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PLEASE CHECK FOR CHANGE INFORMATION AT THE REAR OF THIS MANUAL.

# 7912AD PROGRAMMABLE DIGITIZER SERVICE VOL II

## INSTRUCTION MANUAL

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Dave & Lynn Henderson  
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**SAFETY SUMMARY**

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**SAFETY SUMMARY**


This manual contains safety information which the user must follow to ensure safe operation of the instrument. The following safety information and precautions must be observed during all phases of operation and maintenance.


**Terms and Symbols**

WARNING statements identify conditions or practices that could result in damage to the equipment or property.

CAUTION statements identify conditions or practices that could result in damage to the equipment or other property.

DANGER, as it appears on equipment, identifies areas of immediate hazard that could result in personal injury or loss of life.

 DANGER - High Voltage

 Protective ground (earth) terminal.

**Power Source**

The 7912AD is intended to operate from a power source that does not apply more than 250 volts rms between the supply conductors or between either supply conductor and ground. A protective-ground connection by way of the grounding conductor in the power cord is essential for safe operation.

**Ground the Instrument**

The 7912AD is grounded through the grounding conductor of the power cord. To avoid electric shock, plug the power cord into a properly wired receptacle before connecting to 7912AD inputs or outputs.

**Use the Proper Power Cord**

Use only the power cord and connector specified in the parts list. Use only a power cord that is in good condition.

**Use the Proper Fuse**

To avoid fire hazard, use only the fuse specified in the parts list for your instrument; use a fuse which is identical in type, voltage rating, and current rating.

**Do not Operate in an Explosive Atmosphere**

To avoid explosion, do not operate this instrument in an atmosphere of explosive gases unless it has been specifically certified for such operation.

**Do Not Service Alone**

Do not perform internal service or adjustment of this instrument unless another person capable of rendering first aid and resuscitation is present.

**Use Care When Servicing With Power On**

Dangerous voltages exist at several points in this instrument. To avoid personal injury, do not touch exposed connections and components while power is on.

Disconnect power before removing protective panels, soldering, or replacing components.

**PREFACE**

This service manual is provided to assist in the service and repair of the 7912AD Programmable Digitizer. It is intended for qualified service personnel only.

Volume I contains an introduction to the 7912AD and operating and programming information to help the service person understand and operate the instrument. A block diagram and detailed circuit description follow.

Volume II contains maintenance information and a calibration procedure. At the rear are electrical and mechanical parts lists and electrical and mechanical diagrams.

For more operation and programming information, see the 7912AD Operators Manual. For a full discussion of the IEEE 488 bus to which this instrument can be interfaced, see IEEE Standard 488-1975, the IEEE Standard Digital Interface for Programmable Instrumentation.

## 7912AD SERVICE

### SECTION 4

#### INSTALLATION AND MAINTENANCE

Instructions in this section cover 7912AD installation, system configuration, and maintenance.

#### Installation

##### WARNING

During rackmount installation, interchanging the left and right slide-out track assemblies defeats the extension stop (safety latch) feature of the tracks. Equipment could, when extended, come out of the slides and fall from the rack, possibly causing personal injury and equipment damage.

When mounting the supplied slide-out tracks, inspect both assemblies to find the LH (left hand) and RH (right hand) designations to determine correct placement. Install the LH assembly to your left side as you face the front of the rack and install the RH assembly to your right side. Refer to the rackmounting instructions in this manual for complete information.

#### Installing the 7912AD in a Rack

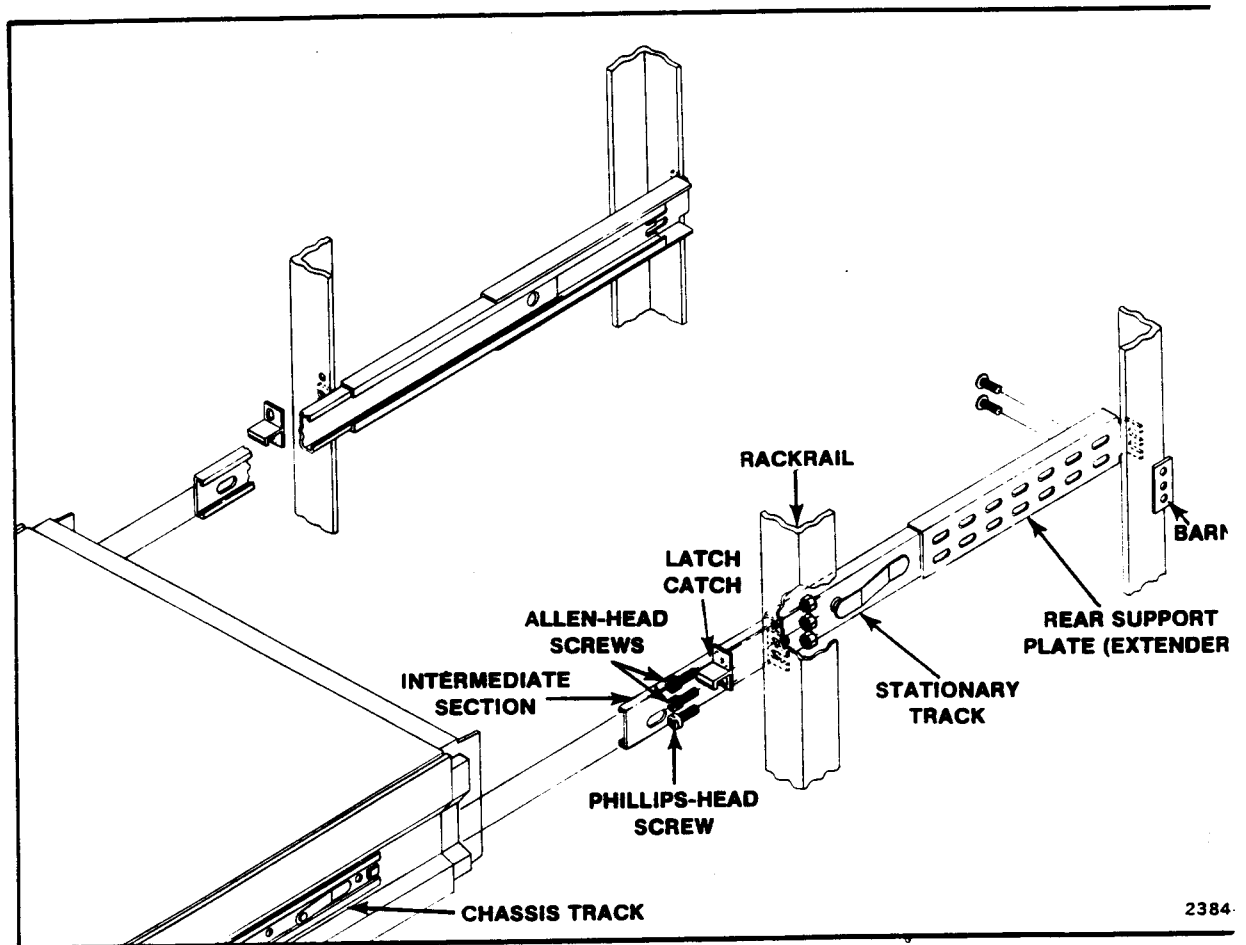
Hardware is supplied with the 7912AD to mount it in a standard 19-inch rack. Part numbers and drawings of the hardware are shown with the accessories in the mechanical parts list found in the back of the manual. The 7912AD is supplied with the chassis slide tracks already in place.

The following dimensions in the rack are required:

|                               |               |           |
|-------------------------------|---------------|-----------|
| Rack rail hole spacing        | 0.500 inches  | (1.27 cm) |
| Min. rack depth               | 27.5 inches   | (70 cm)   |
| Min. width between rack rails | 17.650 inches | (44.8 cm) |

To attach the hardware to the rack, refer to Fig. 4-1 and follow this procedure:

1. Adjusting for the depth of the rack, attach the rear support plates to the stationary slide tracks with bolts and barnuts. Do not fully tighten the bolts. For shallow racks, the rear support plates can be reversed as shown in Fig. 4-2. However, the rack must allow the 7912AD to extend out the rear of the rack.



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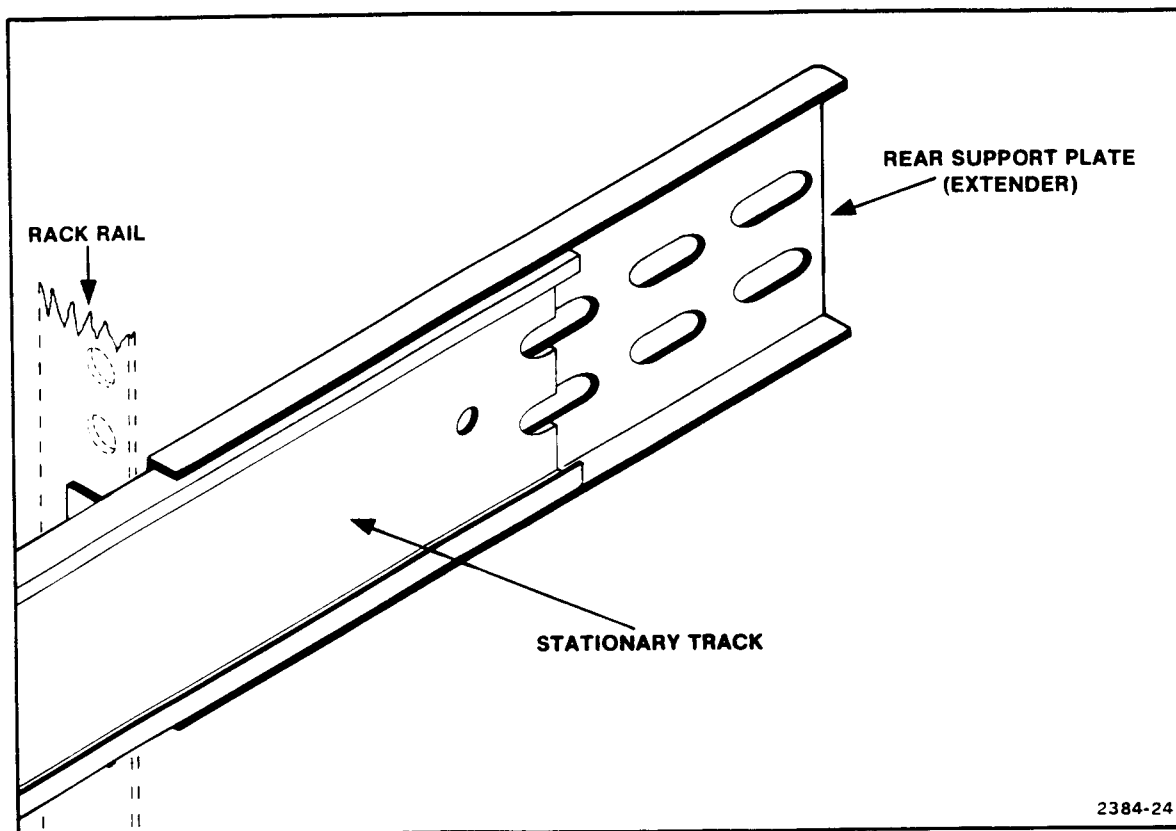
**Fig. 4-1. Assembling the 7912AD rackmounting hardware.**

2. Install the latch catches on the front rack rails. The catch for the right and the one for the left are not the same. Install each so the slots point toward the outside and the lip of the catch points down. Install a nut on the top screw of each if the rack rail is not threaded.

3. Install the assembled stationary tracks and rear supports. The right and left tracks are not the same; compare them to the chassis slide tracks on the sides of the 7912AD to install correctly. Use nuts or barnnuts at the rear if the rack rail holes are not threaded.

4. Tighten the rack rail bolts enough to secure the stationary track and rear support, but still allow movement. Fully tighten the bolts that attach the rear supports to the stationary tracks.

5. Slide the intermediate sections into the stationary tracks so they lock in their extended positions.



**Fig. 4-2. Reversing the rear-support plates for a shallow rack.**

6. Carefully lift the 7912AD into place so the chassis tracks align with the intermediate sections (this may require two people). Slide the 7912AD chassis tracks into the intermediate sections and push the instrument part way into the rack.

7. The sliding track sections should align themselves as the 7912AD is pushed into the rack. Tighten all bolts with the sections aligned.

8. Push the 7912AD into place in the rack and check that the latches catch properly. The tracks are prelubricated and should slide freely.

Before operating the 7912AD, check the environmental and physical specifications at the end of Section 1; the operating temperature and airflow requirements of the instrument must be met. Be sure there is nothing blocking the fan intake (screen on rear panel).



## 7912AD SERVICE

### Cabling

Depending on the use of the 7912AD, make some or all of the following connections.

1. Connect one of the COMPOSITE Video OUTPUTS (either LINEAR or BINARY) to a compatible video monitor with a 75-ohm coaxial cable. Compatible monitors include the TEKTRONIX 634 Monitor and the 650- and 670-Series Picture Monitors. See the video output specifications in Section 1 to determine compatibility with other monitors. Refer to the monitor manuals for correct connection at the monitor and for operating information. Normally, a 75-ohm termination is required.
2. Connect the SYNC OUTPUT to the monitor external sync input, if desired. Also, external sync can be applied to the 7912AD video output through the LOOP connectors. If the sync signal is not daisy-chained to another instrument, terminate LOOP in 75 ohms.
3. Connect the X, Y, and Z outputs to a compatible display monitor with coaxial cable. Compatible monitors include the TEKTRONIX 600-Series monitors. See the IEEE 488 Interface specifications in Section 1 to determine compatibility with other monitors. Refer to the monitor manuals for correct connection at the monitor and for operating information. Because the signals are not very high frequency, the cable and termination impedances are normally not critical.

### Connecting Power

1. With the power cord disconnected from the power source, set the line voltage selector switch to the correct position for the local AC power line voltage. Either 115 VAC, nominal, or 230 VAC, nominal, can be selected.
2. The 7912AD power cord is provided with a polarized, three-terminal power connector. If the connector does not match the power outlet, it is up to the user to replace the connector with one that meets local safety codes and connects the instrument for proper operation. Hook up a replacement connector according to the following chart:

| Conductor    | Color Code               |
|--------------|--------------------------|
| Line         | Brown (copper wire)      |
| Neutral      | Blue (tinned copperwire) |
| Safety-earth | Green with yellow stripe |

3. Connect the 7912AD power cord to an AC power line with the correct voltage and frequency. See the power input specifications in Section 1 for more information on the power requirements of the 7912AD. Failure to supply the correct voltage and frequency on the AC power input can damage the instrument.

**WARNING**

To avoid electric shock, be sure that the protective-ground circuit is not interrupted. This can allow the chassis to float to hazardous potentials. Be sure that the power cord, plug, and outlet provide a secure path to earth (ground) for the protective-ground circuit of the 7912AD.

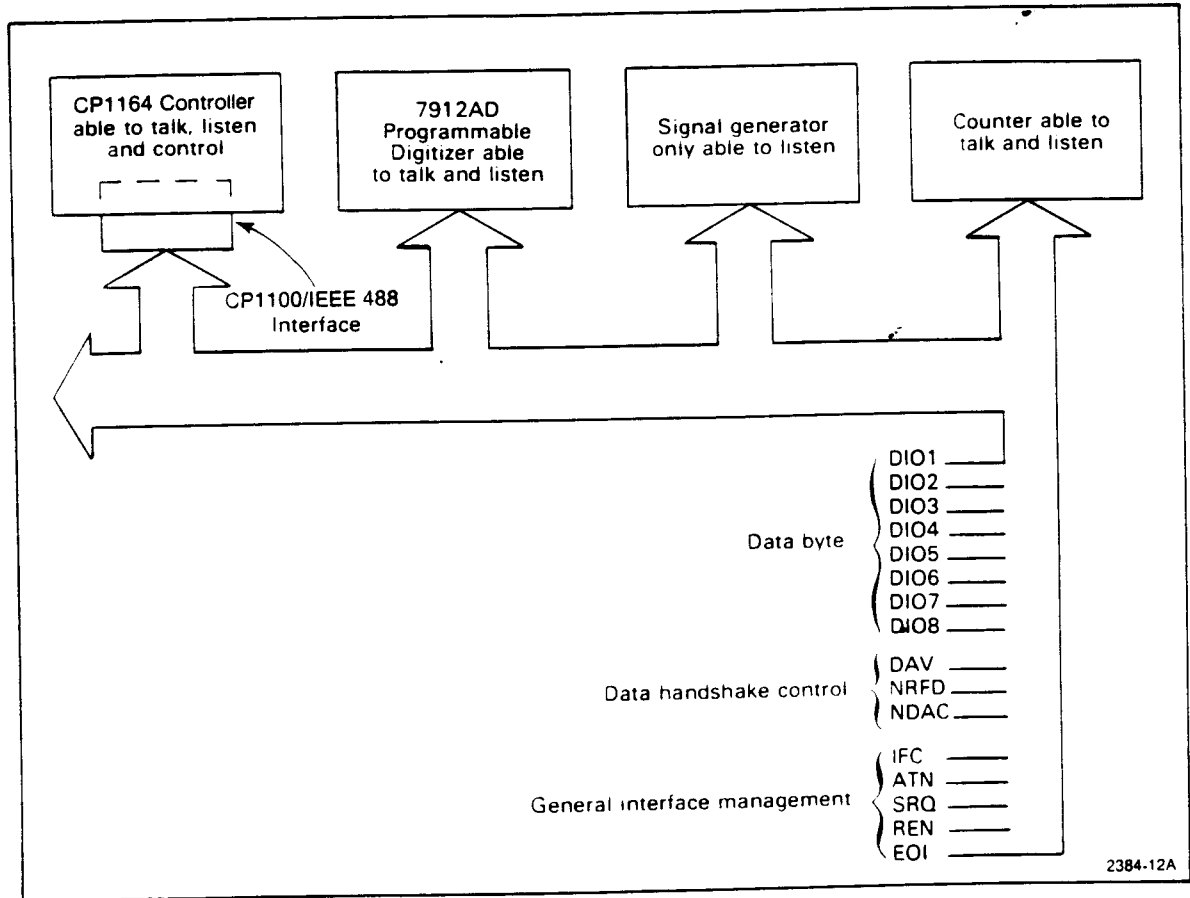
4. Set the PRINCIPAL POWER SWITCH on the 7912AD rear panel to ON.

5. Connect input signals at the rear panel, if desired. Three inputs are provided: VERT IN, CAL IN, and TRIG IN. These connect directly through 50-ohm coaxial cable to, respectively, VERT OUT, CAL OUT, and TRIG OUT on the front panel. These straight-through connections are intended for routing signals through the instrument to the front panel for connection to the plug-ins. The VERT and CAL paths are very high bandwidth through rigid coaxial cable. For details, see the Feedthrough Connectors specification in Section 1.

6. If remote power control of the 7912AD is desired, connect a device capable of placing a TTL active low on the 7912AD ACTUATE connector (rear panel). The 7912AD asserts a TTL active low on its ENABLE output when turned on to provide a daisy-chain path for the remote power control signal. The ENABLE signal is delayed slightly to space out the power-up surges if more than one instrument in the system is connected in this manner. See the power supply specifications in Section 1 for more information.

**Configuring an IEEE 488 System**

A typical IEEE 488 system includes a controller, a talker, and one or more listeners. More than one function can be combined in a single instrument as is the case in the 7912AD, which can be set either to talk or to listen to the controller. A system including a controller and the 7912AD is shown in Fig. 4-3.



**Fig. 4-3. An IEEE 488 system showing some typical instruments connected to the bus.**

Up to 15 devices, separated by no more than 20 meters total cable length can be interfaced to a single IEEE 488 bus. More than 15 devices can be interfaced if they do not connect to the bus but are interfaced through another device. Such a scheme is used for programmable plug-ins housed in the 7912AD mainframe; the 7912AD provides a transparent interface between the bus and the plug-ins.

IEEE 488 is a flexible system -- it works either in a star or linear configuration (Fig. 4-4). To maintain the bus electrical characteristics, a device load must be connected for each two meters of cable and more than half the devices connected at any time must be powered-up. Although devices are usually spaced no more than two meters apart, they can be separated farther if the required number of device loads are lumped at any point.

To interface the 7912AD to an IEEE 488 system, connect the IEEE 488 cable supplied with the 7912AD between the rear-panel IEEE 488 port and the nearest instrument connected to the bus. If the system only includes the 7912AD and a controller, the two-meters-per-instrument rule allows the cables from the two instruments to be connected for a total of four meters in bus length between the controller and instrument.

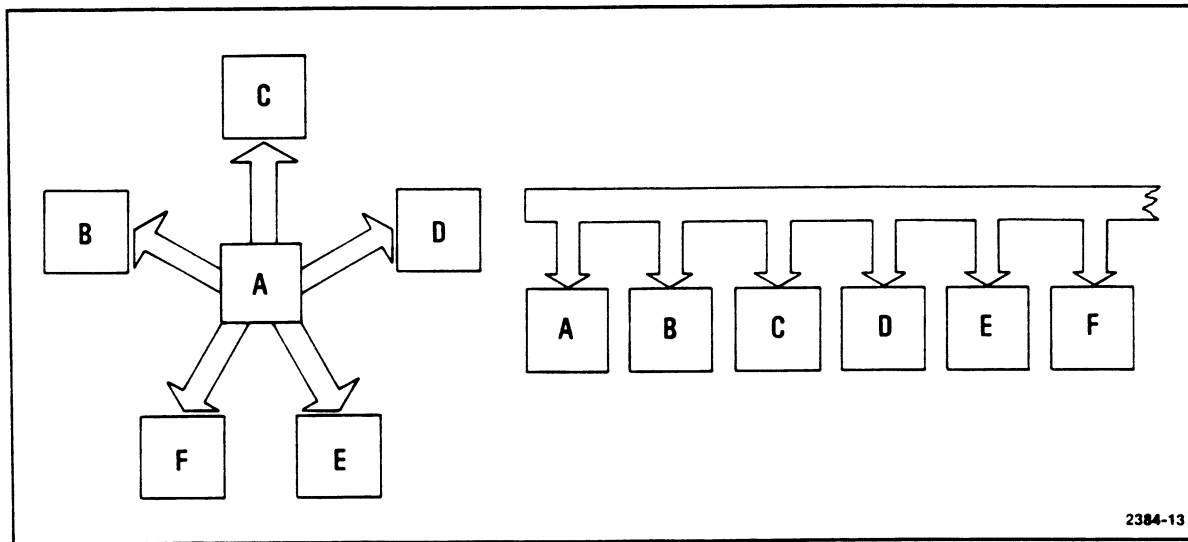
### Selecting IEEE 488 Bus Addresses

Two sets of switches on the IEEE 488 Interface card (A56) select the primary and secondary addresses for the 7912AD and programmable plug-ins (if used). The switches are shown in Fig. 4-5.

S400 assigns either a one or a zero to each of the lower five bits in the 7912AD primary bus addresses, My Talk Address (MTA) and My Listen Address (MLA). These bits are identified as T5 through T1 of MTA and L5 through L1 of MLA in the IEEE 488 standard. Values are assigned according to the following:

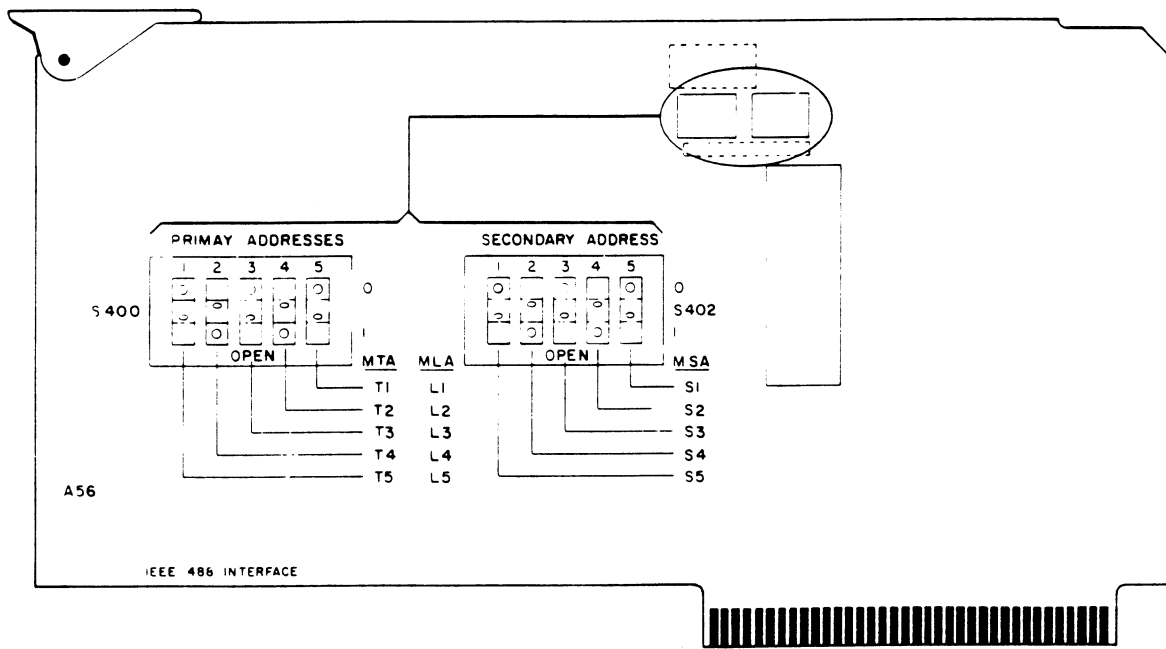
| Address Bit | S400 Switch # |
|-------------|---------------|
| T5, L5      | 1             |
| T4, L4      | 2             |
| T3, L3      | 3             |
| T2, L2      | 4             |
| T1, L1      | 5             |

S402 assigns either a one or a zero to each of the lower five bits in the 7912AD My Secondary Address (MSA). These bits are identified as S5 through S1 in the IEEE 488 standard. Values are assigned according to the following:



2384-13

Fig. 4-4. An IEEE 488 system can be configured in either a star or linear manner.



2385-1

Fig. 4-5. The 7912AD IEEE 488 bus address switches.

| Address Bit | S402 Switch # |
|-------------|---------------|
| S5          | 1             |
| S4          | 2             |
| S3          | 3             |
| S2          | 4             |
| S1          | 5             |

Programmable plug-ins in the 7912AD respond to the same primary bus addresses as the mainframe. The 7912AD MSA is used to determine the plug-in MSAs according to the following:

| Plug-in Compartment | MSA            |
|---------------------|----------------|
| VERTICAL            | 7912 MSA + 1   |
| HORIZONTAL          | 7912AD MSA + 2 |

For the first instrument connected to a controller with TEK SPS BASIC Software, the recommended bus addresses are:

| 7912AD Address | Value (hex) |
|----------------|-------------|
| MTA            | 20          |
| MLA            | 40          |
| MSA            | 60          |

For the above recommended addresses, set all switches on S400 and S402 to zero (up). Increment these addresses for each instrument added to the system.

To select other addresses, check the requirements in the IEEE 488 standard. Also, if programmable plug-ins are used, select a 7912AD MSA no higher than 7C (hex).

### Selecting Internal Jumpers

Jumpers on circuit boards in the 7912AD shown on the following figures are set to the standard position.

**Memory Control (A16).** Jumpers on P331, P333, P431, and P433 are set at the factory as shown in Fig. 4-6. These settings should not be changed. P701 is set according to the scan mode -- standard or option 4 (fast scan).

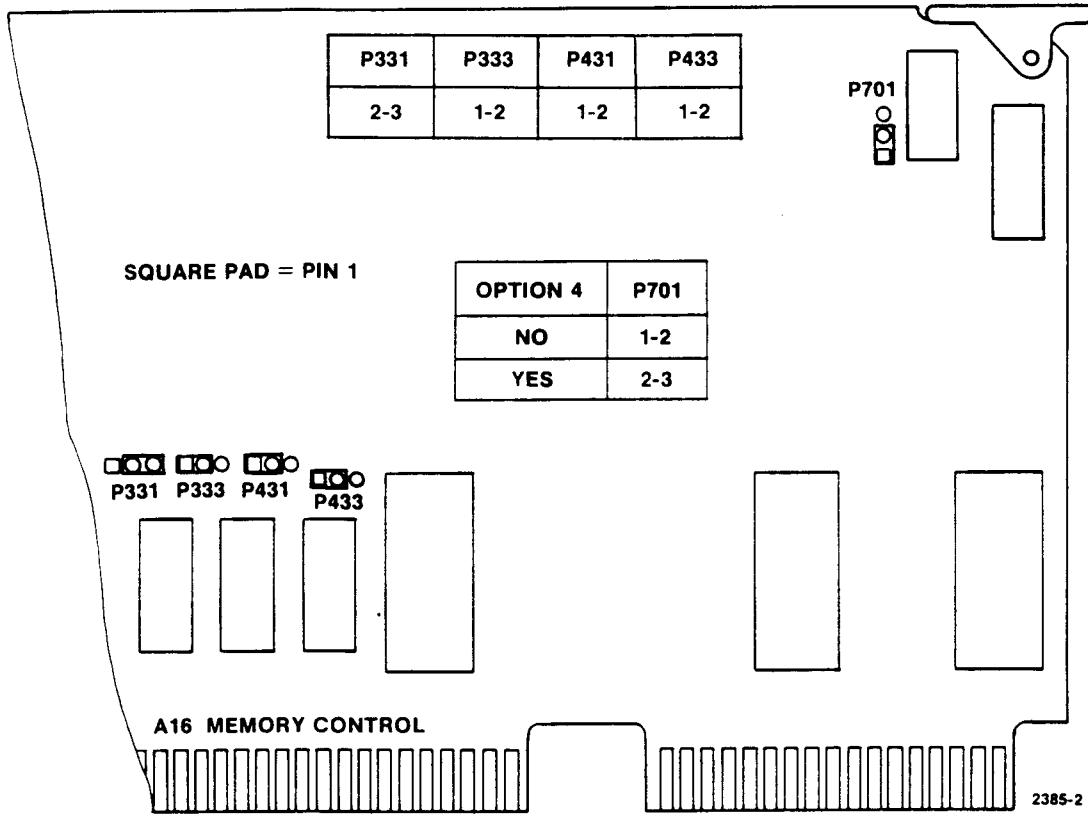


Fig. 4-6. Memory Control board (A16) jumper positions.

**Data Buffer (A20).** Jumpers on P306, P500, P646, and P710 are set according to both the scan mode -- standard or option 4 (fast scan) -- and the TV scan rate -- standard (525 lines/frame) or option 13 (625 lines/frame). The standard and optional jumper positions are shown on Fig. 4-7.

**Translator (A22).** Jumpers on the Translator board shown on Fig. 4-8 configure the 7912AD for testing, for IEEE 488 system compatibility, and for scan mode.

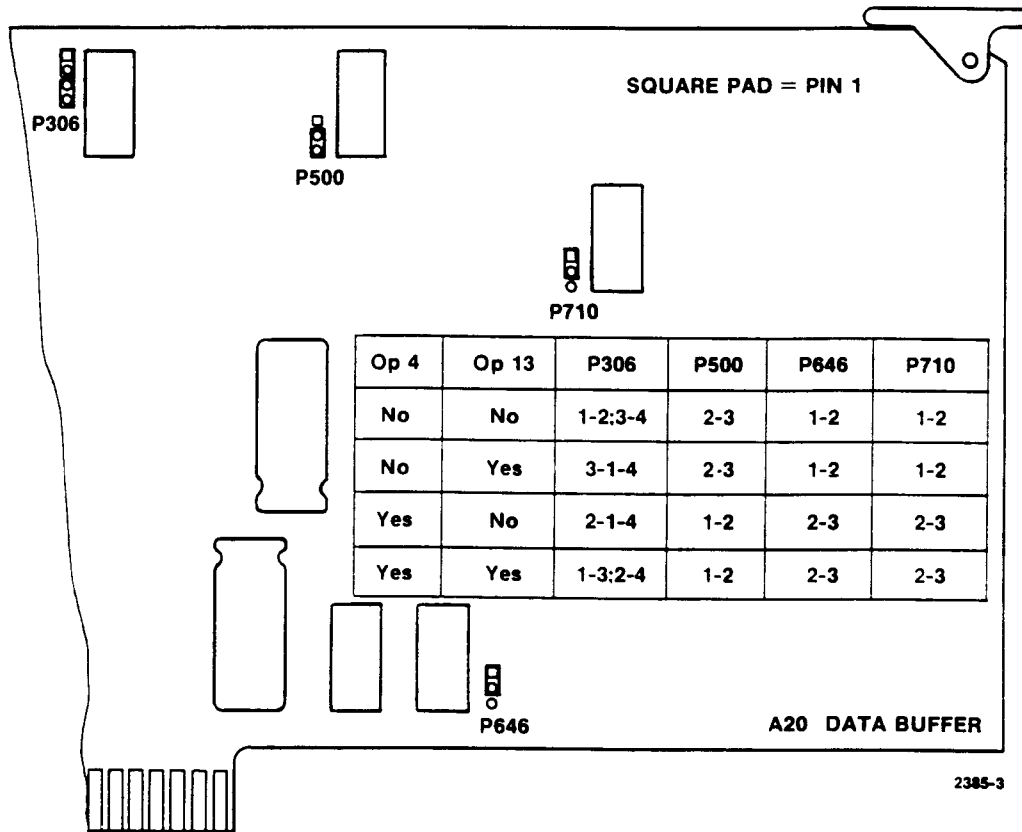


Fig. 4-7. Data Buffer board (A20) jumper positions.

A jumper on P300 is set to enable or lockout diagnostic commands. The instrument is shipped with this strap set to the TEST position (jumper pins 2 and 3). To disable the diagnostic commands, jumper pins 1 and 2 (NORM position). In this position, the 7912AD reports a command error if the diagnostic commands are used.

Another effect of the jumper on P300 involves error number 308. This internal error, a 6800 MPU interrupt fault (unrecognized interrupt), is not reported with P300 jumpered in the NORM position; this error is reported only with P300 in the TEST position.

A jumper on P410 is set according to the message delimiter used in IEEE 488 bus data transfers. Its effect is described under Command Syntax in Section 2. The position of this jumper is read by the 6800 MPU to determine whether it is to respond to the EOI bus signal line or to the ASCII line feed (LF) character.



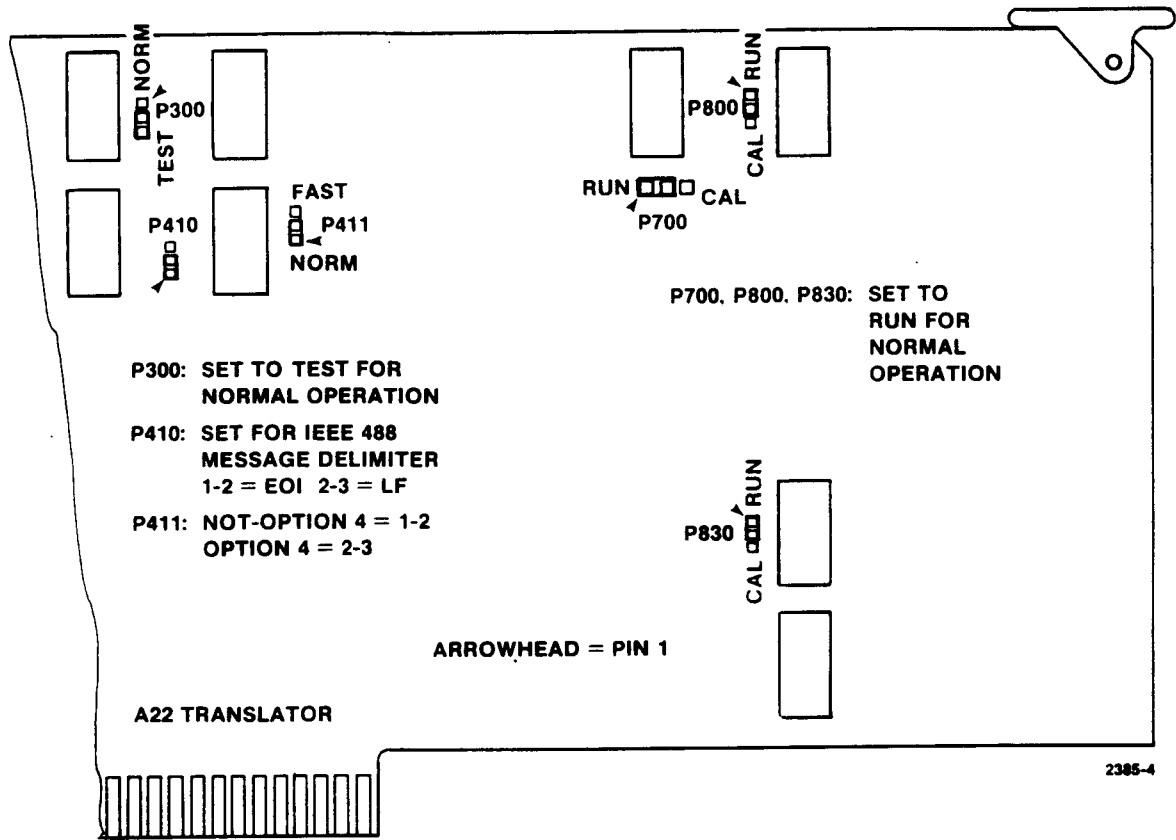


Fig. 4-8. Translator board (A22) jumper positions.

A jumper on P411 is set according to the scan mode -- standard or option 4 (fast scan).

Jumpers on P700, P800, and P830 can be set for direct control of three operating parameters from the front panel. Normally, they should be set to RUN. If necessary for servicing, however, they can be set to CAL.

**CAUTION**

Setting P700 and P800 to other than RUN (pins 1 and 2) bypasses the 6800 MPU intensity protection for graticule intensity and main intensity respectively. Set the intensity controls carefully. Too high an intensity level can immediately damage the scan converter target.

The jumpers, the parameters affected, and the jumper positions are as follows:

|      | Parameter           | RUN | CAL |
|------|---------------------|-----|-----|
| P700 | Graticule intensity | 1-2 | 2-3 |
| P800 | Main intensity      | 1-2 | 2-3 |
| P830 | Focus               | 1-2 | 2-3 |

**Graticule Generator (A24).** A jumper on P040 is set to gate the graticule generator. For normal operation, jumper pins 1 and 2 as shown in Fig. 4-9. In this position, the graticule generator is gated after each time base sweep. For servicing, pins 2 and 3 can be jumpered instead to free-run the graticule generator; in this mode, it operates repetitively, whether or not it is gated by the time base sweep.

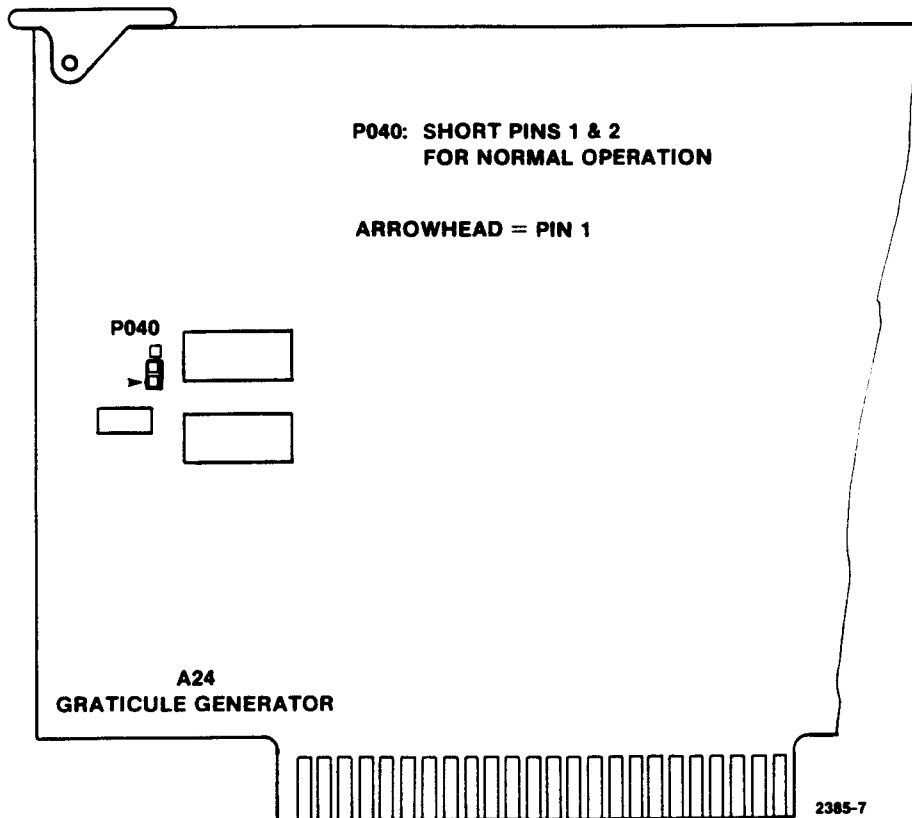


Fig. 4-9. Graticule Generator board (A24) jumper positions.

**X & Y Ramp Generator (A26).** Jumpers on P010, P030, P900, P930, P1000, and P1030 are set according to both the scan mode -- standard or option 4 (fast scan -- and the TV scan rate -- standard (525 lines/frame) or option 13 (625 lines/frame). The standard and optional jumper positions are shown on Fig. 4-10.

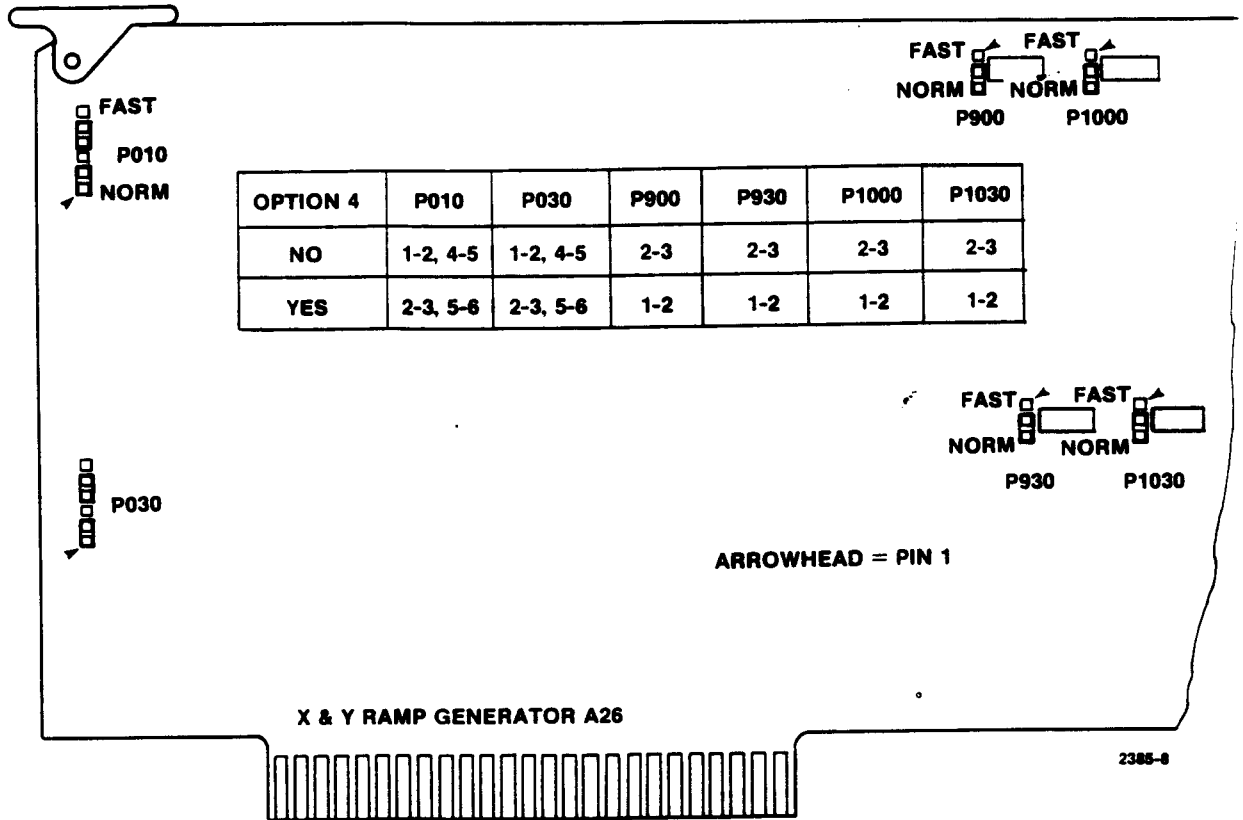
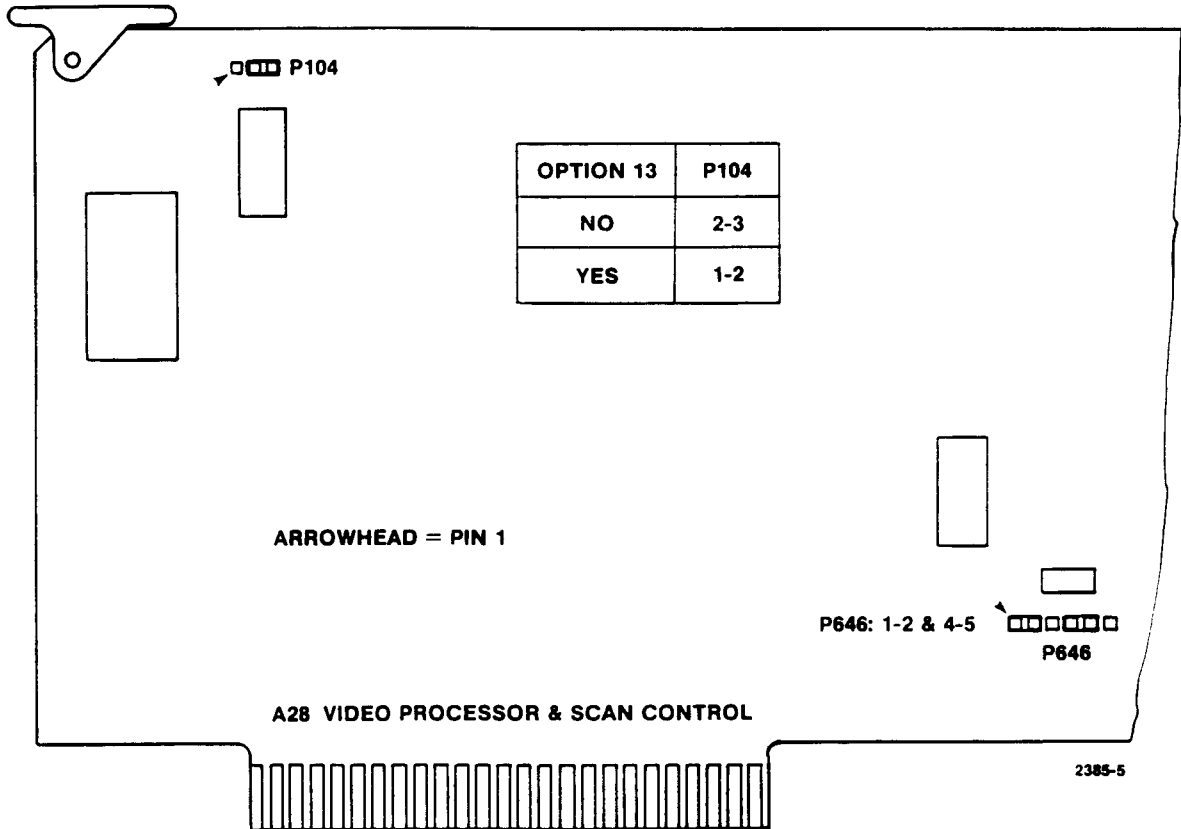


Fig. 4-10. X & Y Ramp Generator board (A26) jumper positions.

**Video Processor & Scan Control (A28).** A jumper on P104 is set for the TV scan rate -- standard (525 lines/frame) or option 13 (625 lines/frame) -- as shown in Fig. 4-11.

Always jumper pins 1 and 2 and jumper pins 4 and 5 on P646.



**Fig. 4-11. Video Processor & Scan Control board (A28) jumper positions.**

**Plug-In Interface (A46).** Jumpers on P420 and P630 (or P512 and P516 for SNB100837 & Up) are set according to the scan mode--standard or option 4 (fast scan). Set the jumpers as shown in Fig. 4-12 (SN B100836 & Below) or Fig. 4-14A (SN B100837 & Up).

**MPU (A54).** Set the jumpers on P012, P224, P216, and P234 to RUN for normal operation as shown in Fig. 4-13. Other positions are used only for special purposes during debugging.

**IEEE 488 Interface (A56).** A jumper on P300 selects the XYZ display mode as shown on Fig. 4-14. Jumper pins 1 and 2 for normal operation; pins 2 and 3 are provided for address mapping as a test aid.

Always jumper P602 between pins 1 and 2.

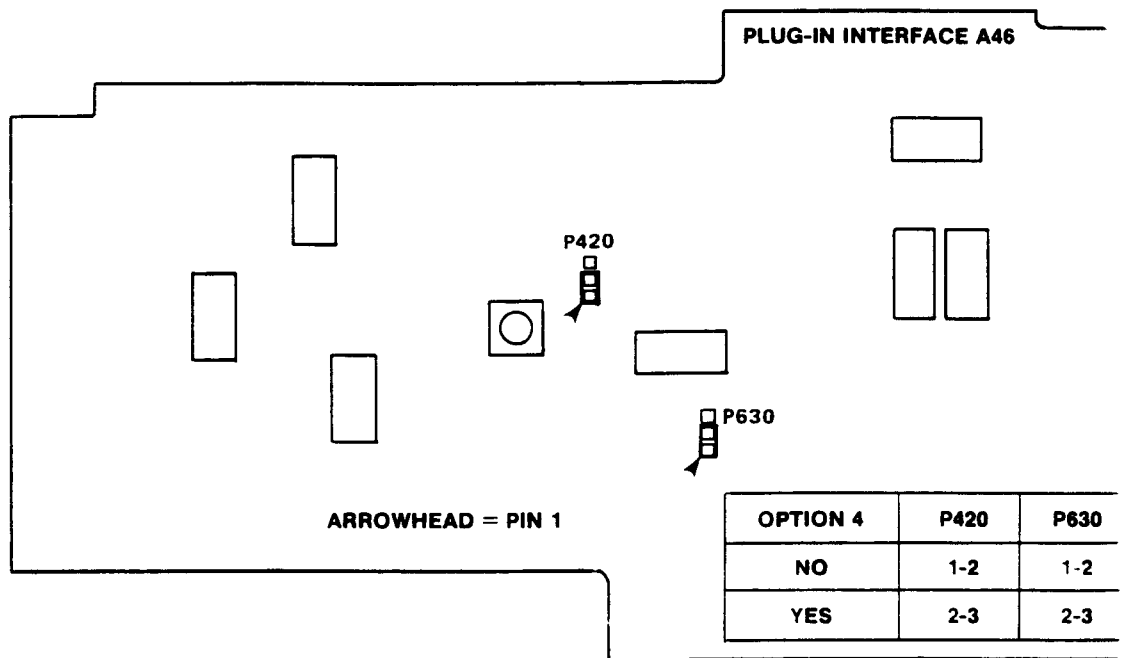


Fig. 4-12. Plug-In Interface board (A46) jumper positions (SN B1008 & Below).

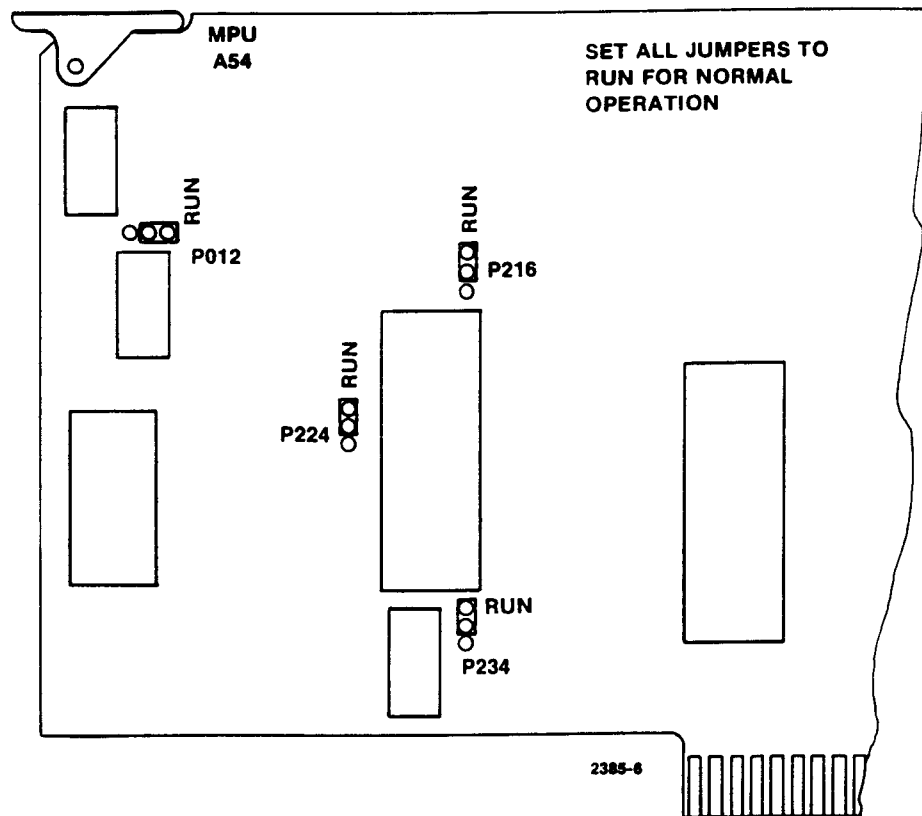


Fig. 4-13. MPU board (A54) jumper positions.

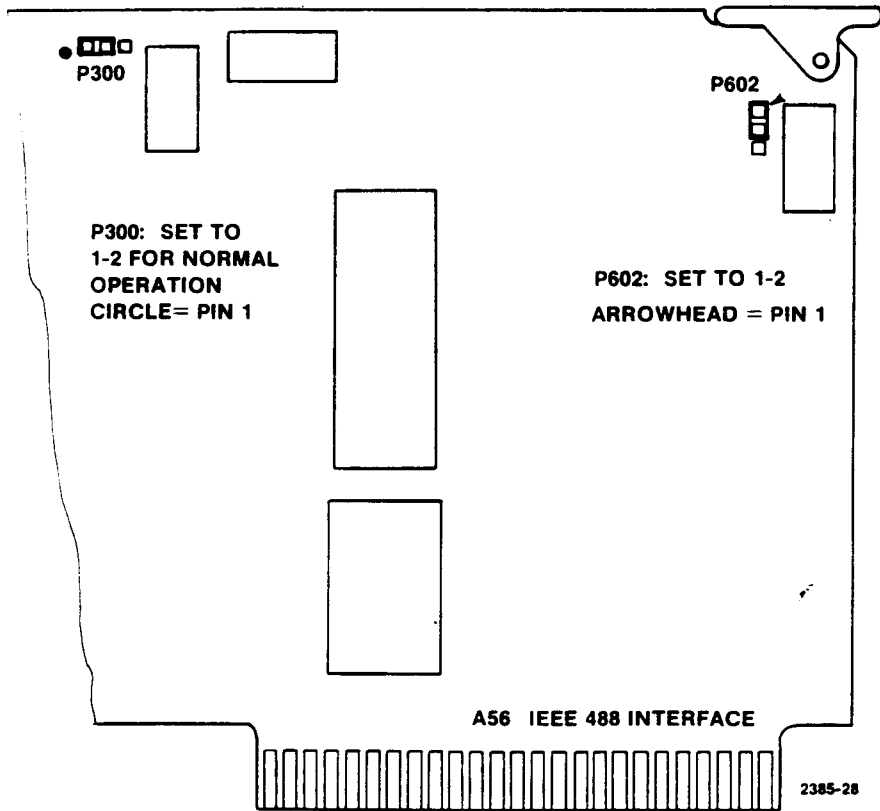


Fig. 4-14. IEEE 488 Interface board (A56) jumper positions.

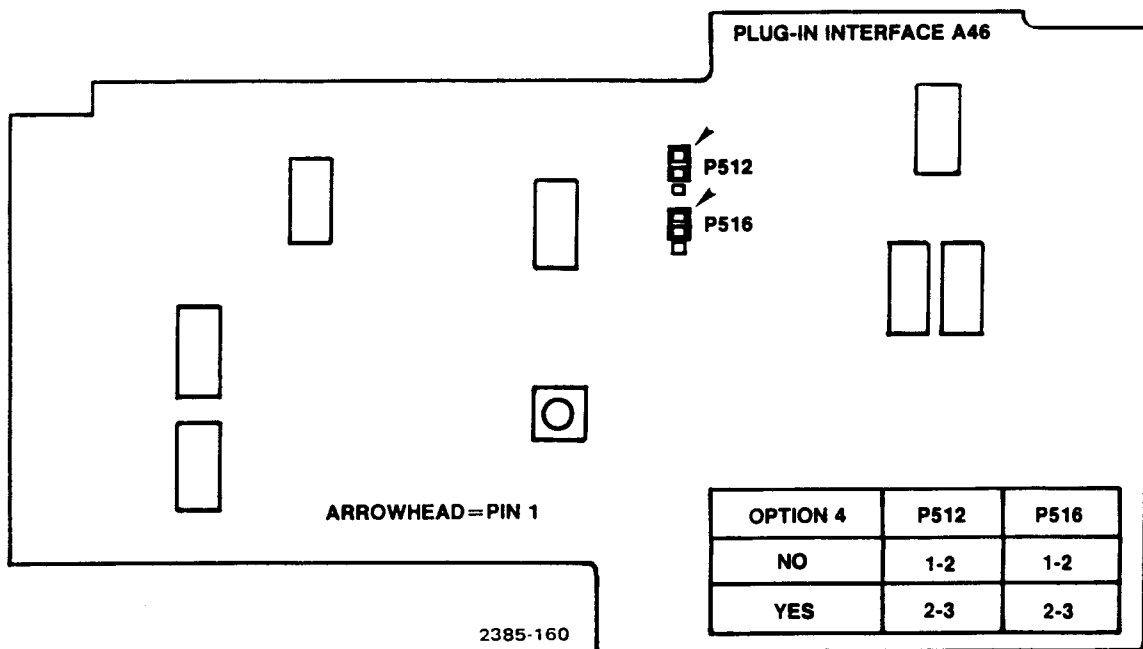


Fig. 4-14A. Plug-In Interface board (A46) jumper positions (SN B100837 & Up).

## Preventive Maintenance

Preventive maintenance, consisting of cleaning, visual inspection, etc., performed on a regular basis, will improve the reliability of this instrument. Periodic checks of the semiconductor devices used in the unit are not recommended as a preventive maintenance measure. See semiconductor-checking information given under Troubleshooting.

The severity of the environment to which this instrument is subjected determines the frequency of maintenance. A convenient time to perform preventive maintenance is preceding adjustment of the instrument.

### Cleaning



Avoid the use of chemical cleaning agents which might damage the plastics used in this unit. In particular, avoid chemicals that contain benzene, toluene, xylene, acetone, chloroethane, or similar chemicals.

**Exterior.** Loose dust may be removed with a soft cloth or a dry brush. Dirt that remains can be removed with a soft cloth dampened with a mild detergent and water solution. Abrasive cleaners should not be used.

**Interior.** Dust on the interior of the unit should be removed occasionally due to its electrical conductivity under high humidity conditions. Cleaning the interior of the unit should precede calibration, since the cleaning process could alter the settings of the calibration adjustments. Use low-velocity compressed air to blow off the accumulated dust. Hardened dirt can be removed with a soft, dry brush, cotton-tipped swab, or cloth dampened with a mild detergent and water solution.

### Visual Inspection

This instrument should be inspected occasionally for such defects as broken connections, improperly seated semiconductors, damaged circuit boards, and heat-damaged parts.

The corrective procedure for most visible defects is obvious. However, particular care must be taken if heat-damaged components are found. Overheating usually indicates other trouble in the instrument; therefore, it is important that the cause of overheating be corrected to prevent recurrence of the damage.

### Lubrication

There are no components in this instrument that require a regular lubrication program during the life of the instrument.

### Grid Bias Maintenance Adjustment

The 7912AD writing gun grid bias may require adjustment as often as every 100 hours of operation to ensure that the writing rate specifications are met. The following procedure allows the adjustment to be made without removing the instrument covers.

**WARNING**

Failure to comply precisely with this procedure can result in damage to the CRT.

### Required Equipment

TV monitor  
500 kHz sine wave generator  
Time base plug-in  
Amplifier plug-in

1. Turn the 7912AD on and allow it to warm up for at least three hours in its normal operating environment.
2. Connect the 7912AD BINARY VIDEO OUT to the TV monitor video input.
3. Set time base controls for 10 microseconds/division, SOURCE to INT, MAG to X10 (on). The readout will indicate 1 microsecond/division.



4. Connect the 500 kHz signal source to the amplifier plug-in vertical input. Set the VOLTS/DIV for an 8-division waveform.
5. Turn the 7912AD MAIN INTENSITY control clockwise until the DECREASE INTENSITY indicator lights.
6. Carefully adjust R602, GRID BIAS, through the hole near the rear of the right side cover for a full sine wave display with only slight blooming of the rising portion.
7. Turn the 7912AD MAIN INTENSITY control fully counterclockwise (off). Disconnect the test equipment.

## **Troubleshooting**

### **Troubleshooting Aids**

**Schematic Diagrams.** Schematic diagrams are provided on foldout pages in Section 7. The circuit number and electrical value of each component are shown on the diagrams. Power supply voltages are also shown. Components that are mounted on circuit boards are enclosed on the diagrams with a heavy black line.

**Circuit-Board Illustrations.** Illustrations of circuit boards are shown opposite the schematic diagrams. Each board-mounted electrical component is identified by its circuit number.

**Main Interconnect (A68) Connectors Diagram.** This diagram, Fig. 7-4 shows the pinout of the connectors on the Main Interconnect board. A table is also provided that lists all the signals routed through the Main Interconnect Board and their connections in alphabetical order.

**Component-Locator Grids.** Schematic diagrams and circuit-board illustrations are bounded by component-locator grids. When used with the associated lookup tables, these grids allow you to quickly locate a component on either the schematic or the circuit board.

**Calibration and Wiring Diagrams.** The Calibration and wiring diagrams show the locations of the adjustments referenced in the calibration procedure. Locations of cables and wires connecting to each board are also shown.

**Component and Wiring Color Code.** Colored stripes or dots on resistors and capacitors signify electrical values, tolerances, etc., according to the EIA standard color code. Components not color coded usually have the value printed on the body.

The insulated wires used for interconnection in the 7912AD are color coded to facilitate tracing wires from one point to another in the unit.

**Semiconductor Lead Configuration.** The lead configurations of the semiconductor devices used in this instrument are shown in Fig. 4-15.

### Troubleshooting Equipment

The following equipment is useful for troubleshooting the 7912AD.

1) **Semiconductor Tester** -- Some means of testing the transistors, operational amplifiers, comparitors, diodes, and FET's used in this instrument is helpful. A transistor-curve tracer such as the TEKTRONIX Type 577-177 or 577-178 will give the most complete information.

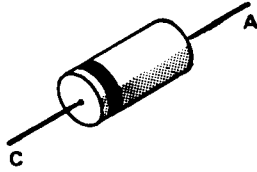
2) **Multimeter** -- A voltmeter is required for checking voltages within the circuits, and an ohmmeter for checking resistors and diodes. The voltmeter should have an input impedance of at least 10 megohm, a range of at least 0 to 50 volts DC, and an accuracy of 0.01%. The ohmmeter should have a range of 0 to 20 megohms.

3) **Test Oscilloscope** -- A test oscilloscope (with DC-100 MHz bandwidth) is required to view waveforms at different points in the circuits. A TEKTRONIX 7000-series Oscilloscope equipped with a readout system, 7D13 Digital Multimeter unit, 7B-series Time-Base unit, and a 7A-series Amplifier unit with a 10X probe will meet the needs of both items 2 and 3.

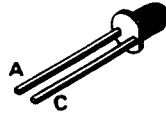
4) **Plug-in Extender** -- This fixture permits operation of the 7912AD outside of the plug-in compartment for better accessibility during troubleshooting. Order TEKTRONIX Part Number 067-0589-00.

5) **Logic Analyzer** -- A logic analyzer, such as the TEKTRONIX 7D01 is required to view many of the digital signals in the 6800 and 2900 systems. The TEKTRONIX DF2 Display Formatter enhances the 7D01's usefulness in troubleshooting IEEE 488 interface and bus problems.

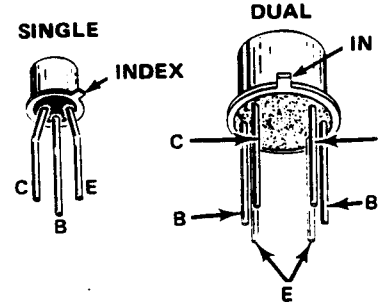
**NOTE**  
**LEAD CONFIGURATIONS AND CASE STYLES ARE TYPICAL, BUT MAY VARY DUE TO VENDOR CHANGES OR INSTRUMENT MODIFICATIONS.**



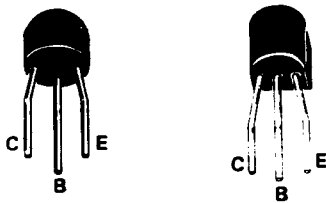
SIGNAL DIODE



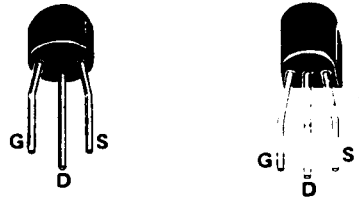
LIGHT EMITTING DIODE (L.E.D.)



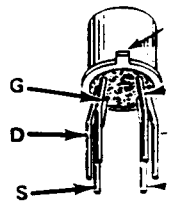
METAL CASE TRANSISTORS



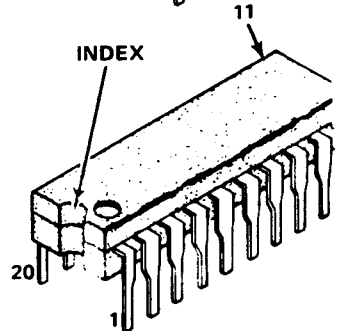
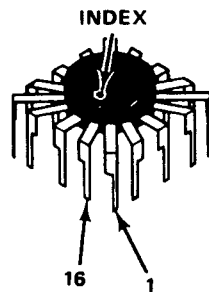
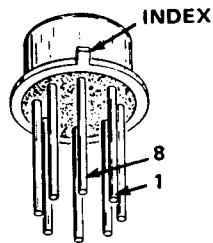
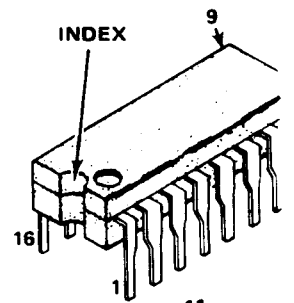
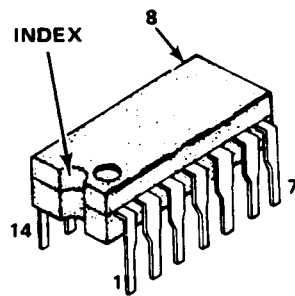
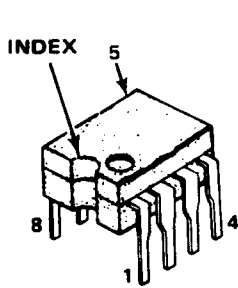
PLASTIC CASE TRANSISTORS



PLASTIC CASE FETS



DUAL MET CASE FF



INTEGRATED CIRCUITS

Fig. 4-15. Semiconductor lead configurations.

## 7912AD Checkout Software

Checkout Software for the 7912AD is provided as a standard accessory to the instrument. The software is provided in two versions - one designed to run under TEK SPS BASIC and one for 4051 BASIC. Providing that the instrument is capable of communicating over the IEEE 488 bus, the software provides go/no-go testing of the command set used during normal operation of the 7912AD. It is not intended to diagnose problems down to the chip level. When a fault is detected, an error message is printed to provide service personnel the maximum amount of information concerning the fault.

For a complete checkout, the software requires the use of programmable plug-ins in the 7912AD. Refer to the Checkout Software manual for more information.

## Troubleshooting Procedure

This troubleshooting procedure is arranged in an order which checks the simple trouble sources before proceeding with extensive troubleshooting. The first few checks ensure proper connection, operation, and adjustment. If the trouble is not located by these checks, the remaining steps aid in locating the component. When the defective component is located, it should be replaced using the replacement procedure given under Corrective Maintenance.

1) **Check Control Settings.** An incorrect setting of the 7912AD controls can indicate a problem that does not exist. If there is any question about the correct function or operation of a control or front-panel connector, refer to the operating instructions provided in Section 2.

2) **Check Associated Equipment.** Before proceeding with troubleshooting of the 7912AD, check that the equipment used with this instrument is operating correctly. If possible, substitute known good equipment for any equipment in question. and see if the problem persists. Check that any interconnecting cables are not defective.

3) **Visual Check.** Visually check the portion of the instrument in which the trouble is suspected. Many problems can be located by visual indications such as unsoldered connections, broken wires, damaged circuit

boards, damaged components, or components bent over and touching other parts or circuit board runs.

4) **Check Instrument Adjustment.** Check the adjustment of the unit of the affected circuit by performing the Calibration Procedure in Section 5. The apparent trouble may only be a result of mis-adjustment and may be corrected by calibration.

5) **Isolate Trouble to a Circuit.** To isolate trouble to a circuit, note the trouble symptom. The symptom often identifies the circuit in which the trouble is located. When trouble symptoms appear in more than one circuit, check the affected circuits by taking voltage readings. Incorrect operation of all circuits sometimes indicates trouble in the power supply.

After the defective circuit has been located, proceed with step 6 to locate the defective components.

6) **Check Individual Components.** The following methods are provided for checking the individual components. Components which are soldered in place are best checked by disconnecting one end to isolate the measurement from the effects of surrounding circuitry.

**CAUTION**

To avoid component damage, disconnect the power source before removing or replacing semiconductors.

**NOTE**

To locate intermittent or temperature sensitive components mounted on the circuit boards, Quik Freeze (Miller Stephenson, MS-240, TEKTRONIX Part Number 006-0173-01) is recommended. Dry ice or dichloro-difluoromethane (Freon 12, Dupont or Can-O-Gas) may also be used.

A) **TRANSISTORS.** The best check of transistor operation is actual performance under operating conditions. Transistors that are soldered to the circuit board should first be checked in-circuit using a dynamic transistor tester; then a replacement can be substituted to further verify that the old transistor is bad. Socketed transistors can be

checked immediately by substituting a known good component; however, be sure that circuit conditions are not such that a replacement might also be damaged. If substitute transistors are not available, check the old transistor out-of-circuit using a dynamic tester (such as the TEKTRONIX Type 577-177). Static-type testers may be used, but since they do not check operation under simulated operating conditions, some defects may go unnoticed. Be sure the power is off before attempting to remove or replace any transistor.

B) INTEGRATED CIRCUITS. Analog IC's such as comparitors and operational amplifiers can usually be checked in-circuit with a voltmeter or test oscilloscope. An understanding of the device and circuit operation is essential for this type of troubleshooting. (For example, an op amp can be tested by measuring the input and output circuit voltages and comparing this ratio to the ratio of input and feedback resistors.) Analog IC's that are socketed can also be checked out-of-circuit using a dynamic tester such as the TEKTRONIX 577-178.

Digital IC's are best checked in-circuit using a logic probe or voltmeter. Use care when checking voltages and waveforms around DIP (Dual-In-line-Package) IC's so that adjacent leads are not shorted together. A convenient means of connecting a test probe to 14- and 16-pins IC's is with an IC test clip. This device also doubles as an extraction tool.

C) DIODES. A diode can be checked for an open or shorted condition by measuring the resistance between terminals with an ohmmeter set to the R X 1k scale. The diode resistance should be very high in one direction and very low when the meter leads are reversed. A diode can also be tested with a dynamic tester (transistor curver tracer).

**CAUTION**

Do not use an ohmmeter scale that has a high internal current. High currents may damage the diodes under test.

D) RESISTORS. Check resistors with an ohmmeter. Resistor tolerance is given in the **Electrical Parts List**. Resistors normally do not need to be replaced unless the measured value varies widely from the specified value.

E) CAPACITORS. A leaky or shorted capacitor can be detected by checking resistance with an ohmmeter on the highest scale. Use an ohmmeter that will not exceed the voltage rating of the capacitor. (Be careful to observe correct polarity when checking electrolytic capacitors.) The resistance reading should be high after initial charge of the capacitor. An open capacitor can best be detected with a capacitance meter, or by checking whether the capacitor passes AC signals.

7) **Repair and Readjust the Circuit.** Replace the defective component or assembly. Be sure to check the performance of any circuit that has been repaired or that has had any electrical components replaced. Recalibration of the affected circuit may be necessary.

### Using the Diagnostic Commands

Three diagnostic commands allow the user to enter and run routines on the 6800 MPU system. Access to the MPU memory space via the IEEE 488 bus is gained by setting a strap on the Translator board (A22) -- see Selecting Internal Jumpers earlier in this section. These commands should be used with caution; used improperly, they can put the 7912AD into illegal modes of operation.

The diagnostic commands are GET, PUT, and EXC. They are sent to the 7912AD in the same manner as the commands in Section 2, requiring that the instrument first be made a listener. In addition, to examine a 6800 memory location with the GET command, the 7912AD must be made a talker after receiving GET in order for it to return the memory contents. Formats for the commands are shown with characters in bold that are to be transmitted exactly as stated and characters in brackets that are command elements to be supplied by the user.

**PUT.** The format for the put data command is:

**PUT H<ADRS>,H<VAL>**

ADRS is an address in 6800 memory space specified by one to four hexadecimal digits. VAL is the bit pattern to be set at that memory location specified by two hexadecimal digits.

**GET.** This is a device-dependent command -- it is **not** the same as the group execute trigger (GET) interface message. The format for the get data command is:

**GET H<ADRS>**

ADRS is an address in 6800 memory space specified by one to four hexadecimal digits.

**EXC.** The format for the execute command is:

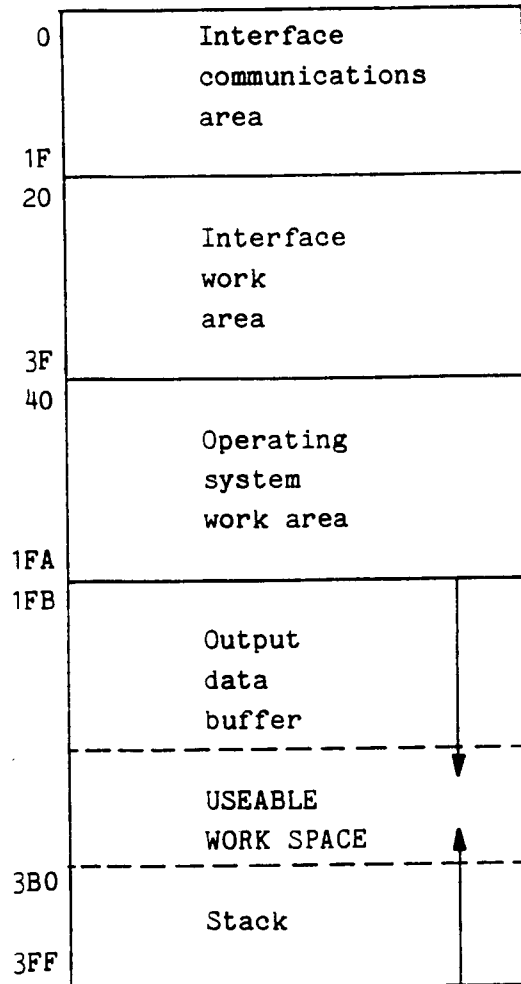
**EXC ADRS**

ADRS is an address in 6800 memory space specified by one to four hexadecimal digits.

The 6800 MPU performs a JSR instruction to the address specified by the execute instruction. It expects to find a subroutine that returns control to the operating system with standard subroutine linkage. Use caution if interrupts are to be disabled as part of the subroutine since this disables the MPU firmware intensity protection.

User subroutines should be confined to 6800 RAM space between the output data buffer and the stack. This leaves a useable work space of about 450 bytes depending on the amount of output buffer required by the subroutine and the amount of stack space required by subroutine nesting. The RAM space is shown in the following memory map (addresses are in hexadecimal):





### Diagnosing Power-Up Problems

Because the front-panel is controlled by the 6800 MPU operating system any problem in the MPU system is likely to become apparent at power-up. A power-up routine in firmware allows a logical attack on such a problem.

**Setup.** The 7912AD should be connected to a TV monitor; plug-ins (with readout) should be installed. The instrument should not be connected to an IEEE 488 bus.

**Required Equipment.** The minimum equipment required to trace problems that become apparent at power-up is an oscilloscope with a 10X probe. If a logic probe is substituted, it may be necessary to connect its strobe to MPU CK2 so the probe does not respond to glitches between cycles. A more effective tool would be a logic analyzer, such as the TEKTRONIX 7D01. Extender boards included in the 7912AD Calibration Kit (listed in the required equipment for the calibration procedure) may be handy.

**Step 1. Does the ON/OFF button light?** If it does, proceed to step 2. If the button does not light, or does not stay lighted when released:

- a. Check that the power cord is plugged into an active power source with the correct voltage.
- b. Check that the rear-panel PRINCIPAL POWER SWITCH is ON.
- c. If a and b check ok, the problem lies in the power supply or the ON/OFF switch, which bypasses the 6800 MPU.

**Step 2. Do the DIGITAL and REMOTE buttons light?** The DIGITAL and REMOTE lights should come on momentarily when power is applied. If not, the problem may be on the Translator board (A22) or in the front-panel wiring.

**Step 3. Do the TV and LOCAL buttons light?** As part of its power-up routine, the 6800 MPU lights DIGITAL and REMOTE, then turns them off after about two seconds and lights TV and LOCAL. If this occurs, skip to step 4. Failure to do this indicates a failure at some point in the power-up routine. This routine brings up the 6800 MPU and the 2900 memory controller in an orderly manner, assures correct instrument operation in so far as it can be checked, sets instrument modes to a predetermined state, and alerts the IEEE 488 bus controller-in-charge that the instrument has powered up. In case of failure, the routine hangs the 6800 MPU at an address that points to the failure.

Before proceeding to diagnose the MPU, however:

- a. Check the MPU system power supplies, +5.1 V, -5.2 V, -2 V, and +15 V at the test points on the Power Connector board (A62). Then check that the +12 V derived from +15 V on the MPU Memory board (A52) is correct; +12 V can be reached on the bottom of C200 or CR200.
- b. Check the MPU system clocks. The clocks are derived from 10 MHz supplied by the Data Buffer (A20); it can be checked at B13 of the MPU (A54) edge connector. This signal is available on the B13 pad of the connector on the bottom of the Main Interconnect board (A68) -- see Fig. 7-42 for the pinout. The 6800 clocks, CK1 and CK2, are available at B16 and A19 of the edge connector, respectively, and CK2 is also available at A11 or B1 of the diagnostic connector on the back of the Main Interconnect, P514. STROBE, a 100-nanosecond pulse near the center of the CK2 on-time, is available at B30 of the edge connector or B11 of P514. CK1, CK2, and STROBE are all generated on the MPU board (A54).

c. For the MPU to power-up,  $\overline{\text{RST}}$  must be generated for 750 milliseconds. Check that this signal (bottom of R112 on A54) goes low for 750 milliseconds after power is turned on and then goes high. If it does not, check that PON (B15 of the A54 edge connector) goes low for 750 milliseconds after turn-on and then goes high. PON is generated by the power supply,  $\overline{\text{RST}}$  on the MPU board.

To find out if the 6800 is hung, and if so, what it means, look at the 6800 address bus. These signals are available on the MPU edge connector pads on the bottom of the Main Interconnect. They are also available on square pins of the diagnostic connector, P514: the lower 12 address lines are buffered; the upper three lines are decoded to represent blocks of memory -- see diagram 15 for the decoding scheme. With the MPU board on an extender, all the above lines can be accessed at either the IC pins or the edge connector pads on the MPU board.

**CAUTION**

Turn off 7912AD power before removing or installing any circuit boards or circuit board extenders.

All addresses are given in hexadecimal.

d. If the 6800 address bus does not indicate that the MPU is hung in a tight loop in the range 7CXX, then a problem is indicated on either the MPU board (A54) or the MPU Memory board (A52).

e. If the 6800 is hung in a tight loop, compare the address or addresses to the following:

**7C1F** - The 6800 vectors to 7C1F to start its power-up sequence. Its first action is to clear the main and graticule intensity levels, although this is not apparent since the instrument is still in digital mode. The 6800 MPU then writes the value of each address into the pair of bytes at that address in RAM.

**7C2E to 7C35** - If the 6800 hangs in this sequence of code, it is failing to load the RAM or the 6800 is not executing instructions properly.

**7C3A to 7C43** - Hanging here results from a failure to read the RAM or an execution problem while reading back and verifying RAM contents.

**7C47** - A loop at this address indicates the RAM contents did not match the word stored.

**7C4C to 7C59** - Within this sequence the 6800 is reading, complementing, writing, and verifying each byte of RAM.

**7C5D** - A loop here indicates the RAM contents did not match the byte written.

**7C5F to 7C68** - When the 6800 executes the code at these addresses, it clears all RAM locations.

**7C6D to 7C75** - All RAM is verified to be zero.

**7C79** - A loop at this address indicates a RAM location did not clear.

**7C83 to 7C8A** - A fault on the MPU board can cause a hang here.

f. Faults detected above may be isolated to the MPU board (A54) or the MPU Memory board (A52). Faults involving the following addresses occur during ROM tests, however, and can indicate a problem on either of these two boards or the IEEE 488 Interface board (A56), since it also contains ROM. In addition, if a ROM fault is detected while testing the IEEE 488 Interface board ROM, it may mean there is a problem on the 6800 buffered data bus; this could involve the Translator (A22) or Memory Control (A16) as well as the interface. ROMs are checked beginning with the power-up ROM (7C00) and then the operating system beginning at the highest address and continuing down through decreasing addresses with the interface ROM (4000) last.

**7C8C to 7CB8** - Within this loop, the 6800 verifies that each ROM is at the correct address.

**7CA6 to 7CB2** - Within this smaller loop, the 6800 MPU verifies the ROM checksums by summing all memory locations in each ROM.

**7CBD** - Indicates a bad ROM checksum.

**7CBF** - Indicates wrong ROM at an address.

**7CC1** - Start of initializing routine. The routine system status, sets the status byte for power-up (hex 41), clears the error query response, clears communication buffers, and enables interrupts. If other status byte conditions occur, they are stacked and reported after power-up.

**Step 4. Are the scale factors displayed?** When the 6800 finishes its power-up routine, it turns control over to the monitor portion of the firmware. The monitor reads and displays the scale factors. If this occurs, skip to step 5. If not, it indicates the power-up routine did not complete. The most likely cause is an interrupt problem.

a. Check to see if address line 15 pulses high every 500 milliseconds. This can indicate the 6800 is repetitively servicing an interrupt. If so, check to see if  $\overline{\text{HWF}}$  (B14 of the MPU edge connector) is asserted or PON (B15 of the edge connector) is unasserted. The source of these signals is the power supply.

b. Check to see if A15 pulses high every 100 milliseconds or faster. If so, check the following interrupt lines. If asserted, the problem may be isolated to the indicated board or boards.

**DFI** (A20 of edge connector) -- Translator (A22) or MPU (A54).  
**IOI** (A18 of edge connector) -- IEEE 488 Interface (A56) or MPU (A54).  
**PMCI** (A16 of edge connector) -- Memory Control (A16) or MPU (A54).  
**FPI** (A12 of edge connector) -- Translator (A22) or MPU (A54).  
**SNDI** (U702-9 of A54) -- Plug-ins, Plug-In Interface (A46) or MPU (A54).

If none of these interrupts is asserted, a fault in the MPU (A54) is indicated.

c. Check for a tight loop at 7DC9 to 7DCD, which may result in partial readout. This indicates a Translator (A22) or MPU (A54) fault.

d. Check for a halt or tight loop on the 6800 address bus in the range 4019 to 47D5, the IEEE 488 initialization routine, indicated by pulses on  $\overline{\text{IOSEL}}$  (B20 of the MPU edge connector). If the MPU is stuck in this range, check R-ATN (U500-6 on the IEEE 488 Interface board, A56); if R-ATN is asserted (IEEE 488 cable should have been disconnected), a fault on either the interface or MPU board is indicated. If R-ATN is not

asserted, check  $\overline{7KNRFD}$  (A40 on the MPU edge connector); if asserted, a problem is indicated in either plug-in, the Plug-In Interface (A46), or the MPU (A54).

e. If none of the above apply, check the 6800 address bus for a tight loop executed by the MPU. If one is found, compare it to the list of hardware-dependent loops given in the following steps.

**Step 5. Are the front-panel intensity controls active?** When the monitor (7E20 to 7E58) takes control, it sets the trace intensity in response to the front-panel settings while providing intensity protection. If the front-panel controls are not active, the power-up routine may not have completed. Check  $\overline{SRQ}$  (pin 10 on the rear-panel connector) to see if it is asserted -- one of the last acts of the power-up routine. If not, return to step 4.

If  $\overline{SRQ}$  is asserted, but the intensity controls are not active, the MPU may be stuck in one of the following hardware-dependent loops:

**6350 to 6384** - MAIN INTENSITY control loop; waits for both pins 12 and 14 of U710 on the Translator (A22) to go low.

**6394 to 63BE** - GRATICULE INTENSITY control loop; waits for both pins 2 and 4 of U710 on the Translator (A22) to go low.

**63CB to 63ED** - FOCUS control loop; waits for both pins 12 and 14 of U740 on the Translator (A22) to go low.

**Step 6. Does the instrument communicate over the IEEE 488 bus?** If so, running the checkout software may help locate any remaining problems (connect instrument to an IEEE 488 bus controller). If the 7912AD does not respond to messages sent over the bus:

a. Is the IOI interrupt (A18 on the MPU edge connector) asserted? If so, a problem on the MPU is indicated.

b. If IOI is not asserted, check the 6800 address bus for a tight loop. If none is found, a problem on the IEEE 488 Interface (A56) is indicated. If the 6800 is executing a tight loop, compare it to the following addresses for an indication that the problem is related to a plug-in, the Plug-In Interface (A46), or the IEEE 488 Interface. The following addresses are hardware-dependent loops related to the IEEE 488 bus commands:

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**645C to 6460** - Load input message buffer; waits for buffer full or terminator (EOI or LF).

**65E2 to 65E6** - Load command header in output buffer; calls output busy loop (661E).

**661E to 6629** - Output busy; waits for output in progress to complete; calls MCO busy loop (25D4).

**66B1 to 66B5** - Local/remote processor; calls MCD busy loop (25E1).

**68C3 to 68C7** - Digitize defects; calls MCD busy loop (25E1).

**693E to 6942** - Digitize on GET; waits for GET interface message.

**699E to 69A2** - GRAT command handler; waits for PMCI interrupt.

**69B8 to 69BC** - GRAT ON handler; calls MCD busy loop (25E1).

**69CD to 69D1** - GRAT OFF handler; calls MCD busy loop (25E1).

**6A00 to 6A04** - Mode TV handler; calls MCD busy loop (25E1).

**6A40 to 6A44** - Focus handler; calls MCD busy loop (25E1).

**6A61 to 6A65** - MAI handler; calls MCD busy loop (25E1).

**6AA8 to 6AAC** - GRI handler; calls MCD busy loop (25E1).

**6D7C to 6D80** - Repeat command handler; calls output busy loop (661E).

**6D9B to 6D9F** - Repeat handler; calls output busy loop (661E).

**6DF2 to 6DF6** - READ command handler; calls output busy loop (661E).

**6E08 to 6E0C** - READ command handler; calls output busy loop (661E).

**70B9 to 70BD** - DUMP command; calls output busy loop (661E).

**7496 to 749A** - GET byte (diagnostic); calls output busy loop (661E).

78C5 to 78CB - TV interrupt handler; waits for PMCI interrupt.

4188 to 4197 - IOI handler; waits for  $\overline{7KSND}$  to stay false.

41A0 to 71AE - IOI handler; waits for DATVAL flag false.

41EF to 420F - 7KSRQ handler; waits for  $\overline{7KSRQ}$  to stop toggling.

42D5 to 42E2 -  $\overline{DAV}$  handler; waits for  $\overline{IFC}$  or  $\overline{7KNDAC}$  (unasserted).

42ED to 42FE -  $\overline{DAV}$  handler; waits for  $\overline{IFC}$  or  $\overline{7KNRFD}$  (unasserted).

43B7 to 43BB -  $\overline{ATN}$  byte handler; waits for 7KNDAC (unasserted).

4567 to 4577 - CLRBY, ATNFLS; waits for  $\overline{IFC}$  or  $\overline{7KNRFD}$  (unasserted)  
if plug-in is listener.

46AB to 46BD - Send a byte on the IEEE 488 bus; waits for  $\overline{IFC}$  or  $\overline{ATN}$   
and  $\overline{DAV}$  or SENT from IEEE 488 interface.

475A to 4760 -  $\overline{IFC}$  service; waits for  $\overline{IFC}$  false.

252B to 252F - Memory controller output; waits for output in  
progress to complete.

25CE to 25D2 - Memory Controller busy loop; waits for PMCI  
interrupt.

25D4 to 25E0 - Memory Controller output busy loop; waits for PMCI  
interrupt.

25E1 to 25ED - Memory Controller digitize busy loop; waits for PMCI  
interrupt.

**Step 7. Does the digitize operation complete?** If the instrument  
hangs when a digitize operation is started:

a. Check the data buffer clock,  $\overline{EYCA}$  (pin 14 of U346B on the Data  
Buffer, A20). It should be a negative pulse with a 20 MHz repetition  
rate. A problem with this clock indicates a fault on the Data Buffer  
(A20).



b. If the clock is present, does DIG (B7 of the Data Buffer edge connector) go high when a digitize operation is initiated? If not, does  $\overline{\text{PMCSEL}}$  (B18 of the MPU edge connector) pulse low when the operation is initiated? If it does, a Memory Control (A16) problem is indicated; if not, an MPU problem is indicated.

c. Does DIG return to a low level? if not, check first that  $\overline{\text{SWPGATE}}$  (B28 of the Data Buffer edge connector) returns to a low state after it is asserted -- this can be assured by setting the time base for a repetitive sweep, in which case this pin should be toggling. If the data buffer receives a sweep gate, but does not respond by unasserting DIG after setting it high, check that the 2900 smart clock is running. Check CLK4CP (A8 of the Data Memory Interconnect board, A66, either connector) for a 4 MHz clock. If it is missing, the Data Buffer (A20), Memory Control (A16), or Data Memory (A18) boards can be suspected.

d. If DIG returns to a low level, does PMCI (A16 on the MPU, A54, edge connector) become asserted. If not, the problem probably lies on the Memory Control board (A16). If PMCI is asserted, the problem probably lies on the MPU (A54).

**Step 8. Does the XYZ monitor display a digitized waveform?** If the digitize operation completes (step 7), the waveform should be displayed on an XYZ monitor connected to the 7912AD. If not:

a. Check DISPLAY (U400-8 on the IEEE 488 Interface board, A56). If it is not asserted when the memory controller is not otherwise occupied (such as with IEEE 488 bus output), a problem on the IEEE 488 Interface or MPU is indicated.

b. Check  $\overline{\text{LSEND}}$  (B39 on the Memory Control edge connector); this line should be pulsing to handshake data to the interface. If it remains unasserted and YSENT (A39) is asserted, or it remains asserted and YSENT is unasserted, the IEEE 488 Interface is holding up the handshake. If  $\overline{\text{LSEND}}$  is asserted and the interface is responding with YSENT asserted or if  $\overline{\text{LSEND}}$  is not asserted and YSENT is not asserted, the Memory Control board is holding up the handshake.

c. Is B2M/ZEN (A38 on the Memory Control edge connector) pulsing? If not, a fault on the Memory Control board is indicated.

d. Is DAC/ADV (B9 on the Memory Control edge connector) pulsing? If not, a fault on the Memory Control board is indicated. If it is, a fault on the IEEE 488 Interface is indicated.

**Step 9. If the instrument communicates on the IEEE 488 bus, does it read out waveforms?** Send DUMP RAW to the instrument, followed by its talk and secondary addresses, and then look for the following conditions:

a. Check that  $\overline{\text{XMT}}$  (U100-2 on A56) is asserted. If not, the fault probably lies on the interface.

b. If  $\overline{\text{XMT}}$  is asserted, is LSEND (B39 on the Memory Control edge connector) pulsing? If so, the problem lies on the interface board.

c. If  $\overline{\text{LSEND}}$  is not asserted and YSENT (A39 on the edge connector) is asserted or if  $\overline{\text{LSEND}}$  is asserted and YSENT is not asserted, the IEEE 488 interface is holding up the handshake. If  $\overline{\text{LSEND}}$  is not asserted and YSENT is not asserted or if  $\overline{\text{LSEND}}$  is asserted and YSENT is asserted, then Memory Control (A16) is holding up the handshake.

**Step 10. Is the digitized data nonsense?** If so, run a self-test by sending the TEST command.

a. If the instrument self-tests correctly and the data read over the IEEE 488 bus is the same as that seen on the XYZ monitor, the fault may lie on the Data Buffer (A20), the Data Memory (A18), or the Memory Control board (A16), in that order of probability.

b. If the instrument fails self-test, the problem probably lies on the Data Memory or Memory Control boards.

c. If the instrument passes self-test, but the data read over the IEEE 488 bus is different than that displayed on the XYZ monitor, the fault probably lies on the IEEE 488 Interface or the Memory Control board.

## Corrective Maintenance

Corrective maintenance consists of component replacement and instrument repair. Special techniques required to replace components and assemblies are given here.

### Obtaining Replacement Parts

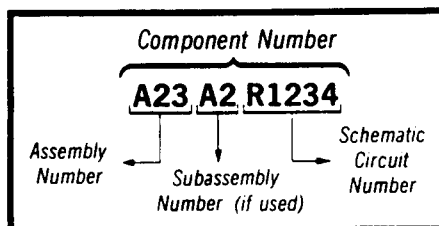
**Standard Parts.** Most electrical and mechanical parts can be obtained through your local Tektronix field office or representative. However, you should be able to obtain many of the standard electronic components from a local commercial source. Before you purchase a part from a source other than Tektronix, check the electrical parts list for the proper value, rating tolerance and description.

Order all special parts directly from your local Tektronix Field Office or representative.

**Ordering Parts.** When ordering replacement parts from Tektronix, Inc., include the following information:

- 1) Instrument Type.
- 2) Instrument Serial Number.
- 3) A description of the part (if electrical, include circuit number found in the Replaceable Electrical Parts list - Section 7).

### COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

- 4) TEKTRONIX Part Number.

**Soldering Techniques****WARNING**

Disconnect the instrument from the power source before soldering.

**Circuit Boards.** The components mounted on the circuit boards in the 7912AD can be replaced using normal circuit-board soldering techniques. Keep the following points in mind when soldering on the circuit boards:

- 1) Use a pencil-type soldering iron with a wattage rating from 15 to 50 watts.
- 2) Apply heat from the soldering iron to the junction between the component and the circuit board.
- 3) Heat-shunt the lead to the component by using a pair of long-nose pliers.
- 4) Avoid excessive heating of the junction with the circuit board, as this could separate the circuit board wiring from the base material.
- 5) Use only 60-40 rosin core, electronic grade solder.
- 6) Clip off any excess lead length extending beyond the circuit board. Clean off any residual flux with a flux-removing solvent.

**Metal Terminals.** When soldering metal terminals use 60-40 tin-lead solder and a 15 to 50 watt soldering iron. Observe the following precautions when soldering metal terminals:

- 1) Apply only enough heat to make the solder flow freely.
- 2) Apply only enough solder to form a solid connection. Excess solder may impair the function of the part.
- 3) If a wire extends beyond the solder joint, clip off the excess.
- 4) Clean the flux from the solder joint with a flux-removing solvent.

**Microprocessor Operating System Firmware**

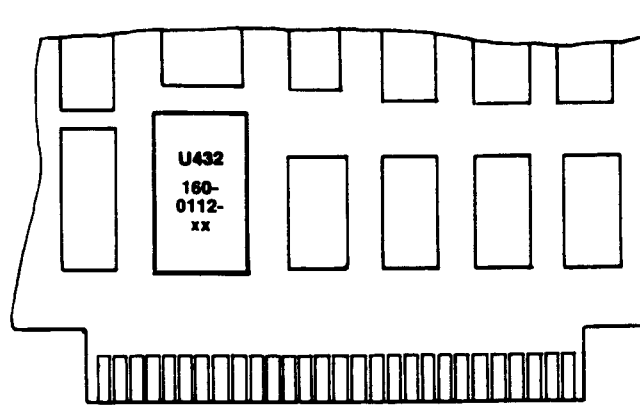
Operating systems for the 6800 MPU and 2900 memory controller are contained in firmware. To determine the operating system installed, query the 7912AD with the ID? command. The response ends with FXX.YY where XX is the 6800 MPU firmware version number and YY is the 2900 memory controller firmware version number. The PROM locations are shown on Figs. 4-16 and 4-17. The value of the XX suffix shown on the part numbers may vary with the version number.

**6800 Version 1.** The following part-numbered PROMs contain the 6800 MPU operating system, version 1:

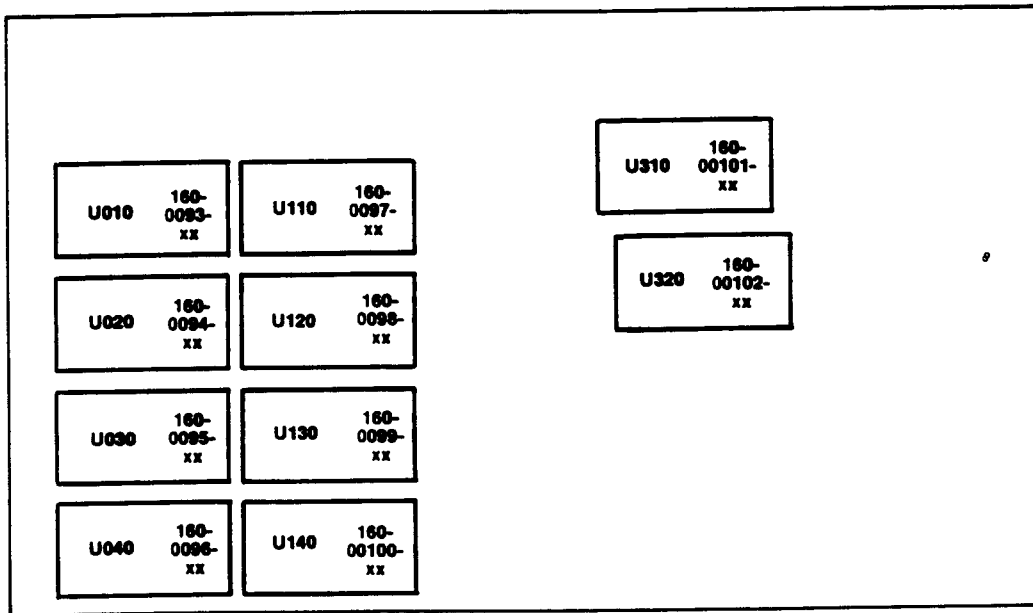
|                          |      |             |
|--------------------------|------|-------------|
| MPU Memory (A52)         | U010 | 160-0093-01 |
|                          | U020 | 160-0094-01 |
|                          | U030 | 160-0095-01 |
|                          | U040 | 160-0096-01 |
|                          | U110 | 160-0097-01 |
|                          | U120 | 160-0098-01 |
|                          | U130 | 160-0099-01 |
|                          | U140 | 160-0100-01 |
|                          | U310 | 160-0101-01 |
|                          | U320 | 160-0102-01 |
| IEEE 488 Interface (A56) | U432 | 160-0112-01 |

**2900 Version 1.** The following part-numbered PROMs contain the 2900 memory controller microcode and microsequencer control PROM on the Memory Control board and the 2900 constant PROMs on the Data Memory board:

|                         |       |             |
|-------------------------|-------|-------------|
| Memory Controller (A16) | U321  | 160-0083-01 |
|                         | U421  | 160-0085-01 |
|                         | U423  | 160-0084-01 |
|                         | U425  | 160-0092-01 |
|                         | U521  | 160-0089-01 |
|                         | U523  | 160-0088-01 |
|                         | U621  | 160-0091-01 |
|                         | U623  | 160-0093-01 |
|                         | U723  | 160-0087-01 |
|                         | U821  | 160-0086-01 |
| Data Memory (A18)       | U1302 | 160-0109-01 |
|                         | U1312 | 160-0108-00 |



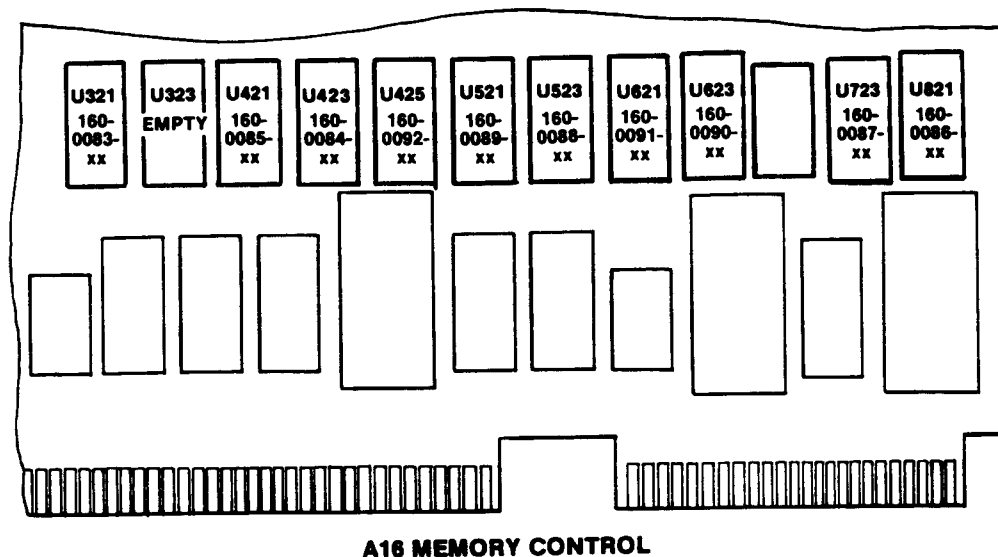
A56 IEEE INTERFACE



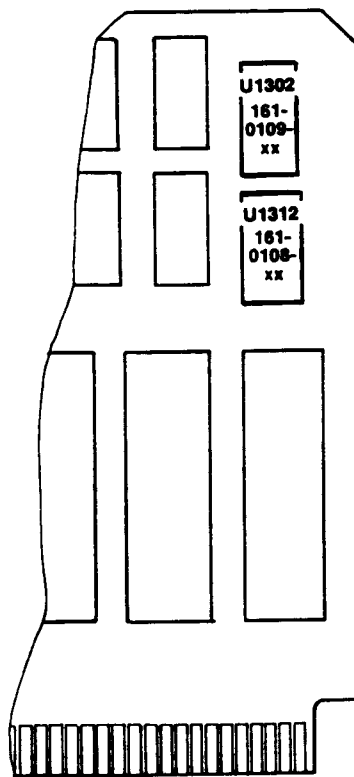
A52 MPU MEMORY

2385-31

Fig. 4-16. Location of PROMs in the 6800 operating system.



A16 MEMORY CONTROL



A18 DATA MEMORY

2385-32

Fig. 4-17. Location of PROMs in the 2900 memory controller operating s

## Changing the Power Supply

### Removing the Power Supply:

1. Turn off the PRINCIPAL POWER SWITCH.
2. Disconnect the power cord.
3. Remove the top cover of the 7912AD.
4. Disconnect the ground wire from the post on top of the chassis near the XYZ outputs.
5. Remove the screws at the corners of the power supply rear panel.
6. Slide the power supply back an inch or so.
7. Unplug the four power supply wire bundles from the Power Connector board (A62).
8. Slide the power supply out of the 7912AD chassis.

**CAUTION**

Allow several minutes for the input filter capacitors to discharge before removing the power supply covers.

### Installing the Power Supply:

1. Check that the PRINCIPAL POWER SWITCH is off.
2. Check that the power cord is disconnected.
3. Check the power supply loads for proper resistances. Use a Triplet model 630 N-A VOM or equivalent. Remove the plug-ins and the right-side cover of the 7912AD. (All test points are on the SCAN AMP and READING GUN board (A38) shown on Fig. 7-51 in the diagrams section. Connect the VOM to the points indicated in Table 4-1.) The measurements in the REVERSE column can be made by changing the +/- switch on the VOM to (-).



TABLE 4-1

| Power Supply Resistances |             |             |            |                     |          |
|--------------------------|-------------|-------------|------------|---------------------|----------|
| POWER SUPPLY             | METER RANGE | METER LEADS |            | APPROXIMATE READING |          |
|                          |             | -COM        | V-Ω-A      | NORMAL              | REVERSE  |
| +365                     | X1000       | TP538       | P032-pin 1 | 26K ohms            | 45K ohms |
| +130                     | X1000       | TP538       | P526-pin 8 | 8K ohms             | 10K ohms |
| +50                      | X100        | TP538       | P526-pin 6 | 440 ohms            | 440 ohms |
| +15                      | X100        | TP538       | P526-pin 5 | 95 ohms             | 95 ohms  |
| +5                       | X100        | TP538       | P526-pin 4 | 55 ohms             | 55 ohms  |
| -15                      | X100        | TP538       | P526-pin 2 | 100 ohms            | 100 ohms |
| -50                      | X100        | TP538       | P526-pin 1 | 1000 ohms           | 710 ohms |

4. Insert the power supply partially into the 7912AD chassis, leading the four wiring bundles in so as to avoid pinching the wires.
5. Connect the four wire bundles to the Power Connector board (A62). The connectors are of different sizes to prevent mix-up and are keyed with arrowheads on the board and on the connector to indicate pin 1.
6. Insert the power supply fully, but carefully to avoid pinching the wires.
7. Connect the ground wire (green-yellow) to the post with the ground (safety earth) symbol near the XYZ outputs. Connect with a nut and integral lockwasher on top of the nut already on the post to secure the chassis.
8. Reinstall the four screws at the corners of the power supply rear panel.
9. Connect the power cord.
10. Turn on the PRINCIPAL POWER SWITCH.

**Power Supply Maintenance Adjustments**

If power supply components are replaced that will affect the main inverter or fan circuits, the following adjustments should be made. These adjustments are preset at the factory and need not be changed unless power supply components are replaced.

**Adjusting the Inverter Frequency:** The inverter frequency is set as follows while observing the ripple frequency.

1. Turn off the PRINCIPAL POWER SWITCH and disconnect the line cord.
2. Remove both plug-ins from the mainframe.
2. Set the 7912AD on its left side and remove the top and bottom covers.
4. Connect the vertical input of a test oscilloscope to TP604 on the Power Connector board (A62 - see Fig. 7-35 in the diagrams section). Connect the oscilloscope probe ground wire to chassis ground.
5. Set the oscilloscope input to AC coupling and a vertical deflection factor of 50 millivolts/division.
6. Reconnect the AC line cord and turn on the PRINCIPAL POWER SWITCH.



**CAUTION**

Dangerous voltages exist at several points in the instrument. Do not touch any exposed parts while the AC line cord is connected.

7. Power up the 7912AD.
8. Change the oscilloscope volts/division for approximately four divisions of vertical deflection.

9. Adjust R052 on the Inverter board (A82) for approximately 25 microseconds between major spikes.

10. Remove the oscilloscope probe and turn the 7912AD off.

**Adjusting the Fan Voltage:** The fan voltage is adjusted as follows to assure ventilation at low-line voltages.

1. Turn the 7912AD PRINCIPAL POWER SWITCH off and disconnect the line cord.

2. Remove the power supply as discussed in **Removing the Power Supply**.

3. Wait several minutes for the power supply capacitors to discharge.

**CAUTION**

The power supply input capacitors remain charged for several minutes after the power is disconnected. Allow the capacitors to discharge for several minutes before removing the covers. Use caution when working around these capacitors.

4. Remove the five screws holding the power supply cover and slide the power supply out of the cover.

5. Set a book or some other insulation on top of the shield at the rear of the 7912AD chassis and set the power supply on the book.

6. Reconnect the power supply cables to the power connector board. Connect the power supply ground wire to the post on top of the chassis near the XYZ outputs.

7. Connect a digital voltmeter such as the TEKTRONIX DM502 to pins 1 and 3 of P328 (Shown in Fig. 7-36 in the Diagrams section).

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8. Set the digital voltmeter to AC volts on the 200 volt range.
9. Connect the AC line cord from the power supply to a variable transformer and adjust the input line voltage to 90 volts.
10. Turn on the PRINIPAL POWER SWITCH and power up the 7912AD.
11. Adjust R124 for 108 volts on the digital voltmeter. This adjustment ensures that the fan voltage will be high enough for good cooling even at low line voltages.
12. Turn the 7912AD off and disconnect the digital voltmeter.
13. Turn the PRINCIPAL POWER SWITCH off and disconnect the line cord.
14. Allow the power supply capacitors several minutes to discharge before replacing the power supply covers.
15. Disconnect the power supply cables from the Power Connector board (A62) and disconnect the ground wire from the lug on top of the 7912AD chassis.
16. Replace the power supply covers and reinstall the power supply as discussed in **Installing the Power Supply**.

### Changing the 10KV Assembly - A74

#### Removing the Assembly:

1. Disconnect the power cord.

**WARNING**

Be certain power to the instrument is removed before proceeding.

2. Place the instrument on its left side.
3. Remove the top, bottom and right side covers.

4. Remove the small CRT shield side cover, near the rear of the CRT shield. Use a non-magnetized screwdriver to loosen the screws, but don't remove them completely.
5. Remove the CRT rear cover by removing the three small Phillips-head screws. Do not remove the capnuts.
6. Remove the high voltage cover on the bottom of the instrument. Save the cable clamps and hardware.
7. Unplug the CRT rear socket and remove the plastic cover over the socket.
8. Unsolder the two brown wires from pins 1 and 14 (heater leads) from the socket.
9. Refer to Fig. 7-52 and Disconnect the green connector from P842 and P844 on the Horizontal and Z-Axis Amp board (A40). Notice that the arrow on the connector goes toward P842. Disconnect the red connector, P542, the yellow connector, P644, and the orange connector, P642, from the Horizontal and Z-Axis Amp board (A40).
10. Disconnect the black connector, P204, from the H.V. Oscillator board, (A72).
11. Unsolder the two bare leads from the high-voltage transformer at the 10KV assembly (A74).
12. Pull the 10KV assembly from its mounting bracket. Carefully free the CRT socket and cables from the chassis and remove the 10KV assembly.

#### **Installing the 10KV Assembly:**

13. Install the replacement 10KV assembly in the mounting bracket, routing the wires so that they are not crimped as the assembly is pressed into place. The terminal lugs on the assembly should be facing the high-voltage transformer.
14. Route the black/gray-on-white coaxial cable between the chassis flanges that support the 10KV assembly and the CRT. Connect the black connector to P204 on the HV Oscillator board (A72). Be sure to align the arrows on the plug and board (see Fig. 7-59).

15. Refer to Fig. 7-52 and route the gray shielded wire up to the Horizontal and Z-Axis Amplifier (A40) and connect the red connector to P542. Be sure the arrows on the plug and board line up.

16. Route the ribbon cable up to the Horizontal and Z-Axis board.

- a. Connect the orange connector to P642
- b. Connect the yellow connector to P644
- c. Connect the green connector to P842

Be sure the arrow on each connector lines up with the corresponding arrow on the board.

17. Solder the brown (cathode heater) wires to pins 1 and 14 of the CRT socket in either order.

18. Replace the plastic cover on the CRT socket and connect the socket to the CRT plug.

19. Solder the bare wires from the high-voltage transformer to the terminals on the 10KV assembly.

20. Replace the high voltage cover and cable clamps.

21. Replace the CRT rear cover.

22. Replace the small CRT shield using a non-magnetized screwdriver.

### Changing the Scan Converter Tube (CRT)

#### Removing the Scan Converter Tube.

1. Disconnect the AC power cord at the rear of the instrument.

**WARNING**

Be certain power to the instrument is removed before proceeding.

2. Set the instrument on its left side. Remove the top, right-side, and bottom covers.

3. Loosen the two screws on the top of the CRT shield at the rear of the scan converter tube and remove the small cover on the shield.
4. Remove the rear-panel CRT cover marked with the high-voltage symbol. Do not remove the cap nuts - remove 3 screws only.
5. Unplug the socket from the rear of the CRT.
6. Disconnect wires and cables leading to the Vertical Amplifier board (A34); the board is shown in Fig. 7-49 in the Diagrams section. Remove the screws that hold the board and remove the screw that holds the terminal strip in front of the board. Remove the board carefully, detaching the two wires beneath the board from the CRT connecting pins. Handle the board carefully so the two wires soldered to the bottom of the board are not damaged.
7. Remove the black cover on the Video Preamplifier (A32). Unscrew the posts and remove the board carefully, detaching the wire beneath the board from the CRT connecting pin. Handle the board carefully so the wire soldered to the bottom of the board is not damaged.
8. Refer to Fig. 7-48 and tuck the black-on-white coaxial cable from J1955 on the Video Preamp board (A32) through the chassis hole and inside the CRT shield.
9. Pull the orange-on-white wire from the CRT connecting pin.
10. Unsolder the black wire from the terminal lug under the Video Preamp board (A32). Push the wire through the chassis hole and tuck the wire into the CRT shield.
11. Unplug the red-on-white and brown-on-white wires coming from the small terminal strips at the rear of the Video Preamp (A32).

**CAUTION**

Use a nonmagnetic screwdriver to remove shield mounting screws and shield fasteners to avoid magnetizing the shield. All shield mounting screws and shield fastener screws are non-magnetic and should be saved to reinstall the CRT.

12. Remove the two top shield fasteners one at a time by loosening the screw while holding the fastener and then pulling it out. Use caution to avoid dropping the fastener inside the chassis.

13. Remove the four CRT shield mounting screws.
14. Unscrew the eight mounting screws on the front panel and remove the panel. The panel can be moved out of the way without disconnecting any wires.
15. Disconnect the socket on the front of the CRT.
16. Refer to Fig. 7-51 in the diagrams section. Disconnect the blue connector (P006) and the green connector (P040) on the Scan Amplifier and Read Gun Supply board (A38). These wires lead from the front of the CRT. Tuck the wires inside the CRT shield.
17. Disconnect the black connector attached to three wires leading from the front of the CRT; tuck it inside the CRT shield.
18. Disconnect from the right side of the CRT the two wires that lead from the Horizontal and Z-Axis Amplifier board (A40) See Fig. 7-52.
19. Disconnect the three wires that connect to the bottom of the CRT close to the vertical amplifier termination.
20. Disconnect from the CRT the two enameled wires that lead from the vertical amplifier termination on the bottom of the CRT.
21. Remove the bottom shield fastener by loosening the screw while holding the fastener and then pulling it out. Use caution to avoid dropping the fastener inside the chassis.
22. Remove the screws from the cover over the high voltage section-the H-V Oscillator board (A72) and the 10 KV assembly (A74).
23. Slide the cover down and forward and remove it. Be careful not to damage the wiring harness.
24. Unsolder the leads at the 10KV assembly (A74) coming from the high-voltage transformer.
25. Remove the two nuts on the posts holding the high-voltage transformer and move it enough to expose the shield mounting screw beneath the transformer.
26. Remove the four mounting screws on the bottom of the CRT shield.



27. Check that all wires attached to the CRT remain tucked inside the shield.

**WARNING**

Handle the scan converter tube carefully. Wear protective clothing and safety glasses when removing or holding the tube. Do not attempt to remove the metal CRT shield around the scan converter tube.

28. Grasp the front of the scan converter tube shield; rotate slightly back and forth, pulling moderately. Work the tube out of the chassis from the front using care so as not to snag any wires or hardware as the tube is removed.

**Installing the Scan Converter Tube.**

29. Check that the AC power is disconnected from the rear of the instrument. The instrument should be on its left side with the top, right, and bottom covers removed.

30. Note the target voltage on the label at the rear of the tube to use during recalibration that is needed after a new scan converter tube is installed.

31. Tuck all wires inside the scan converter tube shield.

32. Insert the scan converter tube from the front of the instrument. Work the tube into position, rotating it slightly as necessary so the screws clear as it is inserted. The tube must end in position with four holes exposed on the top and two holes exposed in the bottom of the shield.

33. Fish out the wires tucked inside the tube shield so they extend from the front of the tube and through the holes in the tube shield. Three groups of wires are tucked into the front of the shield: a group with a blue connector, a group with a green connector, and a group with a black connector. A black-on-white coaxial cable is tucked inside the front hole on the top of the CRT shield. A black wire is tucked inside the next hole back on the top of the CRT shield.

**CAUTION**

Use a nonmagnetic screwdriver to install shield mounting screws and shield fasteners to avoid magnetizing the shield. Use the nonmagnetic screws removed from the 7912AD when the scan converter tube was removed.

34. Install the four screws that hold the bottom of the CRT shield. Do not tighten the screws. If necessary, unsolder the wires at the 10KV assembly (A74) coming from the high-voltage transformer and remove the nuts on the high-voltage transformer mounting posts to move the high-voltage transformer out of the way.

35. Install the four screws that hold the top of the CRT. Do not tighten the screws.

36. Install the bottom shield fastener and the two top shield fasteners, holding each fastener in place and tightening the screw in the fastener enough to hold it in place. Use caution to avoid dropping the fastener inside the chassis.

37. Tighten the screws installed in steps 34 through 36. If the high-voltage transformer was moved in step 34, replace it and resolder the leads.

38. Replace the cover over the high-voltage section including the cable clamps to hold the wire bundle.

39. Connect the two enameled wires to the CRT that lead from the vertical amplifier termination strip.

40. Connect the three wires to the pins at the bottom of the CRT close to the vertical amplifier termination strip. The orange-on-white wire goes to the top pin (when the instrument is on its left side). The yellow-on-white wire goes to the center pin and the green-on-white goes to the bottom pin.

41. Connect the two horizontal output amplifier wires to the CRT pins close to where the wires attach to the Horizontal and Z-Axis Amplifier (A40) on the right side of the instrument.

42. Connect the blue connector leading from the front of the CRT to P006 on the Scan Amplifier and Read Gun Supply board (A38) See Fig. 7-51.

43. Connect the green connector leading from the front of the CRT to P040 on the Scan Amplifier and Read Gun Supply board (A38).

44. Connect the black connector leading from the front of the CRT to the black connector leading from P661 on the Main Interconnect board (A68). Key the connectors so the red wire connects to the brown-on-white.

45. Connect the socket to the front of the CRT.

46. Install the front panel and replace the eight screws that hold it in place.

47. Solder the black wire leading from the CRT to the rear (ground) lug of the terminal strip under the Video Preamp board (A32). Make sure the other lug is not touching the tube shield.

48. Connect the orange-on-white wire to the CRT connecting pin near it.

49. Connect the red-on-white wire coming from the terminal strip behind the Video Preamp board (A32) to the top CRT connecting pin nearby. Connect the brown-on-white wire to the lower CRT pin.

50. Reinstall the Video Preamplifier board (A32) by attaching the wire beneath it to the CRT connecting pin. Make sure the wiring under the board is not pinched or touching other parts. Then replace the four posts that hold the board in place.

51. Reconnect the wires and cables leading to the Video preamplifier board (A32) See Fig. 7-48. These include black-on-white coaxial cable leading from the top of the CRT; it attaches to J1955 at the top-right corner of the board (when the instrument is on its left side). A single red-on-white (white-red) wire leading from the CRT front socket attaches to J1945, the single pin at the top-center of the board. The red connector P1997 attached to the five pins on the left edge of the board. Be sure to align the arrows on the board and plug. The brown-on-white coaxial cable connects to J1994 at the lower-left corner of the board.

52. Reinstall the Vertical Amplifier board (A34) by attaching the two wires connected to the solder side of the board to the CRT connecting pins beneath the board. Place the board over the two spacer bars along each side of the board. Then replace the screws and nuts that hold the bars and board in place. Reinstall the screw that holds the terminal strip and metal bar in front of the vertical amplifier board.

53. Refer to Fig. 7-49 and reconnect the wires leading to the Vertical Amplifier board (A34):

a. Connect the red-on-white cable to the center plug of the three plugs at the upper-left corner (with the instrument sitting on its left side) of the board (P690).

b. Connect the red two-pin harmonica connector (P780) to the two pins at top-center of the board. Be sure to align the arrows on the plug and the board.

c. Connect the five-pin black harmonica connector (P794) to the pins at the lower-left corner of the board. Be sure to align the arrows on the board and connector.

d. Connect the blue coaxial cable to J660 near the center of the board.

e. Connect the black-on-blue coaxial cable to J661 at the bottom-center of the board.

54. Replace the black cover on the Video Preamplifier board (A32), being careful not to pinch any of the wires that lead under the cover.

55. Plug the CRT rear socket onto the rear of the CRT.

56. Replace the rear panel CRT cover marked with the high-voltage symbol.

57. Replace the small cover on the rear of the CRT shield and tighten the two screws that hold it in place.

58. Disconnect the three pin harmonica connector, P212, from the High-Voltage Oscillator board (A72 - Fig. 7-59). This disables the high-voltage section to protect the CRT from damage.

59. Set R602, Grid Bias, on the Horizontal and Z-Axis Amp board (A40) to minimum. On most instruments the adjustment should be set fully clockwise. If you are in doubt, measure the resistance between the +50V1 supply and the wiper of R602 as follows:

a. Connect the Lo lead of the DM 501 digital multimeter to the lead of the 0.1 microfarad capacitor, C602, that is closest to R602. (Refer to Fig. 7-59 for the locations of these components).

b. Connect the Hi lead of the multimeter to the lead of the 22-ohm resistor, R502, that is closest to R602.

c. Set the multimeter to the 200-Ohms range.

d. Adjust R602, Grid Bias for zero ohms on the multimeter.

e. Remove the multimeter leads.

60. Perform the calibration procedure in Section 5 beginning at the **Read Gun** heading.

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### REPACKAGING FOR SHIPMENT

If the Tektronix instrument is to be shipped to a Tektronix Service Center for service or repair, attach a tag showing: owner (with address) and the name of an individual at your firm that can be contacted. Include complete instrument serial number and a description of the service required.

Save and re-use the package in which your instrument was shipped. If the original packaging is unfit for use or not available, repackage the instrument as follows:

Surround the instrument with polyethylene sheeting to protect the finish of the instrument. Obtain a carton of corrugated cardboard of the correct carton strength and having inside dimensions of no less than six inches more than the instrument dimensions. Cushion the instrument by tightly packing three inches of dunnage or urethane foam between carton and instrument, on all sides. Seal carton with shipping tape or industrial stapler.

The carton test strength for your instrument is 375 pounds.

**SECTION 5****CALIBRATION****INTRODUCTION**

The 7912AD calibration procedure provides instructions to check the instrument and adjust it, if necessary, for specified performance. Perform this procedure after every 1,000 hours of operation or every six months if the instrument is used infrequently to assure full system performance with any of the recommended 7912AD plug-ins. Steps that check Performance Requirements listed in the specifications (Section 1) are marked by a  $\checkmark$ .

A partial calibration may be required any time components are replaced. Perform all of the steps under a subheading such as **Power Supply** or **Read Gun** if any of the steps is to be performed. To avoid unnecessary recalibration of other parts of the instrument, readjust only if the tolerance given in the check part of the step is not met. After readjustment, check the calibration of any steps listed in the interaction part of the step (if any).

Test limits apply to the standard instrument, except as noted for Option 13.

**Required Test Equipment**

The test equipment required to perform the calibration procedure is listed in Table 5-1. All equipment used must be correctly calibrated and operating within its specifications.

Instructions in the calibration procedure assume the use of the recommended equipment in Table 5-1. Other equipment may be used for some steps if its performance is equivalent. For instance, the TEKTRONIX 465 Oscilloscope may serve in place of the recommended 7704A Oscilloscope for all steps requiring a test oscilloscope except where special plug-ins are required. Usually, the instructions are general enough to apply to the substituted equipment. However, where a particular piece of equipment is required for the procedure to work, the instructions are written specifically for that equipment.

Calibration fixtures, adapters, cables, and connectors are available from Tektronix, Inc. Order by part number through your local Tektronix Field Office or representative.

### **Programmable Functions**

Although this procedure checks the instrument for specified performance it does not check programmable functions. If your 7912AD was purchased as part of a system (WP, AD, etc.) Checkout Software (CP56003 or CP56004) is supplied as a standard accessory. See the checkout software manual for instructions.

When purchasing the 7912AD alone, the checkout software is available as an optional accessory. Contact your Tektronix Sales Representative for information.



TABLE 5-1

## REQUIRED TEST EQUIPMENT

| Description                 | Minimum Specifications  | Recommended Equipment   |
|-----------------------------|---|---|
| Amplifier plug-in           | 500 megahertz, 10 millivolt minimum sensitivity   | TEKTRONIX 7A19 Amplifier; other 7000-series amplifiers may be used for some steps   |
| Time base plug-in           | 0.5 nanosecond fastest sweep rate, triggering to 500 megahertz  | TEKTRONIX 7B92A Dual Time base; 7B90P Programmable Time Base may be used for some steps   |
| Signal standardizer plug-in | Pulse, continuous wave, and gain functions  | TEKTRONIX part number 067-0587-02   |
| Plug-in extender            | Provide access to trigger signals   | TEKTRONIX part number 067-0589-01 -- used only for trigger buffer steps   |
| Test oscilloscope           | 75 megahertz bandwidth dual-trace with minimum deflection factor of 5 mV/div, delayed sweep, 1 megohm input impedance, and 4 plug-in compartments | <p>a. TEKTRONIX 7704A Oscilloscope with 7A26 Dual Trace Amplifier, 7A13 Differential Comparator, 7B85 Delaying Time Base, 7B80 Delayed Time Base, and three P106 or P6053B 10X probes</p> <p>b. TEKTRONIX 485 Oscilloscope</p> <p>c. Refer to TEKTRONIX Products Catalog for compatible equipment</p> |

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TABLE 5-1 (cont.)

| Description                     | Minimum Specifications  | Recommended Equipment  |
|---------------------------------|---|--|
| 7912AD Calibration Kit          | Calibration Aid signal source and connectors  | TEKTRONIX part number 067-0854-00  |
| TV monitor                      | Video input   | TEKTRONIX 634 or 632 Picture Monitor   |
| Display monitor                 | XYZ inputs, high-resolution storage   | TEKTRONIX 607 Storage Monitor  |
| Digital multimeter              | 400 volt range, 0.1% basic accuracy   | TEKTRONIX DM501 Digital Multimeter (DM502 can be used with less resolution requires TM 500 power module) |
| Time mark generator             | 0.1% accuracy with markers from 10 milliseconds to 1 nanosecond                     | TEKTRONIX TG501 Time Mark Generator; requires TM500 power module   |
| Sine wave generator             | 250-500 megahertz with 6 megahertz reference frequency                              | TEKTRONIX SG504 Leveled Sine Wave Generator; requires TM500 power module                                 |
| Function generator              | Square wave and sine wave outputs, 1 megahertz frequency range, up to 5 volt output | TEKTRONIX 501 Function Generator; requires TM500 power module  |
| Coaxial cable                   | 50-ohm, 42 inches, BNC connectors   | TEKTRONIX part number 012-0057-01; five required   |
| High voltage digital multimeter | 10 kV voltage range, 1% accuracy  | Valhalla 4500 H.V. Digital Multimeter with HVL 15 kV H.V. test lead set                                  |

TABLE 5-1 (cont.)

| Description    | Minimum Specifications   | Recommended Equipment  |
|----------------|--|--|
| Coaxial cable  | 50-ohm, 18 inches, BNC and BSM connectors -- FG501 external trig out cable | TEKTRONIX part number 012-0127-00; required                        |
| Coaxial cable  | 75-ohm, 42 inches, BNC connectors  | TEKTRONIX part number 012-0074-00; two required                    |
| Adapter        | BNC to dual-banana plugs   | TEKTRONIX part number 103-0090-00                                  |
| Connector      | T, BNC connectors  | TEKTRONIX part number 103-0030-00; two required                    |
| Attenuator     | 5X, 50-ohm, BNC connectors   | TEKTRONIX part number 011-0060-02                                  |
| Attenuator     | 10X, 50-ohm, BNC connectors  | TEKTRONIX part number 011-0059-02                                  |
| Terminator     | 50-ohm, feedthrough, BNC connectors  | TEKTRONIX part number 011-0049-01; two required                    |
| Terminator     | 75-ohm, feedthrough, BNC connectors  | TEKTRONIX part number 011-0055-00; two required                    |
| Alignment tool | Tool with extension handle   | TEKTRONIX part numbers 003-0497-00 (tool) and 003-0307-00 (handle) |
| Alignment tool | JFD Adjustment Tool 5284   | TEKTRONIX part number 003-0489-00                                  |

**Preliminary Instructions**

1. Before starting, thoroughly clean and inspect the 7912AD.
2. Allow a 20-minute warm-up and operate the 7912AD at an ambient temperature of +20 to +30 degrees C while calibrating.
3. Remove 7912AD covers only as necessary and replace them as soon as possible. With the covers off, air is not routed through the instrument properly, causing some parts to overheat.
4. AC line voltage connected to the 7912AD power cord should be at the nominal voltage selected on the rear panel. If not, use a variable transformer to obtain the voltage selected -- take care that the safety-earth ground path is preserved so that the instrument chassis is still connected directly to ground through the power cord.
5. Turn off power when removing or installing plug-ins, then allow a short time for the 7912AD to stabilize when turned back on.
6. 7912AD front and rear-panel controls and connectors are spelled and capitalized in this procedure as they appear on the instrument.
7. Leave the TV monitor and XYZ monitor connected throughout the procedure. Do not disconnect except when directed to connect the 7912AD output to other instruments.
8. Leave MAIN INTENSITY and GRATICULE INTENSITY set to minimum unless instructed to increase them or when it is necessary to write on the target to view a waveform or the graticule.
9. Because the 7912AD powers on in TV and LOCAL modes, no instructions are given to set it to these modes at power-up. Instructions are given in this procedure only where needed to change the 7912AD operating modes.
10. Adjust the test oscilloscope front-panel gain and sweep calibration and the compensation of all probes before beginning and at any point in the procedure where the plug-ins or probes are changed.

**CALIBRATION PROCEDURE****Power Supply****Required Equipment**

Amplifier plug-in  
 Time base plug-in  
 Digital multimeter

**Setup**

- a. With power off, install the plug-ins:

|            |           |
|------------|-----------|
| VERTICAL   | Amplifier |
| HORIZONTAL | Time base |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Power supply test points are shown in the Diagrams section:

|                                |           |
|--------------------------------|-----------|
| Power Connector<br>board (A62) | Fig. 7-57 |
| Inverter board (A82)           | Fig. 7-61 |
| Regulator board (A88)          | Fig. 7-62 |

**1. +5.1 V check/adjust**

- a. Set the digital multimeter for:

|       |             |
|-------|-------------|
| Range | 20 volts DC |
|-------|-------------|

- b. Connect the digital multimeter leads on the Power Connector board (A62):

|    |                  |
|----|------------------|
| Lo | TP504, Com S TP  |
| Hi | TP502, +5.1 S TP |

- c. CHECK - Multimeter reads +5.100 volts  $\pm 0.010$  volt.

d. ADJUST - R010, +5.1 V, on the Inverter board (A82). It can be reached through a hole in the top cover of the power supply next to the Vertical Amplifier board (A34).

e. INTERACTION - Adjusting +5.1 V changes the raw supply for the other power supplies. Therefore, perform steps 2 and 3 if R010, +5.1 V, on the Inverter board (A82) is changed.

## 2. -50 V check/adjust

a. Set the digital multimeter for:

|        |               |
|--------|---------------|
| Range: | 200 volts, DC |
|--------|---------------|

b. Connect the digital multimeter leads on the Power Connector board (A62):

|    |                 |
|----|-----------------|
| Lo | TP904, Gnd 4 TP |
| Hi | TP906, -50 S TP |

c. CHECK - That the digital multimeter reads -50.00 volts,  $\pm 0.10$  volt.

d. ADJUST - R508, -50 V, on the Regulator board (A88). It can be reached through a hole in the top cover of the power supply located near where the multimeter leads are connected.

e. INTERACTION - If R508, -50 V, on the Regulator board (A88) is changed, other supplies referenced to it (-15 V, +5 V, +15 V, etc.) must be checked. Any change in the -50 volt supply may also affect the operation of many other circuits in the 7912AD and plug-ins.

## 3. Power supply voltages check

a. Connect the digital multimeter on the Power Connector board (A62) as directed in the CHECK step, setting the meter to the given range.

b. CHECK - For the following voltage readings within the indicated tolerance:

## 7912AD SERVICE

| METER<br>RANGE | METER LEADS       |                    | READING       | TOLERANCE         |
|----------------|-------------------|--------------------|---------------|-------------------|
|                | LO                | HI                 |               |                   |
| 20 volts DC    | TP904<br>Gnd 4 TP | TP908<br>-15 S TP  | -15.000 volts | $\pm 0.090$ volts |
| 20 volts DC    | TP904<br>Gnd 4 TP | TP902<br>+5 S TP   | +5.000 volts  | $\pm 0.050$ volts |
| 20 volts DC    | TP904<br>Gnd 4 TP | TP702<br>+15 S TP  | +15.000 volts | $\pm 0.090$ volts |
| 200 volts DC   | TP904<br>Gnd 4 TP | TP704<br>+50 S TP  | +50.00 volts  | $\pm 0.25$ volts  |
| 200 volts DC   | TP904<br>Gnd 4 TP | TP914<br>130 V     | +130.00 volts | $\pm 1.30$ volts  |
| 1000 volts DC  | TP904<br>Gnd 4 TP | TP912<br>365 V     | +365.0 volts  | $\pm 3.7$ volts   |
| 20 volts DC    | TP504<br>Com S TP | TP614<br>-5.2 S TP | -5.200 volts  | $\pm 0.052$ volts |
| 20 volts DC    | TP504<br>Com S TP | TP506<br>-2 S TP   | -2.000 volts  | $\pm 0.020$ volts |

c. Disconnect meter leads.

**Sync Output****Required Equipment**

Test oscilloscope  
 75-ohm coaxial cable  
 75-ohm terminator

**Setup**

- a. Set the test oscilloscope for:

|                 |                              |
|-----------------|------------------------------|
| Volts/division  | 1 volt                       |
| A time/division | 2 milliseconds               |
| Trigger source  | External                     |
| Trigger slope   | Negative                     |
| B delay mode    | B starts after delay         |
| Delay time      | Approximately 5 milliseconds |
| B time/division | 10 microseconds              |

- b. Connect the test oscilloscope for:

|              |   |
|--------------|---|
| Amplifier in | 7912AD SYNC OUT through a 75-ohm coaxial cable and 75-ohm terminator at amplifier input |
|--------------|---|

|               |  |
|---------------|--|
| A ext trig in | TP302 on the Video Processor and Scan Control board (A28) through 10X probe. The test point is shown on Fig. 7-16 in the Diagrams section. |
|---------------|--|

✓ 4. **SYNC OUT amplitude check**

- a. Set the test oscilloscope for:

|                 |   |
|-----------------|---|
| Horizontal mode | A |
|-----------------|---|



✓ 5. SYNC OUT timing check

- a. Change the test oscilloscope for:

Horizontal mode                                 B

- b. CHECK - The period of the SYNC OUT waveform is approximately 64 microseconds.

- c. Change the test oscilloscope for:

B time/division                                 5 microseconds

- d. CHECK - The pulse width is approximately 4 microseconds.

- e. Change the test oscilloscope for:

B time/division                                 0.2 milliseconds  
Delay time   Approximately 7 milliseconds

- f. CHECK - For 18 serration pulses with a period equal to one-half that of the surrounding sync pulses. The serration pulse train is six narrow, six wide, and then six narrow pulses, all negative polarity.

- g. Disconnect the test oscilloscope.

**Ramp Bias****Required Equipment**

Test oscilloscope

**Setup**

- a. Set the test oscilloscope for:

|                   |  |
|-------------------|--|
| Volts/division    | 5 millivolts (50 millivolts<br>at probe tip) |
| Vertical position | Graticule center                             |
| Input coupling    | DC   |
| Time/division     | 50 microseconds                              |
| Trigger mode      | Automatic                                    |

- b. Ramp bias test points and adjustments are shown in the Diagrams section:

|                                     |           |
|-------------------------------------|-----------|
| X & Y Ramp Generator<br>board (A26) | Fig. 7-46 |
|-------------------------------------|-----------|

**6. Y ramp bias check/adjust**

- a. Establish a ground reference level on the test oscilloscope display.
- b. Connect the test oscilloscope to the X Y & Ramp Generator board (A26):

|                 |                         |
|-----------------|-------------------------|
| Amplifier input | TP600 through 10X probe |
|-----------------|-------------------------|

- c. CHECK - Test oscilloscope deflection is no more than  $\pm 10$  millivolts (0.2 division) from the ground reference.

- d. ADJUST - R604, Bias Level, on the X & Y Ramp Generator board (A26) to set the test oscilloscope trace to the ground reference level.

**7. X ramp bias check/adjust**

a. Change the test oscilloscope connection on the X & Y Ramp Generator board (A26):

Amplifier input

TP602 through 10X probe

b. CHECK - Test oscilloscope deflection is no more than  $\pm 10$  millivolts (0.2 division) from the ground reference.

c. ADJUST - R634, Bias Level, on the X & Y Ramp Generator board (A26) to set the test oscilloscope trace to the ground reference level.

d. Disconnect the test oscilloscope.

**Y Ramp****Required Equipment**

Test oscilloscope including 7A13 Differential Comparator plug-in

**Setup**

- a. The following plug-ins are required in the test oscilloscope:

|                |                              |
|----------------|------------------------------|
| Left vertical  | Amplifier                    |
| Right vertical | 7A13 Differential Comparator |
| A horizontal   | Delaying time base           |
| B horizontal   | Delayed time base            |

- b. Set the test oscilloscope for:

|                       |   |
|-----------------------|---|
| Left volts/division   | 0.1 volt (1 volt at probe tip)  |
| 7A13 volts/division   | 50 millivolts (500 millivolts at probe tips)  |
| 7A13 + input          | DC  |
| 7A13 - input          | V <sub>c</sub>  |
| 7A13 comparison volts | +205 volts -- pull out variable knob (without 10X probe with readout encoder, comparison volts reads low by a factor of 10) |
| Vertical mode         | Chop  |
| A time/division       | 2 milliseconds  |
| A trigger source      | Internal, left vertical   |
| A trigger slope       | Positive  |
| B delay mode          | B starts after delay  |
| Delay time            | 0.5 milliseconds  |
| B time/division       | 0.2 milliseconds  |
| B trigger mode        | Automatic   |
| Horizontal mode       | B   |

- c. While pressing the 7A13 V<sub>c</sub> reference button, set the test oscilloscope right vertical trace to graticule center with the 7A13 position control.

d. Y ramp test points and adjustments are shown in the Diagrams section:

|  |           |
|--|-----------|
| X & Y Ramp Generator board (A26)           | Fig. 7-46 |
| Video Processor & Scan Control board (A28) | Fig. 7-47 |
| Scan Amp & Read Gun Supply board (A38)     | Fig. 7-51 |

### 8. Y ramp gain check/adjust

a. Connect the test oscilloscope left vertical plug-in to the Video Processor & Scan Control board (A28) for:

|                 |  |
|-----------------|--|
| Amplifier input | TP212 (vertical blanking), VB, through 10X probe |
|-----------------|--|

b. Connect the 7A13 to the Scan Amp & Read Gun Supply board (A38) for:

|         |  |
|---------|--|
| + input | P108 (or end of R108, the 49.9 kilohm resistor just below) through 10X probe |
| - input | P122 (or end of R120, the 49.9 kilohm resistor just above) through 10X probe |

c. Set the B time base position control to center the negative transition of the vertical blanking pulse (connected to left vertical plug-in).

d. The ramp may appear as a series of dashed lines. If not visible, bring it on screen by varying the comparison voltage.

e. Detune R1442, X Scan Rotation, on the X & Y Ramp Generator board (A26) to obtain best straight-line ramp. This adjustment is at the bottom-front of the board and requires the alignment tool and extension handle called out in the calibration equipment list at the beginning of this section.

f. Set 7A13 comparison voltage so the ramp crosses graticule center on the test oscilloscope; the ramp vertical center should coincide with the blanking pulse transition as shown in Fig. 5-1.

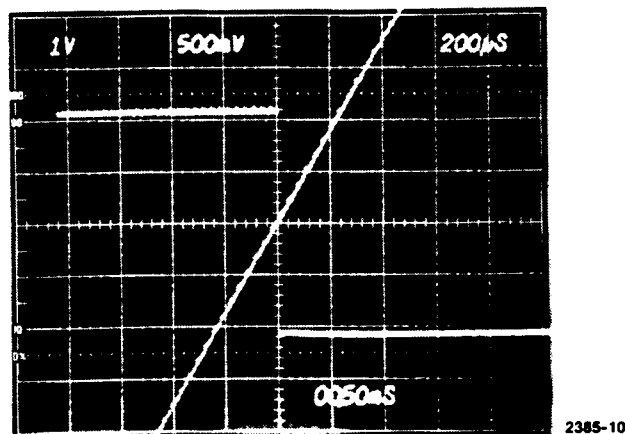


Fig. 5-1. Y ramp start.

- g. Record the test oscilloscope comparison voltage and delay time.
- h. Increase the delay time to center the rising edge of the next vertical blanking pulse -- approximately 15.9 milliseconds (18.9 milliseconds for option 13).
- i. Again note the delay time.
- j. Increase the 7A13 comparison voltage so the ramp is again centered on the graticule (increase approximately 69.5 volts).
- k. CHECK - The 7A13 comparison voltage should equal the voltage recorded above plus 69.5 volts  $\pm 3.5$  volts as shown in Fig. 5-2.
- l. ADJUST - R1000, Y Gain, on the X & Y Ramp Generator board (A26) to center the ramp on the graticule with the 7A13 comparison voltage set to the reading recorded above plus 69.5 volts.
- m. INTERACTION - If R1000, Y Gain, on the X & Y Ramp Generator board (A26) is changed, reset the delay time to 0.5 milliseconds and repeat this step. If R1442, X Scan Rotation, on the X & Y Ramp Generator board was changed, the X scan rotation adjust step must be performed.

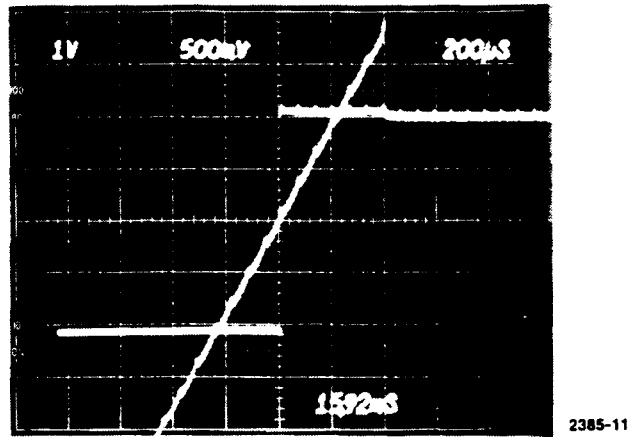


Fig. 5-2. Y ramp end.

#### 9. Y ramp centering check/adjust

a. Compute the delay time to the center of the ramp by finding the difference between the two delay times noted in the last step (Y ramp gain), dividing by two, and adding the result to the first delay time noted.

b. Change the test oscilloscope for:

|              |                               |
|--------------|-------------------------------|
| 7A13 - input | DC                            |
| Delay time   | Center of ramp computed above |

c. CHECK - Without moving the B time base position control, that the ramp crosses graticule center  $\pm 0.5$  division horizontally.

d. ADJUST - R900, Y Centering, on the X & Y Ramp Generator board (A26) so the ramp crosses graticule center.

## 10. Y ramp common mode check/adjust

- a. Change the test oscilloscope for:

|                       |            |
|-----------------------|------------|
| 7A13 - input          | Vc         |
| 7A13 comparison volts | +244 volts |

b. CHECK - that the ramp crosses graticule center within 0.2 division horizontally.

c. ADJUST - R508, Y Com Mode, on the Scan Amp & Read Gun Supply board (A38) so the ramp crosses graticule center.

- d. Change the test oscilloscope for:

|              |    |
|--------------|----|
| 7A13 + input | Vc |
| 7A13 - input | DC |

e. CHECK - that the ramp crosses graticule center within 0.2 division horizontally.

f. ADJUST - R508, Y Com Mode, on the Scan Amp & Read Gun Supply board (A38) so the ramp crosses graticule center.

g. INTERACTION - Repeat this step until both checks are successful.

- h. Disconnect test oscilloscope probes.



**X Ramp****Required Equipment**

Test oscilloscope including 7A13 Differential Comparator plug-in

**Setup**

- a. The following plug-ins are required in the test oscilloscope:

|                |                              |
|----------------|------------------------------|
| Left vertical  | Amplifier                    |
| Right vertical | 7A13 Differential Comparator |
| A horizontal   | Delaying time base           |
| B horizontal   | Delayed time base            |

- b. Set the test oscilloscope for:

|                       |  |
|-----------------------|--|
| Left volts/division   | 0.1 volt (1 volt at probe tip)               |
| 7A13 volts/division   | 50 millivolts (500 millivolts at probe tips) |
| 7A13 + input          | DC   |
| 7A13 - input          | Vc   |
| 7A13 comparison volts | +195 volts                                   |
| Vertical mode         | Chop   |
| A time/division       | 20 microseconds                              |
| A trigger source      | Internal, left vertical                      |
| A trigger slope       | Positive                                     |
| B delay mode          | B starts after delay                         |
| Delay time            | 5 microseconds                               |
| B time/division       | 2 microseconds                               |
| B trigger mode        | Automatic                                    |
| Horizontal mode       | B  |

c. While pressing the 7A13 Vc reference button, set the test oscilloscope right vertical trace to graticule center with the 7A13 position control.

d. X ramp test points and adjustments are shown in the Diagrams section:

|   |           |
|---|-----------|
| X & Y Ramp Generator<br>board (A26)           | Fig. 7-46 |
| Video Processor & Scan<br>Control board (A28) | Fig. 7-47 |
| Scan Amp & Read<br>Supply board (A38)         | Fig. 7-51 |

### 11. X ramp gain check/adjust

a. Connect the test oscilloscope left vertical plug-in to the Video Processor & Scan Control board (A28) for:

|                 |   |
|-----------------|---|
| Amplifier input | TP210, HB (horizontal blanking),<br>through 10X probe |
|-----------------|---|

b. Connect the 7A13 to the Scan Amp & Read Gun Supply board (A38) for:

|         |  |
|---------|--|
| + input | P126 (or end of R128, the 49.9<br>kilohm resistor just below)<br>through 10X probe |
|---------|--|

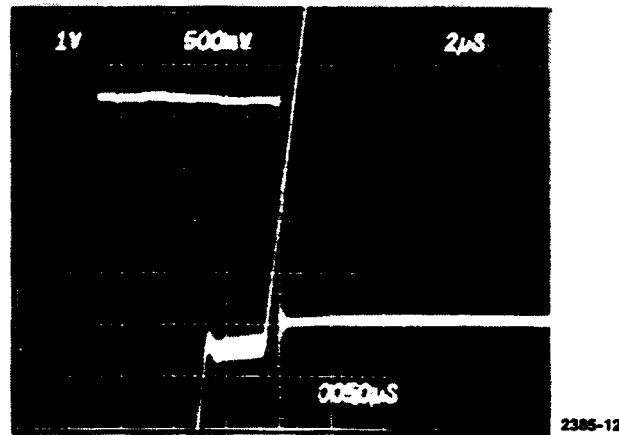
|         |  |
|---------|--|
| - input | P142 (or end of R140, the 49.9<br>kilohm resistor just above)<br>through 10X probe |
|---------|--|

c. Set the B time base position control to center the negative transition of the horizontal blanking pulse (connected to the left vertical plug-in).

d. The ramp may appear as a series of dashed lines. If not visible, bring it on screen by varying the comparison voltage.

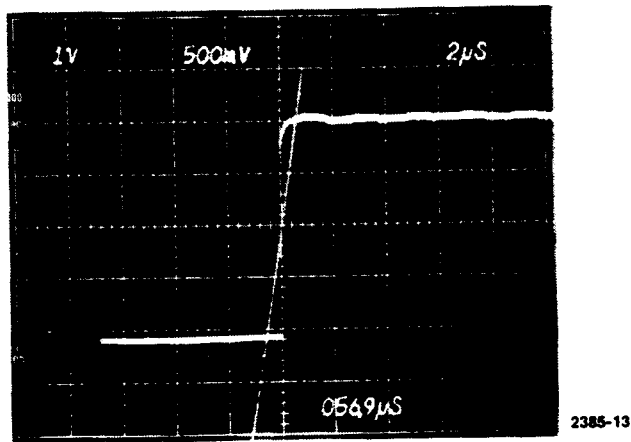
e. Detune R1414, Y Scan Rotation, on the X & Y Ramp Generator board (A26) to obtain the best straight-line ramp.

f. Set the 7A13 comparison voltage so the ramp crosses graticule center on the test oscilloscope; the ramp vertical center should coincide with the blanking pulse transition as shown in Fig. 5-3.



**Fig. 5-3. X ramp start.**

- g. Record the test oscilloscope comparison voltage and delay time.
- h. Increase the delay time to center the rising edge of the next horizontal blanking pulse -- (approximately 57 microseconds).
- i. Again note the delay time.
- j. Increase the 7A13 comparison voltage so the ramp again crosses graticule center (increase approximately 93 volts).
- k. CHECK - The 7A13 comparison voltage should equal the voltage recorded above, plus 93 volts  $\pm 4.65$  volts, as shown in Fig. 5-4.
- l. ADJUST - R1032, X Gain, on the X & Y Ramp Generator board (A26) to center the ramp on the graticule with the 7A13 comparison voltage set to the reading recorded above plus 93 volts.
- m. INTERACTION - If R1032, X Gain, on the X & Y Ramp Generator board (A26) is changed, reset the delay time to 5 microseconds and repeat this step. If R1414, Y Scan Rotation, on the X & Y Ramp Generator board (A26) was changed, the Y scan rotation check/adjust step must be performed.



**Fig. 5-4. X ramp end.**

## 12. X ramp centering check/adjust

a. Compute the delay time to the center of the X ramp by finding the difference between the two delay times notes in the last step (X ramp gain), dividing by two, and adding the result to the first delay time noted.

b. Change the test oscilloscope for:

|              |                               |
|--------------|-------------------------------|
| 7A13 - input | DC                            |
| Delay time   | Center of ramp computed above |

c. CHECK - Without moving the B time base position control, that the ramp crosses graticule center  $\pm 0.5$  division horizontally.

d. ADJUST - R930, X Centering, on the X & Y Ramp Generator board (A26) so the ramp crosses the graticule center.

**13. X ramp common mode check/adjust**

- a. Change the test oscilloscope for:

|                       |            |
|-----------------------|------------|
| 7A13 - input          | Vc         |
| 7A13 comparison volts | +244 volts |

b. CHECK - That the ramp crosses graticule center within 0.2 division horizontally.

c. ADJUST - R528, X Com Mode, on the Scan Amp & Read Gun Supply board (A38) so the ramp crosses graticule center.

- d. Change the test oscilloscope for:

|              |    |
|--------------|----|
| 7A13 + input | Vc |
| 7A13 - input | DC |

e. CHECK - That the ramp crosses graticule center within 0.2 division horizontally.

f. ADJUST - R528, X Com Mode, on the Scan Amp & Read Gun Supply board (A38) so the ramp crosses graticule center.

g. INTERACTION - Repeat this step until both checks are successful.

- h. Disconnect test oscilloscope probes.

**14. Y ramp compensation adjust**

- a. Change the 7912AD for:

|      |         |
|------|---------|
| MODE | DIGITAL |
|------|---------|

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- b. Change the test oscilloscope for:

|                 |   |
|-----------------|---|
| Volts/division  | 20 millivolts (200 millivolts at probe tip) |
| Vertical mode   | Single trace                                |
| Time/division   | 2 microseconds                              |
| Trigger source  | External                                    |
| Trigger slope   | Positive                                    |
| Trigger level   | Midrange                                    |
| Horizontal mode | Undelayed (independent)                     |

- c. Connect the test oscilloscope for:

|                     |   |
|---------------------|---|
| Amplifier input     | TP600 on the Video Processor & Scan Control board (A28) through 10X probe |
| External trigger in | TP700 on the X & Y Ramp Generator board (A26) through 10X probe           |

- d. Change the test oscilloscope for:

|               |                 |
|---------------|-----------------|
| Time/division | 0.5 microsecond |
| Trigger slope | Negative        |

e. ADJUST - R018 and C012 on the Scan Amp & Read Gun Supply board (A38) for minimum positive and negative aberrations following the trailing (negative) edge of the vertical blanking pulse riding on the video displayed on the test oscilloscope.

- f. Disconnect the test oscilloscope.

**Read Gun****Required Equipment**

TV monitor  
 Digital multimeter  
 Coaxial cables, 75-ohm (2)  
 75-ohm feedthrough terminators, BNC connectors (2)

**Setup**

a. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

b. Connect the TV monitor to the 7912AD with 75-ohm coaxial cables, terminating inputs in 75 ohms:

|             |                       |
|-------------|-----------------------|
| Video input | LINEAR COMP VIDEO OUT |
| Sync input  | SYNC OUT              |

c. Set the digital multimeter for:

|       |               |
|-------|---------------|
| Range | 1 kilovolt DC |
|-------|---------------|

d. Read Gun test points and adjustments are shown in the Diagrams section:

|  |           |
|--|-----------|
| Scan Amp & Read Gun Supply board (A38) | Fig. 7-51 |
|--|-----------|

**15. Read gun anode voltage check/adjust**

a. Connect the digital multimeter to the Scan Amp & Read Gun Supply board (A38) between:

|    |                |
|----|----------------|
| Lo | TP538 (ground) |
| Hi | TP506          |

b. CHECK - The digital multimeter reads +259.0 volts  $\pm 1.0$  volt.

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c. ADJUST - R2602, Anode, on the Scan Amp & Read Gun Supply board (A38) for a digital multimeter reading of 259.0 volts.

d. Disconnect the digital multimeter.

### 16. Read gun X & Y alignment adjust

a. Turn off 7912AD power and disconnect P006 on the Scan Amp & Read Gun Supply board (A38). Rotate P006 180 degrees and plug it back onto the circuit board connector so the arrow does not align with the arrow on the circuit board.

b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

c. ADJUST - R632, Y Alignment, and R732, X Alignment, for a bright, sharp, well-defined ring around the edge of the TV monitor display. Concentrate on adjusting for a high-contrast ring and disregard the other features of the display.

d. Turn off 7912AD power and disconnect P006 on the Scan Amp & Read Gun Supply board (A38). Return P006 to its original position so its arrow and the arrow on the circuit board are aligned.

e. Turn 7912AD power back on.

### 17. Read gun cathode voltage check/adjust

a. Change the digital multimeter for:

|       |             |
|-------|-------------|
| Range | 20 volts DC |
|-------|-------------|

b. Connect the digital multimeter leads to the Scan Amp & Read Gun Supply board (A38) between:

|    |              |
|----|--------------|
| Lo | TP738, $I_k$ |
| Hi | TP838, $I_k$ |

c. CHECK - The digital multimeter reads -3.750 volts  $\pm 0.180$  volt, (-5 V when an additional sticker, located on the Read Gun of the crt, indicates = 1.0 mA).



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- d. ADJUST - R728, Cathode Current ( $I_k$ ), on the Scan Amp & Read Gun Supply board (A38) for a digital multimeter reading of -3.750 volts, (-500 V when an additional sticker, located on the Read Gun of the crt, indicates  $I_k = 1.0$  mA).
  
- e. Disconnect the digital multimeter.

## Video Preamp

### Required Equipment

Test oscilloscope  
Digital multimeter  
7912AD Calibration Kit

### Setup

- a. Turn off 7912AD power.

**CAUTION**

Do not use magnetized tools when working near the scan converter tube. Magnetizing the tube shield would degrade instrument performance.

- b. Remove the black metal shield over the Video Preamplifier board (A32).
- c. Remove the side cover from the rear of the scan converter tube shield and note the target level voltage written on the tube label. Replace the side cover on the shield.
- d. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.
- e. Video preamplifier test points and adjustments are shown in the Diagrams section:

|  |           |
|--|-----------|
| Video Processor & Scan Control board (A28) | Fig. 7-47 |
| Video Preamplifier board (A32)             | Fig. 7-48 |

- f. Connect the short jumper supplied in the 7912AD Calibration Kit between J1946 and J1956 on the Video Preamplifier board (A32).

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g. Disconnect 9-1 (white-brown) coax from J1994 on the Video Preamplifier board (A32).

h. Set the Calibration Aid supplied in the 7912AD Calibration Kit for:

|                          |        |
|--------------------------|--------|
| Video calibration switch | Preamp |
|--------------------------|--------|

i. Connect the Calibration Aid to the 7912AD:

|                       |   |
|-----------------------|---|
| Cal                   | On the Video Processor & Scan Control board (A28) through the BNC-to-clip-lead adapter with the red clip to TP302, 500 kHz, and the black clip to TP708, Gnd. |
| Probe power           | PROBE POWER   |
| Video calibration out | J1947 on the Video Preamplifier board (A32) through coax with BNC and Tektronix connectors supplied with 7912AD Calibration Kit.                              |

j. Set the test oscilloscope for:

|                          |                        |
|--------------------------|------------------------|
| Volts/division           | 50 millivolts/division |
| Amplifier input coupling | DC                     |
| Time/division            | 1 microsecond          |
| Triggering               | Internal               |

k. Connect the test oscilloscope to the Video Preamplifier board between:

|                 |  |
|-----------------|--|
| Amplifier input | J1994 through coax with BNC and Tektronix connectors terminating input with 50-ohm feedthrough terminator -- both supplied with 7912AD Calibration Kit |
|-----------------|--|

l. Set the digital multimeter for:

|       |             |
|-------|-------------|
| Range | 20 volts DC |
|-------|-------------|

m. Connect the digital voltmeter to the Video Preamplifier board (A32) between:

|    |                            |
|----|----------------------------|
| Lo | Chassis ground             |
| Hi | End of R1953 nearest R1952 |

### 18. Target level check/adjust

a. CHECK - Digital multimeter reading equal to the target level voltage noted during setup minus six volts (to correct for the cathode potential)  $\pm 1$  percent.

b. ADJUST - R1952, Target Level, on the Video Preamplifier board (A32) for a digital multimeter reading equal to the target level voltage minus six volts.

c. Disconnect the digital multimeter.

### 19. Video preamplifier output level check/adjust

a. Wait for the output level to stabilize -- at least five minutes since turning on the instrument if previously warmed-up.

b. Establish a ground reference on the test oscilloscope display.

c. CHECK - Test oscilloscope display for a waveform centered about the ground reference level  $\pm 10$  millivolts.

d. ADJUST - R1979, Video DC Level, on the Video Preamplifier board (A32) to center the waveform displayed on the test oscilloscope about the ground reference level.

### 20. Video preamplifier gain check

a. CHECK - Test oscilloscope waveform for a peak-to-peak amplitude of 200 millivolts  $\pm 10$  millivolts (4 divisions  $\pm 0.2$  division) measured at the center of the pulse top and bottom levels. This verifies a gain of 10 through the video preamplifier.

**21. Video preamplifier high-frequency compensation check/adjust**

a. Place the Video Preamplifier board (A32) cover upside down on the four metal posts on the board. Bare metal on the cover must contact at least one post. This simulates the normal video preamplifier stray capacitance.

b. CHECK - Positive transition for aberrations no greater than  $\pm 5$  percent (0.2 division) with a rise time less than or equal to  $100 \pm 10$  nanoseconds -- change test oscilloscope time/division as necessary to observe.

c. ADJUST - R1972, Loop Gain, R1977, H.F., and C1976 for best compromise between positive transition aberrations and rise time. If necessary, turn off power and adjust R1957 for best results by unsoldering it, moving it toward or away from the board and resoldering it.

d. Turn off power.

e. Disconnect the test oscilloscope and Calibration Aid.

f. Disconnect the short jumper.

g. Reconnect 9-1 (white-brown) coax to J1994 on the Video Preamplifier board (A32).

h. Replace the black Video Preamplifier board (A32) cover, taking care not to pinch any wires under the cover.

i. Turn 7912AD power back on.

**Video Processor**

**Required Equipment**

Test oscilloscope  
7912AD Calibration Kit  
Coaxial cable, BNC connectors

**Setup**

**NOTE**

The accuracy of the clamp level check is highly dependent upon temperature. Allow the instrument to warm up fully and stabilize -- approximately 2 to 3 hours at the same ambient temperature as expected during normal operation. If necessary, the clamp level can be set as close as possible before a full warm-up and reset after enough time has passed while other parts of the calibration procedure are performed.

- a. Set the 7912AD for:

|                     |         |
|---------------------|---------|
| MAIN INTENSITY      | Minimum |
| GRATICULE INTENSITY | Minimum |

- b. Video processor test points and adjustments are shown in the Diagrams section:

|  |           |
|--|-----------|
| Video processor & Scan Amp board (A28) | Fig. 7-47 |
| Scan Amp & Read Gun Supply board (A38) | Fig. 7-51 |

- c. Set the Calibration Aid supplied with the 7912AD Calibration Kit for:

|                          |                  |
|--------------------------|------------------|
| Video calibration switch | Cathode blanking |
|--------------------------|------------------|

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- d. Connect the Calibration Aid to the 7912AD for:

|                       |  |
|-----------------------|--|
| Sync                  | TP402, Screen Center, on the Video Processor & Scan Control board (A28)  |
| Probe power           | PROBE POWER  |
| Video calibration out | J944 on the Scan Amp & Read Gun Supply board (A38) through coax with BNC and Tektronix connectors supplied with the 7912AD Calibration Kit |

- e. Set the test oscilloscope for:

|                          |   |
|--------------------------|---|
| Volts/division           | 5 millivolts (50 millivolts at probe tip) |
| Amplifier input coupling | DC  |
| Time/division            | 10 microseconds                           |
| Trigger source           | External                                  |
| Trigger slope            | Positive                                  |

- f. Connect the test oscilloscope for:

|                 |   |
|-----------------|---|
| Amplifier input | R940 at the end farther from J944 on the Scan Amp & Read Gun Supply board (A38) through 10X probe |
| Ext trigger in  | Trig out on the Calibration Aid through coaxial cable   |

g. Note the test oscilloscope display baseline level, then move the test oscilloscope amplifier input probe to the end of R940 nearer J944 on the Scan Amp & Read Gun Supply board (A38). Set the Calibration Aid DC level control to restore the baseline to that just noted at the other end of R940.

h. Change the test oscilloscope time base position control to center the blanking pulse on the test oscilloscope graticule.

**22. Clamp level check/adjust**

- a. Change the test oscilloscope input to connect:

|                 |   |
|-----------------|---|
| Amplifier input | TP706 on the Video Processor<br>& Scan Amp board (A28) through<br>a 10X probe |
|-----------------|---|

b. Note the amplitude of the cathode blanking pulse centered on the graticule. The amplitude is typically 75 to 100 millivolts after full warm-up.

- c. Change the test oscilloscope connection for:

|                 |   |
|-----------------|---|
| Amplifier input | TP704 on the Video Processor &<br>Scan Control board (A28) through<br>10X probe |
|-----------------|---|

d. CHECK - The DC level of the test oscilloscope display is equal to the cathode blanking pulse amplitude noted above.

e. ADJUST - R406, Clamp Level, on the Video Processor & Scan Control board (A28) for a test oscilloscope display DC level equal to the cathode blanking pulse amplitude noted above.

f. Disconnect the test oscilloscope and Calibration Aid.

g. INTERACTION - Changing R406, Clamp Level, on the Video Processor & Scan Control board (A28) affects both the DC Schmitt and the CRT grid bias adjustments.

**23. X symmetry and gain (shading) check/adjust**

- a. Change the 7912AD for:

|      |         |
|------|---------|
| MODE | DIGITAL |
|------|---------|



b. Change the test oscilloscope for:

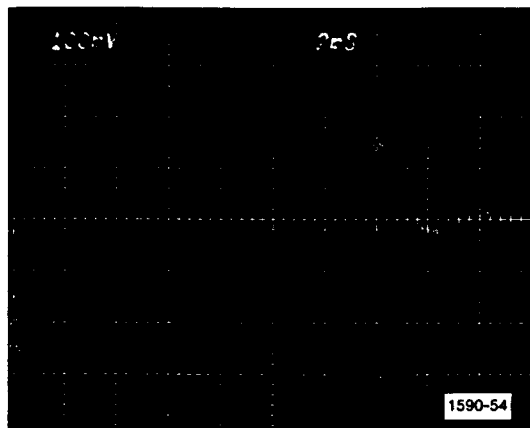
|                 |   |
|-----------------|---|
| Volts/division  | 10 millivolts (100 millivolts at probe tip) |
| Bandwidth limit | On  |
| Time/division   | 2 milliseconds                              |
| Trigger source  | Internal                                    |

c. Connect the test oscilloscope to the Video Processor & Scan Control board (A28) between:

|                 |                         |
|-----------------|-------------------------|
| Amplifier input | TP600 through 10X probe |
|-----------------|-------------------------|

d. Set test oscilloscope triggering controls for a triggered sweep.

e. CHECK - the test oscilloscope display for a flat baseline as shown in Fig. 5-5.



**Fig. 5-5. X symmetry and gain (shading) check display.**

f. ADJUST - R839, X Symmetry, and R904, X Gain, on the Video Processor & Scan Control board (A28) for a flat baseline displayed on the test oscilloscope.

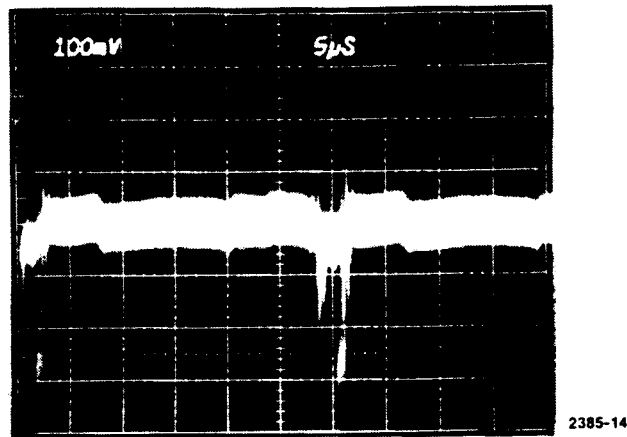
**24. Y symmetry and gain (shading) check/adjust**

- a. Change the test oscilloscope for:

Time/division                      5 microseconds

- b. Reset test oscilloscope triggering controls as necessary for a triggered sweep.

- c. CHECK - Test oscilloscope display for a flat baseline as shown in Fig. 5-6.



**Fig. 5-6. Y symmetry and gain(shading) check display.**

- d. ADJUST - R806, Y Gain, and R832, Y Symmetry, on the Video Processor & Scan Control board (A28) for a flat baseline on the test oscilloscope display.

- e. Disconnect the test oscilloscope.

**Z-Axis****Required Equipment**

Time base plug-in  
 Test oscilloscope

**Setup**

a. Z-axis test points and adjustments are shown in the Diagrams section:

|                       |           |
|-----------------------|-----------|
| Horizontal & Z-Axis   | Fig. 7-52 |
| Amplifier board (A40) |           |
| Main Interconnect     | Fig. 7-58 |
| board (A68)           |           |

b. With 7912AD power off, remove the Graticule Generator board (A24).

c. With 7912AD power off, disconnect P624 on the Main Interconnect board (A68) to disable the high-voltage oscillator, protecting the scan converter target.

d. With 7912AD power off, install the 7912AD plug-in:

|            |           |
|------------|-----------|
| HORIZONTAL | Time base |
|------------|-----------|

e. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

f. Set the time base plug-in for:

|               |                 |
|---------------|-----------------|
| Time/division | 0.1 microsecond |
| Triggering    | Automatic       |

g. Set the test oscilloscope for:

|                |  |
|----------------|--|
| Volts/division | 50 millivolts (500 millivolts<br>at probe tip) |
| Time/division  | 50 nanoseconds/division                        |
| Trigger source | Internal                                       |
| Trigger slope  | Positive                                       |

h. Connect the test oscilloscope to Horizontal & Z-Axis Amplifier board (A40) between:

|                 |                         |
|-----------------|-------------------------|
| Amplifier input | TP838 through 10X probe |
|-----------------|-------------------------|

## 25. Z-axis transient response check/adjust

a. Increase MAIN INTENSITY for an unblanking pulse amplitude of six divisions as displayed on the test oscilloscope.

b. CHECK - for a slightly peaked positive transition with aberrations no greater than  $\pm 2$  percent (0.12 division) and a rise time of 16 nanoseconds or less as shown in Fig. 5-7. Change time/division as necessary to view rise time.

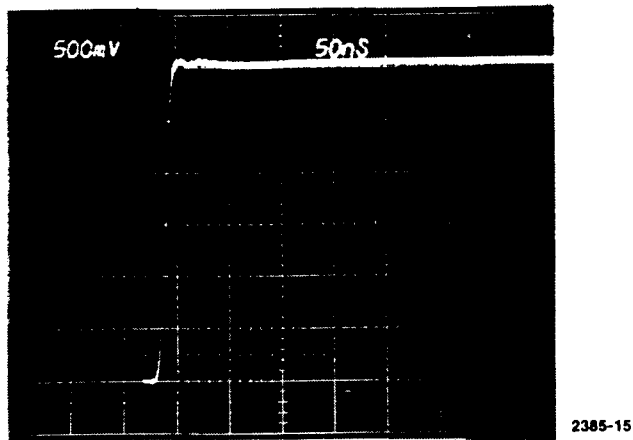


Fig. 5-7. Z-axis transient response display.

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- c. ADJUST - R812, Z Comp, C808, and C818 on the Horizontal & Z-Axis board (A40) for a slightly peaked positive transition with aberrations no greater than  $\pm 2$  percent (0.12 division) and a rise time of 16 nanoseconds or less.
- d. Disconnect the test oscilloscope.
- e. Turn off 7912AD power and reconnect P624 on the Main Interconnect board (A68) to restore high-voltage drive.
- f. With power off, reinstall the Graticule Generator board (A24).

## 7912AD SERVICE

### 10KV

#### Required Equipment

High voltage digital multimeter  
High voltage test lead set  
Test oscilloscope

#### Setup

- a. Set the digital multimeter for:

|       |                 |
|-------|-----------------|
| Range | 10 kilovolts DC |
|-------|-----------------|

- b. 10 KV test points and adjustments are shown in the Diagrams section:

|                                   |           |
|-----------------------------------|-----------|
| Video Preamplifier<br>board (A32) | Fig. 7-48 |
|-----------------------------------|-----------|

|                                     |           |
|-------------------------------------|-----------|
| Scan Amp & Read Gun<br>Supply (A38) | Fig. 7-51 |
|-------------------------------------|-----------|

|                               |           |
|-------------------------------|-----------|
| High-Voltage Oscillator (A72) | Fig. 7-59 |
|-------------------------------|-----------|

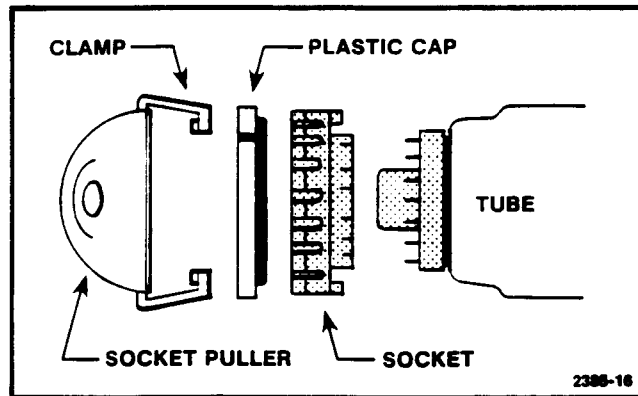
|  |           |
|--|-----------|
| Horizontal & Z-Axis<br>Amplifier board (A40) | Fig. 7-10 |
|--|-----------|

|                                  |           |
|----------------------------------|-----------|
| Main Interconnect<br>board (A68) | Fig. 7-41 |
|----------------------------------|-----------|

#### 26. -10 kilovolts check/adjust

- a. With power off, set the PRINCIPAL POWER SWITCH to off and unplug the 7912AD power cord.
- b. Loosen the two screws at the top of the crt shield toward the rear of the instrument and remove the side cover from the rear of the crt shield.
- c. Remove the rear-panel crt shield marked "Danger 10 KV", unscrewing the three phillips-head screws that hold it in place.
- d. Disconnect the crt socket and disassemble it as shown in Fig. 5-8.

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**Fig. 5-8. The scan converter crt socket.**

- e. Connect the high-voltage digital multimeter test leads to chassis ground and to pin 2 of the crt socket (the pins are numbered on the socket).
- f. Reconnect the crt socket to the tube pins.
- g. If P624 on the Main Interconnect board (A68) or P212 on the High-Voltage Oscillator board (A72) was disconnected to remove the high voltage drive, reconnect it.
- h. Reconnect the 7912AD power cord, turn on the PRINCIPAL POWER SWITCH, and turn on 7912AD power with MAIN INTENSITY and GRATICULE INTENSITY set to minimum.
- i. CHECK - The digital multimeter reads -10.00 kilovolts  $\pm 0.10$  kilovolt.
- j. ADJUST - R618, High Voltage, on the Horizontal & Z-Axis Amplifier board (A40) for a digital multimeter reading of -10.00 kilovolts.
- k. Turn off 7912AD power, turn off the PRINCIPAL POWER SWITCH and unplug the power cord.
- l. Note that the digital multimeter reading has decayed to zero, then remove the high voltage test lead, reassemble the tube socket and plug it back onto the crt pins.

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m. Replace the rear-panel crt shield and side cover at the rear of the crt shield. Check that the bottom of the crt side cover does not contact the back of the Horizontal & Z-Axis Amplifier board (A40).

n. Reconnect the power cord and return PRINCIPAL POWER SWITCH to on.

o. INTERACTION - Changing R618, High Voltage, on the Horizontal & Z-Axis Amplifier board (A40) affects the crt grid bias adjust step.



**Intensity Limits****Required Equipment**

Time base plug-in  
 Test oscilloscope  
 Time mark generator  
 Coaxial cable, 50-ohm  
 50-ohm feedthrough terminator, BNC connectors

**Setup**

a. Intensity limit test points and adjustments are shown in the Diagrams section:

|  |           |
|--|-----------|
| Translator board (A22)                       | Fig. 7-44 |
| Plug-in Interface<br>board (A46)             | Fig. 7-54 |
| Horizontal & Z-Axis<br>Amplifier board (A40) | Fig. 7-52 |
| Main Interconnect board (A68)                | Fig. 7-58 |

b. With 7912AD power off, disconnect P624 on the Main Interconnect board (A68) to disable writing gun high voltage.

c. With power off, install the 7912AD plug-in:

|            |           |
|------------|-----------|
| HORIZONTAL | Time base |
|------------|-----------|

d. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

e. Set the time mark generator for:

|        |                 |
|--------|-----------------|
| Marker | 10 milliseconds |
|--------|-----------------|

f. Connect the time mark generator to the time base plug-in between:

|            |                     |
|------------|---------------------|
| Marker out | External trigger in |
|------------|---------------------|

- g. Set the time base plug-in for:

|                |                               |
|----------------|-------------------------------|
| Time/division  | 200 nanoseconds (unmagnified) |
| Trigger source | External                      |
| Trigger level  | Triggered sweep               |

- h. Set the test oscilloscope for:

|                          |                                  |
|--------------------------|----------------------------------|
| Volts/division           | 0.5 volt (5 volts at probe tip)  |
| Amplifier input coupling | DC                               |
| Time/division            | 2 milliseconds                   |
| Trigger source           | Internal                         |
| Trigger slope            | Positive                         |
| Horizontal position      | Trace begins at graticule center |

## 27. Lower intensity limit adjust

- a. Connect the test oscilloscope to the Horizontal and Z-Axis Amplifier board (A40) between:

|                 |  |
|-----------------|--|
| Amplifier input | TP844 (Z-Axis drive signal)<br>through 10X probe |
|-----------------|--|

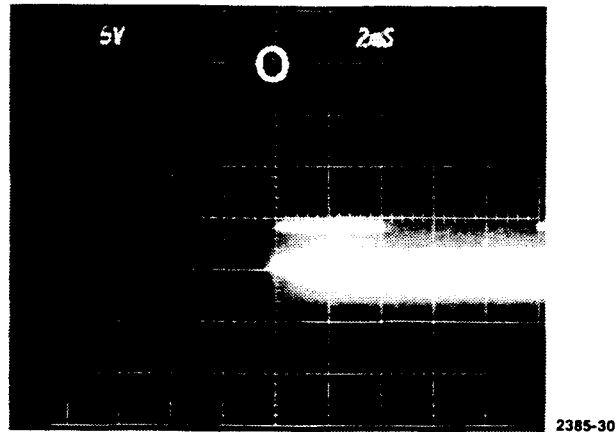
- b. Establish a ground reference on the test oscilloscope: set amplifier input coupling to ground, position the trace one division from the bottom of the graticule, and return the amplifier input coupling to DC.

- c. Wait for the scan converter tube to stabilize -- about five minutes after turn-on, if previously warmed up.

- d. Increase MAIN INTENSITY for an unblanking pulse top 30 volts (6 divisions) above the ground reference level on the test oscilloscope graticule (see Fig. 5-9). The baseline rises about 10 volts for a pulse amplitude of 20 volts, peak-to-peak.

- e. Change the 7912AD time base for:

|               |                             |
|---------------|-----------------------------|
| time/division | 1 millisecond (unmagnified) |
|---------------|-----------------------------|



**Fig. 5-9. Test oscilloscope display for setting lower intensity limit.**

f. ADJUST - R137 on the Plug-In Interface board (A26) so the unblanking pulse top is limited to +23 volts (4.6 divisions) above the ground reference level.

### 28. Upper intensity limit check/adjust

a. Change the 7912AD time base plug-in for:

|               |                               |
|---------------|-------------------------------|
| Time/division | 10 microseconds (unmagnified) |
|---------------|-------------------------------|

b. CHECK - The amplitude of the unblanking pulse displayed at the test oscilloscope graticule center increases as the 7912AD time/division is changed in the following steps:

| FROM            | TO              |
|-----------------|-----------------|
| 10 microseconds | 5 microseconds  |
| 5 microseconds  | 2 microseconds  |
| 2 microseconds  | 1 microsecond   |
| 1 microsecond   | 500 nanoseconds |
| 500 nanoseconds | 200 nanoseconds |

c. ADJUST - R608 on the Translator board (A22) with the 7912AD time/division at 200 nanoseconds so the unblanking pulse top is limited

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to less than 30 volts. Then adjust R608 just past the point where it causes the unblanking pulse amplitude to increase.

- d. Reduce 7912AD MAIN INTENSITY to minimum.

### 29. Analog protect check

- a. Change the time base plug-in for:

|               |               |
|---------------|---------------|
| Time/division | 1 millisecond |
|---------------|---------------|

- b. Increase 7912AD MAIN INTENSITY until the front-panel DECREASE INTENSITY light blinks.

- c. CHECK - Unblanking pulse top is 21.5 volts from ground reference  $\pm 0.5$  volt (4.3 divisions  $\pm 0.1$  division).

- d. Reduce MAIN INTENSITY to minimum.

- e. Disconnect the test oscilloscope and time mark generator.

- f. Turn off 7912AD power and reconnect P624 on the Main Interconnect board (A68).

**Focus****Required Equipment**

Time base plug-in  
 TV monitor  
 Coaxial cables, 75-ohm (2)  
 75-ohm feedthrough terminators, BNC connectors (2)

**Setup**

- a. With power off, install the 7912AD plug-in:

|            |           |
|------------|-----------|
| HORIZONTAL | Time base |
|------------|-----------|

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Connect the TV monitor to the 7912AD with 75-ohm coaxial cables, terminating inputs in 75 ohms:

|             |                       |
|-------------|-----------------------|
| Video input | LINEAR COMP VIDEO OUT |
| Sync input  | SYNC OUT              |

- d. Set the TV monitor for external sync and set brightness and contrast controls for normal viewing.

- e. Set the time base plug-in for:

|               |               |
|---------------|---------------|
| Time/division | 1 microsecond |
| Triggering    | Automatic     |

- f. Focus adjustments are shown in the Diagrams section:

|                       |           |
|-----------------------|-----------|
| Scan Amp & Read Gun   | Fig. 7-51 |
| Supply board (A38)    |           |
| Horizontal & Z-Axis   | Fig. 7-52 |
| Amplifier board (A40) |           |

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### 30. Focus adjust

a. Increase GRATICULE INTENSITY to view the graticule on the TV monitor. If the dots do not appear with adequate intensity within a half-turn of the control, carefully increase R602, CRT Grid Bias, on the Horizontal & Z-Axis Amplifier board (A40) for adequate intensity.

b. ADJUST - (R5002), FOCUS control, on the front panel; (R5210) (for SN B100913 and up), focus centering, on the chassis; R448, Astigmatism, on the Horizontal & Z-Axis Amplifier board (A40), and R804, Mag Focus, and R918, Shield, both on the Scan Amp and Read Gun Supply board (A38) for best focus of graticule dots over the full display. These adjustments interact; repeat as necessary.

c. INTERACTION - These adjustments affect both geometry and writing rate. Also, changing R602, CRT Grid Bias, on the Horizontal & Z-Axis board (A40) affects the CRT grid bias adjust step.

### 31. Geometry adjust

a. ADJUST - R446, Geometry, on the Horizontal and Z-Axis Amplifier board (A40) for straight graticule rows and columns -- adjust for best overall effect to achieve least bowing and expansion or compression over the entire graticule.

**TV Scale Factors**

**Required Equipment**

Amplifier plug-in  
Time base plug-in  
Test oscilloscope  
TV monitor  
Coaxial cables, 75-ohm (2)  
75-ohm feedthrough terminators, BNC connectors (2)

**Setup**

- a. With power off, install the 7912AD plug-ins:

|            |           |
|------------|-----------|
| VERTICAL   | Amplifier |
| HORIZONTAL | Time base |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Connect the TV monitor to the 7912AD with 75-ohm coaxial cables, terminating inputs in 75-ohms:

|             |                       |
|-------------|-----------------------|
| Video input | LINEAR COMP VIDEO OUT |
| Sync input  | SYNC OUT              |

- d. Set the TV monitor for external sync and set brightness and contrast controls for normal viewing.

- e. Turn TV SCALE FACTORS switch to ON.

- f. Set the amplifier volts/division and time base time/division controls to obtain readout with same number of characters.

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- g. The TV scale factors adjustment is shown in the Diagrams section:

|                        |           |
|------------------------|-----------|
| Translator board (A22) | Fig. 7-45 |
| Video Processor & Scan | Fig. 7-47 |
| Control board (A28)    |           |
| MPU board (A54)        | Fig. 7-55 |

### 32. TV scale factors centering check/adjust

a. CHECK - Scale factor readout is approximately centered horizontally on the TV monitor with the amplifier readout on the left and time base readout on the right.

b. ADJUST - R100, R0 Ct, on the Translator board (A22) to approximately center the TV scale factor readout.

### 33. Readout current match check/adjust

a. Press and hold the amplifier plug-in trace-identify button (this requires a probe with an identify button in the case of the 7A16P plug-in).

b. CHECK - Readout display for correct characters in the word IDENTIFY and for a stable display with no blinking.

c. ADJUST - R932 on the MPU board (A54) for correct readout of the word IDENTIFY. Vary the adjustment to find the range that provides correct readout then leave the adjustment at the center of this range.

#### NOTE

For Instrument Serial Numbers B100826 & Up, R932 is a fixed resistor.



**34. TV scale factors intensity check/adjust**

- a. Set the test oscilloscope for:

|                |                |
|----------------|----------------|
| Volts/division | 0.5 volt       |
| Input coupling | DC             |
| Time/division  | 2 milliseconds |
| Trigger source | Internal       |
| Trigger slope  | Positive       |

- b. Connect the test oscilloscope to the 7912AD through 75-ohm coaxial cable, terminating in 75 ohms:

|                 |                  |
|-----------------|------------------|
| Amplifier input | LINEAR VIDEO OUT |
|-----------------|------------------|

- c. Establish a ground reference on the test oscilloscope by noting the level displayed on the graticule with the input grounded.

- d. CHECK - The amplitude of the narrow positive pulses is approximately one volt (two divisions) above the ground reference level.

- e. ADJUST - R504, Readout Gain, on the Video Processor & Scan Control board (A28) for an amplitude of one volt (two divisions) above ground level on the narrow positive pulses.

**Trigger Buffer****Required Equipment**

Signal standardizer plug-in  
 7A19 Amplifier  
 7B92A Time Base  
 Plug-in extender  
 Test oscilloscope  
 Sine wave generator  
 Coaxial cables, BNC connectors (2)  
 50-ohm feedthrough terminators, BNC connectors (2)

**Setup**

- a. With power off, install the 7912AD plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | Plug-in extender    |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Set the signal standardizer for:

|          |               |
|----------|---------------|
| Test     | Com mode      |
| Rep Rate | 100 kilohertz |

- d. Set the test oscilloscope for:

|                     |               |
|---------------------|---------------|
| Ch 1 volts/division | 50 millivolts |
| Ch 2 volts/division | 50 millivolts |
| Ch 1 input coupling | DC            |
| Ch 2 input coupling | DC            |
| Ch 2 polarity       | Inverted      |
| Vert amplifier mode | Add           |
| Time/division       | 1 millisecond |
| Trigger mode        | Automatic     |

- e. Establish a ground reference for oscilloscope display at graticule center.

f. Disconnect the plug-in extender coaxial cables at A20 and B20 connectors on the plug-in extender.

g. Connect the test oscilloscope to the plug-in extender with coaxial cables, terminating inputs in 50 ohms:

|                      |                        |
|----------------------|------------------------|
| Ch 1 amplifier input | A20 (+ trigger output) |
| Ch 2 amplifier input | B20 (- trigger output) |

h. The trigger buffer adjustment is shown in the Diagrams section:

|                                  |           |
|----------------------------------|-----------|
| Plug-in Interface<br>board (A46) | Fig. 7-54 |
|----------------------------------|-----------|

### 35. Trigger buffer centering check/adjust

a. CHECK - Test oscilloscope deflection from ground reference is no greater than  $\pm 25$  millivolts (0.5 division).

b. ADJUST - R414 on the Plug-In Interface board (A46) to set the test oscilloscope trace to the ground reference level.

### 36. Trigger buffer gain check

a. Change the signal standardizer plug-in for:

|          |  |
|----------|--|
| Test     | Triggering gain                                    |
| Position | Center bright line on test oscilloscope<br>Display |

b. CHECK - The gain lines match the test oscilloscope graticule within 0.15 division at three divisions above and below graticule center.

c. Disconnect the test oscilloscope.

**37. Trigger buffer bandwidth check**

- a. With power off, change the 7912AD plug-ins for:

|            |                 |
|------------|-----------------|
| VERTICAL   | 7A19 Amplifier  |
| HORIZONTAL | 7B92A Time Base |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Set the 7A19 for:

|                |           |
|----------------|-----------|
| Volts/division | 0.5 volts |
|----------------|-----------|

- d. Set the sine wave generator for:

|           |                                     |
|-----------|-------------------------------------|
| Amplitude | 0.5 volts peak-to-peak into 50 ohms |
| Frequency | 500 megahertz                       |

- e. Connect the sine wave generator to the 7912AD between:

|        |                         |
|--------|-------------------------|
| Output | Amplifier plug-in input |
|--------|-------------------------|

- f. CHECK - That the 7B92A triggering controls can be set for an internally triggered sweep (triggered indicator lights).

- g. Disconnect the sine wave generator.

## Video Processor Comparator

### Required Equipment

Signal standardizer plug-in  
 Time base plug-in  
 Test oscilloscope

### Setup

- a. With power off, install the 7912AD plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | Time base           |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum. turn on 7912AD power.

- c. Set the test oscilloscope for:

|                     |  |
|---------------------|--|
| Ch 1 volts/division | 20 millivolts (200 millivolts<br>at probe tip) |
| Ch 2 volts/division | 0.1 volt (1 volt at probe tip)                 |
| Ch 2 Polarity       | + Up   |
| Vert amplifier mode | Alternate                                      |
| Time/division       | 5 microseconds                                 |
| Trigger source      | Internal, channel 1                            |

- d. Video processor comparator test points and adjustments are shown in the Diagrams section:

|   |           |
|---|-----------|
| Video Processor & Scan<br>Control board (A28) | Fig. 7-47 |
|---|-----------|

- e. Connect the test oscilloscope to the Video Processor and Scan Control board (A28) for:

|                      |                                |
|----------------------|--------------------------------|
| Ch 1 amplifier input | TP600 through 10X probe        |
| Ch 2 amplifier input | TP702, S.V., through 10X probe |

f. Set the 7912AD for:

MODE

DIGITAL

### 38. DC Schmitt check/adjust

a. Increase MAIN INTENSITY for a video pulse amplitude of 400 millivolts (two divisions) above the baseline on the channel 1 trace. The video pulse is detected from the common mode baseline written on the target and occurs on the test oscilloscope display midway between the higher pulses caused by blanking. On Fig. 5-10, the video pulse detected from the target can be seen at two points -- about midway between graticule center and the graticule edges.

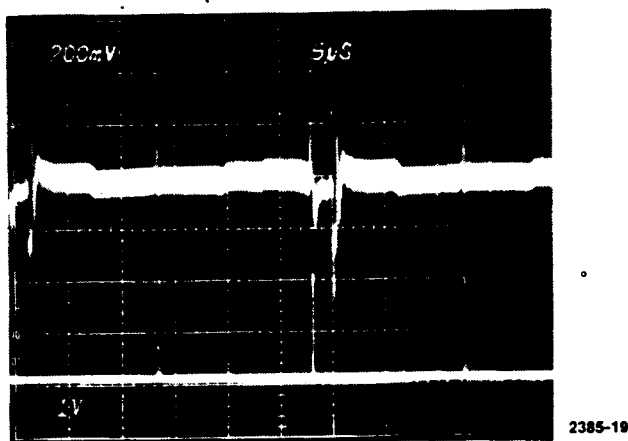


Fig. 5-10. Schmitt video check display.

b. CHECK - The channel 2 trace for pulses directly time-related to the video pulses on the channel 1 trace that are detected from the common mode baseline written on the target. These pulses are shown about midway between graticule center and the graticule edges in Fig. 5-11.

c. ADJUST - R635, DC Schmitt, on the Video Processor and Scan Control board (A28) for pulses on the channel 2 trace directly time-related to the common mode baseline video pulses on the channel 1 trace.

- d. Disconnect the test oscilloscope.
- e. INTERACTION - Changing R635, DC Schmitt, on the Video Processor and Scan Control board (A28) affects the grid bias adjust step.

**Writing Gun Grid Bias**

**Required Equipment**

Signal standardizer plug-in  
Time base plug-in  
TV monitor  
Function generator  
Test oscilloscope  
Coaxial cable  
75-ohm coaxial cables (2)  
75-ohm feedthrough terminators (2)

**Setup**

- a. With power off, install the 7912AD plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | Time base           |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Connect the TV monitor to the 7912AD with 75-ohm coaxial cables, terminating in 75 ohms:

|             |                       |
|-------------|-----------------------|
| Video input | BINARY COMP VIDEO OUT |
| Sync input  | SYNC OUT              |

- d. Set the TV monitor for external sync and set brightness and contrast controls as necessary.

- e. Set the signal standardizer plug-in for:

|      |        |
|------|--------|
| Test | Aux in |
|------|--------|



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- f. Set the time base plug-in for:

|                |  |
|----------------|--|
| Time/division  | 10 microseconds (unmagnified)          |
| Magnifier      | X10 (1 microsecond effective time/div) |
| Trigger source | Internal                               |
| Holdoff        | Minimum                                |

- g. Writing gun test points and adjustments are shown in the Diagrams section:

|                                    |           |
|------------------------------------|-----------|
| Horizontal & Z-Axis<br>board (A40) | Fig. 7-52 |
|------------------------------------|-----------|

- h. Set the test oscilloscope for:

|                     |                                  |
|---------------------|----------------------------------|
| Volts/division      | 0.5 volt (5 volts at probe tip)  |
| Input coupling      | DC                               |
| Time/division       | 2 milliseconds                   |
| Trigger source      | Internal                         |
| Trigger slope       | Positive                         |
| Horizontal position | Trace begins at graticule center |

- i. Connect the test oscilloscope to the Horizontal and Z-Axis Amplifier board (A40) between:

|                 |  |
|-----------------|--|
| Amplifier input | TP844 (Z-axis drive) through 10X probe |
|-----------------|--|

- j. Set the function generator for:

|           |               |
|-----------|---------------|
| Function  | Sine wave     |
| Frequency | 500 kilohertz |
| Amplitude | Minimum       |
| Position  | Center        |

- k. Connect the function generator to the signal standardizer plug-in between:

|        |        |
|--------|--------|
| Output | Aux in |
|--------|--------|

**39. CRT grid bias adjust**

- a. Establish a ground reference on the test oscilloscope one division from the graticule bottom.
- b. Wait for the scan converter tube to stabilize -- about 15 minutes after turn-on, if previously warmed up.
- c. Increase the MAIN INTENSITY and GRATICULE INTENSITY controls until the graticule and sine wave are visible on the TV monitor. Increase R602, CRT Grid Bias, on the Horizontal & Z-Axis Amp board (A40) carefully, if necessary, to see the trace and graticule.
- d. Set the function generator amplitude and position controls for a centered, eight-division display on the TV monitor.
- e. Set GRATICULE INTENSITY to minimum.
- f. Set the MAIN INTENSITY control for an unblanking pulse top 22.5 volts (4.5 divisions) above the reference level on the graticule (the baseline rises about 10 volts for a pulse amplitude of 12.5 volts, peak-to-peak). Watch the TV monitor carefully if MAIN INTENSITY is increased; reduce trace intensity with R602, CRT Grid Bias, on the Horizontal & Z-Axis Amplifier board (A40) if the trace blooms.
- g. ADJUST - R602, CRT Grid Bias, on the Horizontal & Z-Axis Amplifier board (A40) so the full five cycles of the sine wave are just written. Adjust R602 for the minimum intensity needed to close the gaps on the trace after setting FOCUS for least gaps in display.
- h. Reduce MAIN INTENSITY to minimum.
- i. Disconnect the function generator and test oscilloscope.

**Vertical Graticule and Amplifier****Required Equipment**

Signal standardizer plug-in  
 Time base plug-in  
 TV monitor  
 XYZ monitor  
 Test oscilloscope  
 Coaxial cables, BNC connectors (3)  
 Coaxial cables, 75-ohm (2)  
 75-ohm feedthrough terminators, BNC connectors (2)

**Setup**

- a. With power off, install the plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | Time base           |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Connect the TV monitor to the 7912AD with 75-ohm coaxial cables, terminating inputs in 75 ohms:

|             |                       |
|-------------|-----------------------|
| Video input | BINARY COMP VIDEO OUT |
| Sync input  | SYNC OUT              |

- d. Set the TV monitor for external sync and set brightness and contrast controls as necessary.

- e. Connect the XYZ monitor to the 7912AD XYZ outputs. The coaxial cable and termination impedances are not critical over short distances.

- f. Set the signal standardizer plug-in for:

|          |               |
|----------|---------------|
| Test     | Com mode      |
| Rep rate | 100 kilohertz |

- g. Set the time base plug-in for:

|               |               |
|---------------|---------------|
| Time/division | 1 microsecond |
| Triggering    | Automatic     |

- h. Set the test oscilloscope for:

|                |                                |
|----------------|--------------------------------|
| Volts/division | 0.1 volt (1 volt at probe tip) |
| Time division  | 500 microseconds               |
| Trigger source | Internal                       |
| Trigger slope  | Negative                       |

- i. Vertical graticule and amplifier test points and adjustments are shown in the Diagrams section:

|                                       |           |
|---------------------------------------|-----------|
| Graticule Generator<br>board (A24)    | Fig. 7-45 |
| X and Y Ramp Generator<br>board (A26) | Fig. 7-46 |
| Vertical Amplifier<br>board (A34)     | Fig. 7-79 |
| IEEE 488 Interface<br>board (A56)     | Fig. 7-56 |

#### 40. X scan rotation adjust

- a. Increase MAIN INTENSITY for minimum viewable trace.
- b. ADJUST - R1443, X Scan Rotation, on the X and Y Ramp Generator board (A26) for minimum number of TV lines crossed by baseline trace on the TV monitor.

#### 41. Horizontal graticule ramp amplitude check/adjust

- a. Connect the test oscilloscope to the Graticule Generator board (A24) between:

|                 |   |
|-----------------|---|
| Amplifier input | TP840 (next to Q740)<br>through 10X probe |
|-----------------|---|

It may be necessary to power down and remove the board in order to clip on to the test point.

b. CHECK - The staircase ramp amplitude is 5 volts  $\pm 0.1$  volt (5 divisions  $\pm 0.1$  division) from the first step above the baseline to the top of the ramp -- see Fig. 5-11.

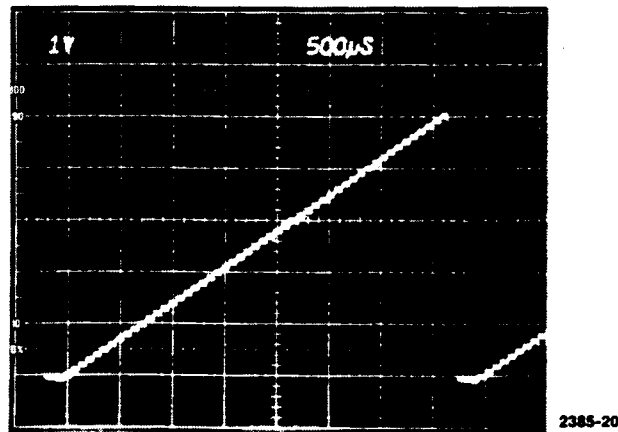


Fig. 5-11. Horizontal graticule ramp.

c. ADJUST - R540 on the Graticule Generator board (A24) for a staircase ramp amplitude of 5 volts (5 divisions) from the first step above the baseline to the top of the ramp.

d. Disconnect the test oscilloscope.

e. Change the TV monitor connection for:

Video input

LINEAR COMP VIDEO OUT

## ✓ 42. Vertical graticule centering and gain check/adjust

- a. Change the time base plug-in for:

|               |               |
|---------------|---------------|
| Time/division | 1 millisecond |
|---------------|---------------|

b. While switching the signal standardizer plug-in test switch between com mode and vert or horiz gain, set the plug-in position control to match the bright center line of the gain lines to the com mode baseline.

c. With the signal standardizer plug-in test switch in vert or horiz gain, increase MAIN INTENSITY and GRATICULE INTENSITY to display both the graticule and the gain lines.

d. CHECK - The graticule matches the gain lines at three divisions above and below the bright center line  $\pm 0.06$  division and the total deflection between these graticule lines is six divisions  $\pm 0.06$  division.

e. ADJUST - R950, Vert Gain, and R850, Vert Position, on the Graticule Generator board (A24), so the graticule matches the gain lines three divisions above and below the bright center line.

## 43. Vertical graticule dots check/adjust

- a. Reduce MAIN INTENSITY to minimum.

b. If the bottom row of graticule dots is off screen, note the position of R712, Vert Cent, on the Vertical Amplifier board (A34), and then change it to bring the bottom row of graticule dots on screen.

c. CHECK - Graticule dot columns are full with no dots missing and no dots below the bottom row.

d. ADJUST - R050 on the Graticule Generator board (A24), to fill the dot columns on the graticule with no dots missing and no extra dots (below bottom row of graticule).

e. If R712, Vert Cent, on the Vertical Amplifier board (A34) was changed above, restore it to its original position.

f. Press DIGITAL and observe that only major divisions are marked on the X-Y-Z monitor.

✓ 44. Vertical amplifier gain and centering adjust

- a. Change the signal standardizer plug-in for:

|           |                             |
|-----------|-----------------------------|
| Test      | Vert or horiz step response |
| Position  | Midrange                    |
| Amplitude | Midrange                    |

- b. Change the time base plug-in for:

|                |               |
|----------------|---------------|
| Time/division  | 1 microsecond |
| Trigger source | Line          |

c. Increase MAIN INTENSITY to obtain two bands across the TV screen, each about 0.4 divisions high, changing the signal standardizer position and amplitude controls as necessary to view the two bands.

d. While repeatedly pressing DIGITAL, set the signal standardizer position and amplitude controls so the bands are partially off the top and bottom edges of the XYZ monitor display. The top and bottom of the display should be lines where the two bands end with the inside of each band more ragged due to trace blooming. These straight lines mark the edges of the digital scan on the target.

- e. Reduce MAIN INTENSITY to minimum.

f. Set the monitor vertical position control and adjust R200 on the IEEE 488 Interface board (A56) to set the top and bottom edges of the bands on the top and bottom graticule lines of the XYZ monitor at the horizontal center of the graticule. This is shown in Fig. 5-12.

- g. Press DIGITAL again to digitize the graticule.

h. ADJUST - While repeatedly pressing DIGITAL to display the effect, R712, Vert Cent, and R730, Vert Gain, on the Vertical Amplifier board (A24) to set the top and bottom dots in the center column of graticule dots on the top and bottom lines of XYZ monitor graticule. When properly set, only the inside half of each dot is visible (see Fig. 5-13).

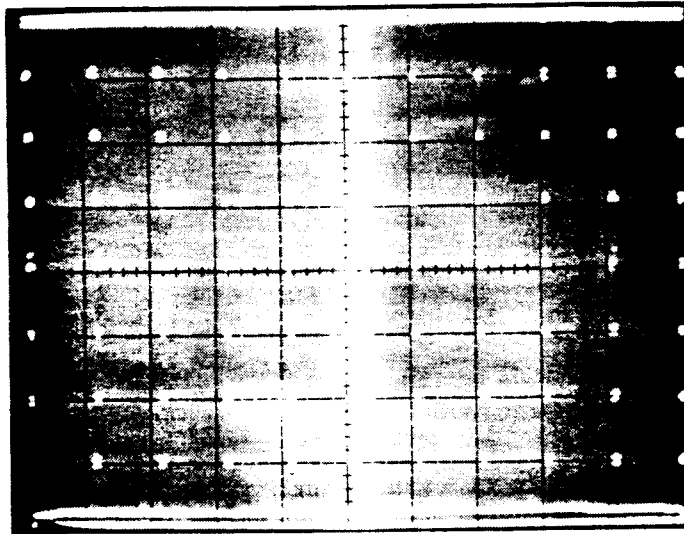


Fig. 5-12. Vertical amplifier gain and centering display setup.

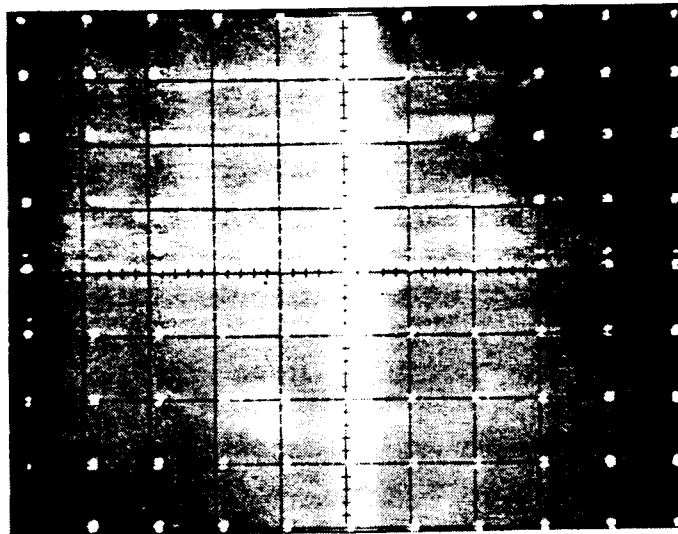


Fig. 5-13. Vertical amplifier gain and centering adjustment.





**CAUTION**

Setting P700 and P800 on the Translator board (A22) to other than RUN (pins 1 and 2) bypasses the 6800 MPU intensity protection for graticule intensity and main intensity respectively. Therefore, set the intensity controls carefully. Too high an intensity level can immediately damage the scan converter target.

- f. With power off, install the plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Time base           |
| HORIZONTAL | Signal standardizer |

- g. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- h. Set the time base plug-in for:

|               |               |
|---------------|---------------|
| Time/division | 1 microsecond |
| Triggering    | Automatic     |

- i. Set the signal standardizer plug-in for:

|          |                    |
|----------|--------------------|
| Test     | Vert or horiz gain |
| Rep rate | 100 kilohertz      |

- j. Set 7912AD MAIN INTENSITY for normal brightness while viewing the TV display.

- k. Horizontal graticule and amplifier test points and adjustments are shown in the Diagrams section:

|                                    |           |
|------------------------------------|-----------|
| Translator board (A22)             | Fig. 7-40 |
| Graticule Generator board (A24)    | Fig. 7-45 |
| X and Y Ramp Generator board (A26) | Fig. 7-46 |
| Horizontal and Z-Axis board (A40)  | Fig. 7-52 |
| IEEE 488 Interface board (A56)     | Fig. 7-56 |

#### ✓ 45. Horizontal graticule centering and gain check/adjust

a. While switching the signal standardizer plug-in test switch between com mode and vert or horiz gain, set the plug-in position control to match the bright center line of the gain lines to the com mode baseline.

b. With the signal standardizer in vert or horiz gain, increase GRATICULE INTENSITY and MAIN INTENSITY to display both the gain lines and the graticule dots.

c. CHECK - The graticule matches the gain lines at four divisions both to the left and to the right of the bright center line  $\pm 0.08$  divisions with a total deflection between these graticule lines of eight divisions  $\pm 0.08$  division.

d. ADJUST - R954, Horiz Gain, and R952, Horiz Position, on the Graticule Generator board (A24) so the graticule matches the gain lines at four divisions both to the left and to the right of the bright center line.

e. Turn off power and reset the jumper on the Graticule Generator board to its normal position. Jumper P040 as follows:

|      |          |
|------|----------|
| P040 | Pins 1-2 |
|------|----------|

f. With power off, reset the jumpers on the Translator board (A22) that enable the MPU firmware intensity protection. Jumper P700 (graticule intensity) and P800 (main intensity) as follows:

|      |               |
|------|---------------|
| P700 | Pins 1-2, RUN |
| P800 | Pins 1-2, RUN |

**46. Horizontal amplifier limit center check/adjust**

- a. With power off, change the plug-ins for:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | Time base           |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on the 7912AD power.

- c. Change the signal standardizer plug-in for:

|      |          |
|------|----------|
| Test | Com mode |
|------|----------|

- d. Change the time base plug-in for:

|                |      |
|----------------|------|
| Trigger source | Line |
|----------------|------|

- e. Increase GRATICULE INTENSITY for normal brightness on the TV monitor display.

- f. Increase MAIN INTENSITY for a baseline trace 0.4 divisions in trace height.

- g. Press DIGITAL repeatedly, using the time base position control to move the trace and observe on the XYZ monitor that the trace beginning and end are squared off. This indicates the sweep is covering the portion of the target scanned in digital mode; the abrupt trace beginning and end mark the edges of the digital scan.

- h. Reduce MAIN INTENSITY to minimum.

- i. Set the monitor horizontal position control and adjust R300 on the IEEE 488 Interface board (A56) to set the beginning and end of the baseline trace on the XYZ monitor graticule edges.

- j. With 7912AD power off, short TP214 and TP224 on the Horizontal and Z-Axis Amplifier board (A40).

- k. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn 7912AD power back on.

l. Repeatedly press DIGITAL, increasing GRATICULE INTENSITY until a single line of dots appears on the XYZ monitor.

m. CHECK - The line of dots is at the monitor graticule center  $\pm 0.5$  divisions.

n. ADJUST - R118, Limit Center, on the Horizontal and Z-Axis Amplifier board (A40) while repeatedly pressing DIGITAL so the line of dots is set on the monitor graticule center.

o. Turn off 7912AD power and remove the short between TP214 and TP224 on the Horizontal and Z-Axis Amplifier board (A40).

p. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn 7912AD power back on.

#### ✓ 47. Horizontal amplifier gain and centering check/adjust

a. Increase GRATICULE INTENSITY and digitize the graticule.

b. CHECK - The outside columns of graticule dots match the vertical edges of the monitor graticule at the vertical center. Only the inside half of these dots should be visible -- some dots above and below may be missing.

c. ADJUST - While repeatedly pressing DIGITAL, R312, Horiz Gain, and R418, Horiz Centering, on the Horizontal and Z-Axis Amplifier board (A40) to match the outside columns of graticule dots with the outside edges of the XYZ monitor graticule at vertical center. Only the inside half of these dots should be visible -- some dots above and below may be missing.

#### 48. Y scan rotation check/adjust

a. CHECK - The inside half of all dots in the outside dot graticule columns are visible.

b. ADJUST - While repeatedly digitizing, R1414, Y Scan Rotation, on the X and Y Ramp Generator board (A26) for as many dots as possible in the outside dot graticule columns.

**Horizontal Amplifier Response****Required Equipment**

Signal standardizer plug-in  
 7B92A Time Base plug-in  
 TV monitor  
 Time mark generator  
 75-ohm coaxial cables (2)  
 75-ohm feedthrough terminators (2)  
 50-ohm coaxial cables (2)  
 50-ohm feedthrough terminators (2)

**Setup**

- a. With power off, install the 7912AD plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | 7B92A Time Base     |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Connect the TV monitor to the 7912AD with 75-ohm coaxial cables, terminating inputs in 75-ohms:

|             |                       |
|-------------|-----------------------|
| Video input | LINEAR COMP VIDEO OUT |
| Sync input  | SYNC OUT              |

- d. Set the signal standardizer plug-in for:

|           |          |
|-----------|----------|
| Test      | Aux in   |
| Position  | Midrange |
| Amplitude | Minimum  |

- e. Set the 7B92A for:

|                |               |
|----------------|---------------|
| Time/division  | 1 millisecond |
| Trigger source | External      |

- f. Set the time mark generator for:

Marker 1 millisecond

- g. Connect the time mark generator to the 7912AD through 50-ohm coaxial cables, terminating inputs in 50-ohms:

Marker out Signal standardizer aux in  
Trigger out 7B92A ext trigger in

- h. Horizontal amplifier response adjustments are shown in the Diagrams section:

Horizontal & Z-Axis Amp Fig. 7-52  
board (A40)

#### ✓ 49. DC linearity check

- a. Increase MAIN INTENSITY and GRATICULE INTENSITY to observe the time marks and graticule. Change the plug-in controls as necessary to obtain the display.
- b. Set the 7B92A position and sweep cal controls to match the second and tenth time marks to the corresponding graticule columns exactly.
- c. CHECK - Each time mark from the second to the tenth matches the graticule within 0.05 division.

#### 50. Two-nanosecond timing check/adjust

##### NOTE

The 2-nanosecond and 500-picosecond timing steps should be performed with the time base normally used with this instrument; the sweep calibration control on the plug-in front panel must be adjusted correctly before performing this step.

## 7912AD SERVICE

- a. Change the 7B92A for:

|               |               |
|---------------|---------------|
| Position      | Midrange      |
| Time/division | 2 nanoseconds |

- b. Change time mark generator for:

|        |               |
|--------|---------------|
| Marker | 2 nanoseconds |
|--------|---------------|

- c. Increase signal standardizer amplitude as necessary.

d. CHECK - Deflection between the second and tenth time marks is eight divisions,  $\pm 0.32$  division.

e. ADJUST - C108 and C132, 2 nS Adj, on the Horizontal and Z-Axis Amplifier board (A40) equally for eight divisions deflection between the second and tenth time marks.

### 51. 500 picosecond timing check/adjust

- a. Change the 7B92A for:

|               |                 |
|---------------|-----------------|
| Time/division | 500 picoseconds |
|---------------|-----------------|

- b. Change the time mark generator for:

|        |   |
|--------|---|
| Marker | 1 nanosecond (change connection,<br>if necessary) |
|--------|---|

c. Change the 7912AD plug-in controls for a triggered display with sufficient vertical amplitude.

d. CHECK - Deflection between the second and tenth time marks is eight divisions  $\pm 0.4$  division.

e. ADJUST - C326 on the Horizontal and Z-Axis Amplifier board (A40) for eight divisions deflection between the second and tenth time marks.

- f. Disconnect time mark generator.



**Vertical Amplifier Response****Required Equipment**

Signal standardizer plug-in  
 Time base plug-in  
 TV monitor  
 Sine wave generator  
 75-ohm coaxial cables (2)  
 75-ohm feedthrough terminators (2)  
 50-ohm 5X attenuator

**Setup**

- a. With power off, install the 7912AD plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | Time Base           |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Connect the TV monitor to the 7912AD with 75-ohm coaxial cables, terminating inputs in 75-ohms:

|          |                       |
|----------|-----------------------|
| Video in | LINEAR COMP VIDEO OUT |
| Sync in  | SYNC OUT              |

- d. Set the TV monitor for external triggering and set brightness and contrast for normal viewing.

- e. Set signal standardizer plug-in for:

|           |                               |
|-----------|-------------------------------|
| Test      | Vert or horiz + step response |
| Amplitude | Midrange                      |
| Position  | Midrange                      |
| Rep rate  | 100 Hz                        |

- f. Set the time base plug-in for:

|                |               |
|----------------|---------------|
| Time/division  | 1 millisecond |
| Trigger source | Internal      |
| Trigger slope  | Negative      |

- g. Vertical amplifier response adjustments are shown in the Diagrams section:

|                                   |           |
|-----------------------------------|-----------|
| Vertical Amplifier<br>board (A34) | Fig. 7-49 |
|-----------------------------------|-----------|

## 52. Low-frequency compensation check/adjust

- a. Increase MAIN INTENSITY and GRATICULE INTENSITY to view the step response waveform and the graticule.
- b. Set the signal standardizer plug-in controls for a centered, six-division display.
- c. CHECK - For a flat pulse top with variations no greater than 0.06 division -- decrease GRATICULE INTENSITY, if necessary, to see the step response more clearly.
- d. ADJUST - R749 and R764 on the Vertical Amplifier board (A34) for a flat pulse top.

## 53. High-frequency response check/adjust

- a. Change the signal standardizer plug-in for:

|          |       |
|----------|-------|
| Rep rate | 1 MHz |
|----------|-------|

- b. Change the time base plug-in for:

|               |                |
|---------------|----------------|
| Time/division | 10 nanoseconds |
| Trigger slope | Positive       |

- c. CHECK - For aberrations no greater than 5 percent total within the first 10 nanoseconds after transition (0.3 division vertically during first division horizontally).

d. ADJUST - The following adjustments on the Vertical Amplifier board (A34) for best transient response. Observe the pulse top in the specified interval after the positive transition at the indicated time base plug-in time/division:

| Time/division  | Observe  | Adjust  |
|----------------|--|---|
| 10 nanoseconds | First 100 nanoseconds, ignore first 10 nanoseconds | R758  |
| 5 nanoseconds  | First 25 nanoseconds, ignore first 2-3 nanoseconds | R743  |
| 5 nanoseconds  | First 10 nanoseconds, ignore first 2-3 nanoseconds | L667  |
| 5 nanoseconds  | First 5 nanoseconds                                | Position CRT termination resistor leads under CRT |
| 2 nanoseconds  | Front corner                                       | C658, R658, C751, R751                            |

d. Reduce MAIN INTENSITY.

e. INTERACTION - The high-frequency response adjustments affect bandwidth; if changed perform bandwidth check as well.

#### ✓ 54. Vertical amplifier bandwidth check

a. Change the signal standardizer plug-in for:

|           |                         |
|-----------|-------------------------|
| Test      | Vert or horiz freq resp |
| Amplitude | Maximum                 |

b. Change the time base plug-in for:

|               |                      |
|---------------|----------------------|
| Time/division | 100 microseconds     |
| Triggering    | Automatic (free-run) |

- c. Set the sine wave generator for:

|           |                         |
|-----------|-------------------------|
| Frequency | Ref (above 3 megahertz) |
| Amplitude | Midrange                |

- d. Connect the sine wave generator to the signal standardizer plug-in between:

|        |                             |
|--------|-----------------------------|
| Output | CW in through 5X attenuator |
|--------|-----------------------------|

- e. Increase GRATICULE INTENSITY to view the graticule.

f. Change the sine wave generator amplitude control and the signal standardizer position control to obtain a 10-division input signal. To do this, first obtain an eight-division display. Then move the display up one division without changing the amplitude. Finally, increase the amplitude to fill the bottom division of the display again.

g. Reduce the signal standardizer amplitude for six divisions of deflection peak-to-peak. This sets up the sine wave generator amplitude and signal standardizer amplitude within the range of the signal standardizer leveling amplifier. The CW leveled indicator should be lighted; if not, or if it goes out while sweeping the frequency, increase the sine wave generator amplitude until the light comes on.

h. Sweep the sine-wave generator frequency to find where the 7912AD response drops to 4.5 divisions peak-to-peak.

i. CHECK - The sine wave generator frequency is greater than or equal to 500 megahertz. This corresponds to a -3 dB point (4.2 divisions) with the 7A19 Amplifier plug-in. If this check fails, repeat the high-frequency response adjustment to peak up the transient response within the aberration limits.

## ✓ 55. Signal/graticule isolation check

- a. Change sine wave generator for:

|           |                                      |
|-----------|--------------------------------------|
| Frequency | Reference (greater than 3 megahertz) |
| Amplitude | Eight-division display               |

b. CHECK - A change in size or position of the graticule dots of no greater than 0.2 division while sweeping the sine wave generator from 250 megahertz to 500 megahertz (isolation of at least 40:1).

c. Disconnect the sine wave generator.

✓ 56. Vertical deflection linearity check

a. Change the signal standardizer plug-in for:

|          |                    |
|----------|--------------------|
| Test     | Vert or horiz gain |
| Rep rate | 100 kilohertz      |

b. Change the time base plug-in for:

|               |               |
|---------------|---------------|
| Time/division | 1 millisecond |
|---------------|---------------|

c. Set the 7912AD MAIN INTENSITY and GRATICULE INTENSITY to view the gain lines and the graticule.

d. CHECK - For no more than 0.1 division difference between any two divisions of deflection of gain lines -- use signal standardizer position control to line up gain lines and graticule for comparison.

**Resolution****Required Equipment**

Amplifier plug-in  
 Time base plug-in  
 607 storage monitor  
 Function generator  
 7912AD Calibration Kit  
 50-ohm coaxial cables (2)  
 Coaxial cables (3)  
 50-ohm feedthrough terminators (2)  
 50-ohm 10X attenuator

**Setup**

- a. With power off, install 7912AD plug-ins:

|            |           |
|------------|-----------|
| VERTICAL   | Amplifier |
| HORIZONTAL | Time base |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Connect the 607 Storage Monitor to the 7912AD XYZ outputs with coaxial cables. For short distances, the cable and termination impedances are not critical.

- d. Set monitor for non-store operation.

- e. Set amplifier plug-in for:

|                |               |
|----------------|---------------|
| Volts/division | 10 millivolts |
| Position       | Midrange      |

- f. Set time base plug-in for:

|                |                 |
|----------------|-----------------|
| Time/division  | 500 nanoseconds |
| Trigger source | External        |
| Trigger slope  | Positive        |

g. Set the Calibration Aid supplied in the 7912AD Calibration Kit for:

|                          |        |
|--------------------------|--------|
| Video calibration switch | Preamp |
| Vertical delay switch    | Out    |

h. Connect the Calibration Aid to the 7912AD between:

|     |  |
|-----|--|
| Cal | On the Video Processor & Scan Control board (A28) through the BNC-to-clip-lead adapter with the red clip to TP302, 500 kHz, and the black clip to TP708, Gnd. (shown on Fig. 7-47) |
|-----|--|

|             |             |
|-------------|-------------|
| Probe power | PROBE POWER |
|-------------|-------------|

i. Set the function generator for:

|           |             |
|-----------|-------------|
| Function  | Square wave |
| Frequency | 1 megahertz |
| Amplitude | Minimum     |
| Offset    | Midrange    |

j. Connect the function generator to the 7912AD with coaxial cables between:

|          |  |
|----------|--|
| Output   | Amplifier input through 10X attenuator, terminating in 50 ohms |
| Trig out | Time base ext trig input                                       |

## ✓ 57. Digital mode vertical resolution check

a. Increase MAIN INTENSITY and GRATICULE INTENSITY while repeatedly digitizing to view the function generator output and the graticule.

b. While repeatedly digitizing to see the effect, set the function generator amplitude and offset for a 25 millivolt (2.5 division) square wave near graticule center.

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- c. Reduce GRATICULE INTENSITY to minimum.
- d. While repeatedly digitizing to see the effect, set MAIN INTENSITY and FOCUS for a well-defined trace. Use the minimum MAIN INTENSITY necessary.
- e. Change the amplifier plug-in for:  

|                |        |
|----------------|--------|
| Volts/division | 1 volt |
|----------------|--------|
- f. Press DIGITAL.
- g. CHECK - For discrete level changes so a square wave is evident on the monitor. If this check fails, repeat the focus adjust step earlier in this procedure.
- h. Disconnect the function generator.

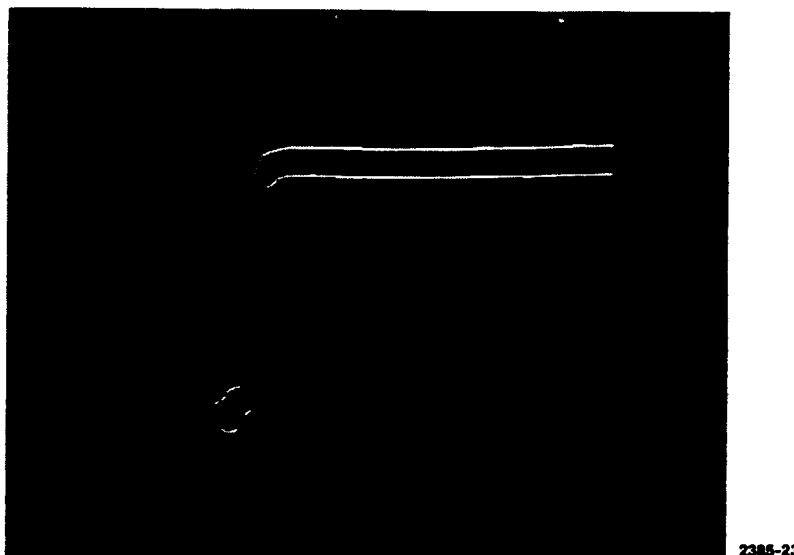
### ✓ 58. Digital mode horizontal resolution check

- a. Change the time base plug-in for:  

|               |                |
|---------------|----------------|
| Time/division | 50 nanoseconds |
|---------------|----------------|
- b. Connect the Calibration Aid outputs to the 7912AD through 50-ohm coaxial cables, terminating the plug-in inputs in 50 ohms:  

|                      |                       |
|----------------------|-----------------------|
| Resolution check out | Amplifier input       |
| Trig out             | Time base ext trig in |
- c. While repeatedly pressing DIGITAL to see the effect, set the 7912AD plug-in controls to position the positive transition for best display.
- d. While repeatedly pressing DIGITAL to see the effect, increase MAIN INTENSITY and set FOCUS for a well defined trace with the edges separated, even on the leading edge of the pulse as a result of blooming (see Fig. 5-14).
- e. Store the waveform on the monitor.





**Fig. 5-14. Horizontal data resolution check setup.**

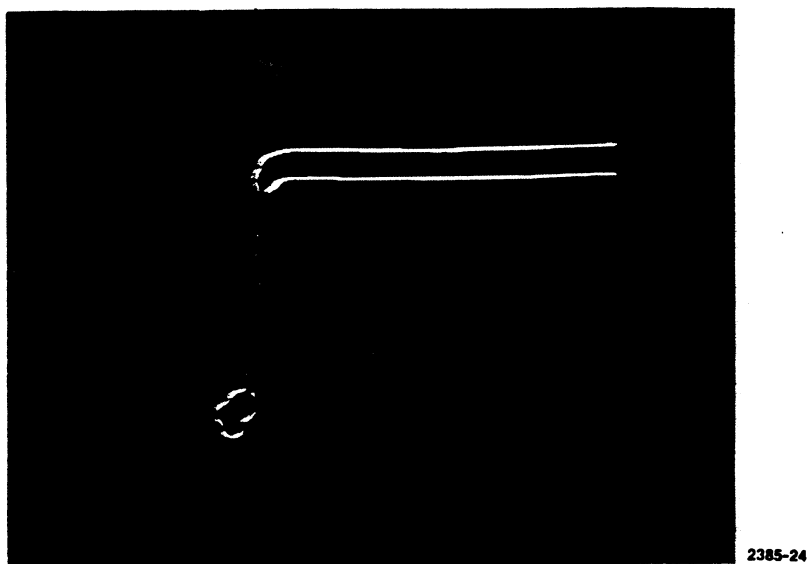
f. Change the Calibration Aid for:

Vertical delay switch            In

g. Digitize the delayed pulse.

h. CHECK - Trace edges on the rising portion of the two pulses displayed on the monitor are offset -- an example of a waveform obtained by this check is shown in Fig. 5-15. This check may require several tries with readjustment of the monitor intensity and stored brightness or persistence controls to display the offset between the pulses.

i. Disconnect the Calibration Aid.



**Fig. 5-15. Horizontal data resolution check showing offset between the delayed and undelayed pulses.**

**Scan Converter Target****Required Equipment**

Signal standardizer plug-in  
 7B92A Time Base  
 TV monitor  
 XYZ monitor  
 Sine wave generator  
 75-ohm coaxial cables (2)  
 75-ohm feedthrough terminators  
 Coaxial cables (3)

**Setup**

- a. With power off, install the 7912AD plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | Time base           |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Connect the TV monitor to the 7912AD with 75-ohm coaxial cables, terminating inputs in 75 ohms:

|             |                       |
|-------------|-----------------------|
| Video input | LINEAR COMP VIDEO OUT |
| Sync input  | SYNC OUT              |

- d. Set the TV monitor for external triggering and set brightness and contrast for normal viewing.

- e. Connect the XYZ monitor to the 7912AD XYZ outputs through coaxial cables. For short distances, the cable and termination impedances are not critical.

- f. Set the XYZ monitor controls for normal viewing.

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- g. Set the signal standardizer plug-in for:

|           |          |
|-----------|----------|
| Test      | Aux in   |
| Position  | Midrange |
| Amplitude | Midrange |

- h. Set the 7B92A Time Base for:

|                |                 |
|----------------|-----------------|
| Time/division  | 0.5 nanoseconds |
| Trigger mode   | HF sync         |
| Trigger source | Internal        |

- i. Set the sine wave generator for:

|           |               |
|-----------|---------------|
| Frequency | 500 megahertz |
| Amplitude | Minimum       |

- j. Connect the sine wave generator to the signal standardizer plug-in:

|        |        |
|--------|--------|
| Output | Aux in |
|--------|--------|

- k. Increase MAIN INTENSITY and GRATICULE INTENSITY to view the trace and graticule.

✓ 59. TV mode writing rate check

- a. Set the signal standardizer position and amplitude controls and the sine wave generator amplitude control for an eight-division display.

- b. Change the time base triggering controls for:

|                |              |
|----------------|--------------|
| Trigger mode   | Single sweep |
| Trigger source | Line         |

- c. Change the 7912AD intensity controls for:

|                     |         |
|---------------------|---------|
| MAIN INTENSITY      | Maximum |
| GRATICULE INTENSITY | Minimum |

- d. CHECK - The eight-division sine wave is fully written when the time base single-sweep reset button is pressed. Set TV monitor brightness

and contrast controls as necessary to see the trace. It may be necessary to repeat the check, setting the FOCUS control for optimum writing rate.

- e. Reduce MAIN INTENSITY.
- f. Disconnect the sine wave generator.

### √ 60. Digital mode writing rate check

- a. Change the signal standardizer plug-in for:

|          |                               |
|----------|-------------------------------|
| Test     | Vert or horiz + step response |
| Rep rate | 1 megahertz                   |

- b. Change the 7B92A controls for:

|                |              |
|----------------|--------------|
| Time/division  | 1 nanosecond |
| Trigger slope  | Positive     |
| Trigger mode   | Automatic    |
| Trigger source | Internal     |

- c. Increase 7912AD intensity controls for:

|                     |                   |
|---------------------|-------------------|
| MAIN INTENSITY      | Visible trace     |
| GRATICULE INTENSITY | Visible graticule |

- d. Change the 7B92A for:

|              |        |
|--------------|--------|
| Trigger mode | Normal |
|--------------|--------|

e. Change the signal standardizer position and amplitude controls and the time base trigger level and position controls to display an eight-division step within the center eight horizontal divisions on the graticule.

- f. Change the 7B92A for:

|              |              |
|--------------|--------------|
| Trigger mode | Single sweep |
|--------------|--------------|

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g. Change the 7912AD intensity controls for:

|                     |         |
|---------------------|---------|
| MAIN INTENSITY      | Maximum |
| GRATICULE INTENSITY | Minimum |

h. Press DIGITAL and then the time base SGL-SWP RESET button after a two-second wait for setup time in switching between TV and digital modes.

i. CHECK - That the full eight-division positive step is digitized and displayed on the XYZ monitor. It may be necessary to repeat the check, setting FOCUS for optimum writing rate.

### NOTE

The following steps are to be used when digital writing rate is not within specifications.

j. Add .5 Volts to the target level voltage, as measured on the Video Preamplifier board, and adjust R1952 to this new voltage (see Step 18). Steps 22, 23, and 24 should be rechecked and Step 38 redone before returning to the writing rate check.

k. INTERACTION - Writing rate is related to adjustment of the target level, clamp level, and DC Schmitt level. These adjustments control the trade off between writing rate and noise.

The clamp level is critical to achieving noise immunity in both the TV display and data; it must be checked and adjusted according to the clamp level check/adjust step earlier in this procedure.

If writing rate is borderline, it may be possible to reduce noise immunity and at the same time improve writing rate with the DC Schmitt and target level adjustments (see Part j).

In either case, change these adjustments only enough to achieve specific writing rate and check for target defects according to the digitized defects check (next step) at an ambient temperature of 40 degrees C or the maximum expected ambient temperature if below that. If noise immunity has been compromised, it is most noticeable at elevated temperatures as shown in the TV picture.

✓ 61. Digitized defects check

- a. Reduce MAIN INTENSITY and GRATICULE INTENSITY to minimum
- b. Press DIGITAL, then the time base single-sweep reset button.
- c. CHECK - No more than six defects are displayed on the monitor with no two within 3 degrees on a vertical line passing through one of the points.

**Composite Video Outputs****Required Equipment**

Time base plug-in  
 Test oscilloscope  
 75-ohm coaxial cable  
 75-ohm feedthrough terminator

**Setup**

- a. With power off, install the 7912AD plug-in:

|            |           |
|------------|-----------|
| HORIZONTAL | Time base |
|------------|-----------|

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Set the time base plug-in for:

|               |               |
|---------------|---------------|
| Time/division | 1 microsecond |
| Triggering    | Automatic     |

- d. Change the 7912AD for:

|                  |     |
|------------------|-----|
| TV SCALE FACTORS | OFF |
|------------------|-----|

- e. Set the test oscilloscope for:

|                |                |
|----------------|----------------|
| Volts/division | 500 millivolts |
| Input coupling | DC             |
| Time/division  | 2 milliseconds |
| Trigger source | External       |
| Trigger slope  | Negative       |

- f. Connect the test oscilloscope to the 7912AD between:

|                 |   |
|-----------------|---|
| Amplifier input | LINEAR COMP VIDEO OUT through<br>75-ohm coaxial cable with 75-ohm<br>termination at the amplifier input |
|-----------------|---|



Time base ext  
trigger input

TP700 on the X & Y Ramp Generator  
board (A26) shown on Fig. 7-46  
through a 10X probe

✓ 62. **LINEAR amplitude check**

- a. Establish a ground reference on the test oscilloscope display.
- b. Set the test oscilloscope time base triggering controls for a triggered display.
- c. Observe the pulse near center screen on the test oscilloscope while increasing MAIN INTENSITY for a pulse amplitude of about 1 volt (2 divisions) above the bright baseline. The pulse amplitude should limit as MAIN INTENSITY is increased a small amount and pulse width should spread as shown in Fig. 5-16.

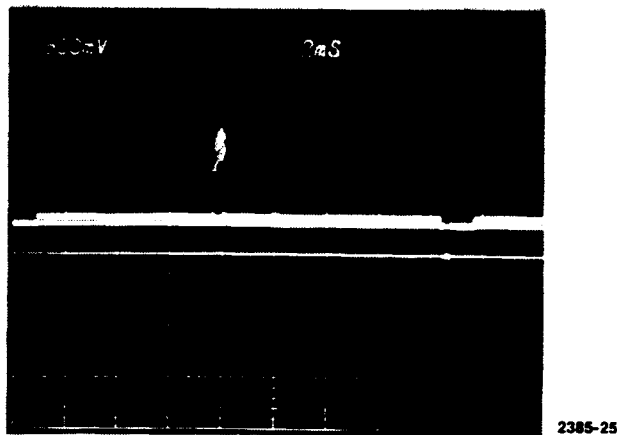


Fig. 5-16. Video pulse display of LINEAR amplitude check.

- d. CHECK - Pulse amplitude is approximately 1 volt (2 divisions) from ground reference and the negative sync pulses are approximately -0.3 volts (0.6 division) in amplitude from the ground reference.

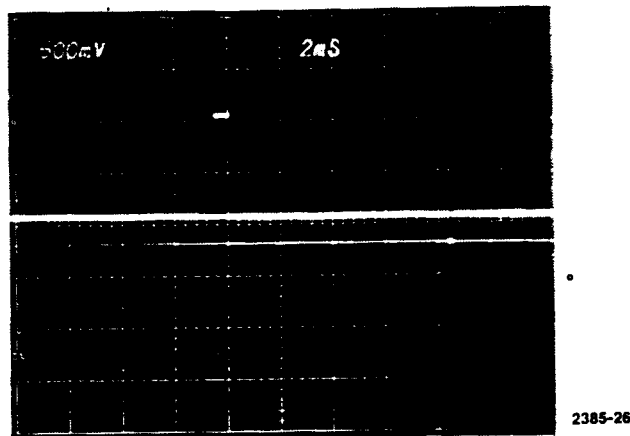
✓ 63. **BINARY amplitude check**

a. Change the test oscilloscope to connect the amplifier input to the 7912AD between:

Amplifier input

BINARY COMP VIDEO OUT through  
75-ohm coaxial cable with 75-ohm  
termination at the amplifier input

b. **CHECK** - Positive pulse top is +1 volts  $\pm 0.1$  volt (2 divisions  $\pm 0.2$  division) and bright baseline is 0 to +0.3 volts (0 to +0.6 division) from the ground reference level. The negative sync pulses should have an amplitude of approximately 0.3 volts (-0.6 division) from the ground reference. The test oscilloscope display is shown in Fig. 5-17.



**Fig. 5-17. BINARY amplitude check display.**

c. Disconnect the test oscilloscope.

**XYZ Display****Required Equipment**

Signal standardizer plug-in  
 Time base plug-in  
 Test oscilloscope  
 XYZ monitor or test oscilloscope  
 Coaxial cables (3)

**Setup**

- a. With power off, install the 7912AD plug-ins:

|            |                     |
|------------|---------------------|
| VERTICAL   | Signal standardizer |
| HORIZONTAL | Time base           |

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

c. Connect the XYZ monitor to the 7912AD XYZ outputs. Connect the monitor normally used with this instrument if available. For short distances, the cable and termination impedances are not critical. However, for this portion of the calibration procedure, an input impedance at the monitor of at least 100 kilohms is assumed.

- d. Set the signal standardizer plug-in for:

|           |                             |
|-----------|-----------------------------|
| Test      | Vert or horiz step response |
| Position  | Midrange                    |
| Amplitude | Midrange                    |
| Rep rate  | 100 kilohertz               |

- e. Set the time base plug-in for:

|                |               |
|----------------|---------------|
| Time/division  | 1 microsecond |
| Trigger source | Line          |

- f. XYZ adjustments are shown in the Diagrams section:

|                                   |           |
|-----------------------------------|-----------|
| IEEE 488 Interface<br>board (A56) | Fig. 7-56 |
|-----------------------------------|-----------|

## ✓ 64. Y output gain check/adjust

a. NOTE - If Y output gain was adjusted as part of the vertical amplifier gain and centering adjust step with the monitor to be used with the instrument, skip this step.

b. Increase MAIN INTENSITY, while repeatedly pressing DIGITAL, to obtain two bands across the monitor screen. Change the signal standardizer position and amplitude controls so the bands are partially off the top and bottom edges of the display. The top and bottom of the display should be lines where the two bands end with the inside of each band more ragged due to trace blooming. The straight lines mark the edge of the digital scan on the target. This display is shown earlier in the procedure as Fig. 5-13. Change the monitor vertical position control and R200 on the IEEE 488 Interface board (A56) as necessary to observe the straight edges at the top and bottom of the display.

c. Reduce MAIN INTENSITY to minimum.

d. NOTE - If the monitor is not the one to be used with this instrument, skip to the alternate Y output gain step.

e. CHECK - The straight edges at the top and bottom on the display match the top and bottom edges of the monitor graticule.

f. ADJUST - R200 on the IEEE 488 Interface board (A56) and the monitor vertical position to set the top and bottom trace edges on the top and bottom graticule lines.

### 64A. Alternate Y output gain check/adjust

a. NOTE - If the monitor to be used with the instrument is not available, the Y output should be a nominal 1 volt peak-to-peak.

b. Set the test oscilloscope for:

|                |                 |
|----------------|-----------------|
| Volts/division | 200 millivolts  |
| Time/division  | 10 microseconds |
| Trigger source | Internal        |
| Trigger slope  | Negative        |

c. Connect the test oscilloscope to the 7912AD without 50-ohm termination:

|                 |   |
|-----------------|---|
| Amplifier input | Y |
|-----------------|---|

d. CHECK - Test oscilloscope display for a peak-to-peak amplitude of 1 volt  $\pm 0.04$  volts (5 divisions  $\pm 0.2$  division).

e. ADJUST - R200 on the IEEE 488 Interface board (A56) for a peak-to-peak amplitude of 1 volt (5 divisions).

f. Reconnect the 7912AD Y output to the XYZ monitor.

### ✓ 65. X output gain check/adjust

a. NOTE - If X output gain was adjusted as part of the horizontal limit center check/adjust step with the monitor to be used with the instrument, skip this step.

b. Change the signal standardizer plug-in for:

|      |          |
|------|----------|
| Test | Com mode |
|------|----------|

c. While repeatedly pressing DIGITAL, increase MAIN INTENSITY and observe a baseline trace on the monitor. Continue to increase MAIN INTENSITY while repeatedly digitizing the trace to cause trace blooming for a fat trace. Observe that the beginning and end of the trace are squared off -- this indicates the beginning and end of the digital scan. It may be necessary to change the time base position control while digitizing to center the sweep. Also, change the monitor horizontal position control and R300 on the IEEE 488 Interface board (A56) as necessary to observe the beginning and end of the trace.

d. Reduce MAIN INTENSITY to minimum.

e. NOTE - If the monitor is not the one to be used with this instrument, skip to the alternate X output gain step.

f. CHECK - The abrupt beginning of the trace occurs at the left edge of the monitor graticule and the abrupt end of the trace occurs at the right edge of the graticule.

g. ADJUST - R300 on the IEEE 488 Interface board (A56) and the monitor horizontal position control to set the abrupt beginning and end of trace at the edges of the monitor graticule.

#### 65A. Alternate X output gain check/adjust

a. NOTE - If the monitor to be used with the instrument is not available, the X output should be a nominal 1 volt peak-to-peak.

b. Change the test oscilloscope for:

|               |                  |
|---------------|------------------|
| Time/division | 200 microseconds |
|---------------|------------------|

c. Connect the test oscilloscope to the 7912AD without 50-ohm input termination:

|                 |   |
|-----------------|---|
| Amplifier input | X |
|-----------------|---|

d. CHECK - The ramp amplitude displayed on the test oscilloscope is 1 volt peak-to-peak  $\pm 0.04$  volts (5 divisions  $\pm 0.2$  division).

e. ADJUST - R300 on the IEEE 488 Interface board (A56) for a ramp amplitude of 1 volt peak-to-peak (5 divisions).

#### √ 66. Z output gain check

a. Change the test oscilloscope for:

|                |                |
|----------------|----------------|
| Volts/division | 500 millivolts |
| Time/division  | 5 microseconds |

b. Connect the test oscilloscope to the 7912AD without 50-ohm input termination:

|                 |   |
|-----------------|---|
| Amplifier input | Z |
|-----------------|---|

c. CHECK - The amplitude of the unblanking pulse is at least 1 volt (2 divisions) peak-to-peak.

- d. Disconnect the test oscilloscope.

**Power Supply Remote Control****Required Equipment**

Test oscilloscope  
 DM501 Digital Multimeter  
 Function generator  
 Coaxial cables (4)  
 BNC T connector (2)  
 BNC-to-banana plug adapter

**Setup**

- a. Set the test oscilloscope for:

|                     |                     |
|---------------------|---------------------|
| CH 1 volts/division | 1 volt              |
| Ch 2 volts/division | 5 volts             |
| Vert Amplifier mode | Chop                |
| Time/division       | 50 milliseconds     |
| Trigger source      | Internal, vert ch 1 |
| Trigger mode        | Normal              |
| Trigger slope       | Negative            |
| Trigger level       | Less than zero      |

- b. Set the DM501 for:

|       |          |
|-------|----------|
| Range | 2 kilohm |
|-------|----------|

The DM501 is used only as a current source for a pull-up on the ENABLE output. Another current source of less than 16 milliamps can be substituted, such as a 1 kilohm resistor connected to +5 volts.

- c. Set the function generator for:

|                      |  |
|----------------------|--|
| Function             | Square wave                              |
| Frequency            | 0.1 hertz                                |
| Amplitude and offset | +0.5 volts (low) to - .1<br>volts (high) |

- d. Establish a ground reference level for the channel 2 display (requires auto trigger -- reset to normal when done).



e. Connect the test oscilloscope to the 7912AD with coaxial cables between:

|                                       |                                 |
|---------------------------------------|---------------------------------|
| Ch 1 input                            | ACTUATE through BNC T connector |
| Ch 2 input through<br>BNC t connector | ENABLE                          |

f. Connect the digital multimeter with coaxial cable between:

|   |                              |
|---|------------------------------|
| Input through BNC-to-<br>banana plug adapter<br>(ground side on DMM lo connector) | Test oscilloscope Ch 2 input |
|---|------------------------------|

### ✓ 67. ACTUATE input check

a. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, connect the function generator to the 7912AD with coaxial cable between:

|        |         |
|--------|---------|
| Output | ACTUATE |
|--------|---------|

b. CHECK - The 7912AD powers on and off at the function generator frequency (about 5 seconds on, 5 seconds off).

### ✓ 68. ENABLE output checks

a. CHECK - The test oscilloscope channel 2 (ENABLE) waveform switches low 150 milliseconds  $\pm$  50 milliseconds (3 divisions  $\pm$  1 division) after the channel 1 (ACTUATE) waveform. The channel 1 transition may not be visible but occurs at the left graticule edge if the triggering and position controls are set correctly. The test oscilloscope display is shown in Fig. 5-18.

b. CHECK - The channel 2 (ENABLE) waveform low level is within 0.4 volts of ground reference level.

c. Disconnect the digital multimeter, test oscilloscope, and function generator.

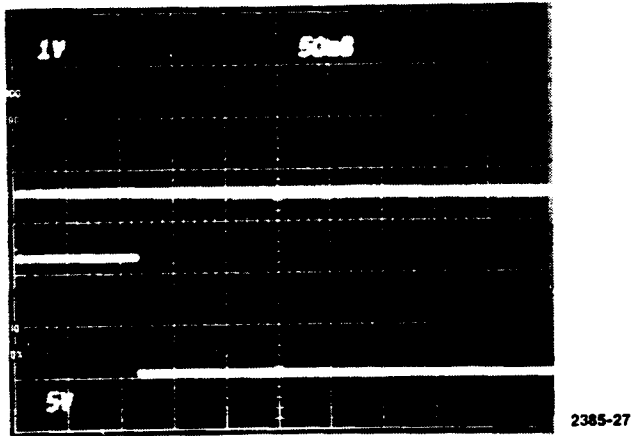


Fig. 5-18. The ENABLE output check display.

**Sweep Gate Output**

**Required Equipment**

- Time base plug-in
- Test oscilloscope
- Coaxial cable
- 50-ohm feedthrough terminator

**Setup**

- a. With power off, install the 7912AD plug-in

HORIZONTAL                      Time base

- b. With MAIN INTENSITY and GRATICULE INTENSITY set to minimum, turn on 7912AD power.

- c. Set the time base plug-in for:

Time/division                      1 microsecond  
Triggering                          Automatic

- d. Set the test oscilloscope for:

Volts/division                      0.2 volts  
Time/division                      2 microseconds  
Trigger source                      Internal  
Trigger slope                        Positive

- e. Establish a ground reference on the test oscilloscope display.

- f. Connect the test oscilloscope to the 7912AD with coaxial cable, terminating the amplifier input in 50-ohms:

Amplifier input                      + GATE OUT

**✓ 69. + GATE OUT checks**

- a. CHECK - Pulse top is +0.5 volt  $\pm 0.05$  volt (2.5 divisions  $\pm 0.25$  division) referred to ground level.
- b. CHECK - The positive pulse width is at least 10 microseconds (5 divisions).
- c. Disconnect the test oscilloscope.

# REPLACEABLE ELECTRICAL PARTS

## PARTS ORDERING INFORMATION

Replacement parts are available from or through your local Tektronix, Inc. Field Office or representative.

Changes to Tektronix instruments are sometimes made to accommodate improved components as they become available, and to give you the benefit of the latest circuit improvements developed in our engineering department. It is therefore important, when ordering parts, to include the following information in your order: Part number, instrument type or number, serial number, and modification number if applicable.

If a part you have ordered has been replaced with a new or improved part, your local Tektronix, Inc. Field Office or representative will contact you concerning any change in part number.

Change information, if any, is located at the rear of this manual.

### LIST OF ASSEMBLIES

A list of assemblies can be found at the beginning of the Electrical Parts List. The assemblies are listed in numerical order. When the complete component number of a part is known, this list will identify the assembly in which the part is located.

### CROSS INDEX-MFR. CODE NUMBER TO MANUFACTURER

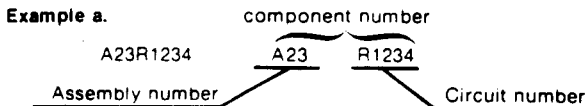
The Mfr. Code Number to Manufacturer index for the Electrical Parts List is located immediately after this page. The Cross Index provides codes, names and addresses of manufacturers of components listed in the Electrical Parts List.

### ABBREVIATIONS

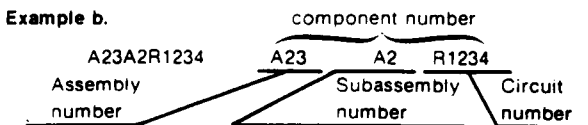
Abbreviations conform to American National Standard Y1 1

### COMPONENT NUMBER (column one of the Electrical Parts List)

A numbering method has been used to identify assemblies, subassemblies and parts. Examples of this numbering method and typical expansions are illustrated by the following:



Read: Resistor 1234 of Assembly 23



Read: Resistor 1234 of Subassembly 2 of Assembly 23

Only the circuit number will appear on the diagrams and circuit board illustrations. Each diagram and circuit board illustration is clearly marked with the assembly number. Assembly numbers are also marked on the mechanical exploded views located in the Mechanical Parts List. The component number is obtained by adding the assembly number prefix to the circuit number.

The Electrical Parts List is divided and arranged by assemblies in numerical sequence (e.g., assembly A1 with its subassemblies and parts, precedes assembly A2 with its subassemblies and parts).

Chassis-mounted parts have no assembly number prefix and are located at the end of the Electrical Parts List.

### TEKTRONIX PART NO. (column two of the Electrical Parts List)

Indicates part number to be used when ordering replacement part from Tektronix.

### SERIAL/MODEL NO. (columns three and four of the Electrical Parts List)

Column three (3) indicates the serial number at which the part was first used. Column four (4) indicates the serial number at which the part was removed. No serial number entered indicates part is good for all serial numbers.

### NAME & DESCRIPTION (column five of the Electrical Parts List)

In the Parts List, an Item Name is separated from the description by a colon (:). Because of space limitations, an Item Name may sometimes appear as incomplete. For further Item Name identification, the U.S. Federal Cataloging Handbook H6-1 can be utilized where possible.

### MFR. CODE (column six of the Electrical Parts List)

Indicates the code number of the actual manufacturer of the part. (Code to name and address cross reference can be found immediately after this page.)

### MFR. PART NUMBER (column seven of the Electrical Parts List)

Indicates actual manufacturers part number.

CROSS INDEX—MFR. CODE NUMBER TO MANUFACTURER

| Mfr. Code | Manufacturer  | Address                               | City, State, Zip                 |
|-----------|---|---------------------------------------|----------------------------------|
| 000DV     | ARROW-M CORP.   | 250 SHEFFIELD STREET                  | MOUNTAINSIDE, NJ 07092           |
| 000HX     | SAN-O INDUSTRIAL CORP.  | 170 WILBUR PLACE                      | BAHEMIA<br>LONG ISLAND, NY 11716 |
| 000JO     | DILECTRON INC.  | 2669 S MYRTLE AVE                     | MONROVIA, CA 91016               |
| 000LI     | TOPTRON CORP  |                                       | TOKYO, JAPAN                     |
| 00213     | NYTRONICS, COMPONENTS GROUP, INC.,<br>SUBSIDIARY OF NYTRONICS, INC.               | ORANGE STREET                         | DARLINGTON, SC 29532             |
| 00853     | SANGAMO ELECTRIC CO., S. CAROLINA DIV.  | P.O. BOX 128                          | PICKENS, SC 29671                |
| 01121     | ALLEN-BRADLEY COMPANY   | 1201 2ND STREET SOUTH                 | MILWAUKEE, WI 53204              |
| 01281     | TRW ELECTRONIC COMPONENTS, SEMICONDUCTOR<br>OPERATIONS                            | 14520 AVIATION BLVD.                  | LAWNDALE, CA 90260               |
| 01295     | TEXAS INSTRUMENTS, INC.<br>SEMICONDUCTOR GROUP                                    | P.O. BOX 5012                         | DALLAS, TX 75222                 |
| 02111     | SPECTROL ELECTRONICS CORPORATION  | 17070 EAST GALE AVENUE                | CITY OF INDUSTRY, CA 91745       |
| 02735     | RCA CORPORATION, SOLID STATE DIVISION   | ROUTE 202                             | SOMERVILLE, NY 08876             |
| 03508     | GENERAL ELECTRIC COMPANY, SEMI-CONDUCTOR<br>PRODUCTS DEPARTMENT                   | ELECTRONICS PARK                      | SYRACUSE, NY 13201               |
| 03888     | KDI PYROFILM CORPORATION  | 60 S JEFFERSON ROAD                   | WHIPPANY, NJ 07981               |
| 04009     | ARROW-HART, INC.  | 103 HAWTHORNE STREET                  | HARTFORD, CT 06106               |
| 04222     | AVX CERAMICS, DIVISION OF AVX CORP.   | P O BOX 867                           | MYRTLE BEACH, SC 29577           |
| 04713     | MOTOROLA, INC., SEMICONDUCTOR PROD. DIV.  | 5005 E MCDOWELL RD, PO BOX 20923      | PHOENIX, AZ 85036                |
| 05397     | UNION CARBIDE CORPORATION, MATERIALS<br>SYSTEMS DIVISION                          | 11901 MADISON AVENUE                  | CLEVELAND, OH 44101              |
| 07263     | FAIRCHILD SEMICONDUCTOR, A DIV. OF<br>FAIRCHILD CAMERA AND INSTRUMENT CORP.       | 464 ELLIS STREET                      | MOUNTAIN VIEW, CA 94042          |
| 07716     | TRW ELECTRONIC COMPONENTS, IRC FIXED<br>RESISTORS, BURLINGTON DIV.                | 2850 MT. PLEASANT                     | BURLINGTON, IA 52601             |
| 09023     | CORNELL-DUBILIER ELECTRONIC DIVISION<br>FEDERAL PACIFIC ELECTRIC CO.              | 2652 DALRYMPLE ST.                    | SANFORD, NC 27330                |
| 12300     | POTTER AND BRUMFIELD, DIV. AMF<br>CANADA LTD.                                     | 52 ROYAL ROAD, P O BOX 698            | GUELPH, ONTARIO, CANADA          |
| 12697     | CLAROSTAT MFG. CO., INC.  | LOWER WASHINGTON STREET               | DOVER, NH 03820                  |
| 12954     | SIEMENS CORPORATION, COMPONENTS GROUP   | 8700 E THOMAS RD, P O BOX 1390        | SCOTTSDALE, AZ 85252             |
| 12969     | UNITRODE CORPORATION  | 580 PLEASANT STREET                   | WATERTOWN, MA 02172              |
| 14298     | AMERICAN COMPONENTS, INC., AN<br>INSILCO COMPANY                                  | 8TH AVE. AT HARRY STREET              | CONSHOHOCKEN, PA 19428           |
| 14433     | ITT SEMICONDUCTORS  | 3301 ELECTRONICS WAY<br>P O BOX 3049  | WEST PALM BEACH, FL 33402        |
| 14552     | MICRO SEMICONDUCTOR CORP.   | 2830 E FAIRVIEW ST.                   | SANTA ANA, CA 92704              |
| 14752     | ELECTRO CUBE INC.   | 1710 S. DEL MAR AVE.                  | SAN GABRIEL, CA 91776            |
| 14859     | TEXAS INSTRUMENTS INC., CONTROL DIV.  | 300 NORTH MAIN                        | VERSAILLES, KY 40383             |
| 14936     | GENERAL INSTRUMENT CORP., SEMICONDUCTOR<br>PRODUCTS GROUP                         | P.O. BOX 600, 600 W. JOHN ST.         | HICKSVILLE, NY 11802             |
| 15238     | ITT SEMICONDUCTORS, A DIVISION OF INTER<br>NATIONAL TELEPHONE AND TELEGRAPH CORP. | P.O. BOX 168, 500 BROADWAY            | LAWRENCE, MA 01841               |
| 15454     | RODAN INDUSTRIES, INC.  | 2905 BLUE STAR ST.                    | ANAHEIM, CA 92806                |
| 17856     | SILICONIX, INC.   | 2201 LAURELWOOD DRIVE                 | SANTA CLARA, CA 95054            |
| 18324     | SIGNETICS CORP.   | 811 E. ARQUES                         | SUNNYVALE, CA 94086              |
| 19396     | ILLINOIS TOOL WORKS, INC. PAKTRON DIV.  | 900 FOLLIN LANE, SE                   | VIENNA, VA 22180                 |
| 22229     | SOLITRON DEVICES, INC.,<br>SEMICONDUCTOR GROUP                                    | 8808 BALBOA AVENUE                    | SAN DIEGO OPERS, CA 92123        |
| 22526     | BERG ELECTRONICS, INC.  | YOUK EXPRESSWAY                       | NEW CUMBERLAND, PA 17070         |
| 24546     | CORNING GLASS WORKS, ELECTRONIC<br>COMPONENTS DIVISION                            | 550 HIGH STREET                       | BRADFORD, PA 16701               |
| 26769     | NCI INC.  | 5900 AUSTRALIAN AVENUE                | WEST PALM BEACH, FL 33407        |
| 27014     | NATIONAL SEMICONDUCTOR CORP.  | 2900 SEMICONDUCTOR DR.                | SANTA CLARA, CA 95051            |
| 32159     | WEST-CAP ARIZONA  | 2201 E. ELVIRA ROAD                   | TUCSON, AZ 85706                 |
| 32997     | BOURNS, INC., TRIMPOT PRODUCTS DIV.   | 1200 COLUMBIA AVE.                    | RIVERSIDE, CA 92507              |
| 34335     | ADVANCED MICRO DEVICES  | 901 THOMPSON PL.                      | SUNNYVALE, CA 94086              |
| 34649     | INTEL CORP  | 3065 BOWERS AVE.                      | SANTA CLARA, CA 95051            |
| 50157     | MIDWEST COMPONENTS INC.   | P. O. BOX 787<br>1981 PORT CITY BLVD. | MUSKEGON, MI 49443               |
| 50558     | ELECTRONIC CONCEPTS, INC.   | 526 INDUSTRIAL WAY WEST               | EATONTOWN, NJ 07724              |
| 51642     | CENTRE ENGINEERING INC.   | 2820 E COLLEGE AVENUE                 | STATE COLLEGE, PA 16801          |
| 54473     | MATSUSHITA ELECTRIC, CORP. OF AMERICA   | 1 PANASONIC WAY                       | SECAUCUS, NJ 07094               |
| 55680     | NICHICON/AMERICA/CORP.  | 6435 N PROESEL AVENUE                 | CHICAGO, IL 60645                |
| 56289     | SPRAGUE ELECTRIC CO.  | 87 MARSHALL ST.                       | NORTH ADAMS, MA 01247            |
| 57668     | R-OHM CORP.   | 16931 MILLIKEN AVE.                   | IRVINE, CA 92713                 |

CROSS INDEX—MFR. CODE NUMBER TO MANUFACTURER

| Mfr. Code | Manufacturer   | Address                                      | City, State, Zip        |
|-----------|--|--|-------------------------|
| 57924     | BOURNS INC NETWORKS DIV 12155  | MAGNOLIA AVE                                 | RIVERSIDE, CA 92503     |
| 58361     | GENERAL INSTRUMENT CORP.<br>OPTO ELECTRONICS DIV.                                  | 3400 HILLVIEW AVE                            | PALO ALTO, CA 94304     |
| 59660     | TUSONIX INC.   | 2155 N FORBES BLVD                           | TUCSON, AZ 85705        |
| 59821     | CENTRALAB INC  | 7158 MERCHANT AVE                            | EL PASO, TX 79915       |
| 71400     | SUB NORTH AMERICAN PHILIPS CORP<br>BUSSMAN MFG., DIVISION OF MCGRAW-<br>EDISON CO. | 2536 W. UNIVERSITY ST.                       | ST. LOUIS, MO 63107     |
| 71590     | CENTRALAB ELECTRONICS, DIV. OF<br>GLOBE-UNION, INC.                                | P O BOX 858                                  | FORT DODGE, IA 50501    |
| 72982     | ERIE TECHNOLOGICAL PRODUCTS, INC.  | 644 W. 12TH ST.                              | ERIE, PA 16512          |
| 73138     | BECKMAN INSTRUMENTS, INC., HELIPOT DIV.  | 2500 HARBOR BLVD.                            | FULLERTON, CA 92634     |
| 73559     | CARLING SWITCH INC.  | 505 NEW PARK AVENUE                          | WEST HARTFORD, CT 06110 |
| 73899     | JFD ELECTRONICS COMPONENTS CORP.   | PINETREE ROAD                                | OXFORD, NC 27565        |
| 74276     | SIGNALITE DIV., GENERAL INSTRUMENT CORP.   | 1933 HECK AVE.                               | NEPTUNE, NJ 07753       |
| 74970     | JOHNSON, E. F., CO.  | 299 10TH AVE. S. W.                          | WASECA, MN 56093        |
| 75042     | TRW ELECTRONIC COMPONENTS, IRC FIXED<br>RESISTORS, PHILADELPHIA DIVISION           | 401 N. BROAD ST.                             | PHILADELPHIA, PA 19108  |
| 75378     | CTS KNIGHTS, INC.  | 400 REIMANN AVE.                             | SANDWICH, IL 60548      |
| 75915     | LITTELFUSE, INC.   | 800 E. NORTHWEST HWY                         | DES PLAINES, IL 60016   |
| 76493     | BELL INDUSTRIES, INC.,<br>MILLER, J. W., DIV.                                      | 19070 REYES AVE., P O BOX 5825               | COMPTON, CA 90224       |
| 78488     | STACKPOLE CARBON CO.   |  | ST. MARYS, PA 15857     |
| 80009     | TEKTRONIX, INC.  | P O BOX 500                                  | BEAVERTON, OR 97077     |
| 80031     | ELECTRA-MIDLAND CORP., MEPCO DIV.  | 22 COLUMBIA ROAD                             | MORRISTOWN, NJ 07960    |
| 80294     | BOURNS, INC., INSTRUMENT DIV.  | 6135 MAGNOLIA AVE.                           | RIVERSIDE, CA 92506     |
| 81073     | GRAYHILL, INC.   | 561 HILLGROVE AVE., PO BOX 373               | LA GRANGE, IL 60525     |
| 82877     | ROTRON, INC.   | 7-9 HASBROUCK LANE                           | WOODSTOCK, NY 12498     |
| 83003     | VARO, INC.   | P O BOX 411, 2203 WALNUT STREET              | GARLAND, TX 75040       |
| 84411     | TRW ELECTRONIC COMPONENTS, TRW CAPACITORS  | 112 W. FIRST ST.                             | OGALLALA, NE 69153      |
| 90201     | MALLORY CAPACITOR CO., DIV. OF<br>P. R. MALLORY AND CO., INC.                      | 3029 E. WASHINGTON STREET<br>P. O. BOX 372   | INDIANAPOLIS, IN 46206  |
| 91637     | DALE ELECTRONICS, INC.   | P. O. BOX 609                                | COLUMBUS, NE 68601      |
| 93958     | REPUBLIC ELECTRONICS CORPORATION   | 176 E 7TH STREET                             | PATERSON, NJ 07524      |
| 96733     | SAN FERNANDO ELECTRIC MFG CO   | 1501 FIRST ST                                | SAN FERNANDO, CA 91341  |
| S3774     | OSHINO ELECTRIC LAMP WORKS LTD   | 5 2 MINAMI SHINAGAWA 2 CHORE<br>SHINAGAWA KU | TOKYO, JAPAN            |
| T0271     | COMPONENT CONCEPTS, INC.   | 3229 PINE ST                                 | EVERETT, WA 98201       |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description  | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| ASSEMBLIES    |                    |                      |         |   |          |                 |
| A10           | 670-5153-00        |                      |         | CKT BOARD ASSY:MODE SWITCH  | 80009    | 670-5153-00     |
| A12           | 670-5154-00        | B010100              | B079999 | CKT BOARD ASSY:POWER SWITCH   | 80009    | 670-5154-00     |
| A12           | 670-5154-01        | B080000              |         | CKT BOARD ASSY:POWER SWITCH   | 80009    | 670-5154-01     |
| A16           | 670-5149-00        | B010100              | B089999 | CKT BOARD ASSY:MEMORY CONTROL                                       | 80009    | 670-5149-00     |
| A16           | 670-5149-02        | B090000              | B100773 | CKT BOARD ASSY:MEMORY CONTROL                                       | 80009    | 670-5149-02     |
| A16           | 670-5149-03        | B100774              |         | CKT BOARD ASSY:MEMORY CONTROL                                       | 80009    | 670-5149-03     |
| A18           | 670-5156-00        | B010100              | B100811 | CKT BOARD ASSY:MICRO CONTROL MEMORY                                 | 80009    | 670-5156-00     |
| A18           | 670-5156-02        | B100812              |         | CKT BOARD ASSY:MICRO CONTROL MEMORY                                 | 80009    | 670-5156-02     |
| A20           | 670-5148-00        | B010100              | B010253 | CKT BOARD ASSY:DATA BUFFER  | 80009    | 670-5148-00     |
| A20           | 670-5148-01        | B010254              | B089999 | CKT BOARD ASSY:DATA BUFFER  | 80009    | 670-5148-01     |
| A20           | 670-5148-02        | B090000              | B100786 | CKT BOARD ASSY:DATA BUFFER  | 80009    | 670-5148-00     |
| A20           | 670-5148-03        | B100787              |         | CKT BOARD ASSY:DATA BUFFER  | 80009    | 670-5148-03     |
| A22           | 670-5150-00        | B010100              | B069999 | CKT BOARD ASSY:TRANSLATOR   | 80009    | 670-5150-00     |
| A22           | 670-5150-02        | B070000              | B100784 | CKT BOARD ASSY:TRANSLATOR   | 80009    | 670-5150-02     |
| A22           | 670-5150-01        | B010147              | B069999 | CKT BOARD ASSY:TRANSLATOR<br>(OPTION 13 ONLY)                       | 80009    | 670-5150-01     |
| A22           | -----              |                      |         |   |          |                 |
| A22           | 670-5150-02        | B070000              | B100784 | CKT BOARD ASSY:TRANSLATOR<br>(OPTION 13 ONLY)                       | 80009    | 670-5150-02     |
| A22           | -----              |                      |         |   |          |                 |
| A22           | 670-5150-03        | B100785              | B100896 | CKT BOARD ASSY:TRANSLATOR<br>(OPTION 13 ONLY)                       | 80009    | 670-5150-03     |
| A22           | -----              |                      |         |   |          |                 |
| A22           | 670-5150-04        | B100897              |         | CKT BOARD ASSY:TRANSLATOR   | 80009    | 670-5150-04     |
| A24           | 670-5146-00        |                      |         | CKT BOARD ASSY:GRATICULE GENERATOR                                  | 80009    | 670-5146-00     |
| A26           | 670-5147-00        | B010100              | B039999 | CKT BOARD ASSY:X AND Y RAMP GENERATOR                               | 80009    | 670-5147-00     |
| A26           | 670-5147-01        | B040000              | B060648 | CKT BOARD ASSY:X AND Y RAMP GENERATOR                               | 80009    | 670-5147-01     |
| A26           | 670-5147-02        | B060649              | B080713 | CKT BOARD ASSY:X AND Y RAMP GENERATOR                               | 80009    | 670-5147-02     |
| A26           | 670-5147-03        | B080714              |         | CKT BOARD ASSY:X AND Y RAMP GENERATOR                               | 80009    | 670-5147-03     |
| A28           | 670-5145-00        | B010100              | B070679 | CKT BOARD ASSY:VIDEO PROCESSOR                                      | 80009    | 670-5145-00     |
| A28           | 670-5145-01        | B070680              | B079999 | CKT BOARD ASSY:VIDEO PROCESSOR                                      | 80009    | 670-5145-01     |
| A28           | 670-5145-02        | B080000              |         | CKT BOARD ASSY:VIDEO PROCESSOR                                      | 80009    | 670-5145-02     |
| A32           | 670-4377-01        |                      |         | CKT BOARD ASSY:VIDEO PREAMPLIFIER                                   | 80009    | 670-4377-01     |
| A34           | 670-1630-03        | B010100              | B111270 | CKT BOARD ASSY:VERTICAL AMPLIFIER                                   | 80009    | 670-1630-03     |
| A34           | 670-1630-05        | B111271              |         | CKT BOARD ASSY:VERTICAL AMPLIFIER                                   | 8009     | 670-1630-05     |
| A36           | 670-2526-00        |                      |         | CKT BOARD ASSY:DELAY LINE TERMINATION                               | 80009    | 670-2526-00     |
| A36           | -----              |                      |         | (SEE RMPL FOR REPLACEABLE PARTS)                                    |          |                 |
| A38           | 670-5143-00        | B010100              | B100774 | CKT BOARD ASSY:SCAN AMPL & READING GUN                              | 80009    | 670-5143-00     |
| A38           | 670-5143-01        | B100775              |         | CKT BOARD ASSY:SCAN AMP & GUN READING                               | 80009    | 670-5143-01     |
| A40           | 670-5144-00        | B010100              | B039999 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS                              | 80009    | 670-5144-00     |
| A40           | 670-5144-01        | B040000              | B079999 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS                              | 80009    | 670-5144-01     |
| A40           | 670-5144-02        | B080000              | B100766 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS                              | 80009    | 670-5144-02     |
| A40           | 670-5144-03        | B100767              | B100776 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS                              | 80009    | 670-5144-03     |
| A40           | 670-5144-04        | B100777              | B111279 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS                              | 80009    | 670-5144-04     |
| A40           | 670-5144-05        | B111280              |         | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS                              | 80009    | 670-5144-05     |
| A40A          | 670-6789-00        | B040000              | B080729 | CKT BOARD ASSY:HIGH VOLTAGE SHUTDOWN                                | 80009    | 670-6789-00     |
| A40A          | 670-6789-01        | B080730              | B100766 | CKT BOARD ASSY:HIGH VOLTAGE SHUTDOWN                                | 80009    | 670-6789-01     |
| A42           | -----              |                      |         | CKT BOARD ASSY:50 OHM FOLLOWER                                      |          |                 |
| A42           | -----              |                      |         | (NOT REPLACEABLE ORDER 672-0688-02)                                 |          |                 |
| A42           | 670-1698-05        | B010100              | B100836 | CKT BOARD ASSY:50 OHM FOLLOWER                                      | 80009    | 670-1698-05     |
| A42           | 670-1698-07        | B100837              |         | CKT BOARD ASSY:50 OHM FOLLOWER                                      | 80009    | 670-1698-07     |
| A42           | 670-1698-06        |                      |         | CKT BOARD ASSY:50 OHM FOLLOWER                                      | 80009    | 670-1698-06     |
| A42           | -----              |                      |         | (OPTION 04 ONLY)  |          |                 |
| A44           | 670-1625-06        |                      |         | CKT BOARD ASSY:VERTICAL INTERFACE                                   | 80009    | 670-1625-06     |
| A46           | -----              |                      |         | CKT BOARD ASSY:PLUG-IN INTERFACE                                    |          |                 |
| A46           | -----              |                      |         | (NOT REPLACEABLE ORDER 672-0688-02 OR<br>672-0734-01 FOR OPTION 04) |          |                 |
| A48           | 670-5160-00        |                      |         | CKT BOARD ASSY:VERTICAL ATTENUATOR                                  | 80009    | 670-5160-00     |
| A48           | -----              |                      |         | (OPTION 04 ONLY)  |          |                 |



| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                      | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A52           | 670-4953-00        | B010100              | B049999 | CKT BOARD ASSY:MPU MEMORY               | 80009    | 670-4953-00     |
| A52           | 670-4953-01        | B050000              | B109999 | CKT BOARD ASSY:MPU MEMORY               | 80009    | 670-4953-01     |
| A52           | -----              |                      |         | (SUBPART OF 672-0690-XX)                |          |                 |
| A54           | 670-4948-00        | B010100              | B040538 | CKT BOARD ASSY:MPU                      | 80009    | 670-4948-00     |
| A54           | 670-4948-01        | B040539              | B049999 | CKT BOARD ASSY:MPU                      | 80009    | 670-4948-01     |
| A54           | 670-4948-02        | B050000              | B080713 | CKT BOARD ASSY:MPU                      | 80009    | 670-4948-02     |
| A54           | 670-4948-03        | B080714              | B100793 | CKT BOARD ASSY:MPU                      | 80009    | 670-4948-03     |
| A54           | 670-4948-04        | B100794              | B100825 | CKT BOARD ASSY:MPU                      | 80009    | 670-4948-04     |
| A54           | 670-4948-05        | B100826              | B109999 | CKT BOARD ASSY:MPU                      | 80009    | 670-4948-05     |
| A54           | -----              |                      |         | (SUBPART OF 672-0690-XX)                |          |                 |
| A54           | 670-7642-00        | B110000              |         | CKT BOARD ASSY:MPU                      | 80009    | 670-7642-00     |
| A56           | 670-4946-00        | B010100              | B049999 | CKT BOARD ASSY:7912AD/GPIB INTERFACE    | 80009    | 670-4946-00     |
| A56           | 670-4946-01        | B050000              | B059999 | CKT BOARD ASSY:7912AD/GPIB INTERFACE    | 80009    | 670-4946-01     |
| A56           | 670-4946-02        | B060000              | B100869 | CKT BOARD ASSY:7912AD/GPIB INTERFACE    | 80009    | 670-4946-02     |
| A56           | 670-4946-03        | B100870              | B109999 | CKT BOARD ASSY:7912AD/GPIB INTERFACE    | 80009    | 670-4946-03     |
| A56           | 670-4946-04        | B110000              | B111210 | CKT BOARD ASSY:7912AD/GPIB INTERFACE    | 80009    | 670-4946-04     |
| A56           | 670-4946-05        | B111211              |         | CKT BOARD ASSY:7912AD/GPIB INTERFACE    | 80009    | 670-4946-05     |
| A62           | 670-5157-00        | B010100              | B089999 | CKT BOARD ASSY:POWER CONNECTOR          | 80009    | 670-5157-00     |
| A62           | 670-5157-01        | B090000              |         | CKT BOARD ASSY:POWER CONNECTOR          | 80009    | 670-5157-01     |
| A66           | 670-5174-00        |                      |         | CKT BOARD ASSY:DATA MEMORY INTERCONNECT | 80009    | 670-5174-00     |
| A68           | 670-5152-00        | B010100              | B059999 | CKT BOARD ASSY:MAIN INTERCONNECT        | 80009    | 670-5152-00     |
| A68           | 670-5152-01        | B060000              | B089999 | CKT BOARD ASSY:MAIN INTERCONNECT        | 80009    | 670-5152-01     |
| A68           | 670-5152-02        | B090000              | B100940 | CKT BOARD ASSY:MAIN INTERCONNECT        | 80009    | 670-5152-02     |
| A68           | 670-5152-04        | B100941              |         | CKT BOARD ASSY:MAIN INTERCONNECT        | 80009    | 670-5152-03     |
| A72           | 670-5155-00        | B010100              | B039999 | CKT BOARD ASSY:HIGH VOLTAGE OSC         | 80009    | 670-5155-00     |
| A72           | 670-5155-01        | B040000              | B059999 | CKT BOARD ASSY:HIGH VOLTAGE OSC         | 80009    | 670-5155-01     |
| A72           | 670-5155-02        | B060000              |         | CKT BOARD ASSY:HIGH VOLTAGE OSC         | 80009    | 670-5155-02     |
| A74           | 119-0452-03        | B010100              | B049999 | POWER SUPPLY:10KV.POTTED                | 80009    | 119-0452-03     |
| A74           | 119-0452-05        | B050000              | B100912 | POWER SUPPLY:10KV.POTTED                | 80009    | 119-0452-05     |
| A74           | 119-0452-06        | B100913              | B011279 | POWER SUPPLY:10KV.POTTED                | 80009    | 119-0452-06     |
| A74           | 119-0452-07        | B111280              |         | E                                       |          |                 |
| A76           | 670-8302-00        | B111250              |         | CKT BOARD ASSY:READING GUN SOCKET       | 80009    | 670-8302-00     |
| A80           | 670-4957-00        | B010100              | B010260 | CKT BOARD ASSY:LINE POWER               | 80009    | 670-4957-00     |
| A80           | 670-4957-01        | B010261              | B010286 | CKT BOARD ASSY:LINE POWER               | 80009    | 670-4957-01     |
| A80           | 670-4957-02        | B010287              | B020421 | CKT BOARD ASSY:LINE POWER               | 80009    | 670-4957-02     |
| A80           | 670-4957-00        | B020422              | B039999 | CKT BOARD ASSY:LINE POWER               | 80009    | 670-4957-00     |
| A80           | 670-4957-03        | B040000              | B089999 | CKT BOARD ASSY:LINE POWER               | 80009    | 670-4957-03     |
| A80           | 670-4957-04        | B090000              | B100940 | CKT BOARD ASSY:LINE POWER               | 80009    | 670-4957-04     |
| A80           | 670-4957-05        | B100941              |         | CKT BOARD ASSY:LINE POWER               | 80009    | 670-4957-05     |
| A82           | 670-5364-00        | B010100              | B010273 | CKT BOARD ASSY:INVERTER                 | 80009    | 670-5364-00     |
| A82           | 670-5364-01        | B010274              | B039999 | CKT BOARD ASSY:INVERTER                 | 80009    | 670-5364-01     |
| A82           | 670-5364-02        | B040000              | B100881 | CKT BOARD ASSY:INVERTER                 | 80009    | 670-5364-02     |
| A82           | 670-5364-03        | B100882              | B100940 | CKT BOARD ASSY:INVERTER                 | 80009    | 670-5364-03     |
| A82           | 670-5364-04        | B100941              | B101067 | CKT BOARD ASSY:INVERTER                 | 80009    | 670-5364-04     |
| A82           | 670-5364-05        | B101068              | B101114 | CKT BOARD ASSY:INVERTER                 | 80009    | 670-5364-05     |
| A82           | 670-5364-06        | B101115              |         | CKT BOARD ASSY:INVERTER                 | 80009    | 670-5364-06     |
| A84           | 670-4960-00        | B010100              | B089999 | CKT BOARD ASSY:SOCKET                   | 80009    | 670-4960-00     |
| A84           | 670-4960-01        | B090000              |         | CKT BOARD ASSY:SOCKET                   | 80009    | 670-4960-01     |
| A86           | 670-5158-00        | B010100              | B079999 | CKT BOARD ASSY:RECTIFIER FILTER         | 80009    | 670-5158-00     |
| A86           | 670-5158-02        | B080000              | B089999 | CKT BOARD ASSY:RECTIFIER FILTER         | 80009    | 670-5158-02     |
| A86           | 670-5158-03        | B090000              | B100978 | CKT BOARD ASSY:RECTIFIER FILTER         | 80009    | 670-5158-03     |
| A86           | 670-5158-04        | B100979              |         | CKT BOARD ASSY:RECTIFIER FILTER         | 80009    | 670-5158-04     |
| A88           | 670-5418-00        | B010100              | B039999 | CKT BOARD ASSY:REGULATOR                | 80009    | 670-5418-00     |
| A88           | 670-5418-01        | B040000              | B079999 | CKT BOARD ASSY:REGULATOR                | 80009    | 670-5418-01     |
| A88           | 670-5418-02        | B080000              | B089999 | CKT BOARD ASSY:REGULATOR                | 80009    | 670-5418-02     |
| A88           | 670-5418-04        | B090000              |         | CKT BOARD ASSY:REGULATOR                | 80009    | 670-5418-04     |

**Replaceable Electrical Parts—7912AD Service**

| Component No.    | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description              | Mfr Code | Mfr Part Number |
|------------------|--------------------|----------------------|---------|---------------------------------|----------|-----------------|
| A10 MODE SWITCH  |                    |                      |         |                                 |          |                 |
| A10              | 670-5153-00        |                      |         | CKT BOARD ASSY:MODE SWITCH      | 80009    | 670-5153-00     |
| A10DS112         | 150-0048-01        |                      |         | LAMP,INCAND:5V,0.06A,SEL        | S3774    | OL683AS15 TPL   |
| A10DS114         | 150-0048-01        |                      |         | LAMP,INCAND:5V,0.06A,SEL        | S3774    | OL683AS15 TPL   |
| A10DS212         | 150-0048-01        |                      |         | LAMP,INCAND:5V,0.06A,SEL        | S3774    | OL683AS15 TPL   |
| A10DS312         | 150-0048-01        |                      |         | LAMP,INCAND:5V,0.06A,SEL        | S3774    | OL683AS15 TPL   |
| A10DS411         | 150-1036-00        |                      |         | LAMP,LED:RED,3.0V,40MA          | 01295    | TIL 209A        |
| A10DS412         | 150-0048-01        |                      |         | LAMP,INCAND:5V,0.06A,SEL        | S3774    | OL683AS15 TPL   |
| A10S112          | 214-0628-00        |                      |         | SPRING,FLAT:PUSH BUTTON         | 80009    | 214-0628-00     |
| A10S114          | 214-0628-00        |                      |         | SPRING,FLAT:PUSH BUTTON         | 80009    | 214-0628-00     |
| A10S212          | 214-0628-00        |                      |         | SPRING,FLAT:PUSH BUTTON         | 80009    | 214-0628-00     |
| A10S312          | 214-0628-00        |                      |         | SPRING,FLAT:PUSH BUTTON         | 80009    | 214-0628-00     |
| A10S412          | 214-0628-00        |                      |         | SPRING,FLAT:PUSH BUTTON         | 80009    | 214-0628-00     |
| A12 POWER SWITCH |                    |                      |         |                                 |          |                 |
| A12              | 670-5154-00        | B010100              | B079999 | CKT BOARD ASSY:POWER SWITCH     | 80009    | 670-5154-00     |
| A12              | 670-5154-01        | B080000              |         | CKT BOARD ASSY:POWER SWITCH     | 80009    | 670-5154-01     |
| A12DS100         | 150-0048-01        |                      |         | LAMP,INCAND:5V,0.06A,SEL        | S3774    | OL683AS15 TPL   |
| A12S100          | 214-0628-00        |                      |         | SPRING,FLAT:PUSH BUTTON         | 80009    | 214-0628-00     |
| A12R100          | 307-0109-00        | B080000              |         | RES.,FXD,CMPSN:8.2 OHM,5%,0.25W | 01121    | CB82G5          |

| Component No.      | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                | Mfr Code | Mfr Part Number |
|--------------------|--------------------|----------------------|---------|-----------------------------------|----------|-----------------|
| A16 MEMORY CONTROL |                    |                      |         |                                   |          |                 |
| A16                | 670-5149-00        | B010100              | B089999 | CKT BOARD ASSY:MEMORY CONTROL     | 80009    | 670-5149-00     |
| A16                | 670-5149-02        | B090000              | B100773 | CKT BOARD ASSY:MEMORY CONTROL     | 80009    | 670-5149-02     |
| A16                | 670-5149-03        | B100774              |         | CKT BOARD ASSY:MEMORY CONTROL     | 80009    | 670-5149-03     |
| A16C001            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C002            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C003            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C011            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C013            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C021            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C023            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C041            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C042            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C043            | 290-0755-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%,10V | 55680    | ULA1A01TEA      |
| A16C045            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C101            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C103            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C111            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C121            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C123            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C141            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C143            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C145            | 290-0755-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%,10V | 55680    | ULA1A01TEA      |
| A16C146            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C201            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C203            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C205            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C207            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C211            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C213            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C221            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C223            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C231            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C233            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C235            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C243            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C303            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C311            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C313            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C321            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C323            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C331            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C341            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C343            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C401            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C403            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C405            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C411            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C413            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C421            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A16C423            | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                      | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|---|----------|------------------|
| A16C425       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C441       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C501       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C503       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C505       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C513       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C521       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C523       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C531       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C533       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C535       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C601       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C603       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C611       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C613       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C621       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C631       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C633       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C635       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C701       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C703       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C711       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C713       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C721       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C723       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C731       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C811       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C813       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16C821       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V         | 04222    | SA201C103KAA     |
| A16F146       | 159-0059-00        |                      |         | FUSE,WIRE LEAD:5A,FAST-BLOW             | 000HX    | SPI-5A           |
| A16L042       | 108-0858-00        |                      |         | COIL,RF:FIXED,3.2NH                     | 80009    | 108-0858-00      |
| A16Q210       | 151-0190-00        |                      |         | TRANSISTOR:SILICON,NPN                  | 07263    | S032677          |
| A16R011       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%,0.25W          | 01121    | CB1025           |
| A16R041       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%,0.25W          | 01121    | CB1025           |
| A16R233       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%,0.25W          | 01121    | CB1025           |
| A16R311       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%,0.25W          | 01121    | CB1025           |
| A16R415       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%,0.25W          | 01121    | CB1025           |
| A16R641       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%,0.25W          | 01121    | CB1025           |
| A16R701       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%,0.25W          | 01121    | CB1025           |
| A16TP031      | 214-0579-00        |                      |         | TERM,TEST POINT:BRS CD PL               | 80009    | 214-0579-00      |
| A16U001       | 156-1025-00        | B010100              | B100904 | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR | 01295    | SN74LS242 N OR J |
| A16U001       | 156-1025-02        | B100905              | B100904 | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR | 01295    | SN74LS242        |
| A16U003       | 156-1025-00        | B010100              | B100904 | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR | 01295    | SN74LS242 N OR J |
| A16U003       | 156-1025-02        | B100905              |         | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR | 01295    | SN74LS242        |
| A16U011       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER            | 01295    | SN74LS04         |
| A16U013       | 156-0955-02        |                      |         | MICROCIRCUIT,DI:OCTAL BFR W/3 STATE OUT | 04713    | SN74LS241        |
| A16U021       | 156-0386-02        |                      |         | MICROCIRCUIT,DI:TRIPLE 3-INP NAND GATE  | 27014    | SN74LS10N        |
| A16U023       | 156-0541-02        |                      |         | MICROCIRCUIT,DI:DUAL 2 TO 4 LINE DCDR   | 01295    | SN74LS139NP3     |
| A16U031       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER            | 01295    | SN74LS04         |
| A16U041       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP        | 07263    | 74LS74A          |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A16U043       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F     | 01295    | SN74LS374       |
| A16U043       | 156-0982-03        | B100905              |         | MICROCIRCUIT,DI:OCTAL-D-EDGE FF.SCRN      | 01295    | SN74LS374 N3    |
| A16U101       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F     | 01295    | SN74LS374       |
| A16U101       | 156-0982-03        | B100905              |         | MICROCIRCUIT,DI:OCTAL-D-EDGE FF.SCRN      | 01295    | SN74LS374 N3    |
| A16U103       | 156-0304-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 INP NAND GATE      | 01295    | SN74S20         |
| A16U111       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F     | 01295    | SN74LS374       |
| A16U111       | 156-0982-03        | B100905              |         | MICROCIRCUIT,DI:OCTAL-D-EDGE FF.SCRN      | 01295    | SN74LS374 N3    |
| A16U113       | 156-0180-04        |                      |         | MICROCIRCUIT,DI:QUAD 2-INPUT NAND GATE    | 01295    | SN74S00NP3      |
| A16U121       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F     | 01295    | SN74LS374       |
| A16U121       | 156-0982-03        | B100905              |         | MICROCIRCUIT,DI:OCTAL-D-EDGE FF.SCRN      | 01295    | SN74LS374 N3    |
| A16U123       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F     | 01295    | SN74LS374       |
| A16U123       | 156-0982-03        | B100905              |         | MICROCIRCUIT,DI:OCTAL-D-EDGE FF.SCRN      | 01295    | SN74LS374 N3    |
| A16U141       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F     | 01295    | SN74LS374       |
| A16U141       | 156-0982-03        | B100905              |         | MICROCIRCUIT,DI:OCTAL-D-EDGE FF.SCRN      | 01295    | SN74LS374 N3    |
| A16U143       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F     | 01295    | SN74LS374       |
| A16U143       | 156-0982-03        | B100905              |         | MICROCIRCUIT,DI:OCTAL-D-EDGE FF.SCRN      | 01295    | SN74LS374 N3    |
| A16U201       | 156-0459-02        |                      |         | MICROCIRCUIT,DI:QUAD 2 INPUT & GATE.BURN  | 01295    | SN74S08         |
| A16U203       | 156-0180-04        |                      |         | MICROCIRCUIT,DI:QUAD 2-INPUT NAND GATE    | 01295    | SN74S00NP3      |
| A16U211       | 156-0180-04        |                      |         | MICROCIRCUIT,DI:QUAD 2-INPUT NAND GATE    | 01295    | SN74S00NP3      |
| A16U213       | 156-0323-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER,BURN-IN      | 01295    | SN74S04         |
| A16U221       | 156-0180-04        |                      |         | MICROCIRCUIT,DI:QUAD 2-INPUT NAND GATE    | 01295    | SN74S00NP3      |
| A16U223       | 156-0321-02        |                      |         | MICROCIRCUIT,DI:TRIPLE 3 INP NAND GATE    | 01295    | SN74S10         |
| A16U231       | 156-0321-02        |                      |         | MICROCIRCUIT,DI:TRIPLE 3 INP NAND GATE    | 01295    | SN74S10         |
| A16U233       | 156-1061-02        |                      |         | MICROCIRCUIT,DI:DUAL JK FF.SCREENED       | 07263    | SL81712         |
| A16U241       | 156-0419-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 INP NAND LINE DRVR | 07263    | 74S140          |
| A16U243       | 156-0419-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 INP NAND LINE DRVR | 07263    | 74S140          |
| A16U245       | 156-0419-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 INP NAND LINE DRVR | 07263    | 74S140          |
| A16U301       | 156-1061-02        |                      |         | MICROCIRCUIT,DI:DUAL JK FF.SCREENED       | 07263    | SL81712         |
| A16U303       | 156-0304-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 INP NAND GATE      | 01295    | SN74S20         |
| A16U311       | 156-1061-02        |                      |         | MICROCIRCUIT,DI:DUAL JK FF.SCREENED       | 07263    | SL81712         |
| A16U313       | 156-1061-02        |                      |         | MICROCIRCUIT,DI:DUAL JK FF.SCREENED       | 07263    | SL81712         |
| A16U321       | 160-0083-01        |                      |         | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0083-01     |
| A16U341       | 156-1046-02        |                      |         | MICROCIRCUIT,DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A16U343       | 156-1046-02        |                      |         | MICROCIRCUIT,DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A16U343       | 156-1046-02        |                      |         | MICROCIRCUIT,DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A16U401       | 156-1061-02        |                      |         | MICROCIRCUIT,DI:DUAL JK FF.SCREENED       | 07263    | SL81712         |
| A16U403       | 156-0739-02        |                      |         | MICROCIRCUIT,DI:QUAD 2 INP OR GATE.SCRN   | 01295    | SN74S32         |
| A16U411       | 156-0765-04        |                      |         | MICROCIRCUIT,DI:SYN UP/DN BINARY COUNTER  | 01295    | SN74S169N3      |
| A16U413       | 156-0180-04        |                      |         | MICROCIRCUIT,DI:QUAD 2-INPUT NAND GATE    | 01295    | SN74S00NP3      |
| A16U415       | 156-0948-02        |                      |         | MICROCIRCUIT,DI:QUAD D F-F.BURN-IN        | 01295    | SN74S175J4      |
| A16U421       | 160-0085-01        |                      |         | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0085-01     |
| A16U423       | 160-0084-01        |                      |         | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0084-01     |
| A16U425       | 160-0092-01        |                      |         | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0092-01     |
| A16U441       | 156-1046-02        |                      |         | MICROCIRCUIT,DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A16U443       | 156-1029-00        |                      |         | MICROCIRCUIT,DI:MICROPROGRAM SEQUENCE     | 34335    | AM2909ADC       |
| A16U501       | 156-0320-03        |                      |         | MICROCIRCUIT,DI:TRIPLE 3 INP NAND GATE    | 01295    | SN74S11NP3      |
| A16U503       | 156-0180-04        |                      |         | MICROCIRCUIT,DI:QUAD 2-INPUT NAND GATE    | 01295    | SN74S00NP3      |
| A16U511       | 156-1061-02        |                      |         | MICROCIRCUIT,DI:DUAL JK FF.SCREENED       | 07263    | SL81712         |
| A16U513       | 156-0323-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER,BURN-IN      | 01295    | SN74S04         |
| A16U521       | 160-0089-01        |                      |         | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0089-01     |
| A16U523       | 160-0088-01        |                      |         | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0088-01     |
| A16U541       | 156-1046-02        |                      |         | MICROCIRCUIT,DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A16U543       | 156-1046-02        |                      |         | MICROCIRCUIT,DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A16U601       | 156-0321-02        |                      |         | MICROCIRCUIT,DI:TRIPLE 3 INP NAND GATE    | 01295    | SN74S10         |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscnt | Name & Description                        | Mfr Code | Mfr Part Numbe |
|---------------|--------------------|----------------------------|---|----------|----------------|
| A16U603       | 156-0324-03        |                            | MICROCIRCUIT,DI:8 INP DATA SEL.SCRN       | 01295    | SN74S151       |
| A16U611       | 156-0459-02        |                            | MICROCIRCUIT,DI:QUAD 2 INPUT & GATE.BURN  | 01295    | SN74S08        |
| A16U613       | 156-0707-03        |                            | MICROCIRCUIT,DI:QUAD 2 INP EXCL OR GATE   | 07263    | 74S86          |
| A16U621       | 160-0091-01        |                            | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0091-01    |
| A16U623       | 160-0090-01        |                            | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0090-01    |
| A16U641       | 156-0419-02        |                            | MICROCIRCUIT,DI:DUAL 4 INP NAND LINE DRVR | 07263    | 74S140         |
| A16U643       | 156-1029-00        |                            | MICROCIRCUIT,DI:MICROPROGRAM SEQUENCE     | 34335    | AM2909ADC      |
| A16U701       | 156-0324-03        |                            | MICROCIRCUIT,DI:8 INP DATA SEL.SCRN       | 01295    | SN74S151       |
| A16U703       | 156-0324-03        |                            | MICROCIRCUIT,DI:8 INP DATA SEL.SCRN       | 01295    | SN74S151       |
| A16U711       | 156-0323-02        |                            | MICROCIRCUIT,DI:HEX INVERTER.BURN-IN      | 01295    | SN74S04        |
| A16U713       | 156-0180-04        |                            | MICROCIRCUIT,DI:QUAD 2-INPUT NAND GATE    | 01295    | SN74S00NP3     |
| A16U721       | 160-0082-00        |                            | MICROCIRCUIT,DI:256 X 4 PROM.PROGRAMMED   | 80009    | 160-0082-00    |
| A16U723       | 160-0087-01        |                            | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0087-01    |
| A16U743       | 156-1046-02        |                            | MICROCIRCUIT,DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02    |
| A16U801       | 156-1046-02        |                            | MICROCIRCUIT,DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02    |
| A16U821       | 160-0086-01        |                            | MICROCIRCUIT,DI:2048 X 4 PROM.PROGRAMMED  | 80009    | 160-0086-01    |
| A16U841       | 156-1029-00        |                            | MICROCIRCUIT,DI:MICROPROGRAM SEQUENCE     | 34335    | AM2909ADC      |

| Component No.            | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                  | Mfr Code | Mfr Part Number |
|--------------------------|--------------------|----------------------|---------|-------------------------------------|----------|-----------------|
| A18 MICRO CONTROL MEMORY |                    |                      |         |                                     |          |                 |
| A18                      | 670-5156-00        | B010100              | B100811 | CKT BOARD ASSY:MICRO CONTROL MEMORY | 80009    | 670-5156-00     |
| A18                      | 670-5156-02        | B100812              |         | CKT BOARD ASSY:MICRO CONTROL MEMORY | 80009    | 670-5156-02     |
| A18C002                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C004                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C010                  | 290-0755-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%,10V   | 55680    | ULA1A01TEA      |
| A18C011                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C014                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C020                  | 290-0755-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%,10V   | 55680    | ULA1A01TEA      |
| A18C021                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C022                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C030                  | 290-0755-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%,10V   | 55680    | ULA1A01TEA      |
| A18C032                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C101                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C102                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C104                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C112                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C122                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C202                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C204                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C212                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C222                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C302                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C304                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C312                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C322                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C402                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C404                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C412                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C432                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C502                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C504                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C522                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C532                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C602                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C604                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C622                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C632                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C702                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C704                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C722                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C724                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C732                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C802                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C804                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C822                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C824                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C832                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C902                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C904                  | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C1002                 | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |
| A18C1004                 | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V     | 04222    | SA201C103KAA    |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Numbe  |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A18C1102      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF.10%.100V           | 04222    | SA201C103KAA    |
| A18C1112      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF.10%.100V           | 04222    | SA201C103KAA    |
| A18C1122      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF.10%.100V           | 04222    | SA201C103KAA    |
| A18C1202      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF.10%.100V           | 04222    | SA201C103KAA    |
| A18C1212      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF.10%.100V           | 04222    | SA201C103KAA    |
| A18C1302      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF.10%.100V           | 04222    | SA201C103KAA    |
| A18C1304      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF.10%.100V           | 04222    | SA201C103KAA    |
| A18F011       | 159-0059-00        |                      |         | FUSE.WIRE LEAD:5A.FAST-BLOW               | 000HX    | SPI-5A          |
| A18F030       | 159-0059-00        |                      |         | FUSE.WIRE LEAD:5A.FAST-BLOW               | 000HX    | SPI-5A          |
| A18L020       | 108-0858-00        |                      |         | COIL.RF:FIXED.3.2NH                       | 80009    | 108-0858-00     |
| A18R832       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W            | 01121    | CB1025          |
| A18R1322      | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W           | 01121    | CB4715          |
| A18U002       | 156-0720-02        |                      |         | MICROCIRCUIT.DI:HEX DRVR.4 TO 2 LINE      | 01295    | SN74LS368       |
| A18U004       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U004       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U012       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U012       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U022       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U022       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U032       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U032       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U112       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U112       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U132       | 156-1042-00        |                      |         | MICROCIRCUIT.DI:1024 X STATIC R/W RAM     | 80009    | 156-1042-00     |
| A18U212       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U212       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U232       | 156-1042-00        |                      |         | MICROCIRCUIT.DI:1024 X STATIC R/W RAM     | 80009    | 156-1042-00     |
| A18U312       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U312       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U332       | 156-1042-00        |                      |         | MICROCIRCUIT.DI:1024 X STATIC R/W RAM     | 80009    | 156-1042-00     |
| A18U412       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U412       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U432       | 156-1042-00        |                      |         | MICROCIRCUIT.DI:1024 X STATIC R/W RAM     | 80009    | 156-1042-00     |
| A18U502       | 156-0386-02        |                      |         | MICROCIRCUIT.DI:TRIPLE 3-INP NAND GATE    | 27014    | DM74LS10N       |
| A18U512       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U512       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U522       | 156-1046-02        |                      |         | MICROCIRCUIT.DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A18U532       | 156-1046-02        |                      |         | MICROCIRCUIT.DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A18U602       | 156-0385-02        |                      |         | MICROCIRCUIT.DI:HEX INVERTER              | 01295    | SN74LS04        |
| A18U612       | 156-0987-00        | B010100              | B090758 | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-00     |
| A18U612       | 156-0987-02        | B090759              |         | MICROCIRCUIT.DI:4096 X 1 STATIC R/W RAM   | 80009    | 156-0987-02     |
| A18U622       | 156-1046-02        |                      |         | MICROCIRCUIT.DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A18U632       | 156-1046-02        |                      |         | MICROCIRCUIT.DI:OCTAL D TYPE EDGE TRIG FF | 80009    | 156-1046-02     |
| A18U702       | 156-0739-02        |                      |         | MICROCIRCUIT.DI:QUAD 2 INP OR GATE.SCRN   | 01295    | SN74S32         |
| A18U712       | 156-0323-02        |                      |         | MICROCIRCUIT.DI:HEX INVERTER.BURN-IN      | 01295    | SN74S04         |
| A18U722       | 156-0522-02        |                      |         | MICROCIRCUIT.DI:QUAD 2-INP MUX W/3 STATE  | 07263    | 74S257          |
| A18U724       | 156-0522-02        |                      |         | MICROCIRCUIT.DI:QUAD 2-INP MUX W/3 STATE  | 07263    | 74S257          |
| A18U732       | 156-0522-02        |                      |         | MICROCIRCUIT.DI:QUAD 2-INP MUX W/3 STATE  | 07263    | 74S257          |
| A18U802       | 156-0323-02        |                      |         | MICROCIRCUIT.DI:HEX INVERTER.BURN-IN      | 01295    | SN74S04         |
| A18U812       | 156-0459-02        |                      |         | MICROCIRCUIT.DI:QUAD 2 INPUT & GATE.BURN  | 01295    | SN74S08         |
| A18U822       | 156-0692-02        |                      |         | MICROCIRCUIT.DI:LOOK AHEAD CARRY GEN.SCRN | 01295    | SN74S182(NP3 OF |
| A18U824       | 156-0471-02        |                      |         | MICROCIRCUIT.DI:DUAL 4/1 LINE DATA SEL    | 01295    | SN74LS253NP3    |



| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                         | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A18U832       | 156-0471-02        |                      |         | MICROCIRCUIT,DI:DUAL 4/1 LINE DATA SEL     | 01295    | SN74LS253NP3    |
| A18U902       | 156-0325-02        |                      |         | MICROCIRCUIT,DI:DUAL 4-1 LINE DATA,BURN-IN | 01295    | SN74S153JP3     |
| A18U912       | 156-0325-02        |                      |         | MICROCIRCUIT,DI:DUAL 4-1 LINE DATA,BURN-IN | 01295    | SN74S153JP3     |
| A18U922       | 156-1043-00        | B010100              | B090758 | MICROCIRCUIT,DI:4 BIT MICROPROCESSOR SLICE | 34335    | AM2901BDC       |
| A18U922       | 156-1043-02        | B090759              |         | MICROCIRCUIT,DI:4 BIT MICROPROCESSOR,SCRN  | 34335    | AM2901DCB       |
| A18U1002      | 156-0325-02        |                      |         | MICROCIRCUIT,DI:DUAL 4-1 LINE DATA,BURN-IN | 01295    | SN74S153JP3     |
| A18U1012      | 156-0325-02        |                      |         | MICROCIRCUIT,DI:DUAL 4-1 LINE DATA,BURN-IN | 01295    | SN74S153JP3     |
| A18U1022      | 156-1043-00        | B010100              | B090758 | MICROCIRCUIT,DI:4 BIT MICROPROCESSOR SLICE | 34335    | AM2901BDC       |
| A18U1022      | 156-1043-02        |                      |         | MICROCIRCUIT,DI:4 BIT MICROPROCESSOR,SCRN  | 34335    | AM2901DCB       |
| A18U1102      | 156-0325-02        |                      |         | MICROCIRCUIT,DI:DUAL 4-1 LINE DATA,BURN-IN | 01295    | SN74S153JP3     |
| A18U1112      | 156-0325-02        |                      |         | MICROCIRCUIT,DI:DUAL 4-1 LINE DATA,BURN-IN | 01295    | SN74S153JP3     |
| A18U1202      | 156-0325-02        |                      |         | MICROCIRCUIT,DI:DUAL 4-1 LINE DATA,BURN-IN | 01295    | SN74S153JP3     |
| A18U1212      | 156-0325-02        |                      |         | MICROCIRCUIT,DI:DUAL 4-1 LINE DATA,BURN-IN | 01295    | SN74S153JP3     |
| A18U1222      | 156-1043-00        | B010100              | B090758 | MICROCIRCUIT,DI:4 BIT MICROPROCESSOR SLICE | 34335    | AM2901BDC       |
| A18U1222      | 156-1043-02        | B090759              |         | MICROCIRCUIT,DI:4 BIT MICROPROCESSOR,SCRN  | 34335    | AM2901DCB       |
| A18U1302      | 160-0109-01        |                      |         | MICROCIRCUIT,DI:256 BIT PROM W/3 STATE OUT | 80009    | 160-0109-01     |
| A18U1312      | 160-0108-00        |                      |         | MICROCIRCUIT,DI:PROM 256 BIT W/3 STATE OUT | 80009    | 160-0108-00     |
| A18U1322      | 156-1043-00        | B010100              | B090758 | MICROCIRCUIT,DI:4 BIT MICROPROCESSOR SLICE | 34335    | AM2901BDC       |
| A18U1322      | 156-1043-02        | B090759              |         | MICROCIRCUIT,DI:4 BIT MICROPROCESSOR,SCRN  | 34335    | AM2901DCB       |

# Replaceable Electrical Parts—7912AD Service

| Component No.          | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                 | Mfr Code | Mfr Part Number |
|------------------------|--------------------|----------------------|---------|------------------------------------|----------|-----------------|
| <b>A20 DATA BUFFER</b> |                    |                      |         |                                    |          |                 |
| A20                    | 670-5148-00        | B010100              | B010253 | CKT BOARD ASSY:DATA BUFFER         | 80009    | 670-5148-00     |
| A20                    | 670-5148-01        | B010254              | B089999 | CKT BOARD ASSY:DATA BUFFER         | 80009    | 670-5148-01     |
| A20                    | 670-5148-02        | B090000              | B100786 | CKT BOARD ASSY:DATA BUFFER         | 80009    | 670-5148-00     |
| A20                    | 670-5148-03        | B100787              |         | CKT BOARD ASSY:DATA BUFFER         | 80009    | 670-5148-03     |
| A20C024                | 290-0773-00        | B090000              |         | CAP.,FXD,ELCTLT:1000UF,+50-10%,10V | 56289    | 500D154         |
| A20C034                | 290-0773-00        | B010100              | B089999 | CAP.,FXD,ELCTLT:1000UF,+50-10%,10V | 56289    | 500D154         |
| A20C048                | 283-0238-00        | B010254              | B089999 | CAP.,FXD,CER DI:0.01UF,10%,50V     | 72982    | 8121N075X7R010: |
| A20C100                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C106                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C108                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C116                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C118                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C126                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C128                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C136                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C138                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C146                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C148                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C208                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C216                | 281-0773-00        | B090000              |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C218                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C226                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C228                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C236                | 281-0773-00        | B010100              | B089999 | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C238                | 281-0773-00        | B010100              | B089999 | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C238                | 283-0341-00        | B090000              |         | CAP.,FXD,CER DI:0.047UF,10%,100V   | 72982    | 8121N153X7R0473 |
| A20C246                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C248                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C300                | 281-0773-00        | B090000              |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C310                | 281-0773-00        | B010100              | B089999 | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C316                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C336                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C338                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C346                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C348                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C410                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C424                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C426                | 283-0167-00        |                      |         | CAP.,FXD,CER DI:0.1UF,10%,100V     | 72982    | 8131N145X5R0104 |
| A20C428                | 281-0620-00        |                      |         | CAP.,FXD,CER DI:21PF,1%,500V       | 59660    | 301-000C0G0210F |
| A20C430                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C500                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C510                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C520                | 290-0773-00        |                      |         | CAP.,FXD,ELCTLT:1000UF,+50-10%,10V | 56289    | 500D154         |
| A20C540                | 290-0773-00        |                      |         | CAP.,FXD,ELCTLT:1000UF,+50-10%,10V | 56289    | 500D154         |
| A20C600                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C602                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C610                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C616                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C620                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C630                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |
| A20C634                | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V    | 04222    | SA201C103KAA    |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-----------------------------------|----------|-----------------|
| A20C636       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C640       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C646       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C704       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C706       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C710       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C716       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C718       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C720       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C746       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C748       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C800       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C820       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C822       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C828       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C900       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C902       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C930       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20C932       | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V   | 04222    | SA201C103KAA    |
| A20CR316      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA | 01295    | 1N4152R         |
| A20CR626      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA | 01295    | 1N4152R         |
| A20F034       | 159-0059-00        | B090000              |         | FUSE.WIRE LEAD:5A,FAST-BLOW       | 000HX    | SPI-5A          |
| A20F044       | 159-0059-00        | B010100              | B089999 | FUSE.WIRE LEAD:5A,FAST-BLOW       | 000HX    | SPI-5A          |
| A20F530       | 159-0059-00        |                      |         | FUSE.WIRE LEAD:5A,FAST-BLOW       | 000HX    | SPI-5A          |
| A20F540       | 159-0059-00        |                      |         | FUSE.WIRE LEAD:5A,FAST-BLOW       | 000HX    | SPI-5A          |
| A20L428       | 108-0182-00        |                      |         | COIL,RF:0.3UH                     | 80009    | 108-0182-00     |
| A20Q044       | 151-0190-00        | B090000              |         | TRANSISTOR:SILICON,NPN            | 07263    | S032677         |
| A20R042       | 315-0103-00        | B090000              |         | RES.,FXD.CMPSN:10K OHM,5%,0.25W   | 01121    | CB1035          |
| A20R044       | 315-0103-00        | B090000              |         | RES.,FXD.CMPSN:10K OHM,5%,0.25W   | 01121    | CB1035          |
| A20R048       | 315-0751-00        | B010254              | B089999 | RES.,FXD.CMPSN:750 OHM,5%,0.25W   | 01121    | CB7515          |
| A20R110       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R120       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R130       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R140       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R200       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R210       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R220       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R230       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R236       | 315-0751-00        | B090000              |         | RES.,FXD.CMPSN:750 OHM,5%,0.25W   | 01121    | CB7515          |
| A20R240       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R300       | 315-0102-00        | B090000              |         | RES.,FXD.CMPSN:1K OHM,5%,0.25W    | 01121    | CB1025          |
| A20R306       | 315-0102-00        | B010100              | B089999 | RES.,FXD.CMPSN:1K OHM,5%,0.25W    | 01121    | CB1025          |
| A20R310       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R320       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R326       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R330       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R340       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R400       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R406       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R410       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R420       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |
| A20R440       | 307-0489-00        |                      |         | RES.NTWK.FXD,FI:100 OHM,20%,1W    | 57924    | 4308R-101-101   |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|---|----------|------------------|
| A20R608       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R616       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W            | 01121    | CB1025           |
| A20R620       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W            | 01121    | CB1025           |
| A20R700       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R720       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W            | 01121    | CB1025           |
| A20R726       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R730       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R736       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R740       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R806       | 307-0493-00        |                      |         | RES.NTWK.FXD.FI:(7)50 OHM.5%.0.125W       | 32997    | 4308R-101-500    |
| A20R810       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R816       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R826       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R840       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R846       | 307-0493-00        |                      |         | RES.NTWK.FXD.FI:(7)50 OHM.5%.0.125W       | 32997    | 4308R-101-500    |
| A20R910       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R920       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20R930       | 307-0489-00        |                      |         | RES.NTWK.FXD.FI:100 OHM.20%.1W            | 57924    | 4308R-101-101    |
| A20U008       | 156-0205-00        | B010100              | B060597 | MICROCIRCUIT,DI:QUAD 2-INPUT NOR GATE     | 04713    | MC10102 (P OR L) |
| A20U008       | 156-0205-02        | B060598              |         | MICROCIRCUIT,DI:QUAD 2-IMP NOR GATE.SCRN  | 04713    | MC10102PD/LD     |
| A20U018       | 156-0368-00        | B010100              | B060612 | MICROCIRCUIT,DI:QUAD TTL TO ECL CONVERTER | 04713    | MC10124L         |
| A20U018       | 156-0368-03        | B060613              |         | MICROCIRCUIT,DI:TTL TO ECL QUAD TRANS     | 04713    | MC10124LD        |
| A20U028       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 80009    | 156-0880-00      |
| A20U028       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 04713    | MC10231PD/LD     |
| A20U038       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 80009    | 156-0880-00      |
| A20U038       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 04713    | MC10231PD/LD     |
| A20U048       | 156-0252-00        | B010100              | B060645 | MICROCIRCUIT,DI:TRIPLE 4-3-3 INP NOR GATE | 80009    | 156-0252-00      |
| A20U048       | 156-0252-02        | B060646              |         | MICROCIRCUIT,DI:TRIPLE 4-3-3 INP NOR GATE | 04713    | MC10106PD/LD     |
| A20U104       | 156-0252-00        | B010100              | B060645 | MICROCIRCUIT,DI:TRIPLE 4-3-3 INP NOR GATE | 80009    | 156-0252-00      |
| A20U104       | 156-0252-02        | B060646              |         | MICROCIRCUIT,DI:TRIPLE 4-3-3 INP NOR GATE | 04713    | MC10106PD/LD     |
| A20U114       | 156-0205-00        | B010100              | B060597 | MICROCIRCUIT,DI:QUAD 2-INPUT NOR GATE     | 04713    | MC10102 (P OR L) |
| A20U114       | 156-0205-02        | B060598              |         | MICROCIRCUIT,DI:QUAD 2-IMP NOR GATE.SCRN  | 04713    | MC10102PD/LD     |
| A20U124       | 156-0252-00        | B010100              | B060645 | MICROCIRCUIT,DI:TRIPLE 4-3-3 INP NOR GATE | 80009    | 156-0252-00      |
| A20U124       | 156-0252-02        | B060646              |         | MICROCIRCUIT,DI:TRIPLE 4-3-3 INP NOR GATE | 04713    | MC10106PD/LD     |
| A20U134       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 80009    | 156-0880-00      |
| A20U134       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 04713    | MC10231PD/LD     |
| A20U144       | 156-0205-00        | B010100              | B060597 | MICROCIRCUIT,DI:QUAD 2-INPUT NOR GATE     | 04713    | MC10102 (P OR L) |
| A20U144       | 156-0205-02        | B060598              |         | MICROCIRCUIT,DI:QUAD 2-IMP NOR GATE.SCRN  | 04713    | MC10102PD/LD     |
| A20U200       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 80009    | 156-0880-00      |
| A20U200       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 04713    | MC10231PD/LD     |
| A20U206       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 80009    | 156-0880-00      |
| A20U206       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 04713    | MC10231PD/LD     |
| A20U210       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 80009    | 156-0880-00      |
| A20U210       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 04713    | MC10231PD/LD     |
| A20U216       | 156-0640-00        | B010100              | B060645 | MICROCIRCUIT,DI:8 LINE MULTIPLEXER        | 80009    | 156-0640-00      |
| A20U216       | 156-0640-02        | B060646              |         | MICROCIRCUIT,DI:8 LINE MULTIPLEXER        | 04713    | MC10164PD/LD     |
| A20U220       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 80009    | 156-0880-00      |
| A20U220       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 04713    | 10231PD/LD       |
| A20U226       | 156-1038-00        | B010100              | B050592 | MICROCIRCUIT,DI:4 BIT BINARY COUNTER      | 80009    | 1038-00          |
| A20U226       | 156-1038-01        | B050593              |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER      | 80009    | 1038-01          |
| A20U230       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 80009    | 156-0880-00      |
| A20U230       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF    | 04713    | MC10231PD/LD     |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                         | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|--|----------|------------------|
| A20U236       | 156-0316-00        | B010100              | B060612 | MICROCIRCUIT,DI:QUAD ECL TO TTL CONVERTER  | 04713    | MC10125L         |
| A20U236       | 156-0316-04        | B060613              |         | MICROCIRCUIT,DI:QUAD ECL TO TTL TRANS      | 04713    | MC10125PD/LD     |
| A20U240       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 80009    | 156-0880-00      |
| A20U240       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 04713    | MC10231PD/LD     |
| A20U246       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 80009    | 156-0880-00      |
| A20U246       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 04713    | MC10231PD/LD     |
| A20U300       | 156-0368-00        | B010100              | B060612 | MICROCIRCUIT,DI:QUAD TTL TO ECL CONVERTER  | 04713    | MC10124L         |
| A20U300       | 156-0368-03        | B060613              |         | MICROCIRCUIT,DI:TTL TO ECL QUAD TRANS      | 04713    | MC10124LD        |
| A20U306       | 160-0106-00        |                      |         | MICROCIRCUIT,DI:PROM 32 X 8,PROGRAMMED     | 80009    | 160-0106-00      |
| A20U310       | 160-0107-00        |                      |         | MICROCIRCUIT,DI:PROM 32 X 8,PROGRAMMED     | 80009    | 160-0107-00      |
| A20U316       | 156-1038-00        | B010100              | B050592 | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-00      |
| A20U316       | 156-1038-01        | B050593              |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-01      |
| A20U320       | 156-0759-00        | B010100              | B060645 | MICROCIRCUIT,DI:QUAD 2-INPUT OR GATE       | 80009    | 156-0759-00      |
| A20U320       | 156-0759-01        | B060646              |         | MICROCIRCUIT,DI:QUAD 2-INPUT OR GATE,CHK   | 80009    | 156-0759-01      |
| A20U326       | 160-0105-00        |                      |         | MICROCIRCUIT,DI:PROM,32 X 8,PROGRAMMED     | 80009    | 160-0105-00      |
| A20U330       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 80009    | 156-0880-00      |
| A20U330       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 04713    | MC10231PD/LD     |
| A20U336       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 80009    | 156-0880-00      |
| A20U336       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 04713    | MC10231PD/LD     |
| A20U340       | 156-0205-00        | B010100              | B060597 | MICROCIRCUIT,DI:QUAD 2-INPUT NOR GATE      | 04713    | MC10102 (P OR L) |
| A20U340       | 156-0205-02        | B060598              |         | MICROCIRCUIT,DI:QUAD 2-INP NOR GATE,SCRN   | 04713    | MC10102PD/LD     |
| A20U346       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 80009    | 156-0880-00      |
| A20U346       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 04713    | MC10231PD/LD     |
| A20U400       | 156-1023-00        | B010100              | B050592 | MICROCIRCUIT,DI:5-BIT MAGNITUDE COMPARATOR | 80009    | 156-1023-00      |
| A20U400       | 156-1023-01        | B050593              |         | MICROCIRCUIT,DI:5-BIT MAGNITUDE COMPARATOR | 04713    | MC10166PD/LD     |
| A20U406       | 156-0480-02        |                      |         | MICROCIRCUIT,DI:QUAD 2 INP & GATE          | 01295    | SN74LS08NP3      |
| A20U410       | 156-1023-00        | B010100              | B050592 | MICROCIRCUIT,DI:5-BIT MAGNITUDE COMPARATOR | 80009    | 156-1023-00      |
| A20U410       | 156-1023-01        | B050593              |         | MICROCIRCUIT,DI:5-BIT MAGNITUDE COMPARATOR | 04713    | MC10166PD/LD     |
| A20U420       | 156-1019-00        | B010100              | B070673 | MICROCIRCUIT,DI:DUAL 3-INPUT/OUTPUT        | 80009    | 156-1019-00      |
| A20U420       | 156-1019-02        | B070674              |         | MICROCIRCUIT,DI:DUAL 3-INPUT/OUTPUT,SCRN   | 04713    | MC10210PD/LD     |
| A20U430       | 156-0316-00        | B010100              | B060612 | MICROCIRCUIT,DI:QUAD ECL TO TTL CONVERTER  | 04713    | MC10125L         |
| A20U430       | 156-0316-04        | B060613              |         | MICROCIRCUIT,DI:QUAD ECL TO TTL TRANS      | 04713    | MC10125PD/LD     |
| A20U436       | 156-0205-00        | B010100              | B060597 | MICROCIRCUIT,DI:QUAD 2-INPUT NOR GATE      | 04713    | MC10102 (P OR L) |
| A20U436       | 156-0205-02        | B060598              |         | MICROCIRCUIT,DI:QUAD 2-INP NOR GATE,SCRN   | 04713    | MC10102PD/LD     |
| A20U440       | 156-0182-00        | B010100              | B060645 | MICROCIRCUIT,DI:TRIPLE 2-3-2 INPUT GATE    | 04713    | MC10105P/L       |
| A20U440       | 156-0182-02        | B060646              |         | MICROCIRCUIT,DI:TRIPLE 2-3-2 INPUT GATE    | 04713    | MC10105PD/LD     |
| A20U446       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 80009    | 156-0880-00      |
| A20U446       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 04713    | MC10231PD/LD     |
| A20U500       | 160-0103-00        |                      |         | MICROCIRCUIT,DI:PROM 256 BIT W/3 STATE OUT | 80009    | 160-0103-00      |
| A20U508       | 156-0844-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT CNTR,SCRN        | 01295    | SN74LS161A       |
| A20U510       | 160-0104-00        |                      |         | MICROCIRCUIT,DI:PROM 256 BIT W/3 STATE OUT | 80009    | 160-0104-00      |
| A20U518       | 156-1063-00        | B010100              | B050592 | MICROCIRCUIT,DI:6-BIT IDENTITY COMPARATOR  | 07263    | 93S47DC          |
| A20U518       | 156-1063-01        | B050593              |         | MICROCIRCUIT,DI:6-BIT IDENTITY COMPARATOR  | 07263    | 93S47DCQR        |
| A20U528       | 156-1063-00        | B010100              | B050592 | MICROCIRCUIT,DI:6-BIT IDENTITY COMPARATOR  | 07263    | 93S47DC          |
| A20U528       | 156-1063-01        | B050593              |         | MICROCIRCUIT,DI:6-BIT IDENTITY COMPARATOR  | 07263    | 93S47DCQR        |
| A20U538       | 156-0522-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP MUX W/3 STATE   | 07263    | 74S257           |
| A20U548       | 156-0522-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP MUX W/3 STATE   | 07263    | 74S257           |
| A20U600       | 156-0948-02        |                      |         | MICROCIRCUIT,DI:QUAD D F-F,BURN-IN         | 01295    | SN74S175J4       |
| A20U608       | 156-1038-00        | B010100              | B050592 | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-00      |
| A20U608       | 156-1038-01        | B050593              |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-01      |
| A20U610       | 156-0844-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT CNTR,SCRN        | 01295    | SN74LS161A       |
| A20U618       | 156-1038-00        | B010100              | B050592 | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-00      |
| A20U618       | 156-1038-01        | B050593              |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-01      |
| A20U620       | 156-0844-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT CNTR,SCRN        | 01295    | SN74LS161A       |
| A20U628       | 156-1038-00        | B010100              | B050592 | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-00      |
| A20U628       | 156-1038-01        | B050593              |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-01      |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                         | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|--|----------|------------------|
| A20U630       | 156-0844-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT CNTR.SCRN        | 01295    | SN74LS161A       |
| A20U638       | 156-1038-00        | B010100              | B050592 | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-00      |
| A20U638       | 156-1038-01        | B050593              |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-01      |
| A20U640       | 156-0522-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP MUX W/3 STATE   | 07263    | 74S257           |
| A20U648       | 156-0205-00        | B010100              | B060597 | MICROCIRCUIT,DI:QUAD 2-INPUT NOR GATE      | 04713    | MC10102 (P OR L) |
| A20U648       | 156-0205-02        | B060598              |         | MICROCIRCUIT,DI:QUAD 2-INP NOR GATE.SCRN   | 04713    | MC10102PD/LD     |
| A20U700       | 156-1023-00        | B010100              | B050592 | MICROCIRCUIT,DI:5-BIT MAGNITUDE COMPARATOR | 80009    | 156-1023-00      |
| A20U700       | 156-1023-01        | B050593              |         | MICROCIRCUIT,DI:5-BIT MAGNITUDE COMPARATOR | 04713    | MC10166PD/LD     |
| A20U710       | 156-0760-00        | B010100              | B060645 | MICROCIRCUIT,DI:QUINT LATCH                | 07263    | F10175DC         |
| A20U710       | 156-0760-01        | B060646              |         | MICROCIRCUIT,DI:QUINT LATCH.SCREENED       | 04713    | MC10175P/L       |
| A20U720       | 156-0182-00        | B010100              | B060645 | MICROCIRCUIT,DI:TRIPLE 2-3-2 INPUT GATE    | 04713    | MC10105P/L       |
| A20U720       | 156-0182-02        | B060646              |         | MICROCIRCUIT,DI:TRIPLE 2-3-2 INPUT GATE    | 04713    | MC10105PD/LD     |
| A20U730       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 80009    | 156-0880-00      |
| A20U730       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 04713    | MC10231PD/LD     |
| A20U740       | 156-1038-00        | B010100              | B050592 | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-00      |
| A20U740       | 156-1038-01        | B050593              |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER       | 80009    | 156-1038-01      |
| A20U800       | 156-0847-00        | B010100              | B050595 | MICROCIRCUIT,DI:64-BIT REGISTER FILE       | 07263    | 10145ADC         |
| A20U800       | 156-0847-01        | B050596              |         | MICROCIRCUIT,DI:64 BIT REGISTER FILE.SCRN  | 07263    | 10145ADCQR       |
| A20U806       | 156-0847-00        | B010100              | B050595 | MICROCIRCUIT,DI:64-BIT REGISTER FILE       | 07263    | 10145ADC         |
| A20U806       | 156-0847-01        | B050596              |         | MICROCIRCUIT,DI:64 BIT REGISTER FILE.SCRN  | 07263    | 10145ADCQR       |
| A20U810       | 156-0847-00        | B010100              | B050595 | MICROCIRCUIT,DI:64-BIT REGISTER FILE       | 07263    | 10145ADC         |
| A20U810       | 156-0847-01        | B050596              |         | MICROCIRCUIT,DI:64 BIT REGISTER FILE.SCRN  | 07263    | 10145ADCQR       |
| A20U816       | 156-0847-00        | B010100              | B050595 | MICROCIRCUIT,DI:64-BIT REGISTER FILE       | 07263    | 10145ADC         |
| A20U816       | 156-0847-01        | B050596              |         | MICROCIRCUIT,DI:64 BIT REGISTER FILE.SCRN  | 07263    | 10145ADCQR       |
| A20U820       | 156-0847-00        | B010100              | B050595 | MICROCIRCUIT,DI:64-BIT REGISTER FILE       | 07263    | 10145ADC         |
| A20U820       | 156-0847-01        | B050596              |         | MICROCIRCUIT,DI:64 BIT REGISTER FILE.SCRN  | 07263    | 10145ADCQR       |
| A20U826       | 156-0847-00        | B010100              | B050595 | MICROCIRCUIT,DI:64-BIT REGISTER FILE       | 07263    | 10145ADC         |
| A20U826       | 156-0847-01        | B050596              |         | MICROCIRCUIT,DI:64 BIT REGISTER FILE.SCRN  | 07263    | 10145ADCQR       |
| A20U830       | 156-0847-00        | B010100              | B050595 | MICROCIRCUIT,DI:64-BIT REGISTER FILE       | 07263    | 10145ADC         |
| A20U830       | 156-0847-01        | B050596              |         | MICROCIRCUIT,DI:64 BIT REGISTER FILE.SCRN  | 07263    | 10145ADCQR       |
| A20U836       | 156-0847-00        | B010100              | B050595 | MICROCIRCUIT,DI:64-BIT REGISTER FILE       | 07263    | 10145ADC         |
| A20U836       | 156-0847-01        | B050596              |         | MICROCIRCUIT,DI:64 BIT REGISTER FILE.SCRN  | 07263    | 10145ADCQR       |
| A20U840       | 156-0760-00        | B010100              | B060645 | MICROCIRCUIT,DI:QUINT LATCH                | 07263    | F10175DC         |
| A20U840       | 156-0760-01        | B060646              |         | MICROCIRCUIT,DI:QUINT LATCH.SCREENED       | 04713    | MC10175P/L       |
| A20U846       | 156-1023-00        | B010100              | B050592 | MICROCIRCUIT,DI:5-BIT MAGNITUDE COMPARATOR | 80009    | 156-1023-00      |
| A20U846       | 156-1023-01        | B050593              |         | MICROCIRCUIT,DI:5-BIT MAGNITUDE COMPARATOR | 04713    | MC10166PD/LD     |
| A20U900       | 156-1035-00        |                      |         | MICROCIRCUIT,DI:128 X 1 STATIC RAM         | 04713    | MCM10147L        |
| A20U900       | 156-1035-01        | B060646              |         | MICROCIRCUIT,DI:128 X 1 STATIC RAM         | 04713    | MC10147LDS       |
| A20U910       | 156-0632-00        | B010100              | B060645 | MICROCIRCUIT,DI:QUAD 2 INPUT MUX/LATCH     | 04713    | MC10173L         |
| A20U910       | 156-0632-02        | B060646              |         | MICROCIRCUIT,DI:QUAD 2 INPUT MUX/LATCH     | 04713    | MC10173PD/LD     |
| A20U916       | 156-0316-00        | B010100              | B060612 | MICROCIRCUIT,DI:QUAD ECL TO TTL CONVERTER  | 04713    | MC10125L         |
| A20U916       | 156-0316-04        | B060613              |         | MICROCIRCUIT,DI:QUAD ECL TO TTL TRANS      | 04713    | MC10125PD/LD     |
| A20U920       | 156-0632-00        | B010100              | B060645 | MICROCIRCUIT,DI:QUAD 2 INPUT MUX/LATCH     | 04713    | MC10173L         |
| A20U920       | 156-0632-02        | B060646              |         | MICROCIRCUIT,DI:QUAD 2 INPUT MUX/LATCH     | 04713    | MC10173PD/LD     |
| A20U926       | 156-0316-00        | B010100              | B060612 | MICROCIRCUIT,DI:QUAD ECL TO TTL CONVERTER  | 04713    | MC10125L         |
| A20U926       | 156-0316-04        | B060613              |         | MICROCIRCUIT,DI:QUAD ECL TO TTL TRANS      | 04713    | MC10125PD/LD     |
| A20U930       | 156-0632-00        | B010100              | B060645 | MICROCIRCUIT,DI:QUAD 2 INPUT MUX/LATCH     | 04713    | MC10173L         |
| A20U930       | 156-0632-02        | B060646              |         | MICROCIRCUIT,DI:QUAD 2 INPUT MUX/LATCH     | 04713    | MC10173PD/LD     |
| A20U936       | 156-0316-00        | B010100              | B060612 | MICROCIRCUIT,DI:QUAD ECL TO TTL CONVERTER  | 04713    | MC10125L         |
| A20U936       | 156-0316-04        | B060613              |         | MICROCIRCUIT,DI:QUAD ECL TO TTL TRANS      | 04713    | MC10125PD/LD     |
| A20U940       | 156-1035-00        | B010100              | B060645 | MICROCIRCUIT,DI:128 X 1 STATIC RAM         | 04713    | MCM10147L        |
| A20U940       | 156-1035-01        | B060646              |         | MICROCIRCUIT,DI:128 X 1 STATIC RAM         | 04713    | MC10147LDS       |
| A20U946       | 156-0880-00        | B010100              | B060645 | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 80009    | 156-0880-00      |
| A20U946       | 156-0880-02        | B060646              |         | MICROCIRCUIT,DI:DUAL D MASTER SLAVE FF     | 04713    | MC10231PD/LD     |
| A20Y646       | 158-0147-00        |                      |         | XTAL UNIT.QTZ:80MHZ 0.01%.SERIES           | 75378    | TX-409           |

| Component No.  | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                  | Mfr Code | Mfr Part Number  |
|----------------|--------------------|----------------------|---------|-------------------------------------|----------|------------------|
| A22 TRANSLATOR |                    |                      |         |                                     |          |                  |
| A22            | 670-5150-00        | B010100              | B069999 | CKT BOARD ASSY:TRANSLATOR           | 80009    | 670-5150-00      |
| A22            | 670-5150-02        | B070000              | B100784 | CKT BOARD ASSY:TRANSLATOR           | 80009    | 670-5150-02      |
| A22            | 670-5150-01        | B010147              | B069999 | CKT BOARD ASSY:TRANSLATOR           | 80009    | 670-5150-01      |
| A22            | -----              |                      |         | (OPTION 13 ONLY)                    |          |                  |
| A22            | 670-5150-02        | B070000              | B100784 | CKT BOARD ASSY:TRANSLATOR           | 80009    | 670-5150-02      |
| A22            | -----              |                      |         | (OPTION 13 ONLY)                    |          |                  |
| A22            | 670-5150-03        | B100785              | B100896 | CKT BOARD ASSY:TRANSLATOR           | 80009    | 670-5150-03      |
| A22            | -----              |                      |         | (OPTION 13 ONLY)                    |          |                  |
| A22            | 670-5150-04        | B100897              |         | CKT BOARD ASSY:TRANSLATOR           | 80009    | 670-5150-04      |
| A22C020        | 283-0648-00        |                      |         | CAP.,FXD,MICA D:10PF,5%,100V        | 00853    | D151C100D0       |
| A22C041        | 283-0150-00        |                      |         | CAP.,FXD,CER DI:650PF,5%,200V       | 59660    | 0835030Z5E0 651J |
| A22C042        | 285-0882-00        | B010100              | B069999 | CAP.,FXD,PLSTC:0.047UF,10%,100V     | 56289    | LP66A1B473K001   |
| A22C042        | 285-0627-00        | B010147              |         | CAP.,FXD,PLSTC:0.0033UF,5%,100V     | 56289    | 192P33252        |
| A22C111        | 283-0005-00        |                      |         | CAP.,FXD,CER DI:0.01UF,+100-0%,250V | 72982    | 8131N300Z5U0103P |
| A22C120        | 283-0648-00        |                      |         | CAP.,FXD,MICA D:10PF,5%,100V        | 00853    | D151C100D0       |
| A22C141        | 283-0346-00        |                      |         | CAP.,FXD,CER DI:0.47UF,+80-20%,100V | 72982    | 8131-M100F474Z   |
| A22C221        | 283-0129-00        |                      |         | CAP.,FXD,CER DI:0.56UF,20%,100V     | 56289    | 3C37X5R564M050B  |
| A22C222        | 283-0346-00        |                      |         | CAP.,FXD,CER DI:0.47UF,+80-20%,100V | 72982    | 8131-M100F474Z   |
| A22C224        | 283-0666-00        | B070000              |         | CAP.,FXD,MICA D:890PF,2%,100V       | 00853    | D151F891G0       |
| A22C230        | 283-0346-00        |                      |         | CAP.,FXD,CER DI:0.47UF,+80-20%,100V | 72982    | 8131-M100F474Z   |
| A22C231        | 283-0129-00        |                      |         | CAP.,FXD,CER DI:0.56UF,20%,100V     | 56289    | 3C37X5R564M050B  |
| A22C310        | 281-0523-00        |                      |         | CAP.,FXD,CER DI:100PF,+/-20PF,500V  | 72982    | 301-000U2M0101M  |
| A22C313        | 283-0666-00        | B010100              | B069999 | CAP.,FXD,MICA D:890PF,2%,100V       | 00853    | D151F891G0       |
| A22C521        | 285-1134-00        |                      |         | CAP.,FXD,PLSTC:0.1UF,0.5%,100V      | 50558    | MH12D104J        |
| A22C522        | 285-1134-00        |                      |         | CAP.,FXD,PLSTC:0.1UF,0.5%,100V      | 50558    | MH12D104J        |
| A22C601        | 283-0100-00        |                      |         | CAP.,FXD,CER DI:0.0047UF,10%,200V   | 56289    | 273C3            |
| A22C602        | 283-0065-01        |                      |         | CAP.,FXD,CER DI:0.001UF,5%,100V     | 59660    | 083558Z25E00102J |
| A22C603        | 283-0164-00        |                      |         | CAP.,FXD,CER DI:2.2UF,20%,25V       | 04222    | SR402E225MAA     |
| A22C611        | 281-0523-00        |                      |         | CAP.,FXD,CER DI:100PF,+/-20PF,500V  | 72982    | 301-000U2M0101M  |
| A22C621        | 283-0005-00        |                      |         | CAP.,FXD,CER DI:0.01UF,+100-0%,250V | 72982    | 8131N300Z5U0103P |
| A22C622        | 285-1134-00        |                      |         | CAP.,FXD,PLSTC:0.1UF,0.5%,100V      | 50558    | MH12D104J        |
| A22C631        | 283-0065-01        |                      |         | CAP.,FXD,CER DI:0.001UF,5%,100V     | 59660    | 083558Z25E00102J |
| A22C632        | 283-0005-00        |                      |         | CAP.,FXD,CER DI:0.01UF,+100-0%,250V | 72982    | 8131N300Z5U0103P |
| A22C633        | 285-0905-00        |                      |         | CAP.,FXD,PLSTC:0.33UF,5%,50V        | 56289    | LP66A1A334J002   |
| A22C700        | 283-0005-00        |                      |         | CAP.,FXD,CER DI:0.01UF,+100-0%,250V | 72982    | 8131N300Z5U0103P |
| A22C721        | 283-0005-00        |                      |         | CAP.,FXD,CER DI:0.01UF,+100-0%,250V | 72982    | 8131N300Z5U0103P |
| A22C730        | 283-0065-01        |                      |         | CAP.,FXD,CER DI:0.001UF,5%,100V     | 59660    | 083558Z25E00102J |
| A22C841        | 281-0523-00        |                      |         | CAP.,FXD,CER DI:100PF,+/-20PF,500V  | 72982    | 301-000U2M0101M  |
| A22C931        | 281-0523-00        |                      |         | CAP.,FXD,CER DI:100PF,+/-20PF,500V  | 72982    | 301-000U2M0101M  |
| A22CR209       | 152-0141-02        | B010100              | B069999 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A22CR222       | 152-0141-02        | B070000              |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A22CR840       | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A22Q210        | 151-0190-00        |                      |         | TRANSISTOR:SILICON,NPN              | 07263    | S032677          |
| A22Q630        | 151-1005-00        |                      |         | TRANSISTOR:SILICON,JFE,N-CHANNEL    | 27014    | F55037           |
| A22Q840        | 151-0190-00        |                      |         | TRANSISTOR:SILICON,NPN              | 07263    | S032677          |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                  | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|-------------------------------------|----------|------------------|
| A22R011       | 315-0302-00        |                      |         | RES.,FXD.CMPSN:3K OHM,5%.0.25W      | 01121    | CB3025           |
| A22R022       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM,5%.0.25W    | 01121    | CB5125           |
| A22R041       | 315-0562-00        |                      |         | RES.,FXD.CMPSN:5.6K OHM,5%.0.25W    | 01121    | CB5625           |
| A22R042       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025           |
| A22R043       | 321-0289-00        |                      |         | RES.,FXD.FILM:10K OHM,1%.0.125W     | 91637    | MFF1816G10001F   |
| A22R052       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025           |
| A22R100       | 311-1238-00        |                      |         | RES.,VAR.NONWIR:5K OHM,10%.0.50W    | 73138    | 72-27-0          |
| A22R101       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025           |
| A22R111       | 315-0123-00        |                      |         | RES.,FXD.CMPSN:12K OHM,5%.0.25W     | 01121    | CB1235           |
| A22R112       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM,5%.0.25W    | 01121    | CB5125           |
| A22R121       | 315-0151-00        |                      |         | RES.,FXD.CMPSN:150 OHM,5%.0.25W     | 01121    | CB1515           |
| A22R141       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM,5%.0.25W    | 01121    | CB5125           |
| A22R201       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM,5%.0.25W    | 01121    | CB5125           |
| A22R209       | 315-0104-00        | B010100              | B069999 | RES.,FXD.CMPSN:100K OHM,5%.0.25W    | 01121    | CB1045           |
| A22R210       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W     | 01121    | CB1035           |
| A22R211       | 315-0105-00        |                      |         | RES.,FXD.CMPSN:1M OHM,5%.0.25W      | 01121    | CB1055           |
| A22R212       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM,5%.0.25W    | 01121    | CB4725           |
| A22R221       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM,5%.0.25W     | 01121    | CB1015           |
| A22R222       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025           |
| A22R223       | 315-0104-00        | B070000              |         | RES.,FXD.CMPSN:100K OHM,5%.0.25W    | 01121    | CB1045           |
| A22R241       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM,5%.0.25W     | 01121    | CB1015           |
| A22R301       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025           |
| A22R310       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025           |
| A22R311       | 315-0511-00        |                      |         | RES.,FXD.CMPSN:510 OHM,5%.0.25W     | 01121    | CB5115           |
| A22R312       | 315-0302-00        |                      |         | RES.,FXD.CMPSN:3K OHM,5%.0.25W      | 01121    | CB3025           |
| A22R313       | 315-0155-00        | B010100              | B100896 | RES.,FXD.CMPSN:1.5M OHM,5%.0.25W    | 01121    | CB1555           |
| A22R313       | 315-0245-00        | B100897              |         | RES.,FXD.CMPSN:2.4M OHM,5%.0.25W    | 01121    | CB2455           |
| A22R401       | 315-0151-00        |                      |         | RES.,FXD.CMPSN:150 OHM,5%.0.25W     | 01121    | CB1515           |
| A22R402       | 315-0151-00        |                      |         | RES.,FXD.CMPSN:150 OHM,5%.0.25W     | 01121    | CB1515           |
| A22R403       | 315-0151-00        |                      |         | RES.,FXD.CMPSN:150 OHM,5%.0.25W     | 01121    | CB1515           |
| A22R404       | 315-0151-00        |                      |         | RES.,FXD.CMPSN:150 OHM,5%.0.25W     | 01121    | CB1515           |
| A22R501       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025           |
| A22R503       | 315-0473-00        |                      |         | RES.,FXD.CMPSN:47K OHM,5%.0.25W     | 01121    | CB4735           |
| A22R510       | 311-1918-00        | B070000              |         | RES.,VAR.NONWIR:2K OHM,10%.0.50W    | 73138    | 72-199-0         |
| A22R511       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025           |
| A22R512       | 321-0159-00        |                      |         | RES.,FXD.FILM:442 OHM,1%.0.125W     | 91637    | MFF1816G442R0F   |
| A22R531       | 315-0303-00        |                      |         | RES.,FXD.CMPSN:30K OHM,5%.0.25W     | 01121    | CB3035           |
| A22R532       | 315-0303-00        |                      |         | RES.,FXD.CMPSN:30K OHM,5%.0.25W     | 01121    | CB3035           |
| A22R600       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W     | 01121    | CB1035           |
| A22R601       | 315-0433-00        |                      |         | RES.,FXD.CMPSN:43K OHM,5%.0.25W     | 01121    | CB4335           |
| A22R602       | 315-0620-00        |                      |         | RES.,FXD.CMPSN:62 OHM,5%.0.25W      | 01121    | CB6205           |
| A22R608       | 311-1918-00        | B010100              | B069999 | RES.,VAR.NONWIR:2K OHM,10%.0.50W    | 73138    | 72-199-0         |
| A22R610       | 321-0268-00        |                      |         | RES.,FXD.FILM:6.04K OHM,1%.0.125W   | 91637    | MFF1816G60400F   |
| A22R611       | 315-0752-00        |                      |         | RES.,FXD.CMPSN:7.5K OHM,5%.0.25W    | 01121    | CB7525           |
| A22R612       | 321-0277-03        |                      |         | RES.,FXD.FILM:7.5K OHM,0.25%.0.125W | 24546    | NC55C7501C       |
| A22R613       | 321-0268-00        |                      |         | RES.,FXD.FILM:6.04K OHM,1%.0.125W   | 91637    | MFF1816G60400F   |
| A22R614       | 321-0289-00        |                      |         | RES.,FXD.FILM:10K OHM,1%.0.125W     | 91637    | MFF1816G10001F   |
| A22R621       | 321-0251-00        |                      |         | RES.,FXD.FILM:4.02K OHM,1%.0.125W   | 91637    | MFF1816G40200F   |
| A22R622       | 315-0513-00        |                      |         | RES.,FXD.CMPSN:51K OHM,5%.0.25W     | 01121    | CB5135           |
| A22R631       | 321-0333-00        |                      |         | RES.,FXD.FILM:28.7K OHM,1%.0.125W   | 91637    | MFF1816G28701F   |
| A22R632       | 323-0525-00        |                      |         | RES.,FXD.FILM:2.87M OHM,1%.0.5W     | 07716    | CEC 2.87M 1% T-C |
| A22R633       | 315-0134-00        |                      |         | RES.,FXD.CMPSN:130K OHM,5%.0.25W    | 01121    | CB1345           |
| A22R634       | 315-0473-00        |                      |         | RES.,FXD.CMPSN:47K OHM,5%.0.25W     | 01121    | CB4735           |
| A22R635       | 315-0201-00        |                      |         | RES.,FXD.CMPSN:200 OHM,5%.0.25W     | 01121    | CB2015           |



| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|-----------------------------|---|----------|-----------------|
| A22R641       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R642       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R701       | 321-0268-00        |                             | RES..FXD.FILM:6.04K OHM.1%.0.125W         | 91637    | MFF1816G60400F  |
| A22R702       | 321-0289-00        |                             | RES..FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816G10001F  |
| A22R703       | 315-0150-00        |                             | RES..FXD.CMPSN:15 OHM.5%.0.25W            | 01121    | CB1505          |
| A22R704       | 315-0433-00        |                             | RES..FXD.CMPSN:43K OHM.5%.0.25W           | 01121    | CB4335          |
| A22R711       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM.5%.0.25W           | 01121    | CB1035          |
| A22R712       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM.5%.0.25W           | 01121    | CB1035          |
| A22R713       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R714       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R715       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM.5%.0.25W           | 01121    | CB1035          |
| A22R716       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM.5%.0.25W           | 01121    | CB1035          |
| A22R717       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R718       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R721       | 315-0752-00        |                             | RES..FXD.CMPSN:7.5K OHM.5%.0.25W          | 01121    | CB7525          |
| A22R722       | 321-0816-03        |                             | RES..FXD.FILM:5K OHM.0.25%.0.125W         | 91637    | MFF1816D50000C  |
| A22R723       | 321-0816-03        |                             | RES..FXD.FILM:5K OHM.0.25%.0.125W         | 91637    | MFF1816D50000C  |
| A22R724       | 315-0752-00        |                             | RES..FXD.CMPSN:7.5K OHM.5%.0.25W          | 01121    | CB7525          |
| A22R731       | 321-0289-00        |                             | RES..FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816G10001F  |
| A22R732       | 321-0268-00        |                             | RES..FXD.FILM:6.04K OHM.1%.0.125W         | 91637    | MFF1816G60400F  |
| A22R734       | 315-0201-00        |                             | RES..FXD.CMPSN:200 OHM.5%.0.25W           | 01121    | CB2015          |
| A22R735       | 315-0433-00        |                             | RES..FXD.CMPSN:43K OHM.5%.0.25W           | 01121    | CB4335          |
| A22R741       | 315-0752-00        |                             | RES..FXD.CMPSN:7.5K OHM.5%.0.25W          | 01121    | CB7525          |
| A22R742       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R743       | 315-0752-00        |                             | RES..FXD.CMPSN:7.5K OHM.5%.0.25W          | 01121    | CB7525          |
| A22R744       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R745       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R746       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM.5%.0.25W           | 01121    | CB1035          |
| A22R747       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM.5%.0.25W           | 01121    | CB1035          |
| A22R801       | 321-0275-00        |                             | RES..FXD.FILM:7.15K OHM.1%.0.125W         | 91637    | MFF1816G71500F  |
| A22R802       | 321-0277-03        |                             | RES..FXD.FILM:7.5K OHM.0.25%.0.125W       | 24546    | NC55C7501C      |
| A22R831       | 315-0102-00        |                             | RES..FXD.CMPSN:1K OHM.5%.0.25W            | 01121    | CB1025          |
| A22R841       | 321-0275-00        |                             | RES..FXD.FILM:7.15K OHM.1%.0.125W         | 91637    | MFF1816G71500F  |
| A22R842       | 321-0277-03        |                             | RES..FXD.FILM:7.5K OHM.0.25%.0.125W       | 24546    | NC55C7501C      |
| A22R843       | 315-0101-00        |                             | RES..FXD.CMPSN:100 OHM.5%.0.25W           | 01121    | CB1015          |
| A22R844       | 315-0151-00        |                             | RES..FXD.CMPSN:150 OHM.5%.0.25W           | 01121    | CB1515          |
| A22R845       | 315-0182-00        |                             | RES..FXD.CMPSN:1.8K OHM.5%.0.25W          | 01121    | CB1825          |
| A22R846       | 315-0122-00        |                             | RES..FXD.CMPSN:1.2K OHM.5%.0.25W          | 01121    | CB1225          |
| A22R1001      | 315-0102-00        |                             | RES..FXD.CMPSN:1K OHM.5%.0.25W            | 01121    | CB1025          |
| A22R1002      | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R1003      | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R1021      | 321-0275-00        |                             | RES..FXD.FILM:7.15K OHM.1%.0.125W         | 91637    | MFF1816G71500F  |
| A22R1022      | 321-0277-03        |                             | RES..FXD.FILM:7.5K OHM.0.25%.0.125W       | 24546    | NC55C7501C      |
| A22R1031      | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R1032      | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R1034      | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM.5%.0.25W          | 01121    | CB5125          |
| A22R1104      | 321-0248-00        |                             | RES..FXD.FILM:3.74K OHM.1%.0.125W         | 91637    | MFF1816G37400F  |
| A22R1105      | 321-0932-00        |                             | RES..FXD.FILM:2.5K OHM.1%.0.125W          | 24546    | NA55D2501F      |
| A22U000       | 156-0339-02        |                             | MICROCIRCUIT,DI:16 X 4 SRAM,SCREENED      | 27014    | 8599 SCREENED   |
| A22U010       | 156-0339-02        |                             | MICROCIRCUIT,DI:16 X 4 SRAM,SCREENED      | 27014    | 8599 SCREENED   |
| A22U020       | 156-0382-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE      | 01295    | SN74LS00        |
| A22U030       | 156-0382-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE      | 01295    | SN74LS00        |
| A22U032       | 156-0405-03        |                             | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV | 07263    | 9602            |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                          | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A22U040       | 156-0405-03        |                      |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV   | 07263    | 9602            |
| A22U100       | 156-0339-02        |                      |         | MICROCIRCUIT,DI:16 X 4 SRAM,SCREENED        | 27014    | 8599 SCREENED   |
| A22U106       | 156-0412-02        | B070000              |         | MICROCIRCUIT,DI:SYN 4 BIT UP/DOWN CNTR      | 01295    | SN74LS193N3     |
| A22U110       | 156-0339-02        |                      |         | MICROCIRCUIT,DI:16 X 4 SRAM,SCREENED        | 27014    | 8599 SCREENED   |
| A22U120       | 156-1168-00        | B010100              | B010249 | MICROCIRCUIT,DI:8192-BIT ROM.HORIZ SCAN     | 04713    | MCM6571A        |
| A22U120       | 156-1208-00        | B010250              |         | MICROCIRCUIT,DI:CHARACTER GENERATOR         | 80009    | 156-1208-00     |
| A22U130       | 156-0383-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NOR GATE         | 01295    | SN74LS02        |
| A22U140       | 156-0470-02        |                      |         | MICROCIRCUIT,DI:8 INP DATA SEL W/3 STATE    | 01295    | SN74LS251       |
| A22U150       | 156-0412-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT UP/DOWN CNTR      | 01295    | SN74LS193N3     |
| A22U200       | 156-0412-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT UP/DOWN CNTR      | 01295    | SN74LS193N3     |
| A22U210       | 156-0412-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT UP/DOWN CNTR      | 01295    | SN74LS193N3     |
| A22U220       | 156-0412-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT UP/DOWN CNTR      | 01295    | SN74LS193N3     |
| A22U230       | 156-0412-02        |                      |         | MICROCIRCUIT,DI:SYN 4 BIT UP/DOWN CNTR      | 01295    | SN74LS193N3     |
| A22U240       | 160-0111-02        |                      |         | MICROCIRCUIT,DI:256 BIT PROM W/3 STATE OUT  | 80009    | 160-0111-02     |
| A22U300       | 156-0541-02        |                      |         | MICROCIRCUIT,DI:DUAL 2 TO 4 LINE DCDR       | 01295    | SN74LS139NP3    |
| A22U310       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00        |
| A22U320       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:QUAD D FLIP-FLOP            | 07263    | 74LS74A         |
| A22U330       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00        |
| A22U340       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE          | 01295    | SN74LS32NP3     |
| A22U400       | 156-0145-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND BFR         | 01295    | SN7438          |
| A22U410       | 156-0720-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE        | 01295    | SN74LS368       |
| A22U420       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER                | 01295    | SN74LS04        |
| A22U430       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER                | 01295    | SN74LS04        |
| A22U440       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER                | 01295    | SN74LS04        |
| A22U500       | 156-0383-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NOR GATE         | 01295    | SN74LS02        |
| A22U510       | 156-0391-02        |                      |         | MICROCIRCUIT,DI:HEX LATCH W/CLEAR           | 01295    | SN74LS174       |
| A22U520       | 156-0405-03        |                      |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV   | 07263    | 9602            |
| A22U530       | 156-0469-02        |                      |         | MICROCIRCUIT,DI:3/8 LINE DCDR               | 01295    | SN74LS138NP3    |
| A22U540       | 156-0469-02        |                      |         | MICROCIRCUIT,DI:3/8 LINE DCDR               | 01295    | SN74LS138NP3    |
| A22U600       | 156-0405-03        |                      |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV   | 07263    | 9602            |
| A22U610       | 156-0509-00        |                      |         | MICROCIRCUIT,DI:8-BIT BINARY.MULT CUR       | 04713    | MC1408L8        |
| A22U620       | 156-0921-01        |                      |         | MICROCIRCUIT,LI:OPERATIONAL.AMPLIFIER.SEL   | 80009    | 156-0921-01     |
| A22U622       | 156-0402-00        | B010100              | B100904 | MICROCIRCUIT,LI:TIMER                       | 27014    | LM555CN         |
| A22U622       | 156-0402-02        | B100905              |         | MICROCIRCUIT,LI:TIMER.CHK                   | 27014    | LM555CN/A +     |
| A22U640       | 156-0383-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NOR GATE         | 01295    | SN74LS02        |
| A22U700       | 156-0411-01        | B010100              | B100904 | MICROCIRCUIT,LI:QUAD.COMPARATOR.SGL SPLY    | 27014    | LM339N          |
| A22U700       | 156-0411-02        | B100905              |         | MICROCIRCUIT,LI:QUAD COMPARATOR.SEL         | 04713    | LM339JDS        |
| A22U710       | 156-0720-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE        | 01295    | SN74LS368       |
| A22U720       | 156-0067-00        |                      |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER       | 01295    | MICROA741CP     |
| A22U722       | 156-0067-00        |                      |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER       | 01295    | MICROA741CP     |
| A22U730       | 156-0411-01        | B010100              | B100904 | MICROCIRCUIT,LI:QUAD.COMPARATOR.SGL SPLY    | 27014    | LM339N          |
| A22U730       | 156-0411-02        | B100905              |         | MICROCIRCUIT,LI:QUAD COMPARATOR.SEL         | 04713    | LM339JDS        |
| A22U740       | 156-0720-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE        | 01295    | SN74LS368       |
| A22U800       | 156-0392-01        | B010100              | B100904 | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR          | 34335    | AM25LS175       |
| A22U800       | 156-0392-03        | B100905              |         | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR          | 01295    | SN74S175NP3     |
| A22U810       | 156-0927-00        | B010100              | B100904 | MICROCIRCUIT,LI:DIGITAL TO ANALOG CONVERTER | 80009    | 156-0927-00     |
| A22U810       | 156-0927-02        | B100905              |         | MICROCIRCUIT,LI:DIGITAL/ANALOG CONVERTER    | 04713    | MC3410CLD       |
| A22U820       | 156-0392-01        | B010100              | B100904 | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR          | 34335    | AM25LS175       |
| A22U820       | 156-0392-03        | B100905              |         | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR          | 01295    | SN74S175NP3     |
| A22U830       | 156-0391-02        |                      |         | MICROCIRCUIT,DI:HEX LATCH W/CLEAR           | 01295    | SN74LS174       |
| A22U840       | 156-0509-00        |                      |         | MICROCIRCUIT,DI:8-BIT BINARY.MULT CUR       | 04713    | MC1408L8        |
| A22U900       | 156-0392-01        | B010100              | B100904 | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR          | 34335    | AM25LS175       |
| A22U900       | 156-0392-03        | B100905              |         | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR          | 01295    | SN74S175NP3     |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A22U910       | 156-0392-01        | B010100              | B100904 | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR        | 34335    | AM25LS175       |
| A22U910       | 156-0392-03        | B100905              |         | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR        | 01295    | SN74S175NP3     |
| A22U920       | 156-0392-01        | B010100              | B100904 | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR        | 34335    | AM25LS175       |
| A22U920       | 156-0392-03        | B100905              |         | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR        | 01295    | SN74S175NP3     |
| A22U930       | 156-0509-00        |                      |         | MICROCIRCUIT,DI:8-BIT BINARY,MULT CUR     | 04713    | MC1408L8        |
| A22U940       | 156-0391-02        |                      |         | MICROCIRCUIT,DI:HEX LATCH W/CLEAR         | 01295    | SN74LS174       |
| A22U1010      | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP          | 07263    | 74LS74A         |
| A22U1020      | 156-0381-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP EXCL OR GATE   | 01295    | SN74LS86        |
| A22U1040      | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER              | 01295    | SN74LS04        |
| A22U1100      | 156-0067-00        |                      |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER     | 01295    | MICROA741CP     |
| A22U1110      | 156-0720-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR,4 TO 2 LINE      | 01295    | SN74LS368       |
| A22U1120      | 156-0464-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 INP NAND GATE      | 01295    | SN74LS20        |
| A22U1130      | 156-0567-02        |                      |         | MICROCIRCUIT,DI:DUAL J-K NEG-EDGE-TRIG FF | 01295    | SN74LS113NP3    |
| A22U1140      | 156-0392-01        | B010100              | B100904 | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR        | 34335    | AM25LS175       |
| A22U1140      | 156-0392-03        | B100905              |         | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR        | 01295    | SN74S175NP3     |
| A22VR021      | 152-0508-00        |                      |         | SEMICONV DEVICE:ZENER,0.4W,12.6V,5%       | 80009    | 152-0508-00     |

# Replaceable Electrical Parts—7912AD Service

| Component No.                  | Tektronix Part No. | Serial/Model No. Eff Dscnt | Name & Description                   | Mfr Code | Mfr Part Number  |
|--------------------------------|--------------------|----------------------------|--------------------------------------|----------|------------------|
| <b>A24 GRATICULE GENERATOR</b> |                    |                            |                                      |          |                  |
| A24                            | 670-5146-00        |                            | CKT BOARD ASSY:GRATICULE GENERATOR   | 80009    | 670-5146-00      |
| A24C020                        | 283-0594-00        |                            | CAP.,FXD.MICA D:0.001UF,1%.100V      | 00853    | D151F102F0       |
| A24C150                        | 281-0630-00        |                            | CAP.,FXD.CER DI:390PF,5%.500V        | 72982    | 630000Y5D391J    |
| A24C230                        | 281-0536-00        |                            | CAP.,FXD.CER DI:1000PF,10%.500V      | 72982    | 301000 X 5P0102H |
| A24C260                        | 283-0655-00        |                            | CAP.,FXD.MICA D:0.0033UF,1%.500V     | 00853    | D195F332F0       |
| A24C262                        | 283-0198-00        |                            | CAP.,FXD.CER DI:0.22UF,20%.50V       | 56289    | 1C10Z5U223M050   |
| A24C270                        | 283-0187-00        |                            | CAP.,FXD.CER DI:0.047UF,10%.400V     | 72982    | 8131N401X5R047   |
| A24C272                        | 290-0722-00        |                            | CAP.,FXD.ELCTLT:100UF,20%.10V        | 56289    | 196D107X0010PE   |
| A24C274                        | 290-0722-00        |                            | CAP.,FXD.ELCTLT:100UF,20%.10V        | 56289    | 196D107X0010PE   |
| A24C310                        | 283-0004-00        |                            | CAP.,FXD.CER DI:0.02UF, +80-20%.150V | 59821    | SDDH69J203Z      |
| A24C320                        | 283-0004-00        |                            | CAP.,FXD.CER DI:0.02UF, +80-20%.150V | 59821    | SDDH69J203Z      |
| A24C330                        | 283-0004-00        |                            | CAP.,FXD.CER DI:0.02UF, +80-20%.150V | 59821    | SDDH69J203Z      |
| A24C332                        | 281-0536-00        |                            | CAP.,FXD.CER DI:1000PF,10%.500V      | 72982    | 301000 X 5P0102H |
| A24C340                        | 283-0004-00        |                            | CAP.,FXD.CER DI:0.02UF, +80-20%.150V | 59821    | SDDH69J203Z      |
| A24C350                        | 283-0004-00        |                            | CAP.,FXD.CER DI:0.02UF, +80-20%.150V | 59821    | SDDH69J203Z      |
| A24C370                        | 283-0003-00        |                            | CAP.,FXD.CER DI:0.01UF, +80-20%.150V | 59821    | 2DDH66J103Z      |
| A24C420                        | 281-0536-00        |                            | CAP.,FXD.CER DI:1000PF,10%.500V      | 72982    | 301000 X 5P0102H |
| A24C510                        | 285-0808-00        |                            | CAP.,FXD.PLSTC:0.1UF,10%.50V         | 56289    | LP66A1A104K004   |
| A24C514                        | 290-0522-00        |                            | CAP.,FXD.ELCTLT:1UF,20%.50V          | 56289    | 196D105X0050HA   |
| A24C522                        | 290-0522-00        |                            | CAP.,FXD.ELCTLT:1UF,20%.50V          | 56289    | 196D105X0050HA   |
| A24C550                        | 283-0003-00        |                            | CAP.,FXD.CER DI:0.01UF, +80-20%.150V | 59821    | 2DDH66J103Z      |
| A24C552                        | 283-0003-00        |                            | CAP.,FXD.CER DI:0.01UF, +80-20%.150V | 59821    | 2DDH66J103Z      |
| A24C554                        | 283-0178-00        |                            | CAP.,FXD.CER DI:0.1UF, +80-20%.100V  | 72982    | 8131N145651 1F   |
| A24C560                        | 283-0178-00        |                            | CAP.,FXD.CER DI:0.1UF, +80-20%.100V  | 72982    | 8131N145651 1L   |
| A24C570                        | 283-0111-00        |                            | CAP.,FXD.CER DI:0.1UF,20%.50V        | 56289    | 273C11           |
| A24C610                        | 283-0617-00        |                            | CAP.,FXD.MICA D:4700PF,10%.300V      | 00853    | D195F472KO       |
| A24C612                        | 281-0509-00        |                            | CAP.,FXD.CER DI:15PF, +/-1.5PF,500V  | 59660    | 301-000C0G0150H  |
| A24C640                        | 283-0177-00        |                            | CAP.,FXD.CER DI:1UF, +80-20%.25V     | 56289    | 2C20Z5U105Z025   |
| A24C662                        | 283-0111-00        |                            | CAP.,FXD.CER DI:0.1UF,20%.50V        | 56289    | 273C11           |
| A24C670                        | 283-0111-00        |                            | CAP.,FXD.CER DI:0.1UF,20%.50V        | 56289    | 273C11           |
| A24C710                        | 290-0522-00        |                            | CAP.,FXD.ELCTLT:1UF,20%.50V          | 56289    | 196D105X0050HA   |
| A24C712                        | 283-0178-00        |                            | CAP.,FXD.CER DI:0.1UF, +80-20%.100V  | 72982    | 8131N145651 104  |
| A24C740                        | 290-0536-00        |                            | CAP.,FXD.ELCTLT:10UF,20%.25V         | 90201    | TDC106M025FL     |
| A24C820                        | 290-0522-00        |                            | CAP.,FXD.ELCTLT:1UF,20%.50V          | 56289    | 196D105X0050HA   |
| A24C830                        | 281-0519-00        |                            | CAP.,FXD.CER DI:47PF, +/-4.7PF,500V  | 59660    | 308-000C0G0470K  |
| A24C832                        | 283-0593-00        |                            | CAP.,FXD.MICA D:0.01UF,1%.100V       | 00853    | D301F103F0       |
| A24C880                        | 290-0522-00        |                            | CAP.,FXD.ELCTLT:1UF,20%.50V          | 56289    | 196D105X0050HA   |
| A24CR360                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR370                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR450                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR540                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR550                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR552                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR554                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR556                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR570                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR572                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR620                       | 152-0246-00        |                            | SEMICONV DEVICE:SW,SI,40V,200MA      | 03508    | DE140            |
| A24CR630                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A24CR710                       | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                   | Mfr Code | Mfr Part Number |
|---------------|--------------------|-----------------------------|--------------------------------------|----------|-----------------|
| A24CR720      | 152-0246-00        |                             | SEMICONV DEVICE:SW.SI.40V.200MA      | 03508    | DE140           |
| A24CR722      | 152-0246-00        |                             | SEMICONV DEVICE:SW.SI.40V.200MA      | 03508    | DE140           |
| A24CR730      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A24CR770      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A24CR772      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A24CR774      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A24CR776      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A24CR820      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A24CR870      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A24L370       | 108-0245-00        |                             | COIL.RF:3.9UH                        | 76493    | B6310-1         |
| A24Q370       | 151-0225-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S39291          |
| A24Q372       | 151-0225-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S39291          |
| A24Q460       | 151-0188-00        |                             | TRANSISTOR:SILICON.PNP               | 04713    | SPS6868K        |
| A24Q470       | 151-0190-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A24Q520       | 151-0190-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A24Q522       | 151-0220-00        |                             | TRANSISTOR:SILICON.PNP               | 07263    | S036228         |
| A24Q530       | 151-0220-00        |                             | TRANSISTOR:SILICON.PNP               | 07263    | S036228         |
| A24Q532       | 151-0220-00        |                             | TRANSISTOR:SILICON.PNP               | 07263    | S036228         |
| A24Q534       | 151-0190-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A24Q610       | 151-0232-00        |                             | TRANSISTOR:SILICON.NPN.DUAL          | 07263    | SP12141         |
| A24Q620       | 151-0232-00        |                             | TRANSISTOR:SILICON.NPN.DUAL          | 07263    | SP12141         |
| A24Q630       | 151-0190-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A24Q632       | 151-0190-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A24Q640       | 151-0232-00        |                             | TRANSISTOR:SILICON.NPN.DUAL          | 07263    | SP12141         |
| A24Q670       | 151-0220-00        |                             | TRANSISTOR:SILICON.PNP               | 07263    | S036228         |
| A24Q672       | 151-0220-00        |                             | TRANSISTOR:SILICON.PNP               | 07263    | S036228         |
| A24Q712       | 151-0221-00        |                             | TRANSISTOR:SILICON.PNP               | 04713    | SPS246          |
| A24Q720       | 151-1041-00        |                             | TRANSISTOR:SILICON.FE.N-CHANNEL.DUAL | 22229    | FD1582          |
| A24Q730       | 151-0190-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A24Q740       | 151-0232-00        |                             | TRANSISTOR:SILICON.NPN.DUAL          | 07263    | SP12141         |
| A24Q772       | 151-0220-00        |                             | TRANSISTOR:SILICON.PNP               | 07263    | S036228         |
| A24Q830       | 151-0190-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A24Q870       | 151-0220-00        |                             | TRANSISTOR:SILICON.PNP               | 07263    | S036228         |
| A24Q872       | 151-0190-00        |                             | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A24R030       | 321-0280-00        |                             | RES.,FXD.FILM:8.06K OHM.1%.0.125W    | 91637    | MFF1816G80600F  |
| A24R050       | 311-1198-00        |                             | RES.,VAR.NONWIR:20K OHM.20%.0.5W     | 73138    | 72-29-0         |
| A24R052       | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A24R120       | 315-0182-00        |                             | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W     | 01121    | CB1825          |
| A24R130       | 315-0182-00        |                             | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W     | 01121    | CB1825          |
| A24R170       | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A24R172       | 315-0512-00        |                             | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W     | 01121    | CB5125          |
| A24R210       | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A24R230       | 315-0101-00        |                             | RES.,FXD.CMPSN:100 OHM.5%.0.25W      | 01121    | CB1015          |
| A24R240       | 315-0182-00        |                             | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W     | 01121    | CB1825          |
| A24R250       | 315-0182-00        |                             | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W     | 01121    | CB1825          |
| A24R252       | 315-0182-00        |                             | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W     | 01121    | CB1825          |
| A24R270       | 315-0512-00        |                             | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W     | 01121    | CB5125          |
| A24R272       | 315-0682-00        |                             | RES.,FXD.CMPSN:6.8K OHM.5%.0.25W     | 01121    | CB6825          |
| A24R350       | 315-0101-00        |                             | RES.,FXD.CMPSN:100 OHM.5%.0.25W      | 01121    | CB1015          |
| A24R360       | 315-0332-00        |                             | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W     | 01121    | CB3325          |
| A24R362       | 315-0752-00        |                             | RES.,FXD.CMPSN:7.5K OHM.5%.0.25W     | 01121    | CB7525          |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                 | Mfr Code | Mfr Part Numbe |
|---------------|--------------------|-----------------------------|------------------------------------|----------|----------------|
| A24R370       | 315-0132-00        |                             | RES.,FXD.CMPSN:1.3K OHM.5%.0.25W   | 01121    | CB1325         |
| A24R372       | 315-0332-00        |                             | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W   | 01121    | CB3325         |
| A24R374       | 315-0562-00        |                             | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W   | 01121    | CB5625         |
| A24R376       | 315-0362-00        |                             | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625         |
| A24R420       | 315-0101-00        |                             | RES.,FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015         |
| A24R430       | 315-0332-00        |                             | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W   | 01121    | CB3325         |
| A24R460       | 315-0362-00        |                             | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625         |
| A24R462       | 315-0132-00        |                             | RES.,FXD.CMPSN:1.3K OHM.5%.0.25W   | 01121    | CB1325         |
| A24R470       | 315-0184-00        |                             | RES.,FXD.CMPSN:180K OHM.5%.0.25W   | 01121    | CB1845         |
| A24R472       | 315-0133-00        |                             | RES.,FXD.CMPSN:13K OHM.5%.0.25W    | 01121    | CB1335         |
| A24R474       | 315-0103-00        |                             | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035         |
| A24R510       | 315-0912-00        |                             | RES.,FXD.CMPSN:9.1K OHM.5%.0.25W   | 01121    | CB9125         |
| A24R512       | 315-0272-00        |                             | RES.,FXD.CMPSN:2.7K OHM.5%.0.25W   | 01121    | CB2725         |
| A24R514       | 315-0101-00        |                             | RES.,FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015         |
| A24R516       | 321-0242-08        |                             | RES.,FXD.FILM:3.24K OHM.1%.0.125W  | 91637    | MFF1816D32400F |
| A24R518       | 321-0255-08        |                             | RES.,FXD.FILM:4.42K OHM.1%.0.125W  | 24546    | NC55C4421F     |
| A24R520       | 315-0332-00        |                             | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W   | 01121    | CB3325         |
| A24R522       | 315-0472-00        |                             | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725         |
| A24R524       | 315-0562-00        |                             | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W   | 01121    | CB5625         |
| A24R526       | 315-0302-00        |                             | RES.,FXD.CMPSN:3K OHM.5%.0.25W     | 01121    | CB3025         |
| A24R528       | 315-0101-00        |                             | RES.,FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015         |
| A24R529       | 315-0222-00        |                             | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225         |
| A24R530       | 315-0562-00        |                             | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W   | 01121    | CB5625         |
| A24R532       | 323-0269-09        |                             | RES.,FXD.FILM:6.19K OHM.1%.0.50W   | 91637    | MFF1226C61900F |
| A24R534       | 315-0132-00        |                             | RES.,FXD.CMPSN:1.3K OHM.5%.0.25W   | 01121    | CB1325         |
| A24R540       | 311-1239-00        |                             | RES.,VAR.NONWIR:2.5K OHM.10%.0.50W | 72-26-0  |                |
| A24R542       | 315-0362-00        |                             | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625         |
| A24R544       | 321-0425-00        |                             | RES.,FXD.FILM:261K OHM.1%.0.125W   | 91637    | MFF1816G26102r |
| A24R546       | 321-0328-00        |                             | RES.,FXD.FILM:25.5K OHM.1%.0.125W  | 91637    | MFF1816G25501F |
| A24R550       | 321-0422-00        |                             | RES.,FXD.FILM:243K OHM.1%.0.125W   | 91637    | MFF1816G24302F |
| A24R552       | 321-0244-00        |                             | RES.,FXD.FILM:3.4K OHM.1%.0.125W   | 91637    | MFF1816G34000F |
| A24R554       | 315-0100-00        |                             | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005         |
| A24R556       | 321-0212-00        |                             | RES.,FXD.FILM:1.58K OHM.1%.0.125W  | 91637    | MFF1816G15800F |
| A24R560       | 315-0362-00        |                             | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625         |
| A24R562       | 315-0100-00        |                             | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005         |
| A24R572       | 315-0332-00        |                             | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W   | 01121    | CB3325         |
| A24R574       | 315-0622-00        |                             | RES.,FXD.CMPSN:6.2K OHM.5%.0.25W   | 01121    | CB6225         |
| A24R579       | 315-0752-00        |                             | RES.,FXD.CMPSN:7.5K OHM.5%.0.25W   | 01121    | CB7525         |
| A24R610       | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025         |
| A24R612       | 321-0338-08        |                             | RES.,FXD.FILM:32.4K OHM.1%.0.125W  | 91637    | MFF1816D32401F |
| A24R614       | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025         |
| A24R616       | 321-0202-00        |                             | RES.,FXD.FILM:1.24K OHM.1%.0.125W  | 91637    | MFF1816G12400F |
| A24R618       | 321-0267-00        |                             | RES.,FXD.FILM:5.9K OHM.1%.0.125W   | 91637    | MFF1816G59000F |
| A24R620       | 321-0355-08        |                             | RES.,FXD.FILM:48.7K OHM.1%.0.125W  | 24546    | NC55C4872F     |
| A24R622       | 321-0253-08        |                             | RES.,FXD.FILM:4.22K OHM.1%.0.125W  | 24546    | NC55C4221F     |
| A24R624       | 321-1607-08        |                             | RES.,FXD.FILM:1.86K OHM.1%.0.125W  | 24546    | NC55C1861F     |
| A24R626       | 321-0283-08        |                             | RES.,FXD.FILM:8.66K OHM.1%.0.125W  | 24546    | NC55C8660F     |
| A24R630       | 321-0250-00        |                             | RES.,FXD.FILM:3.92K OHM.1%.0.125W  | 91637    | MFF1816G39200F |
| A24R632       | 321-0270-00        |                             | RES.,FXD.FILM:6.34K OHM.1%.0.125W  | 91637    | MFF1816G63400F |
| A24R634       | 315-0332-00        |                             | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W   | 01121    | CB3325         |
| A24R636       | 315-0562-00        |                             | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W   | 01121    | CB5625         |
| A24R638       | 315-0273-00        |                             | RES.,FXD.CMPSN:27K OHM.5%.0.25W    | 01121    | CB2735         |
| A24R640       | 315-0362-00        |                             | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625         |
| A24R642       | 321-0311-00        |                             | RES.,FXD.FILM:16.9K OHM.1%.0.125W  | 91637    | MFF1816G16901F |

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscnt | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------------|-----------------------------------|----------|-----------------|
| A24R644       | 321-0264-08        |                            | RES.,FXD.FILM:5.49K OHM,1%.0.125W | 24546    | NC55C5491F      |
| A24R646       | 321-0258-00        |                            | RES.,FXD.FILM:4.75K OHM,1%.0.125W | 91637    | MFF1816G47500F  |
| A24R652       | 321-0247-00        |                            | RES.,FXD.FILM:3.65K OHM,1%.0.125W | 91637    | MFF1816G36500F  |
| A24R654       | 321-0247-00        |                            | RES.,FXD.FILM:3.65K OHM,1%.0.125W | 91637    | MFF1816G36500F  |
| A24R658       | 321-0164-08        |                            | RES.,FXD.FILM:499 OHM,1%.0.125W   | 91637    | MFF1816D499R0F  |
| A24R660       | 315-0132-00        |                            | RES.,FXD.CMPSN:1.3K OHM,5%.0.25W  | 01121    | CB1325          |
| A24R670       | 315-0362-00        |                            | RES.,FXD.CMPSN:3.6K OHM,5%.0.25W  | 01121    | CB3625          |
| A24R672       | 321-0277-08        |                            | RES.,FXD.FILM:7.5K OHM,1%.0.125W  | 24546    | NC55C7501F      |
| A24R674       | 321-0239-00        |                            | RES.,FXD.FILM:3.01K OHM,1%.0.125W | 91637    | MFF1816G30100F  |
| A24R676       | 315-0221-00        |                            | RES.,FXD.CMPSN:220 OHM,5%.0.25W   | 01121    | CB2215          |
| A24R678       | 321-0239-00        |                            | RES.,FXD.FILM:3.01K OHM,1%.0.125W | 91637    | MFF1816G30100F  |
| A24R679       | 315-0221-00        |                            | RES.,FXD.CMPSN:220 OHM,5%.0.25W   | 01121    | CB2215          |
| A24R710       | 315-0822-00        |                            | RES.,FXD.CMPSN:8.2K OHM,5%.0.25W  | 01121    | CB8225          |
| A24R712       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM,5%.0.25W    | 01121    | CB1005          |
| A24R714       | 315-0470-00        |                            | RES.,FXD.CMPSN:47 OHM,5%.0.25W    | 01121    | CB4705          |
| A24R716       | 315-0152-00        |                            | RES.,FXD.CMPSN:1.5K OHM,5%.0.25W  | 01121    | CB1525          |
| A24R720       | 321-0414-09        |                            | RES.,FXD.FILM:200K OHM,1%.0.125W  | 24546    | NE55E2003F      |
| A24R722       | 315-0133-00        |                            | RES.,FXD.CMPSN:13K OHM,5%.0.25W   | 01121    | CB1335          |
| A24R724       | 315-0102-00        |                            | RES.,FXD.CMPSN:1K OHM,5%.0.25W    | 01121    | CB1025          |
| A24R726       | 315-0242-00        |                            | RES.,FXD.CMPSN:2.4K OHM,5%.0.25W  | 01121    | CB2425          |
| A24R728       | 321-0327-00        |                            | RES.,FXD.FILM:24.9K OHM,1%.0.125W | 91637    | MFF1816G24901F  |
| A24R730       | 315-0223-00        |                            | RES.,FXD.CMPSN:22K OHM,5%.0.25W   | 01121    | CB2235          |
| A24R732       | 315-0102-00        |                            | RES.,FXD.CMPSN:1K OHM,5%.0.25W    | 01121    | CB1025          |
| A24R734       | 315-0103-00        |                            | RES.,FXD.CMPSN:10K OHM,5%.0.25W   | 01121    | CB1035          |
| A24R736       | 315-0911-00        |                            | RES.,FXD.CMPSN:910 OHM,5%.0.25W   | 01121    | CB9115          |
| A24R738       | 315-0122-00        |                            | RES.,FXD.CMPSN:1.2K OHM,5%.0.25W  | 01121    | CB1225          |
| A24R739       | 315-0472-00        |                            | RES.,FXD.CMPSN:4.7K OHM,5%.0.25W  | 01121    | CB4725          |
| A24R740       | 321-0176-00        |                            | RES.,FXD.FILM:665 OHM,1%.0.125W   | 91637    | MFF1816G665R0F  |
| A24R742       | 321-0176-00        |                            | RES.,FXD.FILM:665 OHM,1%.0.125W   | 91637    | MFF1816G665R0F  |
| A24R744       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM,5%.0.25W    | 01121    | CB1005          |
| A24R746       | 321-0176-00        |                            | RES.,FXD.FILM:665 OHM,1%.0.125W   | 91637    | MFF1816G665R0F  |
| A24R748       | 321-0176-00        |                            | RES.,FXD.FILM:665 OHM,1%.0.125W   | 91637    | MFF1816G665R0F  |
| A24R750       | 321-0164-08        |                            | RES.,FXD.FILM:499 OHM,1%.0.125W   | 91637    | MFF1816D499R0F  |
| A24R752       | 321-0197-08        |                            | RES.,FXD.FILM:1.1K OHM,1%.0.125W  | 24546    | NC55C1100F      |
| A24R754       | 321-0289-00        |                            | RES.,FXD.FILM:10K OHM,1%.0.125W   | 91637    | MFF1816G10001F  |
| A24R756       | 321-0260-00        |                            | RES.,FXD.FILM:4.99K OHM,1%.0.125W | 91637    | MFF1816G49900F  |
| A24R758       | 321-0129-00        |                            | RES.,FXD.FILM:215 OHM,1%.0.125W   | 91637    | MFF1816G215R0F  |
| A24R759       | 321-0247-00        |                            | RES.,FXD.FILM:3.65K OHM,1%.0.125W | 91637    | MFF1816G36500F  |
| A24R772       | 315-0911-00        |                            | RES.,FXD.CMPSN:910 OHM,5%.0.25W   | 01121    | CB9115          |
| A24R820       | 315-0681-00        |                            | RES.,FXD.CMPSN:680 OHM,5%.0.25W   | 01121    | CB6815          |
| A24R822       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM,5%.0.25W    | 01121    | CB1005          |
| A24R830       | 315-0103-00        |                            | RES.,FXD.CMPSN:10K OHM,5%.0.25W   | 01121    | CB1035          |
| A24R832       | 315-0470-00        |                            | RES.,FXD.CMPSN:47 OHM,5%.0.25W    | 01121    | CB4705          |
| A24R834       | 315-0471-00        |                            | RES.,FXD.CMPSN:470 OHM,5%.0.25W   | 01121    | CB4715          |
| A24R840       | 321-0248-08        |                            | RES.,FXD.FILM:3.74K OHM,1%.0.125W | 24546    | NC55C3741F      |
| A24R842       | 321-0323-08        |                            | RES.,FXD.FILM:22.6K OHM,1%.0.125W | 91637    | MFF1816D22601F  |
| A24R844       | 321-0283-08        |                            | RES.,FXD.FILM:8.66K OHM,1%.0.125W | 24546    | NC55C8660F      |
| A24R850       | 311-1236-00        |                            | RES.,VAR.NONWIR:250 OHM,10%.0.50W | 73138    | 72-22-0         |
| A24R851       | 321-0247-00        |                            | RES.,FXD.FILM:3.65K OHM,1%.0.125W | 91637    | MFF1816G36500F  |
| A24R852       | 321-0164-08        |                            | RES.,FXD.FILM:499 OHM,1%.0.125W   | 91637    | MFF1816D499R0F  |
| A24R854       | 321-0164-08        |                            | RES.,FXD.FILM:499 OHM,1%.0.125W   | 91637    | MFF1816D499R0F  |
| A24R856       | 321-0197-08        |                            | RES.,FXD.FILM:1.1K OHM,1%.0.125W  | 24546    | NC55C1100F      |
| A24R858       | 321-0289-00        |                            | RES.,FXD.FILM:10K OHM,1%.0.125W   | 91637    | MFF1816G10001F  |
| A24R859       | 321-0260-00        |                            | RES.,FXD.FILM:4.99K OHM,1%.0.125W | 91637    | MFF1816G49900F  |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. |         | Name & Description                          | Mfr Code | Mfr Part Number |
|---------------|--------------------|------------------|---------|---|----------|-----------------|
|               |                    | Eff              | Dscont  |   |          |                 |
| A24R870       | 315-0221-00        |                  |         | RES.,FXD,CMPSN:220 OHM.5%.0.25W             | 01121    | CB2215          |
| A24R872       | 321-0239-00        |                  |         | RES.,FXD,FILM:3.01K OHM.1%.0.125W           | 91637    | MFF1816G30100F  |
| A24R874       | 315-0221-00        |                  |         | RES.,FXD,CMPSN:220 OHM.5%.0.25W             | 01121    | CB2215          |
| A24R876       | 321-0239-00        |                  |         | RES.,FXD,FILM:3.01K OHM.1%.0.125W           | 91637    | MFF1816G30100F  |
| A24R878       | 321-0129-00        |                  |         | RES.,FXD,FILM:215 OHM.1%.0.125W             | 91637    | MFF1816G215R0   |
| A24R950       | 311-1237-00        |                  |         | RES.,VAR,NONWIR:1K OHM.10%.0.50W            | 32997    | 3386X-T07-102   |
| A24R952       | 311-1236-00        |                  |         | RES.,VAR,NONWIR:250 OHM.10%.0.50W           | 73138    | 72-22-0         |
| A24R954       | 311-1237-00        |                  |         | RES.,VAR,NONWIR:1K OHM.10%.0.50W            | 32997    | 3386X-T07-102   |
| A24U060       | 156-0530-02        |                  |         | MICROCIRCUIT,DI:QUAD 2-INP MUX,SCRN         | 01295    | SN74LS157P3     |
| A24U070       | 156-0386-02        |                  |         | MICROCIRCUIT,DI:TRIPLE 3-INP NAND GATE      | 27014    | DM74LS10N       |
| A24U080       | 156-0382-02        |                  |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00        |
| A24U110       | 156-0072-02        |                  |         | MICROCIRCUIT,DI:MONOSTABLE MV,BURN-IN       | 01295    | SN74121         |
| A24U120       | 156-0202-02        |                  |         | MICROCIRCUIT,DI:PRGM MOD-N HEXIDECIMAL CNTR | 04713    | MC4018(NDS OR   |
| A24U130       | 156-0202-02        |                  |         | MICROCIRCUIT,DI:PRGM MOD-N HEXIDECIMAL CNTR | 04713    | MC4018(NDS OR   |
| A24U140       | 156-0202-02        |                  |         | MICROCIRCUIT,DI:PRGM MOD-N HEXIDECIMAL CNTR | 04713    | MC4018(NDS OR   |
| A24U150       | 156-0072-02        |                  |         | MICROCIRCUIT,DI:MONOSTABLE MV,BURN-IN       | 01295    | SN74121         |
| A24U170       | 156-0405-03        |                  |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV   | 07263    | 9602            |
| A24U210       | 156-0387-02        |                  |         | MICROCIRCUIT,DI:DUAL J-K FF,BURN IN         | 01295    | SN74LS73        |
| A24U220       | 156-0202-02        |                  |         | MICROCIRCUIT,DI:PRGM MOD-N HEXIDECIMAL CNTR | 04713    | MC4018(NDS OR   |
| A24U230       | 156-0382-02        |                  |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00        |
| A24U240       | 156-0202-02        |                  |         | MICROCIRCUIT,DI:PRGM MOD-N HEXIDECIMAL CNTR | 04713    | MC4018(NDS OR   |
| A24U250       | 156-0072-02        |                  |         | MICROCIRCUIT,DI:MONOSTABLE MV,BURN-IN       | 01295    | SN74121         |
| A24U310       | 156-0388-03        |                  |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP            | 07263    | 74LS74A         |
| A24U320       | 156-0382-02        |                  |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00        |
| A24U330       | 156-0388-03        |                  |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP            | 07263    | 74LS74A         |
| A24U340       | 156-0032-03        |                  |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER,SCRN   | 07263    | 7493(PCQR)      |
| A24U350       | 156-0382-02        |                  |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00        |
| A24U410       | 156-0072-02        |                  |         | MICROCIRCUIT,DI:MONOSTABLE MV,BURN-IN       | 01295    | SN74121         |
| A24U420       | 156-0382-02        |                  |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00        |
| A24U430       | 156-0382-02        |                  |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00        |
| A24U440       | 156-0386-02        |                  |         | MICROCIRCUIT,DI:TRIPLE 3-INP NAND GATE      | 27014    | DM74LS10N       |
| A24U450       | 156-0124-00        | B010100          | B100904 | MICROCIRCUIT,DI:SGL FREQ/PHASE DETECTOR     | 80009    | 156-0124-00     |
| A24U450       | 156-0124-00        | B100905          |         | MICROCIRCUIT,DI:PHASE/FREQ DETECTOR,SCRN    | 80009    | 156-0124-02     |
| A24U650       | 156-0067-00        |                  |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER       | 01295    | MICROA741CP     |
| A24VR510      | 152-0149-00        |                  |         | SEMICONV DEVICE:ZENER.0.4W.10V.5%           | 04713    | SZG35009K3      |



| Component No.              | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                    | Mfr Code | Mfr Part Number |
|----------------------------|--------------------|----------------------|---------|---------------------------------------|----------|-----------------|
| A26 X AND Y RAMP GENERATOR |                    |                      |         |                                       |          |                 |
| A26                        | 670-5147-00        | B010100              | B039999 | CKT BOARD ASSY:X AND Y RAMP GENERATOR | 80009    | 670-5147-00     |
| A26                        | 670-5147-01        | B040000              | B060648 | CKT BOARD ASSY:X AND Y RAMP GENERATOR | 80009    | 670-5147-01     |
| A26                        | 670-5147-02        | B060649              | B080713 | CKT BOARD ASSY:X AND Y RAMP GENERATOR | 80009    | 670-5147-02     |
| A26                        | 670-5147-03        | B080714              |         | CKT BOARD ASSY:X AND Y RAMP GENERATOR | 80009    | 670-5147-03     |
| A26C014                    | 283-0177-00        |                      |         | CAP.,FXD.CER DI:1UF,+80-20%.25V       | 56289    | 2C20Z5U105Z025B |
| A26C016                    | 281-0549-00        |                      |         | CAP.,FXD.CER DI:68PF,10%.500V         | 59660    | 301-000U2J0680K |
| A26C020                    | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C040                    | 281-0549-00        | B010100              | B060648 | CAP.,FXD.CER DI:68PF,10%.500V         | 59660    | 301-000U2J0680K |
| A26C040                    | 283-0334-00        | B060649              |         | CAP.,FXD.CER DI:130PF,+1-2%.500V      | 04222    | SR207A131GAA    |
| A26C042                    | 283-0177-00        |                      |         | CAP.,FXD.CER DI:1UF,+80-20%.25V       | 56289    | 2C20Z5U105Z025B |
| A26C044                    | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C100                    | 281-0518-00        | B010100              | B060648 | CAP.,FXD.CER DI:47PF,+/-9.4PF,500V    | 59660    | 301-000U2J0470M |
| A26C100                    | 281-0605-00        | B060649              |         | CAP.,FXD.CER DI:200PF,10%.500V        | 04222    | 7001-1375       |
| A26C102                    | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%.50V         | 56289    | 273C11          |
| A26C130                    | 281-0518-00        | B010100              | B060648 | CAP.,FXD.CER DI:47PF,+/-9.4PF,500V    | 59660    | 301-000U2J0470M |
| A26C130                    | 281-0605-00        | B060649              |         | CAP.,FXD.CER DI:200PF,10%.500V        | 04222    | 7001-1375       |
| A26C140                    | 290-0534-00        |                      |         | CAP.,FXD.ELCTLT:1UF,20%.35V           | 56289    | 196D105X0035HA1 |
| A26C142                    | 290-0534-00        |                      |         | CAP.,FXD.ELCTLT:1UF,20%.35V           | 56289    | 196D105X0035HA1 |
| A26C144                    | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%.50V         | 56289    | 273C11          |
| A26C200                    | 281-0543-00        |                      |         | CAP.,FXD.CER DI:270PF,10%.500V        | 72982    | 301055X5P271K   |
| A26C210                    | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%.50V         | 56289    | 273C11          |
| A26C230                    | 281-0543-00        |                      |         | CAP.,FXD.CER DI:270PF,10%.500V        | 72982    | 301055X5P271K   |
| A26C240                    | 290-0534-00        |                      |         | CAP.,FXD.ELCTLT:1UF,20%.35V           | 56289    | 196D105X0035HA1 |
| A26C242                    | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%.50V         | 56289    | 273C11          |
| A26C310                    | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%.50V         | 56289    | 273C11          |
| A26C330                    | 290-0135-01        |                      |         | CAP.,FXD.ELCTLT:15UF,20%.20V          | 26769    | 40SS1568015M1C  |
| A26C340                    | 290-0305-01        |                      |         | CAP.,FXD.ELCTLT:3UF,10%.150V          | 56289    | 109D305X9150C2  |
| A26C600                    | 285-1062-00        |                      |         | CAP.,FXD.PLSTC:0.005UF,0.1%.200V      | 19396    | 502F02PP460     |
| A26C610                    | 290-0534-00        |                      |         | CAP.,FXD.ELCTLT:1UF,20%.35V           | 56289    | 196D105X0035HA1 |
| A26C622                    | 285-1062-00        |                      |         | CAP.,FXD.PLSTC:0.005UF,0.1%.200V      | 19396    | 502F02PP460     |
| A26C640                    | 290-0534-00        |                      |         | CAP.,FXD.ELCTLT:1UF,20%.35V           | 56289    | 196D105X0035HA1 |
| A26C642                    | 290-0305-01        |                      |         | CAP.,FXD.ELCTLT:3UF,10%.150V          | 56289    | 109D305X9150C2  |
| A26C646                    | 281-0542-00        |                      |         | CAP.,FXD.CER DI:18PF,10%.500V         | 59660    | 301-000C0GO180K |
| A26C700                    | 281-0546-00        |                      |         | CAP.,FXD.CER DI:330PF,10%.500V        | 04222    | 7001-1380       |
| A26C730                    | 281-0580-00        |                      |         | CAP.,FXD.CER DI:470PF,10%.500V        | 04222    | 7001-1374       |
| A26C912                    | 281-0518-00        |                      |         | CAP.,FXD.CER DI:47PF,+/-9.4PF,500V    | 59660    | 301-000U2J0470M |
| A26C914                    | 283-0204-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%.50V        | 96733    | R2676           |
| A26C920                    | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C940                    | 281-0518-00        |                      |         | CAP.,FXD.CER DI:47PF,+/-9.4PF,500V    | 59660    | 301-000U2J0470M |
| A26C942                    | 283-0204-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%.50V        | 96733    | R2676           |
| A26C946                    | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C1020                   | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C1030                   | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C1040                   | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C1100                   | 290-0534-00        |                      |         | CAP.,FXD.ELCTLT:1UF,20%.35V           | 56289    | 196D105X0035HA1 |
| A26C1102                   | 281-0140-00        | B010100              | B039999 | CAP.,VAR.CER DI:5-25PF,100V           | 59660    | 518-023A 5-25   |
| A26C1102                   | 281-0504-00        | B040000              |         | CAP.,FXD.CER DI:10PF,+/-1PF,500V      | 04222    | 7001-COG-100F   |
| A26C1104                   | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C1130                   | 290-0309-00        |                      |         | CAP.,FXD.ELCTLT:100UF,20%.25V         | 56289    | 109D107X0025F2  |
| A26C1132                   | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |
| A26C1140                   | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V   | 59821    | 2DDH66J103Z     |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscnt   | Name & Description                   | Mfr Code | Mfr Part Numbe  |
|---------------|--------------------|----------------------|---------|--------------------------------------|----------|-----------------|
| A26C1200      | 281-0140-00        | B010100              | B039999 | CAP.,VAR.CER DI:5-25PF,100V          | 59660    | 518-023A 5-25   |
| A26C1226      | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V  | 59821    | 2DDH66J103Z     |
| A26C1230      | 290-0534-00        |                      |         | CAP.,FXD.ELCTL:1UF,20%,35V           | 56289    | 196D105X0035HA  |
| A26C1300      | 281-0610-00        |                      |         | CAP.,FXD.CER DI:2.2PF,+/-0.1PF,500V  | 59660    | 374-018COJ0229E |
| A26C1320      | 281-0670-00        |                      |         | CAP.,FXD.CER DI:1.8PF,+/-0.1PF,500V  | 04222    | 7040-C0K-1R8B   |
| A26C1322      | 290-0309-00        |                      |         | CAP.,FXD.ELCTL:100UF,20%,25V         | 56289    | 109D107X0025F2  |
| A26C1330      | 281-0534-00        |                      |         | CAP.,FXD.CER DI:3.3PF,+/-0.25PF,500V | 04222    | 7001-COJ-3R3C   |
| A26C1340      | 281-0534-00        |                      |         | CAP.,FXD.CER DI:3.3PF,+/-0.25PF,500V | 04222    | 7001-COJ-3R3C   |
| A26C1400      | 281-0504-00        |                      |         | CAP.,FXD.CER DI:10PF,+/-1PF,500V     | 04222    | 7001-COG-100F   |
| A26C1420      | 281-0504-00        |                      |         | CAP.,FXD.CER DI:10PF,+/-1PF,500V     | 04222    | 7001-COG-100F   |
| A26C1430      | 281-0504-00        |                      |         | CAP.,FXD.CER DI:10PF,+/-1PF,500V     | 04222    | 7001-COG-100F   |
| A26C1440      | 281-0504-00        |                      |         | CAP.,FXD.CER DI:10PF,+/-1PF,500V     | 04222    | 7001-COG-100F   |
| A26CR014      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR020      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR040      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR100      | 152-0246-00        |                      |         | SEMICONV DEVICE:SW,Si,40V,200MA      | 03508    | DE140           |
| A26CR110      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR130      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR132      | 152-0246-00        |                      |         | SEMICONV DEVICE:SW,Si,40V,200MA      | 03508    | DE140           |
| A26CR140      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR200      | 152-0246-00        |                      |         | SEMICONV DEVICE:SW,Si,40V,200MA      | 03508    | DE140           |
| A26CR230      | 152-0246-00        |                      |         | SEMICONV DEVICE:SW,Si,40V,200MA      | 03508    | DE140           |
| A26CR400      | 152-0501-00        |                      |         | SEMICONV DEVICE:SILICON,70V,200MA    | 04713    | SSD2405         |
| A26CR420      | 152-0501-00        |                      |         | SEMICONV DEVICE:SILICON,70V,200MA    | 04713    | SSD2405         |
| A26CR700      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR710      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR730      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR740      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR1100     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR1140     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR1200     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR1240     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR1310     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR1312     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR1340     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26CR1342     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A26LR1100     | 108-0298-00        |                      |         | COIL,RF:235NH (WOUND ON A 36 OHM RE  | 80009    | 108-0298-00     |
| A26LR1130     | 108-0298-00        |                      |         | COIL,RF:235NH (WOUND ON A 36 OHM RE  | 80009    | 108-0298-00     |
| A26Q020       | 151-0190-00        |                      |         | TRANSISTOR:SILICON,NPN               | 07263    | S032677         |
| A26Q130       | 151-0188-00        |                      |         | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A26Q200       | 151-0188-00        |                      |         | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A26Q220       | 151-0188-00        |                      |         | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A26Q222       | 151-0190-00        |                      |         | TRANSISTOR:SILICON,NPN               | 07263    | S032677         |
| A26Q224       | 151-0190-00        |                      |         | TRANSISTOR:SILICON,NPN               | 07263    | S032677         |
| A26Q230       | 151-0188-00        |                      |         | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A26Q232       | 151-0188-00        |                      |         | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A26Q300       | 151-0134-00        |                      |         | TRANSISTOR:SILICON,PNP               | 80009    | 151-0134-00     |
| A26Q302       | 151-0134-00        |                      |         | TRANSISTOR:SILICON,PNP               | 80009    | 151-0134-00     |
| A26Q320       | 151-0188-00        |                      |         | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A26Q330       | 151-0190-00        |                      |         | TRANSISTOR:SILICON,NPN               | 07263    | S032677         |
| A26Q402       | 151-0302-00        |                      |         | TRANSISTOR:SILICON,NPN               | 07263    | S038487         |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                    | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---------------------------------------|----------|-----------------|
| A26Q410       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q420       | 151-0302-00        |                      |         | TRANSISTOR:SILICON.NPN                | 07263    | S038487         |
| A26Q422       | 151-0302-00        |                      |         | TRANSISTOR:SILICON.NPN                | 07263    | S038487         |
| A26Q440       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q600       | 151-1036-00        |                      |         | TRANSISTOR:SILICON.JFE.N-CHANNEL.DUAL | 17856    | DN1663          |
| A26Q630       | 151-1036-00        |                      |         | TRANSISTOR:SILICON.JFE.N-CHANNEL.DUAL | 17856    | DN1663          |
| A26Q700       | 151-0134-00        |                      |         | TRANSISTOR:SILICON.PNP                | 80009    | 151-0134-00     |
| A26Q720       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q740       | 151-0134-00        |                      |         | TRANSISTOR:SILICON.PNP                | 80009    | 151-0134-00     |
| A26Q742       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1010      | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL           | 07263    | SP12141         |
| A26Q1040      | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL           | 07263    | SP12141         |
| A26Q1110      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1120      | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL           | 07263    | SP12141         |
| A26Q1140      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1142      | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL           | 07263    | SP12141         |
| A26Q1210      | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL           | 07263    | SP12141         |
| A26Q1240      | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL           | 07263    | SP12141         |
| A26Q1300      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1310      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1312      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1320      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1330      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1340      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1342      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26Q1344      | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                | 07263    | S036228         |
| A26R002       | 321-0983-00        |                      |         | RES.,FXD,FILM:4.5M OHM,1%,0.125W      | 91637    | CM110216G45003F |
| A26R004       | 321-0247-00        |                      |         | RES.,FXD,FILM:3.65K OHM,1%,0.125W     | 91637    | MFF1816G36500F  |
| A26R006       | 321-0276-00        |                      |         | RES.,FXD,FILM:7.32K OHM,1%,0.125W     | 91637    | MFF1816G73200F  |
| A26R008       | 321-0217-00        |                      |         | RES.,FXD,FILM:1.78K OHM,1%,0.125W     | 91637    | MFF1816G17800F  |
| A26R010       | 321-0481-00        |                      |         | RES.,FXD,FILM:1M OHM,1%,0.125W        | 24546    | NA4D1004F       |
| A26R012       | 321-0227-00        |                      |         | RES.,FXD,FILM:2.26K OHM,1%,0.125W     | 91637    | MFF1816G22600F  |
| A26R014       | 321-0261-09        |                      |         | RES.,FXD,FILM:5.11K OHM,1%,0.125W     | 91637    | MFF1816C51100F  |
| A26R016       | 315-0183-00        |                      |         | RES.,FXD,CMPSN:18K OHM,5%,0.25W       | 01121    | CB1835          |
| A26R020       | 321-0239-00        |                      |         | RES.,FXD,FILM:3.01K OHM,1%,0.125W     | 91637    | MFF1816G30100F  |
| A26R022       | 321-0222-00        |                      |         | RES.,FXD,FILM:2K OHM,1%,0.125W        | 91637    | MFF1816G20000F  |
| A26R024       | 315-0103-00        |                      |         | RES.,FXD,CMPSN:10K OHM,5%,0.25W       | 01121    | CB1035          |
| A26R026       | 315-0432-00        |                      |         | RES.,FXD,CMPSN:4.3K OHM,5%,0.25W      | 01121    | CB4325          |
| A26R028       | 315-0472-00        |                      |         | RES.,FXD,CMPSN:4.7K OHM,5%,0.25W      | 01121    | CB4725          |
| A26R030       | 315-0103-00        |                      |         | RES.,FXD,CMPSN:10K OHM,5%,0.25W       | 01121    | CB1035          |
| A26R031       | 321-0305-00        |                      |         | RES.,FXD,FILM:14.7K OHM,1%,0.125W     | 91637    | MFF1816G14701F  |
| A26R032       | 321-0486-00        |                      |         | RES.,FXD,FILM:1.13M OHM,1%,0.125W     | 91637    | HMF188G11303F   |
| A26R033       | 321-0983-00        |                      |         | RES.,FXD,FILM:4.5M OHM,1%,0.125W      | 91637    | CM110216G45003F |
| A26R034       | 321-0428-00        |                      |         | RES.,FXD,FILM:280K OHM,1%,0.125W      | 91637    | MFF1816G28002F  |
| A26R035       | 321-0261-09        |                      |         | RES.,FXD,FILM:5.11K OHM,1%,0.125W     | 91637    | MFF1816C51100F  |
| A26R036       | 321-0481-00        |                      |         | RES.,FXD,FILM:1M OHM,1%,0.125W        | 24546    | NA4D1004F       |
| A26R037       | 321-0261-09        | B010100              | B060648 | RES.,FXD,FILM:5.11K OHM,1%,0.125W     | 91637    | MFF1816C51100F  |
| A26R037       | 321-0216-00        | B060649              | B080713 | RES.,FXD,FILM:1.74K OHM,1%,0.125W     | 91637    | MFF1816G17400F  |
| A26R037       | 315-0362-00        | B080714              |         | RES.,FXD,CMPSN:3.6K OHM,5%,0.25W      | 01121    | CB3625          |
| A26R040       | 315-0183-00        |                      |         | RES.,FXD,CMPSN:18K OHM,5%,0.25W       | 01121    | CB1835          |
| A26R042       | 321-0222-00        |                      |         | RES.,FXD,FILM:2K OHM,1%,0.125W        | 91637    | MFF1816G20000F  |
| A26R044       | 321-0239-00        |                      |         | RES.,FXD,FILM:3.01K OHM,1%,0.125W     | 91637    | MFF1816G30100F  |
| A26R100       | 303-0391-00        |                      |         | RES.,FXD,CMPSN:390 OHM,5%,1W          | 01121    | GB3915          |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Discont | Name & Description                   | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--------------------------------------|----------|-----------------|
| A26R102       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W      | 01121    | CB1035          |
| A26R110       | 321-0261-09        |                      |         | RES.,FXD.FILM:5.11K OHM.1%.0.125W    | 91637    | MFF1816C51100F  |
| A26R120       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W     | 01121    | CB4725          |
| A26R132       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W      | 01121    | CB1035          |
| A26R134       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W     | 01121    | CB4725          |
| A26R140       | 321-0261-09        |                      |         | RES.,FXD.FILM:5.11K OHM.1%.0.125W    | 91637    | MFF1816C51100F  |
| A26R200       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W      | 01121    | CB1015          |
| A26R202       | 321-0126-00        |                      |         | RES.,FXD.FILM:200 OHM.1%.0.125W      | 91637    | MFF1816G200R0F  |
| A26R204       | 315-0332-00        |                      |         | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W     | 01121    | CB3325          |
| A26R206       | 321-0143-00        |                      |         | RES.,FXD.FILM:301 OHM.1%.0.125W      | 91637    | MFF1816G301R0F  |
| A26R210       | 315-0122-00        |                      |         | RES.,FXD.CMPSN:1.2K OHM.5%.0.25W     | 01121    | CB1225          |
| A26R212       | 315-0332-00        |                      |         | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W     | 01121    | CB3325          |
| A26R220       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W      | 01121    | CB1035          |
| A26R222       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W     | 01121    | CB4725          |
| A26R224       | 315-0432-00        |                      |         | RES.,FXD.CMPSN:4.3K OHM.5%.0.25W     | 01121    | CB4325          |
| A26R230       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W      | 01121    | CB1015          |
| A26R232       | 315-0332-00        |                      |         | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W     | 01121    | CB3325          |
| A26R234       | 321-0143-00        |                      |         | RES.,FXD.FILM:301 OHM.1%.0.125W      | 91637    | MFF1816G301R0F  |
| A26R236       | 321-0126-00        |                      |         | RES.,FXD.FILM:200 OHM.1%.0.125W      | 91637    | MFF1816G200R0F  |
| A26R240       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W      | 01121    | CB1035          |
| A26R310       | 315-0362-00        |                      |         | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W     | 01121    | CB3625          |
| A26R312       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W     | 01121    | CB4725          |
| A26R320       | 315-0621-00        | B010100              | B010299 | RES.,FXD.CMPSN:620 OHM.5%.0.25W      | 01121    | CB6215          |
| A26R320       | 315-0751-00        | B010300              |         | RES.,FXD.CMPSN:750 OHM.5%.0.25W      | 01121    | CB7515          |
| A26R328       | 322-0219-00        |                      |         | RES.,FXD.FILM:1.87K OHM.1%.0.25W     | 75042    | CEBT0-1871F     |
| A26R330       | 315-0184-00        |                      |         | RES.,FXD.CMPSN:180K OHM.5%.0.25W     | 01121    | CB1845          |
| A26R332       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W     | 01121    | CB4725          |
| A26R340       | 315-0362-00        |                      |         | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W     | 01121    | CB3625          |
| A26R342       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A26R344       | 321-0260-03        |                      |         | RES.,FXD.FILM:4.99K OHM.0.25%.0.125W | 24546    | NC55C4991C      |
| A26R400       | 315-0822-00        |                      |         | RES.,FXD.CMPSN:8.2K OHM.5%.0.25W     | 01121    | CB8225          |
| A26R402       | 321-0293-00        |                      |         | RES.,FXD.FILM:11K OHM.1%.0.125W      | 91637    | MFF1816G11001F  |
| A26R404       | 321-0278-00        |                      |         | RES.,FXD.FILM:7.68K OHM.1%.0.125W    | 91637    | MFF1816G76800F  |
| A26R406       | 321-0327-03        |                      |         | RES.,FXD.FILM:24.9K OHM.0.25%.0.125W | 24546    | NC55C2492C      |
| A26R410       | 321-0260-03        |                      |         | RES.,FXD.FILM:4.99K OHM.0.25%.0.125W | 24546    | NC55C4991C      |
| A26R420       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A26R422       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W      | 01121    | CB1035          |
| A26R424       | 315-0362-00        |                      |         | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W     | 01121    | CB3625          |
| A26R426       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W       | 01121    | CB1005          |
| A26R430       | 315-0822-00        |                      |         | RES.,FXD.CMPSN:8.2K OHM.5%.0.25W     | 01121    | CB8225          |
| A26R432       | 321-0293-00        |                      |         | RES.,FXD.FILM:11K OHM.1%.0.125W      | 91637    | MFF1816G11001F  |
| A26R434       | 321-0278-00        |                      |         | RES.,FXD.FILM:7.68K OHM.1%.0.125W    | 91637    | MFF1816G76800F  |
| A26R436       | 321-0327-03        |                      |         | RES.,FXD.FILM:24.9K OHM.0.25%.0.125W | 24546    | NC55C2492C      |
| A26R440       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A26R442       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W       | 01121    | CB1005          |
| A26R500       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W     | 01121    | CB5125          |
| A26R502       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W      | 01121    | CB1035          |
| A26R504       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W       | 01121    | CB1005          |
| A26R506       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W     | 01121    | CB1045          |
| A26R507       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W     | 01121    | CB1045          |
| A26R508       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W     | 01121    | CB1045          |
| A26R509       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W     | 01121    | CB4725          |
| A26R510       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W      | 01121    | CB1015          |
| A26R520       | 321-0260-03        |                      |         | RES.,FXD.FILM:4.99K OHM.0.25%.0.125W | 24546    | NC55C4991C      |

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                   | Mfr Code | Mfr Part Number |
|---------------|--------------------|-----------------------------|--------------------------------------|----------|-----------------|
| A26R522       | 321-0202-00        |                             | RES..FXD.FILM:1.24K OHM,1%.0.125W    | 91637    | MFF1816G12400F  |
| A26R524       | 321-0277-03        |                             | RES..FXD.FILM:7.5K OHM,0.25%.0.125W  | 24546    | NC55C7501C      |
| A26R526       | 315-0512-00        |                             | RES..FXD.CMPSN:5.1K OHM,5%.0.25W     | 01121    | CB5125          |
| A26R528       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A26R529       | 315-0100-00        |                             | RES..FXD.CMPSN:10 OHM,5%.0.25W       | 01121    | CB1005          |
| A26R530       | 315-0104-00        |                             | RES..FXD.CMPSN:100K OHM,5%.0.25W     | 01121    | CB1045          |
| A26R532       | 315-0104-00        |                             | RES..FXD.CMPSN:100K OHM,5%.0.25W     | 01121    | CB1045          |
| A26R534       | 315-0104-00        |                             | RES..FXD.CMPSN:100K OHM,5%.0.25W     | 01121    | CB1045          |
| A26R536       | 315-0472-00        |                             | RES..FXD.CMPSN:4.7K OHM,5%.0.25W     | 01121    | CB4725          |
| A26R540       | 315-0101-00        |                             | RES..FXD.CMPSN:100 OHM,5%.0.25W      | 01121    | CB1015          |
| A26R542       | 321-0260-03        |                             | RES..FXD.FILM:4.99K OHM,0.25%.0.125W | 24546    | NC55C4991C      |
| A26R544       | 321-0202-00        |                             | RES..FXD.FILM:1.24K OHM,1%.0.125W    | 91637    | MFF1816G12400F  |
| A26R600       | 315-0392-00        |                             | RES..FXD.CMPSN:3.9K OHM,5%.0.25W     | 01121    | CB3925          |
| A26R602       | 315-0100-00        |                             | RES..FXD.CMPSN:10 OHM,5%.0.25W       | 01121    | CB1005          |
| A26R604       | 311-1248-00        |                             | RES..VAR.NONWIR:500 OHM,10%.0.50W    | 73138    | 72-23-0         |
| A26R610       | 315-0301-00        |                             | RES..FXD.CMPSN:300 OHM,5%.0.25W      | 01121    | CB3015          |
| A26R612       | 315-0681-00        |                             | RES..FXD.CMPSN:680 OHM,5%.0.25W      | 01121    | CB6815          |
| A26R614       | 322-0327-03        |                             | RES..FXD.FILM:24.9K OHM,0.25%.0.25W  | 91637    | MFF1421D24901C  |
| A26R616       | 315-0203-00        |                             | RES..FXD.CMPSN:20K OHM,5%.0.25W      | 01121    | CB2035          |
| A26R620       | 301-0362-00        |                             | RES..FXD.CMPSN:3.6K OHM,5%.0.50W     | 01121    | EB3625          |
| A26R630       | 315-0392-00        |                             | RES..FXD.CMPSN:3.9K OHM,5%.0.25W     | 01121    | CB3925          |
| A26R632       | 315-0100-00        |                             | RES..FXD.CMPSN:10 OHM,5%.0.25W       | 01121    | CB1005          |
| A26R634       | 311-1248-00        |                             | RES..VAR.NONWIR:500 OHM,10%.0.50W    | 73138    | 72-23-0         |
| A26R640       | 315-0301-00        |                             | RES..FXD.CMPSN:300 OHM,5%.0.25W      | 01121    | CB3015          |
| A26R642       | 315-0681-00        |                             | RES..FXD.CMPSN:680 OHM,5%.0.25W      | 01121    | CB6815          |
| A26R644       | 322-0327-03        |                             | RES..FXD.FILM:24.9K OHM,0.25%.0.25W  | 91637    | MFF1421D24901C  |
| A26R646       | 315-0203-00        |                             | RES..FXD.CMPSN:20K OHM,5%.0.25W      | 01121    | CB2035          |
| A26R648       | 301-0362-00        |                             | RES..FXD.CMPSN:3.6K OHM,5%.0.50W     | 01121    | EB3625          |
| A26R649       | 321-0277-03        |                             | RES..FXD.FILM:7.5K OHM,0.25%.0.125W  | 24546    | NC55C7501C      |
| A26R700       | 315-0100-00        |                             | RES..FXD.CMPSN:10 OHM,5%.0.25W       | 01121    | CB1005          |
| A26R710       | 303-0471-00        |                             | RES..FXD.CMPSN:470 OHM,5%.1W         | 01121    | GB4715          |
| A26R712       | 315-0201-00        |                             | RES..FXD.CMPSN:200 OHM,5%.0.25W      | 01121    | CB2015          |
| A26R730       | 315-0100-00        |                             | RES..FXD.CMPSN:10 OHM,5%.0.25W       | 01121    | CB1005          |
| A26R740       | 301-0102-00        |                             | RES..FXD.CMPSN:1K OHM,5%.0.50W       | 01121    | EB1025          |
| A26R742       | 315-0201-00        |                             | RES..FXD.CMPSN:200 OHM,5%.0.25W      | 01121    | CB2015          |
| A26R800       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A26R830       | 315-0103-00        |                             | RES..FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A26R900       | 311-1248-00        |                             | RES..VAR.NONWIR:500 OHM,10%.0.50W    | 73138    | 72-23-0         |
| A26R902       | 321-0254-09        |                             | RES..FXD.FILM:4.32K OHM,1%.0.125W    | 24546    | NE55E4321F      |
| A26R904       | 321-0258-09        |                             | RES..FXD.FILM:4.75K OHM,1%.0.125W    | 91637    | MFF1816C47500F  |
| A26R906       | 321-0258-09        |                             | RES..FXD.FILM:4.75K OHM,1%.0.125W    | 91637    | MFF1816C47500F  |
| A26R908       | 321-0408-09        |                             | RES..FXD.FILM:174K OHM,1%.0.125W     | 91637    | MFF1816C17402F  |
| A26R910       | 321-0435-00        |                             | RES..FXD.FILM:332K OHM,1%.0.125W     | 91637    | MFF1816G33202F  |
| A26R912       | 315-0751-00        |                             | RES..FXD.CMPSN:750 OHM,5%.0.25W      | 01121    | CB7515          |
| A26R914       | 315-0100-00        |                             | RES..FXD.CMPSN:10 OHM,5%.0.25W       | 01121    | CB1005          |
| A26R920       | 315-0100-00        |                             | RES..FXD.CMPSN:10 OHM,5%.0.25W       | 01121    | CB1005          |
| A26R922       | 315-0273-00        |                             | RES..FXD.CMPSN:27K OHM,5%.0.25W      | 01121    | CB2735          |
| A26R930       | 311-1248-00        |                             | RES..VAR.NONWIR:500 OHM,10%.0.50W    | 73138    | 72-23-0         |
| A26R932       | 321-0254-09        |                             | RES..FXD.FILM:4.32K OHM,1%.0.125W    | 24546    | NE55E4321F      |
| A26R940       | 321-0258-09        |                             | RES..FXD.FILM:4.75K OHM,1%.0.125W    | 91637    | MFF1816C47500F  |
| A26R941       | 321-0258-09        |                             | RES..FXD.FILM:4.75K OHM,1%.0.125W    | 91637    | MFF1816C47500F  |
| A26R942       | 321-0392-09        |                             | RES..FXD.FILM:118K OHM,1%.0.125W     | 91637    | MFF1816C11802F  |
| A26R943       | 321-0423-09        |                             | RES..FXD.FILM:249K OHM,1%.0.125W     | 24546    | NE55E2493F      |
| A26R944       | 315-0751-00        |                             | RES..FXD.CMPSN:750 OHM,5%.0.25W      | 01121    | CB7515          |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Discnt  | Name & Description                  | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-------------------------------------|----------|-----------------|
| A26R945       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W      | 01121    | CB1005          |
| A26R946       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W      | 01121    | CB1005          |
| A26R1000      | 311-1238-00        |                      |         | RES.,VAR.NONWIR:5K OHM.10%.0.50W    | 73138    | 72-27-0         |
| A26R1002      | 321-0306-09        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W     | 24546    | NE55E1502F      |
| A26R1004      | 321-0338-09        |                      |         | RES.,FXD.FILM:32.4K OHM.1%.0.125W   | 91637    | MFF1816C32401F  |
| A26R1006      | 321-0201-09        |                      |         | RES.,FXD.FILM:1.21K OHM.1%.0.125W   | 24546    | NE55E1211F      |
| A26R1010      | 315-0271-00        |                      |         | RES.,FXD.CMPSN:270 OHM.5%.0.25W     | 01121    | CB2715          |
| A26R1012      | 315-0562-00        |                      |         | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W    | 01121    | CB5625          |
| A26R1020      | 321-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM.1%.0.125W   | 91637    | MFF1816G24901F  |
| A26R1022      | 321-0352-00        |                      |         | RES.,FXD.FILM:45.3K OHM.1%.0.125W   | 91637    | MFF1816G45301F  |
| A26R1024      | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W      | 01121    | CB1005          |
| A26R1030      | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W      | 01121    | CB1005          |
| A26R1032      | 311-1238-00        |                      |         | RES.,VAR.NONWIR:5K OHM.10%.0.50W    | 73138    | 72-27-0         |
| A26R1040      | 321-0287-09        |                      |         | RES.,FXD.FILM:9.53K OHM.1%.0.125W   | 24546    | NE55E9531F      |
| A26R1041      | 321-0321-07        |                      |         | RES.,FXD.FILM:21.5K OHM.0.1%.0.125W | 91637    | MFF1816C21501B  |
| A26R1042      | 321-0201-09        |                      |         | RES.,FXD.FILM:1.21K OHM.1%.0.125W   | 24546    | NE55E1211F      |
| A26R1043      | 315-0271-00        |                      |         | RES.,FXD.CMPSN:270 OHM.5%.0.25W     | 01121    | CB2715          |
| A26R1044      | 315-0562-00        |                      |         | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W    | 01121    | CB5625          |
| A26R1045      | 321-0352-00        |                      |         | RES.,FXD.FILM:45.3K OHM.1%.0.125W   | 91637    | MFF1816G45301F  |
| A26R1046      | 321-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM.1%.0.125W   | 91637    | MFF1816G24901F  |
| A26R1100      | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W     | 01121    | CB1015          |
| A26R1110      | 321-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM.1%.0.125W   | 91637    | MFF1816G24901F  |
| A26R1112      | 321-0257-00        |                      |         | RES.,FXD.FILM:4.64K OHM.1%.0.125W   | 91637    | MFF1816G46400F  |
| A26R1114      | 321-0291-00        |                      |         | RES.,FXD.FILM:10.5K OHM.1%.0.125W   | 91637    | MFF1816G10501F  |
| A26R1116      | 321-0331-09        |                      |         | RES.,FXD.FILM:27.4K OHM.1%.0.125W   | 91637    | MFF1816C27401F  |
| A26R1130      | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W      | 01121    | CB1005          |
| A26R1140      | 321-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM.1%.0.125W   | 91637    | MFF1816G24901F  |
| A26R1142      | 321-0257-09        |                      |         | RES.,FXD.FILM:4.64K OHM.1%.0.125W   | 91637    | MFF1816C46400F  |
| A26R1144      | 321-0291-09        |                      |         | RES.,FXD.FILM:10.5K OHM.1%.0.125W   | 24546    | NE55E1052F      |
| A26R1146      | 321-0331-09        |                      |         | RES.,FXD.FILM:27.4K OHM.1%.0.125W   | 91637    | MFF1816C27401F  |
| A26R1200      | 315-0560-00        | B010100              | B060648 | RES.,FXD.CMPSN:56 OHM.5%.0.25W      | 01121    | CB5605          |
| A26R1202      | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W     | 01121    | CB4715          |
| A26R1204      | 321-0171-09        |                      |         | RES.,FXD.FILM:590 OHM.1%.0.125W     | 91637    | MFF1816C590R0F  |
| A26R1210      | 321-0171-09        |                      |         | RES.,FXD.FILM:590 OHM.1%.0.125W     | 91637    | MFF1816C590R0F  |
| A26R1212      | 321-0292-09        |                      |         | RES.,FXD.FILM:10.7K OHM.1%.0.125W   | 24546    | NE55E1072F      |
| A26R1214      | 321-0313-09        |                      |         | RES.,FXD.FILM:17.8K OHM.1%.0.125W   | 24546    | NE55E1782F      |
| A26R1220      | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W     | 01121    | CB4715          |
| A26R1222      | 321-0313-09        |                      |         | RES.,FXD.FILM:17.8K OHM.1%.0.125W   | 24546    | NE55E1782F      |
| A26R1224      | 321-0296-09        |                      |         | RES.,FXD.FILM:11.8K OHM.1%.0.125W   | 24546    | NE55E1182F      |
| A26R1226      | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W      | 01121    | CB1005          |
| A26R1230      | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W     | 01121    | CB1015          |
| A26R1232      | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W     | 01121    | CB4715          |
| A26R1240      | 321-0171-09        |                      |         | RES.,FXD.FILM:590 OHM.1%.0.125W     | 91637    | MFF1816C590R0F  |
| A26R1241      | 321-0171-09        |                      |         | RES.,FXD.FILM:590 OHM.1%.0.125W     | 91637    | MFF1816C590R0F  |
| A26R1242      | 321-0292-09        |                      |         | RES.,FXD.FILM:10.7K OHM.1%.0.125W   | 24546    | NE55E1072F      |
| A26R1243      | 321-0313-09        |                      |         | RES.,FXD.FILM:17.8K OHM.1%.0.125W   | 24546    | NE55E1782F      |
| A26R1244      | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W     | 01121    | CB4715          |
| A26R1245      | 321-0313-09        |                      |         | RES.,FXD.FILM:17.8K OHM.1%.0.125W   | 24546    | NE55E1782F      |
| A26R1246      | 321-0296-09        |                      |         | RES.,FXD.FILM:11.8K OHM.1%.0.125W   | 24546    | NE55E1182F      |
| A26R1300      | 321-0306-09        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W     | 24546    | NE55E1502F      |
| A26R1310      | 315-0182-00        |                      |         | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W    | 01121    | CB1825          |
| A26R1320      | 321-0306-00        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W     | 91637    | MFF1816G15001F  |
| A26R1340      | 321-0306-09        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W     | 24546    | NE55E1502F      |
| A26R1342      | 315-0182-00        |                      |         | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W    | 01121    | CB1825          |

Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A26R1344      | 321-0306-09        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W           | 24546    | NE55E1502F      |
| A26R1400      | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W            | 01121    | CB1005          |
| A26R1402      | 321-0289-09        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816C10001F  |
| A26R1410      | 321-0260-09        |                      |         | RES.,FXD.FILM:4.99K OHM.1%.0.125W         | 24546    | NE55E4991F      |
| A26R1412      | 321-0261-09        |                      |         | RES.,FXD.FILM:5.11K OHM.1%.0.125W         | 91637    | MFF1816C51100F  |
| A26R1414      | 311-1238-00        |                      |         | RES.,VAR.NONWIR:5K OHM.10%.0.50W          | 73138    | 72-27-0         |
| A26R1416      | 321-0295-09        |                      |         | RES.,FXD.FILM:11.5K OHM.1%.0.125W         | 24546    | NE55E1152F      |
| A26R1418      | 321-0261-09        |                      |         | RES.,FXD.FILM:5.11K OHM.1%.0.125W         | 91637    | MFF1816C51100F  |
| A26R1420      | 321-0260-09        |                      |         | RES.,FXD.FILM:4.99K OHM.1%.0.125W         | 24546    | NE55E4991F      |
| A26R1422      | 321-0289-09        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816C10001F  |
| A26R1424      | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W            | 01121    | CB1005          |
| A26R1430      | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W            | 01121    | CB1005          |
| A26R1432      | 321-0289-09        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816C10001F  |
| A26R1440      | 321-0263-09        |                      |         | RES.,FXD.FILM:5.36K OHM.1%.0.125W         | 24546    | NE55E5361F      |
| A26R1441      | 321-0289-09        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816C10001F  |
| A26R1442      | 311-1238-00        |                      |         | RES.,VAR.NONWIR:5K OHM.10%.0.50W          | 73138    | 72-27-0         |
| A26R1443      | 321-0289-09        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816C10001F  |
| A26R1444      | 321-0289-09        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816C10001F  |
| A26R1445      | 321-0263-09        |                      |         | RES.,FXD.FILM:5.36K OHM.1%.0.125W         | 24546    | NE55E5361F      |
| A26R1446      | 321-0289-09        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816C10001F  |
| A26R1447      | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W            | 01121    | CB1005          |
| A26U020       | 156-0742-00        | B010100              | B100904 | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER     | 27014    | LM318N          |
| A26U020       | 156-0742-01        | B100905              | B101144 | MICROCIRCUIT,LI:OPNL AMPL,FUNCTIONAL TEST | 80009    | 156-0742-01     |
| A26U020       | 156-0742-02        | B101145              |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER,SEL | 01295    | LM318JG         |
| A26U040       | 156-0742-00        | B010100              | B100904 | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER     | 27014    | LM318N          |
| A26U040       | 156-0742-01        | B100905              | B101144 | MICROCIRCUIT,LI:OPNL AMPL,FUNCTIONAL TEST | 80009    | 156-0742-01     |
| A26U040       | 156-0742-02        | B101145              |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER,SEL | 01295    | LM318JG         |
| A26U110       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP          | 07263    | 74LS74A         |
| A26U120       | 156-0386-02        |                      |         | MICROCIRCUIT,DI:TRIPLE 3-INP NAND GATE    | 27014    | DM74LS10N       |
| A26U140       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP          | 07263    | 74LS74A         |
| A26U210       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE      | 01295    | SN74LS00        |
| A26U240       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE      | 01295    | SN74LS00        |
| A26U310       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE      | 01295    | SN74LS00        |
| A26U340       | 156-0405-03        |                      |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV | 07263    | 9602            |
| A26U410       | 156-0068-00        | B010100              | B100904 | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0068-00     |
| A26U410       | 156-0048-02        | B100905              |         | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0048-02     |
| A26U440       | 156-0068-00        | B010100              | B100904 | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0068-00     |
| A26U440       | 156-0048-02        | B100905              |         | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0048-02     |
| A26U510       | 156-0068-00        | B010100              | B100904 | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0068-00     |
| A26U510       | 156-0048-02        | B100905              |         | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0048-02     |
| A26U540       | 156-0068-00        | B010100              | B100904 | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0068-00     |
| A26U540       | 156-0048-02        | B100905              |         | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0048-02     |
| A26VR920      | 152-0226-00        |                      |         | SEMICONV DEVICE:ZENER,0.4W,5.1V,5%        | 14552    | TD3810980       |

# Replaceable Electrical Parts—7912AD Service

| Component No.              | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                    | Mfr Code | Mfr Part Number  |
|----------------------------|--------------------|----------------------|---------|---------------------------------------|----------|------------------|
| <b>A28 VIDEO PROCESSOR</b> |                    |                      |         |                                       |          |                  |
| A28                        | 670-5145-00        | B010100              | B070679 | CKT BOARD ASSY:VIDEO PROCESSOR        | 80009    | 670-5145-00      |
| A28                        | 670-5145-01        | B070680              | B079999 | CKT BOARD ASSY:VIDEO PROCESSOR        | 80009    | 670-5145-01      |
| A28                        | 670-5145-02        | B080000              |         | CKT BOARD ASSY:VIDEO PROCESSOR        | 80009    | 670-5145-02      |
| A28C004                    | 283-0067-00        |                      |         | CAP.,FXD,CER DI:0.001UF,10%,200V      | 59660    | 835-515-Z5D01021 |
| A28C006                    | 283-0067-00        |                      |         | CAP.,FXD,CER DI:0.001UF,10%,200V      | 59660    | 835-515-Z5D01021 |
| A28C008                    | 281-0523-00        |                      |         | CAP.,FXD,CER DI:100PF, +/-20PF,500V   | 72982    | 301-000U2M01011  |
| A28C022                    | 290-0536-00        |                      |         | CAP.,FXD,ELCTLT:10UF,20%,25V          | 90201    | TDC106M025FL     |
| A28C034                    | 283-0637-00        |                      |         | CAP.,FXD,MICA D:20PF 2.5%,100V        | 00853    | D151E20000       |
| A28C036                    | 283-0103-00        |                      |         | CAP.,FXD,CER DI:180PF,5%,500V         | 59660    | 831-518-Z5D0181. |
| A28C042                    | 290-0301-00        |                      |         | CAP.,FXD,ELCTLT:10UF,10%,20V          | 56289    | 150D106X9020B2   |
| A28C102                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |
| A28C132                    | 283-0198-00        |                      |         | CAP.,FXD,CER DI:0.22UF,20%,.50V       | 56289    | 1C10Z5U223M05C   |
| A28C136                    | 283-0142-00        |                      |         | CAP.,FXD,CER DI:0.0027UF,5%,.200V     | 59660    | 875571YEE0272J   |
| A28C138                    | 283-0100-00        |                      |         | CAP.,FXD,CER DI:0.0047UF,10%,.200V    | 56289    | 273C3            |
| A28C204                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C218                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C244                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 56289    | 109D827X0006F2   |
| A28C246                    | 290-0708-00        |                      |         | CAP.,FXD,ELCTLT:820UF,20%,.6V         | 56289    | 1C10Z5U503Z050   |
| A28C300                    | 283-0010-00        |                      |         | CAP.,FXD,CER DI:0.05UF, +100-20%,.50V | 71590    | 2DDU66B104Z      |
| A28C304                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C314                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C330                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C402                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C418                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |
| A28C420                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C422                    | 290-0534-00        |                      |         | CAP.,FXD,ELCTLT:1UF,20%,.35V          | 56289    | 196D105X0035HA   |
| A28C424                    | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%,100V       | 04222    | SA201C103KAA     |
| A28C429                    | 281-0519-00        |                      |         | CAP.,FXD,CER DI:47PF, +/-4.7PF,500V   | 59660    | 308-000C0G04701  |
| A28C432                    | 283-0177-00        |                      |         | CAP.,FXD,CER DI:1UF, +80-20%,.25V     | 56289    | 2C20Z5U105Z025   |
| A28C444                    | 290-0723-00        |                      |         | CAP.,FXD,ELCTLT:150UF,20%,.6V         | 56289    | 196D157X0006PE   |
| A28C448                    | 290-0301-00        |                      |         | CAP.,FXD,ELCTLT:10UF,10%,.20V         | 56289    | 150D106X9020B2   |
| A28C512                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C524                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |
| A28C528                    | 290-0534-00        |                      |         | CAP.,FXD,ELCTLT:1UF,20%,.35V          | 56289    | 196D105X0035HA   |
| A28C542                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |
| A28C544                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |
| A28C546                    | 290-0534-00        |                      |         | CAP.,FXD,ELCTLT:1UF,20%,.35V          | 56289    | 196D105X0035HA   |
| A28C602                    | 290-0512-00        |                      |         | CAP.,FXD,ELCTLT:22UF,20%,.15V         | 56289    | 196D225X0015KA   |
| A28C606                    | 281-0592-00        |                      |         | CAP.,FXD,CER DI:4.7PF, +/-0.5PF,500V  | 59660    | 0301080COH0479   |
| A28C626                    | 290-0534-00        |                      |         | CAP.,FXD,ELCTLT:1UF,20%,.35V          | 56289    | 196D105X0035HA   |
| A28C630                    | 283-0094-00        |                      |         | CAP.,FXD,CER DI:27PF,10%,200V         | 59660    | 835-583-C0G0270  |
| A28C642                    | 290-0534-00        |                      |         | CAP.,FXD,ELCTLT:1UF,20%,.35V          | 56289    | 196D105X0035HA   |
| A28C644                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |
| A28C648                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |
| A28C702                    | 281-0670-00        |                      |         | CAP.,FXD,CER DI:1.8PF, +/-0.1PF,500V  | 04222    | 7040-C0K-1R8B    |
| A28C708                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |
| A28C714                    | 281-0536-00        |                      |         | CAP.,FXD,CER DI:1000PF,10%,500V       | 72982    | 301000 X 5P01021 |
| A28C718                    | 283-0194-00        |                      |         | CAP.,FXD,CER DI:4.7UF,20%,.50V        | 56289    | 1C37Z5U475M05C   |
| A28C720                    | 281-0536-00        |                      |         | CAP.,FXD,CER DI:1000PF,10%,500V       | 72982    | 301000 X 5P01021 |
| A28C726                    | 283-0023-00        |                      |         | CAP.,FXD,CER DI:0.1UF, +80-20%,.12V   | 71590    | 2DDU66B104Z      |
| A28C728                    | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF, +80-20%,.150V | 59821    | 2DDH66J103Z      |



| Component No. | Tektronix   |         | Serial/Model No. |  | Name & Description                   | Mfr Code | Mfr Part Number |
|---------------|-------------|---------|------------------|--|--------------------------------------|----------|-----------------|
|               | Part No.    | Eff     | Discont          |  |                                      |          |                 |
| A28C740       | 290-0534-00 |         |                  |  | CAP.,FXD.ELCLTLT:1UF,20%,35V         | 56289    | 196D105X0035HA1 |
| A28C742       | 283-0769-00 |         |                  |  | CAP.,FXD.MICA D:278PF,1%,500V        | 00853    | D15-5F2780F0    |
| A28C746       | 283-0603-00 |         |                  |  | CAP.,FXD.MICA D:113PF,2%,300V        | 00853    | D155F1130G0     |
| A28C748       | 283-0003-00 |         |                  |  | CAP.,FXD.CER DI:0.01UF,+80-20%,150V  | 59821    | 2DDH66J103Z     |
| A28C826       | 283-0204-00 |         |                  |  | CAP.,FXD.CER DI:0.01UF,20%,50V       | 96733    | R2676           |
| A28C828       | 283-0204-00 |         |                  |  | CAP.,FXD.CER DI:0.01UF,20%,50V       | 96733    | R2676           |
| A28C836       | 283-0177-00 |         |                  |  | CAP.,FXD.CER DI:1UF,+80-20%,25V      | 56289    | 2C20Z5U105Z025B |
| A28C914       | 283-0194-00 |         |                  |  | CAP.,FXD.CER DI:4.7UF,20%,50V        | 56289    | 5C37Z5U475M050B |
| A28C924       | 283-0204-00 |         |                  |  | CAP.,FXD.CER DI:0.01UF,20%,50V       | 96733    | R2676           |
| A28C926       | 283-0204-00 |         |                  |  | CAP.,FXD.CER DI:0.01UF,20%,50V       | 96733    | R2676           |
| A28C936       | 290-0534-00 |         |                  |  | CAP.,FXD.ELCLTLT:1UF,20%,35V         | 56289    | 196D105X0035HA1 |
| A28C944       | 283-0177-00 |         |                  |  | CAP.,FXD.CER DI:1UF,+80-20%,25V      | 56289    | 2C20Z5U105Z025B |
| A28CR008      | 152-0141-02 |         |                  |  | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A28CR034      | 152-0141-02 |         |                  |  | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A28CR118      | 152-0141-02 |         |                  |  | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A28CR318      | 152-0141-02 |         |                  |  | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A28CR428      | 152-0141-02 |         |                  |  | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A28CR500      | 152-0141-02 | B080000 |                  |  | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A28CR501      | 152-0141-02 | B080000 |                  |  | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A28CR512      | 152-0141-02 |         |                  |  | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R         |
| A28L734       | 108-0766-00 |         |                  |  | COIL,RF:7.07UH                       | 80009    | 108-0766-00     |
| A28L736       | 108-0765-00 |         |                  |  | COIL,RF:FIXED,17.1UH                 | 80009    | 108-0765-00     |
| A28Q030       | 151-0190-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 07263    | S032677         |
| A28Q412       | 151-0188-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A28Q414       | 151-0188-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A28Q432       | 151-0302-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 07263    | S038487         |
| A28Q434       | 151-0220-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 07263    | S036228         |
| A28Q504       | 151-0223-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 04713    | SPS8026         |
| A28Q522       | 151-0103-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 80009    | 151-0103-00     |
| A28Q546       | 151-0221-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 04713    | SPS246          |
| A28Q577       | 151-0188-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A28Q606       | 151-0133-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 80009    | 151-0133-00     |
| A28Q612       | 151-0232-00 |         |                  |  | TRANSISTOR:SILICON,NPN,DUAL          | 07263    | SP12141         |
| A28Q710       | 151-0190-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 07263    | S032677         |
| A28Q716       | 151-0133-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 80009    | 151-0133-00     |
| A28Q722       | 151-1041-00 |         |                  |  | TRANSISTOR:SILICON,FE,N-CHANNEL,DUAL | 22229    | FD1582          |
| A28Q732       | 151-0188-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A28Q770       | 151-0190-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 07263    | S032677         |
| A28Q810       | 151-0190-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 07263    | S032677         |
| A28Q820       | 151-0188-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 04713    | SPS6868K        |
| A28Q832       | 151-0220-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 07263    | S036228         |
| A28Q834       | 151-0220-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 07263    | S036228         |
| A28Q836       | 151-0223-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 04713    | SPS8026         |
| A28Q916       | 151-0223-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 04713    | SPS8026         |
| A28Q932       | 151-0220-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 07263    | S036228         |
| A28Q934       | 151-0220-00 |         |                  |  | TRANSISTOR:SILICON,PNP               | 07263    | S036228         |
| A28Q936       | 151-0223-00 |         |                  |  | TRANSISTOR:SILICON,NPN               | 04713    | SPS8026         |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscnt   | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-----------------------------------|----------|-----------------|
| A28R002       | 311-1245-00        |                      |         | RES..VAR.NONWIR:10K OHM.10%.0.50W | 73138    | 72-28-0         |
| A28R009       | 315-0105-00        |                      |         | RES..FXD.CMPSN:1M OHM.5%.0.25W    | 01121    | CB1055          |
| A28R012       | 315-0223-00        |                      |         | RES..FXD.CMPSN:22K OHM.5%.0.25W   | 01121    | CB2235          |
| A28R024       | 315-0103-00        |                      |         | RES..FXD.CMPSN:10K OHM.5%.0.25W   | 01121    | CB1035          |
| A28R032       | 315-0393-00        |                      |         | RES..FXD.CMPSN:39K OHM.5%.0.25W   | 01121    | CB3935          |
| A28R034       | 315-0562-00        |                      |         | RES..FXD.CMPSN:5.6K OHM.5%.0.25W  | 01121    | CB5625          |
| A28R036       | 315-0561-00        |                      |         | RES..FXD.CMPSN:560 OHM.5%.0.25W   | 01121    | CB5615          |
| A28R102       | 307-0106-00        |                      |         | RES..FXD.CMPSN:4.7 OHM.5%.0.25W   | 01121    | CB47G5          |
| A28R110       | 315-0512-00        |                      |         | RES..FXD.CMPSN:5.1K OHM.5%.0.25W  | 01121    | CB5125          |
| A28R112       | 315-0512-00        |                      |         | RES..FXD.CMPSN:5.1K OHM.5%.0.25W  | 01121    | CB5125          |
| A28R114       | 315-0100-00        |                      |         | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A28R118       | 315-0101-00        |                      |         | RES..FXD.CMPSN:100 OHM.5%.0.25W   | 01121    | CB1015          |
| A28R126       | 315-0102-00        |                      |         | RES..FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A28R146       | 315-0512-00        |                      |         | RES..FXD.CMPSN:5.1K OHM.5%.0.25W  | 01121    | CB5125          |
| A28R148       | 315-0682-00        |                      |         | RES..FXD.CMPSN:6.8K OHM.5%.0.25W  | 01121    | CB6825          |
| A28R208       | 315-0682-00        |                      |         | RES..FXD.CMPSN:6.8K OHM.5%.0.25W  | 01121    | CB6825          |
| A28R224       | 315-0272-00        |                      |         | RES..FXD.CMPSN:2.7K OHM.5%.0.25W  | 01121    | CB2725          |
| A28R318       | 315-0242-00        |                      |         | RES..FXD.CMPSN:2.4K OHM.5%.0.25W  | 01121    | CB2425          |
| A28R344       | 321-0238-00        |                      |         | RES..FXD.FILM:2.94K OHM.1%.0.125W | 91637    | MFF1816G29400F  |
| A28R346       | 321-0228-00        |                      |         | RES..FXD.FILM:2.32K OHM.1%.0.125W | 91637    | MFF1816G23200F  |
| A28R348       | 321-0176-00        |                      |         | RES..FXD.FILM:665 OHM.1%.0.125W   | 91637    | MFF1816G665R0F  |
| A28R406       | 311-1237-00        |                      |         | RES..VAR.NONWIR:1K OHM.10%.0.50W  | 32997    | 3386X-T07-102   |
| A28R412       | 315-0202-00        |                      |         | RES..FXD.CMPSN:2K OHM.5%.0.25W    | 01121    | CB2025          |
| A28R414       | 315-0103-00        |                      |         | RES..FXD.CMPSN:10K OHM.5%.0.25W   | 01121    | CB1035          |
| A28R416       | 315-0202-00        |                      |         | RES..FXD.CMPSN:2K OHM.5%.0.25W    | 01121    | CB2025          |
| A28R420       | 315-0471-00        |                      |         | RES..FXD.CMPSN:470 OHM.5%.0.25W   | 01121    | CB4715          |
| A28R421       | 315-0471-00        |                      |         | RES..FXD.CMPSN:470 OHM.5%.0.25W   | 01121    | CB4715          |
| A28R422       | 315-0100-00        |                      |         | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A28R424       | 307-0106-00        |                      |         | RES..FXD.CMPSN:4.7 OHM.5%.0.25W   | 01121    | CB47G5          |
| A28R425       | 315-0302-00        |                      |         | RES..FXD.CMPSN:3K OHM.5%.0.25W    | 01121    | CB3025          |
| A28R426       | 315-0102-00        |                      |         | RES..FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A28R427       | 315-0133-00        | B010100              | B070679 | RES..FXD.CMPSN:13K OHM.5%.0.25W   | 01121    | CB1335          |
| A28R427       | 321-0296-00        | B070680              |         | RES..FXD.FILM:11.8K OHM.1%.0.125W | 91637    | MFF1816G11801F  |
| A28R428       | 315-0202-00        |                      |         | RES..FXD.CMPSN:2K OHM.5%.0.25W    | 01121    | CB2025          |
| A28R429       | 315-0153-00        |                      |         | RES..FXD.CMPSN:15K OHM.5%.0.25W   | 01121    | CB1535          |
| A28R430       | 315-0221-00        |                      |         | RES..FXD.CMPSN:220 OHM.5%.0.25W   | 01121    | CB2215          |
| A28R432       | 315-0750-00        |                      |         | RES..FXD.CMPSN:75 OHM.5%.0.25W    | 01121    | CB7505          |
| A28R436       | 315-0102-00        |                      |         | RES..FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A28R438       | 315-0682-00        |                      |         | RES..FXD.CMPSN:6.8K OHM.5%.0.25W  | 01121    | CB6825          |
| A28R440       | 323-0147-00        |                      |         | RES..FXD.FILM:332 OHM.1%.0.50W    | 75042    | CECT0-3320F     |
| A28R442       | 323-0172-00        |                      |         | RES..FXD.FILM:604 OHM.1%.0.50W    | 91637    | MFF1226G604R0F  |
| A28R446       | 315-0820-00        |                      |         | RES..FXD.CMPSN:82 OHM.5%.0.25W    | 01121    | CB8205          |
| A28R500       | 315-0101-00        |                      |         | RES..FXD.CMPSN:100 OHM.5%.0.25W   | 01121    | CB1015          |
| A28R501       | 315-0472-00        | B080000              |         | RES..FXD.CMPSN:4.7K OHM.5%.0.25W  | 01121    | CB4725          |
| A28R502       | 315-0302-00        | B010100              | B070679 | RES..FXD.CMPSN:3K OHM.5%.0.25W    | 01121    | CB3025          |
| A28R502       | 321-0238-00        | B070680              |         | RES..FXD.FILM:2.94K OHM.1%.0.125W | 91637    | MFF1816G29400F  |
| A28R504       | 311-1198-00        |                      |         | RES..VAR.NONWIR:20K OHM.20%.0.5W  | 73138    | 72-29-0         |
| A28R506       | 321-0226-00        |                      |         | RES..FXD.FILM:2.21K OHM.1%.0.125W | 91637    | MFF1816G22100F  |
| A28R508       | 321-0242-00        |                      |         | RES..FXD.FILM:3.24K OHM.1%.0.125W | 91637    | MFF1816G32400F  |
| A28R510       | 315-0100-00        |                      |         | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A28R512       | 315-0620-00        |                      |         | RES..FXD.CMPSN:62 OHM.5%.0.25W    | 01121    | CB6205          |
| A28R514       | 315-0203-00        |                      |         | RES..FXD.CMPSN:20K OHM.5%.0.25W   | 01121    | CB2035          |
| A28R515       | 315-0102-00        |                      |         | RES..FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A28R516       | 321-0195-00        |                      |         | RES..FXD.FILM:1.05K OHM.1%.0.125W | 91637    | MFF1816G10500F  |

Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-----------------------------------|----------|-----------------|
| A28R518       | 321-0304-00        |                      |         | RES.,FXD.FILM:14.3K OHM,1%.0.125W | 91637    | MFF1816G14301F  |
| A28R520       | 315-0680-00        | B010100              | B079999 | RES.,FXD.CMPSN:68 OHM,5%.0.25W    | 01121    | CB6805          |
| A28R520       | 315-0560-00        | B080000              |         | RES.,FXD.CMPSN:56 OHM,5%.0.25W    | 01121    | CB5605          |
| A28R521       | 315-0332-00        | B010100              | B079999 | RES.,FXD.CMPSN:3.3K OHM,5%.0.25W  | 01121    | CB3325          |
| A28R521       | 301-0102-00        | B080000              |         | RES.,FXD.CMPSN:1K OHM,5%.0.50W    | 01121    | EB1025          |
| A28R522       | 315-0152-00        |                      |         | RES.,FXD.CMPSN:1.5K OHM,5%.0.25W  | 01121    | CB1525          |
| A28R525       | 321-0222-00        |                      |         | RES.,FXD.FILM:2K OHM,1%.0.125W    | 91637    | MFF1816G20000F  |
| A28R526       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM,5%.0.25W    | 01121    | CB1005          |
| A28R528       | 321-0193-00        |                      |         | RES.,FXD.FILM:1K OHM,1%.0.125W    | 91637    | MFF1816G10000F  |
| A28R530       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM,5%.0.25W  | 01121    | CB4725          |
| A28R532       | 315-0272-00        |                      |         | RES.,FXD.CMPSN:2.7K OHM,5%.0.25W  | 01121    | CB2725          |
| A28R534       | 315-0562-00        |                      |         | RES.,FXD.CMPSN:5.6K OHM,5%.0.25W  | 01121    | CB5625          |
| A28R536       | 323-0318-00        |                      |         | RES.,FXD.FILM:20K OHM,1%.0.50W    | 91637    | MFF1226D20001F  |
| A28R538       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W    | 01121    | CB1025          |
| A28R600       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM,5%.0.25W    | 01121    | CB1005          |
| A28R604       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM,5%.0.25W   | 01121    | CB1015          |
| A28R606       | 315-0202-00        |                      |         | RES.,FXD.CMPSN:2K OHM,5%.0.25W    | 01121    | CB2025          |
| A28R610       | 315-0223-00        |                      |         | RES.,FXD.CMPSN:22K OHM,5%.0.25W   | 01121    | CB2235          |
| A28R616       | 321-0231-00        |                      |         | RES.,FXD.FILM:2.49K OHM,1%.0.125W | 91637    | MFF1816G24900F  |
| A28R618       | 315-0202-00        |                      |         | RES.,FXD.CMPSN:2K OHM,5%.0.25W    | 01121    | CB2025          |
| A28R622       | 321-0239-00        |                      |         | RES.,FXD.FILM:3.01K OHM,1%.0.125W | 91637    | MFF1816G30100F  |
| A28R624       | 307-0106-00        |                      |         | RES.,FXD.CMPSN:4.7 OHM,5%.0.25W   | 01121    | CB47G5          |
| A28R626       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM,5%.0.25W    | 01121    | CB1005          |
| A28R628       | 315-0621-00        |                      |         | RES.,FXD.CMPSN:620 OHM,5%.0.25W   | 01121    | CB6215          |
| A28R630       | 315-0511-00        |                      |         | RES.,FXD.CMPSN:510 OHM,5%.0.25W   | 01121    | CB5115          |
| A28R631       | 315-0360-00        |                      |         | RES.,FXD.CMPSN:36 OHM,5%.0.25W    | 01121    | CB3605          |
| A28R632       | 321-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM,1%.0.125W | 91637    | MFF1816G24901F  |
| A28R634       | 321-0318-00        |                      |         | RES.,FXD.FILM:20K OHM,1%.0.125W   | 91637    | MFF1816G20001F  |
| A28R635       | 311-1245-00        |                      |         | RES.,VAR.NONWIR:10K OHM,10%.0.50W | 73138    | 72-28-0         |
| A28R636       | 321-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM,1%.0.125W | 91637    | MFF1816G24901F  |
| A28R638       | 321-0357-00        |                      |         | RES.,FXD.FILM:51.1K OHM,1%.0.125W | 91637    | MFF1816G51101F  |
| A28R642       | 321-0220-00        |                      |         | RES.,FXD.FILM:1.91K OHM,1%.0.125W | 91637    | MFF1816G19100F  |
| A28R702       | 315-0510-00        |                      |         | RES.,FXD.CMPSN:51 OHM,5%.0.25W    | 01121    | CB5105          |
| A28R704       | 321-0289-00        |                      |         | RES.,FXD.FILM:10K OHM,1%.0.125W   | 91637    | MFF1816G10001F  |
| A28R710       | 315-0242-00        |                      |         | RES.,FXD.CMPSN:2.4K OHM,5%.0.25W  | 01121    | CB2425          |
| A28R718       | 315-0153-00        |                      |         | RES.,FXD.CMPSN:15K OHM,5%.0.25W   | 01121    | CB1535          |
| A28R722       | 321-0231-00        |                      |         | RES.,FXD.FILM:2.49K OHM,1%.0.125W | 91637    | MFF1816G24900F  |
| A28R724       | 315-0563-00        |                      |         | RES.,FXD.CMPSN:56K OHM,5%.0.25W   | 01121    | CB5635          |
| A28R726       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W   | 01121    | CB1035          |
| A28R728       | 321-0335-00        |                      |         | RES.,FXD.FILM:30.1K OHM,1%.0.125W | 91637    | CMF55116G30101F |
| A28R730       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W    | 01121    | CB1025          |
| A28R732       | 321-0135-00        |                      |         | RES.,FXD.FILM:249 OHM,1%.0.125W   | 91637    | MFF1816G249R0F  |
| A28R744       | 321-0068-00        |                      |         | RES.,FXD.FILM:49.9 OHM,1%.0.125W  | 91637    | MFF1816G49R90F  |
| A28R800       | 307-0106-00        |                      |         | RES.,FXD.CMPSN:4.7 OHM,5%.0.25W   | 01121    | CB47G5          |
| A28R802       | 315-0303-00        |                      |         | RES.,FXD.CMPSN:30K OHM,5%.0.25W   | 01121    | CB3035          |
| A28R804       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM,5%.0.25W   | 01121    | CB1015          |
| A28R806       | 311-1245-00        |                      |         | RES.,VAR.NONWIR:10K OHM,10%.0.50W | 73138    | 72-28-0         |
| A28R808       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W   | 01121    | CB1035          |
| A28R810       | 321-0289-00        |                      |         | RES.,FXD.FILM:10K OHM,1%.0.125W   | 91637    | MFF1816G10001F  |
| A28R812       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W   | 01121    | CB1035          |
| A28R814       | 321-0298-00        |                      |         | RES.,FXD.FILM:12.4K OHM,1%.0.125W | 91637    | MFF1816G12401F  |
| A28R815       | 321-0239-00        |                      |         | RES.,FXD.FILM:3.01K OHM,1%.0.125W | 91637    | MFF1816G30100F  |
| A28R816       | 321-0298-00        |                      |         | RES.,FXD.FILM:12.4K OHM,1%.0.125W | 91637    | MFF1816G12401F  |
| A28R817       | 321-0239-00        |                      |         | RES.,FXD.FILM:3.01K OHM,1%.0.125W | 91637    | MFF1816G30100F  |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A28R818       | 321-0298-00        |                      |         | RES.,FXD.FILM:12.4K OHM.1%.0.125W         | 91637    | MFF1816G12401F  |
| A28R819       | 321-0239-00        |                      |         | RES.,FXD.FILM:3.01K OHM.1%.0.125W         | 91637    | MFF1816G30100F  |
| A28R822       | 321-0306-00        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W           | 91637    | MFF1816G15001F  |
| A28R824       | 321-0256-00        |                      |         | RES.,FXD.FILM:4.53K OHM.1%.0.125W         | 91637    | MFF1816G45300F  |
| A28R826       | 321-0241-00        |                      |         | RES.,FXD.FILM:3.16K OHM.1%.0.125W         | 91637    | MFF1816G31600F  |
| A28R828       | 321-0241-00        |                      |         | RES.,FXD.FILM:3.16K OHM.1%.0.125W         | 91637    | MFF1816G31600F  |
| A28R830       | 321-0356-00        |                      |         | RES.,FXD.FILM:49.9K OHM.1%.0.125W         | 91637    | MFF1816G49901F  |
| A28R832       | 311-1245-00        |                      |         | RES.,VAR.NONWIR:10K OHM.10%.0.50W         | 73138    | 72-28-0         |
| A28R834       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM.5%.0.25W            | 01121    | CB2205          |
| A28R836       | 321-0233-00        |                      |         | RES.,FXD.FILM:2.61K OHM.1%.0.125W         | 91637    | MFF1816G26100F  |
| A28R838       | 321-0356-00        |                      |         | RES.,FXD.FILM:49.9K OHM.1%.0.125W         | 91637    | MFF1816G49901F  |
| A28R839       | 311-1245-00        |                      |         | RES.,VAR.NONWIR:10K OHM.10%.0.50W         | 73138    | 72-28-0         |
| A28R842       | 321-0335-00        |                      |         | RES.,FXD.FILM:30.1K OHM.1%.0.125W         | 91637    | CMF55116G30101F |
| A28R844       | 321-0306-00        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W           | 91637    | MFF1816G15001F  |
| A28R900       | 321-0239-00        |                      |         | RES.,FXD.FILM:3.01K OHM.1%.0.125W         | 91637    | MFF1816G30100F  |
| A28R902       | 315-0153-00        |                      |         | RES.,FXD.CMPSN:15K OHM.5%.0.25W           | 01121    | CB1535          |
| A28R904       | 311-1245-00        |                      |         | RES.,VAR.NONWIR:10K OHM.10%.0.50W         | 73138    | 72-28-0         |
| A28R906       | 315-0303-00        |                      |         | RES.,FXD.CMPSN:30K OHM.5%.0.25W           | 01121    | CB3035          |
| A28R908       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W           | 01121    | CB1015          |
| A28R912       | 321-0298-00        |                      |         | RES.,FXD.FILM:12.4K OHM.1%.0.125W         | 91637    | MFF1816G12401F  |
| A28R914       | 321-0256-00        |                      |         | RES.,FXD.FILM:4.53K OHM.1%.0.125W         | 91637    | MFF1816G45300F  |
| A28R916       | 321-0289-00        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W           | 91637    | MFF1816G10001F  |
| A28R924       | 321-0306-00        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W           | 91637    | MFF1816G15001F  |
| A28R932       | 321-0335-00        |                      |         | RES.,FXD.FILM:30.1K OHM.1%.0.125W         | 91637    | CMF55116G30101F |
| A28R934       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM.5%.0.25W            | 01121    | CB2205          |
| A28R936       | 321-0233-00        |                      |         | RES.,FXD.FILM:2.61K OHM.1%.0.125W         | 91637    | MFF1816G26100F  |
| A28R940       | 321-0335-00        |                      |         | RES.,FXD.FILM:30.1K OHM.1%.0.125W         | 91637    | CMF55116G30101F |
| A28R942       | 321-0306-00        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W           | 91637    | MFF1816G15001F  |
| A28U014       | 156-1115-00        |                      |         | MICROCIRCUIT,DI:SYNC GENERATOR            | 80009    | 156-1115-00     |
| A28U028       | 156-0177-02        |                      |         | MICROCIRCUIT,DI:DUAL LINE RCVR.SCRN       | 01295    | SN75107A/NP3 OF |
| A28U104       | 156-0330-02        |                      |         | MICROCIRCUIT,DI:HEX BUFFER                | 04713    | MC14050BCLD     |
| A28U114       | 156-0646-02        |                      |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER      | 01295    | SN74LS93        |
| A28U124       | 156-0330-02        |                      |         | MICROCIRCUIT,DI:HEX BUFFER                | 04713    | MC14050BCLD     |
| A28U200       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER              | 01295    | SN74LS04        |
| A28U206       | 156-0405-03        |                      |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV | 07263    | 9602            |
| A28U210       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE      | 01295    | SN74LS00        |
| A28U216       | 156-0387-02        |                      |         | MICROCIRCUIT,DI:DUAL J-K FF.BURN IN       | 01295    | SN74LS73        |
| A28U220       | 156-0656-02        |                      |         | MICROCIRCUIT,DI:DECADE COUNTER.BURN-IN    | 01295    | SN74LS90        |
| A28U226       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP          | 07263    | 74LS74A         |
| A28U240       | 156-0405-03        |                      |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV | 07263    | 9602            |
| A28U246       | 156-0530-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP MUX.SCRN       | 01295    | SN74LS157P3     |
| A28U302       | 156-0467-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND BFR.SCRN  | 01295    | SN74LS38        |
| A28U308       | 156-0646-02        |                      |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER      | 01295    | SN74LS93        |
| A28U312       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE      | 01295    | SN74LS00        |
| A28U318       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE      | 01295    | SN74LS00        |
| A28U322       | 156-0656-02        |                      |         | MICROCIRCUIT,DI:DECADE COUNTER.BURN-IN    | 01295    | SN74LS90        |
| A28U328       | 156-0093-02        |                      |         | MICROCIRCUIT,DI:HEX INV BUFFER.BURN-IN    | 27014    | DM8016          |
| A28U342       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP          | 07263    | 74LS74A         |
| A28U406       | 156-0646-02        |                      |         | MICROCIRCUIT,DI:4 BIT BINARY COUNTER      | 01295    | SN74LS93        |
| A28U630       | 156-0048-00        | B010100              | B100904 | MICROCIRCUIT,LI:FIVE NPN TRANSISTOR ARRAY | 02735    | C-3046          |
| A28U630       | 156-0048-02        | B100905              |         | MICROCIRCUIT,LI:5 XSTR ARRAY              | 80009    | 156-0048-02     |
| A28U724       | 156-0067-00        |                      |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER     | 01295    | MICROA741CP     |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                         | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A28U816       | 156-0048-00        | B010100              | B100904 | MICROCIRCUIT.LI:FIVE NPN TRANSISTOR ARRAY  | 02735    | CA3046          |
| A28U816       | 156-0048-02        | B100905              |         | MICROCIRCUIT.LI:5 XSTR ARRAY               | 80009    | 156-0048-02     |
| A28U826       | 156-0158-00        |                      |         | MICROCIRCUIT.LI:DUAL OPERATIONAL AMPLIFIER | 18324    | MC1458N         |
| A28U926       | 156-0158-00        |                      |         | MICROCIRCUIT.LI:DUAL OPERATIONAL AMPLIFIER | 18324    | MC1458N         |
| A28VR120      | 152-0149-00        |                      |         | SEMICONV DEVICE:ZENER.0.4W.10V.5%          | 04713    | SZG35009K3      |

Replaceable Electrical Parts—7912AD Service

| Component No.          | Tektronix Part No. | Serial/Model No. Eff Dscnt | Name & Description                  | Mfr Code | Mfr Part Number |
|------------------------|--------------------|----------------------------|-------------------------------------|----------|-----------------|
| A32 VIDEO PREAMPLIFIER |                    |                            |                                     |          |                 |
| A32                    | 670-4377-01        |                            | CKT BOARD ASSY:VIDEO PREAMPLIFIER   | 80009    | 670-4377-01     |
| A32C1946               | 283-0068-00        |                            | CAP.,FXD,CER DI:0.01UF,+100-0%.500V | 59660    | 871-533E103P    |
| A32C1955               | 283-0111-00        |                            | CAP.,FXD,CER DI:0.1UF,20%.50V       | 56289    | 273C11          |
| A32C1956               | 285-0808-00        |                            | CAP.,FXD,PLSTC:0.1UF,10%.50V        | 56289    | LP66A1A104K004  |
| A32C1958               | 290-0717-00        |                            | CAP.,FXD,PLSTC:15UF,20%.50V         | 90201    | TDC156M050WSG   |
| A32C1961               | 281-0557-00        |                            | CAP.,FXD,CER DI:1.8PF,10%.500V      | 04222    | 7001-COK-1R8B   |
| A32C1965               | 290-0534-00        |                            | CAP.,FXD,ELCTLT:1UF,20%.35V         | 56289    | 196D105X0035HA1 |
| A32C1971               | 290-0536-00        |                            | CAP.,FXD,ELCTLT:10UF,20%.25V        | 90201    | TDC106M025FL    |
| A32C1976               | 281-0123-00        |                            | CAP.,VAR,CER DI:5-25PF,100V         | 59660    | 518-000A5-25    |
| A32C1977               | 281-0523-00        |                            | CAP.,FXD,CER DI:100PF,+/-20PF,500V  | 72982    | 301-000U2M0101M |
| A32C1981               | 281-0627-00        |                            | CAP.,FXD,CER DI:1PF,+/-0.25PF,500V  | 04222    | 77001-COK-1R0C  |
| A32C1983               | 281-0512-00        |                            | CAP.,FXD,CER DI:27PF,+/-2.7PF,500V  | 59660    | 0301080C0G0270K |
| A32C1991               | 290-0531-00        |                            | CAP.,FXD,ELCTLT:100UF,20%.10V       | 90201    | TDC107M010WLC   |
| A32C1993               | 290-0534-00        |                            | CAP.,FXD,ELCTLT:1UF,20%.35V         | 56289    | 196D105X0035HA1 |
| A32C1995               | 283-0003-00        |                            | CAP.,FXD,CER DI:0.01UF,+80-20%.150V | 59821    | 2DDH66J103Z     |
| A32C1996               | 290-0534-00        |                            | CAP.,FXD,ELCTLT:1UF,20%.35V         | 56289    | 196D105X0035HA1 |
| A32C1997               | 290-0531-00        |                            | CAP.,FXD,ELCTLT:100UF,20%.10V       | 90201    | TDC107M010WLC   |
| A32C1998               | 290-0536-00        |                            | CAP.,FXD,ELCTLT:10UF,20%.25V        | 90201    | TDC106M025FL    |
| A32C1999               | 290-0536-00        |                            | CAP.,FXD,ELCTLT:10UF,20%.25V        | 90201    | TDC106M025FL    |
| A32L1997               | 108-0395-00        |                            | COIL,RF:64UH                        | 80009    | 108-0395-00     |
| A32L1999               | 120-0402-00        |                            | XFMR,TOROID:3 TURNS SINGLE          | 80009    | 120-0402-00     |
| A32Q1957               | 151-1102-00        |                            | TRANSISTOR:SILICON,FE,N-CHANNEL     | 17856    | DN1564/U431     |
| A32Q1962               | 151-0190-00        |                            | TRANSISTOR:SILICON,NPN              | 07263    | S032677         |
| A32Q1965               | 151-0188-00        |                            | TRANSISTOR:SILICON,PNP              | 04713    | SPS6868K        |
| A32Q1968               | 151-0188-00        |                            | TRANSISTOR:SILICON,PNP              | 04713    | SPS6868K        |
| A32Q1973               | 151-0133-00        |                            | TRANSISTOR:SILICON,PNP              | 80009    | 151-0133-00     |
| A32Q1991               | 151-0133-00        |                            | TRANSISTOR:SILICON,PNP              | 80009    | 151-0133-00     |
| A32R1946               | 301-0103-00        |                            | RES.,FXD,CMPSN:10K OHM,5%.0.50W     | 01121    | EB1035          |
| A32R1947               | 321-0068-00        |                            | RES.,FXD,FILM:49.9 OHM,1%.0.125W    | 91637    | MFF1816G49R90F  |
| A32R1948               | 321-0376-00        |                            | RES.,FXD,FILM:80.6K OHM,1%.0.125W   | 91637    | MFF1816G80601F  |
| A32R1949               | 321-0317-00        |                            | RES.,FXD,FILM:19.6K OHM,1%.0.125W   | 91637    | MFF1816G19601F  |
| A32R1952               | 311-1268-00        |                            | RES.,VAR,NONWIR:10K OHM,10%.0.50W   | 32997    | 3329P-L58-103   |
| A32R1953               | 315-0105-00        |                            | RES.,FXD,CMPSN:1M OHM,5%.0.25W      | 01121    | CB1055          |
| A32R1955               | 316-0565-00        |                            | RES.,FXD,CMPSN:5.6M OHM,10%.0.25W   | 01121    | CB5651          |
| A32R1956               | 315-0475-00        |                            | RES.,FXD,CMPSN:4.7M OHM,5%.0.25W    | 01121    | CB4755          |
| A32R1957               | 319-0031-00        |                            | RES.,FXD,FILM:1M OHM,1%.0.25W       | 91637    | DC1423-10003F   |
| A32R1958               | 301-0241-00        |                            | RES.,FXD,CMPSN:240 OHM,5%.0.50W     | 01121    | EB2415          |
| A32R1959               | 308-0553-00        |                            | RES.,FXD,WW:680 OHM,1%.3W           | 91637    | RS2B-D6R00J     |
| A32R1961               | 315-0203-00        |                            | RES.,FXD,CMPSN:20K OHM,5%.0.25W     | 01121    | CB2035          |
| A32R1963               | 315-0204-00        |                            | RES.,FXD,CMPSN:200K OHM,5%.0.25W    | 01121    | CB2045          |
| A32R1966               | 315-0332-00        |                            | RES.,FXD,CMPSN:3.3K OHM,5%.0.25W    | 01121    | CB3325          |
| A32R1968               | 315-0163-00        |                            | RES.,FXD,CMPSN:16K OHM,5%.0.25W     | 01121    | CB1635          |
| A32R1971               | 315-0100-00        |                            | RES.,FXD,CMPSN:10 OHM,5%.0.25W      | 01121    | CB1005          |
| A32R1972               | 311-1259-00        |                            | RES.,VAR,NONWIR:100 OHM,10%.0.50W   | 32997    | 3329P-L58-101   |
| A32R1973               | 315-0101-00        |                            | RES.,FXD,CMPSN:100 OHM,5%.0.25W     | 01121    | CB1015          |
| A32R1975               | 315-0202-00        |                            | RES.,FXD,CMPSN:2K OHM,5%.0.25W      | 01121    | CB2025          |
| A32R1976               | 321-0222-00        |                            | RES.,FXD,FILM:2K OHM,1%.0.125W      | 91637    | MFF1816G20000F  |
| A32R1977               | 311-1263-00        |                            | RES.,VAR,NONWIR:1K OHM,10%.0.50W    | 32997    | 3329P-L58-102   |

| Component No. | Tektronix Part No. | Serial/Model No. |         | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|------------------|---------|-----------------------------------|----------|-----------------|
|               |                    | Eff              | Dscont  |                                   |          |                 |
| A32R1979      | 311-1228-00        |                  |         | RES..VAR.NONWIR:10K OHM.20%.0.50W | 32997    | 3386F-T04-103   |
| A32R1980      | 321-0306-00        |                  |         | RES..FXD.FILM:15K OHM.1%.0.125W   | 91637    | MFF1816G15001F  |
| A32R1981      | 321-0289-00        |                  |         | RES..FXD.FILM:10K OHM.1%.0.125W   | 91637    | MFF1816G10001F  |
| A32R1983      | 315-0220-00        |                  |         | RES..FXD.CMPSN:22 OHM.5%.0.25W    | 01121    | CB2205          |
| A32R1985      | 315-0510-00        |                  |         | RES..FXD.CMPSN:51 OHM.5%.0.25W    | 01121    | CB5105          |
| A32R1986      | 315-0122-00        |                  |         | RES..FXD.CMPSN:1.2K OHM.5%.0.25W  | 01121    | CB1225          |
| A32R1989      | 315-0222-00        |                  |         | RES..FXD.CMPSN:2.2K OHM.5%.0.25W  | 01121    | CB2225          |
| A32R1992      | 301-0751-00        |                  |         | RES..FXD.CMPSN:750 OHM.5%.0.50W   | 01121    | EB7515          |
| A32R1993      | 315-0100-00        |                  |         | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A32R1994      | 321-0125-00        |                  |         | RES..FXD.FILM:196 OHM.1%.0.125W   | 91637    | MFF1816G196R0F  |
| A32R1996      | 315-0100-00        |                  |         | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A32R1997      | 315-0330-00        |                  |         | RES..FXD.CMPSN:33 OHM.5%.0.25W    | 01121    | CB3305          |
| A32R1998      | 315-0100-00        |                  |         | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A32U1983      | 156-0068-00        | B010100          | B100904 | MICROCIRCUIT.LI:5 XSTR ARRAY      | 80009    | 156-0068-00     |
| A32U1983      | 156-0048-02        | B100905          |         | MICROCIRCUIT.LI:5 XSTR ARRAY      | 80009    | 156-0048-02     |

# Replaceable Electrical Parts—7912AD Service

| Component No.                 | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                   | Mfr Code | Mfr Part Number |
|-------------------------------|--------------------|----------------------|---------|--------------------------------------|----------|-----------------|
| <b>A34 VERTICAL AMPLIFIER</b> |                    |                      |         |                                      |          |                 |
| A34                           | 670-1630-03        | B010100              | B011270 | CKT BOARD ASSY:VERTICAL AMPLIFIER    | 80009    | 670-1630-03     |
| A34                           | 670-1630-05        | B011271              |         | E                                    |          |                 |
| A34C657                       | 283-0185-00        |                      |         | CAP.,FXD,CER DI:2.5PF.5%.50V         | 72982    | 8101B057C0K029  |
| A34C658                       | 281-0218-00        |                      |         | CAP.,VAR,CER DI:1.5PF.+2-2.5%.100V   | 59660    | 513-013A1-5     |
| A34C659                       | 283-0185-00        |                      |         | CAP.,FXD,CER DI:2.5PF.5%.50V         | 72982    | 8101B057C0K029  |
| A34C662                       | 281-0603-00        |                      |         | CAP.,FXD,CER DI:39PF.5%.500V         | 59660    | 0301080C0G0390  |
| A34C663                       | 281-0603-00        |                      |         | CAP.,FXD,CER DI:39PF.5%.500V         | 59660    | 0301080C0G0390  |
| A34C670                       | 281-0543-00        |                      |         | CAP.,FXD,CER DI:270PF.10%.500V       | 72982    | 301055X5P271K   |
| A34C672                       | 281-0543-00        |                      |         | CAP.,FXD,CER DI:270PF.10%.500V       | 72982    | 301055X5P271K   |
| A34C675                       | 283-0160-00        |                      |         | CAP.,FXD,CER DI:1.5PF.10%.50V        | 93958    | 1C15RB          |
| A34C676                       | 283-0181-00        |                      |         | CAP.,FXD,CER DI:1.8PF.10%.100V       | 59660    | 8101B121COKO11  |
| A34C680                       | 283-0181-00        |                      |         | CAP.,FXD,CER DI:1.8PF.10%.100V       | 59660    | 8101B121COKO11  |
| A34C681                       | 283-0160-00        |                      |         | CAP.,FXD,CER DI:1.5PF.10%.50V        | 93958    | 1C15RB          |
| A34C685                       | 281-0543-00        |                      |         | CAP.,FXD,CER DI:270PF.10%.500V       | 72982    | 301055X5P271K   |
| A34C689                       | 281-0543-00        |                      |         | CAP.,FXD,CER DI:270PF.10%.500V       | 72982    | 301055X5P271K   |
| A34C733                       | 283-0160-00        |                      |         | CAP.,FXD,CER DI:1.5PF.10%.50V        | 93958    | 1C15RB          |
| A34C734                       | 283-0181-00        |                      |         | CAP.,FXD,CER DI:1.8PF.10%.100V       | 59660    | 8101B121COKO11  |
| A34C736                       | 283-0160-00        |                      |         | CAP.,FXD,CER DI:1.5PF.10%.50V        | 93958    | 1C15RB          |
| A34C738                       | 283-0181-00        |                      |         | CAP.,FXD,CER DI:1.8PF.10%.100V       | 59660    | 8101B121COKO11  |
| A34C739                       | 283-0160-00        |                      |         | CAP.,FXD,CER DI:1.5PF.10%.50V        | 93958    | 1C15RB          |
| A34C743                       | 283-0128-00        |                      |         | CAP.,FXD,CER DI:100PF.5%.500V        | 59660    | 871-536T2H101J  |
| A34C745                       | 283-0114-00        |                      |         | CAP.,FXD,CER DI:0.0015UF.5%.200V     | 59660    | 805534Y5DO152J  |
| A34C747                       | 283-0239-00        |                      |         | CAP.,FXD,CER DI:0.022UF.10%.50V      | 72982    | 8121N083X7R02   |
| A34C749                       | 283-0203-00        |                      |         | CAP.,FXD,CER DI:0.47UF.20%.50V       | 72982    | 8131M058Z5U04.  |
| A34C751                       | 281-0214-00        |                      |         | CAP.,VAR,CER DI:0.5-3PF.400V         | 80031    | 2502A0R503VP02  |
| A34C758                       | 283-0108-00        |                      |         | CAP.,FXD,CER DI:220PF.10%.200V       | 56289    | 1C10C0G221K20C  |
| A34C760                       | 283-0180-00        |                      |         | CAP.,FXD,CER DI:5600PF.20%.200V      | 72982    | 8121N204 E 562M |
| A34C762                       | 283-0211-00        |                      |         | CAP.,FXD,CER DI:0.1UF.10%.200V       | 04222    | SR406C104KAA    |
| A34C764                       | 283-0212-00        |                      |         | CAP.,FXD,CER DI:2UF.20%.50V          | 51642    | 400-050-Z5U205M |
| A34C770                       | 283-0001-00        |                      |         | CAP.,FXD,CER DI:0.005UF.+100-0%.500V | 59821    | 2DDH61L502P     |
| A34C787                       | 283-0001-00        |                      |         | CAP.,FXD,CER DI:0.005UF.+100-0%.500V | 59821    | 2DDH61L502P     |
| A34C789                       | 283-0001-00        |                      |         | CAP.,FXD,CER DI:0.005UF.+100-0%.500V | 59821    | 2DDH61L502P     |
| A34C791                       | 283-0001-00        |                      |         | CAP.,FXD,CER DI:0.005UF.+100-0%.500V | 59821    | 2DDH61L502P     |
| A34C794                       | 283-0001-00        |                      |         | CAP.,FXD,CER DI:0.005UF.+100-0%.500V | 59821    | 2DDH61L502P     |
| A34C796                       | 283-0001-00        |                      |         | CAP.,FXD,CER DI:0.005UF.+100-0%.500V | 59821    | 2DDH61L502P     |
| A34C798                       | 283-0001-00        |                      |         | CAP.,FXD,CER DI:0.005UF.+100-0%.500V | 59821    | 2DDH61L502P     |
| A34L660                       | 108-0369-00        |                      |         | COIL,RF:0.12UH                       | 80009    | 108-0369-00     |
| A34L661                       | 108-0369-00        |                      |         | COIL,RF:0.12UH                       | 80009    | 108-0369-00     |
| A34L667                       | 114-0222-00        |                      |         | COIL,RF:2-6UH,CORE 276-0568-00       | 80009    | 114-0222-00     |
| A34L791                       | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |
| A34L794                       | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |
| A34L796                       | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |
| A34L798                       | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |
| A34LR787                      | 108-0330-00        |                      |         | COIL,RF:0.4UH                        | 80009    | 108-0330-00     |
| A34LR789                      | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |
| A34LR791                      | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |
| A34LR794                      | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |
| A34LR796                      | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |
| A34LR798                      | 108-0325-00        |                      |         | COIL,RF:0.5UH                        | 80009    | 108-0325-00     |



| Component No. | Tektronix   | Serial/Model No. |        | Name & Description                | Mfr   | Mfr Part Number |
|---------------|-------------|------------------|--------|-----------------------------------|-------|-----------------|
|               | Part No.    | Eff              | Dscont |                                   | Code  |                 |
| A34Q694       | 151-0190-00 |                  |        | TRANSISTOR:SILICON,NPN            | 07263 | S032677         |
| A34Q698       | 151-0190-00 |                  |        | TRANSISTOR:SILICON,NPN            | 07263 | S032677         |
| A34Q705       | 151-0190-00 |                  |        | TRANSISTOR:SILICON,NPN            | 07263 | S032677         |
| A34Q710       | 151-0188-00 |                  |        | TRANSISTOR:SILICON,PNP            | 04713 | SPS6868K        |
| A34Q716       | 151-0188-00 |                  |        | TRANSISTOR:SILICON,PNP            | 04713 | SPS6868K        |
| A34Q723       | 151-0302-00 |                  |        | TRANSISTOR:SILICON,NPN            | 07263 | S038487         |
| A34Q728       | 151-0302-00 |                  |        | TRANSISTOR:SILICON,NPN            | 07263 | S038487         |
| A34Q773       | 151-0302-00 |                  |        | TRANSISTOR:SILICON,NPN            | 07263 | S038487         |
| A34Q776       | 151-0188-00 |                  |        | TRANSISTOR:SILICON,PNP            | 04713 | SPS6868K        |
| A34Q785       | 151-0390-00 |                  |        | TRANSISTOR:SILICON,NPN            | 04713 | SPS3414         |
| A34Q786       | 151-0126-00 |                  |        | TRANSISTOR:SILICON,NPN            | 04713 | ST1046          |
| A34R657       | 317-0270-00 |                  |        | RES.,FXD.CMPSN:27 OHM,5%.0.125W   | 01121 | BB2705          |
| A34R658       | 311-0605-00 |                  |        | RES.,VAR.NONWIR:TRMR,200 OHM,0.5W | 73138 | 82-23-2         |
| A34R659       | 317-0270-00 |                  |        | RES.,FXD.CMPSN:27 OHM,5%.0.125W   | 01121 | BB2705          |
| A34R660       | 324-0114-00 |                  |        | RES.,FXD.FILM:150 OHM,1%.1W       | 91637 | MFF1226G1500F   |
| A34R661       | 324-0114-00 |                  |        | RES.,FXD.FILM:150 OHM,1%.1W       | 91637 | MFF1226G1500F   |
| A34R662       | 321-0039-00 |                  |        | RES.,FXD.FILM:24.9 OHM,1%.0.125W  | 91637 | MFF1816G24R90F  |
| A34R663       | 321-0039-00 |                  |        | RES.,FXD.FILM:24.9 OHM,1%.0.125W  | 91637 | MFF1816G24R90F  |
| A34R667       | 315-0911-00 |                  |        | RES.,FXD.CMPSN:910 OHM,5%.0.25W   | 01121 | CB9115          |
| A34R668       | 315-0911-00 |                  |        | RES.,FXD.CMPSN:910 OHM,5%.0.25W   | 01121 | CB9115          |
| A34R670       | 317-0047-00 |                  |        | RES.,FXD.CMPSN:4.7 OHM,5%.0.125W  | 01121 | BB47G5          |
| A34R672       | 317-0047-00 |                  |        | RES.,FXD.CMPSN:4.7 OHM,5%.0.125W  | 01121 | BB47G5          |
| A34R676       | 317-0101-00 |                  |        | RES.,FXD.CMPSN:100 OHM,5%.0.125W  | 01121 | BB1015          |
| A34R677       | 323-0069-00 |                  |        | RES.,FXD.FILM:51.1 OHM,1%.0.50W   | 91637 | MFF1226G51R10F  |
| A34R679       | 323-0069-00 |                  |        | RES.,FXD.FILM:51.1 OHM,1%.0.50W   | 91637 | MFF1226G51R10F  |
| A34R680       | 317-0101-00 |                  |        | RES.,FXD.CMPSN:100 OHM,5%.0.125W  | 01121 | BB1015          |
| A34R682       | 323-0121-00 |                  |        | RES.,FXD.FILM:178 OHM,1%.0.50W    | 75042 | CECT0-1780F     |
| A34R684       | 317-0511-00 |                  |        | RES.,FXD.CMPSN:510 OHM,5%.0.125W  | 01121 | BB5115          |
| A34R685       | 315-0820-00 |                  |        | RES.,FXD.CMPSN:82 OHM,5%.0.25W    | 01121 | CB8205          |
| A34R686       | 315-0820-00 |                  |        | RES.,FXD.CMPSN:82 OHM,5%.0.25W    | 01121 | CB8205          |
| A34R688       | 317-0511-00 |                  |        | RES.,FXD.CMPSN:510 OHM,5%.0.125W  | 01121 | BB5115          |
| A34R689       | 323-0121-00 |                  |        | RES.,FXD.FILM:178 OHM,1%.0.50W    | 75042 | CECT0-1780F     |
| A34R691       | 321-0068-00 |                  |        | RES.,FXD.FILM:49.9 OHM,1%.0.125W  | 91637 | MFF1816G49R90F  |
| A34R693       | 321-0126-00 |                  |        | RES.,FXD.FILM:200 OHM,1%.0.125W   | 91637 | MFF1816G200R0F  |
| A34R694       | 315-0911-00 |                  |        | RES.,FXD.CMPSN:910 OHM,5%.0.25W   | 01121 | CB9115          |
| A34R695       | 321-0058-00 |                  |        | RES.,FXD.FILM:39.2 OHM,1%.0.125W  | 91637 | MFF1816G39R20F  |
| A34R697       | 321-0058-00 |                  |        | RES.,FXD.FILM:39.2 OHM,1%.0.125W  | 91637 | MFF1816G39R20F  |
| A34R698       | 315-0510-00 |                  |        | RES.,FXD.CMPSN:51 OHM,5%.0.25W    | 01121 | CB5105          |
| A34R700       | 315-0911-00 |                  |        | RES.,FXD.CMPSN:910 OHM,5%.0.25W   | 01121 | CB9115          |
| A34R701       | 321-0126-00 |                  |        | RES.,FXD.FILM:200 OHM,1%.0.125W   | 91637 | MFF1816G200R0F  |
| A34R703       | 315-0303-00 |                  |        | RES.,FXD.CMPSN:30K OHM,5%.0.25W   | 01121 | CB3035          |
| A34R704       | 315-0621-00 |                  |        | RES.,FXD.CMPSN:620 OHM,5%.0.25W   | 01121 | CB6215          |
| A34R706       | 321-0237-00 |                  |        | RES.,FXD.FILM:2.87K OHM,1%.0.125W | 91637 | MFF1816G28700F  |
| A34R707       | 311-0622-01 |                  |        | RES.,VAR.NONWIR:100 OHM,10%.0.50W | 32997 | 3329H-K28-101   |
| A34R708       | 321-0114-00 |                  |        | RES.,FXD.FILM:150 OHM,1%.0.125W   | 91637 | MFF1816G150R0F  |
| A34R709       | 321-0114-00 |                  |        | RES.,FXD.FILM:150 OHM,1%.0.125W   | 91637 | MFF1816G150R0F  |
| A34R711       | 321-0201-00 |                  |        | RES.,FXD.FILM:1.21K OHM,1%.0.125W | 91637 | MFF1816G12100F  |
| A34R712       | 311-0532-00 |                  |        | RES.,VAR.WW:TRMR,1.5K OHM,1W      | 80294 | 3345P-1-152     |
| A34R713       | 321-0201-00 |                  |        | RES.,FXD.FILM:1.21K OHM,1%.0.125W | 91637 | MFF1816G12100F  |
| A34R715       | 321-0123-00 |                  |        | RES.,FXD.FILM:187 OHM,1%.0.125W   | 91637 | MFF1816G187R0F  |
| A34R717       | 315-0301-00 |                  |        | RES.,FXD.CMPSN:300 OHM,5%.0.25W   | 01121 | CB3015          |
| A34R718       | 321-0126-00 |                  |        | RES.,FXD.FILM:200 OHM,1%.0.125W   | 91637 | MFF1816G200R0F  |
| A34R719       | 321-0191-00 |                  |        | RES.,FXD.FILM:953 OHM,1%.0.125W   | 91637 | MFF1816G953R0F  |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                     | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A34R721       | 315-0301-00        |                      |         | RES.,FXD.CMPSN:300 OHM.5%.0.25W        | 01121    | CB3015          |
| A34R722       | 321-0117-00        |                      |         | RES.,FXD.FILM:162 OHM.1%.0.125W        | 91637    | MFF1816G162R0F  |
| A34R724       | 323-0147-00        |                      |         | RES.,FXD.FILM:332 OHM.1%.0.50W         | 75042    | CECT0-3320F     |
| A34R725       | 323-0147-00        |                      |         | RES.,FXD.FILM:332 OHM.1%.0.50W         | 75042    | CECT0-3320F     |
| A34R726       | 323-0090-00        |                      |         | RES.,FXD.FILM:84.5 OHM.1%.0.50W        | 75042    | CECT0-84R5F     |
| A34R727       | 321-0056-00        |                      |         | RES.,FXD.FILM:37.4 OHM.1%.0.125W       | 91637    | MFF1816G37R40F  |
| A34R730       | 311-1259-00        |                      |         | RES.,VAR.NONWIR:100 OHM.10%.0.50W      | 32997    | 3329P-L58-101   |
| A34R732       | 317-0470-00        |                      |         | RES.,FXD.CMPSN:47 OHM.5%.0.125W        | 01121    | BB4705          |
| A34R733       | 317-0470-00        |                      |         | RES.,FXD.CMPSN:47 OHM.5%.0.125W        | 01121    | BB4705          |
| A34R734       | 317-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.125W       | 01121    | BB1015          |
| A34R735       | 323-0069-00        |                      |         | RES.,FXD.FILM:51.1 OHM.1%.0.50W        | 91637    | MFF1226G51R10F  |
| A34R736       | 317-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.125W       | 01121    | BB1015          |
| A34R737       | 323-0069-00        |                      |         | RES.,FXD.FILM:51.1 OHM.1%.0.50W        | 91637    | MFF1226G51R10F  |
| A34R738       | 317-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.125W       | 01121    | BB1015          |
| A34R741       | 317-0161-00        |                      |         | RES.,FXD.CMPSN:160 OHM.5%.0.125W       | 01121    | BB1615          |
| A34R741       | -----              |                      |         | (NOMINAL VALUE. SELECTED)              |          |                 |
| A34R741       | -----              |                      |         | (FURNISHED AS A UNIT WITH A34U745)     |          |                 |
| A34R743       | 311-1261-00        |                      |         | RES.,VAR.NONWIR:500 OHM.10%.0.50W      | 32997    | 3329P-L58-501   |
| A34R745       | 315-0561-00        |                      |         | RES.,FXD.CMPSN:560 OHM.5%.0.25W        | 01121    | CB5615          |
| A34R747       | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W        | 01121    | CB4715          |
| A34R749       | 311-0635-00        |                      |         | RES.,VAR.NONWIR:1K OHM.10%.0.5%.0.5W   | 73138    | 82P-6-2-102K    |
| A34R751       | 311-1265-00        |                      |         | RES.,VAR.NONWIR:2K OHM.10%.0.50W       | 32997    | 3329P-L58-202   |
| A34R753       | 323-0097-00        |                      |         | RES.,FXD.FILM:100 OHM.1%.0.50W         | 75042    | CECT0-1000F     |
| A34R754       | 323-0097-00        |                      |         | RES.,FXD.FILM:100 OHM.1%.0.50W         | 75042    | CECT0-1000F     |
| A34R756       | 317-0161-00        |                      |         | RES.,FXD.CMPSN:160 OHM.5%.0.125W       | 01121    | BB1615          |
| A34R756       | -----              |                      |         | (NOMINAL VALUE. SELECTED)              |          |                 |
| A34R756       | -----              |                      |         | (FURNISHED AS A UNIT WITH A34U745)     |          |                 |
| A34R758       | 311-1261-00        |                      |         | RES.,VAR.NONWIR:500 OHM.10%.0.50W      | 32997    | 3329P-L58-501   |
| A34R760       | 315-0751-00        |                      |         | RES.,FXD.CMPSN:750 OHM.5%.0.25W        | 01121    | CB7515          |
| A34R762       | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W        | 01121    | CB4715          |
| A34R764       | 311-1265-00        |                      |         | RES.,VAR.NONWIR:2K OHM.10%.0.50W       | 32997    | 3329P-L58-202   |
| A34R767       | 323-0097-00        |                      |         | RES.,FXD.FILM:100 OHM.1%.0.50W         | 75042    | CECT0-1000F     |
| A34R768       | 323-0097-00        |                      |         | RES.,FXD.FILM:100 OHM.1%.0.50W         | 75042    | CECT0-1000F     |
| A34R770       | 308-0692-00        |                      |         | RES.,FXD.WW:44 OHM.1%.3W               | 91637    | RS2B44R00F      |
| A34R771       | 323-0112-00        | B010100              | B111270 | RES.,FXD.FILM:143 OHM.1%.0.50W         | 75042    | CECT0-1430F     |
| A34R771       | 323-0119-00        | B111271              |         | RES.,FXD.FILM:169 OHM.1%.0.50W         | 75042    | CECT0-1690F     |
| A34R775       | 315-0182-00        |                      |         | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W       | 01121    | CB1825          |
| A34R778       | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W        | 01121    | CB4715          |
| A34R783       | 321-0324-00        |                      |         | RES.,FXD.FILM:23.2K OHM.1%.0.125W      | 91637    | MFF1816G23201F  |
| A34R784       | 321-0289-00        |                      |         | RES.,FXD.FILM:10K OHM.1%.0.125W        | 91637    | MFF1816G10001F  |
| A34R785       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W       | 01121    | CB4725          |
| A34R786       | 315-0362-00        |                      |         | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W       | 01121    | CB3625          |
| A34R789       | 315-0362-00        |                      |         | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W       | 01121    | CB3625          |
| A34R790       | 323-0064-00        |                      |         | RES.,FXD.FILM:45.3 OHM.1%.0.50W        | 91637    | MFF1226G45R30F  |
| A34R792       | 323-0064-00        |                      |         | RES.,FXD.FILM:45.3 OHM.1%.0.50W        | 91637    | MFF1226G45R30F  |
| A34R795       | 323-0077-00        |                      |         | RES.,FXD.FILM:61.9 OHM.1%.0.50W        | 75042    | CECT0-61R90F    |
| A34R796       | 323-0143-00        |                      |         | RES.,FXD.FILM:301 OHM.1%.0.50W         | 75042    | CECT0-3010F     |
| A34R797       | 321-0063-00        |                      |         | RES.,FXD.FILM:44.2 OHM.1%.0.125W       | 91637    | MFF1816G44R20F  |
| A34R799       | 308-0248-00        |                      |         | RES.,FXD.WW:150 OHM.1%.5W              | 91637    | RS2A-B150R0F    |
| A34RT731      | 307-0364-00        |                      |         | RES.,THERMAL:50 OHM.5%.0.125W          | 15-54    | DG125500J       |
| A34U685       | 155-0059-00        |                      |         | MICROCIRCUIT,LI:ML,HIGH FREQUENCY AMPL | 80009    | 155-0059-00     |
| A34U745       | 155-0064-00        |                      |         | MICROCIRCUIT,LI:OUTPUT AMPLIFIER       | 80009    | 155-0064-00     |

| Component No.                      | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                     | Mfr Code | Mfr Part Number  |
|------------------------------------|--------------------|----------------------|---------|--|----------|------------------|
| A38 SCAN AMPLIFIER AND GUN READING |                    |                      |         |  |          |                  |
| A38                                | 670-5143-00        | B010100              | B100774 | CKT BOARD ASSY:SCAN AMPL & READING GUN | 80009    | 670-5143-00      |
| A38                                | 670-5143-01        | B100775              |         | CKT BOARD ASSY:SCAN AMP & GUN READING  | 80009    | 670-5143-01      |
| A38C012                            | 281-0158-00        |                      |         | CAP.,VAR.CER D1:7.45PF,50V             | 73899    | DVJ-5006         |
| A38C032                            | 283-0128-00        |                      |         | CAP.,FXD.CER DI:100PF,5%,500V          | 59660    | 871-536T2H101J   |
| A38C116                            | 283-0008-00        | B010100              | B100774 | CAP.,FXD.CER DI:0.1UF,20%,500V         | 56289    | 3C37X7R104M500B  |
| A38C116                            | 283-0414-00        | B100775              |         | CAP.,FXD.CER DI:0.022UF,20%,500V       | 51642    | 300-500X7R223M   |
| A38C122                            | 283-0008-00        | B010100              | B100774 | CAP.,FXD.CER DI:0.1UF,20%,500V         | 56289    | 3C37X7R104M500B  |
| A38C122                            | 283-0414-00        | B100775              |         | CAP.,FXD.CER DI:0.022UF,20%,500V       | 51642    | 300-500X7R223M   |
| A38C126                            | 283-0008-00        | B010100              | B100774 | CAP.,FXD.CER DI:0.1UF,20%,500V         | 56289    | 3C37X7R104M500B  |
| A38C126                            | 283-0414-00        | B100775              |         | CAP.,FXD.CER DI:0.022UF,20%,500V       | 51642    | 300-500X7R223M   |
| A38C136                            | 283-0008-00        | B010100              | B100774 | CAP.,FXD.CER DI:0.1UF,20%,500V         | 56289    | 3C37X7R104M500B  |
| A38C136                            | 283-0414-00        | B100775              |         | CAP.,FXD.CER DI:0.022UF,20%,500V       | 51642    | 300-500X7R223M   |
| A38C208                            | 283-0079-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,250V        | 59660    | 8151B202Y5S0103M |
| A38C222                            | 283-0079-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,250V        | 59660    | 8151B202Y5S0103M |
| A38C228                            | 283-0079-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,250V        | 59660    | 8151B202Y5S0103M |
| A38C242                            | 283-0079-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,250V        | 59660    | 8151B202Y5S0103M |
| A38C308                            | 283-0079-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,250V        | 59660    | 8151B202Y5S0103M |
| A38C318                            | 283-0079-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,250V        | 59660    | 8151B202Y5S0103M |
| A38C332                            | 283-0079-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,250V        | 59660    | 8151B202Y5S0103M |
| A38C338                            | 283-0079-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,250V        | 59660    | 8151B202Y5S0103M |
| A38C410                            | 283-0187-00        |                      |         | CAP.,FXD.CER DI:0.047UF,10%,400V       | 72982    | 8131N401X5R0473K |
| A38C412                            | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%,50V          | 56289    | 273C11           |
| A38C413                            | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF, +80-20%,150V   | 59821    | 2DDH66J103Z      |
| A38C414                            | 290-0536-00        |                      |         | CAP.,FXD.ELCTLT:10UF,20%,25V           | 90201    | TDC106M025FL     |
| A38C415                            | 283-0008-00        | B010100              | B100774 | CAP.,FXD.CER DI:0.1UF,20%,500V         | 56289    | 3C37X7R104M500B  |
| A38C415                            | 283-0414-00        | B100775              |         | CAP.,FXD.CER DI:0.022UF,20%,500V       | 51642    | 300-500X7R223M   |
| A38C416                            | 290-0536-00        |                      |         | CAP.,FXD.ELCTLT:10UF,20%,25V           | 90201    | TDC106M025FL     |
| A38C417                            | 283-0187-00        |                      |         | CAP.,FXD.CER DI:0.047UF,10%,400V       | 72982    | 8131N401X5R0473K |
| A38C418                            | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%,50V          | 56289    | 273C11           |
| A38C430                            | 283-0187-00        |                      |         | CAP.,FXD.CER DI:0.047UF,10%,400V       | 72982    | 8131N401X5R0473K |
| A38C432                            | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF, +80-20%,150V   | 59821    | 2DDH66J103Z      |
| A38C434                            | 290-0536-00        |                      |         | CAP.,FXD.ELCTLT:10UF,20%,25V           | 90201    | TDC106M025FL     |
| A38C436                            | 283-0008-00        | B010100              | B100774 | CAP.,FXD.CER DI:0.1UF,20%,500V         | 56289    | 3C37X7R104M500B  |
| A38C436                            | 283-0414-00        | B100775              |         | CAP.,FXD.CER DI:0.022UF,20%,500V       | 51642    | 300-500X7R223M   |
| A38C438                            | 290-0536-00        |                      |         | CAP.,FXD.ELCTLT:10UF,20%,25V           | 90201    | TDC106M025FL     |
| A38C439                            | 283-0187-00        |                      |         | CAP.,FXD.CER DI:0.047UF,10%,400V       | 72982    | 8131N401X5R0473K |
| A38C540                            | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%,50V          | 56289    | 273C11           |
| A38C542                            | 283-0111-00        |                      |         | CAP.,FXD.CER DI:0.01UF,20%,50V         | 56289    | 273C11           |
| A38C546                            | 283-0177-00        |                      |         | CAP.,FXD.CER DI:1UF, +80-20%,25V       | 56289    | 2C20Z5U105Z025B  |
| A38C604                            | 290-0397-00        |                      |         | CAP.,FXD.ELCTLT:1UF, +50-10%,450V      | 56289    | 34D105F450EE4    |
| A38C618                            | 283-0211-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,200V         | 04222    | SR406C104KAA     |
| A38C620                            | 283-0211-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,200V         | 04222    | SR406C104KAA     |
| A38C622                            | 283-0211-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,200V         | 04222    | SR406C104KAA     |
| A38C624                            | 283-0211-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,200V         | 04222    | SR406C104KAA     |
| A38C626                            | 283-0211-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,200V         | 04222    | SR406C104KAA     |
| A38C628                            | 283-0211-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,200V         | 04222    | SR406C104KAA     |
| A38C708                            | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF, +80-20%,150V   | 59821    | 2DDH66J103Z      |
| A38C710                            | 281-0603-00        |                      |         | CAP.,FXD.CER DI:39PF,5%,500V           | 59660    | 0301080C0G0390   |
| A38C714                            | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF, +80-20%,150V   | 59821    | 2DDH66J103Z      |
| A38C716                            | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF, +80-20%,100V    | 72982    | 8131N145651 104Z |
| A38C720                            | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF, +80-20%,100V    | 72982    | 8131N145651 104Z |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                     | Mfr Code | Mfr Part Number  |
|---------------|--------------------|-----------------------------|--|----------|------------------|
| A38C721       | 283-0178-00        |                             | CAP.,FXD.CER DI:0.1UF. +80-20%.100V    | 72982    | 8131N145651 104Z |
| A38C722       | 283-0178-00        |                             | CAP.,FXD.CER DI:0.1UF. +80-20%.100V    | 72982    | 8131N145651 104Z |
| A38C724       | 283-0178-00        |                             | CAP.,FXD.CER DI:0.1UF. +80-20%.100V    | 72982    | 8131N145651 104Z |
| A38C726       | 283-0178-00        |                             | CAP.,FXD.CER DI:0.1UF. +80-20%.100V    | 72982    | 8131N145651 104Z |
| A38C728       | 283-0178-00        |                             | CAP.,FXD.CER DI:0.1UF. +80-20%.100V    | 72982    | 8131N145651 104Z |
| A38C730       | 283-0178-00        |                             | CAP.,FXD.CER DI:0.1UF. +80-20%.100V    | 72982    | 8131N145651 104Z |
| A38C736       | 281-0524-00        |                             | CAP.,FXD.CER DI:150PF. +/-30PF.500V    | 04222    | 7001-1381        |
| A38C746       | 283-0177-00        |                             | CAP.,FXD.CER DI:1UF. +80-20%.25V       | 56289    | 2C20Z5U105Z025E  |
| A38C802       | 283-0110-00        |                             | CAP.,FXD.CER DI:0.005UF. +80-20%.150V  | 59660    | 855-547-E-502Z   |
| A38C826       | 281-0504-00        |                             | CAP.,FXD.CER DI:10PF. +/-1PF.500V      | 04222    | 7001-COG-100F    |
| A38C832       | 283-0004-00        |                             | CAP.,FXD.CER DI:0.02UF. +80-20%.150V   | 59821    | SDDH69J203Z      |
| A38C836       | 283-0211-00        |                             | CAP.,FXD.CER DI:0.1UF.10%.200V         | 04222    | SR406C104KAA     |
| A38C844       | 283-0128-00        |                             | CAP.,FXD.CER DI:100PF.5%.500V          | 59660    | 871-536T2H101J   |
| A38C902       | 283-0003-00        |                             | CAP.,FXD.CER DI:0.01UF. +80-20%.150V   | 59821    | 2DDH66J103Z      |
| A38C914       | 290-0415-00        |                             | CAP.,FXD.ELCTL:5.6UF.10%.35V           | 56289    | 150D565X9035B2   |
| A38C932       | 281-0593-00        |                             | CAP.,FXD.CER DI:3.9PF.10%.500V         | 04222    | 7001-CQJ-3R9C    |
| A38CR408      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR422      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR428      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR442      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR638      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR640      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR642      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR644      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR646      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR647      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR648      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR649      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR706      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR712      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR908      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR934      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR936      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38CR946      | 152-0141-02        |                             | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R          |
| A38LR208      | 108-0762-00        |                             | COIL,RF:FIXED.16UH                     | 80009    | 108-0762-00      |
| A38LR218      | 108-0762-00        |                             | COIL,RF:FIXED.16UH                     | 80009    | 108-0762-00      |
| A38LR230      | 108-0762-00        |                             | COIL,RF:FIXED.16UH                     | 80009    | 108-0762-00      |
| A38LR240      | 108-0762-00        |                             | COIL,RF:FIXED.16UH                     | 80009    | 108-0762-00      |
| A38Q210       | 151-0280-00        |                             | TRANSISTOR:SILICON.PNP                 | 04713    | SS8065           |
| A38Q212       | 151-0232-00        |                             | TRANSISTOR:SILICON.NPN.DUAL            | 07263    | SP12141          |
| A38Q216       | 151-0232-00        |                             | TRANSISTOR:SILICON.NPN.DUAL            | 07263    | SP12141          |
| A38Q218       | 151-0280-00        |                             | TRANSISTOR:SILICON.PNP                 | 04713    | SS8065           |
| A38Q232       | 151-0280-00        |                             | TRANSISTOR:SILICON.PNP                 | 04713    | SS8065           |
| A38Q234       | 151-0232-00        |                             | TRANSISTOR:SILICON.NPN.DUAL            | 07263    | SP12141          |
| A38Q236       | 151-0232-00        |                             | TRANSISTOR:SILICON.NPN.DUAL            | 07263    | SP12141          |
| A38Q238       | 151-0280-00        |                             | TRANSISTOR:SILICON.PNP                 | 04713    | SS8065           |
| A38Q404       | 151-0367-00        |                             | TRANSISTOR:SILICON.NPN.SEL FROM 3571TP | 04713    | EP7426           |
| A38Q406       | 151-0220-00        |                             | TRANSISTOR:SILICON.PNP                 | 07263    | S036228          |
| A38Q408       | 151-0279-00        |                             | TRANSISTOR:SILICON.NPN                 | 01295    | SGC2622          |
| A38Q414       | 151-0279-00        |                             | TRANSISTOR:SILICON.NPN                 | 01295    | SGC2622          |
| A38Q416       | 151-0367-00        |                             | TRANSISTOR:SILICON.NPN.SEL FROM 3571TP | 04713    | EP7426           |

| Component No. | Tektronix Part No. | Serial/Model No. |         | Name & Description                     | Mfr Code | Mfr Part Number |
|---------------|--------------------|------------------|---------|--|----------|-----------------|
|               |                    | Eff              | Dscont  |  |          |                 |
| A38Q418       | 151-0220-00        |                  |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A38Q424       | 151-0367-00        |                  |         | TRANSISTOR:SILICON.NPN,SEL FROM 3571TP | 04713    | EP7426          |
| A38Q426       | 151-0220-00        |                  |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A38Q428       | 151-0279-00        |                  |         | TRANSISTOR:SILICON.NPN                 | 01295    | SGC2622         |
| A38Q438       | 151-0279-00        |                  |         | TRANSISTOR:SILICON.NPN                 | 01295    | SGC2622         |
| A38Q440       | 151-0367-00        |                  |         | TRANSISTOR:SILICON.NPN,SEL FROM 3571TP | 04713    | EP7426          |
| A38Q442       | 151-0220-00        |                  |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A38Q546       | 151-0301-00        |                  |         | TRANSISTOR:SILICON.PNP                 | 27014    | 2N2907A         |
| A38Q646       | 151-0302-00        |                  |         | TRANSISTOR:SILICON.NPN                 | 07263    | S038487         |
| A38Q704       | 151-0136-00        |                  |         | TRANSISTOR:SILICON.NPN                 | 02735    | 35495           |
| A38Q716       | 151-0279-00        |                  |         | TRANSISTOR:SILICON.NPN                 | 01295    | SGC2622         |
| A38Q746       | 151-0301-00        |                  |         | TRANSISTOR:SILICON.PNP                 | 27014    | 2N2907A         |
| A38Q814       | 151-0232-00        |                  |         | TRANSISTOR:SILICON.NPN,DUAL            | 07263    | SP12141         |
| A38Q834       | 151-0347-00        |                  |         | TRANSISTOR:SILICON.NPN                 | 56289    | 2N5551          |
| A38Q846       | 151-0302-00        |                  |         | TRANSISTOR:SILICON.NPN                 | 07263    | S038487         |
| A38Q848       | 151-0350-00        |                  |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6700         |
| A38Q906       | 151-0134-00        | B010100          | B030487 | TRANSISTOR:SILICON.PNP                 | 80009    | 151-0134-00     |
| A38Q906       | 151-0270-00        | B030488          |         | TRANSISTOR:SILICON.PNP                 | 04713    | OBD             |
| A38Q928       | 151-0261-00        |                  |         | TRANSISTOR:SILICON.PNP,DUAL            | 04713    | SD441           |
| A38Q948       | 151-0188-00        |                  |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6868K        |
| A38R014       | 321-0202-09        |                  |         | RES.,FXD.FILM:1.24K OHM,1%.0.125W      | 91637    | MFF1816C12400F  |
| A38R016       | 321-0202-09        |                  |         | RES.,FXD.FILM:1.24K OHM,1%.0.125W      | 91637    | MFF1816C12400F  |
| A38R018       | 311-1227-00        |                  |         | RES.,VAR.NONWIR:5K OHM,20%.0.50W       | 32997    | 3386F-T04-502   |
| A38R030       | 315-0105-00        |                  |         | RES.,FXD.CMPSN:1M OHM,5%.0.25W         | 01121    | CB1055          |
| A38R032       | 315-0754-00        |                  |         | RES.,FXD.CMPSN:750K OHM,5%.0.25W       | 01121    | CB7545          |
| A38R034       | 315-0155-00        |                  |         | RES.,FXD.CMPSN:1.5M OHM,5%.0.25W       | 01121    | CB1555          |
| A38R036       | 321-0202-09        |                  |         | RES.,FXD.FILM:1.24K OHM,1%.0.125W      | 91637    | MFF1816C12400F  |
| A38R038       | 321-0202-09        |                  |         | RES.,FXD.FILM:1.24K OHM,1%.0.125W      | 91637    | MFF1816C12400F  |
| A38R108       | 324-0356-09        |                  |         | RES.,FXD.FILM:49.9K OHM,1%.1W          | 91637    | MFF1-14C49901F  |
| A38R110       | 323-0355-09        |                  |         | RES.,FXD.FILM:48.7K OHM,1%.0.50W       | 91637    | MFF1226C48701F  |
| A38R112       | 323-0355-09        |                  |         | RES.,FXD.FILM:48.7K OHM,1%.0.50W       | 91637    | MFF1226C48701F  |
| A38R116       | 323-0355-09        |                  |         | RES.,FXD.FILM:48.7K OHM,1%.0.50W       | 91637    | MFF1226C48701F  |
| A38R118       | 323-0355-09        |                  |         | RES.,FXD.FILM:48.7K OHM,1%.0.50W       | 91637    | MFF1226C48701F  |
| A38R120       | 324-0356-09        |                  |         | RES.,FXD.FILM:49.9K OHM,1%.1W          | 91637    | MFF1-14C49901F  |
| A38R128       | 324-0356-09        |                  |         | RES.,FXD.FILM:49.9K OHM,1%.1W          | 91637    | MFF1-14C49901F  |
| A38R132       | 323-0355-09        |                  |         | RES.,FXD.FILM:48.7K OHM,1%.0.50W       | 91637    | MFF1226C48701F  |
| A38R134       | 323-0355-09        |                  |         | RES.,FXD.FILM:48.7K OHM,1%.0.50W       | 91637    | MFF1226C48701F  |
| A38R136       | 323-0355-09        |                  |         | RES.,FXD.FILM:48.7K OHM,1%.0.50W       | 91637    | MFF1226C48701F  |
| A38R138       | 323-0355-09        |                  |         | RES.,FXD.FILM:48.7K OHM,1%.0.50W       | 91637    | MFF1226C48701F  |
| A38R140       | 324-0356-09        |                  |         | RES.,FXD.FILM:49.9K OHM,1%.1W          | 91637    | MFF1-14C49901F  |
| A38R206       | 315-0222-00        |                  |         | RES.,FXD.CMPSN:2.2K OHM,5%.0.25W       | 01121    | CB2225          |
| A38R216       | 323-0283-00        |                  |         | RES.,FXD.FILM:8.66K OHM,1%.0.50W       | 75042    | CECT0-8661F     |
| A38R220       | 315-0101-00        |                  |         | RES.,FXD.CMPSN:100 OHM,5%.0.25W        | 01121    | CB1015          |
| A38R228       | 315-0101-00        |                  |         | RES.,FXD.CMPSN:100 OHM,5%.0.25W        | 01121    | CB1015          |
| A38R236       | 323-0283-00        |                  |         | RES.,FXD.FILM:8.66K OHM,1%.0.50W       | 75042    | CECT0-8661F     |
| A38R244       | 315-0222-00        |                  |         | RES.,FXD.CMPSN:2.2K OHM,5%.0.25W       | 01121    | CB2225          |
| A38R306       | 303-0184-00        |                  |         | RES.,FXD.CMPSN:180K OHM,5%.1W          | 01121    | GB1845          |
| A38R312       | 321-0185-09        |                  |         | RES.,FXD.FILM:825 OHM,1%.0.125W        | 91637    | MFF1816C825R0F  |
| A38R316       | 321-0185-09        |                  |         | RES.,FXD.FILM:825 OHM,1%.0.125W        | 91637    | MFF1816C825R0F  |
| A38R320       | 315-0222-00        |                  |         | RES.,FXD.CMPSN:2.2K OHM,5%.0.25W       | 01121    | CB2225          |
| A38R322       | 303-0184-00        |                  |         | RES.,FXD.CMPSN:180K OHM,5%.1W          | 01121    | GB1845          |
| A38R326       | 303-0184-00        |                  |         | RES.,FXD.CMPSN:180K OHM,5%.1W          | 01121    | GB1845          |
| A38R328       | 315-0222-00        |                  |         | RES.,FXD.CMPSN:2.2K OHM,5%.0.25W       | 01121    | CB2225          |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscnt | Name & Description                 | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------------|------------------------------------|----------|-----------------|
| A38R334       | 321-0185-09        |                            | RES.,FXD.FILM:825 OHM.1%.0.125W    | 91637    | MFF1816C825R0F  |
| A38R336       | 321-0185-09        |                            | RES.,FXD.FILM:825 OHM.1%.0.125W    | 91637    | MFF1816C825R0F  |
| A38R342       | 303-0184-00        |                            | RES.,FXD.CMPSN:180K OHM.5%.1W      | 01121    | GB1845          |
| A38R406       | 315-0183-00        |                            | RES.,FXD.CMPSN:18K OHM.5%.0.25W    | 01121    | CB1835          |
| A38R408       | 301-0822-00        |                            | RES.,FXD.CMPSN:8.2K OHM.5%.0.50W   | 01121    | EB8225          |
| A38R410       | 321-0222-09        |                            | RES.,FXD.FILM:2.00K OHM.1%.0.125W  | 91637    | MFF1816C20000F  |
| A38R412       | 315-0362-00        |                            | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625          |
| A38R416       | 323-0283-00        |                            | RES.,FXD.FILM:8.66K OHM.1%.0.50W   | 75042    | CECT0-8661F     |
| A38R422       | 301-0822-00        |                            | RES.,FXD.CMPSN:8.2K OHM.5%.0.50W   | 01121    | EB8225          |
| A38R424       | 301-0822-00        |                            | RES.,FXD.CMPSN:8.2K OHM.5%.0.50W   | 01121    | EB8225          |
| A38R426       | 315-0183-00        |                            | RES.,FXD.CMPSN:18K OHM.5%.0.25W    | 01121    | CB1835          |
| A38R432       | 321-0222-09        |                            | RES.,FXD.FILM:2.00K OHM.1%.0.125W  | 91637    | MFF1816C20000F  |
| A38R434       | 315-0362-00        |                            | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625          |
| A38R436       | 323-0283-00        |                            | RES.,FXD.FILM:8.66K OHM.1%.0.50W   | 75042    | CECT0-8661F     |
| A38R442       | 301-0822-00        |                            | RES.,FXD.CMPSN:8.2K OHM.5%.0.50W   | 01121    | EB8225          |
| A38R502       | 321-0191-09        |                            | RES.,FXD.FILM:953 OHM.1%.0.125W    | 24546    | NE55E9530F      |
| A38R504       | 321-0155-09        |                            | RES.,FXD.FILM:402 OHM.1%.0.125W    | 24546    | NE55E4020F      |
| A38R508       | 311-1224-00        |                            | RES.,VAR.NONWIR:500 OHM.20%.0.50W  | 32997    | 3386F-T04-501   |
| A38R510       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A38R512       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A38R514       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A38R516       | 321-0222-09        |                            | RES.,FXD.FILM:2.00K OHM.1%.0.125W  | 91637    | MFF1816C20000F  |
| A38R518       | 315-0362-00        |                            | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625          |
| A38R522       | 315-0183-00        |                            | RES.,FXD.CMPSN:18K OHM.5%.0.25W    | 01121    | CB1835          |
| A38R524       | 321-0191-09        |                            | RES.,FXD.FILM:953 OHM.1%.0.125W    | 24546    | NE55E9530F      |
| A38R526       | 321-0155-09        |                            | RES.,FXD.FILM:402 OHM.1%.0.125W    | 24546    | NE55E4020F      |
| A38R528       | 311-1224-00        |                            | RES.,VAR.NONWIR:500 OHM.20%.0.50W  | 32997    | 3386F-T04-501   |
| A38R530       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A38R532       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A38R534       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A38R536       | 321-0222-09        |                            | RES.,FXD.FILM:2.00K OHM.1%.0.125W  | 91637    | MFF1816C20000F  |
| A38R537       | 315-0362-00        |                            | RES.,FXD.CMPSN:3.6K OHM.5%.0.25W   | 01121    | CB3625          |
| A38R538       | 323-0350-00        |                            | RES.,FXD.FILM:43.2K OHM.1%.0.50W   | 75042    | CECT0-4322F     |
| A38R540       | 323-0350-00        |                            | RES.,FXD.FILM:43.2K OHM.1%.0.50W   | 75042    | CECT0-4322F     |
| A38R542       | 315-0183-00        |                            | RES.,FXD.CMPSN:18K OHM.5%.0.25W    | 01121    | CB1835          |
| A38R544       | 323-0126-00        |                            | RES.,FXD.FILM:200 OHM.1%.0.50W     | 75042    | CECT0-2000F     |
| A38R546       | 323-0126-00        |                            | RES.,FXD.FILM:200 OHM.1%.0.50W     | 75042    | CECT0-2000F     |
| A38R548       | 315-0161-00        |                            | RES.,FXD.CMPSN:160 OHM.5%.0.25W    | 01121    | CB1615          |
| A38R602       | 311-1235-00        |                            | RES.,VAR.NONWIR:100K OHM.20%.0.50W | 32997    | 3386F-T04-104   |
| A38R604       | 305-0563-00        |                            | RES.,FXD.CMPSN:56K OHM.5%.2W       | 01121    | HB5635          |
| A38R606       | 321-0298-09        |                            | RES.,FXD.FILM:12.4K OHM.1%.0.125W  | 24546    | NE55E1242F      |
| A38R610       | 321-0452-09        |                            | RES.,FXD.FILM:499K OHM.1%.0.125W   | 24546    | NE55E4993F      |
| A38R612       | 321-0452-09        |                            | RES.,FXD.FILM:499K OHM.1%.0.125W   | 24546    | NE55E4993F      |
| A38R614       | 303-0333-00        |                            | RES.,FXD.CMPSN:33K OHM.5%.1W       | 01121    | GB3335          |
| A38R616       | 303-0333-00        |                            | RES.,FXD.CMPSN:33K OHM.5%.1W       | 01121    | GB3335          |
| A38R618       | 315-0102-00        |                            | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A38R620       | 315-0750-00        |                            | RES.,FXD.CMPSN:75 OHM.5%.0.25W     | 01121    | CB7505          |
| A38R622       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A38R624       | 307-0106-00        |                            | RES.,FXD.CMPSN:4.7 OHM.5%.0.25W    | 01121    | CB47G5          |
| A38R626       | 315-0100-00        |                            | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A38R628       | 315-0101-00        |                            | RES.,FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015          |
| A38R629       | 307-0106-00        |                            | RES.,FXD.CMPSN:4.7 OHM.5%.0.25W    | 01121    | CB47G5          |
| A38R632       | 311-1233-00        |                            | RES.,VAR.NONWIR:50K OHM.20%.0.50W  | 32997    | 3386F-T05-503   |
| A38R634       | 321-0312-00        |                            | RES.,FXD.FILM:17.4K OHM.1%.0.125W  | 91637    | MFF1816G17401F  |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                  | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-------------------------------------|----------|-----------------|
| A38R636       | 321-0263-00        |                      |         | RES.,FXD.FILM:5.36K OHM,1%.0.125W   | 91637    | MFF1816G53600F  |
| A38R638       | 321-0263-00        |                      |         | RES.,FXD.FILM:5.36K OHM,1%.0.125W   | 91637    | MFF1816G53600F  |
| A38R702       | 305-0680-00        |                      |         | RES.,FXD.CMPSN:68 OHM,5%.2W         | 01121    | HB6805          |
| A38R708       | 315-0680-00        |                      |         | RES.,FXD.CMPSN:68 OHM,5%.0.25W      | 01121    | CB6805          |
| A38R709       | 315-0225-00        |                      |         | RES.,FXD.CMPSN:2.2M OHM,5%.0.25W    | 01121    | CB2255          |
| A38R710       | 317-0621-00        |                      |         | RES.,FXD.CMPSN:620 OHM,5%.0.125W    | 01121    | BB6215          |
| A38R712       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025          |
| A38R714       | 315-0750-00        |                      |         | RES.,FXD.CMPSN:75 OHM,5%.0.25W      | 01121    | CB7505          |
| A38R716       | 307-0106-00        |                      |         | RES.,FXD.CMPSN:4.7 OHM,5%.0.25W     | 01121    | CB47G5          |
| A38R718       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM,5%.0.25W      | 01121    | CB2205          |
| A38R720       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM,5%.0.25W      | 01121    | CB1005          |
| A38R722       | 315-0470-00        |                      |         | RES.,FXD.CMPSN:47 OHM,5%.0.25W      | 01121    | CB4705          |
| A38R724       | 322-0519-01        |                      |         | RES.,FXD.FILM:2.49M OHM,0.5%.0.25W  | 91637    | HFF143G24903D   |
| A38R725       | 315-0470-00        |                      |         | RES.,FXD.CMPSN:47 OHM,5%.0.25W      | 01121    | CB4705          |
| A38R726       | 321-0354-00        |                      |         | RES.,FXD.FILM:47.5K OHM,1%.0.125W   | 91637    | MFF1816G47501F  |
| A38R727       | 315-0331-00        |                      |         | RES.,FXD.CMPSN:330 OHM,5%.0.25W     | 01121    | CB3315          |
| A38R728       | 311-1272-00        |                      |         | RES.,VAR.NONWIR:100K OHM,10%.0.50W  | 32997    | 3329P-L58-104   |
| A38R730       | 321-0414-00        |                      |         | RES.,FXD.FILM:200K OHM,1%.0.125W    | 91637    | MFF1816G20002F  |
| A38R731       | 321-0414-00        |                      |         | RES.,FXD.FILM:200K OHM,1%.0.125W    | 91637    | MFF1816G20002F  |
| A38R732       | 311-1233-00        |                      |         | RES.,VAR.NONWIR:50K OHM,20%.0.50W   | 32997    | 3386F-T05-503   |
| A38R733       | 321-0481-00        |                      |         | RES.,FXD.FILM:1M OHM,1%.0.125W      | 24546    | NA4D1004F       |
| A38R734       | 321-0481-00        |                      |         | RES.,FXD.FILM:1M OHM,1%.0.125W      | 24546    | NA4D1004F       |
| A38R735       | 321-0312-00        |                      |         | RES.,FXD.FILM:17.4K OHM,1%.0.125W   | 91637    | MFF1816G17401F  |
| A38R736       | 321-0260-00        |                      |         | RES.,FXD.FILM:4.99K OHM,1%.0.125W   | 91637    | MFF1816G49900F  |
| A38R737       | 321-0263-00        |                      |         | RES.,FXD.FILM:5.36K OHM,1%.0.125W   | 91637    | MFF1816G53600F  |
| A38R738       | 321-0263-00        |                      |         | RES.,FXD.FILM:5.36K OHM,1%.0.125W   | 91637    | MFF1816G53600F  |
| A38R739       | 323-0350-00        |                      |         | RES.,FXD.FILM:43.2K OHM,1%.0.50W    | 75042    | CECT0-4322F     |
| A38R740       | 323-0350-00        |                      |         | RES.,FXD.FILM:43.2K OHM,1%.0.50W    | 75042    | CECT0-4322F     |
| A38R742       | 323-0126-00        |                      |         | RES.,FXD.FILM:200 OHM,1%.0.50W      | 75042    | CECT0-2000F     |
| A38R744       | 323-0126-00        |                      |         | RES.,FXD.FILM:200 OHM,1%.0.50W      | 75042    | CECT0-2000F     |
| A38R746       | 315-0161-00        |                      |         | RES.,FXD.CMPSN:160 OHM,5%.0.25W     | 01121    | CB1615          |
| A38R802       | 308-0623-00        |                      |         | RES.,FXD.WW:167 OHM,1%.3W           | 91637    | RS2B167R0F      |
| A38R804       | 311-1228-00        |                      |         | RES.,VAR.NONWIR:10K OHM,20%.0.50W   | 32997    | 3386F-T04-103   |
| A38R806       | 321-0272-07        | B010100              | B030487 | RES.,FXD.FILM:6.65K OHM,0.1%.0.125W | 91637    | MFF1816C66500B  |
| A38R806       | 321-0815-07        | B030488              |         | RES.,FXD.FILM:4.1K OHM,0.1%.0.125W  | 91637    | MFF1816C41000B  |
| A38R808       | 321-0298-09        |                      |         | RES.,FXD.FILM:12.4K OHM,1%.0.125W   | 24546    | NE55E1242F      |
| A38R814       | 315-0161-00        |                      |         | RES.,FXD.CMPSN:160 OHM,5%.0.25W     | 01121    | CB1615          |
| A38R816       | 321-0216-00        |                      |         | RES.,FXD.FILM:1.74K OHM,1%.0.125W   | 91637    | MFF1816G17400F  |
| A38R818       | 321-0385-00        |                      |         | RES.,FXD.FILM:100K OHM,1%.0.125W    | 91637    | MFF1816G10002F  |
| A38R820       | 321-0402-00        |                      |         | RES.,FXD.FILM:150K OHM,1%.0.125W    | 24546    | NA55D1503F      |
| A38R832       | 315-0513-00        |                      |         | RES.,FXD.CMPSN:51K OHM,5%.0.25W     | 01121    | CB5135          |
| A38R834       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM,5%.0.25W     | 01121    | CB1015          |
| A38R836       | 315-0153-00        |                      |         | RES.,FXD.CMPSN:15K OHM,5%.0.25W     | 01121    | CB1535          |
| A38R838       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W      | 01121    | CB1025          |
| A38R840       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM,5%.0.25W    | 01121    | CB1045          |
| A38R842       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM,5%.0.25W    | 01121    | CB1045          |
| A38R904       | 315-0511-00        |                      |         | RES.,FXD.CMPSN:510 OHM,5%.0.25W     | 01121    | CB5115          |
| A38R906       | 315-0153-00        |                      |         | RES.,FXD.CMPSN:15K OHM,5%.0.25W     | 01121    | CB1535          |
| A38R910       | 323-0315-00        |                      |         | RES.,FXD.FILM:18.7K OHM,1%.0.50W    | 75042    | CECT0-1872F     |
| A38R912       | 303-0823-00        |                      |         | RES.,FXD.CMPSN:82K OHM,5%.1W        | 01121    | GB8235          |
| A38R918       | 311-1252-00        |                      |         | RES.,VAR.NONWIR:500K OHM,20%.0.50W  | 32997    | 3386F-T04-504   |
| A38R922       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W     | 01121    | CB1035          |
| A38R924       | 315-0433-00        |                      |         | RES.,FXD.CMPSN:43K OHM,5%.0.25W     | 01121    | CB4335          |
| A38R926       | 315-0912-00        |                      |         | RES.,FXD.CMPSN:9.1K OHM,5%.0.25W    | 01121    | CB9125          |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                    | Mfr Code | Mfr Part Number |
|---------------|--------------------|-----------------------------|---------------------------------------|----------|-----------------|
| A38R930       | 321-0356-00        |                             | RES.,FXD.FILM:49.9K OHM,1%.0.125W     | 91637    | MFF1816G49901F  |
| A38R932       | 321-0444-00        |                             | RES.,FXD.FILM:412K OHM,1%.0.125W      | 91637    | MFF1816G41202F  |
| A38R938       | 315-0393-00        |                             | RES.,FXD.CMPSN:39K OHM,5%.0.25W       | 01121    | CB3935          |
| A38R940       | 315-0103-00        |                             | RES.,FXD.CMPSN:10K OHM,5%.0.25W       | 01121    | CB1035          |
| A38R942       | 315-0183-00        |                             | RES.,FXD.CMPSN:18K OHM,5%.0.25W       | 01121    | CB1835          |
| A38R944       | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM,5%.0.25W        | 01121    | CB1025          |
| A38R946       | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM,5%.0.25W        | 01121    | CB1025          |
| A38R948       | 315-0472-00        |                             | RES.,FXD.CMPSN:4.7K OHM,5%.0.25W      | 01121    | CB4725          |
| A38U616       | 156-0067-00        |                             | MICROCIRCUIT.LI:OPERATIONAL AMPLIFIER | 01295    | MICROA741CP     |
| A38U828       | 156-0067-00        |                             | MICROCIRCUIT.LI:OPERATIONAL AMPLIFIER | 01295    | MICROA741CP     |
| A38VR206      | 152-0283-00        |                             | SEMICONV DEVICE:ZENER,0.4W,43V,5%     | 12954    | DZ750903B1N976  |
| A38VR224      | 152-0283-00        |                             | SEMICONV DEVICE:ZENER,0.4W,43V,5%     | 12954    | DZ750903B1N976  |
| A38VR226      | 152-0283-00        |                             | SEMICONV DEVICE:ZENER,0.4W,43V,5%     | 12954    | DZ750903B1N976  |
| A38VR244      | 152-0283-00        |                             | SEMICONV DEVICE:ZENER,0.4W,43V,5%     | 12954    | DZ750903B1N976  |
| A38VR308      | 152-0286-00        |                             | SEMICONV DEVICE:ZENER,0.4W,75V,5%     | 80009    | 152-0286-00     |
| A38VR318      | 152-0286-00        |                             | SEMICONV DEVICE:ZENER,0.4W,75V,5%     | 80009    | 152-0286-00     |
| A38VR330      | 152-0286-00        |                             | SEMICONV DEVICE:ZENER,0.4W,75V,5%     | 80009    | 152-0286-00     |
| A38VR338      | 152-0286-00        |                             | SEMICONV DEVICE:ZENER,0.4W,75V,5%     | 80009    | 152-0286-00     |
| A38VR816      | 152-0456-00        |                             | SEMICONV DEVICE:ZENER,0.4W,6.2V,5%    | 04713    | SZG25002K1      |
| A38W928       | 131-0566-00        |                             | BUS CONDUCTOR:DUMMY RES.2.375.22 AWG  | 57668    | JWW-0200E0      |
| A38W936       | 131-0566-00        |                             | BUS CONDUCTOR:DUMMY RES.2.375.22 AWG  | 57668    | JWW-0200E0      |



| Component No.                       | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                     | Mfr Code | Mfr Part Number  |
|-------------------------------------|--------------------|----------------------|---------|--|----------|------------------|
| A40 HORIZONTAL AMPLIFIER AND Z-AXIS |                    |                      |         |  |          |                  |
| A40                                 | 670-5144-00        | B010100              | B039999 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS | 80009    | 670-5144-00      |
| A40                                 | 670-5144-01        | B040000              | B079999 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS | 80009    | 670-5144-01      |
| A40                                 | 670-5144-02        | B080000              | B100766 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS | 80009    | 670-5144-02      |
| A40                                 | 670-5144-03        | B100767              | B100776 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS | 80009    | 670-5144-03      |
| A40                                 | 670-5144-04        | B100777              | B111279 | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS | 80009    | 670-5144-04      |
| A40                                 | 670-5144-05        | B111280              |         | CKT BOARD ASSY:HORIZONTAL AMP & Z-AXIS | 80009    | 670-5144-05      |
| A40C006                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C008                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C016                             | 281-0659-00        |                      |         | CAP.,FXD.CER DI:4.3PF,+/-0.25PF.500V   | 59660    | 301-000C0H0439C  |
| A40C018                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C022                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C024                             | 281-0659-00        |                      |         | CAP.,FXD.CER DI:4.3PF,+/-0.25PF.500V   | 59660    | 301-000C0H0439C  |
| A40C026                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C028                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C108                             | 281-0153-00        |                      |         | CAP.,VAR.AIR DI:1.7-10PF.250V          | 74970    | 187-0106-005     |
| A40C110                             | 283-0647-00        | B010100              | B079999 | CAP.,FXD.MICA D:70PF,1%,100V           | 00853    | D155E700F0       |
| A40C110                             | 283-0633-00        | B080000              | B100776 | CAP.,FXD.MICA D:77PF,1%,100V           | 00853    | D155E770F0       |
| A40C110                             | 283-0647-00        | B100777              |         | CAP.,FXD.MICA D:70PF,1%,100V           | 00853    | D155E700F0       |
| A40C128                             | 283-0647-00        | B010100              | B079999 | CAP.,FXD.MICA D:70PF,1%,100V           | 00853    | D155E700F0       |
| A40C128                             | 283-0633-00        | B080000              | B100776 | CAP.,FXD.MICA D:77PF,1%,100V           | 00853    | D155E770F0       |
| A40C128                             | 283-0647-00        | B100777              |         | CAP.,FXD.MICA D:70PF,1%,100V           | 00853    | D155E700F0       |
| A40C132                             | 281-0153-00        |                      |         | CAP.,VAR.AIR DI:1.7-10PF.250V          | 74970    | 187-0106-005     |
| A40C142                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C220                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C242                             | 290-0267-00        |                      |         | CAP.,FXD.ELCTLT:1UF,20%,35V            | 56289    | 162D105X0035CD2  |
| A40C256                             | 290-0244-00        |                      |         | CAP.,FXD.ELCTLT:0.47UF,5%,35V          | 56289    | 162D474X5035BC2  |
| A40C306                             | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%.25V       | 54473    | ECE-A25V22L      |
| A40C308                             | 283-0604-00        |                      |         | CAP.,FXD.MICA D:304PF,2%,300V          | 00853    | D155F3040G0      |
| A40C316                             | 283-0080-00        |                      |         | CAP.,FXD.CER DI:0.022UF,+80-20%,25V    | 59821    | 2DDU60E223Z      |
| A40C326                             | 281-0219-00        |                      |         | CAP.,VAR.CER DI:5-35PF,+2-2.5%,100V    | 59660    | 0513-501 A 5.035 |
| A40C328                             | 283-0604-00        |                      |         | CAP.,FXD.MICA D:304PF,2%,300V          | 00853    | D155F3040G0      |
| A40C330                             | 290-0572-00        |                      |         | CAP.,FXD.ELCTLT:0.1UF,20%,50V          | 56289    | 196D104X0050HA1  |
| A40C334                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C344                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C352                             | 283-0000-00        |                      |         | CAP.,FXD.CER DI:0.001UF,+100-0%,500V   | 59660    | 831610Y5U0102P   |
| A40C404                             | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%,25V       | 54473    | ECE-A25V22L      |
| A40C406                             | 283-0003-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%,150V    | 59821    | 2DDH66J103Z      |
| A40C446                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C456                             | 283-0100-00        |                      |         | CAP.,FXD.CER DI:0.0047UF,10%,200V      | 56289    | 273C3            |
| A40C502                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C504                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C506                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C508                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C510                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C512                             | 283-0211-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,200V         | 04222    | SR406C104KAA     |
| A40C602                             | 283-0167-00        | B010100              | B100766 | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |
| A40C602                             | 283-0211-00        | B100767              |         | CAP.,FXD.CER DI:0.1UF,10%,200V         | 04222    | SR406C104KAA     |
| A40C608                             | 283-0004-00        |                      |         | CAP.,FXD.CER DI:0.02UF,+80-20%,150V    | 59821    | SDDH69J203Z      |
| A40C614                             | 281-0629-00        |                      |         | CAP.,FXD.CER DI:33PF,5%,600V           | 04222    | 7027-C0G-330J    |
| A40C622                             | 290-0528-00        |                      |         | CAP.,FXD.ELCTLT:15UF,20%,50V           | 56289    | 196D156X0050PE4  |
| A40C624                             | 283-0116-00        |                      |         | CAP.,FXD.CER DI:820PF,5%,500V          | 59660    | 801547B821J      |
| A40C706                             | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF,10%,100V         | 72982    | 8131N145X5R0104K |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                    | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|---------------------------------------|----------|------------------|
| A40C710       | 283-0004-00        |                      |         | CAP.,FXD.CER DI:0.02UF. - 80-20%.150V | 59821    | SDDH69J203Z      |
| A40C714       | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF.10%.100V        | 72982    | 8131N145X5R0104F |
| A40C716       | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF.10%.100V        | 72982    | 8131N145X5R0104F |
| A40C718       | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF.10%.100V        | 72982    | 8131N145X5R0104F |
| A40C728       | 283-0004-00        |                      |         | CAP.,FXD.CER DI:0.02UF. - 80-20%.150V | 59821    | SDDH69J203Z      |
| A40C732       | 283-0004-00        |                      |         | CAP.,FXD.CER DI:0.02UF. - 80-20%.150V | 59821    | SDDH69J203Z      |
| A40C734       | 283-0004-00        |                      |         | CAP.,FXD.CER DI:0.02UF. - 80-20%.150V | 59821    | SDDH69J203Z      |
| A40C735       | 283-0004-00        |                      |         | CAP.,FXD.CER DI:0.02UF. - 80-20%.150V | 59821    | SDDH69J203Z      |
| A40C738       | 283-0113-00        |                      |         | CAP.,FXD.CER DI:56PF.1%.500V          | 59660    | 0851560CG0560F   |
| A40C802       | 283-0167-00        |                      |         | CAP.,FXD.CER DI:0.1UF.10%.100V        | 72982    | 8131N145X5R0104F |
| A40C806       | 283-0594-00        |                      |         | CAP.,FXD.MICA D:0.001UF.1%.100V       | 00853    | D151F102F0       |
| A40C808       | 281-0060-00        |                      |         | CAP.,VAR.CER DI:2-8PF.350V            | 73899    | DV11-P8A         |
| A40C812       | 281-0546-00        |                      |         | CAP.,FXD.CER DI:330PF.10%.500V        | 04222    | 7001-1380        |
| A40C818       | 281-0093-00        |                      |         | CAP.,VAR.CER DI:5.5-18PF              | 59660    | 538-011A5.5-18   |
| A40C820       | 281-0661-00        |                      |         | CAP.,FXD.CER DI:0.8PF. +/-0.1PF.500V  | 04222    | 7001-COK-OR8B    |
| A40C826       | 283-0150-00        |                      |         | CAP.,FXD.CER DI:650PF.5%.200V         | 59660    | 0835030Z5E0 651J |
| A40C830       | 283-0004-00        |                      |         | CAP.,FXD.CER DI:0.02UF. - 80-20%.150V | 59821    | SDDH69J203Z      |
| A40C832       | 281-0627-00        |                      |         | CAP.,FXD.CER DI:1PF. +/-0.25PF.500V   | 04222    | 77001-COK-1R0C   |
| A40C842       | 281-0627-00        | B010100              | B079999 | CAP.,FXD.CER DI:1PF. +/-0.25PF.500V   | 04222    | 77001-COK-1R0C   |
| A40C842       | 283-0317-00        | B080000              |         | CAP.,FXD.CER DI:1PF. +/-0.1PF.500V    | 72982    | 861-518-COK0109B |
| A40CR052      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR054      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR112      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR116      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR122      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR210      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR212      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR228      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR242      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR246      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR450      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR456      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR516      | 152-0141-02        | B100767              |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR518      | 152-0141-02        | B100767              |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR616      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR618      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR630      | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON.400V.750MA    | 14433    | LG4016           |
| A40CR636      | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON.400V.750MA    | 14433    | LG4016           |
| A40CR726      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA     | 01295    | 1N4152R          |
| A40CR740      | 152-0061-00        |                      |         | SEMICONV DEVICE:SILICON.175V.100MA    | 07263    | FDH2161          |
| A40CR814      | 152-0233-00        |                      |         | SEMICONV DEVICE:SILICON.85V.100MA     | 07263    | FDH1986          |
| A40CR828      | 152-0233-00        |                      |         | SEMICONV DEVICE:SILICON.85V.100MA     | 07263    | FDH1986          |
| A40CR832      | 152-0233-00        |                      |         | SEMICONV DEVICE:SILICON.85V.100MA     | 07263    | FDH1986          |
| A40CR836      | 152-0233-00        |                      |         | SEMICONV DEVICE:SILICON.85V.100MA     | 07263    | FDH1986          |
| A40E214       | 276-0507-00        | B040000              |         | SHIELDING BEAD.:FERRITE               | 78488    | 57-3443          |
| A40L404       | 108-0245-00        |                      |         | COIL,RF:3.9UH                         | 76493    | B6310-1          |
| A40L406       | 108-0245-00        |                      |         | COIL,RF:3.9UH                         | 76493    | B6310-1          |
| A40Q008       | 151-0274-00        |                      |         | TRANSISTOR:SILICON.NPN                | 80009    | 151-0274-00      |
| A40Q018       | 151-0270-00        |                      |         | TRANSISTOR:SILICON.PNP                | 04713    | OBD              |
| A40Q022       | 151-0270-00        |                      |         | TRANSISTOR:SILICON.PNP                | 04713    | OBD              |
| A40Q028       | 151-0274-00        |                      |         | TRANSISTOR:SILICON.NPN                | 80009    | 151-0274-00      |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                     | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A40Q046       | 151-0301-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 27014    | 2N2907A         |
| A40Q108       | 151-0190-00        | B010100              | B101158 | TRANSISTOR:SILICON.NPN                 | 07263    | S032677         |
| A40Q110       | 151-0190-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 07263    | S032677         |
| A40Q128       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q132       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q146       | 151-0347-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 56289    | 2N5551          |
| A40Q152       | 151-0347-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 56289    | 2N5551          |
| A40Q154       | 151-0133-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 80009    | 151-0133-00     |
| A40Q156       | 151-0435-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS8335         |
| A40Q214       | 151-0442-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 80009    | 151-0442-00     |
| A40Q216       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q222       | 151-0434-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 04713    | SS7144          |
| A40Q224       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q252       | 151-0133-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 80009    | 151-0133-00     |
| A40Q256       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q318       | 151-0325-00        | B010100              | B030471 | TRANSISTOR:SILICON.PNP.SEL FROM 2N4258 | 80009    | 151-0325-00     |
| A40Q318       | 151-0221-00        | B030472              |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS246          |
| A40Q322       | 151-0325-00        | B010100              | B030471 | TRANSISTOR:SILICON.PNP.SEL FROM 2N4258 | 80009    | 151-0325-00     |
| A40Q322       | 151-0221-00        | B030472              |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS246          |
| A40Q334       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q356       | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL            | 07263    | SP12141         |
| A40Q452       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q515       | 151-0190-00        | B100767              |         | TRANSISTOR:SILICON.NPN                 | 07263    | S032677         |
| A40Q519       | 151-0220-00        | B100767              |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q616       | 151-0220-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 07263    | S036228         |
| A40Q628       | 151-0435-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS8335         |
| A40Q636       | 151-0444-02        |                      |         | TRANSISTOR:SILICON.NPN                 | 80009    | 151-0444-02     |
| A40Q708       | 151-0223-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 04713    | SPS8026         |
| A40Q714       | 151-0160-00        | B010100              | B100776 | TRANSISTOR:SILICON.NPN                 | 80009    | 151-0160-00     |
| A40Q714       | 151-0451-00        | B100777              | B111284 | TRANSISTOR:SILICON.NPN                 | 04713    | SRF503          |
| A40Q714       | 151-0451-01        | B111285              |         | TRANSISTOR:SCREEDED                    | T0271    | 151-0451-01     |
| A40Q726       | 151-0271-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS8236         |
| A40Q732       | 151-0192-00        |                      |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A40Q736       | 151-0134-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 80009    | 151-0134-00     |
| A40Q802       | 153-0623-00        |                      |         | SEMICON DVC SE.MATCHED PAIR            | 80009    | 153-0623-00     |
| A40Q806       | 153-0623-00        |                      |         | SEMICON DVC SE.MATCHED PAIR            | 80009    | 153-0623-00     |
| A40Q826       | 151-0124-00        |                      |         | TRANSISTOR:SILICON.NPN.SEL FROM 2N3501 | 04713    | SM8138          |
| A40Q834       | 151-0270-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 04713    | OBD             |
| A40R004       | 303-0272-00        |                      |         | RES.,FXD.CMPSN:2.7K OHM,5%,1W          | 01121    | GB2725          |
| A40R006       | 315-0270-00        |                      |         | RES.,FXD.CMPSN:27 OHM,5%,0.25W         | 01121    | CB2705          |
| A40R010       | 315-0680-00        |                      |         | RES.,FXD.CMPSN:68 OHM,5%,0.25W         | 01121    | CB6805          |
| A40R012       | 303-0273-00        |                      |         | RES.,FXD.CMPSN:27K OHM,5%,1W           | 01121    | GB2735          |
| A40R014       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM,5%,0.25W         | 01121    | CB1005          |
| A40R018       | 321-0205-00        |                      |         | RES.,FXD.FILM:1.33K OHM,1%,0.125W      | 91637    | MFF1816G13300F  |
| A40R022       | 315-0680-00        |                      |         | RES.,FXD.CMPSN:68 OHM,5%,0.25W         | 01121    | CB6805          |
| A40R024       | 301-0563-00        |                      |         | RES.,FXD.CMPSN:56K OHM,5%,0.50W        | 01121    | EB5635          |
| A40R026       | 315-0150-00        |                      |         | RES.,FXD.CMPSN:15 OHM,5%,0.25W         | 01121    | CB1505          |
| A40R032       | 315-0271-00        |                      |         | RES.,FXD.CMPSN:270 OHM,5%,0.25W        | 01121    | CB2715          |
| A40R034       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM,5%,0.25W         | 01121    | CB1005          |
| A40R036       | 303-0332-00        |                      |         | RES.,FXD.CMPSN:3.3K OHM,5%,1W          | 01121    | GB3325          |
| A40R044       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM,5%,0.25W       | 01121    | CB5125          |
| A40R046       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM,5%,0.25W        | 01121    | CB1035          |
| A40R048       | 315-0222-00        |                      |         | RES.,FXD.CMPSN:2.2K OHM,5%,0.25W       | 01121    | CB2225          |
| A40R108       | 321-0066-00        |                      |         | RES.,FXD.FILM:47.5 OHM,1%,0.125W       | 91637    | MFF1816G47R50F  |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                   | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--------------------------------------|----------|-----------------|
| A40R114       | 321-0258-00        |                      |         | RES.,FXD.FILM:4.75K OHM.1%.0.125W    | 91637    | MFF1816G47500F  |
| A40R116       | 323-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM.1%.0.50W     | 91637    | MFF1226G24901F  |
| A40R118       | 311-1225-00        |                      |         | RES.,VAR.NONWIR:1K OHM.20%.0.50W     | 32997    | 3386F-T04-102   |
| A40R122       | 321-0218-00        |                      |         | RES.,FXD.FILM:1.82K OHM.1%.0.125W    | 91637    | MFF1816G18200F  |
| A40R124       | 321-0260-00        |                      |         | RES.,FXD.FILM:4.99K OHM.1%.0.125W    | 91637    | MFF1816G49900F  |
| A40R126       | 323-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM.1%.0.50W     | 91637    | MFF1226G24901F  |
| A40R128       | 321-0066-00        |                      |         | RES.,FXD.FILM:47.5 OHM.1%.0.125W     | 91637    | MFF1816G47R50F  |
| A40R140       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W       | 01121    | CB1005          |
| A40R142       | 315-0163-00        |                      |         | RES.,FXD.CMPSN:16K OHM.5%.0.25W      | 01121    | CB1635          |
| A40R144       | 315-0181-00        |                      |         | RES.,FXD.CMPSN:180 OHM.5%.0.25W      | 01121    | CB1815          |
| A40R146       | 315-0182-00        |                      |         | RES.,FXD.CMPSN:1.8K OHM.5%.0.25W     | 01121    | CB1825          |
| A40R148       | 315-0302-00        |                      |         | RES.,FXD.CMPSN:3K OHM.5%.0.25W       | 01121    | CB3025          |
| A40R149       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W     | 01121    | CB4725          |
| A40R202       | 301-0333-00        |                      |         | RES.,FXD.CMPSN:33K OHM.5%.0.50W      | 01121    | EB3335          |
| A40R204       | 303-0222-00        |                      |         | RES.,FXD.CMPSN:2.2K OHM.5%.1W        | 01121    | GB2225          |
| A40R206       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A40R208       | 308-0304-00        |                      |         | RES.,FXD.WW:1.5K OHM.1%.3W           | 91637    | RS2B-B15000F    |
| A40R212       | 321-0205-00        |                      |         | RES.,FXD.FILM:1.33K OHM.1%.0.125W    | 91637    | MFF1816G13300F  |
| A40R214       | 323-0706-01        |                      |         | RES.,FXD.FILM:800 OHM.0.5%.0.50W     | 91637    | MFF1226G800R0C  |
| A40R218       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM.5%.0.25W       | 01121    | CB2205          |
| A40R220       | 315-0123-00        |                      |         | RES.,FXD.CMPSN:12K OHM.5%.0.25W      | 01121    | CB1235          |
| A40R222       | 323-0706-01        |                      |         | RES.,FXD.FILM:800 OHM.0.5%.0.50W     | 91637    | MFF1226G800R0C  |
| A40R224       | 321-0205-00        |                      |         | RES.,FXD.FILM:1.33K OHM.1%.0.125W    | 91637    | MFF1816G13300F  |
| A40R226       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM.5%.0.25W       | 01121    | CB2205          |
| A40R228       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A40R230       | 308-0304-00        |                      |         | RES.,FXD.WW:1.5K OHM.1%.3W           | 91637    | RS2B-B15000F    |
| A40R242       | 323-0205-00        |                      |         | RES.,FXD.FILM:1.33K OHM.1%.0.50W     | 75042    | CECT0-1331F     |
| A40R244       | 301-0152-00        |                      |         | RES.,FXD.CMPSN:1.5K OHM.5%.0.50W     | 01121    | EB1525          |
| A40R248       | 315-0475-00        |                      |         | RES.,FXD.CMPSN:4.7M OHM.5%.0.25W     | 01121    | CB4755          |
| A40R250       | 315-0225-00        |                      |         | RES.,FXD.CMPSN:2.2M OHM.5%.0.25W     | 01121    | CB2255          |
| A40R252       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W     | 01121    | CB4725          |
| A40R254       | 315-0682-00        |                      |         | RES.,FXD.CMPSN:6.8K OHM.5%.0.25W     | 01121    | CB6825          |
| A40R256       | 315-0510-00        |                      |         | RES.,FXD.CMPSN:51 OHM.5%.0.25W       | 01121    | CB5105          |
| A40R308       | 315-0270-00        |                      |         | RES.,FXD.CMPSN:27 OHM.5%.0.25W       | 01121    | CB2705          |
| A40R310       | 315-0391-00        |                      |         | RES.,FXD.CMPSN:390 OHM.5%.0.25W      | 01121    | CB3915          |
| A40R312       | 311-1222-00        | B010100              | B111279 | RES.,VAR.NONWIR:100 OHM.20%.0.50W    | 32997    | 3386F-T04-101   |
| A40R312       | 311-1223-00        | B111280              |         | RES.,VAR.NONWIR:TRMR.250 OHM.0.5W    | 02111    | 63M251T602      |
| A40R314       | 321-0126-00        | B010100              | B100776 | RES.,FXD.FILM:200 OHM.1%.0.125W      | 91637    | MFF1816G200R0F  |
| A40R314       | 321-0114-00        | B100777              |         | RES.,FXD.FILM:150 OHM.1%.0.125W      | 91637    | MFF1816G150R0F  |
| A40R316       | 321-0199-06        |                      |         | RES.,FXD.FILM:1.15K OHM.0.25%.0.125W | 91637    | MFF1816C11500C  |
| A40R318       | 321-0131-00        |                      |         | RES.,FXD.FILM:226 OHM.1%.0.125W      | 91637    | MFF1816G226R0F  |
| A40R320       | 321-0193-00        |                      |         | RES.,FXD.FILM:1K OHM.1%.0.125W       | 91637    | MFF1816G10000F  |
| A40R321       | 321-0193-00        |                      |         | RES.,FXD.FILM:1K OHM.1%.0.125W       | 91637    | MFF1816G10000F  |
| A40R322       | 315-0513-00        |                      |         | RES.,FXD.CMPSN:51K OHM.5%.0.25W      | 01121    | CB5135          |
| A40R323       | 315-0152-00        |                      |         | RES.,FXD.CMPSN:1.5K OHM.5%.0.25W     | 01121    | CB1525          |
| A40R324       | 315-0620-00        |                      |         | RES.,FXD.CMPSN:62 OHM.5%.0.25W       | 01121    | CB6205          |
| A40R325       | 315-0391-00        |                      |         | RES.,FXD.CMPSN:390 OHM.5%.0.25W      | 01121    | CB3915          |
| A40R326       | 321-0199-06        |                      |         | RES.,FXD.FILM:1.15K OHM.0.25%.0.125W | 91637    | MFF1816C11500C  |
| A40R328       | 315-0270-00        |                      |         | RES.,FXD.CMPSN:27 OHM.5%.0.25W       | 01121    | CB2705          |
| A40R344       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W       | 01121    | CB1005          |
| A40R346       | 321-0285-00        |                      |         | RES.,FXD.FILM:9.09K OHM.1%.0.125W    | 91637    | MFF1816G90900F  |
| A40R348       | 321-0280-00        |                      |         | RES.,FXD.FILM:8.06K OHM.1%.0.125W    | 91637    | MFF1816G80600F  |
| A40R350       | 315-0562-00        |                      |         | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W     | 01121    | CB5625          |
| A40R352       | 321-0325-00        |                      |         | RES.,FXD.FILM:23.7K OHM.1%.0.125W    | 91637    | MFF1816G23701F  |
| A40R354       | 321-0285-00        |                      |         | RES.,FXD.FILM:9.09K OHM.1%.0.125W    | 91637    | MFF1816G90900F  |

Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. |         | Name & Description                 | Mfr Code | Mfr Part Number |
|---------------|--------------------|------------------|---------|------------------------------------|----------|-----------------|
|               |                    | Eff              | Dscont  |                                    |          |                 |
| A40R356       | 321-0385-00        |                  |         | RES..FXD.FILM:100K OHM.1%.0.125W   | 91637    | MFF1816G10002F  |
| A40R357       | 321-0295-00        |                  |         | RES..FXD.FILM:11.5K OHM.1%.0.125W  | 91637    | MFF1816G11501F  |
| A40R358       | 321-0399-00        |                  |         | RES..FXD.FILM:140K OHM.1%.0.125W   | 91637    | MFF1816G14002F  |
| A40R406       | 307-0106-00        |                  |         | RES..FXD.CMPSN:4.7 OHM.5%.0.25W    | 01121    | CB47G5          |
| A40R408       | 307-0106-00        |                  |         | RES..FXD.CMPSN:4.7 OHM.5%.0.25W    | 01121    | CB47G5          |
| A40R412       | 321-0197-00        |                  |         | RES..FXD.FILM:1.1K OHM.1%.0.125W   | 91637    | MFF1816G11000F  |
| A40R414       | 321-0078-00        |                  |         | RES..FXD.FILM:63.4 OHM.1%.0.125W   | 91637    | MFF1816G63R40F  |
| A40R416       | 323-0167-00        |                  |         | RES..FXD.FILM:536 OHM.1%.0.50W     | 91637    | MFF1226G536R0F  |
| A40R418       | 311-1466-00        |                  |         | RES..VAR.NONWIR:2K OHM.20%.0.50W   | 73138    | 72-39-0         |
| A40R420       | 315-0822-00        |                  |         | RES..FXD.CMPSN:8.2K OHM.5%.0.25W   | 01121    | CB8225          |
| A40R422       | 323-0167-00        |                  |         | RES..FXD.FILM:536 OHM.1%.0.50W     | 91637    | MFF1226G536R0F  |
| A40R424       | 321-0078-00        |                  |         | RES..FXD.FILM:63.4 OHM.1%.0.125W   | 91637    | MFF1816G63R40F  |
| A40R426       | 315-0101-00        |                  |         | RES..FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015          |
| A40R428       | 321-0197-00        |                  |         | RES..FXD.FILM:1.1K OHM.1%.0.125W   | 91637    | MFF1816G11000F  |
| A40R430       | 321-0242-00        |                  |         | RES..FXD.FILM:3.24K OHM.1%.0.125W  | 91637    | MFF1816G32400F  |
| A40R432       | 321-0167-00        |                  |         | RES..FXD.FILM:536 OHM.1%.0.125W    | 91637    | MFF1816G536R0F  |
| A40R434       | 315-0432-00        |                  |         | RES..FXD.CMPSN:4.3K OHM.5%.0.25W   | 01121    | CB4325          |
| A40R436       | 315-0100-00        |                  |         | RES..FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A40R442       | 315-0100-00        |                  |         | RES..FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A40R444       | 315-0100-00        |                  |         | RES..FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A40R446       | 311-1235-00        |                  |         | RES..VAR.NONWIR:100K OHM.20%.0.50W | 32997    | 3386F-T04-104   |
| A40R448       | 311-1235-00        |                  |         | RES..VAR.NONWIR:100K OHM.20%.0.50W | 32997    | 3386F-T04-104   |
| A40R450       | 315-0472-00        |                  |         | RES..FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |
| A40R452       | 321-0398-00        |                  |         | RES..FXD.FILM:137K OHM.1%.0.125W   | 91637    | MFF1816G13702F  |
| A40R454       | 321-0388-00        |                  |         | RES..FXD.FILM:107K OHM.1%.0.125W   | 91637    | MFF1816G10702F  |
| A40R456       | 321-0303-00        |                  |         | RES..FXD.FILM:14K OHM.1%.0.125W    | 91637    | MFF1816G14001F  |
| A40R458       | 315-0102-00        |                  |         | RES..FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A40R502       | 315-0220-00        |                  |         | RES..FXD.CMPSN:22 OHM.5%.0.25W     | 01121    | CB2205          |
| A40R504       | 315-0220-00        |                  |         | RES..FXD.CMPSN:22 OHM.5%.0.25W     | 01121    | CB2205          |
| A40R508       | 315-0100-00        |                  |         | RES..FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A40R510       | 315-0100-00        |                  |         | RES..FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A40R512       | 315-0220-00        |                  |         | RES..FXD.CMPSN:22 OHM.5%.0.25W     | 01121    | CB2205          |
| A40R513       | 315-0392-00        | B100767          |         | RES..FXD.CMPSN:3.9K OHM.5%.0.25W   | 01121    | CB3925          |
| A40R515       | 315-0102-00        | B100767          |         | RES..FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A40R517       | 315-0103-00        | B100767          |         | RES..FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A40R519       | 315-0153-00        | B100767          |         | RES..FXD.CMPSN:15K OHM.5%.0.25W    | 01121    | CB1535          |
| A40R520       | 315-0433-00        | B100767          |         | RES..FXD.CMPSN:43K OHM.5%.0.25W    | 01121    | CB4335          |
| A40R536       | 305-0204-00        |                  |         | RES..FXD.CMPSN:200K OHM.5%.2W      | 01121    | HB2045          |
| A40R602       | 311-1235-00        |                  |         | RES..VAR.NONWIR:100K OHM.20%.0.50W | 32997    | 3386F-T04-104   |
| A40R606       | 321-0486-00        |                  |         | RES..FXD.FILM:1.13M OHM.1%.0.125W  | 91637    | HMF188G11303F   |
| A40R610       | 321-0446-00        |                  |         | RES..FXD.FILM:432K OHM.1%.0.125W   | 91637    | MFF1816G43202F  |
| A40R612       | 315-0471-00        |                  |         | RES..FXD.CMPSN:470 OHM.5%.0.25W    | 01121    | CB4715          |
| A40R614       | 315-0472-00        | B010100          | B039999 | RES..FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |
| A40R616       | 315-0513-00        |                  |         | RES..FXD.CMPSN:51K OHM.5%.0.25W    | 01121    | CB5135          |
| A40R618       | 311-1235-00        |                  |         | RES..VAR.NONWIR:100K OHM.20%.0.50W | 32997    | 3386F-T04-104   |
| A40R620       | 321-0486-00        | B010100          | B039999 | RES..FXD.FILM:1.13M OHM.1%.0.125W  | 91637    | HMF188G11303F   |
| A40R620       | 321-0473-00        | B040000          |         | RES..FXD.FILM:825K OHM.1%.0.125W   | 91637    | MFF1816G82502F  |
| A40R622       | 315-0104-00        |                  |         | RES..FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A40R624       | 315-0153-00        |                  |         | RES..FXD.CMPSN:15K OHM.5%.0.25W    | 01121    | CB1535          |
| A40R626       | 315-0106-00        |                  |         | RES..FXD.CMPSN:10M OHM.5%.0.25W    | 01121    | CB1065          |
| A40R628       | 301-0166-00        |                  |         | RES..FXD.CMPSN:16M OHM.5%.0.50W    | 01121    | EB1665          |
| A40R630       | 315-0102-00        |                  |         | RES..FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A40R632       | 315-0223-00        |                  |         | RES..FXD.CMPSN:22K OHM.5%.0.25W    | 01121    | CB2235          |
| A40R634       | 315-0472-00        |                  |         | RES..FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A40R638       | 323-0181-00        |                      |         | RES.,FXD.FILM:750 OHM.1%.0.50W            | 75042    | CECT0-7500F     |
| A40R704       | 321-0066-00        |                      |         | RES.,FXD.FILM:47.5 OHM.1%.0.125W          | 91637    | MFF1816G47R50F  |
| A40R706       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W            | 01121    | CB1025          |
| A40R708       | 321-0316-00        |                      |         | RES.,FXD.FILM:19.1K OHM.1%.0.125W         | 91637    | MFF1816G19101F  |
| A40R710       | 315-0205-00        |                      |         | RES.,FXD.CMPSN:2M OHM.5%.0.25W            | 01121    | CB2055          |
| A40R712       | 321-0334-00        |                      |         | RES.,FXD.FILM:29.4K OHM.1%.0.125W         | 91637    | MFF1816G29401F  |
| A40R714       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM.5%.0.25W            | 01121    | CB2205          |
| A40R716       | 321-0139-00        |                      |         | RES.,FXD.FILM:274 OHM.1%.0.125W           | 91637    | MFF1816G274R0F  |
| A40R722       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W          | 01121    | CB4725          |
| A40R724       | 315-0751-00        |                      |         | RES.,FXD.CMPSN:750 OHM.5%.0.25W           | 01121    | CB7515          |
| A40R726       | 315-0202-00        |                      |         | RES.,FXD.CMPSN:2K OHM.5%.0.25W            | 01121    | CB2025          |
| A40R728       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM.5%.0.25W            | 01121    | CB2205          |
| A40R730       | 321-0392-00        |                      |         | RES.,FXD.FILM:118K OHM.1%.0.125W          | 91637    | MFF1816G11802F  |
| A40R732       | 315-0121-00        |                      |         | RES.,FXD.CMPSN:120 OHM.5%.0.25W           | 01121    | CB1215          |
| A40R734       | 321-0324-00        |                      |         | RES.,FXD.FILM:23.2K OHM.1%.0.125W         | 91637    | MFF1816G23201F  |
| A40R736       | 321-0264-00        |                      |         | RES.,FXD.FILM:5.49K OHM.1%.0.125W         | 91637    | MFF1816G54900F  |
| A40R738       | 321-0243-00        |                      |         | RES.,FXD.FILM:3.32K OHM.1%.0.125W         | 91637    | MFF1816G33200F  |
| A40R742       | 321-0357-00        |                      |         | RES.,FXD.FILM:51.1K OHM.1%.0.125W         | 91637    | MFF1816G51101F  |
| A40R744       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W          | 01121    | CB1045          |
| A40R802       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W            | 01121    | CB1025          |
| A40R804       | 321-0066-00        |                      |         | RES.,FXD.FILM:47.5 OHM.1%.0.125W          | 91637    | MFF1816G47R50F  |
| A40R806       | 315-0110-00        |                      |         | RES.,FXD.CMPSN:11 OHM.5%.0.25W            | 01121    | CB1105          |
| A40R808       | 321-0210-00        |                      |         | RES.,FXD.FILM:1.5K OHM.1%.0.125W          | 91637    | MFF1816G15000F  |
| A40R812       | 311-1226-00        |                      |         | RES.,VAR.NONWIR:2.5K OHM.20%.0.50W        | 72997    | 3386F-T04-252   |
| A40R818       | 323-0310-00        |                      |         | RES.,FXD.FILM:16.5K OHM.1%.0.50W          | 75042    | CECT0-1652F     |
| A40R824       | 315-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W            | 01121    | CB1005          |
| A40R826       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W          | 01121    | CB1045          |
| A40R830       | 321-0313-00        |                      |         | RES.,FXD.FILM:17.8K OHM.1%.0.125W         | 91637    | MFF1816G17801F  |
| A40R832       | 321-0164-00        |                      |         | RES.,FXD.FILM:499 OHM.1%.0.125W           | 91637    | MFF1816G499R0F  |
| A40R836       | 315-0752-00        |                      |         | RES.,FXD.CMPSN:7.5K OHM.5%.0.25W          | 01121    | CB7525          |
| A40R838       | 322-0643-00        |                      |         | RES.,FXD.FILM:600K OHM.1%.0.25W           | 75042    | CEBT0-6003F     |
| A40R840       | 315-0240-00        |                      |         | RES.,FXD.CMPSN:24 OHM.5%.0.25W            | 01121    | CB2405          |
| A40RT316      | 307-0124-00        |                      |         | RES.,THERMAL:5K OHM.10%                   | 50157    | 1D1618          |
| A40U612       | 156-0223-00        | B010100              | B100766 | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER     | 27014    | LM308H          |
| A40U612       | 156-0512-02        | B100767              |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER,SEL | 04713    | LM308J-8DS      |
| A40VR006      | 152-0282-00        |                      |         | SEMICONV DEVICE:ZENER.0.4W.30V.5%         | 14552    | 1N972B          |
| A40VR304      | 152-0149-00        |                      |         | SEMICONV DEVICE:ZENER.0.4W.10V.5%         | 04713    | SZG35009K3      |
| A40VR632      | 152-0243-00        | B040000              |         | SEMICONV DEVICE:ZENER.0.4W.15V.5%         | 14552    | TD3810983       |
| A40VR718      | 152-0280-00        |                      |         | SEMICONV DEVICE:ZENER.0.4W.6.2V.5%        | 80009    | 152-0280-00     |

| Component No.              | Tektronix Part No. | Serial/Model No. |         | Name & Description                   | Mfr Code | Mfr Part Number |
|----------------------------|--------------------|------------------|---------|--------------------------------------|----------|-----------------|
|                            |                    | Eff              | Dscont  |                                      |          |                 |
| A40A HIGH VOLTAGE SHUTDOWN |                    |                  |         |                                      |          |                 |
| A40A                       | 670-6789-00        | B040000          | B080729 | CKT BOARD ASSY:HIGH VOLTAGE SHUTDOWN | 80009    | 670-6789-00     |
| A40A                       | 670-6789-01        | B080730          | B100766 | CKT BOARD ASSY:HIGH VOLTAGE SHUTDOWN | 80009    | 670-6789-01     |
| A40ACR516                  | 152-0141-02        | B040000          | B100766 | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A40ACR518                  | 152-0141-02        | B040000          | B100766 | SEMICONV DEVICE:SILICON.30V.150MA    | 01295    | 1N4152R         |
| A40AQ515                   | 151-0190-00        | B040000          | B100766 | TRANSISTOR:SILICON.NPN               | 07263    | S032677         |
| A40AQ519                   | 151-0220-00        | B040000          | B100766 | TRANSISTOR:SILICON.PNP               | 07263    | S036228         |
| A40AR513                   | 315-0103-00        | B040000          | B100766 | RES.,FXD.CMPSN:10K OHM.5%.0.25W      | 01121    | CB1035          |
| A40AR515                   | 315-0153-00        | B040000          | B100766 | RES.,FXD.CMPSN:15K OHM.5%.0.25W      | 01121    | CB1535          |
| A40AR517                   | 315-0392-00        | B040000          | B100766 | RES.,FXD.CMPSN:3.9K OHM.5%.0.25W     | 01121    | CB3925          |
| A40AR519                   | 315-0621-00        | B040000          | B080729 | RES.,FXD.CMPSN:620 OHM.5%.0.25W      | 01121    | CB6215          |
| A40AR519                   | 315-0102-00        | B080730          |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W       | 01121    | CB1025          |
| A40AR520                   | 315-0433-00        | B040000          | B100766 | RES.,FXD.CMPSN:43K OHM.5%.0.25W      | 01121    | CB4335          |

# Replaceable Electrical Parts—7912AD Service

| Component No.          | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                  | Mfr Code | Mfr Part Number |
|------------------------|--------------------|-----------------------------|-------------------------------------|----------|-----------------|
| A44 VERTICAL INTERFACE |                    |                             |                                     |          |                 |
| A44                    | 670-1625-06        |                             | CKT BOARD ASSY:VERTICAL INTERFACE   | 80009    | 670-1625-06     |
| A44C4605               | 281-0788-00        |                             | CAP.,FXD.CER DI:470PF,10%,100V      | 96733    | R3015           |
| A44C4610               | 283-0114-00        |                             | CAP.,FXD.CER DI:0.0015UF,5%,200V    | 59660    | 805534Y5DO152L  |
| A44C4611               | 283-0268-00        |                             | CAP.,FXD.CER DI:0.015UF,10%,50V     | 56289    | 1C20X7R153K05C  |
| A44C4613               | 281-0788-00        |                             | CAP.,FXD.CER DI:470PF,10%,100V      | 96733    | R3015           |
| A44C4615               | 281-0615-00        |                             | CAP.,FXD.CER DI:3.9PF,+/-0.5PF,200V | 59660    | 374018C0J0399D  |
| A44C4665               | 281-0788-00        |                             | CAP.,FXD.CER DI:470PF,10%,100V      | 96733    | R3015           |
| A44C4673               | 281-0788-00        |                             | CAP.,FXD.CER DI:470PF,10%,100V      | 96733    | R3015           |
| A44C4677               | 283-0114-00        |                             | CAP.,FXD.CER DI:0.0015UF,5%,200V    | 59660    | 805534Y5DO152J  |
| A44C4678               | 283-0268-00        |                             | CAP.,FXD.CER DI:0.015UF,10%,50V     | 56289    | 1C20X7R153K05C  |
| A44CR4643              | 152-0075-00        |                             | SEMICONV DEVICE:GE.25V,40MA         | 14433    | G866            |
| A44CR4654              | 152-0075-00        |                             | SEMICONV DEVICE:GE.25V,40MA         | 14433    | G866            |
| A44Q4633               | 151-0302-00        |                             | TRANSISTOR:SILICON.NPN              | 07263    | S038487         |
| A44Q4652               | 151-0302-00        |                             | TRANSISTOR:SILICON.NPN              | 07263    | S038487         |
| A44R4602               | 325-0044-00        |                             | RES.,FXD.FILM:100 OHM,0.5%,0.05W    | 03888    | PME50 100 OHM   |
| A44R4603               | 325-0114-00        |                             | RES.,FXD.FILM:105 OHM,0.5%,0.05W    | 14298    | EE 1/20 +/-5%   |
| A44R4605               | 323-0134-00        |                             | RES.,FXD.FILM:243 OHM,1%,0.50W      | 91637    | MFF1226G243R0F  |
| A44R4607               | 321-0126-00        |                             | RES.,FXD.FILM:200 OHM,1%,0.125W     | 91637    | MFF1816G200R0F  |
| A44R4608               | 321-0126-00        |                             | RES.,FXD.FILM:200 OHM,1%,0.125W     | 91637    | MFF1816G200R0F  |
| A44R4610               | 315-0621-00        |                             | RES.,FXD.CMPSN:620 OHM,5%,0.25W     | 01121    | CB6215          |
| A44R4611               | 315-0561-00        |                             | RES.,FXD.CMPSN:560 OHM,5%,0.25W     | 01121    | CB5615          |
| A44R4613               | 323-0134-00        |                             | RES.,FXD.FILM:243 OHM,1%,0.50W      | 91637    | MFF1226G243R0F  |
| A44R4615               | 321-0119-00        |                             | RES.,FXD.FILM:169 OHM,1%,0.125W     | 91637    | MFF1816G169R0F  |
| A44R4616               | 321-0119-00        |                             | RES.,FXD.FILM:169 OHM,1%,0.125W     | 91637    | MFF1816G169R0F  |
| A44R4617               | 321-0048-00        |                             | RES.,FXD.FILM:30.9 OHM,1%,0.125W    | 91637    | MFF1816G30R90F  |
| A44R4618               | 321-0048-00        |                             | RES.,FXD.FILM:30.9 OHM,1%,0.125W    | 91637    | MFF1816G30R90F  |
| A44R4619               | 311-1259-00        |                             | RES.,VAR.NONWIR:100 OHM,10%,0.50W   | 32997    | 3329P-L58-101   |
| A44R4620               | 325-0114-00        |                             | RES.,FXD.FILM:105 OHM,0.5%,0.05W    | 14298    | EE 1/20 +/-5%   |
| A44R4621               | 325-0044-00        |                             | RES.,FXD.FILM:100 OHM,0.5%,0.05W    | 03888    | PME50 100 OHM   |
| A44R4622               | 317-0560-00        |                             | RES.,FXD.CMPSN:56 OHM,5%,0.125W     | 01121    | BB5605          |
| A44R4623               | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM,5%,0.25W      | 01121    | CB1025          |
| A44R4625               | 325-0044-00        |                             | RES.,FXD.FILM:100 OHM,0.5%,0.05W    | 03888    | PME50 100 OHM   |
| A44R4627               | 325-0044-00        |                             | RES.,FXD.FILM:100 OHM,0.5%,0.05W    | 03888    | PME50 100 OHM   |
| A44R4630               | 321-0097-00        |                             | RES.,FXD.FILM:100 OHM,1%,0.125W     | 91637    | MFF1816G100R0F  |
| A44R4632               | 315-0301-00        |                             | RES.,FXD.CMPSN:300 OHM,5%,0.25W     | 01121    | CB3015          |
| A44R4634               | 315-0121-00        |                             | RES.,FXD.CMPSN:120 OHM,5%,0.25W     | 01121    | CB1215          |
| A44R4636               | 315-0132-00        |                             | RES.,FXD.CMPSN:1.3K OHM,5%,0.25W    | 01121    | CB1325          |
| A44R4638               | 315-0121-00        |                             | RES.,FXD.CMPSN:120 OHM,5%,0.25W     | 01121    | CB1215          |
| A44R4640               | 315-0511-00        |                             | RES.,FXD.CMPSN:510 OHM,5%,0.25W     | 01121    | CB5115          |
| A44R4642               | 315-0132-00        |                             | RES.,FXD.CMPSN:1.3K OHM,5%,0.25W    | 01121    | CB1325          |
| A44R4643               | 315-0181-00        |                             | RES.,FXD.CMPSN:180 OHM,5%,0.25W     | 01121    | CB1815          |
| A44R4645               | 315-0121-00        |                             | RES.,FXD.CMPSN:120 OHM,5%,0.25W     | 01121    | CB1215          |
| A44R4647               | 315-0132-00        |                             | RES.,FXD.CMPSN:1.3K OHM,5%,0.25W    | 01121    | CB1325          |
| A44R4649               | 315-0121-00        |                             | RES.,FXD.CMPSN:120 OHM,5%,0.25W     | 01121    | CB1215          |
| A44R4650               | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM,5%,0.25W      | 01121    | CB1025          |
| A44R4652               | 315-0161-00        |                             | RES.,FXD.CMPSN:160 OHM,5%,0.25W     | 01121    | CB1615          |
| A44R4656               | 315-0362-00        |                             | RES.,FXD.CMPSN:3.6K OHM,5%,0.25W    | 01121    | CB3625          |
| A44R4657               | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM,5%,0.25W      | 01121    | CB1025          |



| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A44R4662      | 325-0044-00        |                      |         | RES.,FXD.FILM:100 OHM,0.5%,0.05W          | 03888    | PME50 100 OHM   |
| A44R4663      | 325-0114-00        |                      |         | RES.,FXD.FILM:105 OHM,0.5%,0.05W          | 14298    | EE 1/20 +/-5%   |
| A44R4665      | 323-0134-00        |                      |         | RES.,FXD.FILM:243 OHM,1%,0.50W            | 91637    | MFF1226G243R0F  |
| A44R4667      | 321-0126-00        |                      |         | RES.,FXD.FILM:200 OHM,1%,0.125W           | 91637    | MFF1816G200R0F  |
| A44R4668      | 321-0126-00        |                      |         | RES.,FXD.FILM:200 OHM,1%,0.125W           | 91637    | MFF1816G200R0F  |
| A44R4669      | 317-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM,5%,0.125W          | 01121    | BB1015          |
| A44R4673      | 323-0134-00        |                      |         | RES.,FXD.FILM:243 OHM,1%,0.50W            | 91637    | MFF1226G243R0F  |
| A44R4675      | 321-0126-00        |                      |         | RES.,FXD.FILM:200 OHM,1%,0.125W           | 91637    | MFF1816G200R0F  |
| A44R4676      | 321-0126-00        |                      |         | RES.,FXD.FILM:200 OHM,1%,0.125W           | 91637    | MFF1816G200R0F  |
| A44R4677      | 315-0621-00        |                      |         | RES.,FXD.CMPSN:620 OHM,5%,0.25W           | 01121    | CB6215          |
| A44R4678      | 315-0561-00        |                      |         | RES.,FXD.CMPSN:560 OHM,5%,0.25W           | 01121    | CB5615          |
| A44R4680      | 325-0114-00        |                      |         | RES.,FXD.FILM:105 OHM,0.5%,0.05W          | 14298    | EE 1/20 +/-5%   |
| A44R4681      | 325-0044-00        |                      |         | RES.,FXD.FILM:100 OHM,0.5%,0.05W          | 03888    | PME50 100 OHM   |
| A44R4683      | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%,0.25W            | 01121    | CB1025          |
| A44R4685      | 325-0044-00        |                      |         | RES.,FXD.FILM:100 OHM,0.5%,0.05W          | 03888    | PME50 100 OHM   |
| A44R4687      | 325-0044-00        |                      |         | RES.,FXD.FILM:100 OHM,0.5%,0.05W          | 03888    | PME50 100 OHM   |
| A44R4689      | -----              |                      |         | SELECTED                                  |          |                 |
| A44U4625      | 155-0095-01        | B010100              | B010189 | MICROCIRCUIT,LI:HF DIFFERENTIAL AMPLIFIER | 80009    | 155-0095-01     |
| A44U4625      | 155-0095-03        | B010190              |         | MICROCIRCUIT,LI:HF DIFF AMPLIFIER,TESTED  | 80009    | 155-0095-03     |
| A44U4641      | 156-0048-00        |                      |         | MICROCIRCUIT,LI:FIVE NPN TRANSISTOR ARRAY | 02735    | CA3046          |
| A44U4685      | -----              |                      |         | (PART OF A44U4625)                        |          |                 |

**Replaceable Electrical Parts—7912AD Service**

| Component No.         | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                    | Mfr Code | Mfr Part Number  |
|-----------------------|--------------------|----------------------|---------|---------------------------------------|----------|------------------|
| A46 PLUG-IN INTERFACE |                    |                      |         |                                       |          |                  |
| A46                   | -----              |                      |         | CKT BOARD ASSY:PLUG-IN INTERFACE      |          |                  |
| A46                   | -----              |                      |         | (NOT REPLACEABLE ORDER 672-0688-01 OR |          |                  |
| A46                   | -----              |                      |         | 672-0734-00 FOR OPTION 04)            |          |                  |
| A46C018               | 283-0115-00        | B100837              |         | CAP.,FXD,CER DI:47PF.5%.200V          | 59660    | 805-519-C0G0470J |
| A46C032               | 281-0547-00        | B100837              |         | CAP.,FXD,CER DI:2.7PF.10%.500V        | 04222    | 7001--COJ-2R7C   |
| A46C034               | 281-0503-00        | B100837              |         | CAP.,FXD,CER DI:8PF. +/-0.5PF.500V    | 59660    | 0301-080-COHO-80 |
| A46C038               | 283-0115-00        | B010100              | B100836 | CAP.,FXD,CER DI:47PF.5%.200V          | 59660    | 805-519-C0G0470J |
| A46C102               | 290-0782-00        | B100837              |         | CAP.,FXD,ELCTLT:4.7UF. +75-10%.35V    | 55680    | ULA1V4R7TEA      |
| A46C112               | 281-0523-00        | B100837              |         | CAP.,FXD,CER DI:100PF. +/-20PF.500V   | 72982    | 301-000U2M0101M  |
| A46C116               | 283-0000-00        | B100837              |         | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C118               | 283-0024-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C120               | 283-0024-00        | B100837              |         | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C122               | 283-0024-00        | B100837              |         | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C126               | 283-0024-00        | B100837              |         | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C132               | 283-0000-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C133               | 283-0024-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C134               | 290-0782-00        | B010100              | B100836 | CAP.,FXD,ELCTLT:4.7UF. +75-10%.35V    | 55680    | ULA1V4R7TEA      |
| A46C134               | 283-0000-00        | B100837              |         | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C136               | 281-0523-00        | B010100              | B100836 | CAP.,FXD,CER DI:100PF. +/-20PF.500V   | 72982    | 301-000U2M0101M  |
| A46C136               | 283-0003-00        | B100837              |         | CAP.,FXD,CER DI:0.01UF. +80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C138               | 283-0000-00        | B100837              |         | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C138               | 283-0000-00        | B100837              |         | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C142               | 283-0024-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C142               | 283-0003-00        | B100837              |         | CAP.,FXD,CER DI:0.01UF. +80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C212               | 283-0003-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.01UF. +80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C214               | 283-0024-00        | B100837              |         | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C216               | 283-0000-00        | B100837              |         | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C222               | 283-0000-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C224               | 283-0024-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C226               | 283-0024-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C232               | 283-0000-00        | B100837              |         | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C234               | 281-0547-00        | B010100              | B100836 | CAP.,FXD,CER DI:2.7PF.10%.500V        | 04222    | 7001--COJ-2R7C   |
| A46C234               | 281-0603-00        | B100837              |         | CAP.,FXD,CER DI:39PF.5%.500V          | 59660    | 0301080C0G0390   |
| A46C236               | 281-0503-00        | B010100              | B100836 | CAP.,FXD,CER DI:8PF. +/-0.5PF.500V    | 59660    | 0301-080-COHO-80 |
| A46C236               | 281-0547-00        | B100837              |         | CAP.,FXD,CER DI:2.7PF.10%.500V        | 04222    | 7001--COJ-2R7C   |
| A46C238               | 281-0503-00        | B100837              |         | CAP.,FXD,CER DI:8PF. +/-0.5PF.500V    | 59660    | 0301-080-COHO-80 |
| A46C239               | 283-0003-00        | B100837              |         | CAP.,FXD,CER DI:0.01UF. +80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C242               | 283-0670-00        | B100837              |         | CAP.,FXD,MICA D:375PF.1%.500V         | 00853    | D155F3750F0      |
| A46C244               | 283-0000-00        | B010100              | B100836 | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C244               | 283-0024-00        | B100837              |         | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C246               | 283-0024-00        | B100837              |         | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C248               | 290-0529-00        | B100837              |         | CAP.,FXD,ELCTLT:4.7UF.20%.20V         | 05397    | T362C476M020AS   |
| A46C310               | 283-0203-00        | B100837              |         | CAP.,FXD,CER DI:0.47UF.20%.50V        | 72982    | 8131M058Z5U0474M |
| A46C312               | 281-0603-00        | B010100              | B100836 | CAP.,FXD,CER DI:39PF.5%.500V          | 59660    | 0301080C0G0390   |
| A46C312               | 283-0000-00        | B100837              |         | CAP.,FXD,CER DI:0.001UF. +100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C314               | 281-0505-00        | B100837              |         | CAP.,FXD,CER DI:12PF. +/-1.2PF.500V   | 59660    | 301-012C0G0120K  |
| A46C316               | 283-0670-00        | B010100              | B100836 | CAP.,FXD,MICA D:375PF.1%.500V         | 00853    | D155F3750F0      |
| A46C316               | 290-0778-00        | B100837              |         | CAP.,FXD,ELCTLT:1UF. +50-10%.50V      | 54473    | ECE-A50N1        |
| A46C318               | 281-0505-00        | B100837              |         | CAP.,FXD,CER DI:12PF. +/-1.2PF.500V   | 59660    | 301-012C0G0120K  |
| A46C322               | 283-0024-00        | B100837              |         | CAP.,FXD,CER DI:0.1UF. +80-20%.50V    | 72982    | 8121N083Z5U0104Z |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Discont | Name & Description                   | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|--------------------------------------|----------|------------------|
| A46C324       | 281-0547-00        | B010100              | B100836 | CAP.,FXD.CER DI:2.7PF,10%.500V       | 04222    | 7001--COJ-2R7C   |
| A46C326       | 281-0503-00        | B010100              | B100836 | CAP.,FXD.CER DI:8PF,+/-0.5PF.500V    | 59660    | 0301-080-COHO-80 |
| A46C336       | 283-0000-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.001UF,+100-0%.500V | 59660    | 831610Y5U0102P   |
| A46C336       | 283-0110-00        | B100837              |         | CAP.,FXD.CER DI:0.005UF,+80-20%.150V | 59660    | 855-547-E-502Z   |
| A46C337       | 283-0203-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.47UF,20%.50V       | 72982    | 8131M058Z5U0474M |
| A46C338       | 283-0024-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.1UF,+80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C339       | 283-0003-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.01UF,+80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C344       | 290-0529-00        | B100837              |         | CAP.,FXD.ELCTLT:47UF,20%.20V         | 05397    | T362C476M020AS   |
| A46C346       | 290-0770-00        | B100837              |         | CAP.,FXD.ELCTLT:100UF,+50-10%.25V    | 56289    | 502D230          |
| A46C402       | 283-0003-00        | B100837              |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C410       | 283-0003-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.01UF,+80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C412       | 283-0219-00        | B010100              | B100836 | CAP.,FXD.CER DI:1500PF,20%.50V       | 93958    | 5145-1           |
| A46C418       | 283-0219-00        | B010100              | B100836 | CAP.,FXD.CER DI:1500PF,20%.50V       | 93958    | 5145-1           |
| A46C422       | 283-0176-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.0022UF,20%.50V     | 56289    | 272C5            |
| A46C428       | 283-0176-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.0022UF,20%.50V     | 56289    | 272C5            |
| A46C432       | 283-0176-00        | B100837              |         | CAP.,FXD.CER DI:0.0022UF,20%.50V     | 56289    | 272C5            |
| A46C436       | 283-0176-00        | B100837              |         | CAP.,FXD.CER DI:0.0022UF,20%.50V     | 56289    | 272C5            |
| A46C438       | 283-0110-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.005UF,+80-20%.150V | 59660    | 855-547-E-502Z   |
| A46C442       | 283-0110-00        | B100837              |         | CAP.,FXD.CER DI:0.005UF,+80-20%.150V | 59660    | 855-547-E-502Z   |
| A46C504       | 283-0028-00        | B100837              |         | CAP.,FXD.CER DI:0.0022UF,20%.50V     | 59660    | 0805585Y5SO222M  |
| A46C506       | 283-0028-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.0022UF,20%.50V     | 59660    | 0805585Y5SO222M  |
| A46C508       | 283-0003-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.01UF,+80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C514       | 281-0505-00        | B010100              | B100836 | CAP.,FXD.CER DI:12PF,+/-1.2PF,500V   | 59660    | 301-012C0G0120K  |
| A46C516       | 290-0778-00        | B010100              | B100836 | CAP.,FXD.ELCTLT:1UF,+50-10%.50V      | 54473    | ECE-A50N1        |
| A46C818       | 281-0505-00        | B010100              | B100836 | CAP.,FXD.CER DI:12PF,+/-1.2PF,500V   | 59660    | 301-012C0G0120K  |
| A46C522       | 283-0110-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.005UF,+80-20%.150V | 59660    | 855-547-E-502Z   |
| A46C524       | 283-0003-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.01UF,+80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C528       | 283-0219-00        | B100837              |         | CAP.,FXD.CER DI:1500PF,20%.50V       | 93958    | 5145-1           |
| A46C532       | 283-0110-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.005UF,+80-20%.150V | 59660    | 855-547-E-502Z   |
| A46C536       | 290-0536-00        | B010100              | B100836 | CAP.,FXD.ELCTLT:10UF,20%.25V         | 90201    | TDC106M025FL     |
| A46C540       | 283-0219-00        | B100837              |         | CAP.,FXD.CER DI:1500PF,20%.50V       | 93958    | 5145-1           |
| A46C542       | 283-0024-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.1UF,+80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C542       | 283-0110-00        | B100837              |         | CAP.,FXD.CER DI:0.005UF,+80-20%.150V | 59660    | 855-547-E-502Z   |
| A46C628       | 283-0051-00        | B100837              |         | CAP.,FXD.CER DI:0.0033UF,5%.100V     | 56289    | 1C20C0G332J100B  |
| A46C642       | 283-0003-00        | B100837              |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C644       | 290-0536-00        | B100837              |         | CAP.,FXD.ELCTLT:10UF,20%.25V         | 90201    | TDC106M025FL     |
| A46C646       | 283-0003-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.01UF,+80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C708       | 283-0003-00        | B100837              |         | CAP.,FXD.CER DI:0.01UF,+80-20%.150V  | 59821    | 2DDH66J103Z      |
| A46C714       | 281-0605-00        | B100837              |         | CAP.,FXD.CER DI:200PF,10%.500V       | 04222    | 7001-1375        |
| A46C725       | 283-0051-00        | B030515              | B100836 | CAP.,FXD.CER DI:0.0033UF,5%.100V     | 56289    | 1C20C0G332J100B  |
| A46C728       | 281-0651-00        | B010100              | B030514 | CAP.,FXD.CER DI:47PF,5%.200V         | 59660    | 0374018T2H0 470J |
| A46C728       | 281-0605-00        | B030515              | B100836 | CAP.,FXD.CER DI:200PF,10%.500V       | 04222    | 7001-1375        |
| A46C800       | 281-0773-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.01UF,10%.100V      | 04222    | SA201C103KAA     |
| A46C814       | 281-0605-00        | B100837              |         | CAP.,FXD.CER DI:200PF,10%.500V       | 04222    | 7001-1375        |
| A46C822       | 281-0651-00        | B010100              | B030514 | CAP.,FXD.CER DI:47PF,5%.200V         | 59660    | 0374018T2H0 470J |
| A46C822       | 281-0605-00        | B030515              | B100836 | CAP.,FXD.CER DI:200PF,10%.500V       | 04222    | 7001-1375        |
| A46C826       | 290-0529-00        | B010100              | B100836 | CAP.,FXD.ELCTLT:47UF,20%.20V         | 05397    | T362C476M020AS   |
| A46C828       | 290-0716-00        | B010100              | B100836 | CAP.,FXD.ELCTLT:8.2UF,20%.75V        | 05397    | T11C825M075AS    |
| A46C848       | 290-0716-00        | B100837              |         | CAP.,FXD.ELCTLT:8.2UF,20%.75V        | 05397    | T11C825M075AS    |
| A46C902       | 281-0773-00        | B100837              |         | CAP.,FXD.CER DI:0.01UF,10%.100V      | 04222    | SA201C103KAA     |
| A46C916       | 283-0024-00        | B010100              | B100836 | CAP.,FXD.CER DI:0.1UF,+80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C918       | 290-0770-00        | B010100              | B100836 | CAP.,FXD.ELCTLT:100UF,+50-10%.25V    | 56289    | 502D230          |
| A46C929       | 283-0024-00        | B100837              |         | CAP.,FXD.CER DI:0.1UF,+80-20%.50V    | 72982    | 8121N083Z5U0104Z |
| A46C938       | 290-0529-00        | B010100              | B100836 | CAP.,FXD.ELCTLT:47UF,20%.20V         | 05397    | T362C476M020AS   |
| A46C946       | 290-0716-00        | B010100              | B100836 | CAP.,FXD.ELCTLT:8.2UF,20%.75V        | 05397    | T11C825M075AS    |
| A46C948       | 290-0716-00        | B100837              |         | CAP.,FXD.ELCTLT:8.2UF,20%.75V        | 05397    | T11C825M075AS    |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                 | Mfr Code | Mfr Part Numbe |
|---------------|--------------------|----------------------|---------|------------------------------------|----------|----------------|
| A46CR022      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR024      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR042      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR112      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR114      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR116      | 152-0075-00        | B100837              |         | SEMICON D DEVICE:GE.25V.40MA       | 14433    | G866           |
| A46CR126      | 152-0075-00        | B010100              | B100836 | SEMICON D DEVICE:GE.25V.40MA       | 14433    | G866           |
| A46CR128      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR136      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR138      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR222      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR226      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR322      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR324      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR446      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR502      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR508      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR512      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR514      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR542      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR544      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR546      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR548      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR602      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR614      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR616      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR632      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR702      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR704      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR706      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR708      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR712      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR714      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR716      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR718      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR720      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR721      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR722      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR723      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR724      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR725      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR726      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR727      | 152-0141-02        | B100837              |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR728      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR729      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR744      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR802      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR804      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR806      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR808      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR809      | 152-0141-02        | B010100              | B100836 | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR814      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR816      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |
| A46CR818      | 152-0141-02        |                      |         | SEMICON D DEVICE:SILICON.30V.150MA | 01295    | 1N4152R        |

| Component No. | Tektronix Part No. | Serial/Model No. |         | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|------------------|---------|-----------------------------------|----------|-----------------|
|               |                    | Eff              | Dscont  |                                   |          |                 |
| A46CR819      | 152-0141-02        | B010100          | B100836 | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR820      | 152-0141-02        | B100837          |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR821      | 152-0141-02        | B100837          |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR822      | 152-0141-02        |                  |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR823      | 152-0141-02        | B100837          |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR824      | 152-0141-02        |                  |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR825      | 152-0141-02        | B100837          |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR826      | 152-0141-02        |                  |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR827      | 152-0141-02        |                  |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR828      | 152-0141-02        | B010100          | B100836 | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR829      | 152-0141-02        | B010100          | B100836 | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR832      | 152-0141-02        | B010100          | B100836 | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR834      | 152-0141-02        | B010100          | B100836 | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR848      | 290-0716-00        | B100837          |         | CAP.,FXD.ELCTLT:8.2UF.20%.75V     | 05397    | T11C825M075AS   |
| A46CR906      | 152-0141-02        | B010100          | B100836 | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR908      | 152-0141-02        | B010100          | B100836 | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR934      | 152-0141-02        | B100837          |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR936      | 152-0141-02        |                  |         | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46CR938      | 152-0141-02        | B010100          | B100836 | SEMICONV DEVICE:SILICON.30V.150MA | 01295    | 1N4152R         |
| A46E018       | 276-0507-00        | B100837          |         | SHIELDING BEAD.:FERRITE           | 78488    | 57-3443         |
| A46E036       | 276-0507-00        | B010100          | B100836 | SHIELDING BEAD.:FERRITE           | 78488    | 57-3443         |
| A46L136       | 108-0245-00        | B100837          |         | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L142       | 108-0245-00        | B100837          |         | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L216       | 108-0245-00        | B100837          |         | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L222       | 108-0245-00        | B010100          | B100836 | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L226       | 108-0245-00        | B010100          | B100836 | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L242       | 108-0245-00        | B100837          |         | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L246       | 108-0245-00        | B100837          |         | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L248       | 108-0245-00        | B100837          |         | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L314       | 108-0245-00        | B010100          | B100836 | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L339       | 108-0245-00        | B010100          | B100836 | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L448       | 108-0245-00        | B010100          | B100836 | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46L526       | 108-0245-00        | B010100          | B100836 | COIL,RF:3.9UH                     | 76493    | B6310-1         |
| A46LR220      | 108-0329-00        | B100837          |         | COIL,RF:2.5UH                     | 80009    | 108-0329-00     |
| A46LR226      | 108-0329-00        | B010100          | B100836 | COIL,RF:2.5UH                     | 80009    | 108-0329-00     |
| A46LR339      | 108-0729-00        | B010100          | B100836 | COIL,RF:195NH                     | 80009    | 108-0729-00     |
| A46LR402      | 108-0325-00        | B100837          |         | COIL,RF:0.5UH                     | 80009    | 108-0325-00     |
| A46LR410      | 108-0325-00        | B010100          | B100836 | COIL,RF:0.5UH                     | 80009    | 108-0325-00     |
| A46LR426      | 108-0729-00        | B100837          |         | COIL,RF:195NH                     | 80009    | 108-0729-00     |
| A46LR428      | 108-0325-00        | B010100          | B100836 | COIL,RF:0.5UH                     | 80009    | 108-0325-00     |
| A46LR436      | 108-0325-00        | B100837          |         | COIL,RF:0.5UH                     | 80009    | 108-0325-00     |
| A46LR442      | 108-0325-00        | B100837          |         | COIL,RF:0.5UH                     | 80009    | 108-0325-00     |
| A46LR524      | 108-0325-00        | B010100          | B100836 | COIL,RF:0.5UH                     | 80009    | 108-0325-00     |
| A46LR534      | 108-0325-00        | B010100          | B100836 | COIL,RF:0.5UH                     | 80009    | 108-0325-00     |
| A46LR542      | 108-0325-00        | B100837          |         | COIL,RF:0.5UH                     | 80009    | 108-0325-00     |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                     | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A46Q012       | 151-0127-00        | B100837              |         | TRANSISTOR:SILICON.NPN                 | 07263    | S006075         |
| A46Q014       | 151-0127-00        | B100837              |         | TRANSISTOR:SILICON.NPN                 | 07263    | S006075         |
| A46Q018       | 151-0271-00        | B100837              |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS8236         |
| A46Q026       | 151-0199-00        | B100837              |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6866K        |
| A46Q032       | 151-0223-00        | B100837              |         | TRANSISTOR:SILICON.NPN                 | 04713    | SPS8026         |
| A46Q036       | 151-0271-00        | B010100              | B100836 | TRANSISTOR:SILICON.PNP                 | 04713    | SPS8236         |
| A46Q122       | 151-0199-00        | B010100              | B100836 | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6866K        |
| A46Q136       | 151-0127-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN                 | 07263    | S006075         |
| A46Q138       | 151-0127-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN                 | 07263    | S006075         |
| A46Q222       | 151-0199-00        | B100837              |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6866K        |
| A46Q226       | 151-0199-00        | B100837              |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6866K        |
| A46Q228       | 151-0199-00        | B010100              | B100836 | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6866K        |
| A46Q232       | 151-0223-00        | B100837              |         | TRANSISTOR:SILICON.NPN                 | 04713    | SPS8026         |
| A46Q236       | 151-0199-00        | B010100              | B100836 | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6866K        |
| A46Q238       | 151-0223-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN                 | 04713    | SPS8026         |
| A46Q326       | 151-0223-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN                 | 04713    | SPS8026         |
| A46Q409       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q422       | 151-0362-00        | B010100              | B100836 | TRANSISTOR:SILICON.PNP.SEL FROM 2N4258 | 80009    | 151-0362-00     |
| A46Q428       | 151-0362-00        | B010100              | B100836 | TRANSISTOR:SILICON.PNP.SEL FROM 2N4258 | 80009    | 151-0362-00     |
| A46Q502       | 151-0188-00        | B010100              | B100836 | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6868K        |
| A46Q502       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q504       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q504       | 151-0188-00        | B100837              |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6868K        |
| A46Q506       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q532       | 151-0362-00        | B100837              |         | TRANSISTOR:SILICON.PNP.SEL FROM 2N4258 | 80009    | 151-0362-00     |
| A46Q538       | 151-0223-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN                 | 04713    | SPS8026         |
| A46Q538       | 151-0362-00        | B100837              |         | TRANSISTOR:SILICON.PNP.SEL FROM 2N4258 | 80009    | 151-0362-00     |
| A46Q546       | 151-0223-00        | B100837              |         | TRANSISTOR:SILICON.NPN                 | 04713    | SPS8026         |
| A46Q600       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q602       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q602       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q604       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q604       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q605       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q606       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q606       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q608       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q700       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q702       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q702       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q704       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q706       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q708       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q714       | 151-0190-00        | B100837              |         | TRANSISTOR:SILICON.NPN                 | 07263    | S032677         |
| A46Q738       | 151-0190-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN                 | 07263    | S032677         |
| A46Q802       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q804       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q806       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q806       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q807       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q808       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q808       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q808       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 07263    | S032677         |
| A46Q814       | 151-0190-00        | B100837              |         | TRANSISTOR:SILICON.NPN                 | 07263    | S032677         |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                     | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A46Q836       | 151-0190-00        | B010100              | B100836 | TRANSISTOR:SILICON,NPN                 | 07263    | S032677         |
| A46Q901       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q902       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q902       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q903       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q904       | 151-0192-00        |                      |         | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q905       | 151-0192-00        | B010100              | B100836 | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q906       | 151-0134-00        | B010100              | B100836 | TRANSISTOR:SILICON,PNP                 | 80009    | 151-0134-00     |
| A46Q906       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A46Q908       | 151-0192-00        | B100837              |         | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A46R010       | 315-0102-00        | B100837              |         | RES.,FXD,CMPSN:1K OHM,5%,0.25W         | 01121    | CB1025          |
| A46R012       | 315-0101-00        | B100837              |         | RES.,FXD,CMPSN:100 OHM,5%,0.25W        | 01121    | CB1015          |
| A46R014       | 321-0140-00        | B100837              |         | RES.,FXD,FILM:280 OHM,1%,0.125W        | 91637    | MFF1816G280R0F  |
| A46R016       | 315-0470-00        | B100837              |         | RES.,FXD,CMPSN:47 OHM,5%,0.25W         | 01121    | CB4705          |
| A46R018       | 321-0226-00        | B100837              |         | RES.,FXD,FILM:2.21K OHM,1%,0.125W      | 91637    | MFF1816G22100F  |
| A46R020       | 321-0177-00        | B100837              |         | RES.,FXD,FILM:681 OHM,1%,0.125W        | 91637    | MFF1816G681R0F  |
| A46R022       | 315-0122-00        | B100837              |         | RES.,FXD,CMPSN:1.2K OHM,5%,0.25W       | 01121    | CB1225          |
| A46R024       | 315-0123-00        | B100837              |         | RES.,FXD,CMPSN:12K OHM,5%,0.25W        | 01121    | CB1235          |
| A46R026       | 315-0821-00        | B100837              |         | RES.,FXD,CMPSN:820 OHM,5%,0.25W        | 01121    | CB8215          |
| A46R027       | 315-0104-00        | B010100              | B100836 | RES.,FXD,CMPSN:100K OHM,5%,0.25W       | 01121    | CB1045          |
| A46R028       | 315-0104-00        | B010100              | B100836 | RES.,FXD,CMPSN:100K OHM,5%,0.25W       | 01121    | CB1045          |
| A46R032       | 315-0681-00        | B100837              |         | RES.,FXD,CMPSN:680 OHM,5%,0.25W        | 01121    | CB6815          |
| A46R034       | 321-0191-00        | B010100              | B100836 | RES.,FXD,FILM:953 OHM,1%,0.125W        | 91637    | MFF1816G953R0F  |
| A46R034       | 315-0472-00        | B100837              |         | RES.,FXD,CMPSN:4.7K OHM,5%,0.25W       | 01121    | CB4725          |
| A46R036       | 315-0470-00        | B010100              | B100836 | RES.,FXD,CMPSN:47 OHM,5%,0.25W         | 01121    | CB4705          |
| A46R038       | 321-0226-00        | B010100              | B100836 | RES.,FXD,FILM:2.21K OHM,1%,0.125W      | 91637    | MFF1816G22100F  |
| A46R042       | 321-0177-00        | B010100              | B100836 | RES.,FXD,FILM:681 OHM,1%,0.125W        | 91637    | MFF1816G681R0F  |
| A46R100       | 315-0151-00        | B100837              |         | RES.,FXD,CMPSN:150 OHM,5%,0.25W        | 01121    | CB1515          |
| A46R102       | 315-0301-00        | B100837              |         | RES.,FXD,CMPSN:300 OHM,5%,0.25W        | 01121    | CB3015          |
| A46R104       | 321-0335-00        | B100837              |         | RES.,FXD,FILM:30.1K OHM,1%,0.125W      | 91637    | CMF55116G30101F |
| A46R106       | 315-0153-00        | B100837              |         | RES.,FXD,CMPSN:15K OHM,5%,0.25W        | 01121    | CB1535          |
| A46R108       | 315-0153-00        | B100837              |         | RES.,FXD,CMPSN:15K OHM,5%,0.25W        | 01121    | CB1535          |
| A46R110       | 315-0101-00        | B100837              |         | RES.,FXD,CMPSN:100 OHM,5%,0.25W        | 01121    | CB1015          |
| A46R111       | 315-0153-00        | B010100              | B100836 | RES.,FXD,CMPSN:15K OHM,5%,0.25W        | 01121    | CB1535          |
| A46R111       | 315-0104-00        | B100837              |         | RES.,FXD,CMPSN:100K OHM,5%,0.25W       | 01121    | CB1045          |
| A46R112       | 315-0622-00        | B010100              | B100836 | RES.,FXD,CMPSN:6.2K OHM,5%,0.25W       | 01121    | CB6225          |
| A46R112       | 315-0104-00        | B100837              |         | RES.,FXD,CMPSN:100K OHM,5%,0.25W       | 01121    | CB1045          |
| A46R114       | 315-0153-00        | B010100              | B100836 | RES.,FXD,CMPSN:15K OHM,5%,0.25W        | 01121    | CB1535          |
| A46R114       | 321-0191-00        | B100837              |         | RES.,FXD,FILM:953 OHM,1%,0.125W        | 91637    | MFF1816G953R0F  |
| A46R115       | 315-0622-00        | B100837              |         | RES.,FXD,CMPSN:6.2K OHM,5%,0.25W       | 01121    | CB6225          |
| A46R116       | 315-0622-00        | B010100              | B100836 | RES.,FXD,CMPSN:6.2K OHM,5%,0.25W       | 01121    | CB6225          |
| A46R116       | 321-0210-00        | B100837              |         | RES.,FXD,FILM:1.5K OHM,1%,0.125W       | 91637    | MFF1816G15000F  |
| A46R117       | 321-0224-00        | B100837              |         | RES.,FXD,FILM:2.1K OHM,1%,0.125W       | 91637    | MFF1816G21000F  |
| A46R118       | 315-0103-00        | B010100              | B100836 | RES.,FXD,CMPSN:10K OHM,5%,0.25W        | 01121    | CB1035          |
| A46R118       | 321-0226-00        | B100837              |         | RES.,FXD,FILM:2.21K OHM,1%,0.125W      | 91637    | MFF1816G22100F  |
| A46R119       | 315-0820-00        | B100837              |         | RES.,FXD,CMPSN:82 OHM,5%,0.25W         | 01121    | CB8205          |
| A46R120       | 315-0100-00        | B100837              |         | RES.,FXD,CMPSN:10 OHM,5%,0.25W         | 01121    | CB1005          |
| A46R122       | 321-0210-00        | B010100              | B100836 | RES.,FXD,FILM:1.5K OHM,1%,0.125W       | 91637    | MFF1816G15000F  |
| A46R122       | 315-0100-00        | B100837              |         | RES.,FXD,CMPSN:10 OHM,5%,0.25W         | 01121    | CB1005          |
| A46R124       | 315-0472-00        | B010100              | B100836 | RES.,FXD,CMPSN:4.7K OHM,5%,0.25W       | 01121    | CB4725          |
| A46R124       | 315-0332-00        | B100837              |         | RES.,FXD,CMPSN:3.3K OHM,5%,0.25W       | 01121    | CB3325          |
| A46R126       | 315-0183-00        | B010100              | B100836 | RES.,FXD,CMPSN:18K OHM,5%,0.25W        | 01121    | CB1835          |
| A46R126       | 315-0332-00        | B100837              |         | RES.,FXD,CMPSN:3.3K OHM,5%,0.25W       | 01121    | CB3325          |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-----------------------------------|----------|-----------------|
| A46R128       | 321-0224-00        | B010100              | B100836 | RES.,FXD.FILM:2.1K OHM.1%.0.125W  | 91637    | MFF1816G21000F  |
| A46R128       | 315-0391-00        | B100837              |         | RES.,FXD.CMPSN:390 OHM.5%.0.25W   | 01121    | CB3915          |
| A46R130       | 315-0820-00        | B010100              | B100836 | RES.,FXD.CMPSN:82 OHM.5%.0.25W    | 01121    | CB8205          |
| A46R130       | 315-0102-00        | B100837              |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A46R131       | 321-0140-00        | B010100              | B100836 | RES.,FXD.FILM:280 OHM.1%.0.125W   | 91637    | MFF1816G280R0F  |
| A46R132       | 315-0151-00        | B010100              | B100836 | RES.,FXD.CMPSN:150 OHM.5%.0.25W   | 01121    | CB1515          |
| A46R132       | 315-0222-00        | B100837              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W  | 01121    | CB2225          |
| A46R133       | 315-0301-00        | B010100              | B100836 | RES.,FXD.CMPSN:300 OHM.5%.0.25W   | 01121    | CB3015          |
| A46R134       | 315-0101-00        | B010100              | B100836 | RES.,FXD.CMPSN:100 OHM.5%.0.25W   | 01121    | CB1015          |
| A46R134       | 315-0221-00        | B100837              |         | RES.,FXD.CMPSN:220 OHM.5%.0.25W   | 01121    | CB2215          |
| A46R135       | 321-0328-00        | B010100              | B100836 | RES.,FXD.FILM:25.5K OHM.1%.0.125W | 91637    | MFF1816G25501F  |
| A46R136       | 321-0226-00        | B010100              | B100836 | RES.,FXD.FILM:2.21K OHM.1%.0.125W | 91637    | MFF1816G22100F  |
| A46R136       | 321-0306-00        | B100837              |         | RES.,FXD.FILM:15K OHM.1%.0.125W   | 91637    | MFF1816G15001F  |
| A46R137       | 311-1237-00        | B010100              | B100836 | RES.,VAR.NONWIR:1K OHM.10%.0.50W  | 32997    | 3386X-T07-102   |
| A46R138       | 321-0222-00        | B010100              | B100836 | RES.,FXD.FILM:2K OHM.1%.0.125W    | 91637    | MFF1816G20000F  |
| A46R138       | 321-0193-00        | B100837              |         | RES.,FXD.FILM:1K OHM.1%.0.125W    | 91637    | MFF1816G10000F  |
| A46R139       | 315-0151-00        | B010100              | B100836 | RES.,FXD.CMPSN:150 OHM.5%.0.25W   | 01121    | CB1515          |
| A46R142       | 321-0162-00        | B010100              | B100836 | RES.,FXD.FILM:475 OHM.1%.0.125W   | 91637    | MFF1816G475R0F  |
| A46R142       | 315-0223-00        | B100837              |         | RES.,FXD.CMPSN:22K OHM.5%.0.25W   | 01121    | CB2235          |
| A46R204       | 321-0162-00        | B100837              |         | RES.,FXD.FILM:475 OHM.1%.0.125W   | 91637    | MFF1816G475R0F  |
| A46R206       | 321-0222-00        | B100837              |         | RES.,FXD.FILM:2K OHM.1%.0.125W    | 91637    | MFF1816G20000F  |
| A46R208       | 311-1237-00        | B100837              |         | RES.,VAR.NONWIR:1K OHM.10%.0.50W  | 32997    | 3386X-T07-102   |
| A46R211       | 315-0512-00        | B010100              | B100836 | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W  | 01121    | CB5125          |
| A46R212       | 321-0306-00        | B010100              | B100836 | RES.,FXD.FILM:15K OHM.1%.0.125W   | 91637    | MFF1816G15001F  |
| A46R212       | 321-0222-00        | B100837              |         | RES.,FXD.FILM:2K OHM.1%.0.125W    | 91637    | MFF1816G20000F  |
| A46R214       | 315-0622-00        | B100837              |         | RES.,FXD.CMPSN:6.2K OHM.5%.0.25W  | 01121    | CB6225          |
| A46R216       | 315-0223-00        | B010100              | B100836 | RES.,FXD.CMPSN:22K OHM.5%.0.25W   | 01121    | CB2235          |
| A46R216       | 321-0205-00        | B100837              |         | RES.,FXD.FILM:1.33K OHM.1%.0.125W | 91637    | MFF1816G13300F  |
| A46R218       | 321-0328-00        | B100837              |         | RES.,FXD.FILM:25.5K OHM.1%.0.125W | 91637    | MFF1816G25501F  |
| A46R219       | 321-0128-00        | B010100              | B100836 | RES.,FXD.FILM:210 OHM.1%.0.125W   | 91637    | MFF1816G210R0F  |
| A46R220       | 321-0205-00        | B010100              | B100836 | RES.,FXD.FILM:1.33K OHM.1%.0.125W | 91637    | MFF1816G13300F  |
| A46R220       | 315-0122-00        | B100837              |         | RES.,FXD.CMPSN:1.2K OHM.5%.0.25W  | 01121    | CB1225          |
| A46R221       | 315-0123-00        | B010100              | B100836 | RES.,FXD.CMPSN:12K OHM.5%.0.25W   | 01121    | CB1235          |
| A46R221       | 315-0391-00        | B100837              |         | RES.,FXD.CMPSN:390 OHM.5%.0.25W   | 01121    | CB3915          |
| A46R222       | 321-0193-00        | B010100              | B100836 | RES.,FXD.FILM:1K OHM.1%.0.125W    | 91637    | MFF1816G10000F  |
| A46R222       | 315-0183-00        | B100837              |         | RES.,FXD.CMPSN:18K OHM.5%.0.25W   | 01121    | CB1835          |
| A46R223       | 315-0102-00        | B010100              | B100836 | RES.,FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A46R223       | 315-0103-00        | B100837              |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W   | 01121    | CB1035          |
| A46R224       | 315-0222-00        | B010100              | B100836 | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W  | 01121    | CB2225          |
| A46R224       | 315-0472-00        | B100837              |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W  | 01121    | CB4725          |
| A46R225       | 315-0122-00        | B010100              | B100836 | RES.,FXD.CMPSN:1.2K OHM.5%.0.25W  | 01121    | CB1225          |
| A46R225       | 315-0102-00        | B100837              |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A46R226       | 315-0512-00        | B010100              | B100836 | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W  | 01121    | CB5125          |
| A46R226       | 315-0222-00        | B100837              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W  | 01121    | CB2225          |
| A46R227       | 315-0510-00        | B010100              | B100836 | RES.,FXD.CMPSN:51 OHM.5%.0.25W    | 01121    | CB5105          |
| A46R227       | 315-0821-00        | B100837              |         | RES.,FXD.CMPSN:820 OHM.5%.0.25W   | 01121    | CB8215          |
| A46R228       | 315-0123-00        | B010100              | B100836 | RES.,FXD.CMPSN:12K OHM.5%.0.25W   | 01121    | CB1235          |
| A46R228       | 315-0681-00        | B100837              |         | RES.,FXD.CMPSN:680 OHM.5%.0.25W   | 01121    | CB6815          |
| A46R229       | 315-0122-00        | B010100              | B100836 | RES.,FXD.CMPSN:1.2K OHM.5%.0.25W  | 01121    | CB1225          |
| A46R230       | 315-0102-00        | B010100              | B100836 | RES.,FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A46R230       | 315-0103-00        | B100837              |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W   | 01121    | CB1035          |
| A46R231       | 315-0510-00        | B100837              |         | RES.,FXD.CMPSN:51 OHM.5%.0.25W    | 01121    | CB5105          |
| A46R232       | 315-0101-00        | B010100              | B100836 | RES.,FXD.CMPSN:100 OHM.5%.0.25W   | 01121    | CB1015          |
| A46R232       | 315-0221-00        | B100837              |         | RES.,FXD.CMPSN:220 OHM.5%.0.25W   | 01121    | CB2215          |



Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-----------------------------------|----------|-----------------|
| A46R233       | 315-0100-00        | B100837              |         | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A46R234       | 315-0821-00        | B010100              | B100836 | RES..FXD.CMPSN:820 OHM.5%.0.25W   | 01121    | CB8215          |
| A46R234       | 315-0510-00        | B100837              |         | RES..FXD.CMPSN:51 OHM.5%.0.25W    | 01121    | CB5105          |
| A46R235       | 315-0681-00        | B010100              | B100836 | RES..FXD.CMPSN:680 OHM.5%.0.25W   | 01121    | CB6815          |
| A46R235       | 315-0512-00        | B100837              |         | RES..FXD.CMPSN:5.1K OHM.5%.0.25W  | 01121    | CB5125          |
| A46R236       | 315-0391-00        | B010100              | B100836 | RES..FXD.CMPSN:390 OHM.5%.0.25W   | 01121    | CB3915          |
| A46R236       | 315-0123-00        | B100083              | 7       | RES..FXD.CMPSN:12K OHM.5%.0.25W   | 01121    | CB1235          |
| A46R237       | 315-0472-00        | B100837              |         | RES..FXD.CMPSN:4.7K OHM.5%.0.25W  | 01121    | CB4725          |
| A46R238       | 315-0103-00        | B010100              | B100836 | RES..FXD.CMPSN:103 OHM.5%.0.25W   | 01121    | CB1035          |
| A46R238       | 315-0512-00        | B100837              |         | RES..FXD.CMPSN:5.1K OHM.5%.0.25W  | 01121    | CB5125          |
| A46R239       | 315-0101-00        | B100837              |         | RES..FXD.CMPSN:100 OHM.5%.0.25W   | 01121    | CB1015          |
| A46R242       | 321-0335-00        | B010100              | B100836 | RES..FXD.FILM:30.1K OHM.1%.0.125W | 91637    | CMF55116G30101F |
| A46R242       | 321-0220-00        | B100837              |         | RES..FXD.FILM:1.91K OHM.1%.0.125W | 91637    | MFF1816G19100F  |
| A46R244       | 321-0128-00        | B100837              |         | RES..FXD.FILM:210 OHM.1%.0.125W   | 91637    | MFF1816G210R0F  |
| A46R246       | 315-0221-00        | B010100              | B100836 | RES..FXD.CMPSN:220 OHM.5%.0.25W   | 01121    | CB2215          |
| A46R246       | 321-0296-00        | B100837              |         | RES..FXD.FILM:11.8K OHM.1%.0.125W | 91637    | MFF1816G11801F  |
| A46R248       | 315-0472-00        | B010100              | B100836 | RES..FXD.CMPSN:4.7K OHM.5%.0.25W  | 01121    | CB4725          |
| A46R249       | 315-0100-00        | B010100              | B100836 | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A46R304       | 315-0162-00        | B100837              |         | RES..FXD.CMPSN:1.6K OHM.5%.0.25W  | 01121    | CB1625          |
| A46R310       | 315-0101-00        | B010100              | B100836 | RES..FXD.CMPSN:100 OHM.5%.0.25W   | 01121    | CB1015          |
| A46R311       | 321-0220-00        | B010100              | B100836 | RES..FXD.FILM:1.91K OHM.1%.0.125W | 91637    | MFF1816G19100F  |
| A46R312       | 321-0296-00        | B010100              | B100836 | RES..FXD.FILM:11.8K OHM.1%.0.125W | 91637    | MFF1816G11801F  |
| A46R312       | 321-0222-00        | B100837              |         | RES..FXD.FILM:2K OHM.1%.0.125W    | 91637    | MFF1816G20000F  |
| A46R313       | 315-0332-00        | B010100              | B100836 | RES..FXD.CMPSN:3.3K OHM.5%.0.25W  | 01121    | CB3325          |
| A46R314       | 315-0332-00        | B010100              | B100836 | RES..FXD.CMPSN:3.3K OHM.5%.0.25W  | 01121    | CB3325          |
| A46R314       | 315-0151-00        | B100837              |         | RES..FXD.CMPSN:150 OHM.5%.0.25W   | 01121    | CB1515          |
| A46R315       | 323-0181-00        | B010100              | B100836 | RES..FXD.FILM:750 OHM.1%.0.50W    | 75042    | CECTO-7500F     |
| A46R316       | 317-0131-00        | B010100              | B100836 | RES..FXD.CMPSN:130 OHM.5%.0.125W  | 01121    | BB1315          |
| A46R316       | 315-0470-00        | B100837              |         | RES..FXD.CMPSN:47 OHM.5%.0.25W    | 01121    | CB4705          |
| A46R317       | 321-0072-00        | B010100              | B100836 | RES..FXD.FILM:54.9 OHM.1%.0.125W  | 91637    | MFF1816G549R0F  |
| A46R318       | 315-0470-00        | B100837              |         | RES..FXD.CMPSN:47 OHM.5%.0.25W    | 01121    | CB4705          |
| A46R320       | 315-0222-00        | B010100              | B100836 | RES..FXD.CMPSN:2.2K OHM.5%.0.25W  | 01121    | CB2225          |
| A46R322       | 315-0102-00        | B010100              | B100836 | RES..FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A46R322       | 315-0470-00        | B100837              |         | RES..FXD.CMPSN:47 OHM.5%.0.25W    | 01121    | CB4705          |
| A46R323       | 315-0821-00        | B010100              | B100836 | RES..FXD.CMPSN:820 OHM.5%.0.25W   | 01121    | CB8215          |
| A46R324       | 315-0391-00        | B010100              | B100836 | RES..FXD.CMPSN:390 OHM.5%.0.25W   | 01121    | CB3915          |
| A46R325       | 315-0681-00        | B010100              | B100836 | RES..FXD.CMPSN:680 OHM.5%.0.25W   | 01121    | CB6815          |
| A46R326       | 315-0472-00        | B010100              | B100836 | RES..FXD.CMPSN:4.7K OHM.5%.0.25W  | 01121    | CB4725          |
| A46R326       | 315-0201-00        | B100837              |         | RES..FXD.CMPSN:200 OHM.5%.0.25W   | 01121    | CB2015          |
| A46R327       | 323-0127-00        | B010100              | B100836 | RES..FXD.FILM:205 OHM.1%.0.50W    | 91637    | MFF1226G205R0F  |
| A46R328       | 315-0104-00        | B010100              | B100836 | RES..FXD.CMPSN:100K OHM.5%.0.25W  | 01121    | CB1045          |
| A46R328       | 315-0301-00        | B100837              |         | RES..FXD.CMPSN:300 OHM.5%.0.25W   | 01121    | CB3015          |
| A46R329       | 315-0104-00        | B010100              | B100836 | RES..FXD.CMPSN:100K OHM.5%.0.25W  | 01121    | CB1045          |
| A46R330       | 315-0510-00        | B010100              | B100836 | RES..FXD.CMPSN:51 OHM.5%.0.25W    | 01121    | CB5105          |
| A46R332       | 315-0221-00        | B010100              | B100836 | RES..FXD.CMPSN:220 OHM.5%.0.25W   | 01121    | CB2215          |
| A46R332       | 321-0122-00        | B100837              |         | RES..FXD.FILM:182 OHM.1%.0.125W   | 91637    | MFF1816G182R0F  |
| A46R334       | 315-0100-00        | B010100              | B100836 | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A46R336       | 315-0201-00        | B010100              | B100836 | RES..FXD.CMPSN:200 OHM.5%.0.25W   | 01121    | CB2015          |
| A46R336       | 321-0122-00        | B100837              |         | RES..FXD.FILM:182 OHM.1%.0.125W   | 91637    | MFF1816G182R0F  |
| A46R338       | 315-0301-00        | B010100              | B100836 | RES..FXD.CMPSN:300 OHM.5%.0.25W   | 01121    | CB3015          |
| A46R342       | 315-0100-00        | B010100              | B100836 | RES..FXD.CMPSN:10 OHM.5%.0.25W    | 01121    | CB1005          |
| A46R344       | 315-0132-00        | B010100              | B100836 | RES..FXD.CMPSN:1.3K OHM.5%.0.25W  | 01121    | CB1325          |
| A46R402       | 315-0183-00        | B010100              | B100836 | RES..FXD.CMPSN:18K OHM.5%.0.25W   | 01121    | CB1835          |
| A46R404       | 315-0183-00        | B100837              |         | RES..FXD.CMPSN:18K OHM.5%.0.25W   | 01121    | CB1835          |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                 | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|------------------------------------|----------|-----------------|
| A46R410       | 323-0187-00        | B100837              |         | RES..FXD.FILM:866 OHM.1%.0.50W     | 75042    | CECT0-8660F     |
| A46R411       | 315-0103-00        | B100837              |         | RES..FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A46R412       | 321-0148-00        | B010100              | B100836 | RES..FXD.FILM:340 OHM.1%.0.125W    | 91637    | MFF1816G340R0F  |
| A46R412       | 321-0088-00        | B100837              |         | RES..FXD.FILM:80.6 OHM.1%.0.125W   | 91637    | MFF1816G80R60F  |
| A46R414       | 311-1277-00        | B010100              | B100836 | RES..VAR.NONWIR:100 OHM.10%.0.5W   | 32997    | 3329W-L58-101   |
| A46R414       | 321-0088-00        | B100837              |         | RES..FXD.FILM:80.6 OHM.1%.0.125W   | 91637    | MFF1816G80R60F  |
| A46R415       | 315-0202-00        | B100837              |         | RES..FXD.CMPSN:2K OHM.5%.0.25W     | 01121    | CB2025          |
| A46R416       | 321-0107-00        | B010100              | B100836 | RES..FXD.FILM:127 OHM.1%.0.125W    | 91637    | MFF1816G127R0F  |
| A46R416       | 315-0273-00        | B100837              |         | RES..FXD.CMPSN:27K OHM.5%.0.25W    | 01121    | CB2735          |
| A46R417       | 321-0148-00        | B010100              | B100836 | RES..FXD.FILM:340 OHM.1%.0.125W    | 91637    | MFF1816G340R0F  |
| A46R418       | 317-0131-00        | B010100              | B100836 | RES..FXD.CMPSN:130 OHM.5%.0.125W   | 01121    | BB1315          |
| A46R418       | 315-0100-00        | B100837              |         | RES..FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A46R420       | 317-0390-00        | B010100              | B100836 | RES..FXD.CMPSN:39 OHM.5%.0.125W    | 01121    | BB3905          |
| A46R420       | 321-0088-00        | B100837              |         | RES..FXD.FILM:80.6 OHM.1%.0.125W   | 91637    | MFF1816G80R60F  |
| A46R421       | 321-0076-00        | B010100              | B100836 | RES..FXD.FILM:60.4 OHM.1%.0.125W   | 91637    | MFF1816G60R40F  |
| A46R422       | 321-0076-00        | B010100              | B100836 | RES..FXD.FILM:60.4 OHM.1%.0.125W   | 91637    | MFF1816G60R40F  |
| A46R422       | 321-0088-00        | B100837              |         | RES..FXD.FILM:80.6 OHM.1%.0.125W   | 91637    | MFF1816G80R60F  |
| A46R423       | 317-0390-00        | B010100              | B100836 | RES..FXD.CMPSN:39 OHM.5%.0.125W    | 01121    | BB3905          |
| A46R424       | 321-0137-00        | B010100              | B100836 | RES..FXD.FILM:261 OHM.1%.0.125W    | 91637    | MFF1816G261R0F  |
| A46R424       | 323-0187-00        | B100837              |         | RES..FXD.FILM:866 OHM.1%.0.50W     | 75042    | CECT0-8660F     |
| A46R425       | 321-0137-00        | B010100              | B100836 | RES..FXD.FILM:261 OHM.1%.0.125W    | 91637    | MFF1816G261R0F  |
| A46R425       | 323-0127-00        | B100837              |         | RES..FXD.FILM:205 OHM.1%.0.50W     | 91637    | MFF1226G205R0F  |
| A46R426       | 323-0144-00        | B010100              | B100836 | RES..FXD.FILM:309 OHM.1%.0.50W     | 75042    | CECT0-3090F     |
| A46R426       | 315-0104-00        | B100837              |         | RES..FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A46R428       | 315-0104-00        | B100837              |         | RES..FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A46R430       | 321-0122-00        | B010100              | B100836 | RES..FXD.FILM:182 OHM.1%.0.125W    | 91637    | MFF1816G182R0F  |
| A46R430       | 321-0026-00        | B100837              |         | RES..FXD.FILM:18.2 OHM.1%.0.125W   | 91637    | MFF1816G18R20F  |
| A46R432       | 321-0026-00        | B010100              | B100836 | RES..FXD.FILM:18.2 OHM.1%.0.125W   | 91637    | MFF1816G18R20F  |
| A46R432       | 321-0068-00        | B100837              |         | RES..FXD.FILM:49.9 OHM.1%.0.125W   | 91637    | MFF1816G49R90F  |
| A46R433       | 321-0068-00        | B010100              | B100836 | RES..FXD.FILM:49.9 OHM.1%.0.125W   | 91637    | MFF1816G49R90F  |
| A46R434       | 321-0068-00        |                      |         | RES..FXD.FILM:49.9 OHM.1%.0.125W   | 91637    | MFF1816G49R90F  |
| A46R435       | 321-0026-00        | B010100              | B100836 | RES..FXD.FILM:18.2 OHM.1%.0.125W   | 91637    | MFF1816G18R20F  |
| A46R436       | 321-0122-00        | B010100              | B100836 | RES..FXD.FILM:182 OHM.1%.0.125W    | 91637    | MFF1816G182R0F  |
| A46R436       | 321-0026-00        | B100837              |         | RES..FXD.FILM:18.2 OHM.1%.0.125W   | 91637    | MFF1816G18R20F  |
| A46R437       | 323-0144-00        | B100837              |         | RES..FXD.FILM:309 OHM.1%.0.50W     | 75042    | CECT0-3090F     |
| A46R438       | 321-0137-00        | B100837              |         | RES..FXD.FILM:261 OHM.1%.0.125W    | 91637    | MFF1816G261R0F  |
| A46R439       | 321-0137-00        | B100837              |         | RES..FXD.FILM:261 OHM.1%.0.125W    | 91637    | MFF1816G261R0F  |
| A46R446       | 315-0472-00        | B100837              |         | RES..FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |
| A46R448       | 321-0222-00        | B010100              | B100836 | RES..FXD.FILM:2K OHM.1%.0.125W     | 91637    | MFF1816G20000F  |
| A46R506       | 315-0203-00        | B100837              |         | RES..FXD.CMPSN:20K OHM.5%.0.25W    | 01121    | CB2035          |
| A46R508       | 315-0472-00        | B100837              |         | RES..FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |
| A46R510       | 321-0072-00        | B010100              | B100836 | RES..FXD.FILM:54.9 OHM.1%.0.125W   | 91637    | MFF1816G54R90F  |
| A46R510       | 321-0039-00        | B100837              |         | RES..FXD.FILM:24.9 OHM.1%.0.125W   | 91637    | MFF1816G24R90F  |
| A46R512       | 315-0203-00        | B010100              | B100836 | RES..FXD.CMPSN:20K OHM.5%.0.25W    | 01121    | CB2035          |
| A46R512       | 321-0039-00        | B100837              |         | RES..FXD.FILM:24.9 OHM.1%.0.125W   | 91637    | MFF1816G24R90F  |
| A46R513       | 315-0472-00        | B010100              | B100836 | RES..FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |
| A46R514       | 323-0181-00        | B010100              | B100836 | RES..FXD.FILM:750 OHM.1%.0.50W     | 75042    | CECT0-7500F     |
| A46R514       | 321-0039-00        | B100837              |         | RES..FXD.FILM:24.9 OHM.1%.0.125W   | 91637    | MFF1816G24R90F  |
| A46R516       | 321-0039-00        |                      |         | RES..FXD.FILM:24.9 OHM.1%.0.125W   | 91637    | MFF1816G24R90F  |
| A46R518       | 323-0187-00        | B010100              | B100836 | RES..FXD.FILM:866 OHM.1%.0.50W     | 75042    | CECT0-8660F     |
| A46R518       | 321-0218-00        | B100837              |         | RES..FXD.FILM:1.82K OHM.1%.0.125W  | 91637    | MFF1816G18200F  |
| A46R522       | 321-0039-00        | B010100              | B100836 | RES..FXD.FILM:24.9 OHM.1%.0.125W   | 91637    | MFF1816G24R90F  |
| A46R522       | 321-1068-01        | B100837              |         | RES..FXD.FILM:50.5 OHM.0.5%.0.125W | 91637    | MFF1816G50R50D  |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                 | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|------------------------------------|----------|-----------------|
| A46R524       | 321-0088-00        | B010100              | B100836 | RES.,FXD.FILM:80.6 OHM.1%.0.125W   | 91637    | MFF1816G80R60F  |
| A46R524       | 321-1068-01        | B100837              |         | RES.,FXD.FILM:50.5 OHM.0.5%.0.125W | 91637    | MFF1816G50R50D  |
| A46R525       | 321-0218-00        | B010100              | B100836 | RES.,FXD.FILM:1.82K OHM.1%.0.125W  | 91637    | MFF1816G18200F  |
| A46R526       | 315-0273-00        | B010100              | B100836 | RES.,FXD.CMPSN:27K OHM.5%.0.25W    | 01121    | CB2735          |
| A46R526       | 323-0181-00        | B100837              |         | RES.,FXD.FILM:750 OHM.1%.0.50W     | 75042    | CECT0-7500F     |
| A46R528       | 315-0202-00        | B010100              | B100836 | RES.,FXD.CMPSN:2K OHM.5%.0.25W     | 01121    | CB2025          |
| A46R528       | 317-0131-00        | B100837              |         | RES.,FXD.CMPSN:130 OHM.5%.0.125W   | 01121    | BB1315          |
| A46R529       | 321-0088-00        | B010100              | B100836 | RES.,FXD.FILM:80.6 OHM.1%.0.125W   | 91637    | MFF1816G80R60F  |
| A46R530       | 317-0390-00        | B100837              |         | RES.,FXD.CMPSN:39 OHM.1%.0.125W    | 01121    | BB3905          |
| A46R531       | 321-0076-00        | B100837              |         | RES.,FXD.FILM:60.4 OHM.1%.0.125W   | 91637    | MFF1816G60R40F  |
| A46R532       | 321-1068-01        |                      |         | RES.,FXD.FILM:50.5 OHM.0.5%.0.125W | 91637    | MFF1816G50R50D  |
| A46R532       | 321-0076-00        | B100837              |         | RES.,FXD.FILM:60.4 OHM.1%.0.125W   | 91637    | MFF1816G60R40F  |
| A46R534       | 315-0102-00        | B010100              | B100836 | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A46R534       | 317-0390-00        | B100837              |         | RES.,FXD.CMPSN:39 OHM.5%.0.125W    | 01121    | BB3905          |
| A46R535       | 321-0148-00        | B100837              |         | RES.,FXD.FILM:340 OHM.1%.0.125W    | 91637    | MFF1816G340R0F  |
| A46R536       | 321-1068-01        | B010100              | B100836 | RES.,FXD.FILM:50.5 OHM.0.5%.0.125W | 91637    | MFF1816G50R50D  |
| A46R536       | 321-0107-00        | B100837              |         | RES.,FXD.FILM:127 OHM.1%.0.125W    | 91637    | MFF1816G127R0F  |
| A46R537       | 321-0148-00        | B100837              |         | RES.,FXD.FILM:340 OHM.1%.0.125W    | 91637    | MFF1816G340R0F  |
| A46R538       | 315-0102-00        | B010100              | B100836 | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A46R538       | 311-1277-00        | B100837              |         | RES.,VAR.NONWIR:100 OHM.10%.0.5W   | 32997    | 3329W-L58-101   |
| A46R540       | 317-0131-00        | B100837              |         | RES.,FXD.CMPSN:130 OHM.5%.0.125W   | 01121    | BB1315          |
| A46R542       | 315-0100-00        | B010100              | B100836 | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A46R542       | 323-0181-00        | B100837              |         | RES.,FXD.FILM:750 OHM.1%.0.50W     | 75042    | CECT0-7500F     |
| A46R544       | 315-0683-00        | B100837              |         | RES.,FXD.CMPSN:68K OHM.5%.0.25W    | 01121    | CB6835          |
| A46R546       | 307-0586-00        | B010100              | B100836 | RES NTWK.FXD FI:9.39K OHM.2%.1.25W | 32997    | 4310R-101-393G  |
| A46R546       | 315-0102-00        | B100837              |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A46R548       | 315-0183-00        | B100837              |         | RES.,FXD.CMPSN:18K OHM.5%.0.25W    | 01121    | CB1835          |
| A46R604       | 315-0154-00        | B010100              | B100836 | RES.,FXD.CMPSN:150K OHM.5%.0.25W   | 01121    | CB1545          |
| A46R610       | 315-0103-00        | B010100              | B100836 | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A46R612       | 315-0100-00        | B010100              | B100836 | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A46R612       | 307-0606-00        | B100837              |         | RES NTWK.FXD FI:9.15K OHM.2%.0.15W | 32997    | 4310R-101-154   |
| A46R614       | 323-0187-00        | B010100              | B100836 | RES.,FXD.FILM:866 OHM.1%.0.50W     | 75042    | CECT0-8660F     |
| A46R616       | 315-0154-00        | B010100              | B100836 | RES.,FXD.CMPSN:150K OHM.5%.0.25W   | 01121    | CB1545          |
| A46R618       | 315-0154-00        | B010100              | B100836 | RES.,FXD.CMPSN:150K OHM.5%.0.25W   | 01121    | CB1545          |
| A46R624       | 321-0088-00        | B010100              | B100836 | RES.,FXD.FILM:80.6 OHM.1%.0.125W   | 91637    | MFF1816G80R60F  |
| A46R626       | 315-0154-00        | B010100              | B100836 | RES.,FXD.CMPSN:150K OHM.5%.0.25W   | 01121    | CB1545          |
| A46R628       | 315-0154-00        | B010100              | B100836 | RES.,FXD.CMPSN:150K OHM.5%.0.25W   | 01121    | CB1545          |
| A46R629       | 315-0154-00        | B010100              | B100836 | RES.,FXD.CMPSN:150K OHM.5%.0.25W   | 01121    | CB1545          |
| A46R632       | 321-0039-00        | B010100              | B100836 | RES.,FXD.FILM:24.9 OHM.1%.0.125W   | 91637    | MFF1816G24R90F  |
| A46R634       | 321-0039-00        | B010100              | B100836 | RES.,FXD.FILM:24.9 OHM.1%.0.125W   | 91637    | MFF1816G24R90F  |
| A46R634       | 321-0072-00        | B100837              |         | RES.,FXD.FILM:54.9 OHM.1%.0.125W   | 91637    | MFF1816G54R90F  |
| A46R636       | 315-0183-00        | B010100              | B100836 | RES.,FXD.CMPSN:18K OHM.5%.0.25W    | 01121    | CB1835          |
| A46R636       | 321-0072-00        | B100837              |         | RES.,FXD.FILM:54.9 OHM.1%.0.125W   | 91637    | MFF1816G54R90F  |
| A46R638       | 315-0152-00        | B010100              | B100836 | RES.,FXD.CMPSN:1.5K OHM.5%.0.25W   | 01121    | CB1525          |
| A46R639       | 321-0088-00        | B010100              | B100836 | RES.,FXD.FILM:80.6 OHM.1%.0.125W   | 91637    | MFF1816G80R60F  |
| A46R642       | 321-0222-00        | B010100              | B100836 | RES.,FXD.FILM:2K OHM.1%.0.125W     | 91637    | MFF1816G20000F  |
| A46R642       | 321-0068-00        | B100837              |         | RES.,FXD.FILM:49.9 OHM.1%.0.125W   | 91637    | MFF1816G49R90F  |
| A46R644       | 315-0152-00        | B010100              | B100836 | RES.,FXD.CMPSN:1.5K OHM.5%.0.25W   | 01121    | CB1525          |
| A46R644       | 321-0068-00        | B100837              |         | RES.,FXD.FILM:49.9 OHM.1%.0.125W   | 91637    | MFF1816G49R90F  |
| A46R646       | 315-0183-00        | B010100              | B100836 | RES.,FXD.CMPSN:18K OHM.5%.0.25W    | 01121    | CB1835          |
| A46R646       | 315-0100-00        | B100837              |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A46R648       | 315-0152-00        | B100837              |         | RES.,FXD.CMPSN:1.5K OHM.5%.0.25W   | 01121    | CB1525          |
| A46R702       | 315-0221-00        | B010100              | B100836 | RES.,FXD.CMPSN:220 OHM.5%.0.25W    | 01121    | CB2215          |
| A46R704       | 315-0392-00        | B100837              |         | RES.,FXD.CMPSN:3.9K OHM.5%.0.25W   | 01121    | CB3925          |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                         | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A46R706       | 315-0102-00        | B100837              |         | RES..FXD.CMPSN:1K OHM.5%.0.25W             | 01121    | CB1025          |
| A46R712       | 315-0154-00        | B010100              | B100836 | RES..FXD.CMPSN:150K OHM.5%.0.25W           | 01121    | CB1545          |
| A46R712       | 315-0103-00        | B100837              |         | RES..FXD.CMPSN:10K OHM.5%.0.25W            | 01121    | CB1035          |
| A46R714       | 315-0154-00        | B010100              | B100836 | RES..FXD.CMPSN:150K OHM.5%.0.25W           | 01121    | CB1545          |
| A46R714       | 315-0103-00        | B100837              |         | RES..FXD.CMPSN:10K OHM.5%.0.25W            | 01121    | CB1035          |
| A46R716       | 315-0154-00        | B010100              | B100836 | RES..FXD.CMPSN:150K OHM.5%.0.25W           | 01121    | CB1545          |
| A46R716       | 315-0103-00        | B100837              |         | RES..FXD.CMPSN:10K OHM.5%.0.25W            | 01121    | CB1035          |
| A46R718       | 315-0154-00        | B010100              | B100836 | RES..FXD.CMPSN:150K OHM.5%.0.25W           | 01121    | CB1545          |
| A46R718       | 315-0103-00        | B100837              |         | RES..FXD.CMPSN:10K OHM.5%.0.25W            | 01121    | CB1035          |
| A46R722       | 315-0470-00        | B010100              | B100836 | RES..FXD.CMPSN:47 OHM.5%.0.25W             | 01121    | CB4705          |
| A46R722       | 315-0154-00        | B100837              |         | RES..FXD.CMPSN:150K OHM.5%.0.25W           | 01121    | CB1545          |
| A46R732       | 321-0068-00        | B010100              | B100836 | RES..FXD.FILM:49.9 OHM.1%.0.125W           | 91637    | MFF1816G49R90F  |
| A46R734       | 321-0068-00        | B010100              | B100836 | RES..FXD.FILM:49.9 OHM.1%.0.125W           | 91637    | MFF1816G49R90F  |
| A46R736       | 315-0222-00        | B010100              | B100836 | RES..FXD.CMPSN:2.2K OHM.5%.0.25W           | 01121    | CB2225          |
| A46R738       | 307-0586-00        | B100837              |         | RES NTWK.FXD FI:9.39K OHM.2%.1.25W         | 32997    | 4310R-101-393G  |
| A46R744       | 315-0472-00        | B010100              | B100836 | RES..FXD.CMPSN:4.7K OHM.5%.0.25W           | 01121    | CB4725          |
| A46R748       | 315-0103-00        | B010100              | B100836 | RES..FXD.CMPSN:10K OHM.5%.0.25W            | 01121    | CB1035          |
| A46R800       | 315-0301-00        | B010100              | B100836 | RES..FXD.CMPSN:300 OHM.5%.0.25W            | 01121    | CB3015          |
| A46R802       | 315-0301-00        | B100837              |         | RES..FXD.CMPSN:300 OHM.5%.0.25W            | 01121    | CB3015          |
| A46R804       | 315-0221-00        | B100837              |         | RES..FXD.CMPSN:220 OHM.5%.0.25W            | 01121    | CB2215          |
| A46R812       | 315-0154-00        | B010100              | B100836 | RES..FXD.CMPSN:150K OHM.5%.0.25W           | 01121    | CB1545          |
| A46R814       | 315-0102-00        | B010100              | B100836 | RES..FXD.CMPSN:1K OHM.5%.0.25W             | 01121    | CB1025          |
| A46R814       | 315-0222-00        | B100837              |         | RES..FXD.CMPSN:2.2K OHM.5%.0.25W           | 01121    | CB2225          |
| A46R816       | 315-0392-00        | B010100              | B100836 | RES..FXD.CMPSN:3.9K OHM.5%.0.25W           | 01121    | CB3925          |
| A46R818       | 307-0606-00        | B010100              | B100836 | RES NTWK.FXD FI:9.15K OHM.2%.0.15W         | 32997    | 4310R-101-154   |
| A46R818       | 315-0154-00        | B100837              |         | RES..FXD.CMPSN:150K OHM.5%.0.25W           | 01121    | CB1545          |
| A46R826       | 315-0470-00        | B010100              | B100836 | RES..FXD.CMPSN:47 OHM.5%.0.25W             | 01121    | CB4705          |
| A46R832       | 315-0103-00        | B010100              | B100836 | RES..FXD.CMPSN:10K OHM.5%.0.25W            | 01121    | CB1035          |
| A46R834       | 315-0103-00        | B010100              | B100836 | RES..FXD.CMPSN:10K OHM.5%.0.25W            | 01121    | CB1035          |
| A46R836       | 315-0470-00        | B010100              | B100836 | RES..FXD.CMPSN:47 OHM.5%.0.25W             | 01121    | CB4705          |
| A46R838       | 321-0260-00        | B010100              | B100836 | RES..FXD.FILM:4.99K OHM.1%.0.125W          | 91637    | MFF1816G49900F  |
| A46R842       | 315-0103-00        | B010100              | B100836 | RES..FXD.CMPSN:10K OHM.5%.0.25W            | 01121    | CB1035          |
| A46R844       | 321-0260-00        | B100837              |         | RES..FXD.FILM:4.99K OHM.1%.0.125W          | 91637    | MFF1816G49900F  |
| A46R846       | 321-0260-00        | B100837              |         | RES..FXD.FILM:4.99K OHM.1%.0.125W          | 91637    | MFF1816G49900F  |
| A46R916       | 307-0606-00        | B100837              |         | RES NTWK.FXD FI:9.15K OHM.2%.0.15W         | 32997    | 4310R-101-154   |
| A46R920       | 307-0503-00        | B010100              | B100836 | RES NTWK.THK FI:(9)510 OHM.20%.0.125W      | 91637    | MSP10A01-511G   |
| A46R926       | 307-0503-00        | B100837              |         | RES NTWK.THK FI:(9)510 OHM.20%.0.125W      | 91637    | MSP10A01-511G   |
| A46R938       | 315-0683-00        | B010100              | B100836 | RES..FXD.CMPSN:68K OHM.5%.0.25W            | 01121    | CB6835          |
| A46R942       | 321-0260-00        | B010100              | B100836 | RES..FXD.FILM:4.99K OHM.1%.0.125W          | 91637    | MFF1816G49900F  |
| A46U126       | 155-0011-00        | B010100              | B100836 | MICROCIRCUIT,DI:ML.CLOCK AND CHOP BLANKING | 80009    | 155-0011-00     |
| A46U126       | 156-0041-05        |                      |         | MICROCIRCUIT,DI:DUAL D-FLIP FLOP           | 01295    | SN7474          |
| A46U128       | 155-0012-00        | B010100              | B100836 | MICROCIRCUIT,LI:ML.Z-AXIS AND AMPLIFIER    | 80009    | 155-0012-00     |
| A46U136       | 155-0011-00        | B100837              |         | MICROCIRCUIT,DI:ML.CLOCK AND CHOP BLANKING | 80009    | 155-0011-00     |
| A46U212       | 155-0012-00        | B100837              |         | MICROCIRCUIT,LI:ML.Z-AXIS AND AMPLIFIER    | 80009    | 155-0012-00     |
| A46U228       | 156-0041-05        | B010100              | B100836 | MICROCIRCUIT,DI:DUAL D-FLIP FLOP           | 01295    | SN7474          |
| A46U418       | 155-0022-00        | B100837              |         | MICROCIRCUIT,DI:ML.CHANNEL SWITCH          | 80009    | 155-0022-00     |
| A46U422       | 155-0078-10        | B010100              | B100836 | MICROCIRCUIT,LI:ML.VERTICAL AMPLIFIER      | 80009    | 155-0078-10     |
| A46U434       | 155-0078-00        | B100837              |         | MICROCIRCUIT,LI:ML.VERT AMPL               | 80009    | 155-0078-00     |
| A46U528       | 155-0022-00        | B010100              | B100836 | MICROCIRCUIT,DI:ML.CHANNEL SWITCH          | 80009    | 155-0022-00     |
| A46U708       | 156-0651-01        | B100837              |         | MICROCIRCUIT,DI:8-BIT PRL-OUT.SER SHF RGTR | 01295    | SN74LS164N      |
| A46U726       | 155-0017-00        | B100837              |         | MICROCIRCUIT,DI:ML.ZERO LOGIC COUNTER      | 80009    | 155-0017-00     |

| Component No. | Tektronix Part No. | Serial/Model No. |         | Name & Description                         | Mfr Code | Mfr Part Number  |
|---------------|--------------------|------------------|---------|--|----------|------------------|
|               |                    | Eff              | Dscont  |  |          |                  |
| A46U728       | 155-0017-00        | B010100          | B100836 | MICROCIRCUIT,DI:ML,ZERO LOGIC COUNTER      | 80009    | 155-0017-00      |
| A46U812       | 156-0651-02        | B010100          | B100836 | MICROCIRCUIT,DI:8 BIT PRL-OUT SER SHF RGTR | 01295    | SN74LS164(NP3 OR |
| A46U822       | 155-0017-00        |                  |         | MICROCIRCUIT,DI:ML,ZERO LOGIC COUNTER      | 80009    | 155-0017-00      |
| A46VR919      | 152-0217-00        | B010100          | B100836 | SEMICONV DEVICE:ZENER,0.4W,8.2V,5%         | 04713    | SZG20            |
| A46VR938      | 152-0217-00        | B100837          |         | SEMICONV DEVICE:ZENER,0.4W,8.2V,5%         | 04713    | SZG20            |

# Replaceable Electrical Parts—7912AD Service

| Component No.           | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                                  | Mfr Code | Mfr Part Number |
|-------------------------|--------------------|----------------------|---------|---|----------|-----------------|
| A48 VERTICAL ATTENUATOR |                    |                      |         |   |          |                 |
| A48                     | 670-5160-00        | B010100              | B100836 | CKT BOARD ASSY:VERTICAL ATTENUATOR (OPTION 04 ONLY) | 80009    | 670-5160-00     |
| A48                     | -----              |                      |         |   |          |                 |
| A48AT001                | 307-1020-00        | B010100              | B100836 | ATTENUATOR,FXD:50 OHM.2X                            | 80009    | 307-1020-00     |
| A48AT101                | 307-1020-00        | B010100              | B100836 | ATTENUATOR,FXD:50 OHM.2X                            | 80009    | 307-1020-00     |
| A52 MPU MEMORY          |                    |                      |         |   |          |                 |
| A52                     | 670-4953-00        | B010100              | B049999 | CKT BOARD ASSY:MPU MEMORY                           | 80009    | 670-4953-00     |
| A52                     | 670-4953-01        | B050000              | B109999 | CKT BOARD ASSY:MPU MEMORY (SUBPART OF 672-0960-XX)  | 80009    | 670-4953-01     |
| A52                     | -----              |                      |         |   |          |                 |
| A52C002                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C004                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C100                 | 285-0905-00        |                      |         | CAP.,FXD,PLSTC:0.33UF,5%,50V                        | 56289    | LP66A1A334J002  |
| A52C110                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C120                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C130                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C140                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C200                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C210                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C240                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C242                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C301                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C302                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C320                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C340                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C400                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C430                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C440                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52C542                 | 281-0775-00        |                      |         | CAP.,FXD,CER DI:0.1UF,20%,50V                       | 04222    | MA205E104MAA    |
| A52CR101                | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA                   | 01295    | 1N4152R         |
| A52CR200                | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA                   | 01295    | 1N4152R         |
| A52R440                 | 315-0102-00        |                      |         | RES.,FXD,CMPN:1K OHM,5%,0.25W                       | 01121    | CB1025          |
| A52U010                 | 160-0093-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED            | 80009    | 160-0093-01     |
| A52U010                 | 160-0093-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED           | 80009    | 160-0093-02     |
| A52U020                 | 160-0094-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED            | 80009    | 160-0094-01     |
| A52U020                 | 160-0094-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED           | 80009    | 160-0094-02     |
| A52U030                 | 160-0095-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED            | 80009    | 160-0095-01     |
| A52U030                 | 160-0095-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM                      | 80009    | 160-0095-02     |
| A52U040                 | 160-0096-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED            | 80009    | 160-0096-01     |
| A52U040                 | 160-0096-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED           | 80009    | 160-0096-02     |
| A52U100                 | 156-0541-02        |                      |         | MICROCIRCUIT,DI:DUAL 2 TO 4 LINE DCDR               | 01295    | SN74LS139NP3    |
| A52U101                 | 156-0285-00        |                      |         | MICROCIRCUIT,LI:VOLTAGE REGULATOR                   | 27014    | LM340T-12       |
| A52U110                 | 160-0097-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED            | 80009    | 160-0097-01     |
| A52U110                 | 160-0097-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED           | 80009    | 160-0097-02     |
| A52U120                 | 160-0098-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED            | 80009    | 160-0098-01     |
| A52U120                 | 160-0098-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED           | 80009    | 160-0098-02     |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A52U130       | 160-0099-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED  | 80009    | 160-0099-01     |
| A52U130       | 160-0099-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED | 80009    | 160-0099-02     |
| A52U140       | 160-0100-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED  | 80009    | 160-0100-01     |
| A52U140       | 160-0100-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED | 80009    | 160-0100-02     |
| A52U210       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE        | 01295    | SN74LS32NP3     |
| A52U220       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT  | 01295    | SN74LS240       |
| A52U230       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT  | 01295    | SN74LS240       |
| A52U240       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT  | 01295    | SN74LS240       |
| A52U301       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER              | 01295    | SN74LS04        |
| A52U310       | 160-0101-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED  | 80009    | 160-0101-01     |
| A52U310       | 160-0101-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED | 80009    | 160-0101-02     |
| A52U320       | 160-0102-01        | B010100              | B049999 | MICROCIRCUIT,DI:1024 X 8 PROM.PROGRAMMED  | 80009    | 160-0102-01     |
| A52U320       | 160-0102-02        | B050000              |         | MICROCIRCUIT,DI:1024 X 8 EPROM.PROGRAMMED | 80009    | 160-0102-02     |
| A52U330       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE        | 01295    | SN74LS32NP3     |
| A52U332       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE        | 01295    | SN74LS32NP3     |
| A52U340       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE        | 01295    | SN74LS32NP3     |
| A52U410       | 156-0695-00        |                      |         | MICROCIRCUIT,DI:ROM,256 X 4 STATIC        | 18324    | 2606-1B         |
| A52U420       | 156-0695-00        |                      |         | MICROCIRCUIT,DI:ROM,256 X 4 STATIC        | 18324    | 2606-1B         |
| A52U421       | 156-0695-00        |                      |         | MICROCIRCUIT,DI:ROM,256 X 4 STATIC        | 18324    | 2606-1B         |
| A52U430       | 156-0695-00        |                      |         | MICROCIRCUIT,DI:ROM,256 X 4 STATIC        | 18324    | 2606-1B         |
| A52U440       | 156-0478-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 INP & GATE.BURN-IN | 01295    | SN74LS21NP3     |
| A52U501       | 156-0695-00        |                      |         | MICROCIRCUIT,DI:ROM,256 X 4 STATIC        | 18324    | 2606-1B         |
| A52U510       | 156-0695-00        |                      |         | MICROCIRCUIT,DI:ROM,256 X 4 STATIC        | 18324    | 2606-1B         |
| A52U520       | 156-0695-00        |                      |         | MICROCIRCUIT,DI:ROM,256 X 4 STATIC        | 18324    | 2606-1B         |
| A52U521       | 156-0695-00        |                      |         | MICROCIRCUIT,DI:ROM,256 X 4 STATIC        | 18324    | 2606-1B         |
| A52U530       | 156-0541-02        |                      |         | MICROCIRCUIT,DI:DUAL 2 TO 4 LINE DCDR     | 01295    | SN74LS139NP3    |

# Replaceable Electrical Parts—7912AD Service

| Component No.                | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number  |
|------------------------------|--------------------|----------------------|---------|---|----------|------------------|
| A54 MPU (SN B010100-B109999) |                    |                      |         |   |          |                  |
| A54                          | 670-4948-00        | B010100              | B040538 | CKT BOARD ASSY:MPU                        | 80009    | 670-4948-00      |
| A54                          | 670-4948-01        | B040539              | B049999 | CKT BOARD ASSY:MPU                        | 80009    | 670-4948-01      |
| A54                          | 670-4948-02        | B050000              | B080713 | CKT BOARD ASSY:MPU                        | 80009    | 670-4948-02      |
| A54                          | 670-4948-03        | B080714              | B100793 | CKT BOARD ASSY:MPU                        | 80009    | 670-4948-03      |
| A54                          | 670-4948-04        | B100794              | B100825 | CKT BOARD ASSY:MPU                        | 80009    | 670-4948-04      |
| A54                          | 670-4948-05        | B100826              | B109999 | CKT BOARD ASSY:MPU                        | 80009    | 670-4948-05      |
| A54                          | -----              |                      |         | (SUBPART OF 672-0960-XX)                  |          |                  |
| A54C012                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C022                      | 283-0177-00        |                      |         | CAP.,FXD.CER DI:1UF,+80-20%.25V           | 56289    | 2C20Z5U105Z025E  |
| A54C044                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C104                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C105                      | 290-0536-00        | B100826              |         | CAP.,FXD.ELCTLT:10UF,20%.25V              | 90201    | TDC106M025FL     |
| A54C106                      | 290-0246-00        | B010100              | B010112 | CAP.,FXD.ELCTLT:3.3UF,10%,15V             | 56289    | 162D335X9015CD   |
| A54C106                      | 290-0535-00        | B010113              |         | CAP.,FXD.ELCTLT:33UF,20%,10V              | 56289    | 196D336X0010KA1  |
| A54C108                      | 283-0065-00        | B010113              |         | CAP.,FXD.CER DI:0.001UF,5%,100V           | 59660    | 0835-591Y5EO102  |
| A54C110                      | 290-0536-00        | B040539              | B100825 | CAP.,FXD.ELCTLT:10UF,20%.25V              | 90201    | TDC106M025FL     |
| A54C114                      | 283-0060-00        |                      |         | CAP.,FXD.CER DI:100PF,5%,200V             | 59660    | 855-535U2J101J   |
| A54C128                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C204                      | 283-0000-00        |                      |         | CAP.,FXD.CER DI:0.001UF,+100-0%.500V      | 59660    | 831610Y5U0102P   |
| A54C206                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C212                      | 283-0060-00        |                      |         | CAP.,FXD.CER DI:100PF,5%,200V             | 59660    | 855-535U2J101J   |
| A54C218                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C302                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C314                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C322                      | 283-0177-00        |                      |         | CAP.,FXD.CER DI:1UF,+80-20%.25V           | 56289    | 2C20Z5U105Z025E  |
| A54C334                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C524                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C604                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C606                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C636                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C702                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C728                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C734                      | 283-0000-00        |                      |         | CAP.,FXD.CER DI:0.001UF,+100-0%.500V      | 59660    | 831610Y5U0102P   |
| A54C802                      | 283-0051-00        |                      |         | CAP.,FXD.CER DI:0.0033UF,5%,100V          | 56289    | 1C20C0G332J100E  |
| A54C844                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C912                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C914                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C926                      | 283-0177-00        |                      |         | CAP.,FXD.CER DI:1UF,+80-20%.25V           | 56289    | 2C20Z5U105Z025E  |
| A54C932                      | 281-0773-00        |                      |         | CAP.,FXD.CER DI:0.01UF,10%,100V           | 04222    | SA201C103KAA     |
| A54C934                      | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%,200V          | 59660    | 835-515-Z5D0102K |
| A54C942                      | 283-0177-00        |                      |         | CAP.,FXD.CER DI:1UF,+80-20%.25V           | 56289    | 2C20Z5U105Z025E  |
| A54CR104                     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A54CR106                     | 152-0075-00        |                      |         | SEMICONV DEVICE:GE,25V,40MA               | 14433    | G866             |
| A54CR828                     | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A54F744                      | 159-0116-00        | B010100              | B080713 | FUSE,CARTRIDGE:1A,125V,0.4 SEC,0.17 LEADS | 75915    | 273001           |
| A54F744                      | 159-0114-00        | B080714              |         | FUSE,CARTRIDGE:1A,125VAC,FAST-BLOW        | 71400    | GFA 1            |
| A54F836                      | 159-0116-00        | B010100              | B080713 | FUSE,CARTRIDGE:1A,125V,0.4 SEC,0.17 LEADS | 75915    | 273001           |
| A54F836                      | 159-0114-00        | B080714              |         | FUSE,CARTRIDGE:1A,125VAC,FAST-BLOW        | 71400    | GFA 1            |
| A54F844                      | 159-0059-00        |                      |         | FUSE,WIRE LEAD:5A,FAST-BLOW               | 000HX    | SPI-5A           |



| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                         | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A54L934       | 108-0858-00        |                      |         | COIL,RF:FIXED,3.2NH                        | 80009    | 108-0858-00     |
| A54Q212       | 151-0216-00        |                      |         | TRANSISTOR:SILICON.PNP                     | 04713    | SPS8803         |
| A54Q218       | 151-0216-00        |                      |         | TRANSISTOR:SILICON.PNP                     | 04713    | SPS8803         |
| A54Q728       | 151-0192-00        |                      |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652     | 04713    | SPS8801         |
| A54R106       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM,5%.0.25W           | 01121    | CB5125          |
| A54R108       | 315-0201-00        | B010113              |         | RES.,FXD.CMPSN:200 OHM,5%.0.25W            | 01121    | CB2015          |
| A54R110       | 321-0385-00        | B040539              | B100825 | RES.,FXD.FILM:100K OHM,1%.0.125W           | 91637    | MFF1816G10002F  |
| A54R112       | 315-0511-00        |                      |         | RES.,FXD.CMPSN:510 OHM,5%.0.25W            | 01121    | CB5115          |
| A54R114       | 315-0221-00        |                      |         | RES.,FXD.CMPSN:220 OHM,5%.0.25W            | 01121    | CB2215          |
| A54R122       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R123       | 315-0302-00        |                      |         | RES.,FXD.CMPSN:3K OHM,5%.0.25W             | 01121    | CB3025          |
| A54R124       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R126       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R127       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM,5%.0.25W             | 01121    | CB2205          |
| A54R204       | 315-0203-00        |                      |         | RES.,FXD.CMPSN:20K OHM,5%.0.25W            | 01121    | CB2035          |
| A54R206       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R210       | 321-0385-00        | B100826              |         | RES.,FXD.FILM:100K OHM,1%.0.125W           | 91637    | MFF1816G10002F  |
| A54R212       | 315-0221-00        |                      |         | RES.,FXD.CMPSN:220 OHM,5%.0.25W            | 01121    | CB2215          |
| A54R213       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R214       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R216       | 315-0220-00        |                      |         | RES.,FXD.CMPSN:22 OHM,5%.0.25W             | 01121    | CB2205          |
| A54R304       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R602       | 315-0511-00        |                      |         | RES.,FXD.CMPSN:510 OHM,5%.0.25W            | 01121    | CB5115          |
| A54R708       | 315-0102-00        | B050000              |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R728       | 315-0201-00        |                      |         | RES.,FXD.CMPSN:200 OHM,5%.0.25W            | 01121    | CB2015          |
| A54R802       | 315-0301-00        |                      |         | RES.,FXD.CMPSN:300 OHM,5%.0.25W            | 01121    | CB3015          |
| A54R824       | 307-0445-00        |                      |         | RES NTWK.FXD.FI:4.7K OHM,20%.(9) RES       | 91637    | MSP10A01-472M   |
| A54R832       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM,5%.0.25W           | 01121    | CB5125          |
| A54R834       | 321-0261-00        | B010100              | B100825 | RES.,FXD.FILM:5.11K OHM,1%.0.125W          | 91637    | MFF1816G51100F  |
| A54R834       | 321-0262-00        | B100826              |         | RES.,FXD.FILM:5.23K OHM,1%.0.125W          | 91637    | MFF1816G52300F  |
| A54R836       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM,5%.0.25W           | 01121    | CB4725          |
| A54R838       | 321-0261-00        | B010100              | B100825 | RES.,FXD.FILM:5.11K OHM,1%.0.125W          | 91637    | MFF1816G51100F  |
| A54R838       | 321-0264-00        | B100826              |         | RES.,FXD.FILM:5.49K OHM,1%.0.125W          | 91637    | MFF1816G54900F  |
| A54R844       | 321-0281-00        |                      |         | RES.,FXD.FILM:8.25K OHM,1%.0.125W          | 91637    | MFF1816G82500F  |
| A54R926       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R932       | 311-1224-00        | B010100              | B100825 | RES.,VAR.NONWIR:500 OHM,20%.0.50W          | 32997    | 3386F-T04-501   |
| A54R932       | 321-0152-00        | B100826              |         | RES.,FXD.FILM:374 OHM,1%.0.125W            | 91637    | MFF1816G374R0F  |
| A54R934       | 315-0332-00        |                      |         | RES.,FXD.CMPSN:3.3K OHM,5%.0.25W           | 01121    | CB3325          |
| A54R936       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W             | 01121    | CB1025          |
| A54R938       | 321-0373-00        |                      |         | RES.,FXD.FILM:75K OHM, 1%.0.125W           | 91637    | MFF1816G75001F  |
| A54U001       | 156-0567-02        |                      |         | MICROCIRCUIT,DI:DUAL J-K NEG-EDGE-TRIG FF  | 01295    | SN74LS113NP3    |
| A54U012       | 156-0323-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER,BURN-IN       | 01295    | SN74S04         |
| A54U022       | 156-0078-02        |                      |         | MICROCIRCUIT,DI:1 OF 16 DECODER DEMUX.SCRN | 01295    | SN74154         |
| A54U032       | 156-0784-02        |                      |         | MICROCIRCUIT,DI:SYNC 4 BIT BINARY COUNTER  | 27014    | DM74LS163ANA+   |
| A54U102       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP           | 07263    | 74LS74A         |
| A54U114       | 156-0093-02        |                      |         | MICROCIRCUIT,DI:HEX INV BUFFER,BURN-IN     | 27014    | DM8016          |
| A54U122       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER               | 01295    | SN74LS04        |
| A54U132       | 156-0469-02        |                      |         | MICROCIRCUIT,DI:3/8 LINE DCDR              | 01295    | SN74LS138NP3    |
| A54U204       | 156-0733-02        |                      |         | MICROCIRCUIT,DI:DUAL MONOSTABLE MV.SCRN    | 04713    | SN74LS221N/J    |
| A54U206       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE       | 01295    | SN74LS00        |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                         | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A54U222       | 156-0426-00        | B010100              | B040546 | MICROCIRCUIT,DI:MICROPROCESSOR             | 04713    | MC6800S         |
| A54U222       | 156-0426-05        | B040547              |         | MICROCIRCUIT,DI:MICROPROCESSOR,SCREENED    | 80009    | 156-0426-05     |
| A54U234       | 156-0541-02        |                      |         | MICROCIRCUIT,DI:DUAL 2 TO 4 LINE DCDR      | 01295    | SN74LS139NP3    |
| A54U312       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT   | 01295    | SN74LS240       |
| A54U314       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT   | 01295    | SN74LS240       |
| A54U322       | 156-1018-00        |                      |         | MICROCIRCUIT,DI:HEX THREE STATE BUFFER     | 04713    | MC6885/MC8T95L  |
| A54U332       | 156-1018-00        |                      |         | MICROCIRCUIT,DI:HEX THREE STATE BUFFER     | 04713    | MC6885/MC8T95L  |
| A54U334       | 156-1018-00        |                      |         | MICROCIRCUIT,DI:HEX THREE STATE BUFFER     | 04713    | MC6885/MC8T95L  |
| A54U402       | 156-0386-02        |                      |         | MICROCIRCUIT,DI:TRIPLE 3-INP NAND GATE     | 27014    | DM74LS10N       |
| A54U412       | 156-0865-02        |                      |         | MICROCIRCUIT,DI:OCTAL D-TYPE FF W/CLEAR    | 01295    | SN74LS273NP3    |
| A54U424       | 156-0427-00        | B010100              | B070679 | MICROCIRCUIT,DI:PERIPHERAL INTERFACE ADPTR | 04713    | MC6820(L OR P)  |
| A54U424       | 156-0427-04        | B070680              |         | MICROCIRCUIT,DI:PERIPHERAL INTERFACE ADPTR | 80009    | 156-0427-04     |
| A54U512       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT   | 01295    | SN74LS240       |
| A54U514       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U522       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP           | 07263    | 74LS74A         |
| A54U524       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT   | 01295    | SN74LS240       |
| A54U532       | 156-0480-02        |                      |         | MICROCIRCUIT,DI:QUAD 2 INP & GATE          | 01295    | SN74LS08NP3     |
| A54U536       | 156-0730-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NOR BFR,BURN-IN | 01295    | SN74LS33        |
| A54U538       | 156-0865-02        |                      |         | MICROCIRCUIT,DI:OCTAL D-TYPE FF W/CLEAR    | 01295    | SN74LS273NP3    |
| A54U606       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U612       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U614       | 156-0384-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE       | 01295    | SN74LS03        |
| A54U626       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U636       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER               | 01295    | SN74LS04        |
| A54U638       | 156-0730-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NOR BFR,BURN-IN | 01295    | SN74LS33        |
| A54U702       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP           | 07263    | 74LS74A         |
| A54U712       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT   | 01295    | SN74LS240       |
| A54U714       | 156-0384-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE       | 01295    | SN74LS03        |
| A54U722       | 156-0384-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE       | 01295    | SN74LS03        |
| A54U728       | 156-0865-02        |                      |         | MICROCIRCUIT,DI:OCTAL D-TYPE FF W/CLEAR    | 01295    | SN74LS273NP3    |
| A54U732       | 156-0392-00        | B010100              | B100904 | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR         | 34335    | SN74LS175N OR   |
| A54U732       | 156-0392-03        | B100905              |         | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR         | 01295    | SN74S175NP3     |
| A54U814       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT   | 01295    | SN74LS240       |
| A54U822       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U832       | 156-0948-02        | B010100              | B100904 | MICROCIRCUIT,DI:QUAD D F-F BURN-IN         | 01295    | SN74S175J4      |
| A54U832       | 156-0392-03        | B100905              |         | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR         | 01295    | SN74S175NP3     |
| A54U836       | 156-0096-00        | B010100              | B100825 | MICROCIRCUIT,LI:VOLTAGE COMPARATOR         | 27014    | LM311H          |
| A54U836       | 156-1126-01        | B100826              |         | MICROCIRCUIT,LI:VOLTAGE COMPARATOR,SEL     | 01295    | LM311JG4        |
| A54U912       | 156-0347-02        |                      |         | MICROCIRCUIT,DI:10 TO 4 LINE ENCDR,SCRN    | 80009    | 156-0347-02     |
| A54U926       | 155-0014-01        |                      |         | MICROCIRCUIT,DI:ML ANALOG TO DECIMAL CONV  | 80009    | 155-0014-01     |

| Component No.           | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                       | Mfr Code | Mfr Part Number |
|-------------------------|--------------------|-----------------------------|--|----------|-----------------|
| A54 MPU (SN B110000-UP) |                    |                             |  |          |                 |
| A54                     | 670-7642-00        | B110000                     | CKT BOARD ASSY:MPU                       | 80009    | 670-7642-00     |
| A54C110                 | 283-0177-00        |                             | CAP.,FXD,CER DI:1UF, +80-20%.25V         | 56289    | 2C20Z5U105Z025B |
| A54C120                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C210                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C310                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C410                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C411                 | 281-0812-00        |                             | CAP.,FXD,CER DI:1000PF,10%.100V          | 04222    | MA101C102KAA    |
| A54C500                 | 281-0773-00        |                             | CAP.,FXD,CER DI:0.01UF,10%.100V          | 04222    | SA201C103KAA    |
| A54C510                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C520                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C540                 | 281-0812-00        |                             | CAP.,FXD,CER DI:1000PF,10%.100V          | 04222    | MA101C102KAA    |
| A54C610                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C700                 | 283-0635-00        |                             | CAP.,FXD,MICA D:51PF,1%.100V             | 00853    | D151E510F0      |
| A54C701                 | 283-0635-00        |                             | CAP.,FXD,MICA D:51PF,1%.100V             | 00853    | D151E510F0      |
| A54C800                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C900                 | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1100                | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1110                | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1120                | 283-0177-00        |                             | CAP.,FXD,CER DI:1UF, +80-20%.25V         | 56289    | 2C20Z5U105Z025B |
| A54C1200                | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1300                | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1320                | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1330                | 281-0812-00        |                             | CAP.,FXD,CER DI:1000PF,10%.100V          | 04222    | MA101C102KAA    |
| A54C1400                | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1420                | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1510                | 283-0422-00        |                             | CAP.,FXD,CER DI:0.047UF, +80-20%.50V     | 04222    | DG015E473Z      |
| A54C1511                | 281-0812-00        |                             | CAP.,FXD,CER DI:1000PF,10%.100V          | 04222    | MA101C102KAA    |
| A54C1512                | 290-0804-00        |                             | CAP.,FXD,ELCTLT:10UF, +50-10%.25V        | 55680    | ULA1E100TEA     |
| A54C1520                | 283-0177-00        |                             | CAP.,FXD,CER DI:1UF, +80-20%.25V         | 56289    | 2C20Z5U105Z025B |
| A54C1530                | 290-0776-00        |                             | CAP.,FXD,ELCTLT:22UF, +50-10%.10V        | 55680    | ULA1A220TEA     |
| A54C1531                | 283-0177-00        |                             | CAP.,FXD,CER DI:1UF, +80-20%.25V         | 56289    | 2C20Z5U105Z025B |
| A54CR410                | 152-0141-02        |                             | SEMICONV DEVICE:SILICON,30V,150MA        | 01295    | 1N4152R         |
| A54CR1340               | 152-0141-02        |                             | SEMICONV DEVICE:SILICON,30V,150MA        | 01295    | 1N4152R         |
| A54CR1530               | 152-0075-00        |                             | SEMICONV DEVICE:GE,25V,40MA              | 14433    | G866            |
| A54F1531                | 159-0059-00        |                             | FUSE,WIRE LEAD:5A,FAST-BLOW              | 000HX    | SPI-5A          |
| A54J700                 | 131-0608-00        |                             | TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD | 22526    | 47357           |
| A54J700                 | -----              |                             | (QUANTITY OF 2)                          |          |                 |
| A54J910                 | 131-0608-00        |                             | TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD | 22526    | 47357           |
| A54J910                 | -----              |                             | (QUANTITY OF 2)                          |          |                 |
| A54L1520                | 108-0858-00        |                             | COIL,RF:FIXED,3.2NH                      | 80009    | 108-0858-00     |
| A54Q410                 | 151-0192-00        |                             | TRANSISTOR:SILICON,NPN,SEL FROM MPS652   | 04713    | SPS8801         |
| A54Q540                 | 151-0192-00        |                             | TRANSISTOR:SILICON,NPN,SEL FROM MPS652   | 04713    | SPS8801         |
| A54R120                 | 315-0102-00        |                             | RES.,FXD,CMPSN:1K OHM,5%,0.25W           | 01121    | CB1025          |
| A54R121                 | 315-0102-00        |                             | RES.,FXD,CMPSN:1K OHM,5%,0.25W           | 01121    | CB1025          |
| A54R410                 | 321-0373-00        |                             | RES.,FXD,FILM:75K OHM, 1%,0.125W         | 91637    | MFF1816G75001F  |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                         | Mfr Code | Mfr Part Number |
|---------------|--------------------|-----------------------------|--|----------|-----------------|
| A54R411       | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM.5%.0.25W             | 01121    | CB1025          |
| A54R412       | 315-0512-00        |                             | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W           | 01121    | CB5125          |
| A54R500       | 321-0281-00        |                             | RES.,FXD.FILM:8.25K OHM.1%.0.125W          | 91637    | MFF1816G82500F  |
| A54R501       | 321-0264-00        |                             | RES.,FXD.FILM:5.49K OHM.1%.0.125W          | 91637    | MFF1816G54900F  |
| A54R502       | 315-0332-00        |                             | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W           | 01121    | CB3325          |
| A54R503       | 321-0152-00        |                             | RES.,FXD.FILM:374 OHM.1%.0.125W            | 91637    | MFF1816G374R0F  |
| A54R504       | 321-0264-00        |                             | RES.,FXD.FILM:5.49K OHM.1%.0.125W          | 91637    | MFF1816G54900F  |
| A54R510       | 307-0445-00        |                             | RES NTWK.FXD.FI:4.7K OHM.20%. (9) RES      | 91637    | MSP10A01-472M   |
| A54R540       | 315-0201-00        |                             | RES.,FXD.CMPSN:200 OHM.5%.0.25W            | 01121    | CB2015          |
| A54R600       | 315-0472-00        |                             | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W           | 01121    | CB4725          |
| A54R700       | 321-0269-00        |                             | RES.,FXD.FILM:6.19K OHM.1%.0.125W          | 91637    | MFF1816G61900F  |
| A54R701       | 321-0231-00        |                             | RES.,FXD.FILM:2.49K OHM.1%.0.125W          | 91637    | MFF1816G24900F  |
| A54R940       | 315-0202-00        |                             | RES.,FXD.CMPSN:2K OHM.5%.0.25W             | 01121    | CB2025          |
| A54R1110      | 315-0511-00        |                             | RES.,FXD.CMPSN:510 OHM.5%.0.25W            | 01121    | CB5115          |
| A54R1111      | 315-0202-00        |                             | RES.,FXD.CMPSN:2K OHM.5%.0.25W             | 01121    | CB2025          |
| A54R1112      | 315-0302-00        |                             | RES.,FXD.CMPSN:3K OHM.5%.0.25W             | 01121    | CB3025          |
| A54R1120      | 307-0445-00        |                             | RES NTWK.FXD.FI:4.7K OHM.20%. (9) RES      | 91637    | MSP10A01-472M   |
| A54R1240      | 315-0511-00        |                             | RES.,FXD.CMPSN:510 OHM.5%.0.25W            | 01121    | CB5115          |
| A54R1330      | 315-0201-00        |                             | RES.,FXD.CMPSN:200 OHM.5%.0.25W            | 01121    | CB2015          |
| A54R1510      | 315-0203-00        |                             | RES.,FXD.CMPSN:20K OHM.5%.0.25W            | 01121    | CB2035          |
| A54R1511      | 315-0104-00        |                             | RES.,FXD.CMPSN:100K OHM.5%.0.25W           | 01121    | CB1045          |
| A54R1520      | 315-0102-00        |                             | RES.,FXD.CMPSN:1K OHM.5%.0.25W             | 01121    | CB1025          |
| A54R1530      | 315-0512-00        |                             | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W           | 01121    | CB5125          |
| A54TP300      | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP430      | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP432      | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP434      | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP436      | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP500      | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP700      | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP800      | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP1110     | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP1130     | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54TP1330     | 214-0579-00        |                             | TERM.TEST POINT:BRS CD PL                  | 80009    | 214-0579-00     |
| A54U130       | 156-0479-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U200       | 156-0541-02        |                             | MICROCIRCUIT,DI:DUAL 2 TO 4 LINE DC DR     | 01295    | SN74LS139NP3    |
| A54U210       | 156-0479-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U220       | 156-0388-03        |                             | MICROCIRCUIT,DI:DUAL D FLIP-FLOP           | 07263    | 74LS74A         |
| A54U230       | 156-0388-03        |                             | MICROCIRCUIT,DI:DUAL D FLIP-FLOP           | 07263    | 74LS74A         |
| A54U300       | 156-0479-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U310       | 156-0480-02        |                             | MICROCIRCUIT,DI:QUAD 2 INP & GATE          | 01295    | SN74LS08NP3     |
| A54U320       | 156-0384-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE       | 01295    | SN74LS03        |
| A54U330       | 156-0391-02        |                             | MICROCIRCUIT,DI:HEX LATCH W/CLEAR          | 01295    | SN74LS174       |
| A54U400       | 156-0479-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP OR GATE         | 01295    | SN74LS32NP3     |
| A54U420       | 156-0384-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE       | 01295    | SN74LS03        |
| A54U430       | 156-0720-02        |                             | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE       | 01295    | SN74LS368       |
| A54U510       | 155-0014-01        |                             | MICROCIRCUIT,DI:ML,ANALOG TO DECIMAL CONV  | 80009    | SN74LS0014-01   |
| A54U520       | 156-0392-03        |                             | MICROCIRCUIT,DI:QUAD LATCH W/CLEAR         | 01295    | SN74LS175NP3    |
| A54U530       | 156-0385-02        |                             | MICROCIRCUIT,DI:HEX INVERTER               | 01295    | SN74LS04        |
| A54U600       | 156-1126-01        |                             | MICROCIRCUIT,LI:VOLTAGE COMPARATOR,SEL     | 01295    | LM311JG4        |
| A54U610       | 156-1177-01        |                             | MICROCIRCUIT,DI:STET LINE PRIORITY ENCODER | 80009    | 156-1177-01     |
| A54U620       | 156-0720-02        |                             | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE       | 01295    | SN74LS368       |

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscont | Name & Description                         | Mfr Code | Mfr Part Number |
|---------------|--------------------|-----------------------------|--|----------|-----------------|
| A54U630       | 156-0730-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP NOR BFR,BURN-IN | 01295    | SN74LS33        |
| A54U710       | 156-0427-04        |                             | MICROCIRCUIT,DI:PERIPHERAL INTERFACE ADPTR | 80009    | 156-0427-04     |
| A54U730       | 156-0093-02        |                             | MICROCIRCUIT,DI:HEX INV BUFFER,BURN-IN     | 27014    | DM8016          |
| A54U800       | 156-0733-02        |                             | MICROCIRCUIT,DI:DUAL MONOSTABLE MV.SCRN    | 04713    | SN74LS221N/J    |
| A54U810       | 156-0865-02        |                             | MICROCIRCUIT,DI:OCTAL D-TYPE FF W/CLEAR    | 01295    | SN74LS273NP3    |
| A54U820       | 156-0914-02        |                             | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT   | 01295    | SN74LS240       |
| A54U830       | 156-0865-02        |                             | MICROCIRCUIT,DI:OCTAL D-TYPE FF W/CLEAR    | 01295    | SN74LS273NP3    |
| A54U900       | 160-1900-00        |                             | MICROCIRCUIT,DI:4096 X 8 EPROM.PROGRAMMED  | 80009    | 160-1900-00     |
| A54U910       | 156-0567-02        |                             | MICROCIRCUIT,DI:DUAL J-K NEG-EDGE-TRIG FF  | 01295    | SN74LS113NP3    |
| A54U920       | 156-0956-02        |                             | MICROCIRCUIT,DI:OCTAL BFR W/3 STATE OUT    | 01295    | SN74LS244NP3    |
| A54U930       | 156-0852-02        |                             | MICROCIRCUIT,DI:HEX DRVR W/3 STATE INP     | 01295    | SN74LS367NP3    |
| A54U1000      | 160-1899-00        |                             | MICROCIRCUIT,DI:4096 X 8 EPROM. PROGRAMMED | 80009    | 160-1899-00     |
| A54U1010      | 156-1342-00        |                             | MICROCIRCUIT,DI:8 BIT W/CLOCK & RAM        | 07263    | F6802DC         |
| A54U1030      | 156-1025-02        |                             | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR    | 01295    | SN74LS242       |
| A54U1120      | 156-1111-02        |                             | MICROCIRCUIT,DI:OCTAL BUS TRANSCEIVERS     | 01295    | SN74LS245JP3    |
| A54U1130      | 156-1025-02        |                             | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR    | 01295    | SN74LS242       |
| A54U1200      | 160-1901-00        |                             | MICROCIRCUIT,DI:4096 X 8 EPROM.PROGRAMMED  | 80009    | 160-1901-00     |
| A54U1210      | 156-0465-02        |                             | MICROCIRCUIT,DI:8 INP NAND GATE            | 01295    | SN74LS30NP3     |
| A54U1220      | 156-0469-02        |                             | MICROCIRCUIT,DI:3/8 LINE DCDR              | 01295    | SN74LS138NP3    |
| A54U1230      | 156-0720-02        |                             | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE       | 01295    | SN74LS368       |
| A54U1310      | 156-0385-02        |                             | MICROCIRCUIT,DI:HEX INVERTER               | 01295    | SN74LS04        |
| A54U1320      | 156-0480-02        |                             | MICROCIRCUIT,DI:QUAD 2 INP & GATE          | 01295    | SN74LS08NP3     |
| A54U1330      | 156-0382-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE       | 01295    | SN74LS00        |
| A54U1400      | 156-1028-00        |                             | MICROCIRCUIT,DI:1024 X 4 STATIC RAM        | 34649    | 2114            |
| A54U1410      | 156-0733-02        |                             | MICROCIRCUIT,DI:DUAL MONOSTABLE MV.SCRN    | 04713    | SN74LS221N/J    |
| A54U1420      | 156-0382-02        |                             | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE       | 01295    | SN74LS00        |
| A54U1430      | 156-0388-03        |                             | MICROCIRCUIT,DI:DUAL D FLIP-FLOP           | 07263    | 74LS74A         |
| A54U1500      | 156-1028-00        |                             | MICROCIRCUIT,DI:1024 X 4 STATIC RAM        | 34649    | 2114            |
| A54W1310      | 131-0566-00        |                             | BUS CONDUCTOR:DUMMY RES.2.375.22 AWG       | 57668    | JWW-0200E0      |
| A54W1531      | 131-0566-00        |                             | BUS CONDUCTOR:DUMMY RES.2.375.22 AWG       | 57668    | JWW-0200E0      |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                     | Mfr Code | Mfr Part Numbe  |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A56           | 670-4946-00        | B010100              | B049999 | CKT BOARD ASSY:7912AD/GPIB INTERFACE   | 80009    | 670-4946-00     |
| A56           | 670-4946-01        | B050000              | B059999 | CKT BOARD ASSY:7912AD/GPIB INTERFACE   | 80009    | 670-4946-01     |
| A56           | 670-4946-02        | B060000              | B100869 | CKT BOARD ASSY:7912AD/GPIB INTERFACE   | 80009    | 670-4946-02     |
| A56           | 670-4946-03        | B100870              | B109999 | CKT BOARD ASSY:7912AD/GPIB INTERFACE   | 80009    | 670-4946-03     |
| A56           | 670-4946-04        | B110000              | B111210 | CKT BOARD ASSY:7912AD/GPIB INTERFACE   | 80009    | 670-4946-04     |
| A56           | 670-4946-05        | B111211              |         | CKT BOARD ASSY:7912AD/GPIB INTERFACE   | 80009    | 670-4946-05     |
| A56C030       | 290-0745-00        |                      |         | CAP.,FXD,ELCTLT:22UF,+50-10%.25V       | 54473    | ECE-A25V22L     |
| A56C032       | 290-0745-00        |                      |         | CAP.,FXD,ELCTLT:22UF,+50-10%.25V       | 54473    | ECE-A25V22L     |
| A56C100       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C112       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C120       | 283-0077-00        |                      |         | CAP.,FXD,CER DI:330PF,5%.500V          | 59660    | 831-500B331J    |
| A56C122       | 283-0065-01        |                      |         | CAP.,FXD,CER DI:0.001UF,5%.100V        | 59660    | 0835582Z5E0010  |
| A56C130       | 283-0620-00        |                      |         | CAP.,FXD,MICA D:470PF,1%.300V          | 00853    | D155F4771FO     |
| A56C132       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C134       | 283-0649-00        |                      |         | CAP.,FXD,MICA D:105PF,1%.300V          | 00853    | D155F1050F0     |
| A56C200       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C202       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C206       | 281-0580-00        |                      |         | CAP.,FXD,CER DI:470PF,10%.500V         | 04222    | 7001-1374       |
| A56C212       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C214       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C226       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C300       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C302       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C306       | 281-0580-00        |                      |         | CAP.,FXD,CER DI:470PF,10%.500V         | 04222    | 7001-1374       |
| A56C310       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C312       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C320       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C410       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C420       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C432       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C502       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C512       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C520       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C532       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C602       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C604       | 281-0536-00        |                      |         | CAP.,FXD,CER DI:1000PF,10%.500V        | 72982    | 301000 X 5P0102 |
| A56C620       | 281-0773-00        |                      |         | CAP.,FXD,CER DI:0.01UF,10%.100V        | 04222    | SA201C103KAA    |
| A56C634       | 290-0776-00        |                      |         | CAP.,FXD,ELCTLT:22UF,+50-10%.10V       | 55680    | ULA1A220TEA     |
| A56CR312      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A56CR322      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A56CR548      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A56Q600       | 151-0190-00        |                      |         | TRANSISTOR:SILICON,NPN                 | 07263    | S032677         |
| A56Q606       | 151-0192-00        |                      |         | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A56R104       | 315-0471-00        |                      |         | RES.,FXD,CMPSN:470 OHM,5%.0.25W        | 01121    | CB4715          |
| A56R120       | 315-0512-00        |                      |         | RES.,FXD,CMPSN:5.1K OHM,5%.0.25W       | 01121    | CB5125          |
| A56R122       | 321-0305-00        |                      |         | RES.,FXD,FILM:14.7K OHM,1%.0.125W      | 91637    | CB1816G14701F   |
| A56R124       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%.0.25W         | 01121    | CB1025          |
| A56R130       | 315-0102-00        |                      |         | RES.,FXD,CMPSN:1K OHM,5%.0.25W         | 01121    | CB1025          |
| A56R132       | 315-0512-00        |                      |         | RES.,FXD,CMPSN:5.1K OHM,5%.0.25W       | 01121    | CB5125          |
| A56R134       | 315-0103-00        |                      |         | RES.,FXD,CMPSN:10K OHM,5%.0.25W        | 01121    | CB1035          |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                          | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|---|----------|------------------|
| A56R200       | 311-1917-00        |                      |         | RES.,VAR.NONWIR:TRMR.5K OHM.10%.0.5W        | 73138    | 72-198-0         |
| A56R202       | 315-0510-00        |                      |         | RES.,FXD.CMPSN:51 OHM.5%.0.25W              | 01121    | CB5105           |
| A56R204       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W              | 01121    | CB1025           |
| A56R205       | 315-0391-00        | B060000              | B100869 | RES.,FXD.CMPSN:390 OHM.5%.0.25W             | 01121    | CB3915           |
| A56R206       | 321-0135-00        |                      |         | RES.,FXD.FILM:249 OHM.1%.0.125W             | 91637    | MFF1816G249R0F   |
| A56R207       | 315-0391-00        | B060000              | B100869 | RES.,FXD.CMPSN:390 OHM.5%.0.25W             | 01121    | CB3915           |
| A56R208       | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W             | 01121    | CB4715           |
| A56R210       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W              | 01121    | CB1025           |
| A56R212       | 321-0277-00        |                      |         | RES.,FXD.FILM:7.5K OHM.1%.0.125W            | 91637    | MFF1816G75000F   |
| A56R214       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W            | 01121    | CB5125           |
| A56R232       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W              | 01121    | CB1025           |
| A56R238       | 315-0391-00        | B100870              |         | RES.,FXD.CMPSN:390 OHM.5%.0.25W             | 01121    | CB3915           |
| A56R300       | 311-1917-00        |                      |         | RES.,VAR.NONWIR:TRMR.5K OHM.10%.0.5W        | 73138    | 72-198-0         |
| A56R302       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W              | 01121    | CB1025           |
| A56R304       | 321-0135-00        |                      |         | RES.,FXD.FILM:249 OHM.1%.0.125W             | 91637    | MFF1816G249R0F   |
| A56R306       | 321-0277-00        |                      |         | RES.,FXD.FILM:7.5K OHM.1%.0.125W            | 91637    | MFF1816G75000F   |
| A56R308       | 315-0510-00        |                      |         | RES.,FXD.CMPSN:51 OHM.5%.0.25W              | 01121    | CB5105           |
| A56R310       | 315-0512-00        |                      |         | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W            | 01121    | CB5125           |
| A56R312       | 315-0752-00        |                      |         | RES.,FXD.CMPSN:7.5K OHM.5%.0.25W            | 01121    | CB7525           |
| A56R322       | 315-0752-00        |                      |         | RES.,FXD.CMPSN:7.5K OHM.5%.0.25W            | 01121    | CB7525           |
| A56R332       | 315-0391-00        | B100870              |         | RES.,FXD.CMPSN:390 OHM.5%.0.25W             | 01121    | CB3915           |
| A56R334       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W              | 01121    | CB1025           |
| A56R400       | 307-0502-00        |                      |         | RES.NTWK.FXD.FI:(9) 1.8K OHM.20%.0.125W     | 91637    | MSP10A01-182M    |
| A56R420       | 307-0542-00        |                      |         | RES.NTWK.FXD.FI:10K OHM.5%.0.125W           | 01121    | 106A103          |
| A56R530       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W              | 01121    | CB1025           |
| A56R600       | 315-0560-00        |                      |         | RES.,FXD.CMPSN:56 OHM.5%.0.25W              | 01121    | CB5605           |
| A56R610       | 321-0173-00        | B010100              | B111210 | RES.,FXD.FILM:619 OHM.1%.0.125W             | 91637    | MFF1816G619R0F   |
| A56R610       | 321-0203-00        | B111211              |         | RES.,FXD.FILM:1.27K OHM.1%.0.125W           | 91637    | MFF1816G12700F   |
| A56R611       | 321-0237-00        |                      |         | RES.,FXD.FILM:2.87K OHM.1%.0.125W           | 91637    | MFF1816G28700F   |
| A56R612       | 307-0542-00        |                      |         | RES.NTWK.FXD.FI:10K OHM.5%.0.125W           | 01121    | 106A103          |
| A56R614       | 321-0213-00        |                      |         | RES.,FXD.FILM:1.62K OHM.1%.0.125W           | 91637    | MFF1816G16200F   |
| A56S400       | 260-1827-00        |                      |         | SWITCH.ROCKER:5.SPST                        | 81073    | 76SB05S          |
| A56S402       | 260-1827-00        |                      |         | SWITCH.ROCKER:5.SPST                        | 81073    | 76SB05S          |
| A56U002       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER                | 01295    | SN74LS04         |
| A56U012       | 156-0383-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NOR GATE         | 01295    | SN74LS02         |
| A56U022       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP            | 07263    | 74LS74A          |
| A56U032       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP            | 07263    | 74LS74A          |
| A56U100       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE          | 01295    | SN74LS32NP3      |
| A56U102       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP            | 07263    | 74LS74A          |
| A56U110       | 156-0480-02        |                      |         | MICROCIRCUIT,DI:QUAD 2 INP & GATE           | 01295    | SN74LS08NP3      |
| A56U112       | 156-0037-02        |                      |         | MICROCIRCUIT,DI:DUAL 2-W,2-INP & OR INVT GA | 01295    | SN7451(NP3 OR JP |
| A56U120       | 156-0405-03        |                      |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV   | 07263    | 9602             |
| A56U122       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER                | 01295    | SN74LS04         |
| A56U130       | 156-0405-03        |                      |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV   | 07263    | 9602             |
| A56U132       | 156-0721-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-IN NAND SCHMITT TRI  | 04713    | SN74LS132NDS     |
| A56U200       | 156-0770-00        | B010100              | B100869 | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER       | 27014    | LF356H           |
| A56U200       | 156-1156-00        | B100870              |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER       | 27014    | LF356N           |
| A56U202       | 156-0852-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR W/3 STATE INP      | 01295    | SN74LS367NP3     |
| A56U210       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP            | 07263    | 74LS74A          |
| A56U212       | 156-0617-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 BIT CNTR.SCRN        | 01295    | SN74393NP3       |
| A56U220       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00         |
| A56U222       | 156-0479-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP OR GATE          | 01295    | SN74LS32NP3      |

Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                          | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|---|----------|------------------|
| A56U230       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP            | 07263    | 74LS74A          |
| A56U232       | 156-0419-02        |                      |         | MICROCIRCUIT,DI:DUAL 4 INP NAND LINE DRVR   | 07263    | 74S140           |
| A56U300       | 156-0770-00        | B010100              | B100869 | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER       | 27014    | LF356H           |
| A56U300       | 156-1156-00        | B100870              |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER       | 27014    | LF356N           |
| A56U302       | 156-0720-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE        | 01295    | SN74LS368        |
| A56U310       | 156-0927-00        | B010100              | B100904 | MICROCIRCUIT,LI:DIGITAL TO ANALOG CONVERTER | 80009    | 156-0927-00      |
| A56U310       | 156-0927-02        | B100905              |         | MICROCIRCUIT,LI:DIGITAL/ANALOG CONVERTER    | 04713    | MC3410CLD        |
| A56U312       | 156-0720-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE        | 01295    | SN74LS368        |
| A56U320       | 156-0927-00        | B010100              | B100904 | MICROCIRCUIT,LI:DIGITAL TO ANALOG CONVERTER | 80009    | 156-0927-00      |
| A56U320       | 156-0927-02        | B100905              |         | MICROCIRCUIT,LI:DIGITAL/ANALOG CONVERTER    | 04713    | MC3410CLD        |
| A56U322       | 156-0480-02        |                      |         | MICROCIRCUIT,DI:QUAD 2 INP & GATE           | 01295    | SN74LS08NP3      |
| A56U330       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F       | 01295    | SN74LS374        |
| A56U330       | 156-0982-03        | B100905              | B109999 | MICROCIRCUIT,DI:OCTAL-D-EDGE FF. SCRN       | 01295    | SN74LS374 N3     |
| A56U332       | 156-0388-03        |                      |         | MICROCIRCUIT,DI:DUAL D FLIP-FLOP            | 07263    | 74LS74A          |
| A56U400       | 156-0382-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE        | 01295    | SN74LS00         |
| A56U410       | 156-0720-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE        | 01295    | SN74LS368        |
| A56U412       | 156-0427-00        | B010100              | B070679 | MICROCIRCUIT,DI:PERIPHERAL INTERFACE ADPTR  | 04713    | MC6820(L OR P)   |
| A56U412       | 156-0427-04        | B070680              |         | MICROCIRCUIT,DI:PERIPHERAL INTERFACE ADPTR  | 80009    | 156-0427-04      |
| A56U420       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F       | 01295    | SN74LS374        |
| A56U420       | 156-0982-02        | B100905              |         | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F       | 80009    | 156-0982-02      |
| A56U430       | 156-0982-00        | B010100              | B100904 | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F       | 01295    | SN74LS374        |
| A56U430       | 156-0982-02        | B100905              |         | MICROCIRCUIT,DI:OCTAL D EDGE TRIG F-F       | 80009    | 156-0982-02      |
| A56U432       | 160-0112-01        | B010100              | B049999 | MICROCIRCUIT,DI:PROM.2048 X 8.PROGRAMMED    | 80009    | 160-0112-01      |
| A56U432       | 160-0112-03        | B050000              | B109999 | MICROCIRCUIT,DI:2048 X 8 EPROM.PROGRAMMED   | 80009    | 160-0112-03      |
| A56U500       | 156-0720-02        |                      |         | MICROCIRCUIT,DI:HEX DRVR.4 TO 2 LINE        | 01295    | SN74LS368        |
| A56U502       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT    | 01295    | SN74LS240        |
| A56U510       | 156-1025-00        | B010100              | B100904 | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR     | 01295    | SN74LS242 N OR   |
| A56U510       | 156-1025-02        | B100905              |         | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR     | 01295    | SN74LS242        |
| A56U512       | 156-0914-02        |                      |         | MICROCIRCUIT,DI:OCT ST BFR W/3 STATE OUT    | 01295    | SN74LS240        |
| A56U520       | 156-1025-00        | B010100              | B100904 | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR     | 01295    | SN74LS242 N OR J |
| A56U520       | 156-1025-02        | B100905              |         | MICROCIRCUIT,DI:INVERTING QUAD BUS XCVR     | 01295    | SN74LS242        |
| A56U522       | 156-0469-02        |                      |         | MICROCIRCUIT,DI:3/8 LINE DC DR              | 01295    | SN74LS138NP3     |
| A56U528       | 155-0022-00        |                      |         | MICROCIRCUIT,DI:ML.CHANNEL SWITCH           | 80009    | 155-0022-00      |
| A56U530       | 156-1133-00        |                      |         | MICROCKT.INTFC:QUAD 3-STATE XCVR            | 04713    | MC3448AP         |
| A56U532       | 156-1133-00        |                      |         | MICROCKT.INTFC:QUAD 3-STATE XCVR            | 04713    | MC3448AP         |
| A56U600       | 156-0481-02        |                      |         | MICROCIRCUIT,DI:TRIPLE 3 INP & GATE         | 27014    | DM74LS11NA +     |
| A56U602       | 156-0386-02        |                      |         | MICROCIRCUIT,DI:TRIPLE 3-INP NAND GATE      | 27014    | DM74LS10N        |
| A56U610       | 156-0851-02        |                      |         | MICROCIRCUIT,DI:QUAD TO BUS DRIVER.SCREENED | 18324    | N8509A(NB OR FB) |
| A56U612       | 156-0385-02        |                      |         | MICROCIRCUIT,DI:HEX INVERTER                | 01295    | SN74LS04         |
| A56U620       | 156-0480-02        |                      |         | MICROCIRCUIT,DI:QUAD 2 INP & GATE           | 01295    | SN74LS08NP3      |
| A56U622       | 156-0383-02        |                      |         | MICROCIRCUIT,DI:QUAD 2-INP NOR GATE         | 01295    | SN74LS02         |
| A56U630       | 156-0600-00        |                      |         | MICROCIRCUIT,DI:QUAD BUS XCVR               | 80009    | 156-0600-00      |
| A56U632       | 156-0600-00        |                      |         | MICROCIRCUIT,DI:QUAD BUS XCVR               | 80009    | 156-0600-00      |



| Component No.         | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                   | Mfr Code | Mfr Part Number  |
|-----------------------|--------------------|----------------------|---------|--------------------------------------|----------|------------------|
| A62 POWER CONNECTOR   |                    |                      |         |                                      |          |                  |
| A62                   | 670-5157-00        | B010100              | B089999 | CKT BOARD ASSY:POWER CONNECTOR       | 80009    | 670-5157-00      |
| A62                   | 670-5157-01        | B090000              |         | CKT BOARD ASSY:POWER CONNECTOR       | 80009    | 670-5157-01      |
| A62C412               | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%.25V     | 54473    | ECE-A25V22L      |
| A62C414               | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%.25V     | 54473    | ECE-A25V22L      |
| A62C416               | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%.25V     | 54473    | ECE-A25V22L      |
| A62C436               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C442               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C536               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C606               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C714               | 290-0768-00        |                      |         | CAP.,FXD.ELCTLT:10UF,+50-10%.100V    | 54473    | ECE-A100V10L     |
| A62C716               | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%.25V     | 54473    | ECE-A25V22L      |
| A62C814               | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%.25V     | 54473    | ECE-A25V22L      |
| A62C816               | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%.25V     | 54473    | ECE-A25V22L      |
| A62C836               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C842               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C844               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C848               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C849               | 283-0203-00        |                      |         | CAP.,FXD.CER DI:0.47UF,20%.50V       | 72982    | 8131M058Z5U0474M |
| A62C910               | 290-0768-00        |                      |         | CAP.,FXD.ELCTLT:10UF,+50-10%.100V    | 54473    | ECE-A100V10L     |
| A62C936               | 283-0008-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%.500V       | 56289    | 3C37X7R104M500B  |
| A62C940               | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A62C946               | 283-0008-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%.500V       | 56289    | 3C37X7R104M500B  |
| A62F134               | 159-0096-00        |                      |         | FUSE,CARTRIDGE:3AG,7.5A,32V,0.5 SEC  | 80009    | 159-0096-00      |
| A62F140               | 159-0096-00        |                      |         | FUSE,CARTRIDGE:3AG,7.5A,32V,0.5 SEC  | 80009    | 159-0096-00      |
| A62F434               | 159-0096-00        |                      |         | FUSE,CARTRIDGE:3AG,7.5A,32V,0.5 SEC  | 80009    | 159-0096-00      |
| A62F438               | 159-0096-00        |                      |         | FUSE,CARTRIDGE:3AG,7.5A,32V,0.5 SEC  | 80009    | 159-0096-00      |
| A62F632               | 159-0096-00        |                      |         | FUSE,CARTRIDGE:3AG,7.5A,32V,0.5 SEC  | 80009    | 159-0096-00      |
| A62F636               | 159-0096-00        |                      |         | FUSE,CARTRIDGE:3AG,7.5A,32V,0.5 SEC  | 80009    | 159-0096-00      |
| A62F732               | 159-0096-00        |                      |         | FUSE,CARTRIDGE:3AG,7.5A,32V,0.5 SEC  | 80009    | 159-0096-00      |
| A62F736               | 159-0096-00        |                      |         | FUSE,CARTRIDGE:3AG,7.5A,32V,0.5 SEC  | 80009    | 159-0096-00      |
| A62R602               | 315-0202-00        |                      |         | RES.,FXD.CMPSN:2K OHM,5%.0.25W       | 01121    | CB2025           |
| A62R606               | 315-0221-00        |                      |         | RES.,FXD.CMPSN:220 OHM,5%.0.25W      | 01121    | CB2215           |
| A68 MAIN INTERCONNECT |                    |                      |         |                                      |          |                  |
| A68                   | 670-5152-00        | B010100              | B059999 | CKT BOARD ASSY:MAIN INTERCONNECT     | 80009    | 670-5152-00      |
| A68                   | 670-5152-01        | B060000              | B089999 | CKT BOARD ASSY:MAIN INTERCONNECT     | 80009    | 670-5152-01      |
| A68                   | 670-5152-02        | B090000              | B100940 | CKT BOARD ASSY:MAIN INTERCONNECT     | 80009    | 670-5152-02      |
| A68                   | 670-5152-04        | B100941              |         | CKT BOARD ASSY:MAIN INTERCONNECT     | 80009    | 670-5152-03      |
| A68CR018              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A68CR422              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A68CR424              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A68CR426              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A68CR520              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A68R014               | 321-0193-00        | B010100              | B100940 | RES.,FXD.FILM:1K OHM,1%.0.125W       | 91637    | MFF1816G10000F   |
| A68R110               | 321-0193-00        | B010100              | B100940 | RES.,FXD.FILM:1K OHM,1%.0.125W       | 91637    | MFF1816G10000F   |
| A68W014               | 131-0566-00        | B100941              |         | BUS CONDUCTOR:DUMMY RES,2.375,22 AWG | 57668    | JWW-0200E0       |
| A68W110               | 131-0566-00        | B100941              |         | BUS CONDUCTOR:DUMMY RES,2.375,22 AWG | 57668    | JWW-0200E0       |

# Replaceable Electrical Parts—7912AD Service

| Component No.               | Tektronix Part No. | Serial/Model No. Eff | Dscnt   | Name & Description                     | Mfr Code | Mfr Part Number |
|-----------------------------|--------------------|----------------------|---------|--|----------|-----------------|
| A72 HIGH VOLTAGE OSCILLATOR |                    |                      |         |  |          |                 |
| A72                         | 670-5155-00        | 010100               | B039999 | CKT BOARD ASSY:HIGH VOLTAGE OSC        | 80009    | 670-5155-00     |
| A72                         | 670-5155-01        | 040000               | B059999 | CKT BOARD ASSY:HIGH VOLTAGE OSC        | 80009    | 670-5155-01     |
| A72                         | 670-5155-02        | 060000               |         | CKT BOARD ASSY:HIGH VOLTAGE OSC        | 80009    | 670-5155-02     |
| A72C008                     | 290-0255-00        |                      |         | CAP.,FXD.ELCTL:20UF.50V                | 56289    | 30D206G050CC9   |
| A72C011                     | 283-0010-00        | B010113              |         | CAP.,FXD.CER DI:0.05UF. + 100-20%.50V  | 56289    | 1C10Z5U503Z050F |
| A72C012                     | 283-0051-00        |                      |         | CAP.,FXD.CER DI:0.0033UF.5%.100V       | 56289    | 1C20C0G332J100F |
| A72C013                     | 283-0177-00        | B010100              | B010112 | CAP.,FXD.CER DI:1UF. + 80-20%.25V      | 56289    | 2C20Z5U105Z025F |
| A72C014                     | 283-0065-01        |                      |         | CAP.,FXD.CER DI:0.001UF.5%.100V        | 59660    | 0835582Z5E00102 |
| A72C016                     | 283-0065-01        |                      |         | CAP.,FXD.CER DI:0.001UF.5%.100V        | 59660    | 0835582Z5E00102 |
| A72C102                     | 283-0198-00        |                      |         | CAP.,FXD.CER DI:0.22UF.20%.50V         | 56289    | 1C10Z5U223M050  |
| A72C112                     | 283-0129-00        |                      |         | CAP.,FXD.CER DI:0.56UF.20%.100V        | 56289    | 3C37X5R564M050  |
| A72C114                     | 290-0782-00        |                      |         | CAP.,FXD.ELCTL:4.7UF. + 75-10%.35V     | 55680    | ULA1V4R7TEA     |
| A72C116                     | 290-0782-00        |                      |         | CAP.,FXD.ELCTL:4.7UF. + 75-10%.35V     | 55680    | ULA1V4R7TEA     |
| A72C202                     | 281-0523-00        |                      |         | CAP.,FXD.CER DI:100PF. +/-20PF.500V    | 72982    | 301-000U2M0101A |
| A72CR012                    | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R         |
| A72CR014                    | 152-0141-02        | B060000              |         | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R         |
| A72CR018                    | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R         |
| A72CR019                    | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA      | 01295    | 1N4152R         |
| A72R020                     | 315-0102-00        | B060000              |         | RES.,FXD.CMPSN:1K.OHM.5%.0.25W         | 01121    | CB1025          |
| A72L104                     | 108-0422-00        |                      |         | COIL,RF:FIXED.82UH                     | 80009    | 108-0422-00     |
| A72Q002                     | 151-0496-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 80009    | 151-0496-00     |
| A72Q012                     | 151-0350-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 04713    | SPS6700         |
| A72Q014                     | 151-0192-00        |                      |         | TRANSISTOR:SILICON.NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A72Q016                     | 151-0103-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 80009    | 151-0103-00     |
| A72Q018                     | 151-0103-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 80009    | 151-0103-00     |
| A72R010                     | 321-0290-00        |                      |         | RES.,FXD.FILM:10.2K OHM.1%.0.125W      | 91637    | MFF1816G10201F  |
| A72R011                     | 321-0315-00        |                      |         | RES.,FXD.FILM:18.7K OHM.1%.0.125W      | 91637    | CMF55-116G18701 |
| A72R012                     | 315-0513-00        |                      |         | RES.,FXD.CMPSN:51K OHM.5%.0.25W        | 01121    | CB5135          |
| A72R013                     | 315-0513-00        |                      |         | RES.,FXD.CMPSN:51K OHM.5%.0.25W        | 01121    | CB5135          |
| A72R014                     | 315-0681-00        |                      |         | RES.,FXD.CMPSN:680 OHM.5%.0.25W        | 01121    | CB6815          |
| A72R015                     | 321-0327-00        |                      |         | RES.,FXD.FILM:24.9K OHM.1%.0.125W      | 91637    | MFF1816G24901F  |
| A72R016                     | 308-0685-00        |                      |         | RES.,FXD.WW:1.5 OHM.5%.1W              | 75042    | BW20-1R500J     |
| A72R017                     | 321-0293-00        |                      |         | RES.,FXD.FILM:11K OHM.1%.0.125W        | 91637    | MFF1816G11001F  |
| A72R018                     | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W       | 01121    | CB1045          |
| A72R019                     | 321-0197-00        |                      |         | RES.,FXD.FILM:1.1K OHM.1%.0.125W       | 91637    | MFF1816G11000F  |
| A72R020                     | 315-0102-00        | B060000              |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W         | 01121    | CB1025          |
| A72R103                     | 315-0512-00        | B040000              |         | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W       | 01121    | CB5125          |
| A72R208                     | 315-0302-00        |                      |         | RES.,FXD.CMPSN:3K OHM.5%.0.25W         | 01121    | CB3025          |
| A72R0111                    | 315-0562-00        |                      |         | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W       | 01121    | CB5625          |
| A72T102                     | 120-1175-00        |                      |         | TRANSFORMER,RF:FILAMENT                | 80009    | 120-1175-00     |
| A72U012                     | 156-0402-00        | B010100              | B100904 | MICROCIRCUIT,LI:TIMER                  | 27014    | LM555CN         |
| A72U012                     | 156-0402-02        | B100905              |         | MICROCIRCUIT,LI:TIMER,CHK              | 27014    | LM555CN/A       |
| A72VR014                    | 152-0514-00        |                      |         | SEMICONV DEVICE:ZENER.0.4W.10V.1%      | 80009    | 152-0514-00     |
| A72VR016                    | 152-0405-00        | B010100              | B059999 | SEMICONV DEVICE:ZENER.1W.15V.5%        | 80009    | 152-0405-00     |
| A72VR016                    | 152-0304-00        | B060000              |         | SEMICONV DEVICE:ZENER.0.4W.20V.5%      | 15238    | Z5411           |

| Component No.         | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number  |
|-----------------------|--------------------|----------------------|---------|---|----------|------------------|
| <b>A80 LINE POWER</b> |                    |                      |         |   |          |                  |
| A80                   | 670-4957-00        | B010100              | B010260 | CKT BOARD ASSY:LINE POWER                 | 80009    | 670-4957-00      |
| A80                   | 670-4957-01        | B010261              | B010286 | CKT BOARD ASSY:LINE POWER                 | 80009    | 670-4957-01      |
| A80                   | 670-4957-02        | B010287              | B020421 | CKT BOARD ASSY:LINE POWER                 | 80009    | 670-4957-02      |
| A80                   | 670-4957-00        | B020422              | B039999 | CKT BOARD ASSY:LINE POWER                 | 80009    | 670-4957-00      |
| A80                   | 670-4957-03        | B040000              | B089999 | CKT BOARD ASSY:LINE POWER                 | 80009    | 670-4957-03      |
| A80                   | 670-4957-04        | B090000              | B100940 | CKT BOARD ASSY:LINE POWER                 | 80009    | 670-4957-04      |
| A80                   | 670-4957-05        | B100941              |         | CKT BOARD ASSY:LINE POWER                 | 80009    | 670-4957-05      |
| A80C068               | 290-0770-00        |                      |         | CAP.,FXD,ELCTLT:100UF,+50-10%.25V         | 56289    | 502D230          |
| A80C108               | 290-0782-00        |                      |         | CAP.,FXD,ELCTLT:4.7UF,+75-10%.35V         | 55680    | ULA1V4R7TEA      |
| A80C114               | 285-1050-00        |                      |         | CAP.,FXD,PLSTC:0.1UF,1%.200V              | 14752    | 230B1C104F       |
| A80C142               | 290-0779-00        |                      |         | CAP.,FXD,ELCTLT:10UF,+50-10%.50VDC        | 56289    | 502D237          |
| A80C148               | 290-0758-00        |                      |         | CAP.,FXD,ELCTLT:2.2UF,+50-10%.160V        | 56289    | 502D227          |
| A80C164               | 283-0167-00        |                      |         | CAP.,FXD,CER DI:0.1UF,10%,100V            | 72982    | 8131N145XR0104K  |
| A80C222               | 283-0047-00        |                      |         | CAP.,FXD,CER DI:270PF,5%,500V             | 59821    | 2DDH73L271J      |
| A80C228               | 283-0047-00        |                      |         | CAP.,FXD,CER DI:270PF,5%,500V             | 59821    | 2DDH73L271J      |
| A80C264               | 290-0779-00        |                      |         | CAP.,FXD,ELCTLT:10UF,+50-10%.50VDC        | 56289    | 502D237          |
| A80C266               | 283-0129-00        |                      |         | CAP.,FXD,CER DI:0.56UF,20%,100V           | 56289    | 3C37X5R564M050B  |
| A80C268               | 283-0129-00        |                      |         | CAP.,FXD,CER DI:0.56UF,20%,100V           | 56289    | 3C37X5R564M050B  |
| A80C270               | 283-0177-00        | B100941              |         | CAP.,FXD,CER DI:1UF,+80-20%.25V           | 56289    | 2C2DZ5U105Z025B  |
| A80C326               | 285-1050-00        |                      |         | CAP.,FXD,PLSTC:0.1UF,1%.200V              | 14752    | 230B1C104F       |
| A80C367               | 283-0129-00        | B100941              |         | CAP.,FXD,CER DI:0.56UF,20%,100V           | 56289    | 3C37X5R564M050B  |
| A80C376               | 283-0129-00        |                      |         | CAP.,FXD,CER DI:0.56UF,20%,100V           | 56289    | 3C37X5R564M050B  |
| A80C416               | 283-0032-00        |                      |         | CAP.,FXD,CER DI:470PF,5%,500V             | 59660    | 0831085Z5E00471J |
| A80C464               | 290-0512-00        |                      |         | CAP.,FXD,ELCTLT:22UF,20%,15V              | 56289    | 196D226X0015KA1  |
| A80C468               | 283-0003-00        |                      |         | CAP.,FXD,CER DI:0.01UF,+80-20%.150V       | 59821    | 2DDH66J103Z      |
| A80C472               | 290-0779-00        |                      |         | CAP.,FXD,ELCTLT:10UF,+50-10%.50VDC        | 56289    | 502D237          |
| A80C536               | 290-0802-00        |                      |         | CAP.,FXD,ELCTLT:4700UF,+75-10%.16V        | 56289    | D76401           |
| A80C566               | 290-0779-00        |                      |         | CAP.,FXD,ELCTLT:10UF,+50-10%.50VDC        | 56289    | 502D237          |
| A80C606               | 283-0351-00        | B100941              |         | CAP.,FXD,CER DI:5000PF,20%,3000V          | 59660    | 848-562Z5U0502M  |
| A80C608               | 119-1168-00        | B100941              |         | CAPACITOR-RES:0.1UF,20% & 22 OHM,10%.250V | 14752    | RG1782-1         |
| A80C610               | 119-1168-00        | B100941              |         | CAPACITOR-RES:0.1UF,20% & 22 OHM,10%.250V | 14752    | RG1782-1         |
| A80CR124              | 152-0400-00        |                      |         | SEMICONV DEVICE:SILICON,400V,1A           | 80009    | 152-0400-00      |
| A80CR126              | 152-0400-00        |                      |         | SEMICONV DEVICE:SILICON,400V,1A           | 80009    | 152-0400-00      |
| A80CR152              | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON,400V,750MA        | 14433    | LG4016           |
| A80CR154              | 152-0423-00        |                      |         | SEMICONV DEVICE:SILICON,400V,3A           | 04713    | 1N5000           |
| A80CR212              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR218              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR258              | 152-0423-00        |                      |         | SEMICONV DEVICE:SILICON,400V,3A           | 04713    | 1N5000           |
| A80CR262              | 152-0423-00        |                      |         | SEMICONV DEVICE:SILICON,400V,3A           | 04713    | 1N5000           |
| A80CR312              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR314              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR326              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR348              | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON,400V,750MA        | 14433    | LG4016           |
| A80CR364              | 152-0423-00        |                      |         | SEMICONV DEVICE:SILICON,400V,3A           | 04713    | 1N5000           |
| A80CR370              | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR412              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR414              | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR432              | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON,400V,750MA        | 14433    | LG4016           |
| A80CR462              | 152-0141-02        | B010100              | B039999 | SEMICONV DEVICE:SILICON,30V,150MA         | 01295    | 1N4152R          |
| A80CR462              | 152-0075-00        | B040000              | B100940 | SEMICONV DEVICE:GE,25V,40MA               | 14433    | G866             |
| A80CR462              | 152-0071-00        | B100941              |         | SEMICONV DEVICE:GERMANIUM,15V,40MA        | 15238    | G865             |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                 | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|------------------------------------|----------|-----------------|
| A80CR532      | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON.400V.750MA | 14433    | LG4016          |
| A80CR538      | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON.400V.750MA | 14433    | LG4016          |
| A80CR564      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A80CR566      | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A80CR658      | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON.400V.750MA | 14433    | LG4016          |
| A80DS244      | 119-0181-00        | B010100              | B100940 | ARSR,ELEC SURGE:230V.GAS FILLED    | 74276    | CG230L          |
| A80DS248      | 119-0181-00        |                      |         | ARSR,ELEC SURGE:230V.GAS FILLED    | 74276    | CG230L          |
| A80DS358      | 119-0181-00        | B100941              |         | ARSR,ELEC SURGE:230V.GAS FILLED    | 74276    | CG230L          |
| A80K654       | 148-0121-00        | B010100              | B100940 | RELAY,ARMATURE:DPDT.7A.250VAC      | 000DV    | HC2-P-DC6V-UL   |
| A80K654       | 148-0143-00        | B100941              |         | RELAY,ARMATURE:2 FORM C.10A.250VAC | 12300    | K10P11D556      |
| A80Q128       | 151-0634-00        | B010100              | B039999 | TRANSISTOR:SILICON.NPN             | 04713    | SJE1937         |
| A80Q128       | 151-0678-00        | B040000              |         | TRANSISTOR:SILICON.NPN             | 04713    | MJE13005        |
| A80Q232       | 151-0634-00        | B010100              | B039999 | TRANSISTOR:SILICON.NPN             | 04713    | SJE1937         |
| A80Q232       | 151-0678-00        | B040000              |         | TRANSISTOR:SILICON.NPN             | 04713    | MJE13005        |
| A80Q365       | 151-1045-00        | B040000              | B100940 | TRANSISTOR:SILICON.JFE.P.CHANNEL   | 04713    | SPS628          |
| A80Q365       | 151-0190-00        | B100941              |         | TRANSISTOR:SILICON.NPN             | 07263    | S032677         |
| A80Q574       | 151-0301-00        |                      |         | TRANSISTOR:SILICON.PNP             | 27014    | 2N2907A         |
| A80R056       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015          |
| A80R078       | 315-0473-00        |                      |         | RES.,FXD.CMPSN:47K OHM.5%.0.25W    | 01121    | CB4735          |
| A80R118       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A80R122       | 321-0431-00        | B010100              | B089999 | RES.,FXD.FILM:301K OHM.1%.0.125W   | 91637    | MFF1816G30102F  |
| A80R122       | 321-0436-00        | B090000              |         | RES.,FXD.FILM:340K OHM.1%.0.125W   | 91637    | MFF1816G34002F  |
| A80R124       | 311-1241-00        | B010100              | B089999 | RES.,VAR.NONWIR:100K OHM.10%.0.5W  | 32997    | 3386X-T07-104   |
| A80R162       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A80R172       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A80R214       | 321-0441-00        | B010100              | B089999 | RES.,FXD.FILM:383K OHM.1%.0.125W   | 91637    | MFF1816G38302F  |
| A80R214       | 321-0438-00        | B090000              |         | RES.,FXD.FILM:357K OHM.1%.0.125W   | 91637    | MFF1816G35702F  |
| A80R216       | 308-0708-00        |                      |         | RES.,FXD.WW:5.5K OHM.3%.7W         | 91637    | RS7-B55000H     |
| A80R218       | 315-0394-00        | B010100              | B089999 | RES.,FXD.CMPSN:390K OHM.5%.0.25W   | 01121    | CB3945          |
| A80R218       | 315-0364-00        | B090000              |         | RES.,FXD.CMPSN:360K OHM.5%.0.25W   | 01121    | CB3645          |
| A80R272       | 315-0473-00        |                      |         | RES.,FXD.CMPSN:47K OHM.5%.0.25W    | 01121    | CB4735          |
| A80R308       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A80R310       | 315-0914-00        |                      |         | RES.,FXD.CMPSN:910K OHM.5%.0.25W   | 01121    | CB9145          |
| A80R311       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A80R313       | 321-0340-00        |                      |         | RES.,FXD.FILM:34K OHM.1%.0.125W    | 91637    | MFF1816G34001F  |
| A80R314       | 321-0441-00        | B010100              | B089999 | RES.,FXD.FILM:383K OHM.1%.0.125W   | 91637    | MFF1816G38302F  |
| A80R314       | 321-0438-00        | B090000              |         | RES.,FXD.FILM:357K OHM.1%.0.125W   | 91637    | MFF1816G35702F  |
| A80R315       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A80R318       | 315-0105-00        |                      |         | RES.,FXD.CMPSN:1M OHM.5%.0.25W     | 01121    | CB1055          |
| A80R326       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A80R328       | 315-0105-00        |                      |         | RES.,FXD.CMPSN:1M OHM.5%.0.25W     | 01121    | CB1055          |
| A80R368       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015          |
| A80R370       | 315-0102-00        | B100941              |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A80R372       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A80R410       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A80R414       | 315-0474-00        |                      |         | RES.,FXD.CMPSN:470K OHM.5%.0.25W   | 01121    | CB4745          |
| A80R416       | 315-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A80R418       | 315-0331-00        |                      |         | RES.,FXD.CMPSN:330 OHM.5%.0.25W    | 01121    | CB3315          |
| A80R422       | 315-0105-00        |                      |         | RES.,FXD.CMPSN:1M OHM.5%.0.25W     | 01121    | CB1055          |
| A80R424       | 315-0474-00        |                      |         | RES.,FXD.CMPSN:470K OHM.5%.0.25W   | 01121    | CB4745          |

| Component No. | Tektronix Part No. | Serial/Model No. |         | Name & Description                        | Mfr Code | Mfr Part Number  |
|---------------|--------------------|------------------|---------|---|----------|------------------|
|               |                    | Eff              | Dscont  |   |          |                  |
| A80R426       | 315-0105-00        |                  |         | RES.,FXD.CMPSN:1M OHM,5%.0.25W            | 01121    | CB1055           |
| A80R474       | 315-0103-00        |                  |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W           | 01121    | CB1035           |
| A80R478       | 315-0223-00        |                  |         | RES.,FXD.CMPSN:22K OHM,5%.0.25W           | 01121    | CB2235           |
| A80R562       | 315-0101-00        |                  |         | RES.,FXD.CMPSN:100 OHM,5%.0.25W           | 01121    | CB1015           |
| A80R564       | 315-0103-00        |                  |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W           | 01121    | CB1035           |
| A80R566       | 315-0102-00        |                  |         | RES.,FXD.CMPSN:1K OHM,5%.0.25W            | 01121    | CB1025           |
| A80R576       | 315-0103-00        |                  |         | RES.,FXD.CMPSN:10K OHM,5%.0.25W           | 01121    | CB1035           |
| A80R662       | 315-0682-00        |                  |         | RES.,FXD.CMPSN:6.8K OHM,5%.0.25W          | 01121    | CB6825           |
| A80RT622      | 307-0350-00        |                  |         | RES.,THERMAL:7.5 OHM,10%.3.9%/DEG C       | 15454    | 75DJ7R5R0220SS   |
| A80RT628      | 307-0350-00        |                  |         | RES.,THERMAL:7.5 OHM,10%.3.9%/DEG C       | 15454    | 75DJ7R5R0220SS   |
| A80T512       | 120-1164-00        |                  |         | TRANSFORMER,RF:FAN BASE DRIVE             | 80009    | 120-1164-00      |
| A80U166       | 156-0405-03        |                  |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV | 07263    | 9602             |
| A80U316       | 156-0495-00        |                  |         | MICROCIRCUIT,LI:OPNL AMPL                 | 27014    | LM324N           |
| A80U364       | 156-0041-05        | B010100          | B100940 | MICROCIRCUIT,DI:DUAL D-FLIP FLOP          | 01295    | SN7474           |
| A80U364       | 156-0042-02        | B100941          |         | MICROCIRCUIT,DI:DUAL J-K MA-SLAVE,FF,SCRN | 01295    | SN7476(NP3 OR JP |
| A80U444       | 156-0277-00        |                  |         | MICROCIRCUIT,LI:VOLTAGE REGULATOR         | 07263    | MICROA7805UC     |
| A80U468       | 156-0405-03        |                  |         | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV | 07263    | 9602             |
| A80U562       | 156-0302-02        |                  |         | MICROCIRCUIT,DI:DUAL 2-INP NAND DRVR,SCRN | 01295    | SN75452(PP3 OR J |
| A80VR118      | 152-0514-00        |                  |         | SEMICONV DEVICE:ZENER,0.4W,10V,1%         | 80009    | 152-0514-00      |
| A80VR216      | 152-0304-00        |                  |         | SEMICONV DEVICE:ZENER,0.4W,20V,5%         | 15238    | Z5411            |

**Replaceable Electrical Parts—7912AD Service**

| Component No.       | Tektronix Part No. | Serial/Model No. Eff | Discont | Name & Description                  | Mfr Code | Mfr Part Number |
|---------------------|--------------------|----------------------|---------|-------------------------------------|----------|-----------------|
| <b>A82 INVERTER</b> |                    |                      |         |                                     |          |                 |
| A82                 | 670-5364-00        | B010100              | B010273 | CKT BOARD ASSY:INVERTER             | 80009    | 670-5364-00     |
| A82                 | 670-5364-01        | B010274              | B039999 | CKT BOARD ASSY:INVERTER             | 80009    | 670-5364-01     |
| A82                 | 670-5364-02        | B040000              | B100881 | CKT BOARD ASSY:INVERTER             | 80009    | 670-5364-02     |
| A82                 | 670-5364-03        | B100882              | B100940 | CKT BOARD ASSY:INVERTER             | 80009    | 670-5364-03     |
| A82                 | 670-5364-04        | B100941              | B101067 | CKT BOARD ASSY:INVERTER             | 80009    | 670-5364-04     |
| A82                 | 670-5364-05        | B101068              | B101114 | CKT BOARD ASSY:INVERTER             | 80009    | 670-5364-05     |
| A82                 | 670-5364-06        | B101115              |         | CKT BOARD ASSY:INVERTER             | 80009    | 670-5364-06     |
| A82C010             | 285-0622-00        | B010100              | B100940 | CAP..FXD.PLSTC:0.1UF,20%.100V       | 56289    | 192P10402M474   |
| A82C020             | 290-0779-00        | B010100              | B100940 | CAP..FXD.ELCTLT:10UF,+50-10%.50VDC  | 56289    | 502D237         |
| A82C030             | 290-0782-00        | B010100              | B100940 | CAP..FXD.ELCTLT:4.7UF,+75-10%.35V   | 55680    | ULA1V4R7TEA     |
| A82C040             | 290-0183-00        | B010100              | B100940 | CAP..FXD.ELCTLT:1UF,10%.35V         | 90201    | TAC105K035P02   |
| A82C042             | 285-0627-00        | B010100              | B100940 | CAP..FXD.PLSTC:0.0033UF,5%.100V     | 56289    | 192P33252       |
| A82C052             | 285-0627-00        | B010100              | B100940 | CAP..FXD.PLSTC:0.0033UF,5%.100V     | 56289    | 192P33252       |
| A82C054             | 283-0594-00        | B010100              | B100940 | CAP..FXD.MICA D:0.001UF,1%.100V     | 00853    | D151F102F0      |
| A82C110             | 290-0813-00        | B010100              | B100940 | CAP..FXD.ELCTLT:2000UF,-10+75%.200V | 56289    | 36DX9463        |
| A82C111             | 290-0758-00        | B100941              |         | CAP..FXD.ELCTLT:2.2UF,+50-10%.160V  | 56289    | 502D227         |
| A82C112             | 290-0770-00        | B100941              | B101114 | CAP..FXD.ELCTLT:100UF,+50-10%.25V   | 56289    | 502D230         |
| A82C112             | 290-0745-00        | B101115              |         | CAP..FXD.ELCTLT:22UF,+50-10%.25V    | 54473    | ECE-A25V22L     |
| A82C130             | 283-0208-00        | B100941              |         | CAP..FXD.CER DI:0.22UF,10%.200V     | 72982    | 8151N230 C 224+ |
| A82C140             | 283-0005-00        | B010100              | B100940 | CAP..FXD.CER DI:0.01UF,+100-0%.250V | 72982    | 8131N300Z5U010  |
| A82C142             | 285-1097-00        | B010100              | B100940 | CAP..FXD.PLSTC:0.47UF,10%.50V       | 14752    | 230B1A474K      |
| A82C150             | 290-0770-00        | B010100              | B100940 | CAP..FXD.ELCTLT:100UF,+50-10%.25V   | 56289    | 502D230         |
| A82C152             | 283-0178-00        | B010100              | B100940 | CAP..FXD.CER DI:0.1UF,+80-20%.100V  | 72982    | 8131N145651 1   |
| A82C232             | 283-0129-00        | B010100              | B100940 | CAP..FXD.CER DI:0.56UF,20%.100V     | 56289    | 3C37X5R564M     |
| A82C239             | 283-0330-00        | B010274              | B100940 | CAP..FXD.CER DI:100PF,5%.50V        | 51642    | 200-050-NP0-101 |
| A82C240             | 290-0770-00        | B010100              | B100940 | CAP..FXD.ELCTLT:100UF,+50-10%.25V   | 56289    | 502D230         |
| A82C250             | 290-0525-00        | B100941              | B101114 | CAP..FXD.ELCTLT:4.7UF,20%.50V       | 56289    | 196D475X0050KA  |
| A82C250             | 290-0920-00        | B101115              |         | CAP..FXD.ELCTLT:33UF,+50-10%.35V    | 55680    | ULB1V330TEAAN   |
| A82C260             | 290-0525-00        | B100941              | B101114 | CAP..FXD.ELCTLT:4.7UF,20%.50V       | 56289    | 196D475X0050KA  |
| A82C260             | 290-0920-00        | B101115              |         | CAP..FXD.ELCTLT:33UF,+50-10%.35V    | 55680    | ULB1V330TEAAN   |
| A82C310             | 290-0813-00        | B010100              | B100940 | CAP..FXD.ELCTLT:2000UF,-10+75%.200V | 56289    | 36DX9463        |
| A82C320             | 290-0804-00        | B100941              |         | CAP..FXD.ELCTLT:10UF,+50-10%.25V    | 55680    | ULA1E100TEA     |
| A82C338             | 283-0084-00        | B010100              | B100940 | CAP..FXD.CER DI:270PF,5%.1000V      | 59660    | 838 533X5F0 271 |
| A82C340             | 283-0084-00        | B100941              | B101114 | CAP..FXD.CER DI:270PF,5%.1000V      | 59660    | 838 533X5F0 271 |
| A82C342             | 283-0084-00        | B100941              | B101114 | CAP..FXD.CER DI:270PF,5%.1000V      | 59660    | 838 533X5F0 271 |
| A82C350             | 290-0525-00        | B100941              | B101114 | CAP..FXD.ELCTLT:4.7UF,20%.50V       | 56289    | 196D475X0050KA  |
| A82C350             | 290-0920-00        | B101115              |         | CAP..FXD.ELCTLT:33UF,+50-10%.35V    | 55680    | ULB1V330TEAAN   |
| A82C352             | 283-0178-00        | B010100              | B100940 | CAP..FXD.CER DI:0.1UF,+80-20%.100V  | 72982    | 8131N145651 104 |
| A82C354             | 283-0084-00        | B100941              | B101114 | CAP..FXD.CER DI:270PF,5%.1000V      | 59660    | 838 533X5F0 271 |
| A82C360             | 290-0525-00        | B100941              | B101114 | CAP..FXD.ELCTLT:4.7UF,20%.50V       | 56289    | 196D475X0050KA  |
| A82C360             | 290-0920-00        | B101115              |         | CAP..FXD.ELCTLT:33UF,+50-10%.35V    | 55680    | ULB1V330TEAAN   |
| A82C362             | 283-0084-00        | B100941              | B101114 | CAP..FXD.CER DI:270PF,5%.1000V      | 59660    | 838 533X5F0 271 |
| A82C410             | 283-0111-00        | B100941              |         | CAP..FXD.CER DI:0.1UF,20%.50V       | 56289    | 273C11          |
| A82C420             | 283-0178-00        | B010100              | B100940 | CAP..FXD.CER DI:0.1UF,+80-20%.100V  | 72982    | 8131N145651 104 |
| A82C422             | 283-0111-00        | B100941              |         | CAP..FXD.CER DI:0.1UF,20%.50V       | 56289    | 273C11          |
| A82C424             | 283-0119-00        | B100941              |         | CAP..FXD.CER DI:2200PF,5%.200V      | 59660    | 855-536Y5E0222J |
| A82C430             | 283-0081-00        | B101068              |         | CAP..FXD.CER DI:0.1UF,+80-20%.25V   | 59821    | 2DDU69E104Z     |
| A82C438             | 283-0084-00        | B010100              | B100940 | CAP..FXD.CER DI:270PF,5%.1000V      | 59660    | 838 533X5F0 271 |
| A82C440             | 290-0804-00        | B100941              |         | CAP..FXD.ELCTLT:10UF,+50-10%.25V    | 55680    | ULA1E100TEA     |
| A82C442             | 283-0084-00        | B010100              | B100940 | CAP..FXD.CER DI:270PF,5%.1000V      | 59660    | 838 533X5F0 271 |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                  | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|-------------------------------------|----------|------------------|
| A82C444       | 290-0525-00        | B010100              | B100940 | CAP.,FXD,ELCTLT:4.7UF,20%,50V       | 56289    | 196D475X0050KA1  |
| A82C446       | 290-0773-00        | B100941              |         | CAP.,FXD,ELCTLT:1000UF,+50-10%,10V  | 56289    | 500D154          |
| A82C452       | 290-0525-00        | B010100              | B100940 | CAP.,FXD,ELCTLT:4.7UF,20%,50V       | 56289    | 196D475X0050KA1  |
| A82C460       | 283-0351-00        | B100941              |         | CAP.,FXD,CER DI:5000PF,20%,3000V    | 59660    | 848-562Z5U0502M  |
| A82C470       | 283-0238-00        | B100941              |         | CAP.,FXD,CER DI:0.01UF,10%,50V      | 72982    | 8121N075X7R0103K |
| A82C472       | 283-0111-00        | B100941              |         | CAP.,FXD,CER DI:0.1UF,20%,50V       | 56289    | 273C11           |
| A82C474       | 283-0238-00        | B100941              |         | CAP.,FXD,CER DI:0.01UF,10%,50V      | 72982    | 8121N075X7R0103K |
| A82C500       | 290-0758-00        | B010100              | B100940 | CAP.,FXD,ELCTLT:2.2UF,+50-10%,160V  | 56289    | 502D227          |
| A82C510       | 290-0771-00        | B100941              |         | CAP.,FXD,ELCTLT:220UF,+50-10%,10VDC | 56289    | 502D231          |
| A82C520       | 283-0697-00        | B100941              |         | CAP.,FXD,MICA D:545PF,1%,300V       | 09023    | CD15FC(545)F03   |
| A82C530       | 283-0059-00        | B100941              |         | CAP.,FXD,CER DI:1UF,+80-20%,50V     | 51642    | 400050Z5U105Z    |
| A82C532       | 290-0779-00        | B010100              | B010212 | CAP.,FXD,ELCTLT:10UF,+50-10%,50VDC  | 56289    | 502D237          |
| A82C532       | 290-0574-00        | B010213              | B010273 | CAP.,FXD,ELCTLT:47UF,10%,20V        | 90201    | TDC476K020CL     |
| A82C534       | 290-0770-00        | B010100              | B100940 | CAP.,FXD,ELCTLT:100UF,+50-10%,25V   | 56289    | 502D230          |
| A82C536       | 283-0111-00        | B100941              |         | CAP.,FXD,CER DI:0.1UF,20%,50V       | 56289    | 273C11           |
| A82C540       | 283-0084-00        | B010100              | B100940 | CAP.,FXD,CER DI:270PF,5%,1000V      | 59660    | 838 533X5F0 2715 |
| A82C542       | 283-0280-00        | B010100              | B100940 | CAP.,FXD,CER DI:2200PF,10%,2000V    | 59660    | 0818590Y5500222K |
| A82C544       | 283-0111-00        | B100941              |         | CAP.,FXD,CER DI:0.1UF,20%,50V       | 56289    | 273C11           |
| A82C546       | 283-0111-00        | B100941              |         | CAP.,FXD,CER DI:0.1UF,20%,50V       | 56289    | 273C11           |
| A82C550       | 290-0525-00        | B010100              | B100940 | CAP.,FXD,ELCTLT:4.7UF,20%,50V       | 56289    | 196D475X0050KA1  |
| A82C606       | 283-0017-00        | B010100              | B100940 | CAP.,FXD,CER DI:1UF,+80-20%,3V      | 000JO    | RT31052-H        |
| A82C610       | 283-0164-00        | B010100              | B100940 | CAP.,FXD,CER DI:2.2UF,20%,25V       | 04222    | SR402E225MAA     |
| A82C650       | 290-0525-00        | B010100              | B100940 | CAP.,FXD,ELCTLT:4.7UF,20%,50V       | 56289    | 196D475X0050KA1  |
| A82CR010      | 152-0066-00        | B100941              |         | SEMICONV DEVICE:SILICON,400V,750MA  | 14433    | LG4016           |
| A82CR011      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR020      | 152-0066-00        | B100941              |         | SEMICONV DEVICE:SILICON,400V,750MA  | 14433    | LG4016           |
| A82CR021      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR040      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR140      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR150      | 152-0655-00        | B100941              |         | SEMICONV DEVICE:SILICON,100V,3A     | 03508    | A115AX39         |
| A82CR160      | 152-0655-00        | B100941              |         | SEMICONV DEVICE:SILICON,100V,3A     | 03508    | A115AX39         |
| A82CR220      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR222      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR230      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR232      | 152-0141-02        | B040000              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR234      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR240      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR242      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR250      | 152-0333-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON,55V,200MA   | 07263    | FDH-6012         |
| A82CR300      | 152-0066-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON,400V,750MA  | 14433    | LG4016           |
| A82CR310      | 152-0066-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON,400V,750MA  | 14433    | LG4016           |
| A82CR320      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR330      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR331      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR340      | 152-0655-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON,100V,3A     | 03508    | A115AX39         |
| A82CR342      | 152-0655-00        | B100941              |         | SEMICONV DEVICE:SILICON,100V,3A     | 03508    | A115AX39         |
| A82CR350      | 152-0333-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON,55V,200MA   | 07263    | FDH-6012         |
| A82CR360      | 152-0655-00        | B100941              |         | SEMICONV DEVICE:SILICON,100V,3A     | 03508    | A115AX39         |
| A82CR370      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR372      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON,30V,150MA   | 01295    | 1N4152R          |
| A82CR374      | 152-0333-00        | B100941              |         | SEMICONV DEVICE:SILICON,55V,200MA   | 07263    | FDH-6012         |
| A82CR376      | 152-0333-00        | B100941              |         | SEMICONV DEVICE:SILICON,55V,200MA   | 07263    | FDH-6012         |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                 | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|------------------------------------|----------|-----------------|
| A82CR420      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A82CR428      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A82CR470      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A82CR472      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A82CR520      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A82CR524      | 152-0141-02        | B010100              | B100940 | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A82CR526      | 152-0066-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON.400V.750MA | 14433    | LG4016          |
| A82CR528      | 152-0414-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON.200V.0.75A | 12969    | UTR308          |
| A82CR536      | 152-0414-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON.200V.0.75A | 12969    | UTR308          |
| A82CR540      | 152-0141-02        | B100941              |         | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A82CR550      | 152-0655-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON.100V.3A    | 03508    | A115AX39        |
| A82CR600      | 152-0141-02        | B040000              | B100940 | SEMICONV DEVICE:SILICON.30V.150MA  | 01295    | 1N4152R         |
| A82CR640      | 152-0655-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON.100V.3A    | 03508    | A115AX39        |
| A82CR650      | 152-0655-00        | B010100              | B100940 | SEMICONV DEVICE:SILICON.100V.3A    | 03508    | A115AX39        |
| A82DS010      | 150-0035-00        | B010100              | B100940 | LAMP.GLOW:90V.0.3MA.AID-T.WIRE LD  | 000LI    | JH005/3011JA    |
| A82DS130      | 150-0035-00        | B100941              |         | LAMP.GLOW:90V.0.3MA.AID-T.WIRE LD  | 000LI    | JH005/3011JA    |
| A82L010       | 108-0910-00        | B100941              |         | COIL.RF:560UH                      | 80009    | 108-0910-00     |
| A82L120       | 108-0910-00        | B100941              |         | COIL.RF:560UH                      | 80009    | 108-0910-00     |
| A82L210       | 108-0910-01        | B010100              | B100940 | COIL.RF:FIXED.560UH                | 80009    | 108-0910-01     |
| A82L410       | 108-0910-01        | B010100              | B100940 | COIL.RF:FIXED.560UH                | 80009    | 108-0910-01     |
| A82Q050       | 151-0302-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S038487         |
| A82Q130       | 151-0302-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S038487         |
| A82Q140       | 151-0302-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S038487         |
| A82Q142       | 151-0302-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S038487         |
| A82Q230       | 151-0188-00        | B010100              | B100940 | TRANSISTOR:SILICON.PNP             | 04713    | SPS6868K        |
| A82Q234       | 151-0503-00        | B010100              | B100940 | SCR:SILICON.TO-92                  | 04713    | SCR5138         |
| A82Q235       | 151-0302-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S038487         |
| A82Q240       | 151-0290-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S032790         |
| A82Q350       | 151-0290-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S032790         |
| A82Q370       | 151-0622-00        | B100941              |         | TRANSISTOR:SILICON.PNP             | 27014    | 92PU51A         |
| A82Q372       | 151-0622-00        | B100941              |         | TRANSISTOR:SILICON.PNP             | 27014    | 92PU51A         |
| A82Q420       | 151-0302-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S038487         |
| A82Q422       | 151-0435-00        | B100941              |         | TRANSISTOR:SILICON.PNP             | 04713    | SPS8335         |
| A82Q430       | 151-0301-00        | B010100              | B100940 | TRANSISTOR:SILICON.PNP             | 27014    | 2N2907A         |
| A82Q520       | 151-0435-00        | B010100              | B100940 | TRANSISTOR:SILICON.PNP             | 04713    | SPS8335         |
| A82Q530       | 151-0188-00        | B100941              |         | TRANSISTOR:SILICON.PNP             | 04713    | SPS6868K        |
| A82Q600       | 151-0302-00        | B010100              | B100940 | TRANSISTOR:SILICON.NPN             | 07263    | S038487         |
| A82R010       | 311-1246-00        | B010100              | B100940 | RES.,VAR.NONWIR:50K OHM.10%.0.50W  | 02111    | 63X-503-T602    |
| A82R010       | 311-1248-00        | B100941              |         | RES.,VAR.NONWIR:500 OHM.10%.0.50W  | 73138    | 72-23-0         |
| A82R011       | 315-0474-00        | B100941              |         | RES.,FXD.CMPSN:470K OHM.5%.0.25W   | 01121    | CB4745          |
| A82R012       | 321-0289-09        | B100941              |         | RES.,FXD.FILM:10K OHM.1%.0.125W    | 91637    | MFF1816C10001F  |
| A82R030       | 315-0101-00        | B010100              | B100940 | RES.,FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015          |
| A82R032       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A82R034       | 315-0221-00        | B010100              | B100940 | RES.,FXD.CMPSN:220 OHM.5%.0.25W    | 01121    | CB2215          |
| A82R036       | 315-0621-00        | B010100              | B100940 | RES.,FXD.CMPSN:620 OHM.5%.0.25W    | 01121    | CB36215         |
| A82R038       | 315-0331-00        | B010100              | B100940 | RES.,FXD.CMPSN:330 OHM.5%.0.25W    | 01121    | CB3315          |
| A82R040       | 315-0363-00        | B010100              | B100940 | RES.,FXD.CMPSN:36K OHM.5%.0.25W    | 01121    | CB3635          |
| A82R042       | 321-0318-00        | B010100              | B100940 | RES.,FXD.FILM:20K OHM.1%.0.125W    | 91637    | MFF1816G20001F  |
| A82R044       | 321-0302-00        | B010100              | B100940 | RES.,FXD.FILM:13.7K OHM.1%.0.125W  | 91637    | MFF1816G13701F  |
| A82R052       | 311-1245-00        | B010100              | B100940 | RES.,VAR.NONWIR:10K OHM.10%.0.50W  | 73138    | 72-28-0         |



| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                   | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--------------------------------------|----------|-----------------|
| A82R054       | 321-0261-00        | B010100              | B100940 | RES.,FXD.FILM:5.11K OHM,1%.0.125W    | 91637    | MFF1816G51100F  |
| A82R110       | 315-0105-00        | B010100              | B100940 | RES.,FXD.CMPSN:1M OHM,5%.0.25W       | 01121    | CB1055          |
| A82R111       | 321-0671-00        | B100941              |         | RES.,FXD.FILM:8.51K OHM,0.5%.0.125W  | 24546    | NC55C8511D      |
| A82R120       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A82R129       | 315-0475-00        | B100941              |         | RES.,FXD.CMPSN:4.7M OHM,5%.0.25W     | 01121    | CB4755          |
| A82R130       | 321-0259-00        | B010100              | B100940 | RES.,FXD.FILM:4.87K OHM,1%.0.125W    | 91637    | MFF1816G48700F  |
| A82R131       | 321-0185-00        | B010100              | B100940 | RES.,FXD.FILM:825 OHM,1%.0.125W      | 91637    | MFF1816G825R0F  |
| A82R132       | 315-0681-00        | B010100              | B100940 | RES.,FXD.CMPSN:680 OHM,5%.0.25W      | 01121    | CB6815          |
| A82R133       | 321-0259-00        | B010100              | B100940 | RES.,FXD.FILM:4.87K OHM,1%.0.125W    | 91637    | MFF1816G48700F  |
| A82R134       | 315-0102-00        | B010100              | B100940 | RES.,FXD.CMPSN:1K OHM,5%.0.25W       | 01121    | CB1025          |
| A82R135       | 315-0681-00        | B010100              | B100940 | RES.,FXD.CMPSN:680 OHM,5%.0.25W      | 01121    | CB6815          |
| A82R136       | 315-0122-00        | B010100              | B100940 | RES.,FXD.CMPSN:1.2K OHM,5%.0.25W     | 01121    | CB1225          |
| A82R137       | 315-0331-00        | B010100              | B100940 | RES.,FXD.CMPSN:330 OHM,5%.0.25W      | 01121    | CB3315          |
| A82R138       | 315-0182-00        | B010100              | B100940 | RES.,FXD.CMPSN:1.8K OHM,5%.0.25W     | 01121    | CB1825          |
| A82R139       | 315-0122-00        | B010100              | B100940 | RES.,FXD.CMPSN:1.2K OHM,5%.0.25W     | 01121    | CB1225          |
| A82R140       | 315-0272-00        | B010100              | B100940 | RES.,FXD.CMPSN:2.7K OHM,5%.0.25W     | 01121    | CB2725          |
| A82R146       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A82R148       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A82R150       | 315-0152-00        | B010100              | B100940 | RES.,FXD.CMPSN:1.5K OHM,5%.0.25W     | 01121    | CB1525          |
| A82R151       | 308-0240-00        | B100941              |         | RES.,FXD.WW:2 OHM,5%.3W              | 91637    | RS2B-D2R000J    |
| A82R152       | 321-0294-00        | B010100              | B100940 | RES.,FXD.FILM:11.3K OHM,1%.0.125W    | 91637    | MFF1816G11301F  |
| A82R153       | 308-0240-00        | B100941              |         | RES.,FXD.WW:2 OHM,5%.3W              | 91637    | RS2B-D2R000J    |
| A82R154       | 315-0102-00        | B010100              | B100940 | RES.,FXD.CMPSN:1K OHM,5%.0.25W       | 01121    | CB1025          |
| A82R220       | 301-0390-00        | B010100              | B100940 | RES.,FXD.CMPSN:39 OHM,5%.0.50W       | 01121    | EB3905          |
| A82R224       | 315-0104-00        | B010100              | B100940 | RES.,FXD.CMPSN:100K OHM,5%.0.25W     | 01121    | CB1045          |
| A82R230       | 315-0471-00        | B100941              |         | RES.,FXD.CMPSN:470 OHM,5%.0.25W      | 01121    | CB4715          |
| A82R232       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A82R235       | 315-0562-00        | B010100              | B100940 | RES.,FXD.CMPSN:5.6K OHM,5%.0.25W     | 01121    | CB5625          |
| A82R236       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A82R238       | 315-0102-00        | B010100              | B100940 | RES.,FXD.CMPSN:1K OHM,5%.0.25W       | 01121    | CB1025          |
| A82R240       | 315-0113-00        | B010274              | B100940 | RES.,FXD.CMPSN:11K OHM,5%.0.25W      | 01121    | CB1135          |
| A82R241       | 301-0102-00        | B100941              | B101114 | RES.,FXD.CMPSN:1K OHM,5%.0.50W       | 01121    | EB1025          |
| A82R242       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM,5%.0.25W      | 01121    | CB1035          |
| A82R244       | 308-0545-00        | B010100              | B100940 | RES.,FXD.WW:100 OHM,0.5%.5W          | 00213    | 1250S-100R0D    |
| A82R246       | 305-0124-00        | B100941              |         | RES.,FXD.CMPSN:120K OHM,5%.2W        | 01121    | HB1245          |
| A82R248       | 301-0271-00        | B010100              | B100940 | RES.,FXD.CMPSN:270 OHM,5%.0.50W      | 01121    | EB2715          |
| A82R250       | 301-0271-00        | B010100              | B100940 | RES.,FXD.CMPSN:270 OHM,5%.0.50W      | 01121    | EB2715          |
| A82R252       | 315-0102-00        | B010100              | B100940 | RES.,FXD.CMPSN:1K OHM,5%.0.25W       | 01121    | CB1025          |
| A82R254       | 301-0102-00        | B100941              | B101114 | RES.,FXD.CMPSN:1K OHM,5%.0.50W       | 01121    | EB1025          |
| A82R270       | 301-0470-00        | B100941              |         | RES.,FXD.CMPSN:47 OHM,5%.0.50W       | 01121    | EB4705          |
| A82R310       | 305-0124-00        | B010100              | B100940 | RES.,FXD.CMPSN:120K OHM,5%.2W        | 01121    | HB1245          |
| A82R312       | 321-1283-03        | B100941              |         | RES.,FXD.FILM:8.76K OHM,0.25%.0.125W | 91637    | MFF1816D87600C  |
| A82R314       | 321-0816-00        | B100941              |         | RES.,FXD.FILM:5K OHM,1%.0.125W       | 24546    | NA55D5001F      |
| A82R316       | 321-0284-00        | B100941              |         | RES.,FXD.FILM:8.87K OHM,1%.0.125W    | 91637    | MFF1816G88700F  |
| A82R318       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM,5%.0.25W     | 01121    | CB2225          |
| A82R320       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM,5%.0.25W     | 01121    | CB2225          |
| A82R322       | 315-0391-00        | B100941              |         | RES.,FXD.CMPSN:390 OHM,5%.0.25W      | 01121    | CB3915          |
| A82R330       | 305-0431-00        | B010100              | B100940 | RES.,FXD.CMPSN:430 OHM,5%.2W         | 01121    | HB4315          |
| A82R338       | 301-0102-00        | B010113              | B100940 | RES.,FXD.CMPSN:1K OHM,5%.0.50W       | 01121    | EB1025          |
| A82R340       | 308-0240-00        | B100941              |         | RES.,FXD.WW:2 OHM,5%.3W              | 91637    | RS2B-D2R000J    |
| A82R342       | 301-0102-00        | B100941              | B101114 | RES.,FXD.CMPSN:1K OHM,5%.0.50W       | 01121    | EB1025          |
| A82R350       | 301-0102-00        | B100941              | B101114 | RES.,FXD.CMPSN:1K OHM,5%.0.50W       | 01121    | EB1025          |
| A82R360       | 308-0240-00        | B100941              |         | RES.,FXD.WW:2 OHM,5%.3W              | 91637    | RS2B-D2R000J    |
| A82R370       | 315-0100-00        | B100941              |         | RES.,FXD.CMPSN:10 OHM,5%.0.25W       | 01121    | CB1005          |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                 | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|------------------------------------|----------|-----------------|
| A82R372       | 315-0100-00        | B100941              |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A82R400       | 321-0753-06        | B010100              | B100940 | RES.,FXD.FILM:9K OHM.0.25%.0.125W  | 91637    | MFF1816C90000C  |
| A82R410       | 321-0816-00        | B100941              |         | RES.,FXD.FILM:5K OHM.1%.0.125W     | 24546    | NA55D5001F      |
| A82R412       | 321-0264-00        | B100941              |         | RES.,FXD.FILM:5.49K OHM.1%.0.125W  | 91637    | MFF1816G54900F  |
| A82R414       | 321-0248-00        | B100941              |         | RES.,FXD.FILM:3.74K OHM.1%.0.125W  | 91637    | MFF1816G37400F  |
| A82R416       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R420       | 315-0472-00        | B010100              | B100940 | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |
| A82R421       | 315-0100-00        | B100941              |         | RES.,FXD.CMPSN:10 OHM.5%.0.25W     | 01121    | CB1005          |
| A82R422       | 315-0105-00        | B100941              |         | RES.,FXD.CMPSN:1M OHM.5%.0.25W     | 01121    | CB1055          |
| A82R423       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R424       | 315-0105-00        | B100941              |         | RES.,FXD.CMPSN:1M OHM.5%.0.25W     | 01121    | CB1055          |
| A82R425       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R426       | 315-0472-00        | B010100              | B100940 | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |
| A82R428       | 315-0104-00        | B100941              |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A82R430       | 308-0245-00        | B010100              | B100881 | RES.,FXD.WW:0.6 OHM.5%.2W          | 91637    | CW2B30 0.60HM   |
| A82R430       | 308-0499-00        | B100882              | B100940 | RES.,FXD.WW:0.5 OHM.10%.2.5W AXIAL | 91637    | CW2B-R500K-TR   |
| A82R432       | 315-0102-00        | B100941              |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A82R434       | 315-0104-00        | B100941              |         | RES.,FXD.CMPSN:100K OHM.5%.0.25W   | 01121    | CB1045          |
| A82R436       | 321-0385-00        | B100941              |         | RES.,FXD.FILM:100K OHM.1%.0.125W   | 91637    | MFF1816G10002F  |
| A82R438       | 301-0102-00        | B010113              | B100940 | RES.,FXD.CMPSN:1K OHM.5%.0.50W     | 01121    | EB1025          |
| A82R440       | 315-0123-00        | B100941              |         | RES.,FXD.CMPSN:12K OHM.5%.0.25W    | 01121    | CB1235          |
| A82R442       | 301-0102-00        | B010113              | B100940 | RES.,FXD.CMPSN:1K OHM.5%.0.50W     | 01121    | EB1025          |
| A82R500       | 321-0289-03        | B010100              | B100940 | RES.,FXD.FILM:10K OHM.0.25%.0.125W | 91637    | MFF1816D10001C  |
| A82R508       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A82R510       | 321-0248-00        | B010100              | B100940 | RES.,FXD.FILM:3.74K OHM.1%.0.125W  | 91637    | MFF1816G37400F  |
| A82R510       | 311-1238-00        | B100941              |         | RES.,VAR.NONWIR:5K OHM.10%.0.50W   | 73138    | 72-27-0         |
| A82R512       | 315-0472-00        | B010100              | B100940 | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |
| A82R516       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A82R519       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A82R520       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A82R522       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R524       | 315-0391-00        | B100941              |         | RES.,FXD.CMPSN:390 OHM.5%.0.25W    | 01121    | CB3915          |
| A82R525       | 315-0102-00        | B100941              |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A82R526       | 315-0102-00        | B010100              | B100940 | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A82R527       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R528       | 321-0289-09        | B100941              |         | RES.,FXD.FILM:10K OHM.1%.0.125W    | 91637    | MFF1816C10001F  |
| A82R529       | 321-0354-00        | B100941              |         | RES.,FXD.FILM:47.5K OHM.1%.0.125W  | 91637    | MFF1816G47501F  |
| A82R530       | 315-0512-00        | B100941              |         | RES.,FXD.CMPSN:5.1K OHM.5%.0.25W   | 01121    | CB5125          |
| A82R532       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R538       | 301-0102-00        | B010113              | B100940 | RES.,FXD.CMPSN:1K OHM.5%.0.50W     | 01121    | EB1025          |
| A82R540       | 308-0240-00        | B010100              | B100940 | RES.,FXD.WW:2 OHM.5%.3W            | 91637    | RS2B-D2R000J    |
| A82R542       | 315-0151-00        | B100941              |         | RES.,FXD.CMPSN:150 OHM.5%.0.25W    | 01121    | CB1515          |
| A82R544       | 315-0622-00        | B100941              |         | RES.,FXD.CMPSN:6.2K OHM.5%.0.25W   | 01121    | CB6225          |
| A82R546       | 315-0101-00        | B100941              |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W    | 01121    | CB1015          |
| A82R550       | 308-0240-00        | B010100              | B100940 | RES.,FXD.WW:2 OHM.5%.3W            | 91637    | RS2B-D2R000J    |
| A82R552       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R554       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R560       | 315-0222-00        | B100941              |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W   | 01121    | CB2225          |
| A82R562       | 301-0910-00        | B100941              |         | RES.,FXD.CMPSN:91 OHM.5%.0.50W     | 01121    | CB105           |
| A82R600       | 315-0102-00        | B010100              | B100940 | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A82R606       | 315-0103-00        | B010100              | B100940 | RES.,FXD.CMPSN:10K OHM.5%.0.25W    | 01121    | CB1035          |
| A82R610       | 321-0248-00        | B010100              | B100940 | RES.,FXD.FILM:3.74K OHM.1%.0.125W  | 91637    | MFF1816G37400F  |
| A82R612       | 315-0102-00        | B010100              | B100940 | RES.,FXD.CMPSN:1K OHM.5%.0.25W     | 01121    | CB1025          |
| A82R614       | 315-0472-00        | B010100              | B100940 | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W   | 01121    | CB4725          |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                         | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|--|----------|------------------|
| A82R616       | 321-1293-02        | B010100              | B100940 | RES.,FXD.FILM:11.1K OHM,0.5%,0.125W        | 91637    | MFF1816D11100D   |
| A82R618       | 315-0472-00        | B010100              | B100940 | RES.,FXD.CMPNSN:4.7K OHM,5%,0.25W          | 01121    | CB4725           |
| A82R640       | 308-0240-00        | B010100              | B100940 | RES.,FXD.WW:2 OHM,5%,.3W                   | 91637    | RS2B-D2R000J     |
| A82R650       | 308-0240-00        | B010100              | B100940 | RES.,FXD.WW:2 OHM,5%,.3W                   | 91637    | RS2B-D2R000J     |
| A82T260       | 120-0747-00        | B100941              |         | XFMR,TOROID:55 TURNS,SINGLE                | 80009    | 120-0747-00      |
| A82T340       | 120-1162-01        | B010100              | B100940 | TRANSFORMER,RF:BASE DRIVE,POT CORE         | 80009    | 120-1162-01      |
| A82T360       | 120-1162-02        | B100941              |         | TRANSFORMER,RF:BASE DRIVE,POT CORE         | 80009    | 120-1162-02      |
| A82T630       | 120-1163-00        | B010100              | B100940 | TRANSFORMER,RF:CURRENT,POT CORE            | 80009    | 120-1163-00      |
| A82U040       | 156-0405-03        | B010100              | B100940 | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV  | 07263    | 9602             |
| A82U130       | 156-0853-00        | B010100              | B100940 | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER,DUAL | 27014    | LM358N           |
| A82U150       | 156-0405-03        | B010100              | B100940 | MICROCIRCUIT,DI:DUAL RETRIG MONOSTABLE MV  | 07263    | 9602             |
| A82U250       | 156-0038-02        | B010100              | B100940 | MICROCIRCUIT,DI:J-K MASTER SLAVE FF,SCRN   | 01295    | SN7472(NP3 OR JP |
| A82U350       | 156-0341-02        | B010100              | B100940 | MICROCIRCUIT,DI:DUAL 2-INP DRIVER,SCRN     | 01295    | SN75453          |
| A82U410       | 156-0411-02        | B100941              |         | MICROCIRCUIT,LI:QUAD COMPARATOR,SEL        | 04713    | LM339JDS         |
| A82U430       | 156-0092-00        | B100941              |         | MICROCIRCUIT,DI:HEX INV W/OPEN COLLECTOR   | 80009    | 156-0092-00      |
| A82U530       | 156-0411-02        | B100941              |         | MICROCIRCUIT,LI:QUAD COMPARATOR,SEL        | 04713    | LM339JDS         |
| A82U550       | 156-1173-00        | B100941              |         | MICROCIRCUIT,LI:VOLTAGE REFERENCE          | 04713    | MC1403UDS        |
| A82U560       | 156-0030-03        | B100941              |         | MICROCIRCUIT,DI:QUAD 2-INP NAND GATE,SCRN  | 01295    | SN7400(NP3 OR JP |
| A82U570       | 156-0042-02        | B100941              |         | MICROCIRCUIT,DI:DUAL J-K MA-SLAVE,FF,SCRN  | 01295    | SN7476(NP3 OR JP |
| A82U572       | 156-0313-02        | B100941              |         | MICROCIRCUIT,DI:DUAL 2-INP NOR DRVR,SCRN   | 01295    | SN75454(PP3 OR J |
| A82U610       | 156-0411-01        | B010100              | B100904 | MICROCIRCUIT,LI:QUAD,COMPARATOR,SGL SPLY   | 27014    | LM339N           |
| A82U610       | 156-0411-02        | B100905              | B100940 | MICROCIRCUIT,LI:QUAD COMPARATOR,SEL        | 04713    | LM339JDS         |
| A82VR430      | 152-0175-00        | B100941              |         | SEMICONV DEVICE:ZENER,0.4W,5.6V,5%         | 04713    | SZG35008         |
| A82VR520      | 152-0317-00        | B010100              | B100940 | SEMICONV DEVICE:ZENER,0.25W,6.2V,5%        | 04713    | SZG20012         |
| A82VR620      | 152-0089-00        | B010100              | B100940 | SEMICONV DEVICE:ZENER,10W,12.6V,5%         | 80009    | 152-0089-00      |
| A82W222       | 131-0566-00        | B010100              | B100940 | BUS CONDUCTOR:DUMMY RES,2.375,22 AWG       | 57668    | JWW-0200E0       |
| A82W506       | 131-0566-00        | B010100              | B100940 | BUS CONDUCTOR:DUMMY RES,2.375,22 AWG       | 57668    | JWW-0200E0       |
| A82W518       | 131-0566-00        | B010100              | B100940 | BUS CONDUCTOR:DUMMY RES,2.375,22 AWG       | 57668    | JWW-0200E0       |

**Replaceable Electrical Parts—7912AD Service**

| Component No.               | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                       | Mfr Code | Mfr Part Number  |
|-----------------------------|--------------------|----------------------|---------|--|----------|------------------|
| <b>A84 SOCKET</b>           |                    |                      |         |  |          |                  |
| A84                         | 670-4960-00        | B010100              | B089999 | CKT BOARD ASSY:SOCKET                    | 80009    | 670-4960-00      |
| A84                         | 670-4960-01        | B090000              |         | CKT BOARD ASSY:SOCKET                    | 80009    | 670-4960-01      |
| A84C426                     | 285-1164-00        |                      |         | CAP.,FXD.PLSTC:SUF.10%.400V              | 84411    | TRW-35-50594     |
| A84CR224                    | 152-0400-00        |                      |         | SEMICONV DEVICE:SILICON.400V.1A          | 80009    | 152-0400-00      |
| A84CR232                    | 152-0400-00        |                      |         | SEMICONV DEVICE:SILICON.400V.1A          | 80009    | 152-0400-00      |
| A84CR322                    | 152-0400-00        |                      |         | SEMICONV DEVICE:SILICON.400V.1A          | 80009    | 152-0400-00      |
| A84CR334                    | 152-0400-00        |                      |         | SEMICONV DEVICE:SILICON.400V.1A          | 80009    | 152-0400-00      |
| A84F014                     | 159-0013-00        |                      |         | FUSE.CARTRIDGE:3AG.6A.125V.7 SEC         | 71400    | MTH6             |
| A84Q118                     | 151-0368-00        | B010100              | B101067 | TRANSISTOR:SILICON.NPN                   | 04713    | SJ2754           |
| A84Q118                     | 151-0368-01        | B101068              |         | TRANSISTOR:SILICON.NPN                   | 80009    | 151-0368-01      |
| A84Q132                     | 151-0368-00        | B010100              | B101067 | TRANSISTOR:SILICON.NPN                   | 04713    | SJ2754           |
| A84Q132                     | 151-0368-01        | B101068              |         | TRANSISTOR:SILICON.NPN                   | 80009    | 151-0368-01      |
| A84Q318                     | 151-0368-00        | B010100              | B101067 | TRANSISTOR:SILICON.NPN                   | 04713    | SJ2754           |
| A84Q318                     | 151-0368-01        | B101068              |         | TRANSISTOR:SILICON.NPN                   | 04713    | SJ2754           |
| A84Q332                     | 151-0368-00        | B010100              | B101067 | TRANSISTOR:SILICON.NPN                   | 04713    | SJ2754           |
| A84Q332                     | 151-0368-01        | B101068              |         | TRANSISTOR:SILICON.NPN                   | 80009    | 151-0368-01      |
| <b>A86 RECTIFIER FILTER</b> |                    |                      |         |  |          |                  |
| A86                         | 670-5158-00        | B010100              | B079999 | CKT BOARD ASSY:RECTIFIER FILTER          | 80009    | 670-5158-00      |
| A86                         | 670-5158-02        | B080000              | B089999 | CKT BOARD ASSY:RECTIFIER FILTER          | 80009    | 670-5158-02      |
| A86                         | 670-5158-03        | B090000              | B100978 | CKT BOARD ASSY:RECTIFIER FILTER          | 80009    | 670-5158-03      |
| A86                         | 670-5158-04        | B100979              |         | CKT BOARD ASSY:RECTIFIER FILTER          | 80009    | 670-5158-04      |
| A86C112                     | 290-0771-00        |                      |         | CAP.,FXD.ELCTLT:220UF,+50-10%.10VDC      | 56289    | 502D231          |
| A86C114                     | 290-0773-00        |                      |         | CAP.,FXD.ELCTLT:1000UF,+50-10%.10V       | 56289    | 500D154          |
| A86C116                     | 290-0773-00        |                      |         | CAP.,FXD.ELCTLT:1000UF,-50-10%.10V       | 56289    | 500D154          |
| A86C117                     | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V       | 72982    | 8131N145651 104Z |
| A86C118                     | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,-80-20%.100V       | 72982    | 8131N145651 104Z |
| A86C204                     | 290-0770-00        |                      |         | CAP.,FXD.ELCTLT:100UF,-50-10%.25V        | 56289    | 502D230          |
| A86C214                     | 290-0773-00        |                      |         | CAP.,FXD.ELCTLT:1000UF,+50-10%.10V       | 56289    | 500D154          |
| A86C234                     | 283-0194-00        |                      |         | CAP.,FXD.CER DI:4.7UF.20%.50V            | 56289    | 5C37Z5U475M050B  |
| A86C238                     | 290-0768-00        |                      |         | CAP.,FXD.ELCTLT:10UF,+50-10%.100V        | 54473    | ECE-A100V10L     |
| A86C304                     | 290-0397-00        |                      |         | CAP.,FXD.ELCTLT:1UF,-50-10%.450V         | 56289    | 34D105F450EE4    |
| A86C314                     | 290-0758-00        |                      |         | CAP.,FXD.ELCTLT:2.2UF,+50-10%.160V       | 56289    | 502D227          |
| A86C324                     | 290-0773-00        |                      |         | CAP.,FXD.ELCTLT:1000UF,-50-10%.10V       | 56289    | 500D154          |
| A86C326                     | 290-0773-00        |                      |         | CAP.,FXD.ELCTLT:1000UF,+50-10%.10V       | 56289    | 500D154          |
| A86C328                     | 283-0194-00        |                      |         | CAP.,FXD.CER DI:4.7UF.20%.50V            | 56289    | 5C37Z5U475M050B  |
| A86C334                     | 290-0768-00        |                      |         | CAP.,FXD.ELCTLT:10UF,+50-10%.100V        | 54473    | ECE-A100V10L     |
| A86C336                     | 290-0770-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%.25V        | 56289    | 502D230          |
| A86C338                     | 290-0770-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%.25V        | 56289    | 502D230          |
| A86CR001                    | 152-0385-00        | B010100              | B100978 | SEMICONV DEVICE:SILICON.2000V.100MA      | 83003    | MR1-1600         |
| A86CR001                    | 152-0752-00        | B100979              |         | SEMICONV DEVICE:RECT.SI.1A.1600V.MED REC | 04713    | MR1-1600         |
| A86CR002                    | 152-0385-00        | B010100              | B100978 | SEMICONV DEVICE:SILICON.2000V.100MA      | 83003    | MR1-1600         |
| A86CR002                    | 152-0752-00        | B100979              |         | SEMICONV DEVICE:RECT.SI.1A.1600V.MED REC | 04713    | MR1-1600         |
| A86CR003                    | 152-0385-00        | B010100              | B100978 | SEMICONV DEVICE:SILICON.2000V.100MA      | 83003    | VB20-2           |
| A86CR003                    | 152-0752-00        | B100979              |         | SEMICONV DEVICE:RECT.SI.1A.1600V.MED REC | 04713    | MR1-1600         |

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                        | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|---|----------|-----------------|
| A86CR004      | 152-0586-00        |                      |         | SEMICON D DEVICE:SILICON.600V.500MA       | 14936    | RGP10J-011      |
| A86CR005      | 152-0586-00        |                      |         | SEMICON D DEVICE:SILICON.600V.500MA       | 14936    | RGP10J-011      |
| A86CR006      | 152-0586-00        |                      |         | SEMICON D DEVICE:SILICON.600V.500MA       | 14936    | RGP10J-011      |
| A86CR007      | 152-0586-00        |                      |         | SEMICON D DEVICE:SILICON.600V.500MA       | 14936    | RGP10J-011      |
| A86CR008      | 152-0385-00        | B010100              | B100978 | SEMICON D DEVICE:SILICON.2000V.100MA      | 83003    | VB20-2          |
| A86CR008      | 152-0752-00        | B100979              |         | SEMICON D DEVICE:RECT.SI.1A.1600V.MED REC | 04713    | MR1-1600        |
| A86CR014      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR015      | 152-0400-00        | B010100              | B079999 | SEMICON D DEVICE:SILICON.400V.1A          | 80009    | 152-0400-00     |
| A86CR015      | 152-0661-00        | B080000              |         | SEMICON D DEVICE:RECT.SI.600V.3A.FAST     | 04713    | MR856           |
| A86CR016      | 152-0400-00        | B010100              | B079999 | SEMICON D DEVICE:SILICON.400V.1A          | 80009    | 152-0400-00     |
| A86CR016      | 152-0661-00        | B080000              |         | SEMICON D DEVICE:RECT.SI.600V.3A.FAST     | 04713    | MR856           |
| A86CR017      | 152-0400-00        | B010100              | B079999 | SEMICON D DEVICE:SILICON.400V.1A          | 80009    | 152-0400-00     |
| A86CR017      | 152-0661-00        | B080000              |         | SEMICON D DEVICE:RECT.SI.600V.3A.FAST     | 04713    | MR856           |
| A86CR018      | 152-0400-00        | B010100              | B079999 | SEMICON D DEVICE:SILICON.400V.1A          | 80009    | 152-0400-00     |
| A86CR018      | 152-0661-00        | B080000              |         | SEMICON D DEVICE:RECT.SI.600V.3A.FAST     | 04713    | MR856           |
| A86CR019      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR024      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR026      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR114      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR123      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR124      | 152-0640-00        |                      |         | SEMICON D DEVICE:SILICON.35V.30A.DO-4     | 01281    | SD-4101         |
| A86CR224      | 152-0640-00        |                      |         | SEMICON D DEVICE:SILICON.35V.30A.DO-4     | 01281    | SD-4101         |
| A86CR225      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR226      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR227      | 152-0686-00        |                      |         | SEMICON D DEVICE:RECT.SI.100V.5A          | 04713    | SR3273          |
| A86CR228      | 152-0686-00        |                      |         | SEMICON D DEVICE:RECT.SI.100V.5A          | 04713    | SR3273          |
| A86CR314      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86CR316      | 152-0655-00        |                      |         | SEMICON D DEVICE:SILICON.100V.3A          | 03508    | A115AX39        |
| A86L004       | 108-0900-00        |                      |         | COIL.RF:FXD.300MH.POT CORE                | 80009    | 108-0900-00     |
| A86L006       | 108-0553-00        |                      |         | COIL.RF:47MH                              | 32159    | 647.000M        |
| A86L024       | 108-0909-00        |                      |         | COIL.RF:FIXED.1.6MH                       | 80009    | 108-0909-00     |
| A86L026       | 108-0909-00        |                      |         | COIL.RF:FIXED.1.6MH                       | 80009    | 108-0909-00     |
| A86L034       | 108-0910-00        |                      |         | COIL.RF:560UH                             | 80009    | 108-0910-00     |
| A86L114       | 108-0859-00        |                      |         | COIL.RF:FIXED.10UH                        | 80009    | 108-0859-00     |
| A86L116       | 108-0911-00        |                      |         | COIL.RF:FIXED.65UH                        | 80009    | 108-0911-00     |
| A86L124       | 108-0910-00        |                      |         | COIL.RF:560UH                             | 80009    | 108-0910-00     |
| A86L204       | 108-0909-00        |                      |         | COIL.RF:FIXED.1.6MH                       | 80009    | 108-0909-00     |
| A86L214       | 108-0911-00        |                      |         | COIL.RF:FIXED.65UH                        | 80009    | 108-0911-00     |
| A86L224       | 108-0910-00        |                      |         | COIL.RF:560UH                             | 80009    | 108-0910-00     |
| A86L234       | 108-0910-00        |                      |         | COIL.RF:560UH                             | 80009    | 108-0910-00     |
| A86R124       | 306-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.10%.2W              | 01121    | HB1001          |
| A86R126       | 306-0100-00        |                      |         | RES.,FXD.CMPSN:10 OHM.10%.2W              | 01121    | HB1001          |
| A86R240       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W           | 01121    | CB1035          |
| A86S5402      | 260-1759-00        |                      |         | SWITCH.THRMSTC:NC.OPEN 83.3.CL 66.7.10A   | 14859    | 20700L66-322    |
| A86T014       | 120-1160-00        |                      |         | XFMR.PWR.SDN&SU:                          | 80009    | 120-1160-00     |

# Replaceable Electrical Parts—7912AD Service

| Component No.        | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                   | Mfr Code | Mfr Part Number  |
|----------------------|--------------------|----------------------|---------|--------------------------------------|----------|------------------|
| <b>A88 REGULATOR</b> |                    |                      |         |                                      |          |                  |
| A88                  | 670-5418-00        | B010100              | B039999 | CKT BOARD ASSY:REGULATOR             | 80009    | 670-5418-00      |
| A88                  | 670-5418-01        | B040000              | B079999 | CKT BOARD ASSY:REGULATOR             | 80009    | 670-5418-01      |
| A88                  | 670-5418-02        | B080000              | B089999 | CKT BOARD ASSY:REGULATOR             | 80009    | 670-5418-02      |
| A88                  | 670-5418-04        | B090000              |         | CKT BOARD ASSY:REGULATOR             | 80009    | 670-5418-04      |
| A88C002              | 290-0770-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%.25V    | 56289    | 502D230          |
| A88C008              | 283-0067-00        | B010100              | B039999 | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C010              | 283-0047-00        | B040000              |         | CAP.,FXD.CER DI:270PF,5%.500V        | 59821    | 2DDH73L271J      |
| A88C012              | 283-0129-00        |                      |         | CAP.,FXD.CER DI:0.56UF,20%.100V      | 56289    | 3C37X5R564M050   |
| A88C014              | 290-0782-00        |                      |         | CAP.,FXD.ELCTLT:4.7UF,+75-10%.35V    | 55680    | ULA1V4R7TEA      |
| A88C032              | 283-0129-00        |                      |         | CAP.,FXD.CER DI:0.56UF,20%.100V      | 56289    | 3C37X5R564M050   |
| A88C038              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C046              | 283-0100-00        |                      |         | CAP.,FXD.CER DI:0.0047UF,10%.200V    | 56289    | 273C3            |
| A88C122              | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A88C124              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C128              | 290-0768-00        |                      |         | CAP.,FXD.ELCTLT:10UF,+50-10%.100V    | 54473    | ECE-A100V10L     |
| A88C136              | 283-0129-00        |                      |         | CAP.,FXD.CER DI:0.56UF,20%.100V      | 56289    | 3C37X5R564M050   |
| A88C138              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C148              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C150              | 290-0770-00        |                      |         | CAP.,FXD.ELCTLT:100UF,+50-10%.25V    | 56289    | 502D230          |
| A88C202              | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A88C206              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C216              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C244              | 283-0119-00        |                      |         | CAP.,FXD.CER DI:2200PF,5%.200V       | 59660    | 855-536Y5E0227   |
| A88C302              | 290-0768-00        |                      |         | CAP.,FXD.ELCTLT:10UF,+50-10%.100V    | 54473    | ECE-A100V10L     |
| A88C316              | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A88C336              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C348              | 283-0067-00        | B010100              | B089999 | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C348              | 283-0078-00        | B090000              |         | CAP.,FXD.CER DI:0.001UF,20%.500V     | 59660    | 0801 547X5F0102F |
| A88C350              | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A88C406              | 283-0328-00        |                      |         | CAP.,FXD.CER DI:0.03UF,+80-20%.200V  | 72982    | 8131N225Z5U0303  |
| A88C448              | 283-0013-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+100-0%.1000V | 59660    | 818-602ZSU0103F  |
| A88C532              | 283-0178-00        |                      |         | CAP.,FXD.CER DI:0.1UF,+80-20%.100V   | 72982    | 8131N145651 104Z |
| A88C534              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C544              | 283-0008-00        |                      |         | CAP.,FXD.CER DI:0.1UF,20%.500V       | 56289    | 3C37X7R104M500   |
| A88C602              | 290-0745-00        |                      |         | CAP.,FXD.ELCTLT:22UF,+50-10%.25V     | 54473    | ECE-A25V22L      |
| A88C603              | 283-0002-00        |                      |         | CAP.,FXD.CER DI:0.01UF,+80-20%.500V  | 59821    | SDDH69L103Z      |
| A88C608              | 283-0032-00        |                      |         | CAP.,FXD.CER DI:470PF,5%.500V        | 59660    | 0831085Z5E00471  |
| A88C630              | 283-0067-00        |                      |         | CAP.,FXD.CER DI:0.001UF,10%.200V     | 59660    | 835-515-Z5D0102K |
| A88C720              | 283-0032-00        |                      |         | CAP.,FXD.CER DI:470PF,5%.500V        | 59660    | 0831085Z5E00471  |
| A88CR012             | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON,400V,750MA   | 14433    | LG4016           |
| A88CR030             | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON,400V,750MA   | 14433    | LG4016           |
| A88CR046             | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON,400V,750MA   | 14433    | LG4016           |
| A88CR102             | 152-0066-00        |                      |         | SEMICONV DEVICE:SILICON,400V,750MA   | 14433    | LG4016           |
| A88CR104             | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A88CR122             | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A88CR136             | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A88CR138             | 152-0333-00        | B040000              |         | SEMICONV DEVICE:SILICON,55V,200MA    | 01295    | FDH-6012         |
| A88CR144             | 152-0141-02        | B010100              | B039999 | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A88CR148             | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |
| A88CR206             | 152-0141-02        |                      |         | SEMICONV DEVICE:SILICON,30V,150MA    | 01295    | 1N4152R          |

| Component No. | Tektronix Part No. | Serial/Model No. Eff Dscnt | Name & Description                     | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------------|--|----------|-----------------|
| A88CR208      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR214      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR216      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR220      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR222      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR240      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR248      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR320      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR324      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR326      | 152-0333-00        |                            | SEMICONV DEVICE:SILICON,55V,200MA      | 07263    | FDH-6012        |
| A88CR346      | 152-0066-00        |                            | SEMICONV DEVICE:SILICON,400V,750MA     | 14433    | LG4016          |
| A88CR402      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR404      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR438      | 152-0066-00        |                            | SEMICONV DEVICE:SILICON,400V,750MA     | 14433    | LG4016          |
| A88CR442      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR454      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR502      | 152-0066-00        |                            | SEMICONV DEVICE:SILICON,400V,750MA     | 14433    | LG4016          |
| A88CR534      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR536      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR602      | 152-0198-00        |                            | SEMICONV DEVICE:SILICON,200V,3A        | 03508    | 1N5624          |
| A88CR606      | 152-0198-00        |                            | SEMICONV DEVICE:SILICON,200V,3A        | 03508    | 1N5624          |
| A88CR608      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88CR628      | 152-0141-02        |                            | SEMICONV DEVICE:SILICON,30V,150MA      | 01295    | 1N4152R         |
| A88Q012       | 151-0426-00        |                            | TRANSISTOR:SILICON,NPN                 | 03508    | X44H242         |
| A88Q016       | 151-0426-00        |                            | TRANSISTOR:SILICON,NPN                 | 03508    | X44H242         |
| A88Q022       | 151-0476-00        |                            | TRANSISTOR:SILICON,NPN                 | 02735    | 68430           |
| A88Q018       | 151-0136-00        |                            | TRANSISTOR:SILICON,NPN                 | 02735    | 35495           |
| A88Q028       | 151-0407-00        |                            | TRANSISTOR:SILICON,NPN                 | 04713    | SS2456          |
| A88Q030       | 151-0476-00        |                            | TRANSISTOR:SILICON,NPN                 | 02735    | 68430           |
| A88Q040       | 151-0426-00        |                            | TRANSISTOR:SILICON,NPN                 | 03508    | X44H242         |
| A88Q044       | 151-0426-00        |                            | TRANSISTOR:SILICON,NPN                 | 03508    | X44H242         |
| A88Q048       | 151-0136-00        |                            | TRANSISTOR:SILICON,NPN                 | 02735    | 35495           |
| A88Q102       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q118       | 151-0292-00        |                            | TRANSISTOR:SILICON,NPN                 | 01295    | A5T5058         |
| A88Q126       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q128       | 151-0350-00        |                            | TRANSISTOR:SILICON,PNP                 | 04713    | SPS6700         |
| A88Q138       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q140       | 151-0432-00        |                            | TRANSISTOR:SILICON,NPN                 | 27014    | T07391E2        |
| A88Q150       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q154       | 151-0350-00        |                            | TRANSISTOR:SILICON,PNP                 | 04713    | SPS6700         |
| A88Q202       | 151-0216-00        |                            | TRANSISTOR:SILICON,PNP                 | 04713    | SPS8803         |
| A88Q206       | 151-0192-00        |                            | TRANSISTOR:SILICON,NPN,SEL FROM MPS652 | 04713    | SPS8801         |
| A88Q212       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q228       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q234       | 151-0190-00        |                            | TRANSISTOR:SILICON,NPN                 | 07263    | S032677         |
| A88Q236       | 151-0407-00        |                            | TRANSISTOR:SILICON,NPN                 | 04713    | SS2456          |
| A88Q246       | 151-0190-00        |                            | TRANSISTOR:SILICON,NPN                 | 07263    | S032677         |
| A88Q248       | 151-0190-00        |                            | TRANSISTOR:SILICON,NPN                 | 07263    | S032677         |
| A88Q258       | 151-0190-00        |                            | TRANSISTOR:SILICON,NPN                 | 07263    | S032677         |
| A88Q306       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q312       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q316       | 151-0232-00        |                            | TRANSISTOR:SILICON,NPN,DUAL            | 07263    | SP12141         |
| A88Q332       | 151-0350-00        |                            | TRANSISTOR:SILICON,PNP                 | 04713    | SPS6700         |

**Replaceable Electrical Parts—7912AD Service**

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                     | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|--|----------|-----------------|
| A88Q334       | 151-0432-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 27014    | T07391E2        |
| A88Q444       | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL            | 07263    | SP12141         |
| A88Q446       | 151-0192-00        |                      |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A88Q456       | 151-0292-00        | B010100              | B039999 | TRANSISTOR:SILICON.NPN                 | 01295    | A5T5058         |
| A88Q456       | 151-0297-00        | B040000              |         | TRANSISTOR:SILICON.NPN                 | 04713    | ST613           |
| A88Q526       | 151-0497-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 04713    | SJE1985         |
| A88Q534       | 151-0232-00        |                      |         | TRANSISTOR:SILICON.NPN.DUAL            | 07263    | SP12141         |
| A88Q538       | 151-0292-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 01295    | A5T5058         |
| A88Q540       | 151-0297-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 04713    | ST613           |
| A88Q626       | 151-0622-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 27014    | 92PU51A         |
| A88Q634       | 151-0292-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 01295    | A5T5058         |
| A88Q636       | 151-0192-00        |                      |         | TRANSISTOR:SILICON.NPN.SEL FROM MPS652 | 04713    | SPS8801         |
| A88Q644       | 151-0468-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 04713    | SJ6802          |
| A88Q706       | 151-0622-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 27014    | 92PU51A         |
| A88Q708       | 151-0477-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 04713    | SJE374          |
| A88Q738       | 151-0465-00        |                      |         | TRANSISTOR:SILICON.PNP                 | 80009    | 151-0465-00     |
| A88Q748       | 151-0477-00        |                      |         | TRANSISTOR:SILICON.NPN                 | 04713    | SJE374          |
| A88R002       | 315-0681-00        |                      |         | RES.,FXD.CMPSN:680 OHM.5%.0.25W        | 01121    | CB6815          |
| A88R004       | 308-0643-00        |                      |         | RES.,FXD.WW:0.1 OHM.3%.3W              | 91637    | RS2B-ER1000H TR |
| A88R006       | 315-0271-00        | B010100              | B039999 | RES.,FXD.CMPSN:270 OHM.5%.0.25W        | 01121    | CB2715          |
| A88R006       | 321-0156-00        | B040000              |         | RES.,FXD.FILM:412 OHM.1%.0.125W        | 91637    | MFF1816G412R0F  |
| A88R007       | 315-0102-00        | B010100              | B039999 | RES.,FXD.CMPSN:1K OHM.5%.0.25W         | 01121    | CB1025          |
| A88R008       | 321-0331-00        |                      |         | RES.,FXD.FILM:27.4K OHM.1%.0.125W      | 91637    | MFF1816G27401F  |
| A88R022       | 315-0331-00        |                      |         | RES.,FXD.CMPSN:330 OHM.5%.0.25W        | 01121    | CB3315          |
| A88R024       | 308-0240-00        |                      |         | RES.,FXD.WW:2 OHM.5%.3W                | 91637    | RS2B-D2R000J    |
| A88R026       | 321-0122-00        |                      |         | RES.,FXD.FILM:182 OHM.1%.0.125W        | 91637    | MFF1816G182R0F  |
| A88R030       | 308-0240-00        |                      |         | RES.,FXD.WW:2 OHM.5%.3W                | 91637    | RS2B-D2R000J    |
| A88R032       | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W        | 01121    | CB4715          |
| A88R034       | 321-0924-07        |                      |         | RES.,FXD.FILM:40K OHM.0.1%.0.125W      | 91637    | MFF1816C40001B  |
| A88R038       | 315-0681-00        |                      |         | RES.,FXD.CMPSN:680 OHM.5%.0.25W        | 01121    | CB6815          |
| A88R044       | 315-0562-00        |                      |         | RES.,FXD.CMPSN:5.6K OHM.5%.0.25W       | 01121    | CB5625          |
| A88R046       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W        | 01121    | CB1015          |
| A88R052       | 315-0134-00        |                      |         | RES.,FXD.CMPSN:130K OHM.5%.0.25W       | 01121    | CB1345          |
| A88R054       | 321-0306-00        |                      |         | RES.,FXD.FILM:15K OHM.1%.0.125W        | 91637    | MFF1816G15001F  |
| A88R056       | 315-0331-00        |                      |         | RES.,FXD.CMPSN:330 OHM.5%.0.25W        | 01121    | CB3315          |
| A88R102       | 315-0222-00        |                      |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W       | 01121    | CB2225          |
| A88R104       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W         | 01121    | CB1025          |
| A88R106       | 315-0822-00        |                      |         | RES.,FXD.CMPSN:8.2K OHM.5%.0.25W       | 01121    | CB8225          |
| A88R108       | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W        | 01121    | CB4715          |
| A88R112       | 308-0643-00        |                      |         | RES.,FXD.WW:0.1 OHM.3%.3W              | 91637    | RS2B-ER1000H TR |
| A88R114       | 315-0470-00        |                      |         | RES.,FXD.CMPSN:47 OHM.5%.0.25W         | 01121    | CB4705          |
| A88R115       | 321-0926-07        |                      |         | RES.,FXD.FILM:4K OHM.0.1%.0.125W       | 91637    | MFF1816C40000B  |
| A88R116       | 315-0681-00        |                      |         | RES.,FXD.CMPSN:680 OHM.5%.0.25W        | 01121    | CB6815          |
| A88R118       | 315-0363-00        |                      |         | RES.,FXD.CMPSN:36K OHM.5%.0.25W        | 01121    | CB3635          |
| A88R120       | 321-0924-07        |                      |         | RES.,FXD.FILM:40K OHM.0.1%.0.125W      | 91637    | MFF1816C40001B  |
| A88R122       | 315-0472-00        |                      |         | RES.,FXD.CMPSN:4.7K OHM.5%.0.25W       | 01121    | CB4725          |
| A88R123       | 323-0310-00        |                      |         | RES.,FXD.FILM:16.5K OHM.1%.0.50W       | 75042    | CECT0-1652F     |
| A88R124       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W        | 01121    | CB1035          |
| A88R126       | 315-0183-00        |                      |         | RES.,FXD.CMPSN:18K OHM.5%.0.25W        | 01121    | CB1835          |
| A88R128       | 315-0274-00        |                      |         | RES.,FXD.CMPSN:270K OHM.5%.0.25W       | 01121    | CB2745          |
| A88R130       | 315-0151-00        |                      |         | RES.,FXD.CMPSN:150 OHM.5%.0.25W        | 01121    | CB1515          |
| A88R132       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W         | 01121    | CB1025          |
| A88R134       | 315-0153-00        |                      |         | RES.,FXD.CMPSN:15K OHM.5%.0.25W        | 01121    | CB1535          |



| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-----------------------------------|----------|-----------------|
| A88R136       | 315-0103-00        |                      |         | RES..FXD.CMPSN:10K OHM.5%.0.25W   | 01121    | CB1035          |
| A88R138       | 315-0184-00        |                      |         | RES..FXD.CMPSN:180K OHM.5%.0.25W  | 01121    | CB1845          |
| A88R140       | 308-0643-00        |                      |         | RES..FXD.WW:0.1 OHM.3%.3W         | 91637    | RS2B-ER1000H TR |
| A88R141       | 315-0753-00        | B010100              | B039999 | RES..FXD.CMPSN:75K OHM.5%.0.25W   | 01121    | CB7535          |
| A88R141       | 315-0103-00        | B040000              |         | RES..FXD.CMPSN:10K OHM.5%.0.25W   | 01121    | CB1035          |
| A88R142       | 315-0334-00        | B010100              | B039999 | RES..FXD.CMPSN:330K OHM.5%.0.25W  | 01121    | CB3345          |
| A88R144       | 315-0152-00        |                      |         | RES..FXD.CMPSN:1.5K OHM.5%.0.25W  | 01121    | CB1525          |
| A88R145       | 321-0924-07        |                      |         | RES..FXD.FILM:40K OHM.0.1%.0.125W | 91637    | MFF1816C40001B  |
| A88R146       | 315-0182-00        | B010100              | B039999 | RES..FXD.CMPSN:1.8K OHM.5%.0.25W  | 01121    | CB1825          |
| A88R146       | 315-0333-00        | B040000              |         | RES..FXD.CMPSN:33K OHM.5%.0.25W   | 01121    | CB3335          |
| A88R147       | 315-0473-00        | B040000              |         | RES..FXD.CMPSN:47K OHM.5%.0.25W   | 01121    | CB4735          |
| A88R148       | 315-0513-00        |                      |         | RES..FXD.CMPSN:51K OHM.5%.0.25W   | 01121    | CB5135          |
| A88R202       | 315-0562-00        |                      |         | RES..FXD.CMPSN:5.6K OHM.5%.0.25W  | 01121    | CB5625          |
| A88R204       | 315-0221-00        |                      |         | RES..FXD.CMPSN:220 OHM.5%.0.25W   | 01121    | CB2215          |
| A88R206       | 315-0124-00        |                      |         | RES..FXD.CMPSN:120K OHM.5%.0.25W  | 01121    | CB1245          |
| A88R208       | 315-0181-00        |                      |         | RES..FXD.CMPSN:180 OHM.5%.0.25W   | 01121    | CB1815          |
| A88R212       | 315-0103-00        |                      |         | RES..FXD.CMPSN:10K OHM.5%.0.25W   | 01121    | CB1035          |
| A88R214       | 315-0123-00        |                      |         | RES..FXD.CMPSN:12K OHM.5%.0.25W   | 01121    | CB1235          |
| A88R215       | 315-0102-00        |                      |         | RES..FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A88R216       | 315-0103-00        |                      |         | RES..FXD.CMPSN:10K OHM.5%.0.25W   | 01121    | CB1035          |
| A88R217       | 315-0224-00        |                      |         | RES..FXD.CMPSN:220K OHM.5%.0.25W  | 01121    | CB2245          |
| A88R218       | 315-0273-00        |                      |         | RES..FXD.CMPSN:27K OHM.5%.0.25W   | 01121    | CB2735          |
| A88R219       | 315-0273-00        |                      |         | RES..FXD.CMPSN:27K OHM.5%.0.25W   | 01121    | CB2735          |
| A88R224       | 315-0471-00        |                      |         | RES..FXD.CMPSN:470 OHM.5%.0.25W   | 01121    | CB4715          |
| A88R228       | 315-0224-00        |                      |         | RES..FXD.CMPSN:220K OHM.5%.0.25W  | 01121    | CB2245          |
| A88R230       | 315-0331-00        |                      |         | RES..FXD.CMPSN:330 OHM.5%.0.25W   | 01121    | CB3315          |
| A88R234       | 321-0149-00        |                      |         | RES..FXD.FILM:348 OHM.1%.0.125W   | 91637    | MFF1816G348R0F  |
| A88R236       | 323-0310-00        |                      |         | RES..FXD.FILM:16.5K OHM.1%.0.50W  | 75042    | CECT0-1652F     |
| A88R238       | 315-0102-00        |                      |         | RES..FXD.CMPSN:1K OHM.5%.0.25W    | 01121    | CB1025          |
| A88R240       | 321-1296-07        |                      |         | RES..FXD.FILM:12K OHM.0.1%.0.125W | 91637    | MFF1816C12001B  |
| A88R241       | 321-0402-00        |                      |         | RES..FXD.FILM:150K OHM.1%.0.125W  | 24546    | NA55D1503F      |
| A88R242       | 321-0402-00        |                      |         | RES..FXD.FILM:150K OHM.1%.0.125W  | 24546    | NA55D1503F      |
| A88R243       | 321-0756-00        |                      |         | RES..FXD.FILM:50K OHM.1%.0.125W   | 24546    | NA55D5002F      |
| A88R244       | 321-0756-00        |                      |         | RES..FXD.FILM:50K OHM.1%.0.125W   | 24546    | NA55D5002F      |
| A88R245       | 321-0452-00        |                      |         | RES..FXD.FILM:499K OHM.1%.0.125W  | 91637    | MFF1816G49902F  |
| A88R246       | 321-0481-00        |                      |         | RES..FXD.FILM:1M OHM.1%.0.125W    | 24546    | NA4D1004F       |
| A88R247       | 321-0452-00        |                      |         | RES..FXD.FILM:499K OHM.1%.0.125W  | 91637    | MFF1816G49902F  |
| A88R248       | 315-0101-00        |                      |         | RES..FXD.CMPSN:100 OHM.5%.0.25W   | 01121    | CB1015          |
| A88R302       | 304-0681-00        |                      |         | RES..FXD.CMPSN:680 OHM.10%.1W     | 01121    | GB6811          |
| A88R308       | 315-0184-00        |                      |         | RES..FXD.CMPSN:180K OHM.5%.0.25W  | 01121    | CB1845          |
| A88R310       | 315-0274-00        |                      |         | RES..FXD.CMPSN:270K OHM.5%.0.25W  | 01121    | CB2745          |
| A88R311       | 321-0924-07        |                      |         | RES..FXD.FILM:40K OHM.0.1%.0.125W | 91637    | MFF1816C40001B  |
| A88R312       | 315-0223-00        |                      |         | RES..FXD.CMPSN:22K OHM.5%.0.25W   | 01121    | CB2235          |
| A88R314       | 315-0750-00        |                      |         | RES..FXD.CMPSN:75 OHM.5%.0.25W    | 01121    | CB7505          |
| A88R315       | 321-0210-00        |                      |         | RES..FXD.FILM:1.5K OHM.1%.0.125W  | 91637    | MFF1816G15000F  |
| A88R316       | 315-0331-00        |                      |         | RES..FXD.CMPSN:330 OHM.5%.0.25W   | 01121    | CB3315          |
| A88R317       | 321-0265-00        |                      |         | RES..FXD.FILM:5.62K OHM.1%.0.125W | 91637    | MFF1816G56200F  |
| A88R322       | 315-0562-00        |                      |         | RES..FXD.CMPSN:5.6K OHM.5%.0.25W  | 01121    | CB5625          |
| A88R326       | 315-0512-00        |                      |         | RES..FXD.CMPSN:5.1K OHM.5%.0.25W  | 01121    | CB5125          |
| A88R328       | 323-0266-00        |                      |         | RES..FXD.FILM:5.76K OHM.1%.0.5W   | 91637    | MFF1226G57600F  |
| A88R334       | 315-0272-00        |                      |         | RES..FXD.CMPSN:2.7K OHM.5%.0.25W  | 01121    | CB2725          |
| A88R336       | 315-0334-00        |                      |         | RES..FXD.CMPSN:330K OHM.5%.0.25W  | 01121    | CB3345          |
| A88R338       | 315-0621-00        |                      |         | RES..FXD.CMPSN:620 OHM.5%.0.25W   | 01121    | CB6215          |
| A88R342       | 315-0243-00        |                      |         | RES..FXD.CMPSN:24K OHM.5%.0.25W   | 01121    | CB2435          |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                  | Mfr Code | Mfr Part Number |
|---------------|--------------------|----------------------|---------|-------------------------------------|----------|-----------------|
| A88R344       | 321-0431-00        |                      |         | RES.,FXD.FILM:301K OHM.1%.0.125W    | 91637    | MFF1816G30102F  |
| A88R346       | 315-0161-00        |                      |         | RES.,FXD.CMPSN:160 OHM.5%.0.25W     | 01121    | CB1615          |
| A88R348       | 323-0481-04        |                      |         | RES.,FXD.FILM:1M OHM.0.1%.0.50W     | 91637    | MFF1226D10003B  |
| A88R352       | 315-0682-00        |                      |         | RES.,FXD.CMPSN:6.8K OHM.5%.0.25W    | 01121    | CB6825          |
| A88R356       | 315-0513-00        |                      |         | RES.,FXD.CMPSN:51K OHM.5%.0.25W     | 01121    | CB5135          |
| A88R358       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W      | 01121    | CB1025          |
| A88R404       | 321-1296-07        |                      |         | RES.,FXD.FILM:12K OHM.0.1%.0.125W   | 91637    | MFF1816C12001B  |
| A88R406       | 321-0332-07        |                      |         | RES.,FXD.FILM:28K OHM.0.1%.0.125W   | 91637    | MFF1816C28001B  |
| A88R410       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W     | 01121    | CB1015          |
| A88R440       | 323-0510-00        |                      |         | RES.,FXD.FILM:2M OHM.1%.0.50W       | 75042    | CECT0-2004F     |
| A88R441       | 315-0563-00        |                      |         | RES.,FXD.CMPSN:56K OHM.5%.0.25W     | 01121    | CB5635          |
| A88R442       | 315-0273-00        |                      |         | RES.,FXD.CMPSN:27K OHM.5%.0.25W     | 01121    | CB2735          |
| A88R443       | 315-0244-00        |                      |         | RES.,FXD.CMPSN:240K OHM.5%.0.25W    | 01121    | CB2445          |
| A88R444       | 315-0124-00        |                      |         | RES.,FXD.CMPSN:120K OHM.5%.0.25W    | 01121    | CB1245          |
| A88R446       | 315-0333-00        |                      |         | RES.,FXD.CMPSN:33K OHM.5%.0.25W     | 01121    | CB3335          |
| A88R448       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W     | 01121    | CB1015          |
| A88R450       | 321-0728-06        |                      |         | RES.,FXD.FILM:136K OHM.0.25%.0.125W | 91637    | MFF1816C13602C  |
| A88R452       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W      | 01121    | CB1025          |
| A88R502       | 315-0471-00        |                      |         | RES.,FXD.CMPSN:470 OHM.5%.0.25W     | 01121    | CB4715          |
| A88R504       | 321-0264-00        |                      |         | RES.,FXD.FILM:5.49K OHM.1%.0.125W   | 91637    | MFF1816G54900F  |
| A88R506       | 321-0924-07        |                      |         | RES.,FXD.FILM:40K OHM.0.1%.0.125W   | 91637    | MFF1816C40001B  |
| A88R508       | 311-1248-00        |                      |         | RES.,VAR.NONWIR:500 OHM.10%.0.50W   | 73138    | 72-23-0         |
| A88R530       | 321-0373-04        |                      |         | RES.,FXD.FILM:75K OHM.0.1%.0.125W   | 91637    | MFF1816D75001B  |
| A88R531       | 315-0202-00        |                      |         | RES.,FXD.CMPSN:2K OHM.5%.0.25W      | 01121    | CB2025          |
| A88R534       | 315-0244-00        |                      |         | RES.,FXD.CMPSN:240K OHM.5%.0.25W    | 01121    | CB2445          |
| A88R535       | 315-0563-00        |                      |         | RES.,FXD.CMPSN:56K OHM.5%.0.25W     | 01121    | CB5635          |
| A88R536       | 315-0473-00        |                      |         | RES.,FXD.CMPSN:47K OHM.5%.0.25W     | 01121    | CB4735          |
| A88R537       | 321-0414-03        |                      |         | RES.,FXD.FILM:200K OHM.0.25%.0.125W | 24546    | NC55C2003C      |
| A88R538       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W      | 01121    | CB1025          |
| A88R540       | 315-0682-00        | B090000              |         | RES.,FXD.CMPSN:6.8K OHM.5%.0.25W    | 01121    | CB6825          |
| A88R542       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W      | 01121    | CB1025          |
| A88R546       | 305-0124-00        | B010100              | B089999 | RES.,FXD.CMPSN:120K OHM.5%.2W       | 01121    | HB1245          |
| A88R546       | 305-0334-00        | B090000              |         | RES.,FXD.CMPSN:330K OHM.5%.2W       | 01121    | HB3345          |
| A88R608       | 308-0643-00        |                      |         | RES.,FXD.WW:0.1 OHM.3%.3W           | 91637    | RS2B-ER1000H TR |
| A88R610       | 321-0318-03        |                      |         | RES.,FXD.FILM:20K OHM.0.25%.0.125W  | 24546    | NC55C2002C      |
| A88R612       | 321-0967-03        |                      |         | RES.,FXD.FILM:55K OHM.0.25%.0.125W  | 91637    | MFF1816D55001C  |
| A88R613       | 321-1358-07        |                      |         | RES.,FXD.FILM:53K OHM.0.1%.0.125W   | 91637    | MFF1816C53001B  |
| A88R614       | 321-0756-03        |                      |         | RES.,FXD.FILM:50K OHM.0.25%.0.125W  | 91637    | MFF1816D50001C  |
| A88R615       | 321-0165-00        |                      |         | RES.,FXD.FILM:511 OHM.1%.0.125W     | 91637    | MFF1816G511R0F  |
| A88R616       | 315-0223-00        |                      |         | RES.,FXD.CMPSN:22K OHM.5%.0.25W     | 01121    | CB2235          |
| A88R618       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W     | 01121    | CB1015          |
| A88R624       | 315-0203-00        |                      |         | RES.,FXD.CMPSN:20K OHM.5%.0.25W     | 01121    | CB2035          |
| A88R626       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W     | 01121    | CB1015          |
| A88R628       | 315-0332-00        |                      |         | RES.,FXD.CMPSN:3.3K OHM.5%.0.25W    | 01121    | CB3325          |
| A88R630       | 315-0102-00        |                      |         | RES.,FXD.CMPSN:1K OHM.5%.0.25W      | 01121    | CB1025          |
| A88R632       | 301-0104-00        |                      |         | RES.,FXD.CMPSN:100K OHM.5%.0.5W     | 01121    | EB1045          |
| A88R634       | 321-0481-00        |                      |         | RES.,FXD.FILM:1M OHM.1%.0.125W      | 24546    | NA4D1004F       |
| A88R636       | 315-0333-00        |                      |         | RES.,FXD.CMPSN:33K OHM.5%.0.25W     | 01121    | CB3335          |
| A88R638       | 315-0103-00        |                      |         | RES.,FXD.CMPSN:10K OHM.5%.0.25W     | 01121    | CB1035          |
| A88R639       | 301-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.50W     | 01121    | EB1015          |
| A88R704       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W     | 01121    | CB1015          |
| A88R712       | 315-0101-00        |                      |         | RES.,FXD.CMPSN:100 OHM.5%.0.25W     | 01121    | CB1015          |
| A88R714       | 308-0695-00        |                      |         | RES.,FXD.WW:0.05 OHM.10%.5W         | 91637    | RLS-5_05OHM.10% |
| A88R716       | 315-0222-00        |                      |         | RES.,FXD.CMPSN:2.2K OHM.5%.0.25W    | 01121    | CB2225          |

| Component No. | Tektronix Part No. | Serial/Model No. |         | Name & Description                    | Mfr Code | Mfr Part Number |
|---------------|--------------------|------------------|---------|---------------------------------------|----------|-----------------|
|               |                    | Eff              | Dscont  |                                       |          |                 |
| A88R720       | 315-0203-00        |                  |         | RES.,FXD,CMPSN:20K OHM,5%.0.25W       | 01121    | CB2035          |
| A88R722       | 315-0561-00        |                  |         | RES.,FXD,CMPSN:560 OHM,5%.0.25W       | 01121    | CB5615          |
| A88R724       | 315-0101-00        |                  |         | RES.,FXD,CMPSN:100 OHM,5%.0.25W       | 01121    | CB1015          |
| A88R726       | 315-0680-00        |                  |         | RES.,FXD,CMPSN:68 OHM,5%.0.25W        | 01121    | CB6805          |
| A88R728       | 315-0122-00        |                  |         | RES.,FXD,CMPSN:1.2K OHM,5%.0.25W      | 01121    | CB1225          |
| A88R746       | 315-0222-00        |                  |         | RES.,FXD,CMPSN:2.2K OHM,5%.0.25W      | 01121    | CB2225          |
| A88U248       | 156-0067-00        |                  |         | MICROCIRCUIT,LI:OPERATIONAL AMPLIFIER | 01295    | MICROA741CP     |
| A88U628       | 156-0495-00        |                  |         | MICROCIRCUIT,LI:OPNL AMPL             | 27014    | LM324N          |
| A88VR146      | 152-0195-00        | B040000          |         | SEMICOND DEVICE:ZENER,0.4W,5.1V,5%    | 04713    | SZ11755         |
| A88VR148      | 152-0195-00        | B040000          |         | SEMICOND DEVICE:ZENER,0.4W,5.1V,5%    | 04713    | SZ11755         |
| A88VR212      | 152-0175-00        |                  |         | SEMICOND DEVICE:ZENER,0.4W,5.6V,5%    | 04713    | SZG35008        |
| A88VR328      | 152-0486-00        |                  |         | SEMICOND DEVICE:ZENER,0.25W,6.2V,5%   | 80009    | 152-0486-00     |
| A88VR340      | 152-0514-00        |                  |         | SEMICOND DEVICE:ZENER,0.4W,10V,1%     | 80009    | 152-0514-00     |
| A88VR540      | 152-0247-00        | B010100          | B039999 | SEMICOND DEVICE:ZENER,0.4W,150V,5%    | 04713    | SZG275K1RL      |

# Replaceable Electrical Parts—7912AD Service

| Component No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Name & Description                             | Mfr Code | Mfr Part Number  |
|---------------|--------------------|----------------------|---------|--|----------|------------------|
| CHASSIS PARTS |                    |                      |         |  |          |                  |
| B5400         | 119-1024-00        | B010100              | B089999 | FAN. VENTILATING: 115V. 18W. 3100 RPM. 115 CFM | 82877    | 028316           |
| B5400         | 119-1188-00        | B090000              |         | FAN. TUBE AXIAL: 90V. 3100 RPM. 115 CFM        | 82877    | MX70A3028648     |
| C5200         | 283-0211-00        |                      |         | CAP..FXD.CER DI: 0.1UF. 10%. 200V              | 04222    | SR406C104KAA     |
| C5201         | 283-0211-00        |                      |         | CAP..FXD.CER DI: 0.1UF. 10%. 200V              | 04222    | SR406C104KAA     |
| C5202         | 283-0111-00        |                      |         | CAP..FXD.CER DI: 0.1UF. 20%. 50V               | 56289    | 273C11           |
| C5203         | 283-0211-00        |                      |         | CAP..FXD.CER DI: 0.1UF. 10%. 200V              | 04222    | SR406C104KAA     |
| C5205         | 283-0001-00        |                      |         | CAP..FXD.CER DI: 0.005UF. + 100-0%. 500V       | 59821    | 2DDH61L502P      |
| C5400         | 283-0280-00        |                      |         | CAP..FXD.CER DI: 2200PF. 10%. 2000V            | 59660    | 0818590Y5500222K |
| C82110        | 290-0813-00        |                      |         | CAP..FXD.ELCTLT: 2000UF. -10 + 75%. 200V       | 56289    | 36DX9463         |
| C82310        | 290-0813-00        |                      |         | CAP..FXD.ELCTLT: 2000UF. -10 + 75%. 200V       | 56289    | 36DX9463         |
| CR5204        | 152-0413-00        |                      |         | SEMICONV DEVICE: SILICON. 400V. 750MA          | 12969    | UTR307           |
| DL5300        | 119-0437-00        |                      |         | DELAY LINE. ELEC: 62NS. 100 OHM                | 80009    | 119-0437-00      |
| DS5114        | 150-1014-00        | B060000              |         | LAMP. LED: RED. 50MA                           | 58361    | Q6444/MV5054-1   |
| DS5115        | 150-1014-00        | B060000              |         | LAMP. LED: RED. 50MA                           | 58361    | Q6444/MV5054-1   |
| DS5114        | 150-1014-00        | B060000              |         | LAMP. LED: RED. 50MA                           | 58361    | Q6444/MV5054-1   |
| DS5115        | 150-1014-00        | B060000              |         | LAMP. LED: RED. 50MA                           | 58361    | Q6444/MV5054-1   |
| F5400         | 159-0013-00        |                      |         | FUSE. CARTRIDGE: 3AG. 6A. 125V. 7 SEC          | 71400    | MTH6             |
| L5400         | 120-1165-00        |                      |         | TRANSFORMER. RF. TOROID. COMMON MODE REJECT    | 80009    | 120-1165-00      |
| L5401         | 108-0902-00        |                      |         | COIL. RF: 0.4MH. FIXED                         | 80009    | 108-0902-00      |
| L5402         | 108-0902-00        |                      |         | COIL. RF: 0.4MH. FIXED                         | 80009    | 108-0902-00      |
| LR5200        | 108-0685-00        |                      |         | COIL. RF: 62NH                                 | 80009    | 108-0685-00      |
| LR5201        | 108-0685-00        |                      |         | COIL. RF: 62NH                                 | 80009    | 108-0685-00      |
| Q006          | 151-0262-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 02735    | 62396            |
| Q012          | 151-0426-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 03508    | X44H242          |
| Q016          | 151-0426-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 03508    | X44H242          |
| Q022          | 151-0476-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 02735    | 68430            |
| Q030          | 151-0476-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 02735    | 68430            |
| Q040          | 151-0426-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 03508    | X44H242          |
| Q206          | 151-0262-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 02735    | 62396            |
| Q708          | 151-0477-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 04713    | SJE374           |
| Q738          | 151-0465-00        |                      |         | TRANSISTOR: SILICON. PNP                       | 80009    | 151-0465-00      |
| Q748          | 151-0477-00        |                      |         | TRANSISTOR: SILICON. NPN                       | 04713    | SJE374           |
| P5201         | 136-0120-02        | B010100              | B111249 | E  |          |                  |
| R5000         | 311-1150-00        |                      |         | RES..VAR. WW: 10K OHM. 5%                      | 73138    | 7381-1-0         |
| R5001         | 311-1763-00        |                      |         | RES..VAR. NONWIR: 10K OHM. 10%. 1W             | 12697    | 381S-CM40427     |
| R5002         | 311-1190-00        |                      |         | RES..VAR. NONWIR: PNL. 10K OHM. 1W. W/SW       | 01121    | 10M551           |
| R5109         | 323-0164-00        |                      |         | RES..FXD. FILM: 499 OHM. 1%. 0.50W             | 7500     | CECT0-4990F      |
| R5200         | 315-0104-00        |                      |         | RES..FXD. CMPSN: 100K OHM. 5%. 0.25W           | 0111     | CB1045           |
| R5201         | 315-0103-00        |                      |         | RES..FXD. CMPSN: 10K OHM. 5%. 0.25W            | 0111     | CB1035           |
| R5202         | 315-0103-00        |                      |         | RES..FXD. CMPSN: 10K OHM. 5%. 0.25W            | 0111     | CB1035           |
| R5203         | 315-0202-00        |                      |         | RES..FXD. CMPSN: 2K OHM. 5%. 0.25W             | 01121    | CB2025           |
| R5204         | 305-0103-00        |                      |         | RES..FXD. CMPSN: 10K OHM. 5%. 2W               | 01121    | HB1035           |
| R5205         | 307-0292-17        |                      |         | RES..FXD. FILM: THICK FILM. 183 OHM            | 80009    | 307-0292-17      |
| R5206         | 315-0103-00        |                      |         | RES..FXD. CMPSN: 10K OHM. 5%. 0.25W            | 01121    | CB1035           |
| R5210         | 311-2065-00        | B100913              |         | RES..VAR. NONWIR: PNL. 5M OHM. 10%. 1W         | 01121    | 73A1G040S505U    |
| S5001         | 311-1763-00        |                      |         | RES..VAR. NONWIR: 10K OHM. 10%. 1W             | 12697    | 381S-CM40427     |

| Component No. | Tektronix Part No. | Serial/Model No.<br>Eff Dscnt | Name & Description                  | Mfr Code | Mfr Part Number |
|---------------|--------------------|-------------------------------|-------------------------------------|----------|-----------------|
| S5002         | 311-1190-00        |                               | RES.,VAR.NONWIR:PNL,10K OHM,1W,W/SW | 01121    | 10M551          |
| S5400         | 260-1842-00        |                               | SWITCH.ROCKER:DPST,16A,250VAC       | 04009    | 2600-11E 718    |
| S5401         | 260-1909-00        |                               | SWITCH.SLIDE:SPDT,10A,250V          | 73559    | LB453-BL        |
| T5300         | 120-0892-00        |                               | XFMR.PWR.STU:HV                     | 80009    | 120-0892-00     |
| T5404         | 120-1161-00        |                               | XFMR.PWR.STPDN:                     | 80009    | 120-1161-00     |
| V5200         | 154-0698-00        |                               | ELECTRON TUBE:CRT                   | 80009    | 154-0698-00     |

# DIAGRAMS AND CIRCUIT BOARD ILLUSTRATIONS

## Symbols

Graphic symbols and class designation letters are based on ANSI Standard Y32.2-1975.

Logic symbology is based on ANSI Y32.14-1973 in terms of positive logic. Logic symbols depict the logic function performed and may differ from the manufacturer's data.

The overline on a signal name indicates that the signal performs its intended function when it is in the low state.

Abbreviations are based on ANSI Y1.1-1972.

Other ANSI standards that are used in the preparation of diagrams by Tektronix, Inc. are:

- Y14.15, 1966 Drafting Practices.
- Y14.2, 1973 Line Conventions and Lettering.
- Y10.5, 1968 Letter Symbols for Quantities Used in Electrical Science and Electrical Engineering.

American National Standard Institute  
1430 Broadway  
New York, New York 10018

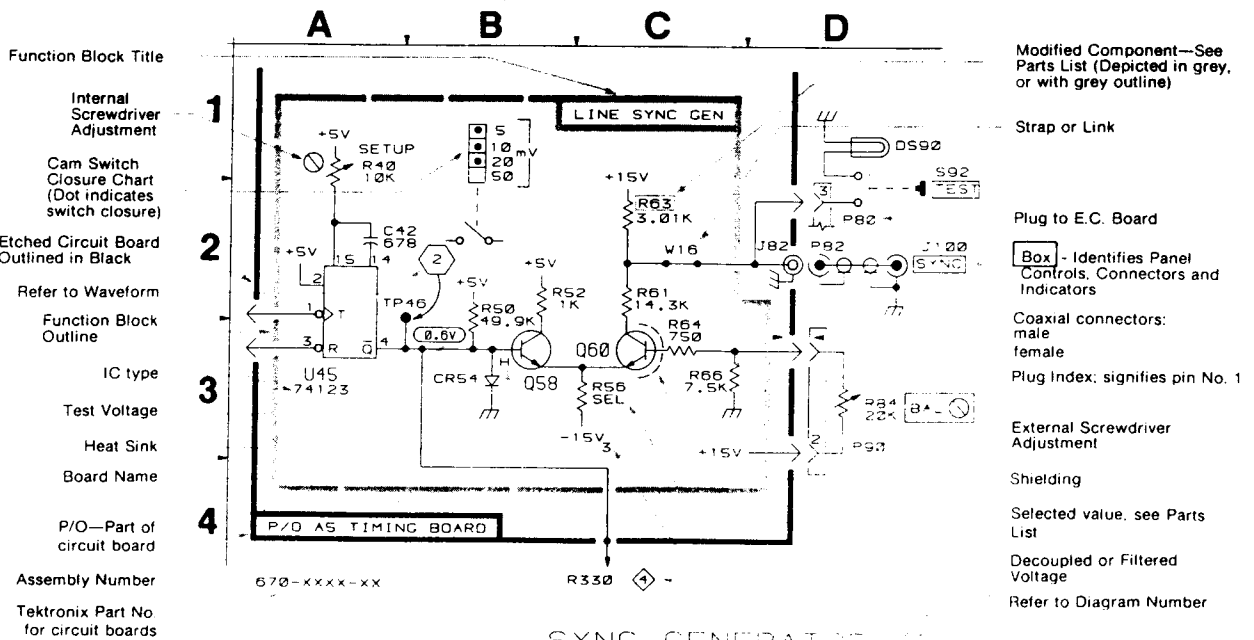
## Component Values

Electrical components shown on the diagrams are in the following units unless noted otherwise:

Capacitors = Values one or greater are in picofarads (pF).  
Values less than one are in microfarads (μF).

Resistors = Ohms (Ω).

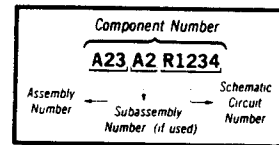
The following special symbols may appear on the diagrams:



## Assembly Numbers and Grid Coordinates

Each assembly in the instrument is assigned an assembly number (e.g., A20). The assembly number appears on the circuit board outline on the diagram, in the title for the circuit board component location illustration, and in the lookup table for the schematic diagram and corresponding component locator illustration. The Replaceable Electrical Parts list is arranged by assemblies in numerical sequence; the components are listed by component number (see following illustration for constructing a component number).

### COMPONENT NUMBER EXAMPLE

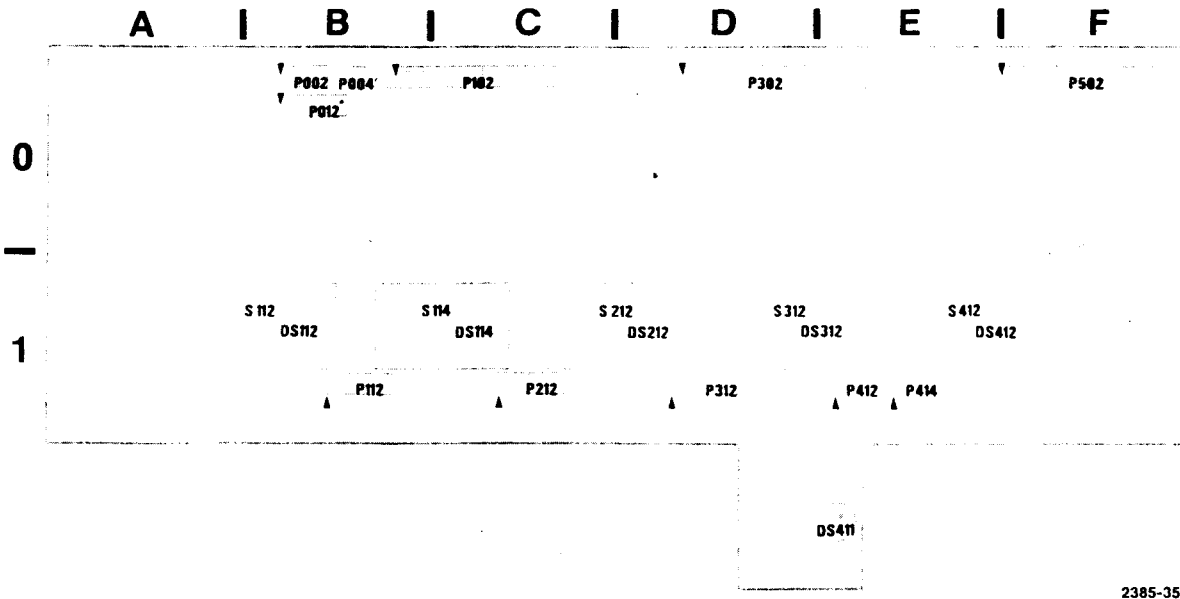


Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

The schematic diagram and circuit board component location illustration have grids. A lookup table with the grid coordinates is provided for ease of locating the component. Only the components illustrated on the facing diagram are listed in the lookup table. When more than one schematic diagram is used to illustrate the circuitry on a circuit board, the circuit board illustration may only appear opposite the first diagram on which it was illustrated; the lookup table will list the diagram number of other diagrams that the circuitry of the circuit board appears on.

SYNC GENERATOR

Schematic Name and Number



2385-35

Fig. 7-2. The Front Panel Mode Switch circuit board, assembly A10.

| P/O A10 ASSY   |                    |                | FRONT PANEL <span style="border: 1px solid black; padding: 2px;">1</span> |                    |                |
|----------------|--------------------|----------------|---|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location |
| DS112          | C4                 | B1             | P312  | F2                 | D1             |
| DS114          | C3                 | C1             | P312  | F3                 | D1             |
| DS212          | C3                 | D1             | P412  | F3                 | E1             |
| DS312          | C2                 | E1             | P414  | F2                 | E1             |
| DS411          | E4                 | E1             | P502  | C1                 | F0             |
| DS412          | C1                 | F0             | P502  | C4                 | F0             |
| J5000          | C4                 | CHASSIS        | R5000   | F2                 | CHASSIS        |
| J5001          | C5                 | CHASSIS        | R5001   | F3                 | CHASSIS        |
| J5002          | C5                 | CHASSIS        | R5002   | F2                 | CHASSIS        |
| J5004          | E5                 | CHASSIS        | S112  | C4                 | B1             |
| P002           | E1                 | B0             | S114  | C3                 | C1             |
| P012           | F1                 | B0             | S212  | C3                 | D1             |
| P102           | F4                 | C0             | S312  | C2                 | D1             |
| P112           | E4                 | B1             | S412  | C1                 | E1             |
| P212           | E5                 | C1             | S5001   | F3                 | CHASSIS        |
| P302           | E2                 | D0             | S5002   | F1                 | CHASSIS        |

| P/O A 12 ASSY |    |    | FRONT PANEL <span style="border: 1px solid black; padding: 2px;">1</span> |    |    |
|---------------|----|----|---|----|----|
| DS100         | D5 | A0 | R100  | D5 |    |
| P100          | E5 | A0 | S100  | D5 | A0 |

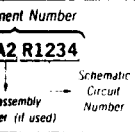
  

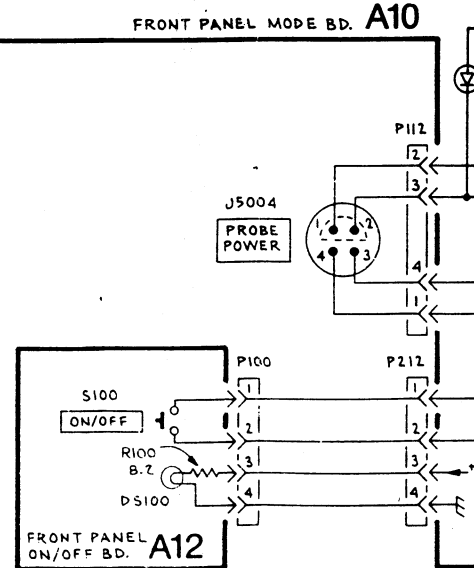
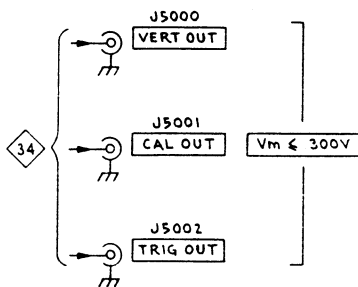
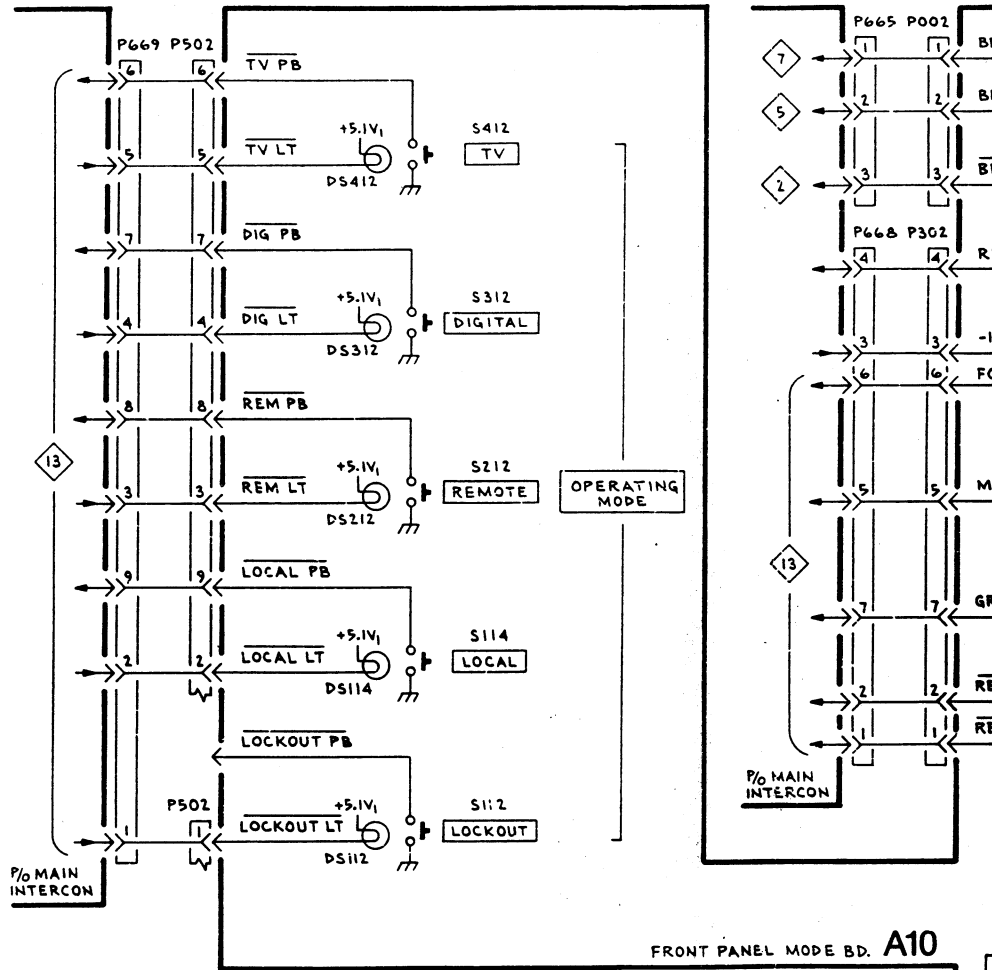
| P/O A68 ASSY |    |    | FRONT PANEL <span style="border: 1px solid black; padding: 2px;">1</span> |    |    |
|--------------|----|----|---|----|----|
| P665         | E1 | G6 | P668  | E3 | G6 |
| P666         | F4 | G6 | P669  | C1 | G6 |

|                              |  |  |  |  |  |
|------------------------------|--|--|--|--|--|
| P/O A68 ASSY - SEE FIG. 7-41 |  |  |  |  |  |
|------------------------------|--|--|--|--|--|

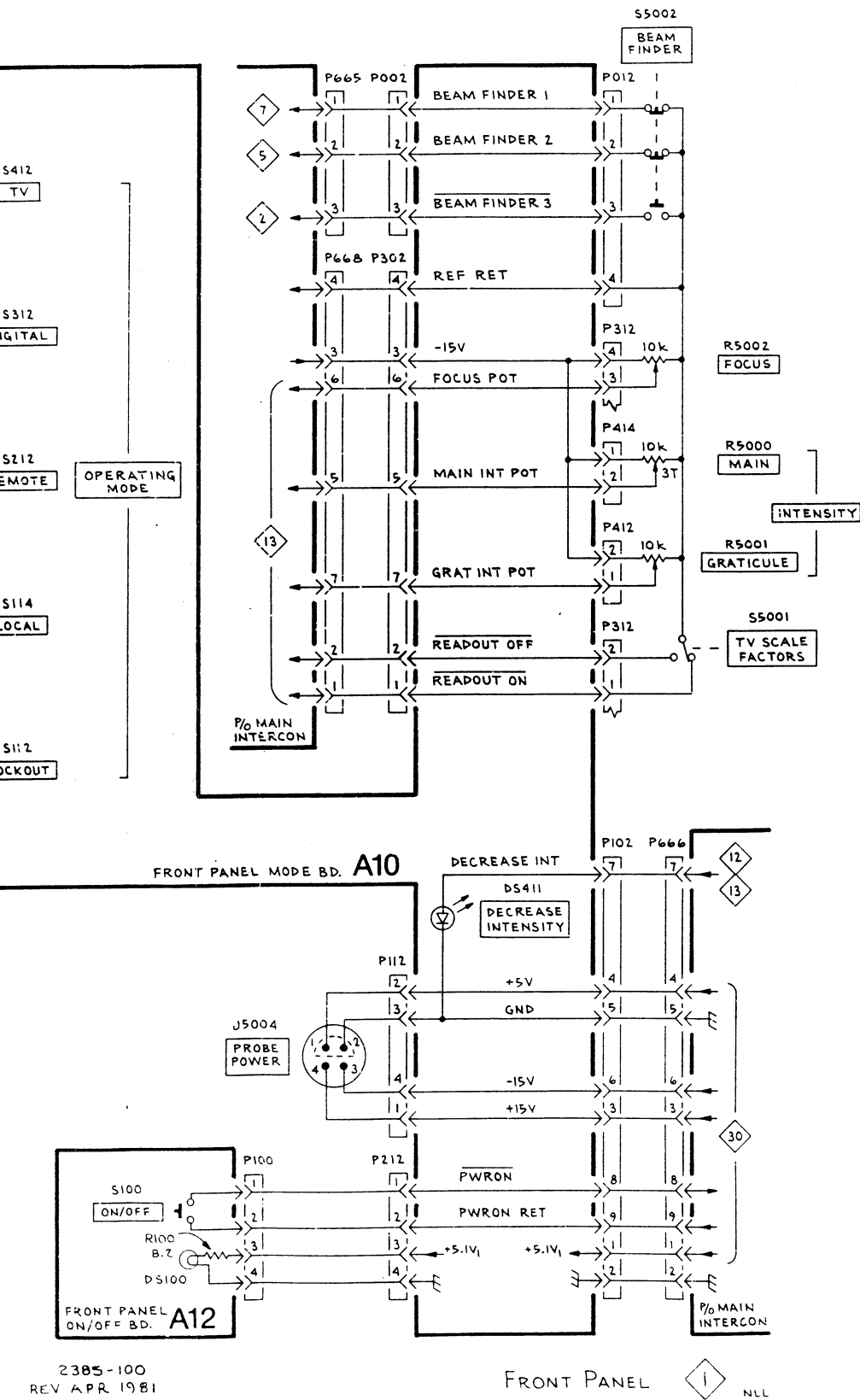
NUMBER EXAMPLE



**A****B****C****D****E****1****2****3****4****5****6**

2385-100  
REV APR 1981





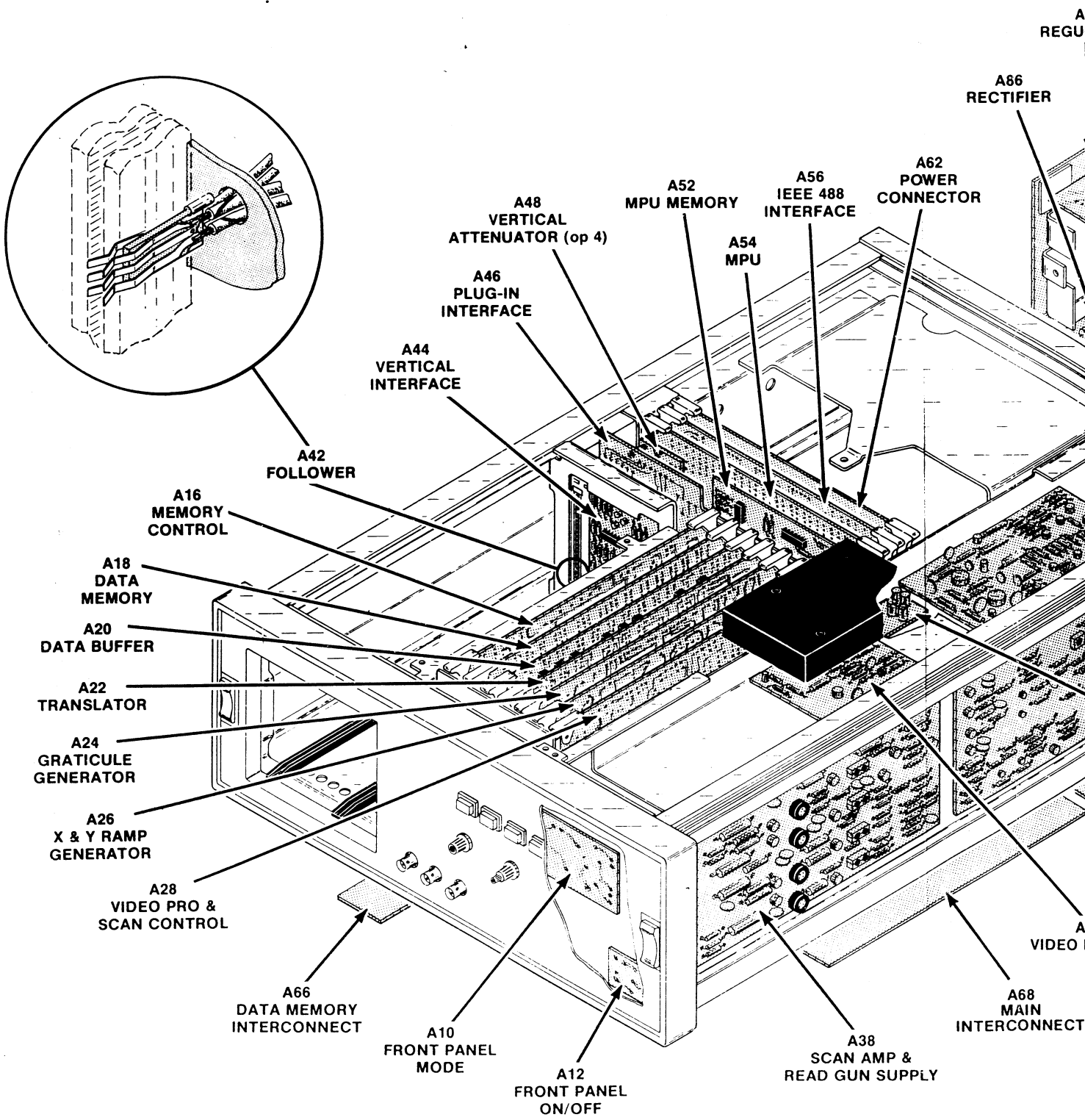
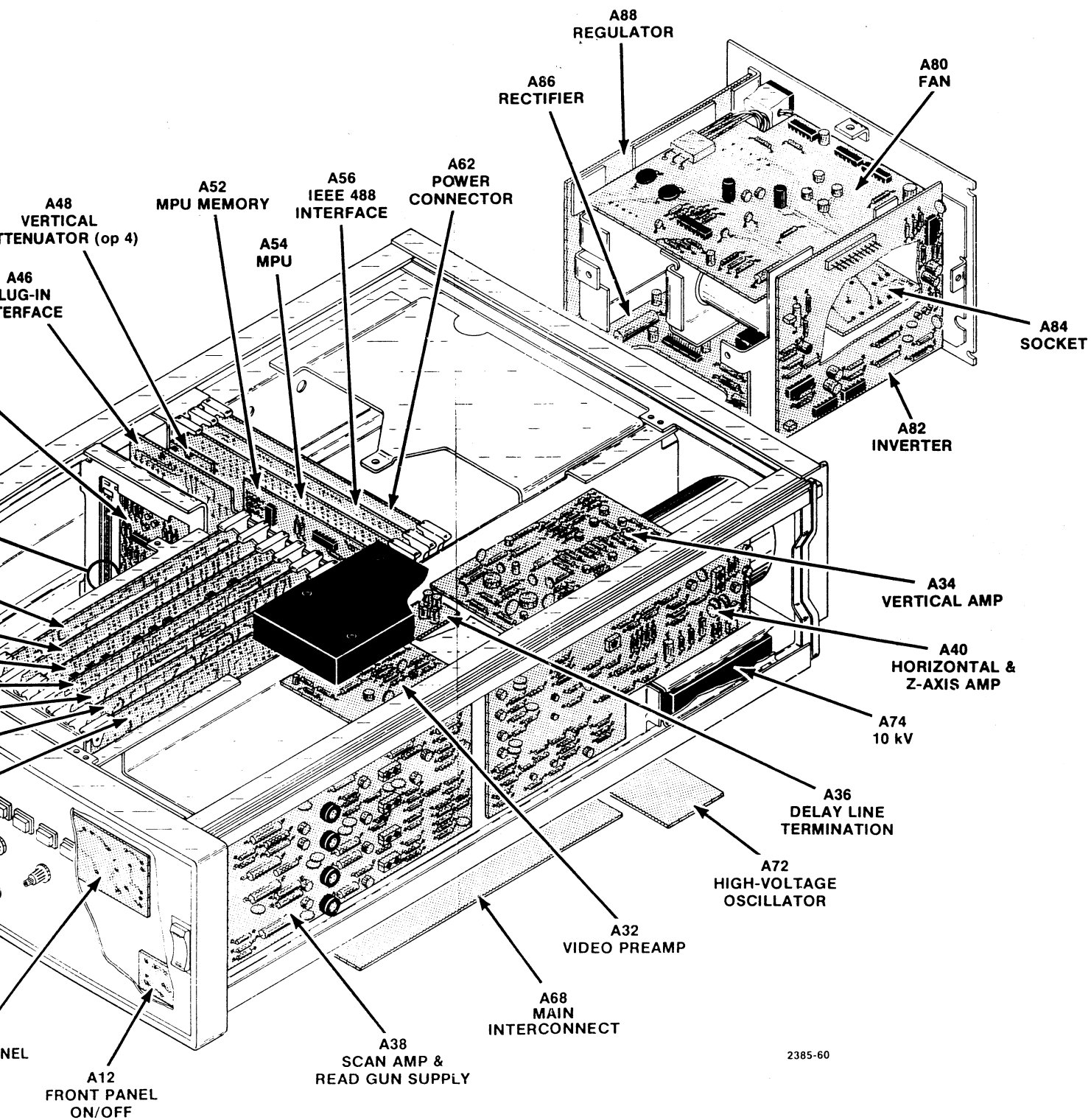


Fig. 7-1. Location of circuit board assemblies A10 through A88.



2385-60

Fig. 7-1. Location of circuit board assemblies A10 through A88.

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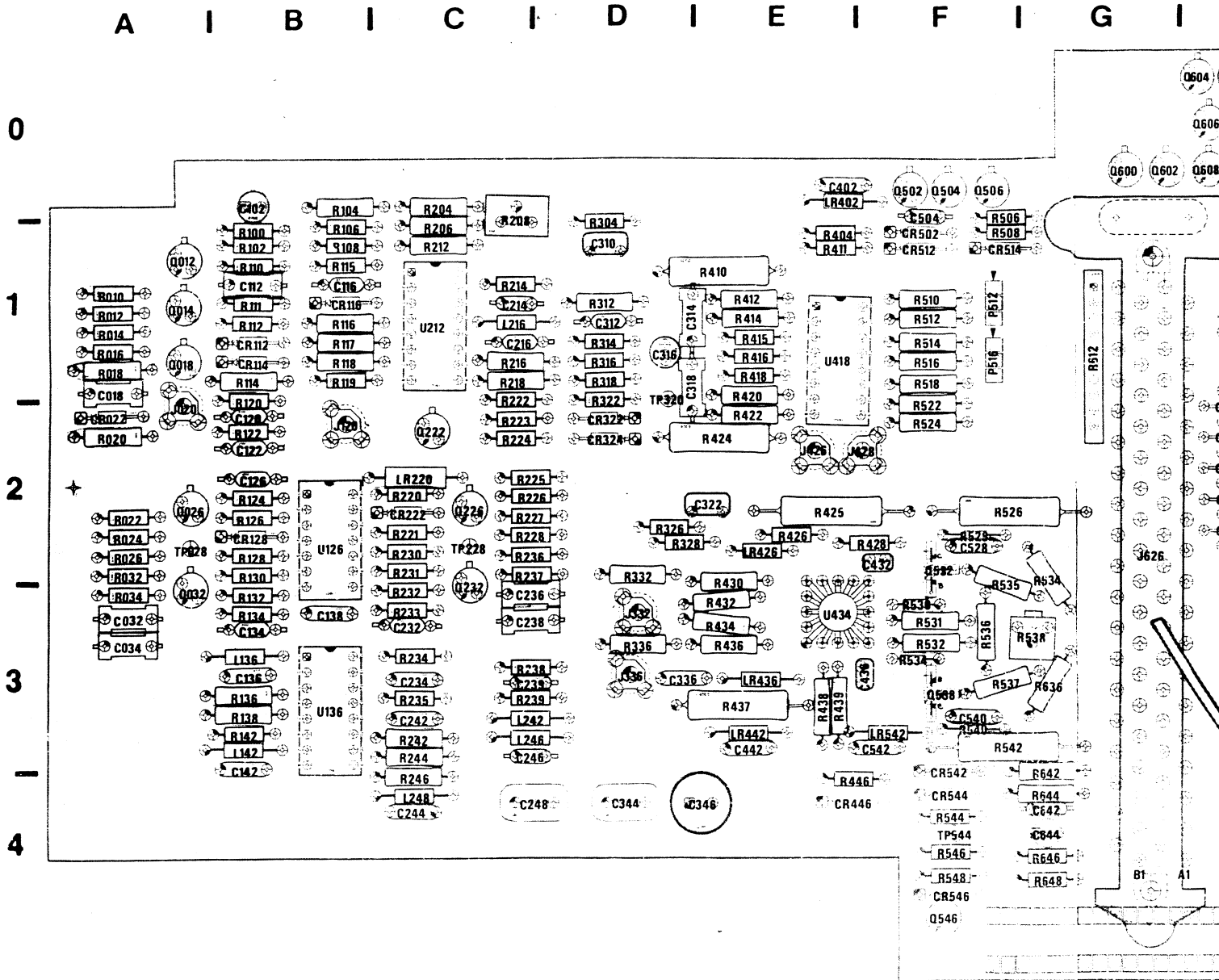
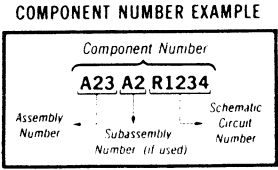
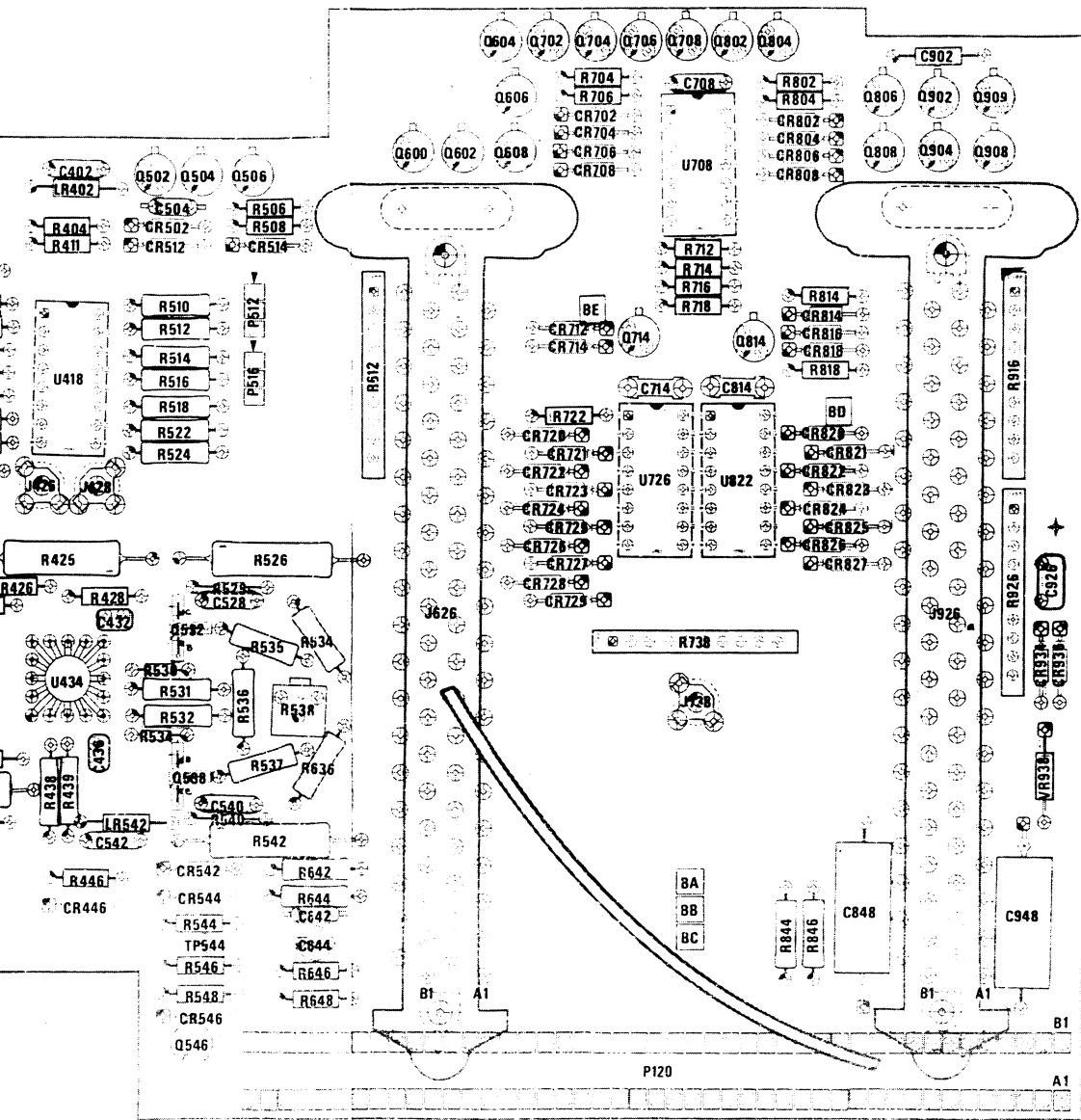


Fig. 7-3. The Plug-In Interface circuit board, assembly A46 (SN B100837 & up).



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List

E I F I G I H I I I J I



2385-155

face circuit board, assembly A46 (SN B100837 & up).

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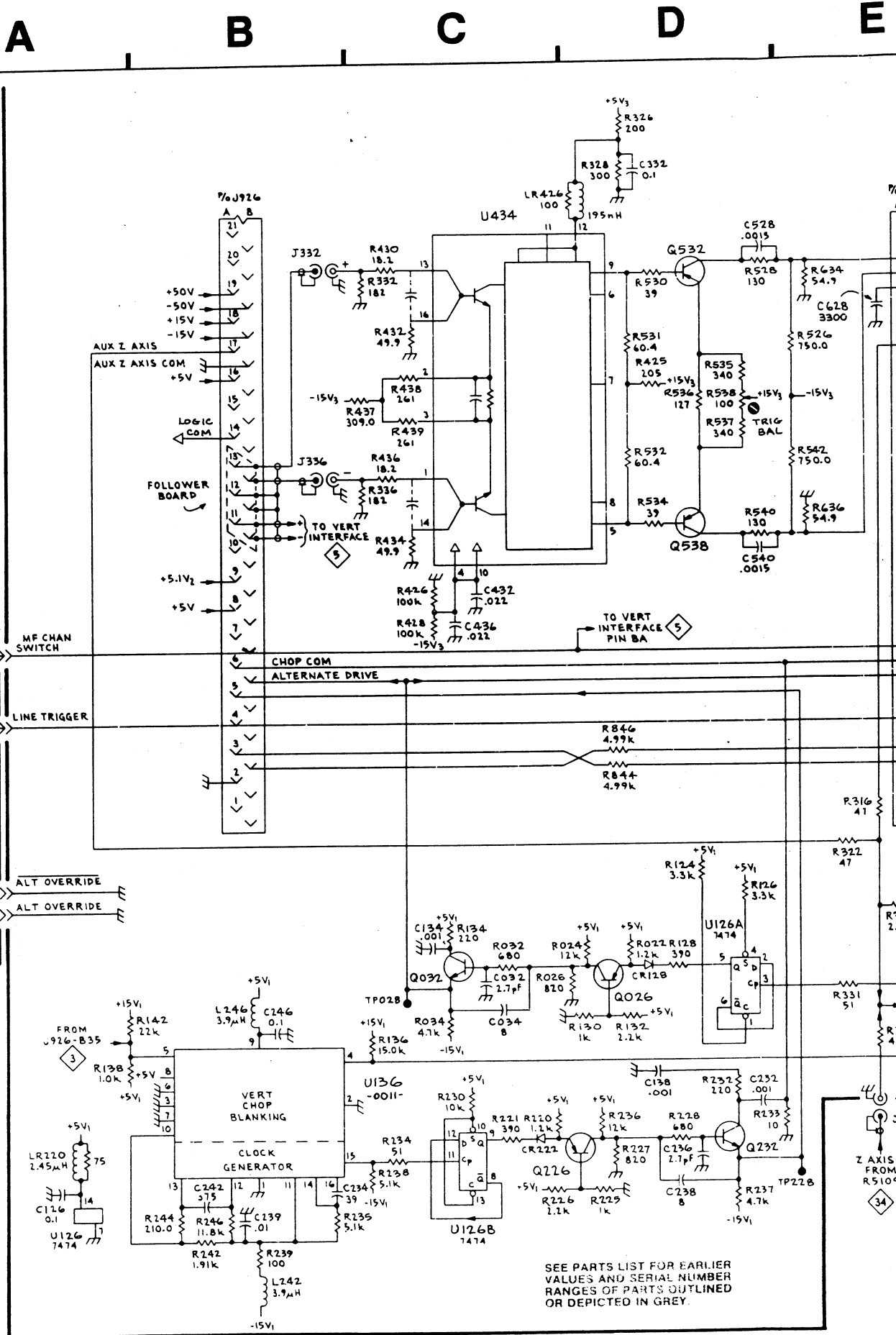
P/O A46 ASSY (SN B100837 & up)

PLUG-IN INTERFACE

2

| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C018           | G2                 | A1             | R016           | G2                 | A1             | R304           | G6                 | D1             |
| C032           | C5                 | A3             | R020           | H1                 | A2             | R312           | E4                 | D1             |
| C034           | C5                 | A3             | R022           | D5                 | A2             | R314           | E4                 | D1             |
| C102           | F1                 | B0             | R024           | D5                 | A2             | R316           | E4                 | D1             |
| C112           | G2                 | B1             | R026           | C5                 | A2             | R318           | E5                 |                |
| C116           | F5                 | B1             | R032           | C5                 | A2             | R322           | E4                 | D2             |
| C126           | A6                 | B2             | R034           | C5                 | A3             | R326           | D1                 | D2             |
| C134           | C5                 | B3             | R100           | G1                 | B1             | R328           | D1                 | D2             |
| C138           | D5                 | B3             | R102           | G1                 | B1             | R331           | E5                 |                |
| C214           | H5                 | C1             | R104           | G2                 | B1             | R332           | C1                 | D2             |
| C216           | G6                 | C1             | R106           | G6                 | B1             | R336           | C2                 | D3             |
| C232           | D5                 | C3             | R108           | G6                 | B1             | R425           | D2                 | E2             |
| C234           | C6                 | C3             | R110           | F2                 | B1             | R426           | C3                 | E2             |
| C236           | D5                 | C3             | R111           | G1                 | B1             | R428           | C3                 | F2             |
| C238           | D6                 | C3             | R112           | H1                 | B1             | R430           | C1                 | E2             |
| C239           | B6                 | C3             | R114           | H1                 | B1             | R432           | C2                 | E2             |
| C242           | B6                 | C3             | R115           | G5                 | B1             | R434           | C3                 | E3             |
| C312           | E4                 | D1             | R116           | F5                 | B1             | R436           | C2                 | E3             |
| C322           | D1                 | E2             | R117           | F5                 | B1             | R437           | C2                 | E3             |
| C336           | D5                 | D3             | R118           | F5                 | B1             | R438           | C2                 | E3             |
| C432           | C3                 |                | R119           | F4                 | B1             | R439           | C2                 | E3             |
| C436           | C3                 | E3             | R122           | E5                 | B2             | R446           | E3                 | E4             |
| C528           | D1                 | F2             | R124           | D4                 | B2             | R526           | E2                 |                |
|                |                    |                | R126           | D4                 | B2             | R528           | D1                 | F2             |
| CR022          | G2                 | A2             | R128           | D5                 | B2             | R530           | D2                 | F3             |
| CR112          | H1                 | B1             | R130           | D5                 | B2             | R531           | D2                 | F3             |
| CR114          | H1                 | B1             | R132           | D5                 | B3             | R532           | D2                 |                |
| CR116          | G5                 | B2             | R134           | C5                 | B3             | R535           | D2                 | F3             |
| CR128          | D5                 | B2             | R136           | C5                 | B3             | R536           | D2                 |                |
| CR222          | C6                 | C2             | R138           | A5                 | B3             | R537           | D2                 | F3             |
| CR322          | G5                 | D2             | R142           | B5                 | B4             | R538           | D2                 | F3             |
|                |                    |                | R204           | F2                 | C0             | R540           | D2                 | F3             |
| E018           | G1                 |                | R206           | F3                 | C1             | R542           | E2                 | F3             |
|                |                    |                | R208           | H6                 | C1             | R544           | F3                 | F4             |
| J120           | A3                 | B2             | R212           | G5                 | C1             | R546           | H4                 | F4             |
| J332           | B1                 | D3             | R214           | G5                 | C1             | R548           | G4                 | F4             |
| J336           | B2                 | D3             | R216           | H5                 | C1             | R634           | E1                 | G2             |
| J626           | E1                 | G2             | R218           | G5                 | C1             | R636           | E3                 | G3             |
| J926           | B1                 | J2             | R220           | C5                 | C2             | R642           | E2                 | G3             |
|                |                    |                | R221           | C5                 | C2             | R644           | E2                 | G4             |
| LR220          | A6                 | C2             | R222           | F6                 | C1             | R646           | H3                 | G4             |
|                |                    |                | R223           | F6                 | C2             | R648           | G4                 | G4             |
| Q014           | G1                 | A1             | R224           | F6                 | C2             | R844           | D4                 |                |
| Q018           | G1                 | A1             | R225           | D6                 | C2             | R846           | D4                 | I4             |
| Q026           | D5                 | A2             | R226           | C6                 | C2             |                |                    |                |
| Q032           | C5                 | A2             | R227           | D6                 | C2             | TP028          | C5                 | A2             |
| Q222           | G6                 | C2             | R230           | C5                 | C2             | TP228          | E6                 | C2             |
| Q226           | C6                 | C2             | R232           | D5                 | C2             | TP320          | E3                 | D1             |
| Q232           | D5                 | C3             | R233           | D6                 | C3             | TP544          | H4                 | F4             |
| Q532           | D1                 | F2             | R234           | C5                 | C3             |                |                    |                |
| Q538           | D3                 | F2             | R235           | B6                 | C3             | U126           | A6                 | B2             |
| Q546           | H4                 | F4             | R237           | D5                 | C3             | U126A          | D5                 | B2             |
|                |                    |                | R238           | C6                 | C3             | U126B          | C6                 | B2             |
| R010           | G2                 | A1             | R242           | B6                 | C3             | U128           | B5                 | B2             |
| R012           | G2                 | A1             | R244           | B6                 | C3             | U136           | C5                 | B3             |
| R014           | G1                 | A1             | R246           | B6                 | C4             | U212           | H5                 | C1             |
|                |                    |                |                |                    |                | U434           | C1                 | E3             |

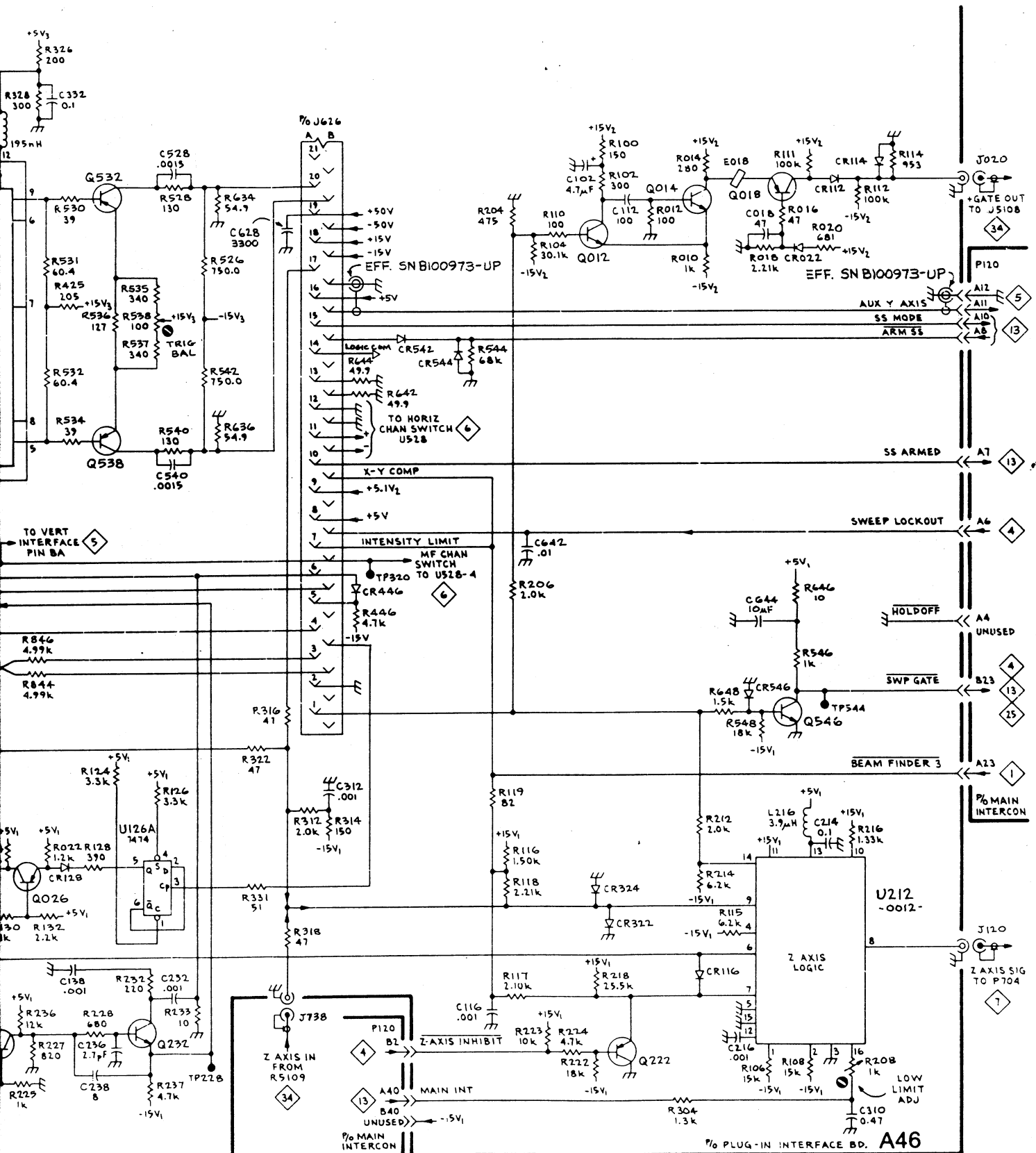
P/O A46 ASSY ALSO SHOWN ON 3 5 & 6



7912AD

(2385-101) 2385-138  
REV JUL 1983

D E F G H



PARTS LIST FOR EARLIER  
REV AND SERIAL NUMBER  
OF PARTS OUTLINED  
EXCEPTED IN GREY.

(2385-101) 2385-138  
REV JUL 1983

(5N B100837 EUP) PLUG-IN INTERFACE 2



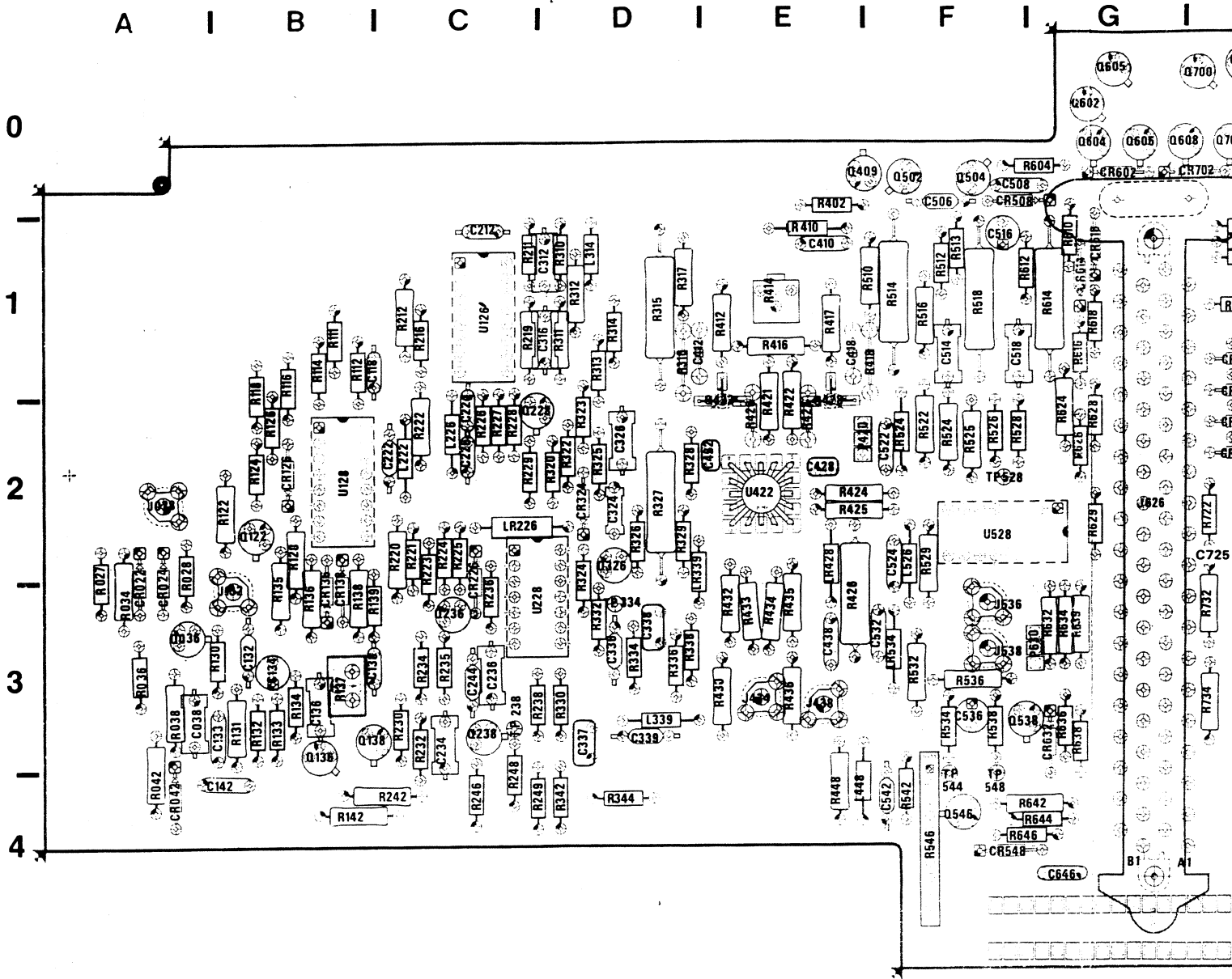
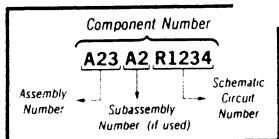
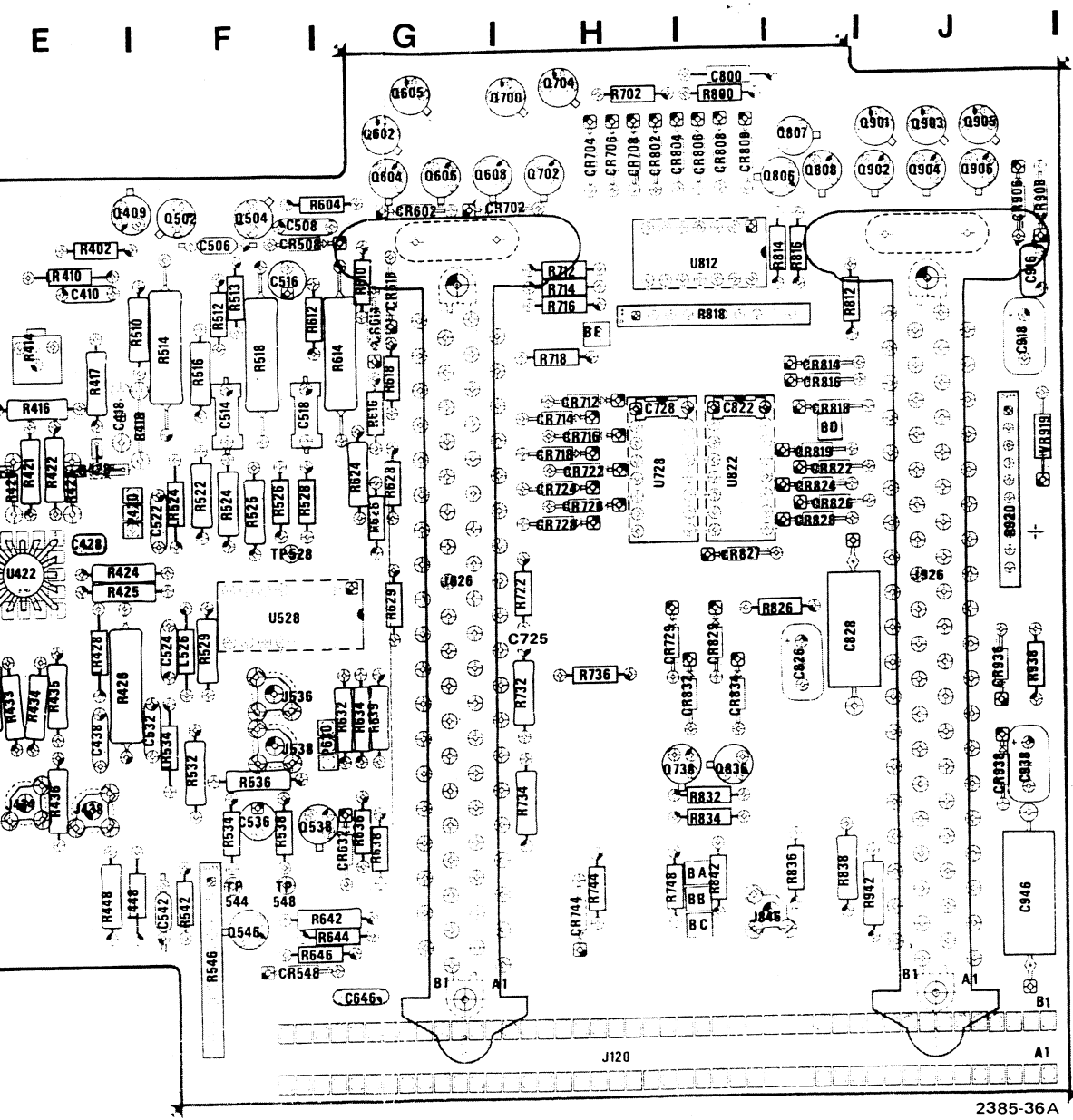


Fig. 7-4. The Plug-In Interface circuit board, assembly A46 (SN B100836 & below)

COMPONENT NUMBER EXAM<sup>1</sup>

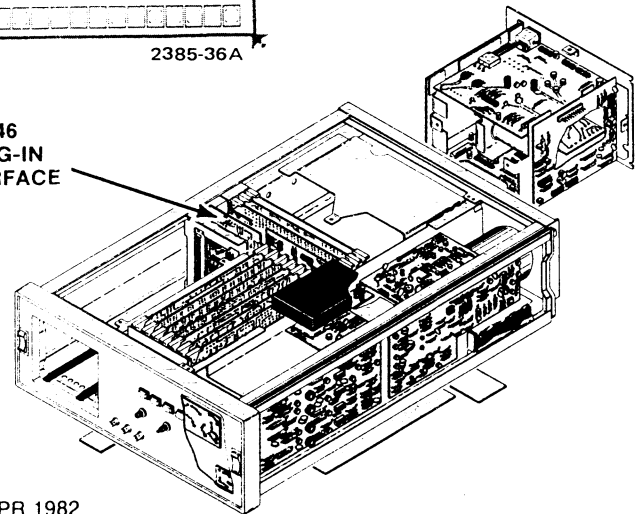


<sup>1</sup>Chassis mounted components have no Assembly Number prefix — see end of Replaceable Electrical Parts List



In Interface circuit board, assembly A46 (SN B100836 & below).

A46  
PLUG-IN  
INTERFACE



ADD APR 1982

| P/O A46 ASSY (SN B100836 & below) |                    |                |                |                    |                | PLUG-IN INTERFACE 2 |                    |                |
|-----------------------------------|--------------------|----------------|----------------|--------------------|----------------|---------------------|--------------------|----------------|
| Circuit Number                    | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number      | Schematic Location | Board Location |
| C038                              | G2                 | A3             | Q326           | D6                 | D2             | R322                | D6                 | D2             |
| C118                              | H5                 | B1             | Q422           | D2                 | E2             | R323                | D6                 | D2             |
| C132                              | F5                 | B3             | Q428           | D3                 | E2             | R324                | C6                 | D3             |
| C134                              | F1                 | B3             | Q538           | G4                 | G3             | R325                | D6                 | D2             |
| C136                              | G2                 | B3             | Q546           | G4                 | F4             | R326                | D6                 | D2             |
| C138                              | E4                 | C3             |                |                    |                | R327                | D2                 | D2             |
| C212                              | B6                 | C1             | R027           | H2                 | A2             | R328                | C3                 | D2             |
| C222                              | G6                 | C2             | R028           | G1                 | B2             | R329                | C3                 | D2             |
| C224                              | B5                 | C2             | R034           | H1                 | A3             | R330                | E5                 | D3             |
| C226                              | A6                 | C2             | R036           | G2                 | A3             | R332                | D5                 | D3             |
| C234                              | C5                 | C3             | R038           | G2                 | A3             | R334                | D5                 | D3             |
| C236                              | C5                 | C3             | R042           | H2                 | A4             | R336                | D1                 | D3             |
| C244                              | C5                 | C4             | R111           | G6                 | B1             | R338                | D1                 | E3             |
| C312                              | B6                 | D1             | R112           | G5                 | B1             | R344                | G6                 | D4             |
| C316                              | B6                 | D1             | R114           | G6                 | B1             | R412                | D2                 | E1             |
| C324                              | D6                 | D2             | R116           | G5                 | B1             | R414                | D2                 | E1             |
| C326                              | D6                 | D2             | R118           | F6                 | B2             | R416                | D2                 | E1             |
| C336                              | D5                 | D3             | R122           | F5                 | B2             | R417                | D2                 | E1             |
| C337                              | H6                 | D3             | R124           | F6                 | B2             | R418                | D3                 | F1             |
| C338                              | D1                 | D3             | R126           | F6                 | B2             | R420                | D2                 | E2             |
| C412                              | D1                 | E1             | R128           | F5                 | B2             | R421                | D2                 | E2             |
| C418                              | D3                 | E1             | R130           | F4                 | B3             | R422                | D2                 | E2             |
| C422                              | C3                 | E2             | R131           | G1                 | B3             | R423                | D3                 | E2             |
| C536                              | G3                 | F3             | R132           | F1                 | B3             | R424                | C2                 | E3             |
| C646                              | F3                 | G4             | R133           | F1                 | B3             | R425                | C2                 | E2             |
| C725                              | E2                 | H2             | R134           | G2                 | B3             | R426                | B2                 | F3             |
| CR022                             | H1                 | A3             | R135           | F5                 | B3             | R430                | B2                 | E3             |
| CR024                             | H1                 | A3             | R136           | F5                 | B3             | R432                | C2                 | E3             |
| CR042                             | G2                 | A4             | R137           | H6                 | B3             | R433                | C3                 | E3             |
| CR126                             | G5                 | B2             | R138           | E4                 | C3             | R434                | C2                 | E3             |
| CR136                             | F5                 | B3             | R139           | E5                 | C3             | R435                | C2                 | E3             |
| CR138                             | F5                 | B3             | R142           | F2                 | B4             | R436                | B3                 | E3             |
| CR226                             | D5                 | C2             | R211           | B6                 | C1             | R448                | G5                 | E4             |
| CR324                             | C6                 | D2             | R212           | C5                 | C1             | R510                | E3                 | F1             |
| CR548                             | G4                 | F4             | R216           | A5                 | C1             | R514                | E2                 | F1             |
| CR632                             | G4                 | G3             | R219           | B6                 | C1             | R534                | G4                 | F3             |
| CR744                             | E3                 | H4             | R220           | H5                 | C2             | R538                | G3                 | F3             |
| CR936                             | E2                 | J3             | R221           | D5                 | C2             | R542                | G3                 | F4             |
| CR938                             | F2                 | J3             | R222           | A5                 | C2             | R636                | G4                 | G3             |
|                                   |                    |                | R223           | D5                 | C2             | R638                | G4                 | G3             |
|                                   |                    |                | R224           | D5                 | C2             | R642                | F3                 | G4             |
| J028                              | H1                 | A3             | R225           | D5                 | C2             | R644                | G4                 | G4             |
| J120                              | A3                 | A2             | R226           | C6                 | C2             | R646                | G4                 | G4             |
| J132                              | H5                 | B3             | R227           | C6                 | C2             | R722                | E4                 | H2             |
| J626                              | E1                 | G3             | R228           | D5                 | C2             | R722                | E4                 | H2             |
| J926                              | B2                 | J3             | R229           | C6                 | C2             | R732                | E2                 | H3             |
|                                   |                    |                | R230           | G2                 | C3             | R734                | E2                 | H3             |
| L222                              | G5                 | C2             | R232           | F2                 | C3             | R744                | E4                 | H4             |
| L226                              | B5                 | C2             | R234           | C5                 | C3             | R826                | E4                 | I3             |
| L314                              | B6                 | D1             | R235           | C5                 | C3             | R836                | E5                 | I4             |
|                                   |                    |                | R236           | D5                 | C3             | R838                | D4                 | I4             |
| LR226                             | A6                 | D2             | R238           | C5                 | D3             | R938                | F2                 | J3             |
| LR339                             | C1                 | E3             | R242           | F2                 | C4             | R942                | D4                 | J4             |
|                                   |                    |                | R246           | C5                 | C4             |                     |                    |                |
| P434                              | B2                 | E3             | R248           | C5                 | C4             | TP238               | C5                 | C3             |
| P438                              | B2                 | E3             | R310           | B6                 | D1             | TP334               | E6                 | D3             |
| P846                              | E5                 | I4             | R311           | B6                 | D1             | TP528               | E3                 | F2             |
|                                   |                    |                | R312           | B6                 | D1             | TP544               | H4                 | F4             |
| Q036                              | G2                 | A3             | R313           | D4                 | D1             | TP548               | H4                 | F4             |
| Q122                              | G6                 | B2             | R314           | D4                 | D1             |                     |                    |                |
| Q136                              | G2                 | B3             | R315           | E2                 | D1             | U126                | B5                 | C1             |
| Q138                              | F2                 | C3             | R316           | D2                 | D1             | U128                | G5                 | B2             |
| Q228                              | C6                 | C2             | R317           | E2                 | D1             | U228B               | C6                 | C3             |
| Q236                              | D5                 | C3             | R320           | C6                 | D2             | U422                | C2                 | E2             |
| Q238                              | C5                 | C3             |                |                    |                |                     |                    |                |

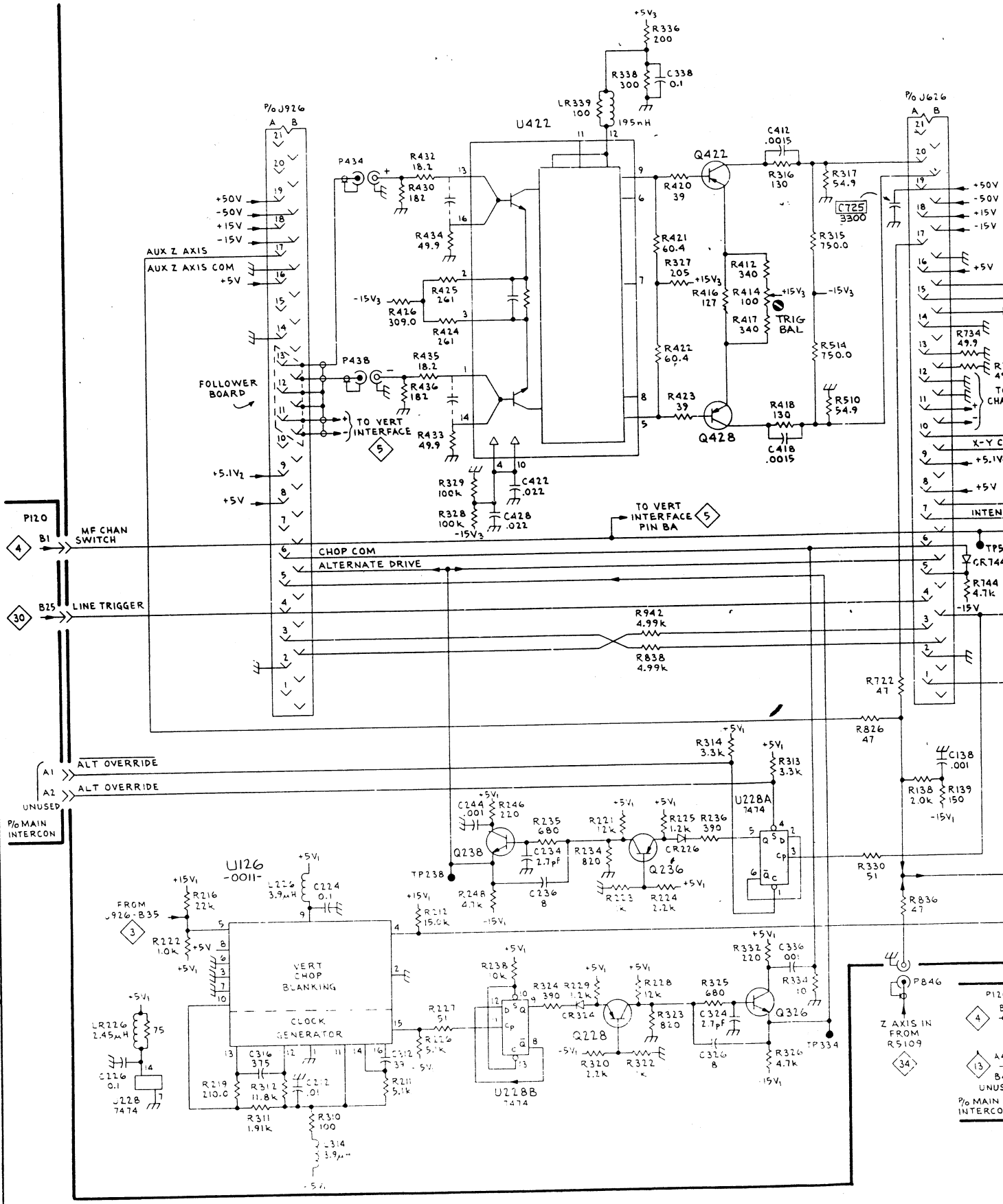
P/O A46 ASSY ALSO SHOWN ON



| P/O A68 ASSY                 |    |    |      |    |    | PLUG-IN INTERFACE 2 |    |    |
|------------------------------|----|----|------|----|----|---------------------|----|----|
| P120                         | A3 | B2 | P120 | E6 | B2 | P120                | H2 | B2 |
| P/O A68 ASSY - SEE FIG. 7-37 |    |    |      |    |    |                     |    |    |

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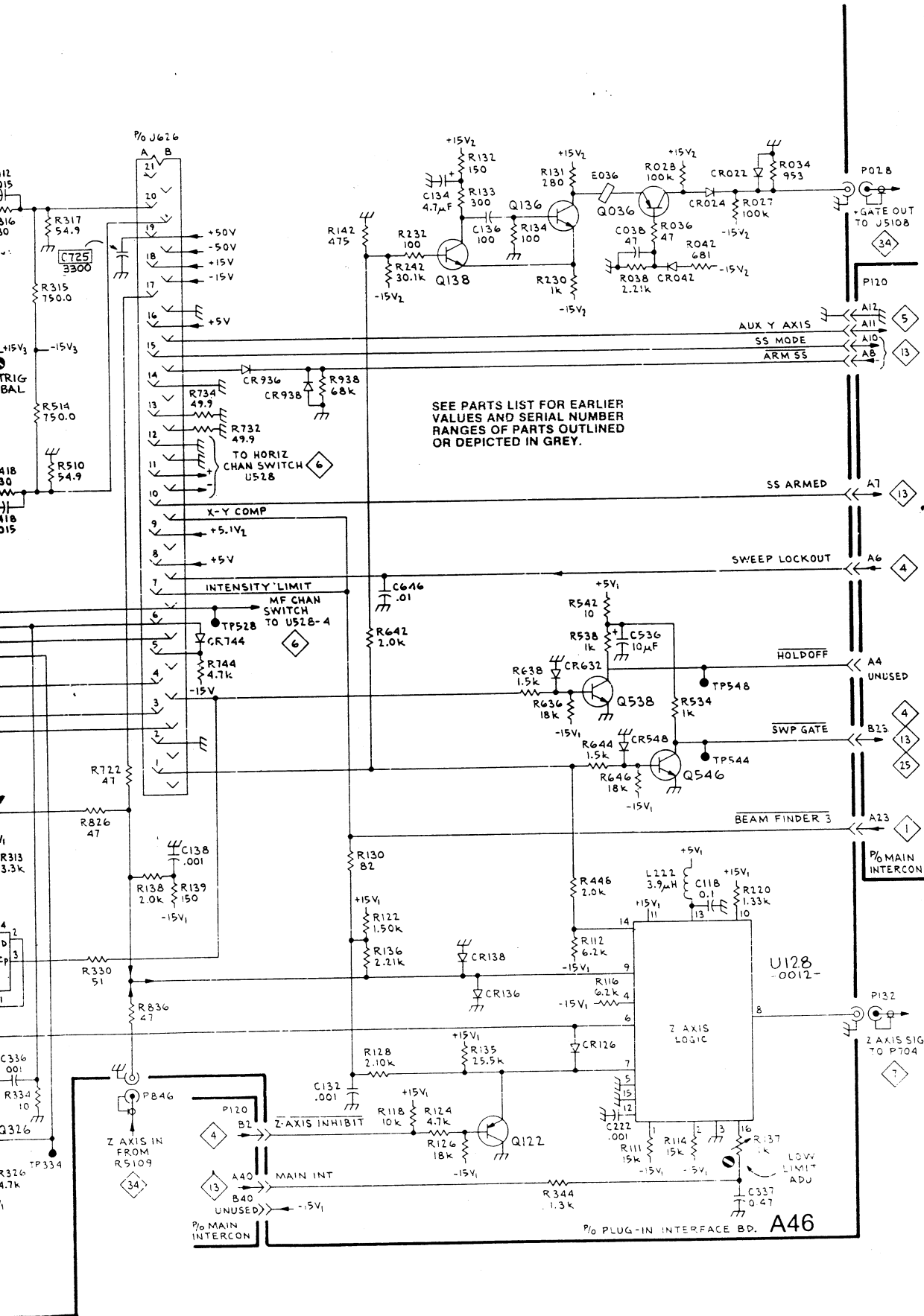
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SEE PARTS LIST FOR EARLIER  
VALUES AND SERIAL NUMBER  
RANGES OF PARTS OUTLINED  
OR DEPICTED IN GREY.

PLUG-IN INTERFACE  
(SN B100836 & below)

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(SN B100836 & BELOW) PLUG-IN INTERFACE 2

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P/O A46 ASSY (SN B100837 & up)

READOUT/7k AQUISITION 3

| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C120           | D5                 | B2             | L136           | E5                 | B3             |
| C122           | E5                 | B2             | L142           | D5                 | B3             |
| C136           | E5                 | B3             | L248           | F5                 | C4             |
| C142           | D5                 | B4             |                |                    |                |
| C248           | B5                 | D4             | LR402          | B3                 | E0             |
| C344           | B5                 | D4             | LR436          | F5                 | E3             |
| C346           | B5                 | E4             | LR442          | E5                 | E3             |
| C402           | B3                 | E0             | LR542          | D5                 | E3             |
| C438           | F5                 |                |                |                    |                |
| C442           | E5                 | E3             | Q502           | A4                 | F0             |
| C504           | B4                 | F0             | Q504           | B4                 | F0             |
| C542           | D5                 | F3             | Q506           | B4                 | F0             |
| C704           | A2                 |                | Q600           | F1                 | G0             |
| C714           | E4                 | H1             | Q602           | F2                 | G0             |
| C814           | D4                 | I1             | Q604           | G1                 | H0             |
| C848           | C5                 | I4             | Q606           | F1                 | H0             |
| C902           | B1                 |                | Q608           | F2                 | H0             |
| C926           | G4                 | J2             | Q702           | G2                 | H0             |
| C948           | B5                 | J4             | Q704           | G1                 | H0             |
|                |                    |                | Q706           | B3                 | H0             |
| CR502          | A4                 | F1             | Q714           | E4                 | I0             |
| CR512          | A4                 | F1             | Q804           | B2                 | I0             |
| CR514          | B4                 | F1             | Q806           | B1                 | J0             |
| CR702          | G2                 | H0             | Q808           | B2                 | J0             |
| CR704          | G2                 | H0             | Q814           | D4                 | I1             |
| CR706          | F2                 | H0             | Q902           | B1                 | J0             |
| CR712          | E4                 | H1             | Q904           | C2                 | J0             |
| CR714          | E4                 | H1             | Q906           | C1                 | J0             |
| CR720          | F3                 | H1             | Q908           | C2                 | J0             |
| CR721          | F3                 | H2             |                |                    |                |
| CR722          | F3                 | H2             | R120           | D5                 | B2             |
| CR723          | F3                 | H2             | R404           | A4                 | E1             |
| CR724          | F3                 | H2             | R411           | B4                 | E1             |
| CR725          | F3                 | H2             | R506           | B4                 | F1             |
| CR726          | F3                 | H2             | R508           | B4                 | F1             |
| CR729          | B3                 | H2             | R612           | H4                 | G1             |
| CR802          | B2                 | I0             | R704           | A2                 | H0             |
| CR804          | B2                 | I0             | R706           | A1                 | H0             |
| CR806          | B2                 | I0             | R722           | H3                 | H1             |
| CR808          | B2                 | I0             | R738           | D2                 | I2             |
| CR814          | E3                 | I1             | R802           | B1                 | I0             |
| CR816          | E4                 | I1             | R804           | B1                 | I0             |
| CR818          | D4                 | I1             | R814           | E4                 | I1             |
| CR820          | D2                 | I2             | R818           | C3                 | I1             |
| CR821          | D2                 | I2             | R912           | E4                 |                |
| CR822          | D2                 | I2             | R914           | E4                 |                |
| CR823          | D2                 | I2             | R916           | C4                 | J1             |
| CR824          | D2                 | I2             | R918           | E4                 |                |
| CR825          | D2                 | I2             | R926           | F4                 | J2             |
| CR826          | D2                 | I2             |                |                    |                |
| CR827          | D2                 | I2             | U708           | A2                 | I0             |
| CR934          | G4                 | J3             | U726           | E3                 | H2             |
| CR936          | G4                 | J3             | U822           | D4                 | I2             |
| J626           | C3                 | G2             | VR938          | G5                 | I3             |
| J626           | G3                 | G2             |                |                    |                |

P/O A46 ASSY ALSO SHOWN ON 2 5 & 6

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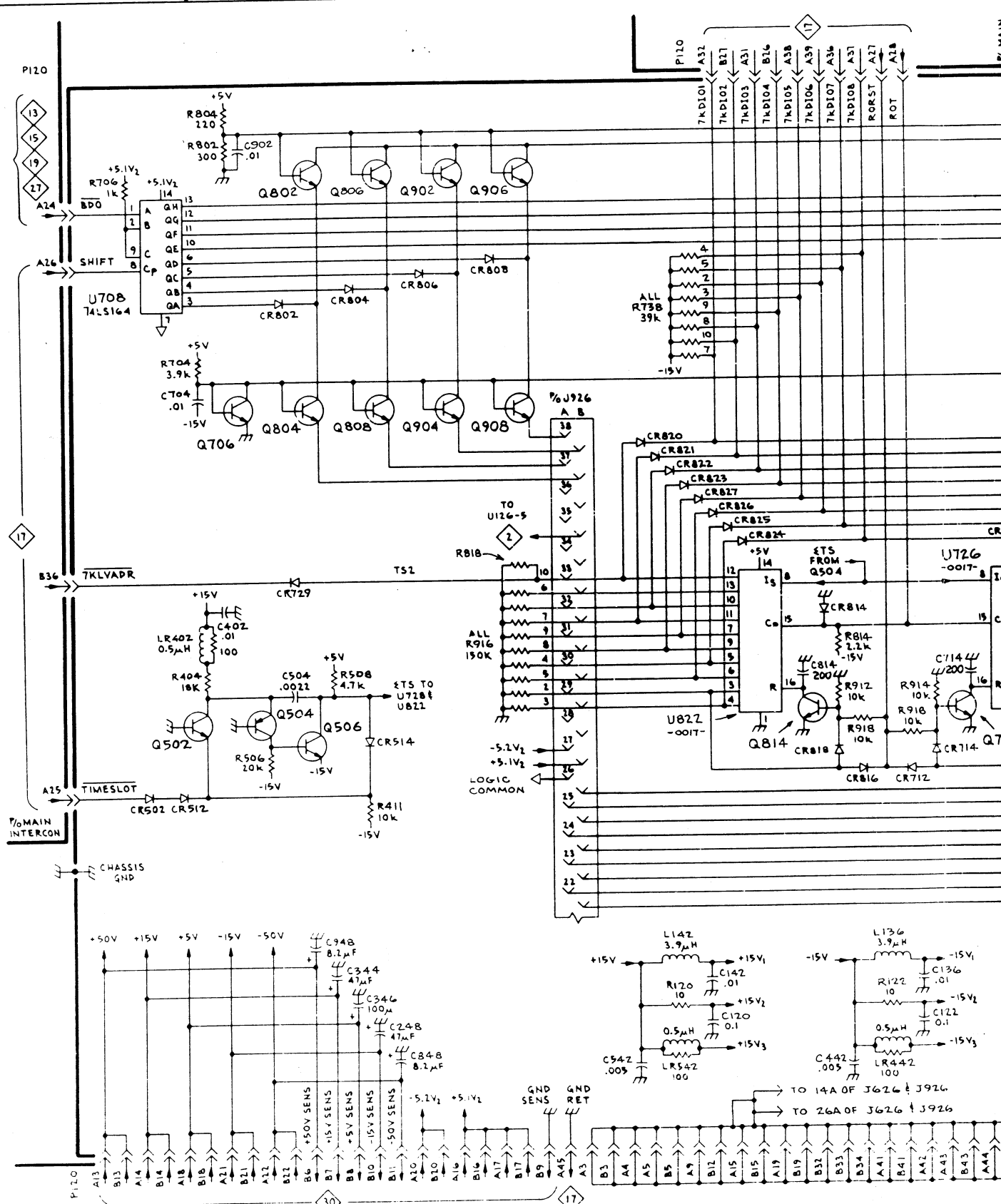
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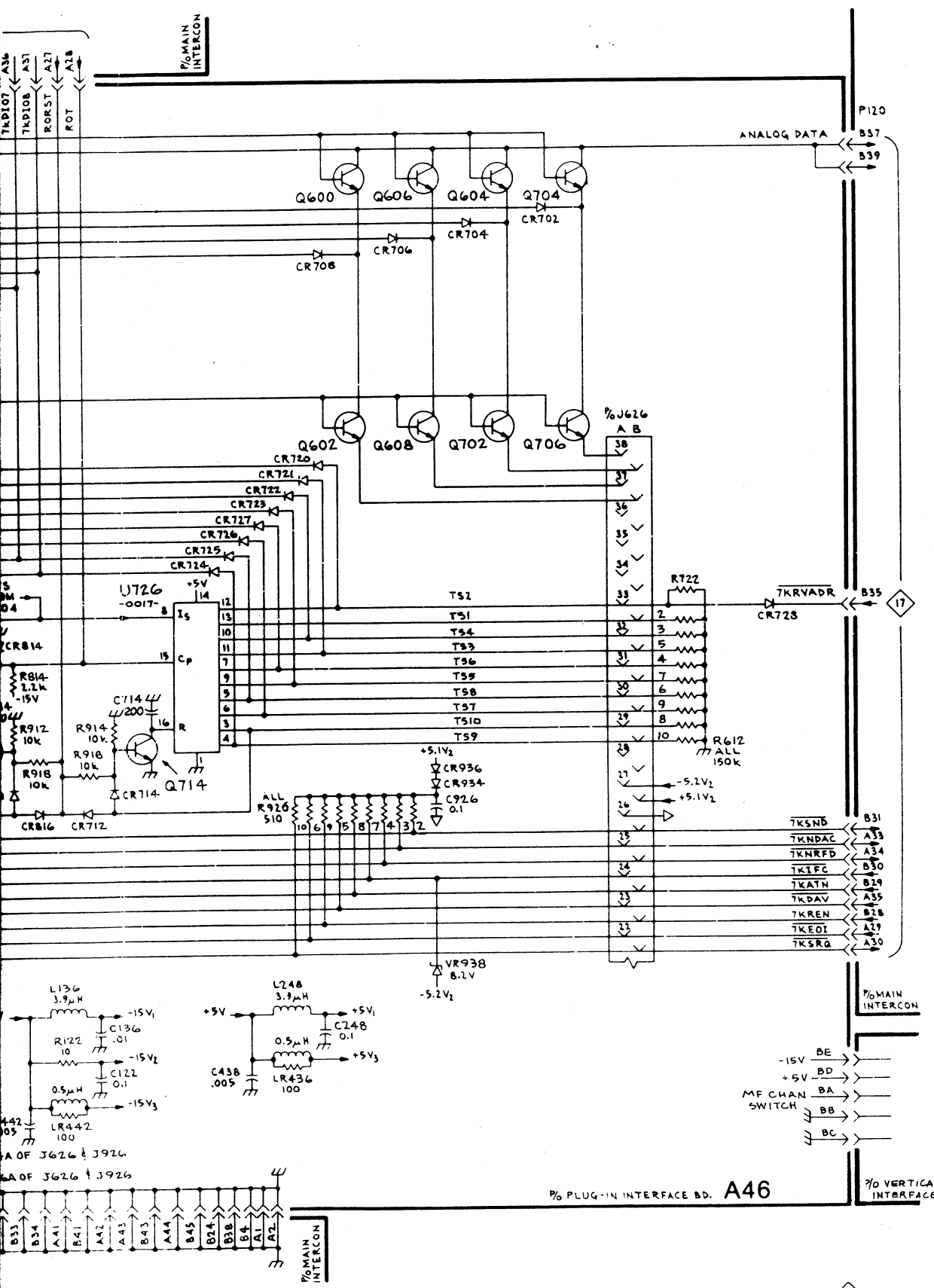
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RO/7K ACQUISITION  
(SN B100837 & up)

(SN B100837 & up) READOUT/7K ACQUISITION 3



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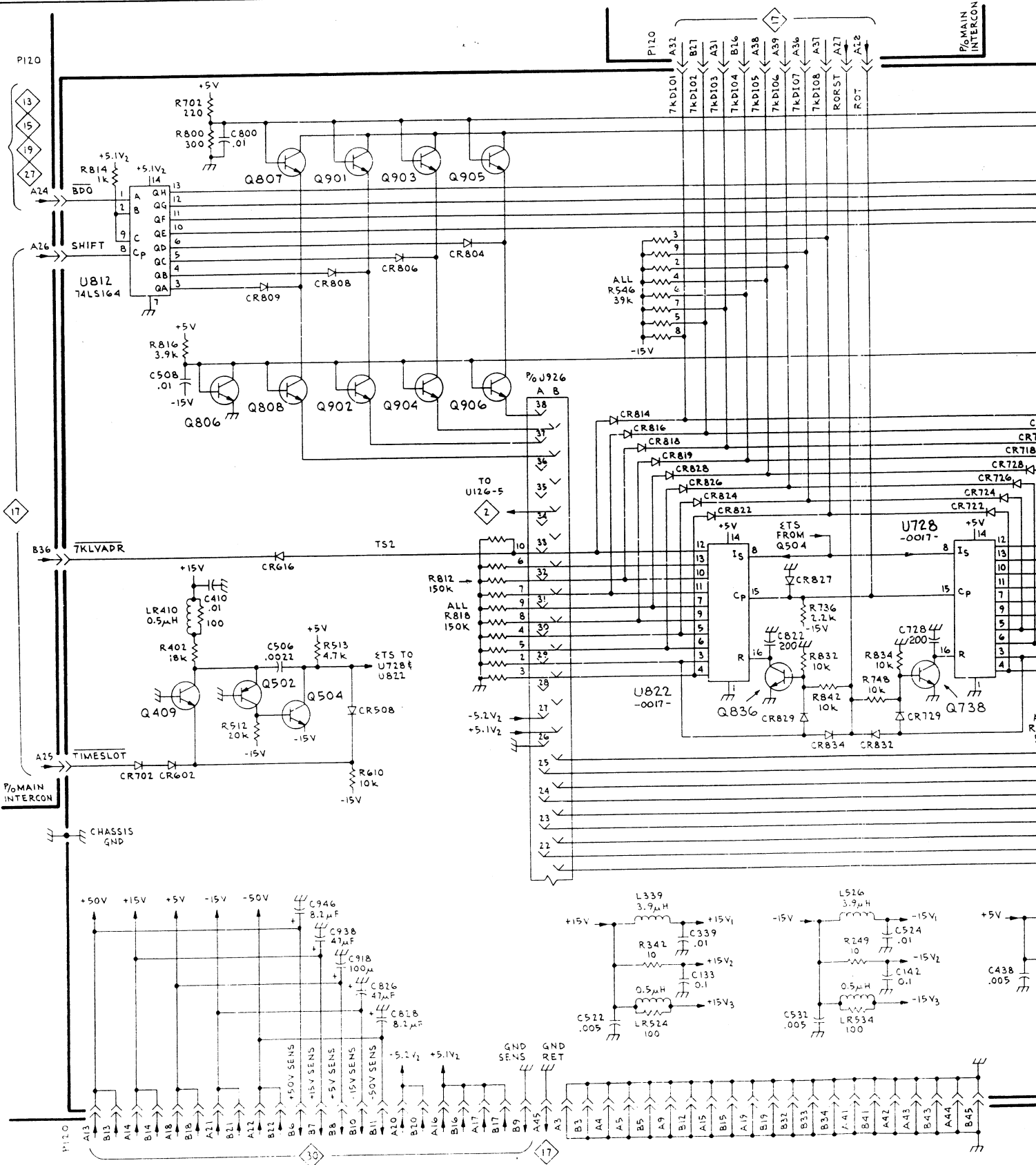
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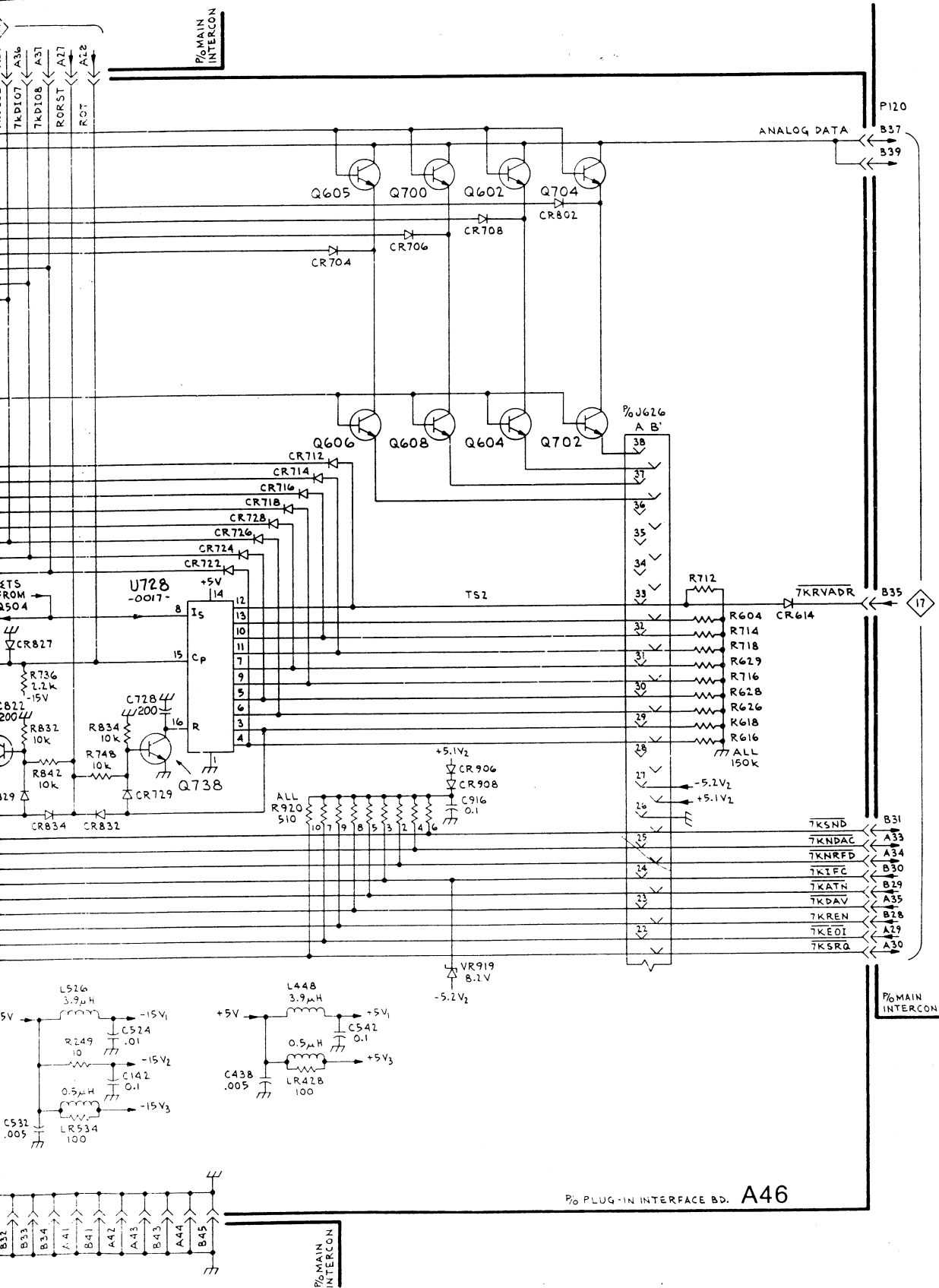
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(SN B100836 & BELOW) READOUT/TK ACQUISITION 3

RO/TK ACQUISITION (SN B100836 & below)

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P/O A46 ASSY (SN B100836 & below)

READOUT/7K ACQUISITION

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| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C133           | D5                 | B3             | CR826          | D3                 | I2             | R546C          | D2                 | F4             |
| C142           | E5                 | B4             | CR827          | D3                 | I2             | R546D          | D2                 | F4             |
| C339           | D5                 | D3             | CR828          | D3                 | I2             | R546E          | D2                 | F4             |
| C410           | B3                 | E1             | CR829          | D4                 | I3             | R546F          | D2                 | F4             |
| C438           | F5                 | E3             | CR832          | E4                 | I3             | R546G          | D2                 | F4             |
| C506           | B4                 | F1             | CR834          | E4                 | I3             | R604           | G3                 | G0             |
| C508           | A2                 | F0             | CR906          | F4                 | J0             | R610           | B4                 | G1             |
| C522           | C5                 | F2             | CR908          | F4                 | J0             | R616           | C4                 | G1             |
| C524           | E5                 | F2             |                |                    |                | R618           | G4                 | G1             |
| C532           | E5                 | F3             | J626           | G2                 | G1             | R626           | G4                 | G2             |
| C542           | F5                 | F4             | J926           | C2                 | J1             | R628           | G4                 | G2             |
| C728           | E4                 | H2             |                |                    |                | R629           | G3                 | G2             |
| C800           | B1                 | I0             | L339           | D5                 | D3             | R702           | B1                 | H0             |
| C822           | D4                 | I2             | L448           | F5                 | E4             | R712           | G3                 | H1             |
| C826           | B5                 | I3             | L526           | E5                 | F2             | R714           | G3                 | H1             |
| C828           | B5                 | I2             |                |                    |                | R716           | G3                 | H1             |
| C905           | C1                 | J0             | LR410          | A3                 | E1             | R718           | G3                 | H1             |
| C916           | F4                 | J1             | LR428          | F5                 | E2             | R736           | D3                 | H3             |
| C918           | B5                 | J1             | LR524          | D5                 | F2             | R748           | E4                 | H4             |
| C938           | B5                 | J3             | LR534          | E5                 | F3             | R800           | B1                 | I0             |
| C946           | B5                 | J4             |                |                    |                | R812           | C3                 | I1             |
|                |                    |                |                |                    |                | R814           | A1                 | I1             |
|                |                    |                |                |                    |                | R816           | A2                 | I1             |
| CR508          | B4                 | F1             | Q409           | A4                 | F0             | R818A          | C3                 | I1             |
| CR602          | A4                 | G1             | Q502           | B4                 | F1             | R818B          | C3                 | I1             |
| CR614          | G3                 | G1             | Q504           | B4                 | F1             | R818C          | C3                 | I1             |
| CR616          | B3                 | G1             | Q602           | G1                 | G0             | R818D          | C3                 | I1             |
| CR702          | A4                 | H1             | Q604           | G2                 | G0             | R818E          | C3                 | I1             |
| CR704          | F2                 | H0             | Q605           | F1                 | G0             | R818F          | C3                 | I1             |
| CR706          | F2                 | H0             | Q606           | F2                 | G0             | R818G          | C3                 | I1             |
| CR708          | G1                 | H0             | Q608           | F2                 | G0             | R818H          | C3                 | I1             |
| CR712          | F3                 | H1             | Q700           | F1                 | H0             | R818I          | C3                 | I1             |
| CR714          | F3                 | H1             | Q702           | G2                 | H0             | R832           | D4                 | I3             |
| CR716          | F3                 | H1             | Q704           | G1                 | H0             | R834           | E4                 | I3             |
| CR718          | F3                 | H1             | Q738           | E4                 | I3             | R842           | E4                 | I3             |
| CR722          | E3                 | H2             | Q806           | B2                 | I0             | R920A          | F4                 | J2             |
| CR724          | E3                 | H2             | Q807           | B1                 | I0             | R920B          | F4                 | J2             |
| CR726          | E3                 | H2             | Q808           | B2                 | I0             | R920C          | F4                 | J2             |
| CR728          | E3                 | H2             | Q836           | D4                 | I3             | R920D          | F4                 | J2             |
| CR729          | E4                 | I3             | Q901           | B1                 | JC             | R920E          | F4                 | J2             |
| CR802          | G1                 | H0             | Q902           | B2                 | J0             | R920F          | F4                 | J2             |
| CR804          | C2                 | I0             | Q903           | C1                 | J0             | R920G          | F4                 | J2             |
| CR806          | B2                 | I0             | Q904           | C2                 | J0             | R920H          | F4                 | J2             |
| CR808          | B2                 | I0             |                |                    |                | R920I          | F4                 | J2             |
| CR809          | B2                 | I0             | R249           | E5                 | C4             |                |                    |                |
| CR814          | D3                 | I1             | R342           | D5                 | D4             | U728           | E3                 | H2             |
| CR816          | D3                 | I1             | R402           | A4                 | E1             | U812           | A2                 | I1             |
| CR818          | D3                 | I1             | R512           | B4                 | F1             | U822           | D3                 | I2             |
| CR819          | D3                 | I1             | R513           | B4                 | F1             |                |                    |                |
| CR822          | D3                 | I2             | R546A          | D2                 | F4             |                |                    |                |
| CR824          | D3                 | I2             | R546B          | D2                 | F4             | VR919          | F5                 | J1             |

P/O A46 ASSY ALSO SHOWN ON

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P/O A68 ASSY

READOUT/7K ACQUISITION

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|      |    |    |      |    |    |     |     |     |
|------|----|----|------|----|----|-----|-----|-----|
| P120 | A1 | B2 | P120 | D1 | B2 | --- | --- | --- |
| P120 | A6 | B2 | P120 | H1 | B2 |     |     |     |

P/O A68 ASSY - SEE FIG. 7-37

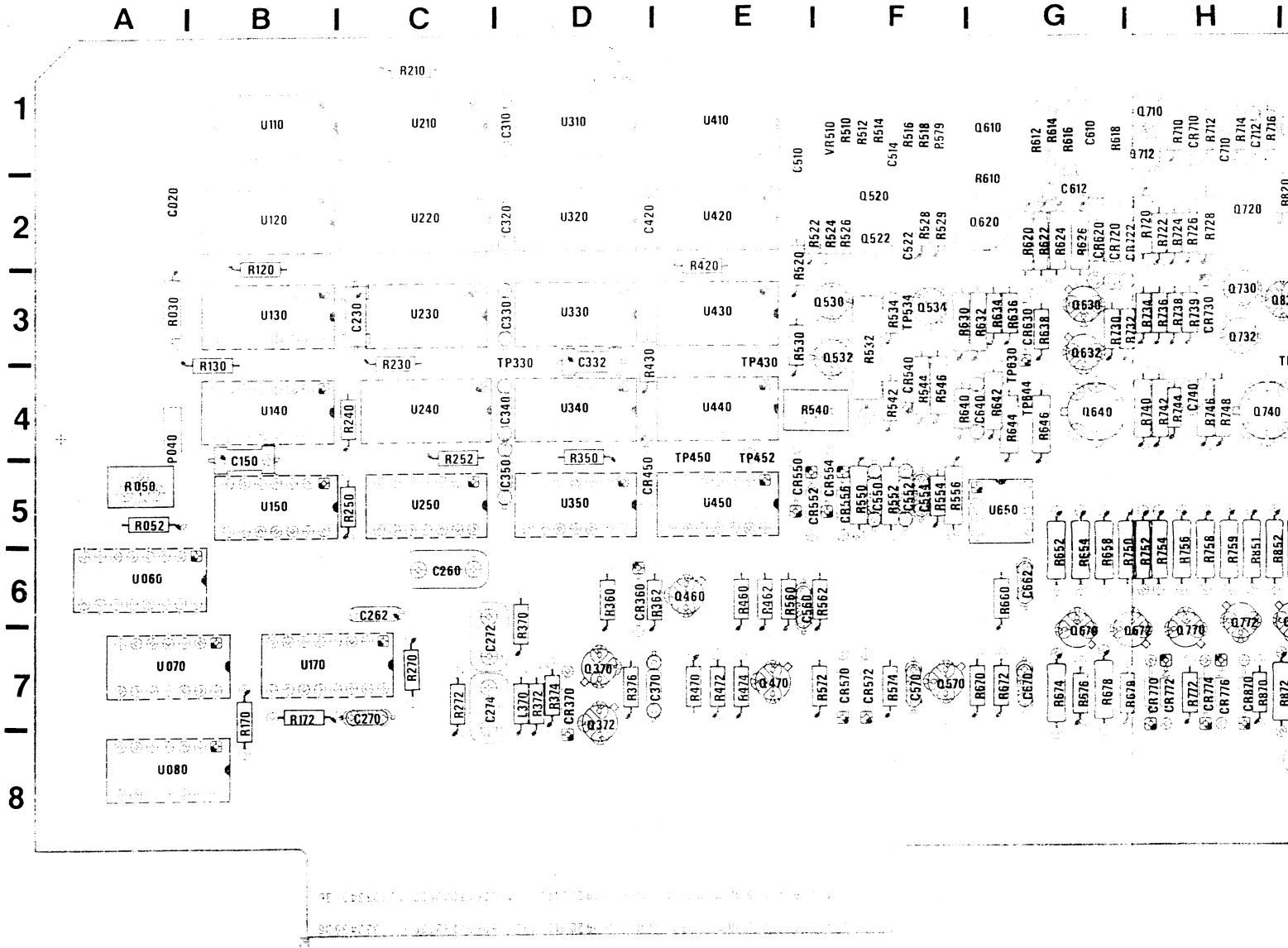
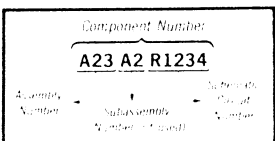


Fig. 7-5. The Graticule Generator circuit board, assembly A24.

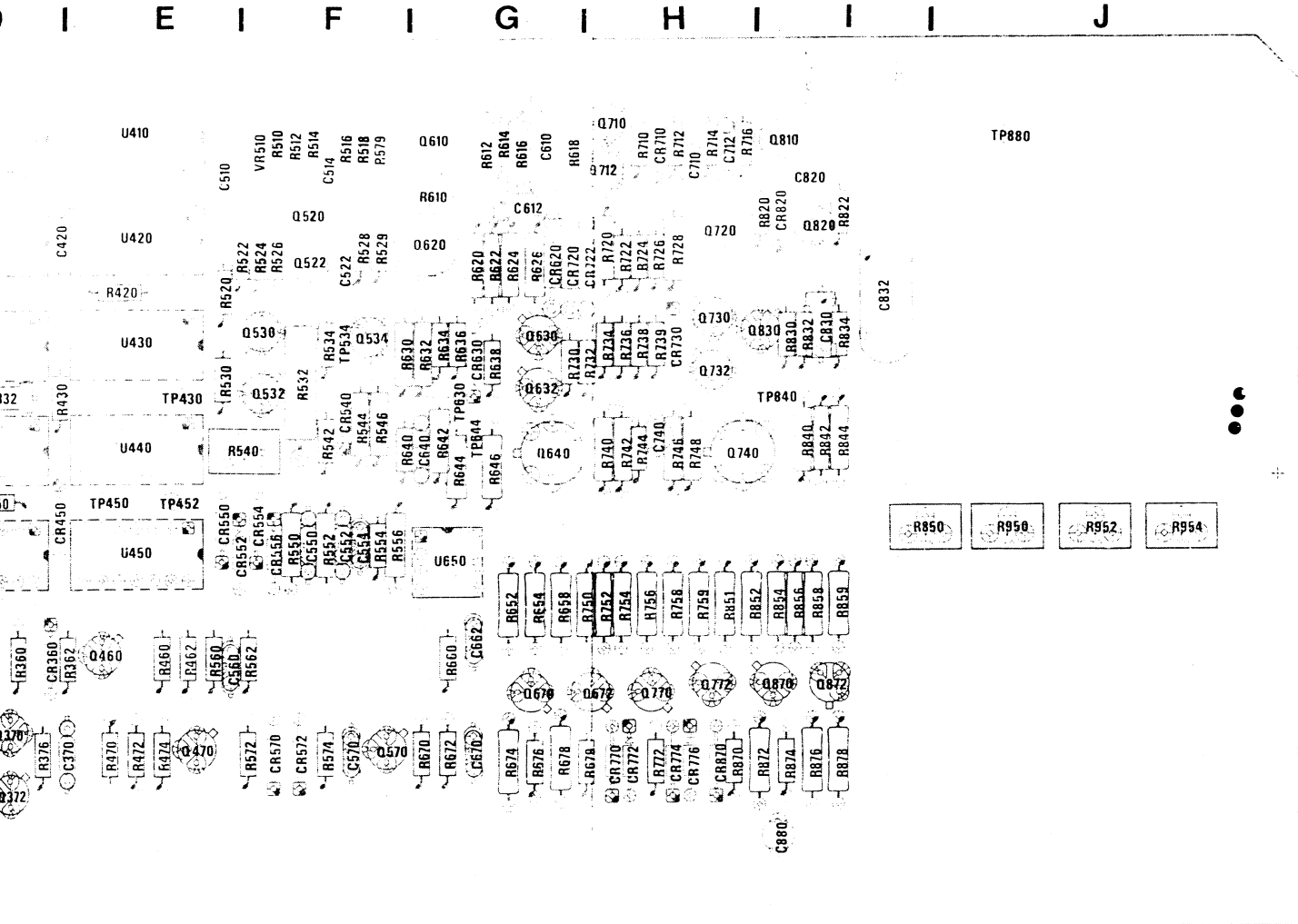
A24  
GRATICULE  
GENERATOR

COMPONENT NUMBER EXAMPLE



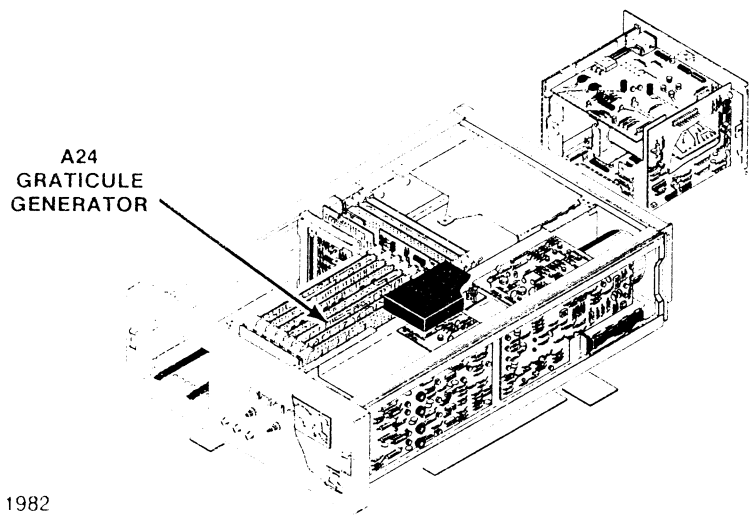
The suggested component designator number is shown in the example above. The suggested component designator number is shown in the example above.

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Fig. 7-5. The Graticule Generator circuit board, assembly A24.



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| P/O A24 ASSY   |                    |                |                |                    |                |                |                    |                |                | GR    |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|-------|
| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number |       |
| C020           | B5                 | A2             | Q610A          | G3                 | G1             | R554           | G5                 | F5             | R851           |       |
| C150           | A2                 | B5             | Q610B          | F3                 | G1             | R556           | F5                 | F5             | R852           |       |
| C230           | A3                 | C3             | Q620A          | F3                 | G2             | R560           | D2                 | E6             | R854           |       |
| C260           | B4                 | C6             | Q620B          | F3                 | G2             | R562           | F6                 | F6             | R856           |       |
| C262           | B6                 | C6             | Q630           | H4                 | G3             | R572           | D2                 | F7             | R858           |       |
| C270           | D5                 | C7             | Q632           | H4                 | G3             | R574           | D2                 | F7             | R859           |       |
| C272           | G6                 | C7             | Q640A          | E2                 | G4             | R579           | F3                 | F1             | R870           |       |
| C274           | G6                 | C7             | Q640B          | F2                 | G4             | R579           | F3                 | G7             | R872           |       |
| C310           | G5                 | D1             | Q670           | F1                 | G7             | R610           | F3                 | G1             | R874           |       |
| C320           | G5                 | D2             | Q672           | E1                 | G7             | R612           | G3                 | G1             | R876           |       |
| C330           | G5                 | D3             | Q710           | E3                 | H1             | R614           | G3                 | G1             | R878           |       |
| C332           | B4                 | D3             | Q712           | E3                 | H1             | R616           | G3                 | G1             | R950           |       |
| C340           | G5                 | D4             | Q720           | G4                 | H2             | R618           | E3                 | G1             | R952           |       |
| C350           | G5                 | D5             | Q730           | H3                 | G3             | R620           | F3                 | G2             | R954           |       |
| C370           | A1                 | D7             | Q732           | H3                 | H3             | R622           | F3                 | G2             |                | TP330 |
| C510           | C2                 | F1             | Q740A          | G2                 | H4             | R624           | F3                 | G2             |                | TP430 |
| C514           | F4                 | F1             | Q740B          | H2                 | H4             | R626           | F3                 | G2             |                | TP452 |
| C522           | E4                 | F2             | Q770           | E2                 | H7             | R630           | E4                 | G3             |                | TP534 |
| C550           | F5                 | F5             | Q772           | G1                 | H7             | R632           | E4                 | G3             |                | TP630 |
| C552           | E5                 | F5             | Q810           | E3                 | I1             | R634           | H5                 | G3             |                | TP644 |
| C554           | G6                 | F5             | Q820           | G3                 | I2             | R636           | H4                 | G3             |                | TP840 |
| C560           | F6                 | F6             | Q830           | G3                 | I3             | R638           | G4                 | G3             |                | TP880 |
| C570           | F6                 | F7             | Q870           | H1                 | I7             | R640           | E5                 | G4             |                |       |
| C610           | E3                 | G1             | Q872           | H2                 | I7             | R642           | E4                 | G4             |                |       |
| C612           | E3                 | G1             |                |                    |                | R644           | E2                 | G4             |                | U060  |
| C640           | E4                 | G4             | R030           | B5                 | A3             | R646           | E2                 | G4             |                | U070A |
| C662           | E4                 | G6             | R050           | B4                 | A5             | R652           | F2                 | G6             |                | U070B |
| C670           | G6                 | G7             | R052           | A5                 | A5             | R654           | F2                 | G6             |                | U070C |
| C710           | E3                 | H1             | R120           | A3                 | B2             | R658           | F2                 | G6             |                | U080A |
| C712           | E3                 | H1             | R130           | A5                 | B3             | R658           | F2                 | G6             |                | U080B |
| C740           | G6                 | H4             | R170           | G4                 | B7             | R660           | D2                 | G6             |                | U080C |
| C820           | G3                 | I2             | R172           | D5                 | B7             | R670           | D2                 | G7             |                | U080D |
| C830           | G3                 | I3             | R210           | G5                 | C1             | R672           | D1                 | G7             |                | U110  |
| C832           | H3                 | I3             | R230           | A4                 | C3             | R674           | F1                 | G7             |                | U120  |
| C880           | G1                 | I8             | R240           | A6                 | C4             | R676           | F1                 | G7             |                | U130  |
|                |                    |                | R250           | A2                 | C5             | R678           | E1                 | G7             |                | U140  |
|                |                    |                | R252           | B5                 | C5             | R679           | E1                 | H7             |                | U150  |
| CR360          | D2                 | D6             | R270           | B6                 | C7             | R710           | E3                 | H1             |                | U170A |
| CR370          | A1                 | D7             | R272           | B1                 | C7             | R712           | E3                 | H1             |                | U170B |
| CR450          | D2                 | E5             | R350           | B4                 | D5             | R714           | E3                 | H1             |                | U210A |
| CR540          | F5                 | F4             | R360           | D4                 | D6             | R716           | E3                 | H1             |                | U210B |
| CR550          | E5                 | F5             | R362           | D2                 | D6             | R720           | G4                 | H2             |                | U220  |
| CR552          | E5                 | F5             | R370           | A1                 | D7             | R722           | G4                 | H2             |                | U230B |
| CR554          | E5                 | F5             | R372           | A1                 | D7             | R724           | F4                 | H2             |                | U230C |
| CR556          | E5                 | F5             | R374           | A1                 | D7             | R726           | F4                 | H2             |                | U230D |
| CR570          | D2                 | F7             | R376           | A1                 | D7             | R728           | G4                 | H2             |                | U240  |
| CR572          | D2                 | F7             | R420           | C5                 | E2             | R730           | H4                 | G3             |                | U250  |
| CR620          | H4                 | G2             | R430           | D2                 | E3             | R732           | H4                 | H3             |                | U310A |
| CR630          | H4                 | G3             | R460           | D1                 | E6             | R734           | H3                 | H3             |                | U310B |
| CR710          | E3                 | H1             | R462           | D2                 | E6             | R736           | H3                 | H3             |                | U320B |
| CR720          | G4                 | H2             | R470           | B1                 | E7             | R738           | H3                 | H3             |                | U330A |
| CR722          | G4                 | H2             | R472           | B1                 | E7             | R739           | H3                 | H3             |                | U330B |
| CR730          | H3                 | H3             | R474           | D4                 | E7             | R740           | F2                 | H4             |                | U340  |
| CR770          | E1                 | H7             | R510           | G4                 | F1             | R742           | E2                 | H4             |                | U350A |
| CR772          | E1                 | H7             | R512           | F3                 | F1             | R744           | F6                 | H4             |                | U350B |
| CR774          | G2                 | H7             | R514           | F4                 | F1             | R746           | G2                 | H4             |                | U350C |
| CR776          | H1                 | H7             | R516           | F3                 | F1             | R748           | H2                 | H4             |                | U350D |
| CR820          | G3                 | I2             | R518           | F3                 | F1             | R750           | E2                 | H6             |                | U410  |
| CR870          | H1                 | I7             | R520           | E6                 | F2             | R752           | E2                 | H6             |                | U420A |
|                |                    |                | R522           | F4                 | F2             | R754           | E2                 | H6             |                | U420B |
| L370           | G6                 | D7             | R524           | F4                 | F2             | R756           | E2                 | H6             |                | U420C |
|                |                    |                | R526           | F4                 | F2             | R758           | E2                 | H6             |                | U420D |
| P040           | A6                 | A4             | R528           | F4                 | F2             | R759           | H2                 | H6             |                | U430A |
|                |                    |                | R529           | F3                 | F2             | R772           | F1                 | H7             |                | U430B |
| Q370           | A1                 | D7             | R530           | E5                 | E3             | R820           | G4                 | I2             |                | U430C |
| Q372           | A1                 | D7             | R532           | E4                 | F3             | R822           | G3                 | I2             |                | U430D |
| Q460           | D2                 | E6             | R534           | E4                 | F3             | R830           | G3                 | I3             |                | U440A |
| Q470           | D3                 | E7             | R540           | E4                 | F4             | R832           | G3                 | I3             |                | U440B |
| Q520           | F4                 | F2             | R542           | E4                 | F4             | R834           | G3                 | I3             |                | U440C |
| Q522           | F4                 | F2             | R544           | E5                 | F4             | R840           | G2                 | I4             |                | U450  |
| Q530           | E4                 | F3             | R546           | E4                 | F4             | R842           | G2                 | I4             |                | U650  |
| Q532           | E4                 | F3             | R550           | E5                 | F5             | R844           | G2                 | I4             |                |       |
| Q534           | E4                 | F3             | R552           | E5                 | F5             | R850           | F2                 | I5             |                | VR510 |
| Q570           | D2                 | F7             |                |                    |                |                |                    |                |                |       |

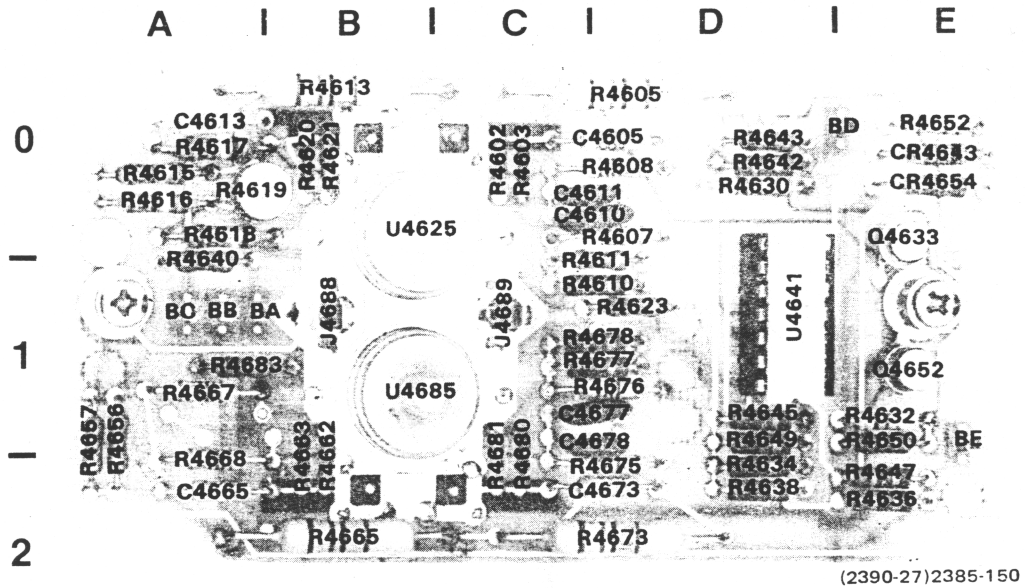
| P/O A68 ASSY |    |    |      |    |    |      |    |    |      | GR |
|--------------|----|----|------|----|----|------|----|----|------|----|
| J544         | A1 | F4 | J544 | A6 | F4 | J544 | B1 | F4 | J544 |    |

P/O A68 ASSY - SEE FIG. 7-37

| Part Number | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|-------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
|             | Q610A          | G3                 | G1             | R554           | G5                 | F5             | R851           | H2                 | H6             |
|             | Q610B          | F3                 | G1             | R556           | F5                 | F5             | R852           | H2                 | 16             |
|             | Q620A          | F3                 | G2             | R560           | D2                 | E6             | R854           | H2                 | 16             |
|             | Q620B          | F3                 | G2             | R562           | F6                 | F6             | R856           | H2                 | 16             |
|             | Q630           | H4                 | G3             | R572           | D2                 | F7             | R858           | H2                 | 16             |
|             | Q632           | H4                 | G3             | R574           | D2                 | F7             | R859           | H2                 | 16             |
|             | Q640A          | E2                 | G4             | R579           | F3                 | F1             | R870           | H1                 | 17             |
|             | Q640B          | F2                 | G4             | R579           | F3                 | G7             | R872           | G1                 | 17             |
|             | Q670           | F1                 | G7             | R610           | F3                 | G1             | R874           | H1                 | 17             |
|             | Q672           | E1                 | G7             | R612           | G3                 | G1             | R876           | H1                 | 17             |
|             | Q710           | E3                 | H1             | R614           | G3                 | G1             | R878           | H2                 | 17             |
|             | Q712           | E3                 | H1             | R616           | G3                 | G1             | R950           | E2                 | J5             |
|             | Q720           | G4                 | H2             | R618           | E3                 | G1             | R952           | H2                 | J5             |
|             | Q730           | H3                 | G3             | R620           | F3                 | G2             | R954           | H2                 | J5             |
|             | Q732           | H3                 | H3             | R622           | F3                 | G2             |                |                    |                |
|             | Q740A          | G2                 | H4             | R624           | F3                 | G2             | TP330          | C2                 | D3             |
|             | Q740B          | H2                 | H4             | R626           | F3                 | G2             | TP430          | F4                 | E4             |
|             | Q770           | E2                 | H7             | R630           | E4                 | G3             | TP452          | F4                 | E5             |
|             | Q772           | G1                 | H7             | R632           | E4                 | G3             | TP534          | E4                 | F3             |
|             | Q810           | E3                 | I1             | R634           | H5                 | G3             | TP630          | H4                 | G3             |
|             | Q820           | G3                 | I2             | R636           | H4                 | G3             | TP644          | E3                 | G4             |
|             | Q830           | G3                 | I3             | R638           | G4                 | G3             | TP840          | G3                 | I3             |
|             | Q870           | H1                 | I7             | R640           | E5                 | G4             | TP880          | E6                 | J1             |
|             | Q872           | H2                 | I7             | R642           | E4                 | G4             |                |                    |                |
|             |                |                    |                | R644           | E2                 | G4             | U060           | B3                 | A6             |
|             | R030           | B5                 | A3             | R646           | E2                 | G4             | U070A          | D5                 | A7             |
|             | R050           | B4                 | A5             | R652           | F2                 | G6             | U070B          | C5                 | A7             |
|             | R052           | A5                 | A5             | R654           | F2                 | G6             | U070C          | C5                 | A7             |
|             | R120           | A3                 | B2             | R658           | F2                 | G6             | U080A          | D6                 | D6             |
|             | R130           | A5                 | B3             | R658           | F2                 | G6             | U080B          | D5                 | A8             |
|             | R170           | G4                 | B7             | R660           | D2                 | G6             | U080C          | C3                 | A8             |
|             | R172           | D5                 | B7             | R670           | D2                 | G7             | U080D          | C3                 | A8             |
|             | R210           | G5                 | C1             | R672           | D1                 | G7             | U110           | B5                 | B1             |
|             | R230           | A4                 | C3             | R674           | F1                 | G7             | U120           | A3                 | B2             |
|             | R240           | A6                 | C4             | R676           | F1                 | G7             | U130           | A5                 | B3             |
|             | R250           | A2                 | C5             | R678           | E1                 | G7             | U140           | A6                 | B4             |
|             | R252           | B5                 | C5             | R679           | E1                 | H7             | U150           | A2                 | B5             |
|             | R270           | B6                 | C7             | R710           | E3                 | H1             | U170A          | B6                 | B7             |
|             | R272           | B1                 | C7             | R712           | E3                 | H1             | U170B          | D5                 | B7             |
|             | R350           | B4                 | D5             | R714           | E3                 | H1             | U210A          | B2                 | C1             |
|             | R360           | D4                 | D6             | R716           | E3                 | H1             | U210B          | D6                 | C1             |
|             | R362           | D2                 | D6             | R720           | G4                 | H2             | U220           | C2                 | C2             |
|             | R370           | A1                 | D7             | R722           | G4                 | H2             | U230B          | A2                 | C3             |
|             | R372           | A1                 | D7             | R724           | F4                 | H2             | U230C          | A3                 | C3             |
|             | R374           | A1                 | D7             | R726           | F4                 | H2             | U230D          | A4                 | C3             |
|             | R376           | A1                 | D7             | R728           | G4                 | H2             | U240           | A4                 | C4             |
|             | R420           | C5                 | E2             | R730           | H4                 | G3             | U250           | B4                 | C5             |
|             | R430           | D2                 | E3             | R732           | H4                 | H3             | U310A          | B3                 | D1             |
|             | R460           | D1                 | E6             | R734           | H3                 | H3             | U310B          | C3                 | D1             |
|             | R462           | D2                 | E6             | R736           | H3                 | H3             | U320B          | A3                 | D2             |
|             | R470           | B1                 | E7             | R738           | H3                 | H3             | U330A          | D3                 | D3             |
|             | R472           | B1                 | E7             | R739           | H3                 | H3             | U330B          | D4                 | D3             |
|             | R474           | D4                 | E7             | R740           | F2                 | H4             | U340           | A5                 | D4             |
|             | R510           | G4                 | F1             | R742           | E2                 | H4             | U350A          | B4                 | D5             |
|             | R512           | F3                 | F1             | R744           | F6                 | H4             | U350B          | B4                 | D5             |
|             | R514           | F4                 | F1             | R746           | G2                 | H4             | U350C          | B2                 | D5             |
|             | R516           | F3                 | F1             | R748           | H2                 | H4             | U350D          | B2                 | D5             |
|             | R518           | F3                 | F1             | R750           | E2                 | H6             | U410           | C2                 | E1             |
|             | R520           | E6                 | F2             | R752           | E2                 | H6             | U420A          | C4                 | E2             |
|             | R522           | F4                 | F2             | R754           | E2                 | H6             | U420B          | C4                 | E2             |
|             | R524           | F4                 | F2             | R756           | E2                 | H6             | U420C          | C4                 | E2             |
|             | R528           | F4                 | F2             | R758           | E2                 | H6             | U420D          | C4                 | E2             |
|             | R529           | F3                 | F2             | R759           | H2                 | H6             | U430A          | D2                 | E3             |
|             | R530           | E5                 | E3             | R772           | F1                 | H7             | U430B          | C5                 | E3             |
|             | R532           | E4                 | F3             | R820           | G4                 | I2             | U430C          | F4                 | E3             |
|             | R534           | E4                 | F3             | R822           | G3                 | I2             | U430D          | F4                 | E3             |
|             | R540           | E4                 | F4             | R830           | G3                 | I3             | U440A          | D3                 | E4             |
|             | R542           | E4                 | F4             | R832           | G3                 | I3             | U440B          | D2                 | E4             |
|             | R544           | E5                 | F4             | R834           | G3                 | I3             | U440C          | D3                 | E4             |
|             | R546           | E4                 | F4             | R840           | G2                 | I4             | U450           | E6                 | F2             |
|             | R550           | E5                 | F5             | R842           | G2                 | I4             | U650           | E5                 | G6             |
|             | R552           | E5                 | F5             | R844           | G2                 | I4             |                |                    |                |
|             |                |                    |                | R850           | F2                 | I5             | VR510          | F4                 | F1             |

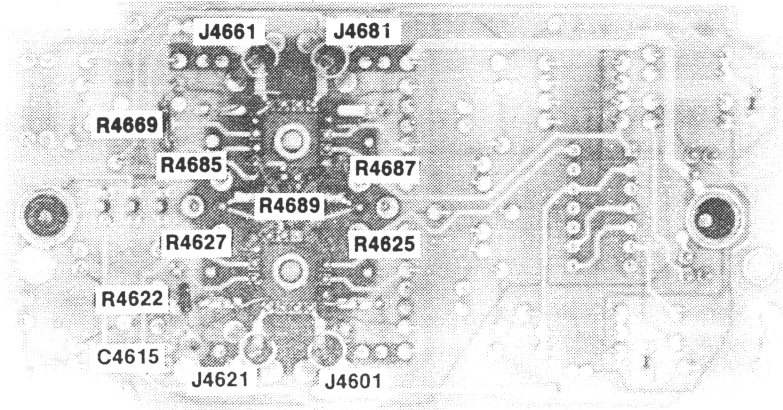
|      |    |    |      |    |    |      |    |    |
|------|----|----|------|----|----|------|----|----|
| J544 | A6 | F4 | J544 | B1 | F4 | J544 | D6 | F4 |
|------|----|----|------|----|----|------|----|----|

P/O A68 ASSY - SEE FIG. 7-37



(2390-27)2385-150

Fig 7-6a. The vertical interface circuit board, assembly A44

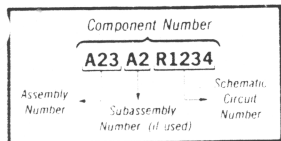


2835-38A

A44  
VERTICAL  
INTERFACE

Fig 7-6b. Components on the back of the vertical interface circuit board, assembly A44

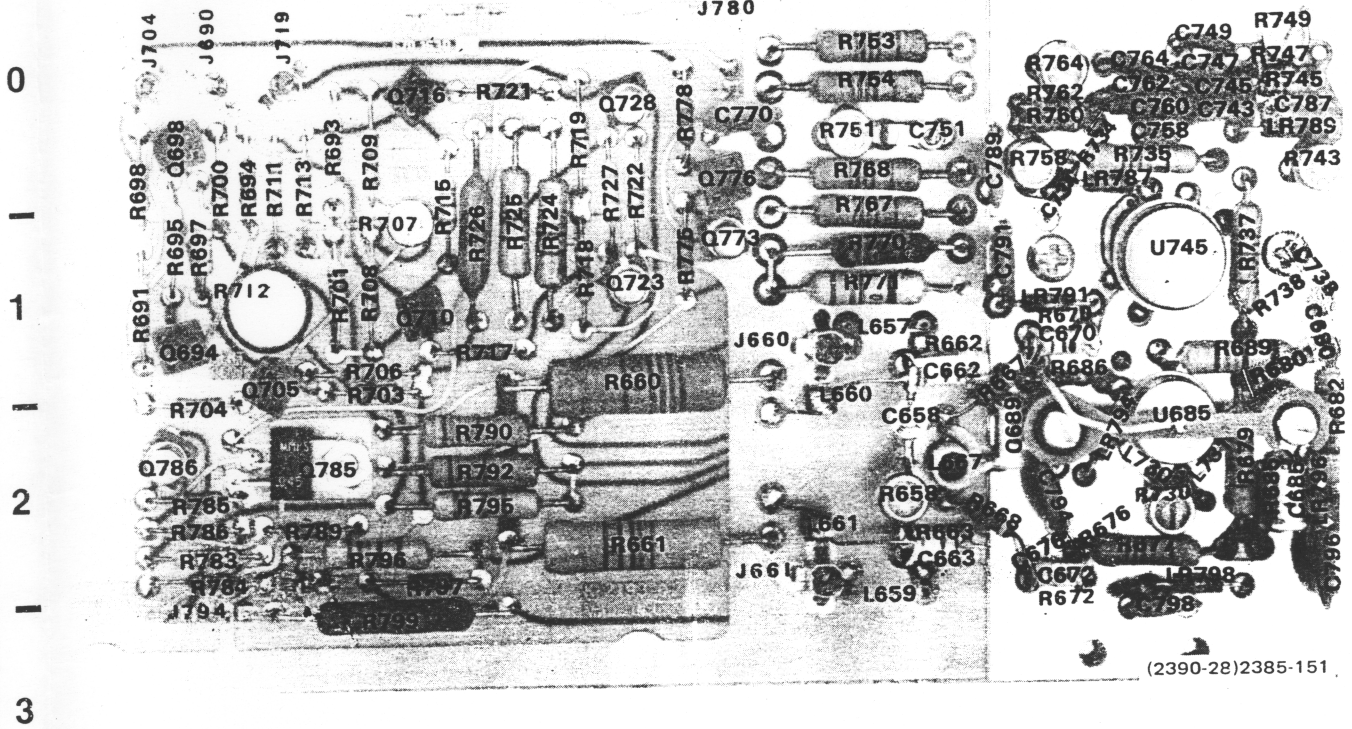
COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix — see end of Replaceable Electrical Parts List

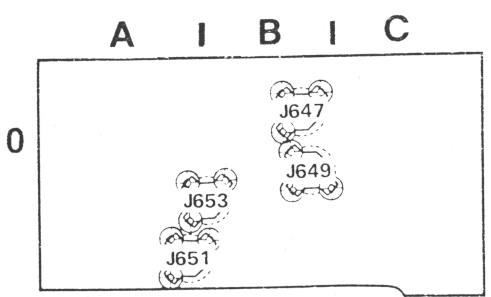
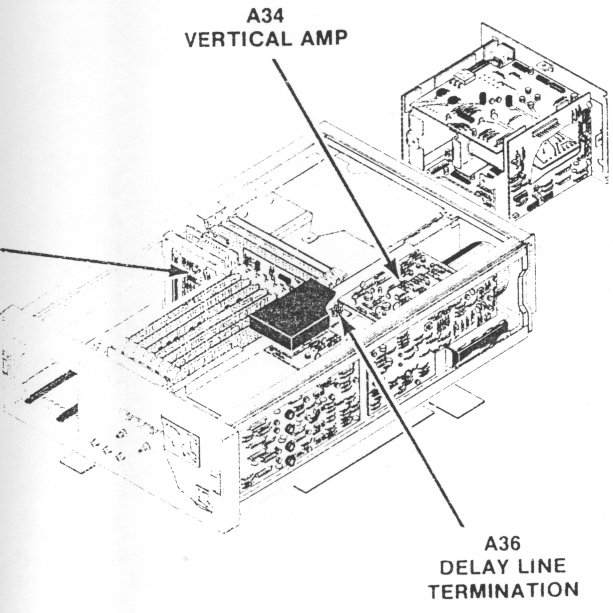


A B C D E F G H I



(2390-28)2385-151

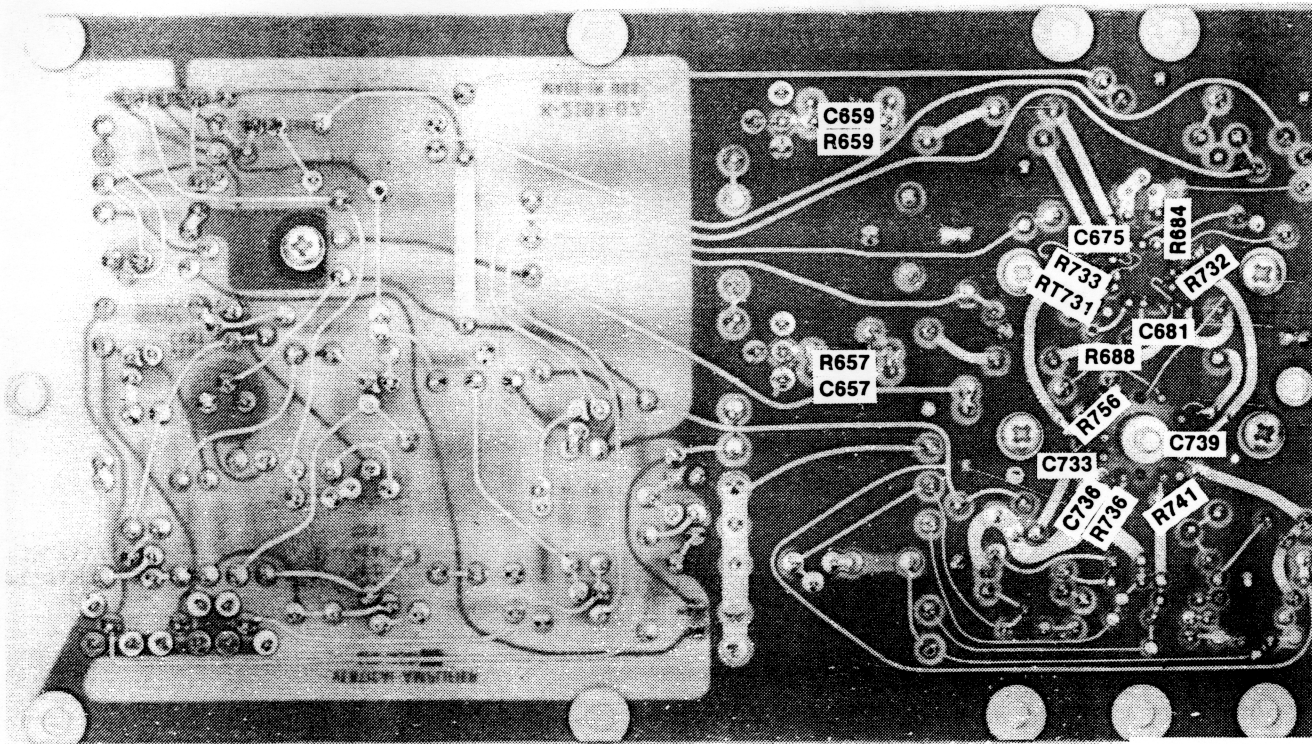
Fig. 7-7. The vertical amplifier circuit board, assembly A34



(1590-106)2835-39

Fig. 7-8. The delay line termination circuit board, assembly A36

REV APR 1982



(2390-29)2385-152

Fig. 7-9. Components on the back of the vertical amplifier circuit board, assembly A34

| P/O A34 ASSY   |                    |                | VERTICAL AMPLIFIER 5 |                    |                |
|----------------|--------------------|----------------|----------------------|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number       | Schematic Location | Board Location |
| C657           | D3                 | †              | R684                 | E4                 | †              |
| C659           | D4                 | †              | R688                 | F4                 | †              |
| C675           | E3                 | †              | R732                 | F4                 | †              |
| C681           | E4                 | †              | R733                 | F3                 | †              |
| C733           | F3                 | †              | R736                 | G3                 | †              |
| C736           | G3                 | †              | R741                 | G4                 | †              |
| R657           | D3                 | †              | R756                 | G4                 | †              |
| R659           | D4                 | †              | RT731                | F3                 | †              |

| A36 ASSY |    |         | VERTICAL AMPLIFIER 5 |    |    |
|----------|----|---------|----------------------|----|----|
| DL5300   | D3 | CHASSIS | J649                 | C4 | B0 |
| J647     | C3 | B0      | J651                 | D3 | A0 |
|          |    |         | J653                 | D4 | A0 |

| P/O A44 ASSY |    |   | VERTICAL AMPLIFIER 5 |    |   |
|--------------|----|---|----------------------|----|---|
| C4615        | B2 | † | R4622                | B2 | † |
| J4601        | A1 | † | R4625                | C1 | † |
| J4621        | A2 | † | R4627                | C2 | † |
| J4661        | A5 | † | R4669                | B5 | † |
| J4681        | A6 | † | R4685                | C5 | † |
|              |    |   | R4687                | C6 | † |
|              |    |   | R4689                | C3 | † |

NOTE: † Back of board.

6

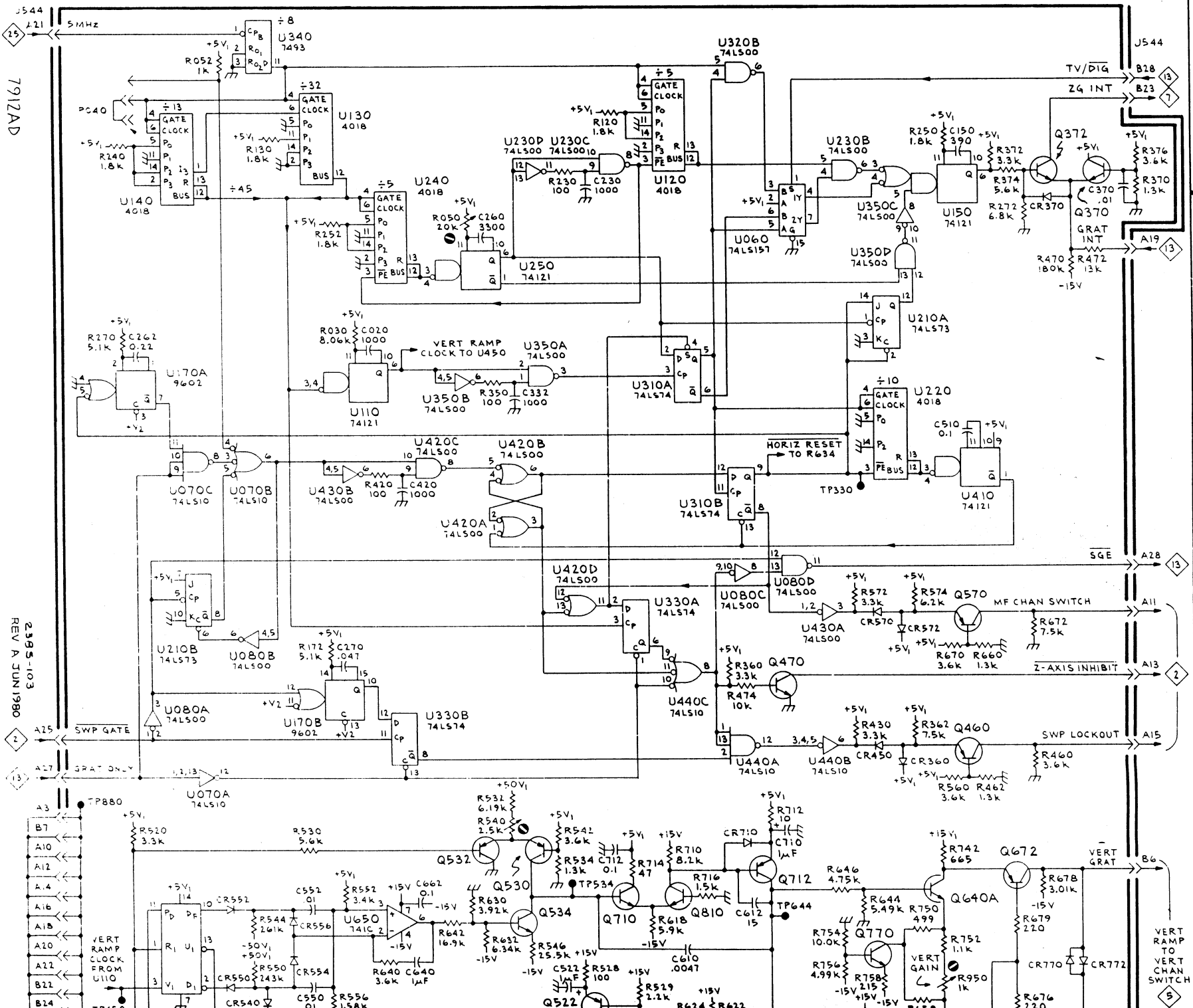
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4

3

2

1



A

B

C

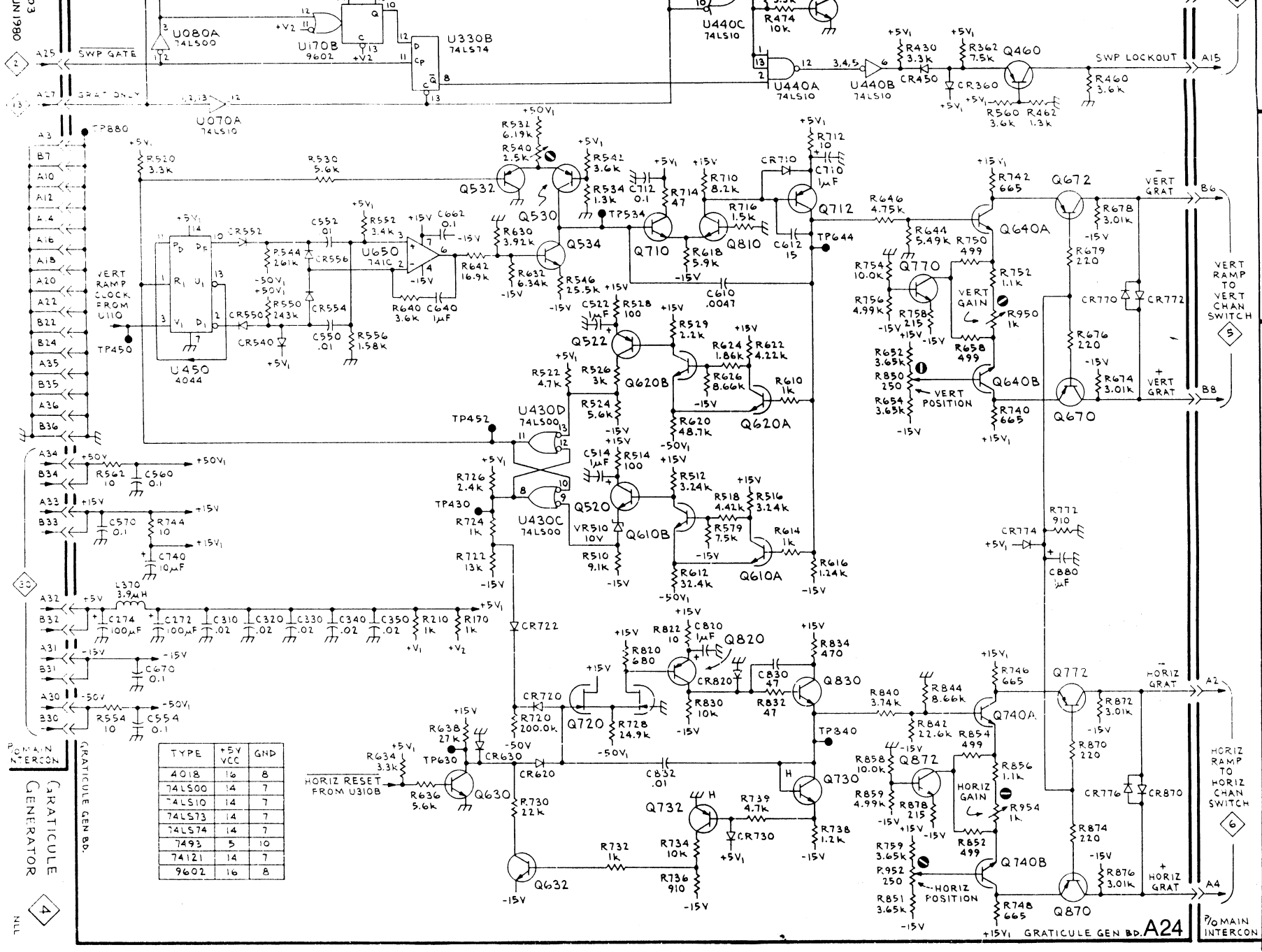
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E

Scans by Outsource-Options =>

2385-103  
REV A JUN 1980

Scans by Outsourc-Options =>



| TYPE   | +5V VCC | GND |
|--------|---------|-----|
| 4018   | 16      | 8   |
| 74LS00 | 14      | 7   |
| 74LS10 | 14      | 7   |
| 74LS73 | 14      | 7   |
| 74LS74 | 14      | 7   |
| 7493   | 5       | 10  |
| 74121  | 14      | 7   |
| 9602   | 16      | 8   |

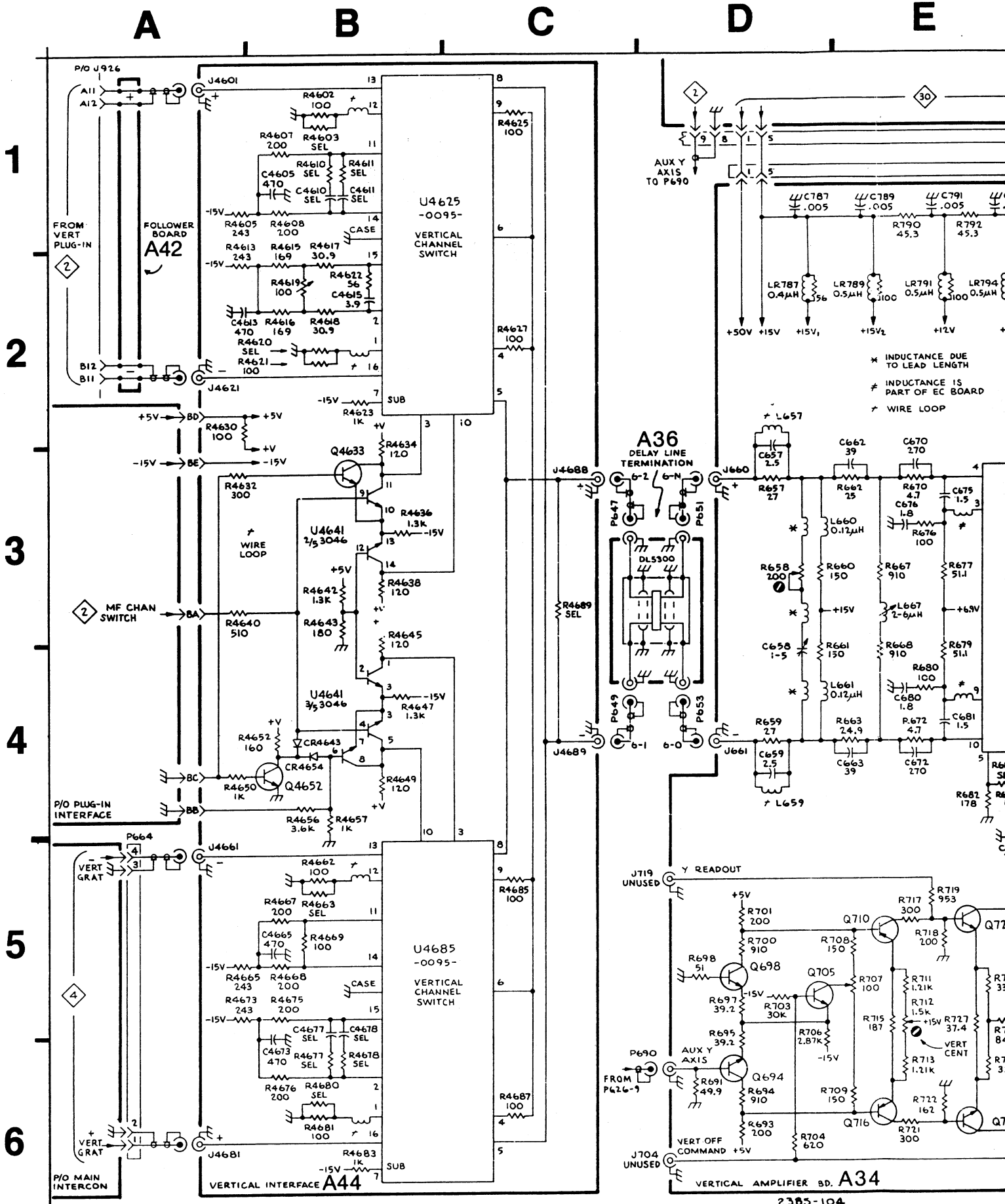
GRATICULE GEN. BR.  
GRATICULE GENERATOR  
4

| P/O A34 ASSY   |                    |                |                |                    |                | VERTICAL AMPLIFIER 5 |                    |                |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------------|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number       | Schematic Location | Board Location |
| C658           | D3                 | F2             | P780           | H5                 | E0             | R717                 | E5                 | C1             |
| C662           | E3                 | G1             | P5205          | H4                 | CHASSIS        | R718                 | E5                 | D1             |
| C663           | E4                 | G2             |                |                    |                | R719                 | E5                 | D0             |
| C670           | E3                 | G1             | Q273           | E5                 | D1             | R721                 | E6                 | D0             |
| C672           | E4                 | G2             | Q694           | D6                 | A1             | R722                 | E6                 | D0             |
| C676           | E3                 | G2             | Q698           | D5                 | A0             | R724                 | E5                 | D1             |
| C680           | E4                 | I1             | Q705           | D5                 | B1             | R725                 | E6                 | D1             |
| C685           | E4                 | I2             | Q710           | E5                 | C1             | R726                 | E5                 | D1             |
| C689           | F4                 | G2             | Q716           | E6                 | C0             | R727                 | E5                 | D1             |
| C734           | F3                 | G2             | Q728           | E6                 | D0             | R730                 | F3                 | H2             |
| C738           | F4                 | I1             | Q773           | G6                 | E1             | R734                 | F3                 | G2             |
| C738           | F4                 | I1             | Q776           | G6                 | E0             | R735                 | F3                 | H0             |
| C739           | F5                 | I1             | Q785           | G5                 | B2             | R737                 | F3                 | I1             |
| C743           | G4                 | H0             | Q786           | G5                 | A2             | R738                 | F4                 | I1             |
| C745           | G4                 | H0             |                |                    |                | R738                 | F4                 | I1             |
| C747           | G5                 | H0             | R658           | D3                 | F2             | R743                 | G3                 | I0             |
| C749           | G5                 | H0             | R660           | D3                 | D2             | R745                 | G4                 | I0             |
| C751           | G5                 | G0             | R661           | D4                 | D2             | U747                 | G5                 | I0             |
| C758           | H4                 | H0             | R662           | E3                 | G1             | R749                 | G5                 | I0             |
| C760           | H4                 | H0             | R663           | E4                 | G2             | R751                 | G5                 | F0             |
| C762           | H5                 | H0             | R667           | E3                 | G1             | R753                 | G5                 | F0             |
| C764           | H5                 | H0             | R668           | E3                 | G2             | R754                 | G5                 | F0             |
| C770           | G6                 | E0             | R670           | E3                 | G1             | R758                 | G4                 | G0             |
| C787           | D1                 | I0             | R672           | E4                 | G2             | R760                 | G4                 | G0             |
| C789           | E1                 | G0             | R676           | E3                 | H2             | R762                 | G5                 | G0             |
| C791           | E1                 | G1             | R677           | E3                 | H2             | R764                 | G5                 | G0             |
| C794           | E1                 | G2             | R679           | E3                 | I2             | R767                 | G5                 | F1             |
| C796           | F1                 | I2             | R680           | E4                 | I1             | R768                 | H5                 | F0             |
| C798           | F1                 | H3             | R682           | E4                 | I2             | R770                 | G6                 | F1             |
| C5205          | H4                 | CHASSIS        | R685           | E4                 | I2             | R771                 | G6                 | F1             |
|                |                    |                | R686           | F4                 | H1             | R775                 | G6                 | E1             |
| J660           | D3                 | F1             | R689           | F4                 | I1             | R778                 | G6                 | E0             |
| J661           | D4                 | F2             | R691           | D6                 | A1             | R783                 | G5                 | B2             |
| J690           | D6                 | B0             | R693           | D6                 | B0             | R784                 | G5                 | B2             |
| J704           | D6                 | A0             | R694           | D6                 | B0             | R785                 | G5                 | B2             |
| J719           | D5                 | B0             | R695           | D5                 | A1             | R786                 | G6                 | B2             |
| J794           | F1                 | A3             | R697           | D5                 | A1             | R789                 | G5                 | B2             |
|                |                    |                | R698           | D5                 | A0             | R790                 | E1                 | D2             |
| L660           | D3                 | F2             | R700           | D5                 | B0             | R792                 | E1                 | D2             |
| L661           | D4                 | F2             | R701           | D5                 | B1             | R795                 | E1                 | D2             |
| L667           | E3                 | G2             | R703           | D5                 | C1             | R796                 | F1                 | C2             |
|                |                    |                | R704           | D6                 | B2             | R797                 | F1                 | C2             |
| LR787          | D2                 | H0             | R706           | D5                 | C1             | R799                 | G1                 | C3             |
| LR789          | E2                 | I0             | R707           | E5                 | C1             | RS205                | H3                 | CHASSIS        |
| LR791          | E2                 | H1             | R708           | E5                 | C1             |                      |                    |                |
| LR794          | E2                 | H2             | R709           | E6                 | C0             | TP786                | G5                 | B2             |
| LR796          | F2                 | I2             | R711           | E5                 | B0             |                      |                    |                |
| LR798          | F2                 | H2             | R712           | E5                 | B1             |                      |                    |                |
| LR5200         | H3                 | CHASSIS        | R713           | E6                 | B0             | U685                 | F3                 | H2             |
| LR5201         | H4                 | CHASSIS        | R715           | E5                 | C1             | U745                 | G3                 | H1             |

| P/O A44 ASSY |    |    |       |    |    | VERTICAL AMPLIFIER 5 |    |    |
|--------------|----|----|-------|----|----|----------------------|----|----|
| C4605        | B1 | D0 | R4608 | B1 | D0 | R4649                | B4 | D2 |
| C4610        | B1 | D0 | R4610 | B1 | D1 | R4650                | A4 | E1 |
| C4611        | B1 | D0 | R4611 | B1 | D1 | R4652                | B4 | E0 |
| C4613        | B2 | A0 | R4613 | A2 | B0 | R4656                | B4 | A1 |
| C4665        | B5 | A2 | R4615 | B2 | A0 | R4657                | B4 | A1 |
| C4673        | B5 | D2 | R4616 | B2 | A0 | R4662                | B5 | B2 |
| C4677        | B5 | D1 | R4617 | B2 | A0 | R4663                | B5 | B2 |
| C4678        | B5 | D1 | R4618 | B2 | A0 | R4665                | B5 | A2 |
|              |    |    | R4619 | B2 | B0 | R4667                | B5 | A1 |
| CR4643       | B4 | E0 | R4620 | B2 | B0 | R4668                | B5 | A2 |
| CR4654       | B4 | E0 | R4621 | B2 | B0 | R4673                | B5 | D2 |
|              |    |    | R4623 | B2 | D1 | R4675                | B5 | D2 |
| J4688        | C3 | B1 | E4630 | A2 | D0 | R4676                | B6 | D1 |
| J4689        | C4 | C1 | R4632 | A3 | E1 | R4677                | B6 | D1 |
|              |    |    | R4634 | B2 | D2 | R4678                | B6 | D1 |
| Q4633        | B3 | E1 | R4636 | B3 | E2 | R4680                | B6 | C2 |
| Q4652        | B4 | E1 | R4638 | B3 | D2 | R4681                | B6 | C2 |
|              |    |    | R4640 | A3 | A0 | R4683                | B6 | A1 |
| R4602        | B1 | C0 | R4642 | B3 | D0 |                      |    |    |
| R4603        | B1 | C0 | R4643 | B3 | D0 | U4625                | B1 | B0 |
| R4605        | A1 | D0 | R4645 | B3 | D1 | U4641                | B3 | D1 |
| R4607        | B1 | D0 | R4647 | B4 | E2 | U4685                | B5 | B1 |

| P/O A68 ASSY |    |    |      |    |    | VERTICAL AMPLIFIER 5 |    |    |
|--------------|----|----|------|----|----|----------------------|----|----|
| P626         | F1 | G2 | P626 | H6 | G2 | P664                 | A5 | G6 |

P/O A68 ASSY - SEE FIG. 7-37



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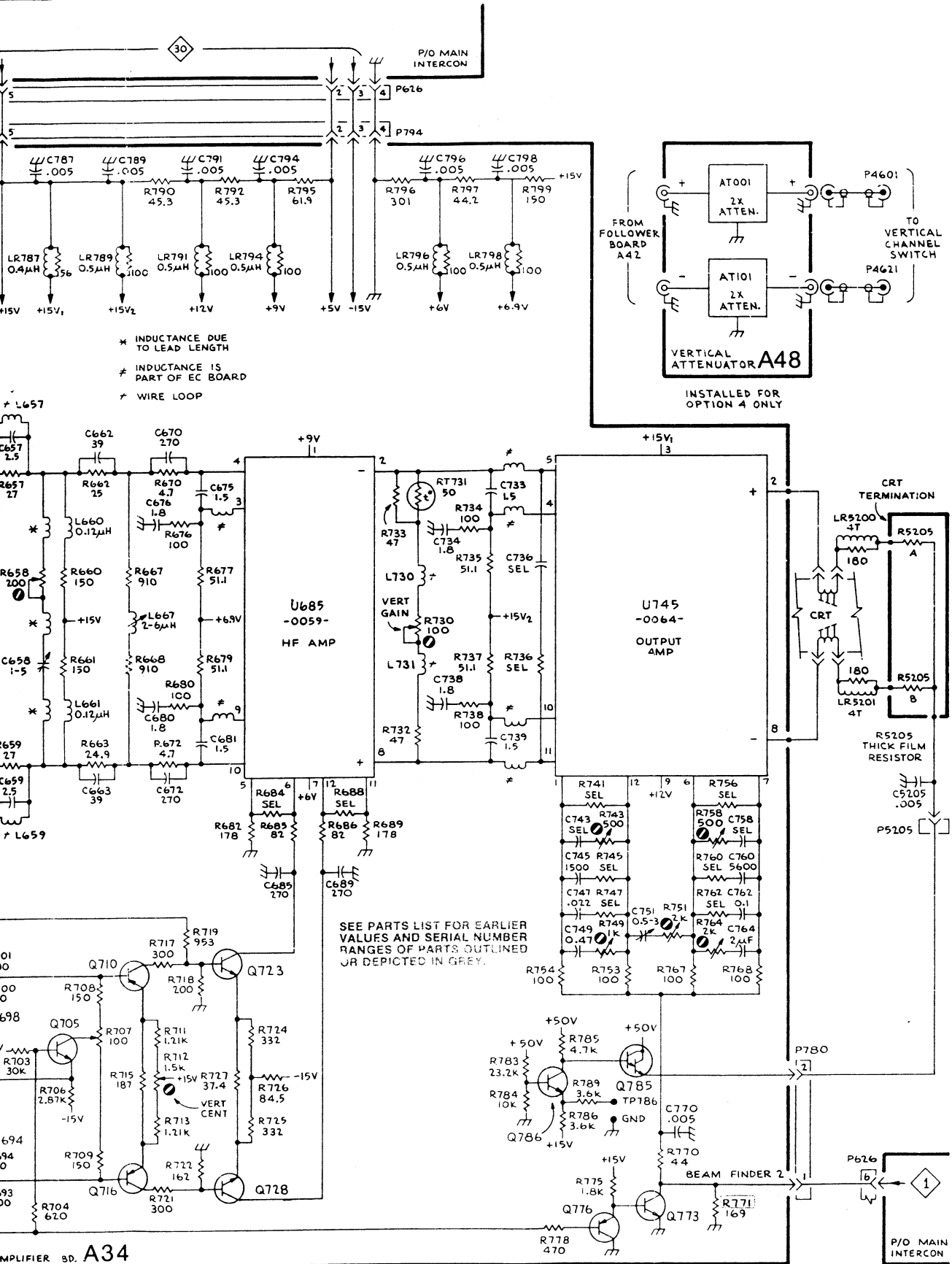
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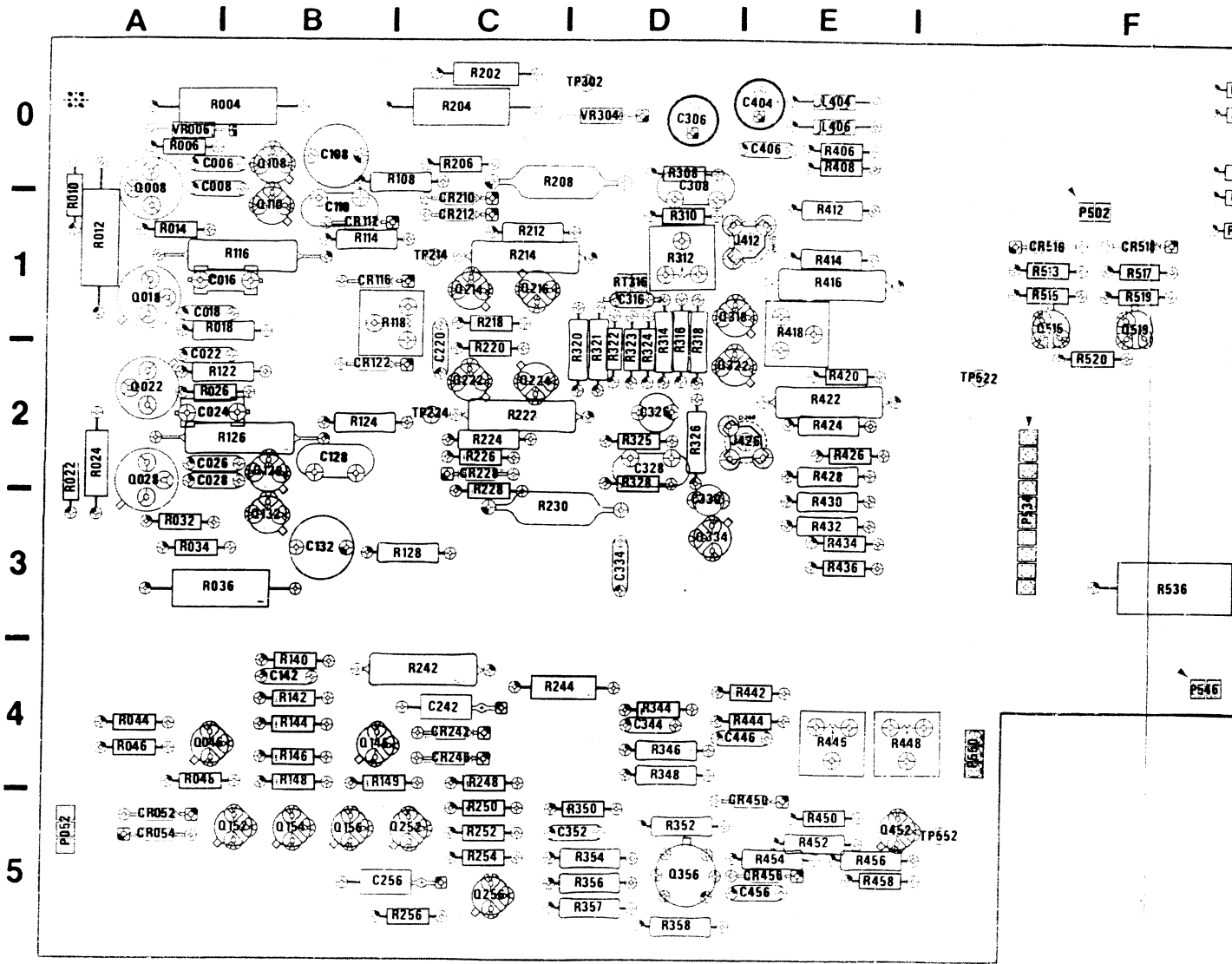
VERTICAL AMPLIFIER

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SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY.

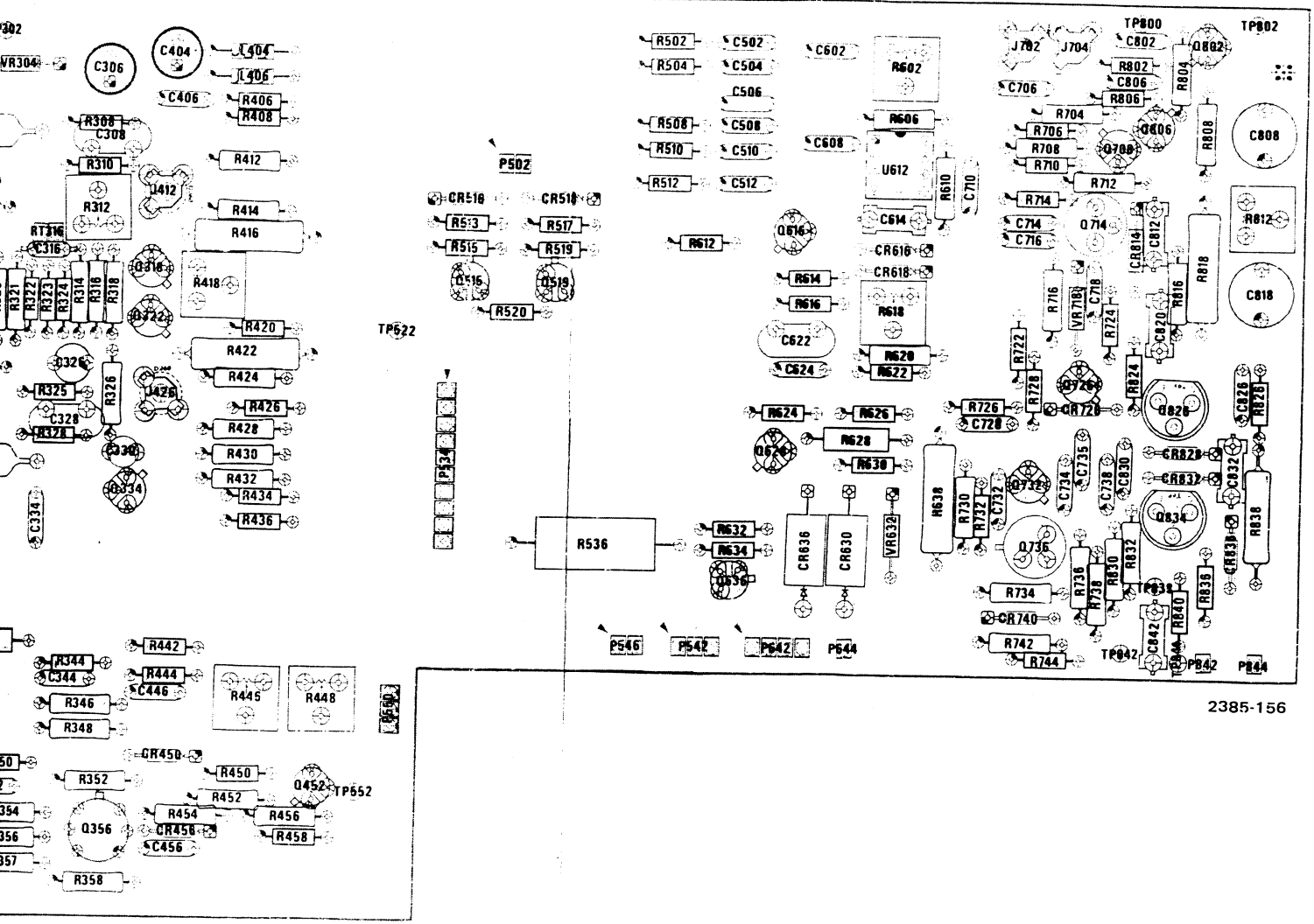
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VERTICAL AMPLIFIER 5






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


2385-156

The Horizontal and Z-Axis Amplifier circuit board, assembly A40 (SN B100767 & up).

| P/O A40 ASSY (SN B100767 & up) |                    |                |                |                    |                | HORIZONTAL AMPLIFIER  |                    |                |
|--------------------------------|--------------------|----------------|----------------|--------------------|----------------|--|--------------------|----------------|
| Circuit Number                 | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| C006                           | F4                 | A0             | Q008           | G4                 | A0             | R230   | E1                 | C3             |
| C008                           | G5                 | A0             | Q018           | G3                 | A1             | R308   | D4                 | D0             |
| C016                           | G5                 | A1             | Q022           | G3                 | A2             | R310   | D4                 | D1             |
| C022                           | G3                 | A2             | Q028           | G2                 | A2             | R312   | D3                 | D1             |
| C024                           | G1                 | A2             | Q108           | F4                 | B0             | R314   | D3                 | D1             |
| C026                           | G3                 | A2             | Q110           | F4                 | B2             | R316   | D4                 | D1             |
| C028                           | G2                 | A2             | Q128           | F2                 | B2             | R318   | D3                 | D1             |
| C108                           | G5                 | B0             | Q132           | F2                 | B3             | R320   | E4                 | D2             |
| C108                           | G5                 | B0             | Q214           | E5                 | C1             | R321   | E2                 | D2             |
| C110                           | G5                 | B1             | Q216           | E4                 | C1             | R322   | D3                 | D2             |
| C128                           | F2                 | B2             | Q222           | E2                 | C2             | R323   | D3                 | D2             |
| C132                           | G1                 | B3             | Q224           | E2                 | C2             | R324   | D3                 | D2             |
| C142                           | E5                 | B4             | Q318           | D4                 | D1             | R325   | D2                 | D2             |
| C220                           | E3                 | C2             | Q322           | D2                 | D2             | R326   | D3                 | D2             |
| C242                           | F5                 | C4             | Q334           | E3                 | D3             | R328   | E2                 | D2             |
| C306                           | E5                 | D0             |                |                    |                | R344   | E6                 | D4             |
| C308                           | D4                 | D0             | R004           | G4                 | B0             | R406   | F5                 | E0             |
| C316                           | D3                 | D1             | R006           | G4                 | A0             | R408   | G6                 | E0             |
| C326                           | D3                 | D2             | R010           | G3                 | A1             | R412   | D4                 | E1             |
| C328                           | D2                 | D2             | R012           | G4                 | A1             | R414   | C4                 | E1             |
| C330                           | E1                 | D3             | R014           | G5                 | A1             | R416   | C4                 | E1             |
| C334                           | G5                 | D3             | R018           | G3                 | B1             | R418   | D3                 | E1             |
| C344                           | G5                 | D3             | R022           | H3                 | A2             | R420   | C3                 | E2             |
| C404                           | F5                 | E0             | R026           | G2                 | A2             | R422   | C2                 | E2             |
| C406                           | G5                 | E0             | R032           | G2                 | A3             | R424   | C2                 | E2             |
| C446                           | D5                 | E4             | R034           | G2                 | A3             | R426   | C1                 | E2             |
| C502                           | D5                 | F0             | R036           | G2                 | B3             | R428   | C1                 | E2             |
| C504                           | E5                 | F0             | R108           | E5                 | C0             | R430   | D1                 | E3             |
| C506                           | E5                 | F0             | R114           | F4                 | B1             | R432   | E3                 | E3             |
| C508                           | F5                 | F0             | R116           | G5                 | B1             | R434   | E1                 | E3             |
| C510                           | G5                 | F0             | R118           | F3                 | C1             | R436   | D1                 | E3             |
| C512                           | D5                 | F1             | R122           | G3                 | B2             | R442   | F6                 | E4             |
|                                |                    |                | R124           | F2                 | B2             | R502   | D6                 | E4             |
| CR112                          | F4                 | B1             | R126           | G2                 | B2             | R504   | E6                 | F0             |
| CR116                          | F3                 | B1             | R128           | E2                 | B3             | R508   | F6                 | F0             |
| CR122                          | F3                 | B2             | R140           | E6                 | B4             | R510   | G6                 | F0             |
| CR210                          | E5                 | C1             | R202           | G3                 | C0             | R512   | D6                 | F1             |
| CR212                          | E4                 | C1             | R204           | F4                 | C0             |  |                    |                |
| CR228                          | E1                 | C2             | R206           | E5                 | C0             | RT316  | D3                 | D1             |
|                                |                    |                | R208           | E5                 | C0             |  |                    |                |
| E214                           | E4                 |                | R212           | E4                 | C1             | TP214  | D5                 | C1             |
|                                |                    |                | R214           | D4                 | C1             | TP224  | D2                 | C2             |
| L404                           | F6                 | E0             | R218           | E4                 | C1             | TP302  | F6                 | D0             |
| L406                           | E6                 | E0             | R220           | E3                 | C2             | TP522  | F5                 | F2             |
|                                |                    |                | R222           | D2                 | C2             |  |                    |                |
| P412                           | C4                 | E1             | R224           | E2                 | C2             | VR006  | F4                 | A0             |
| P426                           | C2                 | E2             | R226           | E2                 | C2             | VR304  | G3                 | D0             |
| P534                           | G6                 | F3             | R228           | E1                 | C2             |  |                    |                |

P/O A46 ASSY ALSO SHOWN ON   & 

| P/O A46 ASSY (SN B100767 & up) |    |    |      |    |    | HORIZONTAL AMPLIFIER  |    |    |
|--------------------------------|----|----|------|----|----|--|----|----|
| C314                           | B4 | D1 | R410 | B5 | E1 | R510   | A2 | F1 |
| C316                           | B5 | D1 | R412 | C4 | E1 | R512   | A2 | F1 |
| C318                           | B4 | D1 | R414 | B4 | E1 | R514   | A3 |    |
|                                |    |    | R415 | A4 | E1 | R516   | A3 |    |
| J426                           | C4 | E2 | R416 | A4 | E1 | R518   | A4 |    |
| J428                           | C2 | F2 | R418 | B4 | E1 | R522   | A4 |    |
|                                |    |    | R420 | B4 | E1 | R524   | A3 |    |
| P512                           | A2 |    | R422 | B4 | E2 |  |    |    |
| P516                           | A3 |    | R424 | B5 | E2 | U418   | B2 | E1 |
| P626                           | A2 |    |      |    |    |  |    |    |

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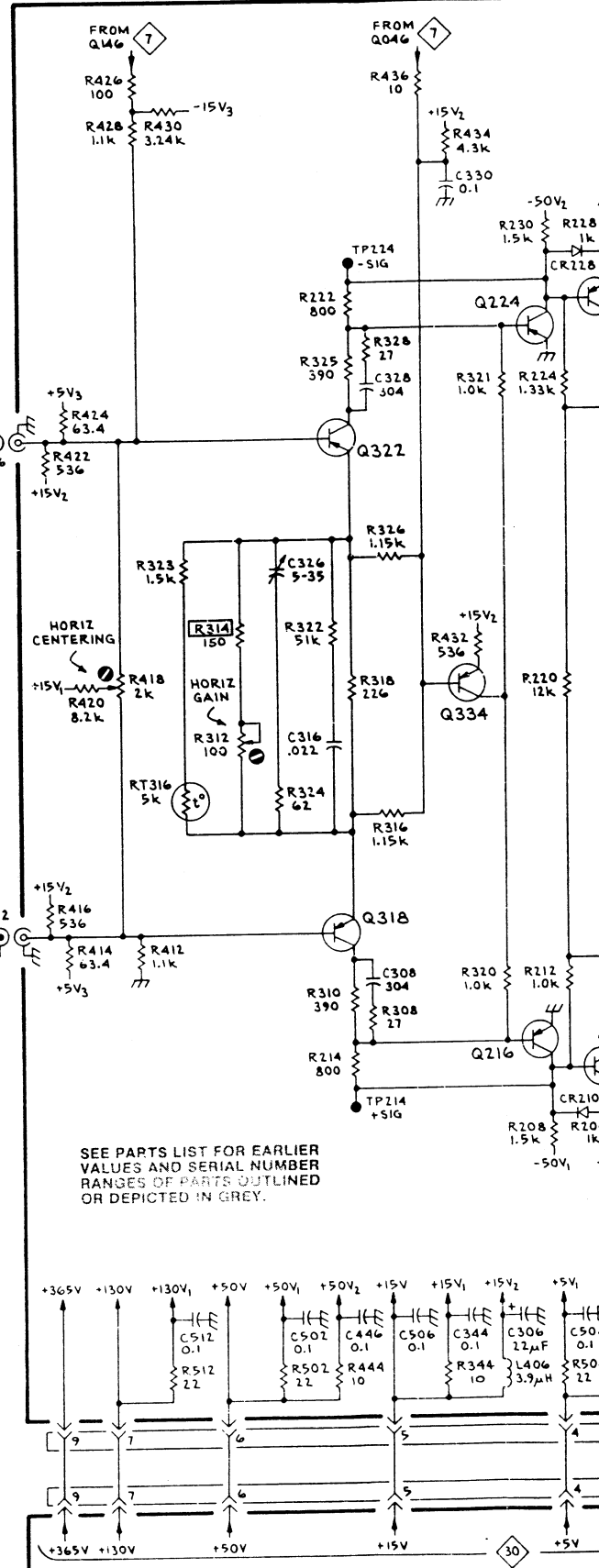
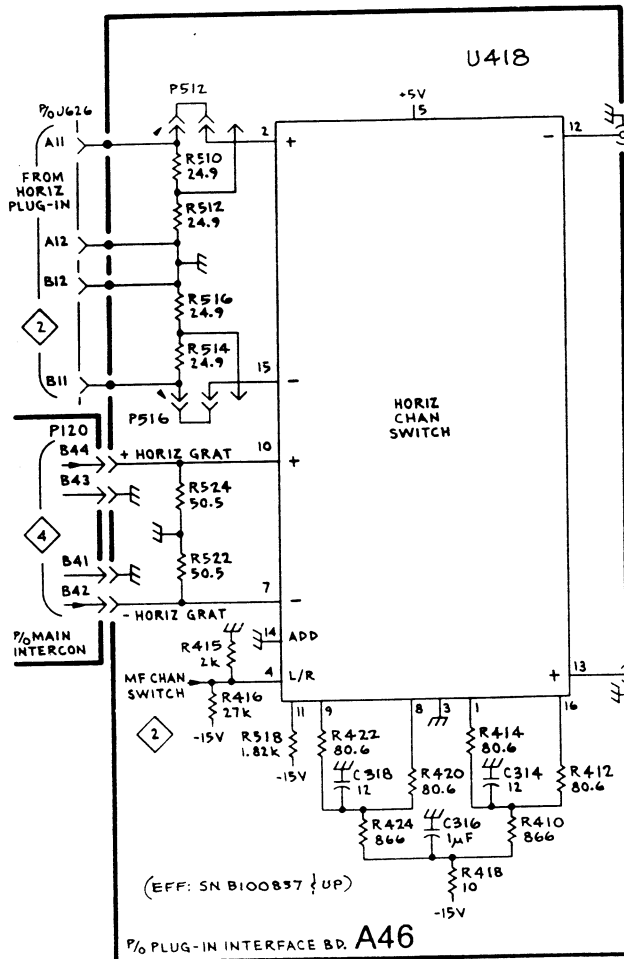
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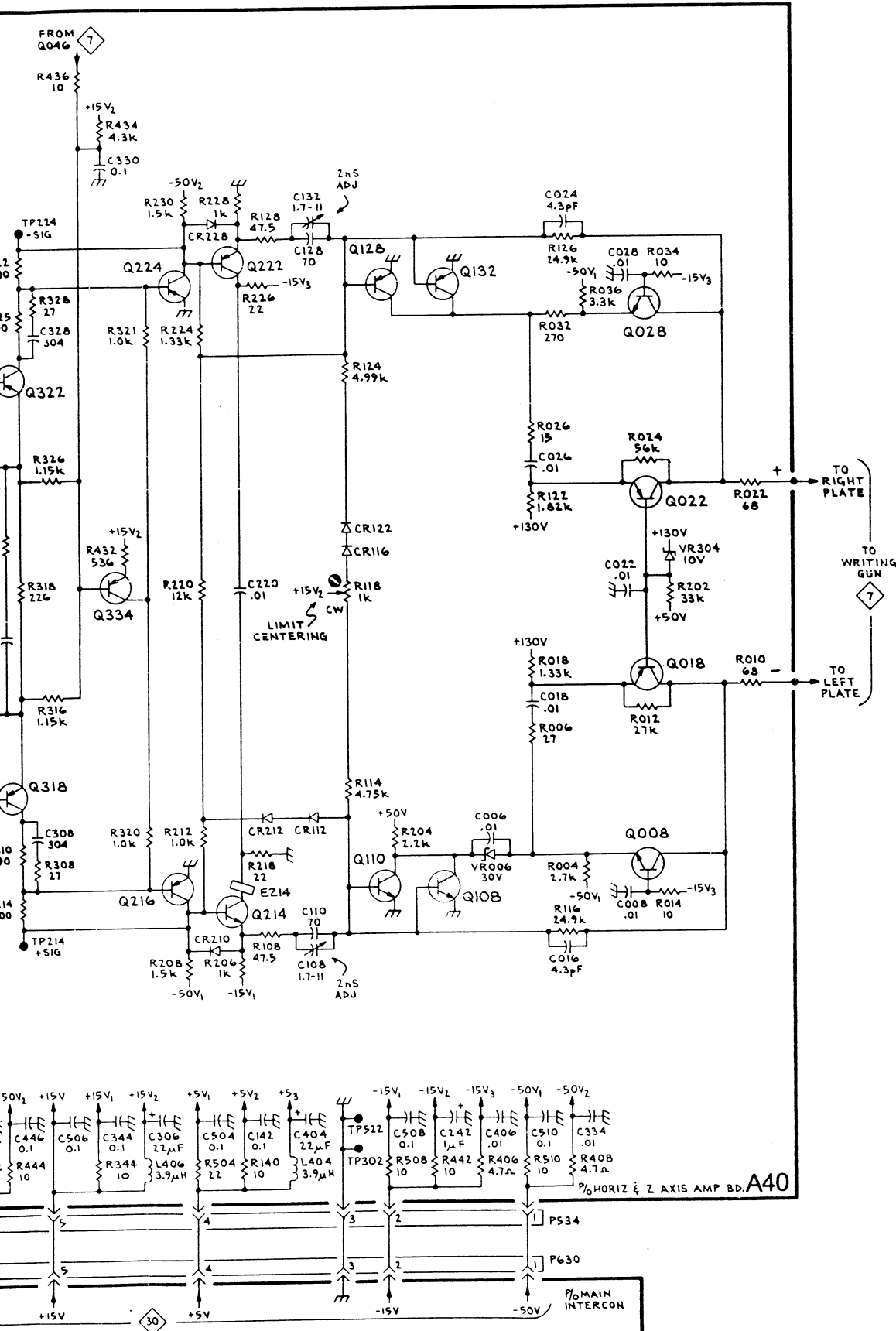
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HORIZONTAL AMPLIFIER  
(SN B100767 & up)

6

105) 2385-139  
EV JUL 1983

(SN B100767 & up) HORIZONTAL AMPLIFIER 6

| P/O A40 ASSY (SN B100766 & below) |                    |                |                |                    |                | HORIZONTAL AMPLIFIER 6 |                    |                |
|-----------------------------------|--------------------|----------------|----------------|--------------------|----------------|------------------------|--------------------|----------------|
| Circuit Number                    | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number         | Schematic Location | Board Location |
| C006                              | G4                 | A0             | Q008           | G4                 | A0             | R226                   | E2                 | C2             |
| C008                              | G5                 | A0             | Q018           | G4                 | A1             | R228                   | E2                 | C2             |
| C016                              | G5                 | A1             | Q022           | G3                 | A2             | R230                   | E2                 | C3             |
| C018                              | G4                 | B1             | Q028           | G2                 | A2             | R308                   | E4                 | D1             |
| C022                              | G3                 | A2             | Q108           | F4                 | B0             | R310                   | D4                 | D1             |
| C024                              | G2                 | A2             | Q110           | F4                 | B1             | R312                   | D3                 | D1             |
| C026                              | G3                 | A2             | Q128           | F2                 | B2             | R314                   | D3                 | D2             |
| C028                              | G2                 | A2             | Q132           | F2                 | B3             | R316                   | E4                 | D1             |
| C108                              | F5                 | B0             | Q214           | E5                 | C1             | R320                   | E4                 | D2             |
| C110                              | F5                 | B1             | Q216           | E4                 | C1             | R321                   | E2                 | D2             |
| C128                              | F2                 | B2             | Q222           | E2                 | C2             | R322                   | D3                 | D2             |
| C132                              | F2                 | B3             | Q224           | E2                 | C2             | R323                   | D3                 | D2             |
| C142                              | E5                 | B4             | Q318           | D4                 | D1             | R324                   | D4                 | D2             |
| C220                              | E3                 | C2             | Q322           | D2                 | D2             | R325                   | D2                 | D2             |
| C242                              | F5                 | C4             | Q334           | E3                 | D3             | R326                   | E3                 | D2             |
| C306                              | E5                 | D0             |                |                    |                | R328                   | E2                 | D2             |
| C308                              | E4                 | D1             |                |                    |                | R344                   | E6                 | D4             |
| C316                              | D3                 | D1             | R004           | G4                 | A0             | R406                   | G6                 | E0             |
| C326                              | D3                 | D2             | R006           | G4                 | A0             | R408                   | G6                 | E1             |
| C328                              | E2                 | D2             | R010           | H3                 | A1             | R412                   | D4                 | E1             |
| C330                              | D1                 | D3             | R012           | G4                 | A1             | R414                   | C4                 | E1             |
| C334                              | G5                 | D3             | R014           | G5                 | A1             | R416                   | C4                 | E1             |
| C344                              | E5                 | D4             | R018           | G4                 | B1             | R418                   | D3                 | E1             |
| C404                              | F5                 | E0             | R022           | H3                 | D2             | R420                   | C3                 | E2             |
| C406                              | G5                 | E0             | R024           | G3                 | A2             | R422                   | C2                 | E2             |
| C446                              | D5                 | E4             | R026           | G3                 | A2             | R424                   | C2                 | E2             |
| C502                              | D5                 | F0             | R032           | G2                 | A3             | R426                   | D1                 | E2             |
| C504                              | E5                 | F0             | R034           | G2                 | A3             | R428                   | D1                 | E2             |
| C506                              | E5                 | F0             | R036           | G2                 | A3             | R430                   | D1                 | E3             |
| C508                              | F5                 | F0             | R108           | E5                 | B0             | R432                   | E3                 | E3             |
| C510                              | G5                 | F1             | R114           | F4                 | B1             | R434                   | E1                 | E3             |
| C512                              | D5                 | F1             | R116           | G5                 | B1             | R436                   | E1                 | E3             |
|                                   |                    |                | R118           | F3                 | B1             | R442                   | F6                 | E4             |
|                                   |                    |                | R122           | G3                 | B2             | R444                   | D6                 | E4             |
| CR112                             | F4                 | B1             | R124           | F2                 | B2             | R502                   | D6                 | F0             |
| CR116                             | F3                 | B1             | R126           | G2                 | B2             | R504                   | E6                 | F0             |
| CR122                             | F3                 | B2             | R128           | E2                 | B3             | R508                   | F6                 | F0             |
| CR210                             | E5                 | C1             | R140           | E6                 | B4             | R510                   | G6                 | F1             |
| CR212                             | F4                 | C1             | R202           | G3                 | C0             | R512                   | D6                 | F1             |
| CR228                             | E2                 | C2             | R204           | F4                 | C0             |                        |                    |                |
|                                   |                    |                | R206           | E5                 | C0             | RT316                  | D4                 | D1             |
| L404                              | F6                 | E0             | R208           | E5                 | C0             |                        |                    |                |
| L406                              | E6                 | E0             | R212           | E4                 | C1             | TP214                  | D5                 | C1             |
|                                   |                    |                | R214           | D5                 | C1             | TP224                  | D2                 | C2             |
|                                   |                    |                | R218           | E4                 | C1             | TP522                  | F5                 | F2             |
| P412                              | C4                 | E1             | R220           | E3                 | C2             |                        |                    |                |
| P426                              | C2                 | E2             | R222           | D2                 | C2             | VR006                  | G4                 | A0             |
| P534                              | G6                 | F3             | R224           | E2                 | C2             | VR304                  | G3                 | D0             |

P/O A40 ASSY ALSO SHOWN ON 7

| P/O A46 ASSY (SN B100766 & below) |    |    |      |    |    | HORIZONTAL AMPLIFIER 6 |    |    |
|-----------------------------------|----|----|------|----|----|------------------------|----|----|
| C514                              | B4 | F1 | R318 | D3 | D2 | R532                   | A3 | F3 |
| C516                              | B5 | F1 | R516 | A2 | F1 | R536                   | A4 | F3 |
| C518                              | B4 | F1 | R518 | B5 | F1 | R612                   | B5 | G1 |
|                                   |    |    | R522 | A2 | F2 | R614                   | B5 | G1 |
| J626                              | A2 | G3 | R524 | B4 | F2 | R624                   | B4 | G2 |
| P420                              | A2 | F2 | R525 | B4 | F2 | R632                   | A3 | G3 |
| P536                              | C2 | F3 | R526 | A4 | F2 | R634                   | A3 | G3 |
| P538                              | C4 | F3 | R528 | A4 | F2 | R639                   | C4 | G3 |
| P630                              | A3 | G3 | R529 | B4 | F2 | U528                   | B3 | F2 |

P/O A46 ASSY ALSO SHOWN ON 2, 3, & 5

| P/O A68 ASSY |    |    |      |    |    | HORIZONTAL AMPLIFIER 6 |   |   |
|--------------|----|----|------|----|----|------------------------|---|---|
| P120         | A4 | B2 | P630 | G6 | G3 | —                      | — | — |

P/O A68 ASSY - SEE FIG. 7-37

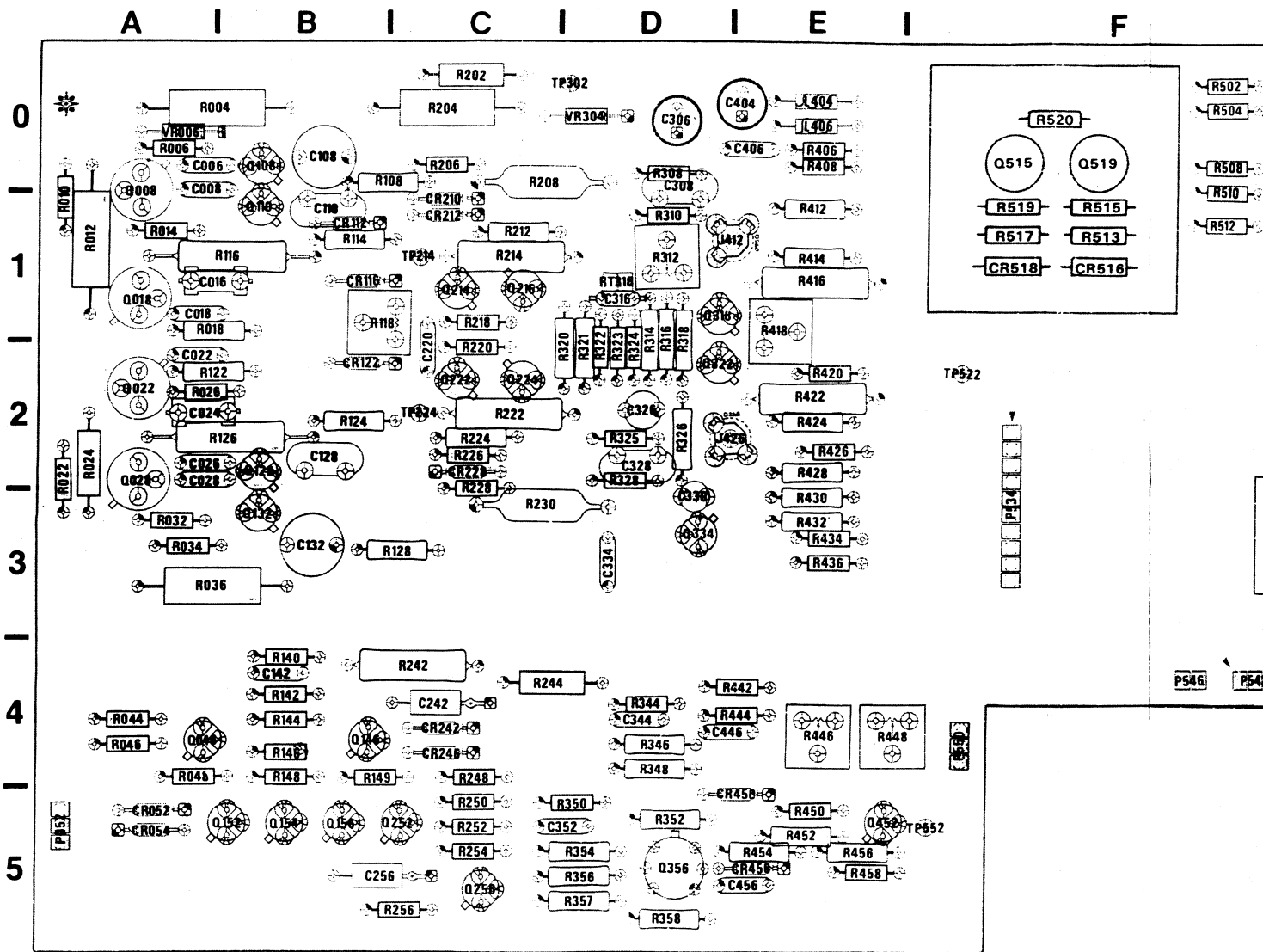
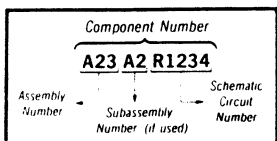
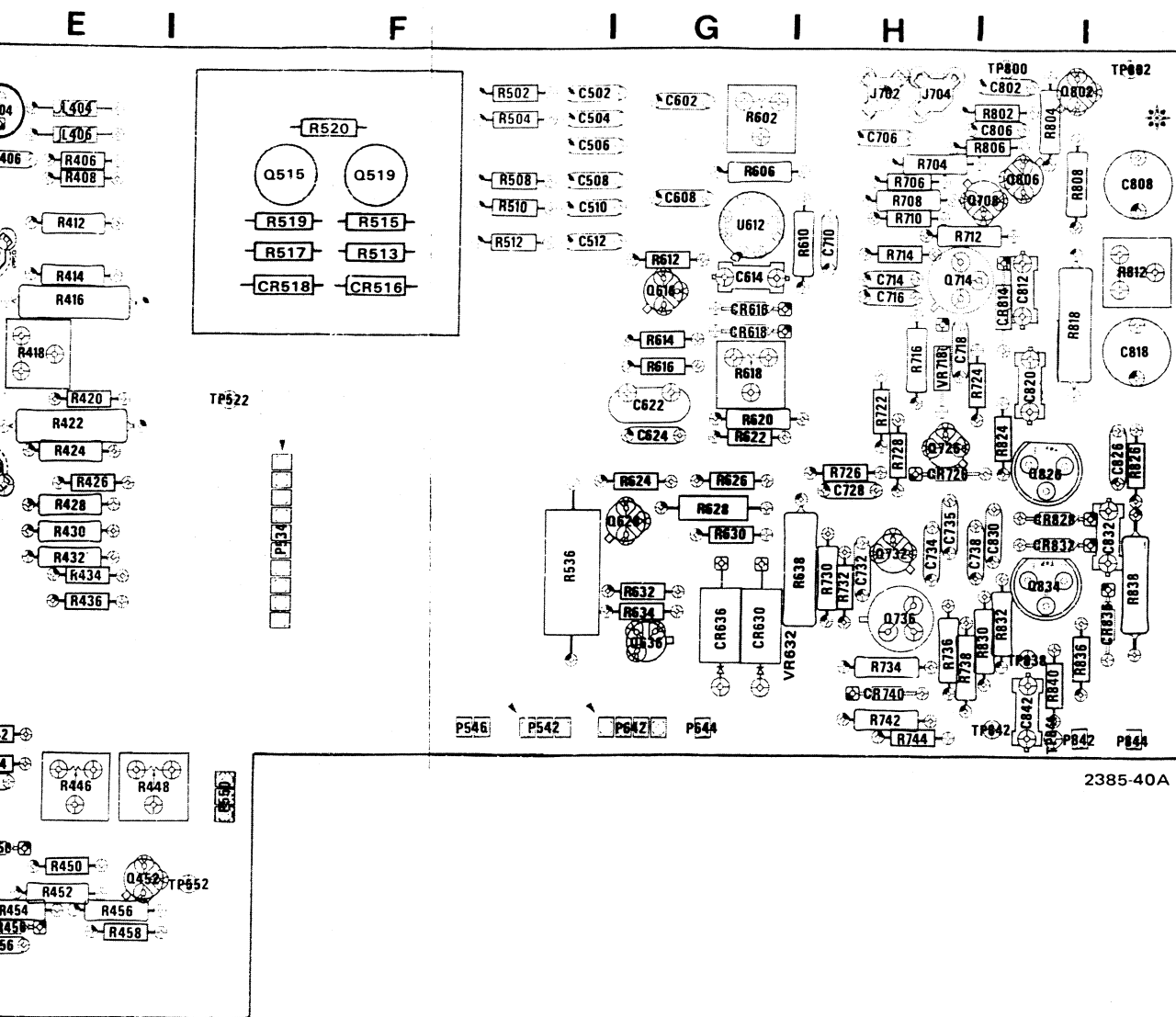


Fig. 7-11. The Horizontal and Z-Axis Amplifier circuit board, assembly A40 (SN B100766)

COMPONENT NUMBER EXAMPLE

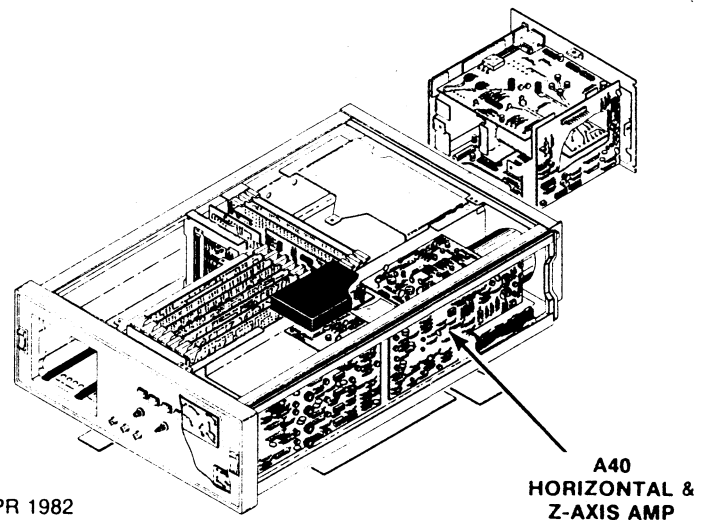


Basic mounted components have no Assembly Number prefix. See end of Replaceable Electrical Parts List



2385-40A

Z-Axis Amplifier circuit board, assembly A40 (SN B100766 & below).



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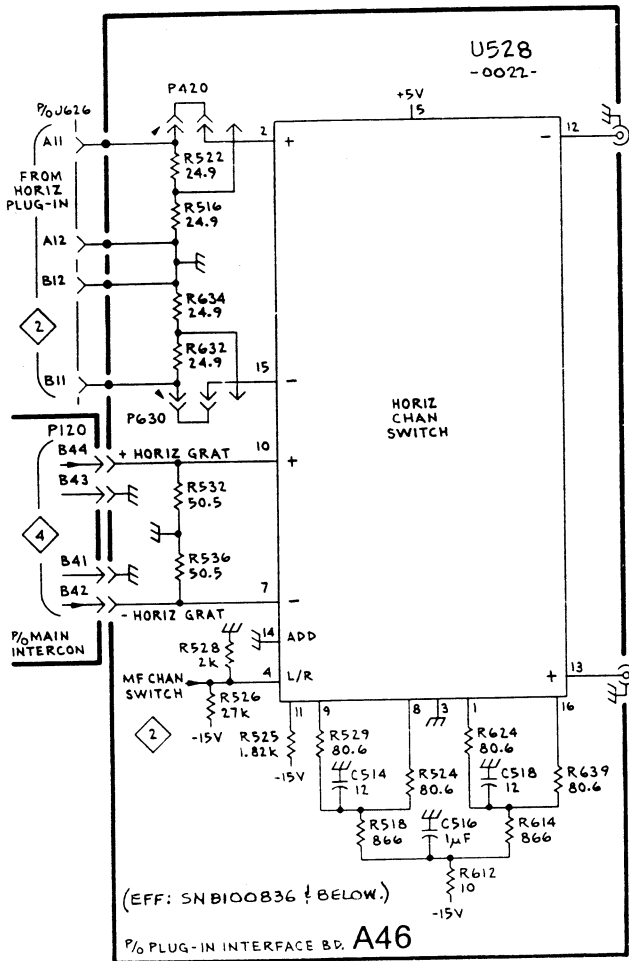
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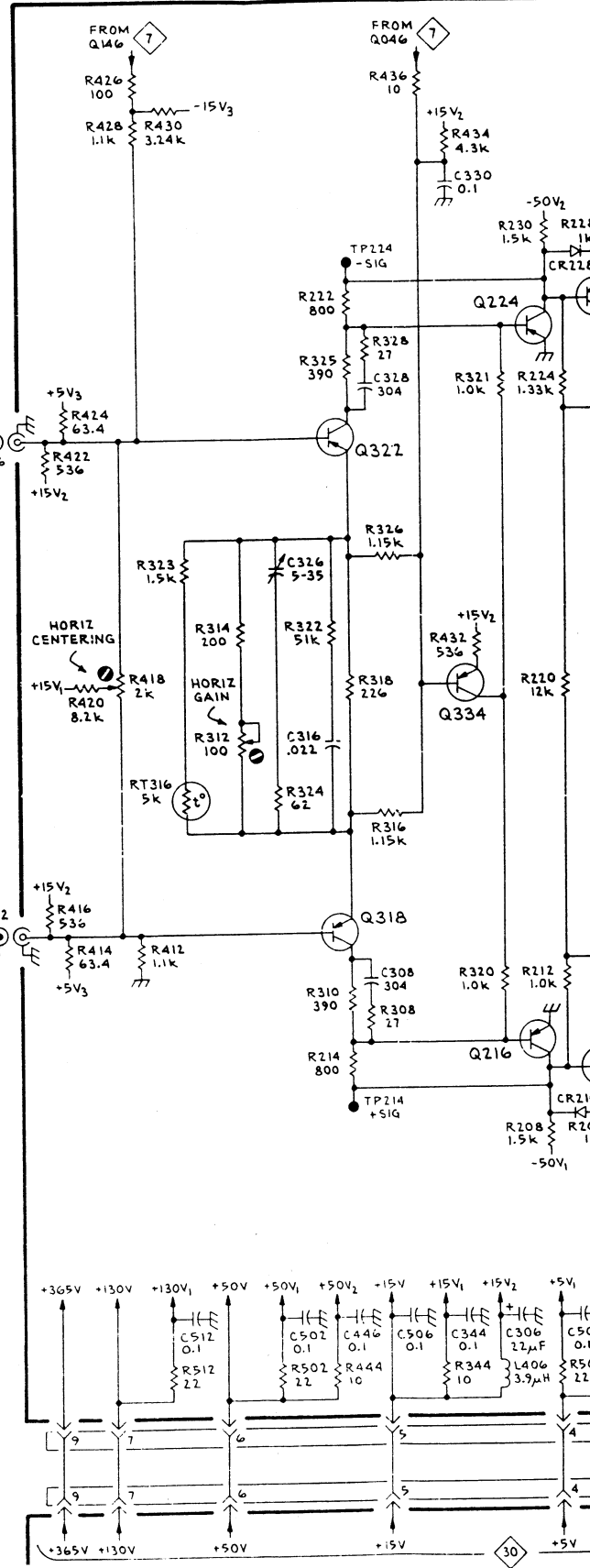
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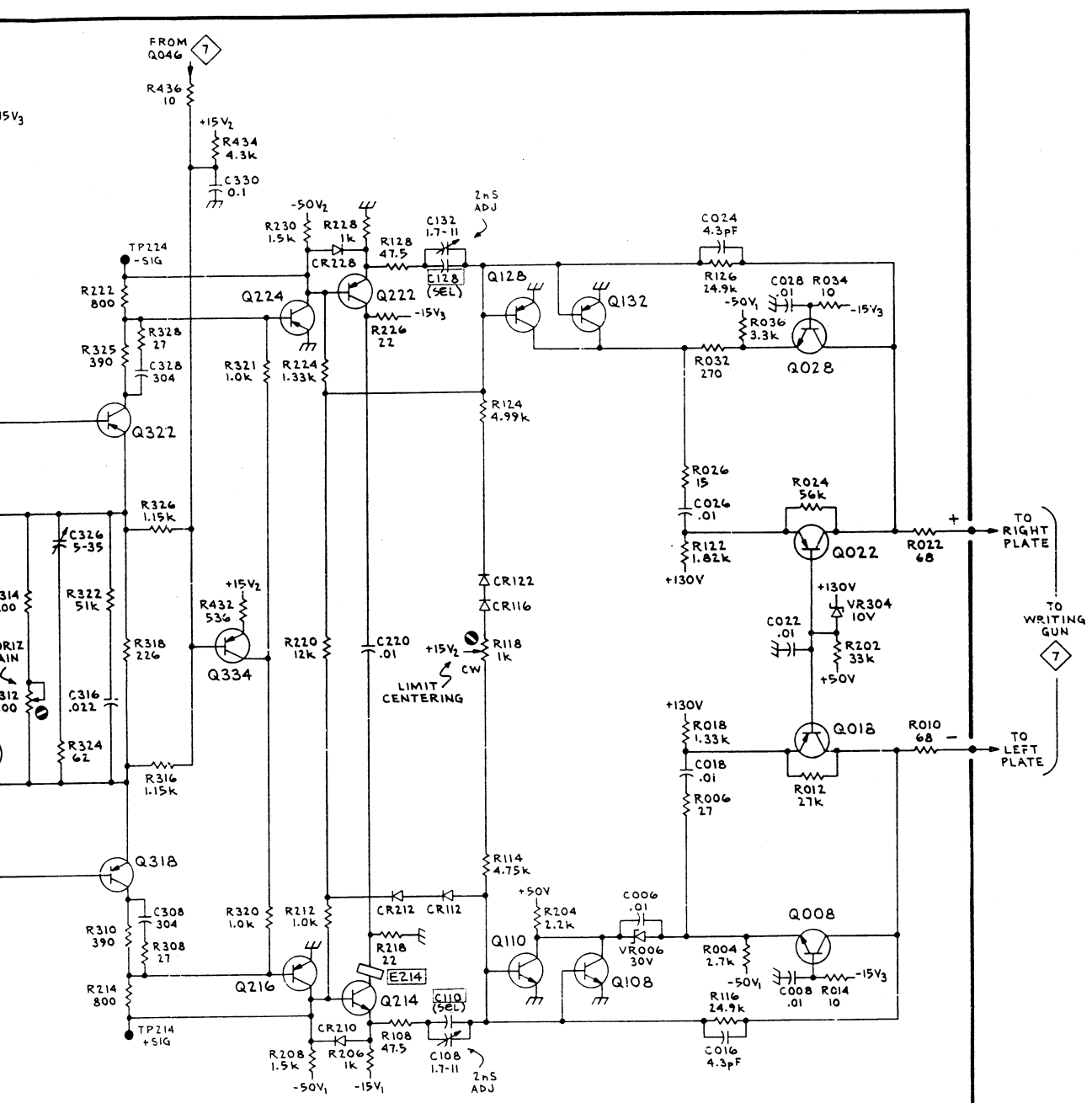
SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY.



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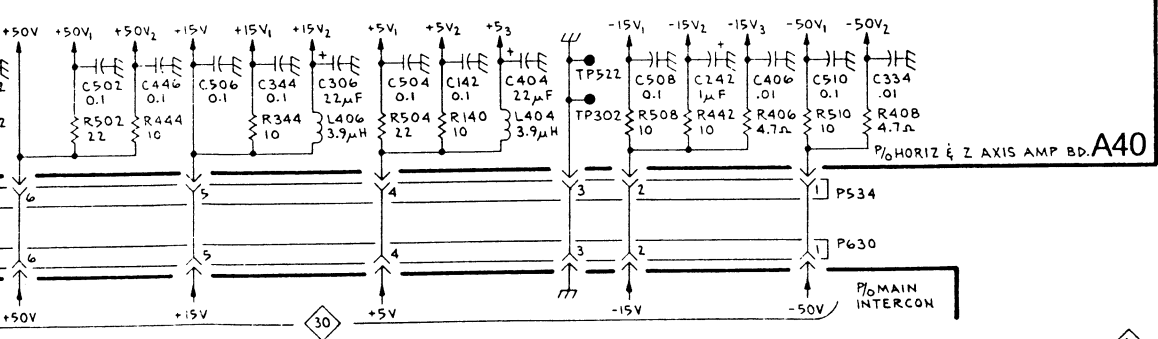
2385-105  
REV APR 1982





HORIZONTAL AMPLIFIER (SN B100766 & below)

6



2385-105 REV APR 1982

(SN B100766 & below) HORIZONTAL AMPLIFIER 6

P/O A40 ASSY (SN B100767 &amp; up)

Z-AXIS/HIGH VOLTAGE

7

| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C256           | G2                 | C5             | Q152           | H2                 | B5             | R616           | D1                 | G1             |
| C352           | G3                 | D5             | Q154           | H2                 | B5             | R618           | C1                 | G2             |
| C456           | F3                 | E5             | Q156           | G3                 | B5             | R620           | C1                 | G2             |
| C602           | A4                 | G0             | Q252           | G2                 | C5             | R622           | C2                 | G2             |
| C608           | B2                 | G0             | Q256           | G2                 | C5             | R624           | E5                 | G2             |
| C614           | B1                 | G1             | Q356           | G3                 | D5             | R626           | D5                 | G2             |
| C622           | C1                 | G2             | Q452           | F3                 | E5             | R628           | D5                 | G2             |
| C624           | C1                 | G2             | Q515           | B1                 | F1             | R630           | D5                 | G2             |
| C706           | B5                 | H0             | Q519           | B1                 | F1             | R632           | D3                 | G3             |
| C710           | C2                 | H1             | Q616           | B1                 | G1             | R634           | D3                 | G3             |
| C714           | B6                 | H1             | Q628           | D5                 | G2             | R638           | A6                 | H3             |
| C716           | B6                 | H1             | Q636           | D2                 | G3             | R704           | A5                 | H0             |
| C718           | B6                 | H1             | Q708           | A5                 | I0             | R706           | A5                 | H0             |
| C728           | C6                 | H2             | Q714           | B6                 | H1             | R708           | A5                 | H0             |
| C732           | C5                 | H3             | Q726           | C6                 | H2             | R710           | B5                 | H1             |
| C734           | B5                 | H3             | Q732           | C5                 | H3             | R712           | A5                 | H1             |
| C735           | C6                 | H3             | Q736           | B6                 | I0             | R714           | B5                 | H1             |
| C738           | C5                 | H3             | Q802           | A6                 | I0             | R716           | B6                 | H1             |
| C802           | A5                 | I0             | Q806           | B6                 | I0             | R722           | C5                 | H2             |
| C806           | A5                 | I0             | Q826           | C6                 | I2             | R724           | B6                 | H2             |
| C808           | B5                 | I0             | Q834           | C5                 | I3             | R726           | C6                 | H2             |
| C812           | B5                 | I1             |                |                    |                | R728           | C6                 | H2             |
| C818           | B5                 | I1             | R044           | H2                 | A4             | R730           | C5                 | H3             |
| C820           | B5                 | I2             | R046           | H2                 | A4             | R732           | C5                 | H3             |
| C826           | D5                 | I1             | R048           | H2                 | A4             | R734           | B5                 | H3             |
| C830           | C5                 | I3             | R142           | H2                 | B4             | R736           | B6                 | H3             |
| C832           | D5                 | I3             | R144           | H3                 | B4             | R738           | B6                 | H3             |
| C842           | D4                 | I4             | R146           | H3                 | B4             | R742           | B5                 | H4             |
| C5202          | E1                 | CHASSIS        | R148           | H3                 | B4             | R744           | D5                 | H4             |
|                |                    |                | R149           | G3                 | C4             | R802           | A6                 | I0             |
|                |                    |                | R242           | H3                 | C4             | R804           | A6                 | I0             |
| CR052          | H2                 | A5             | R244           | H3                 | C4             | R806           | B5                 | I0             |
| CR054          | H2                 | A5             | R248           | G3                 | G4             | R808           | B5                 | I0             |
| CR242          | H3                 | C4             | R250           | G2                 | C5             | R812           | B5                 | I1             |
| CR246          | H3                 | C4             | R252           | G3                 | C5             | R818           | B5                 | I1             |
| CR450          | F3                 | E5             | R254           | G2                 | C5             | R824           | C6                 | I2             |
| CR456          | F3                 | E5             | R256           | G2                 | C5             | R826           | D5                 | I2             |
| CR516          | A1                 | F1             | R346           | G2                 | D4             | R830           | C5                 | I3             |
| CR518          | A1                 | F1             | R348           | G3                 | D4             | R832           | C5                 | I3             |
| CR616          | C2                 | G1             | R350           | G2                 | D5             | R836           | D5                 | I3             |
| CR618          | C1                 | G1             | R352           | F3                 | D5             | R838           | C5                 | I3             |
| CR630          | E5                 | G3             | R354           | G3                 | D5             | R840           | D5                 | I4             |
| CR636          | D5                 | G3             | R356           | G3                 | D5             | R5200          | E3                 | CHASSIS        |
| CR726          | C6                 | HG2            | R357           | G3                 | D5             | R5201          | E1                 | CHASSIS        |
| CR740          | B5                 | H4             | R358           | G3                 | D5             | R5202          | E1                 | CHASSIS        |
| CR814          | B5                 | I1             | R446           | D1                 | E4             | R5204          | E1                 | CHASSIS        |
| CR828          | C5                 | I2             | R448           | F2                 | E4             | R5206          | E1                 | CHASSIS        |
| CR832          | C5                 | I3             | R450           | F3                 | E5             |                |                    |                |
| CR836          | C5                 | I3             | R452           | F3                 | E5             | T5300          | B3                 | CHASSIS        |
| CR5204         | E3                 | CHASSIS        | R454           | F3                 | E5             |                |                    |                |
|                |                    |                | R456           | F3                 | E5             | TP552          | F3                 | F5             |
| P542           | C1                 | I3             | R458           | F3                 | E5             | TP802          | A6                 | I0             |
| P546           | A2                 | F4             | R513           | A1                 | F1             | TP838          | D4                 | I3             |
| P550           | F2                 | F4             | R515           | A1                 | F1             | TP842          | C5                 | I4             |
| P642           | B4                 | G4             | R517           | A1                 | F1             | TP844          | D4                 | I4             |
| P702           | A5                 | H0             | R519           | B1                 | F1             |                |                    |                |
| P704           | A6                 | H0             | R520           | B1                 | F2             | U612           | B2                 | G1             |
| P842           | D4                 | I4             | R536           | D2                 | F3             |                |                    |                |
| P844           | D4                 | I4             | R602           | A4                 | G0             | V5200          | E1                 | CHASSIS        |
| P5200          | E3                 | CHASSIS        | R610           | C2                 | H1             |                |                    |                |
|                |                    |                | R612           | B1                 | F1             | VR632          | E5                 | G3             |
| Q046           | H2                 | B4             | R614           | A2                 | G1             | VR718          | B6                 | H1             |
| Q146           | H3                 | B4             |                |                    |                |                |                    |                |

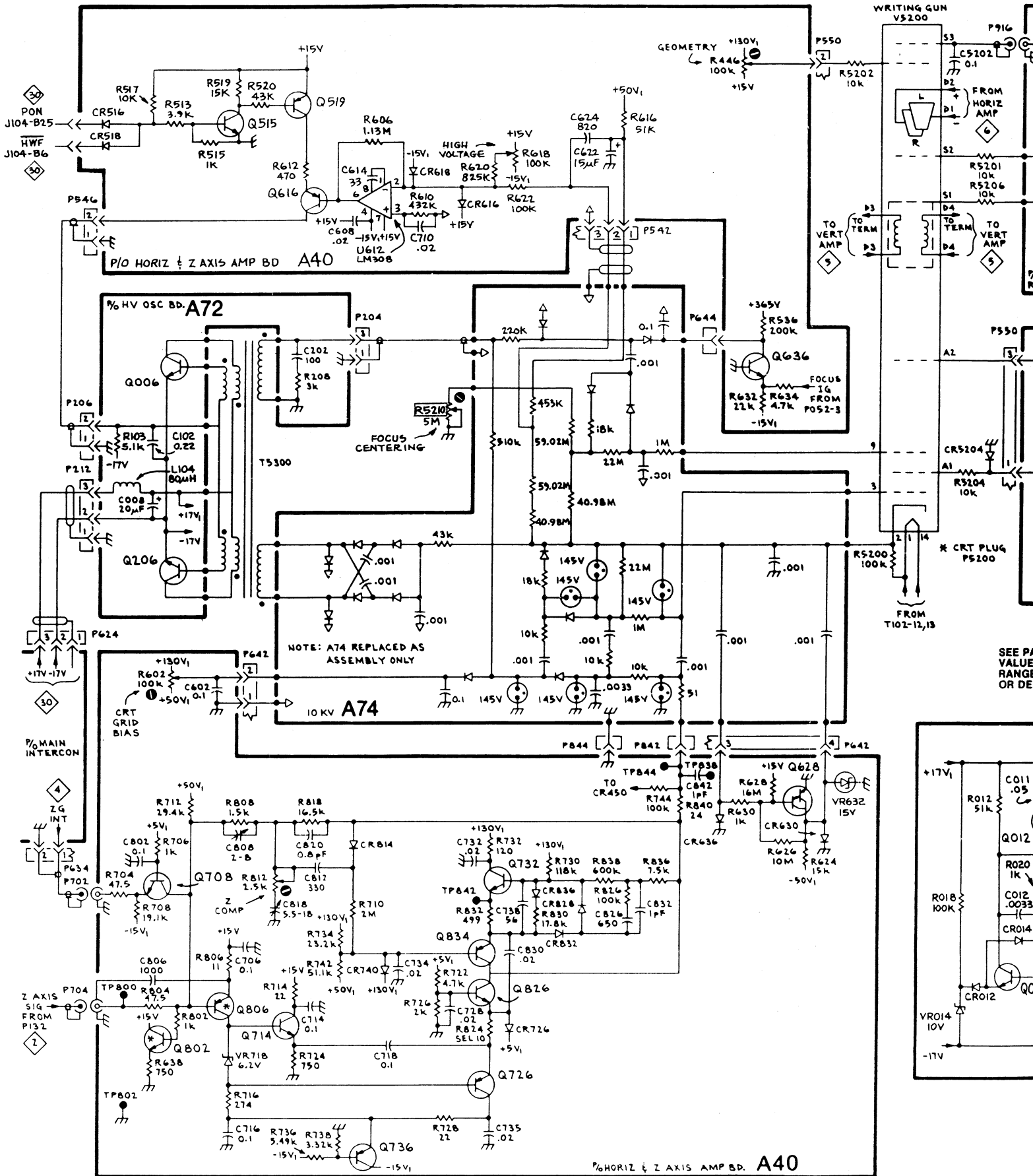
A

B

C

D

E

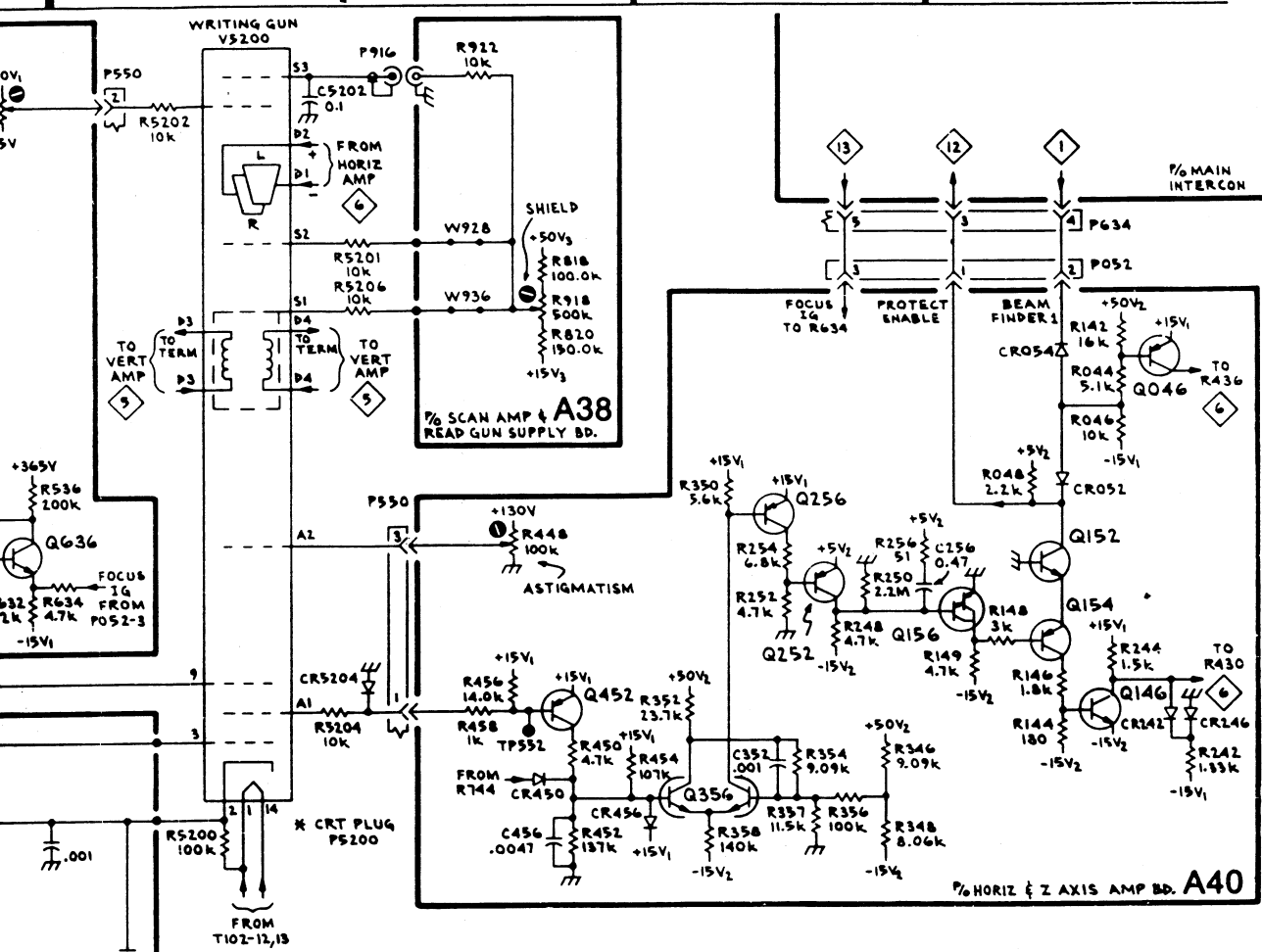


E

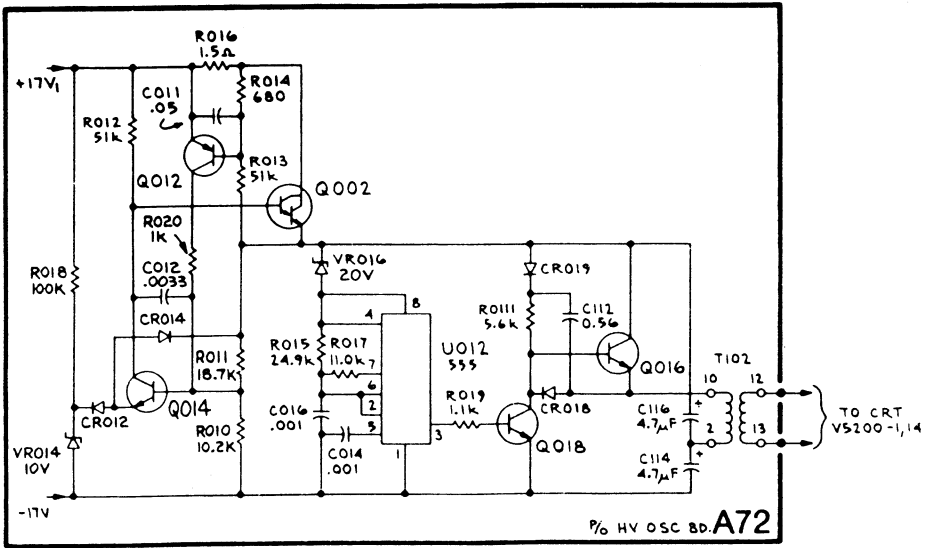
F

G

H



SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY.



\* MATCHED PAIR

bd. A40

2385-134  
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(SN B100767 & UP) Z-AXIS/HIGH VOLTAGE 7

Scans by Outsource-Options =>

Z-AXIS/HIGH VOLTAGE  
(SN B100767 & up)

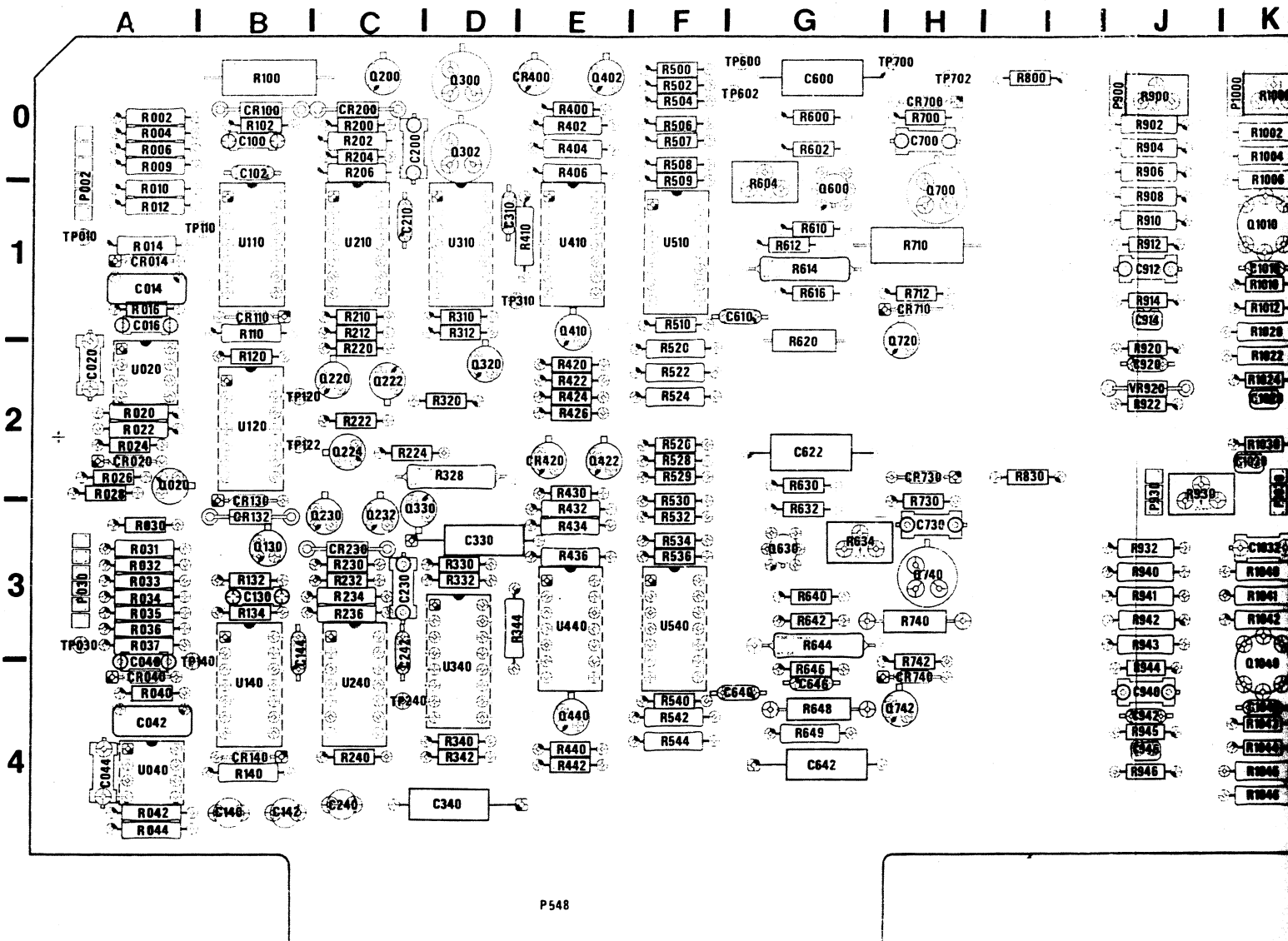
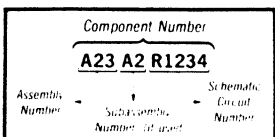


Fig. 7-13. The X and Y Ramp Generator circuit board, assembly A26.

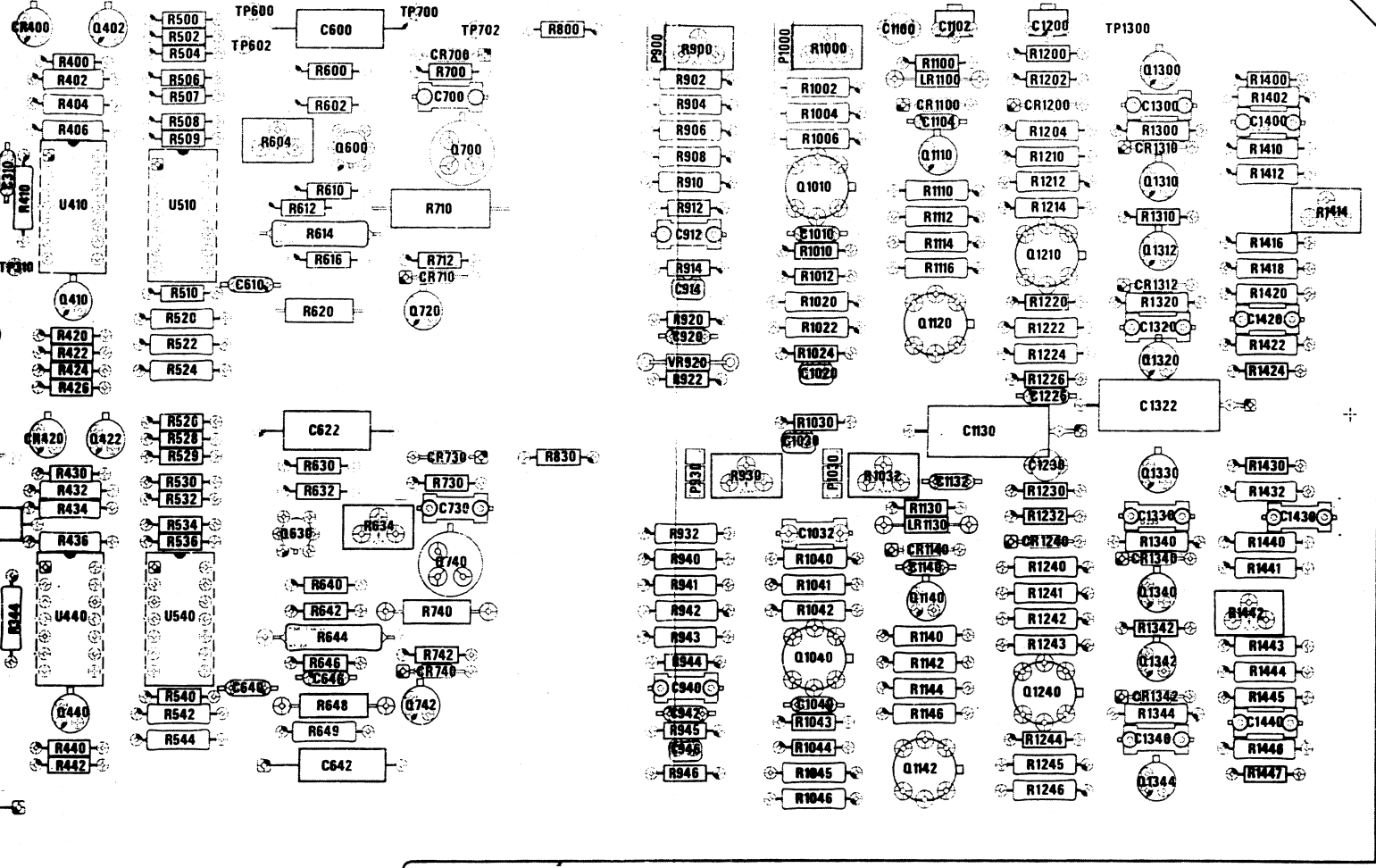
A26  
X & Y RAMP  
GENERATOR

COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix. See end of Replaceable Electrical Part List.

I E I F I G I H I I J I K I L I M I N I O

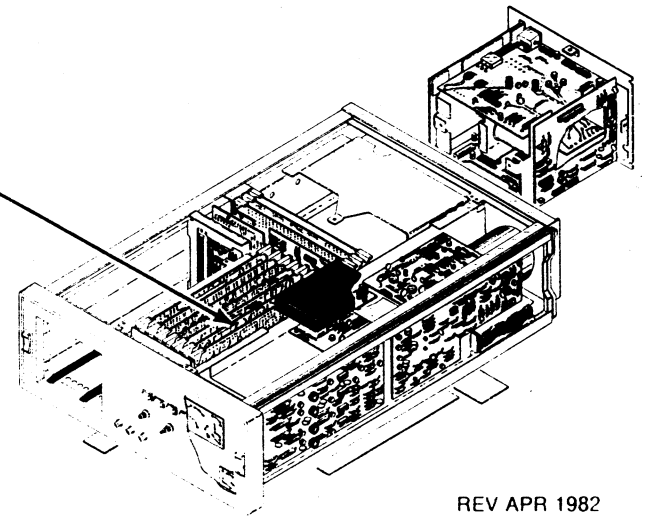


P548

2385-42

Ramp Generator circuit board, assembly A26.

A26  
X & Y RAMP  
GENERATOR



REV APR 1982

| P/O A38 ASSY   |                    |                |                |                    |                |                |                    |                |                |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number |
| P916           | F1                 | J1             | R818<br>R820   | F1<br>F2           | I1<br>I1       | R918<br>R922   | F1<br>F1           | J1<br>J2       | W928<br>W936   |

P/O A38 ASSY ALSO SHOWN ON 9 & 10

| P/O A40 ASSY (SN B100766 & below) |    |         |        |    |         |       |    |    |       |
|-----------------------------------|----|---------|--------|----|---------|-------|----|----|-------|
| C256                              | G2 | C5      | CR832  | C5 | I3      | R242  | H3 | C4 | R712  |
| C352                              | G3 | D5      | CR836  | C5 | I3      | R244  | H3 | C4 | R714  |
| C456                              | F3 | E5      | CR5204 | E3 | CHASSIS | R248  | G3 | C4 | R716  |
| C602                              | A4 | G0      | P542   | C1 | F4      | R250  | G2 | C5 | R716  |
| C608                              | A2 | G1      | P546   | A2 | F4      | R252  | G3 | C5 | R722  |
| C614                              | A1 | G1      | P550   | F2 | F5      | R254  | G2 | C5 | R724  |
| C622                              | C1 | G2      | P642   | B4 | G4      | R256  | G2 | C5 | R726  |
| C624                              | C1 | G2      | P642   | D4 | G4      | R346  | G3 | D4 | R728  |
| C706                              | B5 | H0      | P644   | D2 | G4      | R348  | G3 | D4 | R730  |
| C710                              | B2 | H1      | P702   | A5 | H0      | R350  | G2 | D5 | R734  |
| C714                              | B6 | H1      | P704   | A6 | H0      | R352  | F3 | D5 | R736  |
| C716                              | B6 | H1      | P842   | D4 | I4      | R354  | G3 | D5 | R738  |
| C718                              | B6 | H1      | P844   | D4 | I4      | R356  | G3 | D5 | R742  |
| C718                              | B6 | H1      | P5200  | E3 | CHASSIS | R357  | G3 | D5 | R744  |
| C728                              | C6 | H2      | Q046   | H2 | A4      | R358  | G3 | D5 | R802  |
| C732                              | C5 | H3      | Q146   | H3 | B4      | R446  | D1 | E4 | R804  |
| C734                              | B5 | H4      | Q152   | H2 | B5      | R448  | F2 | E4 | R806  |
| C735                              | C6 | H3      | Q154   | H3 | B5      | R450  | F3 | E5 | R808  |
| C738                              | C5 | H3      | Q156   | G3 | B5      | R452  | F3 | E5 | R812  |
| C802                              | A5 | I0      | Q252   | G2 | C5      | R454  | F3 | E5 | R818  |
| C806                              | A5 | I0      | Q256   | G2 | C5      | R456  | F3 | E5 | R824  |
| C808                              | B5 | I0      | Q356   | G3 | D5      | R458  | F3 | E5 | R826  |
| C812                              | B5 | I1      | Q452   | F3 | E5      | R513  | A1 | F1 | R830  |
| C818                              | B5 | I2      | Q515   | B1 | F0      | R515  | B1 | F1 | R832  |
| C820                              | B5 | I2      | Q519   | B1 | F0      | R517  | A1 | F1 | R836  |
| C826                              | D5 | I2      | Q616   | A1 | G1      | R519  | A1 | F1 | R838  |
| C830                              | C5 | I3      | Q628   | D5 | G2      | R520  | B1 | F0 | R840  |
| C832                              | D5 | I3      | Q636   | D2 | G3      | R536  | D2 | F3 | R5200 |
| C842                              | D4 | I4      | Q708   | A5 | H1      | R602  | A4 | G0 | R5201 |
| C5202                             | E1 | CHASSIS | Q714   | B6 | H1      | R606  | A1 | G0 | R5202 |
| CR052                             | H2 | A5      | Q726   | C6 | H2      | R610  | B1 | G1 | R5204 |
| CR054                             | H2 | A5      | Q732   | C5 | H3      | R612  | A1 | G1 | R5206 |
| CR242                             | H3 | C4      | Q736   | B6 | H3      | R614* | A2 | G1 | T5300 |
| CR246                             | H3 | C4      | Q802   | A6 | I0      | R616  | C1 | G2 | TP302 |
| CR450                             | F3 | E4      | Q806   | B6 | I0      | R618  | B1 | G2 | TP552 |
| CR456                             | F3 | E5      | Q826   | C5 | I2      | R620  | B1 | G2 | TP800 |
| CR516                             | A1 | F1      | Q834   | C5 | I3      | R622  | B1 | G2 | TP802 |
|                                   | A1 |         | R044   | H2 | A4      | R624  | E5 | G2 | TP838 |
| CR616                             | B2 | G1      | R046   | H2 | A4      | R626  | D5 | G2 | TP842 |
| CR618                             | B1 | G1      | R048   | H2 | A4      | R628  | D5 | G2 | TP844 |
| CR630                             | E5 | G3      | R142   | H2 | B4      | R630  | D5 | G3 |       |
| CR636                             | D5 | G3      | R144   | H3 | B4      | R632* | D2 | G3 | U612  |
| CR726                             | C6 | H2      | R146   | H3 | B4      | R634  | D2 | G3 |       |
| CR740                             | B5 | H4      | R148   | H3 | B4      | R638  | A6 | G3 | V5200 |
| CR814                             | B5 | I1      | R149   | G3 | B5      | R706  | A5 | H1 | VR632 |
| CR828                             | C5 | I2      |        |    |         | R710  | B5 | H1 | VR718 |

P/O A40 ASSY ALSO SHOWN ON 6

| P/O A68 ASSY |    |    |      |    |    |     |     |     |     |
|--------------|----|----|------|----|----|-----|-----|-----|-----|
| P624         | A4 | G2 | P634 | A5 | G3 | --- | --- | --- | --- |

P/O A68 ASSY - SEE FIG. 7-37

| A72 ASSY |    |    |       |    |    |      |    |    |       |
|----------|----|----|-------|----|----|------|----|----|-------|
| C008     | A3 | A0 | CR018 | G5 | A1 | Q016 | G5 | A1 | R019  |
| C011*    | F5 | A1 | CR019 | G5 | A1 | Q018 | G6 | A1 | R020* |
| C012     | F5 | A1 |       |    |    | Q206 | A3 | C0 | R103* |
| C014     | F6 | A1 | L104  | A3 | B0 |      |    |    | R208  |
| C016     | F5 | A1 |       |    |    | R010 | F6 | A1 | R0111 |
| C102     | A3 | B0 | P204  | B2 | C0 | R011 | F5 | A1 |       |
| C112     | G5 | B1 | P206  | A3 | C0 | R012 | F5 | A1 | T102  |
| C114     | G6 | B1 | P212  | A3 | C1 | R013 | F5 | A1 |       |
| C116     | G6 | B1 |       |    |    | R014 | F5 | A1 | U012  |
| C202     | B2 | C0 | Q002  | F5 | A0 | R015 | F5 | A1 |       |
|          |    |    | Q006  | A2 | A0 | R016 | F5 | A1 | VR014 |
| CR012    | E5 | A1 | Q012  | F5 | A1 | R017 | F5 | A1 | VR016 |
| CR014*   | F5 | A1 | Q014  | F5 | A1 | R018 | E5 | A1 |       |

Z-AXIS/HIGH VOLTAGE 7

| Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| J1             | R818<br>R820   | F1<br>F2           | I1<br>I1       | R918<br>R922   | F1<br>F1           | J1<br>J2       | W928<br>W936   | F1<br>F2           | J2<br>J3       |

P/O A38 ASSY ALSO SHOWN ON 9 & 10

Z-AXIS/HIGH VOLTAGE 7

| Board Location  | Circuit Number  | Schematic Location   | Board Location   | Circuit Number   | Schematic Location   | Board Location   | Circuit Number   | Schematic Location   | Board Location  |
|---|---|--|--|--|--|--|--|--|---|
| C5<br>D5<br>E5<br>G0<br>G1<br>G1<br>G2<br>G2<br>H0<br>H1<br>H1<br>H1<br>H1<br>H1<br>H1<br>H1<br>H2<br>H3<br>H4<br>H3<br>H3<br>I0<br>I0<br>I0<br>I1<br>I2<br>I2<br>I2<br>I3<br>I3<br>I4<br>CHASSIS<br>A5<br>A5<br>C4<br>C4<br>E4<br>E5<br>F1<br><br>G1<br>G1<br>G3<br>G3<br>H2<br>H4<br>I1<br>I2 | CR832<br>CR836<br>CR5204<br>P542<br>P546<br>P550<br>P642<br>P642<br>P644<br>P702<br>P704<br>P842<br>P844<br>P5200<br>Q046<br>Q146<br>Q152<br>Q154<br>Q156<br>Q252<br>Q256<br>Q356<br>Q452<br>Q515<br>Q519<br>Q616<br>Q628<br>Q636<br>Q708<br>Q714<br>Q726<br>Q732<br>Q736<br>Q802<br>Q806<br>Q826<br>Q834<br>R044<br>R046<br>R048<br>R142<br>R144<br>R146<br>R148<br>R149 | C5<br>C5<br>E3<br>C1<br>A2<br>F2<br>B4<br>D4<br>D2<br>A5<br>A6<br>D4<br>D4<br>E3<br>H2<br>H3<br>H2<br>H3<br>G3<br>G2<br>G2<br>G3<br>F3<br>B1<br><br>A1<br>D5<br>D2<br>A5<br>B6<br>C6<br>C5<br>B6<br>A6<br>C5<br>C5<br>H2<br>H2<br>H2<br>H2<br>H3<br>H3<br>H3<br>G3 | I3<br>I3<br>CHASSIS<br>F4<br>F4<br>F5<br>G4<br>G4<br>G4<br>H0<br>H0<br>I4<br>I4<br>CHASSIS<br>A4<br>B4<br>B5<br>B5<br>C5<br>C5<br>D5<br>E5<br>F0<br>F0<br>G1<br>G2<br>G3<br>H1<br>H1<br>H2<br>H3<br>H3<br>I0<br>I0<br>I2<br>I3<br>A4<br>A4<br>A4<br>B4<br>B4<br>B4<br>B4<br>B5 | R242<br>R244<br>R248<br>R250<br>R252<br>R254<br>R256<br>R346<br>R348<br>R350<br>R352<br>R354<br>R356<br>R357<br>R358<br>R446<br>R448<br>R450<br>R452<br>R454<br>R456<br>R458<br>R513<br>R515<br>R517<br>R519<br>R520<br>R536<br>R602<br>R606<br>R610<br>R612<br>R614*<br>R616<br>R618<br>R620<br>R622<br>R624<br>R626<br>R628<br>R630<br>R632*<br>R634<br>R638<br>R706<br>R710 | H3<br>H3<br>G3<br>G2<br>G3<br>G2<br>G2<br>G3<br>G3<br>G2<br>F3<br>G3<br>G3<br>G3<br>D1<br>F2<br>F3<br>F3<br>F3<br>F3<br>A1<br>B1<br>A1<br>A1<br>B1<br>D2<br>A4<br>A1<br>B1<br>A1<br>B1<br>B1<br>E5<br>D5<br>D5<br>D5<br>D2<br>D2<br>A6<br>A5<br>B5 | C4<br>C4<br>C4<br>C5<br>C5<br>C5<br>D4<br>D4<br>D5<br>D5<br>D5<br>D5<br>E4<br>E4<br>E5<br>E5<br>E5<br>F1<br>F1<br>F1<br>F1<br>F0<br>F3<br>G0<br>G0<br>G1<br>G1<br>G1<br>G2<br>G2<br>G2<br>G2<br>G2<br>G2<br>G3<br>G3<br>G3<br>G3<br>H1<br>H1 | R712<br>R714<br>R716<br>R716<br>R722<br>R724<br>R726<br>R728<br>R730<br>R734<br>R736<br>R738<br>R742<br>R744<br>R802<br>R804<br>R806<br>R808<br>R812<br>R818<br>R824<br>R826<br>R830<br>R832<br>R836<br>R838<br>R840<br>R5200<br>R5201<br>R5202<br>R5204<br>R5206<br>T5300<br>TP302<br>TP552<br>TP800<br>TP802<br>TP838<br>TP842<br>TP844<br><br>U612<br><br>V5200<br>VR632<br>VR718 | A5<br>B5<br>B6<br>B6<br>C5<br>B6<br>C6<br>C6<br>C5<br>B5<br>B6<br>B6<br>B5<br>D5<br>D5<br>A6<br>A6<br>B5<br>B5<br>B5<br>B5<br>C6<br>D5<br>C5<br>C5<br>D5<br>C5<br>D5<br>E3<br>E1<br>E1<br>E3<br>E1<br>B3<br>F6<br>F3<br>A5<br>A6<br>D4<br>C5<br>D4<br><br>B1<br><br>E1<br>E5<br>B6 | H1<br>H1<br>H1<br>H2<br>H2<br>H2<br>H2<br>H3<br>H3<br>H4<br>H4<br>H3<br>H3<br>I0<br>I0<br>I0<br>I1<br>I1<br>I1<br>I1<br>I2<br>I2<br>I3<br>I3<br>I4<br>CHASSIS<br>CHASSIS<br>CHASSIS<br>CHASSIS<br>CHASSIS<br>CHASSIS<br>D0<br>F5<br>I0<br>I0<br>I3<br>I4<br><br>G1<br><br>CHASSIS<br>G3<br>H1 |

P/O A40 ASSY ALSO SHOWN ON 6

Z-AXIS/HIGH VOLTAGE 7

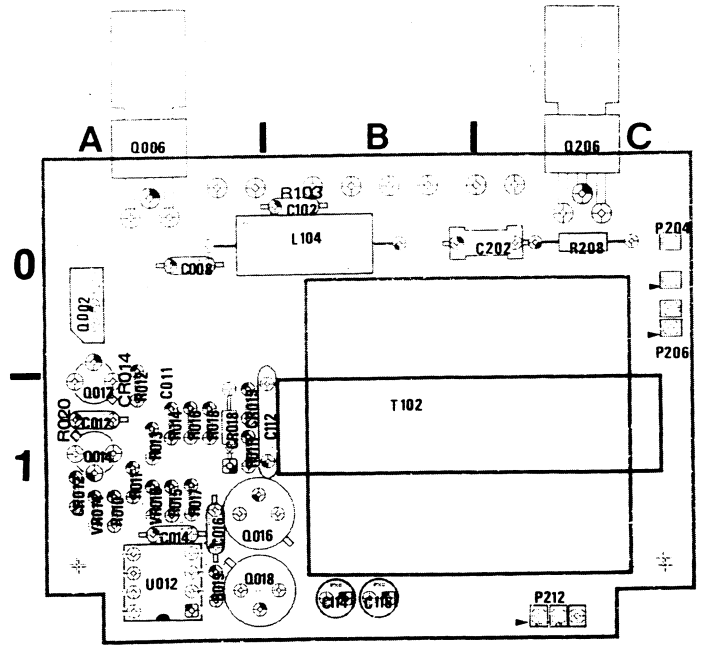
|    |      |    |    |     |     |     |     |     |     |
|----|------|----|----|-----|-----|-----|-----|-----|-----|
| G2 | P634 | A5 | G3 | --- | --- | --- | --- | --- | --- |
|----|------|----|----|-----|-----|-----|-----|-----|-----|

P/O A68 ASSY - SEE FIG. 7-37

Z-AXIS/HIGH VOLTAGE 7

|  |  |  |  |  |  |  |   |  |  |
|--|--|--|--|--|--|--|---|--|--|
| A0<br>A1<br>A1<br>A1<br>A1<br>B0<br>B1<br>B1<br>B1<br>C0<br><br>A1<br>A1 | CR018<br>CR019<br><br>L104<br><br>P204<br>P206<br>P212<br><br>Q002<br>Q006<br>Q012<br>Q014 | G5<br>G5<br><br>A3<br><br>B2<br>A3<br>A3<br><br>F5<br>A2<br>F5<br>F5 | A1<br>A1<br><br>B0<br><br>C0<br>C0<br>C1<br><br>A0<br>A0<br>A1<br>A1 | Q016<br>Q018<br>Q206<br><br>R010<br>R011<br>R012<br>R013<br>R014<br>R015<br>R016<br>R017<br>R018 | G5<br>G6<br>A3<br><br>F6<br>F5<br>F5<br>F5<br>F5<br>F5<br>F5<br>F5<br>E5 | A1<br>A1<br>C0<br><br>A1<br>A1<br>A1<br>A1<br>A1<br>A1<br>A1<br>A1<br>A1 | R019<br>R020*<br>R103*<br>R208<br>R0111<br><br>T102<br><br>U012<br><br>VR014<br>VR016 | F6<br>F5<br>A3<br>B2<br>G5<br><br>G5<br><br>F5<br>E6<br>F5 | A1<br>A1<br>B0<br>C0<br>A1<br><br>B1<br><br>A1<br><br>A1<br>A1 |
|--|--|--|--|--|--|--|---|--|--|

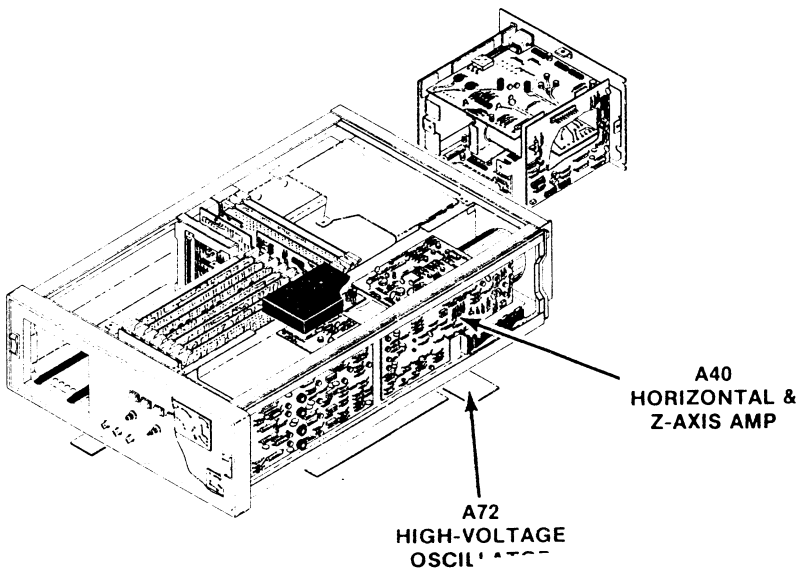




2385-41 A

Fig. 7-12. The High-Voltage Oscillator circuit board, assembly A72.

Parts List for  
Number ranges.



A I B I C I D I E I F I G I

0  
1  
2  
3  
4

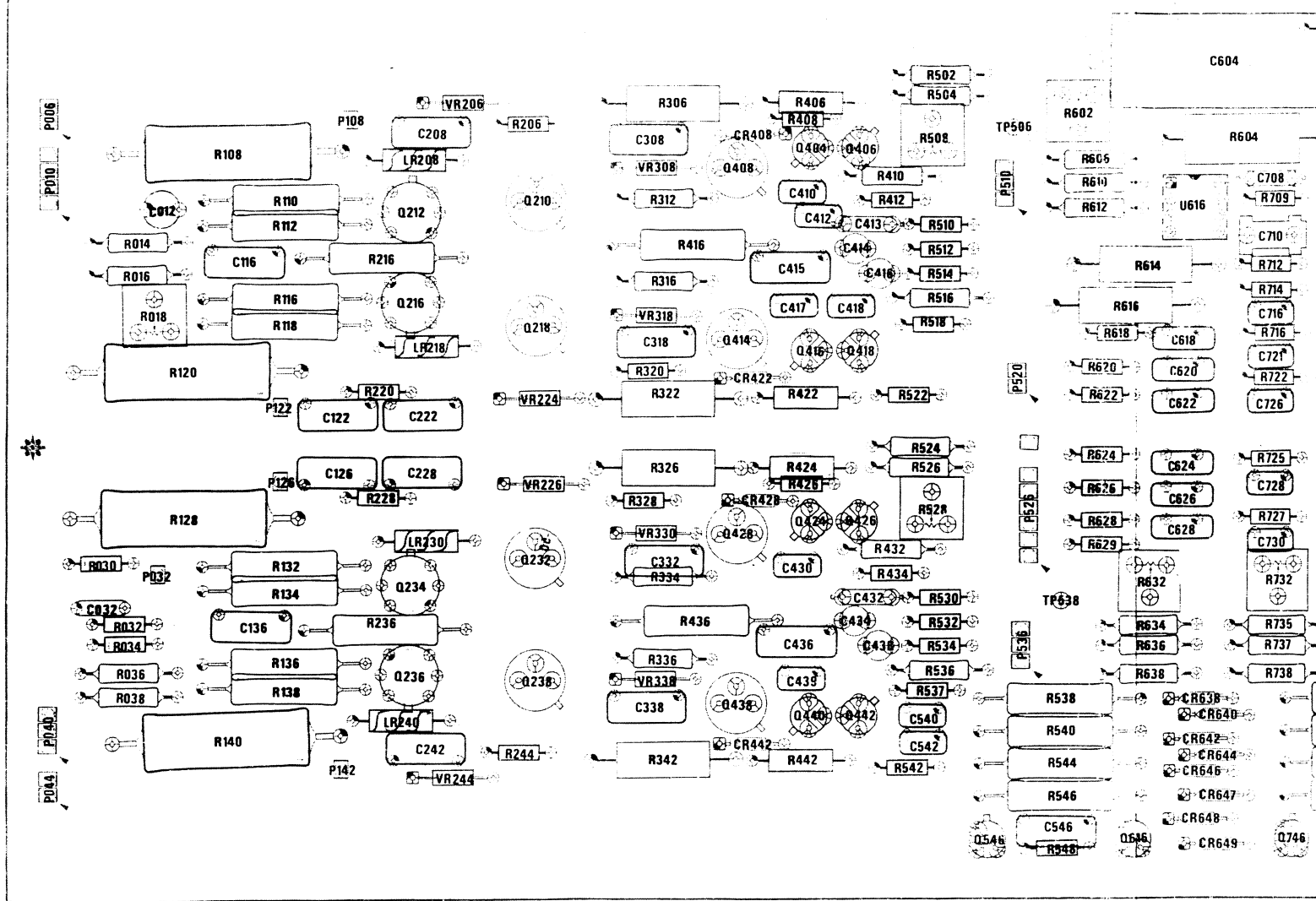
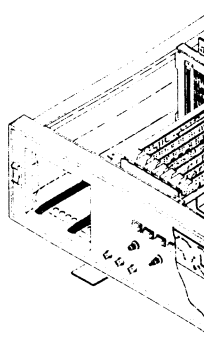
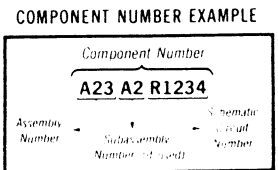
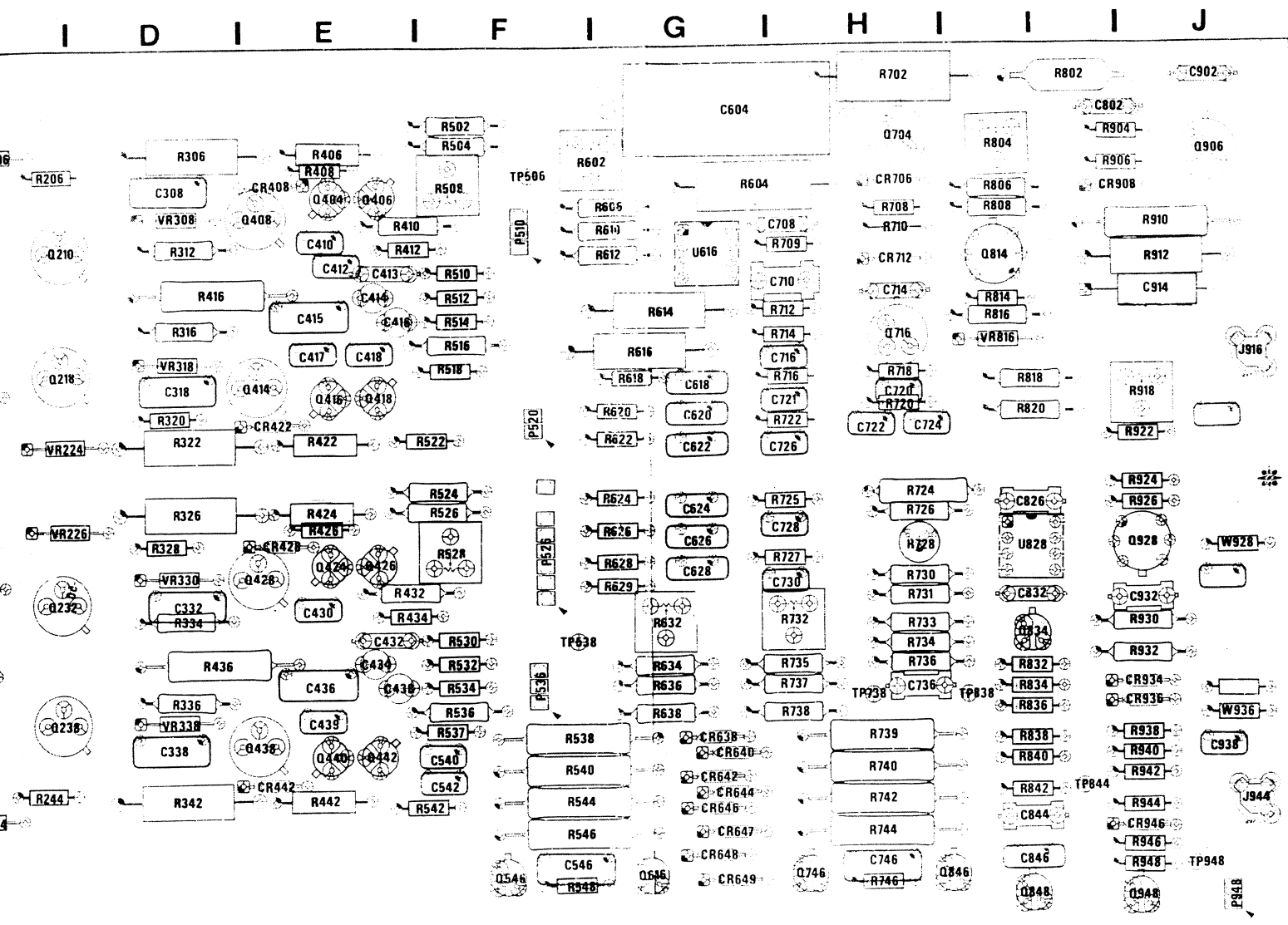


Fig. 7-14. The Scan Amplifier and Reading Gun Supply circuit board, assembly A38.

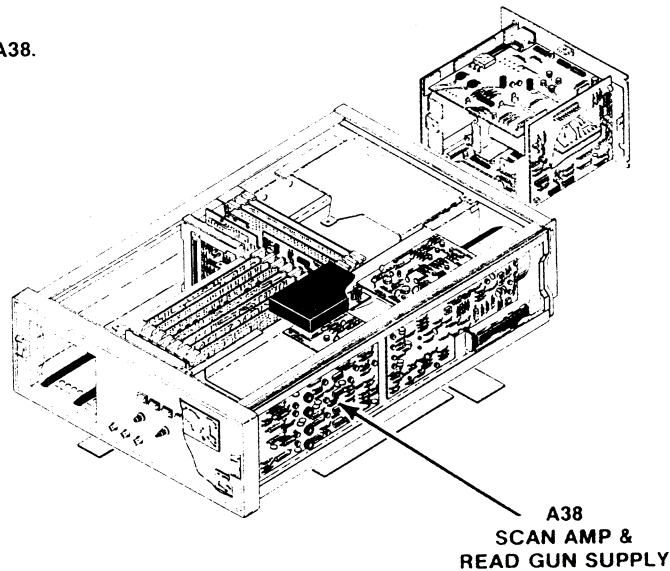




2385-43

Fig. 7-14. The Scan Amplifier and Reading Gun Supply circuit board, assembly A38.

\*See Parts List for serial number range



| P/O A26 ASSY   |                    |                |                |                    |                |                |                    |                |                | X & Y |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|-------|
| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number |       |
| C014           | C3                 | A1             | Q230           | D3                 | C3             | R240           | G4                 | C4             | R649           |       |
| C016           | C3                 | A1             | Q232           | E4                 | C3             | R310           | C5                 | D1             | R700           |       |
| C020           | C3                 | A2             | Q300           | D1                 | D0             | R312           | C2                 | D1             | R710           |       |
| C040           | C6                 | A4             | Q302           | E1                 | D0             | R320           | D5                 | D2             | R712           |       |
| C042           | C6                 | A4             | Q320           | D5                 | D2             | R328           | D3                 | D2             | R730           |       |
| C044           | C6                 | A4             | Q330           | B1                 | C3             | R330           | B1                 | D3             | R740           |       |
| C100           | C2                 | B0             | Q402           | G2                 | E0             | R332           | B1                 | D3             | R742           |       |
| C102           | F3                 | B0             | Q410           | G1                 | E1             | R340           | G4                 | D4             | R800           |       |
| C130           | C5                 | B3             | Q422           | G5                 | E2             | R342           | H2                 | D4             | R830           |       |
| C140           | H2                 | B4             | Q440           | G4                 | E4             | R344           | F4                 | D4             | R914           |       |
| C142           | H2                 | B4             | Q600           | E3                 | G1             | R400           | F1                 | E0             | R920           |       |
| C144           | F3                 | B4             | Q630           | E5                 | G3             | R402           | F1                 | E0             | R922           |       |
| C200           | D3                 | C0             | Q700           | E2                 | H1             | R404           | F2                 | E0             | R945           |       |
| C210           | F3                 | C1             | Q720           | E2                 | H2             | R406           | F1                 | E1             | R946           |       |
| C230           | D6                 | C3             | Q740           | E5                 | H3             | R410           | F1                 | E1             | R1024          |       |
| C240           | H3                 | C4             | Q742           | E5                 | H4             | R420           | F1                 | E2             | R1030          |       |
| C242           | G3                 | C4             |                |                    |                | R422           | G1                 | E2             | R1130          |       |
| C310           | G3                 | D1             |                |                    |                | R424           | G1                 | E2             | R1226          |       |
| C330           | B1                 | D3             | R002           | D3                 | A0             | R426           | G1                 | E2             |                |       |
| C340           | H4                 | D4             | R004           | D3                 | A0             | R430           | F4                 | E3             | TP010          |       |
| C600           | E2                 | G0             | R006           | D3                 | A0             | R432           | F4                 | E3             | TP030          |       |
| C610           | F2                 | G1             | R008           | D3                 | A0             | R434           | F5                 | E3             | TP110          |       |
| C622           | E5                 | G2             | R010           | D2                 | A1             | R436           | F4                 | E3             | TP120          |       |
| C640           | F5                 | G4             | R012           | D3                 | A1             | R440           | F4                 | E4             | TP122          |       |
| C642           | H1                 | G4             | R014           | C3                 | A1             | R442           | G4                 | E4             | TP140          |       |
| C700           | E3                 | H0             | R016           | C3                 | A1             | R500           | G2                 | F0             | TP240          |       |
| C730           | E5                 | H3             | R020           | C3                 | A2             | R502           | G2                 | F0             | TP310          |       |
| C914           | H3                 | J1             | R022           | C3                 | A2             | R504           | G2                 | F0             | TP600          |       |
| C920           | H4                 | J2             | R024           | E3                 | A2             | R506           | F3                 | F0             | TP602          |       |
| C942           | H4                 | J3             | R026           | E3                 | A2             | R507           | G2                 | F1             | TP700          |       |
| C946           | H3                 | J4             | R028           | E3                 | A2             | R508           | F2                 | F1             | TP702          |       |
| C1020          | H2                 | K2             | R030           | E6                 | A3             | R509           | F2                 | F2             | TP1300         |       |
| C1030          | H2                 | K3             | R031           | D6                 | A3             | R510           | F2                 | F2             |                |       |
| C1132          | H1                 | L3             | R032           | D6                 | A3             | R520           | G2                 | F2             |                |       |
| C1226          | H1                 | M2             | R033           | D6                 | A3             | R522           | F2                 | F2             | U020           |       |
|                |                    |                | R034           | D6                 | A3             | R524           | G2                 | F2             | U040           |       |
| CR014          | C3                 | A1             | R035           | D5                 | A3             | R526           | G5                 | F2             | U110A          |       |
| CR020          | E3                 | A2             | R036           | E6                 | A3             | R528           | G5                 | F2             | U110B          |       |
| CR040          | C6                 | A4             | R037           | C6                 | A3             | R529           | G4                 | F2             | U120A          |       |
| CR100          | D3                 | B0             | R040           | C6                 | A4             | R530           | F6                 | F3             | U120B          |       |
| CR110          | C3                 | B1             | R042           | C6                 | A4             | R532           | F5                 | F3             | U120C          |       |
| CR130          | E6                 | B3             | R044           | C6                 | A4             | R534           | G5                 | F3             | U140A          |       |
| CR132          | D5                 | B3             | R100           | D1                 | B0             | R536           | F5                 | F3             | U140B          |       |
| CR140          | C6                 | B4             | R102           | C2                 | B0             | R540           | F5                 | F4             | U210A          |       |
| CR200          | D3                 | C0             | R110           | C3                 | B1             | R542           | G5                 | F4             | U210B          |       |
| CR230          | D5                 | C3             | R120           | C2                 | B2             | R544           | F5                 | F4             | U210C          |       |
| CR400          | F1                 | E0             | R132           | C5                 | B3             | R600           | E2                 | G0             | U210D          |       |
| CR420          | F4                 | E2             | R134           | C5                 | B3             | R602           | D2                 | G0             | U240A          |       |
| CR700          | E2                 | H0             | R140           | C6                 | B4             | R604           | E3                 | G1             | U240B          |       |
| CR710          | E2                 | H1             | R200           | D3                 | C0             | R610           | E2                 | G1             | U240C          |       |
| CR730          | E5                 | H3             | R202           | D1                 | C0             | R612           | E3                 | G1             | U240D          |       |
| CR740          | E5                 | H4             | R204           | G1                 | C0             | R614           | F2                 | G1             | U310A          |       |
|                |                    |                | R206           | D1                 | C0             | R616           | E2                 | G1             | U310B          |       |
| P002           | D3                 | A0             | R210           | C2                 | C1             | R620           | E2                 | G2             | U310C          |       |
| P030           | D6                 | A3             | R212           | C2                 | C1             | R630           | E5                 | G3             | U310D          |       |
|                |                    |                | R220           | D2                 | C2             | R632           | D5                 | G3             | U340A          |       |
| Q020           | E3                 | A2             | R222           | E6                 | C2             | R634           | D6                 | G3             | U410           |       |
| Q130           | D5                 | B3             | R224           | E6                 | C2             | R640           | E5                 | G3             | U440           |       |
| Q200           | D2                 | C0             | R230           | D6                 | C3             | R642           | D6                 | G4             | U510           |       |
| Q220           | D2                 | C2             | R232           | G4                 | C3             | R644           | F5                 | G4             | U540           |       |
| Q222           | C2                 | C2             | R234           | D4                 | C3             | R646           | E5                 | G4             |                |       |
| Q224           | E6                 | C2             | R236           | D4                 | C3             | R648           | E5                 | G4             | VR920          |       |

P/O A26 ASSY ALSO SHOWN ON

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P/O A68 ASSY

| P/O A68 ASSY |    |    |      |    |    |      |    |    |  | X & Y |
|--------------|----|----|------|----|----|------|----|----|--|-------|
| J548         | A2 | F4 | J548 | B1 | F4 | J548 | H1 | F4 |  |       |

P/O A68 ASSY - SEE FIG. 7-37

X & Y SCAN GENERATORS

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| Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| A1             | Q230           | D3                 | C3             | R240           | G4                 | C4             | R649           | G5                 | G4             |
| A1             | Q232           | E4                 | C3             | R310           | C5                 | D1             | R700           | E3                 | H0             |
| A2             | Q300           | D1                 | D0             | R312           | C2                 | D1             | R710           | E2                 | H1             |
| A4             | Q302           | E1                 | D0             | R320           | D5                 | D2             | R712           | E2                 | H1             |
| A4             | Q320           | D5                 | D2             | R328           | D3                 | D2             | R730           | E5                 | H3             |
| A4             | Q330           | B1                 | C3             | R330           | B1                 | D3             | R740           | E5                 | H4             |
| B0             | Q402           | G2                 | E0             | R332           | B1                 | D3             | R742           | E5                 | H4             |
| B0             | Q410           | G1                 | E1             | R340           | G4                 | D4             | R800           | H3                 | I0             |
| B3             | Q422           | G5                 | E2             | R342           | H2                 | D4             | R830           | H6                 | I2             |
| B4             | Q440           | G4                 | E4             | R344           | F4                 | D4             | R914           | H3                 | J1             |
| B4             | Q600           | E3                 | G1             | R400           | F1                 | E0             | R920           | H4                 | J2             |
| B4             | Q630           | E5                 | G3             | R402           | F1                 | E0             | R922           | H3                 | J2             |
| C0             | Q700           | E2                 | H1             | R404           | F2                 | E0             | R945           | H4                 | J4             |
| C1             | Q720           | E2                 | H2             | R406           | F1                 | E1             | R946           | H3                 | J4             |
| C3             | Q740           | E5                 | H3             | R410           | F1                 | E1             | R1024          | H2                 | K2             |
| C4             | Q742           | E5                 | H4             | R420           | F1                 | E2             | R1030          | H2                 | K3             |
| C4             |                |                    |                | R422           | G1                 | E2             | R1130          | H1                 | L3             |
| D1             |                |                    |                | R424           | G1                 | E2             | R1226          | H1                 | M2             |
| D3             | R002           | D3                 | A0             | R426           | G1                 | E2             |                |                    |                |
| D4             | R004           | D3                 | A0             | R430           | F4                 | E3             |                |                    |                |
| G0             | R006           | D3                 | A0             | R432           | F4                 | E3             | TP010          | C2                 | A1             |
| G1             | R008           | D3                 | A0             | R434           | F5                 | E3             | TP030          | C5                 | A3             |
| G2             | R010           | D2                 | A1             | R436           | F4                 | E3             | TP110          | A3                 | B1             |
| G4             | R012           | D3                 | A1             | R440           | F4                 | E4             | TP120          | A2                 | B2             |
| G4             | R014           | C3                 | A1             | R442           | G4                 | E4             | TP122          | A5                 | B2             |
| H0             | R016           | C3                 | A1             | R500           | G2                 | F0             | TP140          | A6                 | B4             |
| H3             | R020           | C3                 | A2             | R502           | G2                 | F0             | TP240          | G5                 | C4             |
| J1             | R022           | C3                 | A2             | R504           | G2                 | F0             | TP310          | G2                 | D1             |
| J2             | R024           | E3                 | A2             | R506           | F3                 | F0             | TP600          | E2                 | G0             |
| J3             | R026           | E3                 | A2             | R507           | G2                 | F0             | TP602          | E5                 | G0             |
| J4             | R028           | E3                 | A2             | R508           | F2                 | F1             | TP700          | E2                 | H0             |
| K2             | R090           | E6                 | A3             | R509           | F2                 | F1             | TP702          | E5                 | H0             |
| K3             | R031           | D6                 | A3             | R510           | F2                 | F2             | TP1300         | H2                 | N0             |
| L3             | R032           | D6                 | A3             | R520           | G2                 | F2             |                |                    |                |
| M2             | R033           | D6                 | A3             | R522           | F2                 | F2             |                |                    |                |
|                | R034           | D6                 | A3             | R524           | G2                 | F2             | U020           | C3                 | A2             |
| A1             | R035           | D5                 | A3             | R526           | G5                 | F2             | U040           | C6                 | A4             |
| A2             | R036           | E6                 | A3             | R528           | G5                 | F2             | U110A          | B3                 | B1             |
| A4             | R037           | C6                 | A3             | R529           | G4                 | F2             | U110B          | B3                 | B1             |
| B0             | R040           | C6                 | A4             | R530           | F6                 | F3             | U120A          | B2                 | B2             |
| B1             | R042           | C6                 | A4             | R532           | F5                 | F3             | U120B          | E3                 | B2             |
| B3             | R044           | C6                 | A4             | R534           | G5                 | F3             | U120C          | B5                 | B2             |
| B3             | R100           | D1                 | B0             | R536           | F5                 | F3             | U140A          | B6                 | B4             |
| B4             | R102           | C2                 | B0             | R540           | F5                 | F4             | U140B          | B6                 | B4             |
| C0             | R110           | C3                 | B1             | R542           | G5                 | F4             | U210A          | B2                 | C1             |
| C3             | R120           | C2                 | B2             | R544           | F5                 | F4             | U210B          | C3                 | C1             |
| E0             | R132           | C5                 | B3             | R600           | E2                 | G0             | U210C          | A1                 | C1             |
| E2             | R134           | C5                 | B3             | R602           | D2                 | G0             | U210D          | F6                 | C1             |
| H0             | R140           | C6                 | B4             | R604           | E3                 | G1             | U240A          | B5                 | C4             |
| H1             | R200           | D3                 | C0             | R610           | E2                 | G1             | U240B          | C6                 | C4             |
| H3             | R202           | D1                 | C0             | R612           | E3                 | G1             | U240C          | G4                 | C4             |
| H4             | R204           | G1                 | C0             | R614           | F2                 | G1             | U240D          | G5                 | C4             |
|                | R206           | D1                 | C0             | R616           | E2                 | G1             | U310A          | G4                 | D1             |
| A0             | R210           | C2                 | C1             | R620           | E2                 | G1             | U310B          | H5                 | D1             |
| A3             | R212           | C2                 | C1             | R630           | E5                 | G2             | U310C          | G1                 | D1             |
|                | R220           | D2                 | C2             | R632           | D5                 | G3             | U310D          | G2                 | C1             |
| A2             | R222           | E6                 | C2             | R634           | D6                 | G3             | U340A          | B1                 | D4             |
| B3             | R224           | E6                 | C2             | R640           | E5                 | G3             | U410           | F1                 | E1             |
| C0             | R230           | D6                 | C3             | R642           | D6                 | G3             | U440           | F4                 | E3             |
| C2             | R232           | G4                 | C3             | R644           | F5                 | G4             | U510           | F2                 | F1             |
| C2             | R234           | D4                 | C3             | R646           | E5                 | G4             | U540           | F5                 | F3             |
| C2             | R236           | D4                 | C3             | R648           | E5                 | G4             |                |                    |                |
|                |                |                    |                |                |                    |                | VR920          | H3                 | J2             |

P/O A26 ASSY ALSO SHOWN ON

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X & Y SCAN GENERATORS

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|    |      |    |    |      |    |    |   |   |   |
|----|------|----|----|------|----|----|---|---|---|
| F4 | J548 | B1 | F4 | J548 | H1 | F4 | — | — | — |
|----|------|----|----|------|----|----|---|---|---|

P/O A68 ASSY - SEE FIG. 7-37

| P/O A26 ASSY   |                    |                | X & Y SCAN AMPLIFIER <span style="border: 1px solid black; padding: 2px;">9</span> |                    |                |
|----------------|--------------------|----------------|--|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| C912           | A1                 | J1             | R943   | B5                 | J3             |
| C940           | A5                 | J4             | R944   | A4                 | J4             |
| C1010          | B1                 | K1             | R1000  | A1                 | K0             |
| C1032          | B5                 | K3             | R1002  | A2                 | K0             |
| C1040          | B4                 | K4             | R1004  | A2                 | K0             |
| C1100          | B1                 | L0             | R1006  | B2                 | K1             |
| C1102          | B2                 | L0             | R1010  | B1                 | K1             |
| C1104          | B1                 | L0             | R1012  | B1                 | K1             |
| C1130          | D4                 | L2             | R1020  | B2                 | K2             |
| C1140          | B4                 | L3             | R1022  | B1                 | K2             |
| C1200          | C2                 | M0             | R1032  | A4                 | K3             |
| C1230          | B4                 | M3             | R1040  | A4                 | K3             |
| C1300          | C1                 | N0             | R1041  | A4                 | K3             |
| C1320          | C3                 | N2             | R1042  | B5                 | K4             |
| C1322          | D1                 | N2             | R1043  | B4                 | K4             |
| C1330          | C4                 | N3             | R1044  | B4                 | K4             |
| C1340          | C5                 | N4             | R1045  | B4                 | K4             |
| C1400          | D1                 | O0             | R1046  | B4                 | K4             |
| C1420          | D3                 | O2             | R1100  | B1                 | L0             |
| C1430          | D4                 | O3             | R1110  | B2                 | L1             |
| C1440          | D5                 | O4             | R1112  | C2                 | L1             |
|                |                    |                | R1114  | C2                 | L1             |
|                |                    |                | R1116  | B2                 | L1             |
| CR1100         | B1                 | L0             | R1140  | B5                 | L3             |
| CR1140         | B4                 | L3             | R1142  | C5                 | L4             |
| CR1200*        | C1                 | M1             | R1144  | C5                 | L4             |
| CR1240         | C4                 | M3             | R1146  | B5                 | L4             |
| CR1310         | C1                 | N1             | R1200*   | C2                 | M0             |
| CR1312         | C3                 | N1             | R1202  | C1                 | M1             |
| CR1340         | C4                 | N3             | R1204  | C2                 | M1             |
| CR1342         | C6                 | N4             | R1210  | C2                 | M1             |
|                |                    |                | R1212  | C2                 | M1             |
| LR1100         | B1                 | L0             | R1214  | C1                 | M1             |
| LR1130         | B4                 | L3             | R1220  | C3                 | M2             |
|                |                    |                | R1222  | C3                 | M2             |
| P900           | B2                 | J0             | R1224  | C2                 | M2             |
| P930           | A5                 | J3             | R1230  | B4                 | M3             |
| P1000          | A2                 | K0             | R1232  | C4                 | M3             |
| P1030          | A5                 | K3             | R1240  | C5                 | M3             |
|                |                    |                | R1241  | C5                 | M3             |
| Q1010          | B1                 | K1             | R1242  | C4                 | M3             |
| Q1040          | B4                 | K4             | R1243  | C4                 | M4             |
| Q1110          | B1                 | L1             | R1244  | C5                 | M4             |
| Q1120A         | B2                 | L2             | R1245  | C6                 | M4             |
| Q1120B         | C2                 | H2             | R1246  | C5                 | M4             |
| Q1140          | B4                 | L3             | R1300  | C1                 | N1             |
| Q1142A         | B5                 | L4             | R1310  | D2                 | N1             |
| Q1142B         | C5                 | L4             | R1320  | C3                 | N2             |
| Q1210A         | C1                 | M1             | R1340  | C4                 | N3             |
| Q1210B         | C3                 | M1             | R1342  | D5                 | N4             |
| Q1240A         | C4                 | M4             | R1344  | C6                 | N4             |
| Q1240B         | C5                 | M4             | R1400  | D1                 | O0             |
| Q1300          | D1                 | N0             | R1402  | D2                 | O0             |
| Q1310          | C1                 | N1             | R1410  | D1                 | O1             |
| Q1312          | C3                 | N1             | R1412  | D1                 | O1             |
| Q1320          | D3                 | N2             | R1414  | D2                 | O1             |
| Q1330          | D4                 | N3             | R1416  | D2                 | O1             |
| Q1340          | C4                 | N3             | R1418  | D3                 | O1             |
| Q1342          | C6                 | N4             | R1420  | D3                 | O2             |
| Q1344          | D6                 | N4             | R1422  | D2                 | O2             |
|                |                    |                | R1424  | D3                 | O2             |
| R900           | A3                 | J0             | R1430  | D4                 | O2             |
| R902           | A3                 | J0             | R1432  | D4                 | O3             |
| R904           | A3                 | J0             | R1440  | D4                 | O3             |
| R906           | A2                 | J1             | R1441  | D4                 | O3             |
| R908           | A2                 | J1             | R1442  | D5                 | O3             |
| R910           | B2                 | J1             | R1443  | D5                 | O3             |
| R912           | A1                 | J1             | R1444  | D5                 | O4             |
| R930           | A4                 | J3             | R1445  | D6                 | O4             |
| R932           | A4                 | J3             | R1446  | D5                 | O4             |
| R940           | A4                 | J3             | R1447  | D6                 | O4             |
| R941           | A4                 | J4             |  |                    |                |

P/O A26 ASSY ALSO SHOWN ON

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| P/O A38 ASSY   |                    |                |                |
|----------------|--------------------|----------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number |
| C012           | H2                 | A1             | R036           |
| C116           | G2                 | B1             | R038           |
| C136           | G5                 | B3             | R108           |
| C208           | G2                 | C0             | R110           |
| C222           | G1                 | C2             | R112           |
| C228           | G5                 | C2             | R116           |
| C242           | G4                 | C4             | R118           |
| C308           | G2                 | D0             | R120           |
| C318           | G1                 | D1             | R128           |
| C332           | G5                 | D3             | R132           |
| C338           | G4                 | D3             | R134           |
| C410           | G2                 | E1             | R136           |
| C415           | G1                 | E1             | R138           |
| C417           | G1                 | E1             | R140           |
| C430           | G5                 | E3             | R206           |
| C436           | G4                 | E3             | R216           |
| C439           | G4                 | E3             | R236           |
|                |                    |                | R306           |
| CR408          | F3                 | E0             | R312           |
| CR422          | F1                 | E2             | R316           |
| CR428          | F6                 | E2             | R320           |
| CR442          | F4                 | E4             | R322           |
|                |                    |                | R326           |
| LR208          | G2                 | C0             | R328           |
| LR218          | G1                 | C1             | R334           |
| LR230          | G5                 | C3             | R336           |
| LR240          | G4                 | C4             | R406           |
|                |                    |                | R408           |
| P108           | H1                 | B0             | R410           |
| P122           | H2                 | B2             | R412           |
| P126           | H4                 | B2             | R416           |
| P142           | H5                 | B4             | R422           |
| P510           | E1                 | F1             | R424           |
| P536           | E4                 | F3             | R426           |
|                |                    |                | R432           |
| Q210           | G2                 | C1             | R434           |
| Q212A          | G3                 | C1             | R436           |
| Q216A          | G2                 | C1             | R442           |
| Q218           | G1                 | C1             | R502           |
| Q232           | G5                 | C3             | R504           |
| Q234A          | G6                 | C3             | R508           |
| Q236A          | G4                 | C3             | R516           |
| Q238           | G4                 | C3             | R518           |
| Q404           | F3                 | E0             | R522           |
| Q406           | F3                 | E0             | R524           |
| Q408           | G2                 | E1             | R526           |
| Q414           | G1                 | E1             | R528           |
| Q416           | F1                 | E2             | R536           |
| Q418           | F1                 | E2             | R537           |
| Q424           | F6                 | E2             | R524           |
| Q426           | F6                 | E2             |                |
| Q428           | G5                 | E2             | VR20           |
| Q438           | G4                 | E4             | VR22           |
| Q440           | F4                 | E4             | VR22           |
| Q442           | F4                 | E4             | VR24           |
|                |                    |                | VR30           |
| R014           | H3                 | A1             | VR31           |
| R016           | H2                 | A1             | VR33           |
| R018           | H2                 | A1             | VR33           |

P/O A38 ASSY ALSO SHOWN ON

P/O A68 ASSY

J548

E1

F4

P662

P662

P/O A68 ASSY - SEE FIG.

| X & Y SCAN AMPLIFIER <span style="border: 1px solid black; padding: 2px;">9</span> |                |                    |                |
|--|----------------|--------------------|----------------|
| Board Location   | Circuit Number | Schematic Location | Board Location |
| J1   | R943           | B5                 | J3             |
| J4   | R944           | A4                 | J4             |
| K1   | R1000          | A1                 | K0             |
| K3   | R1002          | A2                 | K0             |
| K4   | R1004          | A2                 | K0             |
| L0   | R1006          | B2                 | K1             |
| L0   | R1010          | B1                 | K1             |
| L0   | R1012          | B1                 | K1             |
| L2   | R1020          | B2                 | K2             |
| L3   | R1022          | B1                 | K2             |
| M0   | R1032          | A4                 | K3             |
| M3   | R1040          | A4                 | K3             |
| N0   | R1041          | A4                 | K3             |
| N2   | R1042          | B5                 | K4             |
| N2   | R1043          | B4                 | K4             |
| N3   | R1044          | B4                 | K4             |
| N4   | R1045          | B4                 | K4             |
| O0   | R1046          | B4                 | K4             |
| O2   | R1100          | B1                 | L0             |
| O3   | R1110          | B2                 | L1             |
| O4   | R1112          | C2                 | L1             |
|  | R1114          | C2                 | L1             |
| L0   | R1116          | B2                 | L1             |
| L3   | R1140          | B5                 | L3             |
| M1   | R1142          | C5                 | L4             |
| M3   | R1144          | C5                 | L4             |
| N1   | R1146          | B5                 | L4             |
| N1   | R1200*         | C2                 | M0             |
| N3   | R1202          | C1                 | M1             |
| N4   | R1204          | C2                 | M1             |
|  | R1210          | C2                 | M1             |
| L0   | R1212          | C2                 | M1             |
| L3   | R1214          | C1                 | M1             |
|  | R1220*         | C3                 | M2             |
| J0   | R1222          | C3                 | M2             |
| J3   | R1224          | C2                 | M2             |
| K0   | R1230          | B4                 | M3             |
| K3   | R1232          | C4                 | M3             |
|  | R1240          | C5                 | M3             |
| K1   | R1241          | C5                 | M3             |
| K4   | R1242          | C4                 | M3             |
| L1   | R1243          | C4                 | M4             |
| L2   | R1244          | C5                 | M4             |
| H2   | R1245          | C6                 | M4             |
| L3   | R1246          | C5                 | M4             |
| L4   | R1300          | C1                 | N1             |
| L4   | R1310          | D2                 | N1             |
| M1   | R1320          | C3                 | N2             |
| M1   | R1340          | C4                 | N3             |
| M4   | R1342          | D5                 | N4             |
| M4   | R1344          | C6                 | N4             |
| N0   | R1400          | D1                 | O0             |
| N1   | R1402          | D2                 | O0             |
| N1   | R1410          | D1                 | O1             |
| N2   | R1412          | D1                 | O1             |
| N3   | R1414          | D2                 | O1             |
| N3   | R1416          | D2                 | O1             |
| N4   | R1418          | D3                 | O1             |
| N4   | R1420          | D3                 | O2             |
|  | R1422          | D2                 | O2             |
| J0   | R1424          | D3                 | O2             |
| J0   | R1430          | D4                 | O2             |
| J0   | R1432          | D4                 | O3             |
| J1   | R1440          | D4                 | O3             |
| J1   | R1441          | D4                 | O3             |
| J1   | R1442          | D5                 | O3             |
| J1   | R1443          | D5                 | O3             |
| J3   | R1444          | D5                 | O4             |
| J3   | R1445          | D6                 | O4             |
| J3   | R1446          | D5                 | O4             |
| J4   | R1447          | D6                 | O4             |

ASSY ALSO SHOWN ON 8

| P/O A38 ASSY   |                    |                | X & Y SCAN AMPLIFIER <span style="border: 1px solid black; padding: 2px;">9</span> |                    |                |
|----------------|--------------------|----------------|--|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| C012           | H2                 | A1             | R036   | H6                 | A3             |
| C116           | G2                 | B1             | R038   | H5                 | A3             |
| C136           | G5                 | B3             | R108   | G3                 | B0             |
| C208           | G2                 | C0             | R110   | G3                 | B1             |
| C222           | G1                 | C2             | R112   | G3                 | B1             |
| C228           | G5                 | C2             | R116   | G1                 | B1             |
| C242           | G4                 | C4             | R118   | G1                 | B1             |
| C308           | G2                 | D0             | R120   | G1                 | B2             |
| C318           | G1                 | D1             | R128   | H6                 | B2             |
| C332           | G5                 | D3             | R132   | H6                 | B3             |
| C338           | G4                 | D3             | R134   | H6                 | B3             |
| C410           | G2                 | E1             | R136   | H4                 | B3             |
| C415           | G1                 | E1             | R138   | H4                 | B3             |
| C417           | G1                 | E1             | R140   | H4                 | B4             |
| C430           | G5                 | E3             | R206   | G2                 | C0             |
| C436           | G4                 | E3             | R216   | G2                 | C1             |
| C439           | G4                 | E3             | R236   | G5                 | C3             |
|                |                    |                | R306   | G2                 | D0             |
| CR408          | F3                 | E0             | R312   | F3                 | D1             |
| CR422          | F1                 | E2             | R316   | F2                 | D1             |
| CR428          | F6                 | E2             | R320   | G1                 | D2             |
| CR442          | F4                 | E4             | R322   | G1                 | D2             |
|                |                    |                | R326   | G5                 | D2             |
| LR208          | G2                 | C0             | R328   | G5                 | D2             |
| LR218          | G1                 | C1             | R334   | F6                 | D3             |
| LR230          | G5                 | C3             | R336   | F5                 | D3             |
| LR240          | G4                 | C4             | R406   | F2                 | E0             |
|                |                    |                | R408   | F2                 | E0             |
| P108           | H1                 | B0             | R410   | F2                 | E1             |
| P122           | H2                 | B2             | R412   | F3                 | E1             |
| P126           | H4                 | B2             | R416   | G1                 | E1             |
| P142           | H5                 | B4             | R422   | F1                 | E2             |
| P510           | E1                 | F1             | R424   | F5                 | E2             |
| P536           | E4                 | F3             | R426   | F5                 | E2             |
|                |                    |                | R432   | F5                 | E3             |
| Q210           | G2                 | C1             | R434   | F6                 | E3             |
| Q212A          | G3                 | C1             | R436   | G4                 | E3             |
| Q216A          | G2                 | C1             | R442   | F4                 | E4             |
| Q218           | G1                 | C1             | R502   | F2                 | F0             |
| Q232           | G5                 | C3             | R504   | F2                 | F0             |
| Q234A          | G6                 | C3             | R508   | F2                 | F0             |
| Q236A          | G4                 | C3             | R516   | F1                 | F1             |
| Q238           | G4                 | C3             | R518   | F1                 | F1             |
| Q404           | F3                 | E0             | R522   | F1                 | F2             |
| Q406           | F3                 | E0             | R524   | F5                 | F2             |
| Q408           | G2                 | E1             | R526   | F5                 | F2             |
| Q414           | G1                 | E1             | R528   | F5                 | F2             |
| Q416           | F1                 | E2             | R536   | F4                 | F3             |
| Q418           | F1                 | E2             | R537   | F4                 | F3             |
| Q424           | F6                 | E2             | R542   | F4                 | F4             |
| Q426           | F6                 | E2             |  |                    |                |
| Q428           | G5                 | E2             | VR206  | G2                 | C0             |
| Q438           | G4                 | E4             | VR224  | G1                 | C2             |
| Q440           | F4                 | E4             | VR226  | G5                 | C2             |
| Q442           | F4                 | E4             | VR244  | G3                 | C4             |
|                |                    |                | VR308  | G2                 | D1             |
| R014           | H3                 | A1             | VR318  | G1                 | D1             |
| R016           | H2                 | A1             | VR330  | G5                 | D3             |
| R018           | H2                 | A1             | VR338  | G4                 | D3             |

P/O A38 ASSY ALSO SHOWN ON 7 & 10

P/O A68 ASSY

X & Y SCAN AMPLIFIER 9

J548

E1

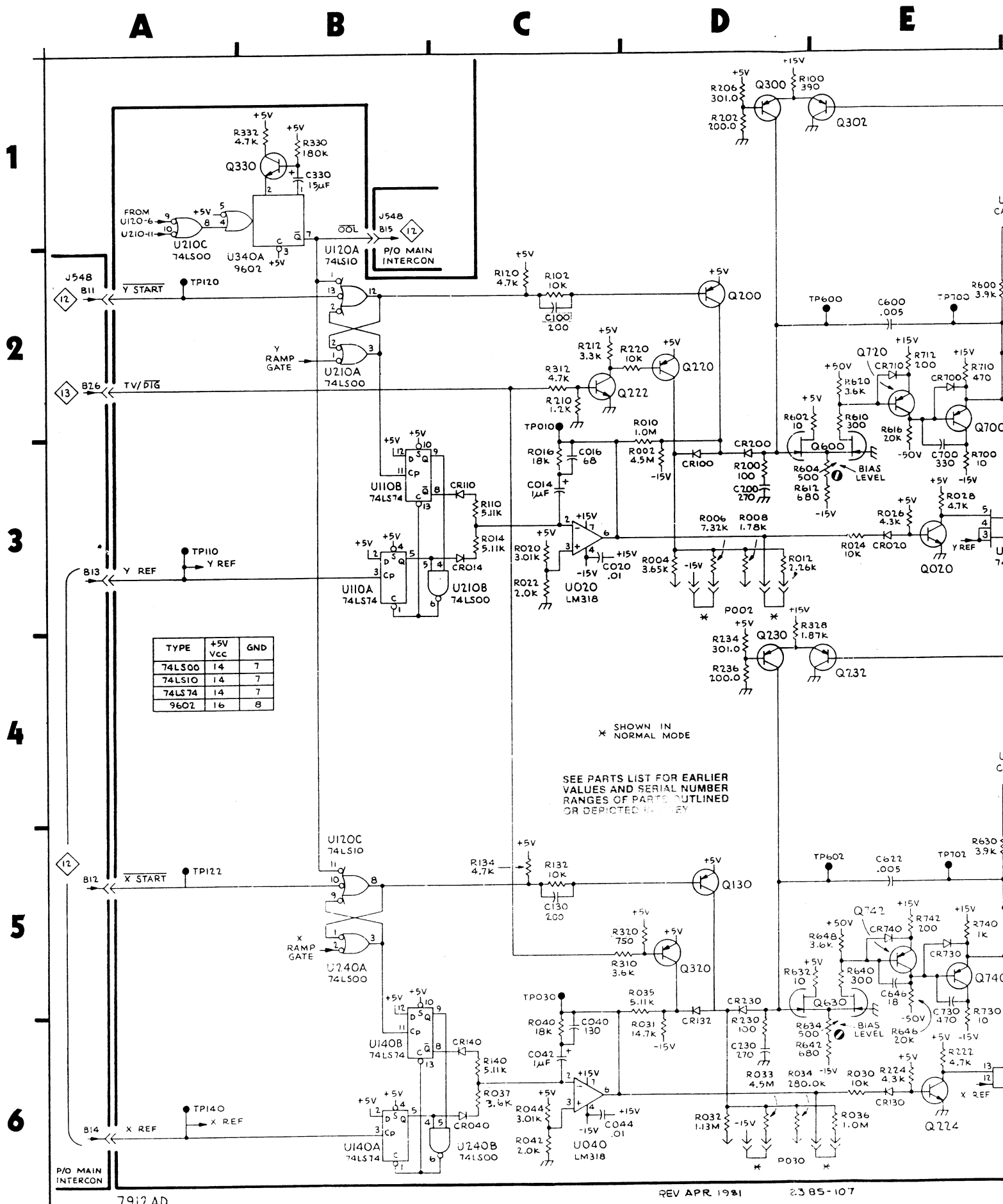
F4

P662  
P662

E1  
E4

G6  
G6

P/O A68 ASSY - SEE FIG. 7-37



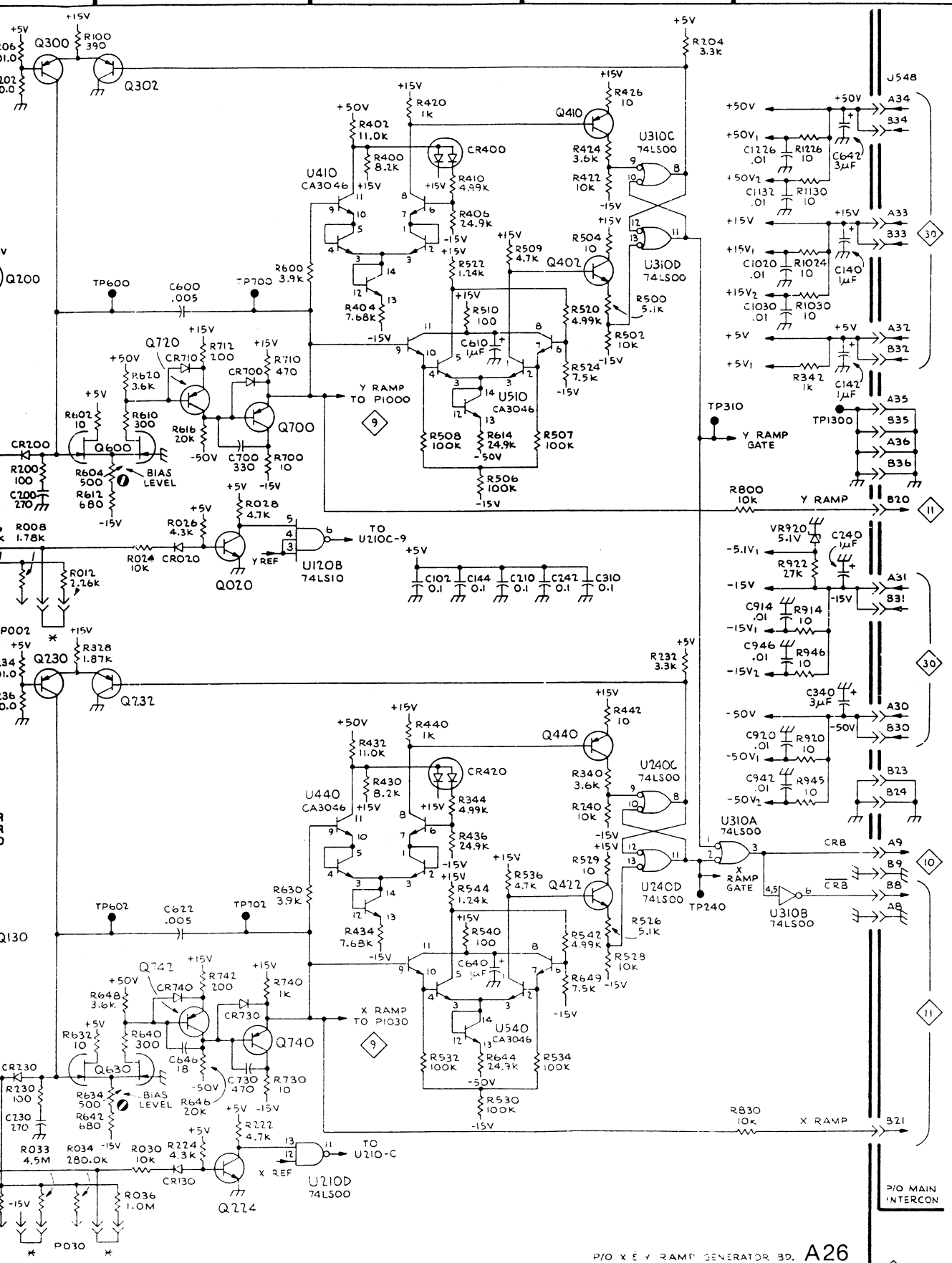
| TYPE   | +5V<br>VCC | GND |
|--------|------------|-----|
| 74LS00 | 14         | 7   |
| 74LS10 | 14         | 7   |
| 74LS74 | 14         | 7   |
| 9602   | 16         | 8   |

\* SHOWN IN NORMAL MODE

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED OTHERWISE



E F G H



P/O X & Y RAMP GENERATOR 3D. A26

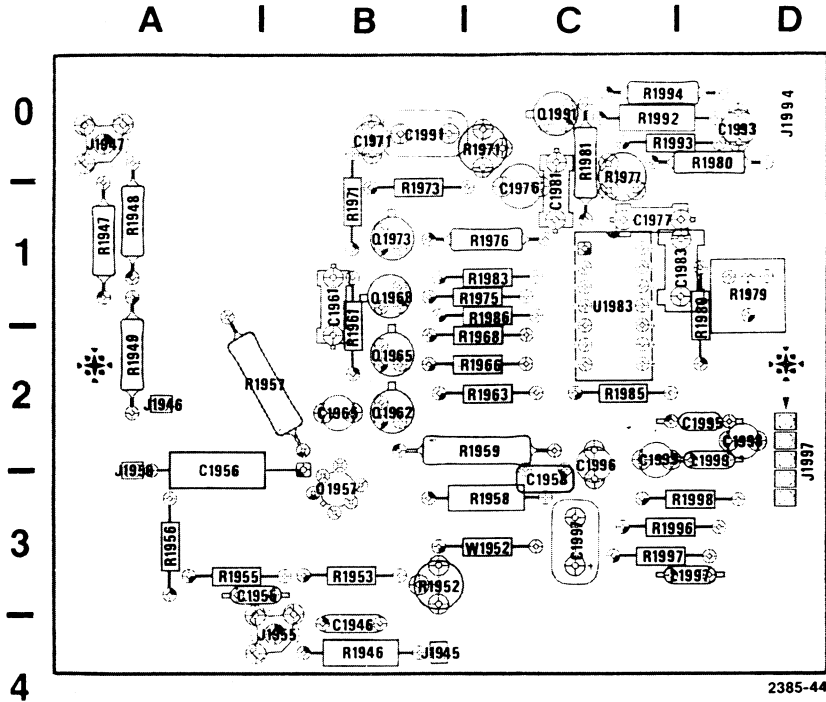
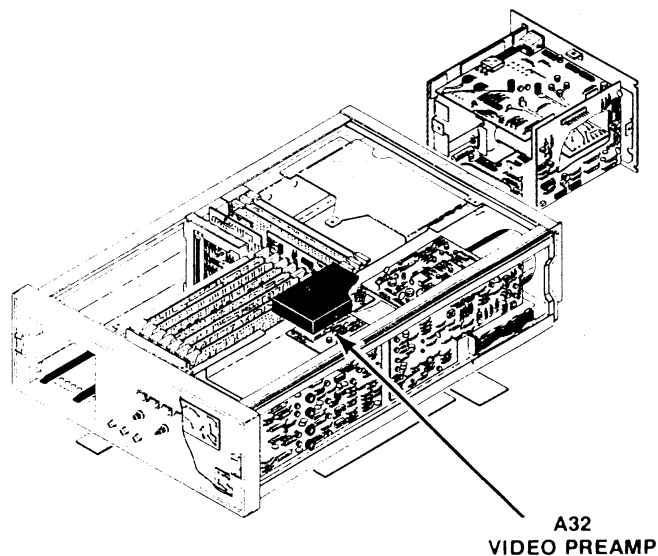
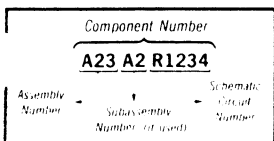


Fig. 7-15. The Video Preamp circuit board, assembly A32.



COMPONENT NUMBER EXAMPLE



Assembled components have no Assembly Number prefix. See end of Replaceable Electrical Parts List.

| P/O A32 ASSY   |                    |                |                |                    |                |                |                    |                |                |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number |
| C1946          | E2                 | B4             | C1997          | H3                 | C3             | Q1957          | E1                 | B3             | R1956          |
| C1955          | E2                 | B3             | C1998          | H3                 | D2             | Q1962          | F1                 | B2             | R1957          |
| C1956          | E1                 | A2             | C1999          | H4                 | C3             | Q1965          | F1                 | B2             | R1957          |
| C1958          | E1                 | C3             |                |                    |                | Q1968          | F1                 | B2             | R1958          |
| C1961          | F1                 | B1             | J1946          | E1                 | A2             | Q1973          | F1                 | B1             | R1959          |
| C1965          | F1                 | B2             | J1947          | D1                 | A0             | Q1991          | H1                 | C0             | R1961          |
| C1971          | F1                 | B0             | J1955          | E2                 | B4             |                |                    |                | R1963          |
| C1976          | F2                 | C1             | J1956          | E1                 | A2             |                |                    |                | R1966          |
| C1977          | G2                 | C1             |                |                    |                | R1946          | E2                 | B4             | R1968          |
| C1981          | G1                 | C1             | L1997          | H3                 | D3             | R1947          | E1                 | A1             | R1971          |
| C1983          | G2                 | D1             | L1999          | H4                 | D2             | R1948          | E1                 | A1             | R1972          |
| C1991          | H1                 | B0             |                |                    |                | R1949          | E1                 | A1             | R1973          |
| C1993          | H2                 | D0             | P1945          | E2                 | B4             | R1952          | E2                 | B3             | R1975          |
| C1995          | H2                 | D2             | P1995          | G2                 | D0             | R1953          | E2                 | B3             | R1976          |
| C1996          | H3                 | C2             | P1997          | H2                 | D3             | R1955          | E1                 | A3             | R1977          |

| P/O A38 ASSY |    |    |       |    |         |      |    |    |      |
|--------------|----|----|-------|----|---------|------|----|----|------|
| C032         | C3 | A3 | C902  | C3 | J0      | Q704 | E6 | H0 | R624 |
| C122         | A1 | B2 | C914  | C3 | J1      | Q716 | C5 | H1 | R626 |
| C126         | A1 | B2 | C932  | F5 | J3      | Q746 | F3 | H4 | R628 |
| C412         | A3 | E1 |       |    |         | Q814 | B3 | I1 | R629 |
| C413         | A2 | E1 | CR638 | E4 | G3      | Q834 | F5 | I3 | R632 |
| C414         | A3 | E1 | CR640 | E4 | G4      | Q846 | F3 | I4 | R634 |
| C416         | A5 | E1 | CR642 | F4 | G4      | Q848 | E5 | I4 | R636 |
| C418         | A5 | E1 | CR644 | F3 | G4      | Q906 | C3 | J0 | R638 |
| C492         | A2 | E3 | CR646 | F4 | G4      | Q928 | F5 | J2 | R702 |
| C434         | A3 | E3 | CR647 | F3 | G4      | Q948 | H5 | J4 | R708 |
| C438         | A5 | E3 | CR648 | E3 | G4      |      |    |    | R709 |
| C540         | A3 | F4 | CR649 | E4 | G4      |      |    |    | R710 |
| C542         | A5 | F4 | CR706 | E6 | H0      | R030 | C2 | A3 | R712 |
| C546         | E4 | F4 | CR712 | C6 | H1      | R032 | C3 | A3 | R714 |
| C604         | C5 | G0 | CR908 | C3 | J0      | R034 | C3 | A3 | R716 |
| C618         | A1 | G1 | CR934 | G5 | J3      | R220 | A1 | C2 | R718 |
| C620         | A2 | G2 | CR936 | G5 | J3      | R228 | A1 | C2 | R720 |
| C622         | A3 | G2 | CR946 | H5 | J4      | R510 | A2 | F1 | R722 |
| C626         | A5 | G2 |       |    |         | R512 | A3 | F1 | R724 |
| C628         | A6 | G2 |       |    |         | R514 | A5 | F1 | R725 |
| C708         | C5 | H1 | J944  | H5 | J4      | R530 | A2 | F3 | R726 |
| C710         | B6 | H1 |       |    |         | R532 | A3 | F3 | R727 |
| C714         | C5 | H1 | P006  | C3 | A0      | R534 | A5 | F3 | R728 |
| C716         | A3 | H1 | P010  | C2 | A1      | R538 | E4 | F4 | R730 |
| C720         | A2 | H2 | P010  | C2 | A1      | R540 | E3 | F4 | R731 |
| C721         | A4 | H2 | P010  | D5 | A1      | R544 | E4 | F4 | R732 |
| C722         | A3 | H2 | P010  | D6 | A1      | R546 | E3 | F4 | R733 |
| C724         | A3 | H2 | P032  | A1 | A3      | R548 | E4 | F4 | R734 |
| C726         | A4 | H2 | P040  | D3 | A4      | R602 | B5 | G0 | R735 |
| C728         | A5 | H2 | P044  | D5 | A4      | R604 | C5 | G0 | R736 |
| C730         | A6 | H3 | P520  | A1 | F2      | R606 | B5 | G1 | R737 |
| C736         | F5 | H3 | P526  | A1 | F2      | R610 | C5 | G1 | R738 |
| C746         | F3 | H4 | P526  | A1 | F2      | R612 | B5 | G1 | R739 |
| C802         | B3 | I0 | P948  | H5 | J4      | R614 | C5 | G1 | R740 |
| C826         | E5 | I2 | P5201 | D4 | CHASSIS | R616 | C5 | G1 | R742 |
| C832         | E5 | I3 |       |    |         | R618 | A1 | G1 | R744 |
| C844         | E5 | I4 | Q546  | E4 | F4      | R620 | A2 | G2 | R746 |
| C846         | E5 | I4 | Q646  | E4 | G4      | R622 | A3 | G2 | R802 |

P/O A38 ASSY ALSO SHOWN ON 7 & 9

| P/O A68 ASSY |    |    |      |    |    |      |    |    |      |
|--------------|----|----|------|----|----|------|----|----|------|
| P628         | H2 | G2 | P632 | A1 | G3 | P660 | H2 | G6 | P662 |

P/O A68 ASSY - SEE FIG. 7-37

VIDEO PREAMP/READING GUN SUPPLY 10

| Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C3             | Q1957          | E1                 | B3             | R1956          | E1                 | A3             | R1979          | G1                 | D1             |
| D2             | Q1962          | F1                 | B2             | R1957          | F2                 | A2             | R1980          | G1                 | D0             |
| C3             | Q1965          | F1                 | B2             | R1957          | F2                 | A2             | R1981          | G1                 | C1             |
|                | Q1968          | F1                 | B2             | R1958          | F1                 | C3             | R1983          | G1                 | C1             |
| A2             | Q1973          | F1                 | B1             | R1959          | E1                 | C2             | R1985          | G2                 | C2             |
| A0             | Q1991          | H1                 | C0             | R1961          | F1                 | B1             | R1986          | G2                 | C1             |
| B4             |                |                    |                | R1963          | F1                 | C2             | R1989          | G1                 | D1             |
| A2             |                |                    |                | R1966          | F1                 | C2             | R1992          | H2                 | C0             |
|                | R1946          | E2                 | B4             | R1968          | F1                 | C2             | R1993          | H2                 | C0             |
| D3             | R1947          | E1                 | A1             | R1971          | F1                 | B1             | R1994          | H2                 | C0             |
| D2             | R1948          | E1                 | A1             | R1972          | F1                 | C0             | R1996          | H3                 | C3             |
|                | R1949          | E1                 | A1             | R1973          | F1                 | B1             | R1997          | H3                 | C3             |
| B4             | R1952          | E2                 | B3             | R1975          | F2                 | C1             | R1998          | H3                 | D3             |
| D0             | R1953          | E2                 | B3             | R1976          | F2                 | C1             |                |                    |                |
| D3             | R1955          | E1                 | A3             | R1977          | G2                 | C1             | U1983          | G2                 | C1             |

VIDEO PREAMP/READING GUN SUPPLY 10

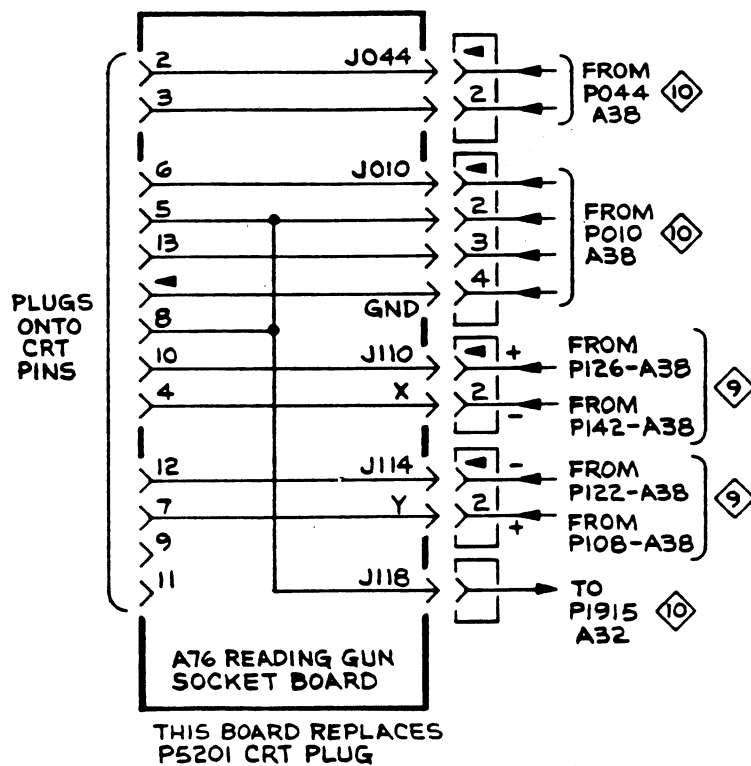
|         |      |    |    |      |    |    |       |    |    |
|---------|------|----|----|------|----|----|-------|----|----|
| J0      | Q704 | E6 | H0 | R624 | A4 | G2 | R804  | B3 | I0 |
| J1      | Q716 | C5 | H1 | R626 | A5 | G2 | R806  | B3 | I0 |
| J3      | Q746 | F3 | H4 | R628 | A6 | G2 | R808  | B4 | I0 |
|         | Q814 | B3 | I1 | R629 | A4 | G2 | R814  | C3 | I1 |
| G3      | Q834 | F5 | I3 | R632 | E4 | G3 | R816  | C3 | I1 |
| G4      | Q846 | F3 | I4 | R634 | E4 | G3 | R832  | G5 | I3 |
| G4      | Q848 | E5 | I4 | R636 | E4 | G3 | R834  | F5 | I3 |
| G4      | Q906 | C3 | J0 | R638 | E4 | G3 | R836  | F5 | I3 |
| G4      | Q928 | F5 | J2 | R702 | E6 | H0 | R838  | E5 | I4 |
| G4      | Q948 | H5 | J4 | R708 | E6 | H0 | R840  | E5 | I4 |
| G4      |      |    |    | R709 | B6 | H1 | R842  | E5 | I4 |
| G4      |      |    |    | R710 | E6 | H1 | R904  | I3 | I0 |
| H0      | R030 | C2 | A3 | R712 | C5 | H1 | R906  | B3 | J0 |
| H1      | R032 | C3 | A3 | R714 | A3 | H1 | R910  | B3 | J1 |
| J0      | R034 | C3 | A3 | R716 | A4 | H1 | R912  | B3 | J1 |
| J3      | R220 | A1 | C2 | R718 | A2 | H2 | R924  | F5 | J2 |
| J3      | R228 | A1 | C2 | R720 | A3 | H2 | R926  | F5 | J2 |
| J4      | R510 | A2 | F1 | R722 | A4 | H2 | R930  | F5 | J3 |
|         | R512 | A3 | F1 | R724 | F5 | H2 | R932  | G5 | J3 |
| J4      | R514 | A5 | F1 | R725 | A5 | H2 | R938  | G5 | J3 |
|         | R530 | A2 | F3 | R726 | F5 | H2 | R940  | H5 | J4 |
|         | R532 | A3 | F3 | R727 | A6 | H2 | R942  | G5 | J4 |
| A0      | R534 | A5 | F3 | R728 | F5 | H2 | R944  | H5 | J4 |
| A1      | R538 | E4 | F4 | R730 | F5 | H3 | R946  | H5 | J4 |
| A1      | R540 | E3 | F4 | R731 | E5 | H3 | R948  | H5 | J4 |
| A1      | R544 | E4 | F4 | R732 | F3 | H3 |       |    |    |
| A3      | R546 | E3 | F4 | R733 | F5 | H3 | TP506 | C5 | F0 |
| A4      | R548 | E4 | F4 | R734 | F5 | H3 | TP538 | A4 | F3 |
| A4      | R602 | B5 | G0 | R735 | F3 | H3 | TP738 | F5 | H3 |
| A4      | R604 | C5 | G0 | R736 | F5 | H3 | TP838 | F5 | I3 |
| F2      | R606 | B5 | G1 | R737 | F3 | H3 | TP844 | E5 | I4 |
| F2      | R610 | C5 | G1 | R738 | F3 | H3 | TP948 | H5 | J4 |
| F2      | R612 | B5 | G1 | R739 | F4 | H3 |       |    |    |
| J4      | R614 | C5 | G1 | R740 | F3 | H4 |       |    |    |
| CHASSIS | R616 | C5 | G1 | R742 | F3 | H4 | U616  | B5 | G1 |
|         | R618 | A1 | G1 | R744 | F3 | H4 | U828  | E5 | I2 |
| F4      | R620 | A2 | G2 | R746 | F3 | H4 |       |    |    |
| G4      | R622 | A3 | G2 | R802 | C4 | I0 | VR816 | C3 | I1 |

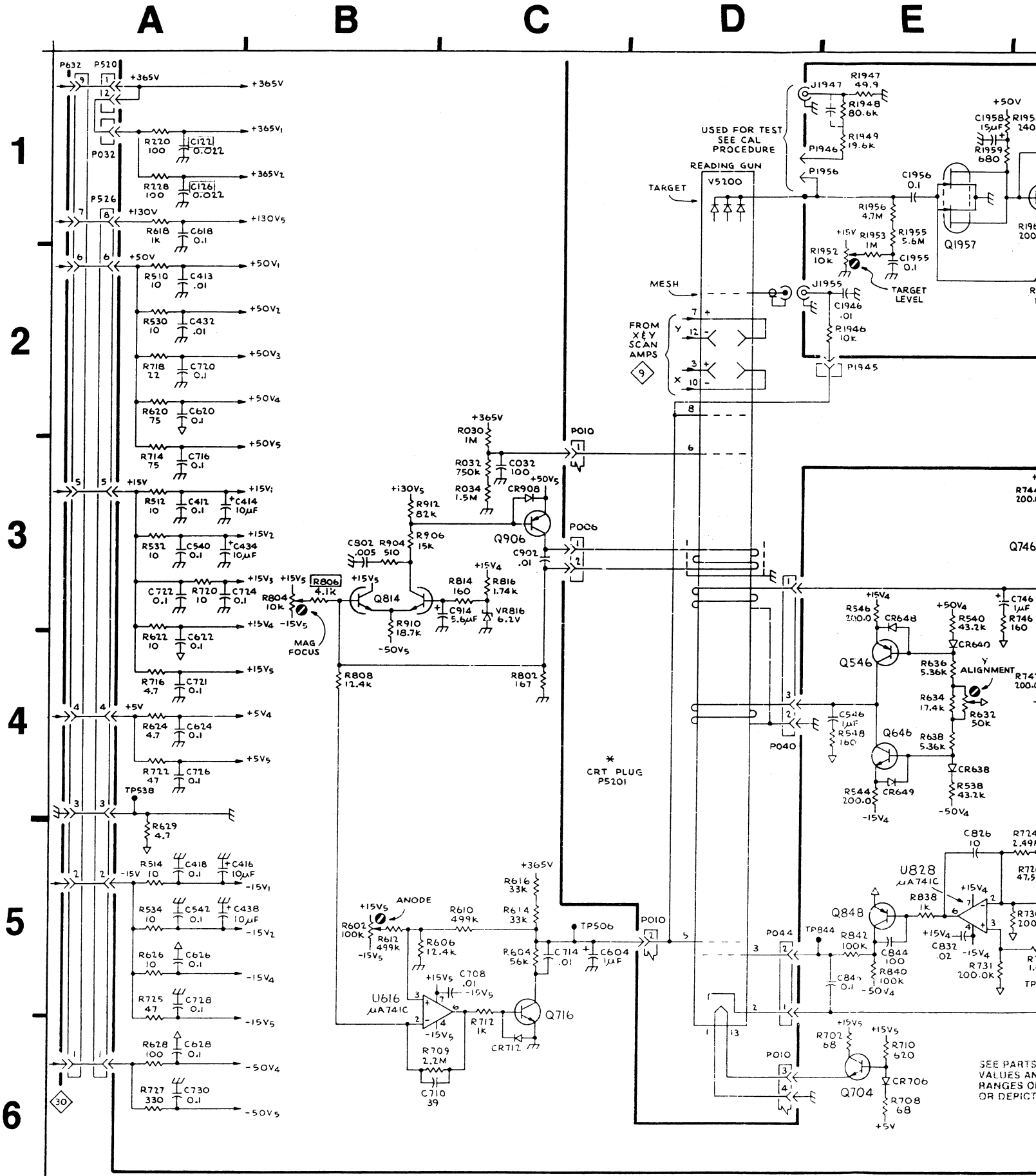
P/O A38 ASSY ALSO SHOWN ON 7 & 9

VIDEO PREAMP/READING GUN SUPPLY 10

|    |      |    |    |      |    |    |     |     |     |
|----|------|----|----|------|----|----|-----|-----|-----|
| G3 | P660 | H2 | G6 | P662 | H5 | G6 | --- | --- | --- |
|----|------|----|----|------|----|----|-----|-----|-----|

P/O A68 ASSY - SEE FIG. 7-37





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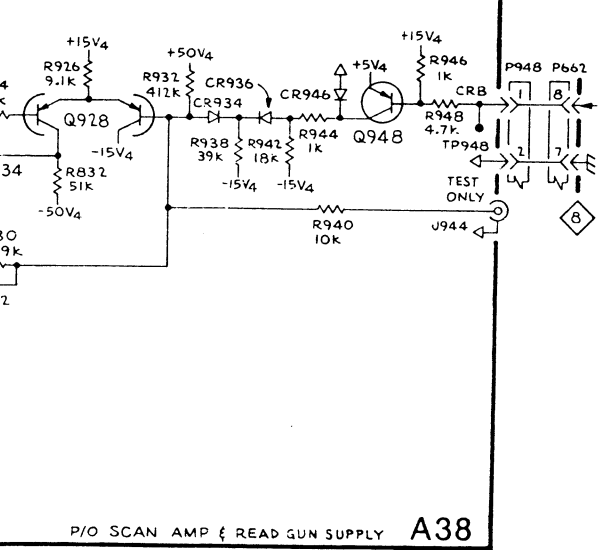
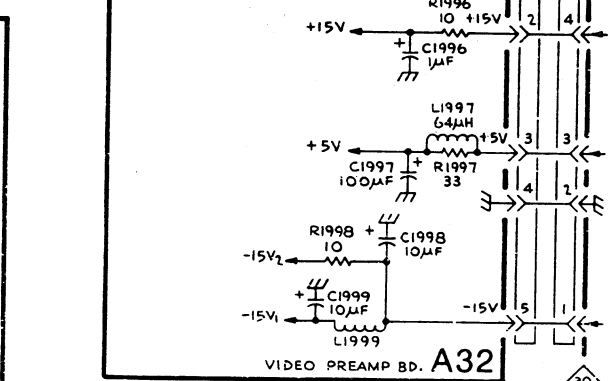
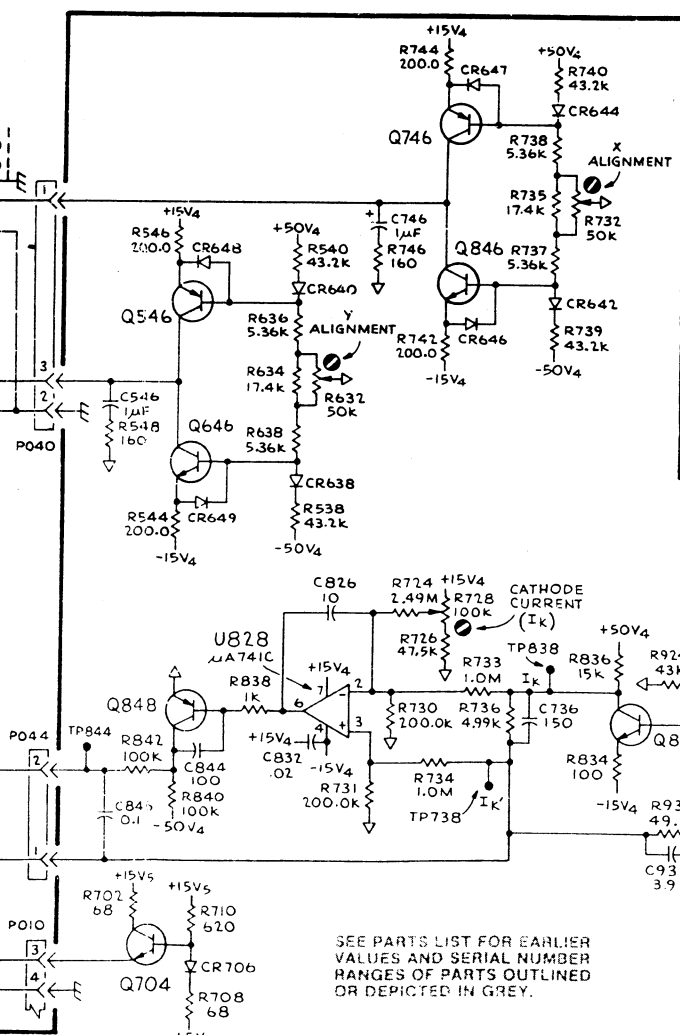
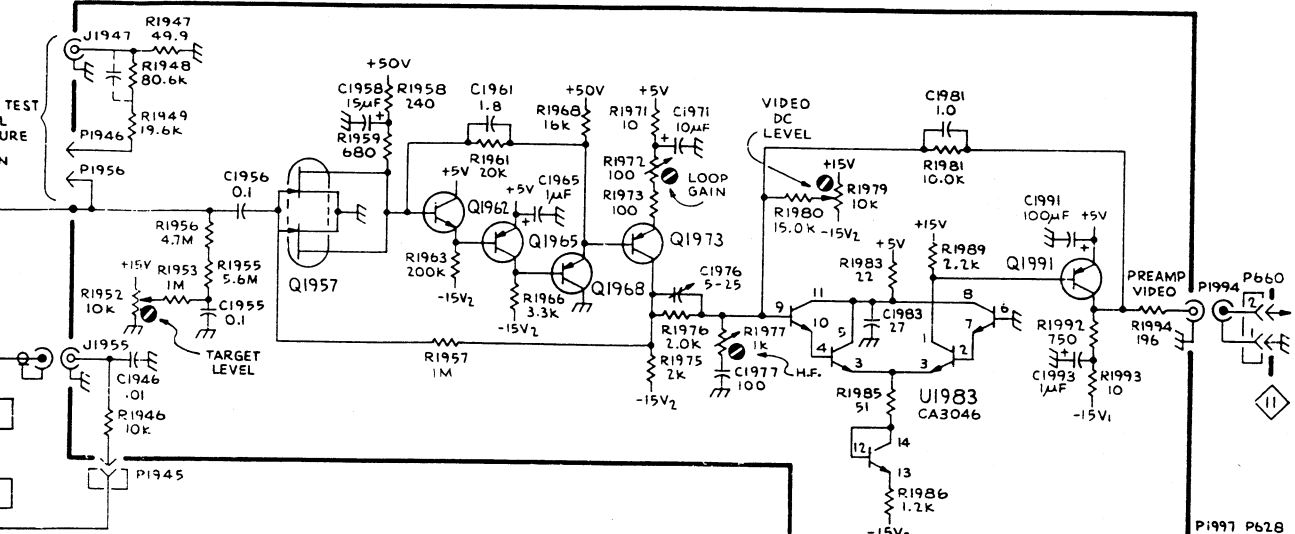
2385-116  
REV DEC 1983

E

F

G

H



VIDEO PREAMP/  
READING GUN SUPPLY

10

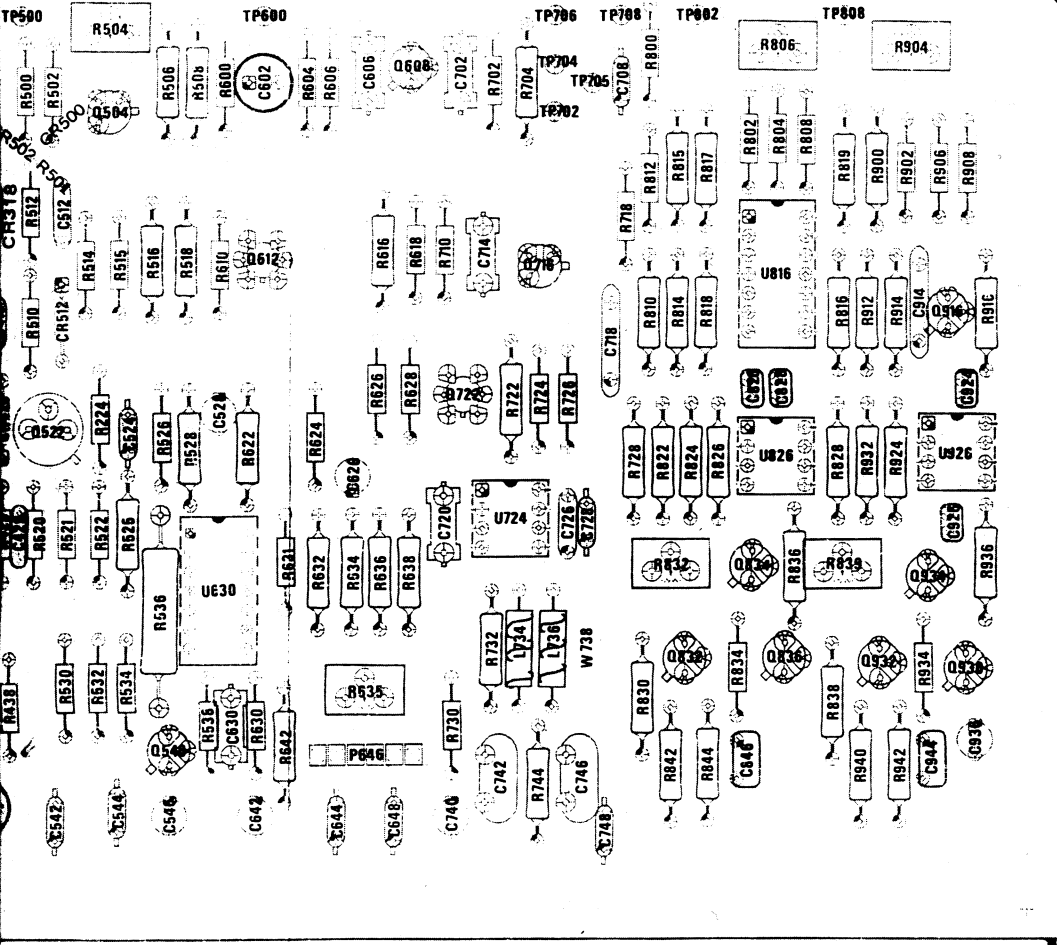
P/O SCAN AMP & READ GUN SUPPLY A38

VIDEO PREAMP/READING GUN SUPPLY 10 SC





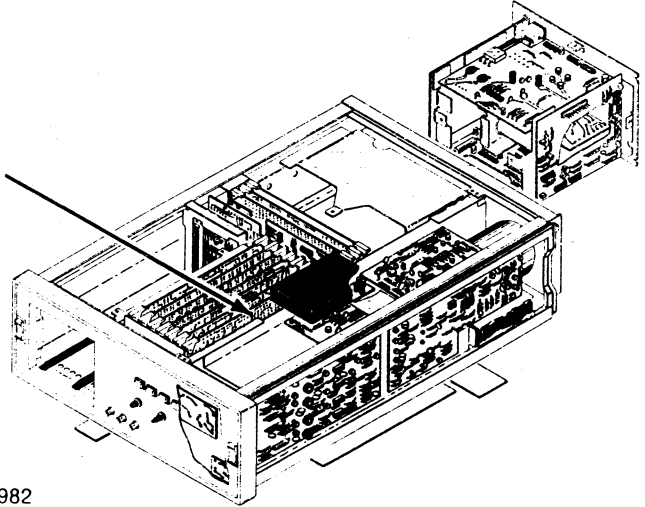
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\*See Parts List for serial number ranges.

2385-45A

A28  
VIDEO PRO &  
SCAN CONTROL



REV APR 1982

P/O A28 ASSY VIDEO PROCESSOR 11

| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C022           | G5                 | A2             | Q834           | B3                 | I3             | R806           | D3                 | I0             |
| C102           | F3                 | B0             | Q836           | B3                 | I3             | R808           | D4                 | I0             |
| C104           | H4                 | B0             | Q916           | C5                 | J1             | R810           | C4                 | I1             |
| C122           | G4                 | B2             | Q932           | B5                 | J3             | R812           | D3                 | I1             |
| C132           | F5                 | B3             | Q934           | B4                 | J3             | R814           | C3                 | I1             |
| C204           | G4                 | C0             | Q936           | B5                 | J3             | R815           | C3                 | I1             |
| C218           | G4                 | C1             | R102           | F3                 | B0             | R816           | C4                 | I1             |
| C224           | G4                 | C2             | R114           | G4                 | B4             | R817           | C3                 | I1             |
| C244           | G4                 | C4             | R126           | G4                 | B2             | R818           | D3                 | I1             |
| C246           | G4                 | C4             | R224           | G2                 | F2             | R819           | C4                 | J1             |
| C304           | H4                 | D0             | R406           | B1                 | E0             | R822           | B4                 | I2             |
| C314           | G4                 | D1             | R412           | G2                 | E1             | R824           | C4                 | I2             |
| C330           | G4                 | D3             | R420           | B1                 | E2             | R826           | B3                 | I2             |
| C402           | G4                 | E0             | R421           | B1                 | E2             | R828           | B5                 | I2             |
| C418           | G3                 | E1             | R424           | G3                 | E2             | R830           | B4                 | I3             |
| C420           | G4                 | E2             | R430           | G2                 | E3             | R832           | B4                 | I3             |
| C432           | B1                 | E3             | R501*          | F0                 | G3             | R834           | B3                 | I3             |
| C524           | G3                 | F2             | R514           | G2                 | F1             | R836           | B3                 | I3             |
| C528           | H3                 | F2             | R515           | E2                 | F1             | R838           | B5                 | I3             |
| C542           | H4                 | F4             | R516           | E2                 | F1             | R839           | B5                 | I3             |
| C544           | H5                 | F4             | R518           | D2                 | F1             | R842           | B4                 | I4             |
| C546           | H4                 | F4             | R522           | G2                 | F2             | R844           | B3                 | I4             |
| C602           | D1                 | G0             | R525           | F2                 | F2             | R900           | C4                 | J1             |
| C606           | D2                 | G0             | R526           | G3                 | F2             | R902           | D4                 | J0             |
| C626           | G3                 | G2             | R528           | F2                 | F2             | R904           | D5                 | J0             |
| C630           | G2                 | G3             | R530           | G2                 | F3             | R906           | D5                 | J0             |
| C642           | G4                 | G4             | R532           | F3                 | F3             | R908           | C5                 | J0             |
| C544           | G4                 | G4             | R534           | G2                 | F3             | R912           | C4                 | J1             |
| C648           | G4                 | G4             | R536           | F2                 | F3             | R914           | C5                 | J1             |
| C702           | D2                 | H0             | R538           | G2                 | F3             | R916           | C5                 | J1             |
| C708           | F3                 | H0             | R600           | D1                 | G0             | R924           | B5                 | J2             |
| C714           | D2                 | H1             | R604           | D1                 | G0             | R932           | B5                 | J2             |
| C718           | D3                 | H1             | R606           | D2                 | G0             | R934           | B4                 | J3             |
| C720           | C2                 | H2             | R610           | D2                 | G1             | R936           | B4                 | J3             |
| C726           | C1                 | H2             | R616           | C2                 | G1             | R940           | B5                 | J4             |
| C728           | C1                 | H2             | R618           | D2                 | G1             | R942           | B5                 | J4             |
| C740           | G4                 | H4             | R622           | F2                 | G2             |                |                    |                |
| C742           | B2                 | H4             | R624           | G3                 | G2             | TP600          | E2                 | G0             |
| C746           | B2                 | H4             | R626           | C2                 | G2             | TP702          | F2                 | H0             |
| C748           | G4                 | H4             | R628           | C2                 | G2             | TP704          | C1                 | H0             |
| C826           | C4                 | I2             | R630           | F2                 | G3             | TP705          | B2                 | H0             |
| C828           | C3                 | I2             | R631           | F2                 | G3             | TP706          | C2                 | H0             |
| C846           | B3                 | I4             | R632           | E2                 | G3             | TP708          | H5                 | H0             |
| C914           | D4                 | J1             | R634           | E2                 | G3             | TP802          | C3                 | I0             |
| C924           | C5                 | J2             | R635           | E2                 | G3             | TP808          | C5                 | I0             |
| C926           | C5                 | J2             | R636           | E2                 | G3             |                |                    |                |
| C936           | G5                 | J4             | R638           | E2                 | G3             |                |                    |                |
| C944           | B4                 | J4             | R642           | F2                 | G4             | U328           | G2                 | D2             |
| CR500*         | F0                 | H3             | R702           | D2                 | H0             | U630           | F2                 | G3             |
| CR502*         | F0                 | H3             | R704           | D2                 | H0             | U630           | F2                 | G3             |
| L734           | B2                 | H3             | R710           | C1                 | H1             | U724           | C1                 | H2             |
| L736           | B2                 | H3             | R718           | D3                 | H1             | U816           | C3                 | I1             |
| P686           | E3                 | G4             | R722           | C1                 | H2             | U816           | C4                 | I1             |
| Q414           | G2                 | E1             | R724           | C2                 | H2             | U826A          | C4                 | I2             |
| Q546           | G2                 | F4             | R726           | B2                 | H2             | U826B          | D3                 | I2             |
| Q608           | D2                 | G0             | R728           | B4                 | H2             | U926A          | C5                 | J2             |
| Q612           | D2                 | G1             | R730           | B2                 | H3             | U926B          | D4                 | J2             |
| Q716           | C2                 | H1             | R732           | C2                 | H3             |                |                    |                |
| Q722A          | C2                 | H2             | R744           | B2                 | H4             | VR120          | F5                 | B2             |
| Q722B          | C2                 | H2             | R800           | G3                 | I0             |                |                    |                |
| Q832           | B4                 | I3             | R802           | D3                 | I0             | W738           | B2                 | H3             |
|                |                    |                | R804           | C3                 | I0             |                |                    |                |

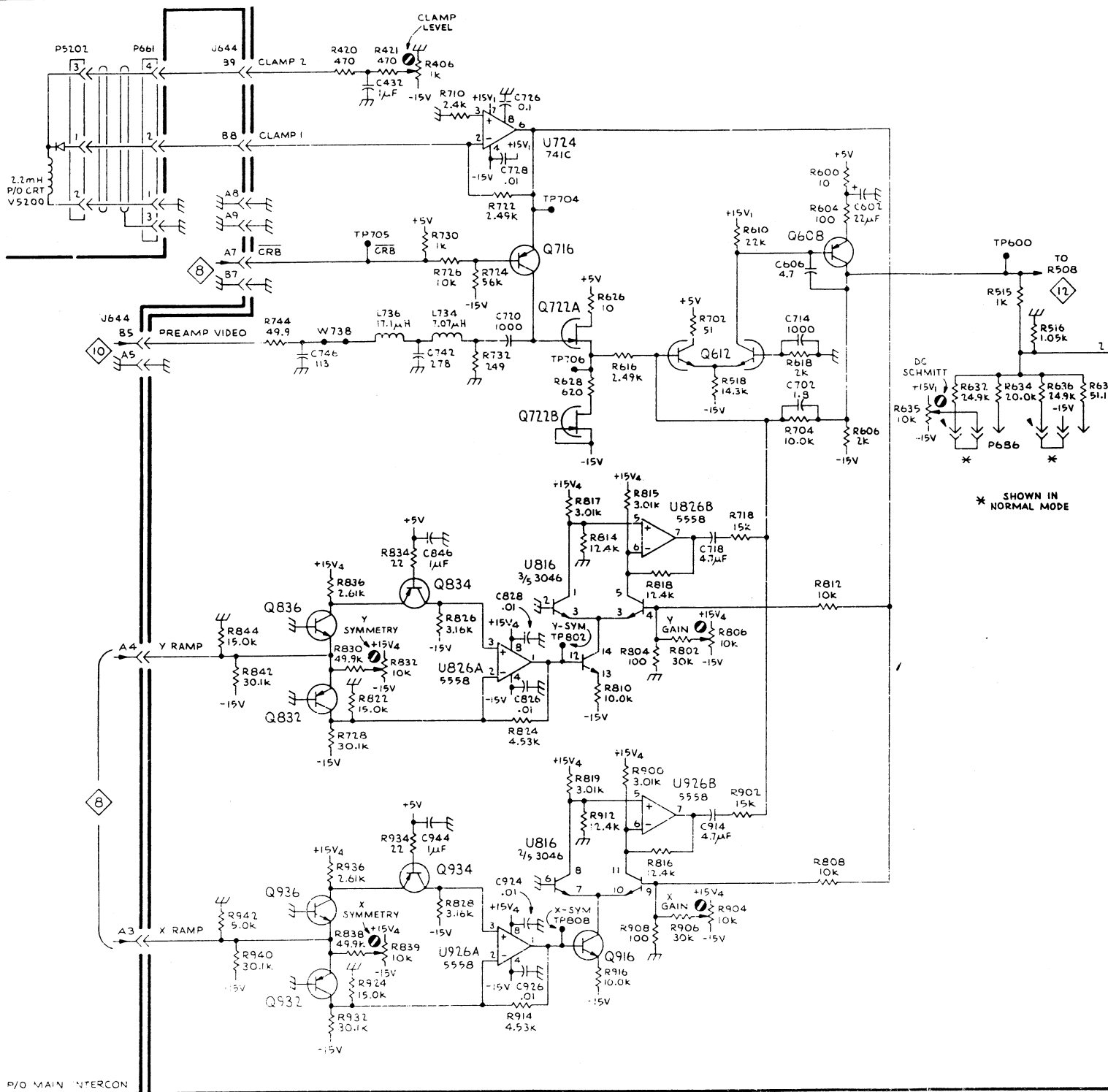
List for  
er ranges.

P/O A28 ASSY ALSO SHOWN ON 12

P/O A68 ASSY VIDEO PROCESSOR 11

|      |    |    |      |    |    |      |    |    |
|------|----|----|------|----|----|------|----|----|
| J644 | B1 | G4 | J644 | H2 | G4 | J661 | A1 | G4 |
|------|----|----|------|----|----|------|----|----|

P/O A68 ASSY - SEE FIG. 7-37

**A****B****C****D****E****1****2****3****4****5**

P/O MAIN INTERCON

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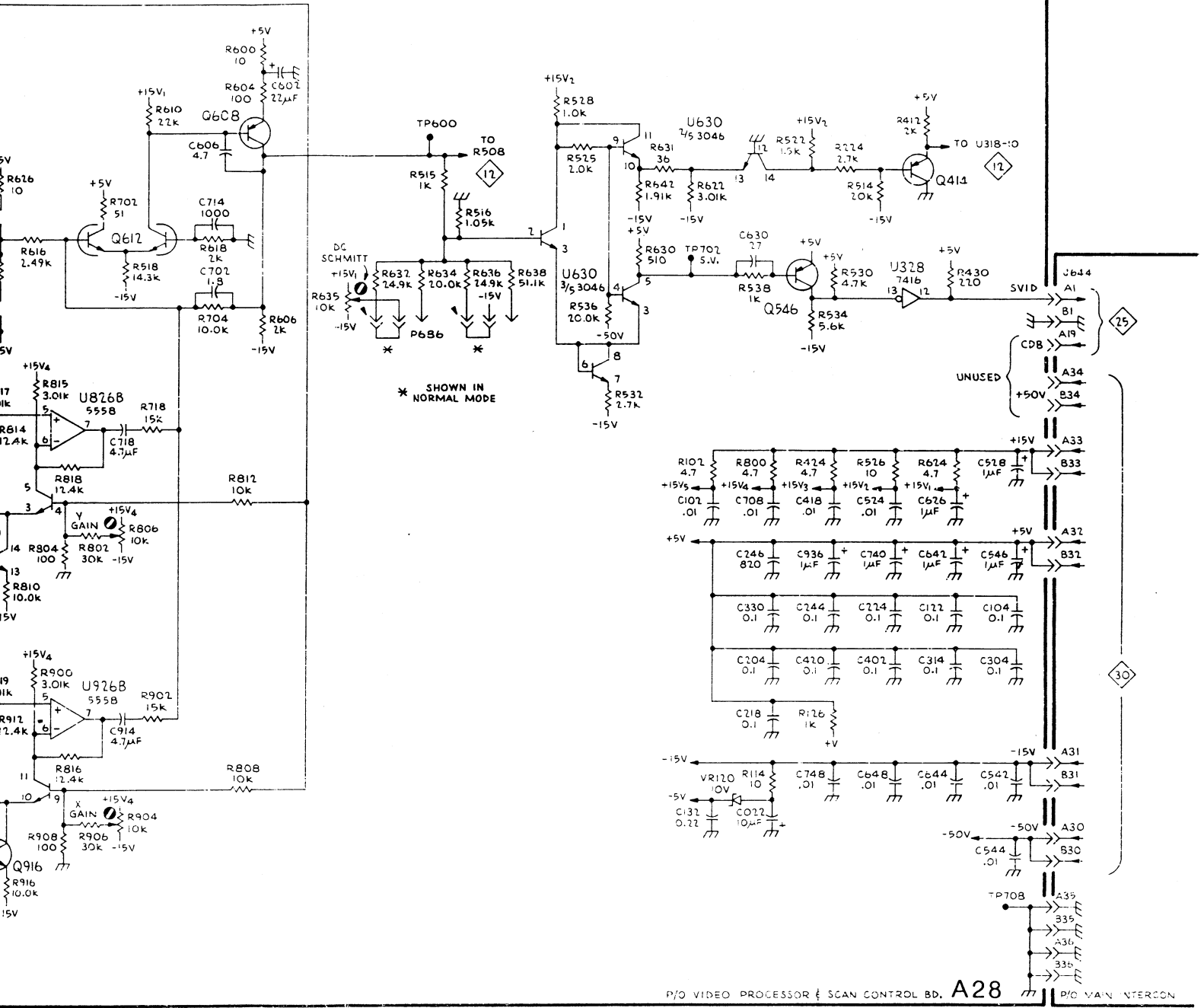
D

E

F

G

H



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VIDEO PROCESSOR 11 SC

P/O A28 ASSY X & Y SCAN CONTROL 12

| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C004           | C3                 | A0             | R504           | G3                 | F0             |
| C006           | C2                 | A0             | R506           | G3                 | F0             |
| C008           | C4                 | A0             | R508           | G3                 | F0             |
| C036           | B3                 | A3             | R510           | H3                 | F1             |
| C042           | A3                 | A4             | R512           | H3                 | F1             |
| C136           | F5                 | B3             | R520           | H3                 | F2             |
| C138           | E4                 | B3             | R521           | H3                 | F2             |
| C300           | B4                 | D0             |                |                    |                |
| C422           | H4                 | E2             | TP210          | D2                 | B0             |
| C422           | H4                 | E2             | TP212          | E3                 | C0             |
| C429           | G3                 | E2             | TP302          | B3                 | D0             |
| C444           | H4                 | E4             | TP306          | G3                 | D0             |
| C448           | H5                 | E4             | TP308          | G4                 | D0             |
| C512           | H3                 | F1             | TP402          | E5                 | E0             |
| CR008          | C2                 | A0             | TP500          | G3                 | F0             |
| CR034          | A3                 | A3             |                |                    |                |
| CR118          | D1                 | B1             | U014           | C2                 | A1             |
| CR318          | F3                 | E1             | U028           | B3                 | A2             |
| CR428          | H3                 | E2             | U028           | B3                 | A2             |
| CR512          | H3                 | F1             | U104A          | D4                 | B0             |
| L042           | A3                 | A4             | U104B          | D3                 | B0             |
|                |                    |                | U104C          | D3                 | B0             |
| P104           | C2                 | B0             | U104D          | D3                 | B0             |
| Q030           | B3                 | A3             | U104E          | D2                 | B0             |
| Q412           | G1                 | E1             | U104F          | C4                 | B0             |
| Q432           | H4                 | E3             | U114           | D1                 | B1             |
| Q434           | H4                 | E3             | U124A          | D4                 | B2             |
| Q504           | G3                 | F0             | U124B          | D1                 | B2             |
| Q522           | H3                 | F2             | U124C          | D4                 | B2             |
|                |                    |                | U200B          | D2                 | C0             |
| R002           | C4                 | A0             | U200C          | F3                 | C0             |
| R009           | C2                 | A0             | U200D          | D3                 | C0             |
| R024           | B3                 | A2             | U200E          | D3                 | C0             |
| R032           | B3                 | A3             | U200F          | D2                 | C0             |
| R034           | A3                 | A3             | U206A          | B4                 | C0             |
| R036           | B3                 | A3             | U210A          | D3                 | C1             |
| R110           | C3                 | B1             | U210B          | C4                 | C1             |
| R112           | B3                 | B1             | U210C          | C4                 | C1             |
| R118           | E2                 | B2             | U210D          | D4                 | C1             |
| R146           | F5                 | B4             | U216A          | E2                 | C1             |
| R148           | E4                 | B4             | U220           | B3                 | C2             |
| R208           | B4                 | C0             | U226A          | D2                 | C2             |
| R318           | F3                 | E1             | U226B          | D2                 | C2             |
| R344           | H5                 | D4             | U240A          | E5                 | C4             |
| R346           | H5                 | D4             | U240B          | F5                 | C4             |
| R348           | H5                 | D4             | U246           | F2                 | C4             |
| R414           | G1                 | E1             | U302A          | C3                 | D0             |
| R416           | G1                 | E1             | U308           | D5                 | D0             |
| R422           | H4                 | E2             | U312A          | D4                 | D1             |
| R425           | H4                 | E2             | U312B          | E3                 | D1             |
| R426           | H4                 | E2             | U312C          | G5                 | D1             |
| R427           | H4                 | E2             | U312D          | F3                 | D1             |
| R428           | H4                 | E2             | U318A          | G4                 | D1             |
| R429           | H3                 | E2             | U318B          | G5                 | D1             |
| R432           | H4                 | E3             | U318C          | F5                 | D1             |
| R436           | H5                 | E3             | U318D          | F3                 | D1             |
| R438           | H4                 | E3             | U322           | D3                 | D2             |
| R440           | H5                 | E4             | U328A          | G3                 | D2             |
| R442           | H5                 | E4             | U328B          | G5                 | D2             |
| R446           | H5                 | E4             | U328C          | G4                 | D2             |
| R500           | G3                 | F0             | U328D          | G4                 | D2             |
| R502           | G3                 | F0             | U342A          | F1                 | D4             |
|                |                    |                | U406           | D5                 | E0             |

P/O A28 ASSY ALSO SHOWN ON 11

P/O A68 ASSY X & Y SCAN CONTROL 12

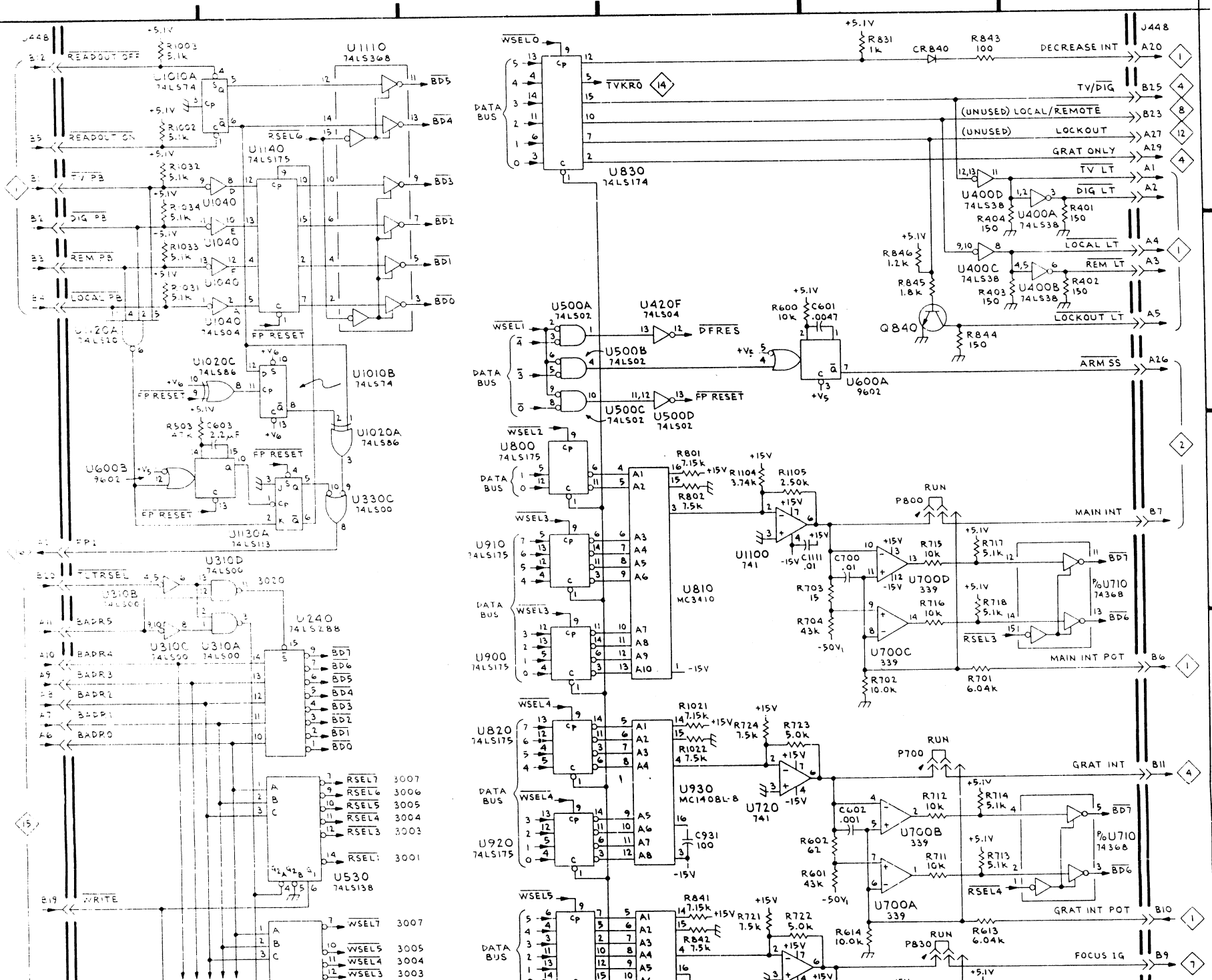
|      |    |    |      |    |    |
|------|----|----|------|----|----|
| J644 | A1 | G4 | J644 | H2 | G4 |
|------|----|----|------|----|----|

P/O A68 ASSY - SEE FIG. 7-37

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Scans by Outsource-Options =>

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REV. JUL 1981



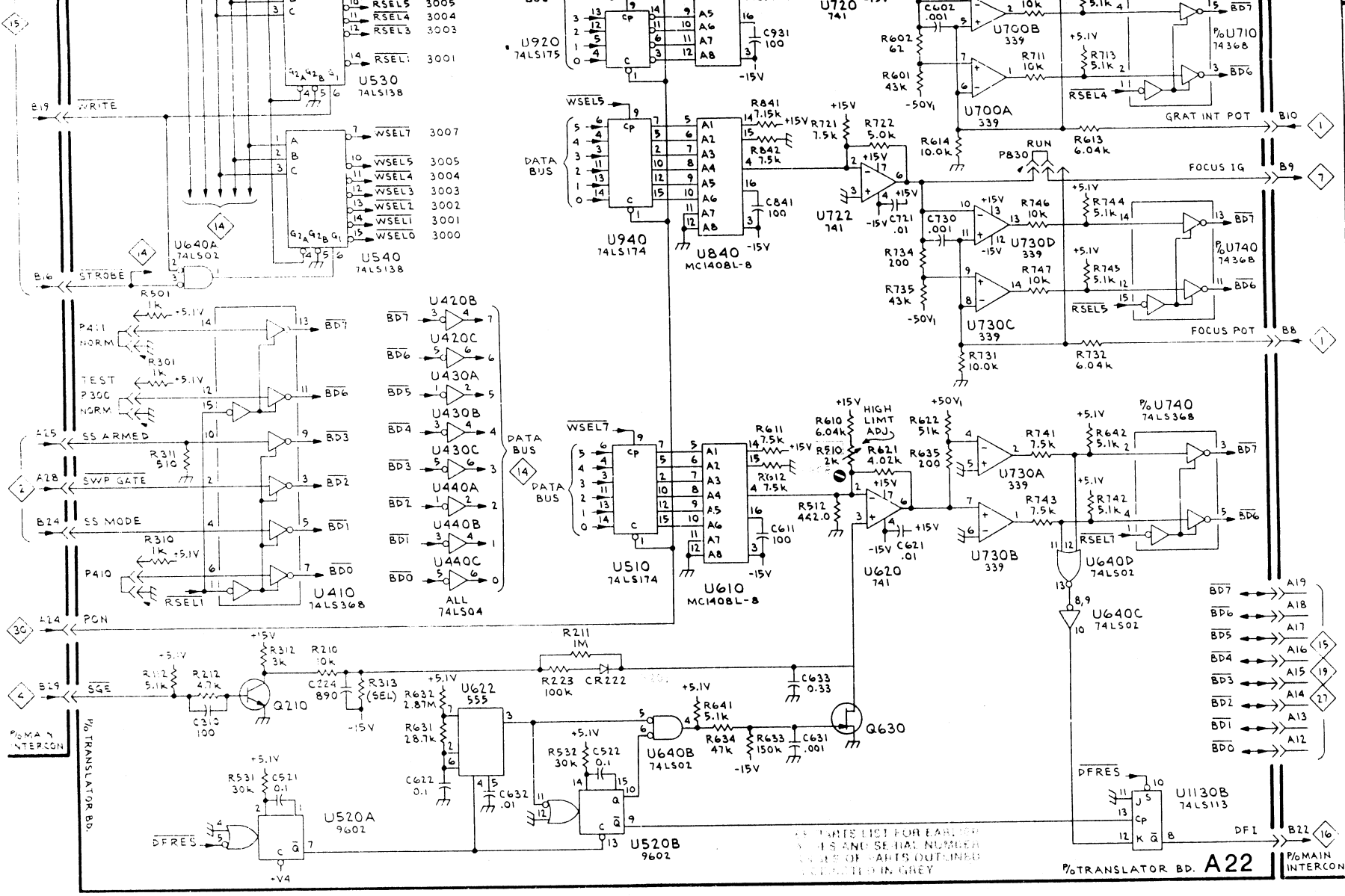
A

B

C

D

E



Scans by Outsource-Options =>

E  
F  
G  
H

NOT INTENDED FOR EARLY  
SERIES AND SERIAL NUMBER  
RANGES OF PARTS OUTLINED  
HEREIN IN GREY

P/M TRANSLATOR BD. A22

P/M MAIN INTERCON

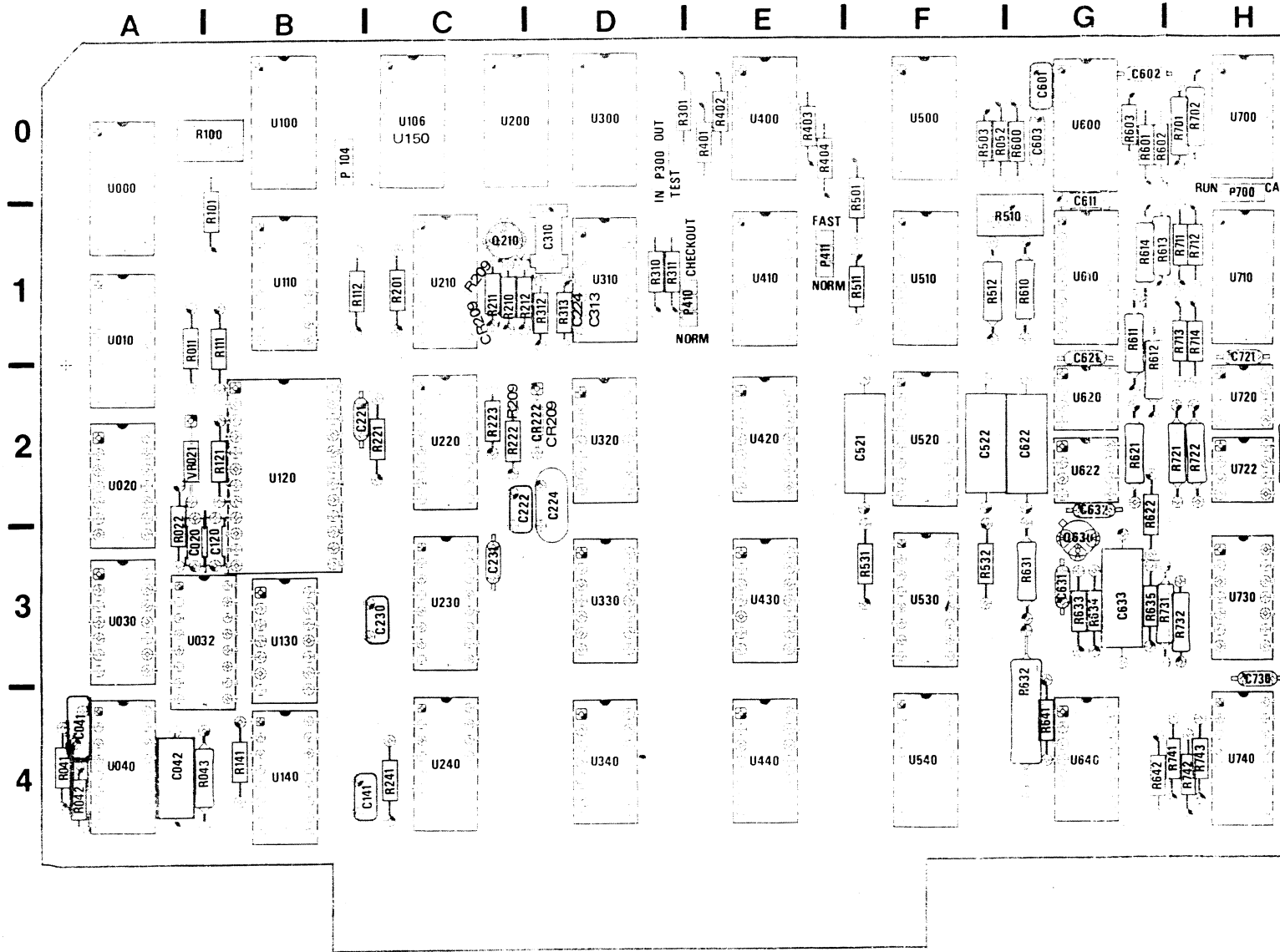
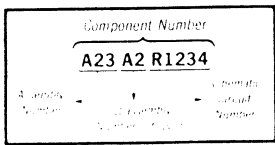


Fig. 7-18. The Translator circuit board, assembly A22.

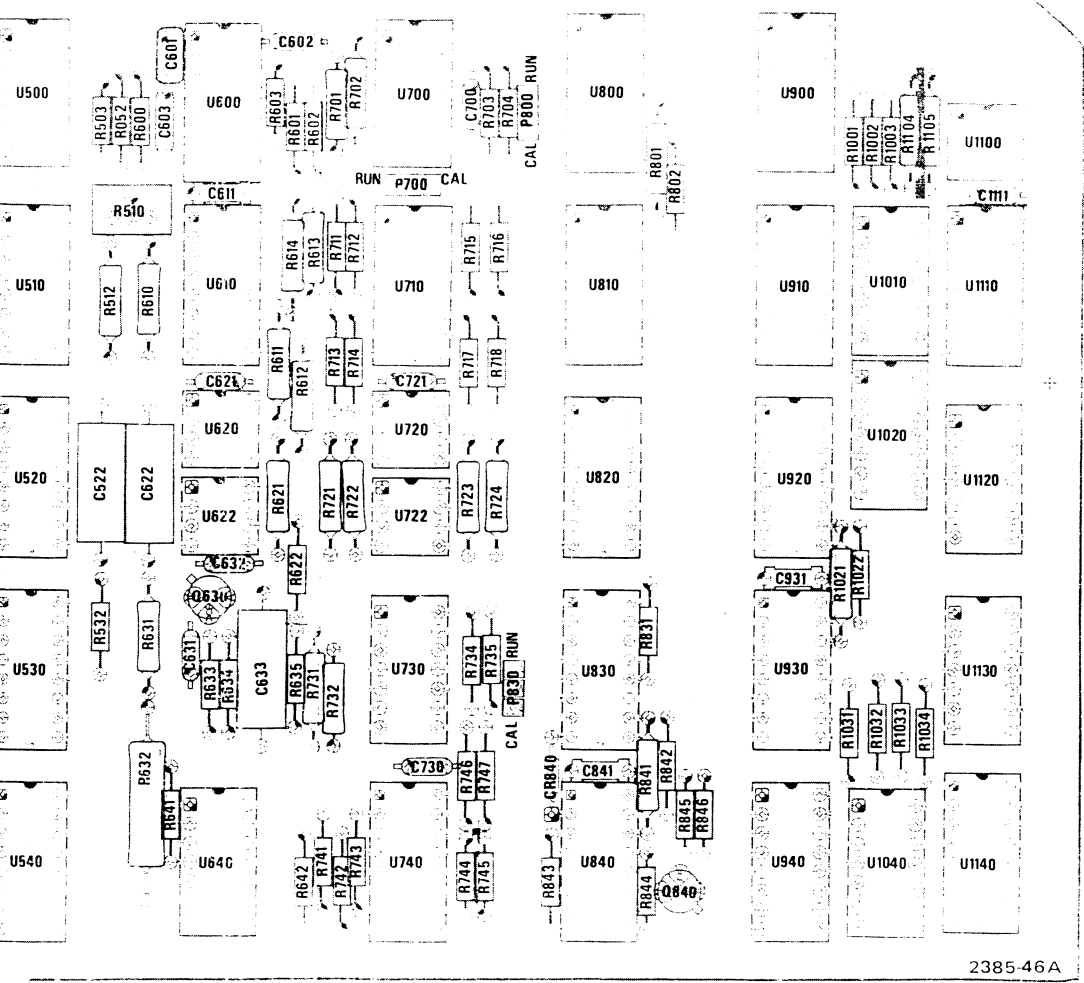
COMPONENT NUMBER EXAMPLE



Example: A23 A2 R1234  
 A = Assembly Number  
 23 = Component Number  
 R = Resistor  
 1234 = Component Number

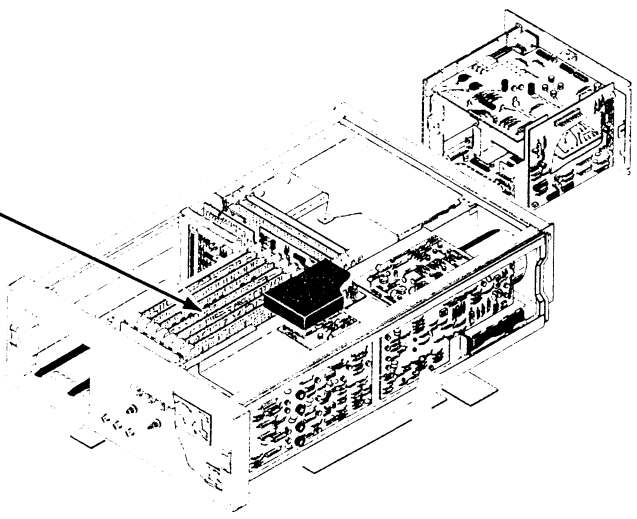


F I G I H I I J I K

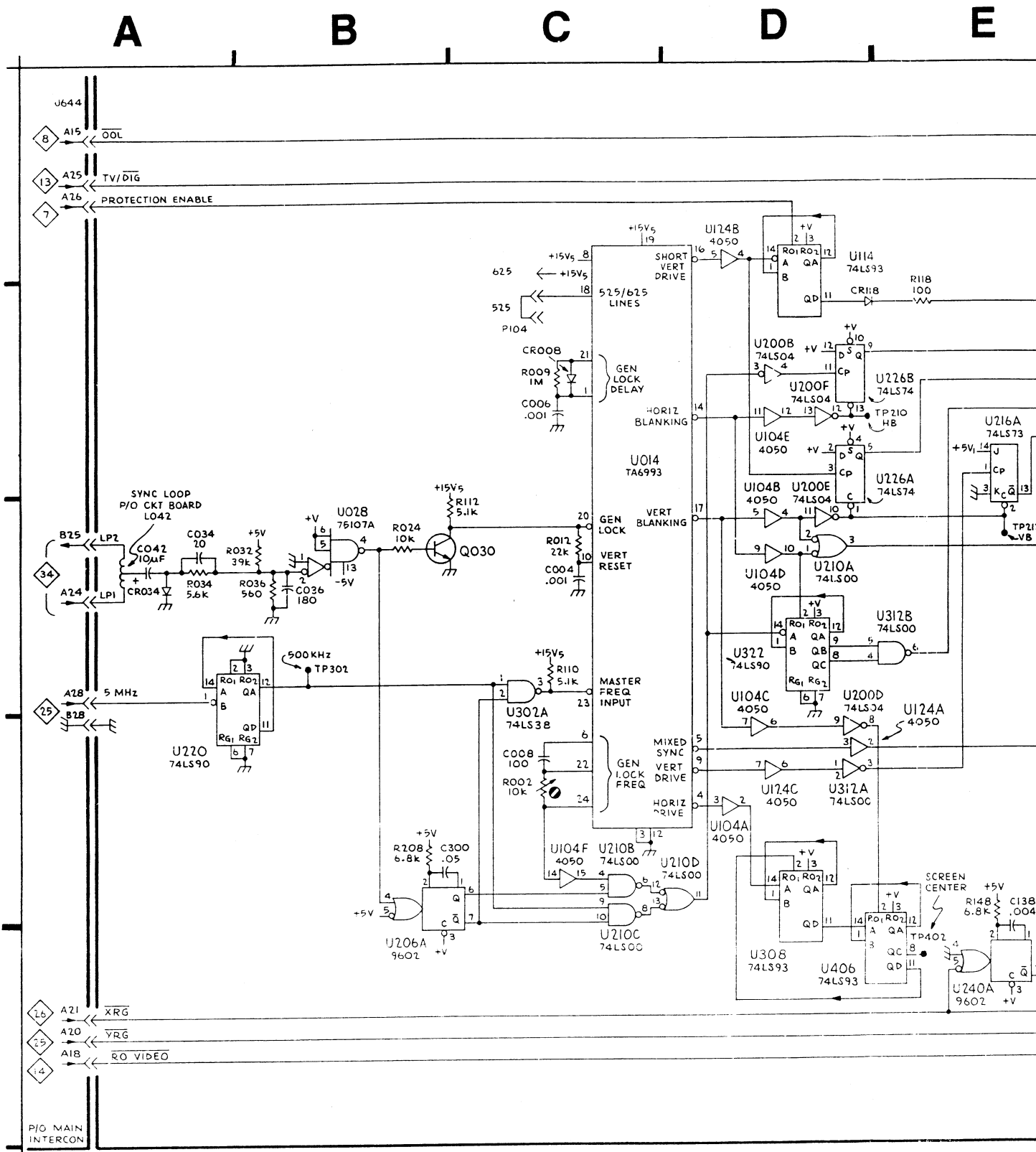


\*See Parts List for serial number ranges.

A22  
TRANSLATOR

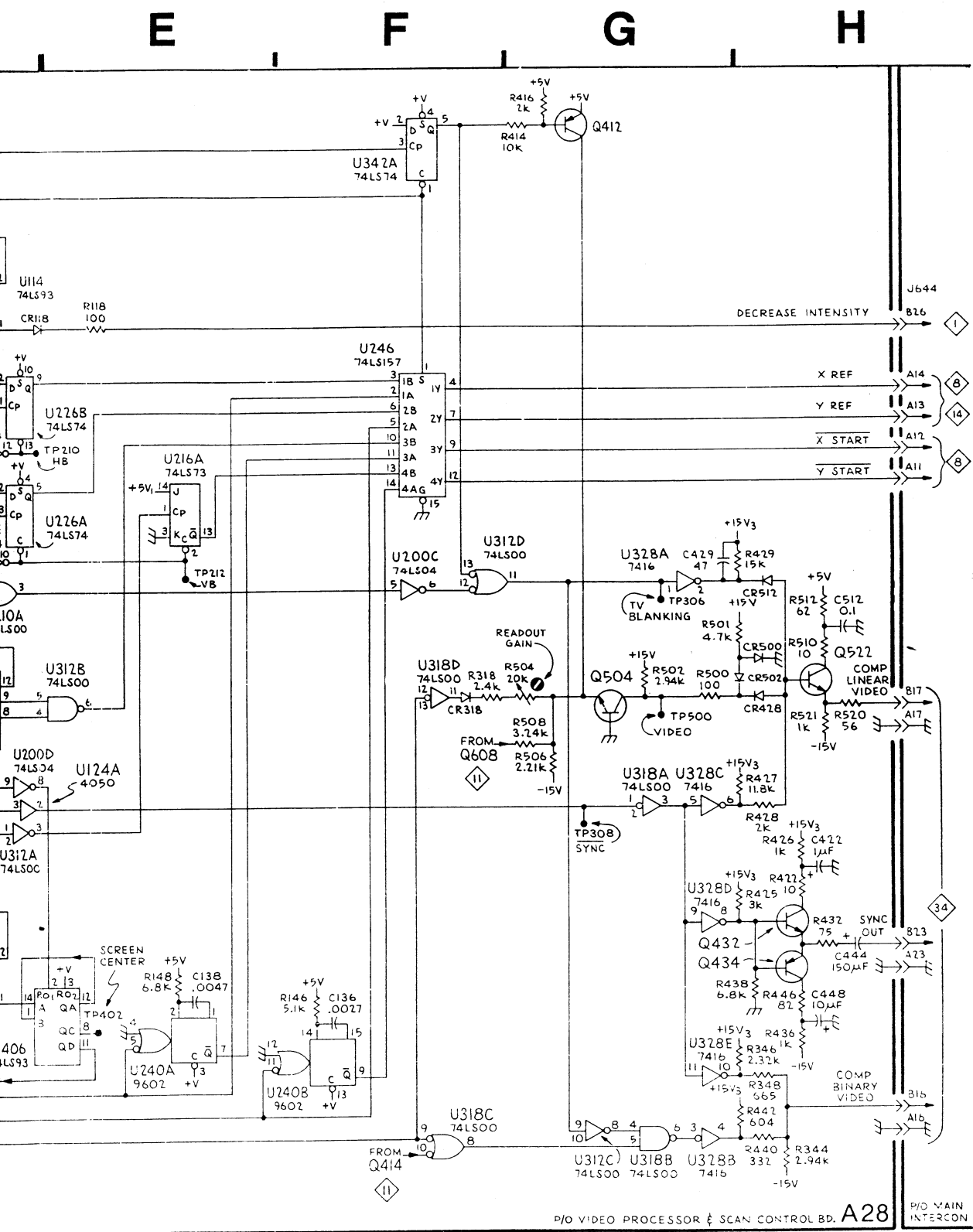


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REV APR 1982



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PR 1982

X & Y SCAN CONTROL 12

| P/O A22 ASSY   |                    |                |                |                    |                | TRANSLATOR <span style="border: 1px solid black; padding: 2px;">13</span> |                    |                |
|----------------|--------------------|----------------|----------------|--------------------|----------------|---|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location |
| C224*          | H5                 | D3             | R622           | F2                 | G2             | U400D   | A2                 | E0             |
| C310           | H6                 | D1             | R631           | H5                 | G3             | U410  | G5                 | E1             |
| C313*          | H5                 | D3             | R632           | H5                 | G4             | U420B   | F4                 | E2             |
| C521           | H5                 | F2             | R633           | H3                 | G3             | U420C   | F4                 | E2             |
| C522           | H4                 | F2             | R634           | H3                 | G3             | U420F   | B3                 | E2             |
| C601           | B2                 | G0             | R635           | G2                 | G3             | U430A   | F4                 | E3             |
| C602           | E2                 | G0             | R641           | H3                 | G4             | U430B   | F4                 | E3             |
| C603           | C5                 | G0             | R642           | F2                 | G4             | U430C   | G4                 | E3             |
| C611           | G3                 | G1             | R701           | D2                 | H0             | U440A   | G4                 | E4             |
| C621           | G3                 | G2             | R702           | D2                 | H0             | U440B   | G4                 | E4             |
| C622           | H5                 | G2             | R703           | C2                 | H0             | U440C   | G4                 | E4             |
| C631           | H3                 | G3             | R704           | D2                 | H0             | U500A   | B4                 | F0             |
| C632           | H4                 | G3             | R711           | E2                 | H1             | U500B   | B4                 | F0             |
| C633           | H3                 | G3             | R712           | D2                 | H1             | U500C   | B4                 | F0             |
| C700           | C2                 | H0             | R713           | E2                 | H1             | U500D   | B3                 | F0             |
| C721           | E2                 | H2             | R714           | D2                 | H1             | U510  | G4                 | F1             |
| C730           | F2                 | H3             | R715           | C2                 | H1             | U520B   | H4                 | F2             |
| C841           | E3                 | I4             | R716           | D2                 | H1             | U520B   | H5                 | F2             |
| C931           | E3                 | J3             | R717           | C2                 | H1             | U530  | E5                 | F3             |
| C1111          | C2                 | K1             | R718           | C2                 | H1             | U540  | E5                 | F4             |
| CR209*         | H4                 | D2             | R721           | E3                 | H2             | U600A   | B2                 | G0             |
| CR222*         | H4                 | D2             | R722           | E3                 | H2             | U600B   | C6                 | G0             |
| CR840          | A2                 | I4             | R723           | D3                 | H2             | U610  | G3                 | G1             |
| P300           | F6                 | D0             | R724           | D3                 | H2             | U620  | G3                 | G2             |
| P410           | G6                 | E1             | R731           | F2                 | H3             | U622  | H4                 | G2             |
| P411           | F6                 | E1             | R732           | F2                 | H3             | U640A   | F6                 | G4             |
| P700           | D2                 | H0             | R734           | F2                 | H3             | U640B   | H4                 | G4             |
| P800           | C2                 | I0             | R735           | F2                 | H3             | U640C   | G2                 | G4             |
| P830           | E2                 | I3             | R741           | F2                 | H4             | U640D   | G2                 | G4             |
| Q210           | H5                 | C1             | R742           | G2                 | H4             | U700A   | E2                 | H0             |
| Q630           | H3                 | G3             | R743           | G2                 | H4             | U700C   | D2                 | H0             |
| Q840           | B2                 | I4             | R744           | E2                 | H4             | U700D   | C2                 | H0             |
| R112           | H6                 | C1             | R745           | F2                 | H4             | U710  | C1                 | H1             |
| R210           | G5                 | C1             | R746           | E2                 | H4             | U710  | E1                 | H1             |
| R211           | G5                 | C1             | R747           | F2                 | H4             | U720  | D3                 | H2             |
| R212           | H6                 | C1             | R801           | C3                 | I0             | U722  | E3                 | H2             |
| R209*          | H4                 |                | R802           | C3                 | I0             | U730A   | G2                 | H3             |
| R223*          | G4                 | C2             | R831           | A2                 | I3             | U730B   | G2                 | H3             |
| R301           | F6                 | D0             | R841           | E3                 | I4             | U730C   | F2                 | H3             |
| R310           | G6                 | D1             | R842           | E3                 | I4             | U730D   | F2                 | H3             |
| R311           | G6                 | D1             | R843           | A2                 | I4             | U740  | F1                 | H4             |
| R312           | G5                 | D1             | R844           | B2                 | I4             | U800  | C4                 | I0             |
| R313           | H5                 | D1             | R845           | B2                 | I4             | U810  | C3                 | I1             |
| R401           | A1                 | E0             | R846           | B2                 | I4             | U820  | D4                 | I2             |
| R402           | B1                 | E0             | R1002          | A6                 | K0             | U830  | A4                 | I3             |
| R403           | B1                 | E0             | R1003          | A6                 | K0             | U840  | E3                 | I4             |
| R404           | A1                 | E0             | R1021          | D3                 | K3             | U900  | D4                 | J0             |
| R501           | F6                 | F0             | R1022          | D3                 | K3             | U910  | C4                 | J1             |
| R503           | C6                 | F0             | R1031          | B6                 | K3             | U920  | E4                 | J2             |
| R510*          | F3                 | F1             | R1032          | A6                 | K3             | U930  | D3                 | J3             |
| R512           | G3                 | F1             | R1033          | B6                 | K3             | U940  | E4                 | J4             |
| R531           | H5                 | F3             | R1034          | A6                 | K3             | U1010A  | A5                 | K1             |
| R532           | H4                 | F3             | R1104          | C3                 | K0             | U1010B  | B5                 | K1             |
| R600           | B2                 | G0             | R1105          | C3                 | K0             | U1020C  | B5                 | K2             |
| R601           | E2                 | G0             | U100B          | E2                 | B0             | U1040A  | B5                 | K4             |
| R602           | E2                 | G0             | U240           | D5                 | C4             | U1040D  | A5                 | K4             |
| R608*          | G3                 | G1             | U310A          | D5                 | D1             | U1040E  | B5                 | K4             |
| R610           | F3                 | G1             | U310B          | C6                 | D1             | U1040F  | B5                 | K4             |
| R611           | F3                 | G1             | U310C          | D6                 | D1             | U1100   | C3                 | K1             |
| R612           | G3                 | G1             | U310D          | C5                 | D1             | U1110   | A5                 | K1             |
| R613           | E2                 | G1             | U330C          | C5                 | D3             | U1120A  | B6                 | L2             |
| R614           | E2                 | G1             | U400A          | A1                 | E0             | U1130A  | C5                 | K3             |
| R621           | G3                 | G2             | U400B          | B1                 | E0             | U1130B  | H1                 | L3             |
|                |                    |                | U400C          | B2                 | E0             | U1140   | A5                 | K4             |

P/O A22 ASSY ALSO SHOWN ON 14

| P/O A68 ASSY                 |    |    |      |    |    | TRANSLATOR <span style="border: 1px solid black; padding: 2px;">13</span> |   |   |
|------------------------------|----|----|------|----|----|---|---|---|
| J448                         | A1 | E4 | J448 | H1 | E4 | —   | — | — |
| P/O A68 ASSY - SEE FIG. 7-37 |    |    |      |    |    |   |   |   |


| P/O A22 ASSY   |                    |                | CHARACTER GENERATOR <span style="border: 1px solid black; padding: 2px;">14</span> |                    |                |
|----------------|--------------------|----------------|--|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| C020           | B1                 | A2             | U032A  | B2                 | D2             |
| C041           | B2                 | A4             | U032B  | C2                 | D2             |
| C042           | B3                 | A4             | U040A  | B2                 | A4             |
| C120           | C1                 | B2             | U040B  | B4                 | A4             |
| C141           | H1                 | B4             | U100   | E4                 | B0             |
| C221           | H2                 | C2             | U106*  | D5                 | C0             |
| C222           | H2                 | C2             | U110   | E6                 | B1             |
| C222           | H2                 | C2             | U120   | G5                 | B2             |
| C222           | H2                 | C2             | U130A  | C6                 | B3             |
| C230           | H2                 | C3             | U130C  | B3                 | B3             |
| C231           | H1                 | C3             | U130D  | B3                 | B3             |
|                |                    |                | U140   | G5                 | B4             |
| R011           | G5                 | A1             | U150*  | D5                 | C0             |
| R022           | C1                 | A2             | U200   | C4                 | C0             |
| R041           | B2                 | A4             | U210   | C5                 | C1             |
| R042           | F2                 | A4             | U220   | C3                 | C2             |
| R043           | B4                 | A4             | U230   | C3                 | C3             |
| R052           | G2                 | F0             | U300A  | D4                 | D0             |
| R100           | B1                 | B0             | U300B  | D5                 | D0             |
| R101           | B1                 | B0             | U320A  | B6                 | D2             |
| R111           | G5                 | B1             | U320B  | B3                 | D2             |
| R121           | G5                 | B2             | U320C  | B3                 | D2             |
| R141           | G4                 | B4             | U330A  | C2                 | D3             |
| R201           | F2                 | C0             | U330B  | C2                 | D3             |
| R222           | G2                 | C2             | U340A  | E6                 | D4             |
| R241           | H1                 | C4             | U340B  | A1                 | D4             |
| R511           | G2                 | F1             | U340C  | B3                 | D4             |
| R1001          | G2                 | J0             | U340D  | B3                 | D4             |
|                |                    |                | U420D  | E1                 | E2             |
| U000           | E3                 | A0             | U430D  | E2                 | E3             |
| U010           | E5                 | A1             | U430E  | E2                 | E3             |
| U020B          | E4                 | A2             | U430F  | E1                 | E3             |
| U020C          | E6                 | A2             | U430F  | E1                 | E3             |
| U020D          | C2                 | A2             | U440D  | E2                 | E4             |
| U030A          | C3                 | A3             | U440E  | E2                 | E4             |
| U030B          | C3                 | A3             | U440F  | E2                 | E4             |
| U030C          | C4                 | A3             | U440F  | E2                 | E4             |
| U030D          | C4                 | A3             | VR021  | G5                 | A2             |



P/O A22 ASSY ALSO SHOWN ON 13


| P/O A68 ASSY |    |    | CHARACTER GENERATOR <span style="border: 1px solid black; padding: 2px;">14</span> |    |    |
|--------------|----|----|--|----|----|
| J448         | A1 | E4 | J448   | H1 | E4 |

P/O A68 ASSY - SEE FIG. 7-37

\*See Parts List for serial number ranges.

| P/O A54 ASSY (SN B100827 & up) |                    |                | 6800 MPU  |                    |                |
|--------------------------------|--------------------|----------------|--|--------------------|----------------|
| Circuit Number                 | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| C106                           | C4                 | A0             | U001A  | B5                 | A0             |
| C108                           | A3                 | C0             | U001B  | B6                 | A0             |
| C110                           | B4                 | C0             | U012A  | B5                 | A1             |
| C114                           | B4                 | B1             | U012B  | B5                 | A1             |
| C204                           | B3                 | C0             | U012D  | B5                 | A1             |
| C212                           | C5                 | C1             | U012E  | B5                 | A1             |
| CR106                          | C4                 | B0             | U012F  | B6                 | A1             |
| CR108                          | A3                 | B0             | U022   | A6                 | A2             |
|                                |                    |                | U032   | A5                 | A3             |
|                                |                    |                | U102A  | B5                 | B0             |
| P012                           | D6                 | A1             | U102B  | B4                 | B0             |
| P216                           | D5                 | C1             | U114A  | C3                 | B1             |
| P224                           | D5                 | C2             | U114D  | C4                 | B1             |
| P234                           | G3                 | C3             | U114E  | C5                 | B1             |
|                                |                    |                | U114F  | C3                 | B1             |
| Q212                           | C5                 | C1             | U122A  | E6                 | B2             |
| Q218                           | C4                 | C1             | U122B  | D5                 | B2             |
| R106                           | B4                 | B0             | U122F  | E5                 | B2             |
| R108                           | A3                 | C0             | U132   | E4                 | B3             |
| R110                           | B4                 | C0             | U204A  | B3                 | C0             |
| R112                           | C3                 | B1             | U206A  | B4                 | C0             |
| R114                           | C4                 | B1             | U206B  | C4                 | C0             |
| R122                           | D4                 | B2             | U206C  | B3                 | C0             |
| R123                           | D3                 | B2             | U206D  | E5                 | C0             |
| R124                           | C4                 | B2             | U222   | D4                 | C2             |
| R126                           | C4                 | B2             | U234A  | E3                 | C3             |
| R127                           | C4                 | B2             | U312   | B2                 | D1             |
| R204                           | B3                 | C0             | U314   | B3                 | D1             |
| R212                           | C5                 | C1             | U322   | G2                 | D2             |
| R213                           | C5                 | C1             | U332   | G2                 | D3             |
| R214                           | C5                 | C1             | U334   | G3                 | D3             |
| R216                           | C5                 | C1             | U402A  | C3                 | E0             |
| R304                           | A3                 | D0             | U402B  | A3                 | E0             |

P/O A54 ASSY ALSO SHOWN ON  & 

| P/O A68 ASSY |    |    | 6800 MPU  |    |    |
|--------------|----|----|--|----|----|
| J110         | A1 | B1 | J110   | H1 | B1 |

P/O A68 ASSY - SEE FIG. 7-37

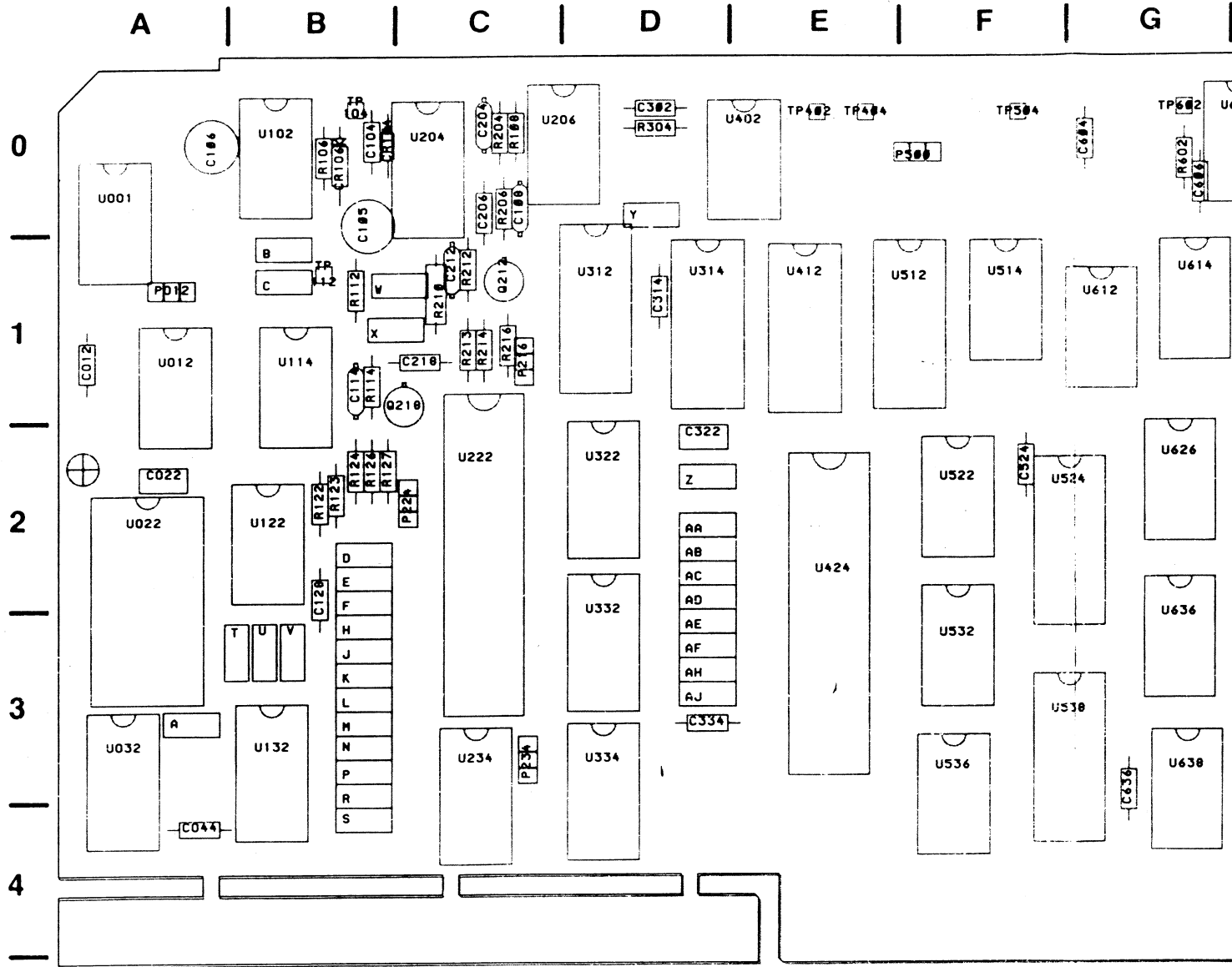
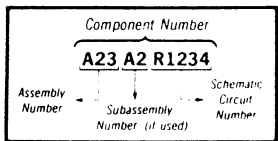
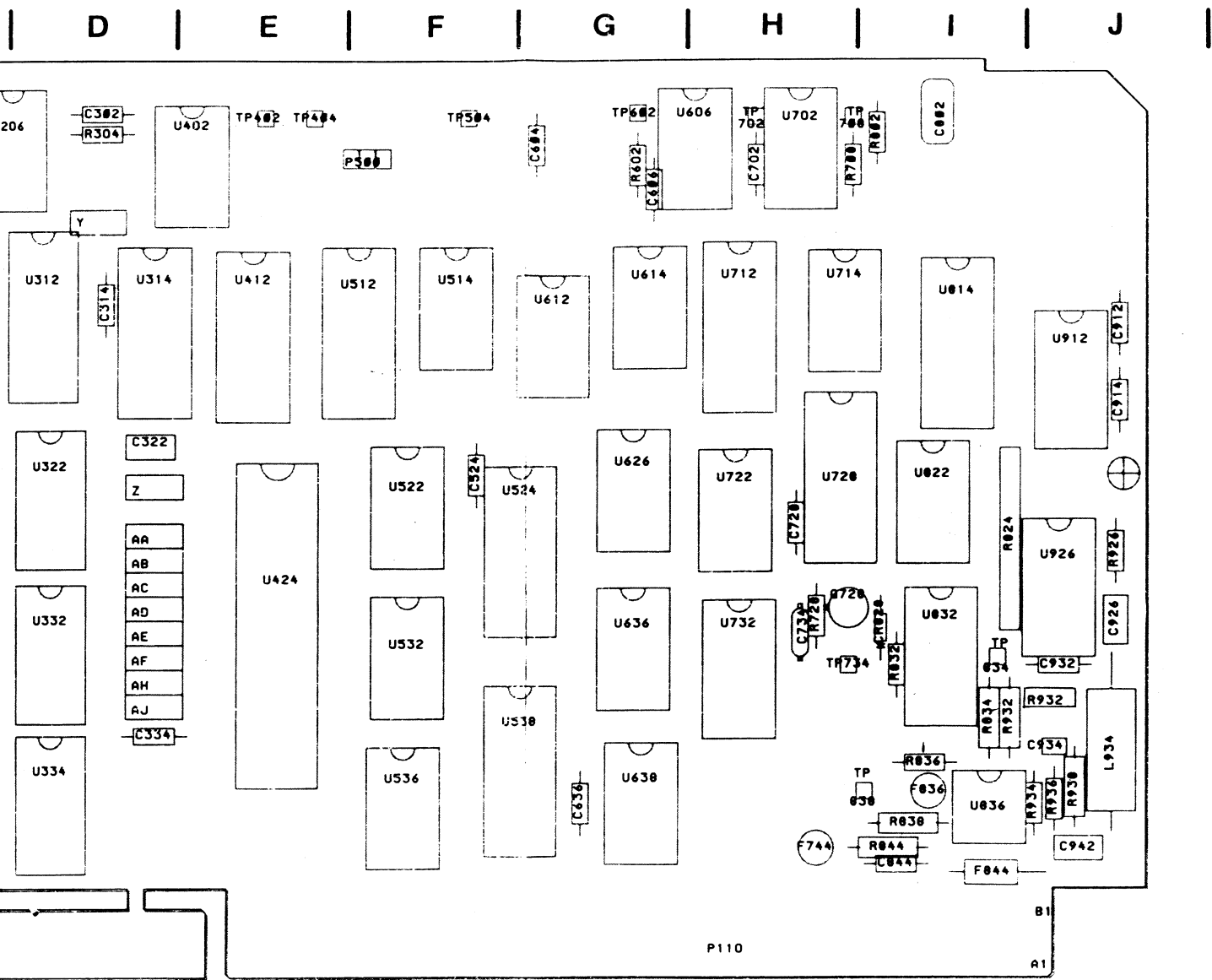


Fig. 7-20. The MPU circuit board, assembly A54 (SN B100827 & up).

COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List



2385-153

Fig. 7-20. The MPU circuit board, assembly A54 (SN B100827 & up).



A B C D E

1

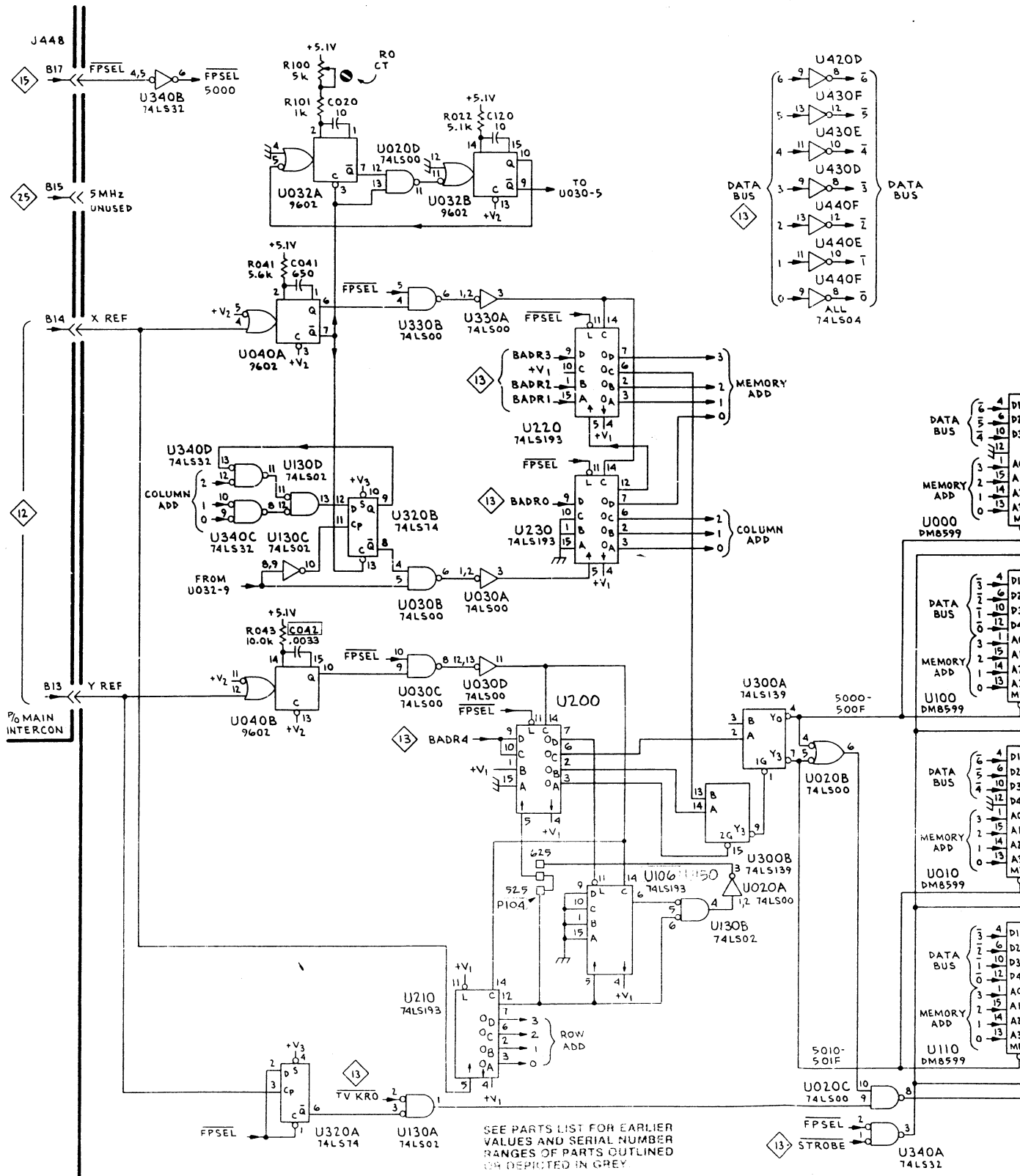
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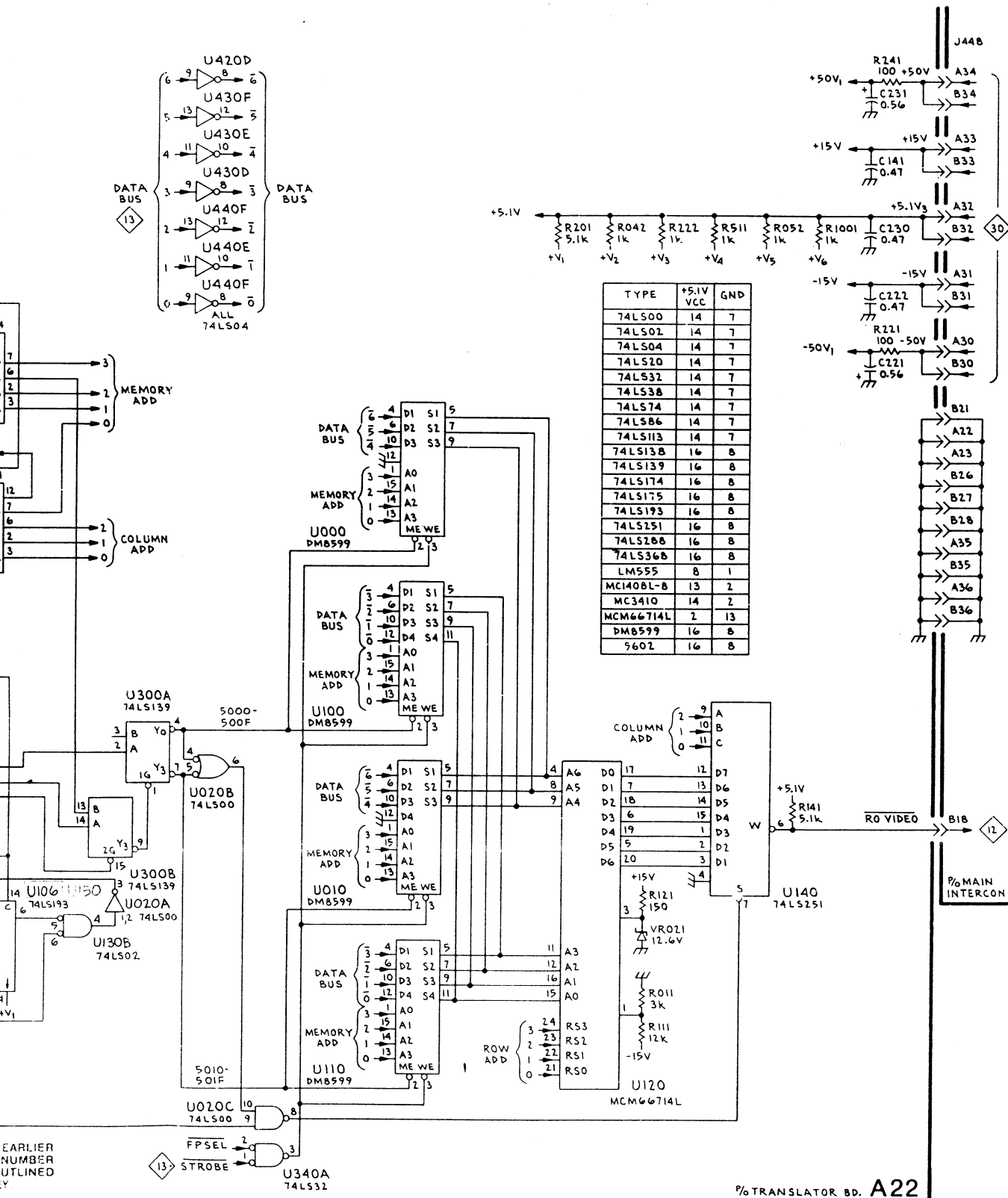
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6



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2385-112  
REV APR 1982



2385-112  
REV APR 1982

CHARACTER GENERATOR

| P/O A54 ASSY (SN B100826 & below) |                    |                | 6800 MPU <span style="border: 1px solid black; padding: 2px;">15</span> |                    |                |
|-----------------------------------|--------------------|----------------|---|--------------------|----------------|
| Circuit Number                    | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location |
| C106                              | C4                 | B0             | U001A   | B5                 | A0             |
| C108                              | A3                 | B0             | U001B   | B6                 | A0             |
| C110                              | B4                 | C0             | U012A   | B5                 | A1             |
| C114                              | B4                 | B1             | U012B   | B5                 | A1             |
| C204                              | B3                 | C0             | U012D   | B5                 | A1             |
| C212                              | C5                 | C1             | U012E   | B5                 | A1             |
| CR106                             | C4                 | B0             | U012F   | B6                 | A0             |
| CR108                             | A3                 | B0             | U022  | A6                 | A2             |
|                                   |                    |                | U032  | A5                 | A3             |
|                                   |                    |                | U102A   | B5                 | B0             |
| P012                              | D6                 | A1             | U102B   | B4                 | B0             |
| P216                              | D5                 | C1             | U114A   | C3                 | B1             |
| P224                              | D5                 | C2             | U114D   | C4                 | B1             |
| P234                              | G3                 | C3             | U114E   | C5                 | B1             |
|                                   |                    |                | U114F   | C3                 | B1             |
| Q212                              | C5                 | C1             | U122A   | E6                 | B2             |
| Q218                              | C4                 | C1             | U122B   | D5                 | B2             |
| R106                              | B4                 | B0             | U122F   | E5                 | B2             |
| R108                              | A3                 | C0             | U132  | E4                 | B3             |
| R110                              | B4                 | C0             | U204A   | B3                 | C0             |
| R112                              | C3                 | B1             | U206A   | B4                 | C0             |
| R114                              | C4                 | B1             | U206B   | C4                 | C0             |
| R122                              | D4                 | B2             | U206C   | B3                 | C0             |
| R123                              | D3                 | B2             | U206D   | E5                 | C0             |
| R124                              | C4                 | B2             | U222  | D4                 | C2             |
| R126                              | C4                 | B2             | U234A   | E3                 | C3             |
| R127                              | C4                 | B2             | U312  | B2                 | D1             |
| R204                              | B3                 | C0             | U314  | B3                 | D1             |
| R212                              | C5                 | C1             | U322  | G2                 | D2             |
| R213                              | C5                 | C1             | U332  | G2                 | D3             |
| R214                              | C5                 | C1             | U334  | G3                 | D3             |
| R216                              | C5                 | C1             | U402A   | C3                 | E0             |
| R304                              | A3                 | D0             | U402B   | A3                 | E0             |

P/O A54 ASSY ALSO SHOWN ON 16 & 17

| P/O A68 ASSY |    |    | 6800 MPU <span style="border: 1px solid black; padding: 2px;">15</span> |    |    |
|--------------|----|----|---|----|----|
| J110         | A1 | B1 | J110  | H1 | B1 |

P/O A68 ASSY - SEE FIG. 7-37

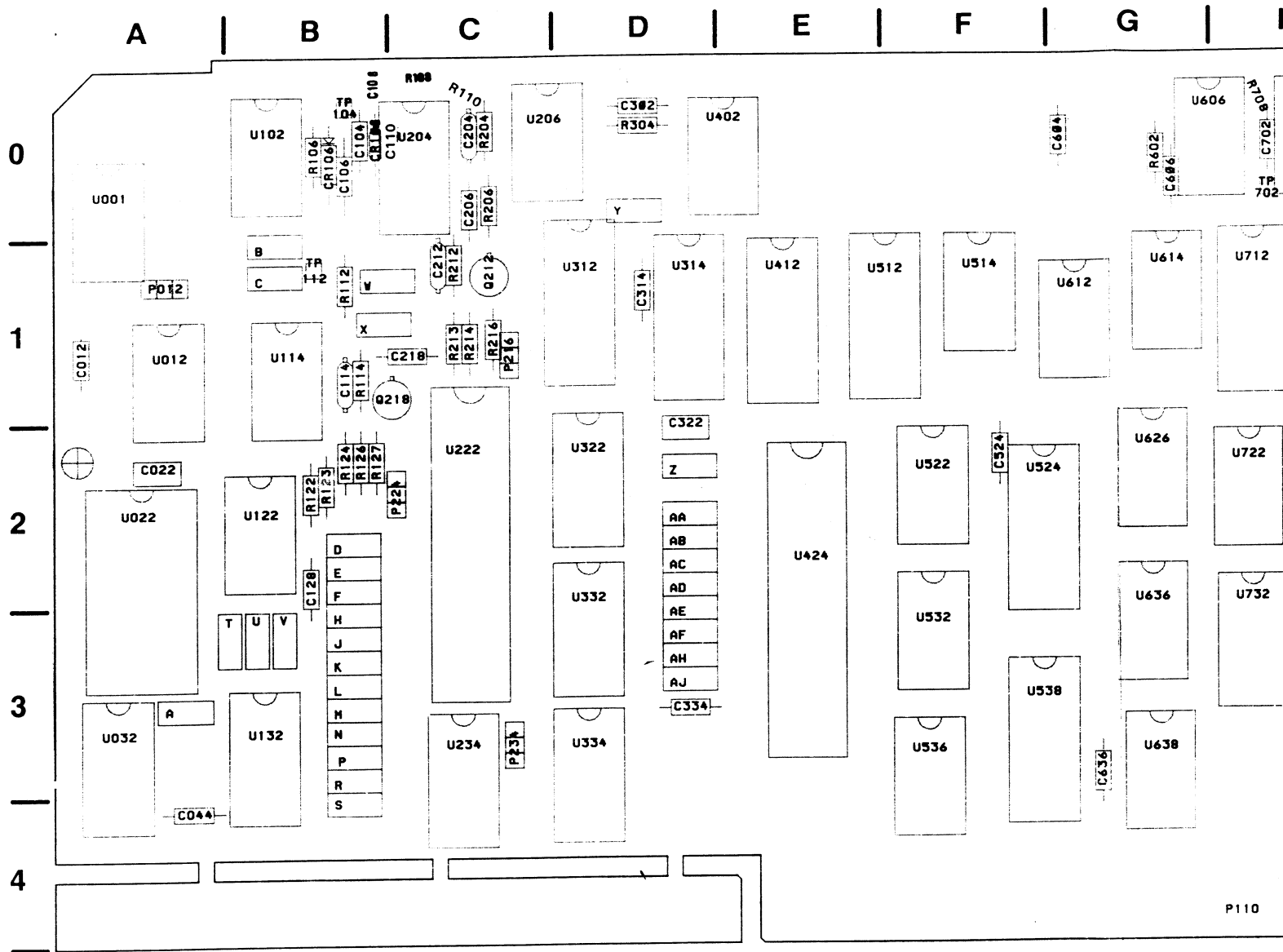
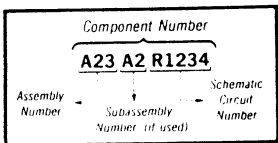


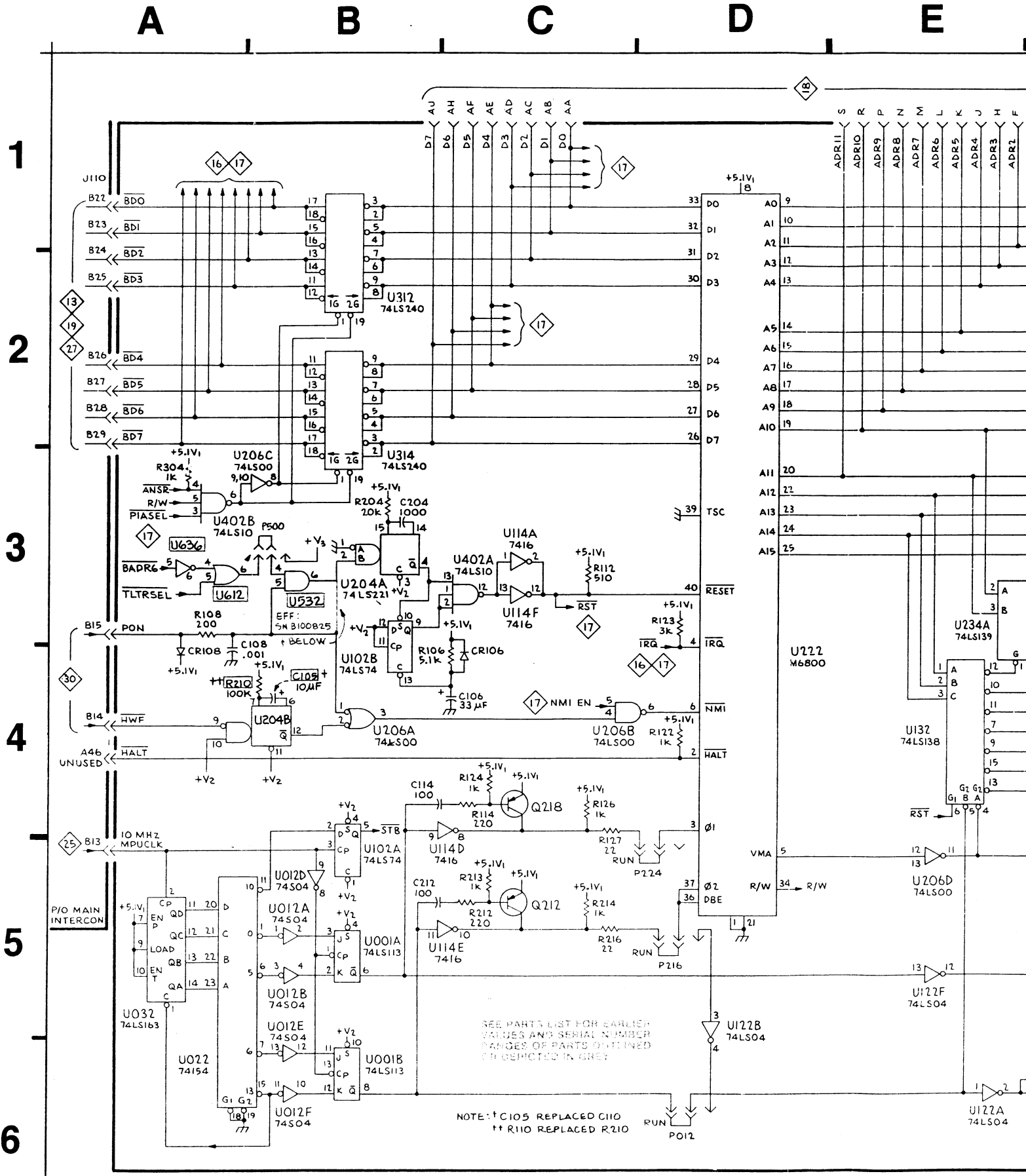
Fig. 7-21. The MPU circuit board, assembly A54 (SN B100826 & below).

COMPONENT NUMBER EXAMPLE



Chassis mounted components have no Assembly Number prefix -- see end of Replaceable Electrical Parts List

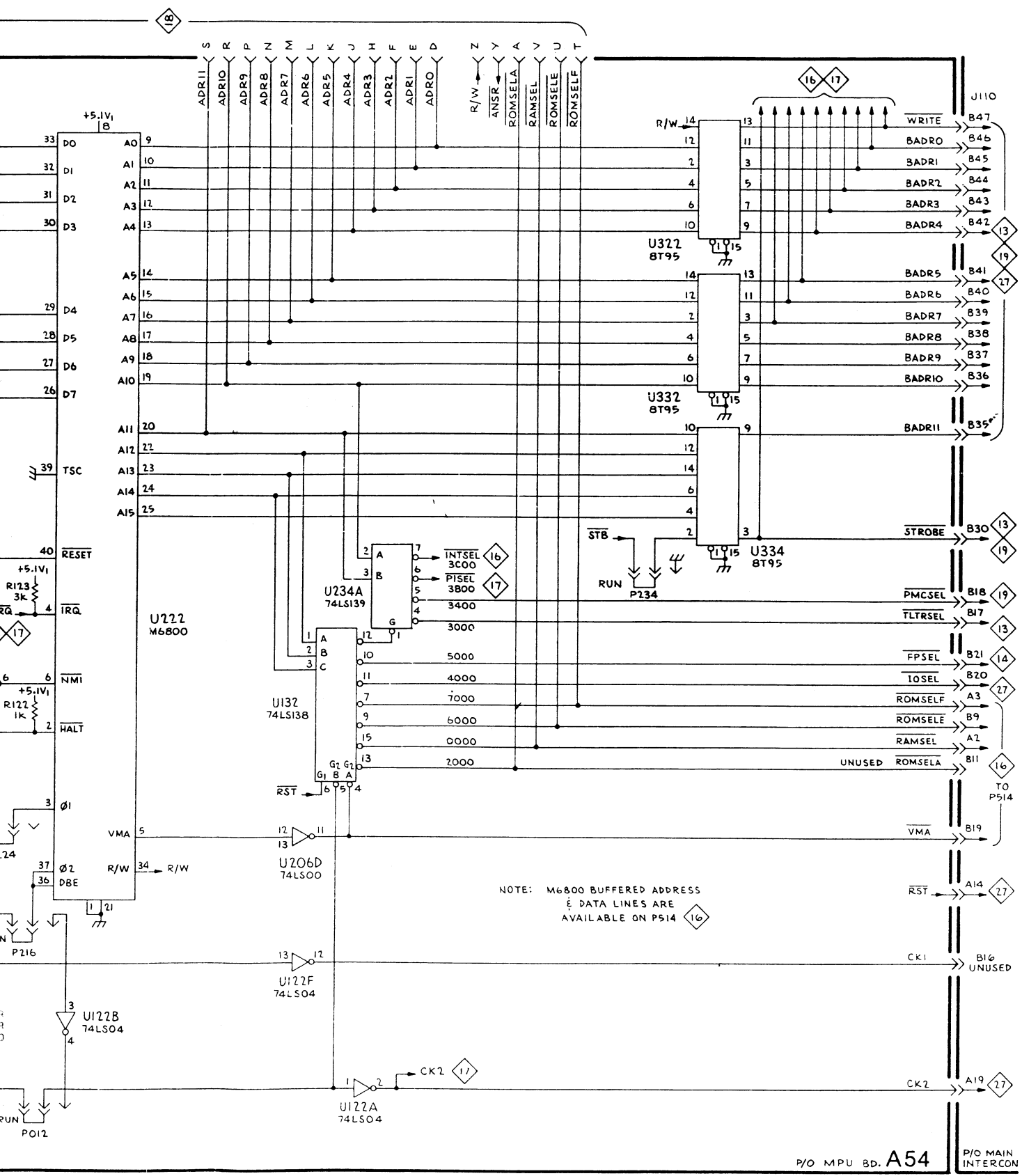




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2385-113  
REV APR. 1982

6800 MPU

| P/O A54 ASSY   |                    |                | 6800 INTERRUPT CONTROL  |                    |                |
|----------------|--------------------|----------------|--|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| C802           | E3                 | I0             | U614D  | C5                 | G1             |
| R708           | B2                 | H0             | U626B  | E6                 | G2             |
| R802           | E3                 | I0             | U636B  | E6                 | G3             |
| U234B          | F5                 | C3             | U702A  | B3                 | H0             |
| U514A          | A3                 | F1             | U702B  | B3                 | H0             |
| U514C          | B4                 | F1             | U712   | C1                 | H1             |
| U514D          | C3                 | F1             | U714A  | C5                 | H1             |
| U524A          | F3                 | F2             | U714B  | C5                 | H1             |
| U532D          | E6                 | F3             | U714C  | C5                 | H1             |
| U606C          | B3                 | G0             | U714D  | C5                 | H1             |
| U606D          | B3                 | G0             | U722A  | F4                 | H2             |
| U612A          | F4                 | G1             | U722B  | F4                 | H2             |
| U612C          | E4                 | G1             | U722C  | F5                 | H2             |
| U614A          | C4                 | G1             | U722D  | F5                 | H2             |
| U614B          | C4                 | G1             | U728   | B5                 | H2             |
| U614C          | C5                 | G1             | U732   | E5                 | H3             |

P/O A54 ASSY ALSO SHOWN ON  & 

| P/O A68 ASSY |          |          | 6800 INTERRUPT CONTROL  |    |    |
|--------------|----------|----------|--|----|----|
| J110<br>J110 | A1<br>D3 | A1<br>A1 | P514   | G2 | F0 |

P/O A68 ASSY - SEE FIG. 7-37



A

B

C

D

E

1

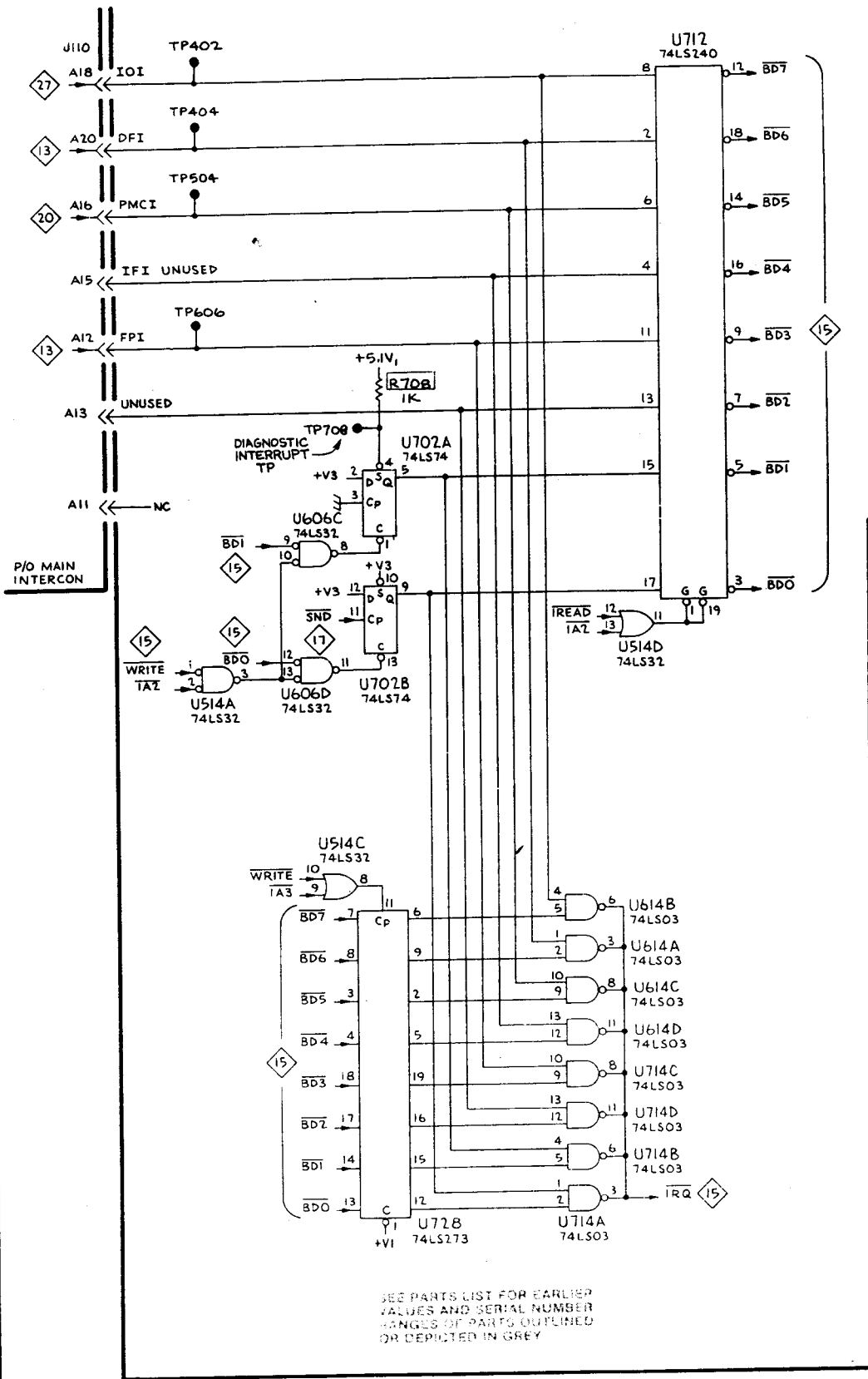
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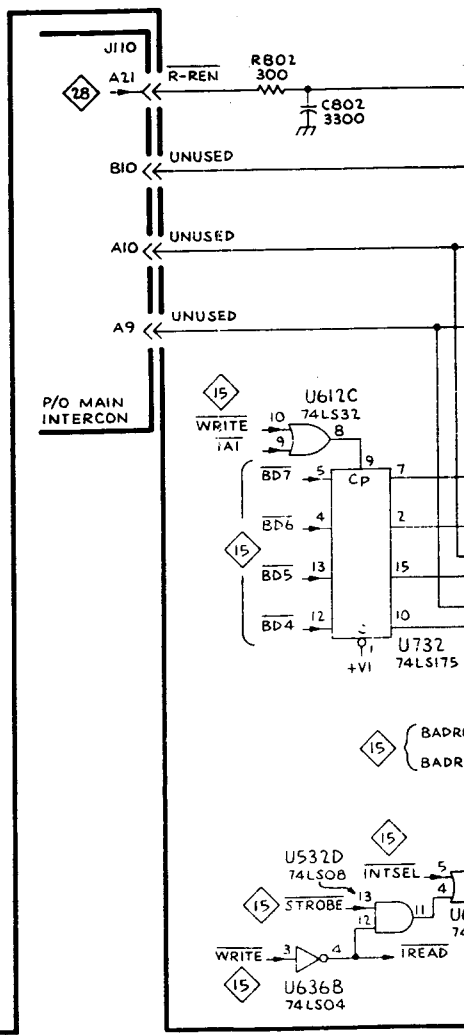
4

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6



| TYPE    | +5.1 VCC |
|---------|----------|
| 74LS00  | 14       |
| 74LS03  | 14       |
| 74LS04  | 14       |
| 74LS08  | 14       |
| 74LS10  | 14       |
| 7416    | 14       |
| 74LS32  | 14       |
| 74LS33  | 14       |
| 74LS74  | 14       |
| 74LS113 | 14       |
| 74LS138 | 16       |
| 74LS139 | 16       |
| 74147   | 16       |
| 74154   | 24       |
| 74LS163 | 16       |
| 74LS175 | 16       |
| 74LS221 | 16       |
| 74LS240 | 20       |
| 74LS273 | 20       |
| 8T95    | 16       |



SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY

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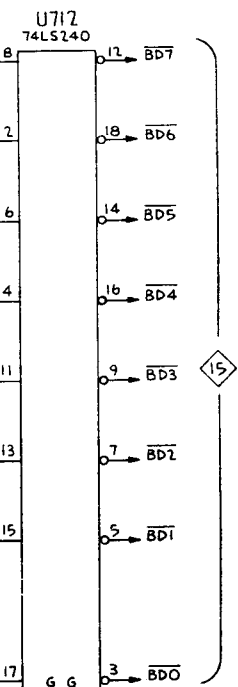
D

E

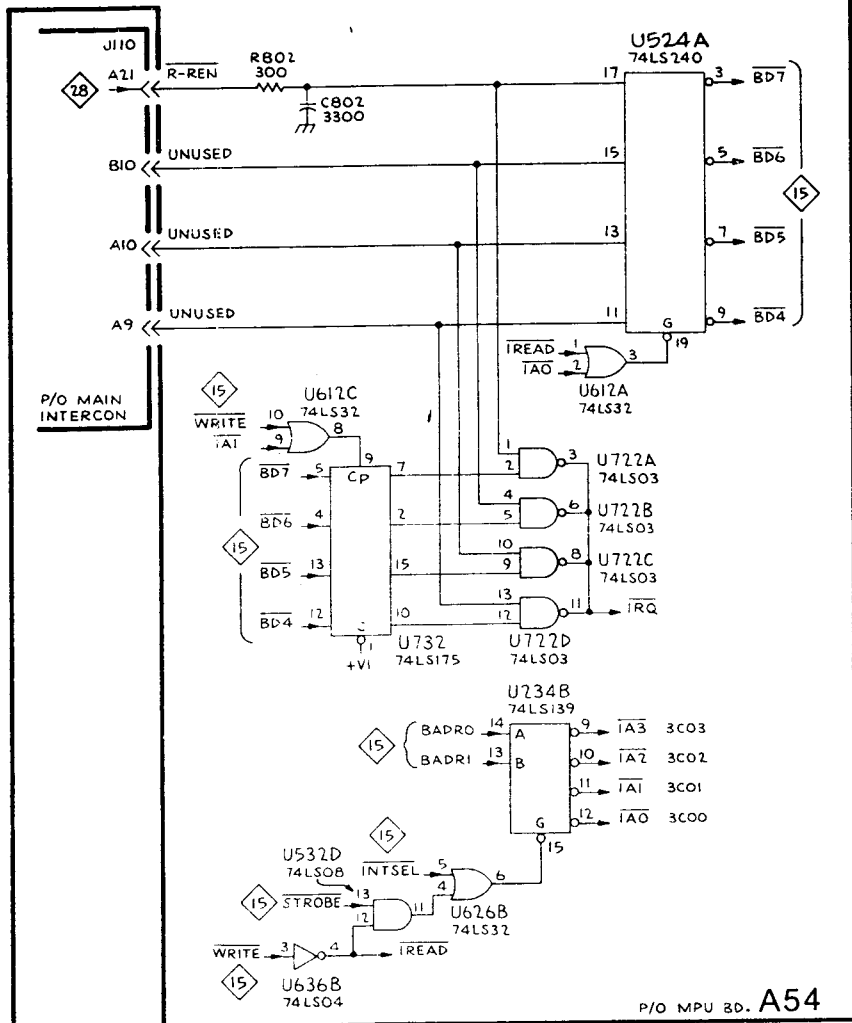
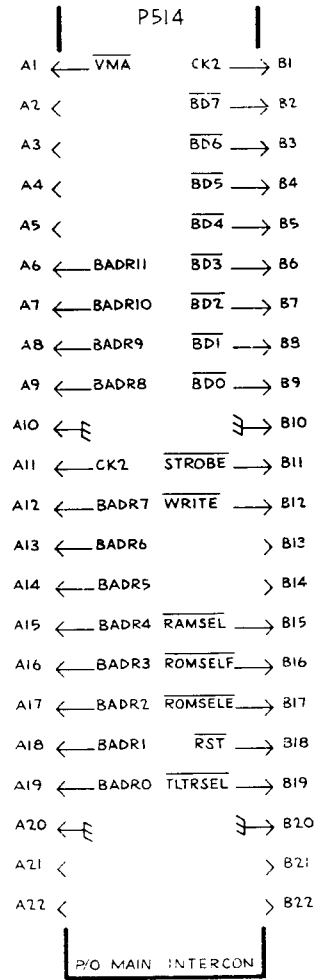
F

G

H



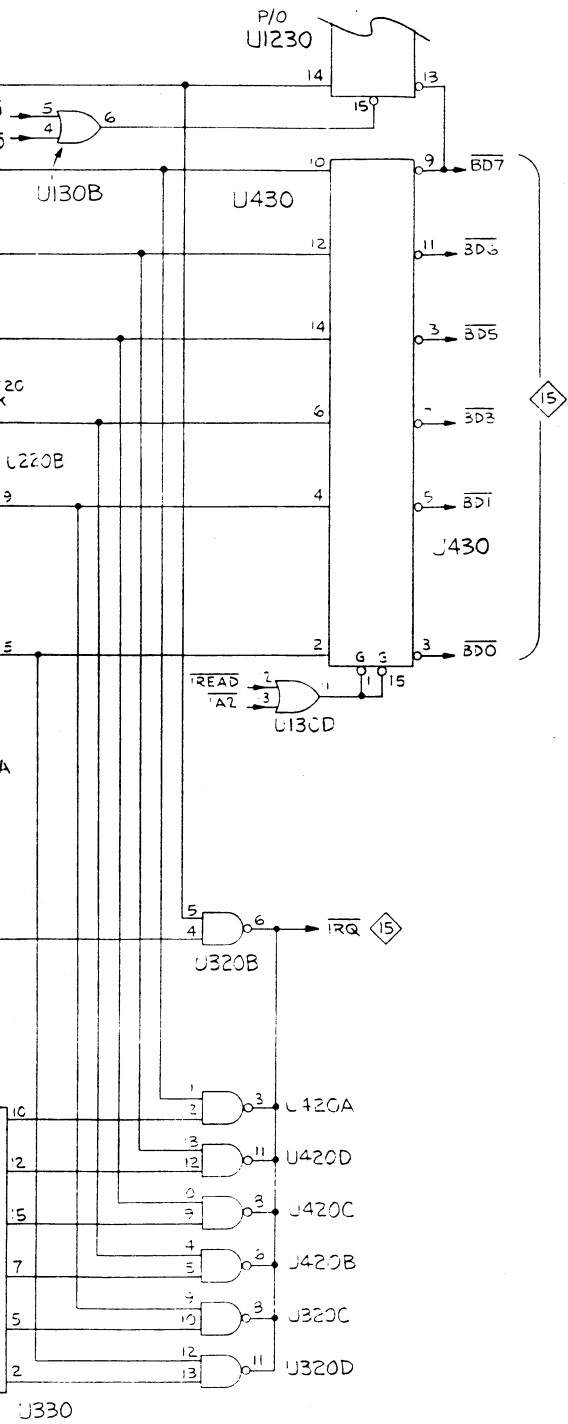
| TYPE    | +5.1V1<br>VCC | COM |
|---------|---------------|-----|
| 74LS00  | 14            | 7   |
| 74LS03  | 14            | 7   |
| 74LS04  | 14            | 7   |
| 74LS08  | 14            | 7   |
| 74LS10  | 14            | 7   |
| 7416    | 14            | 7   |
| 74LS32  | 14            | 7   |
| 74LS33  | 14            | 7   |
| 74LS74  | 14            | 7   |
| 74LS113 | 14            | 7   |
| 74LS138 | 16            | 8   |
| 74LS139 | 16            | 8   |
| 74147   | 16            | 8   |
| 74154   | 24            | 12  |
| 74LS163 | 16            | 8   |
| 74LS175 | 16            | 8   |
| 74LS221 | 16            | 8   |
| 74LS240 | 20            | 10  |
| 74LS273 | 20            | 10  |
| 8T95    | 16            | 8   |



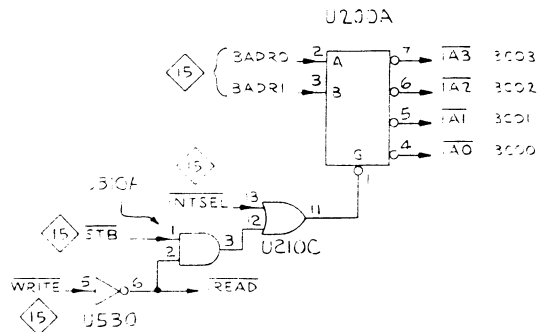
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6800 INTERRUPT CONTROL



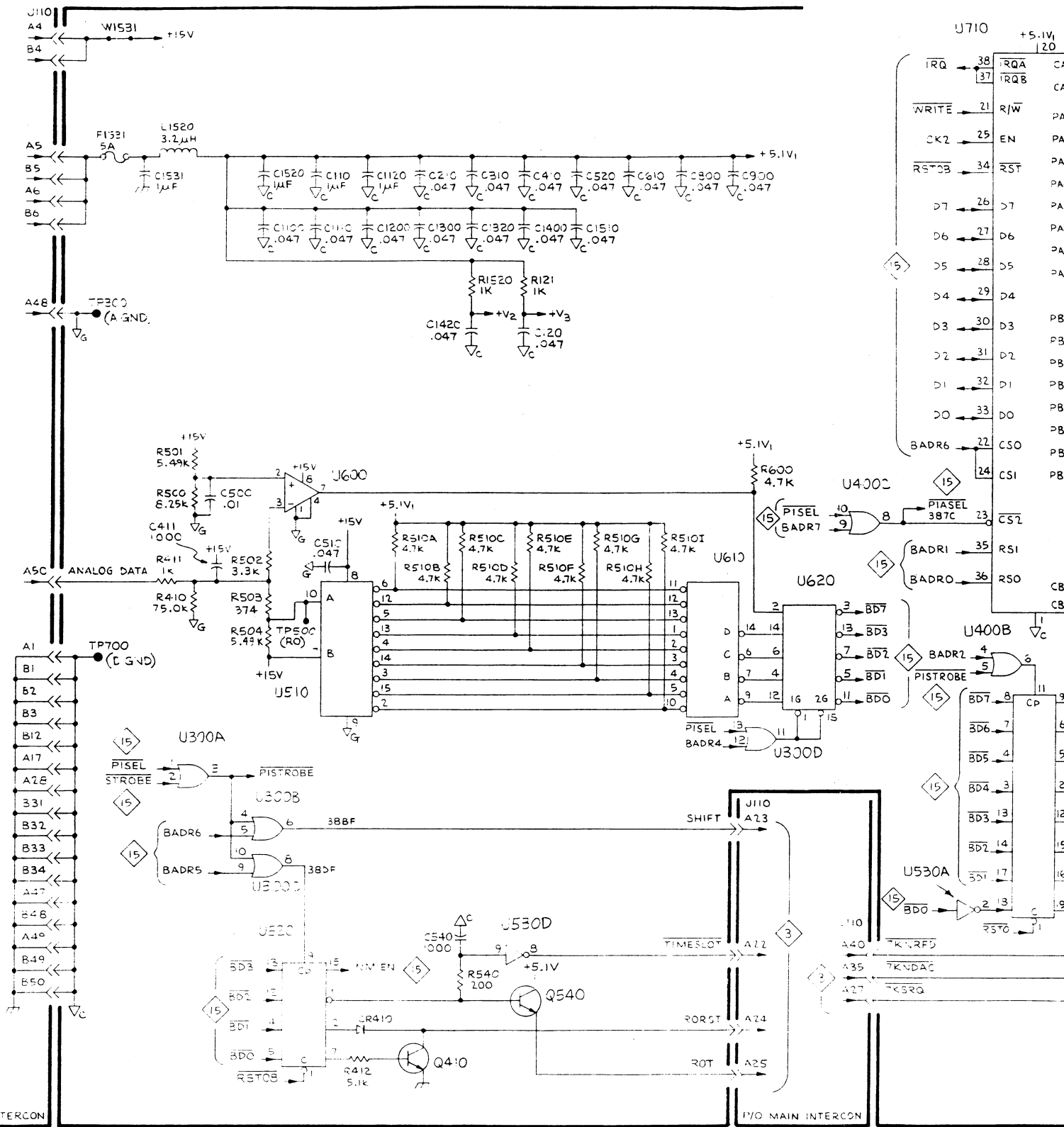


| TYPE    | +5.1V1<br>VCC | COM |
|---------|---------------|-----|
| 74LS00  | 14            | 7   |
| 74LS03  | 14            | 7   |
| 74LS04  | 14            | 7   |
| 74LS08  | 14            | 7   |
| 74LS30  | 14            | 7   |
| 7416    | 14            | 7   |
| 74LS32  | 14            | 7   |
| 74LS33  | 14            | 7   |
| 74LS74  | 14            | -   |
| 74LS113 | 14            | 7   |
| 74LS138 | 16            | 8   |
| 74LS139 | 16            | 8   |
| 74LS74  | 16            | 8   |
| 74LS175 | 16            | 8   |
| 74LS221 | 16            | 8   |
| 74LS210 | 20            | 10  |
| 74LS212 | 14            | 7   |
| 74LS245 | 20            | 10  |
| 74LS273 | 20            | 10  |
| 74LS367 | 16            | 8   |
| 74LS368 | 16            | 8   |
| 2114    | 18            | 9   |
| 2732    | 24            | 12  |
| 3014    | 16            | 8   |
| LM311   | 8             | 4   |

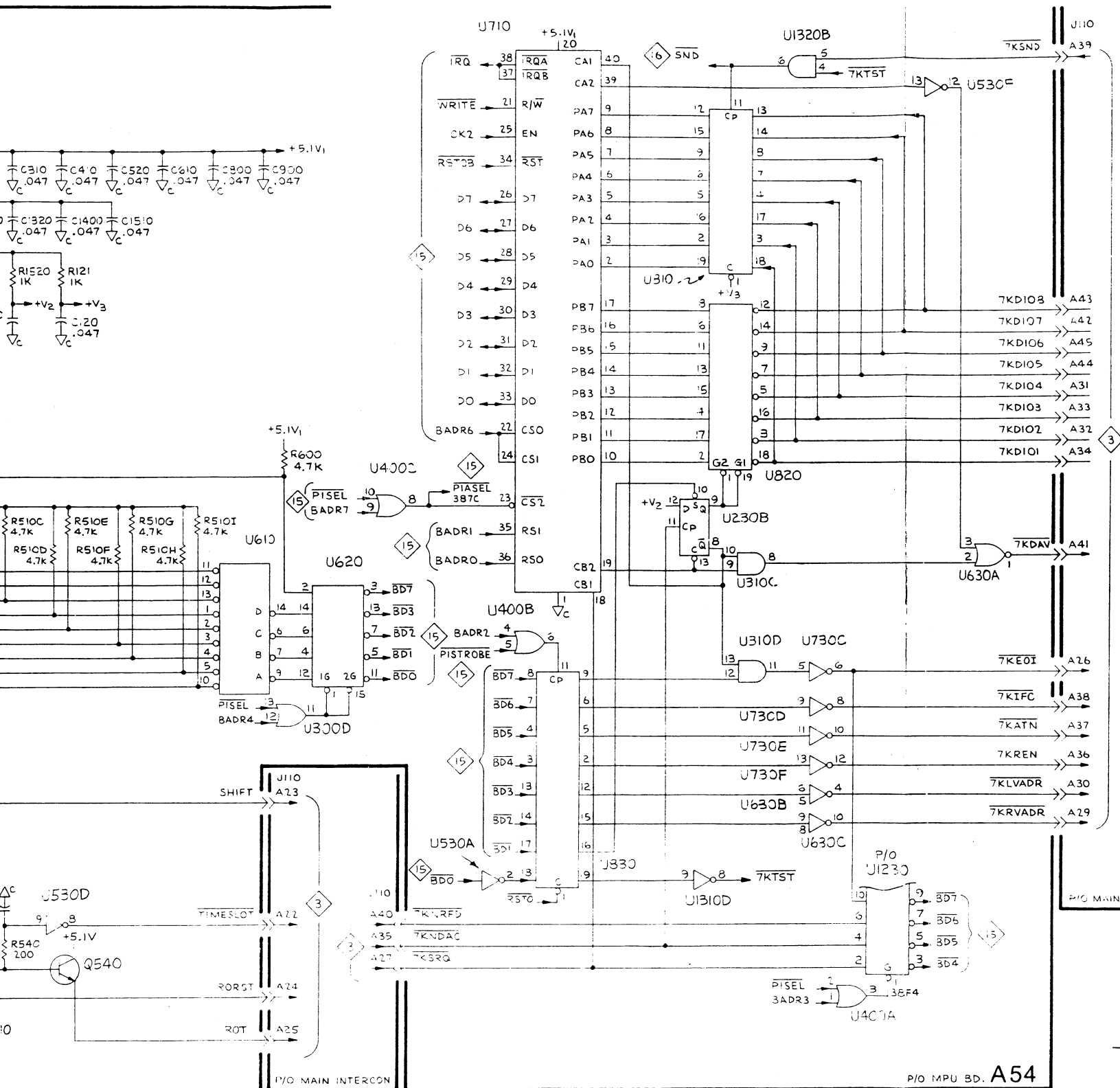


P/O MPU 3D. A54

6302 INTERRUPT CONTROL (SN B111166 & UP)

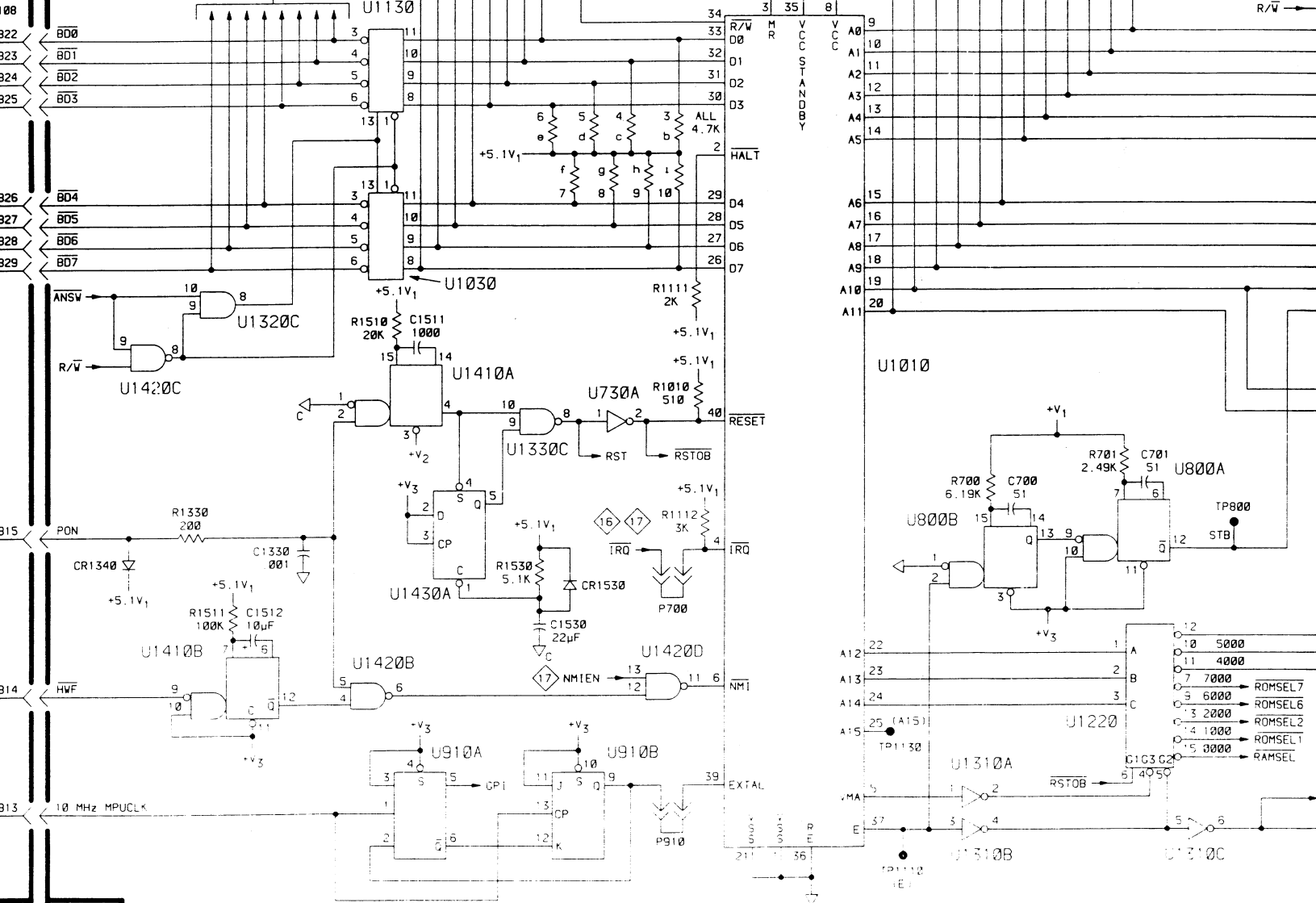


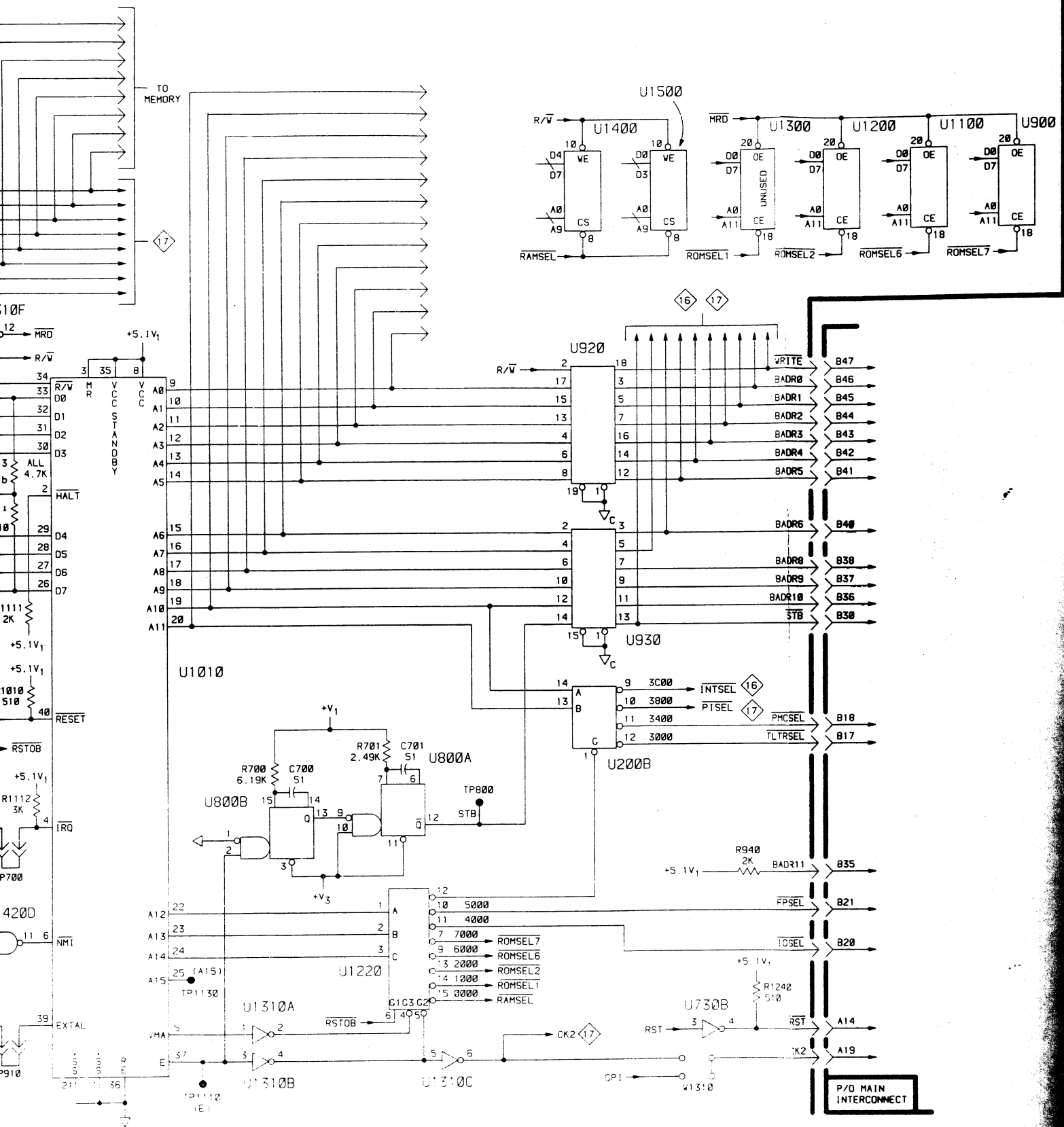
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READOUT/7K INTERFACE (SN B11166 & UP)

| 2114 |     | 2732 |     |
|------|-----|------|-----|
| SIC  | PIN | SIC  | PIN |
| A9   | 15  | A11  | 21  |
| A8   | 16  | A10  | 19  |
| A7   | 17  | A9   | 22  |
| A6   | 1   | A8   | 23  |
| A5   | 2   | A7   | 1   |
| A4   | 3   | A6   | 2   |
| A3   | 4   | A5   | 3   |
| A2   | 7   | A4   | 4   |
| A1   | 6   | A3   | 5   |
| A0   | 5   | A2   | 6   |
| D0   | 14  | A1   | 7   |
| D1   | 13  | A0   | 8   |
| D2   | 12  | D7   | 17  |
| D3   | 11  | D6   | 16  |
|      |     | D5   | 15  |
|      |     | D4   | 14  |
|      |     | D3   | 13  |
|      |     | D2   | 11  |
|      |     | D1   | 10  |
|      |     | D0   | 9   |





MPU/MEM 15  
 (SN B11166 & UP)



P/O A54 ASSY READOUT/7K INTERFACE 17

| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C012           | C2                 | A1             | R832           | C6                 | I3             |
| C022           | C2                 | A2             | R834           | B4                 | I3             |
| C044           | C2                 | A4             | R836           | D3                 | I3             |
| C104           | C2                 | B0             | R838           | B3                 | I3             |
| C128           | C2                 | B2             | R844           | B3                 | I4             |
| C206           | D2                 | C0             | R926           | D2                 | J2             |
| C218           | D2                 | C1             | R932           | B3                 | I3             |
| C302           | D2                 | D0             | R934           | B3                 | J3             |
| C314           | D2                 | D1             | R936           | B3                 | J3             |
| C322           | B2                 | D2             | R938           | B3                 | J3             |
| C334           | B2                 | D3             |                |                    |                |
| C524           | B2                 | F2             | TP104          | A2                 | B0             |
| C604           | C2                 | G0             | TP112          | D1                 | B1             |
| C606           | D2                 | G0             | TP702          | A2                 | H0             |
| C636           | C2                 | G3             | TP734          | A3                 | H3             |
| C702           | C2                 | H0             | TP834          | B4                 | I3             |
| C728           | C2                 | H2             | TP838          | A2                 | I3             |
| C734           | C5                 | H3             |                |                    |                |
| C844           | B3                 | I4             |                |                    |                |
| C912           | C2                 | J1             | U412           | F2                 | E1             |
| C914           | D2                 | J1             | U424           | E1                 | E2             |
| C926           | B2                 | J2             | U512           | F3                 | F1             |
| C932           | B3                 | J3             | U522A          | F3                 | F2             |
| C934           | B3                 | J3             | U524B          | G5                 | F2             |
| C942           | B2                 | J4             | U532A          | F3                 | F3             |
|                |                    |                | U532C          | F4                 | F3             |
| CR828          | C5                 | I3             | U536A          | G4                 | F3             |
|                |                    |                | U536B          | G4                 | F3             |
| F744           | A2                 | H4             | U536C          | G4                 | F3             |
| F836           | A1                 | I3             | U536D          | G4                 | F3             |
| F844           | A1                 | I4             | U538           | F5                 | G3             |
|                |                    |                | U626A          | E3                 | G2             |
| L934           | B1                 | J3             | U626C          | E4                 | G2             |
|                |                    |                | U626D          | G5                 | G2             |
| Q728           | C6                 | H2             | U636A          | G1                 | G3             |
|                |                    |                | U636D          | C5                 | G3             |
| R206           | D2                 | C0             | U638A          | G5                 | G3             |
| R602           | D2                 | G0             | U638B          | H3                 | G3             |
| R728           | C5                 | H2             | U638D          | G4                 | G3             |
| R824B          | D3                 | I2             | U814           | E4                 | I1             |
| R824C          | C3                 | I2             | U822A          | D4                 | I2             |
| R824D          | C3                 | I2             | U822B          | B4                 | I2             |
| R824E          | C3                 | I2             | U822C          | B5                 | I2             |
| R824F          | D3                 | I2             | U822D          | B4                 | I2             |
| R824G          | D3                 | I2             | U832           | B5                 | I3             |
| R824H          | C3                 | I2             | U836           | B3                 | I3             |
| R824I          | C3                 | I2             | U912           | D3                 | J1             |
| R824J          | C3                 | I2             | U926           | B4                 | J2             |

P/O A54 ASSY ALSO SHOWN ON 16 & 15

P/O A68 ASSY READOUT/7K INTERFACE 17

|      |    |    |      |    |    |
|------|----|----|------|----|----|
| J110 | A1 | A1 | J110 | H1 | A1 |
| J110 | D4 | A1 |      |    |    |

P/O A68 ASSY - SEE FIG. 7-37

| P/O A52 ASSY   |                    |                | MPU MEMORY <span style="border: 1px solid black; padding: 2px;">18</span> |                    |                |
|----------------|--------------------|----------------|---|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location |
| C002           | G2                 | A0             | U040  | D5                 | A4             |
| C004           | G1                 | A0             | U100B   | B3                 | B0             |
| C100           | G2                 | B0             | U101  | G2                 | B0             |
| C110           | G1                 | B1             | U110  | B3                 | B1             |
| C120           | G1                 | B2             | U120  | C3                 | B2             |
| C130           | G1                 | B3             | U130  | D3                 | B3             |
| C140           | G1                 | B4             | U140  | D3                 | B4             |
| C200           | G2                 | C0             | U210C   | F5                 | C1             |
| C210           | G1                 | C1             | U220  | G5                 | C2             |
| C240           | G1                 | C4             | U230  | D6                 | C3             |
| C242           | G2                 | C4             | U240  | G4                 | C4             |
| C301           | G1                 | D0             | U301D   | F5                 | D0             |
| C320           | G1                 | D2             | U310  | B6                 | D1             |
| C340           | G1                 | D4             | U320  | C6                 | D2             |
| C400           | G2                 | E0             | U330C   | F4                 | D3             |
| C430           | G2                 | E3             | U332C   | F3                 | D3             |
| C440           | G2                 | E4             | U340C   | F1                 | D4             |
| C542           | G2                 | F4             | U410  | D2                 | E1             |
| CR101          | G2                 | B0             | U420  | D2                 | E1             |
| CR200          | G2                 | C0             | U421  | C2                 | E2             |
| R440           | D6                 | E4             | U430  | B2                 | E3             |
| U010           | B5                 | A1             | U440B   | D6                 | E4             |
| U020           | C5                 | A2             | U501  | D2                 | F0             |
| U030           | D5                 | A3             | U510  | D2                 | F1             |
|                |                    |                | U520  | C2                 | F1             |
|                |                    |                | U521  | B2                 | F2             |
|                |                    |                | U530B   | B1                 | F3             |

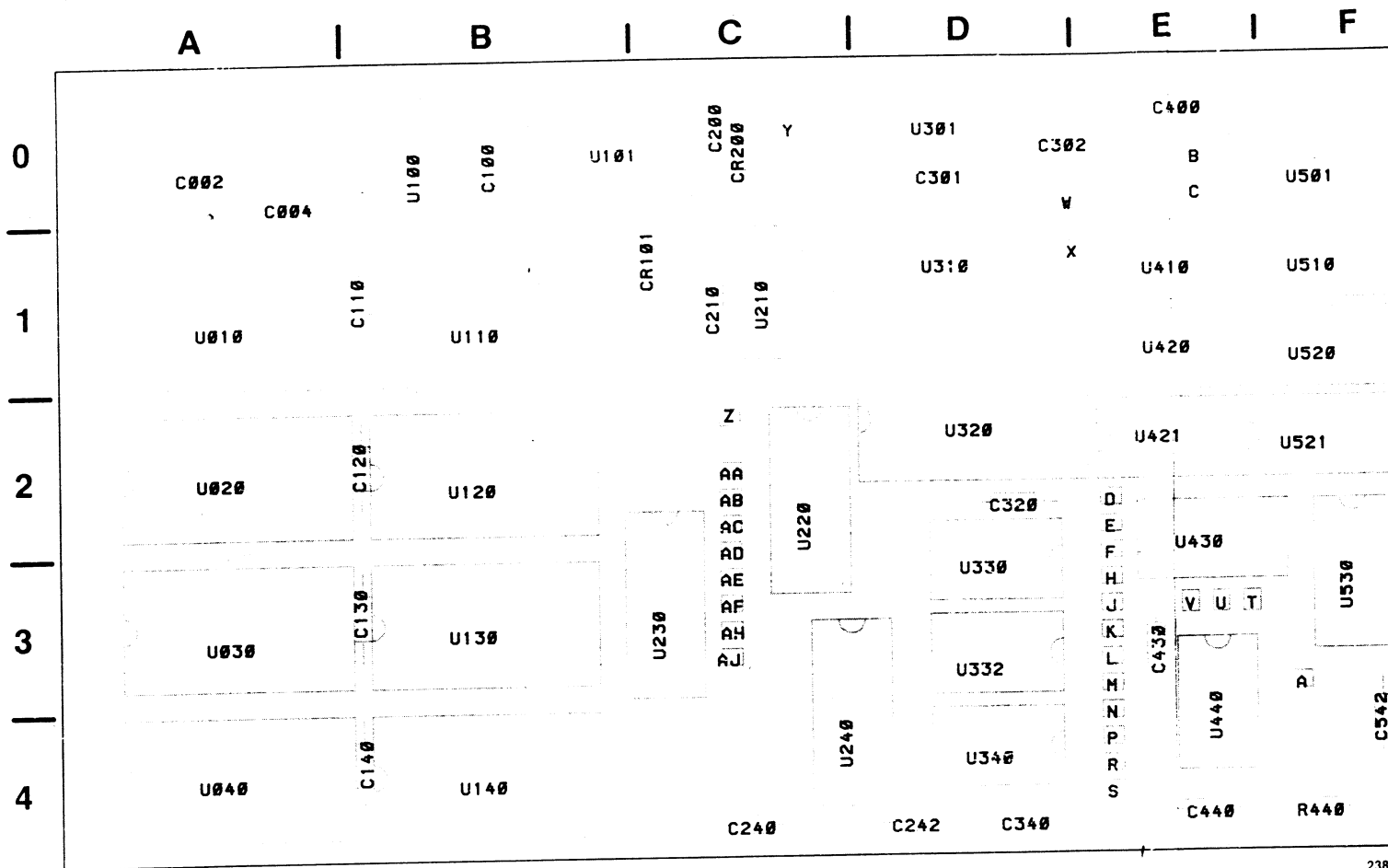
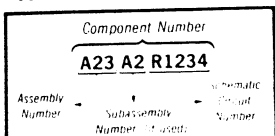


Fig. 7-23. The MPU Memory circuit board, assembly A52.

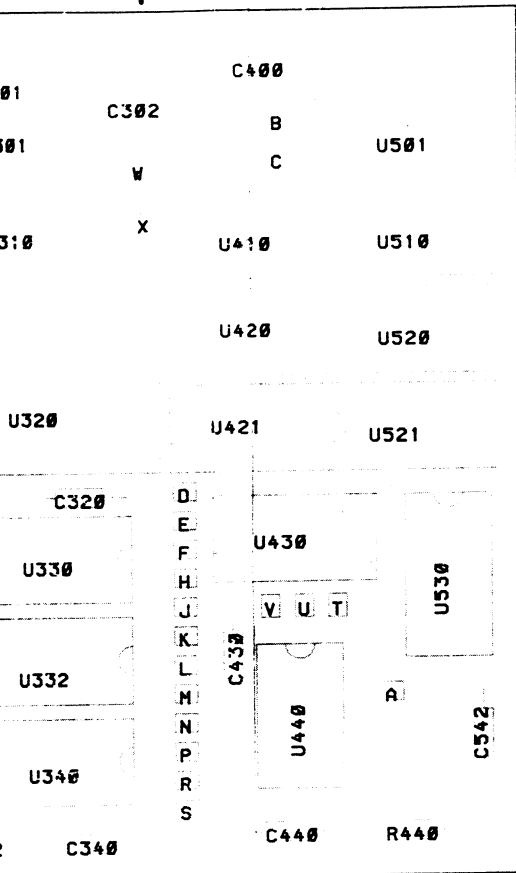
COMPONENT NUMBER EXAMPLE



Chassis-mounted components have an Assembly Number prefix at the end of Reproducible Component Parts List.

(11)

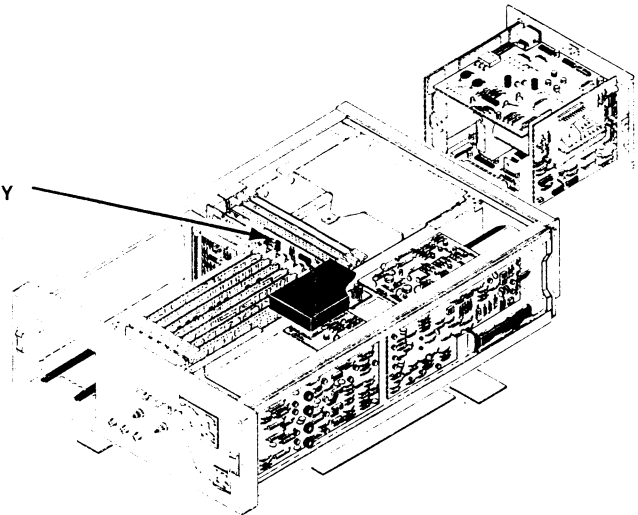
D I E I F



2385-48

52.

A52  
MPU MEMORY



(10)

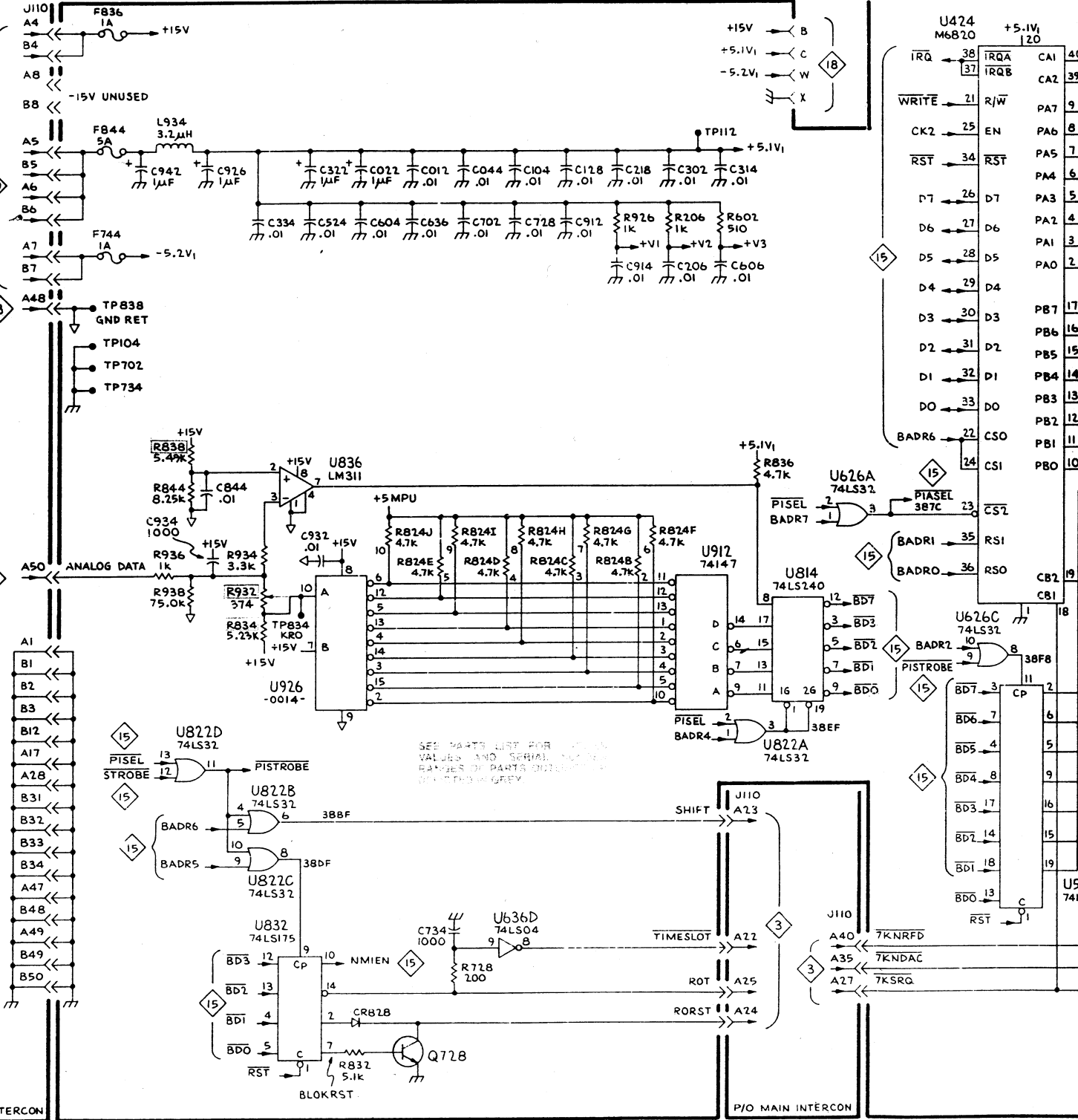
A

B

C

D

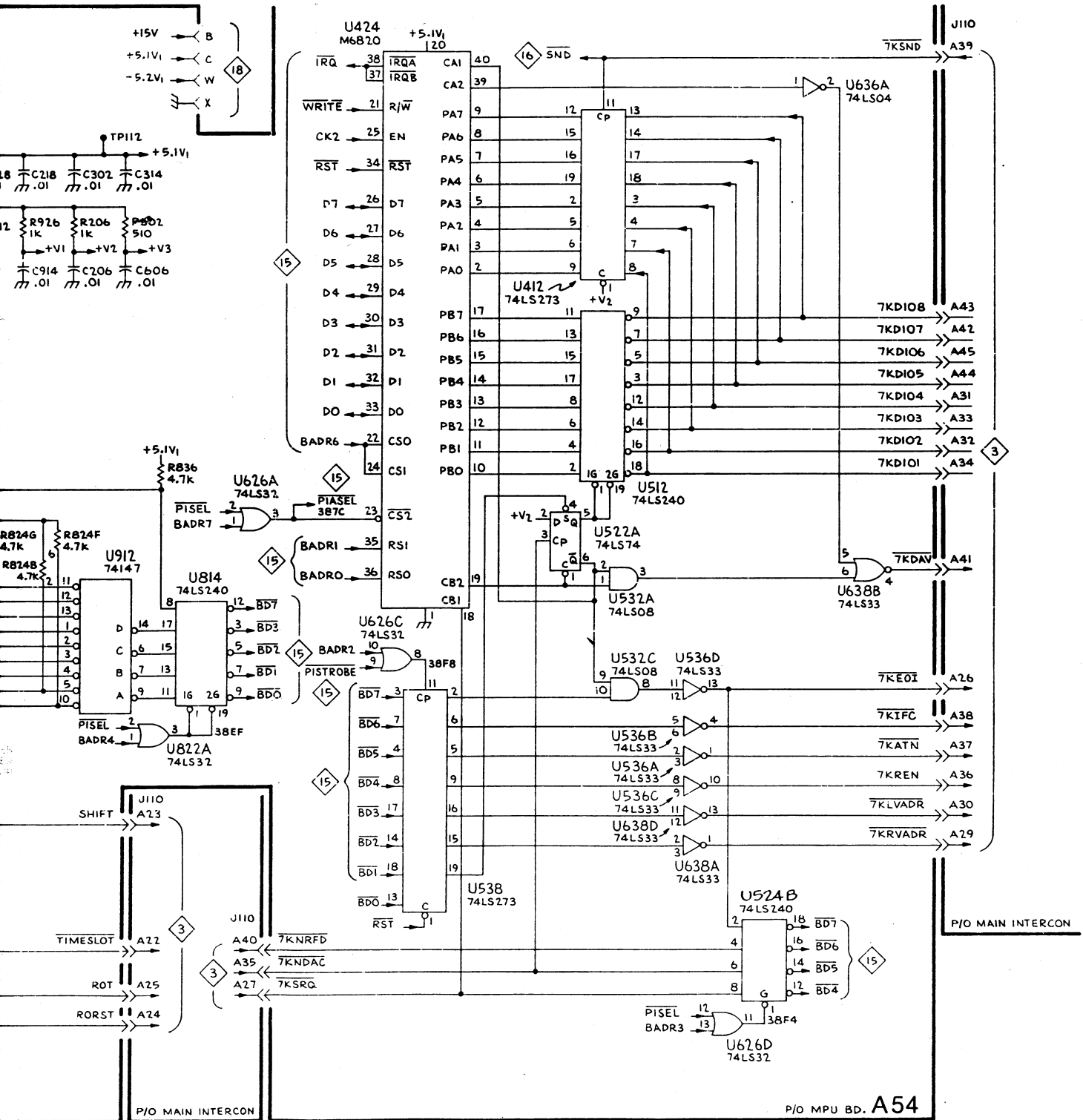
E



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2385-115  
REV APR 1982

# D E F G H



2385-115  
REV APR 1982

READOUT/7K INTERFACE

| P/O A16 ASSY   |                    |                | 2900 PORT TO MPU <span style="border: 1px solid black; padding: 2px;">19</span> |                    |                |
|----------------|--------------------|----------------|---|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location |
| C001           | B4                 | A0             | C521  | C5                 | F2             |
| C002           | B6                 | A0             | C523  | C5                 | F2             |
| C003           | C4                 | A0             | C531  | B5                 | F3             |
| C011           | B6                 | A1             | C533  | B5                 | F3             |
| C013           | B4                 | B1             | C535  | B5                 | F3             |
| C021           | B4                 | A2             | C601  | B5                 | G0             |
| C023           | C4                 | A2             | C603  | C5                 | G0             |
| C031           |                    | A3             | C611  | C5                 | G1             |
| C041           | C4                 | A4             | C613  | C5                 | G1             |
| C042           | C4                 | A4             | C621  | B5                 | G2             |
| C043           | B4                 | A4             | C631  | B5                 | G3             |
| C045           | C4                 | A4             | C633  | B5                 | G3             |
| C101           | B4                 | B0             | C635  | B5                 | G4             |
| C103           | B4                 | B0             | C701  | C5                 | H0             |
| C111           | B4                 | B1             | C703  | B5                 | H0             |
| C121           | C4                 | B2             | C711  | B5                 | H1             |
| C123           | C4                 | B2             | C713  | B5                 | H1             |
| C141           | B4                 | B4             | C721  | C5                 | H2             |
| C143           | B4                 | B4             | C723  | C5                 | H2             |
| C145           | B4                 | B4             | C731  | C6                 | H3             |
| C146           | B6                 | B4             | C811  | C5                 | I1             |
| C201           | B4                 | C0             | C813  | C6                 | I2             |
| C203           | B4                 | C0             | C821  | C6                 | I3             |
| C205           | B4                 | C0             | L042  | B3                 | A4             |
| C207           | B4                 | C0             | R011  | E3                 | A1             |
| C211           | C4                 | C1             | R040  |                    | A4             |
| C213           | B4                 | C1             | R041  | B6                 | A4             |
| C221           | C4                 | C2             | R233  | B6                 | C3             |
| C223           | B4                 | C2             | R311  | C6                 | D1             |
| C231           | B4                 | C3             | R415  | C6                 | E1             |
| C233           | B4                 | C3             | R641  |                    | G4             |
| C235           | C4                 | C3             | TP040   | A4                 | A3             |
| C243           | C4                 | C4             | U001  | B1                 | A0             |
| C303           | B4                 | D0             | U003  | B1                 | A0             |
| C311           | C4                 | D1             | U011B   | F5                 | A1             |
| C313           | C4                 | D1             | U011C   | E4                 | A1             |
| C321           | B5                 | D2             | U011D   | G4                 | A1             |
| C323           | C4                 | D2             | U013  | F4                 | A1             |
| C331           | B4                 | D3             | U021B   | B3                 | A2             |
| C341           | C4                 | D4             | U021C   | B3                 | A2             |
| C343           | B5                 | D4             | U023  | B2                 | A2             |
| C401           | B5                 | E0             | U031A   | F3                 | A3             |
| C403           | B5                 | E0             | U031D   | B3                 | A3             |
| C405           | B5                 | E0             | U031E   | B3                 | A3             |
| C411           | C5                 | E1             | U031F   | B3                 | A3             |
| C413           | B5                 | E1             | U041A   | C1                 | A4             |
| C421           | C5                 | E2             | U041B   | C1                 | A4             |
| C423           | C5                 | E2             | U043  | F2                 | A4             |
| C425           | C5                 | E2             | U101  | G5                 | B0             |
| C441           | B5                 | E4             | U111  | F4                 | B1             |
| C501           | B5                 | F0             | U121  | F3                 | B2             |
| C503           | C5                 | F0             | U123  | G2                 | B2             |
| C505           | B5                 | F0             | U141  | G3                 | B4             |
| C513           | C5                 | F1             | U143  | F5                 | B3             |

P/O A16 ASSY ALSO SHOWN ON 20 & 21

| P/O A66 ASSY  |    |    | 2900 PORT TO MPU <span style="border: 1px solid black; padding: 2px;">19</span> |   |   |
|---|----|----|---|---|---|
| C001  | B4 | A0 | —   | — | — |
| P/O A66 ASSY ALSO SHOWN ON <span style="border: 1px solid black; padding: 2px;">20</span> , <span style="border: 1px solid black; padding: 2px;">21</span> , & <span style="border: 1px solid black; padding: 2px;">23</span> |    |    |   |   |   |

| P/O A68 ASSY                 |    |    | 2900 PORT TO MPU <span style="border: 1px solid black; padding: 2px;">19</span> |    |    |
|------------------------------|----|----|---|----|----|
| J344                         | A1 | D4 | J344  | H4 | D4 |
| J344                         | D1 | D4 |   |    |    |
| P/O A68 ASSY - SEE FIG. 7-37 |    |    |   |    |    |

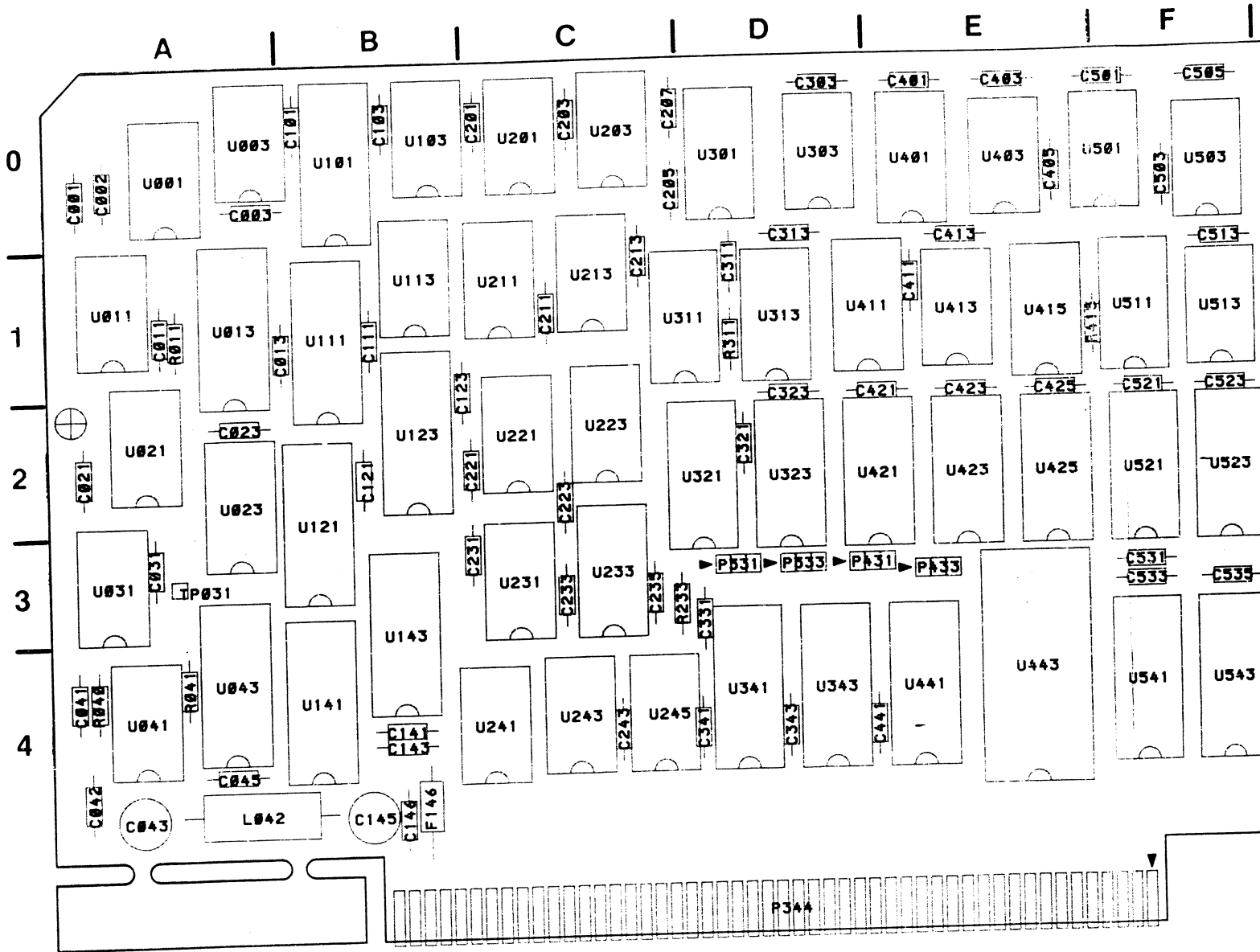
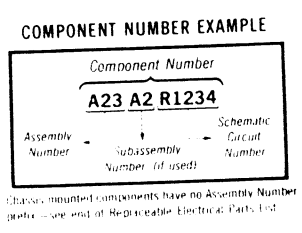
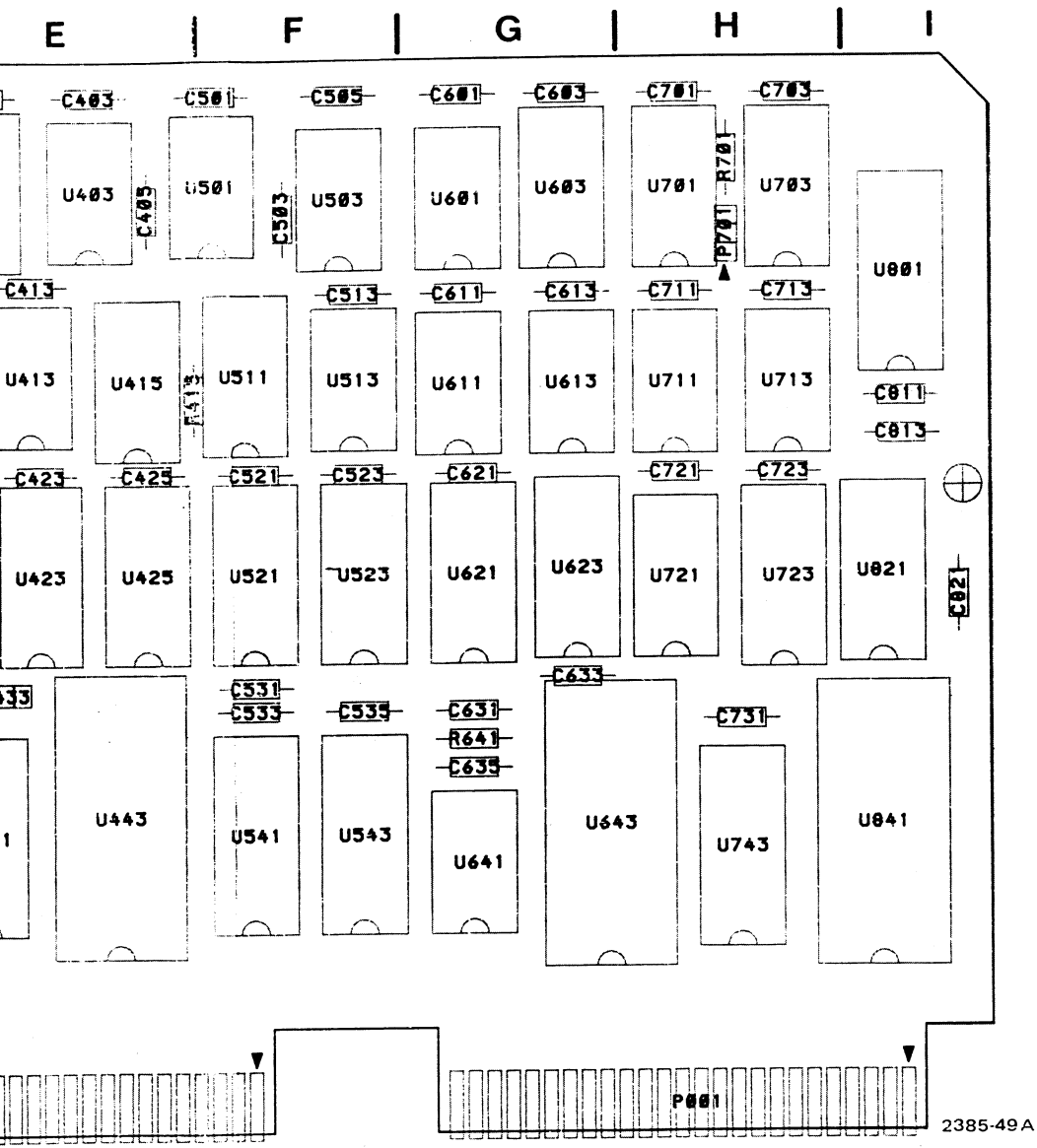


Fig. 7-24. The Memory Control circuit board, assembly A16.

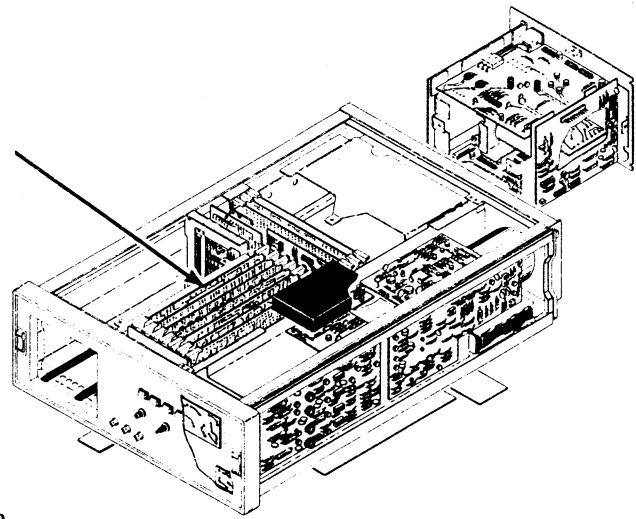






board, assembly A16.

A16  
MEMORY  
CONTROL



REV APR 1982

A

B

C

D

E

1

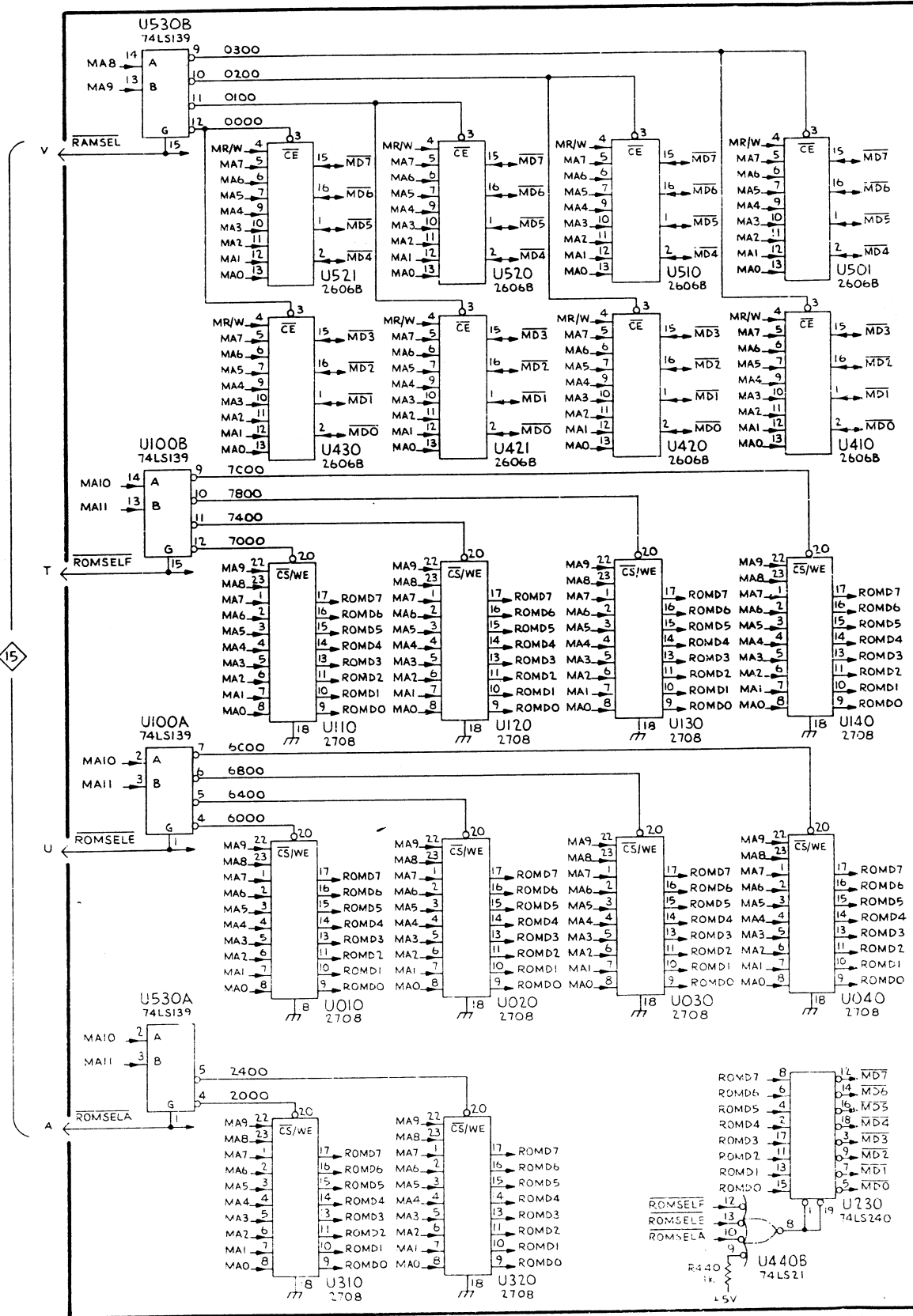
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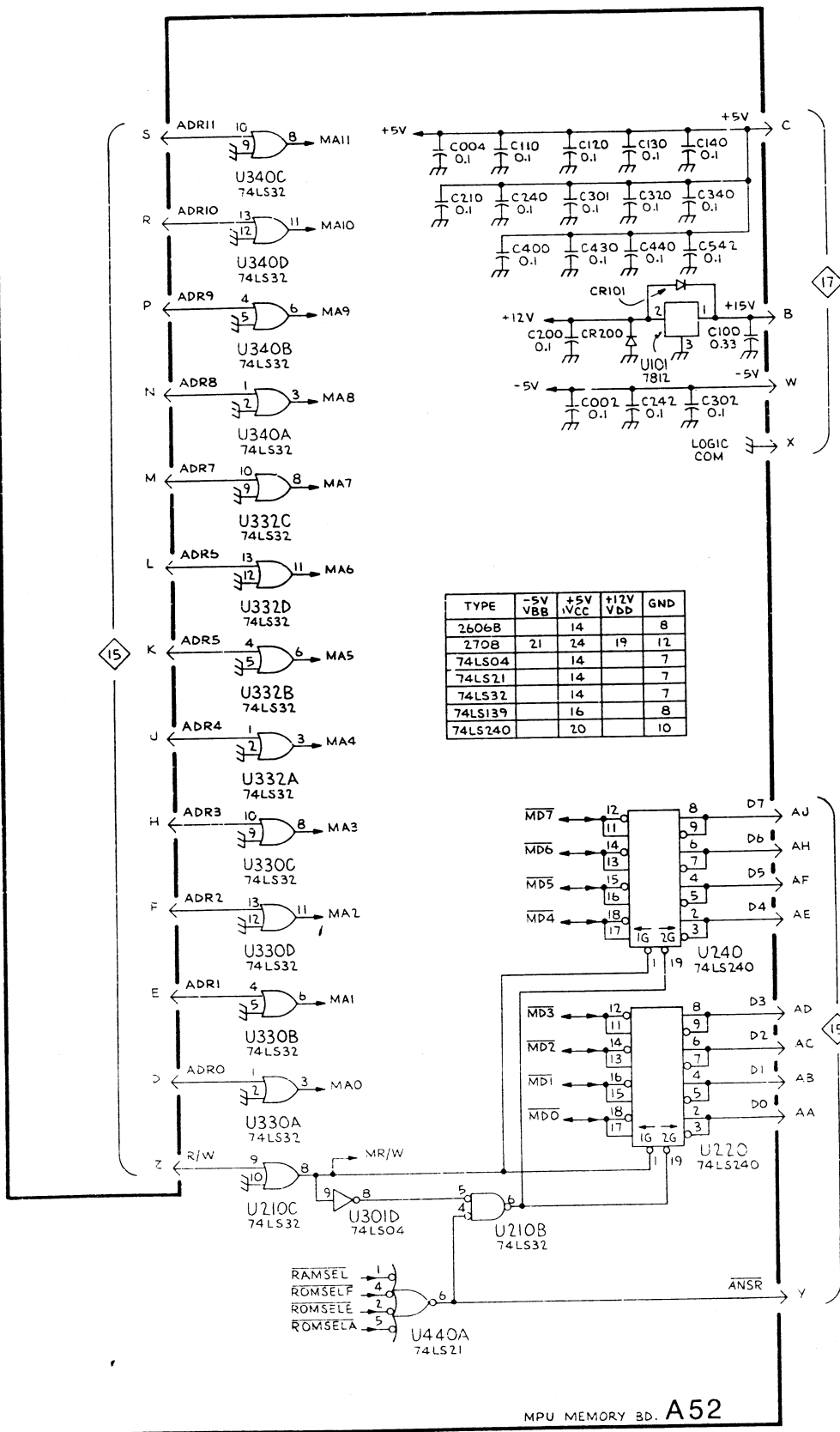
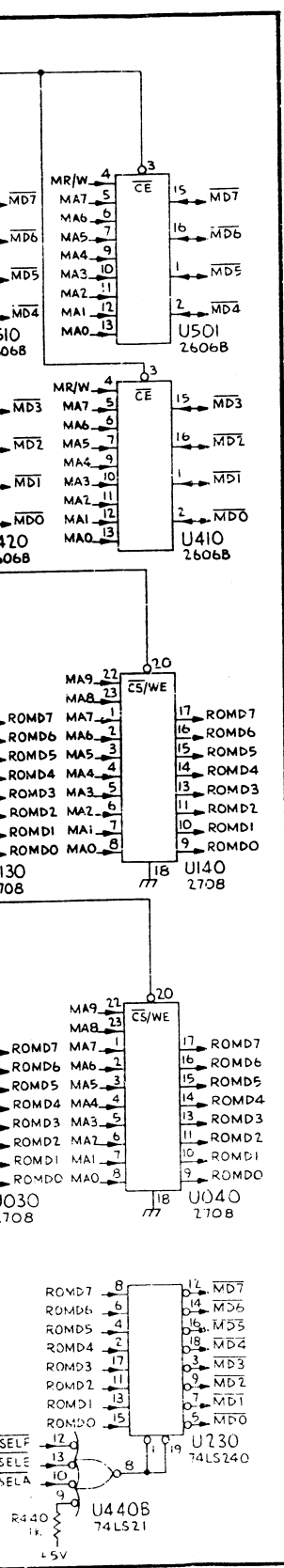
5

6



7912 AD

2385-117



| TYPE    | -5V<br>VBB | +5V<br>VCC | +12V<br>VDD | GND |
|---------|------------|------------|-------------|-----|
| 2606B   | 14         | 14         | 8           | 8   |
| 2708    | 21         | 24         | 19          | 12  |
| 74LS04  | 14         | 14         | 7           | 7   |
| 74LS21  | 14         | 14         | 7           | 7   |
| 74LS32  | 14         | 14         | 7           | 7   |
| 74LS139 | 16         | 16         | 8           | 8   |
| 74LS240 | 20         | 20         | 10          | 10  |

MPU MEMORY BD. A52

2385-117

MPU MEMORY

A

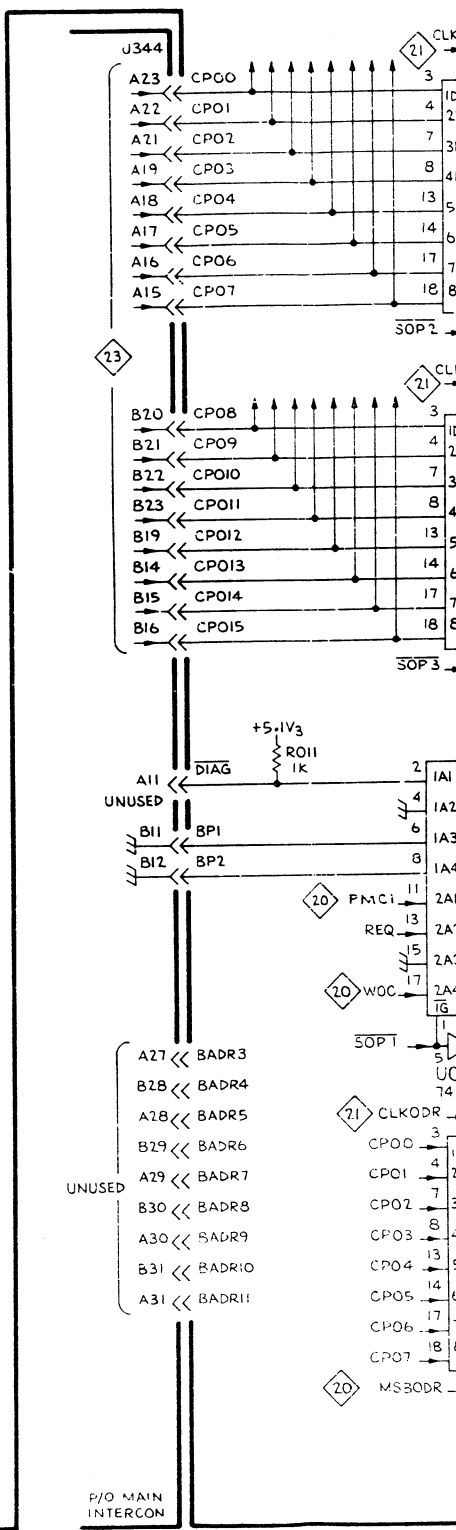
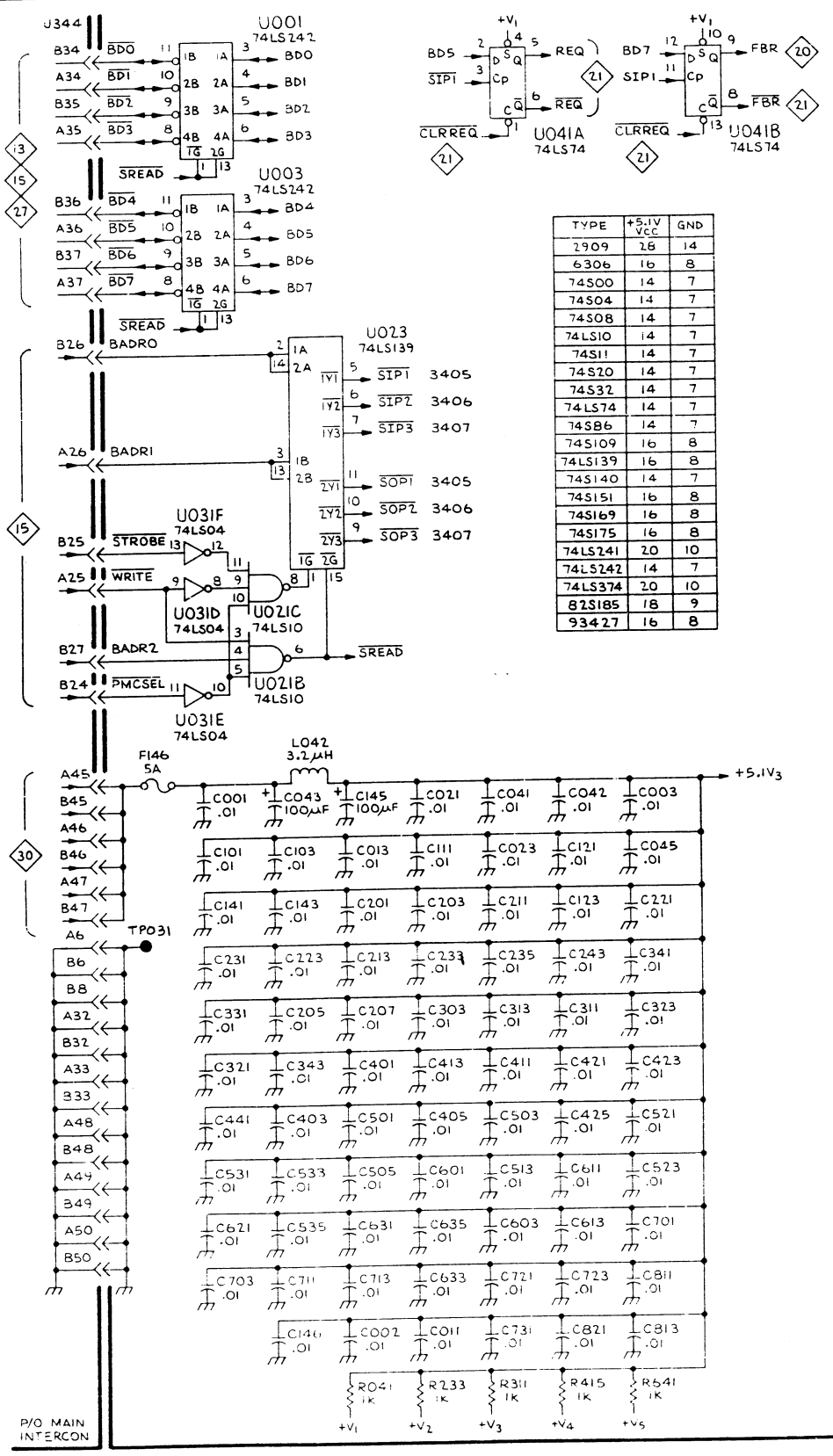
B

C

D

E

1  
2  
3  
4  
5  
6



7912AD

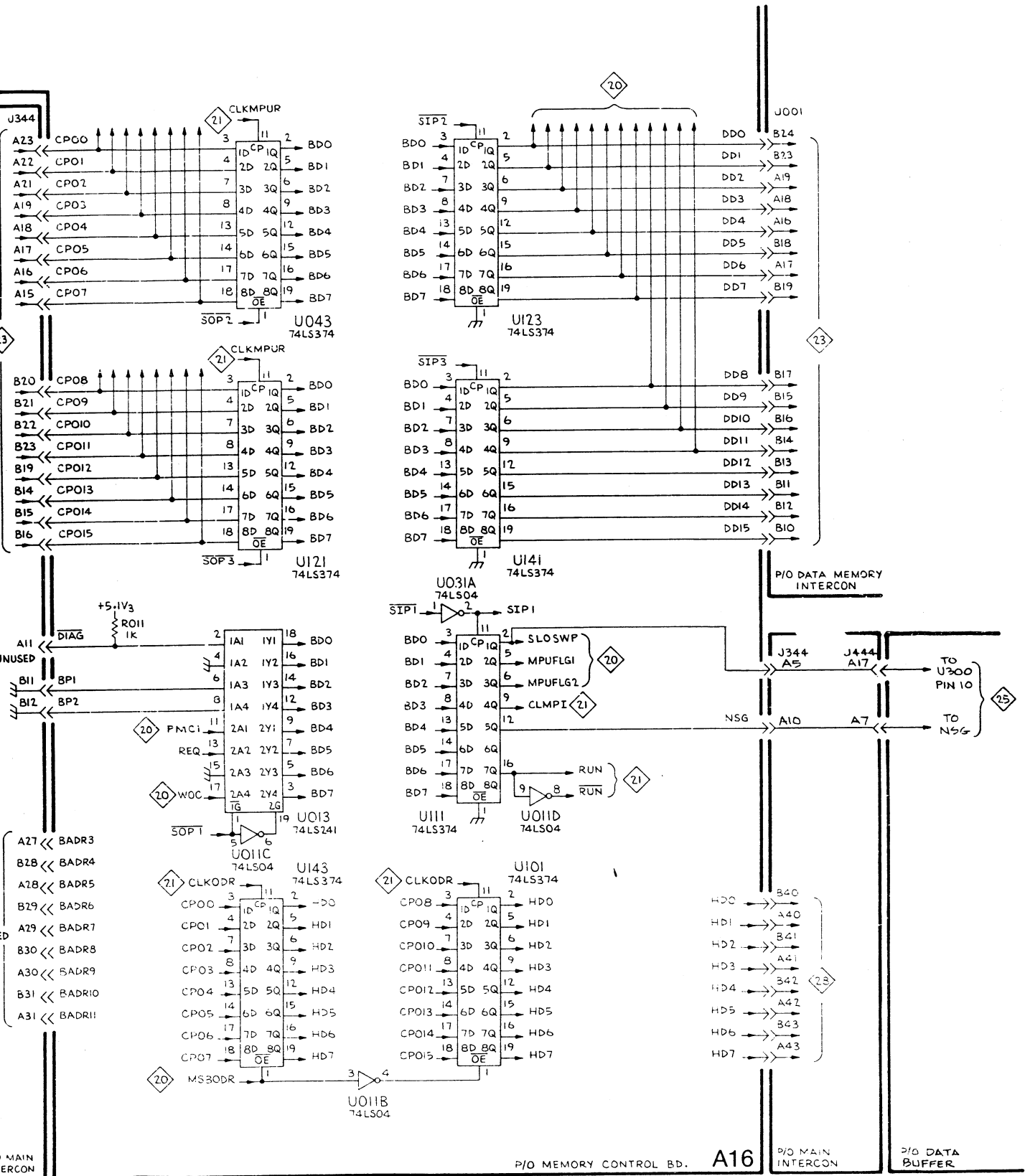
2385-118  
REV JUL 1981

E

F

G

H






2385-118  
REV JUL 1981


2900 PORT TO MPU




A16 P/O MAIN INTERCON P/O DATA BUFFER


2900 PORT TO MPU

| P/O A16 ASSY   |                    |                | 2900 CONTROL  |                    |                |
|----------------|--------------------|----------------|--|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| P331           | C6                 | D3             | U601B  | C4                 | G0             |
| P333           | C5                 | D3             | U603   | C4                 | G0             |
| P431           | C5                 | E3             | U613A  | A2                 | G1             |
| P433           | C5                 | E3             | U623   | G3                 | G2             |
| P701           | C3                 | H0             | U643   | A5                 | G4             |
|                |                    |                | U701   | C1                 | H0             |
|                |                    |                | U703   | C2                 | H0             |
| R701           | C3                 | H0             | U711A  | A2                 | H1             |
|                |                    |                | U711B  | A3                 | H1             |
| U321           | D2                 | D2             | U711C  | C2                 | H1             |
| U323           | D1                 | D2             | U711D  | C4                 | H1             |
| U341           | E1                 | D4             | U711E  | C4                 | H1             |
| U343           | E3                 | D4             | U711F  | A3                 | H1             |
| U421           | D4                 | E2             | U713A  | B3                 | H1             |
| U423           | D3                 | E2             | U713B  | B3                 | H1             |
| U425           | G5                 | E2             | U713D  | B3                 | H1             |
| U441           | G5                 | E4             | U713G  | D2                 | H1             |
| U443           | A6                 | E4             | U721   | B1                 | H3             |
| U513F          | C3                 | F1             | U723   | D6                 | H2             |
| U521           | G2                 | F2             | U743   | E5                 | H4             |
| U523           | G1                 | F2             | U801   | B2                 | I1             |
| U541           | G1                 | F4             | U821   | D5                 | I2             |
| U543           | G3                 | F4             | U841   | A4                 | I4             |

P/O A16 ASSY ALSO SHOWN ON  & 

| P/O A66 ASSY |    |    | 2900 CONTROL  |    |    |
|--------------|----|----|--|----|----|
| J001         | A2 | A0 | J001   | H1 | A0 |
| J001         | F4 | A0 |  |    |    |

P/O A66 ASSY ALSO SHOWN ON , , & 

| P/O A68 ASSY |    |    | 2900 CONTROL  |    |    |
|--------------|----|----|--|----|----|
| J344         | B3 | D4 | J344   | F2 | D4 |

P/O A68 ASSY - SEE FIG. 7-37

A B C D E

1

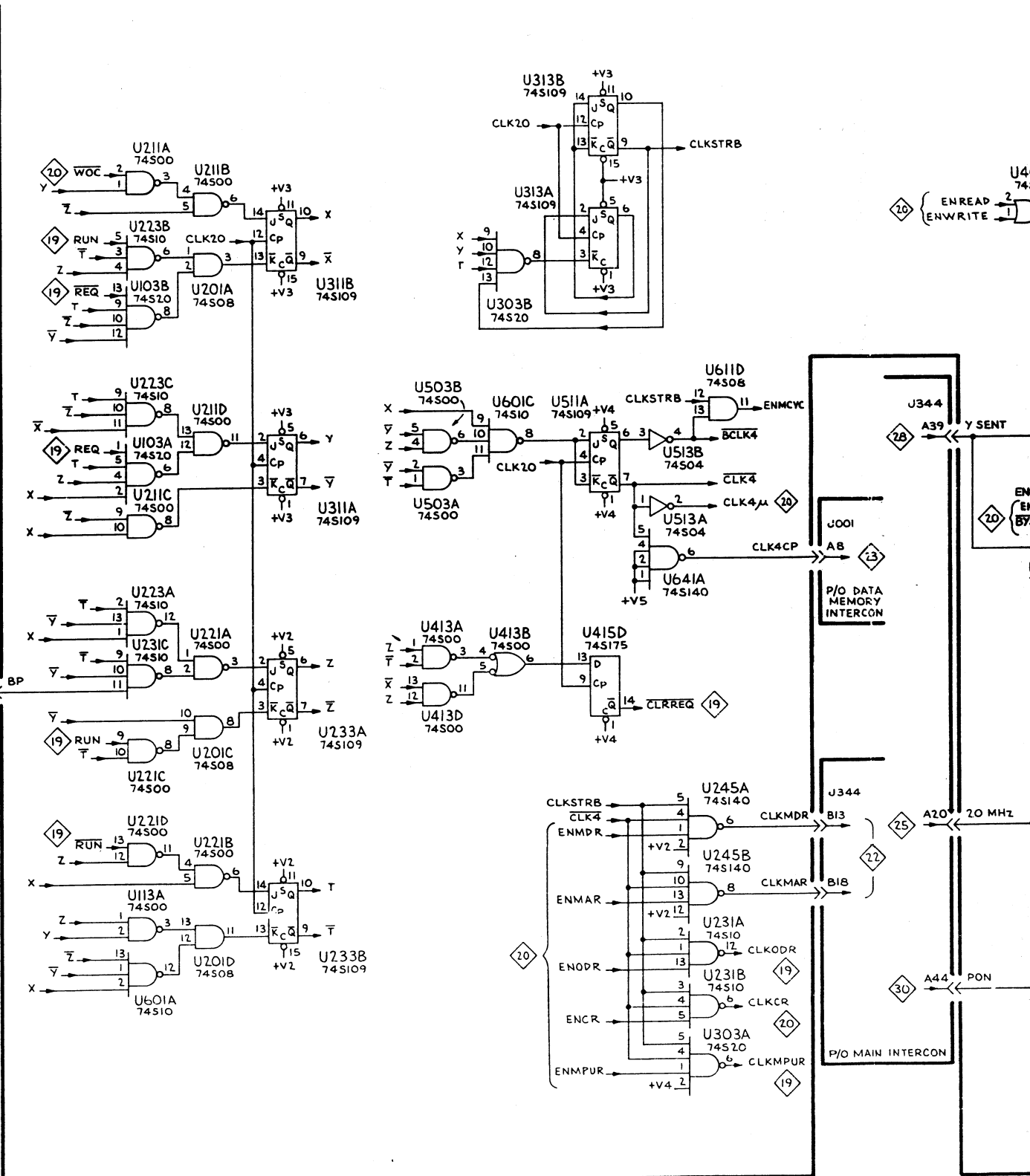
2

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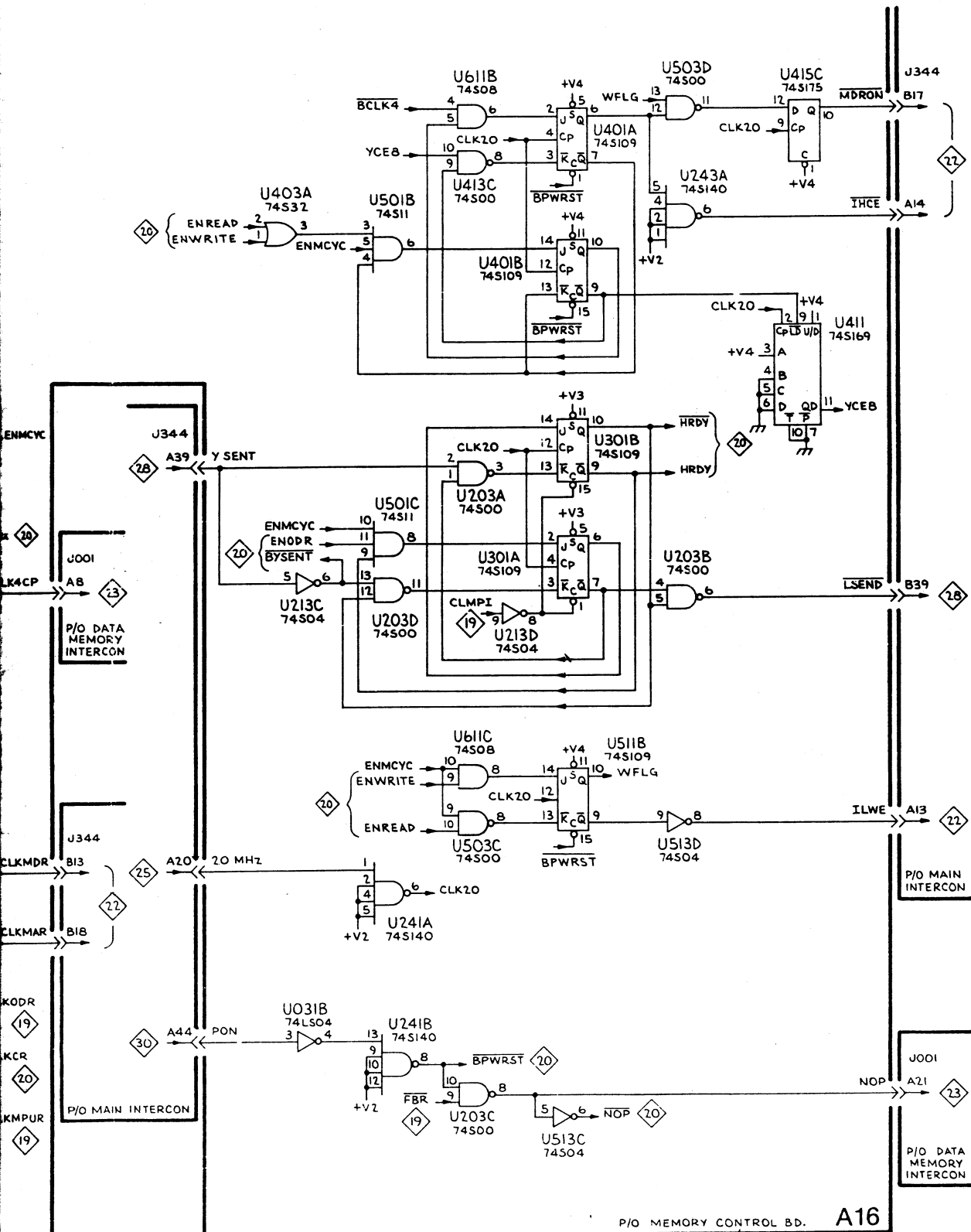
6



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2385-120  
REV APR 1982

E F G H



2900 TIMING

21

2385-120  
REV APR 1982

2900 TIMING

21



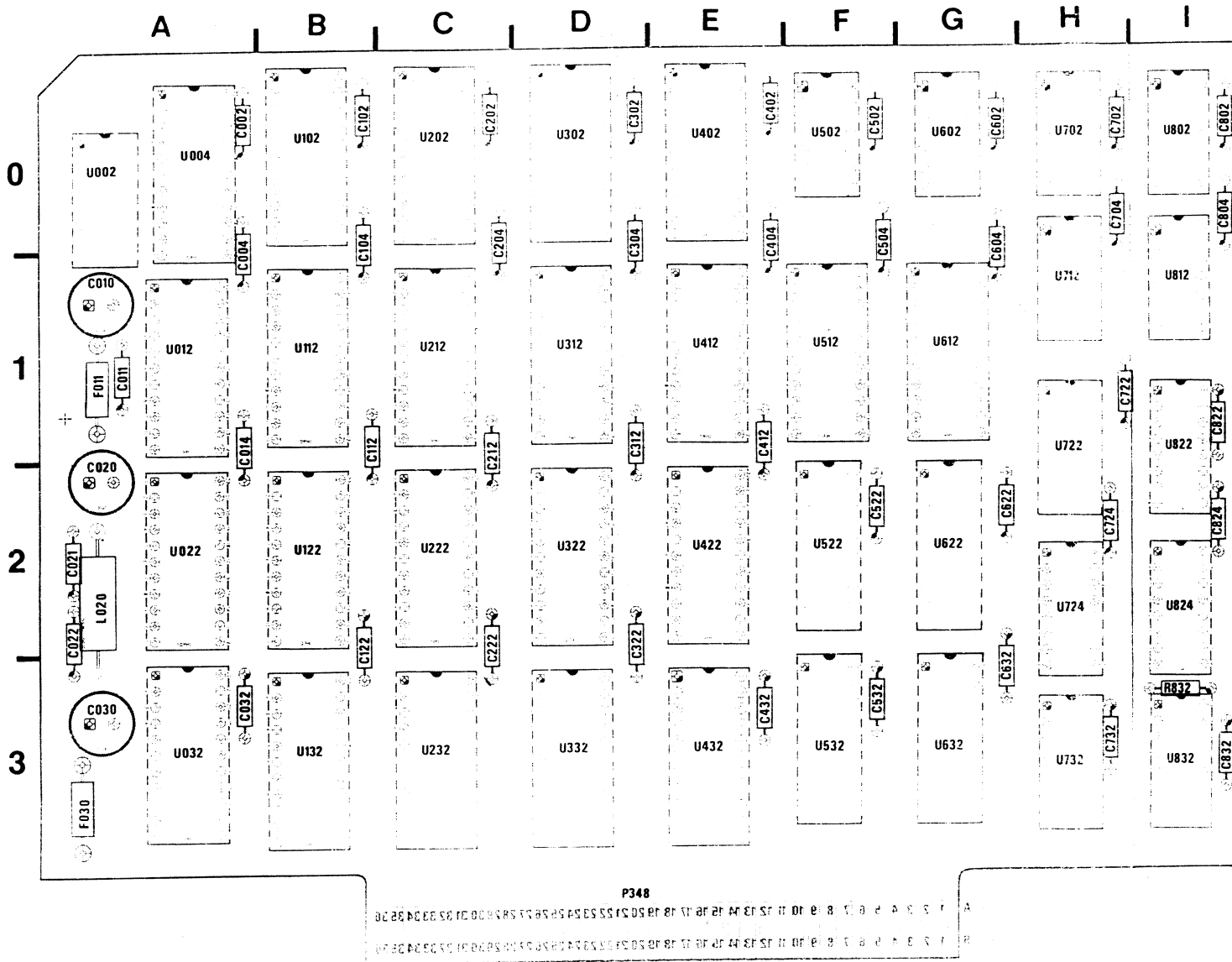
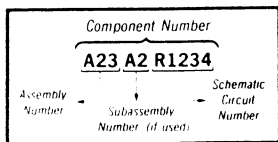
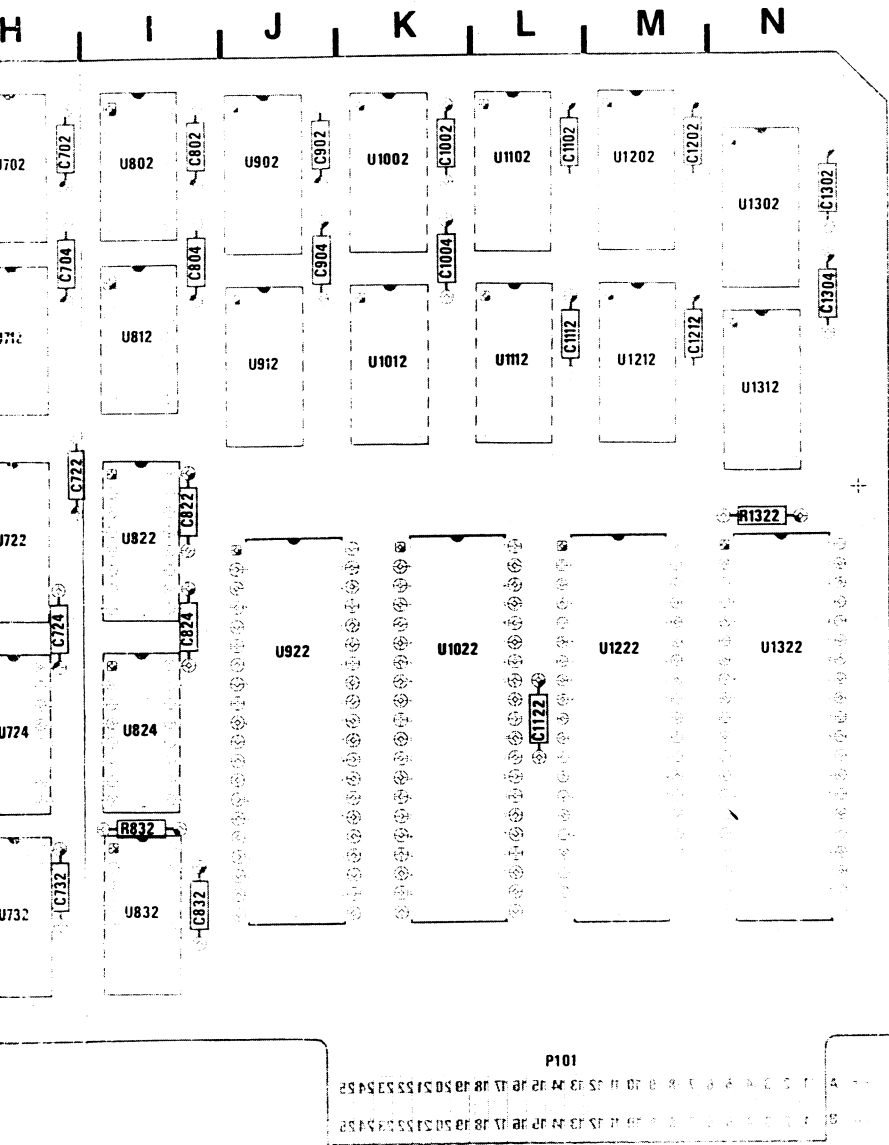


Fig. 7-27. The Data Memory circuit board, assembly A18.

COMPONENT NUMBER EXAMPLE



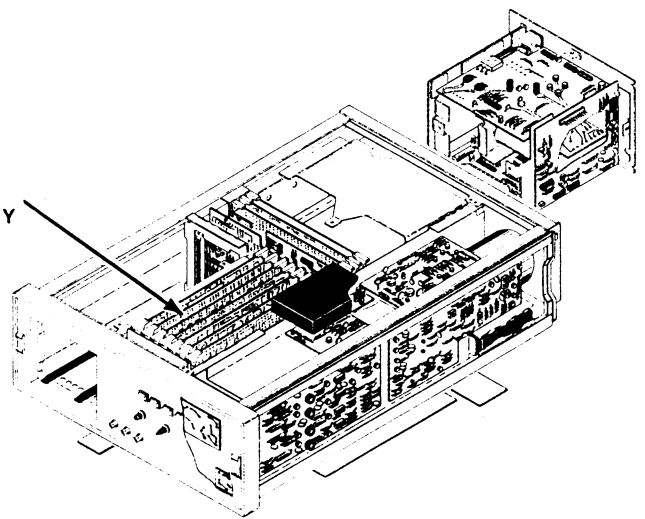
Unassembled components have no Assembly Number  
 See the end of Replaceable Electrical Parts List



2385-50

ply A18.

A18  
DATA  
MEMORY



REV APR 1982

A

B

C

D

E

1

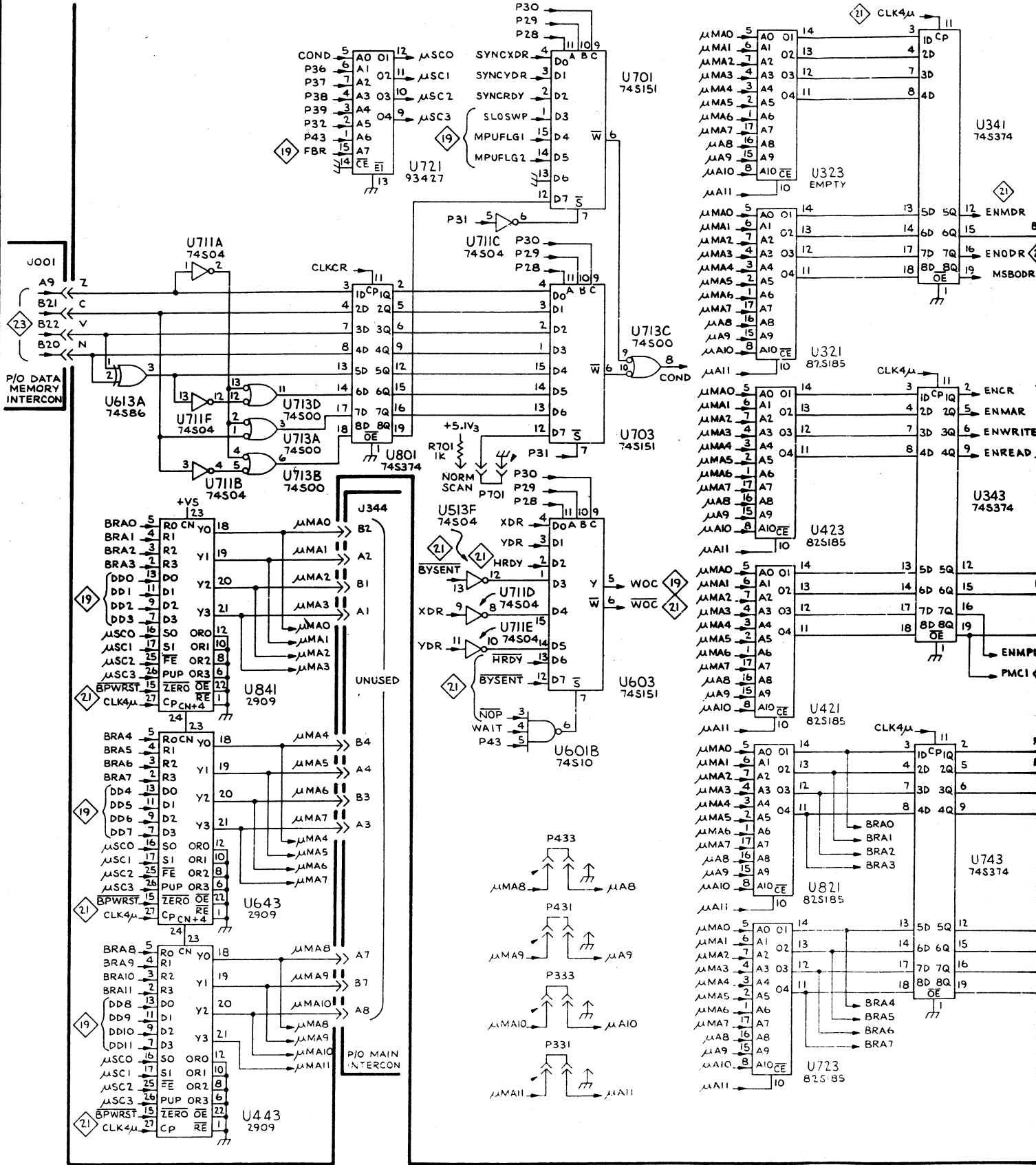
2

3

4

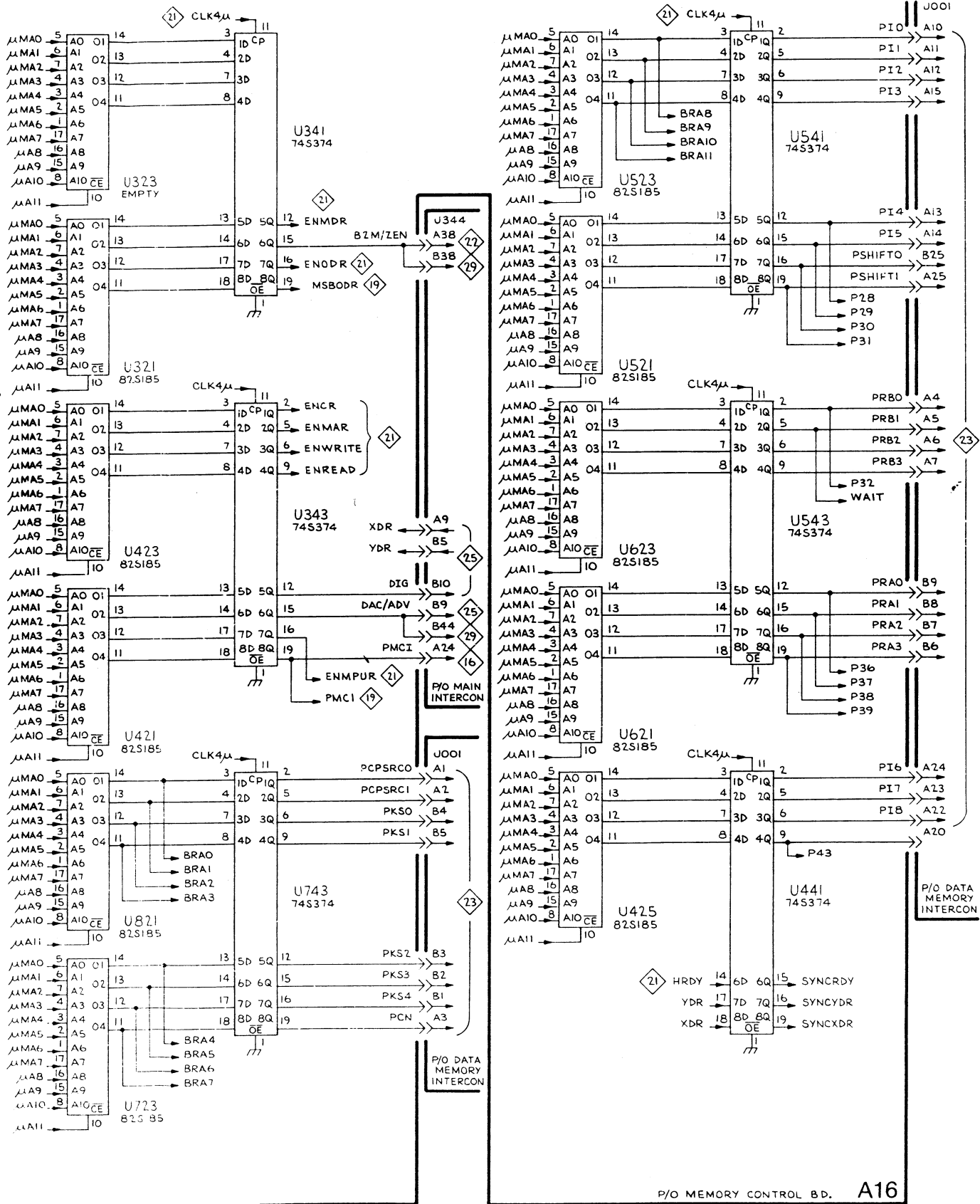
5

6



7912AD

2385-119  
REV APR 1982



2385-119  
REV APR 1982

2900 CONTROL 20

A

B

C

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E

1

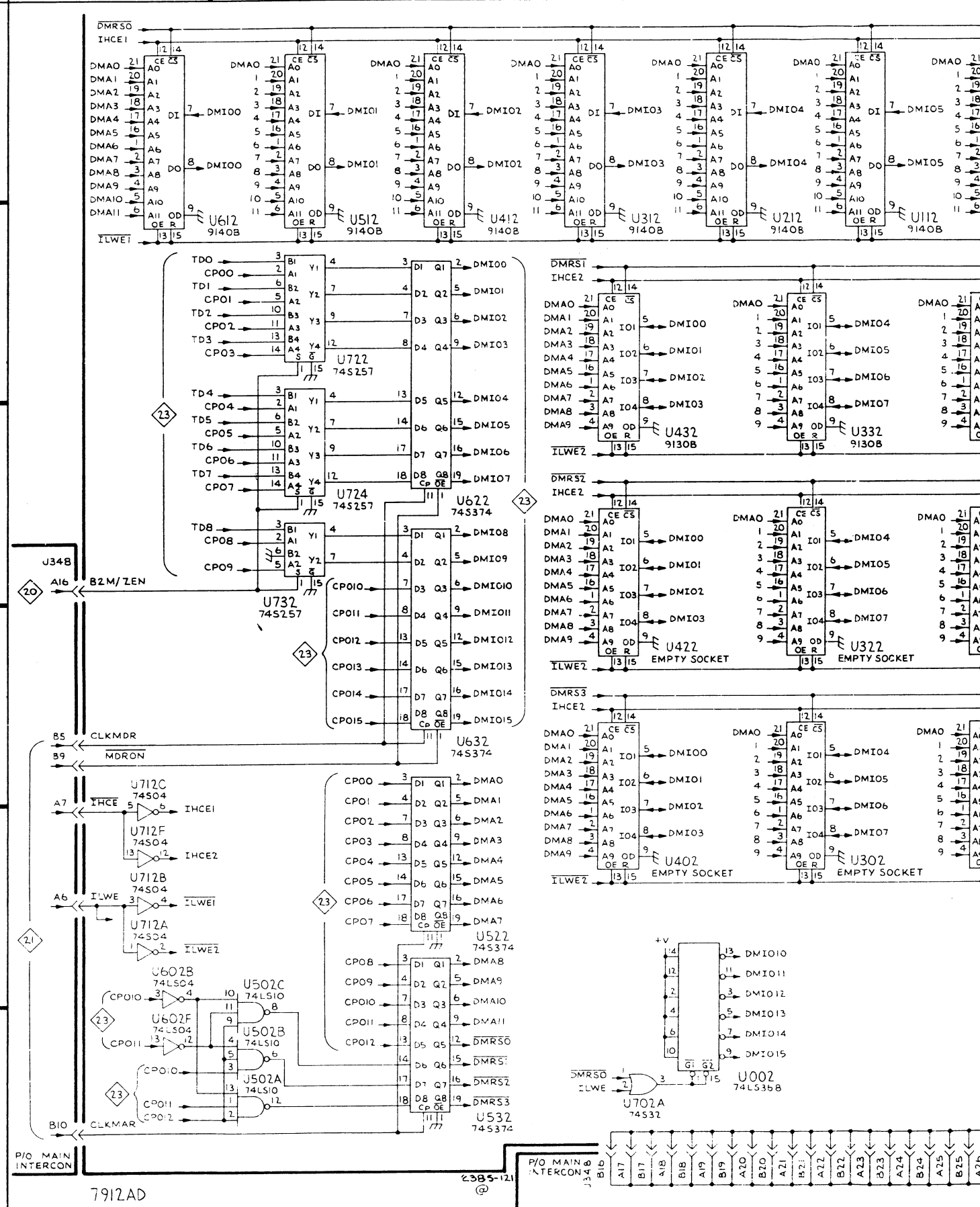
2

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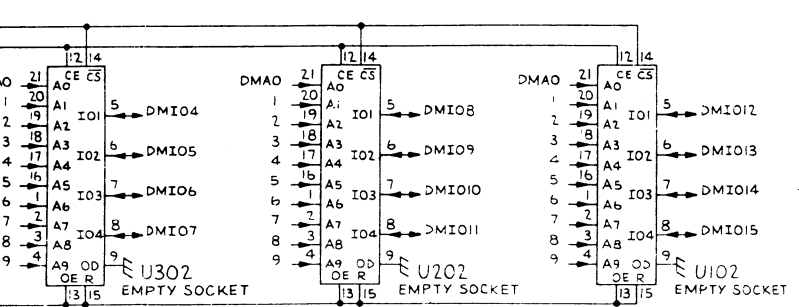
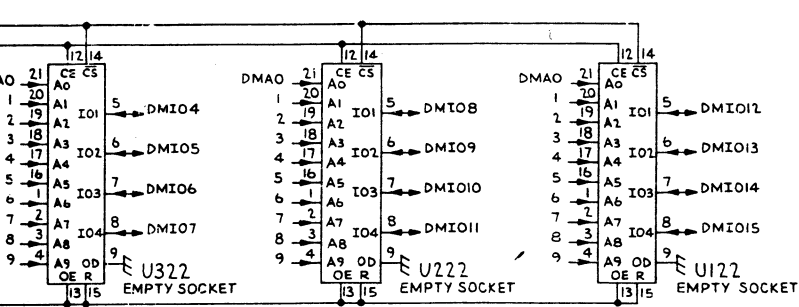
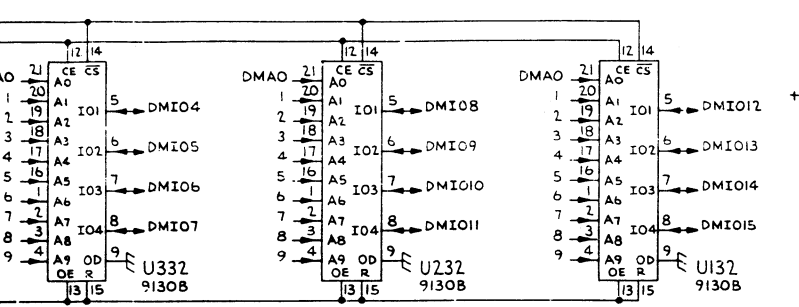
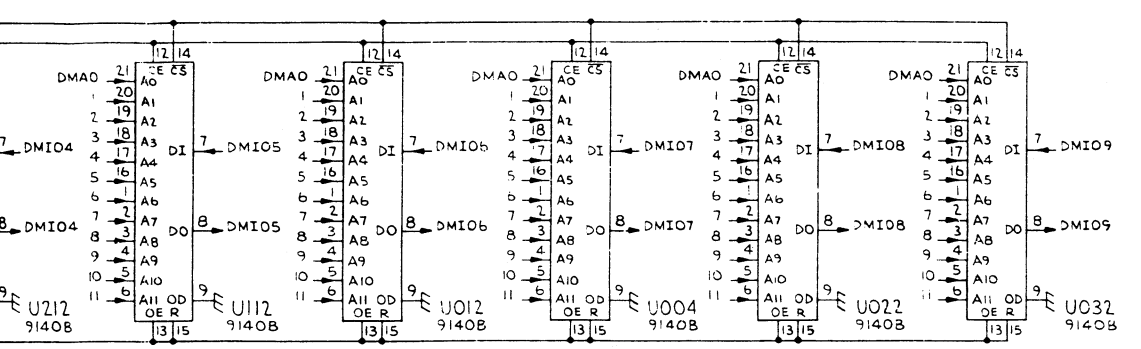


E

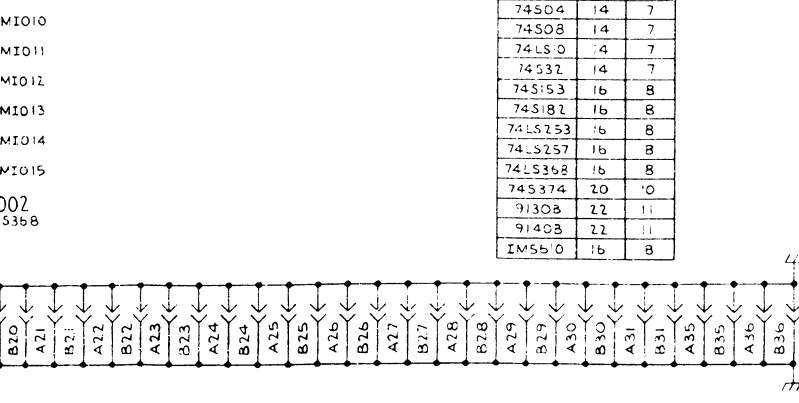
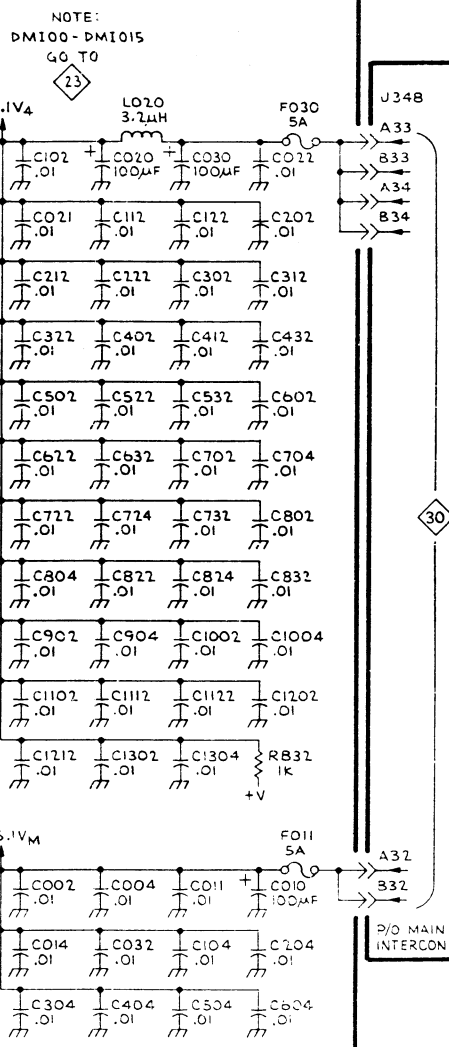
F

G

H



| TYPE    | +5V Vcc | GND |
|---------|---------|-----|
| 2901A   | 10      | 30  |
| 74504   | 14      | 7   |
| 74508   | 14      | 7   |
| 74LS0   | 4       | 7   |
| 74532   | 14      | 7   |
| 74S153  | 16      | 8   |
| 74S182  | 16      | 8   |
| 74LS253 | 16      | 8   |
| 74LS257 | 16      | 8   |
| 74LS368 | 16      | 8   |
| 74S374  | 20      | 0   |
| 9130B   | 22      | 11  |
| 9140B   | 22      | 11  |
| 1M550   | 16      | 8   |

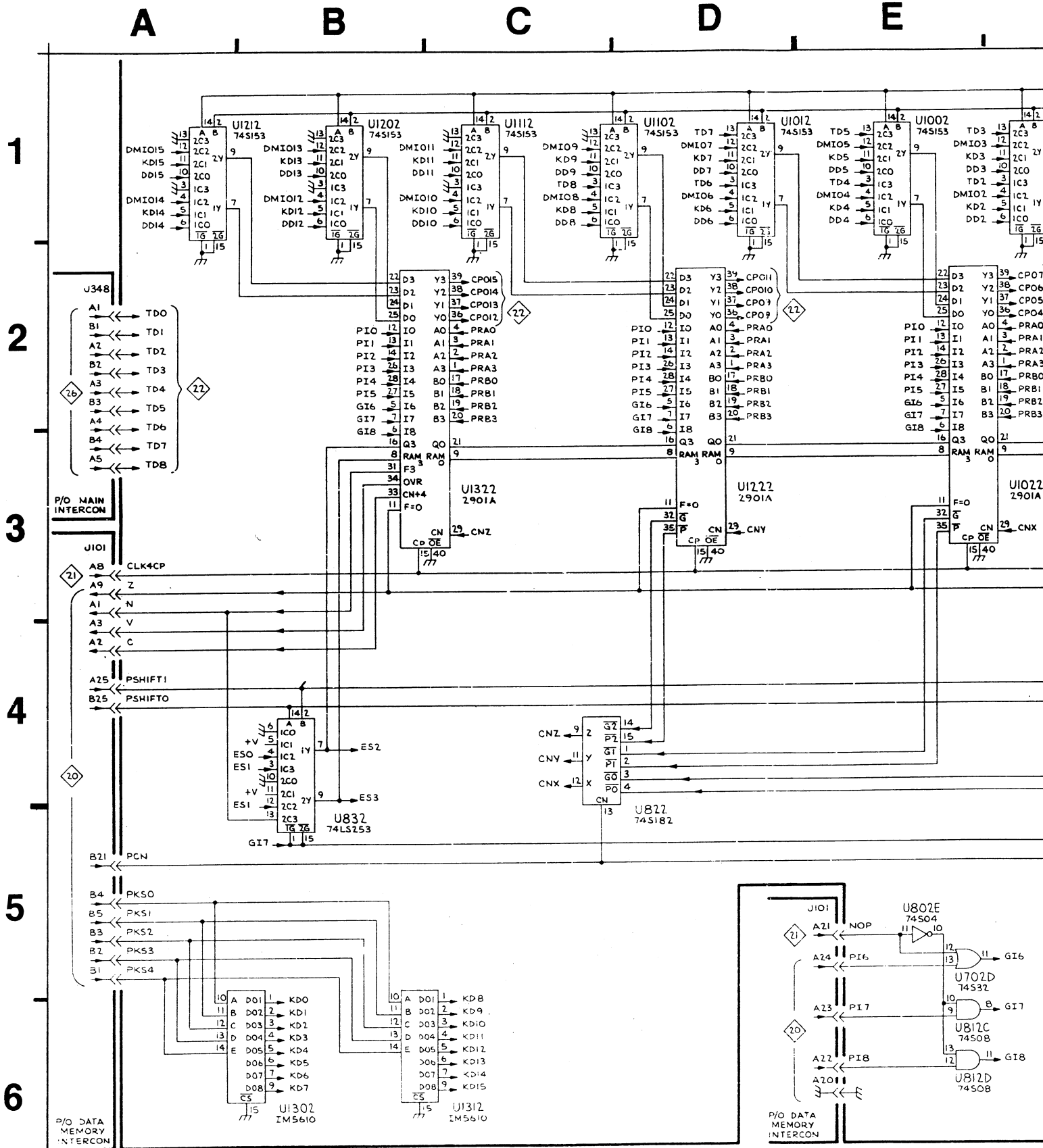


P/O DATA MEMORY 3D, A18

DATA MEMORY 22

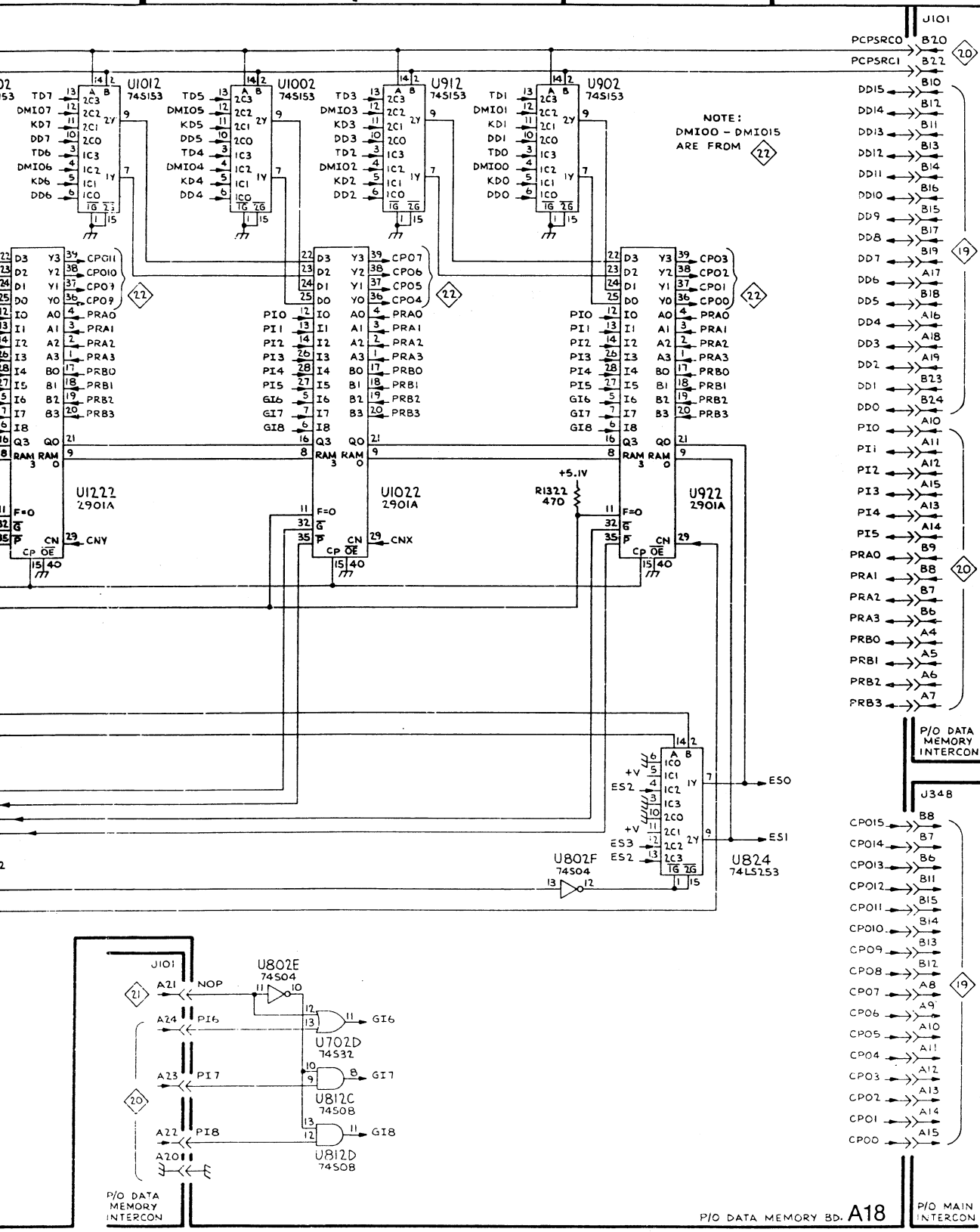
DATA MEMORY

22



7912AD

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REV APRIL 1982



NOTE: DMIO0 - DMIO15 ARE FROM 22

2385-122 REV APRIL 1982

P/O DATA MEMORY BD. A18

2900 CPU 23



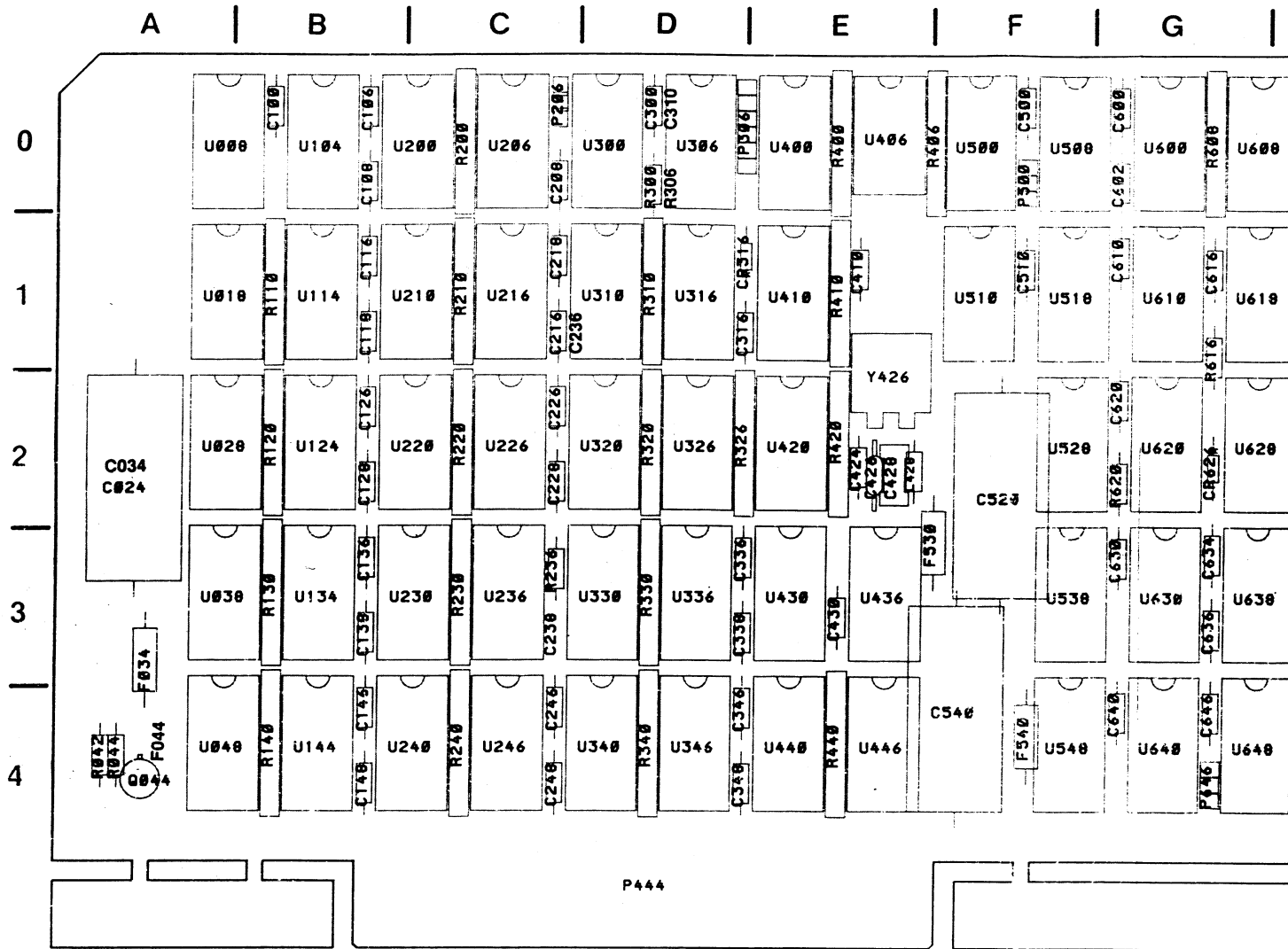
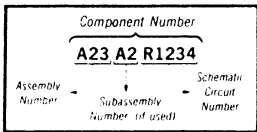


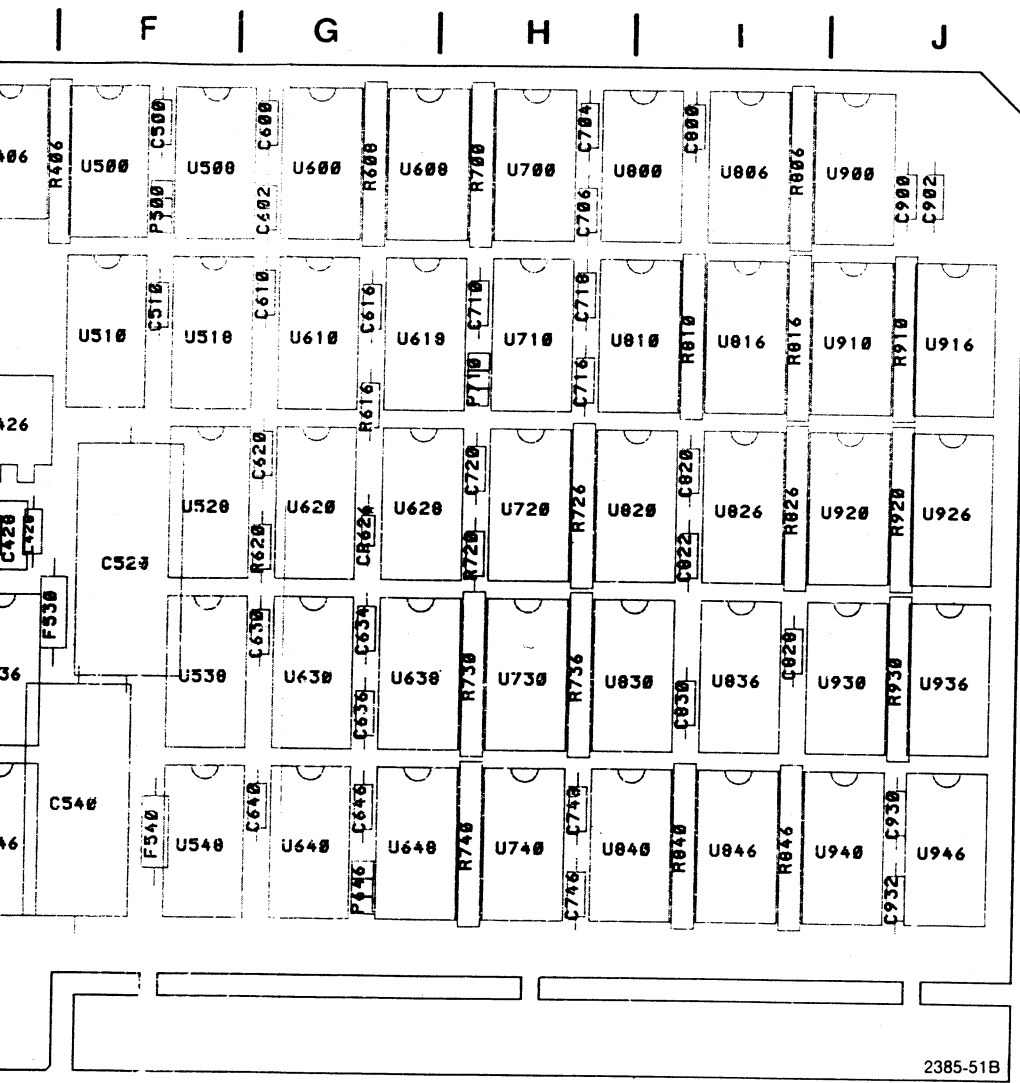
Fig. 7-29. The Data Buffer circuit board, assembly A20.

DATA BUFFER A20

COMPONENT NUMBER EXAMPLE

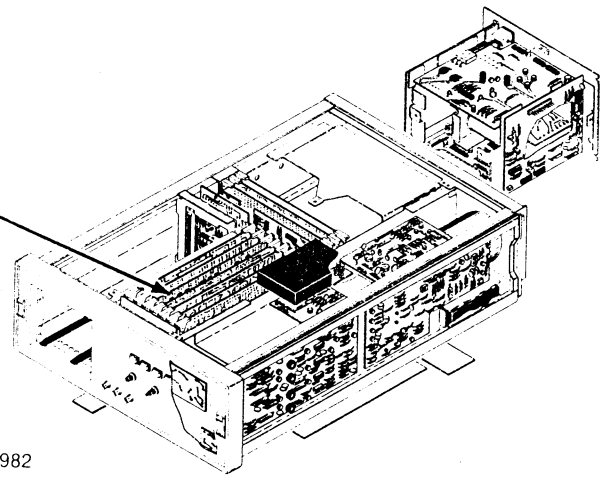


Chassis mounted components bear an Assembly Number prefix — see end of Regenerative Electrical Parts List.



it board, assembly A20.

A20  
DATA BUFFER



REV APR 1982

DATA BUFFER A20  
(SN B090000 & up)

| P/O A20 ASSY (SN B090000 & UP) |                    |                |                |                    |                |                |                    |                |
|--------------------------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| Circuit Number                 | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
| C238                           | G4                 | C3             | R220G          | D4                 | C2             | R440D          | G2                 |                |
| C426                           | G2                 | E2             | R230           | G4                 | C3             | R440E          | G2                 |                |
| C428                           | G3                 | E2             | R230A          | E4                 | C3             | R440F          | D3                 |                |
| L428                           | G3                 | E2             | R230B          | G1                 | C3             | R608A          | B2                 |                |
| P306                           | F3                 | D0             | R230C          | G4                 | C3             | R700D          | B4                 |                |
| Q044                           | G3                 | A4             | R230E          | G1                 | C3             | R726A          | E1                 |                |
| R042                           | G3                 | A4             | R230F          | G4                 | C3             | R726F          | C2                 |                |
| R044                           | G3                 | A4             | R230G          | E4                 | C3             | R726G          | C2                 |                |
| R110A                          | B3                 | B1             | R236           | G4                 | C3             | R730A          | F1                 |                |
| R110B                          | C3                 | B1             | R240A          | H5                 | C4             | R730D          | D2                 |                |
| R110C                          | B3                 | B1             | R240B          | G5                 | C4             | R730E          | D2                 |                |
| R110D                          | B2                 | B1             | R240C          | H3                 | C4             | R740A          | B1                 |                |
| R110E                          | C2                 | B1             | R240E          | B5                 | C4             | R740B          | F2                 |                |
| R110F                          | B2                 | B1             | R240G          | G5                 | C4             | R740C          | B4                 |                |
| R110G                          | E5                 | B1             | R310A          | E5                 | D1             | R806C          | B2                 |                |
| R120A                          | G2                 | B2             | R310B          | F2                 | D1             | R810A          | C4                 |                |
| R120B                          | G2                 | B2             | R310C          | F2                 | D1             | R816C          | E4                 |                |
| R120C                          | G2                 | B2             | R310D          | E5                 | D1             | R826G          | D1                 |                |
| R120D                          | C3                 | B2             | R310E          | E5                 | D1             | R846E          | B1                 |                |
| R120E                          | E4                 | B2             | R310F          | C3                 | D1             | R930A          | D3                 |                |
| R120F                          | B4                 | B2             | R320A          | G5                 | D1             | R930D          | D1                 |                |
| R120G                          | B3                 | B2             | R320B          | G2                 | D2             | R930E          | C1                 |                |
| R130A                          | C4                 | B3             | R320C          | G5                 | D2             | R930F          | C1                 |                |
| R130B                          | D5                 | B3             | R320D          | D3                 | D2             | U008A          | G2                 |                |
| R130C                          | C5                 | B3             | R320E          | G4                 | D2             | U008B          | H1                 |                |
| R130D                          | G2                 | B3             | R320F          | B4                 | D2             | U008C          | G1                 |                |
| R130E                          | D3                 | B3             | R320G          | D3                 | D2             | U018A          | G6                 |                |
| R130G                          | E1                 | B4             | R326C          | F3                 | D2             | U018B          | G6                 |                |
| R140A                          | C4                 | B4             | R326D          | D3                 | D2             | U018C          | G6                 |                |
| R140B                          | D4                 | B4             | R326E          | F2                 | D2             | U018D          | C5                 |                |
| R140C                          | D4                 | B4             | R326F          | G2                 | D2             | U028A          | B4                 |                |
| R140D                          | D4                 | B4             | R326G          | G2                 | D2             | U028B          | C4                 |                |
| R140E                          | C4                 | B4             | R330A          | E2                 | D3             | U038A          | C5                 |                |
| R140F                          | E1                 | B4             | R330B          | E2                 | D3             | U038B          | D5                 |                |
| R140G                          | G4                 | B4             | R330C          | D2                 | D3             | U048A          | G4                 |                |
| R200A                          | E3                 | C0             | R330D          | E2                 | D3             | U048B          | G4                 |                |
| R200B                          | E4                 | C0             | R330E          | E2                 | D3             | U048C          | C4                 |                |
| R200C                          | F5                 | C0             | R330F          | H4                 | D3             | U104A          | A1                 |                |
| R200D                          | C2                 | C0             | R330G          | D1                 | D3             | U104B          | B2                 |                |
| R200E                          | B2                 | C0             | R340A          | C4                 | D4             | U104C          | C2                 |                |
| R200F                          | D4                 | C0             | R340B          | C2                 | D4             | U114A          | B2                 |                |
| R200G                          | B1                 | C0             | R340C          | E1                 | D4             | U114B          | B4                 |                |
| R210A                          | F4                 | C1             | R340D          | B4                 | D4             | U114C          | B3                 |                |
| R210B                          | F4                 | C1             | R340E          | C3                 | D4             | U114D          | B1                 |                |
| R210C                          | F4                 | C1             | R400A          | F2                 | E0             | U124A          | A3                 |                |
| R210D                          | F4                 | C1             | R400B          | E3                 | E0             | U124B          | B3                 |                |
| R210E                          | F1                 | C1             | R400D          | E3                 | E0             | U124C          | B3                 |                |
| R210F                          | F4                 | C1             | R400E          | E3                 | E0             | U134A          | D4                 |                |
| R220A                          | D2                 | C2             | R406A          | E3                 | E0             | U134B          | G3                 |                |
| R220B                          | D2                 | C2             | R410A          | E3                 | E1             | U144A          | C5                 |                |
| R220C                          | G3                 | C2             | R410D          | F3                 | E1             | U144B          | C4                 |                |
| R220D                          | E4                 | C2             | R410E          | F3                 | E1             | U144C          | G4                 |                |
| R220E                          | E4                 | C2             | R420E          | G2                 | E2             | U144D          | C4                 |                |
| R220F                          | H3                 | C2             | R420F          | G2                 | E2             | U200A          | B2                 |                |
|                                |                    |                | R420G          | G2                 | E2             | U200B          | C2                 |                |
|                                |                    |                | R440A          | E1                 | E4             | U206A          | F4                 |                |
|                                |                    |                | R440C          | C3                 | E4             | U206B          | B1                 |                |

P/O A20 ASSY ALSO SHOWN ON 24 & 26

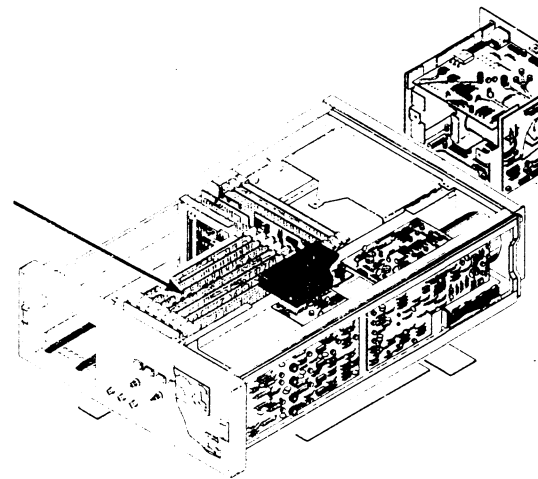
BUFFER CONTROL

25

| Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|--------------------|----------------|----------------|--------------------|----------------|
| G2                 | E4             | U210A          | B2                 | C1             |
| G2                 | E4             | U210B          | B1                 | C1             |
| D3                 | E4             | U216           | F4                 | C1             |
| B2                 | G0             | U220A          | E3                 | C2             |
| B4                 | H0             | U220B          | E4                 | C2             |
| E1                 | H2             | U226           | D5                 | C2             |
| C2                 | H2             | U230A          | D2                 | C3             |
| C2                 | H2             | U230B          | E4                 | C3             |
| F1                 | H3             | U236A          | G1                 | C3             |
| D2                 | H3             | U236B          | G1                 | C3             |
| D2                 | H3             | U236C          | G3                 | C3             |
| B1                 | H4             | U236D          | G1                 | C3             |
| F2                 | H4             | U240A          | C5                 | C4             |
| B4                 | H4             | U240B          | B4                 | C4             |
| R2                 | I0             | U246A          | C5                 | C4             |
| C4                 | I1             | U246B          | B5                 | C4             |
| E4                 | E4             | U300A          | G5                 | D0             |
| D1                 | I2             | U310           | D4                 | D1             |
| B1                 | I4             | U316           | D4                 | D1             |
| D3                 | J3             | U320A          | F4                 | D2             |
| D1                 | J3             | U320B          | A4                 | D2             |
| C1                 | J3             | U330A          | E2                 | D3             |
| C1                 | J3             | U330B          | A4                 | D3             |
|                    |                | U336A          | F2                 | D3             |
| G2                 | A0             | U336B          | E2                 | D3             |
| H1                 | A0             | U340A          | B5                 | D4             |
| G1                 | A0             | U340B          | B5                 | D4             |
| G6                 | A1             | U340C          | B4                 | D4             |
| G6                 | A1             | U340D          | B5                 | D4             |
| G6                 | A1             | U346A          | C2                 | D4             |
| C5                 | A1             | U346B          | D2                 | D4             |
| B4                 | A2             | U400           | E2                 | E0             |
| C4                 | A2             | U410           | F2                 | E1             |
| C5                 | A3             | U420A          | F2                 | E2             |
| D5                 | A3             | U420B          | G2                 | E2             |
| G4                 | A4             | U430A          | D1                 | E3             |
| G4                 | A4             | U430B          | E1                 | E3             |
| C4                 | A4             | U430C          | F1                 | E3             |
| A1                 | B0             | U430D          | C1                 | E3             |
| B2                 | B0             | U436A          | G2                 | E3             |
| C2                 | B0             | U436B          | F1                 | E3             |
| B2                 | B1             | U436C          | F1                 | E3             |
| B4                 | B1             | U436D          | G2                 | E3             |
| B3                 | B1             | U440B          | C3                 | E4             |
| B1                 | B1             | U440D          | D3                 | E4             |
| A3                 | B2             | U446A          | C3                 | E4             |
| B3                 | B2             | U446B          | D3                 | E4             |
| B3                 | B2             | U648A          | F1                 | G4             |
| D4                 | B3             | U648B          | F2                 | G4             |
| G3                 | B3             | U648C          | F2                 | G4             |
| C5                 | B4             | U936B          | C1                 | J3             |
| C4                 | B4             | U936C          | C1                 | J3             |
| G4                 | B4             | U946A          | C1                 | J4             |
| C4                 | B4             | U946B          | D2                 | J4             |
| B2                 | C0             |                |                    |                |
| C2                 | C0             | Y426           | G2                 | E2             |
| F4                 | C0             |                |                    |                |
| B1                 | C1             |                |                    |                |

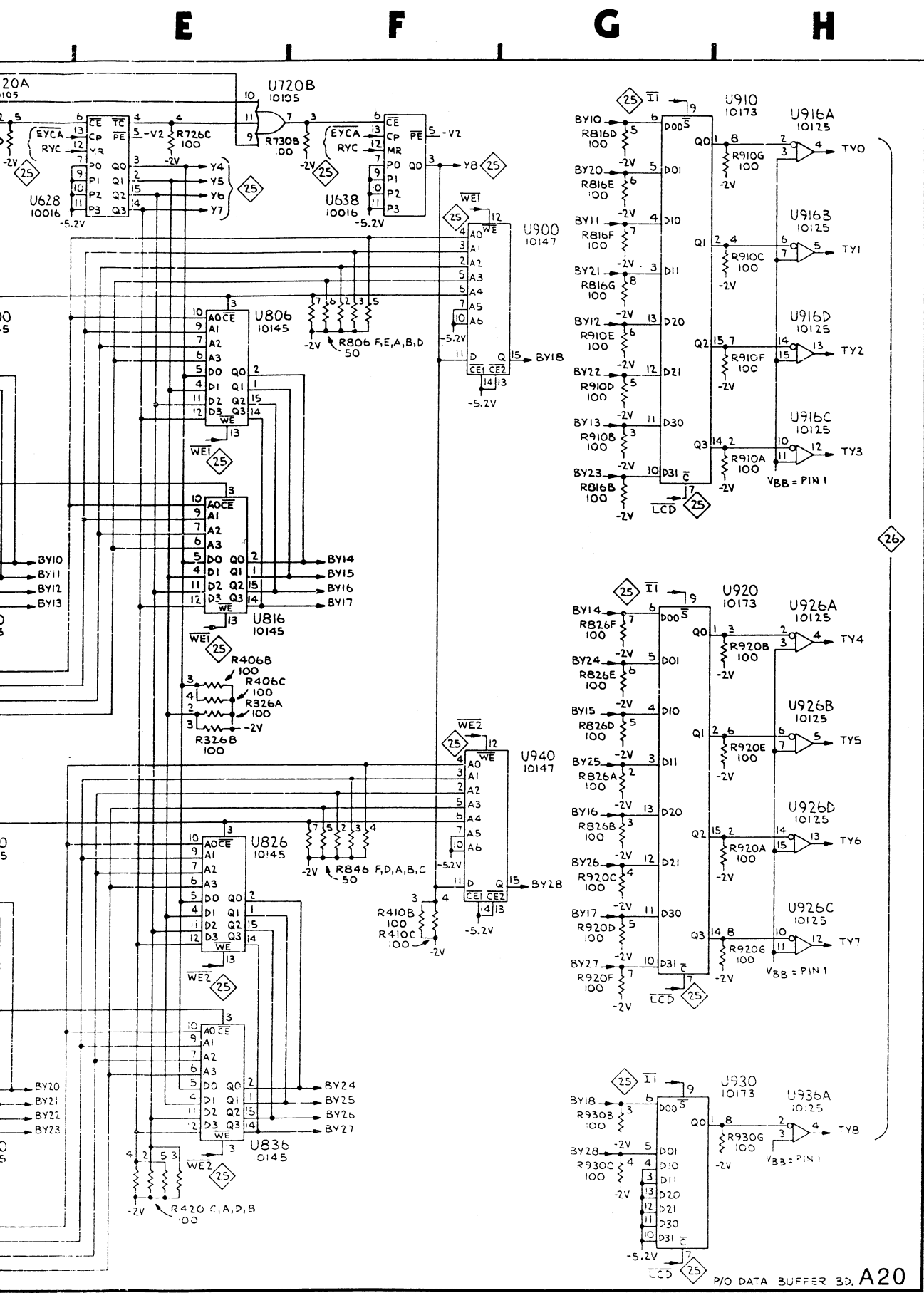
26

A20  
DATA BUFFER



REV APR 1984



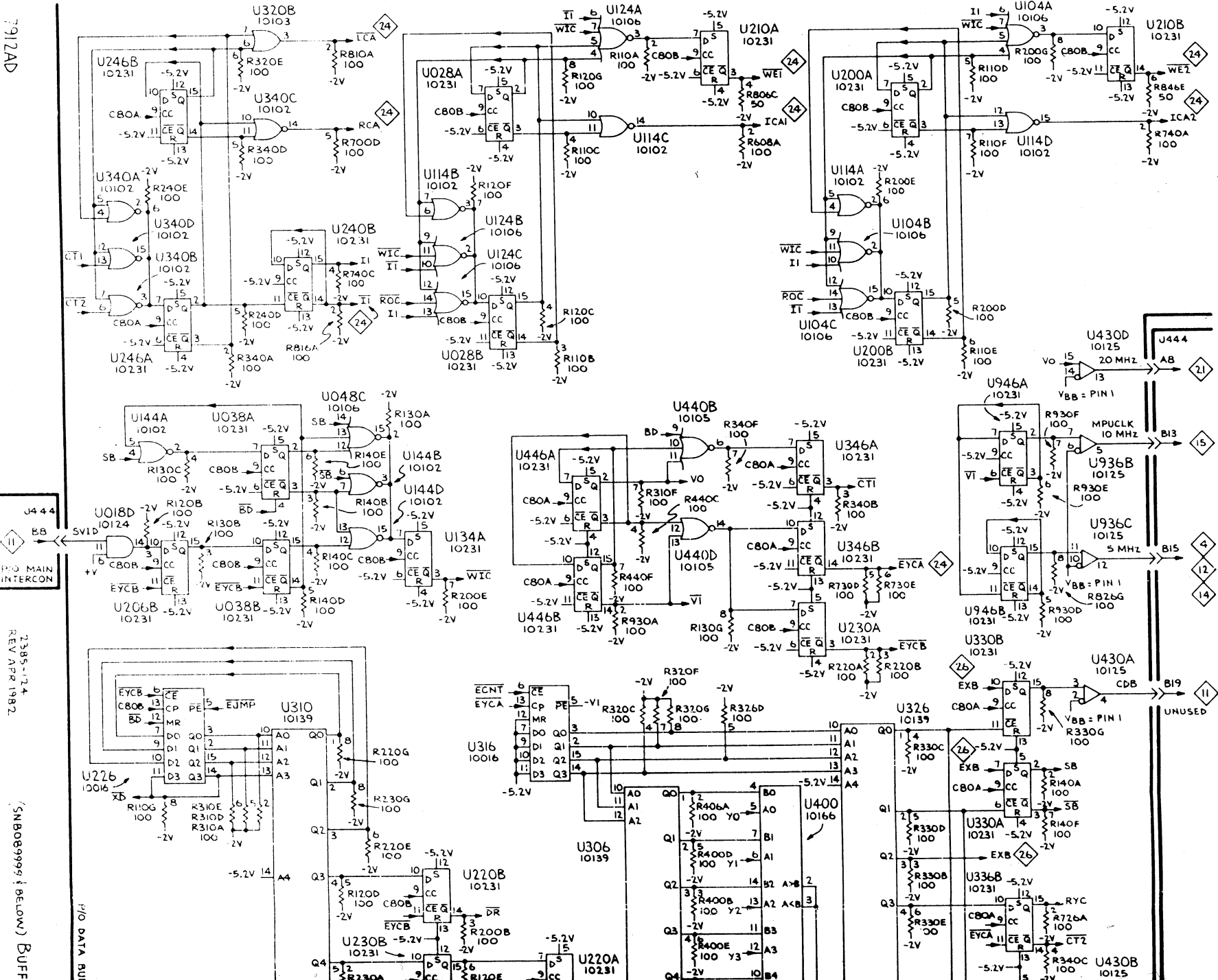


P/O DATA BUFFER 3D, A20

6 5 4 3 2 1

A B C D E

7912AD



Scans by Outsource-Options =>

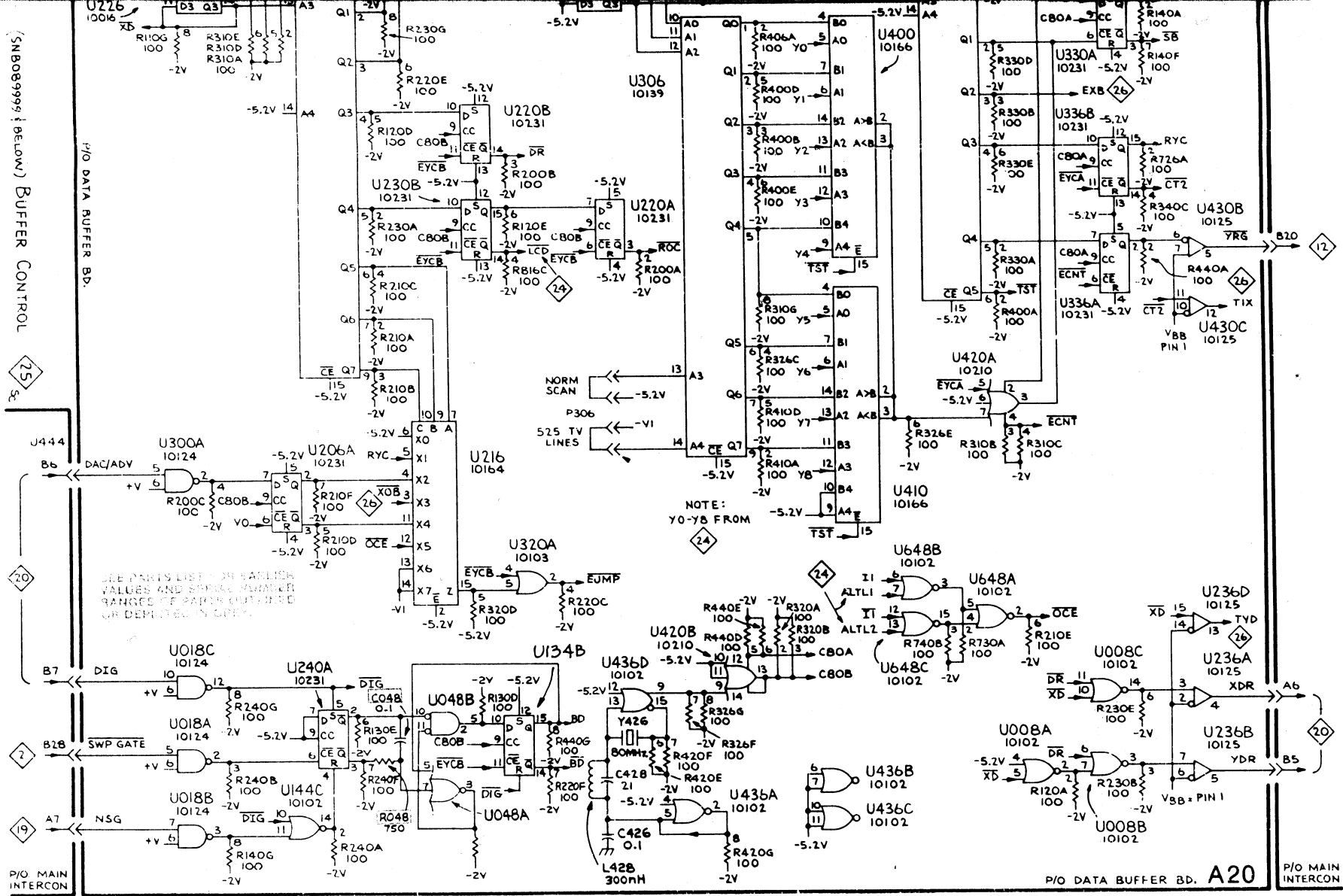
7385-74  
REV APR 1982

(SND089999; below) BUFF

I/O DATA BUS

(SN B089999; below) BUFFER CONTROL

P/O DATA BUFFER BD.



Scans by Outsource-Options =>

(SN B089999 & below) BUFFER CONTROL



A  
B  
C  
D  
E

1

2

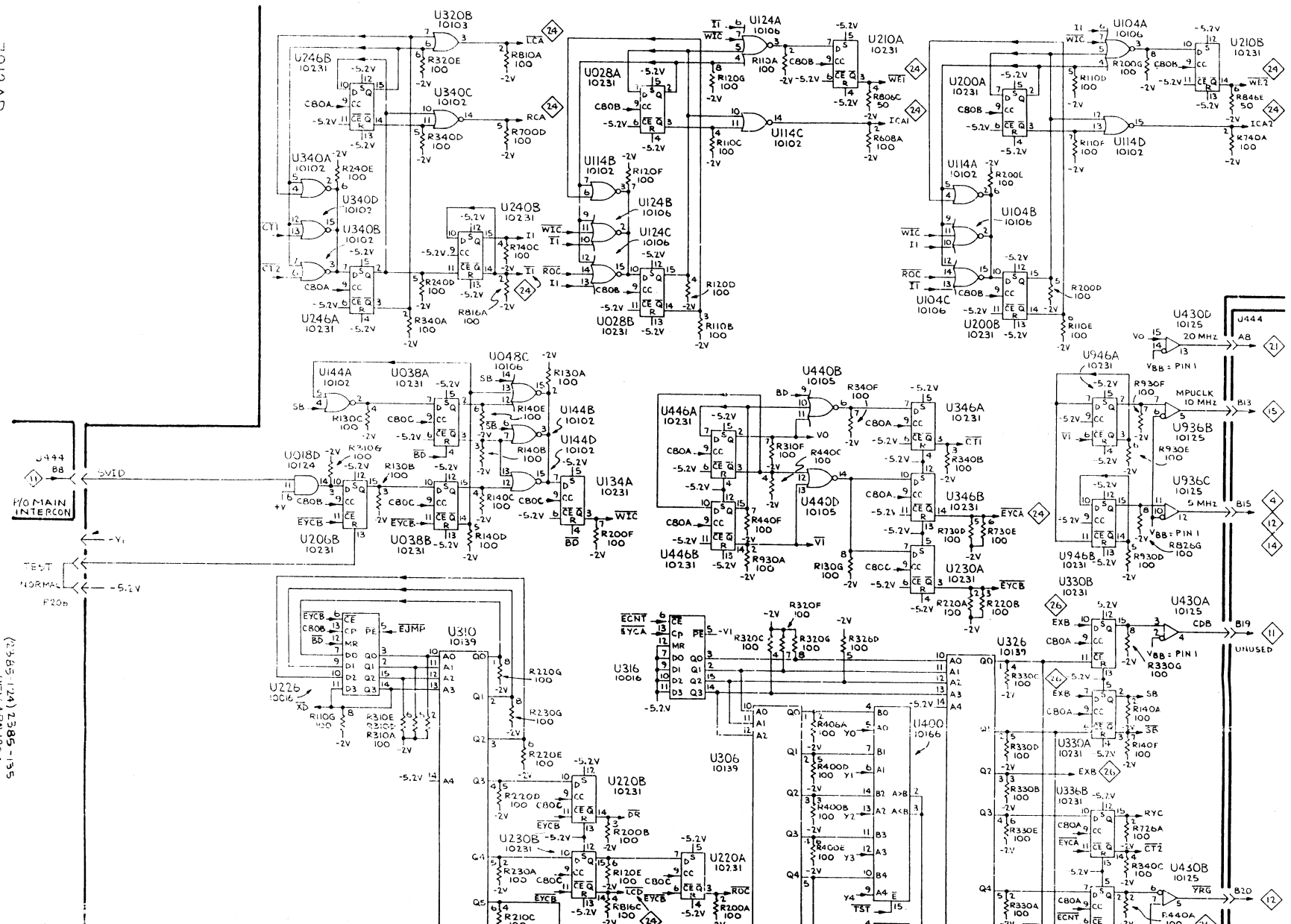
3

4

5

6

7912AD

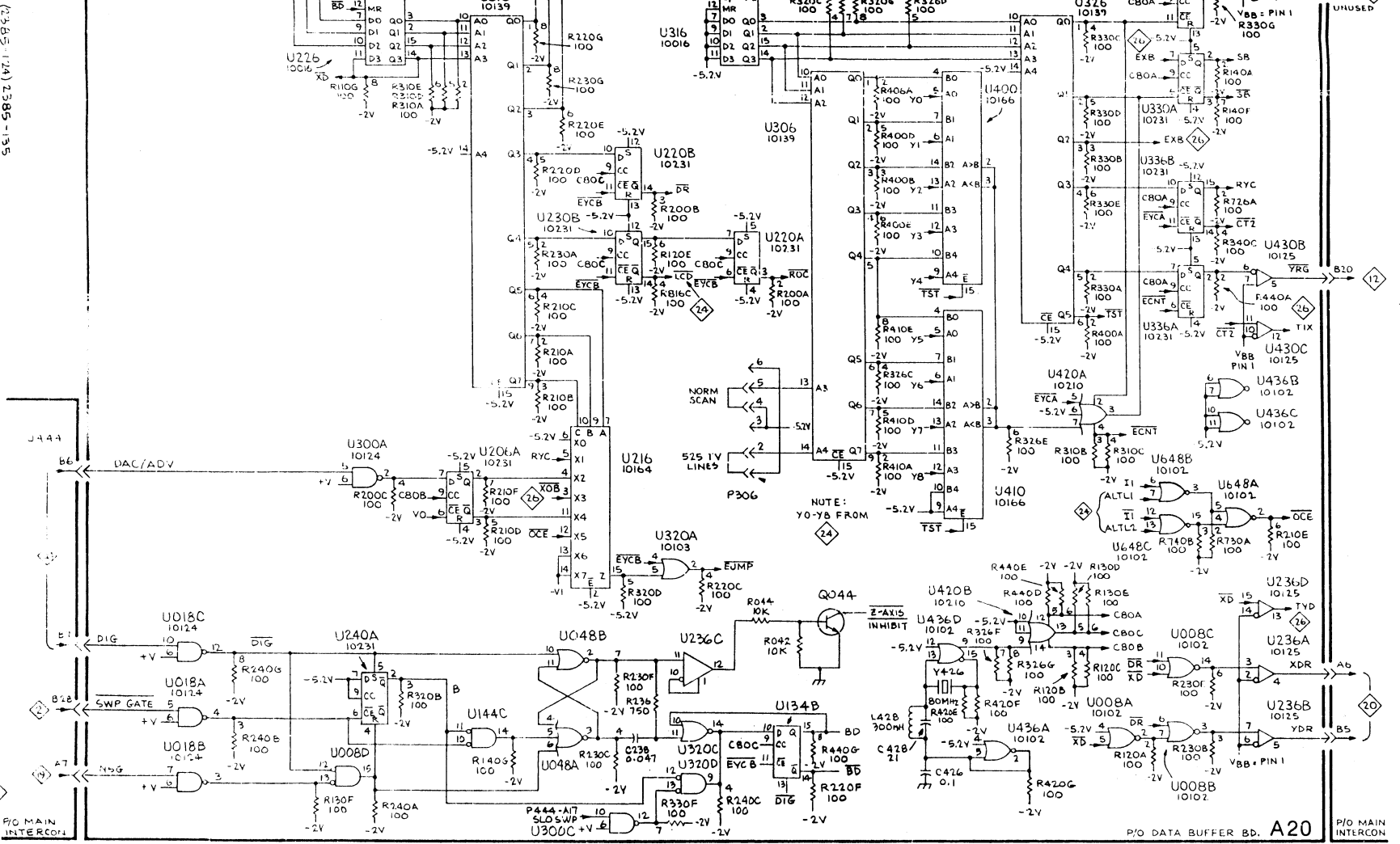


Scans by Outsourc-Options =>

(73-85-1124) 2385-135  
REV. APR. 1984

(2385-174) 2385-135  
REV. APR. 1984



(SN B09000 & up) BUFFER CONTROL



Scans by Outsource-Options =>

25  
BUFFER CONTROL  
(SN B09000 & up)

| P/O A20 ASSY (SN B089999 & BELOW) |                    |                |                |                    |                |                |                    |                |
|-----------------------------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| Circuit Number                    | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
| C426                              | H4                 | E2             | R230G          | D5                 | C3             | R726F          | C2                 | H2             |
| C428                              | H4                 | E2             | R240A          | H5                 | C4             | R726G          | C2                 | H2             |
| L428                              | H4                 | E2             | R240B          | H6                 | C4             | R730A          | G2                 | H3             |
| P306                              | F4                 | D0             | R240D          | B5                 | C4             | R730D          | H3                 | H3             |
| R110A                             | A3                 | B1             | R240E          | A6                 | C4             | R730E          | H3                 | H3             |
| R110B                             | B4                 | B1             | R240G          | G6                 | C4             | R740A          | A1                 | H4             |
| R110C                             | A4                 | B1             | R310A          | E5                 | D1             | R740B          | G2                 | H4             |
| R110D                             | A2                 | B1             | R310B          | F2                 | D1             | R740C          | B5                 | H4             |
| R110E                             | B2                 | B1             | R310C          | F2                 | D1             | R806C          | A3                 | I0             |
| R110F                             | A2                 | B1             | R310D          | E5                 | D1             | R810A          | A5                 | I1             |
| R110G                             | E6                 | B1             | R310E          | E5                 | D1             | R816A          | B5                 | I1             |
| R120A                             | H2                 | B2             | R310F          | C3                 | D1             | R816C          | F4                 | I1             |
| R120B                             | C6                 | B2             | R310G          | F3                 | D1             | R826G          | C1                 | I2             |
| R120C                             | B4                 | B2             | R320A          | G3                 | D2             | R846E          | A1                 | I4             |
| R120D                             | E5                 | B2             | R320B          | G3                 | D2             | R930A          | D3                 | J3             |
| R120E                             | E4                 | B2             | R320C          | D3                 | D2             | R930D          | D1                 | J3             |
| R120F                             | A4                 | B2             | R320D          | G4                 | D2             | R930E          | C1                 | J3             |
| R120G                             | A4                 | B2             | R320E          | A5                 | D2             | R930F          | C1                 | J3             |
| R130A                             | C5                 | B3             | R320F          | D3                 | D2             | U008A          | H2                 | A0             |
| R130B                             | C6                 | B3             | R320G          | D3                 | D2             | U008B          | H2                 | A0             |
| R130C                             | C6                 | B3             | R326C          | F3                 | D2             | U008C          | G2                 | A0             |
| R130D                             | H5                 | B3             | R326D          | D3                 | D2             | U018A          | H6                 | A1             |
| R130E                             | D3                 | B3             | R326E          | F2                 | D2             | U018B          | H6                 | A1             |
| R140A                             | D1                 | B4             | R326F          | H3                 | D2             | U018C          | G6                 | A1             |
| R140B                             | C5                 | B4             | R326G          | H3                 | D2             | U018D          | C6                 | A1             |
| R140C                             | C5                 | B4             | R330A          | F2                 | D3             | U028A          | A4                 | A2             |
| R140D                             | C5                 | B4             | R330B          | E2                 | D3             | U028B          | B4                 | A2             |
| R140E                             | C5                 | B4             | R330C          | D2                 | D3             | U038A          | C5                 | A3             |
| R140F                             | E1                 | B4             | R330D          | E2                 | D3             | U038B          | C5                 | A3             |
| R140G                             | H6                 | B4             | R330E          | E2                 | D3             | U048C          | C5                 | A4             |
| R200A                             | F4                 | C0             | R330G          | D1                 | D3             | U104A          | A1                 | B0             |
| R200B                             | E4                 | C0             | R340A          | B5                 | D4             | U104B          | B2                 | B0             |
| R200C                             | G6                 | C0             | R340B          | C2                 | D4             | U104C          | B2                 | B0             |
| R200D                             | B2                 | C0             | R340C          | E1                 | D4             | U114A          | B2                 | B1             |
| R200E                             | A2                 | C0             | R340D          | A5                 | D4             | U114B          | B4                 | B1             |
| R200F                             | C4                 | C0             | R340E          | C3                 | D4             | U114C          | A3                 | B1             |
| R200G                             | A1                 | C0             | R340F          | F2                 | E0             | U114D          | A1                 | B1             |
| R210A                             | F5                 | C1             | R400A          | E3                 | E0             | U124A          | A3                 | B2             |
| R210B                             | F5                 | C1             | R400B          | E3                 | E0             | U124B          | B4                 | B2             |
| R210C                             | F5                 | C1             | R400C          | E3                 | E0             | U124C          | B4                 | B2             |
| R210D                             | G5                 | C1             | R400E          | E3                 | E0             | U134A          | C4                 | B3             |
| R210E                             | G2                 | C1             | R406A          | E3                 | E0             | U134B          | H4                 | B3             |
| R210F                             | G5                 | C1             | R410A          | F3                 | E1             | U144A          | C6                 | B4             |
| R220A                             | D2                 | C2             | R410D          | F3                 | E1             | U144B          | C5                 | B4             |
| R220B                             | D2                 | C2             | R420E          | H4                 | E2             | U144C          | H5                 | B4             |
| R220C                             | G4                 | C2             | R420F          | H4                 | E2             | U144D          | C5                 | B4             |
| R220E                             | E5                 | C2             | R420G          | H3                 | E2             | U200A          | A2                 | C0             |
| R220F                             | H4                 | C2             | R440A          | F1                 | E4             | U200B          | B2                 | C0             |
| R220G                             | D5                 | C2             | R440C          | C3                 | E4             | U206A          | G5                 | C0             |
| R230A                             | E5                 | C3             | R440D          | G3                 | E4             | U206B          | C6                 | C0             |
| R230B                             | H1                 | C3             | R440E          | G3                 | E4             | U210A          | A3                 | C1             |
| R230E                             | H1                 | C3             | R440F          | C3                 | E4             | U210B          | A1                 | C1             |
|                                   |                    |                | R440G          | H4                 | E4             | U216           | G5                 | C1             |
|                                   |                    |                | R608A          | A3                 | G0             | U220A          | E4                 | C2             |
|                                   |                    |                | R700D          | A5                 | H0             |                |                    |                |
|                                   |                    |                | R726A          | E1                 | H2             |                |                    |                |

P/O A20 ASSY ALSO SHOWN ON  & 

| P/O A68 ASSY |    |    |      |    |    |      |    |    |
|--------------|----|----|------|----|----|------|----|----|
| J444         | B1 | E4 | J444 | C6 | E4 | J444 | G6 | E4 |

P/O A68 ASSY - SEE FIG. 7-37

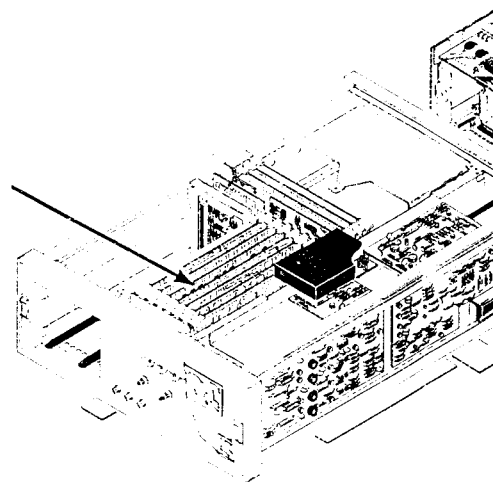
BUFFER CONTROL 25

| Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|--------------------|----------------|----------------|--------------------|----------------|
| C2                 | H2             | U220B          | E4                 | C2             |
| C2                 | H2             | U226           | D6                 | C2             |
| C2                 | H3             | U230A          | D3                 | C3             |
| H3                 | H3             | U230B          | E4                 | C3             |
| H3                 | H3             | U236A          | H1                 | C3             |
| A1                 | H4             | U236B          | H1                 | C3             |
| G2                 | H4             | U236D          | G1                 | C3             |
| B5                 | H4             | U240A          | H5                 | C4             |
| A3                 | I0             | U240B          | B5                 | C4             |
| A5                 | I1             | U246A          | B6                 | C4             |
| B5                 | I1             | U246B          | A6                 | C4             |
| F4                 | I1             | U300A          | G6                 | D0             |
| C1                 | I2             | U306           | E3                 | D0             |
| A1                 | I4             | U310           | E5                 | D1             |
| D3                 | J3             | U316           | D4                 | D1             |
| D1                 | J3             | U320A          | G4                 | D2             |
| C1                 | J3             | U320B          | A5                 | D2             |
| C1                 | J3             | U326           | E2                 | D2             |
|                    |                | U330A          | D2                 | D3             |
| H2                 | A0             | U330B          | D2                 | D3             |
| H2                 | A0             | U336A          | F1                 | D3             |
| G2                 | A0             | U336B          | E1                 | D3             |
| H6                 | A1             | U340A          | B6                 | D4             |
| H6                 | A1             | U340B          | B6                 | D4             |
| G6                 | A1             | U340C          | A5                 | D4             |
| C6                 | A1             | U340D          | B6                 | D4             |
| A4                 | A2             | U346A          | C3                 | D4             |
| B4                 | A2             | U346B          | C3                 | D4             |
| C5                 | A3             | U400           | E3                 | E0             |
| C5                 | A3             | U410           | F3                 | E1             |
| C5                 | A4             | U420A          | F2                 | E2             |
| A1                 | B0             | U420B          | G3                 | E2             |
| B2                 | B0             | U430A          | D1                 | E3             |
| B2                 | B0             | U430B          | F1                 | E3             |
| B2                 | B1             | U430C          | F1                 | E3             |
| B4                 | B1             | U430D          | S1                 | E3             |
| A3                 | B1             | U436A          | H3                 | E3             |
| A1                 | B1             | U436B          | H3                 | E3             |
| A3                 | B2             | U436C          | H3                 | E3             |
| B4                 | B2             | U436D          | H4                 | E3             |
| B4                 | B2             | U440B          | C3                 | E4             |
| C4                 | B3             | U440D          | C3                 | E4             |
| H4                 | B3             | U446A          | C4                 | E4             |
| C6                 | B4             | U446B          | C4                 | E4             |
| C5                 | B4             | U648A          | G2                 | G4             |
| H5                 | B4             | U648B          | G2                 | G4             |
| C5                 | B4             | U648C          | G2                 | G4             |
| A2                 | C0             | U936B          | C1                 | J3             |
| B2                 | C0             | U936C          | C1                 | J3             |
| B5                 | C0             | U946A          | C2                 | J4             |
| C6                 | C0             | U946B          | C2                 | J4             |
| A3                 | C1             |                |                    |                |
| A1                 | C1             | Y426           | H4                 | E2             |
| B5                 | C1             |                |                    |                |
| E4                 | C2             |                |                    |                |

BUFFER CONTROL 25

|    |    |   |   |   |
|----|----|---|---|---|
| 66 | E4 | — | — | — |
|----|----|---|---|---|

A20  
DATA BUFFER



| P/O A20 ASSY   |                    |                | BUFFER OUTPUT PORT 26 |                    |                |
|----------------|--------------------|----------------|-----------------------|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number        | Schematic Location | Board Location |
| C024*          |                    | A2             | C720                  | C3                 | H2             |
| C034*          |                    | B0             | C746                  | B3                 | H4             |
| C048*          | B3                 |                | C748                  | B4                 | H4             |
| C100           | H5                 |                | C800                  | B4                 | I0             |
| C106           | B1                 | B0             | C820                  | B4                 | I2             |
| C108           | B3                 | B0             | C822                  | B3                 | I2             |
| C108           | B2                 | B0             | C828                  | B3                 | I3             |
| C116           | B2                 | B1             | C830                  | C4                 | I3             |
| C118           | B3                 | B1             | C900                  | C3                 | J0             |
| C126           | C3                 | B2             | C902                  | C1                 | J0             |
| C128           | C2                 | B2             | C930                  | C4                 | J3             |
| C136           | C2                 | B3             | C932                  | C3                 | J3             |
| C138           | C3                 | B3             |                       |                    |                |
| C146           | B4                 | B4             | CR316                 | C2                 | D1             |
| C148           | B3                 | B4             | CR626                 | C2                 | G2             |
| C208           | B3                 | C0             |                       |                    |                |
| C216*          |                    | C1             | F034*                 |                    | A3             |
| C218           | B3                 | C1             | F044*                 | B3                 | A4             |
| C226           | B4                 | C2             | F530                  | B2                 | F3             |
| C228           | C3                 | C2             | F540                  | B1                 | F4             |
| C236*          | C3                 | C1             |                       |                    |                |
| C238           | B4                 | C3             | P500                  | D5                 | F0             |
| C246           | C4                 | C4             |                       |                    |                |
| C248           | B3                 | C4             | Q044*                 |                    | A4             |
| C300*          |                    | D0             | R042*                 |                    | A4             |
| C310*          |                    | D0             | R044*                 |                    | A4             |
| C316           | B3                 | D1             | R048*                 |                    |                |
| C336           | B3                 | D3             | R210G                 | G6                 | C1             |
| C338           | B4                 | D3             | R236*                 |                    | D2             |
| C346           | B4                 | D4             | R300*                 |                    | D0             |
| C348           | C3                 | D4             | R306*                 | C2                 | D1             |
| C410           | B4                 | E1             | R616                  | C1                 | G1             |
| C424           | C3                 | E2             | R620                  | D3                 | G2             |
| C430           | B1                 | E3             | R720                  | C2                 | H2             |
| C500           | C1                 | F0             |                       |                    |                |
| C510           | C1                 | F1             | U300B                 | G6                 | D0             |
| C520           | B1                 | F2             | U300D                 | G6                 | D0             |
| C540           | B2                 | F4             | U406D                 | F6                 | E0             |
| C600           | B1                 | G0             | U500                  | E5                 | F0             |
| C602           | B1                 | G0             | U508                  | D3                 | F0             |
| C610           | B1                 | G1             | U510                  | E4                 | F1             |
| C616           | C1                 | G1             | U518                  | F4                 | F1             |
| C620           | C1                 | G2             | U528                  | F5                 | F2             |
| C630           | B1                 | G3             | U538                  | G2                 | F3             |
| C634           | B1                 | G3             | U548                  | G3                 | F4             |
| C636           | B3                 | G3             | U600A                 | F6                 | G0             |
| C640           | B1                 | G4             | U600B                 | F6                 | G0             |
| C646           | C1                 | G4             | U600C                 | G6                 | G0             |
| C704           | C4                 | H0             | U600D                 | G6                 | G0             |
| C706           | B3                 | H0             | U610                  | E1                 | G1             |
| C710           | B3                 | H1             | U620                  | E2                 | G2             |
| C716           | C4                 | H1             | U630                  | E3                 | G3             |
| C718           | C3                 | H1             | U640                  | G1                 | G4             |

P/O A20 ASSY ALSO SHOWN ON 24 & 25

| P/O A68 ASSY                 |    |    | BUFFER OUTPUT PORT 26 |    |    |
|------------------------------|----|----|-----------------------|----|----|
| J444                         | A1 | E4 | J444                  | H1 | E4 |
| P/O A68 ASSY - SEE FIG. 7-37 |    |    |                       |    |    |

\*See Parts List for serial number ranges.

**A B C D E**

**1**

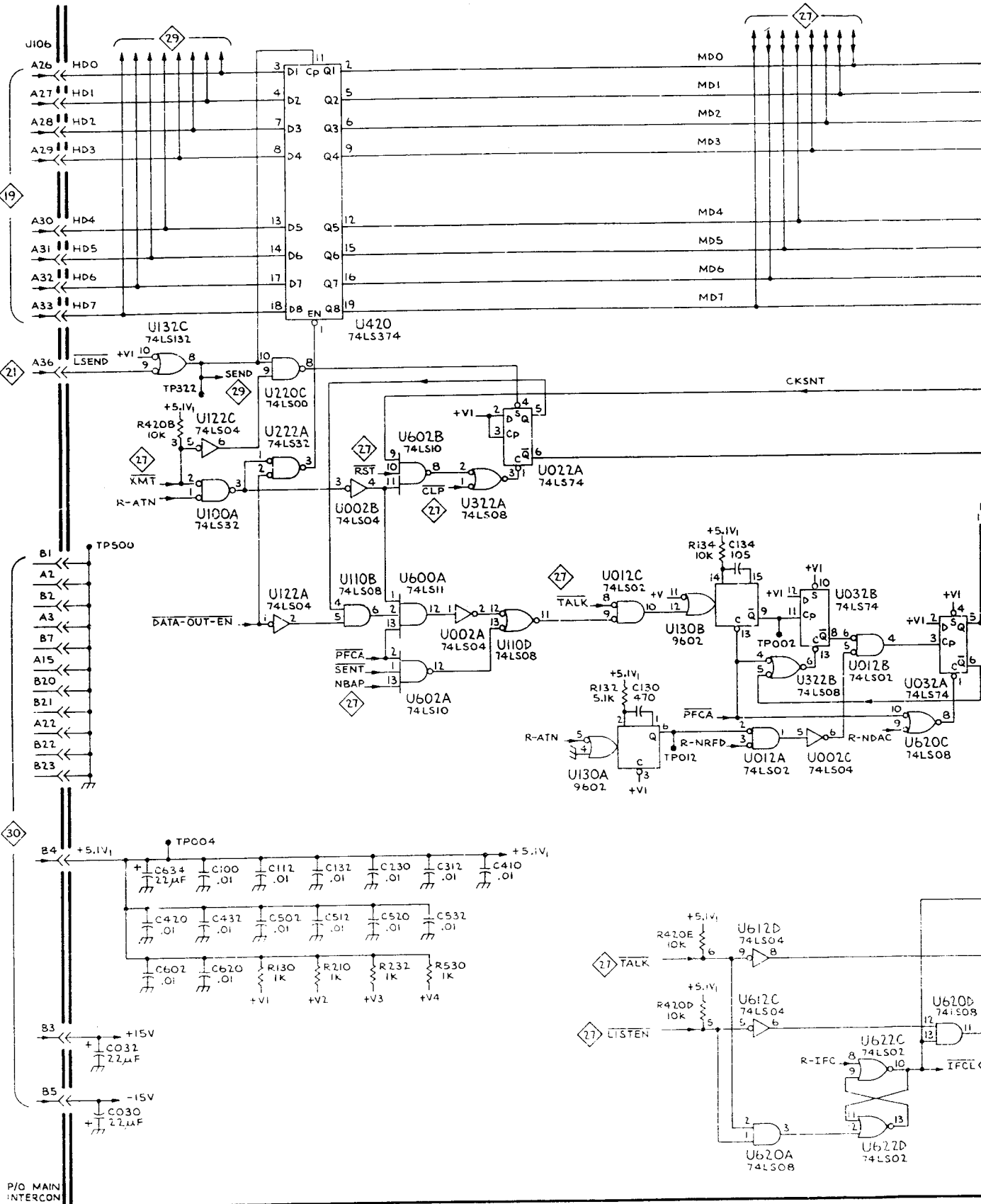
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**3**

**4**

**5**

**6**



P/O MAIN INTERCON

7912AD

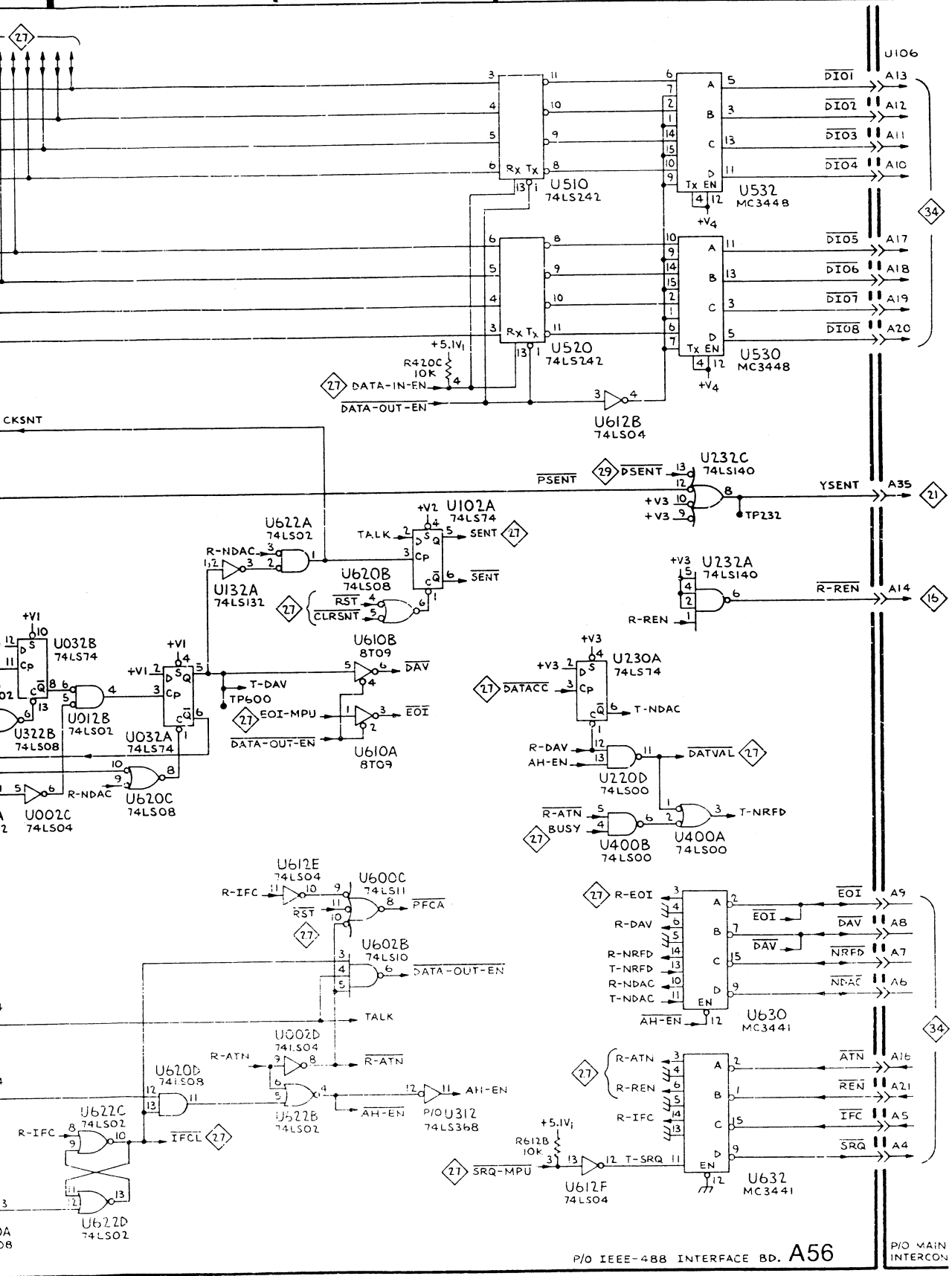
2385-127  
REV APR 1982

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P/O IEEE-488 INTERFACE BD. A56

P/O MAIN INTERCON

2385-127 REV APR 1982

A

B

C

D

E

1

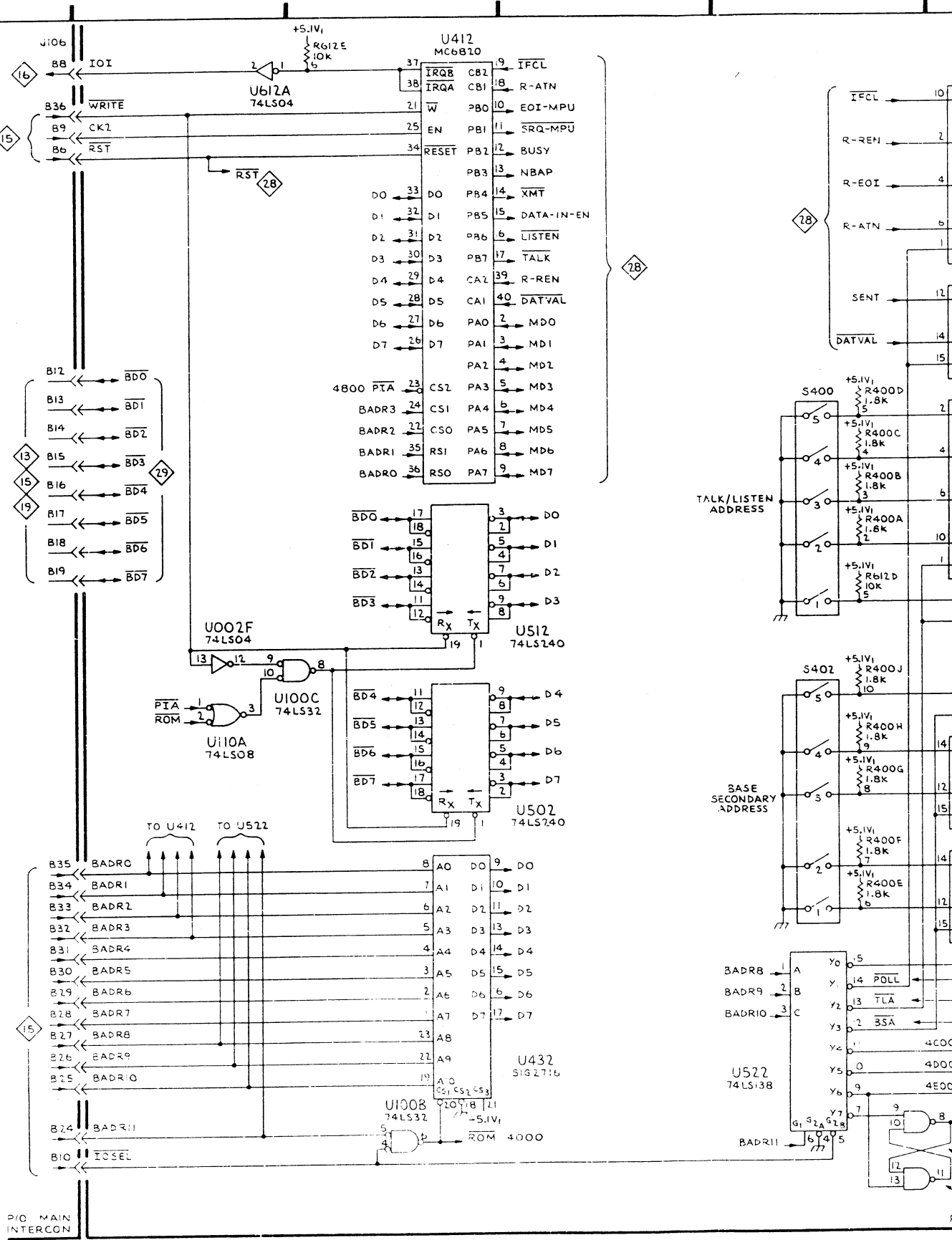
2

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7912AD

2385-126  
©

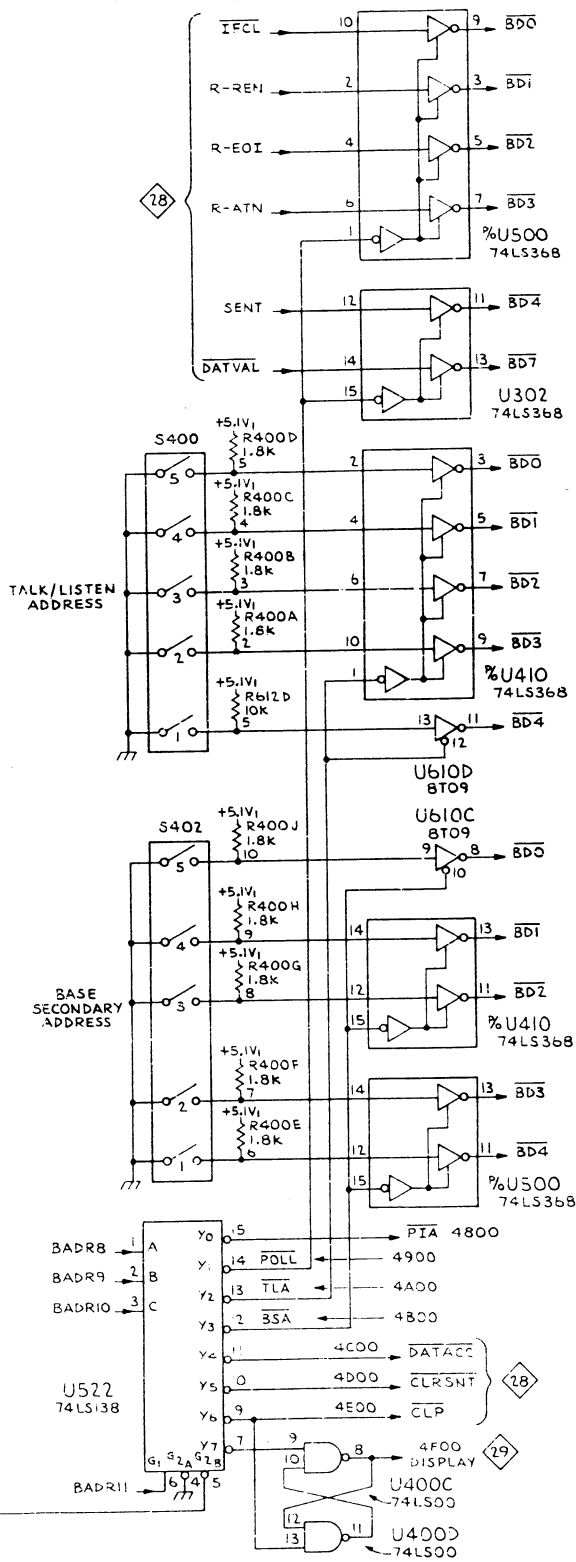


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P/O IEEE-488 INTERFACE BD. A56

IEEE 488 CONTROL

27

IEEE 488 CONTROL

27

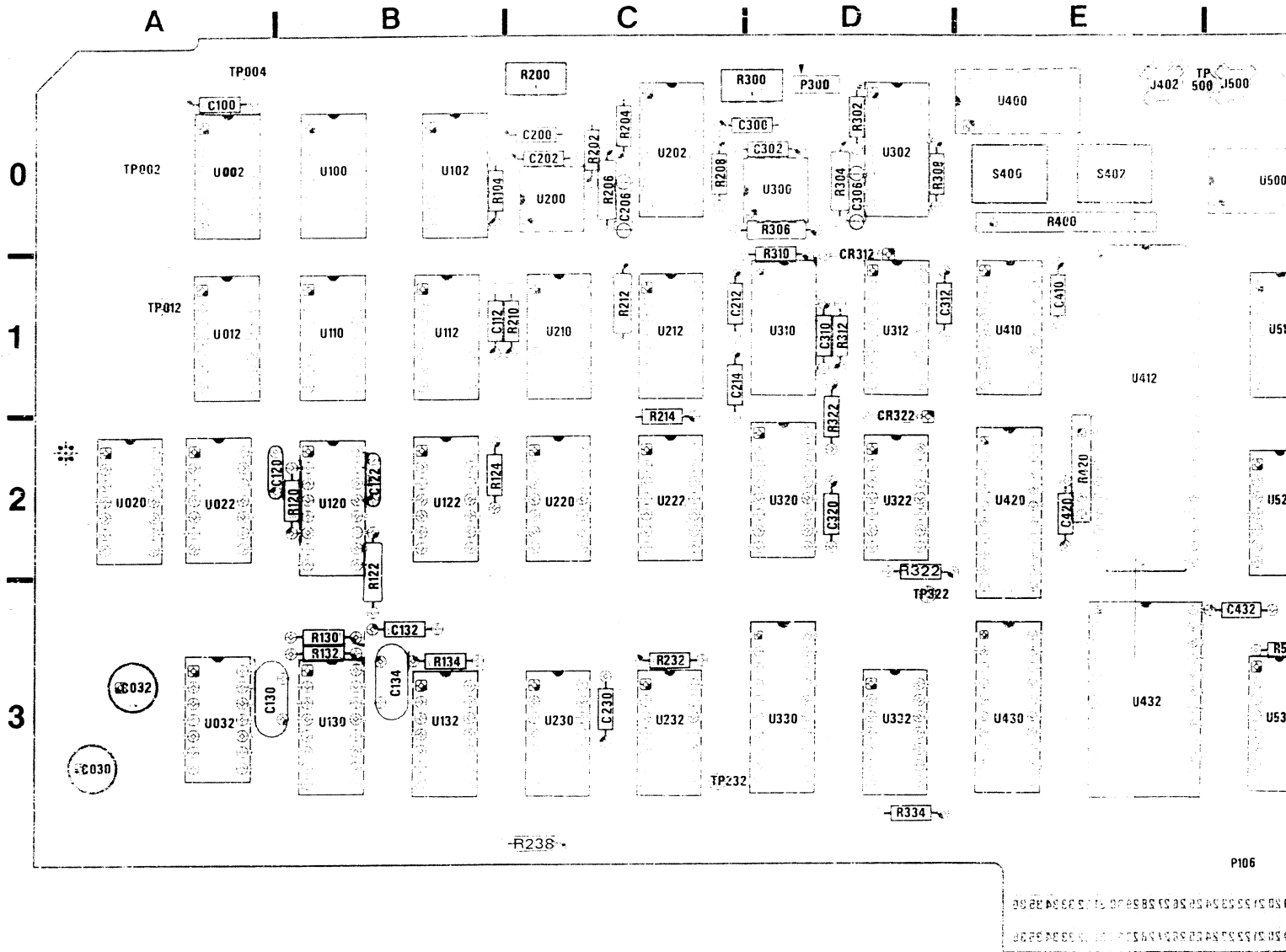
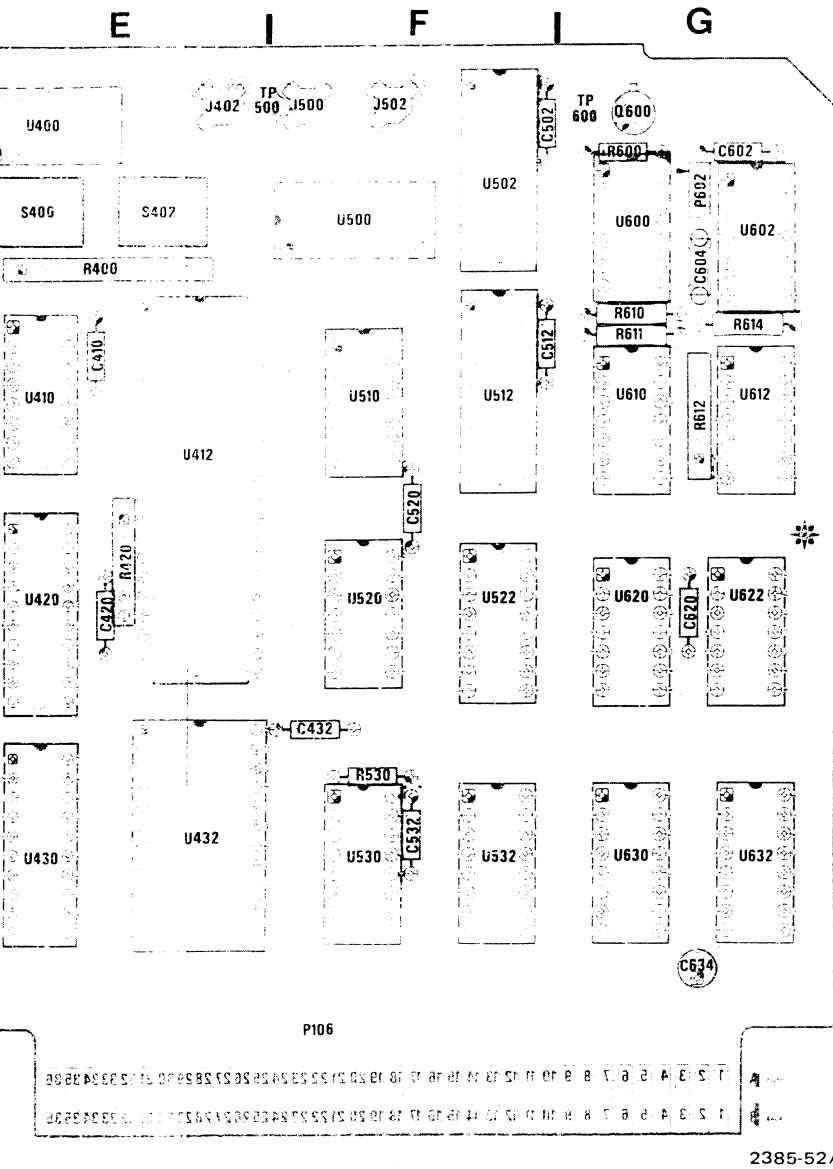


Fig. 7-30. The IEEE 488 Interface circuit board, assembly A56.

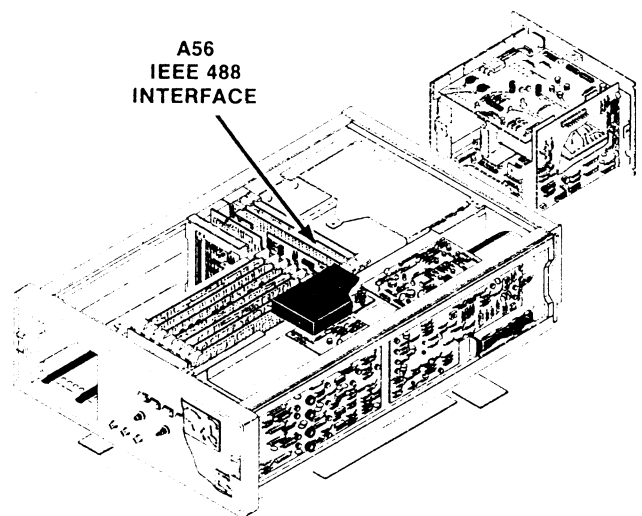
**COMPONENT NUMBER EXAMPLE**

|                     |                                 |                                |
|---------------------|---------------------------------|--------------------------------|
| Component Number    |                                 |                                |
| <b>A23 A2 R1234</b> |                                 |                                |
| Assembly<br>Number  | Subassembly<br>Number (if used) | Schematic<br>Circuit<br>Number |

Check mounted components have an Assembly Number prefix—see end of Appendix on the Technical Parts List.



assembly A56.



REV APR 1982

A B C D

1

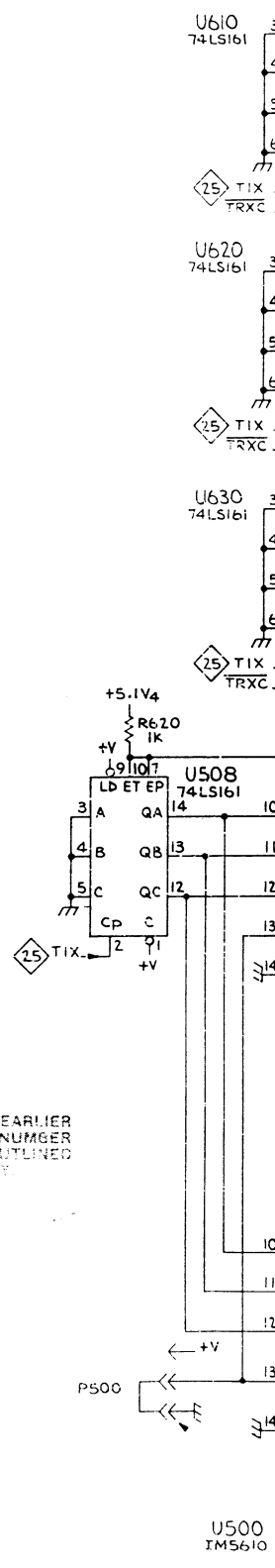
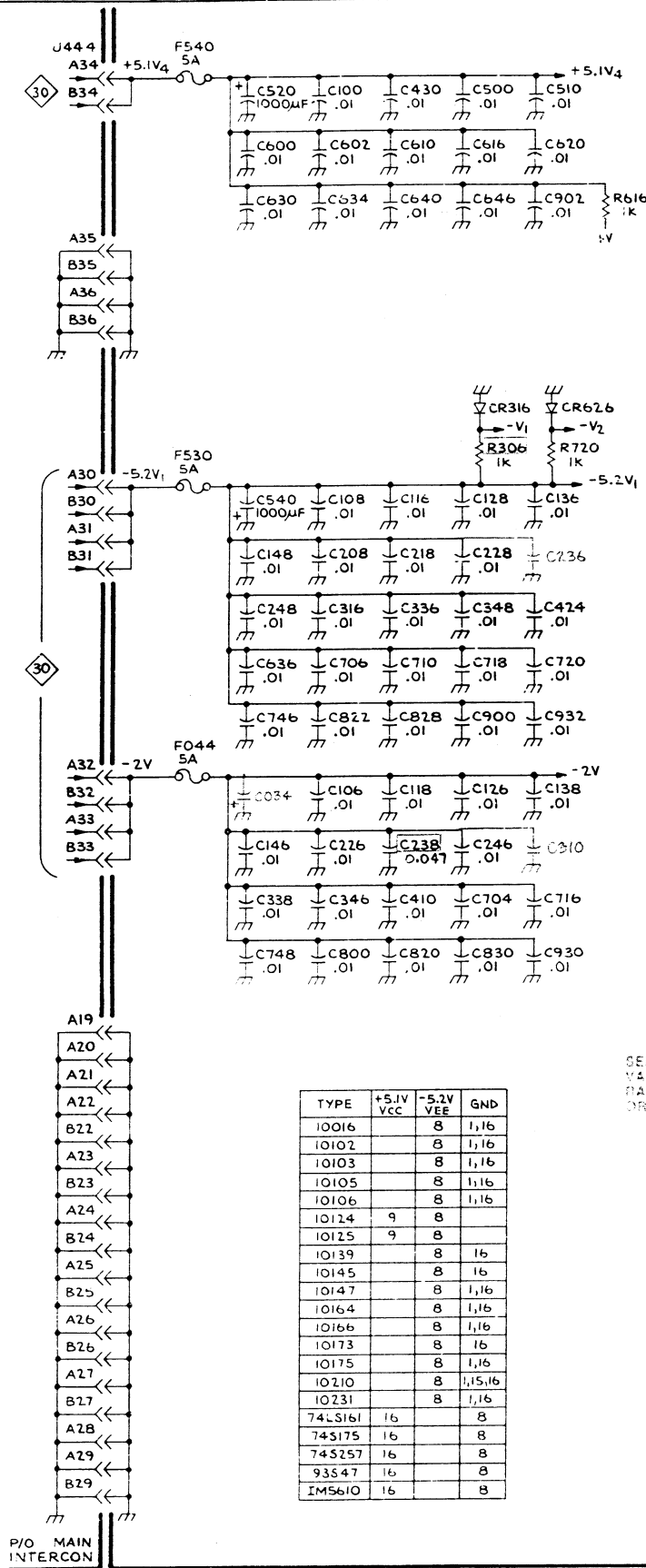
2

3

4

5

6



| TYPE    | +5.1V VCC | -5.2V VEE | GND     |
|---------|-----------|-----------|---------|
| 10016   |           | 8         | 1,16    |
| 10102   |           | 8         | 1,16    |
| 10103   |           | 8         | 1,16    |
| 10105   |           | 8         | 1,16    |
| 10106   |           | 8         | 1,16    |
| 10124   | 9         | 8         |         |
| 10125   | 9         | 8         |         |
| 10139   |           | 8         | 16      |
| 10145   |           | 8         | 16      |
| 10147   |           | 8         | 1,16    |
| 10164   |           | 8         | 1,16    |
| 10166   |           | 8         | 1,16    |
| 10173   |           | 8         | 16      |
| 10175   |           | 8         | 1,16    |
| 10210   |           | 8         | 1,15,16 |
| 10231   |           | 8         | 1,16    |
| 74LS161 | 16        |           | 8       |
| 74S175  | 16        |           | 8       |
| 74S257  | 16        |           | 8       |
| 93S47   | 16        |           | 8       |
| 1M5610  | 16        |           | 8       |

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DERIVED IN GREY.

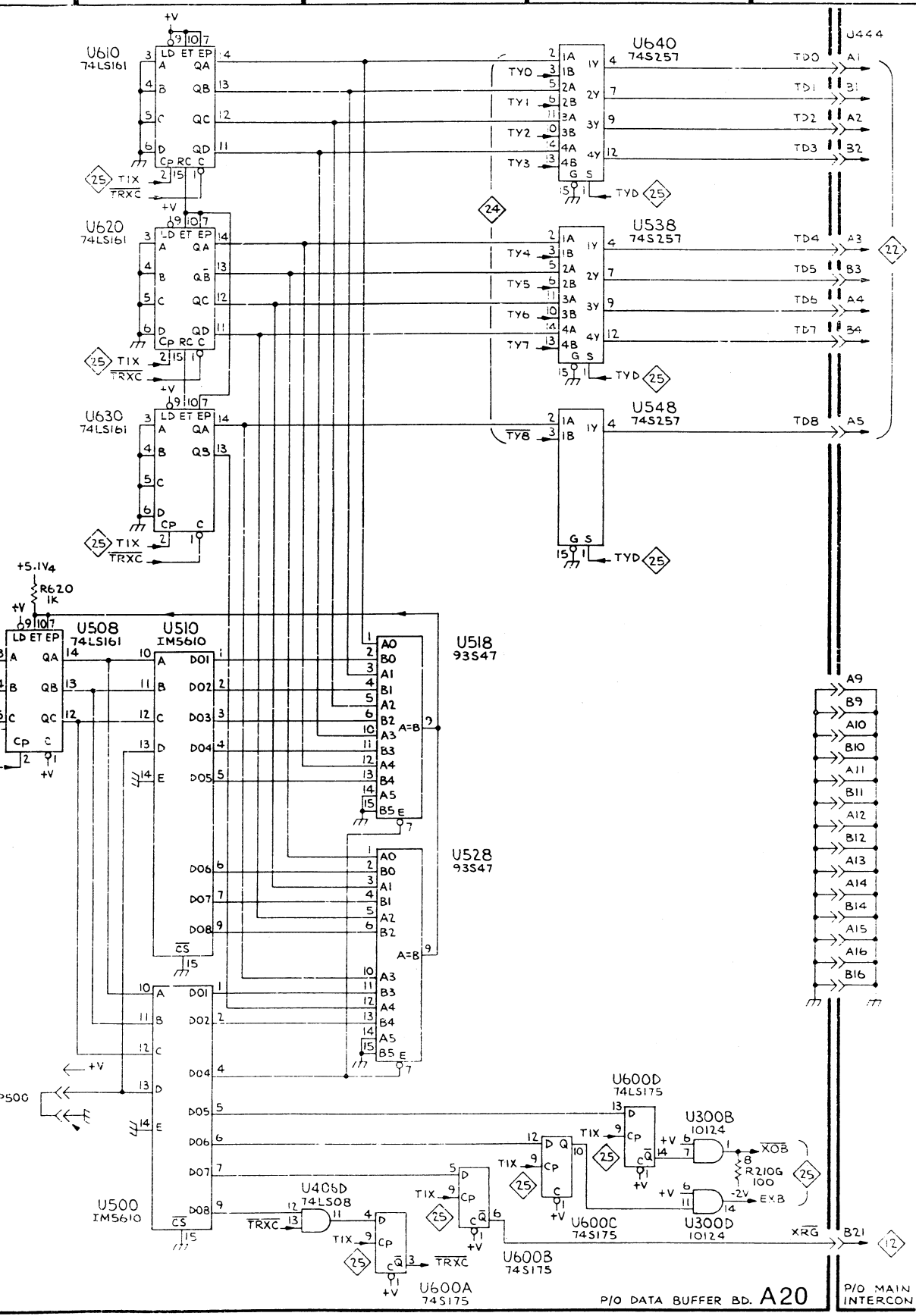
P/O MAIN INTERCON

7912AD

52% R03

2385-125 REV DEC 1983

E F G H



BUFFER OUTPUT PORT

P/O DATA BUFFER BD. A20 P/O MAIN INTERCON

385-125  
REV DEC 1983

BUFFER OUTPUT PORT

| P/O A56 ASSY   |                    |                | IEEE 488 HANDSHAKE <span style="border: 1px solid black; padding: 2px;">28</span> |                    |                |
|----------------|--------------------|----------------|---|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location |
| C030           | A6                 | A3             | U022A   | C3                 | A2             |
| C032           | A5                 | A3             | U032A   | E4                 | A3             |
| C100           | A5                 | A0             | U032B   | D3                 | A3             |
| C112           | B5                 | B1             | U100A   | A3                 | B0             |
| C130           | C4                 | B3             | U102A   | F3                 | B0             |
| C132           | B5                 | B3             | U110B   | B3                 | B1             |
| C134           | D3                 | B3             | U110D   | C3                 | B1             |
| C230           | B5                 | C3             | U122A   | B3                 | B2             |
| C312           | C5                 | D1             | U122C   | A3                 | B2             |
| C410           | C5                 | E1             | U130A   | C4                 | B3             |
| C420           | A5                 | E2             | U130B   | D3                 | B3             |
| C432           | A5                 | F3             | U132A   | E3                 | B3             |
| C502           | B5                 | F0             | U132C   | A2                 | B3             |
| C512           | B5                 | F1             | U220C   | B2                 | C2             |
| C520           | B5                 | F2             | U220D   | G4                 | C2             |
| C532           | C5                 | F3             | U222A   | B3                 | C2             |
| C602           | A5                 | G0             | U230A   | G4                 | C3             |
| C620           | A5                 | G2             | U232A   | G3                 | C3             |
| C634           | A5                 | G3             | U232C   | G3                 | C3             |
|                |                    |                | U322A   | C3                 | D2             |
| J106           | A1                 | E3             | U322B   | D4                 | D2             |
| J106           | H1                 | E3             | U400A   | G4                 | E0             |
|                |                    |                | U400B   | G4                 | E0             |
| R130           | B5                 | B3             | U420  | B1                 | E2             |
| R132           | C4                 | B3             | U510  | G1                 | F1             |
| R134           | D3                 | B3             | U520  | G2                 | F2             |
| R210           | B5                 | C1             | U530  | H2                 | F3             |
| R232           | B5                 | C3             | U532  | H1                 | F3             |
| R420B          | A3                 | E2             | U600A   | B3                 | G0             |
| R420C          | F2                 | E2             | U600C   | F5                 | G0             |
| R420D          | D5                 | E2             | U602A   | B4                 | G0             |
| R420E          | D5                 | E2             | U602B   | B3                 | G0             |
| R530           | C5                 | F3             | U602B   | F5                 | G0             |
| R612B          | G6                 | G1             | U610A   | F4                 | G1             |
|                |                    |                | U610B   | F3                 | G1             |
| TP002          | D3                 | A0             | U612B   | G2                 | G1             |
| TP004          | A5                 | A0             | U612C   | D5                 | G1             |
| TP012          | D4                 | A1             | U612D   | D5                 | G1             |
| TP232          | H3                 | C3             | U612E   | F4                 | G1             |
| TP322          | A2                 | E3             | U612F   | G6                 | G1             |
| TP500          | A3                 | F0             | U620A   | D6                 | G2             |
| TP600          | E4                 | G0             | U620B   | F3                 | G2             |
|                |                    |                | U620C   | E4                 | G2             |
| U002A          | C3                 | A0             | U620D   | E5                 | G2             |
| U002B          | B3                 | A0             | U622A   | F3                 | G2             |
| U002C          | D4                 | A0             | U622B   | F5                 | G2             |
| U002D          | F5                 | A0             | U622C   | E6                 | G2             |
| U012A          | D4                 | A1             | U622D   | E6                 | G2             |
| U012B          | E4                 | A1             | U630  | G5                 | G3             |
| U012C          | C3                 | A1             | U632  | G5                 | G3             |

P/O A56 ASSY ALSO SHOWN ON 27 & 29

| P/O A68 ASSY |    |    | IEEE 488 CONTROL <span style="border: 1px solid black; padding: 2px;">28</span> |    |    |
|--------------|----|----|---|----|----|
| J106         | A1 | E3 | J106  | H1 | E3 |

P/O A68 ASSY - SEE FIG. 7-37

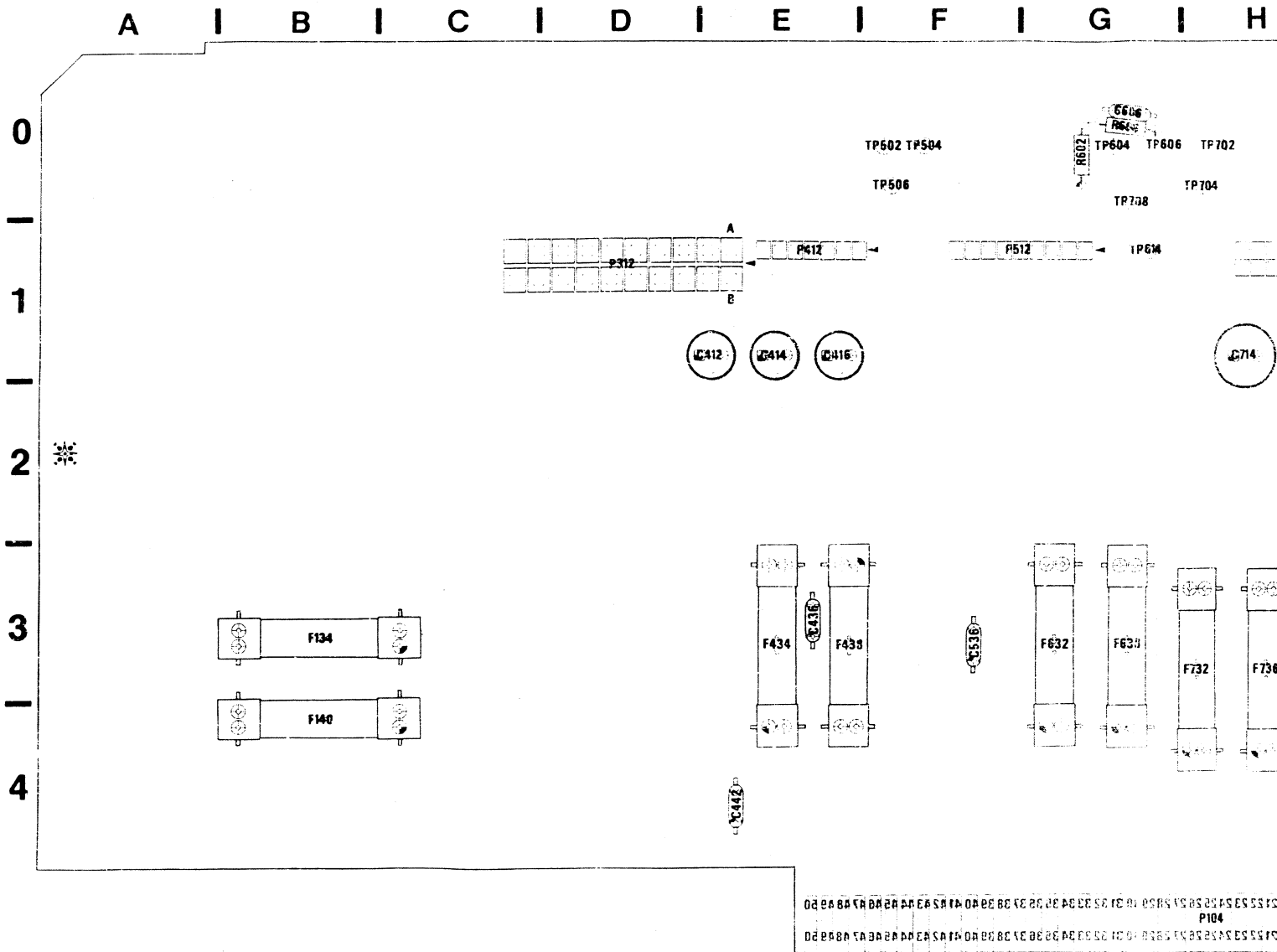
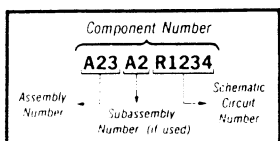


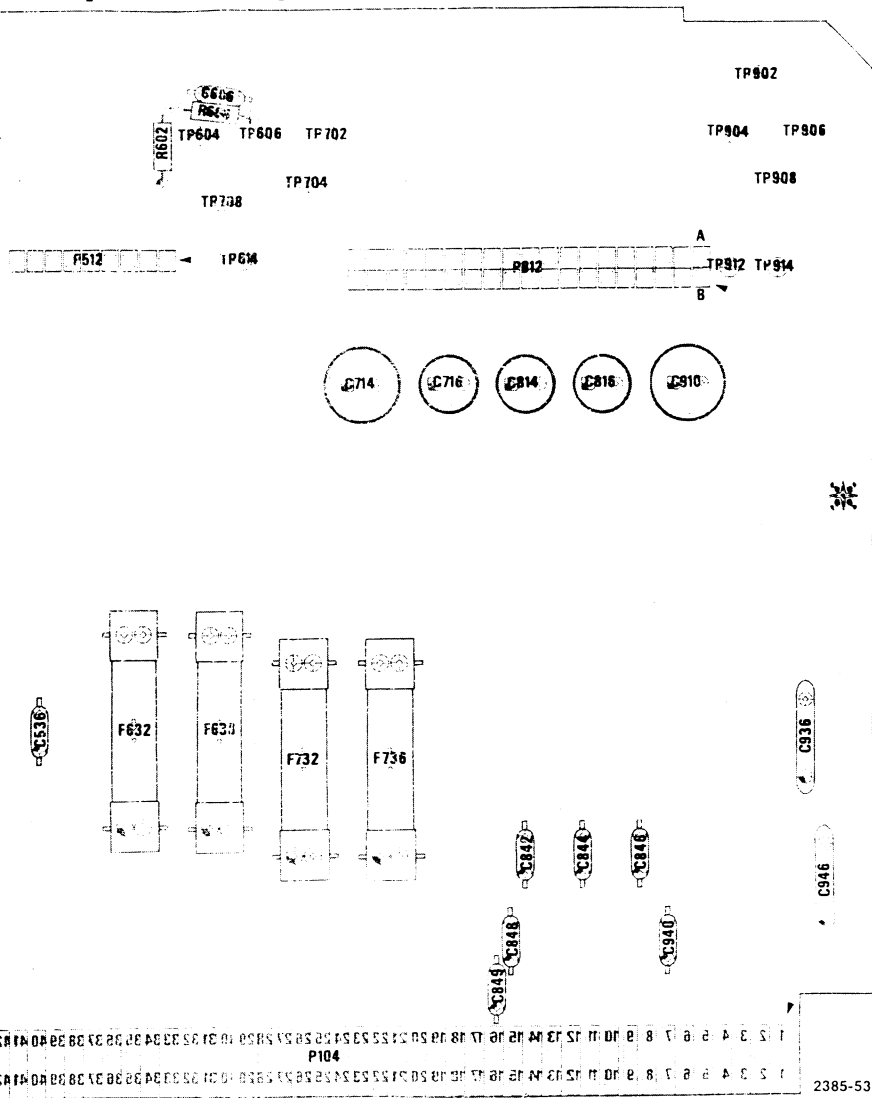
Fig. 7-31. The Power Connector circuit board, assembly A62.

COMPONENT NUMBER EXAMPLE

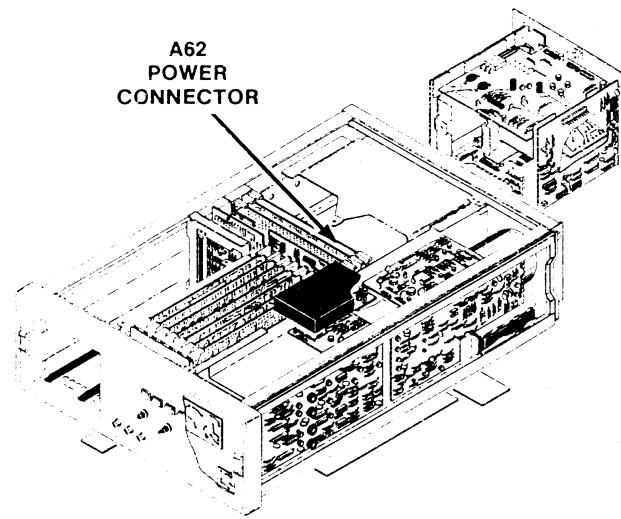


\*Basis-mounted components have no Assembly Number prefix - see end of Replaceable Electrical Parts List

F I G I H I I J



board, assembly A62.



REV JUL 1983



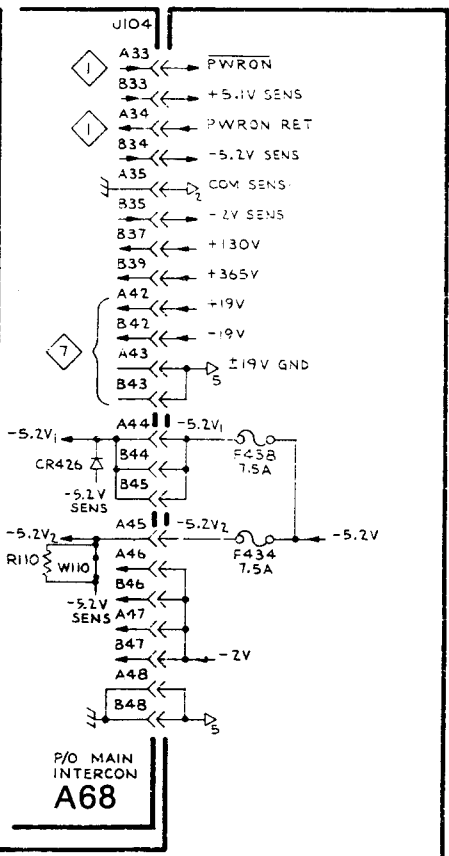
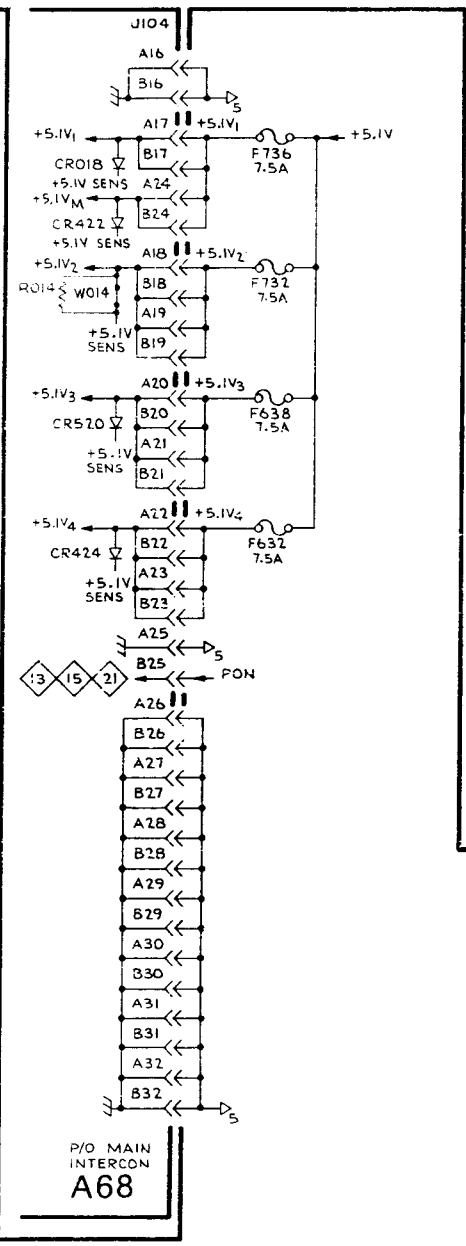
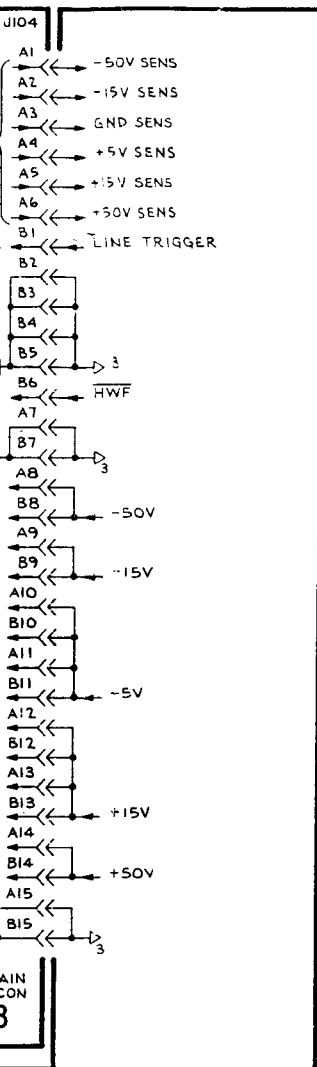


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P/O MAIN INTERCON  
**A68**

SPARE FUSES  
 F140 7.5A  
 F134 7.5A

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY.

POWER CONNECTOR BD. **A62**

2385-129  
REV JUL 1983

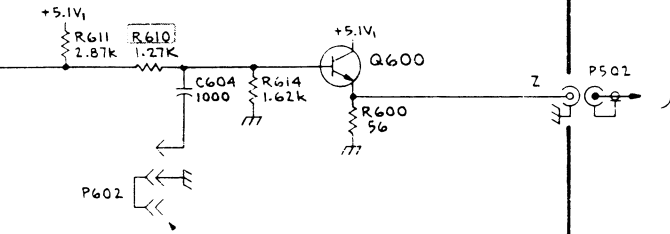
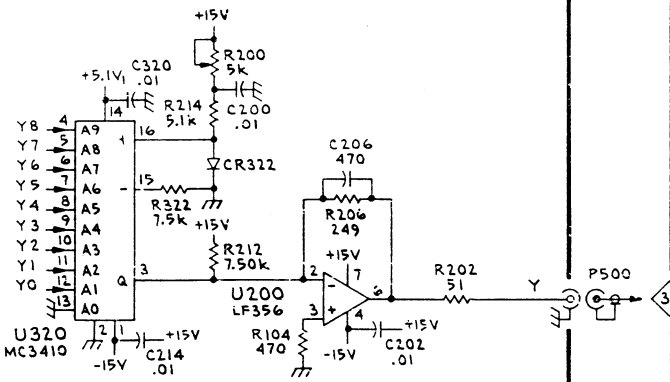
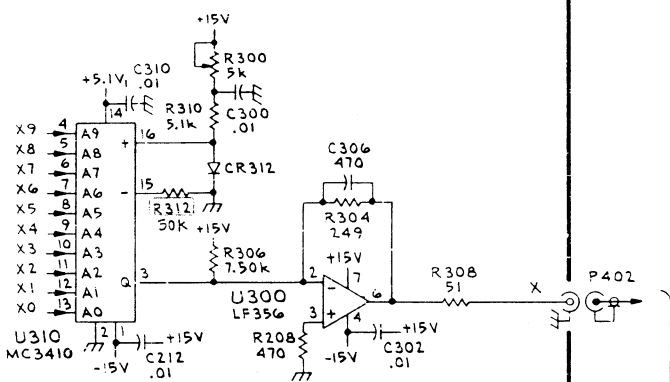
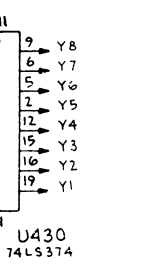
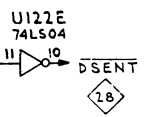
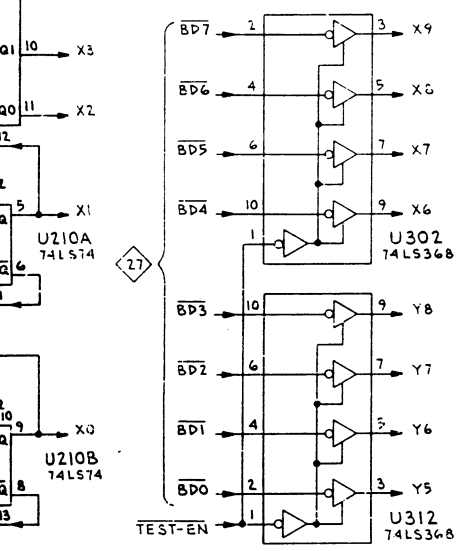
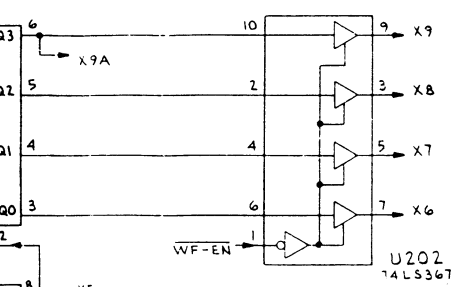
POWER CONNECTOR

30

POWER CONNECTOR

30





SEE PART LIST FOR TOLERANCE VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DERIVED IN GRAY.

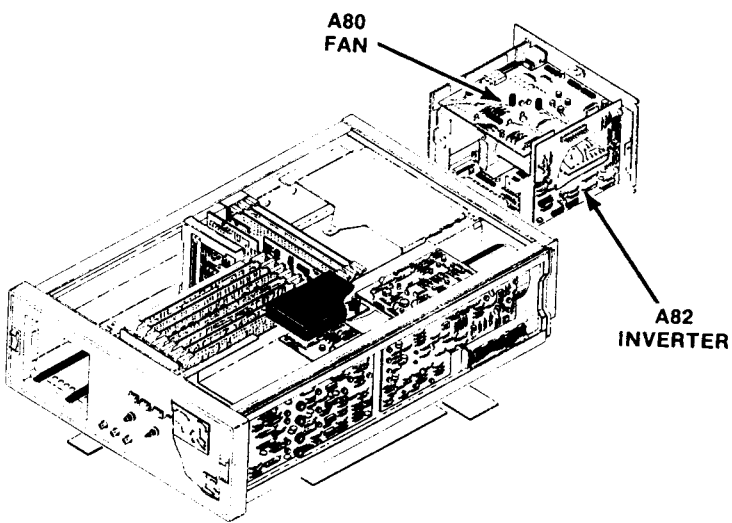
% IEEE-488 INTERFACE BD. A56

2385-128  
REV DEC 1983

XYZ DISPLAY

| P/O A56 ASSY  |                    |                | XYZ DISPLAY <span style="border: 1px solid black; padding: 2px;">29</span> |                    |                |
|---|--------------------|----------------|--|--------------------|----------------|
| Circuit Number  | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| C120  | B3                 | B2             | R310   | G1                 | D1             |
| C122  | C3                 | B2             | R312   | G1                 | D1             |
| C200  | G2                 | C0             | R322*  | G3                 | D2             |
| C202  | G3                 | C0             | R332*  | B2                 | D2             |
| C206  | G3                 | C0             | R334   | B4                 | D3             |
| C212  | F2                 | C1             | R600   | G4                 | G0             |
| C214  | F3                 | C1             | R610   | F4                 | G1             |
| C300  | G1                 | D0             | R611   | F4                 | G1             |
| C302  | G2                 | D0             | R614   | G4                 | G1             |
| C306  | G1                 | D0             | U002E  | C3                 | A0             |
| C310  | F1                 | D1             | U012D  | C3                 | A1             |
| C320  | F2                 | D2             | U022B  | D3                 | A2             |
| C604  | G4                 | G0             | U100D  | C4                 | B0             |
| CR312   | G1                 | D1             | U110C  | C4                 | B1             |
| CR322   | G2                 | D2             | U112A  | D3                 | B1             |
|   |                    |                | U120A  | B3                 | B2             |
| P300  | E4                 | D0             | U120B  | C3                 | B2             |
| P402  | H2                 | E0             | U122D  | C6                 | B2             |
| P500  | H3                 | F0             | U122E  | D4                 | B2             |
| P502  | H4                 | F0             | U122F  | B2                 | B2             |
| P602  | F4                 | G0             | U132D  | B2                 | B3             |
| Q600  | G4                 | G0             | U200   | G3                 | C0             |
|   |                    |                | U202   | E1                 | C0             |
| R104  | G3                 | B0             | U210A  | D3                 | C1             |
| R120  | B3                 | B2             | U210B  | D3                 | C1             |
| R122  | C3                 | B2             | U212A  | D1                 | C1             |
| R124  | B2                 | B2             | U212B  | D2                 | C1             |
| R200  | G2                 | C0             | U222C  | C5                 | C2             |
| R202  | G3                 | C0             | U222D  | D5                 | C2             |
| R204  | E4                 | C0             | U230B  | C6                 | C3             |
| R205*   | B2                 |                | U300   | G2                 | D0             |
| R206  | G3                 | C0             | U302   | E2                 | D0             |
| R207*   | B2                 |                | U310   | F1                 | D1             |
| R208  | G2                 | C0             | U312   | E3                 | D1             |
| R212  | G3                 | C1             | U320   | F3                 | D2             |
| R214  | G2                 | C1             | U322C  | D4                 | D2             |
| R238*   | B2                 | D3             | U322D  | B3                 | D2             |
| R300  | G1                 | D0             | U330   | C5                 | D3             |
| R302  | E4                 | D0             | U332A  | B4                 | D3             |
| R304  | G1                 | D0             | U332B  | C6                 | D3             |
| R306  | G1                 | D0             | U430   | D5                 | E3             |
| R308  | G2                 | D0             | U600B  | C4                 | G0             |
| P/O A56 ASSY ALSO SHOWN ON <span style="border: 1px solid black; padding: 2px;">28</span> |                    |                |  |                    |                |
| P/O A68 ASSY  |                    |                | XYZ DISPLAY <span style="border: 1px solid black; padding: 2px;">29</span> |                    |                |
| J106  | A2                 | A0             | —  | —                  | —              |
| P/O A68 ASSY - SEE FIG. 7-37  |                    |                |  |                    |                |

\*See Parts List for serial number ranges.



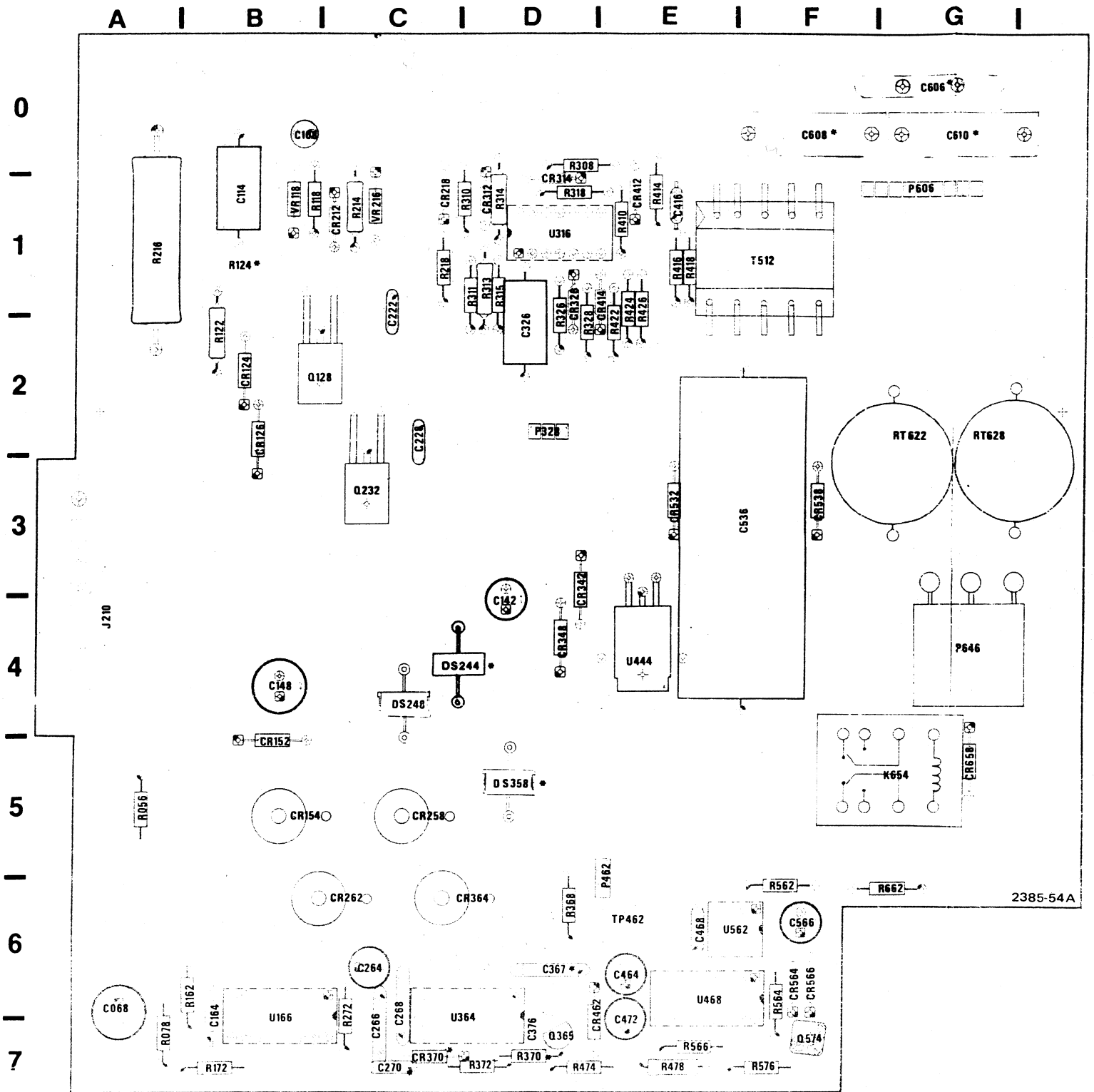
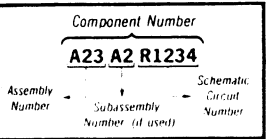


Fig. 7-32. The Fan circuit board, assembly A80.

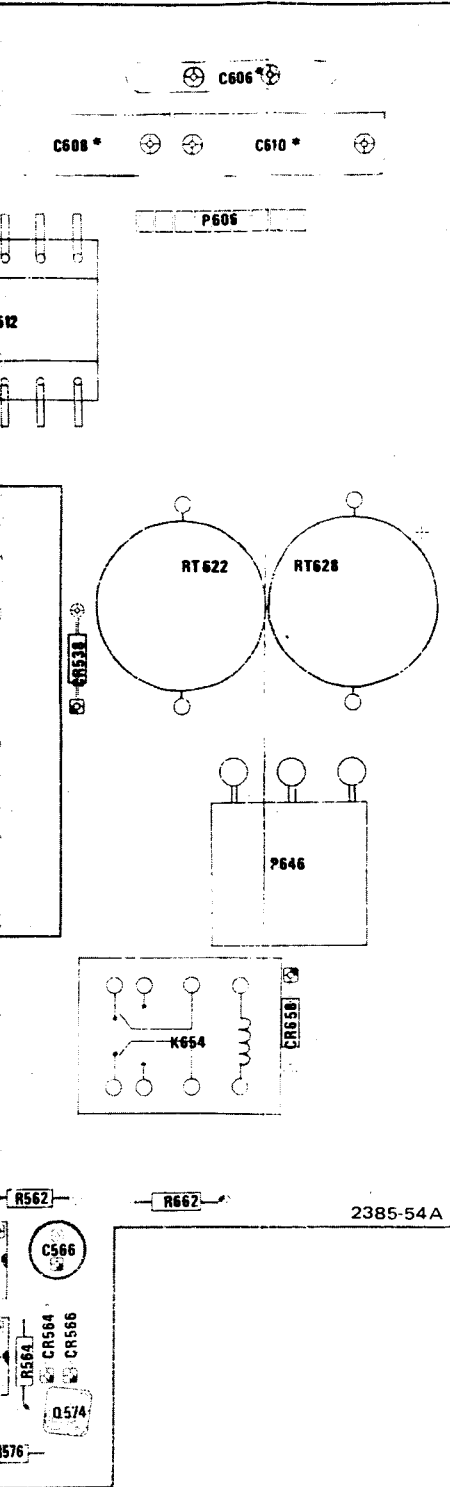
\*See Parts List for serial number ranges.

COMPONENT NUMBER EXAMPLE



Chassis mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

# F I G I



| P/O A80 ASSY   |                    |                | POWER CONTROL <span style="border: 1px solid black; padding: 2px;">31</span> |                    |                |
|----------------|--------------------|----------------|--|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number   | Schematic Location | Board Location |
| B5400          | H2                 | CHASSIS        | Q128   | G2                 | B2             |
| C068           | G4                 | A6             | Q232   | G2                 | C3             |
| C108           | F3                 | B0             | Q365   | E5                 | D7             |
| C114           | C2                 | B1             | Q574   | F5                 | F7             |
| C142           | D4                 | D4             | R056   | C5                 | A5             |
| C148           | E3                 | B4             | R078   | G4                 | A7             |
| C164           | C5                 | B6             | R118   | E3                 | B1             |
| C222           | F2                 | C1             | R122   | C2                 | B2             |
| C228           | F2                 | C2             | R124   | C2                 | B1             |
| C264           | D5                 | C6             | R162   | C5                 | B6             |
| C266           | E4                 | C6             | R172   | D4                 | B7             |
| C268           | D5                 | C6             | R214   | D2                 | C1             |
| C326           | D2                 | D2             | R216   | E3                 | A1             |
| C376           | E5                 | D7             | R218   | D2                 | C1             |
| C416           | E2                 | E1             | R272   | D5                 | C7             |
| C464           | F5                 | E6             | R308   | E2                 | D0             |
| C468           | F5                 | E6             | R310   | E2                 | D1             |
| C472           | D5                 | E7             | R311   | D2                 | D1             |
| C536           | C4                 | F3             | R313   | D2                 | D1             |
| C566           | E5                 | F6             | R314   | D2                 | D1             |
| C5400          | B2                 | CHASSIS        | R315   | D2                 | D1             |
| CR124          | G2                 | B2             | R318   | E2                 | D1             |
| CR126          | G2                 | B2             | R326   | D2                 | D2             |
| CR152          | E3                 | B5             | R328   | F2                 | D2             |
| CR154          | F3                 | B5             | R368   | C5                 | D6             |
| CR212          | C2                 | C1             | R372   | D5                 | D7             |
| CR218          | C2                 | C1             | R410   | E2                 | E1             |
| CR258          | F3                 | C5             | R414   | E2                 | E1             |
| CR262          | F3                 | C6             | R416   | E2                 | E1             |
| CR312          | D2                 | D1             | R418   | F2                 | E1             |
| CR314          | E2                 | D1             | R422   | F2                 | E2             |
| CR326          | E2                 | D2             | R424   | F1                 | E2             |
| CR348          | D4                 | D4             | R426   | F1                 | E2             |
| CR364          | F3                 | D6             | R474   | E5                 | E7             |
| CR412          | E2                 | E1             | R478   | F5                 | E7             |
| CR414          | E2                 | E1             | R562   | F5                 | F6             |
| CR432          | C4                 | E3             | R564   | E5                 | F6             |
| CR462          | D5                 | E6             | R566   | D4                 | E7             |
| CR532          | C4                 | E3             | R576   | F5                 | F8             |
| CR538          | C4                 | F3             | R662   | E5                 | G6             |
| CR564          | E5                 | F6             | RT622  | C3                 | G2             |
| CR566          | E5                 | F6             | RT628  | B3                 | G2             |
| CR658          | E4                 | G4             | S5400  | B2                 | CHASSIS        |
| DS244          | E3                 | C4             | S5401  | C2                 | CHASSIS        |
| DS248          | E3                 | C4             | S5402  | B2                 | CHASSIS        |
| F5400          | B2                 | CHASSIS        | T512   | F2                 | F1             |
| J5400          | H5                 | CHASSIS        | TP462  | C5                 | E6             |
| J5401          | C5                 | CHASSIS        | U166A  | D5                 | B6             |
| J5402          | B1                 | CHASSIS        | U166B  | G4                 | B6             |
| K654           | E4                 | G5             | U316A  | D2                 | D1             |
| L5400          | B1                 | CHASSIS        | U316B  | F2                 | D1             |
| L5401          | B1                 | CHASSIS        | U316C  | E2                 | D1             |
| L5402          | C1                 | CHASSIS        | U316D  | D2                 | D1             |
| P328           | G2                 | D2             | U364A  | E5                 | D6             |
| P462           | G5                 | E5             | U444   | C4                 | E4             |
| P606           | B3                 | G0             | U468A  | E5                 | E6             |
| P606           | C3                 | G0             | U468B  | F5                 | E6             |
| P646           | B2                 | G4             | U562A  | G5                 | F6             |
|                |                    |                | U562B  | E4                 | F6             |
|                |                    |                | VR118  | E3                 | B1             |
|                |                    |                | VR216  | E3                 | C1             |

\*See Parts List for serial number ranges.



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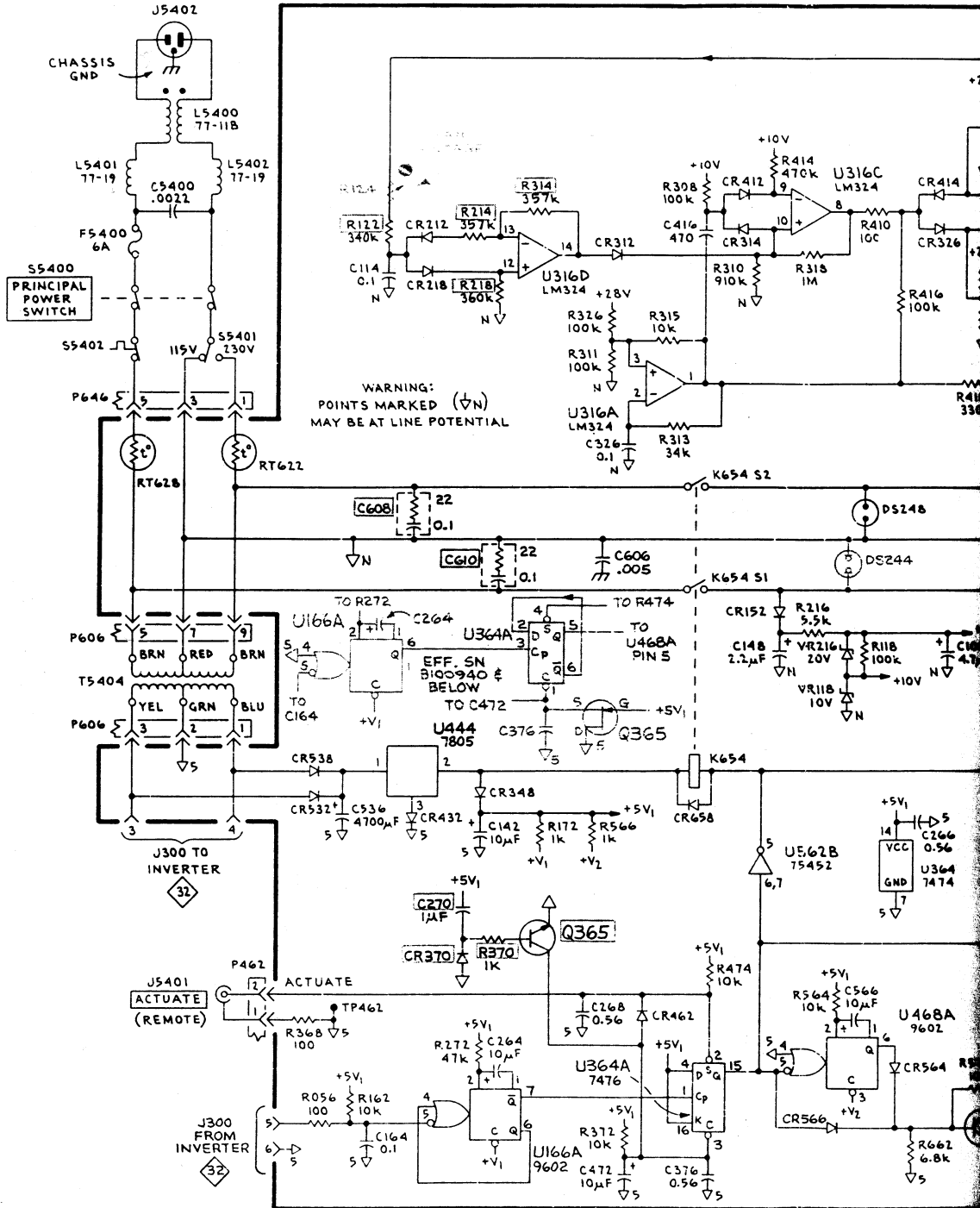
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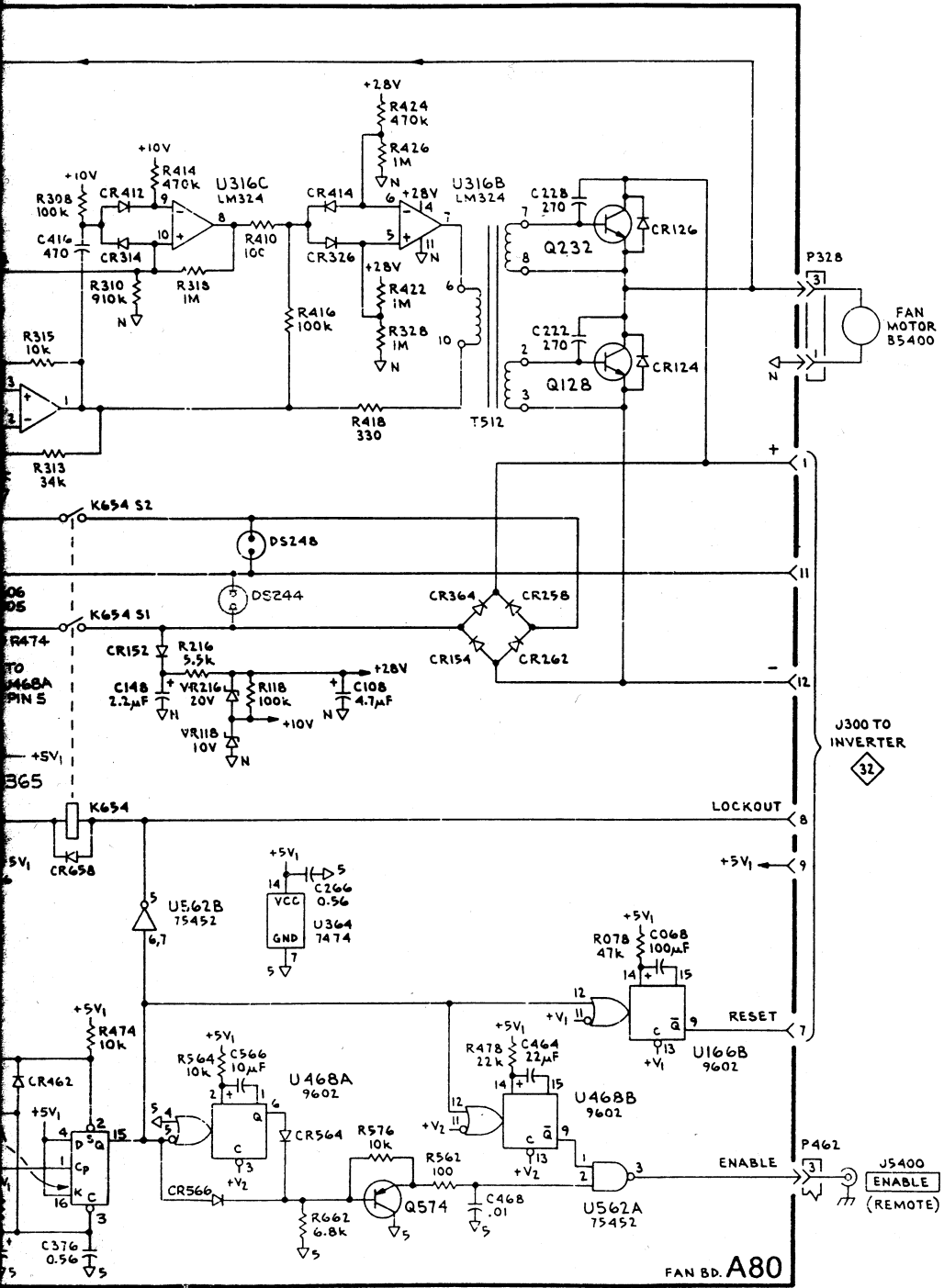


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SEE PARTS LIST FOR EARLIER  
VALUES AND SERIAL NUMBER  
ANGES OF PARTS OUTLINED  
OR SUPPLIED IN GREY.

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POWER CONTROL 31

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POWER CONTROL

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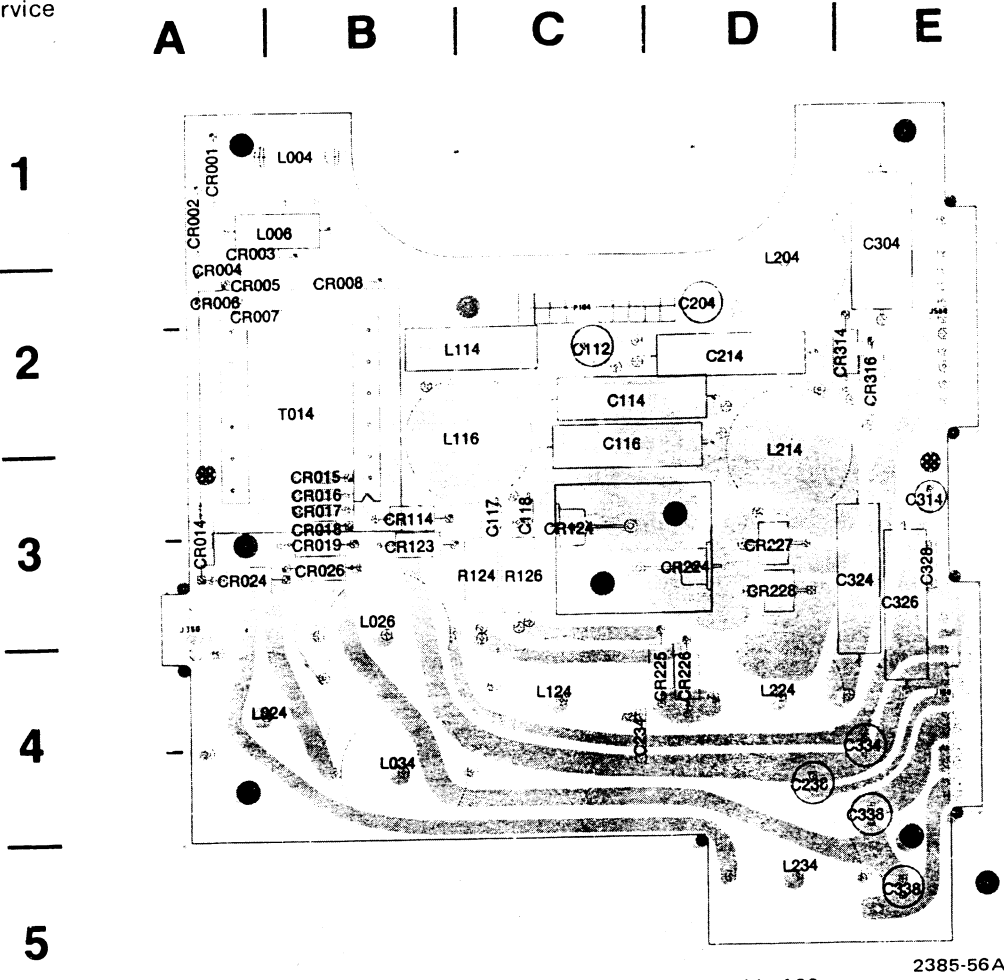


Fig. 7-33. The Rectifier circuit board, assembly A86.

2385-56 A

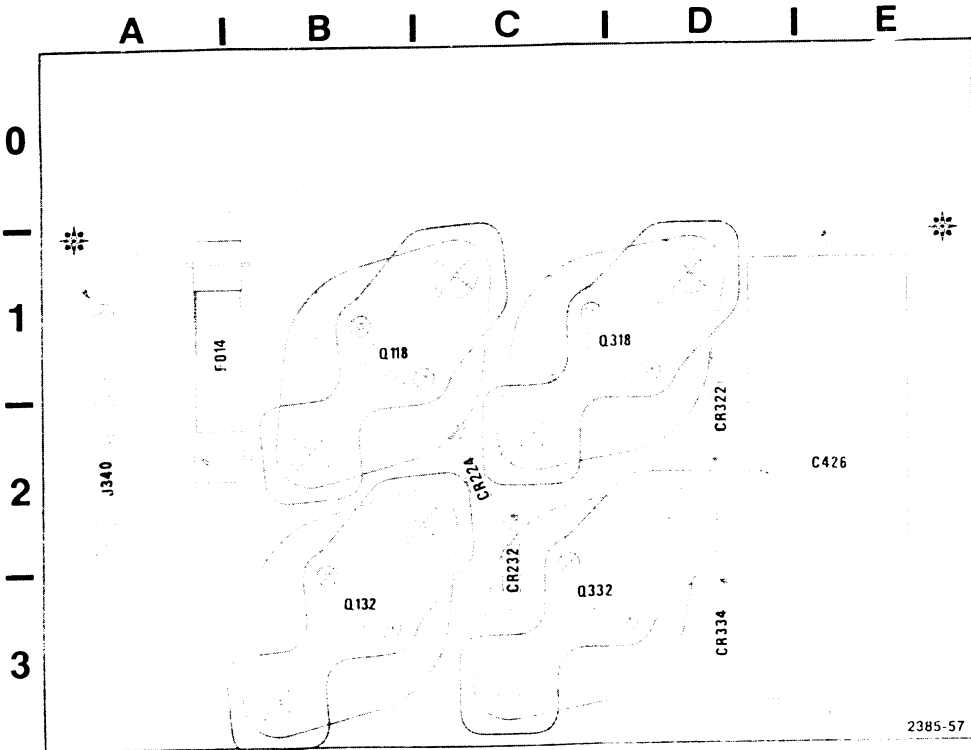
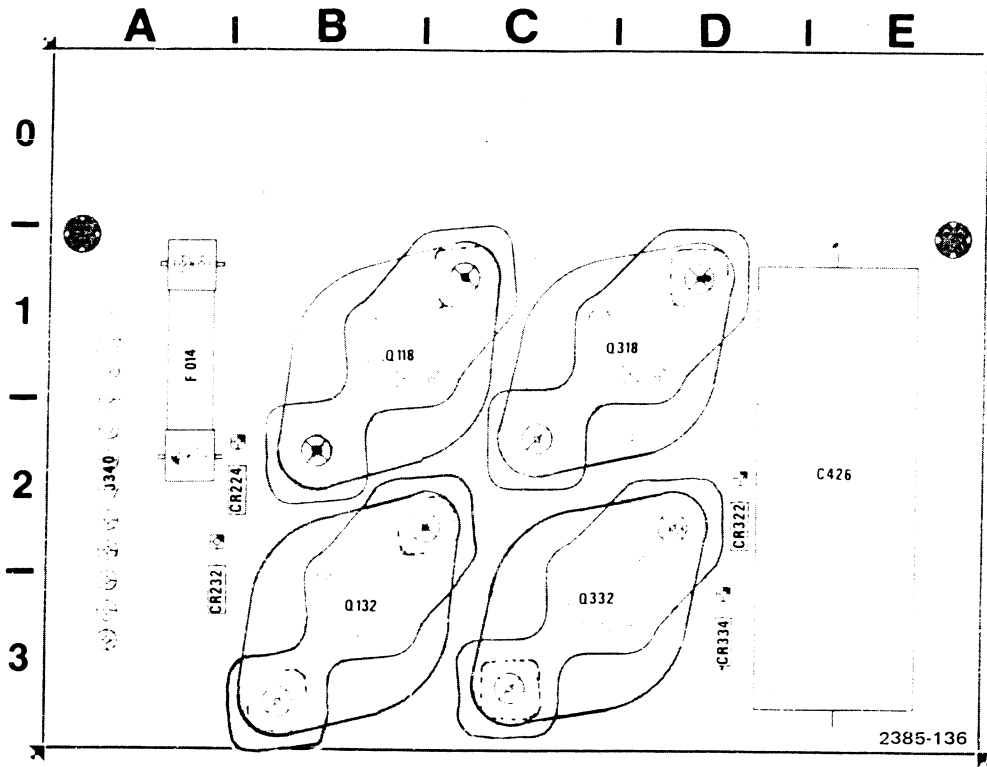


Fig. 7-34A. The Socket circuit board, assembly A84 (SN B089999 & below).

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|                |
|----------------|
| P/O A86 A      |
| Circuit Number |
| C112           |
| C114           |
| C116           |
| C117           |
| C118           |
| C204           |
| C214           |
| C234           |
| C238           |
| C304           |
| C314           |
| C324           |
| C326           |
| C334           |
| C336           |
| C338           |
| CR001          |
| CR002          |
| CR003          |
| CR004          |
| CR005          |
| CR006          |
| P/O A84        |
| C426           |
| CR224          |
| CR232          |



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|--------------|
| P/O A84 ASSY |
| C426         |
| CR224        |
| CR232        |
| CR322        |

Fig. 7-34B. The Socket circuit board, assembly A84 (SN B090000 & up).

| P/O A86 ASSY   |                    |                | INVERTER RECTIFIER <span style="border: 1px solid black; padding: 2px;">32</span> |                    |                |                |                    |                |
|----------------|--------------------|----------------|---|--------------------|----------------|----------------|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
| C112           | H4                 | B1             | CR007   | G1                 | A0             | J560           | H1                 | D0             |
| C114           | H6                 | B1             | CR008   | G1                 | A0             | J560           | H2                 | D1             |
| C116           | H6                 | B1             | CR014   | G3                 | A2             | J560           | H4                 | D1             |
| C117           | G4                 | B1             | CR015   | G2                 | A1             | J560           | H5                 | D1             |
| C118           | G5                 | B1             | CR016   | G2                 | A1             |                |                    |                |
| C204           | H4                 | C0             | CR017   | G2                 | A1             | L004           | H1                 | A0             |
| C214           | H4                 | C1             | CR018   | G2                 | A1             | L006           | H1                 | A0             |
| C234           | H2                 | C3             | CR019   | G3                 | A2             | L024           | H2                 | A2             |
| C238           | H2                 | C3             | CR024   | G3                 | A2             | L026           | H2                 | A2             |
| C304           | H1                 | D0             | CR026   | G3                 | A2             | L034           | H3                 | A3             |
| C314           | H1                 | D1             | CR114   | G2                 | B1             | L114           | H4                 | B1             |
| C324           | H2                 | D2             | CR123   | G2                 | B2             | L116           | H4                 | B1             |
| C324           | H5                 | D2             | CR124   | G5                 | B1             | L124           | G2                 | B2             |
| C326           | G2                 | D2             | CR224   | G4                 | C2             | L204           | H4                 | C0             |
| C334           | H2                 | D3             | CR225   | G5                 | C2             | L214           | H4                 | C1             |
| C336           | H3                 | D3             | CR226   | G5                 | C2             | L224           | H5                 | C2             |
| C338           | H3                 | D3             | CR227   | G4                 | C2             | L234           | H3                 | C3             |
|                |                    |                | CR228   | G4                 | C2             |                |                    |                |
| CR001          | G1                 | A0             | CR314   | G4                 | D1             | R126           | G5                 | B2             |
| CR002          | G1                 | A0             | CR316   | G4                 | D1             |                |                    |                |
| CR003          | G1                 | A0             |   |                    |                | T014           | G1                 | A1             |
| CR004          | G1                 | A0             | J160  | H2                 | D2             |                |                    |                |
| CR005          | G1                 | A0             | J160  | H3                 | D2             |                |                    |                |
| CR006          | G1                 | A0             | J360  | F6                 | A2             |                |                    |                |

| P/O A84 ASSY (SN B089999 & below) |    |    | INVERTER RECTIFIER <span style="border: 1px solid black; padding: 2px;">32</span> |    |    |      |    |    |
|-----------------------------------|----|----|---|----|----|------|----|----|
| C426                              | F2 | E2 | CR322   | F1 | D2 | Q118 | F2 | B1 |
| CR224                             | F2 | C0 | CR334   | F2 | D3 | Q132 | F2 | B3 |
| CR232                             | F2 | C2 | F014  | F1 | A1 | Q318 | F1 | D1 |
|                                   |    |    |   |    |    | Q332 | F2 | D3 |

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|--------------------------------|----|----|-------|----|----|--------------------|----|----|----|
| P/O A84 ASSY (SN B090000 & up) |    |    |       |    |    | INVERTER RECTIFIER |    |    | 32 |
| C426                           | F2 | E2 | CR334 | F2 | D3 | Q132               | F2 | B3 |    |
| CR224                          | F2 | B2 | F014  | F1 | A1 | Q318               | F1 | D1 |    |
| CR232                          | F2 | A3 |       | F2 | B1 | Q332               | F2 | C3 |    |
| CR322                          | F1 | D2 |       |    |    |                    |    |    |    |

|                |    |
|----------------|----|
| INVERTER       | 32 |
| Board Location |    |
| D0             |    |
| D1             |    |
| D1             |    |
| D1             |    |
| A0             |    |
| A0             |    |
| A2             |    |
| A2             |    |
| A3             |    |
| B1             |    |
| B1             |    |
| B2             |    |
| C0             |    |
| C1             |    |
| C2             |    |
| C3             |    |
| B2             |    |
| A1             |    |

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| INVERTER | 32 |
| B1       |    |
| B3       |    |
| D1       |    |
| D3       |    |

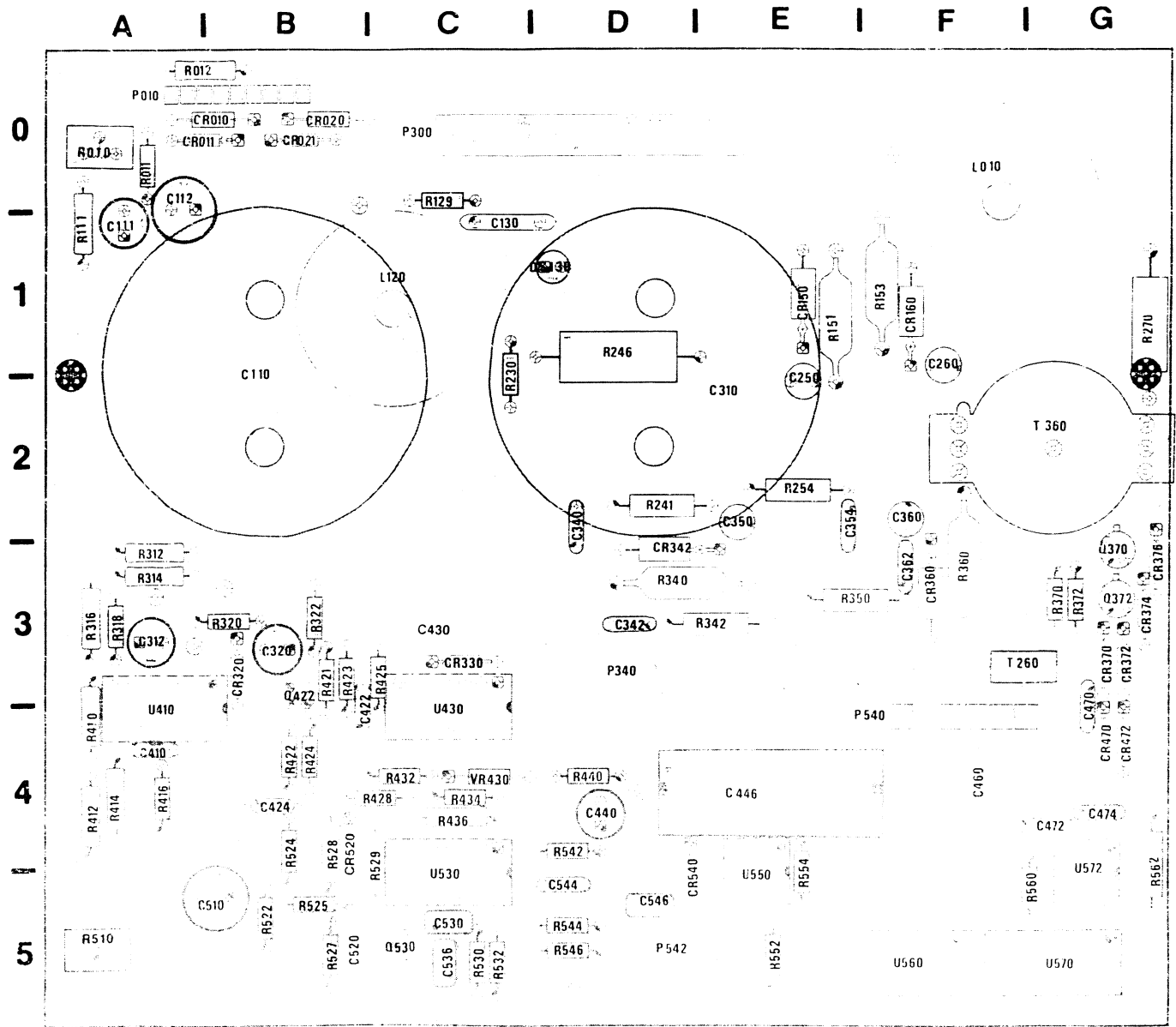
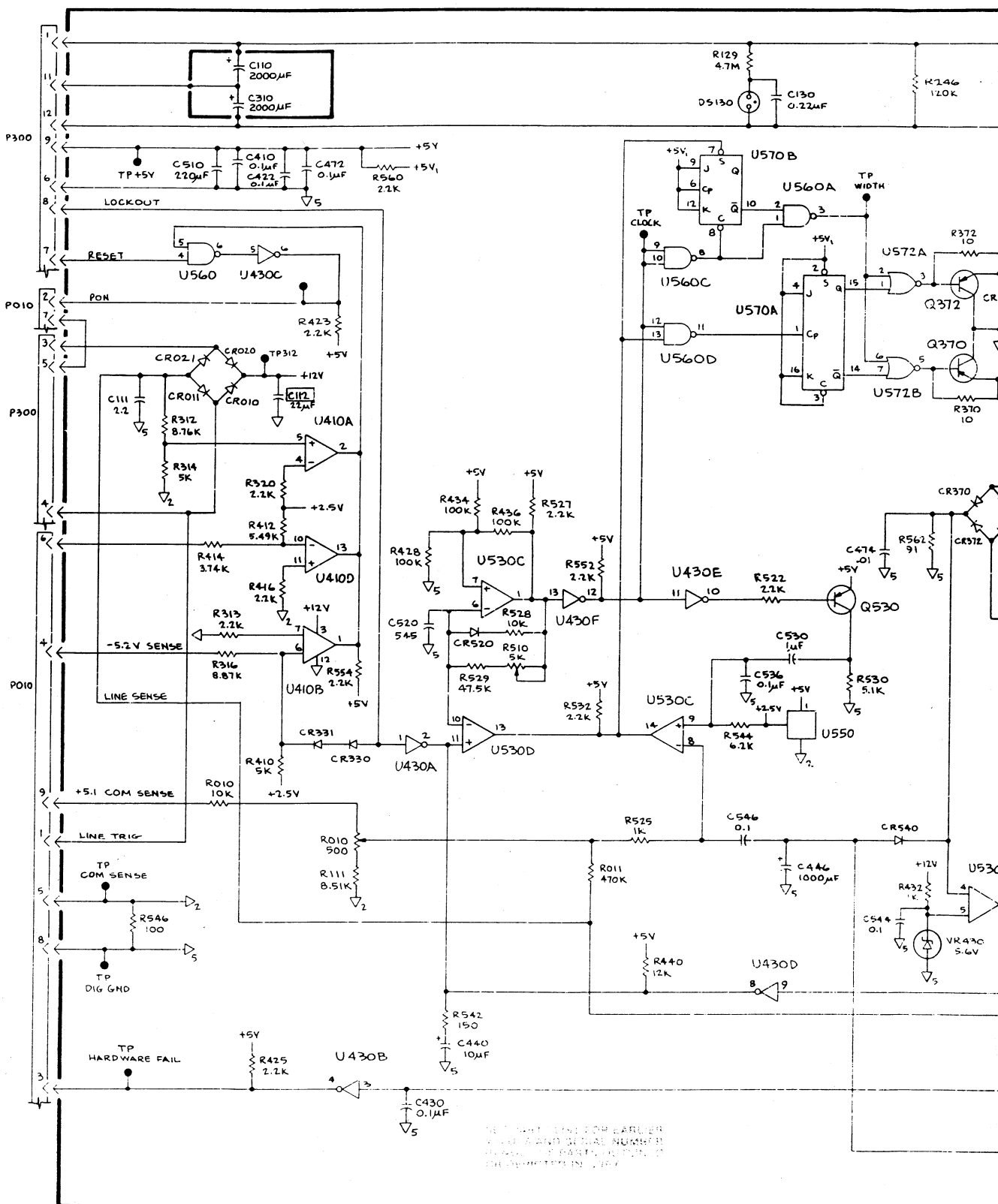


Fig. 7-35A. The Inverter circuit board, assembly A82 (SN B100941 & up).

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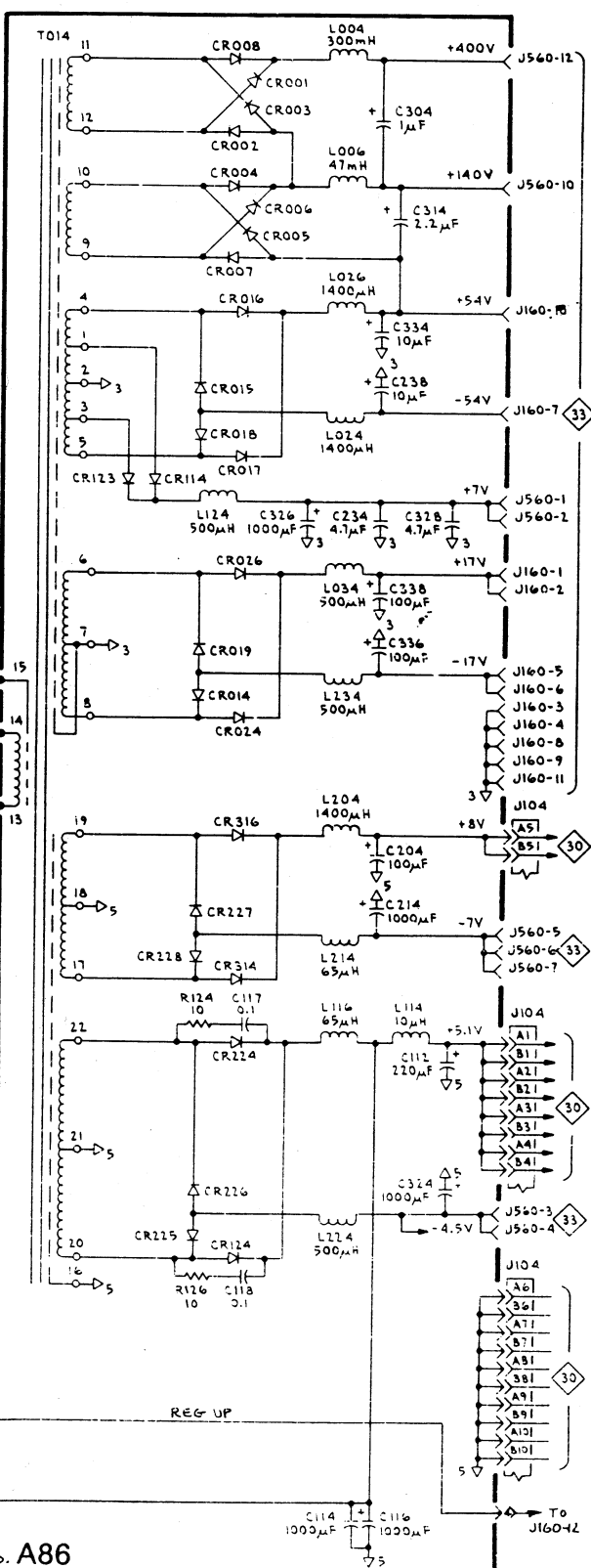
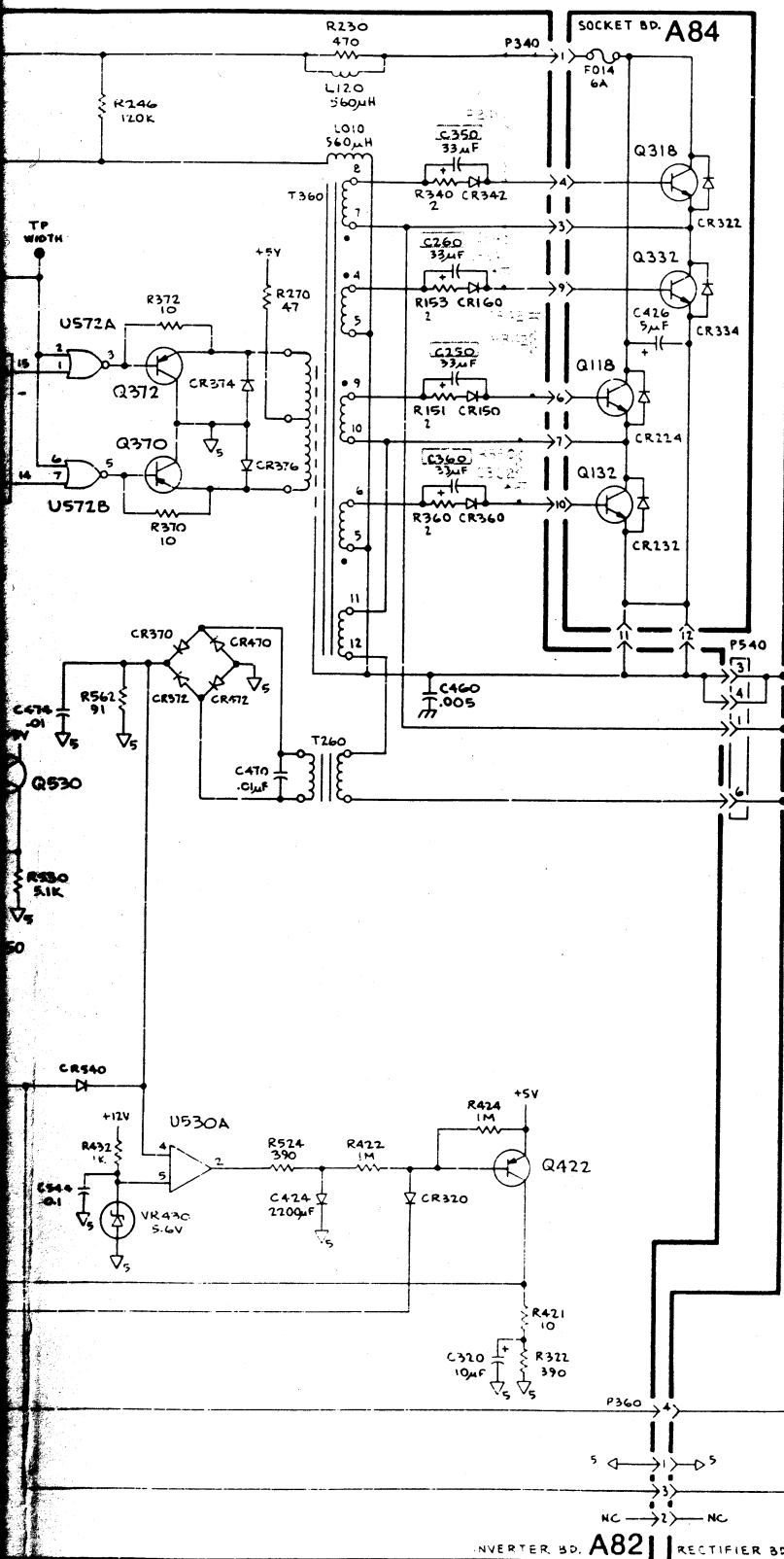


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INVERTER RECTIFIER (SN B100941 & up) 32



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INVERTER RECTIFIER (SN B100941 & UP) 32 NLL

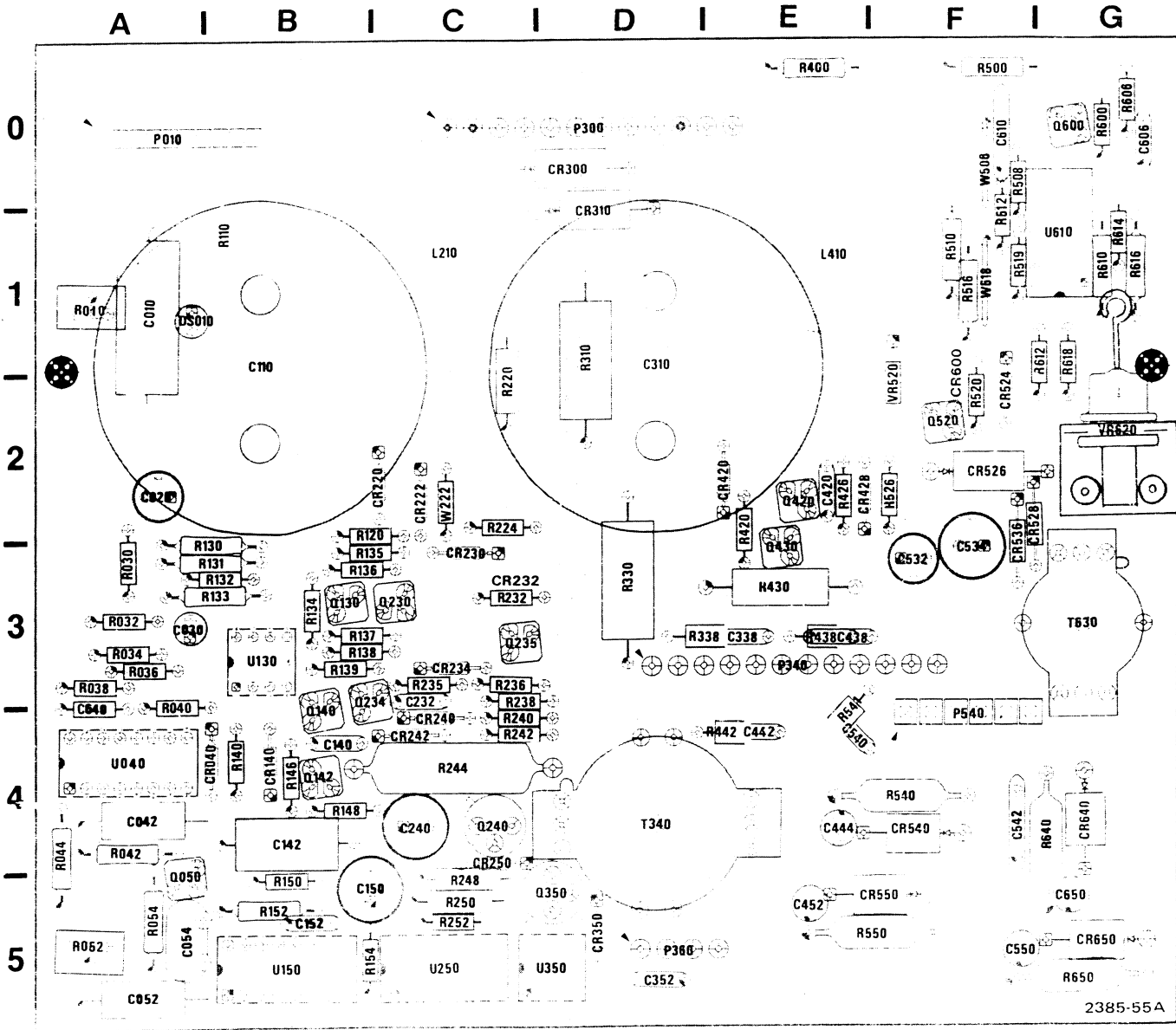


Fig. 7-35B. The Inverter circuit board, assembly A82 (SN B100940 & below).

| Circuit Number |
|----------------|
| C010           |
| C020           |
| C030           |
| C040           |
| C042           |
| C052           |
| C054           |
| C110           |
| C140           |
| C142           |
| C150           |
| C152           |
| C240           |
| C310           |
| C338           |
| C352           |
| C420           |
| C438           |
| C442           |
| C444           |
| C452           |
| C500           |
| C532           |
| C534           |
| C540           |
| C542           |
| C550           |
| C606           |
| C610           |
| C650           |
| CR040          |
| CR140          |
| CR220          |
| CR222          |
| CR230          |
| CR232          |
| CR234          |
| CR240          |
| CR242          |
| CR244          |
| CR248          |
| CR250          |
| CR300          |
| CR310          |
| CR350          |
| CR420          |
| CR428          |
| CR442          |
| CR444          |
| CR452          |
| CR526          |
| CR536          |
| CR550          |
| CR600          |
| CR606          |
| CR640          |
| CR650          |
| DS010          |
| L210           |
| L410           |
| P010           |
| P010           |
| P010           |



| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C010           | C1                 | A1             | P010           | F5                 | A1             | R248           | C2                 | C4             |
| C020           | D6                 | A2             | P300           | F5                 | D0             | R250           | D2                 | C5             |
| C030           | D6                 | A3             | P340           | E1                 | D3             | R252           | C2                 | C5             |
| C040           | B3                 | A4             | P340           | F3                 | D3             | R300           | A1                 | C0             |
| C042           | C2                 | A4             | P360           | F6                 | D5             | R310           | B1                 | D1             |
| C052           | C3                 | A5             | P360           | A6                 | D5             | R330           | E1                 | D3             |
| C054           | C3                 | A5             | P540           | F3                 | F4             | R338           | E2                 | D3             |
| C110           | A1                 | B1             | Q050           | C2                 | A5             | R400           | B5                 | E0             |
| C140           | B3                 | B4             | Q130           | D5                 | B3             | R420           | D4                 | E2             |
| C142           | B2                 | B4             | Q140           | A3                 | B4             | R426           | E6                 | E2             |
| C150           | C2                 | B5             | Q142           | C3                 | B4             | R430           | D4                 | E3             |
| C152           | D1                 | B5             | Q230           | E5                 | C3             | R438           | E2                 | E3             |
| C240           | D2                 | C4             | Q234           | C4                 | C3             | R442 *         | E1                 | E4             |
| C310           | A1                 | D1             | Q235           | E6                 | C3             | R500           | B5                 | F0             |
| C338           | E2                 | D3             | Q240           | D2                 | C4             | R508           | B5                 | F0             |
| C352           | B2                 | D5             | Q350           | D2                 | D5             | R510           | B5                 | F1             |
| C420           | E6                 | E2             | Q420           | D4                 | E2             | R510           | B5                 | F1             |
| C438           | E2                 | E3             | Q430           | D4                 | E3             | R512           | B5                 | F1             |
| C442           | E1                 | E4             | Q520           | C4                 | F2             | R516           | B5                 | F1             |
| C444           | E2                 | E4             | Q600           | D5                 | G0             | R516           | B5                 | F1             |
| C452           | E1                 | E5             | R010           | C6                 | A1             | R519           | B6                 | F1             |
| C500           | A5                 | F0             | R030           | F6                 | A3             | R520           | C4                 | F2             |
| C532 *         | D4                 | F3             | R032           | B2                 | A3             | R526           | C4                 | F2             |
| C534 *         | D3                 | F3             | R034           | B2                 | A3             | R540           | E2                 | F4             |
| C540           | E1                 | F3             | R036           | D6                 | A3             | R541           | E1                 | F4             |
| C542           | E3                 | F4             | R038           | A2                 | A3             | R550           | E1                 | F5             |
| C550           | E2                 | F5             | R040           | B3                 | A4             |                |                    |                |
| C606           | D5                 | G0             | R042           | C2                 | A4             | R600           | D4                 | G0             |
| C610           | B5                 | G1             | R044           | C3                 | A4             | R606           | C5                 | G0             |
| C650           | E2                 | G5             | R052           | C3                 | A5             | R610           | B6                 | G1             |
| CR040          | B3                 | A4             | R054           | C2                 | A5             | R612           | B6                 | G1             |
| CR140          | B2                 | B4             | R110           | C1                 | B1             | R614           | B5                 | G1             |
| CR220          | E4                 | C2             | R120           | E5                 | B2             | R616           | B6                 | G1             |
| CR222          | E5                 | C2             | R130           | C6                 | B3             | R618           | B6                 | G1             |
| CR230          | E6                 | C3             | R131           | C6                 | B3             | R640           | E2                 | G4             |
| CR232          | E5                 | C3             | R132           | C6                 | B3             | R650           | E2                 | G5             |
| CR234          | B3                 | C3             | R133           | D6                 | B3             | T340           | E2                 | D4             |
| CR240          | C4                 | C4             | R134           | E4                 | B3             | T630           | E3                 | G3             |
| CR242          | B3                 | C4             | R135           | E5                 | B3             | U040A *        | C2                 | A4             |
| CR250          | D2                 | C5             | R136           | E5                 | B3             | U040B *        | B3                 | A4             |
| CR300          | A5                 | D0             | R137           | E5                 | B3             | U130A          | B2                 | B3             |
| CR310          | A5                 | D1             | R138           | D5                 | B3             | U130B          | D6                 | B3             |
| CR350          | D2                 | D5             | R139           | A3                 | B3             | U150A          | C3                 | B5             |
| CR420          | B4                 | E2             | R140           | B2                 | B4             | U150B          | C3                 | B5             |
| CR428          | E6                 | E2             | R146           | A3                 | B4             | U250           | C2                 | C5             |
| CR524          | C6                 | F2             | R148           | B3                 | B4             | U350A          | D2                 | D5             |
| CR526          | D3                 | F2             | R150           | B2                 | B5             | U350B          | D3                 | D5             |
| CR528          | D3                 | F2             | R152           | C3                 | B5             | U610A *        | B6                 | G1             |
| CR536          | D3                 | F3             | R154           | A2                 | B5             | U610B *        | B5                 | G1             |
| CR540          | E2                 | F4             | R220           | E1                 | C2             | U610C *        | B5                 | G1             |
| CR550          | E1                 | F5             | R224           | E4                 | C2             | U610D *        | B6                 | G1             |
| CR600          | D4                 | F2             | R232           | C4                 | C3             | VR520          | C6                 | F2             |
| CR640          | E2                 | G4             | R232           | E6                 | C3             | VR620          | D3                 | G2             |
| CR650          | E2                 | G5             | R235           | C4                 | C3             | W222           | E6                 | C2             |
| DS010          | C1                 | A1             | R236           | B4                 | C3             | W506           | A5                 | F0             |
| L210           | E1                 | C1             | R238           | D4                 | C3             | W506           | A5                 | F0             |
| L410           | E1                 | E1             | R240           | D4                 | C4             | W518           | A5                 | F1             |
| P010           | A5                 | A1             | R242           | B3                 | C4             | W518           | A5                 | F1             |
| P010           | A4                 | A0             | R244           | D2                 | C4             |                |                    |                |
| P010           | F4                 | A0             |                |                    |                |                |                    |                |

\*See Parts List for serial number ranges.

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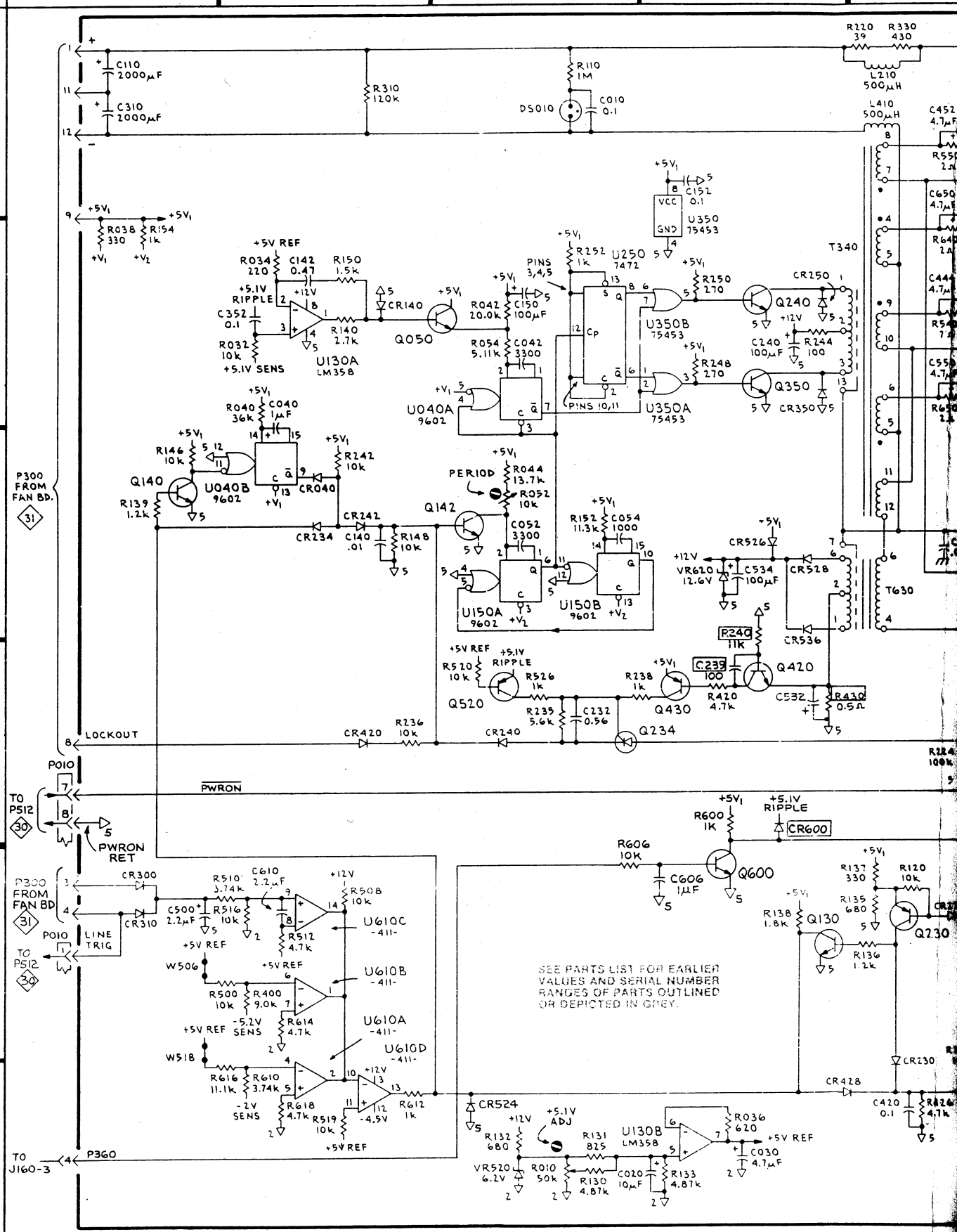
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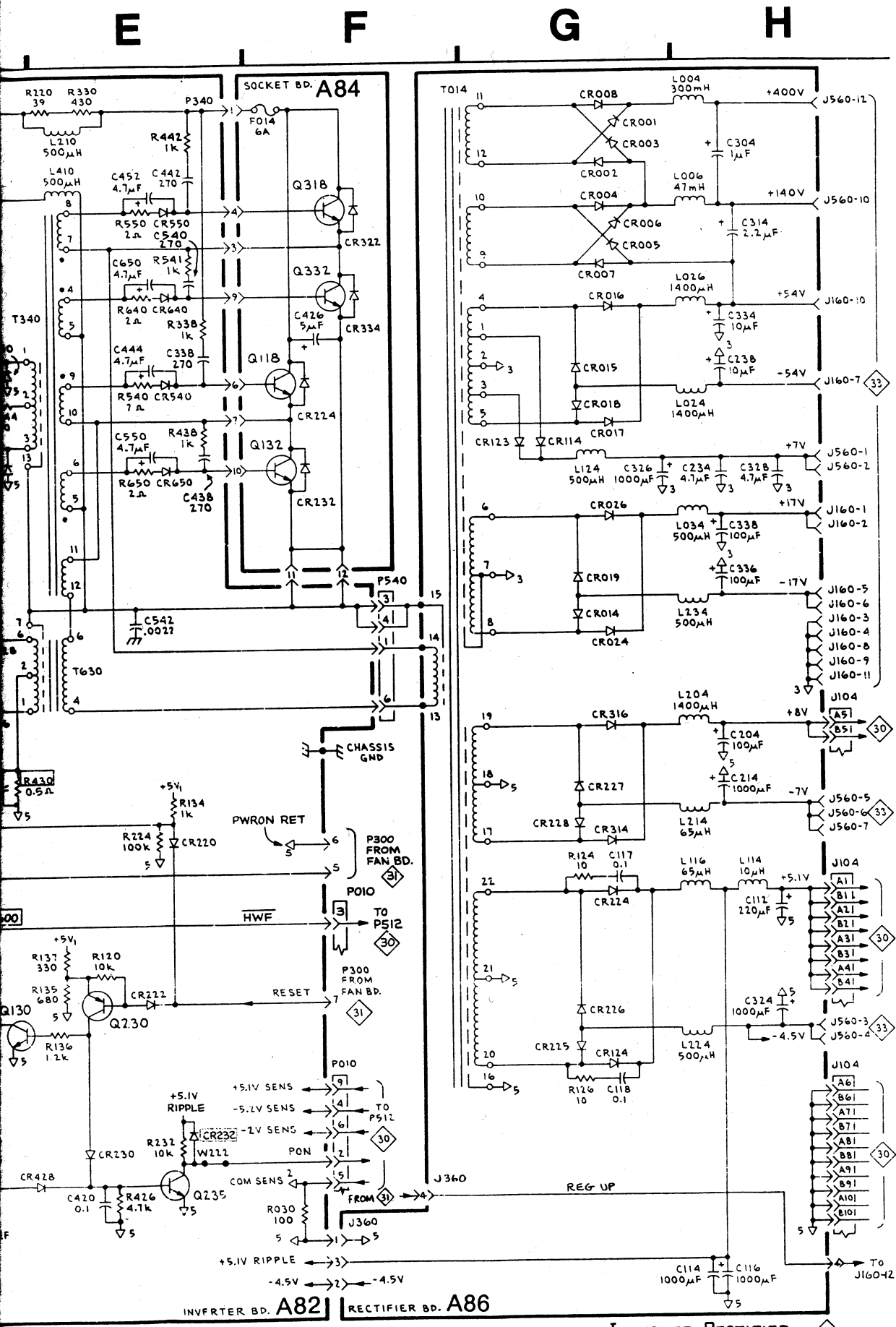
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A82 ASSY (SN B100941 &amp; UP)

INVERTER RECTIFIER

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| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C110           | B1                 | CHASSIS        | L010           | G1                 | F0             | R434           | C3                 | C4             |
| C111           | A3                 | A1             | L120           | G1                 | C1             | R436           | C3                 | C4             |
| C112           | B3                 | A0             |                |                    |                | R440           | E6                 | D4             |
| C130           | E1                 | C1             | P010           | A2                 | A0             | R510           | D4                 | A5             |
| C250           | H2                 | E2             | P300           | A1                 | C0             | R510           | D4                 |                |
| C260           | H1                 | F1             | P340           | H1                 | D3             | R522           | E4                 | B5             |
| C310           | B1                 | CHASSIS        | P540           | I3                 | F4             | R524           | G6                 | B4             |
| C320           | H7                 | B3             |                |                    |                | R525           | D5                 | B5             |
| C340           | H1                 | D2             |                |                    |                | R527           | D3                 | B5             |
| C342           | H2                 | D3             | Q370           | F2                 | G3             | R528           | D4                 | B4             |
| C350           | H1                 | E2             | Q372           | F2                 | G3             | R529           | C5                 | C4             |
| C354           | H1                 | E2             | Q422           | H6                 | B3             | R530           | F5                 | C5             |
| C360           | H2                 | F2             | Q530           | F4                 | C5             | R532           | D5                 | C5             |
| C362           | H2                 | F3             |                |                    |                | R542           | C7                 | D4             |
| C410           | B1                 | A4             | R010           | B5                 | A0             | R544           | E5                 | D5             |
| C422           | B1                 | B4             | R011           | D6                 | A0             | R546           | A6                 | D5             |
| C424           | G6                 | B4             | R012           |                    | A0             | R552           | D4                 | E5             |
| C430 *         | C7                 | C3             | R111           | B6                 | A1             | R554           | B4                 | E5             |
| C440           | C7                 | D4             | R129           | E1                 | C0             | R560           | C1                 | G5             |
| C446           | E6                 | E4             | R151           | H2                 | E1             | R562           | F4                 | G5             |
| C460           | H4                 | F4             | R153           | H2                 | F1             |                |                    |                |
| C470           | G4                 | G4             | R230           | G1                 | C2             | T260           | G4                 | F3             |
| C472           | B1                 | G4             | R241           | H1                 | D2             | T360           | G1                 | G2             |
| C474           | F4                 | G4             | R246           | F1                 | D1             |                |                    |                |
| C510           | A1                 | B5             | R254           | H1                 | E2             | TP312          | B2                 |                |
| C520           | C4                 | B5             | R270           | G2                 | G1             |                |                    |                |
| C530           | E4                 | C5             | R312           | A3                 | A3             | U410A          | B3                 | A4             |
| C536           | E5                 | C5             |                |                    |                | U410B          | B5                 | A4             |
| C544           | F6                 | D5             | R314           | A3                 | A3             | U410D          | B4                 | A4             |
| C546           | E5                 | D5             | R316           | B4                 | A3             | U430A          | C5                 | C4             |
|                |                    |                | R318           |                    | A3             | U430B          | B7                 | C4             |
| CR010          | B3                 | A0             | R320           | B3                 | B3             | U430C          | B2                 | C4             |
| CR011          | A3                 | A0             | R322           | H7                 | B3             | U430D          | E6                 | C4             |
| CR020          | B2                 | B0             | R340           | H1                 | D3             | U430E          | E4                 | C4             |
| CR021          | A2                 | B0             | R342           | H2                 | E3             | U430F          | D4                 | C4             |
| CR150          | H2                 | E1             | R350           | H2                 | E3             | U530A          | G6                 | C5             |
| CR160          | H2                 | F1             | R360           | H3                 | F3             | U530C          | C4                 | C5             |
| CR320          | H6                 | B3             | R370           | F3                 | G3             | U530D          | C5                 | C5             |
| CR330          | B5                 | C3             | R372           | F2                 | G3             | U550           | F5                 | E5             |
| CR331          | B5                 |                | R410           | B5                 | A4             | U560A          | E1                 | F5             |
| CR342          | H1                 | D3             | R412           | B3                 | A4             | U560C          | E2                 | F5             |
| CR360          | H3                 | F3             | R414           | B4                 | A4             | U560D          | E2                 | F5             |
| CR374          | G2                 | G3             | R416           | B4                 | A4             | U560           | A2                 | F5             |
| CR376          | G2                 | G3             | R421           | H7                 | B3             | U570A          | E2                 | G5             |
| CR470          | G3                 | G4             | R422           | G6                 | B4             | U570B          | E1                 | G5             |
| CR472          | G4                 | G4             | R423           | B2                 | B3             | U572A          | F2                 | G4             |
| CR520          | C4                 | B4             | R424           | H6                 | B4             | U572B          | F3                 | G4             |
| CR540          | F5                 | D5             | R425           | B7                 | C3             |                |                    |                |
|                |                    |                | R428           | C4                 | C4             | VR430          | F6                 | C4             |
| DS130          | E1                 | D1             | R432           | F6                 | C4             |                |                    |                |

\*See Parts List for  
serial number ranges.



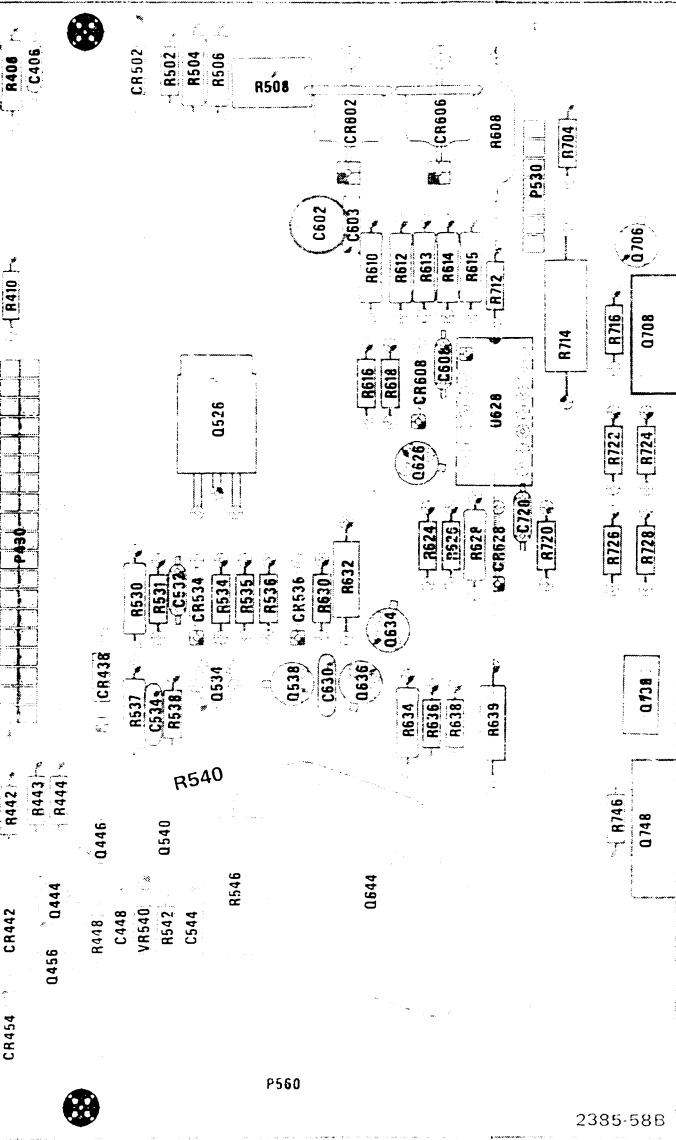
P/O A88 ASSY

| Circuit Number | Schematic Location |
|----------------|--------------------|
|----------------|--------------------|

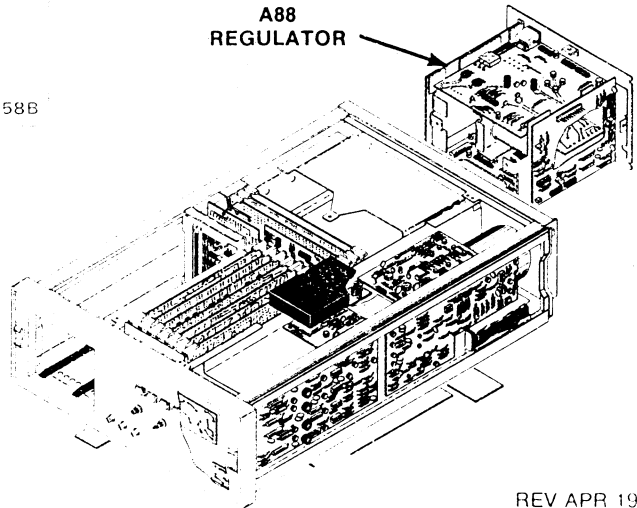
|        |    |
|--------|----|
| C002   | F3 |
| C008*  | H3 |
| C012   | G2 |
| C014   | H2 |
| C032   | E3 |
| C038   | E4 |
| C046   | E5 |
| C122   | H5 |
| C124   | G5 |
| C128   | F5 |
| C136   | D5 |
| C138   | E5 |
| C148   | D5 |
| C150   | E4 |
| C202   | G3 |
| C206   | G3 |
| C216   | G1 |
| C244   | G5 |
| C302   | F3 |
| C316   | F6 |
| C336   | D3 |
| C348   | B2 |
| C348   | B2 |
| C350   | C2 |
| C406   | F4 |
| C448   | A2 |
| C532   | E2 |
| C534   | E1 |
| C544   | A1 |
| C602   | A3 |
| C603   | C5 |
| C608   | B4 |
| C630   | D1 |
| C720   | B2 |
| CR012  | H2 |
| CR030  | E3 |
| CR046  | E5 |
| CR102  | H3 |
| CR104  | G3 |
| CR122  | D4 |
| CR136  | D5 |
| CR138* | E4 |
| CR144  | D4 |
| CR148  | D2 |
| CR206  | F3 |
| CR208  | G3 |
| CR214  | F1 |
| CR216  | F1 |
| CR220  | F5 |
| CR222  | G4 |
| CR240  | D2 |
| CR248  | B6 |
| CR320  | F6 |
| CR324  | F6 |
| CR326  | F6 |
| CR346  | C1 |
| CR402  | G4 |
| CR404  | G4 |
| CR438  | E1 |
| CR442  | A2 |
| CR454  | B2 |
| CR454  | B2 |
| CR502  | H5 |
| CR534  | E2 |
| CR536  | D2 |
| CR602  | C4 |
| CR606  | C3 |
| CR608  | B4 |
| CR628  | B3 |
| P160   | A1 |
| P160   | C2 |

\*See Parts List for serial number ranges.

E I F I G I H I



A88 REGULATOR



assembly A88.

REV APR 1982

P/O A88 ASSY

| Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number |
|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|----------------|
| C002           | F3                 | A0             | P160           | C4                 | B5             | R038           | E5                 | A3             | R3             |
| C008*          | H3                 | A0             | P160           | F4                 | B5             | R044           | E4                 | A4             | R3             |
| C012           | G2                 | A1             | P160           | F5                 | B5             | R046           | E4                 | A4             | R3             |
| C014           | H2                 | A1             | P430           | A4                 | E2             | R052           | D4                 | A5             | R3             |
| C032           | E3                 | A3             | P430           | C1                 | E2             | R054           | D4                 | A5             | R3             |
| C038           | E4                 | A3             | P430           | E1                 | E2             | R102           | G3                 | B0             | R3             |
| C046           | E5                 | A4             | P430           | H2                 | E2             | R104           | G3                 | B0             | R3             |
| C122           | H5                 | B2             | P530           | A3                 | F1             | R106           | G3                 | B0             | R3             |
| C124           | G5                 | B2             | P530           | C2                 | F1             | R108           | H3                 | B0             | R4             |
| C128           | F5                 | B2             | P560           | A1                 | F6             | R112           | H1                 | B1             | R4             |
| C136           | D5                 | B3             | P560           | A2                 | F6             | R114           | H2                 | B1             | R4             |
| C138           | E5                 | B3             | P560           | C1                 | F6             | R115           | H2                 | B1             | R4             |
| C148           | D5                 | B4             | P560           | F1                 | F6             | R116           | G2                 | B1             | R4             |
| C150           | E4                 | A5             | P560           | F6                 | D2             | R118           | G5                 | B1             | R4             |
| C202           | G3                 | C0             |                |                    |                | R120           | E4                 | B2             | R4             |
| C206           | G3                 | C0             | Q012           | H3                 | A1             | R122           | G5                 | B2             | R4             |
| C216           | G1                 | C1             | Q016           | H2                 | A1             | R123           | G5                 | B2             | R4             |
| C244           | G5                 | C2             | H018           | H3                 | A1             | R124           | G5                 | B2             | R4             |
| C302           | F3                 | D0             | Q022           | H5                 | A2             | R126           | D3                 | B2             | R4             |
| C316           | F6                 | D2             | Q028           | G5                 | A2             | R128           | D4                 | B2             | R4             |
| C336           | D3                 | D3             | Q030           | E3                 | A3             | R130           | E5                 | B3             | R5             |
| C348           | B2                 | D4             | Q044           | E5                 | A4             | R132           | E5                 | B3             | R5             |
| C348           | B2                 | D4             | Q048           | E5                 | A4             | R134           | D5                 | B3             | R5             |
| C350           | C2                 | D5             | Q102           | G3                 | B0             | R136           | E4                 | B3             | R5             |
| C406           | F4                 | E0             | Q118           | G4                 | B1             | R138           | D5                 | B3             | R5             |
| C448           | A2                 | F4             | Q126           | D3                 | B2             | R140           | D4                 | B4             | R5             |
| C532           | E2                 | F3             | Q128           | G5                 | B2             | R141           | D4                 | B4             | R5             |
| C534           | E1                 | F3             | Q138           | D5                 | B3             | R142*          | D5                 | B4             | R5             |
| C544           | A1                 | F4             | Q140           | D5                 | B4             | R144           | D5                 | B4             | R5             |
| C602           | A3                 | G0             | Q150           | D4                 | B5             | R145           | D5                 | B4             | R5             |
| C603           | C5                 | G0             | Q154           | D4                 | B5             | R146           | D4                 | B4             | R5             |
| C608           | B4                 | G1             | Q202           | G3                 | C0             | R147*          | D4                 | B5             | R5             |
| C630           | D1                 | G3             | Q206           | G1                 | C0             | R148           | D4                 | B4             | R5             |
| C720           | B2                 | H2             | Q212           | H1                 | C1             | R202           | G3                 | C0             | R5             |
|                |                    |                | Q228           | F6                 | C2             | R204           | G3                 | C0             | R6             |
| CR012          | H2                 | A1             | Q234           | D3                 | C3             | R206           | G3                 | C0             | R6             |
| CR030          | E3                 | A3             | Q236           | E5                 | C3             | R208           | G3                 | C0             | R6             |
| CR046          | E5                 | A4             | Q246           | B6                 | C4             | R212           | G4                 | C1             | R6             |
| CR102          | H3                 | B0             | Q248           | B6                 | C4             | R214           | G5                 | C1             | R6             |
| CR104          | G3                 | B0             | Q258           | C6                 | C5             | R215           | G1                 | C1             | R6             |
| CR122          | D4                 | B2             | Q306           | G4                 | D0             | R216           | G2                 | C1             | R6             |
| CR136          | D5                 | B3             | Q312           | F2                 | D1             | R217           | F1                 | C1             | R6             |
| CR138*         | E4                 | B3             | Q316           | G1                 | D1             | R218           | F1                 | C1             | R6             |
| CR144          | D4                 | B4             | Q332           | D2                 | D3             | R219           | F1                 | C1             | R6             |
| CR148          | D2                 | B4             | Q334           | D3                 | D3             | R224           | G5                 | C1             | R6             |
| CR206          | F3                 | C0             | Q444           | B2                 | E4             | R228           | F6                 | C2             | R6             |
| CR208          | G3                 | C0             | Q446           | B1                 | E4             | R230           | E3                 | C3             | R6             |
| CR214          | F1                 | C1             | Q456           | A2                 | E4             | R234           | E3                 | C3             | R6             |
| CR216          | F1                 | C1             | Q526           | D1                 | F2             | R236           | E3                 | C6             | R6             |
| CR220          | F5                 | C2             | Q534           | D2                 | F3             | R238           | D3                 | C3             | R6             |
| CR222          | G4                 | C2             | Q538           | D2                 | F3             | R240           | E5                 | C4             | R6             |
| CR240          | D2                 | C4             | Q540           | B1                 | F4             | R241           | A6                 | C4             | R7             |
| CR248          | B6                 | C4             | Q626           | B4                 | G2             | R242           | A5                 | C4             | R7             |
| CR320          | F6                 | D2             | Q634           | D1                 | G3             | R243           | B5                 | C4             | R7             |
| CR324          | F6                 | D2             | Q636           | D1                 | G3             | R244           | B5                 | C4             | R7             |
| CR326          | F6                 | D2             | Q644           | B1                 | G4             | R245           | A5                 | C4             | R7             |
| CR346          | C1                 | D4             | Q706           | B3                 | H1             | R246           | A5                 | C4             | R7             |
| CR402          | G4                 | E0             | Q708           | B3                 | H1             | R247           | A6                 | C4             | R7             |
| CR404          | G4                 | E0             | Q738           | B4                 | H3             | R248           | B6                 | C4             | R7             |
| CR438          | E1                 | E3             | Q748           | B4                 | H4             | R302           | F2                 | C0             | R7             |
| CR442          | A2                 | E4             |                |                    |                | R308           | F4                 | D0             | R7             |
| CR454          | B2                 | E5             | R006           | H3                 | A0             | R310           | F2                 | D1             | U2             |
| CR454          | B2                 | E5             | R002           | H3                 | A0             | R311           | F2                 | D1             | U6             |
| CR502          | H5                 | F0             | R004           | H3                 | A0             | R312           | G1                 | D1             | U6             |
| CR534          | E2                 | F3             | R007*          | H3                 | A0             | R314           | H1                 | D1             | U6             |
| CR536          | D2                 | F3             | R008           | H3                 | A0             | R315           | G1                 | D1             | U6             |
| CR602          | C4                 | G0             | R022           | G5                 | A2             | R316           | G1                 | D1             | U6             |
| CR606          | C3                 | G0             | R024           | H5                 | A2             | R317           | G1                 | D1             | VR             |
| CR608          | B4                 | G1             | R026           | G5                 | A2             | R322           | F6                 | D2             | VR             |
| CR628          | B3                 | G2             | R030           | E3                 | A3             | R326           | F6                 | D2             | VR             |
|                |                    |                | R032           | E3                 | A3             | R328           | F6                 | D2             | VR             |
| P160           | A1                 | B5             | R034           | E3                 | A3             | R334           | D3                 | D3             | VR             |
| P160           | C2                 | B5             |                |                    |                | R336           | D3                 | D3             | VR             |

| Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location | Circuit Number | Schematic Location | Board Location |
|--------------------|----------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
| C4                 | B5             | R038           | E5                 | A3             | R338           | D2                 | D3             |
| F4                 | B5             | R044           | E4                 | A4             | R342           | B6                 | D4             |
| F5                 | B5             | R046           | E4                 | A4             | R344           | A5                 | D4             |
| A4                 | E2             | R052           | D4                 | A5             | R346           | B1                 | D4             |
| C1                 | E2             | R054           | D4                 | A5             | R348           | C2                 | D4             |
| E1                 | E2             | R102           | G3                 | B0             | R352           | C5                 | D5             |
| H2                 | E2             | R104           | G3                 | B0             | R356           | B5                 | D5             |
| A3                 | F1             | R106           | G3                 | B0             | R358           | C2                 | D5             |
| C2                 | F1             | R108           | H3                 | B0             | R404           | F4                 | E0             |
| A1                 | F6             | R112           | H1                 | B1             | R406           | F4                 | E0             |
| A2                 | F6             | R114           | H2                 | B1             | R410           | A5                 | E1             |
| C1                 | F6             | R115           | H2                 | B1             | R440           | B1                 | E4             |
| F1                 | F6             | R116           | G2                 | B1             | R441           | B1                 | E4             |
| F6                 | D2             | R118           | G5                 | B1             | R442           | B1                 | E4             |
|                    |                | R120           | E4                 | B2             | R443           | B2                 | E4             |
|                    |                | R122           | G5                 | B2             | R444           | B2                 | E4             |
| H3                 | A1             | R123           | G5                 | B2             | R446           | B2                 | E4             |
| H2                 | A1             | R124           | G5                 | B2             | R448           | A2                 | E4             |
| H3                 | A1             | R126           | D3                 | B2             | R450           | C2                 | E5             |
| H5                 | A2             | R128           | D4                 | B2             | R452           | B2                 | E5             |
| G5                 | A2             | R130           | D4                 | B2             | R502           | H5                 | F0             |
| E3                 | A3             | R132           | E5                 | B3             | R504           | H6                 | F0             |
| E5                 | A4             | R134           | E5                 | B3             | R506           | H5                 | F0             |
| G3                 | A4             | R136           | D5                 | B3             | R508           | H6                 | F0             |
| G4                 | B0             | R138           | E4                 | B3             | R530           | E2                 | F3             |
| D3                 | B1             | R140           | D5                 | B3             | R531           | E2                 | F3             |
| G5                 | B2             | R142*          | D4                 | B4             | R534           | D2                 | F3             |
| D5                 | B2             | R144           | D5                 | B4             | R535           | D2                 | F3             |
| D5                 | B3             | R146           | D5                 | B4             | R536           | D2                 | F3             |
| D4                 | B4             | R147*          | D4                 | B4             | R537           | E1                 | F3             |
| D4                 | B5             | R148           | D4                 | B4             | R538           | E2                 | F3             |
| G3                 | C0             | R202           | D4                 | B5             | R540           | B1                 | F4             |
| G1                 | C0             | R208           | D4                 | B4             | R542           | A1                 | F4             |
| H1                 | C1             | R204           | G3                 | C0             | R546           | A1                 | F4             |
| F6                 | C2             | R206           | G3                 | C0             | R608           | C3                 | G0             |
| D3                 | C3             | R208           | G3                 | C0             | R610           | B2                 | G1             |
| E3                 | C3             | R212           | G4                 | C0             | R612           | B4                 | G1             |
| B6                 | C4             | R214           | G4                 | C1             | R613           | A3                 | G1             |
| B6                 | C4             | R215           | G5                 | C1             | R614           | B2                 | G1             |
| C6                 | C5             | R216           | G1                 | C1             | R615           | A3                 | G1             |
| G4                 | D0             | R217           | G2                 | C1             | R616           | B4                 | G1             |
| F2                 | D1             | R218           | F1                 | C1             | R618           | B4                 | G1             |
| G1                 | D1             | R219           | F1                 | C1             | R624           | B4                 | G2             |
| D2                 | D3             | R224           | F1                 | C1             | R626           | B3                 | G2             |
| D3                 | D3             | R228           | G5                 | C1             | R628           | B3                 | G2             |
| B2                 | E4             | R230           | F6                 | C2             | R630           | D2                 | G3             |
| B1                 | E4             | R234           | E3                 | C3             | R632           | D1                 | G3             |
| A2                 | E4             | R236           | E3                 | C3             | R634           | D1                 | G3             |
| D1                 | F2             | R238           | E3                 | C6             | R636           | D1                 | G3             |
| D2                 | F3             | R240           | D3                 | C3             | R638           | D1                 | G3             |
| D2                 | F3             | R241           | E5                 | C4             | R639           | E1                 | G3             |
| B1                 | F4             | R242           | A6                 | C4             | R704           | B2                 | H0             |
| B4                 | G2             | R243           | A5                 | C4             | R712           | B4                 | H1             |
| D1                 | G3             | R244           | B5                 | C4             | R714           | C4                 | H1             |
| D1                 | G3             | R245           | B5                 | C4             | R716           | B3                 | H1             |
| B1                 | G4             | R246           | A5                 | C4             | R720           | B3                 | H2             |
| B3                 | H1             | R247           | A5                 | C4             | R722           | C3                 | H2             |
| B3                 | H1             | R248           | A6                 | C4             | R724           | C3                 | H2             |
| B4                 | H3             | R302           | B6                 | C4             | R726           | C4                 | H2             |
| B4                 | H4             | R308           | F2                 | C0             | R728           | C4                 | H2             |
|                    |                | R310           | F4                 | D0             | R746           | B4                 | H4             |
|                    |                | R311           | F2                 | D1             | U248           | B6                 | C4             |
| H3                 | A0             | R312           | F2                 | D1             | U628A          | B4                 | G2             |
| H3                 | A0             | R314           | G1                 | D1             | U628B          | B4                 | G2             |
| H3                 | A0             | R315           | H1                 | D1             | U628C          | B3                 | G2             |
| G5                 | A2             | R316           | G1                 | D1             | U628D          | B3                 | G2             |
| H5                 | A2             | R317           | G1                 | D1             |                |                    |                |
| G5                 | A2             | R322           | G1                 | D1             | VR146          | D4                 | B5             |
| E3                 | A3             | R326           | F6                 | D2             | VR148          | D4                 | B5             |
| E3                 | A3             | R328           | F6                 | D2             | VR212          | G3                 | C1             |
| E3                 | A3             | R334           | F6                 | D2             | VR328          | F6                 | D2             |
|                    | A3             | R336           | D3                 | D3             | VR340          | B6                 | D4             |
|                    |                |                | D3                 | D3             | VR540          | A2                 | F4             |



| P/O A18 ASSY   |                    |                | 2900 CPU <span style="border: 1px solid black; padding: 2px;">23</span> |                    |                |
|--|--------------------|----------------|---|--------------------|----------------|
| Circuit Number   | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location |
| R1322  | G3                 | N2             | U922  | G2                 | J2             |
| U702D  | E5                 | H0             | U1002   | E1                 | K0             |
| U802E  | E5                 | I0             | U1012   | D1                 | K1             |
| U802F  | G5                 | I0             | U1022   | E2                 | K2             |
| U812C  | E6                 | I1             | U1102   | D1                 | L0             |
| U812D  | E6                 | I1             | U1112   | C1                 | L1             |
| U822   | G4                 | I1             | U1202   | B1                 | M0             |
| U824   | G4                 | I2             | U1212   | A1                 | M1             |
| U832   | B4                 | I3             | U1222   | D2                 | M2             |
| U902   | G1                 | J0             | U1302   | B6                 | N0             |
| U912   | F1                 | J1             | U1312   | C6                 | N1             |
|  |                    |                | U1322   | B2                 | N2             |
| P/O 18 ASSY ALSO SHOWN ON <span style="border: 1px solid black; padding: 2px;">22</span> |                    |                |   |                    |                |

| P/O A66 ASSY  |    |    | 2900 CPU <span style="border: 1px solid black; padding: 2px;">23</span> |    |    |
|---|----|----|---|----|----|
| J101  | A4 | B0 | J101  | H1 | B0 |
| J101  | E6 | B0 |   |    |    |
| P/O A66 ASSY ALSO SHOWN ON <span style="border: 1px solid black; padding: 2px;">19</span> <span style="border: 1px solid black; padding: 2px;">20</span> & <span style="border: 1px solid black; padding: 2px;">21</span> |    |    |   |    |    |

| P/O A68 ASSY                 |    |    | 2900 CPU <span style="border: 1px solid black; padding: 2px;">23</span> |    |    |
|------------------------------|----|----|---|----|----|
| J348                         | A2 | D4 | J348  | G4 | D4 |
| P/O A68 ASSY - SEE FIG. 7-37 |    |    |   |    |    |

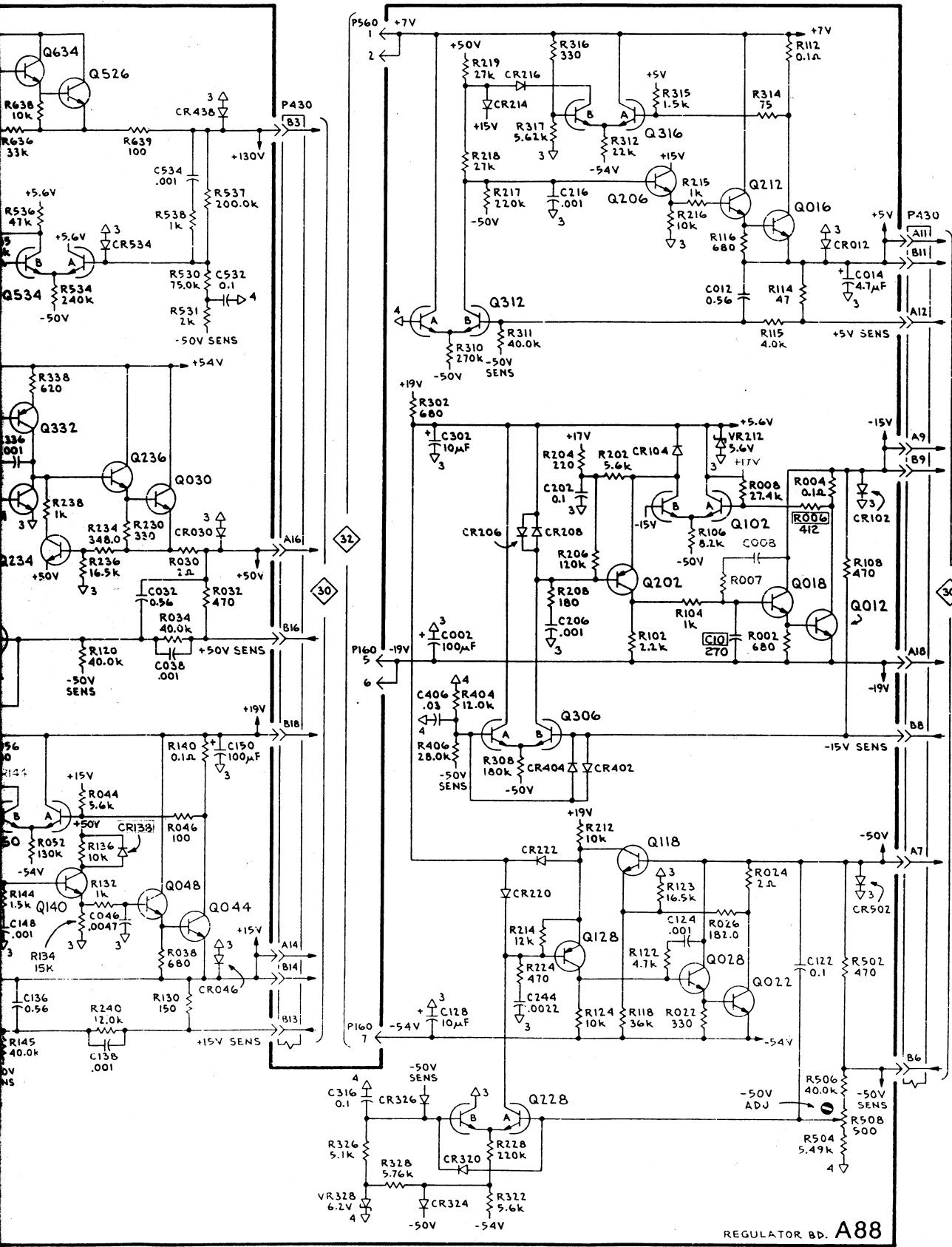


E

F

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H



REGULATORS

33

2386-132  
REV JUL 1981

REGULATORS 33 NLL

| P/O A68 ASSY   |                    |                | REAR PANEL <span style="border: 1px solid black; padding: 2px;">34</span> |                    |                |
|----------------|--------------------|----------------|---|--------------------|----------------|
| Circuit Number | Schematic Location | Board Location | Circuit Number  | Schematic Location | Board Location |
| J5100          | B1                 | CHASSIS        | J5108   | E1                 | CHASSIS        |
| J5101          | B1                 | CHASSIS        | J5109   | E2                 | CHASSIS        |
| J5101          | B2                 | CHASSIS        | J5109   | E2                 | CHASSIS        |
| J5102          | B2                 | CHASSIS        | J5110   | G1                 | CHASSIS        |
| J5102          | B3                 | CHASSIS        | J5110   | G1                 | CHASSIS        |
| J5103          | B3                 | CHASSIS        | J5111   | G1                 | CHASSIS        |
| J5103          | B3                 | CHASSIS        | J5111   | G1                 | CHASSIS        |
| J5104          | B3                 | CHASSIS        | J5112   | G2                 | CHASSIS        |
| J5104          | B3                 | CHASSIS        | J5112   | G2                 | CHASSIS        |
| J5105          | B3                 | CHASSIS        | J5113   | G2                 | CHASSIS        |
| J5105          | B3                 | CHASSIS        | J5113   | G3                 | CHASSIS        |
| J5106          | B4                 | CHASSIS        |   |                    |                |
| J5106          | B4                 | CHASSIS        |   |                    |                |
| J5107          | B4                 | CHASSIS        | P002  | E2                 | A0             |
| J5107          | B4                 | CHASSIS        | P636  | B4                 | G3             |
| J5108          | E1                 | CHASSIS        | P638  | B3                 | G3             |

NOTE: Fig.'s No. 7-38 through 7-42 have been purposely deleted.

A

B

C

D

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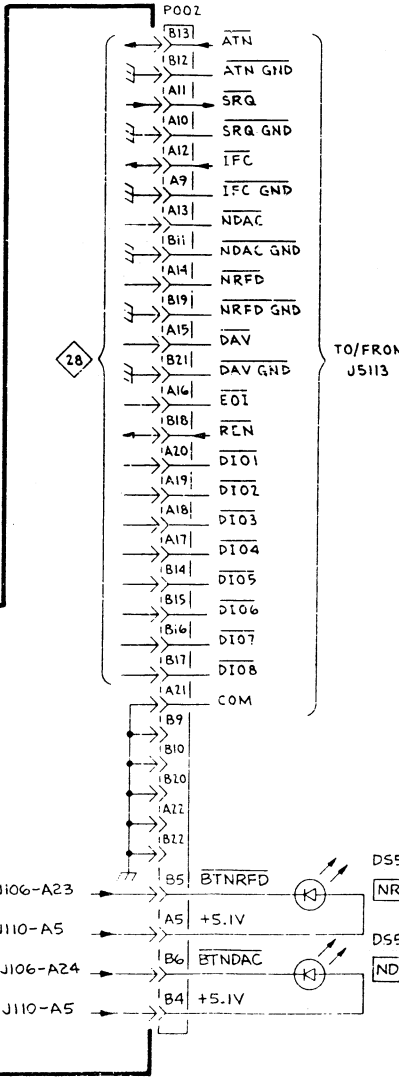
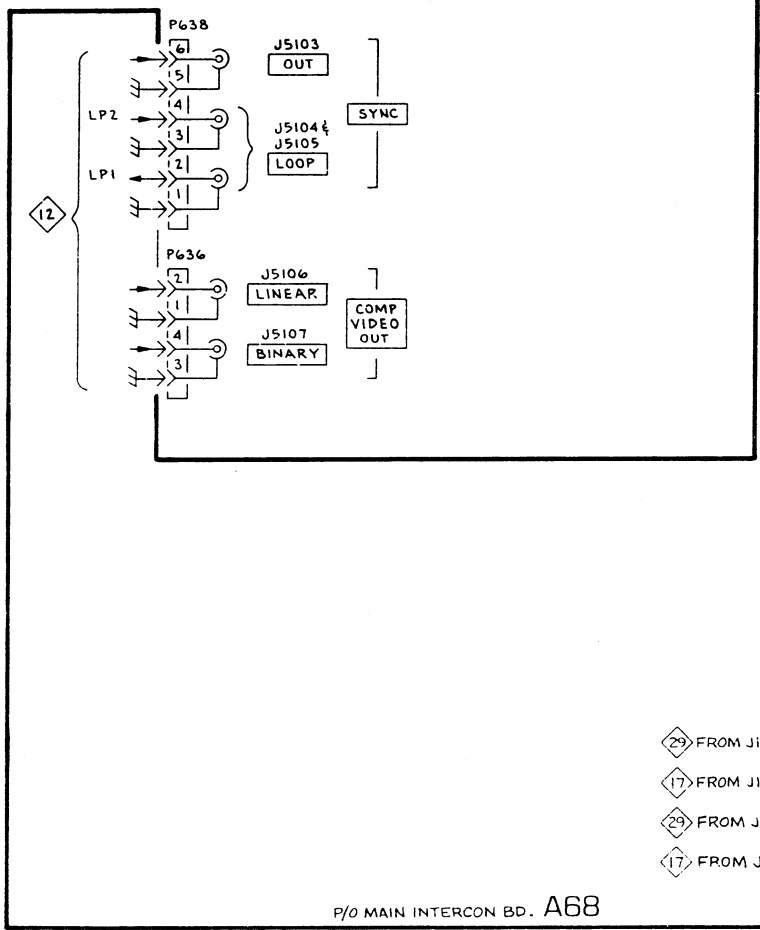
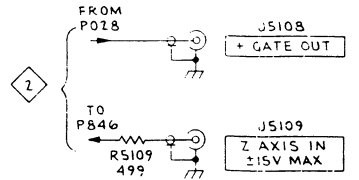
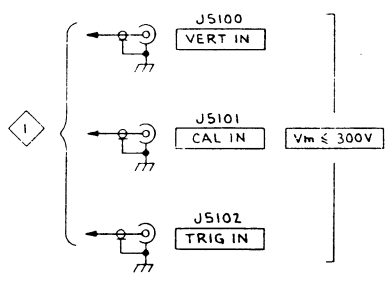
2

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6



P/O MAIN INTERCON BD. A68

7912AD

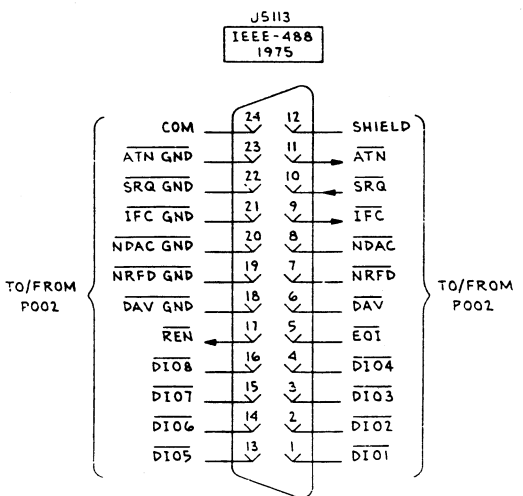
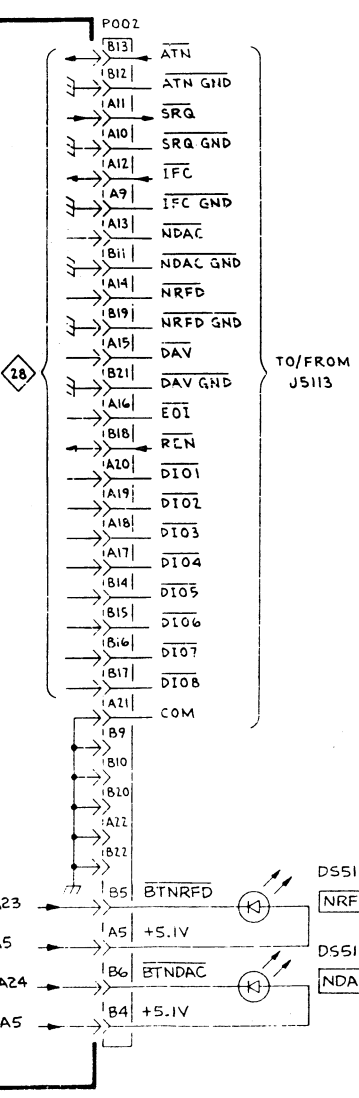
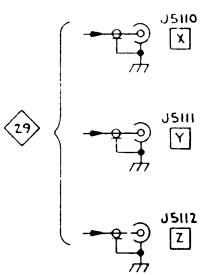
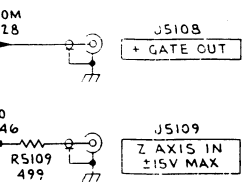
2385-133  
REV A JUN 1980

E

F

G

H



USED AND LIST FOR EARLIER PARTS AND SERIAL NUMBER RANGE OF PARTS OUTLINED OR INDICATED IN GREY.

2385-133  
REV A JUN 1980

REAR PANEL 34

REAR PANEL 34

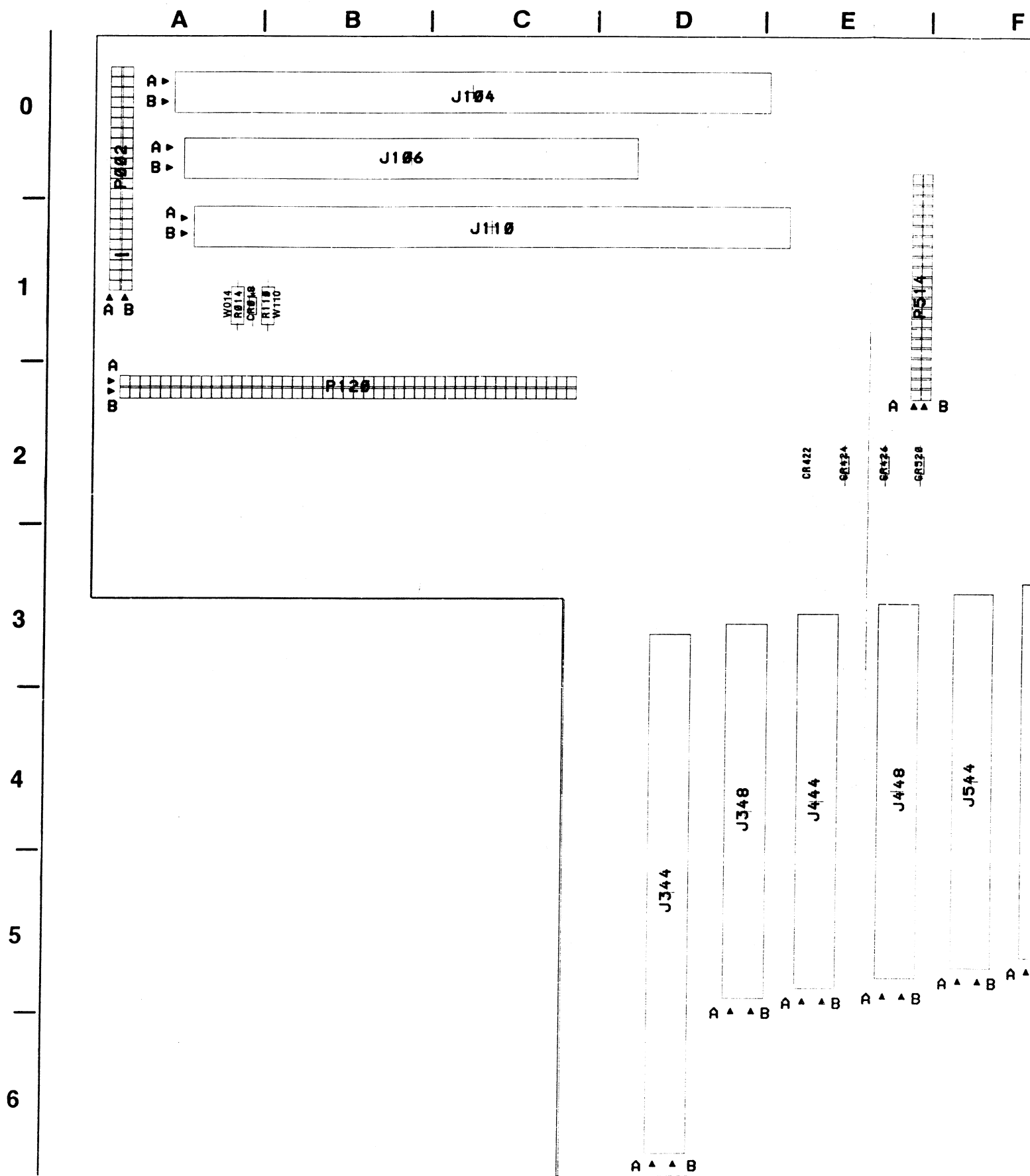
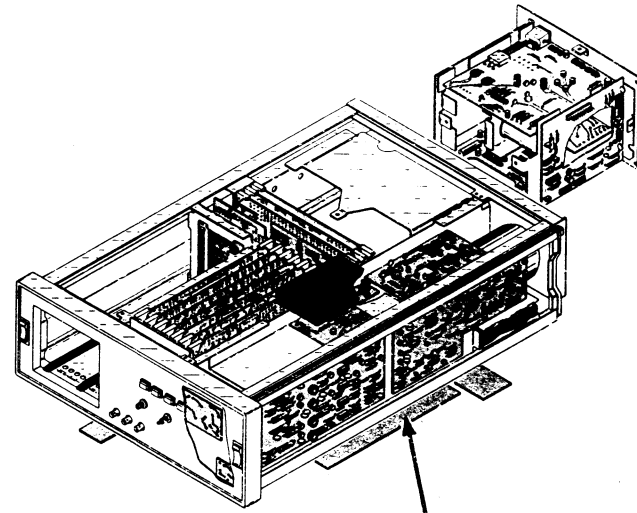
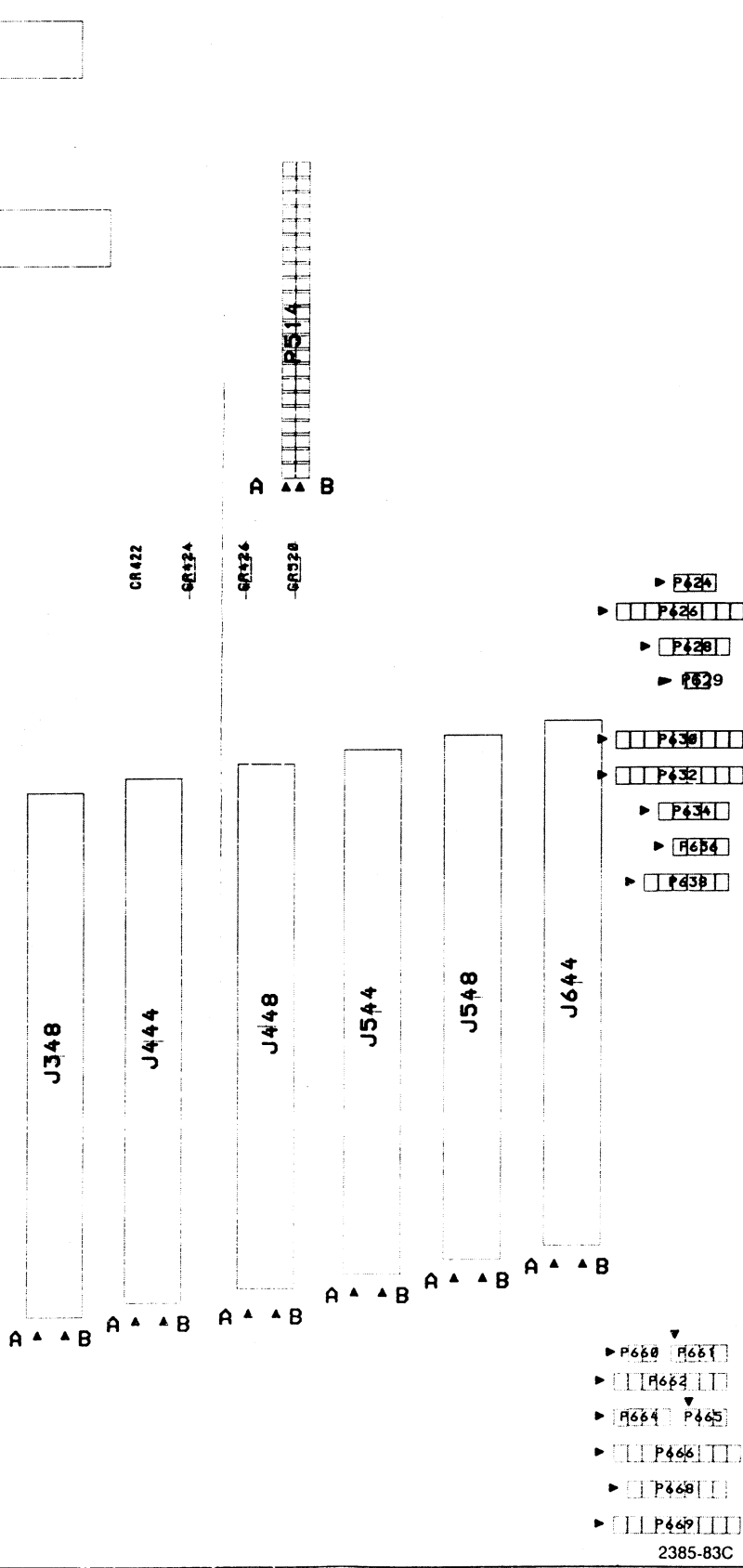


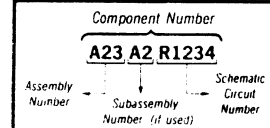
Fig. 7-37. The Main Interconnect circuit board, assembly A68.

I E | F | G



A68  
MAIN  
INNERCONNECT

COMPONENT NUMBER EXAMPLE



Chassis mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List

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ard, assembly A68.



| SIGNAL            | PINOUT          |                |                |  |
|-------------------|-----------------|----------------|----------------|--|
| ALT OVERRIDE      | P120 A1 (2)*    |                |                |  |
| ALT OVERRIDE      | P120 A2 (2)*    |                |                |  |
| ANALOG DATA       | J110 A50 (17)   | P120 B37 (3)   | P120 B39 (3)†  |  |
| ARM SS            | P120 A8 (2)     | J448 A26 (13)* |                |  |
| ATN               | P002 B13 (34)†  | J106 A16 (28)  |                |  |
| AUX Y AXIS        | P120 A11 (2)†   | P626 9 (5)     |                |  |
| B2M/ZEN           | J106 A34 (29)   | J344 A38 (20)† | J344 B38 (20)† | J348 A16 (22)                            |
| BADR0             | J106 B35 (27)   | J110 B46 (15)† | J344 B26 (19)  | J448 A6 (13) P514 A19 (16)               |
| BADR1             | J106 B34 (27)   | J110 B45 (15)† | J344 A26 (19)  | J448 A7 (13) P514 A18 (16)               |
| BADR2             | J106 B33 (27)   | J110 B44 (15)† | J344 B27 (19)  | J488 A8 (13) P514 A17 (16)               |
| BADR3             | J106 B32 (27)   | J110 B43 (15)† | J344 A27 (19)  | J448 A9 (13) P514 A16 (16)               |
| BADR4             | J106 B31 (27)   | J110 B42 (15)† | J344 B28 (19)  | J448 A10 (13) P514 A15 (16)              |
| BADR5             | J106 B30 (27)   | J110 B41 (15)† | J344 A28 (19)  | J448 A11 (13) P514 A14 (16)              |
| BADR6             | J106 B29 (27)   | J110 B40 (15)† | J344 B29 (19)  | P514 A13 (16)                            |
| BADR7             | J106 B38 (27)   | J110 B39 (15)† | J344 A29 (19)  | P514 A12 (16)                            |
| BADR8             | J106 B27 (27)   | J110 B38 (15)† | J344 B30 (19)  | P514 A9 (16)                             |
| BADR9             | J106 B26 (27)   | J110 B37 (15)† | J344 A30 (19)  | P514 A8 (16)                             |
| BADR10            | J106 B25 (27)   | J110 B36 (15)† | J344 B31 (19)  | P514 A7 (16)                             |
| BADR11            | J106 B24 (27)   | J110 B35 (15)† | J344 A31 (19)  | P514 A6 (16)                             |
| BD0               | J106 B12 (27)   | J110 B22 (15)  | P120 A24 (3)   | J344 B34 (19) J448 A12 (13) P514 B9 (16) |
| BD1               | J106 B13 (27)   | J110 B23 (15)  | J344 A34 (19)  | J448 A13 (13) P514 B8 (16)               |
| BD2               | J106 B14 (27)   | J110 B24 (15)  | J344 B35 (19)  | J448 A14 (13) P514 B7 (16)               |
| BD3               | J106 B15 (27)   | J110 B25 (15)  | J344 A35 (19)  | J448 A15 (13) P514 B6 (16)               |
| BD4               | J106 B16 (27)   | J110 B26 (15)  | J344 B36 (19)  | J448 A16 (13) P514 B5 (16)               |
| BD5               | J106 B17 (27)   | J110 B27 (15)  | J344 A36 (19)  | J448 A17 (13) P514 B4 (16)               |
| BD6               | J106 B18 (27)   | J110 B28 (15)  | J344 B37 (19)  | J448 A18 (13) P514 B3 (16)               |
| BD7               | J106 B19 (27)   | J110 B29 (15)  | J344 A37 (19)  | J448 A19 (13) P514 B2 (16)               |
| BEAM FINDER 1     | P634 4 (7)      | P665 1 (1)†    |                |  |
| BEAM FINDER 2     | P626 6 (5)      | P665 2 (1)†    |                |  |
| BEAM FINDER 3     | P120 A23 (2)    | P665 3 (1)†    |                |  |
| BTNDAC            | J106 A24 (29)†  | P002 B6 (34)   |                |  |
| BTNRFD            | J106 A23 (29)†  | P002 B5 (34)   |                |  |
| CDB               | J444 B19 (25)†  | J644 A19 (11)* |                |  |
| CK2               | J106 B9 (27)    | J110 A19 (15)† | P514 B1 (16)   | P514 A11 (16)                            |
| CK1               | J110 B16 (15)†* |                |                |  |
| CLAMP 1           | J644 B8 (11)    | P661 2 (11)†   |                |  |
| CLAMP 2           | J644 B9 (11)†   | P661 4 (11)    |                |  |
| CLKMAR            | J344 B18 (21)†  | J348 B10 (22)  |                |  |
| CLKMDR            | J344 B13 (21)†  | J348 B5 (22)   |                |  |
| COMP LINEAR VIDEO | P636 2 (34)     | J644 B17 (12)† |                |  |
| COMP BINARY VIDEO | P636 4 (34)     | J644 B16 (12)† |                |  |
| CP00              | J344 A23 (19)   | J348 A15 (23)† |                |  |
| CP01              | J344 A22 (19)   | J348 A14 (23)† |                |  |
| CP02              | J344 A21 (19)   | J348 A13 (23)† |                |  |
| CP03              | J344 A19 (19)   | J348 A12 (23)† |                |  |
| CP04              | J344 A18 (19)   | J348 A11 (23)† |                |  |
| CP05              | J344 A17 (19)   | J348 A10 (23)† |                |  |
| CP06              | J344 A16 (19)   | J348 A9 (23)†  |                |  |
| CP07              | J344 A15 (19)   | J348 A8 (23)†  |                |  |
| CP08              | J344 B20 (19)   | J348 B12 (23)† |                |  |
| CP09              | J344 B21 (19)   | J348 B13 (23)† |                |  |
| CP010             | J344 B22 (19)   | J348 B14 (23)† |                |  |
| CP011             | J344 B23 (23)   | J348 B15 (23)† |                |  |
| CP012             | J344 B19 (19)   | J348 B11 (23)† |                |  |
| CP013             | J344 B14 (19)   | J348 B6 (23)†  |                |  |
| CP014             | J344 B15 (19)   | J348 B7 (23)†  |                |  |
| CP015             | J344 B16 (19)   | J348 B8 (23)†  |                |  |
| CRB               | J548 A9 (8)†    | P662 8 (10)    |                |  |
| CRB               | J548 B8 (8)†    | J644 A7 (11)   |                |  |
| DAC/ADV           | J106 A25 (29)   | J344 B9 (20)†  | J344 B44 (20)† | J444 B6 (25)                             |
| DAV               | P002 A15 (34)   | J106 A8 (28)   |                |  |
| DECREASE INT      | J448 A20 (13)†  | J644 B26 (12)† | P666 7 (1)     |  |
| DFI               | J110 A20 (16)   | J448 B22 (13)† |                |  |
| DIAG              | J344 A11 (19)*  |                |                |  |
| DIG               | J344 B10 (20)†  | J444 B7 (25)   |                |  |

| SIGNAL |
|--------|
| DIG L  |
| DIG P  |
| DIO1   |
| DIO2   |
| DIO3   |
| DIO4   |
| DIO5   |
| DIO6   |
| DIO7   |
| DIO8   |
| EOI    |
| FOCUS  |
| FOCUS  |
| FPI    |
| FPSEL  |
| GND P  |
| GND S  |
| GRAT   |
| GRAT   |
| GRAT   |
| HALT   |
| HD0    |
| HD1    |
| HD2    |
| HD3    |
| HD4    |
| HD5    |
| HD6    |
| HD7    |
| HOLD   |
| + HOR  |
| - HOR  |
| HWF    |
| IFC    |
| IFI    |
| IHCE   |
| ILWE   |
| IOI    |
| IOSEL  |
| LINE T |
| LOCAL  |
| LOCAL  |
| LOCAL  |
| LOCKC  |
| LOCKC  |
| LSEND  |
| MAIN I |
| MAIN I |
| MDRON  |
| MF CH  |
| MPUCL  |
| NDAC   |
| NRFD   |
| NSG    |
| OOL    |
| PMCI   |
| PMCSE  |

MAIN INTERCONNECT (A68) SIGNALS

| SIGNAL        | PINOUT          |                |
|---------------|-----------------|----------------|
| AG LT         | J448 A2 (13)†   | P669 4 (1)     |
| AG PB         | J448 B2 (13)    | P669 7 (1)†    |
| O1            | P002 A20 (34)   | J106 A13 (28)  |
| O2            | P002 A19 (34)   | J106 A12 (28)  |
| O3            | P002 A18 (34)   | J106 A11 (28)  |
| O4            | P002 A17 (34)   | J106 A10 (28)  |
| O5            | P002 B14 (34)   | J106 A17 (34)  |
| O6            | P002 B15 (34)   | J106 A18 (34)  |
| O7            | P002 B16 (34)   | J106 A19 (34)  |
| O8            | P002 B17 (34)   | J106 A20 (34)  |
|               | P002 A16 (34)   | J106 A9 (28)   |
| OCUS IG       | J448 B9 (13)†   | P634 4 (7)     |
| OCUS POT      | J448 B8 (13)    | P668 6 (1)†    |
| I             | J110 A12 (16)   | J448 A21 (13)† |
| ISEL          | J110 B21 (15)†  | J448 B17 (14)  |
| ND RET        | J110 A48 (17)   |                |
| ND SENS       | J104 A3 (30)    | P120 B9 (3)    |
| RAT INT       | J448 B11 (13)†  | J544 A19 (4)   |
| RAT INT POT   | J448 B10 (13)   | P668 7 (1)†    |
| RAT ONLY      | J448 A29 (13)†  | J544 A27 (4)   |
| ALT           | J110 A46 (15)*  |                |
| 00            | J106 A26 (28)   | J344 B40 (19)† |
| 01            | J106 A27 (28)   | J344 A40 (19)† |
| 02            | J106 A28 (28)   | J344 B41 (19)† |
| 03            | J106 A29 (28)   | J344 A41 (19)† |
| 04            | J106 A30 (28)   | J344 B42 (19)† |
| 05            | J106 A31 (28)   | J344 A42 (19)† |
| 06            | J106 A32 (28)   | J344 B43 (19)† |
| 07            | J106 A33 (28)   | J344 A43 (19)† |
| OLDOFF        | P120 A4 (2)*    |                |
| HOR GRAT      | P120 B44 (6)    | J544 A4 (4)†   |
| HOR GRAT      | P120 B42 (6)    | J544 A2 (4)†   |
| WF            | J104 B6 (30)†   | J110 B14 (15)  |
| C             | P002 A12 (34)†  | J106 A5 (28)   |
| I             | J110 A15 (16)*  |                |
| CE            | J344 A14 (21)†  | J348 A7 (22)   |
| WE            | J344 A13 (21)†  | J348 A6 (22)   |
| I             | J106 B8 (27)†   | J110 A18 (16)  |
| ISEL          | J106 B10 (27)†  | J110 B20 (15)  |
| NE TRIGGER    | J104 B1 (30)†   | P120 B25 (2)   |
| OCAL LT       | J448 A4 (13)†   | P669 2 (1)     |
| OCAL PB       | J448 B4 (13)    | P669 9 (1)†    |
| OCAL/REMOTE   | J448 B23 (13)†* |                |
| OCKOUT        | J448 A27 (13)†* |                |
| OCKOUT LT     | J448 A5 (13)†   | P669 1 (1)     |
| SEND          | J106 A36 (28)   | J344 B39 (21)  |
| AIN INT       | P120 A40 (2)    | J448 B7 (13)†  |
| AIN INT POT   | J448 B6 (13)†   | P668 5 (1)     |
| DRON          | J344 B17 (21)†  | J348 B9 (22)   |
| F CHAN SWITCH | P120 B1 (2)     | J544 A11 (4)†  |
| PUCKL         | J110 B13 (15)   | J444 B13 (25)† |
| DAC           | P002 A13 (34)   | J106 A6 (28)   |
| RFD           | P002 A14 (34)   | J106 A7 (28)   |
| SG            | J344 A10 (19)†  | J444 A7 (25)   |
| OL            | J548 B15 (8)†   | J644 A15 (12)  |
| MC1           | J110 A16 (16)   | J344 A24 (20)† |
| MCSEL         | J110 B18 (15)†  | J344 B24 (19)  |

| SIGNAL         | PINOUT         |                |                    |
|----------------|----------------|----------------|--------------------|
| PON            | J104 B25 (30)† | J110 B15 (15)  | J344 A44 (21)      |
| PREAMP VIDEO   | J644 B5 (11)   | P660 2 (10)†   |                    |
| PROTECT ENABLE | P634 3 (7)     | J644 A26 (12)  |                    |
| PWRON          | J104 A33 (30)† | P666 8 (1)     |                    |
| PWRON RET      | J104 A34 (30)  | P666 9 (1)†    |                    |
| R-REN          | J106 A14 (28)† | J110 A21 (16)  |                    |
| RAMSEL         | J110 A2 (15)†  | P514 B15 (16)  |                    |
| READOUT OFF    | J448 B12 (13)  | P668 2 (1)†    |                    |
| READOUT ON     | J448 B5 (13)   | P668 1 (1)†    |                    |
| REM LT         | J448 A3 (13)†  | P669 3 (1)     |                    |
| REM PB         | J448 B3 (13)   | P669 8 (1)†    |                    |
| REN            | P002 B18 (34)† | J106 A21 (28)  |                    |
| ROMSELA        | J110 B11 (15)* |                |                    |
| ROMSELE        | J110 B9 (15)†  | P514 B17 (16)  |                    |
| ROMSELF        | J110 A3 (15)†  | P514 B16 (16)  |                    |
| RORST          | J110 A24 (17)† | P120 A27 (3)   |                    |
| ROT            | J110 A25 (17)† | P120 A28 (3)   |                    |
| RST            | J106 A21 (27)† | J110 A14 (15)  | P514 B18 (16)      |
| RO VIDEO       | J448 B18 (14)† | J644 A18 (12)  |                    |
| SGE            | J448 B29 (13)  | J544 A28 (4)†  |                    |
| SHIFT          | J110 A23 (17)† | P120 A26 (3)   |                    |
| SRQ            | P002 A11 (34)  | J106 A4 (28)†  |                    |
| SS ARMED       | P120 A7 (2)†   | J448 A25 (13)  |                    |
| SS MODE        | P120 A10 (2)†  | J448 B24 (13)  |                    |
| STROBE         | J110 B30 (15)† | J344 B25 (19)  | J448 B16 (13) P514 |
| SVID           | J444 B8 (25)   | J644 A1 (11)†  |                    |
| SWP GATE       | P120 B23 (2)†  | J444 B28 (25)  | J448 A28 (13) J544 |
| SWP LOCKOUT    | P120 A6 (2)    | J544 A15 (4)†  |                    |
| SYNC OUT       | P638 6 (34)    | J644 B23 (12)† |                    |
| SYNC LP1       | P638 2 (34)    | J644 A24 (12)  |                    |
| SYNC LP2       | P638 6 (34)    | J644 B25 (12)  |                    |
| SLOSWP         | J444 A17       | J344 A5        |                    |
| TD0            | J348 A1 (23)†  | J444 A1 (26)   |                    |
| TD1            | J348 B1 (23)†  | J444 B1 (26)   |                    |
| TD2            | J348 A2 (23)†  | J444 A2 (26)   |                    |
| TD3            | J348 B2 (23)†  | J444 B2 (26)   |                    |
| TD4            | J348 A3 (23)†  | J444 A3 (26)   |                    |
| TD5            | J348 B3 (23)†  | J444 B3 (26)   |                    |
| TD6            | J348 A4 (23)†  | J444 A4 (26)   |                    |
| TD7            | J348 B4 (23)†  | J444 B4 (26)   |                    |
| TD8            | J348 A5 (23)†  | J444 A5 (26)   |                    |
| TIMESLOT       | J110 A22 (17)† | P120 A25 (3)   |                    |
| TLTRSEL        | J110 B17 (15)† | J448 B20 (13)  | P514 B19 (16)      |
| TV/DIG         | J448 B25 (13)† | J544 B28 (4)   | J548 B26 (8) J644  |
| TV LT          | J448 A1 (13)†  | P669 5 (1)     |                    |
| TV PB          | J448 B1 (13)   | P669 6 (1)†    |                    |
| +VERT GRAT     | J544 B8 (4)†   | P664 1 (5)     |                    |
| -VERT GRAT     | J544 B6 (4)†   | P664 3 (5)     |                    |
| VMA            | J110 B19 (15)† | P514 A1 (16)   |                    |
| WRITE          | J106 B36 (27)  | J110 B47 (15)† | J344 A25 (19) P514 |
| +X             | J548 A5 (9)†   | P662 6 (9)     |                    |
| -X             | J548 A4 (9)†   | P662 4 (9)     |                    |
| XDR            | J344 A9 (20)   | J444 A6 (25)†  |                    |
| XRG            | J444 B21 (26)† | J644 A21 (12)  |                    |
| X REF          | J448 B14 (14)  | J548 B13 (8)   | J644 A14 (12)†     |
| X RAMP         | J548 B21 (8)†  | J644 A3 (11)   |                    |
| X START        | J548 B12 (8)   | J644 A12 (12)† |                    |
| +Y             | J548 A2 (9)†   | P662 1 (9)     |                    |
| -Y             | J548 A1 (9)†   | P662 3 (9)     |                    |
| Y RAMP         | J548 B20 (8)†  | J644 A4 (11)   |                    |
| Y REF          | J448 B13 (14)  | J644 A13 (12)† |                    |

REV JI

## MAIN INTERCONNECT (A68) SIGNALS

| SIGNAL                | PINOUT          |                |
|-----------------------|-----------------|----------------|
| <u>DIG LT</u>         | J448 A2 (13)†   | P669 4 (1)     |
| <u>DIG PB</u>         | J448 B2 (13)    | P669 7 (1)†    |
| <u>DIO1</u>           | P002 A20 (34)   | J106 A13 (28)  |
| <u>DIO2</u>           | P002 A19 (34)   | J106 A12 (28)  |
| <u>DIO3</u>           | P002 A18 (34)   | J106 A11 (28)  |
| <u>DIO4</u>           | P002 A17 (34)   | J106 A10 (28)  |
| <u>DIO5</u>           | P002 B14 (34)   | J106 A17 (34)  |
| <u>DIO6</u>           | P002 B15 (34)   | J106 A18 (34)  |
| <u>DIO7</u>           | P002 B16 (34)   | J106 A19 (34)  |
| <u>DIO8</u>           | P002 B17 (34)   | J106 A20 (34)  |
| <u>EOI</u>            | P002 A16 (34)   | J106 A9 (28)   |
| <u>FOCUS IG</u>       | J448 B9 (13)†   | P634 4 (7)     |
| <u>FOCUS POT</u>      | J448 B8 (13)    | P668 6 (1)†    |
| <u>FPI</u>            | J110 A12 (16)   | J448 A21 (13)† |
| <u>FPSEL</u>          | J110 B21 (15)†  | J448 B17 (14)  |
| <u>GND RET</u>        | J110 A48 (17)   |                |
| <u>GND SENS</u>       | J104 A3 (30)    | P120 B9 (3)    |
| <u>GRAT INT</u>       | J448 B11 (13)†  | J544 A19 (4)   |
| <u>GRAT INT POT</u>   | J448 B10 (13)   | P668 7 (1)†    |
| <u>GRAT ONLY</u>      | J448 A29 (13)†  | J544 A27 (4)   |
| <u>HALT</u>           | J110 A46 (15)*  |                |
| <u>HD0</u>            | J106 A26 (28)   | J344 B40 (19)† |
| <u>HD1</u>            | J106 A27 (28)   | J344 A40 (19)† |
| <u>HD2</u>            | J106 A28 (28)   | J344 B41 (19)† |
| <u>HD3</u>            | J106 A29 (28)   | J344 A41 (19)† |
| <u>HD4</u>            | J106 A30 (28)   | J344 B42 (19)† |
| <u>HD5</u>            | J106 A31 (28)   | J344 A42 (19)† |
| <u>HD6</u>            | J106 A32 (28)   | J344 B43 (19)† |
| <u>HD7</u>            | J106 A33 (28)   | J344 A43 (19)† |
| <u>HOLDOFF</u>        | P120 A4 (2)*    |                |
| <u>+ HOR GRAT</u>     | P120 B44 (6)    | J544 A4 (4)†   |
| <u>- HOR GRAT</u>     | P120 B42 (6)    | J544 A2 (4)†   |
| <u>HWF</u>            | J104 B6 (30)†   | J110 B14 (15)  |
| <u>IFC</u>            | P002 A12 (34)†  | J106 A5 (28)   |
| <u>IFI</u>            | J110 A15 (16)*  |                |
| <u>IHCE</u>           | J344 A14 (21)†  | J348 A7 (22)   |
| <u>ILWE</u>           | J344 A13 (21)†  | J348 A6 (22)   |
| <u>IOI</u>            | J106 B8 (27)†   | J110 A18 (16)  |
| <u>IOSEL</u>          | J106 B10 (27)†  | J110 B20 (15)  |
| <u>LINE TRIGGER</u>   | J104 B1 (30)†   | P120 B25 (2)   |
| <u>LOCAL LT</u>       | J448 A4 (13)†   | P669 2 (1)     |
| <u>LOCAL PB</u>       | J448 B4 (13)    | P669 9 (1)†    |
| <u>LOCAL/REMOTE</u>   | J448 B23 (13)†* |                |
| <u>LOCKOUT</u>        | J448 A27 (13)†* |                |
| <u>LOCKOUT LT</u>     | J448 A5 (13)†   | P669 1 (1)     |
| <u>LSEND</u>          | J106 A36 (28)   | J344 B39 (21)  |
| <u>MAIN INT</u>       | P120 A40 (2)    | J448 B7 (13)†  |
| <u>MAIN INT POT</u>   | J448 B6 (13)†   | P668 5 (1)     |
| <u>MDRON</u>          | J344 B17 (21)†  | J348 B9 (22)   |
| <u>MF CHAN SWITCH</u> | P120 B1 (2)     | J544 A11 (4)†  |
| <u>MPUCLK</u>         | J110 B13 (15)   | J444 B13 (25)† |
| <u>NDAC</u>           | P002 A13 (34)   | J106 A6 (28)   |
| <u>NRFD</u>           | P002 A14 (34)   | J106 A7 (28)   |
| <u>NSG</u>            | J344 A10 (19)†  | J444 A7 (25)   |
| <u>OOL</u>            | J548 B15 (8)†   | J644 A15 (12)  |
| <u>PMCI</u>           | J110 A16 (16)   | J344 A24 (20)† |
| <u>PMCSEL</u>         | J110 B18 (15)†  | J344 B24 (19)  |

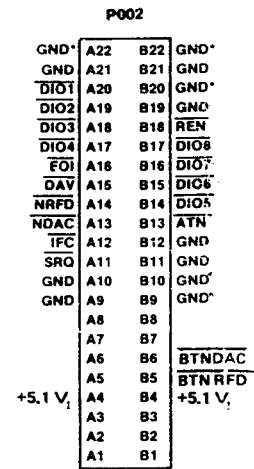
| SIGNAL                | PINOUT         |                |                |
|-----------------------|----------------|----------------|----------------|
| <u>PON</u>            | J104 B25 (30)† | J110 B15 (15)  | J344 A44 (21)  |
| <u>PREAMP VIDEO</u>   | J644 B5 (11)   | P660 2 (10)†   |                |
| <u>PROTECT ENABLE</u> | P634 3 (7)     | J644 A26 (12)  |                |
| <u>PWRON</u>          | J104 A33 (30)† | P666 8 (1)     |                |
| <u>PWRON RET</u>      | J104 A34 (30)  | P666 9 (1)†    |                |
| <u>R-REN</u>          | J106 A14 (28)† | J110 A21 (16)  |                |
| <u>RAMSEL</u>         | J110 A2 (15)†  | P514 B15 (16)  |                |
| <u>READOUT OFF</u>    | J448 B12 (13)  | P668 2 (1)†    |                |
| <u>READOUT ON</u>     | J448 B5 (13)   | P668 1 (1)†    |                |
| <u>REM LT</u>         | J448 A3 (13)†  | P669 3 (1)     |                |
| <u>REM PB</u>         | J448 B3 (13)   | P669 8 (1)†    |                |
| <u>REN</u>            | P002 B18 (34)† | J106 A21 (28)  |                |
| <u>ROMSELA</u>        | J110 B11 (15)* |                |                |
| <u>ROMSELE</u>        | J110 B9 (15)†  | P514 B17 (16)  |                |
| <u>ROMSELF</u>        | J110 A3 (15)†  | P514 B16 (16)  |                |
| <u>ROST</u>           | J110 A24 (17)† | P120 A27 (3)   |                |
| <u>ROT</u>            | J110 A25 (17)† | P120 A28 (3)   |                |
| <u>RST</u>            | J106 A21 (27)† | J110 A14 (15)  | P514 B18 (16)  |
| <u>RO VIDEO</u>       | J448 B18 (14)† | J644 A18 (12)  |                |
| <u>SGE</u>            | J448 B29 (13)  | J544 A28 (4)†  |                |
| <u>SHIFT</u>          | J110 A23 (17)† | P120 A26 (3)   |                |
| <u>SRQ</u>            | P002 A11 (34)  | J106 A4 (28)†  |                |
| <u>SS ARMED</u>       | P120 A7 (2)†   | J448 A25 (13)  |                |
| <u>SS MODE</u>        | P120 A10 (2)†  | J448 B24 (13)  |                |
| <u>STROBE</u>         | J110 B30 (15)† | J344 B25 (19)  | J448 B16 (13)  |
| <u>SVID</u>           | J444 B8 (25)   | J644 A1 (11)†  |                |
| <u>SWP GATE</u>       | P120 B23 (2)†  | J444 B28 (25)  | J448 A28 (13)  |
| <u>SWP LOCKOUT</u>    | P120 A6 (2)    | J544 A15 (4)†  |                |
| <u>SYNC OUT</u>       | P638 6 (34)    | J644 B23 (12)† |                |
| <u>SYNC LP1</u>       | P638 2 (34)    | J644 A24 (12)  |                |
| <u>SYNC LP2</u>       | P638 6 (34)    | J644 B25 (12)  |                |
| <u>SLOWSWP</u>        | J444 A17       | J344 A5        |                |
| <u>TD0</u>            | J348 A1 (23)†  | J444 A1 (26)   |                |
| <u>TD1</u>            | J348 B1 (23)†  | J444 B1 (26)   |                |
| <u>TD2</u>            | J348 A2 (23)†  | J444 A2 (26)   |                |
| <u>TD3</u>            | J348 B2 (23)†  | J444 B2 (26)   |                |
| <u>TD4</u>            | J348 A3 (23)†  | J444 A3 (26)   |                |
| <u>TD5</u>            | J348 B3 (23)†  | J444 B3 (26)   |                |
| <u>TD6</u>            | J348 A4 (23)†  | J444 A4 (26)   |                |
| <u>TD7</u>            | J348 B4 (23)†  | J444 B4 (26)   |                |
| <u>TD8</u>            | J348 A5 (23)†  | J444 A5 (26)   |                |
| <u>TIMESLOT</u>       | J110 A22 (17)† | P120 A25 (3)   |                |
| <u>TLTRSEL</u>        | J110 B17 (15)† | J448 B20 (13)  | P514 B19 (16)  |
| <u>TV/DIG</u>         | J448 B25 (13)† | J544 B28 (4)   | J548 B26 (8)   |
| <u>TV LT</u>          | J448 A1 (13)†  | P669 5 (1)     |                |
| <u>TV PB</u>          | J448 B1 (13)   | P669 6 (1)†    |                |
| <u>+VERT GRAT</u>     | J544 B8 (4)†   | P664 1 (5)     |                |
| <u>-VERT GRAT</u>     | J544 B6 (4)†   | P664 3 (5)     |                |
| <u>VMA</u>            | J110 B19 (15)† | P514 A1 (16)   |                |
| <u>WRITE</u>          | J106 B36 (27)  | J110 B47 (15)† | J344 A25 (19)  |
| <u>+X</u>             | J548 A5 (9)†   | P662 6 (9)     |                |
| <u>-X</u>             | J548 A4 (9)†   | P662 4 (9)     |                |
| <u>XDR</u>            | J344 A9 (20)   | J444 A6 (25)†  |                |
| <u>XRG</u>            | J444 B21 (26)† | J644 A21 (12)  |                |
| <u>X REF</u>          | J448 B14 (14)  | J548 B13 (8)   | J644 A14 (12)† |
| <u>X RAMP</u>         | J548 B21 (8)†  | J644 A3 (11)   |                |
| <u>X START</u>        | J548 B12 (8)   | J644 A12 (12)† |                |
| <u>+Y</u>             | J548 A2 (9)†   | P662 1 (9)     |                |
| <u>-Y</u>             | J548 A1 (9)†   | P662 3 (9)     |                |
| <u>Y RAMP</u>         | J548 B20 (8)†  | J644 A4 (11)   |                |
| <u>Y REF</u>          | J448 B13 (14)  | J644 A13 (12)† |                |

| SIGNAL                    | PINOUT   |
|---------------------------|--|
| 44 A44 (21) J448 A24 (13) | Y START J548 B11 (8) J644 A11 (12)†  |
|                           | YDR J344 B5 (20) J444 B5 (25)†   |
|                           | YRG J444 B20 (25)† J644 A20 (12)   |
|                           | YSENT J106 A35 (28)† J344 A39 (21)   |
|                           | Z-AXIS INHIBIT P120 B2 (2) J544 A13 (4)† J444 B17                                |
|                           | ZG INT J544 B23 (4)† P634 1 (7)  |
|                           | 7KATN J110 A37 (17)† P120 B29 (3)  |
|                           | 7KDAV J110 A41 (17)† P120 A35 (3)  |
|                           | 7KDIO1 J110 A34 (17) P120 A32 (3)  |
|                           | 7KDIO2 J110 A32 (17) P120 B27 (3)  |
|                           | 7KDIO3 J110 A33 (17) P120 A31 (3)  |
|                           | 7KDIO4 J110 A31 (17) P120 B26 (3)  |
|                           | 7KDIO5 J110 A44 (17) P120 A38 (3)  |
|                           | 7KDIO6 J110 A45 (17) P120 A39 (3)  |
|                           | 7KDIO7 J110 A42 (17) P120 A36 (3)  |
|                           | 7KDIO8 J110 A43 (17) P120 A37 (3)  |
| 14 B18 (16)               | 7KEOI J110 A26 (17)† P120 A29 (3)  |
|                           | 7KIFC J110 A38 (17)† P120 B30 (3)  |
|                           | 7KLVADR J110 A30 (17)† P120 B36 (3)  |
|                           | 7KNDAC J110 A35 (17) P120 A33 (3)†   |
|                           | 7KNRFD J110 A40 (17) P120 A34 (3)†   |
|                           | 7KREN J110 A36 (17)† P120 B28 (3)  |
|                           | 7KRVADR J110 A29 (17)† P120 B35 (3)  |
| 18 B16 (13) P514 B11 (16) | 7KSND J110 A39 (17) P120 B31 (3)†  |
| 18 A28 (13) J544 A25 (4)  | 7KSRQ J110 A27 (17) P120 A30 (3)†  |
|                           | μMA0 J344 B2 (20)*   |
|                           | μMA1 J344 A2 (20)*   |
|                           | μMA2 J344 B1 (20)*   |
|                           | μMA3 J344 A1 (20)*   |
|                           | μMA4 J344 B4 (20)*   |
|                           | μMA5 J344 A4 (20)*   |
|                           | μMA6 J344 B3 (20)*   |
|                           | μMA7 J344 A3 (20)*   |
|                           | μMA8 J344 A7 (20)*   |
|                           | μMA9 J344 B7 (20)*   |
|                           | μMA10 J344 A8 (20)*  |
|                           | 5 MHz J444 B15 (25)† J544 A21 (4) J644 A28 (12)                                  |
|                           | 20 MHz J344 A20 (21) J444 A8 (25)†   |
|                           | +5 V J104 A10,B10,A11,B11 (30)† P120 A18,B18 (3)                                 |
| 4 B19 (16)                | J544 A32,B32 (4) J548 A32,B32 (8)  |
| 8 B26 (8) J644 A25 (12)   | P632 4 (10) J644 A32,B32 (11)  |
|                           | P628 3 (10) P630 4 (6)   |
|                           | P626 2 (5) P666 4 (1)  |
|                           | +5.1 V <sub>I</sub> J104 A17,B17 P002 A4 B4 J106 B4 (28)                         |
|                           | J110 A5,B5,A6,B6 (17) J348 A32,B32 (22)  |
|                           | P666 1 (1)   |
| 4 A25 (19) P514 B12 (16)  | +5.1 V <sub>I</sub> J104 A18,B18,A19,B19 (30)† P120 A16,B16,A17,B17 (3)          |
|                           | +5.1 V <sub>I</sub> J104 A20,B20,A21,B21 (30)† J344 A45,B45,A46,B46,A47,B47 (19) |
|                           | J448 A32,B32 (14)  |
|                           | +5.1 V <sub>I</sub> J104 A22,B22,A23,B23 (30)† J348 A33,B33,A34,B34 (22)         |
| 4 A14 (12)†               | J444 A34,B34 (26)  |
|                           | +5.1 V <sub>M</sub> J104 A24,B24 (30) J348 A32,B32 (22)                          |

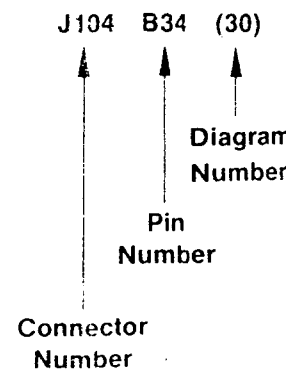
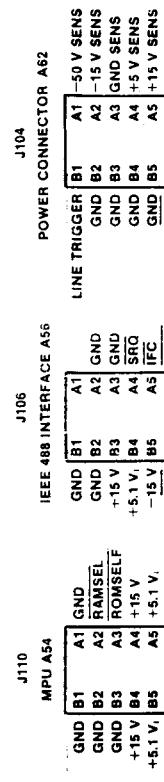
†Signal Source  
\*Unused Signal

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| SIGNAL                 | PINOUT  |  |
|------------------------|---|--|
| +15 V                  | J104 A12,B12,A13,B13 (30)†<br>J110 A4,B4 (17)<br>J448 A33,B33 (14)<br>J548 A33,B33 (8)<br>P626 5 (5)<br>P628 4 (10)<br>P666 3 (1) | J106 B3 (28)<br>P120 A14,B14 (3)<br>J544 A33,B33 (4)<br>J644 A33,B33 (11)<br>P632 5 (10)<br>P630 5 (6)           |
| +19 V                  | J104 A42 (30)†  | P624 3 (7)   |
| +50 V                  | J104 A14,B14 (30)<br>J448 A34,B34 (14)<br>J548 A34,B34 (8)<br>P626 1 (5)<br>P628 5 (10)   | P120 A13,B13 (3)<br>J544 A34,B34 (4)<br>J644 A34,B34 (11)*<br>P632 6 (10)<br>P630 6 (6)                          |
| +130 V                 | J104 B37 (30)†  | P632 7 (10) P630 7   |
| +365 V                 | J104 B39 (30)†<br>P632 9 (10)   | P630 9 (6)   |
| -2 V SHORT TO -2V SENS | J104 A46,B46,A47,B47 (30)†  | J444 A32,B32,A33,B33 (26)  |
| -5.2 V <sub>1</sub>    | J104 A44,B44,B45 (30)†<br>J444 A30,B30,A31,B31 (26)   | J110 A7,B7 (17)  |
| -5.2 V <sub>2</sub>    | J104 A45 (30)   | P120, A20,B20 (3)  |
| -15 V <sub>1</sub>     | P120 B40 (2)*   |  |
| -15 V                  | J104 A9,B9 (30)<br>J110 A8,B8 (17)*<br>J448 A31,B31 (14)<br>J548 A31,B31 (8)<br>P626 3 (5)<br>P628 1 (10)<br>P666 6 (1)           | J106 B5 (28)<br>P120 A21,B21<br>J544 A31,B31 (4)<br>J644 A31,B31 (11)<br>P632 2 (10)<br>P630 2 (6)<br>P668 3 (1) |
| -19 V                  | J104 B42 (30)†  | P624 2 (7)   |
| -50 V                  | J104 A8,B8 (30)†<br>J448 A30,B30 (14)<br>J548 A30,B30 (8)<br>P630 1 (6)   | P120 A22,B22 (3)<br>J544 A30,B30 (4)<br>J644 A30,B30 (11)<br>P632 1 (10)   |
| ±19 V GND              | J104 A43,B43 (30)   | P624 1 (7)   |
| +5 V SENS              | J104 A4 (30)  | P120 B8 (3)†   |
| +5.1 V SENS            | J104 B33 (30)   |  |
| +15 V SENS             | J104 A5 (30)  | P120 B7 (3)†   |
| +50 V SENS             | J104 A6 (30)  | P120 B6 (3)†   |
| -2 V SENS              | J104 B35 (30) SHORT TO -2V  |  |
| -5.2 V SENS            | J104 B34 (30)   |  |
| -15 V SENS             | J104 A2 (30)  | P120 B10 (3)†  |
| -50 V SENS             | J104 A1 (30)  | P120 B11 (3)†  |



\*UNUSED



P002

|     |     |        |
|-----|-----|--------|
| A22 | B22 | GND    |
| A21 | B21 | GND    |
| A20 | B20 | GND    |
| A19 | B19 | GND    |
| A18 | B18 | REN    |
| A17 | B17 | DIO8   |
| A16 | B16 | DIO7   |
| A15 | B15 | DIO6   |
| A14 | B14 | DIO5   |
| A13 | B13 | ATN    |
| A12 | B12 | GND    |
| A11 | B11 | GND    |
| A10 | B10 | GND    |
| A9  | B9  | GND    |
| A8  | B8  | GND    |
| A7  | B7  | GND    |
| A6  | B6  | BTNDAC |
| A5  | B5  | BTNRFD |
| A4  | B4  | +5.1 V |
| A3  | B3  |        |
| A2  | B2  |        |
| A1  | B1  |        |

J104 POWER CONNECTOR A62

|     |            |
|-----|------------|
| A1  | -50 V SENS |
| A2  | -15 V SENS |
| A3  | GND SENS   |
| A4  | +5 V SENS  |
| A5  | +15 V SENS |
| A6  | +50 V SENS |
| A7  | GND        |
| A8  | -50 V      |
| A9  | -15 V      |
| A10 | +5 V       |
| A11 | +5 V       |
| A12 | +15 V      |
| A13 | +50 V      |
| A14 | +50 V      |
| A15 | GND        |
| A16 | GND        |
| A17 | +5.1 V     |
| A18 | +5.1 V     |
| A19 | +5.1 V     |
| A20 | +5.1 V     |
| A21 | +5.1 V     |
| A22 | +5.1 V     |
| A23 | +5.1 V     |
| A24 | +5.1 V     |
| A25 | +5.1 V     |
| A26 | +5.1 V     |
| A27 | +5.1 V     |
| A28 | +5.1 V     |
| A29 | +5.1 V     |
| A30 | +5.1 V     |
| A31 | +5.1 V     |
| A32 | +5.1 V     |
| A33 | +5.1 V     |
| A34 | +5.1 V     |
| A35 | +5.1 V     |
| A36 | +5.1 V     |
| A37 | +5.1 V     |
| A38 | +5.1 V     |
| A39 | +5.1 V     |
| A40 | +5.1 V     |
| A41 | +5.1 V     |
| A42 | +5.1 V     |
| A43 | +5.1 V     |
| A44 | +5.1 V     |
| A45 | +5.1 V     |
| A46 | +5.1 V     |
| A47 | +5.1 V     |
| A48 | +5.1 V     |
| A49 | +5.1 V     |
| A50 | +5.1 V     |

J106 IEEE 488 INTERFACE A56

|     |         |
|-----|---------|
| A1  | GND     |
| A2  | GND     |
| A3  | GND     |
| A4  | SRO     |
| A5  | IFC     |
| A6  | NDAC    |
| A7  | NRFD    |
| A8  | DAV     |
| A9  | EOI     |
| A10 | DIO4    |
| A11 | DIO3    |
| A12 | DIO2    |
| A13 | DIO1    |
| A14 | R-REN   |
| A15 | GND     |
| A16 | ATN     |
| A17 | DIO5    |
| A18 | DIO6    |
| A19 | DIO7    |
| A20 | DIO8    |
| A21 | REN     |
| A22 | GND     |
| A23 | GND     |
| A24 | BTNDAC  |
| A25 | BTNRFD  |
| A26 | DAC/ADV |
| A27 | HD0     |
| A28 | HD1     |
| A29 | HD2     |
| A30 | HD3     |
| A31 | HD4     |
| A32 | HD5     |
| A33 | HD6     |
| A34 | HD7     |
| A35 | B2M/ZEN |
| A36 | YSENT   |
| A37 | LSEND   |
| A38 | WRITE   |
| A39 | WRITE   |
| A40 | WRITE   |
| A41 | WRITE   |
| A42 | WRITE   |
| A43 | WRITE   |
| A44 | WRITE   |
| A45 | WRITE   |
| A46 | WRITE   |
| A47 | WRITE   |
| A48 | WRITE   |
| A49 | WRITE   |
| A50 | WRITE   |

J110 MPU A54

|     |         |
|-----|---------|
| A1  | GND     |
| A2  | RAMSEL  |
| A3  | ROMSELF |
| A4  | +15 V   |
| A5  | +5.1 V  |
| A6  | +5.1 V  |
| A7  | -5.2 V  |
| A8  | -15 V   |
| A9  | ROMSELE |
| A10 | GND     |
| A11 | GND     |
| A12 | FPI     |
| A13 | RST     |
| A14 | IFI     |
| A15 | PMCI    |
| A16 | GND     |
| A17 | GND     |
| A18 | GND     |
| A19 | GND     |
| A20 | GND     |
| A21 | GND     |
| A22 | GND     |
| A23 | GND     |
| A24 | GND     |
| A25 | GND     |
| A26 | GND     |
| A27 | GND     |
| A28 | GND     |
| A29 | GND     |
| A30 | GND     |
| A31 | GND     |
| A32 | GND     |
| A33 | GND     |
| A34 | GND     |
| A35 | GND     |
| A36 | GND     |
| A37 | GND     |
| A38 | GND     |
| A39 | GND     |
| A40 | GND     |
| A41 | GND     |
| A42 | GND     |
| A43 | GND     |
| A44 | GND     |
| A45 | GND     |
| A46 | GND     |
| A47 | GND     |
| A48 | GND     |
| A49 | GND     |
| A50 | GND     |

\*UNUSED

\*UNUSED

ANALOG DATA

LOCATED APPROX. HERE



J344 MEMORY CONTROL A16

|     |     |         |
|-----|-----|---------|
| A50 | B50 | GND     |
| A49 | B49 | GND     |
| A48 | B48 | GND     |
| A47 | B47 | +5.1 V  |
| A46 | B46 | +5.1 V  |
| A45 | B45 | +5.1 V  |
| A44 | B44 | DAC/ADV |
| A43 | B43 | HD6     |
| A42 | B42 | HD4     |
| A41 | B41 | HD2     |
| A40 | B40 | HD0     |
| A39 | B39 | LSEND   |
| A38 | B38 | B2M/ZEN |
| A37 | B37 | BD6     |
| A36 | B36 | BD4     |
| A35 | B35 | BD2     |
| A34 | B34 | BD0     |
| A33 | B33 | GND     |
| A32 | B32 | GND     |
| A31 | B31 | BADR10* |
| A30 | B30 | BADR8*  |
| A29 | B29 | BADR6*  |
| A28 | B28 | BADR4*  |
| A27 | B27 | BADR2   |
| A26 | B26 | BADR0   |
| A25 | B25 | STROBE  |
| A24 | B24 | PMCSSEL |
| A23 | B23 | CPO11   |
| A22 | B22 | CPO10   |
| A21 | B21 | CPO9    |
| A20 | B20 | CPO8    |
| A19 | B19 | CP12    |
| A18 | B18 | CLKMAR  |
| A17 | B17 | MDRON   |
| A16 | B16 | CPO15   |
| A15 | B15 | CPO14   |
| A14 | B14 | CPO13   |
| A13 | B13 | CLKMDR  |
| A12 | B12 | GND     |
| A11 | B11 | GND     |
| A10 | B10 | DIG     |
| A9  | B9  | DAC/ADV |
| A8  | B8  | GND     |
| A7  | B7  | MA9*    |
| A6  | B6  | GND     |
| A5  | B5  | YDR     |
| A4  | B4  | MA4*    |
| A3  | B3  | MA6*    |
| A2  | B2  | MA0*    |
| A1  | B1  | MA2*    |

J348 DATA MEMORY A18

|     |     |        |
|-----|-----|--------|
| A36 | B36 | GND    |
| A35 | B35 | GND    |
| A34 | B34 | +5.1 V |
| A33 | B33 | +5.1 V |
| A32 | B32 | +5.1 V |
| A31 | B31 | GND    |
| A30 | B30 | GND    |
| A29 | B29 | GND    |
| A28 | B28 | GND    |
| A27 | B27 | GND    |
| A26 | B26 | GND    |
| A25 | B25 | GND    |
| A24 | B24 | GND    |
| A23 | B23 | GND    |
| A22 | B22 | GND    |
| A21 | B21 | GND    |
| A20 | B20 | GND    |
| A19 | B19 | GND    |
| A18 | B18 | GND    |
| A17 | B17 | GND    |
| A16 | B16 | GND    |
| A15 | B15 | CPO11  |
| A14 | B14 | CPO10  |
| A13 | B13 | CPO9   |
| A12 | B12 | CPO8   |
| A11 | B11 | CPO12  |
| A10 | B10 | CLKMAR |
| A9  | B9  | MDRON  |
| A8  | B8  | CPO15  |
| A7  | B7  | CPO14  |
| A6  | B6  | CPO13  |
| A5  | B5  | CLKMDR |
| A4  | B4  | TD7    |
| A3  | B3  | TD5    |
| A2  | B2  | TD3    |
| A1  | B1  | TD1    |

J444 DATA BUFFER A20

|     |     |                |
|-----|-----|----------------|
| A36 | B36 | GND            |
| A35 | B35 | GND            |
| A34 | B34 | +5.1 V         |
| A33 | B33 | -2 V           |
| A32 | B32 | -2 V           |
| A31 | B31 | -5.2 V         |
| A30 | B30 | -5.2 V         |
| A29 | B29 | GND            |
| A28 | B28 | SWP GATE       |
| A27 | B27 | GND            |
| A26 | B26 | GND            |
| A25 | B25 | GND            |
| A24 | B24 | GND            |
| A23 | B23 | GND            |
| A22 | B22 | GND            |
| A21 | B21 | XRG            |
| A20 | B20 | YRG            |
| A19 | B19 | CDB*           |
| A18 | B18 | GND            |
| A17 | B17 | Z AXIS INHIBIT |
| A16 | B16 | GND            |
| A15 | B15 | 5 MHz          |
| A14 | B14 | GND            |
| A13 | B13 | MPUCLK         |
| A12 | B12 | GND            |
| A11 | B11 | GND            |
| A10 | B10 | GND            |
| A9  | B9  | GND            |
| A8  | B8  | SVID           |
| A7  | B7  | DIG            |
| A6  | B6  | DAC/ADV        |
| A5  | B5  | YDR            |
| A4  | B4  | TD7            |
| A3  | B3  | TD5            |
| A2  | B2  | TD3            |
| A1  | B1  | TD1            |

J448 TRANSLATOR

|     |     |              |
|-----|-----|--------------|
| A36 | B36 | GND          |
| A35 | B35 | GND          |
| A34 | B34 | +50 V        |
| A33 | B33 | +15 V        |
| A32 | B32 | -5.1 V       |
| A31 | B31 | -15 V        |
| A30 | B30 | -50 V        |
| A29 | B29 | GRAT ONLY    |
| A28 | B28 | SWP GATE     |
| A27 | B27 | LOCKOUT      |
| A26 | B26 | ARM SS       |
| A25 | B25 | SS ARMED     |
| A24 | B24 | PON          |
| A23 | B23 | GND          |
| A22 | B22 | GND          |
| A21 | B21 | FPI          |
| A20 | B20 | DECREASE INT |
| A19 | B19 | BD7          |
| A18 | B18 | BD6          |
| A17 | B17 | BD5          |
| A16 | B16 | BD4          |
| A15 | B15 | BD3          |
| A14 | B14 | BD2          |
| A13 | B13 | BD1          |
| A12 | B12 | BD0          |
| A11 | B11 | BADR5        |
| A10 | B10 | BADR4        |
| A9  | B9  | BADR3        |
| A8  | B8  | BADR2        |
| A7  | B7  | BADR1        |
| A6  | B6  | BADR0        |
| A5  | B5  | LOCKOUT LT   |
| A4  | B4  | LOCAL LT     |
| A3  | B3  | REM LT       |
| A2  | B2  | DIG LT       |
| A1  | B1  | TV LT        |

J104 B34 (30)  
Diagram Number  
Pin Number  
Connector Number

REV APR 1982

\*UNUSED

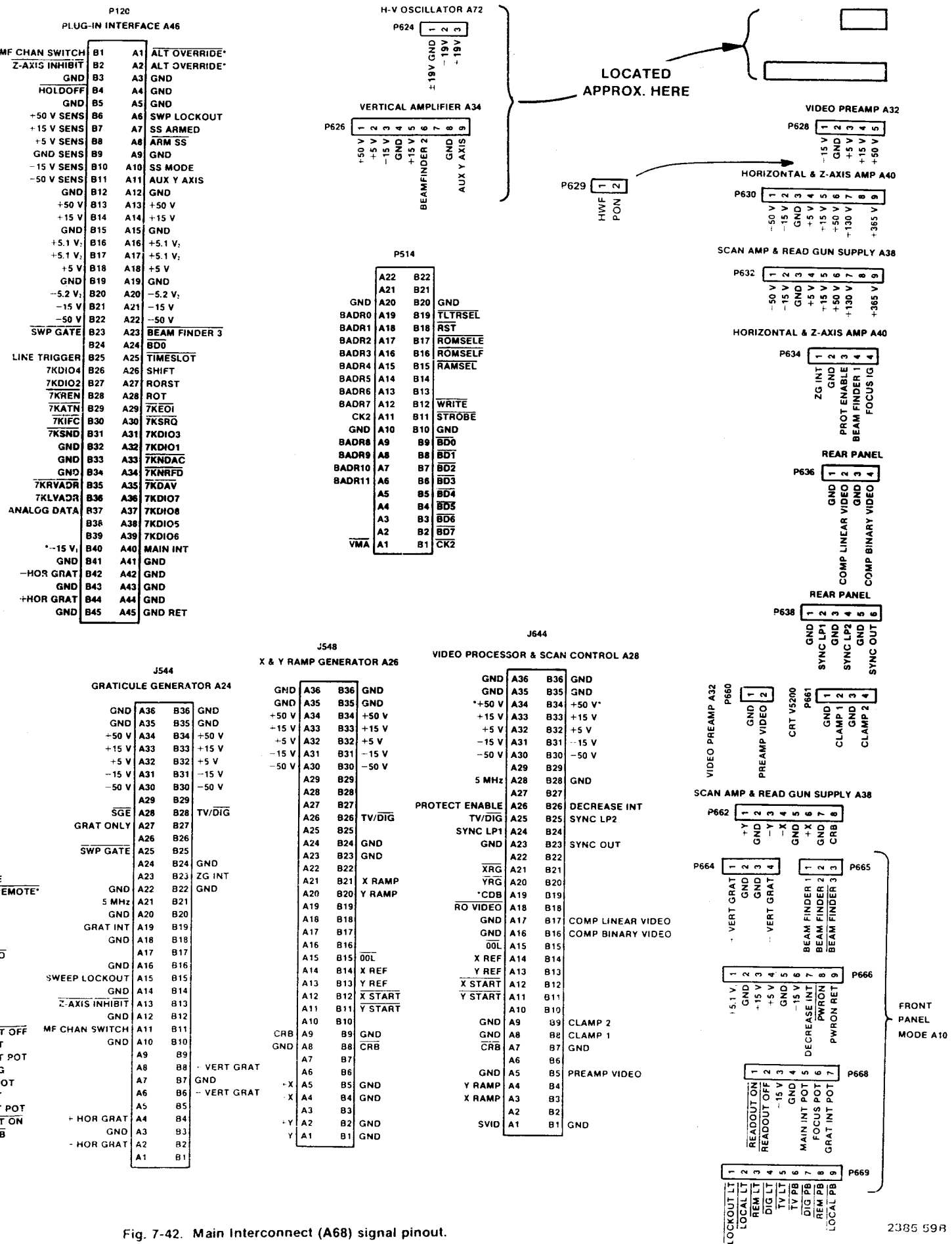


Fig. 7-42. Main Interconnect (A68) signal pinout.

(A68) CONNECT

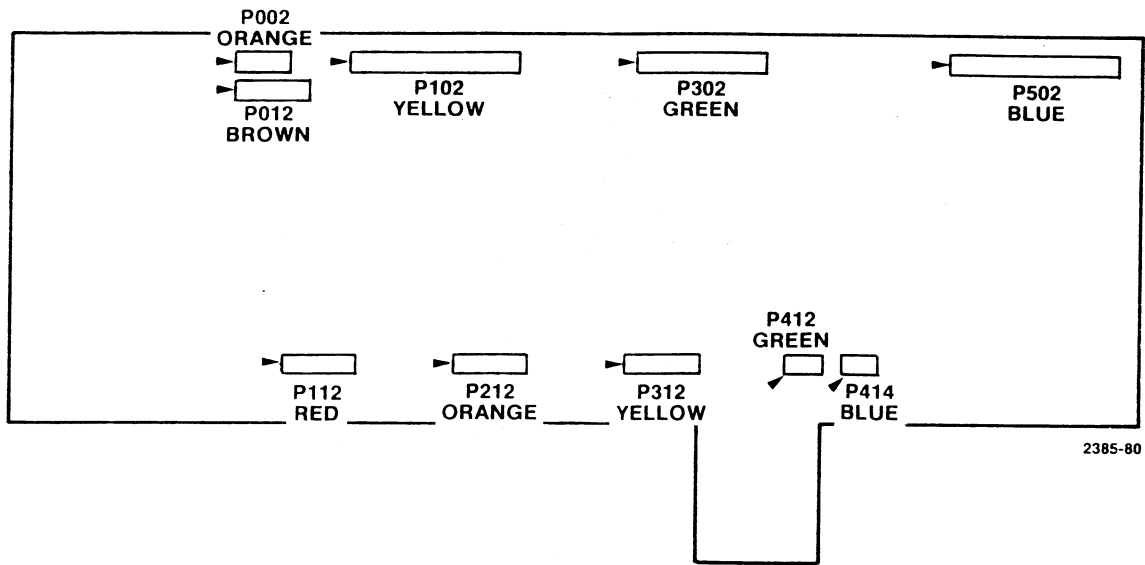


Fig. 7-43. Front Panel Mode, A10, wiring diagram.

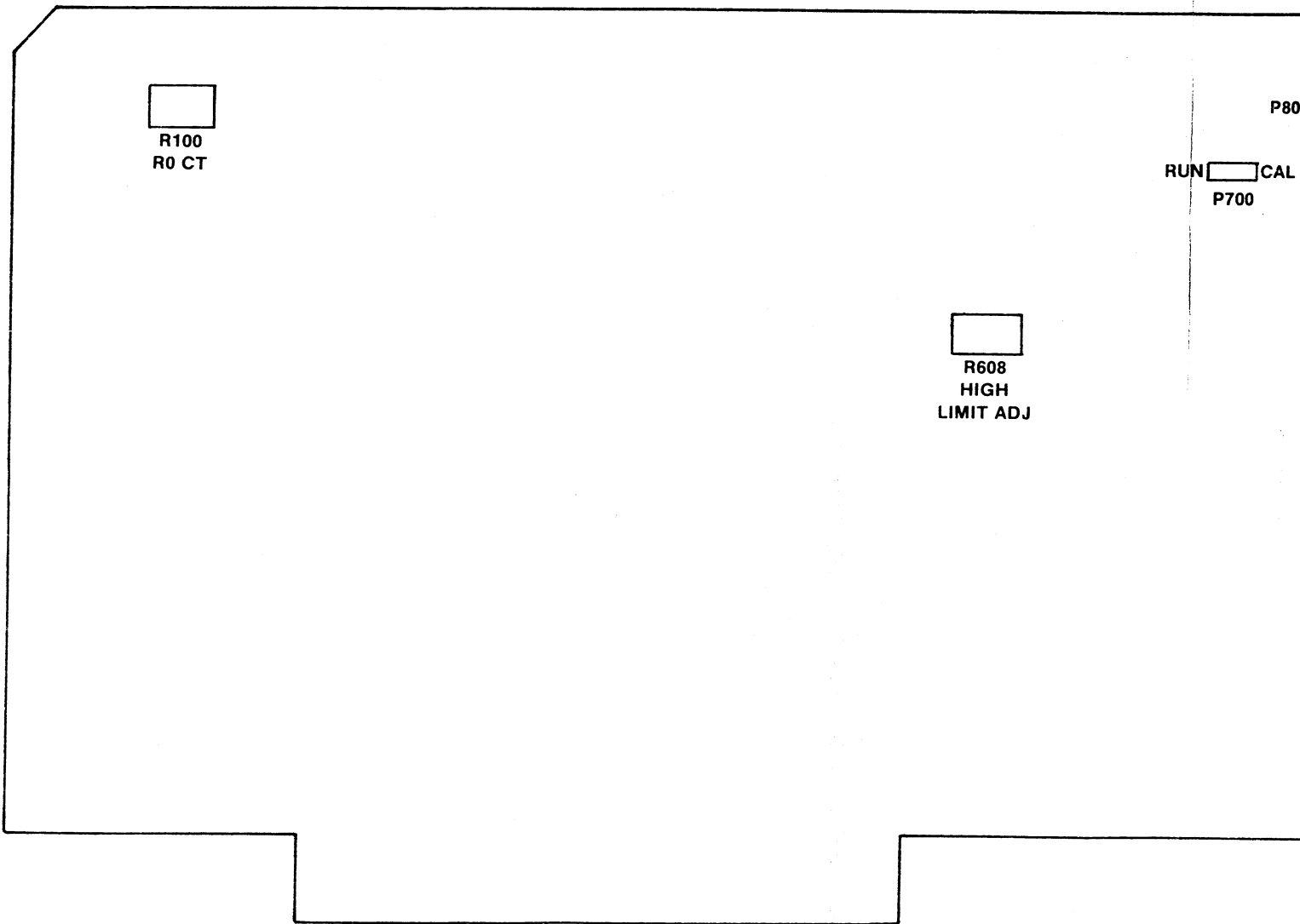
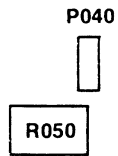
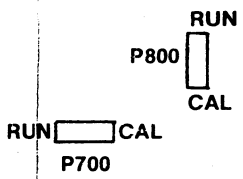
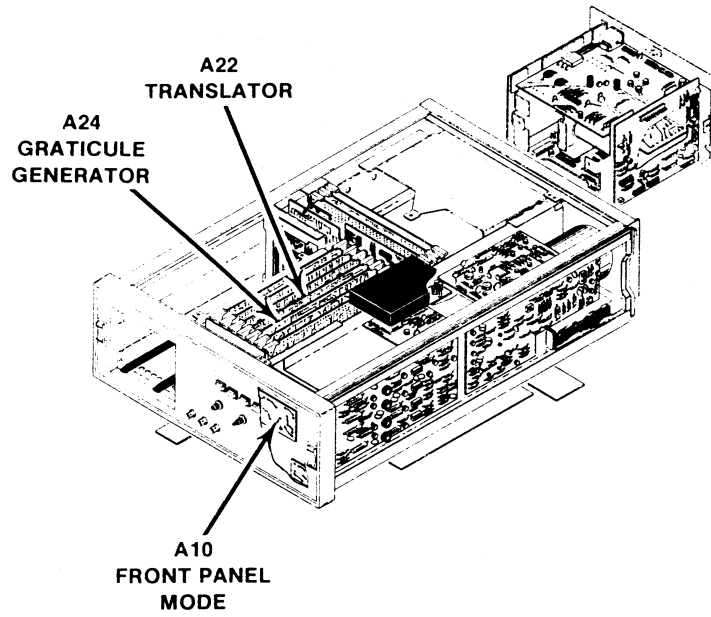


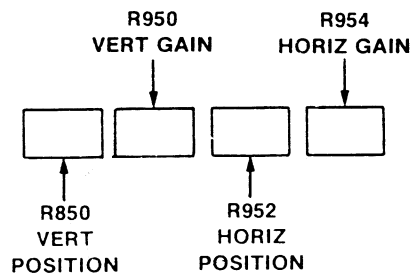
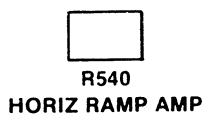
Fig. 7-44. Translator, A22, calibration diagram.





2385-81

Fig. 7-45. Graticule Generator, A24.



2385-82

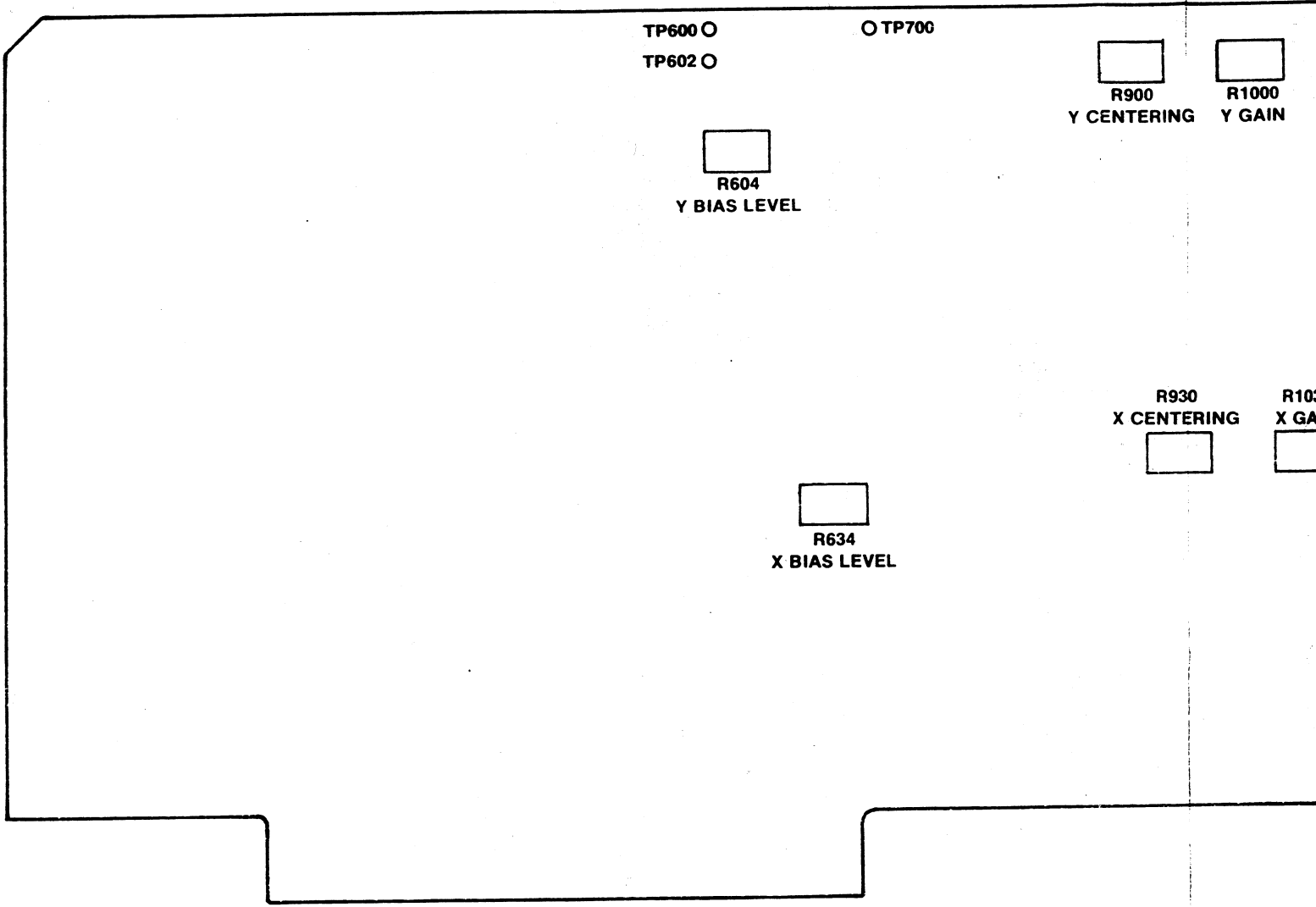
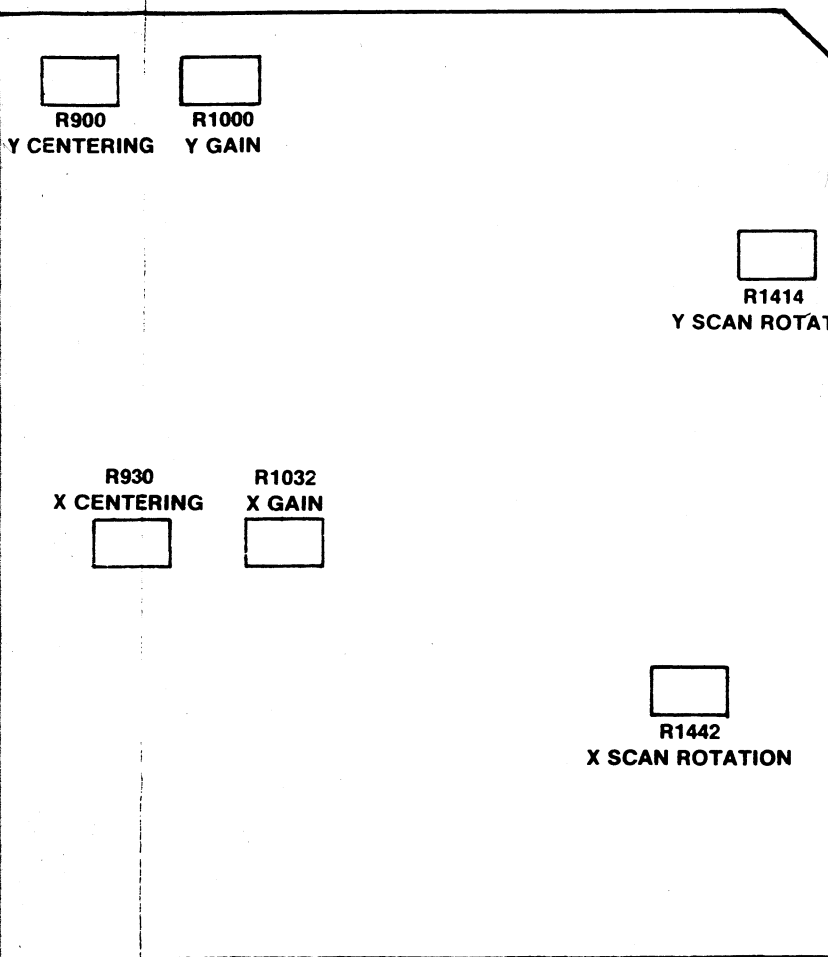


Fig. 7-46. X & Y Ramp Generator, A26, calibration diagram.



2385-77

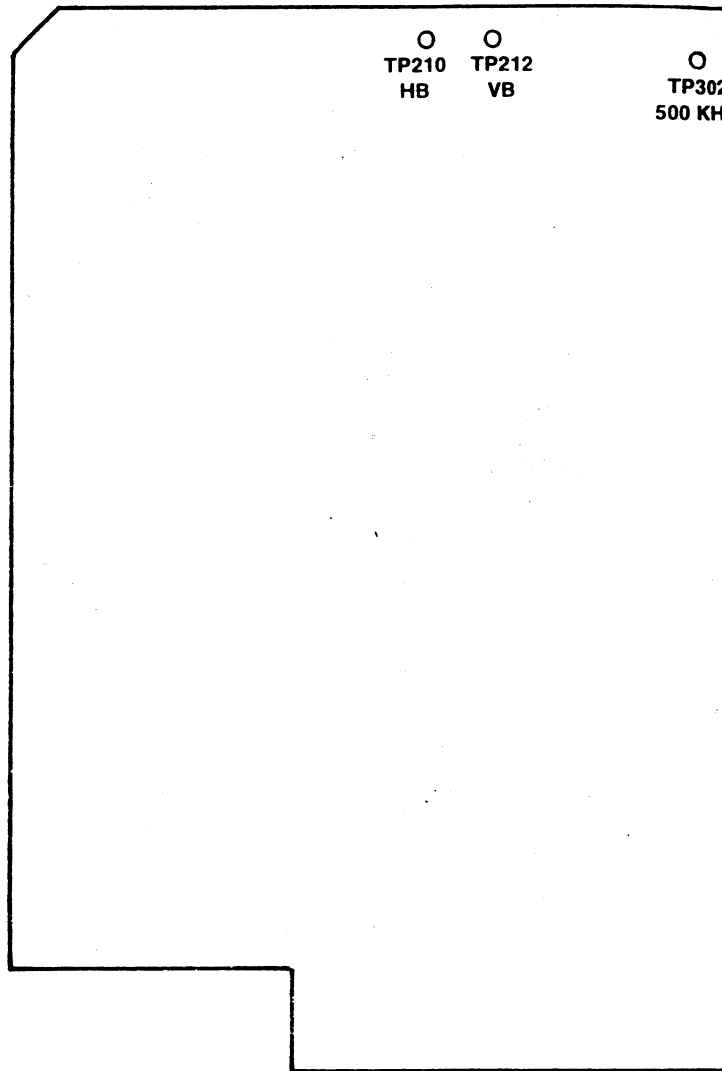
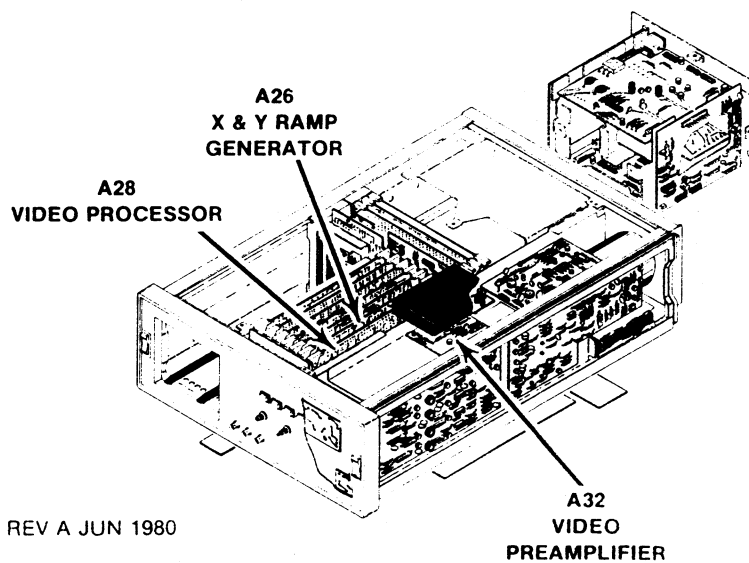
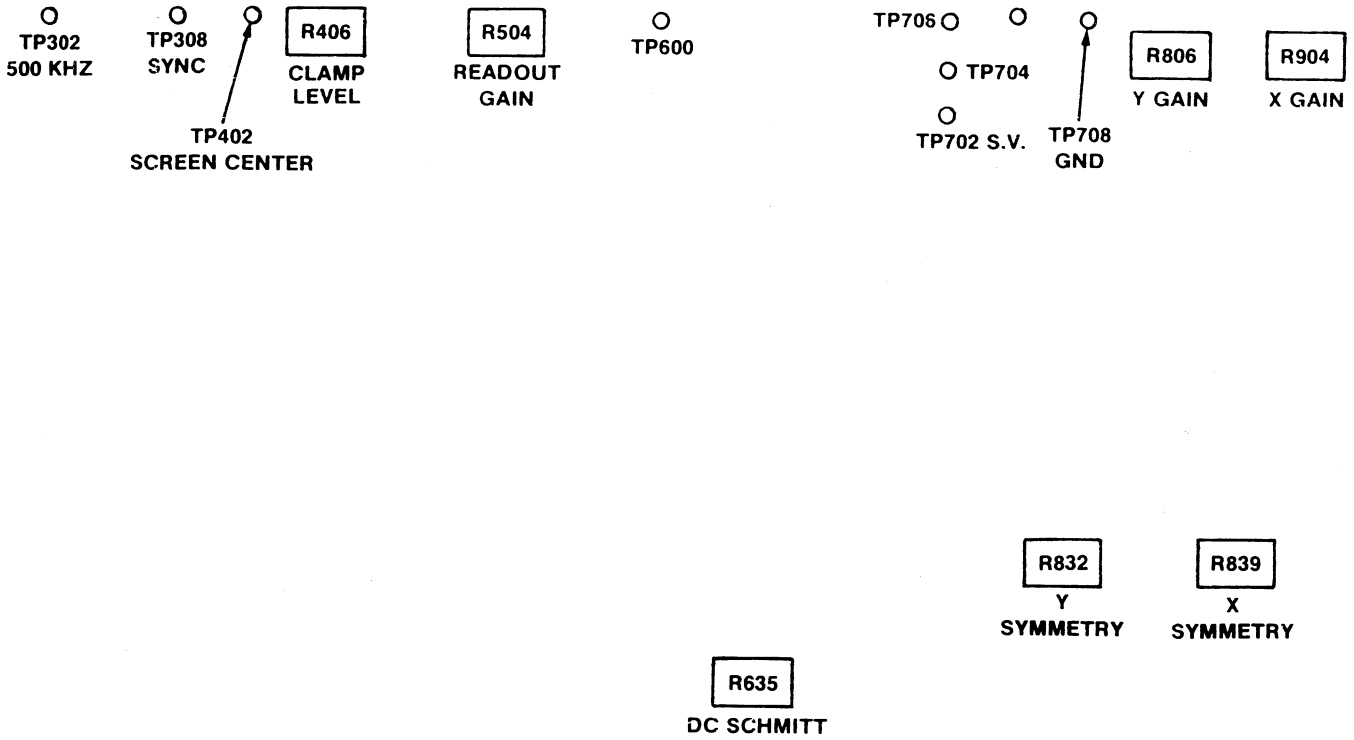


Fig. 7-47. Video Processor, A28,

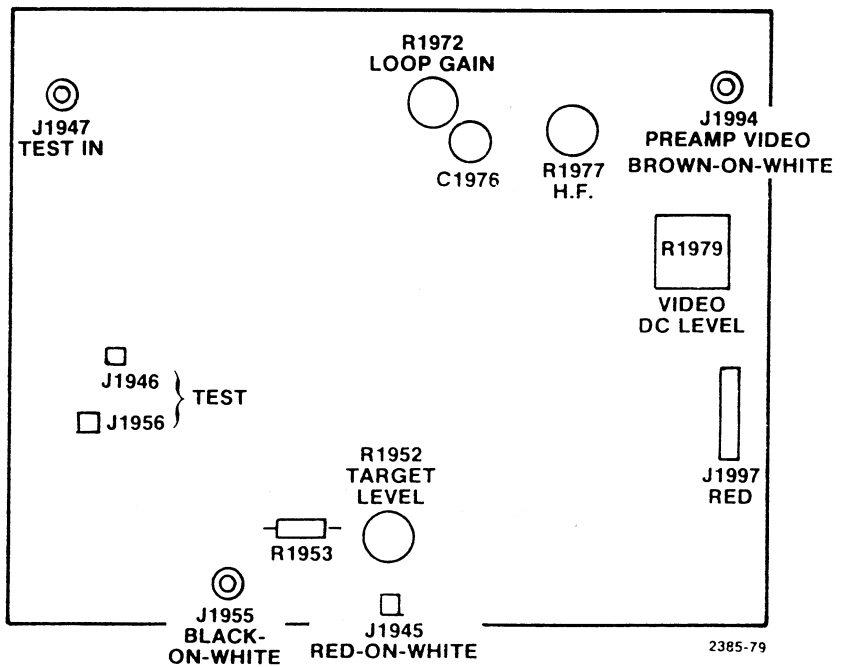


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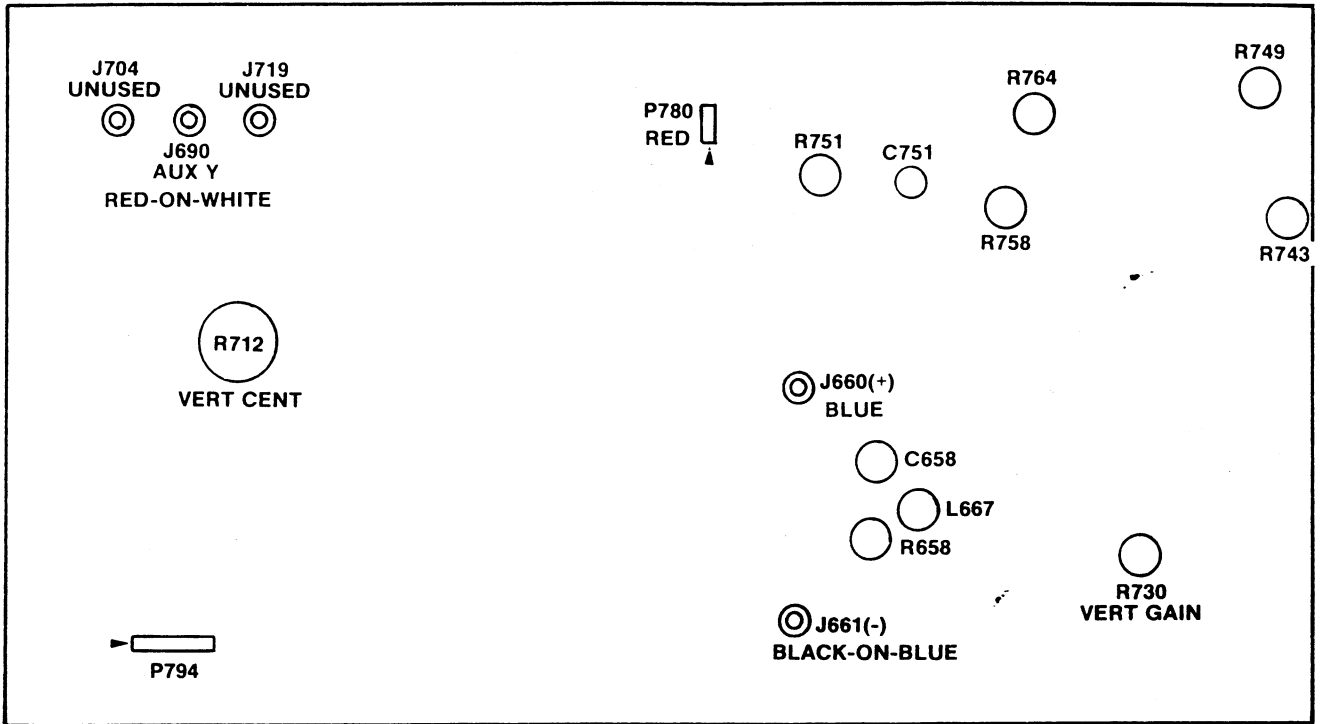
2385-78

processor, A28, calibration diagram.



2385-79

Fig. 7-48. Video Preamplifier, A32, calibration and wiring diagram.



2385-72

Fig. 7-49. Vertical Amplifier, A34, calibration and wiring diagram.

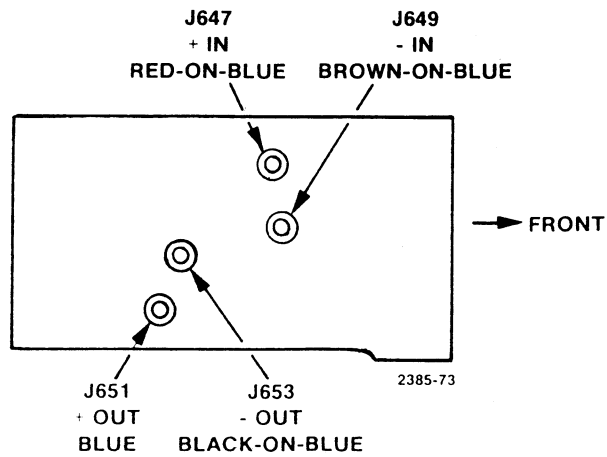


Fig. 7-50. Delay Line Termination, A36, wiring diagram.

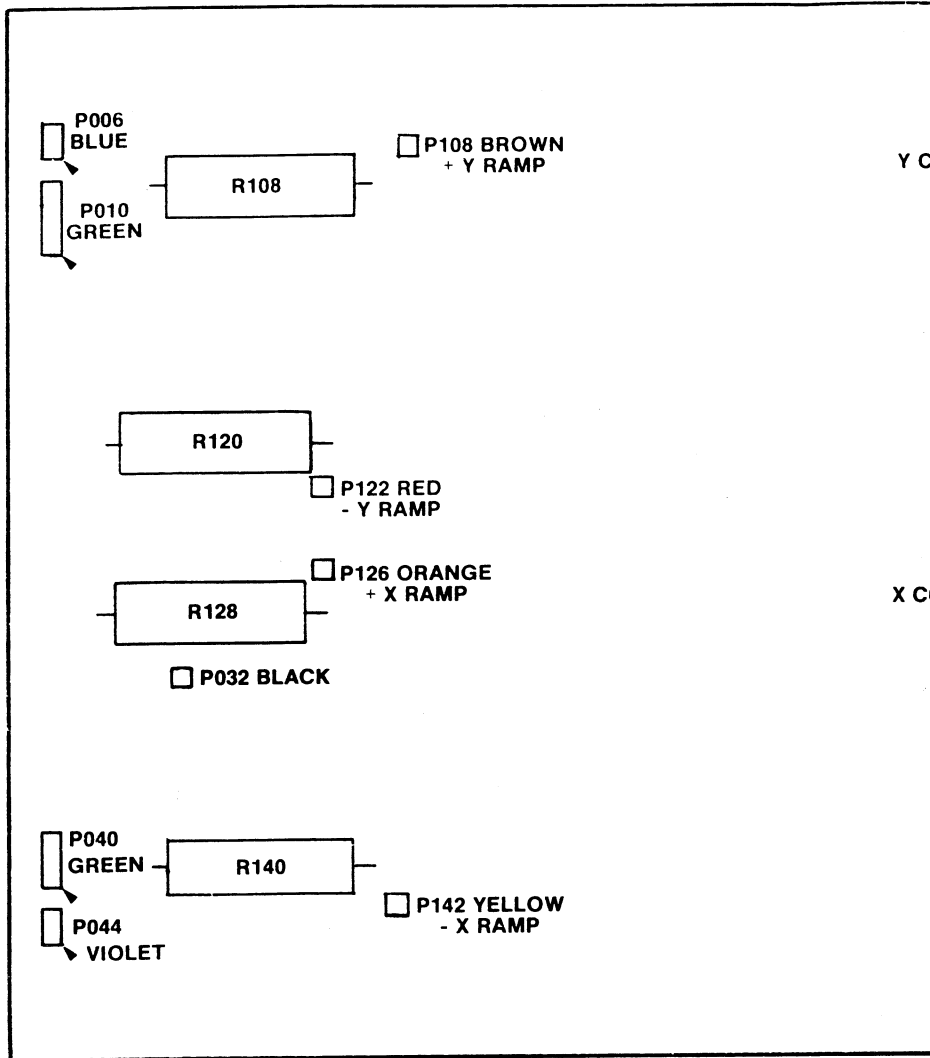
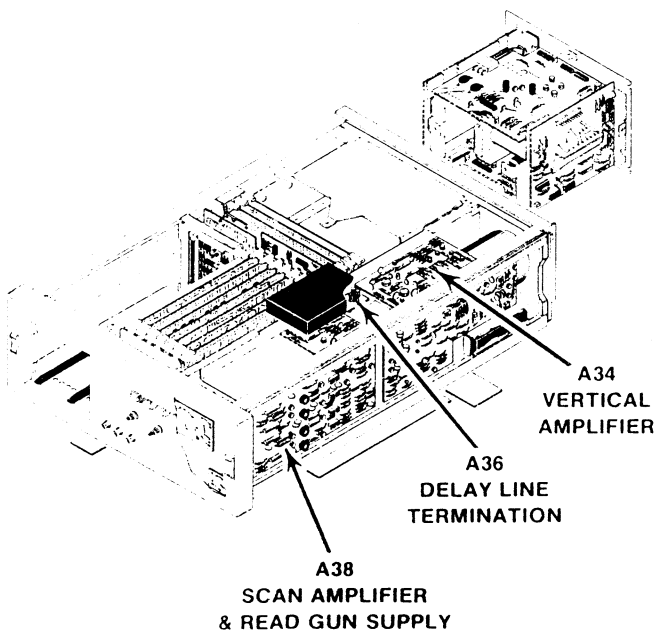
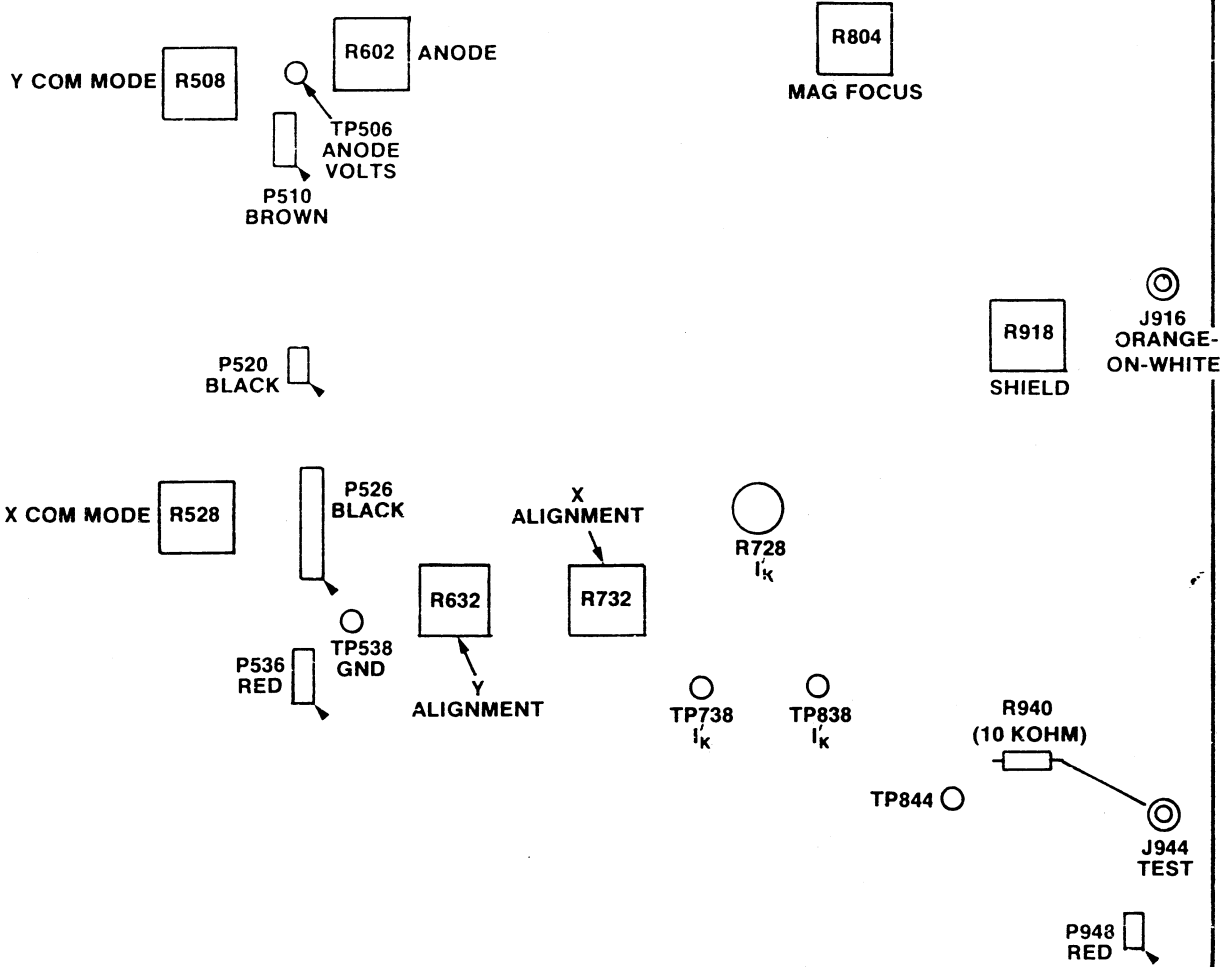


Fig. 7-51. Scan Amplifier & Read Gun Supply





2385-74

1. Scan Amplifier & Read Gun Supply, A38, calibration and wiring diagram.

FIGS. 7-49, 7-50, AND 7-51



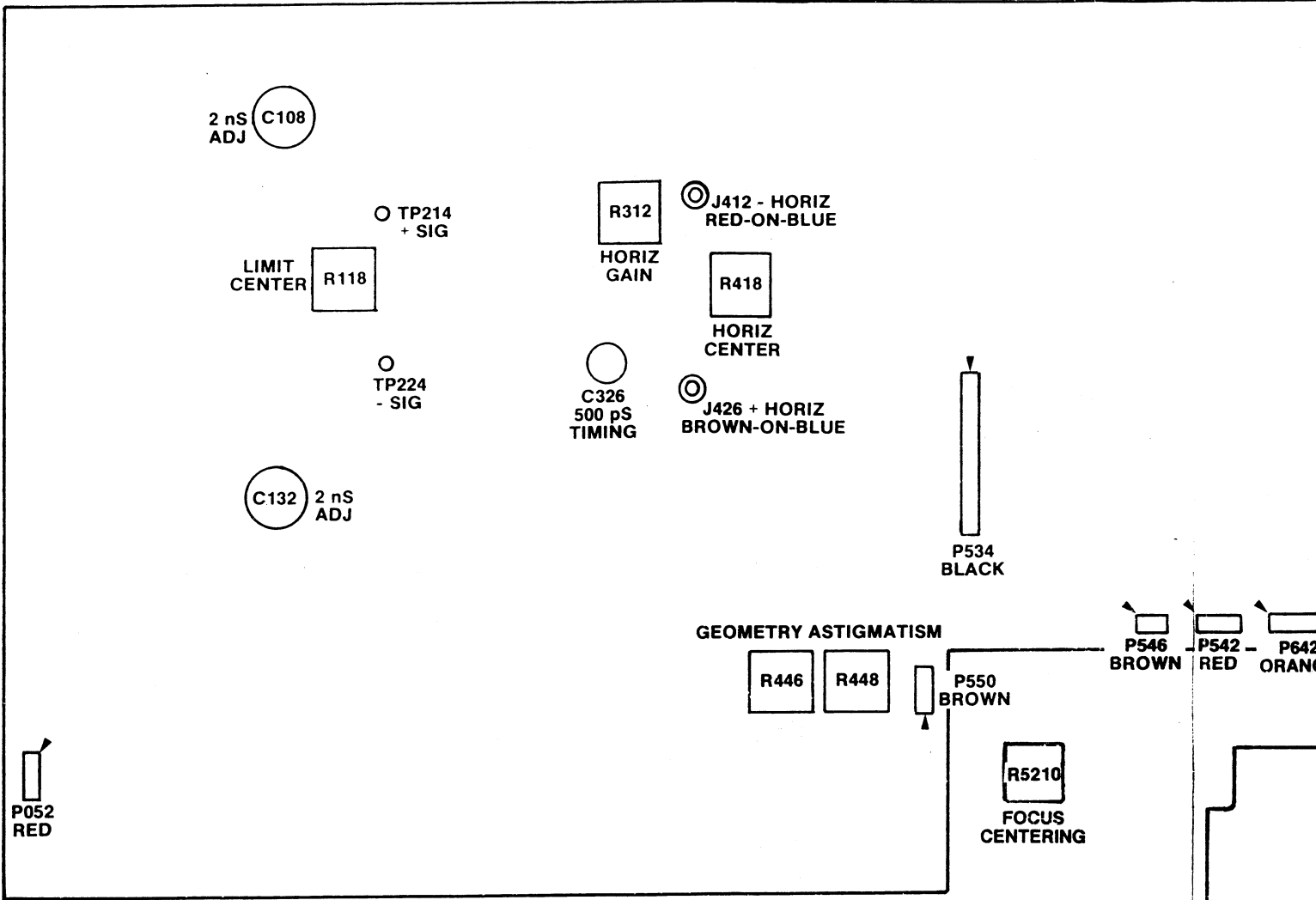


Fig. 7-52. Horizontal & Z-Axis Amplifier, A40, calibration and wiring diagram.

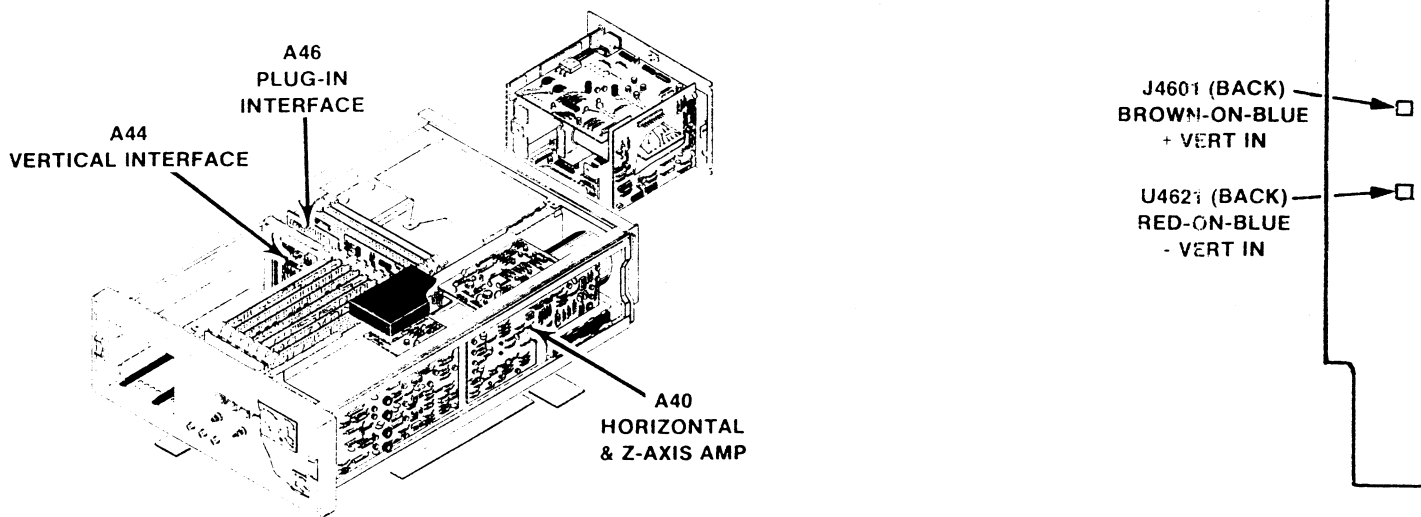


Fig. 7-53. Ve

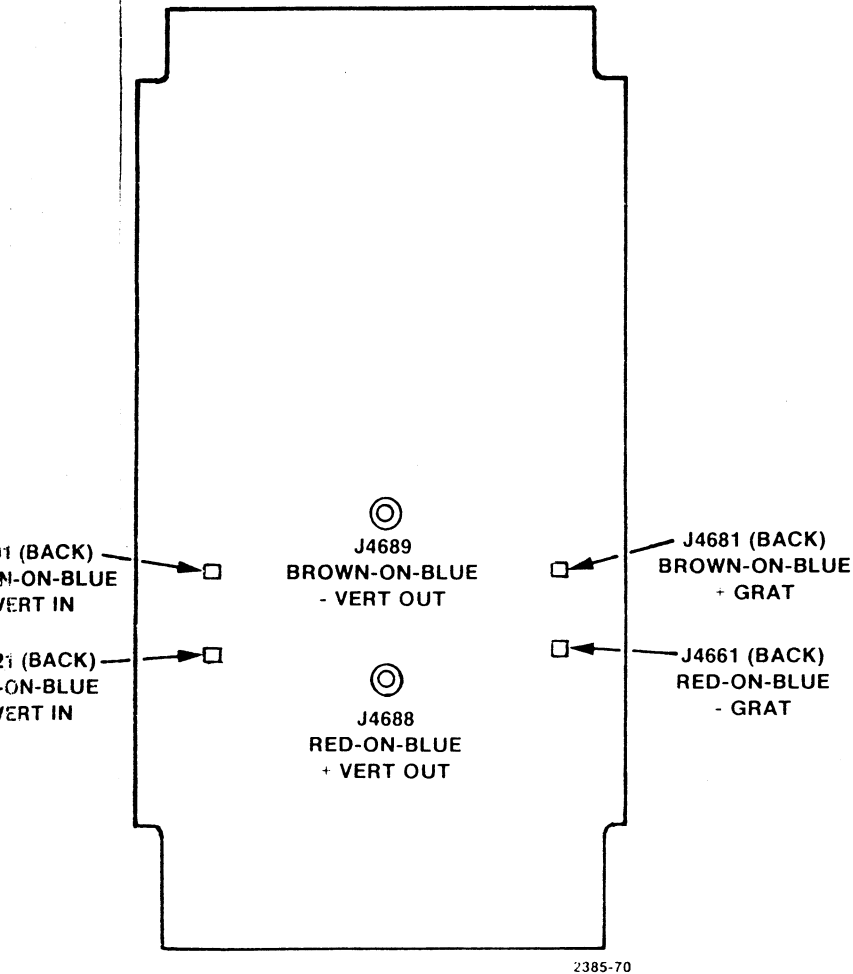
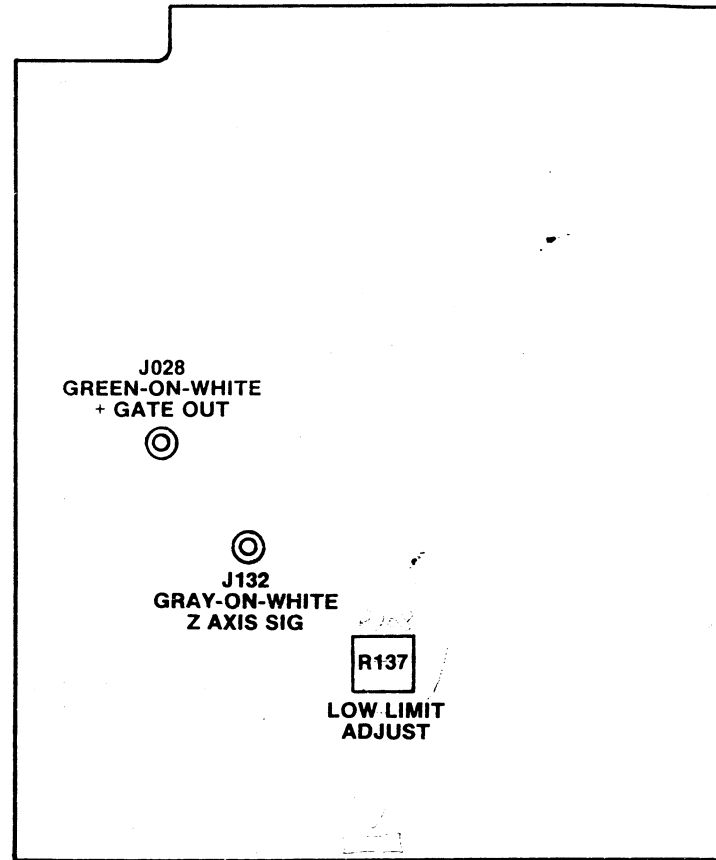
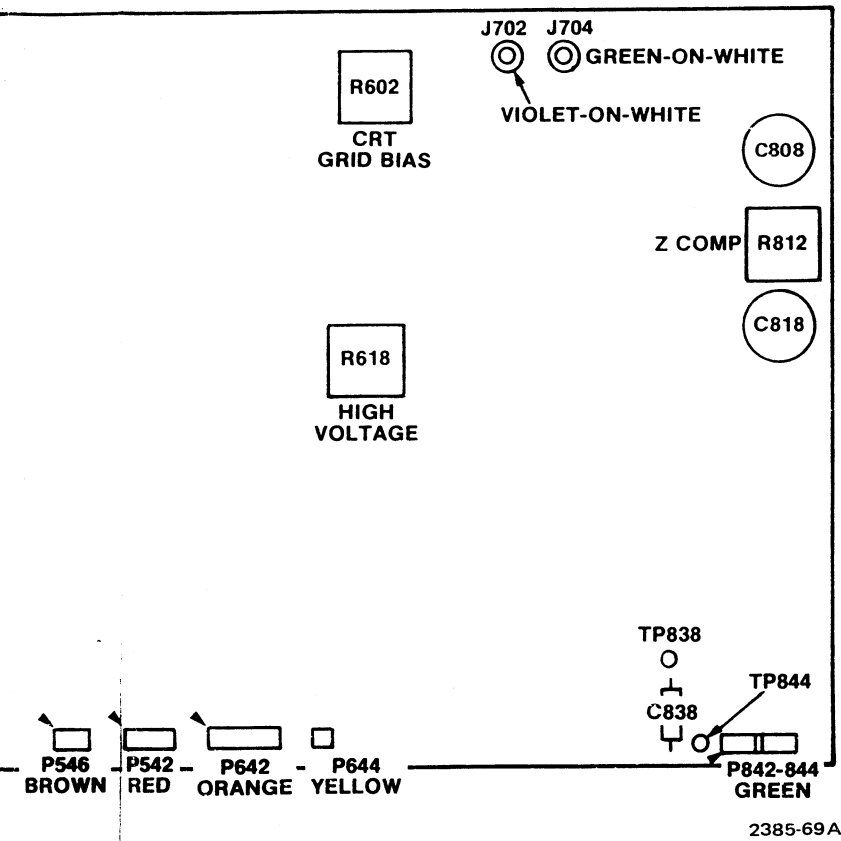


Fig. 7-53. Vertical Interface, A44, wiring diagram.

REV APR 1982

R414  
TRIG CENTER

J434  
BLUE  
+ TRIG



J438  
BLACK-ON-BLUE  
- TRIG

J536  
BROWN-ON-WHITE  
- HORIZ



J538  
RED-ON-WHITE  
+ HORIZ

J846  
BLUE-ON-WHITE  
Z AXIS IN



Fig. 7-54. Plug-In Interface, A46, calibration and wiring diagram.

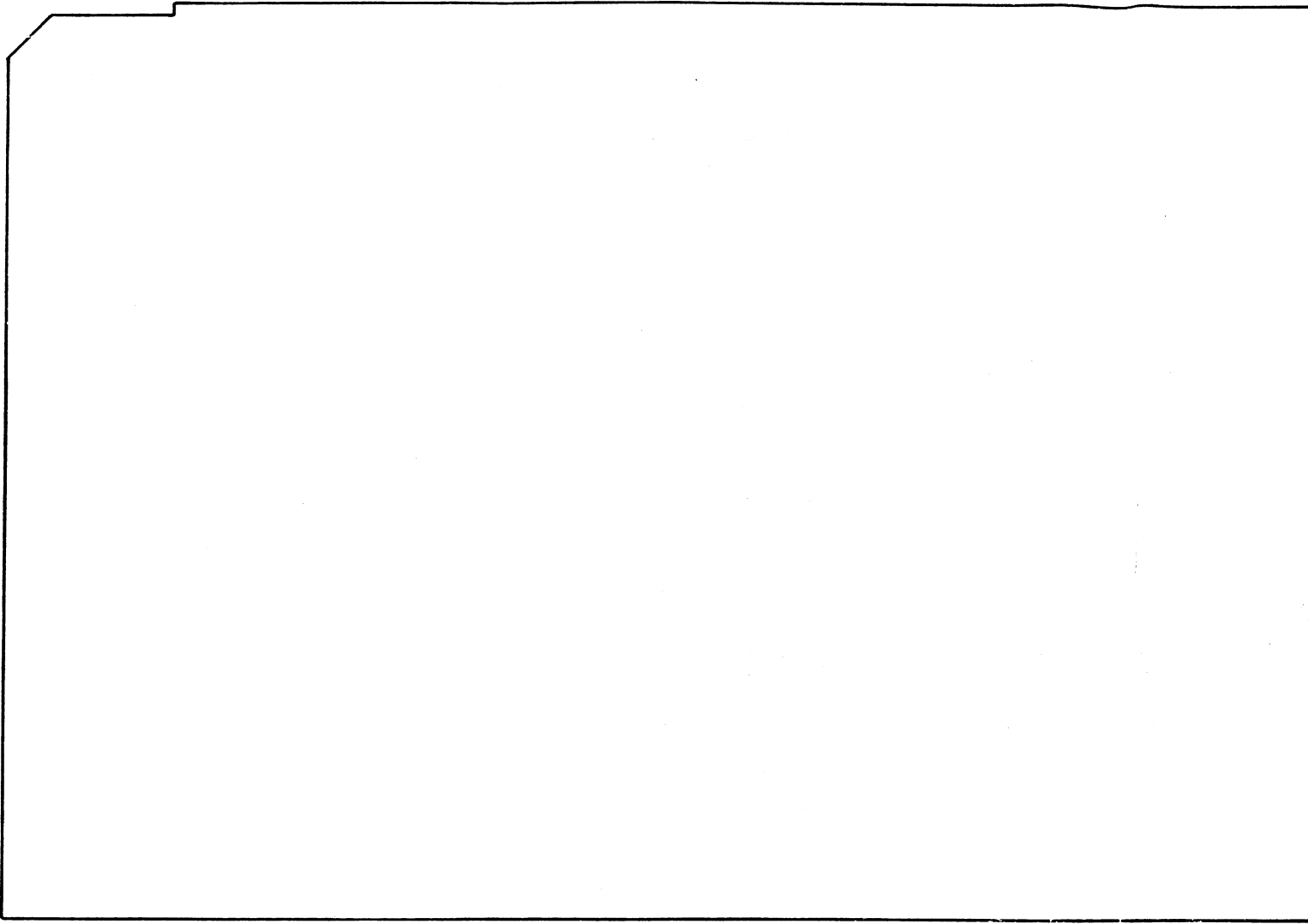


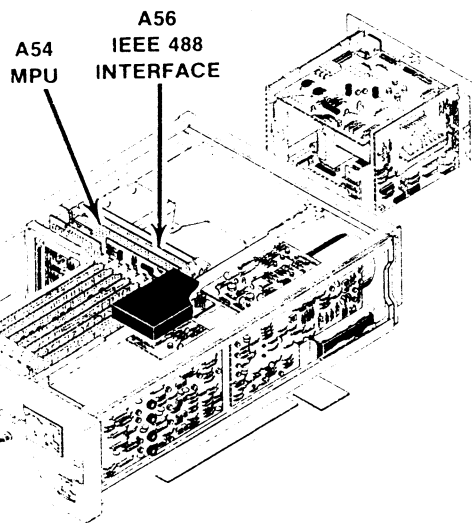
Fig. 7-55. MPU, A54, calibration diagram.

R20  
Y GA



R932  
R0 CURRENT MATCH

2385-67



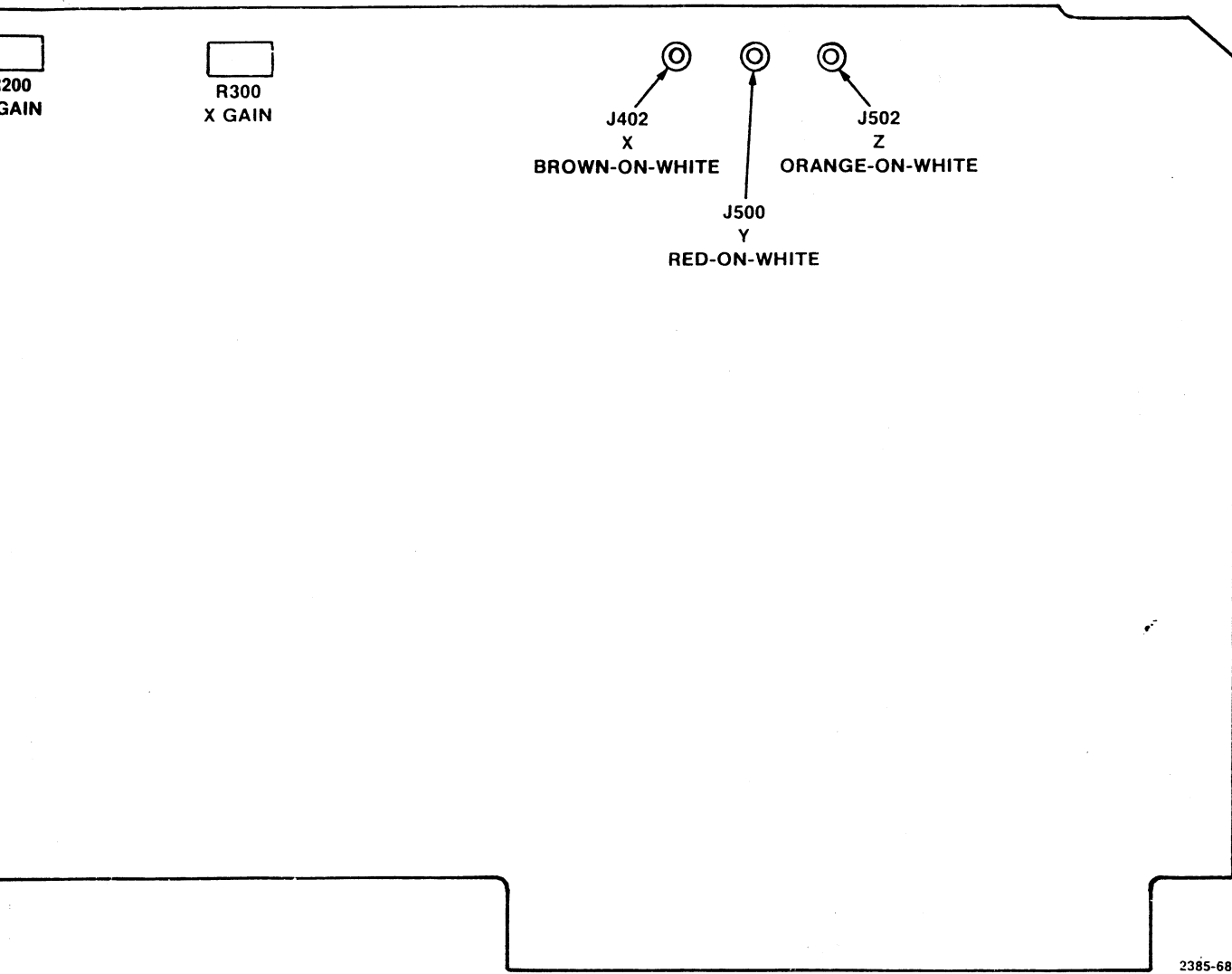
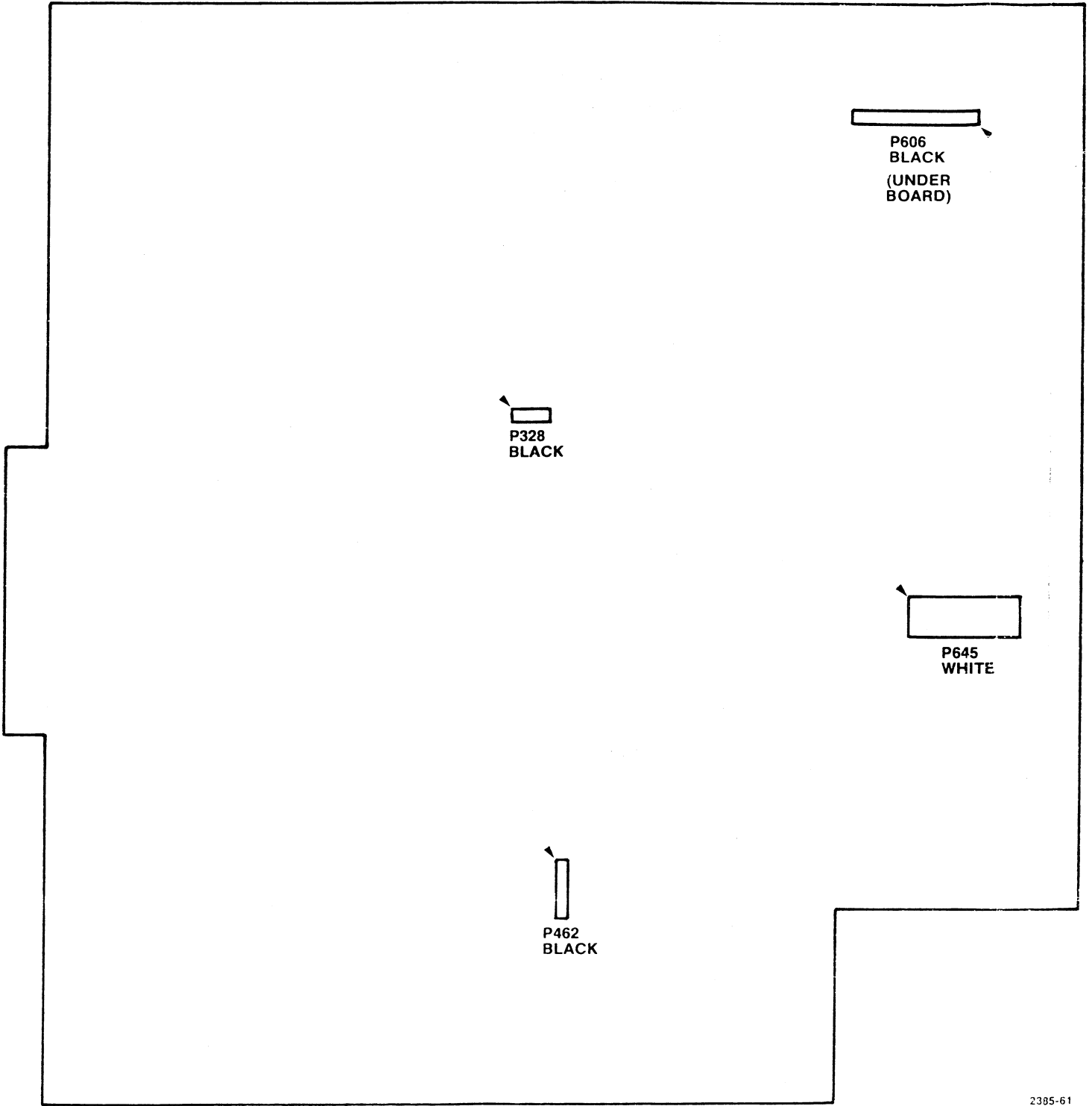


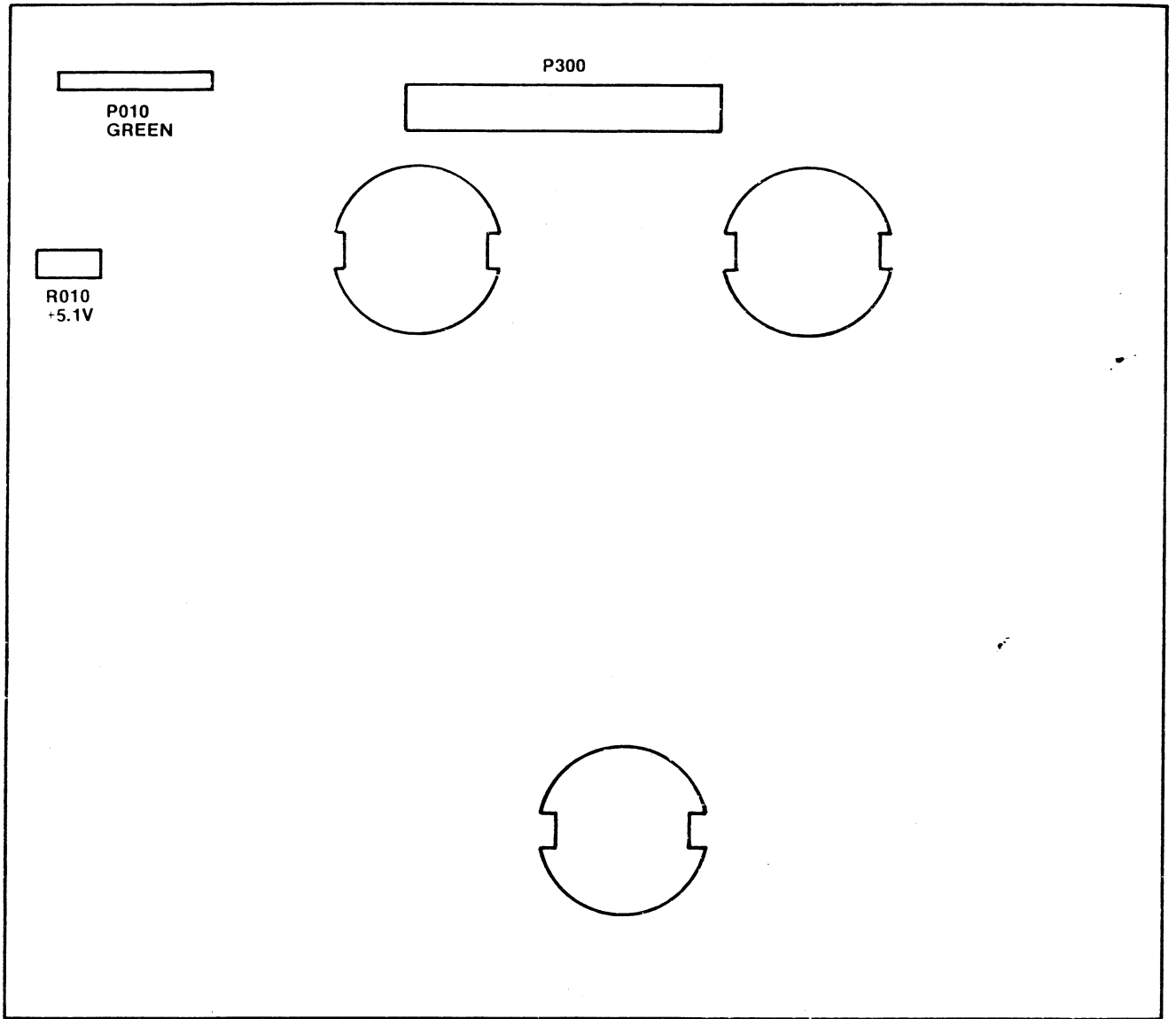
Fig. 7-56. IEEE 488 Interface, A56, calibration and wiring diagram.

@



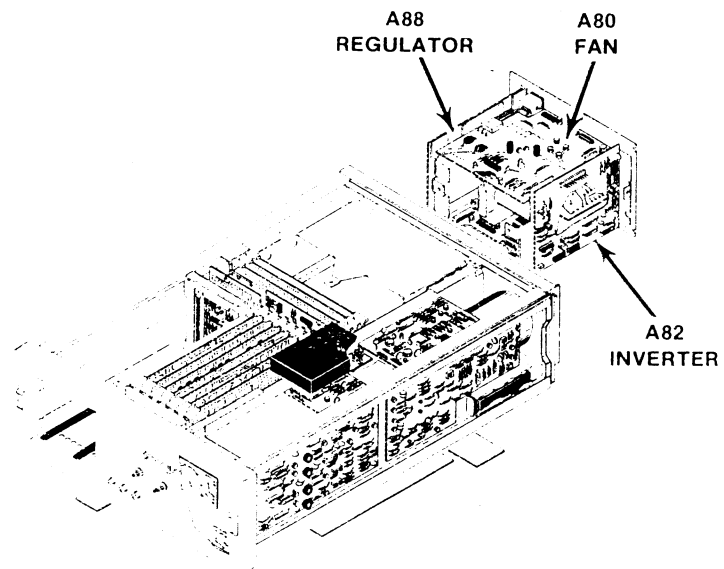
2385-61

Fig. 7-60. Fan, A80, wiring diagram.



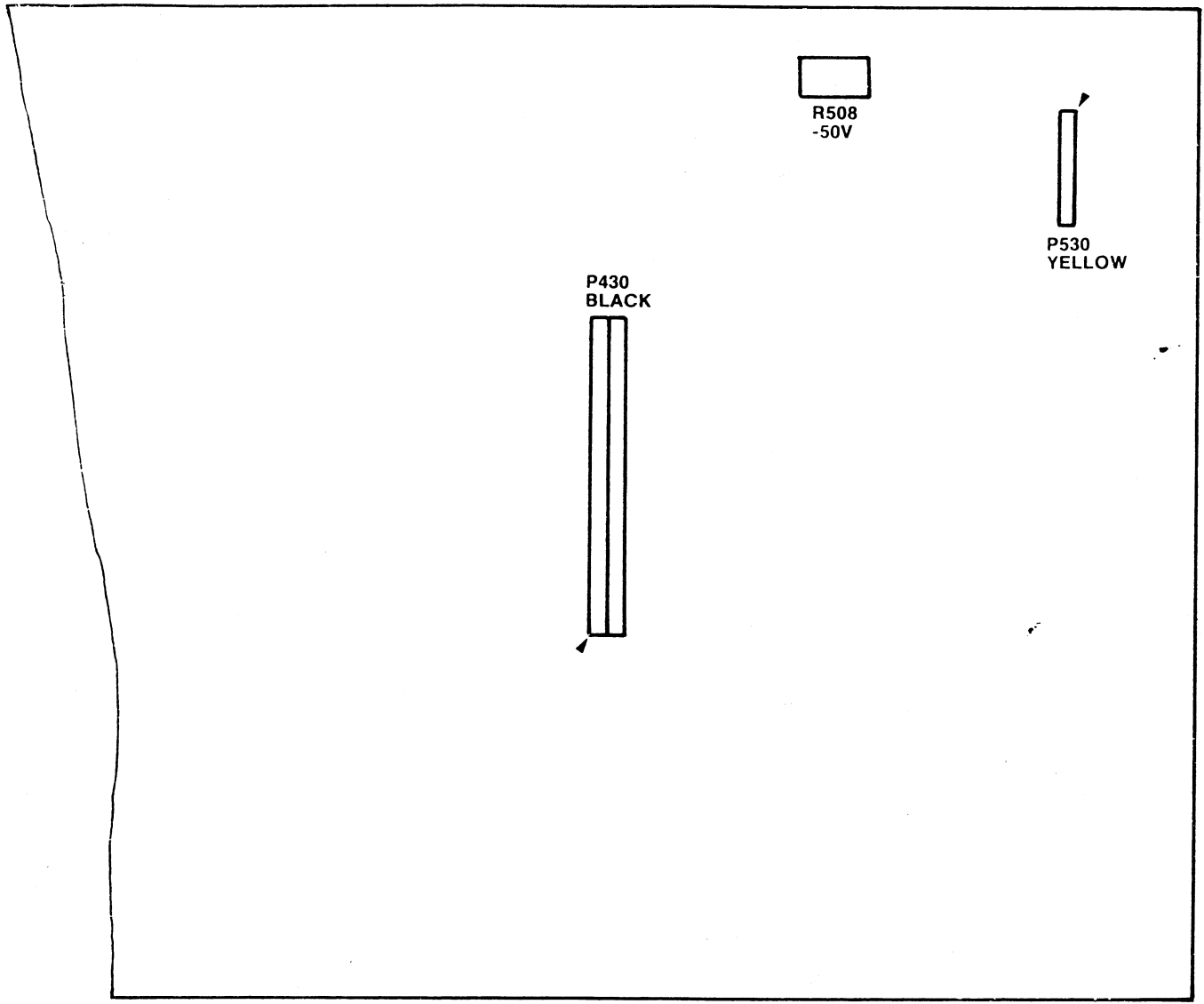
2385-62

Fig. 7-61. Inverter, A82, calibration and wiring diagram.



2385-61





2385-63

Fig. 7-62. Regulator, A88, calibration and wiring diagram.

FIGS. 7-60, 7-61,  
AND 7-62

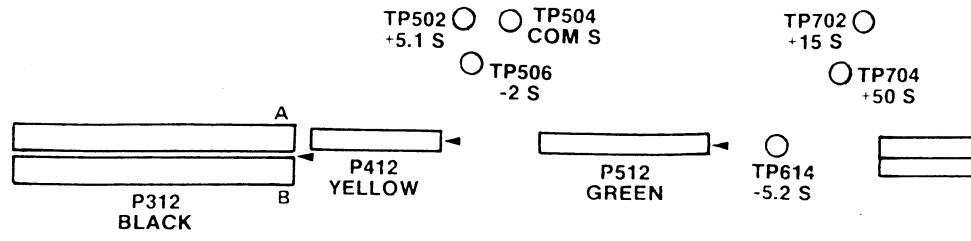
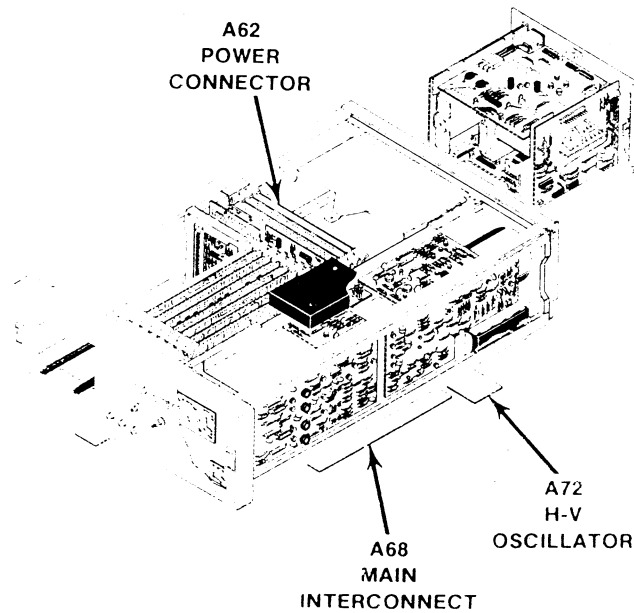


Fig. 7-57. Power Connector, A62, calibration and wiring diagram.



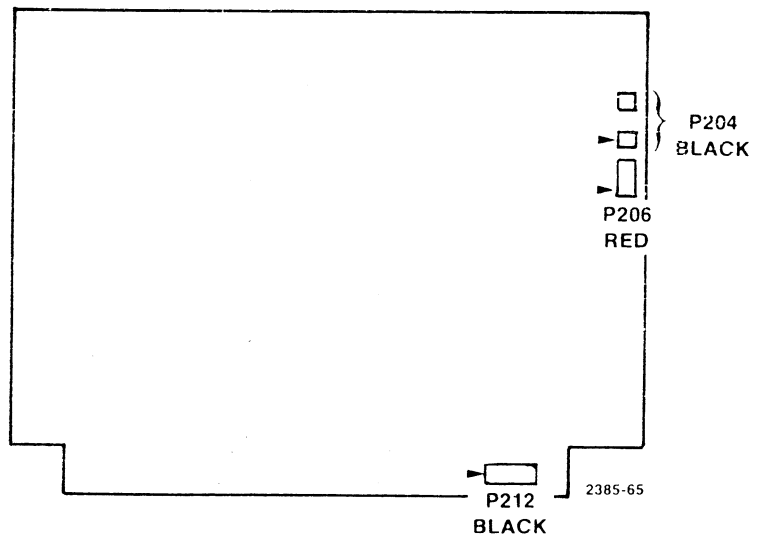
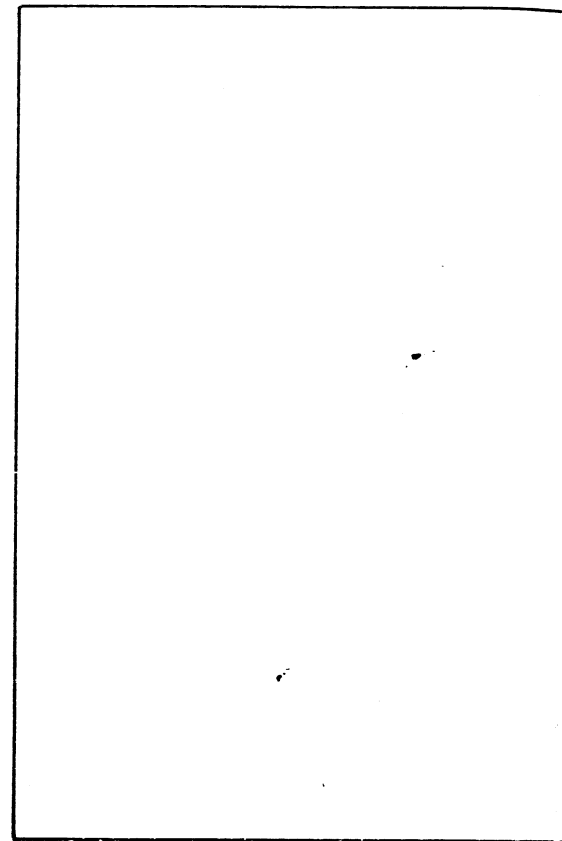
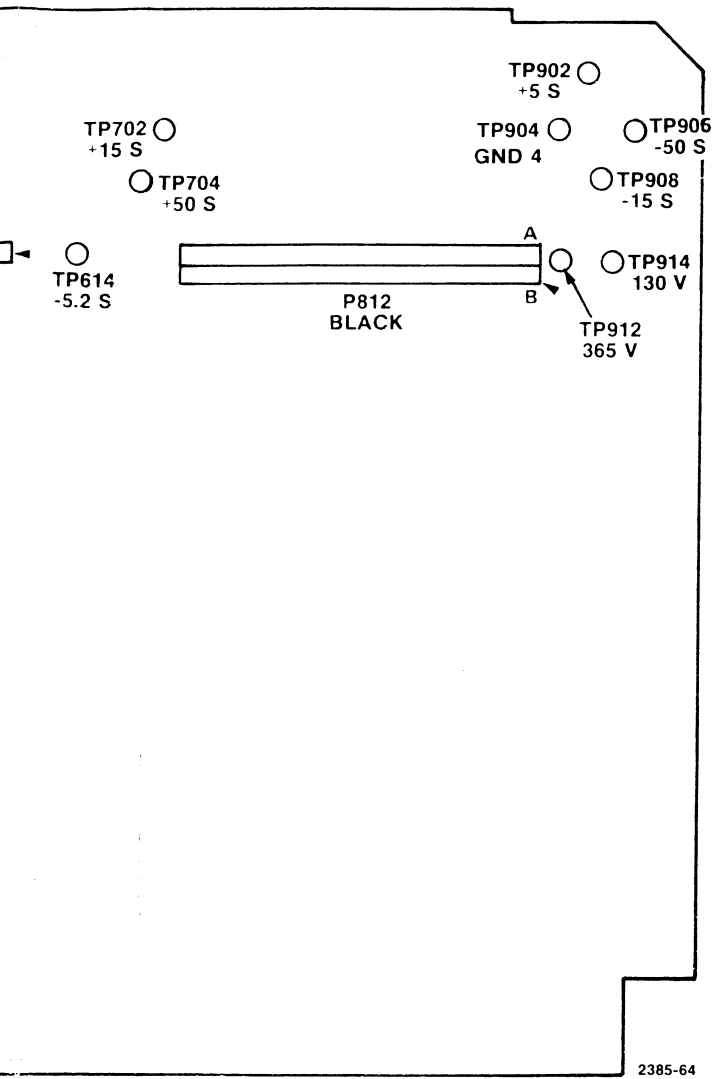
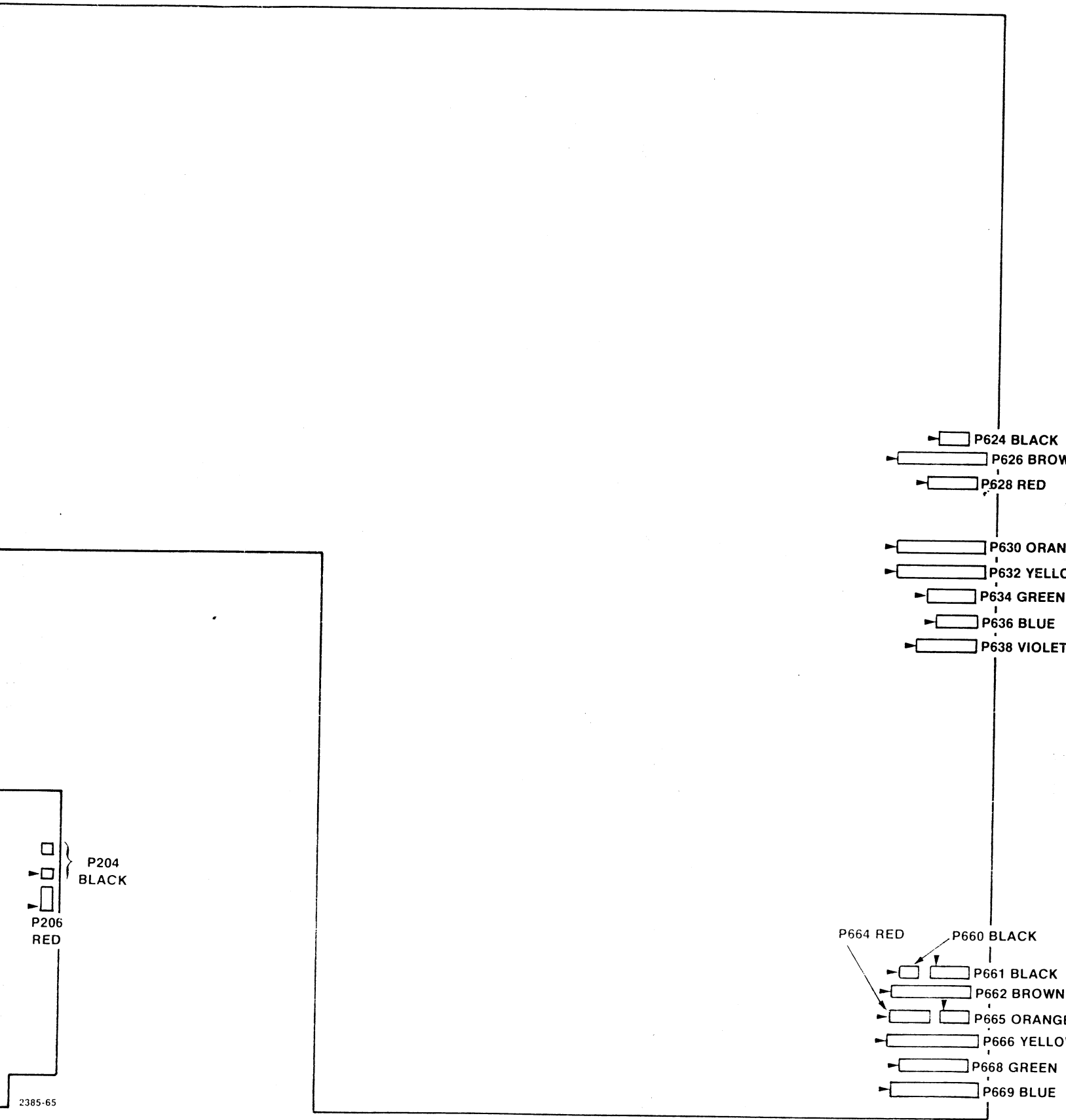


Fig. 7-59. High-Voltage Oscillator, A72, wiring diagram.



2385-65

2385-66

Fig. 7-58. Main Interconnect, A68, wiring diagram.

gram.

# REPLACEABLE MECHANICAL PARTS

## PARTS ORDERING INFORMATION

Replacement parts are available from or through your local Tektronix, Inc. Field Office or representative.

Changes to Tektronix instruments are sometimes made to accommodate improved components as they become available, and to give you the benefit of the latest circuit improvements developed in our engineering department. It is therefore important, when ordering parts, to include the following information in your order: Part number, instrument type or number, serial number, and modification number if applicable.

If a part you have ordered has been replaced with a new or improved part, your local Tektronix, Inc. Field Office or representative will contact you concerning any change in part number.

Change information, if any, is located at the rear of this manual.

## SPECIAL NOTES AND SYMBOLS

X000 Part first added at this serial number  
 00X Part removed after this serial number

## FIGURE AND INDEX NUMBERS

Items in this section are referenced by figure and index numbers to the illustrations.

## INDENTATION SYSTEM

This mechanical parts list is indented to indicate item relationships. Following is an example of the indentation system used in the description column.

```

1 2 3 4 5           Name & Description
Assembly and/or Component
Attaching parts for Assembly and/or Component
  --- * ---
Detail Part of Assembly and/or Component
Attaching parts for Detail Part
  --- * ---
Parts of Detail Part
Attaching parts for Parts of Detail Part
  --- * ---
  
```

Attaching Parts always appear in the same indentation as the item it mounts, while the detail parts are indented to the right. Indented items are part of, and included with, the next higher indentation. The separation symbol --- \* --- indicates the end of attaching parts.

**Attaching parts must be purchased separately, unless otherwise specified.**

## ITEM NAME

In the Parts List, an Item Name is separated from the description by a colon (:). Because of space limitations, an Item Name may sometimes appear as incomplete. For further Item Name identification, the U.S. Federal Cataloging Handbook H6-1 can be utilized where possible.

## ABBREVIATIONS

|       |                    |         |                       |          |                      |          |                 |
|-------|--------------------|---------|-----------------------|----------|----------------------|----------|-----------------|
| "     | INCH               | ELCTRN  | ELECTRON              | IN       | INCH                 | SE       | SINGLE END      |
| #     | NUMBER SIZE        | ELEC    | ELECTRICAL            | INCAND   | INCANDESCENT         | SECT     | SECTION         |
| ACTR  | ACTUATOR           | ELCTLT  | ELECTROLYTIC          | INSUL    | INSULATOR            | SEMICOND | SEMICONDUCTOR   |
| ADPTR | ADAPTER            | ELEM    | ELEMENT               | INTL     | INTERNAL             | SHLD     | SHIELD          |
| ALIGN | ALIGNMENT          | EPL     | ELECTRICAL PARTS LIST | LPHLDR   | LAMPHOLDER           | SHLDR    | SHOULDERED      |
| AL    | ALUMINUM           | EQPT    | EQUIPMENT             | MACH     | MACHINE              | SKT      | SOCKET          |
| ASSEM | ASSEMBLED          | EXT     | EXTERNAL              | MECH     | MECHANICAL           | SL       | SLIDE           |
| ASSY  | ASSEMBLY           | FIL     | FILLISTER HEAD        | MTG      | MOUNTING             | SLFLKG   | SELF-LOCKING    |
| ATTEN | ATTENUATOR         | FLEX    | FLEXIBLE              | NIP      | NIPPLE               | SLVG     | SLEEVING        |
| AWG   | AMERICAN WIRE GAGE | FLH     | FLAT HEAD             | NON WIRE | NOT WIRE WOUND       | SPR      | SPRING          |
| BD    | BOARD              | FLTR    | FILTER                | OBD      | ORDER BY DESCRIPTION | SQ       | SQUARE          |
| BRKT  | BRACKET            | FR      | FRAME or FRONT        | OD       | OUTSIDE DIAMETER     | SST      | STAINLESS STEEL |
| BRZ   | BRASS              | FSTNR   | FASTENER              | OZH      | OVAL HEAD            | STL      | STEEL           |
| BRZ   | BRONZE             | FT      | FOOT                  | PH BRZ   | PHOSPHOR BRONZE      | SW       | SWITCH          |
| BSHG  | BUSHING            | FXD     | FIXED                 | PL       | PLAIN or PLATE       | T        | TUBE            |
| CAB   | CABINET            | GSKT    | GASKET                | PLSTC    | PLASTIC              | TERM     | TERMINAL        |
| CAP   | CAPACITOR          | HDL     | HANDLE                | PN       | PART NUMBER          | THD      | THREAD          |
| CER   | CERAMIC            | HEX     | HEXAGON               | PNH      | PAN HEAD             | THK      | THICK           |
| CHAS  | CHASSIS            | HEX HD  | HEXAGONAL HEAD        | PWR      | POWER                | TNSN     | TENSION         |
| CKT   | CIRCUIT            | HEX SOC | HEXAGONAL SOCKET      | RCPT     | RECEPTACLE           | TPG      | TAPPING         |
| COMP  | COMPOSITION        | HLCPS   | HELICAL COMPRESSION   | RES      | RESISTOR             | TRH      | TRUSS HEAD      |
| CONN  | CONNECTOR          | HLEXT   | HELICAL EXTENSION     | RGD      | RIGID                | V        | VOLTAGE         |
| COV   | COVER              | HV      | HIGH VOLTAGE          | RLF      | RELIEF               | VAR      | VARIABLE        |
| CPLG  | COUPLING           | IC      | INTEGRATED CIRCUIT    | RTNR     | RETAINER             | W/       | WITH            |
| CRT   | CATHODE RAY TUBE   | ID      | INSIDE DIAMETER       | SCH      | SOCKET HEAD          | WSHR     | WASHER          |
| DEG   | DEGREE             | IDNT    | IDENTIFICATION        | SCOPE    | OSCILLOSCOPE         | XFMR     | TRANSFORMER     |
| DWR   | DRAWER             | IMPLR   | IMPELLER              | SCR      | SCREW                | XSTR     | TRANSISTOR      |

# Replaceable Mechanical Parts—7912AD Service

## CROSS INDEX—MFR. CODE NUMBER TO MANUFACTURER

| Mfr. Code | Manufacturer  | Address   | City, State, Zip                                |
|-----------|---|---|---|
| 000BK     | STAUFFER SUPPLY   | 105 SE TAYLOR   | PORTLAND, OR 97214                              |
| 000CX     | N W SPRING AND MANUFACTURING COMPANY                                | 5525 ROSEWOOD STREET  | LAKE OSWEGO, OR 97034                           |
| 000CY     | NORTHWEST FASTENER SALES, INC.                                      | 7923 SW CIRRUS DRIVE  | BEAVERTON, OR 97005                             |
| 000EL     | PORTLAND SCREW CO.  | 6520 N. BASIN AVE.  | PORTLAND, OR 97217                              |
| 000JA     | J. PHILLIP INDUSTRIES INC.  | 5713 NORTHWEST HIGHWAY  | CHICAGO, ILL 60646                              |
| 00779     | AMP, INC.   | P.O. BOX 3608   | HARRISBURG, PA 17105                            |
| 01295     | TEXAS INSTRUMENTS, INC.<br>SEMICONDUCTOR GROUP                      | P.O. BOX 5012   | DALLAS, TX 75222                                |
| 05574     | VIKING INDUSTRIES, INC.   | 21001 NORDHOFF STREET   | CHATSWORTH, CA 91311                            |
| 05820     | WAKEFIELD ENGINEERING, INC.   | AUDUBON ROAD  | WAKEFIELD, MA 01880                             |
| 06229     | ELECTROVERT, INC.   | 86 HARTFORD AVENUE  | MT. VERNON, NY 10553                            |
| 06383     | PANDUIT CORPORATION   | 17301 RIDGELAND   | TINLEY PARK, IL 60477                           |
| 06666     | GENERAL DEVICES CO., INC.   | 525 S. WEBSTER AVE.   | INDIANAPOLIS, IN 46219                          |
| 07707     | USM CORP., USM FASTENER DIV.  | 510 RIVER RD.   | SHELTON, CT 06484                               |
| 08261     | SPECTRA-STRIP CORP.   | 7100 LAMPSON AVE.   | GARDEN GROVE, CA 92642                          |
| 09922     | BURNDY CORPORATION  | RICHARDS AVENUE   | NORWALK, CT 06852                               |
| 11897     | PLASTIGLIDE MFG. CORPORATION  | P O BOX 867, 1757 STANFORD ST.                                  | SANTA MONICA, CA 90406                          |
| 12327     | FREEWAY CORPORATION   | 9301 ALLEN DRIVE  | CLEVELAND, OH 44125                             |
| 12360     | ALBANY PRODUCTS CO., DIV. OF PNEUMO<br>DYNAMICS CORPORATION         | 145 WOODWARD AVENUE<br>2021 W VALLEY VIEW LANE<br>P O BOX 34829 | SOUTH NORWALK, CT 06586<br>DALLAS, TX 75234     |
| 13103     | THERMALLOY COMPANY, INC.  | 10 ESNA PARK DRIVE  | MARKHAM, ONTARIO, CANADA<br>LOS GATOS, CA 95030 |
| 13257     | AMERACE, LTD.   | CRESTWOOD ROAD  | MOUNTAINTOP, PA 18707                           |
| 13511     | AMPHENOL CARDRE DIV., BUNKER RAMO CORP.                             | YOUK EXPRESSWAY   | NEW CUMBERLAND, PA 17070                        |
| 18722     | RCA CORP., SOLID STATE DIVISION                                     | 2620 ENDRESS PLACE  | GREENWOOD, IN 46142                             |
| 22526     | BERG ELECTRONICS, INC.  | 125 BEECHWOOD AVE.  | NEW ROCHELLE, NY 10802                          |
| 24931     | SPECIALITY CONNECTOR CO., INC.                                      | 2222 WELLINGTON COURT   | LISLE, IL 60532                                 |
| 26365     | GRIES REPRODUCER CO., DIV. OF COATS<br>AND CLARK, INC.              | 509 HINDRY AVE.<br>30 ROCKEFELLER PLAZA                         | INGLEWOOD, CA 90301<br>NEW YORK, NY 10020       |
| 27264     | MOLEX, INC.   | 427 OLIVE STREET  | SANTA BARBARA, CA 93101                         |
| 28817     | CAL-METEX CORP., SUBSIDIARY OF METEX<br>CORP.                       | 16931 MILLIKEN AVE.<br>821 STEWART AVE.                         | IRVINE, CA 92713<br>GARDEN CITY, NY 11530       |
| 49671     | RCA CORPORATION   | P O BOX 2244, 40 BRISTOL ST.                                    | WATERBURY, CT 06720                             |
| 53217     | TECHNICAL WIRE PRODUCTS, INC.                                       | 445 CONCORD AVE.  | CAMBRIDGE, MA 02138                             |
| 57668     | R-OHM CORP.   | 1501 MORSE AVENUE   | ELK GROVE VILLAGE, IL 60007                     |
| 70318     | ALLMETAL SCREW PRODUCTS CO., INC.                                   | 446 MORGAN ST.  | CINCINNATI, OH 45206                            |
| 71159     | BRISTOL SOCKET SCREW, DIV. OF<br>AMERICAN CHAIN AND CABLE CO., INC. | 34 FOREST STREET  | ATTLEBORO, MA 02703                             |
| 71279     | CAMBRIDGE THERMIONIC CORP.  | 33 E. FRANKLIN ST.  | DANBURY, CT 06810                               |
| 71785     | TRW, CINCH CONNECTORS   | 4001 BENEFIT AVE., P O BOX 9                                    | ASHTABULA, OH 44004                             |
| 73743     | FISCHER SPECIAL MFG. CO.  | 800 E. NORTHWEST HWY  | DES PLAINES, IL 60016                           |
| 73803     | TEXAS INSTRUMENTS, INC., METALLURGICAL<br>MATERIALS DIV.            | 5700 W. ROOSEVELT RD.   | CHICAGO, IL 60650                               |
| 74868     | BUNKER-RAMO CORP., THE AMPHENOL RF DIV.                             | ST. CHARLES ROAD  | ELGIN, IL 60120                                 |
| 74921     | ITEN FIBRE CO.  | 2100 S. O BAY ST.   | MILWAUKEE, WI 53207                             |
| 75915     | LITTELFUSE, INC.  | P O BOX 500   | BEAVERTON, OR 97077                             |
| 77250     | PHEOLL MANUFACTURING CO., DIVISION<br>OF ALLIED PRODUCTS CORP.      | P O BOX 287   | MILFORD, IL 60953                               |
| 78189     | ILLINOIS TOOL WORKS, INC.<br>SHAKEPROOF DIVISION                    | 5555 N. ELSTON AVE.   | CHICAGO, IL 60630                               |
| 79807     | WROUGHT WASHER MFG. CO.   | 812 SNEDIKER AVE.   | BROOKLYN, NY 11207                              |
| 80009     | TEKTRONIX, INC.   | 2530 CRESCENT DR.   | BROADVIEW, IL 60153                             |
| 81041     | HOWARD INDUSTRIES, DIVISION OF MSL<br>INDUSTRIES, INC.              | 2527 GRANT AVENUE   | SAN LEANDRO, CA 94579                           |
| 82389     | SWITCHCRAFT, INC.   | 701 SONORA AVENUE   | GLENDALE, CA 91201                              |
| 83330     | SMITH, HERMAN H., INC.  | P. O. BOX 1360  | STATESVILLE, NC 28677                           |
| 83385     | CENTRAL SCREW CO.   | 40 MARBLEDALE ROAD  | TUCKAHOE, NY 10707                              |
| 85471     | BOYD, A. B., CO.  | 600 18TH AVE  | ROCKFORD, IL 61101                              |
| 86928     | SEASTROM MFG COMPANY, INC.  | 4444 WEST IRVING PARK RD.                                       | CHICAGO, IL 60641                               |
| 87308     | N. L. INDUSTRIES, INC., SOUTHERN SCREW<br>DIV.                      | 19115 HAMILTON AVE., P O BOX 389                                | GARDENA, CA 90247                               |
| 91836     | KINGS ELECTRONICS CO., INC.   | 135 W. MAGNOLIA BLVD.   | BURBANK, CA 91502                               |
| 93907     | TEXTRON INC. CAMCAR DIV   | P O BOX 6626  | SANTA ROSA, CA 95406                            |
| 95987     | WECKESSER CO., INC.   | 5713 NORTHWEST HIGHWAY  | CHICAGO, IL 60646                               |
| 98159     | RUBBER TECK, INC.   |   |   |
| 98978     | INTERNATIONAL ELECTRONIC RESEARCH CORP.                             |   |   |
| 93109     | C O PANEL COMPONENTS CORP.  |   |   |
| 11105     | J PHILLIP INDUSTRIES INC  |   |   |

CROSS INDEX—MFR. CODE NUMBER TO MANUFACTURER

| Mfr. Code | Manufacturer            | Address         | City, State, Zip    |
|-----------|-------------------------|-----------------|---------------------|
| T1372     | ELECTRI-CORD MFG CO INC | 312 E. MAIN ST. | WESTFIELD, PA 16950 |

# Replaceable Mechanical Parts—7912AD Service

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |        | Qty | 1 | 2 | 3 | 4 | 5 | Name & Description                        | Mfr Code | Mfr Part Number  |
|------------------|--------------------|------------------|--------|-----|---|---|---|---|---|---|----------|------------------|
|                  |                    | Eff              | Dscont |     |   |   |   |   |   |   |          |                  |
| 1-1              | 200-2092-00        |                  |        | 2   |   |   |   |   |   | COVER,ACCESS:ALUMINUM                     | 80009    | 200-2092-00      |
|                  | 214-0603-02        |                  |        | 6   |   |   |   |   |   | .PIN ASSY,SECRG:                          | 80009    | 214-0603-02      |
| -2               | 214-0603-01        |                  |        | 6   |   |   |   |   |   | .PIN,SECURING:0.27 INCH LONG              | 80009    | 214-0603-01      |
|                  | 214-0604-00        |                  |        | 6   |   |   |   |   |   | .WASH.,SPG TNSN:0.26 ID X 0.47 INCH OD    | 80009    | 214-0604-00      |
| -3               | 386-0227-01        |                  |        | 6   |   |   |   |   |   | STOP,CLP,RIM CL:BLACK ACETAL              | 80009    | 386-0227-01      |
|                  | 386-1151-00        |                  |        | 6   |   |   |   |   |   | CLAMP,RIM CLENC:SPG STL CD PL             | 80009    | 386-1151-00      |
| -4               | 386-1151-00        |                  |        | 2   |   |   |   |   |   | GUIDE,RACKMOUNT:19.218 INCH LONG,PAIR     | 06666    | QBD              |
|                  | 351-0313-00        |                  |        | 2   |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
| -7               | 210-0458-00        |                  |        | 12  |   |   |   |   |   | NUT,PL,ASSEM WA:8-32 X 0.344 INCH,STL     | 83385    | ORD BY DESCR     |
|                  |                    |                  |        |     |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
| -8               | 390-0572-00        |                  |        | 1   |   |   |   |   |   | CABINET,SIDE:RIGHT                        | 80009    | 390-0572-00      |
|                  |                    |                  |        |     |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
| -9               | 211-0538-00        |                  |        | 8   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.312"100 DEG,FLH ST | 83385    | ORD BY DESCR     |
|                  |                    |                  |        |     |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
| -10              | 390-0573-00        |                  |        | 1   |   |   |   |   |   | CABINET,SIDE:LEFT                         | 80009    | 390-0573-00      |
|                  |                    |                  |        |     |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
| -11              | 211-0538-00        |                  |        | 8   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.312"100 DEG,FLH ST | 83385    | ORD BY DESCR     |
|                  |                    |                  |        |     |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
| -12              | 366-1189-00        |                  |        | 1   |   |   |   |   |   | KNOB:GRAY                                 | 80009    | 366-1189-00      |
|                  | 213-0153-00        |                  |        | 1   |   |   |   |   |   | .SETSCREW:5-40 X 0.125,STL BK OXD,HEX     | 000CY    | ORD BY DESCR     |
| -13              | 366-1319-02        |                  |        | 1   |   |   |   |   |   | KNOB:GY:0.79 ID,0.28 OD,0.32 H            | 80009    | 366-1319-02      |
|                  | 213-0075-00        |                  |        | 1   |   |   |   |   |   | .SETSCREW:4-40 X 0.094,STL BK OXD,HEX     | 000BK    | ORD BY DESCR     |
| -14              | 366-1059-00        |                  |        | 1   |   |   |   |   |   | PUSH BUTTON:GRAY                          | 80009    | 366-1059-00      |
|                  | 366-1077-00        |                  |        | 2   |   |   |   |   |   | KNOB:GRAY                                 | 80009    | 366-1077-00      |
| -15              | -----              |                  |        | -   |   |   |   |   |   | EACH KNOB INCLUDES:                       |          |                  |
|                  | 213-0246-00        |                  |        | 1   |   |   |   |   |   | .SETSCREW:5-40 X 0.093 ITL BK OXD,HEX     | 71159    | ORD BY DESCR     |
| -16              | 200-0103-00        |                  |        | 1   |   |   |   |   |   | NUT,PLAIN,KNURL:0.25-28 X 0.375" OD,BRASS | 80009    | 200-0103-00      |
|                  | 355-0507-00        |                  |        | 1   |   |   |   |   |   | STUD,SHOULDERED:BINDING POST              | 80009    | 355-0507-00      |
| -17              |                    |                  |        |     |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   |   |          |                  |
| -18              | 210-0455-00        |                  |        | 1   |   |   |   |   |   | NUT,PLAIN,HEX:0.25-28 X 0.375 INCH,BRASS  | 73743    | 3089-402         |
|                  | 210-0223-00        |                  |        | 1   |   |   |   |   |   | TERMINAL,LUG:0.25 INCH DIA,SE             | 86928    | A313-136         |
| -19              |                    |                  |        |     |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   |   |          |                  |
| -20              | 131-0771-00        |                  |        | 1   |   |   |   |   |   | CONN,RCPT,ELEC:4 CONT,QUICK DISCONNECT    | 91836    | 1904-2M58        |
|                  |                    |                  |        |     |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
| -21              | 210-0551-00        |                  |        | 1   |   |   |   |   |   | NUT,PLAIN,HEX:4-40 X 0.25 INCH,STL        | 000BK    | ORD BY DESCR     |
|                  |                    |                  |        |     |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
| -22              | -----              |                  |        | 1   |   |   |   |   |   | RESISTOR,VAR:(SEE R5000 REPL)             |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
| -23              | 210-0583-00        |                  |        | 2   |   |   |   |   |   | NUT,PLAIN,HEX:0.25-32 X 0.312 INCH,BRS    | 73743    | 2X20317-402      |
|                  | 210-0940-00        |                  |        | 1   |   |   |   |   |   | WASHER,FLAT:0.25 ID X 0.375 INCH OD,STL   | 79807    | ORD BY DESCR     |
| -24              | 210-0940-00        |                  |        | 1   |   |   |   |   |   | WASHER,LOCK:0.261 ID,INTL,0.018 THK,BRS   | 78189    | 1214-05-00-0541C |
|                  | 210-0046-00        |                  |        | 1   |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
| -25              |                    |                  |        |     |   |   |   |   |   |   |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   |   |          |                  |
| -26              | -----              |                  |        | 1   |   |   |   |   |   | RESISTOR,VAR:(SEE R5001 AND S5001 REPL)   |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
| -27              | 210-0583-00        |                  |        | 1   |   |   |   |   |   | NUT,PLAIN,HEX:0.25-32 X 0.312 INCH,BRS    | 73743    | 2X20317-402      |
|                  | 210-0940-00        |                  |        | 1   |   |   |   |   |   | WASHER,FLAT:0.25 ID X 0.375 INCH OD,STL   | 79807    | ORD BY DESCR     |
| -28              | 210-0940-00        |                  |        | 1   |   |   |   |   |   | WASHER,LOCK:0.261 ID,INTL,0.018 THK,BRS   | 78189    | 1214-05-00-0541C |
|                  | 210-0046-00        |                  |        | 1   |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
| -29              |                    |                  |        |     |   |   |   |   |   |   |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   |   |          |                  |
| -30              | -----              |                  |        | 1   |   |   |   |   |   | RESISTOR,VAR:(SEE R5002 AND S5002 REPL)   |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
| -31              | 210-0583-00        |                  |        | 1   |   |   |   |   |   | NUT,PLAIN,HEX:0.25-32 X 0.312 INCH,BRS    | 73743    | 2X20317-402      |
|                  | 210-0940-00        |                  |        | 1   |   |   |   |   |   | WASHER,FLAT:0.25 ID X 0.375 INCH OD,STL   | 79807    | ORD BY DESCR     |
| -32              | 210-0940-00        |                  |        | 1   |   |   |   |   |   | WASHER,LOCK:0.261 ID,INTL,0.018 THK,BRS   | 78189    | 1214-05-00-0541C |
|                  | 210-0046-00        |                  |        | 1   |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
| -33              |                    |                  |        |     |   |   |   |   |   |   |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   |   |          |                  |
| -34              | -----              |                  |        | 1   |   |   |   |   |   | CKT BOARD ASSY MODE SW(SEE A10 REPL)      |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   | .....(ATTACHING PARTS).....               |          |                  |
| -35              | 211-0116-00        |                  |        | 3   |   |   |   |   |   | SCR,ASSEM WSHR:4-40 X 0.312 INCH,PNH BRS  | 83385    | ORD BY DESCR     |
|                  |                    |                  |        |     |   |   |   |   |   | .....(END ATTACHING PARTS).....           |          |                  |
| -36              | -----              |                  |        | -   |   |   |   |   |   | CKT BOARD ASSY INCLUDES:                  |          |                  |
|                  |                    |                  |        |     |   |   |   |   |   |   |          |                  |
| -37              | 344-0304-00        |                  |        | 5   |   |   |   |   |   | CLIP,RETAINING: PUSH BUTTON,CU BE         | 80009    | 344-0304-00      |
|                  | 352-0308-01        |                  |        | 5   |   |   |   |   |   | HOUSING,PB:                               | 80009    | 352-0308-01      |
| -38              | 366-1200-00        |                  |        | 5   |   |   |   |   |   | PUSH BUTTON:0.61 X 0.50 X 0.355 OA        | 80009    | 366-1200-00      |
|                  | 136-0370-00        |                  |        | 5   |   |   |   |   |   | LAMPHOLDER:PLASTIC                        | 80009    | 136-0370-00      |
| -39              | 136-0370-00        |                  |        | 5   |   |   |   |   |   | LAMPHOLDER:PLASTIC                        | 80009    | 136-0370-00      |
|                  | 210-0702-00        |                  |        | 25  |   |   |   |   |   | EYELET,METALLIC:0.047 OD X 0.125 INCH LON | 07707    | S6127            |



Replaceable Mechanical Parts—7912AD Service

| Fig. &<br>Index<br>No. | Tektronix<br>Part No. | Serial/Model No. |         | Qty | Name & Description  |   |   |   |   | Mfr<br>Code | Mfr Part Number |
|------------------------|-----------------------|------------------|---------|-----|---|---|---|---|---|-------------|-----------------|
|                        |                       | Eff              | Dscont  |     | 1   | 2 | 3 | 4 | 5 |             |                 |
| 1-41                   | 214-0628-00           |                  |         | 5   | SPRING,FLAT:PUSH BUTTON   |   |   |   |   | 80009       | 214-0628-00     |
| -42                    | 131-0608-00           |                  |         | 49  | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                     |   |   |   |   | 22526       | 47357           |
| -43                    | -----                 |                  |         | 1   | CKT BOARD ASSY:PWR SW(SEE A12 REPL)<br>***** (ATTACHING PARTS)*****           |   |   |   |   |             |                 |
| -44                    | 211-0116-00           |                  |         | 2   | SCR,ASSEM WSHR:4.40 X 0.312 INCH,PNH BRS<br>***** (END ATTACHING PARTS)*****  |   |   |   |   | 83385       | ORD BY DESCR    |
|                        | -----                 |                  |         | -   | CKT BOARD ASSY INCLUDES:  |   |   |   |   |             |                 |
| -45                    | 344-0304-00           |                  |         | 1   | .CLIP,RETAINING:PUSH BUTTON,CU BE   |   |   |   |   | 80009       | 344-0304-00     |
| -46                    | 352-0308-01           |                  |         | 1   | .HOUSING,PB:  |   |   |   |   | 80009       | 352-0308-01     |
| -47                    | 366-1200-00           |                  |         | 1   | .PUSH BUTTON:0.61 X 0.50 X 0.355 OA   |   |   |   |   | 80009       | 366-1200-00     |
| -48                    | 136-0370-00           |                  |         | 1   | LAMPHOLDER:PLASTIC  |   |   |   |   | 80009       | 136-0370-00     |
| -49                    | 210-0702-00           |                  |         | 5   | .EYELET,METALLIC:0.047 OD X 0.125 INCH LON                                    |   |   |   |   | 07707       | S6127           |
| -50                    | 214-0628-00           |                  |         | 1   | SPRING,FLAT:PUSH BUTTON   |   |   |   |   | 80009       | 214-0628-00     |
| -51                    | 131-0608-00           |                  |         | 4   | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                     |   |   |   |   | 22526       | 47357           |
| -52                    | 333-2328-00           |                  |         | 1   | PANEL,FRONT:<br>***** (ATTACHING PARTS)*****                                  |   |   |   |   | 80009       | 333-2328-00     |
| -53                    | 213-0794-01           |                  |         | 8   | SCREW,CAP:4-40,HEX SOC,STEEL<br>***** (END ATTACHING PARTS)*****              |   |   |   |   | 80009       | 213-0794-01     |
| -54                    | 175-2104-00           |                  |         | 1   | CABLE ASSY,RF:50 OHM COAX,33.78 L   |   |   |   |   | 80009       | 175-2104-00     |
| -55                    | 175-2105-00           |                  |         | 1   | CABLE ASSY,RF:50 OHM COAX,33.8 L  |   |   |   |   | 80009       | 175-2105-00     |
| -56                    | 131-1124-00           |                  |         | 2   | CONN,RCPT,ELEC:BNC,FEMALE   |   |   |   |   | 24931       | 28JS155-1       |
| -57                    | 131-0818-00           |                  |         | 1   | CONNECTOR,RCPT,:BNC,FEMALE  |   |   |   |   | 91836       | KC-19-153       |
| -58                    | 407-1997-00           |                  |         | 1   | BRKT,ELEC CONN:ALUMINUM<br>***** (ATTACHING PARTS)*****                       |   |   |   |   | 80009       | 407-1997-00     |
| -59                    | 210-0457-00           |                  |         | 2   | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL  |   |   |   |   | 83385       | ORD BY DESCR    |
| -60                    | 210-0802-00           |                  |         | 2   | WASHER,FLAT:0.15 ID X 0.312 INCH OD   |   |   |   |   | 12327       | ORD BY DESCR    |
| -61                    | 211-0538-00           |                  |         | 2   | SCREW,MACHINE:6-32 X 0.312*100 DEG,FLH ST<br>***** (END ATTACHING PARTS)***** |   |   |   |   | 83385       | ORD BY DESCR    |
| -62                    | 343-0706-01           |                  |         | 2   | RETAINER,LATCH:W/SPRING & INSERT<br>***** (ATTACHING PARTS)*****              |   |   |   |   | 80009       | 343-0706-01     |
| -63                    | 212-0070-00           |                  |         | 2   | SCREW,MACHINE:8-32 X 0.312*100 DEG,FLH ST<br>***** (END ATTACHING PARTS)***** |   |   |   |   | 83385       | ORD BY DESCR    |
| -64                    | 367-0236-01           |                  |         | 1   | HANDLE,LATCH:1.925,ALUMINUM<br>***** (ATTACHING PARTS)*****                   |   |   |   |   | 80009       | 367-0236-01     |
| -65                    | 214-2653-00           |                  |         | 1   | PIN,STR,HDL:0.125 DIA X 0.875 L,SST<br>***** (END ATTACHING PARTS)*****       |   |   |   |   | 80009       | 214-2653-00     |
| -66                    | 210-1278-00           |                  |         | 2   | WASHER,SPR TNSN:0.128 ID X 0.003 THK  |   |   |   |   | 86928       | 5806-6-1        |
| -67                    | 105-0756-00           |                  |         | 1   | CATCH,LATCH:  |   |   |   |   | 80009       | 105-0756-00     |
| -68                    | 214-2654-00           |                  |         | 1   | SPRING,HLCPS:0.188 OD X 0.69 L,CLOSED EN                                      |   |   |   |   | 000CX       | OBD             |
| -69                    | 407-2021-00           |                  |         | 2   | BRACKET,ANGLE:EMI,ALUMINUM  |   |   |   |   | 80009       | 407-2021-00     |
| -70                    | 337-2453-00           |                  |         | 1   | SHIELD,ELEC:EMI   |   |   |   |   | 80009       | 337-2453-00     |
| -71                    | 337-1543-00           |                  |         | 1   | SHLD GSKT,ELECT:2.50 INCHES LONG  |   |   |   |   | 80009       | 337-1543-00     |
| -72                    | 337-1542-00           |                  |         | 1   | SHLD GSKT,ELECT:2.10 INCHES LONG  |   |   |   |   | 80009       | 337-1542-00     |
| -73                    | 426-1421-01           | B010100          | B111329 | 1   | FRAME PANEL,CAB:FRONT,FINISHED  |   |   |   |   | 80009       | 426-1421-01     |
|                        | 426-1421-05           | B111330          |         | 1   | FRAME PANEL,CAB:FINISHED,FRONT<br>***** (ATTACHING PARTS)*****                |   |   |   |   | 80009       | 426-1421-05     |
| -74                    | 213-0760-00           |                  |         | 4   | SCREW,TPG,TF:8-32 X 0.875,SPCL TAPTITE  |   |   |   |   | 93907       | ORD BY DESCR    |
| -75                    | 210-0457-00           |                  |         | 4   | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL  |   |   |   |   | 83385       | ORD BY DESCR    |
| -76                    | 211-0538-00           |                  |         | 4   | SCREW,MACHINE:6-32 X 0.312*100 DEG,FLH ST<br>***** (END ATTACHING PARTS)***** |   |   |   |   | 83385       | ORD BY DESCR    |
| -77                    | 200-2093-00           |                  |         | 2   | COVER,HOLE:ALUMINUM   |   |   |   |   | 80009       | 200-2093-00     |
| -78                    | 131-1315-01           |                  |         | 3   | CONN,RCPT,ELEC:BNC,FEMALE   |   |   |   |   | 24931       | 28JR 306-1      |
| -79                    | 210-0255-00           |                  |         | 1   | TERMINAL,LUG:0.391 ID,LOCKING,BRS CD PL                                       |   |   |   |   | 80009       | 210-0255-00     |
| -80                    | 386-3733-00           | B010100          | B059999 | 1   | PLATE,REAR:TO BOARD   |   |   |   |   | 80009       | 386-3733-00     |
|                        | 333-2600-00           | B060000          | B100871 | 1   | PANEL,REAR:   |   |   |   |   | 80009       | 333-2600-00     |
|                        | 333-2600-01           | B100872          | B101029 | 1   | PANEL,REAR:   |   |   |   |   | 80009       | 333-2600-01     |
|                        | 333-2600-02           | B101030          |         | 1   | PANEL,REAR:<br>***** (ATTACHING PARTS)*****                                   |   |   |   |   | 80009       | 333-2600-02     |
| -81                    | 211-0504-00           |                  |         | 2   | SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL<br>***** (END ATTACHING PARTS)*****    |   |   |   |   | 83385       | ORD BY DESCR    |

# Replaceable Mechanical Parts—7912AD Service

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | Name & Description  |   |   |   |   | Mfr Code | Mfr Part Number  |
|------------------|--------------------|------------------|---------|-----|---|---|---|---|---|----------|------------------|
|                  |                    | Eff              | Dscont  |     | 1   | 2 | 3 | 4 | 5 |          |                  |
| 1-82             | 131-0346-01        |                  |         | 1   | CONN,RCPT,ELEC:24 CONTACT,FEMALE<br>.....(ATTACHING PARTS)..... |   |   |   |   | 71785    | 222-22-24-242    |
| -83              | 129-0572-00        | B010100          | B100871 | 2   | SPACER,POST:0.29 LONG X 0.25 HEX                                |   |   |   |   | 80009    | 129-0572-00      |
|                  | 129-0922-00        | B100872          |         | 2   | SPACER,POST:0.71,W/6-32 THD ONE END,AL                          |   |   |   |   | 80009    | 129-0922-00      |
| -84              | 210-0008-00        | B100872          |         | 2   | WASHER,LOCK:INTL.0.172 ID X 0.331"OD,S                          |   |   |   |   | 78189    | 1208-00-00-0541C |
|                  |                    |                  |         |     | .....(END ATTACHING PARTS).....                                 |   |   |   |   |          |                  |
| -85              | 131-0818-00        |                  |         | 6   | CONNECTOR,RCPT.:BNC,FEMALE                                      |   |   |   |   | 91836    | KC-19-153        |
| -86              | 131-1124-00        |                  |         | 2   | CONN,RCPT,ELEC:BNC,FEMALE                                       |   |   |   |   | 24931    | 28JS155-1        |
| -87              | 200-1528-00        |                  |         | 1   | COVER,ACCESS:CRT REAR   |   |   |   |   | 80009    | 200-1528-00      |
|                  |                    |                  |         |     | .....(ATTACHING PARTS).....                                     |   |   |   |   |          |                  |
| -88              | 211-0008-00        |                  |         | 3   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ                          |   |   |   |   | 83385    | ORD BY DESCR     |
| -89              | 220-0601-00        |                  |         | 3   | NUT,PLAIN,CAP.:4-40 X 0.25 INCH HEX,BRS                         |   |   |   |   | 73743    | 93261-03         |
|                  |                    |                  |         |     | .....(END ATTACHING PARTS).....                                 |   |   |   |   |          |                  |
| -90              | 337-1846-00        |                  |         | 1   | SHIELD,CRT:REAR   |   |   |   |   | 80009    | 337-1846-00      |
| -91              | 131-0809-00        |                  |         | 1   | TERMINAL,STUD:PNL MT,4-40 TAP 1 END                             |   |   |   |   | 71279    | 570-1510-01-0519 |
|                  |                    |                  |         |     | .....(ATTACHING PARTS).....                                     |   |   |   |   |          |                  |
| -92              | 211-0007-00        |                  |         | 1   | SCREW,MACHINE:4-40 X 0.188 INCH,PNH STL                         |   |   |   |   | 83385    | ORD BY DESCR     |
| -93              | 210-0994-00        |                  |         | 1   | WASHER,FLAT:0.125 ID X 0.25" OD,STL                             |   |   |   |   | 86928    | 5702-201-20      |
|                  |                    |                  |         |     | .....(END ATTACHING PARTS).....                                 |   |   |   |   |          |                  |
| -94              | 131-0955-00        |                  |         | 2   | CONN,RCPT,ELEC:BNC,FEMALE                                       |   |   |   |   | 13511    | 31-279           |
| -95              | 210-0255-00        |                  |         | 1   | TERMINAL,LUG:0.391 ID,LOCKING,BRS CD PL                         |   |   |   |   | 80009    | 210-0255-00      |
| -96              | 333-2329-00        |                  |         | 1   | PANEL,REAR:   |   |   |   |   | 80009    | 333-2329-00      |
|                  |                    |                  |         |     | .....(ATTACHING PARTS).....                                     |   |   |   |   |          |                  |
| -97              | 211-0504-00        |                  |         | 4   | SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL                          |   |   |   |   | 83385    | ORD BY DESCR     |
|                  |                    |                  |         |     | .....(END ATTACHING PARTS).....                                 |   |   |   |   |          |                  |
| -98              | 426-1422-01        |                  |         | 1   | FRAME PANEL,CAB:REAR W/HARDWARE                                 |   |   |   |   | 80009    | 426-1422-01      |
|                  |                    |                  |         |     | .....(ATTACHING PARTS).....                                     |   |   |   |   |          |                  |
| -99              | 213-0760-00        |                  |         | 4   | SCREW,TPG,TF:8-32 X 0.875,SPCL TAPTITE                          |   |   |   |   | 93907    | ORD BY DESCR     |
| -100             | 210-0457-00        |                  |         | 2   | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL                          |   |   |   |   | 83385    | ORD BY DESCR     |
| -101             | 211-0538-00        |                  |         | 2   | SCREW,MACHINE:6-32 X 0.312"100 DEG,FLH ST                       |   |   |   |   | 83385    | ORD BY DESCR     |
|                  |                    |                  |         |     | .....(END ATTACHING PARTS).....                                 |   |   |   |   |          |                  |
| -102             | 348-0277-00        | B010100          | B010414 | FT  | SHLD GSKT,ELEC:2.80 FEET LONG                                   |   |   |   |   | 28817    | 01-0504-1891     |
|                  |                    |                  |         |     | SHLD GSKT,ELEC:ELASTOFORM,0.187 W X 0.156                       |   |   |   |   |          |                  |
| -103             | 337-2697-00        | B010415          |         | FT  | CLAMP,LOOP:0.375 ID,PLASTIC                                     |   |   |   |   | 95987    | 3-8-6B           |
|                  |                    |                  |         |     | .....(ATTACHING PARTS).....                                     |   |   |   |   |          |                  |
| -104             | 210-0457-00        |                  |         | 1   | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL                          |   |   |   |   | 93385    | ORD BY DESCR     |
| -105             | 210-0863-00        | B100777          |         | 1   | WSHR,LOOP CLAMP:0.187 ID U/W 0.5 W CLP,STL                      |   |   |   |   | 95987    | C191             |
|                  |                    |                  |         |     | .....(END ATTACHING PARTS).....                                 |   |   |   |   |          |                  |
| -106             | 426-1426-00        |                  |         | 1   | FRAME SECT,CAB.:TOP LEFT  |   |   |   |   | 80009    | 426-1426-00      |
| -107             | 426-1425-00        |                  |         | 1   | FRAME SECT,CAB.:BOTTOM LEFT                                     |   |   |   |   | 80009    | 426-1425-00      |
| -108             | 426-1428-00        |                  |         | 1   | FRAME SECT,CAB.:TOP RIGHT                                       |   |   |   |   | 80009    | 426-1428-00      |
| -109             | 426-1427-00        |                  |         | 1   | FRAME SECT,CAB.:BOTTOM RIGHT                                    |   |   |   |   | 80009    | 426-1427-00      |

| Fig. &<br>Index<br>No. | Tektronix<br>Part No. | Serial/Model No. |         | Qty | 1 2 3 4 5 | Name & Description   | Mfr<br>Code | Mfr Part Number  |
|------------------------|-----------------------|------------------|---------|-----|-----------|--|-------------|------------------|
|                        |                       | Eff              | Dscont  |     |           |  |             |                  |
| 2-1                    | -----                 |                  |         | 1   |           | CKT BOARD ASSY:VIDEO PRCS(SEE A28 REPL)                                    |             |                  |
| -2                     | 105-0793-00           |                  |         | 2   |           | .EJECTOR,CKT BD:WHITE,PLASTIC  | 71279       | 415-7036-01-0020 |
| -3                     | 214-1337-00           |                  |         | 2   |           | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL                                      | 80009       | 214-1337-00      |
| -4                     | 136-0578-00           | B010100          | B010116 | 1   |           | .SKT,PL-IN ELEK:MICROCKT,24 PIN,LOW PROFIL                                 | 73803       | C S9002-24       |
| -5                     | 136-0260-02           |                  |         | 1   |           | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL                                 | 71785       | 133-51-92-008    |
| -6                     | 131-0993-00           |                  |         | 6   |           | .BUS,CONDUCTOR:2 WIRE BLACK  | 00779       | 850100-01        |
| -7                     | 131-0608-00           |                  |         | 9   |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                  | 22526       | 47357            |
| -8                     | 136-0269-02           |                  | B010100 | 3   |           | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL                                 | 73803       | CS9002-14        |
| -9                     | 136-0252-07           | B010100          | B050596 | 60  |           | .SOCKET,PIN CONN:W/O DIMPLE  | 22526       | 75060-012        |
|                        | 136-0252-07           | B050597          | B111235 | 12  |           | .SOCKET,PIN CONN:W/O DIMPLE  | 22526       | 75060-012        |
| -10                    | 136-0514-00           |                  | B010100 | 3   |           | .SKT,PL-IN ELEC:MICROCIRCUIT,8 DIP   | 73803       | CS9002-8         |
| -11                    | 214-0579-00           |                  |         | 15  |           | .TERM,TEST POINT:BRS CD PL   | 80009       | 214-0579-00      |
| -12                    | -----                 |                  |         | 1   |           | CKT BOARD ASSY:RAMP GEN(SEE A26 REPL)                                      |             |                  |
| -13                    | 105-0793-00           |                  |         | 2   |           | .EJECTOR,CKT BD:WHITE,PLASTIC  | 71279       | 415-7036-01-0020 |
| -14                    | 214-1337-00           |                  |         | 2   |           | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL                                      | 80009       | 214-1337-00      |
| -15                    | 131-0608-00           |                  |         | 24  |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                  | 22526       | 47357            |
| -16                    | 131-0993-00           |                  |         | 8   |           | .BUS,CONDUCTOR:2 WIRE BLACK  | 00779       | 850100-01        |
| -17                    | 136-0260-02           |                  | B010100 | 1   |           | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL                                 | 71785       | 133-51-92-008    |
| -18                    | 136-0269-02           |                  | B010100 | 10  |           | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL                                 | 73803       | CS9002-14        |
| -19                    | 136-0252-07           | B010100          | B050574 | 144 |           | .SOCKET,PIN CONN:W/O DIMPLE  | 22526       | 75060-012        |
|                        | 136-0252-07           | B050575          | B111235 | 51  |           | .SOCKET,PIN CONN:W/O DIMPLE  | 22526       | 75060-012        |
| -20                    | 136-0514-00           |                  | B010100 | 2   |           | .SKT,PL-IN ELEC:MICROCIRCUIT,8 DIP   | 73803       | CS9002-8         |
| -21                    | 214-0579-00           |                  |         | 13  |           | .TERM,TEST POINT:BRS CD PL   | 80009       | 214-0579-00      |
| -22                    | -----                 |                  |         | 1   |           | CKT BOARD ASSY:GRATICULE GEN(SEE A24 REPL)                                 |             |                  |
| -23                    | 105-0793-00           |                  |         | 2   |           | .EJECTOR,CKT BD:WHITE,PLASTIC  | 71279       | 415-7036-01-0020 |
| -24                    | 214-1337-00           |                  |         | 2   |           | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL                                      | 80009       | 214-1337-00      |
| -25                    | 131-0608-00           |                  |         | 3   |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                  | 22526       | 47357            |
| -26                    | 131-0993-00           |                  |         | 1   |           | .BUS,CONDUCTOR:2 WIRE BLACK  | 00779       | 850100-01        |
| -27                    | 136-0260-02           |                  | B010100 | 7   |           | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL                                 | 71785       | 133-51-92-008    |
| -28                    | 136-0269-02           |                  | B010100 | 17  |           | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL                                 | 73803       | CS9002-14        |
| -29                    | 136-0252-07           | B010100          | B050584 | 105 |           | .SOCKET,PIN CONN:W/O DIMPLE  | 22526       | 75060-012        |
|                        | 136-0252-07           | B050585          | B111235 | 30  |           | .SOCKET,PIN CONN:W/O DIMPLE  | 22526       | 75060-012        |
| -30                    | 200-0945-01           |                  |         | 1   |           | .COVER,HALF XSTR:DUAL TO-18,W/2-56 THD<br>.....(ATTACHING PARTS).....      | 80009       | 200-0945-01      |
| -31                    | 211-0001-00           |                  |         | 1   |           | .SCREW,MACHINE:2-56 X 0.25 INCH,PNH STL<br>.....(END ATTACHING PARTS)..... | 87308       | ORD BY DESCR     |
| -32                    | 200-0945-00           |                  |         | 1   |           | .COVER,HALF XSTR:DUAL TO-18,ALUMINUM                                       | 80009       | 200-0945-00      |
| -33                    | 136-0514-00           |                  | B010100 | 1   |           | .SKT,PL-IN ELEC:MICROCIRCUIT,8 DIP   | 73803       | CS9002-8         |
| -34                    | 214-0579-00           |                  |         | 9   |           | .TERM,TEST POINT:BRS CD PL   | 80009       | 214-0579-00      |
| -35                    | -----                 |                  |         | 1   |           | CKT BOARD ASSY:TRANSLATOR(SEE A22 REPL)                                    |             |                  |
| -36                    | 105-0793-00           |                  |         | 2   |           | .EJECTOR,CKT BD:WHITE,PLASTIC  | 71279       | 415-7036-01-0020 |
| -37                    | 214-1337-00           |                  |         | 2   |           | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL                                      | 80009       | 214-1337-00      |
| -38                    | 131-0608-00           | B010100          | B069999 | 18  |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                  | 22526       | 47357            |
|                        | 131-0608-00           | B070000          |         | 21  |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                  | 22526       | 47357            |
| -39                    | 131-0993-00           | B010100          | B069999 | 6   |           | .BUS,CONDUCTOR:2 WIRE BLACK  | 00779       | 850100-01        |
|                        | 131-0608-00           | B070000          |         | 7   |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                  | 22526       | 47357            |
| -40                    | 136-0260-02           | B010100          | B050573 | 5   |           | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL                                 | 71785       | 133-51-92-008    |
| -41                    | 136-0578-00           | B010100          | B050573 | 1   |           | .SKT,PL-IN ELEK:MICROCKT,24 PIN,LOW PROFIL                                 | 73803       | C S9002-24       |
| -42                    | 136-0269-02           | B010100          | B050573 | 3   |           | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL                                 | 73803       | CS9002-14        |
| -43                    | 136-0252-07           | B010100          | B050573 | 9   |           | .SOCKET,PIN CONN:W/O DIMPLE  | 22526       | 75060-012        |
|                        | 136-0252-07           | B100785          |         | 3   |           | .SOCKET,PIN CONN:W/O DIMPLE  | 22526       | 75060-012        |
| -44                    | 136-0514-00           |                  | B010100 | 5   |           | .SKT,PL-IN ELEC:MICROCIRCUIT,8 DIP   | 73803       | CS9002-8         |
| -45                    | -----                 |                  |         | 1   |           | CKT BOARD ASSY:DATA BUFFER(SEE A20 REPL)                                   |             |                  |
| -46                    | 105-0793-00           |                  |         | 2   |           | .EJECTOR,CKT BD:WHITE,PLASTIC  | 71279       | 415-7036-01-0020 |
| -47                    | 214-1337-00           |                  |         | 2   |           | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL                                      | 80009       | 214-1337-00      |
| -48                    | 131-0608-00           | B010100          | B089999 | 13  |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                  | 22526       | 47357            |
|                        | 131-0608-00           | B090000          |         | 18  |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                  | 22526       | 47357            |
| -49                    | 131-0993-00           | B010100          | B089999 | 3   |           | .BUS,CONDUCTOR:2 WIRE BLACK  | 00779       | 850100-01        |
|                        | 131-0993-00           | B090000          |         | 4   |           | .BUS,CONDUCTOR:2 WIRE BLACK  | 00779       | 850100-01        |
| -50                    | 136-0260-02           | B010100          | B050595 | 18  |           | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL                                 | 71785       | 133-51-92-008    |
|                        | 136-0260-02           | B050596          | B100786 | 8   |           | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL                                 | 71785       | 133-51-92-008    |
|                        | 136-0729-00           | B100787          | B111235 | 6   |           | .SKT,PL-IN ELEK:MICROCKT,16 CONTACT  | 09922       | DILB16P-108T     |
|                        | 136-0729-00           | B111236          |         | 5   |           | .SKT,PL-IN ELEK:MICROCKT,16 CONTACT  | 09922       | DILB16P-108T     |
| -51                    | 136-0269-02           |                  | B010100 | 1   |           | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL                                 | 73803       | CS9002-14        |

Replaceable Mechanical Parts—7912AD Service

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Qty | 1 | 2 | 3 | 4 | 5 | Name & Description                          | Mfr Code | Mfr Part Number  |
|------------------|--------------------|----------------------|---------|-----|---|---|---|---|---|---|----------|------------------|
| 2-52             | -----              |                      |         | 1   |   |   |   |   |   | CKT BOARD ASSY:UCONTROL MEM (SEE A18 REPL)  |          |                  |
| -53              | 105-0793-00        |                      |         | 2   |   |   |   |   |   | .EJECTOR,CKT BD:WHITE,PLASTIC               | 71279    | 415-7036-01-0020 |
| -54              | 214-1337-00        |                      |         | 2   |   |   |   |   |   | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL       | 80009    | 214-1337-00      |
| -55              | 136-0260-02        | B010100              | B100811 | 5   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW C   | 71785    | 133-51-92-008    |
|                  | 136-0729-00        | B100812              | B111235 | 5   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,16 CONTACT         | 09922    | DILB16P-108T     |
| -56              | 136-0634-00        |                      | B010100 | 4   |   |   |   |   |   | .SOCKET,PLUG-IN:20 LEAD DIP,CKT BD MTG      | 73803    | CS9002-20        |
| -57              | 136-0621-00        | B010100              | B100811 | 22  |   |   |   |   |   | .SOCKET,PLUG-IN:22 CONTACT                  | 73803    | CS9002-22        |
|                  | 136-0754-00        | B100812              | B111235 | 14  |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,22 DIP         | 09922    | DILB22P-108      |
| -58              | 136-0269-02        |                      | B010100 | 6   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL  | 73803    | CS9002-14        |
| -59              | 136-0623-00        | B010100              | B100811 | 4   |   |   |   |   |   | .SOCKET,PLUG-IN:40 DIP,LOW PROFILE          | 73803    | CS9002-40        |
|                  | 136-0757-00        | B100812              |         | 4   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,40 PIN             | 09922    | DILB40P-108      |
| -60              | -----              |                      |         | 1   |   |   |   |   |   | CKT BOARD ASSY:MEMORY CONTROL(SEE A16 REPL) |          |                  |
| -61              | 105-0793-00        |                      |         | 2   |   |   |   |   |   | .EJECTOR,CKT BD:WHITE,PLASTIC               | 71279    | 415-7036-01-0020 |
| -62              | 214-1337-00        |                      |         | 2   |   |   |   |   |   | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL       | 80009    | 214-1337-00      |
| -63              | 136-0260-02        |                      | B010100 | 12  |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL  | 71785    | 133-51-92-008    |
| -64              | 131-0608-00        |                      |         | 15  |   |   |   |   |   | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD   | 22526    | 47357            |
| -65              | 131-0993-00        |                      |         | 5   |   |   |   |   |   | .BUS,CONDUCTOR:2 WIRE BLACK                 | 00779    | 850100-01        |
| -66              | 136-0634-00        | B010100              | B100773 | 1   |   |   |   |   |   | .SOCKET,PLUG-IN:20 LEAD DIP,CKT BD MTG      | 73803    | CS9002-20        |
|                  | 136-0729-00        | B100774              |         | 1   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,16 CONTACT         | 09922    | DILB16P-108T     |
| -67              | 136-0269-02        |                      |         | 1   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL  | 73803    | CS9002-14        |
| -68              | 136-0670-00        | B010100              | B080713 | 11  |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,18 PIN,LOW PROFIL  | 73803    | CS9002-18        |
|                  | 136-0756-00        | B080714              |         | 10  |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,18 DIP         | 09922    | DILB18P-108      |
| -69              | 136-0694-00        | B010100              | B080713 | 3   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,28 CONTACT     | 73803    | CS9002-28        |
|                  | 136-0755-00        | B080714              |         | 3   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,28 DIP         | 09922    | DILB28P-108      |
| -70              | 351-0087-00        |                      |         | 14  |   |   |   |   |   | GUIDE,CKT BOARD:4.75 INCH LONG,PLASTIC      | 80009    | 351-0087-00      |
| -71              | 441-1434-00        |                      |         | 1   |   |   |   |   |   | CHAS.DIGITIZER:CIRCUIT BOARD                | 80009    | 441-1434-00      |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (ATTACHING PARTS) *****               |          |                  |
| -72              | 211-0538-00        |                      |         | 2   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.312*100 DEG,FLH ST   | 83385    | ORD BY DESCR     |
| -73              | 210-0457-00        |                      |         | 2   |   |   |   |   |   | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL      | 83385    | ORD BY DESCR     |
| -74              | 211-0504-00        |                      |         | 2   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL      | 83385    | ORD BY DESCR     |
| -75              | 210-0202-00        |                      |         | 1   |   |   |   |   |   | TERMINAL,LUG:0.146 ID,LOCKING,BRZ TINNED    | 78189    | 2104-06-00-2520N |
| -76              | 211-0008-00        |                      |         | 1   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ      | 83385    | ORD BY DESCR     |
| -77              | 211-0101-00        |                      |         | 1   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.25,100 DEG,FLH STL   | 83385    | ORD BY DESCR     |
| -78              | 210-0586-00        |                      |         | 2   |   |   |   |   |   | NUT,PL,ASSEM WA:4-40 X 0.25,STL             | 83385    | ORD BY DESCR     |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (END ATTACHING PARTS) *****           |          |                  |
| -79              | 352-0509-00        |                      |         | 14  |   |   |   |   |   | HOLDER,CKT CD:                              | 80009    | 352-0509-00      |
| -80              | 407-2124-00        |                      |         | 1   |   |   |   |   |   | BRACKET,SUPPORT:ALUMINUM                    | 80009    | 407-2124-00      |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (ATTACHING PARTS) *****               |          |                  |
| -81              | 211-0008-00        | B010100              | B040548 | 2   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ      | 83385    | ORD BY DESCR     |
|                  | 211-0504-00        | B040549              |         | 2   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL      | 83385    | ORD BY DESCR     |
| -82              | 211-0504-00        | B010100              | B029999 | 1   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL      | 83385    | ORD BY DESCR     |
|                  | 211-0538-00        | B030000              |         | 1   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.312*100 DEG,FLH ST   | 83385    | ORD BY DESCR     |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (END ATTACHING PARTS) *****           |          |                  |
| -82.1            | 407-2508-00        | B030000              |         | 1   |   |   |   |   |   | BRACKET,CMPNT:SHIELD                        | 80009    | 407-2508-00      |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (ATTACHING PARTS) *****               |          |                  |
| -82.2            | 211-0008-00        | B030000              |         | 2   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ      | 83385    | ORD BY DESCR     |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (END ATTACHING PARTS) *****           |          |                  |
| -82.3            | 388-6977-00        | B030000              |         | 1   |   |   |   |   |   | CIRCUIT BOARD:SHIELD                        | 80009    | 388-6977-00      |
| -83              | 386-1557-00        | B010100              | B100828 | 6   |   |   |   |   |   | SPACER,CKT BD:0.29 H.ACETAL                 | 80009    | 386-1557-00      |
|                  | 386-1557-00        | B100829              |         | 4   |   |   |   |   |   | SPACER,CKT BD:0.29 H.ACETAL                 | 80009    | 386-1557-00      |
|                  | 386-1556-00        | B100829              |         | 2   |   |   |   |   |   | SUPPORT,CKT BD:0.215 H.ACETAL               | 80009    | 386-1556-00      |
| -84              | 381-0393-00        |                      |         | 1   |   |   |   |   |   | BAR,SUPPORT:CIRCUIT CARD,ALUMINUM           | 80009    | 381-0393-00      |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (ATTACHING PARTS) *****               |          |                  |
| -85              | 211-0504-00        |                      |         | 1   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL      | 83385    | ORD BY DESCR     |
| -86              | 211-0538-00        |                      |         | 1   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.312*100 DEG,FLH ST   | 83385    | ORD BY DESCR     |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (END ATTACHING PARTS) *****           |          |                  |
| -87              | 407-2041-00        |                      |         | 1   |   |   |   |   |   | BRACKET,CKT BD:ALUMINUM                     | 80009    | 407-2041-00      |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (ATTACHING PARTS) *****               |          |                  |
| -88              | 210-0457-00        |                      |         | 2   |   |   |   |   |   | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL      | 83385    | ORD BY DESCR     |
| -89              | 211-0507-00        |                      |         | 2   |   |   |   |   |   | SCREW,MACHINE:6-32 X 0.312 INCH,PNH STL     | 83385    | ORD BY DESCR     |
|                  |                    |                      |         |     |   |   |   |   |   | ***** (END ATTACHING PARTS) *****           |          |                  |

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | 1 2 3 4 5 | Name & Description  | Mfr Code | Mfr Part Number |
|------------------|--------------------|------------------|---------|-----|-----------|---|----------|-----------------|
|                  |                    | Eff              | Dscont  |     |           |   |          |                 |
| 2-90             | 441-1389-00        |                  |         | 1   |           | CHASSIS,SUPPORT:E.C. CARD<br>***** (ATTACHING PARTS) *****                      | 80009    | 441-1389-00     |
| -91              | 211-0538-00        |                  |         | 1   |           | SCREW,MACHINE:6-32 X 0.312" 100 DEG.FLH ST                                      | 83385    | ORD BY DESCR    |
| -92              | 210-0457-00        |                  |         | 2   |           | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL  | 83385    | ORD BY DESCR    |
| -93              | 211-0007-00        |                  |         | 2   |           | SCREW,MACHINE:4-40 X 0.188 INCH,PNH STL   | 83385    | ORD BY DESCR    |
| -94              | 210-0994-00        |                  |         | 2   |           | WASHER,FLAT:0.125 ID X 0.25" OD,STL   | 86928    | 5702-201-20     |
| -95              | 210-0586-00        |                  |         | 2   |           | NUT,PL,ASSEM WA:4-40 X 0.25,STL   | 83385    | ORD BY DESCR    |
| -96              | 211-0101-00        |                  |         | 2   |           | SCREW,MACHINE:4-40 X 0.25,100 DEG.FLH STL                                       | 83385    | ORD BY DESCR    |
| -97              | 211-0504-00        |                  |         | 2   |           | SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****     | 83385    | ORD BY DESCR    |
| -98              | 129-0517-00        |                  |         | 2   |           | POST,ELEC-MECH:0.25 L X 0.25 HEX.AL<br>***** (ATTACHING PARTS) *****            | 80009    | 129-0517-00     |
| -99              | 211-0007-00        |                  |         | 2   |           | SCREW,MACHINE:4-40 X 0.188 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****    | 83385    | ORD BY DESCR    |
| -100             | 343-0089-00        |                  |         | 4   |           | CLAMP,LOOP:LARGE  | 80009    | 343-0089-00     |
| -101             | 131-0800-00        | B010100          | B101060 | 2   |           | CONTACT,ELEC:PLUG-IN GROUND   | 80009    | 131-0800-00     |
|                  | 131-0800-03        | B101061          |         | 2   |           | CONTACT,ELEC:PLUG-IN GND,BE NI HT TR<br>***** (ATTACHING PARTS) *****           | 80009    | 131-0800-03     |
| -102             | 213-0138-00        |                  |         | 4   |           | SCR,TPG,TF:4-24 X 0.188 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****       | 83385    | ORD BY DESCR    |
| -103             | 131-0930-00        |                  |         | 2   |           | CONTACT,ELEC:PLUG-IN GROUND<br>***** (ATTACHING PARTS) *****                    | 80009    | 131-0930-00     |
| -104             | 210-0586-00        |                  |         | 2   |           | NUT,PL,ASSEM WA:4-40 X 0.25,STL   | 83385    | ORD BY DESCR    |
| -105             | 211-0008-00        |                  |         | 1   |           | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>***** (END ATTACHING PARTS) *****     | 83385    | ORD BY DESCR    |
| -106             | 441-1374-00        | B010100          | B040548 | 1   |           | CHAS,PL-IN UNIT:  | 80009    | 441-1374-00     |
|                  | 441-1374-01        | B040549          |         | 1   |           | CHAS,PL-IN UNIT:<br>***** (ATTACHING PARTS) *****                               | 80009    | 441-1374-01     |
| -107             | 210-0457-00        |                  |         | 4   |           | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL  | 83385    | ORD BY DESCR    |
| -108             | 211-0538-00        |                  |         | 4   |           | SCREW,MACHINE:6-32 X 0.312" 100 DEG.FLH ST                                      | 83385    | ORD BY DESCR    |
| -109             | 213-0263-00        |                  |         | 6   |           | SCREW,TPG,TF:4-24 X 0.375 INCH,PNH STL  | 83385    | ORD BY DESCR    |
| -110             | 211-0007-00        |                  |         | 2   |           | SCREW,MACHINE:4-40 X 0.188 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****    | 83385    | ORD BY DESCR    |
| -111             | 129-0427-00        |                  |         | 2   |           | POST,ELEC-MECH:4-40 X 0.188 X 1.056" L HEX<br>***** (ATTACHING PARTS) *****     | 80009    | 129-0427-00     |
| -112             | 211-0007-00        |                  |         | 2   |           | SCREW,MACHINE:4-40 X 0.188 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****    | 83385    | ORD BY DESCR    |
| 112.1            | 337-2694-00        | B050584          |         | 1   |           | SHIELD,ELEC:CIRCUIT BOARD<br>***** (ATTACHING PARTS) *****                      | 80009    | 337-2694-00     |
| 112.2            | 211-0008-00        | B050584          |         | 4   |           | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ  | 83385    | ORD BY DESCR    |
| 112.3            | 220-0449-00        | B050584          |         | 2   |           | NUT,SLEEVE:4-40 X 0.188 X 0.50" LONG<br>***** (END ATTACHING PARTS) *****       | 80009    | 220-0449-00     |
| -113             | -----              |                  |         | 1   |           | CKT BOARD ASSY:VERT INTERFACE(SEE A44 REPL                                      |          |                 |
| -114             | 136-0263-04        |                  |         | 5   |           | .SOCKET,PIN TERM:FOR 0.025 INCH SQUARE PIN                                      | 22526    | 75377-001       |
| -115             | 136-0252-07        | B010100          | B111235 | 12  |           | .SOCKET,PIN TERM:U/W 0.016-0.018 DIA PINS                                       | 22526    | 75060-007       |
| -116             | 131-1003-00        |                  |         | 6   |           | CONN,RCPT,ELEC:CKT BD MT.3 PRONG  | 90009    | 131-1003-00     |
| -117             | 211-0155-00        |                  |         | 2   |           | .SCREW,EXT,RLV B:4-40 X 0.375 INCH,SST  | 80009    | 211-0155-00     |
| -118             | 361-0238-00        |                  |         | 2   |           | .SPACER,SLEEVE:0.25 OD X 0.34 INCH LONG   | 80009    | 361-0238-00     |
| -119             | -----              |                  |         | 2   |           | MICROCIRCUIT,LI:(SEE U4625 AND U4685 REPL<br>***** (ATTACHING PARTS) *****      |          |                 |
| -120             | 210-0406-00        |                  |         | 2   |           | NUT,PLAIN,HEX:4-40 X 0.188 INCH,BRS   | 73743    | 12161-50        |
| -121             | 210-0906-00        |                  |         | 2   |           | WASHER,NONMETAL:FIBER,0.125 ID X 0.203" OD<br>***** (END ATTACHING PARTS) ***** | 86928    | ORD BY DESCR    |
| -122             | 131-1429-00        |                  |         | 1   |           | CONTACT,ELEC:IC GND,DUAL  | 80009    | 131-1429-00     |
| -123             | 136-0269-02        | B010100          | B101002 | 1   |           | SKT,PL-IN ELEC:MICROCIRCUIT,14 DIP,LOW CL                                       | 73803    | CS9002-14       |
|                  | 136-0728-00        | B101003          | B111235 | 1   |           | SKT,PL-IN ELEC:MICROCKT,14 CONTACT  | 09922    | DILB14P-108     |
|                  | 672-0688-00        | B010100          | B100836 | 1   |           | CKT CARD ASSY:  | 80009    | 672-0688-00     |
|                  | 672-0688-01        | B100837          | B100972 | 1   |           | CKT BOARD ASSY:PLUG-IN INTERFACE  | 80009    | 672-0688-01     |
|                  | 672-0688-02        | B100973          |         | 1   |           | CKT BOARD ASSY:PLUG-IN INTERFACE  | 80009    | 672-0688-02     |
|                  | 672-0734-00        | B010100          | B100972 | 1   |           | CKT CARD ASSY:<br>(OPTION 04 ONLY)  | 80009    | 672-0734-00     |
|                  | 672-0734-01        | B100973          |         | 1   |           | CKT BOARD ASSY:PLUG-IN INTERFACE<br>(OPTION 04 ONLY)                            | 80009    | 672-0734-01     |
| -124             | -----              |                  |         | 1   |           | CKT BOARD ASSY:50 OHM FOLLOW(SEE A42 REPL                                       |          |                 |
| -125             | -----              |                  |         | 1   |           | CKT BOARD ASSY:PLUG-IN INTFC(SEE A46 REPL                                       |          |                 |

Replaceable Mechanical Parts—7912AD Service

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | 1 | 2 | 3 | 4 | 5 | Name & Description  | Mfr Code | Mfr Part Number |
|------------------|--------------------|------------------|---------|-----|---|---|---|---|---|---|----------|-----------------|
|                  |                    | Eff              | Dscont  |     |   |   |   |   |   |   |          |                 |
| 2-               | 131-0767-05        |                  |         | 1   |   |   |   |   |   | CONNECTOR,RCPT.:PLUG-IN CKT BD.35/70 CON<br>.....(ATTACHING PARTS).....     | 80009    | 131-0767-05     |
| -126             | 213-0232-00        |                  |         | 2   |   |   |   |   |   | SCR,TPG,THD FOR:2-32 X 0.312 INCH.PNH ST<br>.....(END ATTACHING PARTS)..... | 83385    | ORD BY DESCR    |
|                  | -----              |                  |         | -   |   |   |   |   |   | CONNECTOR INCLUDES:   |          |                 |
| -127             | 200-0950-00        |                  |         | 2   |   |   |   |   |   | COVER,ELEC CONN:PLASTIC   | 80009    | 200-0950-00     |
| -128             | 214-1665-00        |                  |         | 1   |   |   |   |   |   | SPRING,FLAT:2.35 X 0.041 MUSIC WIRE   | 80009    | 214-1665-00     |
| -129             | 131-0727-00        |                  |         | 32  |   |   |   |   |   | CONTACT,ELEC:OFFSET   | 80009    | 131-0727-00     |
| -130             | 131-0726-00        |                  |         | 32  |   |   |   |   |   | CONTACT,ELEC:STRAIGHT   | 80009    | 131-0726-00     |
| -131             | 204-0365-02        |                  |         | 1   |   |   |   |   |   | BODY,CONNECTOR:PLUG-IN CIRCUIT CARD   | 80009    | 204-0365-02     |
|                  | 131-0767-07        |                  |         | 1   |   |   |   |   |   | CONNECTOR,RCPT.:PLUG-IN CKT BD.70 CONTAC<br>.....(ATTACHING PARTS).....     | 80009    | 131-0767-07     |
| -132             | 213-0232-00        |                  |         | 2   |   |   |   |   |   | SCR,TPG,THD FOR:2-32 X 0.312 INCH.PNH ST<br>.....(END ATTACHING PARTS)..... | 83385    | ORD BY DESCR    |
|                  | -----              |                  |         | -   |   |   |   |   |   | CONNECTOR INCLUDES:   |          |                 |
| -133             | 200-0950-00        |                  |         | 2   |   |   |   |   |   | COVER,ELEC CONN:PLASTIC   | 80009    | 200-0950-00     |
| -134             | 131-0727-00        |                  |         | 35  |   |   |   |   |   | CONTACT,ELEC:OFFSET   | 80009    | 131-0727-00     |
| -135             | 131-0726-00        |                  |         | 35  |   |   |   |   |   | CONTACT,ELEC:STRAIGHT   | 80009    | 131-0726-00     |
| -136             | 204-0365-02        |                  |         | 1   |   |   |   |   |   | BODY,CONNECTOR:PLUG-IN CIRCUIT CARD   | 80009    | 204-0365-02     |
| -137             | 131-2183-00        | B010100          | B090756 | 5   |   |   |   |   |   | CONN,RCPT,ELEC:CKT CD.2 X 10 FEM,SIDE EN                                    | 00779    | 5-87729-6       |
|                  | 131-2616-00        | B090757          |         | 1   |   |   |   |   |   | CONN,RCPT,ELEC:CKT BD,2 X 45,0.1 SPACING                                    | 00779    | 4-86063-1       |
| -138             | 131-0592-00        |                  |         | 4   |   |   |   |   |   | CONTACT,ELEC:0.885 INCH LONG  | 22526    | 47353           |
| -139             | 351-0227-00        |                  |         | 2   |   |   |   |   |   | GUIDE-POST,LOCK:0.84 INCH LONG  | 80009    | 351-0227-00     |
| -140             | 136-0269-02        | B010100          | B050577 | 2   |   |   |   |   |   | SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW C                                    | 73803    | CS9002-14       |
| -141             | 136-0260-02        | B010100          | B050577 | 5   |   |   |   |   |   | SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW C                                    | 71785    | 133-51-92-008   |
|                  | 136-0260-02        | B050578          | B100815 | 4   |   |   |   |   |   | SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW C                                    | 71785    | 133-51-92-008   |
|                  | 136-0729-00        | B100816          | B111235 | 4   |   |   |   |   |   | SKT,PL-IN ELEK:MICROCKT,16 CONTACT  | 09922    | DILB16P-108T    |
| -142             | 136-0252-07        | B010100          | B050577 | 105 |   |   |   |   |   | SOCKET,PIN CONN:W/O DIMPLE  | 22526    | 75060-012       |
|                  | 136-0252-07        | B050578          | B111235 | 9   |   |   |   |   |   | SOCKET,PIN CONN:W/O DIMPLE  | 22526    | 75060-012       |
|                  | 136-0252-07        | B111236          |         | 7   |   |   |   |   |   | SOCKET,PIN CONN:W/O DIMPLE  | 22526    | 75060-012       |
| -143 2           | 14-0579-00         |                  |         | 5   |   |   |   |   |   | TERM,TEST POINT:BRS CD PL   | 80009    | 214-0579-00     |
| -144             | 131-1003-00        |                  |         | 6   |   |   |   |   |   | CONN,RCPT,ELEC:CKT BD MT,3 PRONG  | 80009    | 131-1003-00     |
| -145             | 131-0993-00        |                  |         | 2   |   |   |   |   |   | BUS,CONDUCTOR:2 WIRE BLACK  | 00779    | 850100-01       |
| -146             | 131-0608-00        |                  |         | 6   |   |   |   |   |   | TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                    | 22526    | 47357           |
|                  | 175-2450-00        |                  |         | 1   |   |   |   |   |   | LEAD,ELECTRICAL:22 AWG,6.0 L,9-2  | 80009    | 175-2450-00     |
|                  | 175-7841-00        | B100973          |         | 1   |   |   |   |   |   | CABLE ASSY,RF:50 OHM COAX,4.0 L,9-N<br>.....(P120 TO J626)                  | 80009    | 175-7841-00     |
|                  | -----              |                  |         | -   |   |   |   |   |   |   |          |                 |
|                  |                    |                  |         |     |   |   |   |   |   | OPTION 04   |          |                 |
| 2-147            | 129-0353-00        |                  |         | 2   |   |   |   |   |   | POST,ELEC-MECH:0.188 HEX X 0.385 INCH LON<br>.....(ATTACHING PARTS).....    | 80009    | 129-0353-00     |
| -148             | 211-0007-00        |                  |         | 4   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.188 INCH.PNH STL<br>.....(END ATTACHING PARTS).....  | 83385    | ORD BY DESCR    |
| -149             | -----              |                  |         | 1   |   |   |   |   |   | CKT BOARD ASSY:VERT ATTEN(SEE A48 REPL)                                     |          |                 |
| -150             | 136-0252-07        |                  |         | 4   |   |   |   |   |   | SOCKET,PIN CONN:W/O DIMPLE  | 22526    | 75060-012       |
| -151             | 131-1003-00        |                  |         | 4   |   |   |   |   |   | CONN,RCPT,ELEC:CKT BD MT,3 PRONG  | 80009    | 131-1003-00     |
| -152             | 307-1020-00        |                  |         | 2   |   |   |   |   |   | ATTENUATOR,FXD:50 OHM,2X  | 80009    | 307-1020-00     |
| -153             | 344-0248-00        |                  |         | 2   |   |   |   |   |   | CLIP,ATTENUATOR:  | 80009    | 344-0248-00     |
| -154             | 214-1797-00        |                  |         | 4   |   |   |   |   |   | PIN,ATTEN CLIP:   | 80009    | 214-1797-00     |

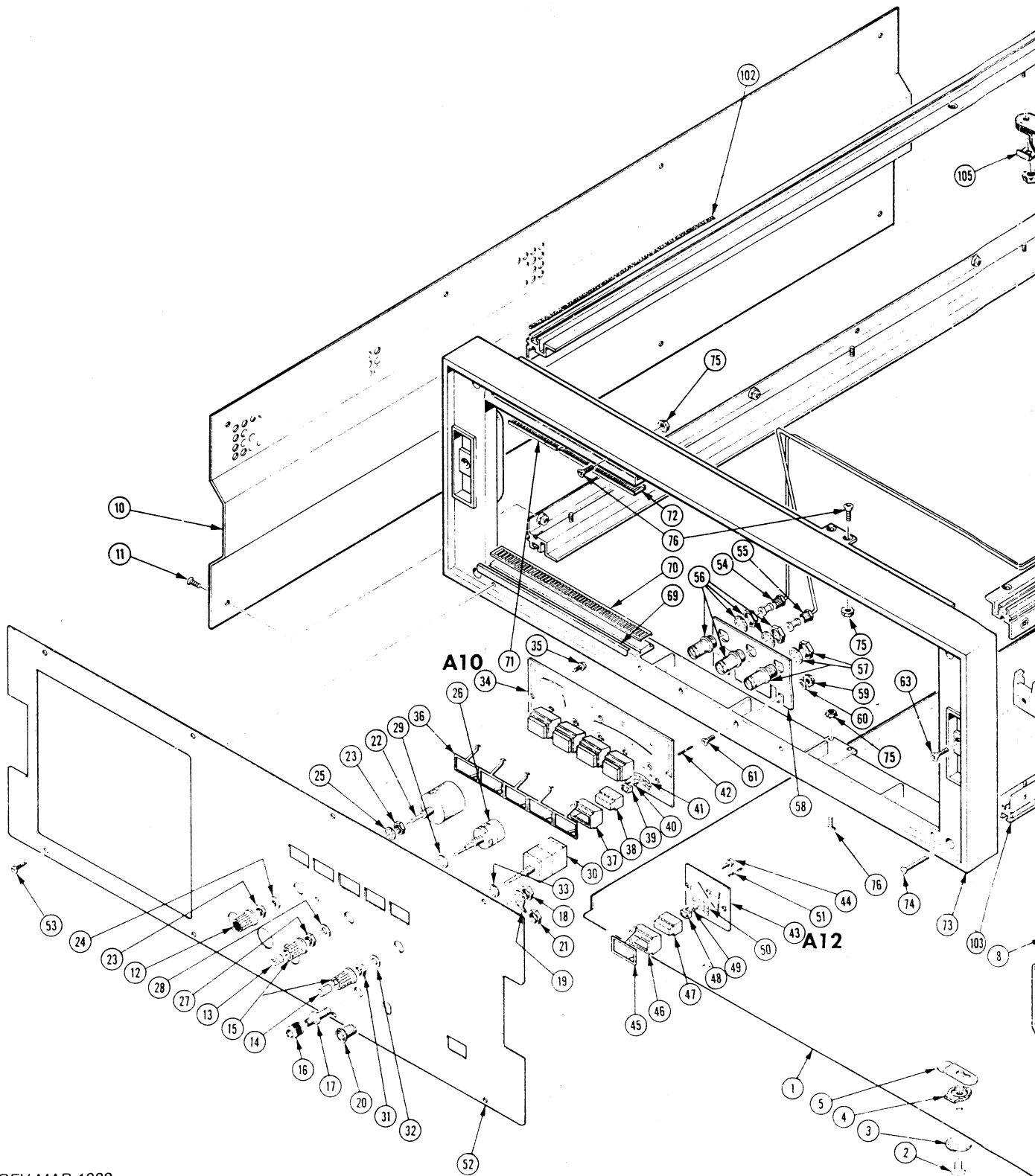
| Fig. & Index No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Qty | 1 | 2 | 3 | 4 | 5 | Name & Description                          | Mfr Code | Mfr Part Number  |
|------------------|--------------------|----------------------|---------|-----|---|---|---|---|---|---|----------|------------------|
| 3-1              | -----              |                      |         | 1   |   |   |   |   |   | CKT BOARD ASSY:POWER CONN(SEE A62 REPL)     |          |                  |
| -2               | 131-1811-00        |                      |         | 1   |   |   |   |   |   | .TERM SET,PIN:10,0.025 SQ ON 0.15 CTR       | 22526    | 65595-110        |
| -3               | 131-1812-00        |                      |         | 1   |   |   |   |   |   | .TERM SET,PIN:10,0.025 SQ ON 0.15 CTR       | 22526    | 65603-110        |
| -4               | 131-1425-00        |                      |         | 1   |   |   |   |   |   | .TERM SET,PIN:(36) 0.025 SQ RTANG.0.15L     | 22526    | 65521-136        |
| -5               | 131-1426-00        |                      |         | 1   |   |   |   |   |   | .TERM SET,PIN:(36) 0.025 SQ RTANG.0.25L     | 22526    | 65524-136        |
| -6               | 344-0286-00        |                      |         | 16  |   |   |   |   |   | .CLIP,ELECTRICAL:FOR 3AG FUSE,BRS           | 75915    | 102074           |
| -7               | 105-0793-00        |                      |         | 2   |   |   |   |   |   | .EJECTOR,CKT BD:WHITE,PLASTIC               | 71279    | 415-7036-01-0020 |
| -8               | 214-1337-00        |                      |         | 2   |   |   |   |   |   | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL       | 80009    | 214-1337-00      |
| -9               | -----              |                      |         | 1   |   |   |   |   |   | CKT BD ASSY:7912AD/GPIB INTFC(SEE A56 REPL) |          |                  |
| -10              | 136-0578-00        | B010100              | B080713 | 1   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,24 PIN,LOW PROFIL  | 73803    | C S9002-24       |
|                  | 136-0751-00        | B080714              | B109999 | 1   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,24 PIN             | 09922    | DILB24P108       |
| -11              | 131-1003-00        |                      |         | 3   |   |   |   |   |   | .CONN,RCPT,ELEC:CKT BD MT,3 PRONG           | 80009    | 131-1003-00      |
| -12              | 131-0993-00        |                      |         | 2   |   |   |   |   |   | .BUS,CONDUCTOR:2 WIRE BLACK                 | 00779    | 850100-01        |
| -13              | 131-0608-00        |                      |         | 6   |   |   |   |   |   | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD   | 22526    | 47357            |
| -14              | 136-0269-02        |                      | B010100 | 27  |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL  | 73803    | CS9002-14        |
| -15              | 136-0623-00        | B010100              | B070679 | 1   |   |   |   |   |   | .SOCKET,PLUG-IN:40 DIP,LOW PROFILE          | 73803    | CS9002-40        |
| -16              | 136-0260-02        | B010100              | B050580 | 4   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL  | 71785    | 133-51-92-008    |
|                  | 136-0260-02        | B050581              |         | 2   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW CL  | 71785    | 133-51-92-008    |
| -17              | 136-0634-00        |                      | B010100 | 3   |   |   |   |   |   | .SOCKET,PLUG-IN:20 LEAD DIP,CKT BD MTG      | 73803    | CS9002-20        |
| -18              | 105-0793-00        |                      |         | 2   |   |   |   |   |   | .EJECTOR,CKT BD:WHITE,PLASTIC               | 71279    | 415-7036-01-0020 |
| -19              | 214-1337-00        |                      |         | 2   |   |   |   |   |   | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL       | 80009    | 214-1337-00      |
| -20              | 214-0579-00        |                      |         | 7   |   |   |   |   |   | .TERM,TEST POINT:BRS CD PL                  | 80009    | 214-0579-00      |
| -21              | 136-0252-07        | B010100              | B050580 | 6   |   |   |   |   |   | .SOCKET,PIN CONN:W/O DIMPLE                 | 22526    | 75060-012        |
|                  | 136-0252-07        | B111211              |         | 3   |   |   |   |   |   | .SOCKET,PIN CONN:W/O DIMPLE                 | 22526    | 75060-012        |
|                  | 672-0960-00        | B070725              | B100825 | 1   |   |   |   |   |   | CKT BOARD ASSY:MPU/MEMORY                   | 80009    | 672-0960-00      |
|                  | 672-0960-01        | B100826              | B109999 | 1   |   |   |   |   |   | CKT BOARD ASSY:MPU/MEMORY                   | 80009    | 672-0960-01      |
|                  |                    |                      |         |     |   |   |   |   |   | *****ATTACHING PARTS*****                   |          |                  |
| -22              | 211-0155-00        |                      |         | 4   |   |   |   |   |   | SCREW,EXT,RLV B:4-40 X 0.375 INCH,SST       | 80009    | 211-0155-00      |
|                  |                    |                      |         |     |   |   |   |   |   | *****END ATTACHING PARTS*****               |          |                  |
| -23              | -----              |                      |         | 1   |   |   |   |   |   | .CKT BOARD ASSY:MPU(SEE A54 REPL)           |          |                  |
| -24              | 136-0578-00        |                      | B010100 | 1   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,24 PIN,LOW PROFIL  | 73803    | C S9002-24       |
| -25              | 136-0269-02        |                      | B010100 | 21  |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW C   | 73803    | CS9002-14        |
| -26              | 136-0623-00        | B010100              | B070679 | 2   |   |   |   |   |   | .SOCKET,PLUG-IN:40 DIP,LOW PROFILE          | 73803    | CS9002-40        |
|                  | 136-0623-00        | B070680              | B100793 | 1   |   |   |   |   |   | .SOCKET,PLUG-IN:40 DIP,LOW PROFILE          | 73803    | CS9002-40        |
|                  | 136-0757-00        | B100794              |         | 1   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,40 PIN             | 09922    | DILB40P-108      |
| -27              | 136-0260-02        | B010100              | B040538 | 1   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW C   | 71785    | 133-51-92-008    |
| -28              | 136-0634-00        |                      | B010100 | 9   |   |   |   |   |   | .SOCKET,PLUG-IN:20 LEAD DIP,CKT BD MTG      | 73803    | CS9002-20        |
| -29              | 105-0793-00        |                      |         | 2   |   |   |   |   |   | .EJECTOR,CKT BD:WHITE,PLASTIC               | 71279    | 415-7036-01-0020 |
| -30              | 214-1337-00        |                      |         | 2   |   |   |   |   |   | .PIN,SPRING:0.10 OD X 0.25 INCH L,STL       | 80009    | 214-1337-00      |
| -31              | 136-0252-07        | B010100              | B100825 | 8   |   |   |   |   |   | .SOCKET,PIN CONN:W/O DIMPLE                 | 22526    | 75060-012        |
| -32              | 214-0579-00        | B010100              | B100825 | 6   |   |   |   |   |   | .TERM,TEST POINT:BRS CD PL                  | 80009    | 214-0579-00      |
|                  | 214-0579-00        | B100826              |         | 11  |   |   |   |   |   | .TERM,TEST POINT:BRS CD PL                  | 80009    | 214-0579-00      |
| -33              | 361-0238-00        |                      |         | 6   |   |   |   |   |   | .SPACER,SLEEVE:0.25 OD X 0.34 INCH LONG     | 80009    | 361-0238-00      |
| -34              | 136-0263-04        |                      |         | 30  |   |   |   |   |   | .SOCKET,PIN TERM:FOR 0.025 INCH SQUARE PI   | 22526    | 75377-001        |
|                  | 131-0608-00        | B100826              |         | 3   |   |   |   |   |   | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD   | 22526    | 47357            |
|                  | 131-0993-00        | B100826              |         | 1   |   |   |   |   |   | .BUS,CONDUCTOR:2 WIRE BLACK                 | 00779    | 850100-01        |
| -35              | -----              |                      |         | 1   |   |   |   |   |   | .CKT BOARD ASSY:MPU MEMORY(SEE A52 REPL)    |          |                  |
| -36              | 351-0188-00        |                      |         | 6   |   |   |   |   |   | .GUIDE-POST,LOCK:0.65 INCH LONG             | 80009    | 351-0188-00      |
| -37              | 131-0590-00        |                      |         | 30  |   |   |   |   |   | .CONTACT,ELEC:0.71 INCH LONG                | 22526    | 47351            |
| -38              | 136-0269-02        |                      | B010100 | 6   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW C   | 73803    | CS9002-14        |
| -39              | 136-0260-02        | B010100              | B040538 | 8   |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCIRCUIT,16 DIP,LOW C   | 71785    | 133-51-92-008    |
| -40              | 136-0634-00        |                      | B010100 | 2   |   |   |   |   |   | .SOCKET,PLUG-IN:20 LEAD DIP,CKT BD MTG      | 73803    | CS9002-20        |
| -41              | 136-0578-00        | B010100              | B080713 | 10  |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,24 PIN,LOW PROFIL  | 73803    | C S9002-24       |
|                  | 136-0751-00        | B080714              |         | 10  |   |   |   |   |   | .SKT,PL-IN ELEK:MICROCKT,24 PIN             | 09922    | DILB24P108       |
| -42              | -----              |                      |         | 1   |   |   |   |   |   | .MICROCIRCUIT,LI:(SEE U101 REPL)            |          |                  |
|                  |                    |                      |         |     |   |   |   |   |   | *****ATTACHING PARTS*****                   |          |                  |
| -43              | 210-0551-00        |                      |         | 1   |   |   |   |   |   | .NUT,PLAIN,HEX.:4-40 X 0.25 INCH,STL        | 000BK    | ORD BY DESCR     |
| -44              | 210-0054-00        |                      |         | 1   |   |   |   |   |   | .WASHER,LOCK:SPLIT,0.118 ID X 0.212 OD S    | 83385    | ORD BY DESCR     |
| -45              | 210-0994-00        |                      |         | 1   |   |   |   |   |   | .WASHER,FLAT:0.125 ID X 0.25 OD,STL         | 86928    | 5702-201-20      |
| -46              | 210-1178-00        |                      |         | 1   |   |   |   |   |   | .WASHER,SHLDR:U/W T0-220 TRANSISTOR         | 49671    | DF137A           |
| -47              | 211-0012-00        |                      |         | 1   |   |   |   |   |   | .SCREW,MACHINE:4-40 X 0.375,PNH STL CD PL   | 83385    | ORD BY DESCR     |
|                  |                    |                      |         |     |   |   |   |   |   | *****END ATTACHING PARTS*****               |          |                  |
| -48              | 342-0202-00        |                      |         | 1   |   |   |   |   |   | .INSULATOR,PLATE:TRANSISTOR                 | 01295    | 10-21-023-106    |
| -49              | 214-1967-00        |                      |         | 1   |   |   |   |   |   | .HEAT SINK,DIODE:FINGER TYPE                | 13103    | 6107B-14         |
| -50              | 351-0279-00        |                      |         | 4   |   |   |   |   |   | GUIDE,SHOE:5.18 X 0.375,NYLON               | 80009    | 351-0279-00      |

Replaceable Mechanical Parts—7912AD Service

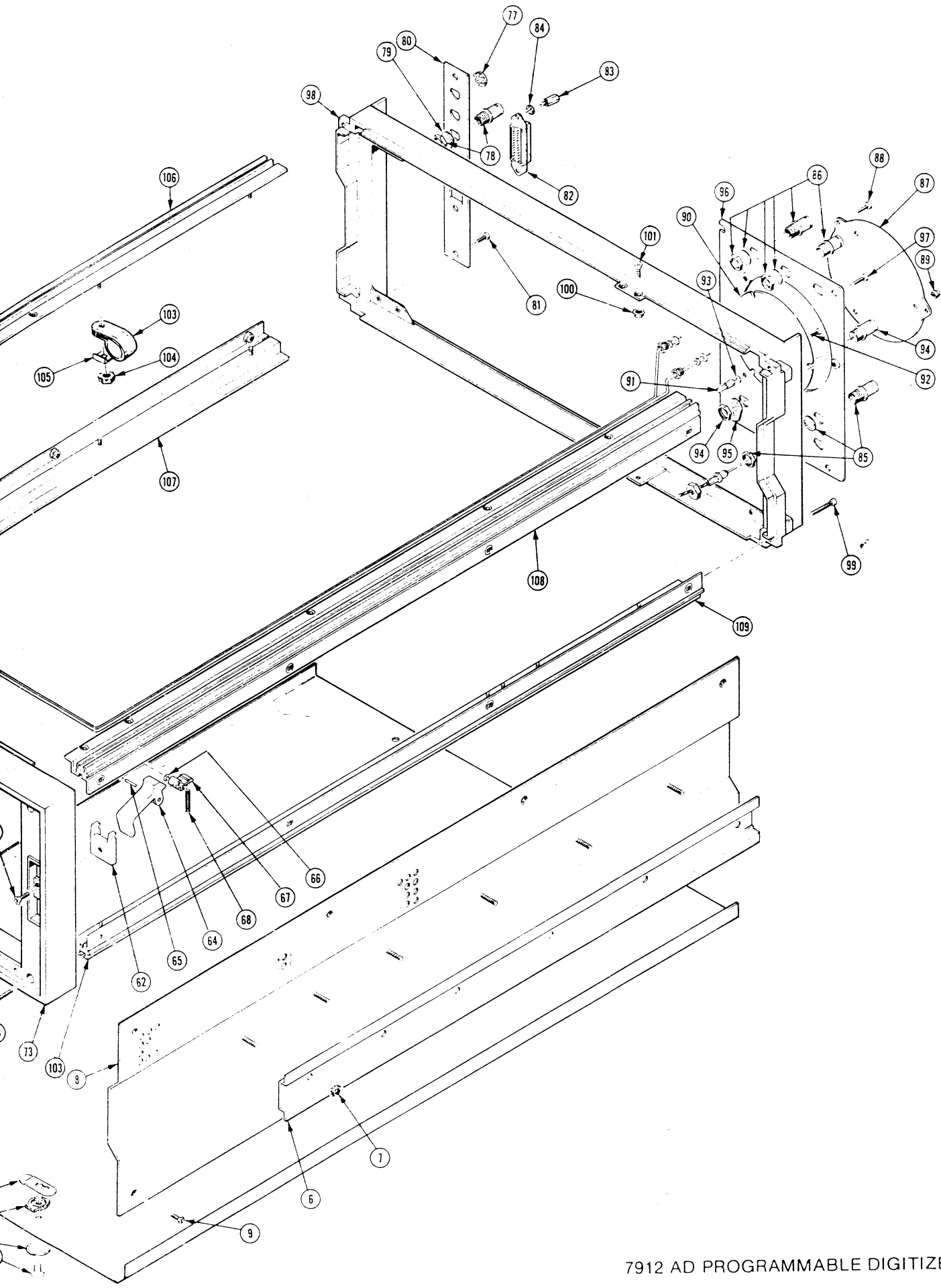
| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | 1 2 3 4 5 | Name & Description  | Mfr Code | Mfr Part Number  |
|------------------|--------------------|------------------|---------|-----|-----------|---|----------|------------------|
|                  |                    | Eff              | Dscont  |     |           |   |          |                  |
| 3-51             | 386-3746-00        |                  |         | 1   |           | SUPPORT,CHASSIS:TOP REAR<br>***** (ATTACHING PARTS) *****                       | 80009    | 386-3746-00      |
| -52              | 210-0586-00        |                  |         | 2   |           | NUT,PL,ASSEM WA:4-40 X 0.25,STL   | 83385    | ORD BY DESCR     |
| -53              | 211-0008-00        |                  |         | 2   |           | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ  | 83385    | ORD BY DESCR     |
| -54              | 210-0457-00        |                  |         | 2   |           | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL  | 83385    | ORD BY DESCR     |
| -55              | 210-0202-00        |                  |         | 1   |           | TERMINAL,LUG:0.146 ID,LOCKING,BRZ TINNED<br>***** (END ATTACHING PARTS) *****   | 78189    | 2104-06-00-2520N |
|                  | 334-3510-00        | B010195          |         | 1   |           | MARKER,IDENT:MARKED +5.1 ADJ  | 80009    | 334-3510-00      |
|                  | 334-3511-00        | B010195          |         | 1   |           | MARKER,IDENT:MARKED -50 ADJ   | 80009    | 334-3511-00      |
| -56              | 200-2093-00        |                  |         | 1   |           | COVER,HOLE:ALUMINUM<br>***** (ATTACHING PARTS) *****                            | 80009    | 200-2093-00      |
| -57              | 210-0457-00        |                  |         | 2   |           | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL  | 83385    | ORD BY DESCR     |
| -58              | 210-0863-00        |                  |         | 1   |           | WSHR,LOOP CLAMP:0.187 ID U/W 0.5 W CLP,STL<br>***** (END ATTACHING PARTS) ***** | 95987    | C191             |
| -59              | 343-0013-00        |                  |         | 1   |           | CLAMP,LOOP:0.375 ID,PLASTIC   | 95987    | 3-8-6B           |
| -60              | 200-2139-00        |                  |         | 1   |           | COVER,CHASSIS:IO<br>***** (ATTACHING PARTS) *****                               | 80009    | 200-2139-00      |
| -61              | 210-0457-00        |                  |         | 2   |           | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL<br>***** (END ATTACHING PARTS) *****     | 83385    | ORD BY DESCR     |
| -62              | 348-0056-00        |                  |         | 1   |           | GROMMET,PLASTIC:0.375 INCH DIA  | 80009    | 348-0056-00      |
| -63              | 351-0087-00        |                  |         | 6   |           | GUIDE,CKT BOARD:4.75 INCH LONG,PLASTIC  | 80009    | 351-0087-00      |
| -64              | 441-1382-00        |                  |         | 1   |           | CHASSIS,CKT CD:<br>***** (ATTACHING PARTS) *****                                | 80009    | 441-1382-00      |
| -65              | 210-0457-00        |                  |         | 6   |           | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL  | 83385    | ORD BY DESCR     |
| -66              | 211-0538-00        |                  |         | 1   |           | SCREW,MACHINE:6-32 X 0.312*100 DEG,FLH ST<br>***** (END ATTACHING PARTS) *****  | 83385    | ORD BY DESCR     |
| -67              | 200-2215-00        |                  |         | 1   |           | COVER,PENUM:<br>***** (ATTACHING PARTS) *****                                   | 80009    | 200-2215-00      |
| -68              | 211-0504-00        |                  |         | 2   |           | SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****     | 83385    | ORD BY DESCR     |
| -69              | -----              |                  |         | 1   |           | CKT BOARD ASSY:DATA MEM INTCON(SEE A66 REP                                      |          |                  |
| -70              | 129-0688-00        |                  |         | 4   |           | .SPACER,POST:0.46 L X 0.25 DIA  | 80009    | 129-0688-00      |
| -71              | 131-1411-00        |                  |         | 2   |           | .CONNECTOR,RCPT.:CKT CD 25/50 CONTACT   | 05574    | 3VH25/1JV5       |
| -72              | 210-0586-00        |                  |         | 4   |           | .NUT,PL,ASSEM WA:4-40 X 0.25,STL  | 83385    | ORD BY DESCR     |
| -73              | -----              |                  |         | 1   |           | CKT BOARD ASSY:MAIN INTCON(SEE A68 REPL)<br>***** (ATTACHING PARTS) *****       |          |                  |
| -74              | 211-0012-00        |                  |         | 4   |           | SCREW,MACHINE:4-40 X 0.375,PNH STL CD PL  | 83385    | ORD BY DESCR     |
| -75              | 211-0016-00        |                  |         | 8   |           | SCREW,MACHINE:4-40 X 0.625 INCH,PNH STL   | 83385    | ORD BY DESCR     |
| -76              | 361-0762-00        |                  |         | 12  |           | SPACER,SLEEVE:0.128 ID X 0.15" L,BRASS<br>***** (END ATTACHING PARTS) *****     | 80009    | 361-0762-00      |
|                  | -----              |                  |         | -   |           | CKT BOARD ASSY INCLUDES:  |          |                  |
| -77              | 131-1857-00        | B010100          | B101024 | 4   |           | .TERM. SET,PIN:36/0.025 SQ PIN,ON 0.1 CTRS                                      | 22526    | 65500136         |
|                  | 131-1343-00        | B0101025         | B101164 | 4   |           | .TERM. SET,PIN:36-0.525 L X 0.025 SQ  | 22526    | 65501-136        |
|                  | 131-1857-00        | B0101165         |         | 4   |           | .TERM. SET,PIN:36/0.025 SQ PIN,ON 0.1 CTRS                                      | 22526    | 65500136         |
| -78              | 131-2171-00        |                  |         | 1   |           | .TERM. SET,PIN:40/80,0.025 SQ   | 00779    | 4-87422-0        |
| -79              | 131-0931-00        |                  |         | 1   |           | .CONN,RCPT,ELEC:CKT BD,50/100 CONTACT   | 05574    | 3VH50/1JV3       |
| -80              | 131-1178-00        |                  |         | 4   |           | .CONN,RCPT,ELEC:CKT CARD TYPE,36/72 CONT  | 05574    | 000201-5182      |
| -81              | 131-1178-03        |                  |         | 2   |           | .CONN,RCPT,ELEC:CKT BD,36/72 CONT   | 80009    | 131-1178-03      |
| -82              | 131-1425-00        | B010100          | B101024 | 2   |           | .TERM SET,PIN:(36) 0.025 SQ RTANG,0.15L   | 22526    | 65521-136        |
| -83              | 131-2168-00        |                  |         | 2   |           | .CONN,RCPT,ELEC:CKT CD,50/100 FEM CONTACTS<br>***** (ATTACHING PARTS) *****     | 05574    | 000231-3606      |
| -84              | 211-0014-00        |                  |         | 4   |           | SCREW,MACHINE:4-40 X 0.50 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****     | 83385    | ORD BY DESCR     |
| -85              | 131-1658-00        |                  |         | 1   |           | .CONNECTOR,RCPT.:CKT CD EDGE,36-72 CONTACT<br>***** (ATTACHING PARTS) *****     | 05574    | 000231-3601      |
| -86              | 211-0014-00        |                  |         | 2   |           | SCREW,MACHINE:4-40 X 0.50 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****     | 83385    | ORD BY DESCR     |
| -87              | 129-0420-00        |                  |         | 6   |           | POST,ELEC-MECH:0.575 LONG X 0.188 I HEX<br>***** (ATTACHING PARTS) *****        | 80009    | 129-0420-00      |
| -88              | 211-0008-00        |                  |         | 6   |           | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>***** (END ATTACHING PARTS) *****     | 83385    | ORD BY DESCR     |



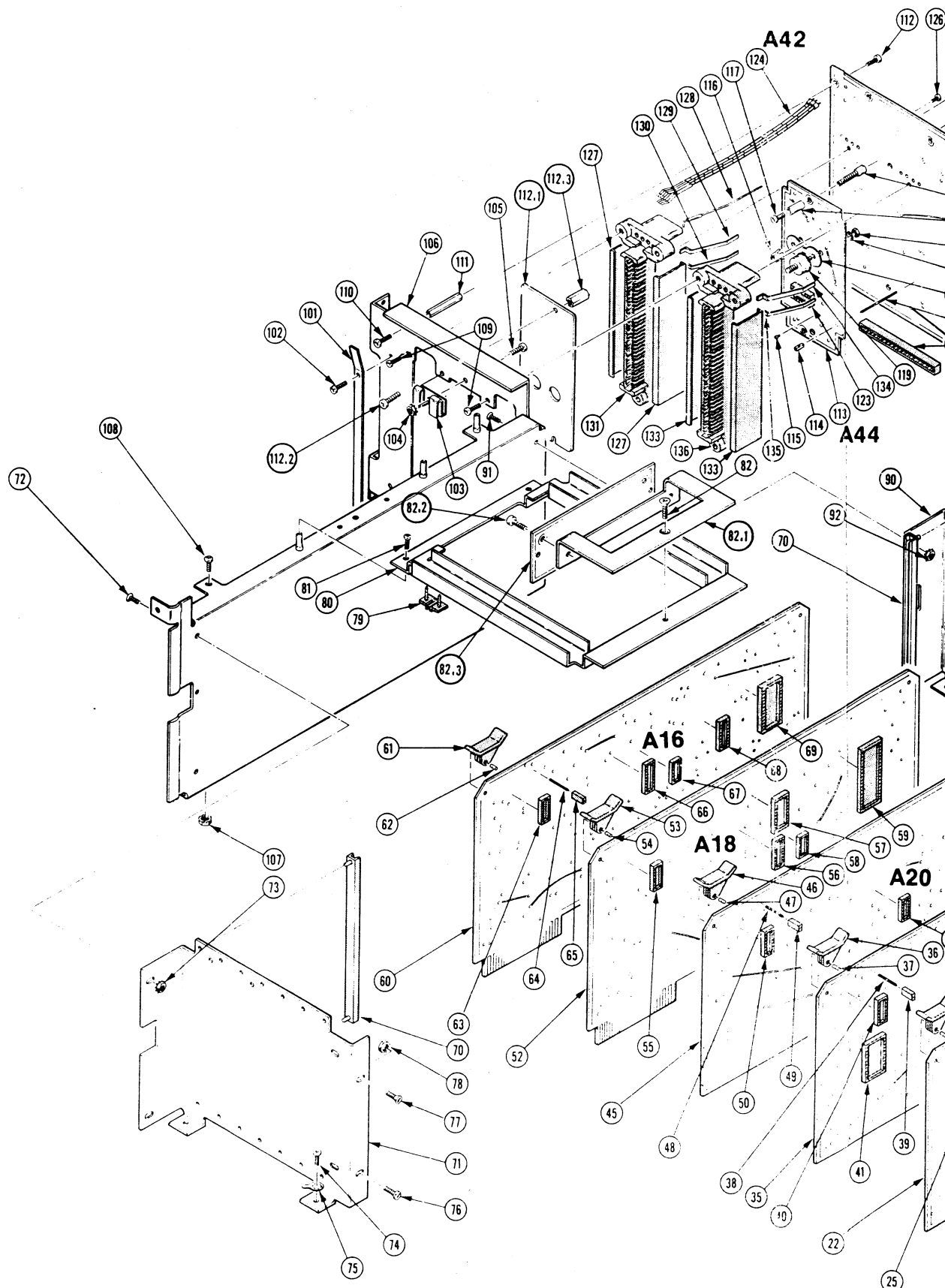
| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | Name & Description   |   |   |   |   | Mfr Code | Mfr Part Number |
|------------------|--------------------|------------------|---------|-----|--|---|---|---|---|----------|-----------------|
|                  |                    | Eff              | Dscont  |     | 1  | 2 | 3 | 4 | 5 |          |                 |
| 3-89             | 351-0295-02        |                  |         | 2   | GUIDE,SLIDE:PLUG-IN,LWR<br>***** (ATTACHING PARTS) *****                             |   |   |   |   | 80009    | 351-0295-02     |
| -90              | 210-0586-00        |                  |         | 2   | NUT,PL,ASSEM WA:4-40 X 0.25,STL  |   |   |   |   | 83385    | ORD BY DESCR    |
| -91              | 211-0101-00        |                  |         | 2   | SCREW,MACHINE:4-40 X 0.25,100 DEG.FLH STL  |   |   |   |   | 83385    | ORD BY DESCR    |
| -92              | 213-0088-00        |                  |         | 2   | SCR,TPG,THD CTG:4-24 X 0.25 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****        |   |   |   |   | 83385    | ORD BY DESCR    |
|                  | 252-0562-00        | B010135          |         | 1   | PLASTIC CHANNEL:0.100 X 0.120.POLYETHYLENE   |   |   |   |   | 06229    | GS2             |
| -93              | 441-1375-01        |                  |         | 1   | CHASSIS,PLENUM:W/BRACKET & HARDWARE<br>***** (ATTACHING PARTS) *****                 |   |   |   |   | 80009    | 441-1375-01     |
| -94              | 210-0457-00        |                  |         | 2   | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL   |   |   |   |   | 83385    | ORD BY DESCR    |
| -95              | 211-0538-00        |                  |         | 2   | SCREW,MACHINE:6-32 X 0.312"100 DEG.FLH ST<br>***** (END ATTACHING PARTS) *****       |   |   |   |   | 83385    | ORD BY DESCR    |
| -96              | 386-3775-00        |                  |         | 1   | SUPPORT,CHASSIS:REAR<br>***** (ATTACHING PARTS) *****                                |   |   |   |   | 80009    | 386-3775-00     |
| -97              | 211-0008-00        | B010100          | B059999 | 2   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ   |   |   |   |   | 83385    | ORD BY DESCR    |
|                  | 211-0008-00        | B060000          |         | 1   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ   |   |   |   |   | 83385    | ORD BY DESCR    |
|                  | 211-0012-00        | B060000          |         | 1   | SCREW,MACHINE:4-40 X 0.375,PNH STL CD PL   |   |   |   |   | 83385    | ORD BY DESCR    |
| -98              | 210-0994-00        |                  |         | 2   | WASHER,FLAT:0.125 ID X 0.25" OD,STL<br>***** (END ATTACHING PARTS) *****             |   |   |   |   | 86928    | 5702-201-20     |
| -99              | 441-1386-00        | B010100          | B059999 | 1   | CHASSIS,CRT:   |   |   |   |   | 80009    | 441-1386-00     |
|                  | 441-1386-01        | B060000          |         | 1   | CHASSIS,CRT:<br>***** (ATTACHING PARTS) *****  |   |   |   |   | 80009    | 441-1386-01     |
| -100             | 211-0012-00        |                  |         | 5   | SCREW,MACHINE:4-40 X 0.375,PNH STL CD PL   |   |   |   |   | 83385    | ORD BY DESCR    |
| -101             | 210-0994-00        | B010100          | B080713 | 6   | WASHER,FLAT:0.125 ID X 0.25" OD,STL  |   |   |   |   | 86928    | 5702-201-20     |
|                  | 210-0994-00        | B080714          |         | 5   | WASHER,FLAT:0.125 ID X 0.25" OD,STL<br>***** (END ATTACHING PARTS) *****             |   |   |   |   | 86928    | 5702-201-20     |
| -102             | 343-0003-00        | B080714          |         | 1   | CLAMP,LOOP:0.25 ID,PLASTIC<br>***** (ATTACHING PARTS) *****                          |   |   |   |   | 95987    | 1-4-6B          |
| -103             | 211-0012-00        |                  |         | 1   | SCREW,MACHINE:4-40 X 0.375,PNH STL CD PL   |   |   |   |   | 83385    | ORD BY DESCR    |
| -104             | 210-0863-00        | B080714          |         | 1   | WSHR,LOOP CLAMP:0.187 ID U/W 0.5 W CLP,STL<br>***** (END ATTACHING PARTS) *****      |   |   |   |   | 95987    | C191            |
| -105             | 407-2646-00        | B060000          |         | 1   | BRACKET,ANGLE:POWER SUPPLY SUPPORT,AL<br>***** (ATTACHING PARTS) *****               |   |   |   |   | 80009    | 407-2646-00     |
| -106             | 211-0012-00        |                  |         | 1   | SCREW,MACHINE:4-40 X 0.375,PNH STL CD PL   |   |   |   |   | 83385    | ORD BY DESCR    |
| -107             | 211-0025-00        | B060000          |         | 1   | SCREW,MACHINE:4-40 X 0.375 100 DEG.FLH ST  |   |   |   |   | 83385    | ORD BY DESCR    |
| -108             | 210-0586-00        | B060000          |         | 1   | NUT,PL,ASSEM WA:4-40 X 0.25,STL  |   |   |   |   | 83385    | ORD BY DESCR    |
| -109             | 211-0538-00        | B060000          |         | 1   | SCREW,MACHINE:6-32 X 0.312"100 DEG.FLH ST  |   |   |   |   | 83385    | ORD BY DESCR    |
| -110             | 210-0457-00        | B060000          |         | 1   | NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL<br>***** (END ATTACHING PARTS) *****          |   |   |   |   | 83385    | ORD BY DESCR    |
| -111             | -----              | B110000          |         | 1   | CKT BOARD ASSY:MPU(SEE A54 REPL)<br>***** (ATTACHING PARTS) *****                    |   |   |   |   |          |                 |
| -112             | 211-0155-00        |                  |         | 4   | SCREW,EXT,RLV B:4-40 X 0.375 INCH,SST<br>***** (END ATTACHING PARTS) *****           |   |   |   |   | 80009    | 211-0155-00     |
| -113             | 105-0160-00        |                  |         | 2   | MPU BOARD INCLUDES:<br>EJECTOR,CKT BD:WHITE PLASTIC<br>***** (ATTACHING PARTS) ***** |   |   |   |   | 80009    | 105-0160-00     |
| -114             | 214-1337-00        |                  |         | 2   | PIN,SPRING:0.10 OD X 0.25 INCH L,STL<br>***** (END ATTACHING PARTS) *****            |   |   |   |   | 80009    | 214-1337-00     |
| -115             | 131-0993-00        |                  |         | 2   | BUS,CONDUCTOR:2 WIRE BLACK   |   |   |   |   | 00779    | 850100-01       |
| -116             | 136-0751-00        |                  |         | 3   | SKT,PL-IN ELEK:MICROCKT,24 PIN<br>(FOR U900,U1000,U1200)                             |   |   |   |   | 09922    | DILB24P108      |
| -117             | 136-0757-00        |                  |         | 1   | SKT,PL-IN ELEK:MICROCKT,40 PIN<br>(FOR U1010)  |   |   |   |   | 09922    | DILB40P-108     |

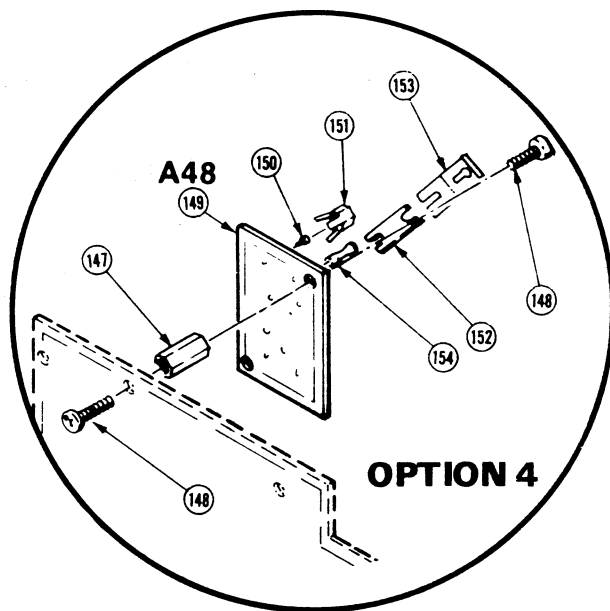
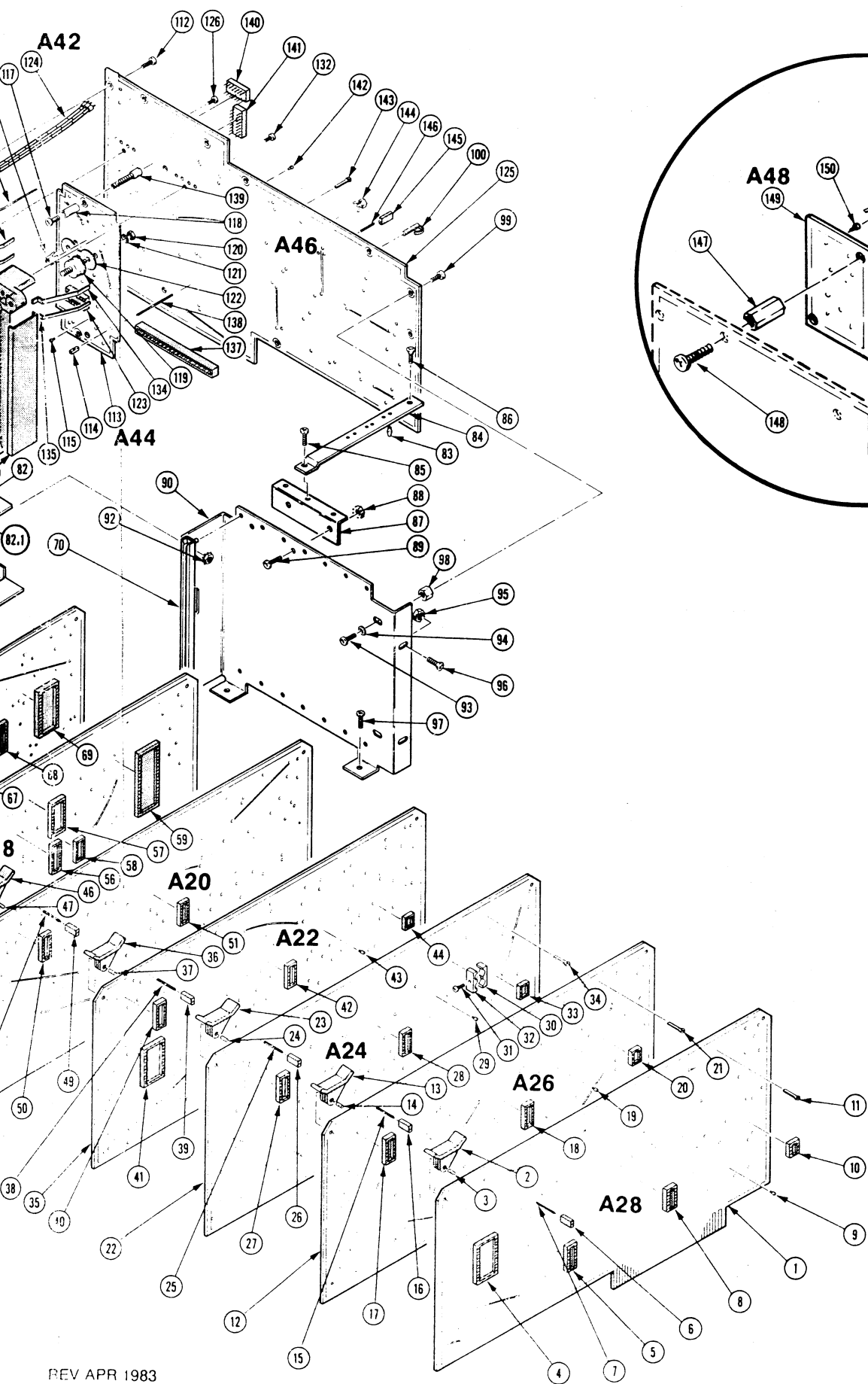


REV MAR 1982

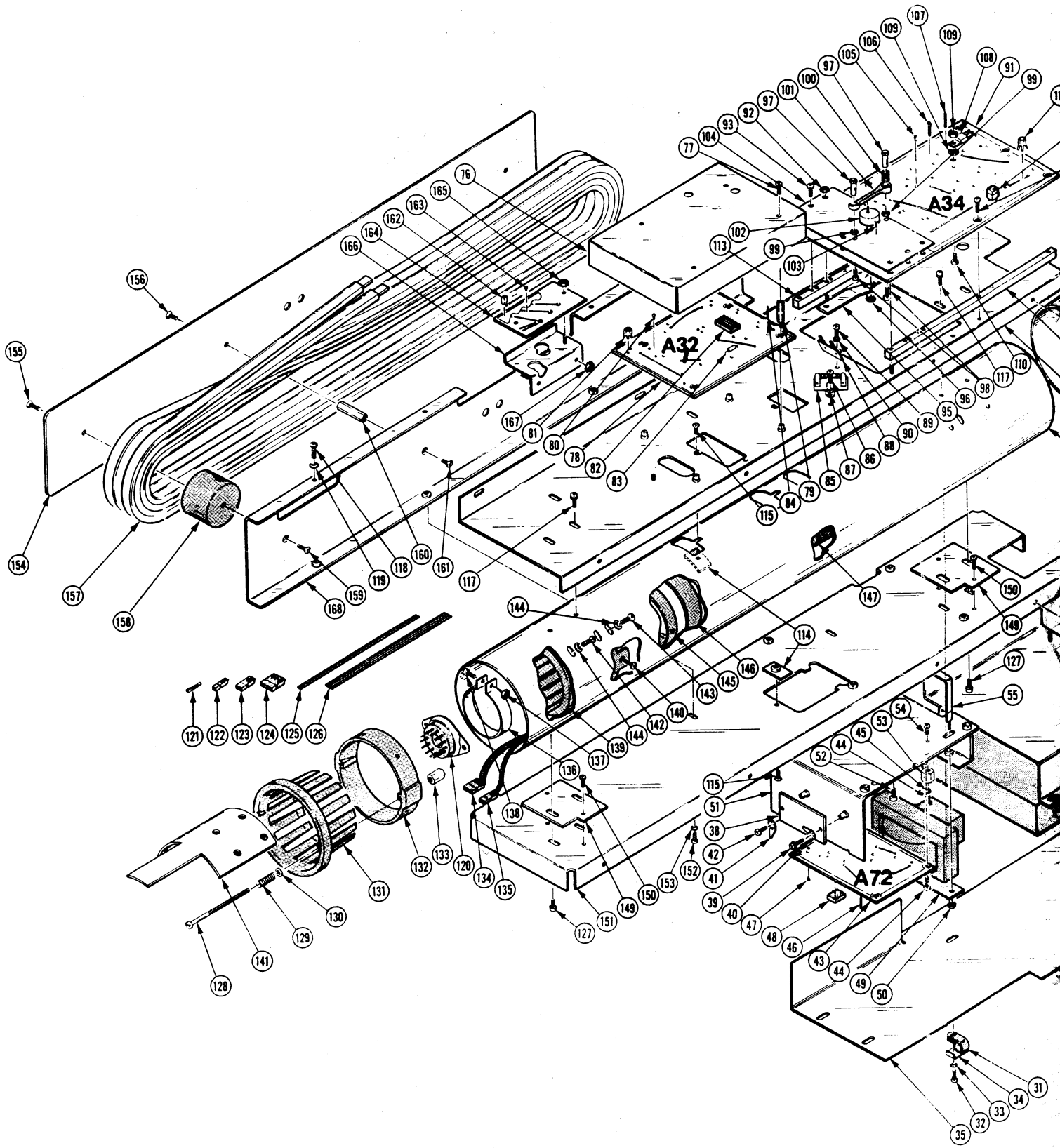


7912 AD PROGRAMMABLE DIGITIZER



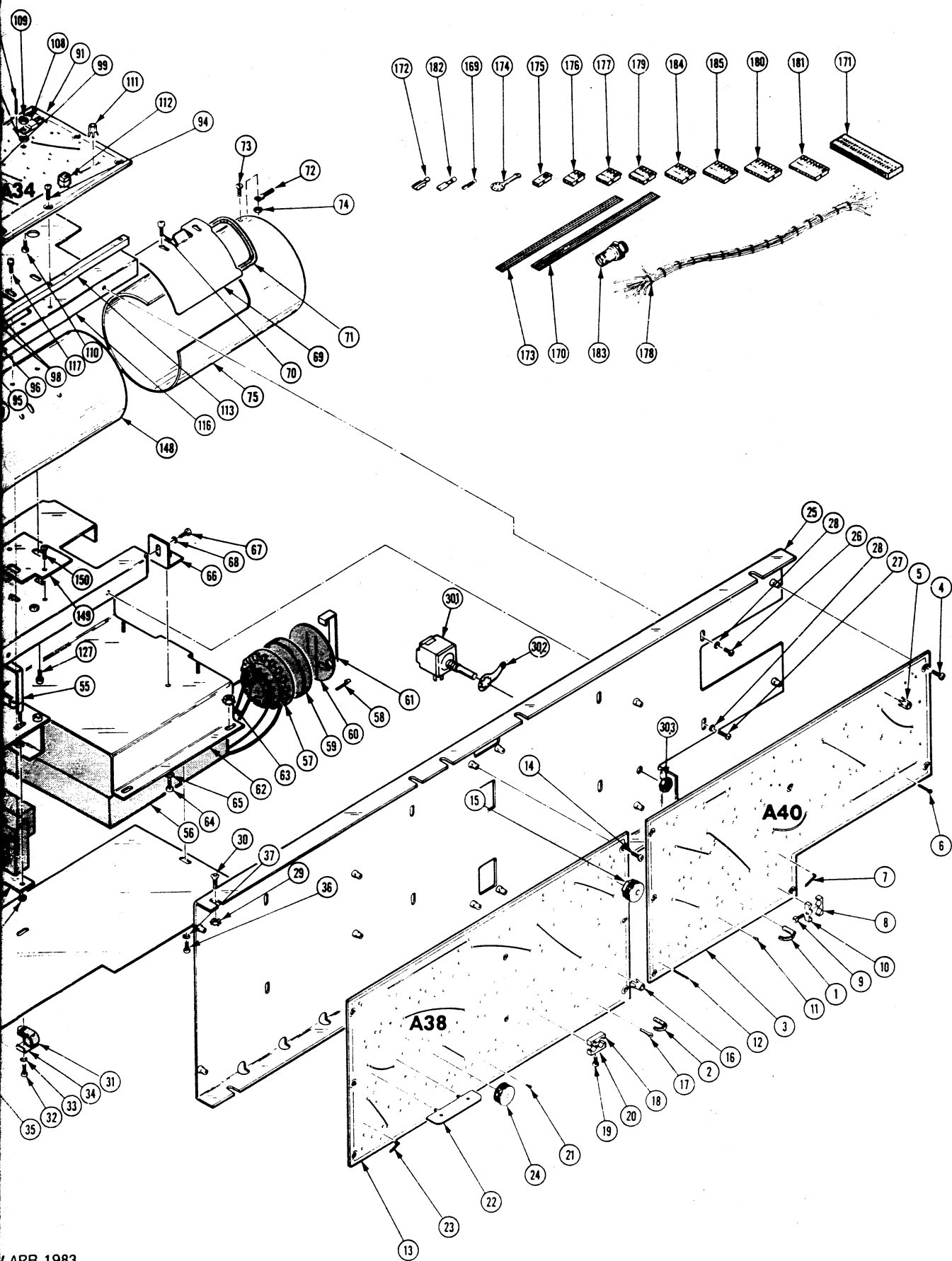


REV APR 1983

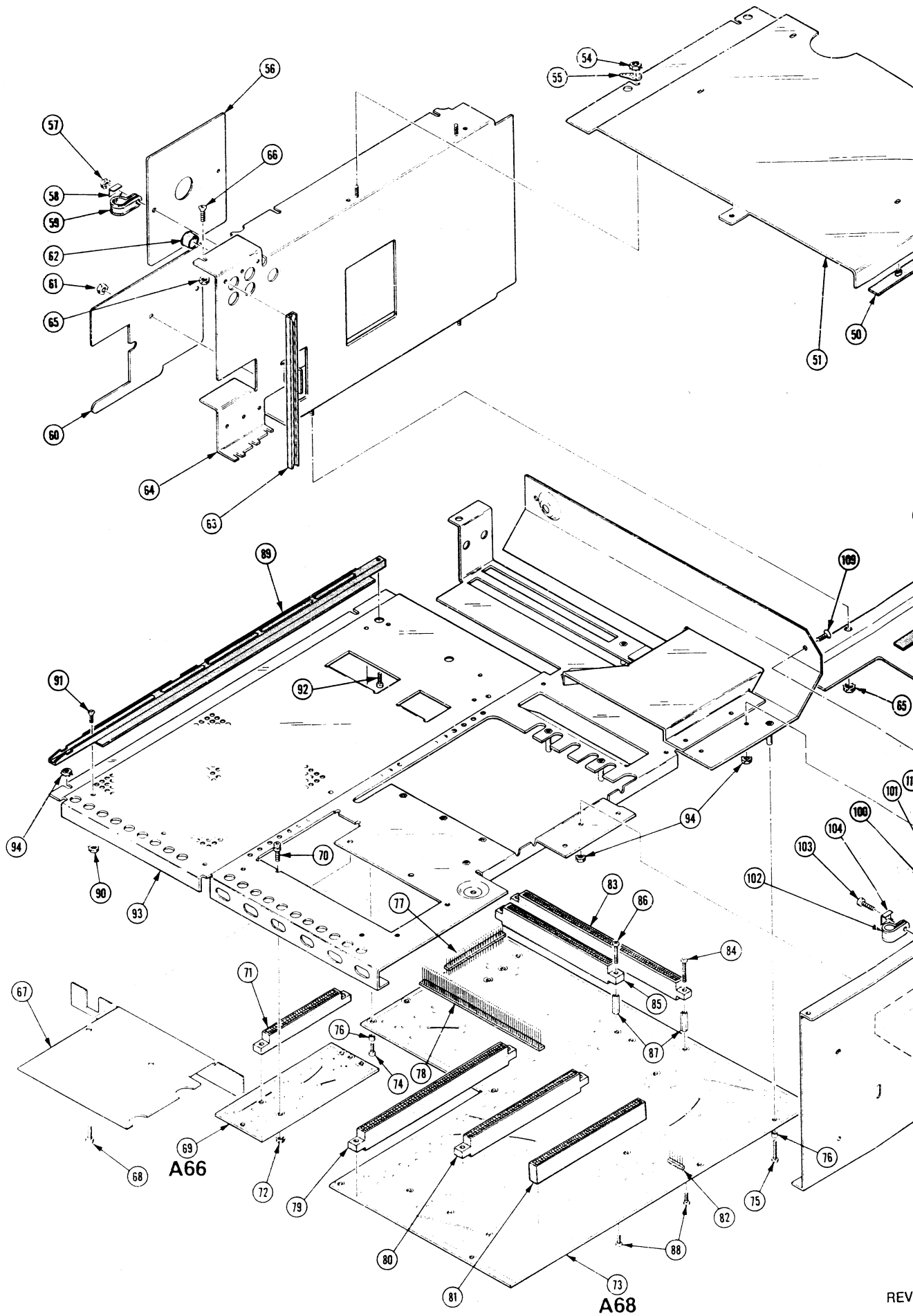


7912 AD PROGRAMMABLE DIGITIZER

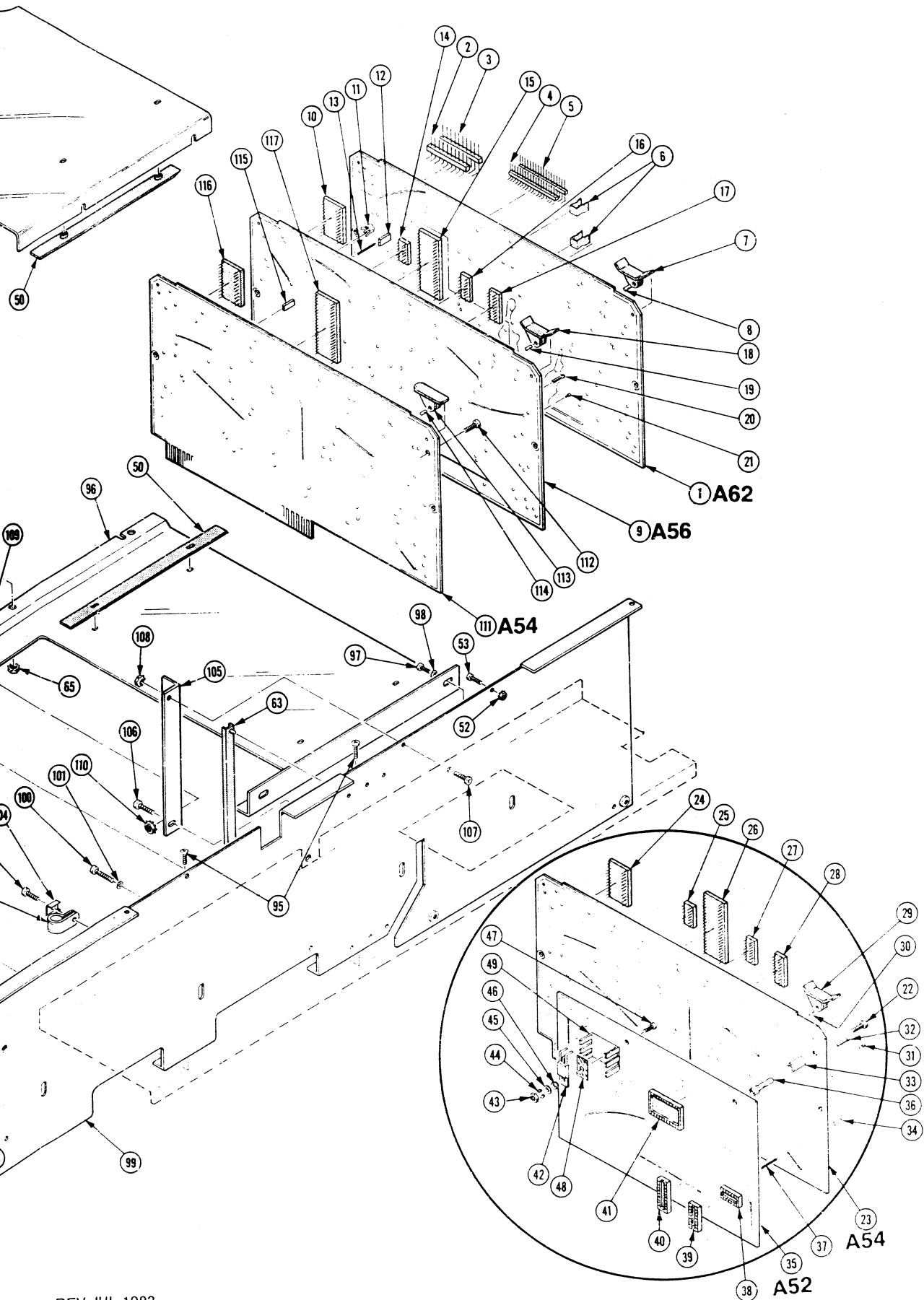
REV APR 1983



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REV JUL 1983

7912 AD PROGRAMMABLE DIGITIZER

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Qty | 1 2 3 4 5 | Name & Description  | Mfr Code | Mfr Part Number |
|------------------|--------------------|----------------------|---------|-----|-----------|---|----------|-----------------|
| 4-1              | 343-0089-00        |                      |         | 2   |           | CLAMP,LOOP:LARGE  | 80009    | 343-0089-00     |
| -2               | 343-0136-00        |                      |         | 1   |           | CLAMP,LOOP:0.234 INCH MOUNTING HOLE   | 80009    | 343-0136-00     |
| -3               | -----              |                      |         | 1   |           | CKT BOARD ASSY:HORIZ. Z-AXIS(SEE A40 REPL)<br>***** (ATTACHING PARTS) *****   |          |                 |
| -4               | 211-0008-00        | B010100              | B039999 | 6   |           | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ  | 83385    | ORD BY DESCR    |
|                  | 211-0008-00        | B040000              |         | 5   |           | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ  | 83385    | ORD BY DESCR    |
|                  | 210-0870-00        | B040000              | B100766 | 1   |           | WASHER,FLAT:0.14 ID X 0.312 INCH OD STL                                       | 12327    | ORD BY DESCR    |
|                  | 343-0003-00        | B040000              |         | 1   |           | CLAMP,LOOP:0.25 ID,PLASTIC  | 95987    | 1-4-6B          |
|                  | 210-0863-00        | B040000              |         | 1   |           | WSHR,LOOP CLAMP:0.187 ID U/W 0.5 W CLP,STL                                    | 95987    | C191            |
|                  | 211-0012-00        | B040000              |         | 1   |           | SCREW,MACHINE:4-40 X 0.375,PNH STL CD PL<br>***** (END ATTACHING PARTS) ***** | 83385    | ORD BY DESCR    |
|                  | -----              |                      |         | -   |           | CKT BOARD ASSY INCLUDES:  |          |                 |
| -5               | 131-1003-00        |                      |         | 4   |           | .CONN,RCPT,ELEC:CKT BD MT,3 PRONG   | 80009    | 131-1003-00     |
| -6               | 214-0579-00        |                      |         | 10  |           | .TERM,TEST POINT:BRS CD PL  | 80009    | 214-0579-00     |
| -7               | 131-0589-00        |                      |         | 8   |           | .TERMINAL,PIN:0.46 L X 0.025 SQ   | 22526    | 48283-029       |
| -8               | 200-0945-01        |                      |         | 1   |           | .COVER,HALF XSTR:DUAL TO-18,W/2-56 THD<br>***** (ATTACHING PARTS) *****       | 80009    | 200-0945-01     |
| -9               | 211-0001-00        |                      |         | 1   |           | .SCREW,MACHINE:2-56 X 0.25 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****  | 87308    | ORD BY DESCR    |
| -10              | 200-0945-00        |                      |         | 1   |           | .COVER,HALF XSTR:DUAL TO-18,ALUMINUM  | 80009    | 200-0945-00     |
| -11              | 136-0252-07        | B010100              | B050589 | 132 |           | .SOCKET,PIN CONN:W/O DIMPLE   | 22526    | 75060-012       |
|                  | 136-0252-07        | B050590              | B100766 | 114 |           | .SOCKET,PIN CONN:W/O DIMPLE   | 22526    | 75060-012       |
|                  | 136-0252-07        | B100767              | B111235 | 108 |           | .SOCKET,PIN CONN:W/O DIMPLE   | 22526    | 75060-012       |
|                  | 136-0252-07        | B111236              |         | 4   |           | .SOCKET,PIN CONN:W/O DIMPLE   | 22526    | 75060-012       |
| -12              | 131-0608-00        | B010100              | B100766 | 18  |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                     | 22526    | 47357           |
|                  | 131-0608-00        | B100767              |         | 20  |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                     | 22526    | 47357           |
|                  | -----              |                      |         | 1   |           | CKT BOARD ASSY:H/V SHUT DOWN(SEE A89 REPL)                                    |          |                 |
|                  | 131-0608-00        | B040000              |         | 2   |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                     | 22526    | 47357           |
|                  | 253-0176-00        | B040000              |         | 1   |           | TAPE,PRESS SENS:VINYL FOAM,0.5 X 0.062  | 85471    | ORD BY DESCR    |
|                  | 175-3347-00        | B040000              | B089999 | 1   |           | LEAD,ASSY,ELEC:2,26 AWG,26.0 L,9.0 & 9N                                       | 80009    | 175-3347-00     |
|                  | 198-4447-00        | B090000              |         | 1   |           | WIRE SET,ELEC:  | 80009    | 198-4447-00     |
|                  | 352-0169-00        | B040000              | B089999 | 1   |           | .HLDR,TERM CONN:2 WIRE BLACK  | 80009    | 352-0169-00     |
|                  | 352-0169-00        | B090000              |         | 2   |           | .HLDR,TERM CONN:2 WIRE BLACK  | 80009    | 352-0169-00     |
| -13              | -----              |                      |         | 1   |           | CKT BD ASSY:SCAN AMP & RDNG GUN(SEE A38)<br>***** (ATTACHING PARTS) *****     |          |                 |
| -14              | 211-0008-00        |                      |         | 6   |           | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>***** (END ATTACHING PARTS) *****   | 83385    | ORD BY DESCR    |
|                  | -----              |                      |         | -   |           | CKT BOARD ASSY INCLUDES:  |          |                 |
| -15              | 214-1121-00        | B010100              | B030487 | 1   |           | .HEAT SINK,ELEC:  | 80009    | 214-1121-00     |
|                  | 214-1254-00        | B030488              |         | 1   |           | .HEAT SINK,ELEC:0.422 H X 1.240 INCH OD                                       | 05820    | 209SB           |
| -16              | 131-1003-00        |                      |         | 2   |           | .CONN,RCPT,ELEC:CKT BD MT,3 PRONG   | 80009    | 131-1003-00     |
| -17              | 214-0579-00        |                      |         | 6   |           | .TERM,TEST POINT:BRS CD PL  | 80009    | 214-0579-00     |
| -18              | 200-0945-01        |                      |         | 4   |           | .COVER,HALF XSTR:DUAL TO-18,W/2-56 THD<br>***** (ATTACHING PARTS) *****       | 80009    | 200-0945-01     |
| -19              | 211-0001-00        |                      |         | 1   |           | .SCREW,MACHINE:2-56 X 0.25 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****  | 87308    | ORD BY DESCR    |
| -20              | 200-0945-00        |                      |         | 4   |           | .COVER,HALF XSTR:DUAL TO-18,ALUMINUM  | 80009    | 200-0945-00     |
| -21              | 136-0252-07        | B010100              | B050586 | 93  |           | .SOCKET,PIN CONN:W/O DIMPLE   | 22526    | 75060-012       |
|                  | 136-0252-07        | B050587              | B111235 | 62  |           | SOCKET,PIN CONN:W/O DIMPLE  | 22526    | 75060-012       |
|                  | 136-0252-07        | B111236              |         | 38  |           | SOCKET,PIN CONN:W/O DIMPLE  | 22526    | 75060-012       |
| -22              | 337-0896-00        |                      |         | 1   |           | .PLATE,ELEC SHLD:CKT BOARD MOUNT,BRS  | 80009    | 337-0896-00     |
| -23              | 131-0589-00        |                      |         | 33  |           | .TERMINAL,PIN:0.46 L X 0.025 SQ   | 22526    | 48283-029       |
| -24              | 214-0668-00        |                      |         | 4   |           | .HEAT SINK,ELEC:FOR TO-5  | 13103    | 2211B           |
|                  | 124-0050-00        | B080000              |         | 1   |           | PLASTIC STRIP:0.75W X 9.875" LG,FOAM TAPE                                     | 80009    | 124-0050-00     |
| -25              | 441-1390-00        | B010100              | B100912 | 1   |           | CHASSIS,CKT CD:   | 80009    | 441-1390-00     |
|                  | 441-1390-01        | B100913              |         | 1   |           | CHASSIS,CKT BD:<br>***** (ATTACHING PARTS) *****                              | 80009    | 441-1390-01     |
| -26              | 211-0007-00        |                      |         | 4   |           | SCREW,MACHINE:4-40 X 0.188 INCH,PNH STL                                       | 83385    | ORD BY DESCR    |
| -27              | 211-0097-00        |                      |         | 4   |           | SCREW,MACHINE:4-40 X 0.312 INCH,PNH STL                                       | 83385    | ORD BY DESCR    |
| -28              | 210-0994-00        |                      |         | 8   |           | WASHER,FLAT:0.125 ID X 0.25" OD,STL   | 86928    | 5702-201-20     |
| -29              | 210-0586-00        |                      |         | 6   |           | NUT,PL,ASSEM WA:4-40 X 0.25,STL   | 83385    | ORD BY DESCR    |
| -30              | 211-0038-00        |                      |         | 6   |           | SCREW,MACHINE:4-40 X 0.312,FLH,100 DEG<br>***** (END ATTACHING PARTS) *****   | 83385    | ORD BY DESCR    |
| -30.1            | -----              |                      |         | 1   |           | RES.VAR:0.5M OHM(SEE R5210 REPL)<br>***** (ATTACHING PARTS) *****             |          |                 |
| -30.2            | 210-0223-01        | B100913              |         | 1   |           | TERMINAL,LUG:0.25 INCH DIA,SE,60 DEG BEN                                      | 86928    | ORD BY DESCR    |
| -30.3            | 210-0583-00        | B100913              |         | 1   |           | NUT,PLAIN,HEX:0.25-32 X 0.312 INCH,BRS<br>***** (END ATTACHING PARTS) *****   | 73743    | 2X20317-402     |

Replaceable Mechanical Parts—7912AD Service

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | 1 2 3 4 5 | Name & Description   | Mfr Code | Mfr Part Number |
|------------------|--------------------|------------------|---------|-----|-----------|--|----------|-----------------|
|                  |                    | Eff              | Dscont  |     |           |  |          |                 |
| 4-31             | 343-0013-00        |                  |         | 2   |           | CLAMP, LOOP: 0.375 ID, PLASTIC<br>.....(ATTACHING PARTS).....                    | 95987    | 3-8-6B          |
| -32              | 211-0012-00        |                  |         | 2   |           | SCREW, MACHINE: 4-40 X 0.375, PNH, STL, CD PL                                    | 83385    | ORD BY DESCR    |
| -33              | 210-0994-00        |                  |         | 1   |           | WASHER, FLAT: 0.125 ID X 0.25" OD, STL   | 86928    | 5702-201-20     |
| -34              | 210-0863-00        |                  |         | 1   |           | WSHR, LOOP CLAMP: 0.187 ID U/W 0.5 W CLP, STL<br>.....(END ATTACHING PARTS)..... | 95987    | C191            |
| -35              | 200-2108-00        |                  |         | 1   |           | COVER, CHASSIS: H.V. ALUMINUM<br>.....(ATTACHING PARTS).....                     | 80009    | 200-2108-00     |
| -36              | 211-0008-00        |                  |         | 2   |           | SCREW, MACHINE: 4-40 X 0.250, PNH, STL, POZ                                      | 83385    | ORD BY DESCR    |
| -37              | 210-0994-00        |                  |         | 2   |           | WASHER, FLAT: 0.125 ID X 0.25" OD, STL<br>.....(END ATTACHING PARTS).....        | 86928    | 5702-201-20     |
| -38              | -----              |                  |         | 1   |           | RES., FXD, FILM: (SEE R5205 REPL)<br>.....(ATTACHING PARTS).....                 |          |                 |
| -39              | 211-0116-00        |                  |         | 2   |           | SCR, ASSEM WSHR: 4-40 X 0.312 INCH, PNH BRS                                      | 83385    | ORD BY DESCR    |
| -40              | 210-0201-00        |                  |         | 1   |           | TERMINAL, LUG: 0.12 ID, LOCKING, BRZ TIN PL<br>.....(END ATTACHING PARTS).....   | 86928    | ORD BY DESCR    |
| -41              | 210-0201-00        |                  |         | 1   |           | TERMINAL, LUG: 0.12 ID, LOCKING, BRZ TIN PL<br>.....(ATTACHING PARTS).....       | 86928    | ORD BY DESCR    |
| -42              | 211-0008-00        |                  |         | 1   |           | SCREW, MACHINE: 4-40 X 0.250, PNH, STL, POZ<br>.....(END ATTACHING PARTS).....   | 83385    | ORD BY DESCR    |
| -43              | -----              |                  |         | 1   |           | CKT BOARD ASSY: HIGH VOLTAGE OSC (SEE A72 RE)<br>.....(ATTACHING PARTS).....     |          |                 |
| -44              | 211-0008-00        |                  |         | 4   |           | SCREW, MACHINE: 4-40 X 0.250, PNH, STL, POZ                                      | 83385    | ORD BY DESCR    |
| -45              | 210-1178-00        |                  |         | 2   |           | WASHER, SHLDR: U/W T0-220 TRANSISTOR<br>.....(END ATTACHING PARTS).....          | 49671    | DF137A          |
| -46              | -----              |                  |         | -   |           | CKT BOARD ASSY INCLUDES:   |          |                 |
| -46              | 131-0608-00        |                  |         | 7   |           | .TERMINAL, PIN: 0.365 L X 0.025 PH BRZ GOLD                                      | 22526    | 47357           |
| -47              | 136-0252-04        |                  |         | 12  |           | .SOCKET, PIN TERM: U/W 0.016-0.018 DIA PINS                                      | 22526    | 75060-007       |
| -48              | 136-0514-00        | B010100          | B080713 | 1   |           | .SKT, PL-IN ELEC: MICROCIRCUIT, 8 DIP  | 73803    | CS9002-8        |
|                  | 136-0727-00        | B080714          |         | 1   |           | .SKT, PL-IN ELEC: MICROCKT, 8 CONTACT  | 09922    | DILB8P-108      |
|                  | 214-0269-00        | B060000          |         | 2   |           | .HEAT SINK, XSTR: 0.312 DIA X 0.75 L   | 98978    | TXD-032-75      |
| -49              | 386-3776-00        |                  |         | 1   |           | PLATE, H.V.:<br>.....(ATTACHING PARTS).....                                      | 80009    | 386-3776-00     |
| -50              | 210-0586-00        |                  |         | 2   |           | NUT, PL, ASSEM WA: 4-40 X 0.25, STL<br>.....(END ATTACHING PARTS).....           | 83385    | ORD BY DESCR    |
| -51              | 441-1387-00        |                  |         | 1   |           | CHASSIS, XFMR: H.V.<br>.....(ATTACHING PARTS).....                               | 80009    | 441-1387-00     |
| -52              | 211-0097-00        |                  |         | 4   |           | SCREW, MACHINE: 4-40 X 0.312 INCH, PNH, STL<br>.....(END ATTACHING PARTS).....   | 83385    | ORD BY DESCR    |
| -53              | 129-0410-00        |                  |         | 2   |           | SPACER, POST: 0.375 LONG, 0.375 HEX<br>.....(ATTACHING PARTS).....               | 80009    | 129-0410-00     |
| -54              | 211-0008-00        |                  |         | 2   |           | SCREW, MACHINE: 4-40 X 0.250, PNH, STL, POZ<br>.....(END ATTACHING PARTS).....   | 83385    | ORD BY DESCR    |
| -55              | 346-0010-00        |                  |         | 1   |           | BAND, RETAINING:   | 80009    | 346-0010-00     |
| -56              | -----              |                  |         | 1   |           | POWER SUPPLY (SEE A74 REPL)  |          |                 |
| -57              | 204-0464-00        |                  |         | 1   |           | .BODY SECT, PROBE: NOSE TRANSITION   | 80009    | 204-0464-00     |
| -58              | 214-0464-00        |                  |         | 14  |           | .CONTACT, ELEC: CRT  | 80009    | 214-0464-00     |
| -59              | 200-0917-01        |                  |         | 1   |           | COV, ELECTRON TU: 2.052 OD X 0.291" THK, PLST                                    | 80009    | 200-0917-01     |
| -60              | 367-0117-00        |                  |         | 1   |           | PULL, SOCKET:  | 80009    | 367-0117-00     |
| -61              | 343-0235-00        |                  |         | 1   |           | CLAMP, CRT SKT: DELRIN   | 80009    | 343-0235-00     |
| -62              | 441-1388-00        |                  |         | 1   |           | CHASSIS, XFMR: H.V.<br>.....(ATTACHING PARTS).....                               | 80009    | 441-1388-00     |
| -63              | 210-0457-00        |                  |         | 2   |           | NUT, PL, ASSEM WA: 6-32 X 0.312, STL, CD PL                                      | 83385    | ORD BY DESCR    |
| -64              | 211-0008-00        | B010100          | B040538 | 1   |           | SCREW, MACHINE: 4-40 X 0.250, PNH, STL, POZ                                      | 83385    | ORD BY DESCR    |
|                  | 211-0038-00        | B040539          |         | 1   |           | SCREW, MACHINE: 4-40 X 0.312, FLH, 100 DEG                                       | 83385    | ORD BY DESCR    |
| -65              | 210-0994-00        | B010100          | B040538 | 1   |           | WASHER, FLAT: 0.125 ID X 0.25" OD, STL   | 86928    | 5702-201-20     |
|                  | 210-1344-00        | B040539          |         | 1   |           | WASHER, FLAT: 0.125 ID X 0.4 THK, AL, 1.5 OD<br>.....(END ATTACHING PARTS).....  | 80009    | 210-1344-00     |
| -66              | 407-1990-00        |                  |         | 1   |           | BRACKET, SUPPORT: CHASSIES TO H.V., ALUMINUM<br>.....(ATTACHING PARTS).....      | 80009    | 407-1990-00     |
| -67              | 211-0008-00        |                  |         | 1   |           | SCREW, MACHINE: 4-40 X 0.250, PNH, STL, POZ                                      | 83385    | ORD BY DESCR    |
| -68              | 210-0994-00        |                  |         | 1   |           | WASHER, FLAT: 0.125 ID X 0.25" OD, STL<br>.....(END ATTACHING PARTS).....        | 86928    | 5702-201-20     |

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | Name & Description  |   |   |   |   | Mfr Code | Mfr Part Number  |
|------------------|--------------------|------------------|---------|-----|---|---|---|---|---|----------|------------------|
|                  |                    | Eff              | Dscont  |     | 1   | 2 | 3 | 4 | 5 |          |                  |
| 4-69             | 337-1916-00        |                  |         | 1   | SHIELD,CRT:RIGHT<br>***** (ATTACHING PARTS) *****                               |   |   |   |   | 80009    | 337-1916-00      |
| -70              | 211-0168-00        |                  |         | 2   | SCREW,MACHINE:4-40 X 0.25 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****     |   |   |   |   | 12360    | ORD BY DESCR     |
| -71              | 252-0562-00        |                  |         | FT  | PLASTIC CHANNEL:0.100 X 0.120,POLYETHYLENE                                      |   |   |   |   | 06229    | GS2              |
| -72              | 214-0034-00        |                  |         | 3   | BOLT,EYE:4-40 X 0.312 INCH,STL<br>***** (ATTACHING PARTS) *****                 |   |   |   |   | 000EL    | ORD BY DESCR     |
| -73              | 211-0022-00        |                  |         | 3   | SCREW,MACHINE:2-56 X 0.188 INCH,PNH STL   |   |   |   |   | 83385    | ORD BY DESCR     |
| -74              | 210-0405-00        |                  |         | 3   | NUT,PLAIN,HEX.:2-56 X 0.188 INCH,BRS<br>***** (END ATTACHING PARTS) *****       |   |   |   |   | 73743    | 12157-50         |
| -75              | 337-1828-00        | B010100          | B049999 | 1   | SHIELD,CRT:REAR   |   |   |   |   | 80009    | 337-1828-00      |
|                  | 337-1828-02        | B050000          |         | 1   | SHIELD,CRT:REAR   |   |   |   |   | 80009    | 337-1828-02      |
| -76              | 337-2485-00        |                  |         | 1   | SHIELD,ELEC:READING GUN PREAMP<br>***** (ATTACHING PARTS) *****                 |   |   |   |   | 80009    | 337-2485-00      |
| -77              | 211-0008-00        |                  |         | 4   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>***** (END ATTACHING PARTS) *****     |   |   |   |   | 83385    | ORD BY DESCR     |
| -78              | -----              |                  |         | 1   | CKT BOARD ASSY:VIDEO PREAMP(SEE A32 REPL)<br>***** (ATTACHING PARTS) *****      |   |   |   |   |          |                  |
| -79              | 129-0338-00        |                  |         | 4   | POST,ELEC-MECH:HEX.,0.188 X 0.64 INCH LONG<br>***** (END ATTACHING PARTS) ***** |   |   |   |   | 80009    | 129-0338-00      |
|                  | -----              |                  |         | -   | CKT BOARD ASSY INCLUDES:  |   |   |   |   |          |                  |
| -80              | 136-0252-07        | B010100          | B111235 | 24  | .SOCKET,PIN TERM:U/W 0.016-0.018 DIA PINS                                       |   |   |   |   | 22526    | 75060-007        |
| -81              | 131-1003-00        |                  |         | 3   | .CONN,RCPT,ELEC:CKT BD MT,3 PRONG   |   |   |   |   | 80009    | 131-1003-00      |
| -82              | 136-0269-02        | B010100          | B050579 | 1   | .SKT,PL-IN ELEK:MICROCIRCUIT,14 DIP,LOW CL                                      |   |   |   |   | 73803    | CS9002-14        |
| -83              | 131-0566-00        |                  |         | 1   | .BUS CONDUCTOR:DUMMY RES,2.375,22 AWG   |   |   |   |   | 57668    | JWW-0200E0       |
| -84              | 131-0608-00        |                  |         | 8   | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                       |   |   |   |   | 22526    | 47357            |
|                  | 343-0308-00        | B010214          | B049999 | 1   | STRAIN RLF,CA:POWER CABLE<br>***** (ATTACHING PARTS) *****                      |   |   |   |   | 80009    | 343-0308-00      |
|                  | 210-0407-00        | B010214          | B049999 | 1   | NUT,PLAIN,HEX.:6-32 X 0.25 INCH,BRS   |   |   |   |   | 73743    | 3038-0228-402    |
|                  | 210-0228-00        | B010214          | B049999 | 1   | TERMINAL,LUG:0.176 ID X 0.312"OD,SE<br>***** (END ATTACHING PARTS) *****        |   |   |   |   | 78189    | 2103-08-00-2520N |
| -85              | 131-0023-00        |                  |         | 1   | TERMINAL CARD:2 LUG/1 MTG LUG<br>***** (ATTACHING PARTS) *****                  |   |   |   |   | 71785    | 322-11-03-028    |
| -86              | 213-0146-00        |                  |         | 1   | SCR,TPG,THD FOR:6-20 X 0.313 INCH,PNH STL                                       |   |   |   |   | 83385    | ORD BY DESCR     |
| -87              | 210-0006-00        |                  |         | 1   | WASHER,LOCK:#6 INTL,0.018 THK,STL CD PL<br>***** (END ATTACHING PARTS) *****    |   |   |   |   | 78189    | 1206-00-00-0541C |
| -88              | 124-0291-00        |                  |         | 1   | TERMINAL,BOARD:4 LUGS ON 0.375 CENTERS<br>***** (ATTACHING PARTS) *****         |   |   |   |   | 83330    | OBD              |
| -89              | 213-0146-00        |                  |         | 1   | SCR,TPG,THD FOR:6-20 X 0.313 INCH,PNH STL                                       |   |   |   |   | 83385    | ORD BY DESCR     |
| -90              | 210-0006-00        |                  |         | 1   | WASHER,LOCK:#6 INTL,0.018 THK,STL CD PL<br>***** (END ATTACHING PARTS) *****    |   |   |   |   | 78189    | 1206-00-00-0541C |
| -91              | -----              |                  |         | 1   | CKT BOARD ASSY:VERTICAL AMP(SEE A34 REPL)<br>***** (ATTACHING PARTS) *****      |   |   |   |   |          |                  |
| -92              | 210-0586-00        |                  |         | 3   | NUT,PL,ASSEM WA:4-40 X 0.25,STL   |   |   |   |   | 83385    | ORD BY DESCR     |
| -93              | 211-0008-00        |                  |         | 4   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ  |   |   |   |   | 83385    | ORD BY DESCR     |
| -94              | 211-0014-00        |                  |         | 1   | SCREW,MACHINE:4-40 X 0.50 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****     |   |   |   |   | 83385    | ORD BY DESCR     |
|                  | -----              |                  |         | -   | CKT BOARD ASSY INCLUDES:  |   |   |   |   |          |                  |
| -95              | 214-2592-00        |                  |         | 1   | .HT SK,CKT CD:VERTICAL<br>***** (ATTACHING PARTS) *****                         |   |   |   |   | 80009    | 214-2592-00      |
| -96              | 210-0407-00        |                  |         | 1   | NUT,PLAIN,HEX.:6-32 X 0.25 INCH,BRS<br>***** (END ATTACHING PARTS) *****        |   |   |   |   | 73743    | 3038-0228-402    |
| -97              | 210-0599-00        |                  |         | 4   | NUT,SLEEVE:4-40 X 0.391 INCH LONG<br>***** (ATTACHING PARTS) *****              |   |   |   |   | 80009    | 210-0599-00      |
| -98              | 211-0097-00        |                  |         | 4   | SCREW,MACHINE:4-40 X 0.312 INCH,PNH STL   |   |   |   |   | 83385    | ORD BY DESCR     |
| -99              | 210-0551-00        |                  |         | 4   | NUT,PLAIN,HEX.:4-40 X 0.25 INCH,STL<br>***** (END ATTACHING PARTS) *****        |   |   |   |   | 000BK    | ORD BY DESCR     |
| -100             | 214-0368-00        |                  |         | 2   | .SPRING,HLCPS:0.24 DIA X 0.438 INCH LONG  |   |   |   |   | 80009    | 214-0368-00      |
| -101             | 343-0097-00        |                  |         | 2   | .RTNR,TRANSISTOR:HEAT SINK  |   |   |   |   | 80009    | 343-0097-00      |
| -102             | 210-0627-00        |                  |         | 2   | RIVET,SOLID:0.042 DIA X 0.25 INCH,RDH   |   |   |   |   | 80009    | 210-0627-00      |
| -103             | 136-0252-06        |                  |         | 10  | SOCKET,PIN TERM:0.178 INCH LONG   |   |   |   |   | 00779    | 2-332095-6       |
| -104             | 214-1683-03        |                  |         | 1   | .HT SK,MICROCKT:VERTICAL AMPLIFIER,RIGHT  |   |   |   |   | 80009    | 214-1683-03      |
| -105             | 136-0252-04        |                  |         | 5   | .SOCKET,PIN TERM:U/W 0.016-0.018 DIA PINS                                       |   |   |   |   | 22526    | 75060-007        |
|                  | 136-0252-01        |                  |         | 20  | .CONTACT,ELEC:0.178 INCH LONG   |   |   |   |   | 00779    | 1-332095-2       |
| -106 2           | 14-0579-00         |                  |         | 2   | .TERM,TEST POINT:BRS CD PL  |   |   |   |   | 80009    | 214-0579-00      |
| -107             | 131-0608-00        |                  |         | 7   | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                       |   |   |   |   | 22526    | 47357            |

Replaceable Mechanical Parts—7912AD Service

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | 1 | 2 | 3 | 4 | 5 | Name & Description  | Mfr Code | Mfr Part Number |
|------------------|--------------------|------------------|---------|-----|---|---|---|---|---|---|----------|-----------------|
|                  |                    | Eff              | Dscont  |     |   |   |   |   |   |   |          |                 |
| 4-108            | ----               |                  |         | 1   |   |   |   |   |   | .TRANSISTOR:(SEE Q785 REPL)<br>.....(ATTACHING PARTS).....                    |          |                 |
| -109             | 210-0551-00        |                  |         | 2   |   |   |   |   |   | .NUT,PLAIN,HEX.:4-40 X 0.25 INCH,STL  | 000BK    | ORD BY DESCR    |
| -110             | 211-0097-00        |                  |         | 1   |   |   |   |   |   | .SCREW,MACHINE:4-40 X 0.312 INCH,PNH STL<br>.....(END ATTACHING PARTS).....   | 83385    | ORD BY DESCR    |
| -111             | 131-1003-00        |                  |         | 5   |   |   |   |   |   | .CONN,RCPT,ELEC:CKT BD MT,3 PRONG   | 80009    | 131-1003-00     |
| -112             | 136-0220-00        | B010100          | B030422 | 10  |   |   |   |   |   | .SKT,PL-IN ELEK:TRANSISTOR 3 CONTACT,PCB M                                    | 71785    | 133-23-11-034   |
| -113             | 220-0679-00        |                  |         | 2   |   |   |   |   |   | NUT BAR:0.25 SQ X 6.9 INCH LONG   | 80009    | 220-0679-00     |
| -114             | 386-2767-00        |                  |         | 3   |   |   |   |   |   | PLATE,GND,CRT:<br>.....(ATTACHING PARTS).....                                 | 80009    | 386-2767-00     |
| -115             | 211-0117-00        |                  |         | 3   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.312 INCH,PNH,SST<br>.....(END ATTACHING PARTS).....    | 70318    | ORD BY DESCR    |
|                  | 342-0518-00        | B080740          |         | 1   |   |   |   |   |   | INSULATOR,FILM:CIRCUIT BOARD,FISH PAPER                                       | 80009    | 342-0518-00     |
|                  | 342-0519-00        | B080740          |         | 1   |   |   |   |   |   | INSULATOR,FILM:CIRCUIT BOARD,FISH PAPER                                       | 80009    | 342-0519-00     |
| -116             | 441-1385-00        | B010100          | B059999 | 1   |   |   |   |   |   | CHAS,DIGITIZER:   | 80009    | 441-1385-00     |
|                  | 441-1385-02        | B060000          |         | 1   |   |   |   |   |   | CHAS,DIGITIZER:<br>.....(ATTACHING PARTS).....                                | 80009    | 441-1385-02     |
| -117             | 211-0121-00        | B010100          | B010125 | 4   |   |   |   |   |   | SCR,ASSEM WSHR:4-40 X 0.438 INCH,PNH BRS                                      | 83385    | ORD BY DESCR    |
|                  | 211-0143-00        | B010126          |         | 4   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.375,PNH  | 83385    | ORD BY DESCR    |
|                  | 210-1002-00        | B010126          |         | 4   |   |   |   |   |   | WASHER,FLAT:0.125 ID X 0.25 INCH OD,BRS                                       | 12327    | ORD BY DESCR    |
| -118             | 211-0008-00        |                  |         | 2   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ  | 83385    | ORD BY DESCR    |
| -119             | 210-0994-00        |                  |         | 2   |   |   |   |   |   | WASHER,FLAT:0.125 ID X 0.25" OD,STL<br>.....(END ATTACHING PARTS).....        | 86928    | 5702-201-20     |
| -120             | 136-0120-02        | B010100          | B111249 | 1   |   |   |   |   |   | SKT,PL-IN ELEK:ELECTRON TUBE,13 CONT  | 80009    | 136-0120-02     |
|                  | ----               | B111250          |         | 1   |   |   |   |   |   | CKT BOARD ASSY:READING GUN SKT(SEE A76REPL)                                   |          |                 |
|                  | 175-9274-00        |                  |         | 1   |   |   |   |   |   | .CA ASSY,SP,ELEC:4,26 AWG,4.5 L,RIBBON  | 80009    | 175-9274-00     |
|                  | 175-9275-00        |                  |         | 1   |   |   |   |   |   | .CA ASSY,SP,ELEC:2,26 AWG,8.0 L,RIBBON  | 80009    | 175-9275-00     |
|                  | 175-9276-00        |                  |         | 1   |   |   |   |   |   | .CA ASSY,SP,ELEC:2,26 AWG,5.0 L,RIBBON  | 80009    | 175-9276-00     |
|                  | 175-9277-00        |                  |         | 1   |   |   |   |   |   | .CA ASSY,SP,ELEC:2,26 AWG,8.0 L,RIBBON  | 80009    | 175-9277-00     |
| -121             | 131-0707-00        |                  |         | 6   |   |   |   |   |   | .CONNECTOR,TERM:22-26 AWG,BRS & CU BE GOLD                                    | 22526    | 47439           |
| -122             | 352-0171-01        |                  |         | 2   |   |   |   |   |   | .CONN BODY,PL,EL:1 WIRE BROWN   | 80009    | 352-0171-01     |
|                  | 352-0171-02        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:1 WIRE RED   | 80009    | 352-0171-02     |
|                  | 352-0171-03        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:1 WIRE ORANGE  | 80009    | 352-0171-03     |
|                  | 352-0171-04        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:1 WIRE YELLOW  | 80009    | 352-0171-04     |
| -123             | 352-0169-07        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:2 WIRE PURPLE  | 80009    | 352-0169-07     |
| -124             | 352-0162-05        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:4 WIRE GREEN   | 80009    | 352-0162-05     |
| -125             | 175-0825-00        |                  |         | FT  |   |   |   |   |   | .WIRE,ELECTRICAL:2 WIRE RIBBON  | 80009    | 175-0825-00     |
| -126             | 175-0827-00        |                  |         | FT  |   |   |   |   |   | .CABLE,SP,ELEC:4,26 AWG,STRD,PVC JKT,RBN                                      | 08261    | SS04267(1061)0C |
|                  | ----               |                  |         | 1   |   |   |   |   |   | ELECTRON TUBE:ASSEMBLY(SEE V5200 REPL)<br>.....(ATTACHING PARTS).....         |          |                 |
| -127             | 211-0121-00        | B010100          | B010125 | 4   |   |   |   |   |   | SCR,ASSEM WSHR:4-40 X 0.438 INCH,PNH BRS                                      | 83385    | ORD BY DESCR    |
|                  | 211-0143-00        | B010126          |         | 4   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.375,PNH  | 83385    | ORD BY DESCR    |
|                  | 210-1002-00        | B010126          |         | 4   |   |   |   |   |   | WASHER,FLAT:0.125 ID X 0.25 INCH OD,BRS<br>.....(END ATTACHING PARTS).....    | 12327    | ORD BY DESCR    |
| -128             | 211-0170-00        |                  |         | 4   |   |   |   |   |   | .SCREW,MACHINE:4-40 X 2.75 INCH,PNH STL                                       | 83385    | ORD BY DESCR    |
| -129             | 214-1333-00        |                  |         | 4   |   |   |   |   |   | .SPRING,HLCPS:0.213 OD X 0.375 INCH LONG                                      | 80009    | 214-1333-00     |
| -130             | 210-0994-00        |                  |         | 4   |   |   |   |   |   | .WASHER,FLAT:0.125 ID X 0.25" OD,STL  | 86928    | 5702-201-20     |
| -131             | 343-0205-03        |                  |         | 2   |   |   |   |   |   | .CLP,ELCTR N TUBE:3.0 DIA X 1.5 L   | 80009    | 343-0205-03     |
| -132             | 354-0347-00        |                  |         | 2   |   |   |   |   |   | .RING,CRT CLAMP:  | 80009    | 354-0347-00     |
| -133             | 384-0617-00        |                  |         | 2   |   |   |   |   |   | .SPACER,POST:0.375 L X 0.25 HEX   | 80009    | 384-0617-00     |
| -134             | 352-0161-00        |                  |         | 1   |   |   |   |   |   | .HLDR,TERM CONN:3 WIRE,BLACK  | 80009    | 352-0161-00     |
| -135             | 352-0169-06        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:2 WIRE BLUE  | 80009    | 352-0169-06     |
| -136             | 343-0442-00        |                  |         | 1   |   |   |   |   |   | .CLAMP,COIL:<br>.....(ATTACHING PARTS).....                                   | 80009    | 343-0442-00     |
| -137             | 210-0406-00        |                  |         | 1   |   |   |   |   |   | .NUT,PLAIN,HEX.:4-40 X 0.188 INCH,BRS   | 73743    | 12161-50        |
| -138             | 211-0152-00        |                  |         | 1   |   |   |   |   |   | .SCR,ASSEM WSHR:4-40 X 0.625 INCH,PNH BRS<br>.....(END ATTACHING PARTS).....  | 83385    | ORD BY DESCR    |
| -139             | 108-0763-00        |                  |         | 1   |   |   |   |   |   | .COIL,TUBE DEFLE:X-Y ALIGNMENT<br>.....(ATTACHING PARTS).....                 | 80009    | 108-0763-00     |
| -140             | 211-0105-00        |                  |         | 1   |   |   |   |   |   | .SCREW,MACHINE:4-40 X 0.188,100 DEG,FLH ST<br>.....(END ATTACHING PARTS)..... | 83385    | ORD BY DESCR    |
| -141             | 386-2757-00        |                  |         | 1   |   |   |   |   |   | .SPRT,CRT SHLD:<br>.....(ATTACHING PARTS).....                                | 80009    | 386-2757-00     |
| -142             | 211-0168-00        |                  |         | 4   |   |   |   |   |   | .SCREW,MACHINE:4-40 X 0.25 INCH,PNH STL                                       | 12360    | ORD BY DESCR    |
| -143             | 211-0596-00        |                  |         | 2   |   |   |   |   |   | .SCREW,MACHINE:6-32 X 0.375 INCH,PNH BRS                                      | 83385    | ORD BY DESCR    |
| -144             | 210-0802-00        |                  |         | 6   |   |   |   |   |   | .WASHER,FLAT:0.15 ID X 0.312 INCH OD<br>.....(END ATTACHING PARTS).....       | 12327    | ORD BY DESCR    |

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | 1 | 2 | 3 | 4 | 5 | Name & Description   | Mfr Code | Mfr Part Number  |
|------------------|--------------------|------------------|---------|-----|---|---|---|---|---|--|----------|------------------|
|                  |                    | Eff              | Dscont  |     |   |   |   |   |   |  |          |                  |
| 4-145            | 343-0441-00        |                  |         | 1   |   |   |   |   |   | .RETAINER,COIL:  | 80009    | 343-0041-00      |
| -146             | 108-0764-00        |                  |         | 1   |   |   |   |   |   | .COIL,TUBE DEFLE:FOCUS   | 80009    | 108-0764-00      |
| -147             | 124-0050-00        |                  |         | IN  |   |   |   |   |   | .PLASTIC STRIP:0.75W X 9.875" LG,FOAM TAPE                                     | 80009    | 124-0050-00      |
| -148             | 337-1798-00        |                  |         | 1   |   |   |   |   |   | .SHIELD,CRT:   | 80009    | 337-1798-00      |
| -149             | 407-2046-00        |                  |         | 2   |   |   |   |   |   | BRACKET,CRT:ALUMINUM<br>***** (ATTACHING PARTS)*****                           | 80009    | 407-2046-00      |
| -150             | 211-0008-00        |                  |         | 4   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>***** (END ATTACHING PARTS)*****     | 83385    | ORD BY DESCR     |
| -151             | 386-3777-00        |                  |         | 1   |   |   |   |   |   | SUPPORT,CRT:<br>***** (ATTACHING PARTS)*****                                   | 80009    | 386-3777-00      |
| -152             | 211-0008-00        |                  |         | 3   |   |   |   |   |   | SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ   | 83385    | ORD BY DESCR     |
| -153             | 210-0994-00        |                  |         | 3   |   |   |   |   |   | WASHER,FLAT:0.125 ID X 0.25" OD,STL<br>***** (END ATTACHING PARTS)*****        | 86928    | 5702-201-20      |
|                  | 119-0437-00        |                  |         | 1   |   |   |   |   |   | DELAY LINE,ELEC:62NS,100 OHM   | 80009    | 119-0437-00      |
| -154             | 441-1154-00        |                  |         | 1   |   |   |   |   |   | .CHASSIS,SCOPE:DELAY LINE RIGHT<br>***** (ATTACHING PARTS)*****                | 80009    | 441-1154-00      |
| -155             | 213-0068-00        |                  |         | 2   |   |   |   |   |   | .SCR,TPG,THD CTG:4-40 X 0.50 INCH,PNL STL                                      | 83385    | ORD BY DESCR     |
| -156             | 211-0101-00        |                  |         | 2   |   |   |   |   |   | .SCREW,MACHINE:4-40 X 0.25,100 DEG,FLH STL<br>***** (END ATTACHING PARTS)***** | 83385    | ORD BY DESCR     |
| -157             | 175-1309-00        |                  |         | FT  |   |   |   |   |   | .CABLE,RF:1.5 NS/FT DLY,100 OHM  | 80009    | 175-1309-00      |
| -158             | 129-0403-00        |                  |         | 2   |   |   |   |   |   | .SPACER,POST:1.45 L X 1.5 OD<br>***** (ATTACHING PARTS)*****                   | 80009    | 129-0403-00      |
| -159             | 213-0068-00        |                  |         | 2   |   |   |   |   |   | .SCR,TPG,THD CTG:4-40 X 0.50 INCH,PNL STL<br>***** (END ATTACHING PARTS)*****  | 83385    | ORD BY DESCR     |
| -160             | 129-0425-00        |                  |         | 2   |   |   |   |   |   | .SPACER,POST:0.90 L X 0.25 HEX<br>***** (ATTACHING PARTS)*****                 | 80009    | 129-0425-00      |
| -161             | 211-0101-00        |                  |         | 2   |   |   |   |   |   | .SCREW,MACHINE:4-40 X 0.25,100 DEG,FLH STL<br>***** (END ATTACHING PARTS)***** | 83385    | ORD BY DESCR     |
| -162             | 131-1003-00        |                  |         | 4   |   |   |   |   |   | .CONN,RCPT,ELEC:CKT BD MT,3 PRONG  | 80009    | 131-1003-00      |
| -163             | 136-0252-04        |                  |         | 4   |   |   |   |   |   | .SOCKET,PIN TERM:U/W 0.016-0.018 DIA PINS                                      | 22526    | 75060-007        |
| -164             | -----              |                  |         | 1   |   |   |   |   |   | .CKT BOARD ASSY:DELAY LINE TERM(SEE A36 RE<br>***** (ATTACHING PARTS)*****     |          |                  |
| -165             | 210-0586-00        |                  |         | 1   |   |   |   |   |   | .NUT,PL,ASSEM WA:4-40 X 0.25,STL<br>***** (END ATTACHING PARTS)*****           | 83385    | ORD BY DESCR     |
| -166             | 407-1310-00        |                  |         | 1   |   |   |   |   |   | .BRACKET,DL:<br>***** (ATTACHING PARTS)*****                                   | 80009    | 407-1310-00      |
| -167             | 210-0586-00        |                  |         | 2   |   |   |   |   |   | NUT,PL,ASSEM WA:4-40 X 0.25,STL<br>***** (END ATTACHING PARTS)*****            | 83385    | ORD BY DESCR     |
| -168             | 441-1155-00        |                  |         | 1   |   |   |   |   |   | .CHASSIS,SCOPE:DELAY LINE,LEFT   | 80009    | 441-1155-00      |
|                  | 198-3905-00        | B010100          | B059999 | 1   |   |   |   |   |   | WIRE SET,ELEC:   | 80009    | 198-3905-00      |
|                  | 198-4248-00        | B060000          |         | 1   |   |   |   |   |   | WIRE SET,ELEC:   | 80009    | 198-4248-00      |
| -169             | 131-0707-00        |                  |         | 24  |   |   |   |   |   | .CONNECTOR,TERM:22-26 AWG,BRS & CU BE GOLD                                     | 22526    | 47439            |
| -170             | 175-0828-00        |                  |         | FT  |   |   |   |   |   | WIRE,ELECTRICAL:5 WIRE RIBBON  | 08261    | SS-0526-710610C  |
| -171             | 352-0330-00        |                  |         | 1   |   |   |   |   |   | .HLDR,TERM. CONN:44 WIRE,DBL ROW,BLACK   | 22526    | 65043-072        |
|                  | 198-3907-00        |                  |         | 1   |   |   |   |   |   | WIRE SET,ELEC:   | 80009    | 198-3907-00      |
|                  | 198-3906-00        |                  |         | 1   |   |   |   |   |   | WIRE SET,ELEC:   | 80009    | 198-3906-00      |
|                  | 131-0707-00        |                  |         | 30  |   |   |   |   |   | .CONNECTOR,TERM:22-26 AWG,BRS & CU BE GOLD                                     | 22526    | 47439            |
| -172             | 131-0965-00        |                  |         | 3   |   |   |   |   |   | .CONTACT,ELEC:0.25" SQ,22-26 AWG WIRE  | 22526    | 47792            |
| -173             | 175-0827-00        |                  |         | FT  |   |   |   |   |   | .CABLE,SP,ELEC:4.26 AWG,STRD,PVC JKT,RBN                                       | 08261    | SS04267(1061)0C  |
| -174             | 210-0202-00        |                  |         | 1   |   |   |   |   |   | .TERMINAL,LUG:0.146 ID,LOCKING,BRZ TINNED                                      | 78189    | 2104-06-00-2520N |
| -175             | 352-0169-05        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:2 WIRE GREEN  | 80009    | 352-0169-05      |
|                  | 352-0169-06        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:2 WIRE BLUE   | 80009    | 352-0169-06      |
| -176             | 352-0161-00        |                  |         | 3   |   |   |   |   |   | .HLDR,TERM CONN:3 WIRE,BLACK   | 80009    | 352-0161-00      |
|                  | 352-0161-01        |                  |         | 2   |   |   |   |   |   | .CONN BODY,PL,EL:3 WIRE BROWN  | 80009    | 352-0161-01      |
| -177             | 352-0162-00        |                  |         | 1   |   |   |   |   |   | .HLDR,TERM CONN:4 WIRE BLACK   | 80009    | 352-0162-00      |
|                  | 352-0162-01        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:4 WIRE BROWN  | 80009    | 352-0162-01      |
|                  | 352-0162-02        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:4 WIRE RED  | 80009    | 352-0162-02      |
|                  | 352-0162-03        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:4 WIRE ORANGE   | 80009    | 352-0162-03      |
|                  | 352-0162-04        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:4 WIRE YELLOW   | 80009    | 352-0162-04      |
| -178             | 179-2606-00        |                  |         | 1   |   |   |   |   |   | WIRING HARNESS,:   | 80009    | 179-2606-00      |
|                  | 131-0707-00        |                  |         | 57  |   |   |   |   |   | .CONNECTOR,TERM:22-26 AWG,BRS & CU BE GOLD                                     | 22526    | 47439            |
|                  | 352-0169-00        |                  |         | 1   |   |   |   |   |   | .HLDR,TERM CONN:2 WIRE BLACK   | 80009    | 352-0169-00      |
|                  | 352-0169-02        |                  |         | 2   |   |   |   |   |   | .CONN BODY,PL,EL:2 WIRE RED  | 80009    | 352-0169-02      |
|                  | 352-0169-04        |                  |         | 2   |   |   |   |   |   | .CONN BODY,PL,EL:2 WIRE YELLOW   | 80009    | 352-0169-04      |
|                  | 352-0161-01        |                  |         | 1   |   |   |   |   |   | .CONN BODY,PL,EL:3 WIRE BROWN  | 80009    | 352-0161-01      |

Replaceable Mechanical Parts—7912AD Service

| Fig. &<br>Index<br>No. | Tektronix<br>Part No. | Serial/Model No. |        | Qty | 1 | 2 | 3 | 4 | 5 | Name & Description                         | Mfr<br>Code | Mfr Part Number |
|------------------------|-----------------------|------------------|--------|-----|---|---|---|---|---|--|-------------|-----------------|
|                        |                       | Eff              | Dscont |     |   |   |   |   |   |  |             |                 |
| 4-179                  | 352-0163-05           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:5 WIRE GREEN              | 80009       | 352-0163-05     |
| -180                   | 352-0166-00           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:8 WIRE BLACK              | 80009       | 352-0166-00     |
|                        | 352-0166-01           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:8 WIRE BROWN              | 80009       | 352-0166-01     |
| -181                   | 352-0167-00           |                  |        | 1   |   |   |   |   |   | .HLDR,TERM CONN:9 WIRE BLACK               | 80009       | 352-0167-00     |
|                        | 352-0167-03           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:9 WIRE ORANGE             | 80009       | 352-0167-03     |
|                        | 352-0167-04           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:9 WIRE YELLOW             | 80009       | 352-0167-04     |
|                        | 343-0549-00           |                  |        | 11  |   |   |   |   |   | .STRAP,TIEDOWN:0.091 W X 3.62 INCH LONG    | 06383       | PLT1M           |
|                        | 179-2607-00           |                  |        | 1   |   |   |   |   |   | WIRING HARNESS,:COAX                       | 80009       | 179-2607-00     |
|                        | 131-0707-00           |                  |        | 31  |   |   |   |   |   | .CONNECTOR,TERM:22-26 AWG,BRS & CU BE GOLD | 22526       | 47439           |
|                        | 352-0169-00           |                  |        | 1   |   |   |   |   |   | .HLDR,TERM CONN:2 WIRE BLACK               | 80009       | 352-0169-00     |
|                        | 352-0169-02           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:2 WIRE RED                | 80009       | 352-0169-00     |
|                        | 352-0162-02           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:4 WIRE RED                | 80009       | 352-0162-02     |
|                        | 352-0163-00           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:5 WIRE BLACK              | 80009       | 352-0163-00     |
|                        | 352-0163-02           |                  |        | 2   |   |   |   |   |   | .CONN BODY,PL,EL:5 WIRE RED                | 80009       | 352-0163-02     |
|                        | 352-0167-01           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:9 WIRE BROWN              | 80009       | 352-0167-01     |
|                        | 343-0549-00           |                  |        | 18  |   |   |   |   |   | .STRAP,TIEDOWN:0.091 W X 3.62 INCH LONG    | 06383       | PLT1M           |
|                        | 179-2608-00           |                  |        | 1   |   |   |   |   |   | WIRING HARNESS,:CRT                        | 80009       | 179-2608-00     |
|                        | 131-0707-00           |                  |        | 3   |   |   |   |   |   | .CONNECTOR,TERM:22-26 AWG,BRS & CU BE GOLD | 22526       | 47439           |
| -182                   | 131-1538-00           |                  |        | 3   |   |   |   |   |   | .CONTACT,ELEC:CRIMP-ON,22-26 AWG WIRE      | 22526       | 75369-002       |
|                        | 352-0161-01           |                  |        | 1   |   |   |   |   |   | .CONN BODY,PL,EL:3 WIRE BROWN              | 80009       | 352-0161-01     |
|                        | 343-0549-00           |                  |        | 5   |   |   |   |   |   | .STRAP,TIEDOWN:0.091 W X 3.62 INCH LONG    | 06383       | PLT1M           |
|                        | 179-2609-00           |                  |        | 1   |   |   |   |   |   | WIRING HARNESS,:REAR PANEL COAX            | 80009       | 179-2609-00     |
|                        | 131-0707-00           |                  |        | 12  |   |   |   |   |   | .CONNECTOR,TERM:22-26 AWG,BRS & CU BE GOLD | 22526       | 47439           |
| -183                   | 131-0818-00           |                  |        | 9   |   |   |   |   |   | .CONNECTOR,RCPT,:BNC,FEMALE                | 91836       | KC-19-153       |
|                        | 352-0162-06           |                  |        | 1   |   |   |   |   |   | .HLDR,TERM CONN:4 WIRE,BLUE                | 80009       | 352-0162-06     |
| -184                   | 352-0164-07           |                  |        | 1   |   |   |   |   |   | .HLDR,TERM CONN:6 WIRE VIOLET              | 80009       | 352-0164-07     |
|                        | 343-0549-00           |                  |        | 11  |   |   |   |   |   | .STRAP,TIEDOWN:0.091 W X 3.62 INCH LONG    | 06383       | PLT1M           |
|                        | 179-2610-00           |                  |        | 1   |   |   |   |   |   | WIRING HARNESS,:FRONT PANEL                | 80009       | 179-2610-00     |
|                        | 131-2084-00           |                  |        | 56  |   |   |   |   |   | .TERM,QUICK DISC:26 AWG,COPPER NICKEL      | 00779       | 5250-207-2      |
|                        | 352-0161-03           |                  |        | 2   |   |   |   |   |   | .CONN BODY,PL,EL:3 WIRE ORANGE             | 80009       | 352-0161-03     |
| -185                   | 352-0165-05           |                  |        | 2   |   |   |   |   |   | .CONN BODY,PL,EL:7 WIRE GREEN              | 80009       | 352-0165-05     |
|                        | 352-0167-04           |                  |        | 2   |   |   |   |   |   | .CONN BODY,PL,EL:9 WIRE YELLOW             | 80009       | 352-0167-04     |
|                        | 352-0167-06           |                  |        | 2   |   |   |   |   |   | .CONN BODY,PL,EL:9 WIRE BLUE               | 80009       | 352-0167-06     |
|                        | 343-0549-00           |                  |        | 11  |   |   |   |   |   | .STRAP,TIEDOWN:0.091 W X 3.62 INCH LONG    | 06383       | PLT1M           |

| Fig. &<br>Index<br>No. | Tektronix<br>Part No. | Serial/Model No. |         | Qty | 1 2 3 4 5 | Name & Description  | Mfr<br>Code | Mfr Part Number  |
|------------------------|-----------------------|------------------|---------|-----|-----------|---|-------------|------------------|
|                        |                       | Eff              | Dscont  |     |           |   |             |                  |
| 5-                     | 620-0269-00           | B010100          | B039999 | 1   |           | POWER SUPPLY:   | 80009       | 620-0269-00      |
|                        | 620-0269-01           | B040000          | B059999 | 1   |           | POWER SUPPLY:   | 80009       | 620-0269-01      |
|                        | 620-0269-02           | B060000          | B079999 | 1   |           | POWER SUPPLY:   | 80009       | 620-0269-02      |
|                        | 620-0269-03           | B080000          | B089999 | 1   |           | POWER SUPPLY:   | 80009       | 620-0269-03      |
|                        | 620-0269-04           | B090000          | B100940 | 1   |           | POWER SUPPLY:   | 80009       | 620-0269-04      |
|                        | 620-0269-05           | B100941          | B101114 | 1   |           | POWER SUPPLY:   | 80009       | 620-0269-05      |
|                        | 620-0269-06           | B101115          |         | 1   |           | POWER SUPPLY:   | 80009       | 620-0269-06      |
| -1                     | 343-0013-00           |                  |         | 1   |           | .CLAMP,LOOP:0.375 ID,PLASTIC<br>.....(ATTACHING PARTS).....                   | 95987       | 3-8-6B           |
| -2                     | 211-0504-00           |                  |         | 1   |           | .SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL                                       | 83385       | ORD BY DESCR     |
| -3                     | 210-0863-00           |                  |         | 1   |           | .WSHR,LOOP CLAMP:0.187 ID U/W 0.5 W CLP,ST<br>.....(END ATTACHING PARTS)..... | 95987       | C191             |
| -4                     | 343-0007-00           |                  |         | 1   |           | .CLAMP,LOOP:<br>.....(ATTACHING PARTS).....                                   | 95987       | 5-8-6B           |
| -5                     | 211-0504-00           |                  |         | 1   |           | .SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL                                       | 83385       | ORD BY DESCR     |
| -6                     | 210-0863-00           |                  |         | 1   |           | .WSHR,LOOP CLAMP:0.187 ID U/W 0.5 W CLP,ST<br>.....(END ATTACHING PARTS)..... | 95987       | C191             |
| -7                     | 343-0006-00           |                  |         | 1   |           | .CLAMP,LOOP:0.50 INCH DIAMETER,PLSTC<br>.....(ATTACHING PARTS).....           | 95987       | 1-2-6B           |
| -8                     | 211-0504-00           |                  |         | 1   |           | .SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL                                       | 83385       | ORD BY DESCR     |
| -9                     | 210-0863-00           |                  |         | 1   |           | .WSHR,LOOP CLAMP:0.187 ID U/W 0.5 W CLP,ST<br>.....(END ATTACHING PARTS)..... | 95987       | C191             |
| -10                    | 426-1350-01           | B010100          | B060611 | 1   |           | .MOUNT,PWR SPLY:  | 80009       | 426-1350-01      |
|                        | 426-1674-01           | B060612          |         | 2   |           | .MOUNT,PWR SPLY:STEEL<br>.....(ATTACHING PARTS).....                          | 80009       | 426-1674-01      |
| -11                    | 220-0555-00           |                  |         | 2   |           | .NUT,PLAIN,HEX.:8-32 X 0.25 INCH STL  | 000EL       | ORD BY DESCR     |
|                        | 210-0008-00           |                  |         | 2   |           | .WASHER,LOCK:INTL,0.172 ID X 0.331"OD,S<br>.....(END ATTACHING PARTS).....    | 78189       | 1208-00-00-0541C |
| -12                    | 200-2147-00           | B010100          | B059999 | 1   |           | .COVER,PWR SPLY:TOP & BOTTOM  | 80009       | 200-2147-00      |
|                        | 200-2147-01           | B060000          | B100811 | 1   |           | .COVER,PWR SPLY:TOP & BOTTOM  | 80009       | 200-2147-01      |
|                        | 200-2147-02           | B100812          |         | 1   |           | .COVER,PWR SPLY:TOP & BOTTOM,ALUMINUM<br>.....(ATTACHING PARTS).....          | 80009       | 200-2147-02      |
| -13                    | 211-0504-00           |                  |         | 6   |           | .SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL<br>.....(END ATTACHING PARTS).....    | 83385       | ORD BY DESCR     |
| -14                    | -----                 |                  |         | 1   |           | .CKT BOARD ASSY:INVERTER(SEE A82 REPL)<br>.....(ATTACHING PARTS).....         |             |                  |
| -15                    | 211-0008-00           |                  |         | 4   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ                                       | 83385       | ORD BY DESCR     |
| -16                    | 212-0507-00           |                  |         | 4   |           | .SCREW,MACHINE:10-32 X 0.375 INCH,PNH STL                                     | 83385       | ORD BY DESCR     |
| -17                    | 210-0056-00           |                  |         | 4   |           | .WASHER,LOCK:SPLIT,0.195 ID X 0.32" OD,P                                      | 83385       | ORD BY DESCR     |
| -18                    | 210-1009-00           |                  |         | 4   |           | .SHIM:0.2 ID X 0.014 THK,STL CD P<br>.....(END ATTACHING PARTS).....          | 80009       | 210-1009-00      |
|                        | -----                 |                  |         | -   |           | .CKT BOARD ASSY INCLUDES:   |             |                  |
| -19                    | 131-0608-00           | B010100          | B100940 | 7   |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                     | 22526       | 47357            |
|                        | 131-0608-00           | B100941          |         | 9   |           | .TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                     | 22526       | 47357            |
|                        | 214-0579-00           | B100941          |         | 7   |           | .TERM,TEST POINT:BRZ CD PL  | 80009       | 214-0579-00      |
|                        | 346-0120-00           | B100941          |         | 1   |           | .STRAP,TIEDOWN:5.5 L MIN,PLASTIC  | 06383       | SST 1.5M         |
|                        | 131-0589-00           |                  |         | 4   |           | .TERMINAL,PIN:0.46 L X 0.025 SQ   | 22526       | 48283-029        |
| -20                    | -----                 |                  |         | 2   |           | .COIL,RF:(SEE L210 AND L410 REPL)<br>.....(ATTACHING PARTS).....              |             |                  |
| -21                    | 210-0586-00           |                  |         | 2   |           | .NUT,PL,ASSEM WA:4-40 X 0.25,STL  | 83385       | ORD BY DESCR     |
| -22                    | 210-0994-00           |                  |         | 2   |           | .WASHER,FLAT:0.125 ID X 0.25" OD,STL  | 86928       | 5702-201-20      |
| -23                    | 211-0189-00           |                  |         | 2   |           | .SCREW,MACHINE:4-40 X 0.875 INCH,PLSTC  | 26365       | ORD BY DESCR     |
| -24                    | 200-0847-00           |                  |         | 2   |           | .CAP,INSERT,KNOB:BLK,0.561 OD X0.18 H,PLS<br>.....(END ATTACHING PARTS).....  | 80009       | 200-0847-00      |
| -25                    | 136-0183-00           |                  |         | 2   |           | .SOCKET,PLUG-IN:3 PIN,ROUND   | 80009       | 136-0183-00      |
| -26                    | -----                 |                  |         | 1   |           | .SEMICON DVC,DI:(SEE VR620 REPL)<br>.....(ATTACHING PARTS).....               |             |                  |
| -27                    | 210-0410-00           |                  |         | 1   |           | .NUT,PLAIN,HEX.:10-32 X 0.312 INCH,BRS  | 73743       | 2X20003-402      |
| -28                    | 210-0056-00           |                  |         | 1   |           | .WASHER,LOCK:SPLIT,0.195 ID X 0.32" OD,P                                      | 83385       | ORD BY DESCR     |
| -29                    | 210-1009-00           |                  |         | 1   |           | .SHIM:0.2 ID X 0.014 THK,STL CD P<br>.....(END ATTACHING PARTS).....          | 80009       | 210-1009-00      |
| -30                    | 407-1933-00           |                  |         | 1   |           | .BRACKET,DIODE:ALUMINUM<br>.....(ATTACHING PARTS).....                        | 80009       | 407-1933-00      |
| -31                    | 210-0586-00           |                  |         | 2   |           | .NUT,PL,ASSEM WA:4-40 X 0.25,STL  | 83385       | ORD BY DESCR     |
| -32                    | 211-0008-00           |                  |         | 2   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>.....(END ATTACHING PARTS).....    | 83385       | ORD BY DESCR     |



Replaceable Mechanical Parts—7912AD Service

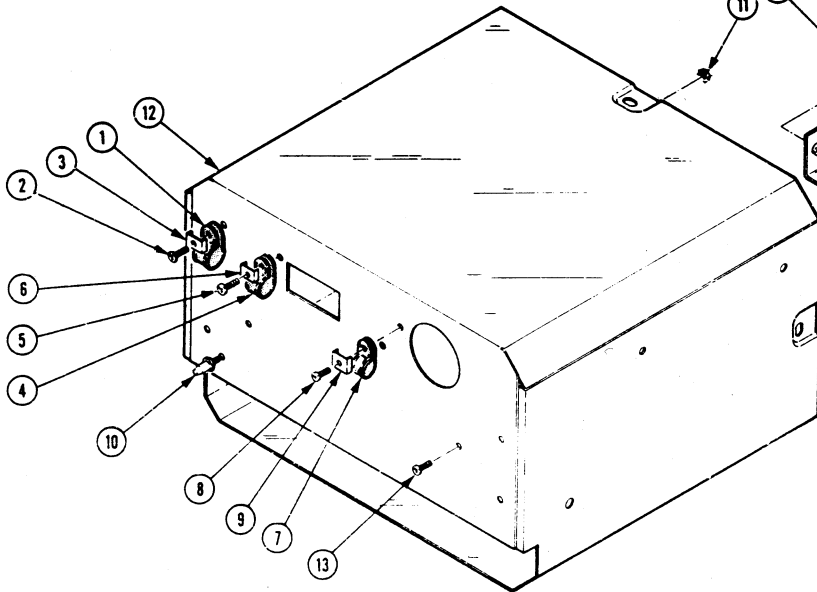
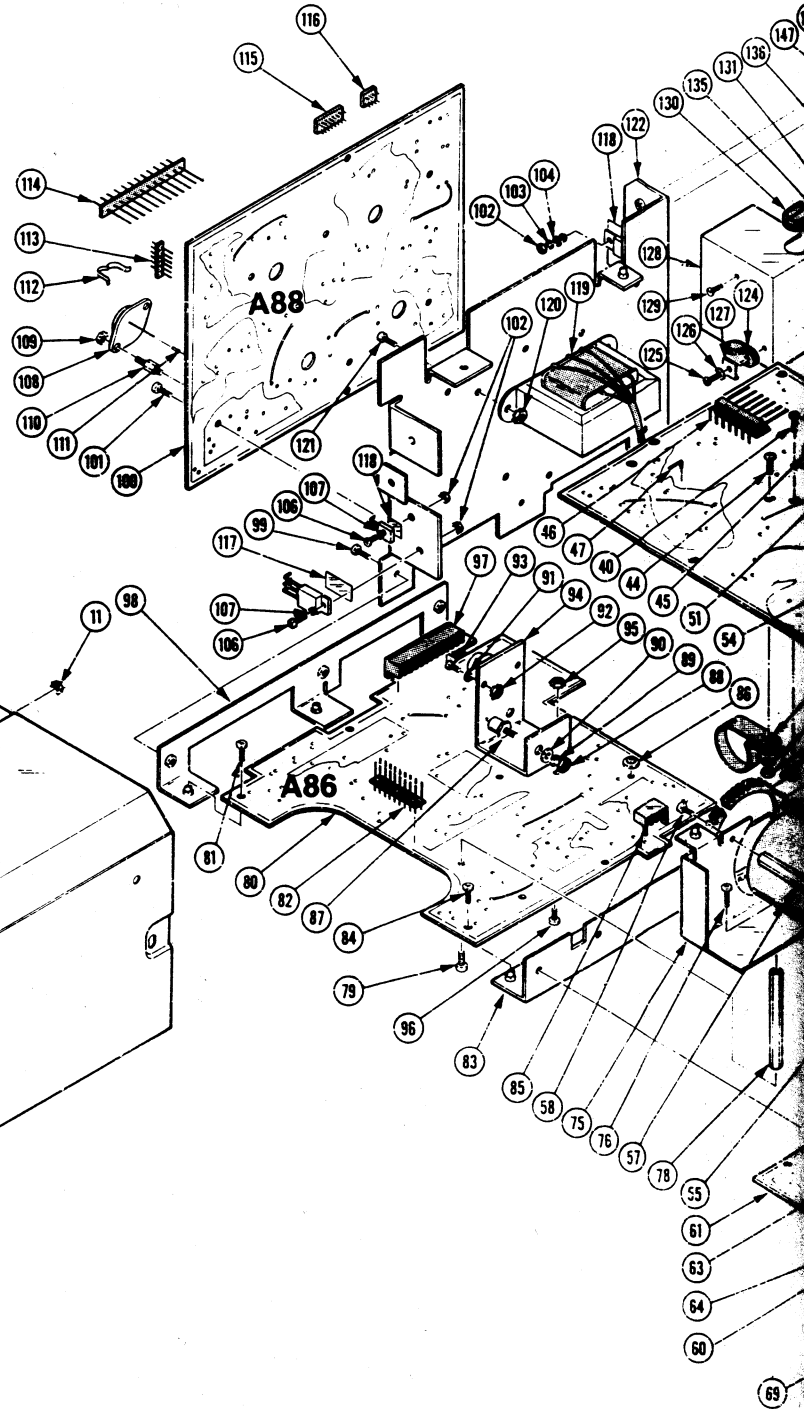
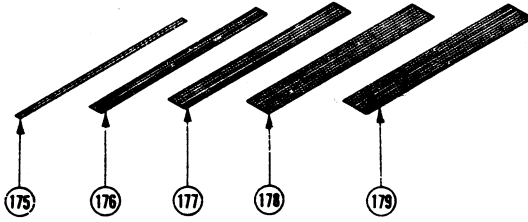
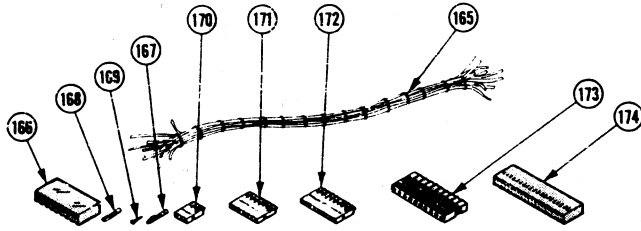
| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | 1 | 2 | 3 | 4 | 5 | Name & Description   | Mfr Code | Mfr Part Number |
|------------------|--------------------|------------------|---------|-----|---|---|---|---|---|--|----------|-----------------|
|                  |                    | Eff              | Dscont  |     |   |   |   |   |   |  |          |                 |
| 5-33             | 131-1792-00        |                  |         | 2   |   |   |   |   |   | ..CONTACT ASSY,EL:12 MALE CONTACT,FLAT WAF                                       | 27264    | 09-70-2121      |
| -34              | 131-2205-00        |                  |         | 1   |   |   |   |   |   | ..TERM,FEEDTHRU:4 PIN INSULATED  | 27264    | H-2402-12KG     |
| -35              | 136-0514-00        | B010100          | B050584 | 2   |   |   |   |   |   | ..SKT,PL-IN ELEC:MICROCIRCUIT,8 DIP  | 73803    | CS9002-8        |
| -36              | 136-0260-02        | B010100          | B050584 | 2   |   |   |   |   |   | ..SKT,PL-IN ELEC:MICROCIRCUIT,16 DIP,LOW C                                       | 71785    | 133-51-92-008   |
| -37              | 136-0269-02        | B010100          | B050584 | 2   |   |   |   |   |   | ..SKT,PL-IN ELEC:MICROCIRCUIT,14 DIP,LOW C                                       | 73803    | CS9002-14       |
|                  | 136-0269-02        | B050585          | B080713 | 1   |   |   |   |   |   | ..SKT,PL-IN ELEC:MICROCIRCUIT,14 DIP,LOW C                                       | 73803    | CS9002-14       |
|                  | 136-0728-00        | B080714          |         | 1   |   |   |   |   |   | ..SKT,PL-IN ELEC:MICROCKT,14 CONTACT   | 09922    | DILB14P-108     |
| -38              | 136-0220-00        | B010100          | B050584 | 12  |   |   |   |   |   | ..SKT,PL-IN ELEC:TRANSISTOR 3 CONTACT,PCB  | 71785    | 133-23-11-034   |
|                  | 136-0220-00        | B050585          |         | 5   |   |   |   |   |   | ..SKT,PL-IN ELEC:TRANSISTOR 3 CONTACT,PCB  | 71785    | 133-23-11-034   |
| -39              | -----              |                  |         | 1   |   |   |   |   |   | ..CKT BOARD ASSY:LINE POWER(SEE A80 REPL)<br>***** (ATTACHING PARTS) *****       |          |                 |
| -40              | 211-0008-00        |                  |         | 6   |   |   |   |   |   | ..SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>***** (END ATTACHING PARTS) *****    | 83385    | ORD BY DESCR    |
|                  | -----              |                  |         | -   |   |   |   |   |   | ..CKT BOARD ASSY INCLUDES:   |          |                 |
| -41              | 343-0014-00        |                  |         | 1   |   |   |   |   |   | ..CLAMP,LOOP:<br>***** (ATTACHING PARTS) *****                                   | 95987    | 1-6B            |
| -42              | 210-0407-00        |                  |         | 1   |   |   |   |   |   | ..NUT,PLAIN,HEX.:6-32 X 0.25 INCH,BRS  | 73743    | 3038-0228-402   |
| -43              | 210-0055-00        |                  |         | 1   |   |   |   |   |   | ..WASHER,LOCK:SPLIT,0.145 ID X 0.253 OD,S  | 83385    | ORD BY DESCR    |
| -44              | 211-0510-00        |                  |         | 1   |   |   |   |   |   | ..SCREW,MACHINE:6-32 X 0.375,PNH,STL,CD PL<br>***** (END ATTACHING PARTS) *****  | 83385    | ORD BY DESCR    |
| -45              | 344-0236-00        |                  |         | 2   |   |   |   |   |   | ..CLIP,SPR TNSN:   | 80009    | 344-0236-00     |
| -46              | 131-2182-00        |                  |         | 1   |   |   |   |   |   | ..TERM. SET,PIN:1 X 5.0,156 SPACING,RTANG  | 27264    | 09-47-1052      |
| -47              | 131-0589-00        |                  |         | 6   |   |   |   |   |   | ..TERMINAL,PIN:0.46 L X 0.025 SQ   | 22526    | 48283-029       |
| -48              | 214-0579-00        |                  |         | 1   |   |   |   |   |   | ..TERM,TEST POINT:BRS CD PL  | 80009    | 214-0579-00     |
| -49              | 136-0220-00        | B010100          | B050597 | 1   |   |   |   |   |   | ..SKT,PL-IN ELEC:TRANSISTOR 3 CONTACT,PCB  | 71785    | 133-23-11-034   |
| -50              | 136-0514-00        | B010100          | B050597 | 1   |   |   |   |   |   | ..SKT,PL-IN ELEC:MICROCIRCUIT,8 DIP  | 73803    | CS9002-8        |
| -51              | 131-0608-00        |                  |         | 5   |   |   |   |   |   | ..TERMINAL,PIN:0.365 L X 0.025 PH BRZ GOLD                                       | 22526    | 47357           |
| -52              | 136-0260-02        | B010100          | B050597 | 2   |   |   |   |   |   | ..SKT,PL-IN ELEC:MICROCIRCUIT,16 DIP,LOW C                                       | 71785    | 133-51-92-008   |
| -53              | 136-0269-02        | B010100          | B050597 | 2   |   |   |   |   |   | ..SKT,PL-IN ELEC:MICROCIRCUIT,14 DIP,LOW C                                       | 73803    | CS9002-14       |
| -54              | 131-1795-00        |                  |         | 1   |   |   |   |   |   | ..CONNECTOR,RCPT,:12 FEMALE CONTACT,RT-ANG                                       | 27264    | 09-62-3121      |
| -55              | -----              |                  |         | 2   |   |   |   |   |   | ..CAP.,FXD,ELCLT:(SEE C110 AND C310 REPL)<br>***** (ATTACHING PARTS) *****       |          |                 |
| -56              | 212-0518-00        |                  |         | 2   |   |   |   |   |   | ..SCREW,MACHINE:10-32 X 0.312,PNH,STL,CD PL<br>***** (END ATTACHING PARTS) ***** | 83385    | ORD BY DESCR    |
| -57              | 129-0669-00        |                  |         | 1   |   |   |   |   |   | ..SPACER,POST:2.03 L X 0.25 DIA<br>***** (ATTACHING PARTS) *****                 | 80009    | 129-0669-00     |
| -58              | 211-0504-00        |                  |         | 2   |   |   |   |   |   | ..SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****    | 83385    | ORD BY DESCR    |
| -59              | 441-1411-00        |                  |         | 1   |   |   |   |   |   | ..CHAS,DIGITIZER:INVERTER CKT BD<br>***** (ATTACHING PARTS) *****                | 80009    | 441-1411-00     |
| -60              | 211-0507-00        |                  |         | 2   |   |   |   |   |   | ..SCREW,MACHINE:6-32 X 0.312 INCH,PNH STL<br>***** (END ATTACHING PARTS) *****   | 83385    | ORD BY DESCR    |
| -61              | -----              |                  |         | 1   |   |   |   |   |   | ..CKT BOARD ASSY:SOCKET(SEE A84 REPL)<br>***** (ATTACHING PARTS) *****           |          |                 |
| -62              | 211-0008-00        |                  |         | 2   |   |   |   |   |   | ..SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>***** (END ATTACHING PARTS) *****    | 83385    | ORD BY DESCR    |
|                  | -----              |                  |         | -   |   |   |   |   |   | ..CKT BOARD ASSY INCLUDES:   |          |                 |
| -63              | 129-0366-00        |                  |         | 2   |   |   |   |   |   | ..SPACER,POST:0.218 L X 0.187 OD,BRS   | 80009    | 129-0366-00     |
| -64              | 346-0032-00        |                  |         | 1   |   |   |   |   |   | ..STRAP,RETAINING:0.075 DIA X 4.0 L,MLD RB                                       | 98159    | 2859-75-4       |
| -65              | -----              |                  |         | 4   |   |   |   |   |   | ..TRANSISTOR:(SEE Q118,Q132,Q318,Q332 REPL)<br>***** (ATTACHING PARTS) *****     |          |                 |
| -66              | 211-0511-00        | B010100          | B089999 | 8   |   |   |   |   |   | ..SCREW,MACHINE:6-32 X 0.500,PNH,STL,CD PL                                       | 83385    | ORD BY DESCR    |
|                  | 211-0017-00        | B090000          |         | 8   |   |   |   |   |   | ..SCREW,MACHINE:4-40 X 0.375 INCH,PNH STL  | 83385    | ORD BY DESCR    |
|                  | 210-0586-00        | B090000          |         | 8   |   |   |   |   |   | ..NUT,PL,ASSEM WA:4-40 X 0.25,STL<br>***** (END ATTACHING PARTS) *****           | 83385    | ORD BY DESCR    |
|                  | 361-0122-00        | B090000          |         | 8   |   |   |   |   |   | ..SPACER,SLEEVE:0.125 L X 0.12 ID BRS  | 80009    | 361-0122-00     |
|                  | 210-0803-00        | B090000          |         | 8   |   |   |   |   |   | ..WASHER,FLAT:0.15 ID X 0.032 THK,STL CD   | 12327    | ORD BY DESCR    |
|                  | 210-0935-00        | B090000          |         | 8   |   |   |   |   |   | ..WASHER,NONMETAL:FIBER,0.14 ID X 0.375"OD                                       | 74921    | ORD BY DESCR    |
| -67              | 386-0978-00        |                  |         | 4   |   |   |   |   |   | ..INSULATOR,PLATE:TRANSISTOR,MICA  | 80009    | 386-0978-00     |
| -68              | 361-0839-00        |                  |         | 1   |   |   |   |   |   | ..SPACER,PLATE:HEAT EXCHANGER  | 80009    | 361-0839-00     |
| -69              | 136-0361-00        | B010100          | B089999 | 4   |   |   |   |   |   | ..SPACER,XSTR:   | 80009    | 136-0361-00     |
| -70              | 136-0384-00        | B010100          | B089999 | 8   |   |   |   |   |   | ..SOCKET,PIN TERM:FOR 0.04 DIAMETER PIN  | 00779    | 52120           |
| -71              | 131-0847-00        | B010100          | B089999 | 8   |   |   |   |   |   | ..TERMINAL,STUD:6-32 X 0.435 INCH LONG   | 80009    | 131-0847-00     |
| -72              | 344-0154-00        |                  |         | 2   |   |   |   |   |   | ..CLIP,ELECTRICAL:FUSE,CKT BD MT   | 80009    | 344-0154-00     |
| -73              | 131-1795-00        |                  |         | 1   |   |   |   |   |   | ..CONNECTOR,RCPT,:12 FEMALE CONTACT,RT-ANG                                       | 27264    | 09-62-3121      |

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. Eff | Dscont  | Qty | 1 2 3 4 5 | Name & Description  | Mfr Code | Mfr Part Number |
|------------------|--------------------|----------------------|---------|-----|-----------|---|----------|-----------------|
| 5-74             | 255-0334-00        |                      |         | 2   |           | .PLASTIC CHANNEL:12.75 X 0.175 X 0.155,NYL                                  | 11897    | 122-37-2500     |
| -75              | 407-1937-00        |                      |         | 1   |           | .BRACKET,CAP:<br>.....(ATTACHING PARTS).....                                | 80009    | 407-1937-00     |
| -76              | 211-0504-00        |                      |         | 1   |           | .SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL                                     | 83385    | ORD BY DESCR    |
| -77              | 211-0507-00        |                      |         | 1   |           | .SCREW,MACHINE:6-32 X 0.312 INCH,PNH STL<br>.....(END ATTACHING PARTS)..... | 83385    | ORD BY DESCR    |
| -78              | 129-0149-00        |                      |         | 1   |           | .POST,ELEC-MECH:6-32 X 0.25 X 3.406"LONG<br>.....(ATTACHING PARTS).....     | 80009    | 129-0149-00     |
| -79              | 211-0504-00        |                      |         | 1   |           | .SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL<br>.....(END ATTACHING PARTS).....  | 83385    | ORD BY DESCR    |
| -80              | -----              |                      |         | -   |           | .CKT BOARD ASSY:RECTIFIER FILTER(SEE A86 R<br>.....(ATTACHING PARTS).....   |          |                 |
| -81              | 211-0008-00        |                      |         | 3   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>.....(END ATTACHING PARTS).....  | 83385    | ORD BY DESCR    |
|                  | -----              |                      |         | -   |           | .CKT BOARD ASSY INCLUDES:   |          |                 |
|                  | -----              |                      |         | 7   |           | .COIL,RF:(SEE A86L024,L025,L034,L124,L204                                   |          |                 |
|                  | -----              |                      |         | -   |           | .L224,L234 REPL)<br>.....(ATTACHING PARTS).....                             |          |                 |
|                  | 210-0586-00        | B010100              | B079999 | 7   |           | .NUT,PL,ASSEM WA:4-40 X 0.25,STL  | 83385    | ORD BY DESCR    |
|                  | 210-0589-00        | B080000              |         | 7   |           | .NUT,SELF LKG HE:4-40 X 0.250 INCH<br>.....(END ATTACHING PARTS).....       | 13257    | 22 NM-40        |
| -82              | 131-1939-00        |                      |         | 2   |           | .TERM SET,PNH:4X14,0.15 SPACING   | 22526    | 65561-114       |
| -83              | 407-1936-00        |                      |         | 1   |           | .BRACKET,ANGLE:INVERTER CHASSIS,ALUMINUM<br>.....(ATTACHING PARTS).....     | 80009    | 407-1936-00     |
| -84              | 211-0008-00        | B010100              | B100839 | 3   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ                                     | 83385    | ORD BY DESCR    |
|                  | 211-0008-00        | B100840              |         | 2   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ                                     | 83385    | ORD BY DESCR    |
|                  | 211-0207-00        | B100840              |         | 1   |           | .SCR,ASSEM WSHR:4-40 X 0.312 DOUBLE SEMS<br>.....(END ATTACHING PARTS)..... | 83385    | ORD BY DESCR    |
| -85              | 131-2206-00        |                      |         | 1   |           | .CONN,RCPT,ELEC:CKT BD,4 CONT FEMALE  | 27264    | 09-62-3041      |
| -86              | 200-0847-00        |                      |         | 14  |           | .CAP,INSERT,KNOB:BLK,0.561 OD X0.18 H,PLS                                   | 80009    | 200-0847-00     |
| -87              | -----              |                      |         | 2   |           | .SEMICONV DEVICE:(SEE CR125 AND CR224 REP<br>.....(ATTACHING PARTS).....    |          |                 |
| -88              | 210-0410-00        |                      |         | 2   |           | .NUT,PLAIN,HEX.:10-32 X 0.312 INCH,BRS                                      | 73743    | 2X20003-402     |
| -89              | 210-0056-00        |                      |         | 2   |           | .WASHER,LOCK:SPLIT,0.195 ID X 0.32" OD,P                                    | 83385    | ORD BY DESCR    |
| -90              | 210-0813-00        |                      |         | 2   |           | .WSHR,SHOULDERED:# 10 FIBER<br>.....(END ATTACHING PARTS).....              | 74921    | ORD BY DESCR    |
| -91              | -----              |                      |         | 1   |           | .SW,THERMOSTATIC:(SEE S5402 REPL)<br>.....(ATTACHING PARTS).....            |          |                 |
| -92              | 210-0586-00        |                      |         | 2   |           | .NUT,PL,ASSEM WA:4-40 X 0.25,STL  | 83385    | ORD BY DESCR    |
| -93              | 211-0008-00        |                      |         | 2   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>.....(END ATTACHING PARTS).....  | 83385    | ORD BY DESCR    |
| -94              | 407-2056-00        |                      |         | 1   |           | .BRACKET,XSTR:ALUMINUM<br>.....(ATTACHING PARTS).....                       | 80009    | 407-2056-00     |
| -95              | 210-0586-00        |                      |         | 4   |           | .NUT,PL,ASSEM WA:4-40 X 0.25,STL  | 83385    | ORD BY DESCR    |
| -96              | 211-0008-00        |                      |         | 4   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>.....(END ATTACHING PARTS).....  | 83385    | ORD BY DESCR    |
| -97              | 131-1795-00        |                      |         | 2   |           | .CONNECTOR,RCPT.:12 FEMALE CONTACT,RT-ANG                                   | 27264    | 09-62-3121      |
| -98              | 407-1938-00        |                      |         | 1   |           | .BRACKET,CHASSIS:REGULATOR<br>.....(ATTACHING PARTS).....                   | 80009    | 407-1938-00     |
| -99              | 211-0008-00        |                      |         | 3   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>.....(END ATTACHING PARTS).....  | 83385    | ORD BY DESCR    |
| -100             | -----              |                      |         | 1   |           | .CKT BOARD ASSY:REGULATOR(SEE A88 REPL)<br>.....(ATTACHING PARTS).....      |          |                 |
| -101             | 211-0008-00        |                      |         | 6   |           | .SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ                                     | 83385    | ORD BY DESCR    |
| -102             | 210-0586-00        | B010100              | B060624 | 5   |           | .NUT,PL,ASSEM WA:4-40 X 0.25,STL  | 83385    | ORD BY DESCR    |
|                  | 210-0406-00        | B060625              |         | 5   |           | .NUT,PLAIN,HEX.:4-40 X 0.188 INCH,BRS                                       | 73743    | 12161-50        |
| -103             | 210-0994-00        |                      |         | 5   |           | .WASHER,FLAT:0.125 ID X 0.25" OD,STL  | 86928    | 5702-201-20     |
| -104             | 210-1178-00        |                      |         | 5   |           | .WASHER,SHLDR:U/W T0-220 TRANSISTOR   | 49671    | DF137A          |
| -105             | 211-0198-00        |                      |         | 5   |           | .SCREW,MACHINE:4-40 X 0.438 PNH,STL,POZ                                     | 77250    | ORD BY DESCR    |
| -106             | 211-0097-00        |                      |         | 3   |           | .SCREW,MACHINE:4-40 X 0.312 INCH,PNH STL                                    | 83385    | ORD BY DESCR    |
| -107             | 210-1122-00        |                      |         | 3   |           | .WASHER,LOCK:0.12 ID,DISHED,0.025 THK<br>.....(END ATTACHING PARTS).....    | 86928    | ORD BY DESCR    |

# Replaceable Mechanical Parts—7912AD Service

| Fig. &<br>Index<br>No. | Tektronix<br>Part No. | Serial/Model No. |         | Qty | 1 2 3 4 5 | Name & Description   | Mfr<br>Code | Mfr Part Number |
|------------------------|-----------------------|------------------|---------|-----|-----------|--|-------------|-----------------|
|                        |                       | Eff              | Dscont  |     |           |  |             |                 |
| 5-                     | -----                 |                  |         | -   |           | .CKT BOARD ASSY INCLUDES:  |             |                 |
| -108                   | -----                 |                  |         | 1   |           | ..TRANSISTOR:(SEE Q644 REPL)<br>.....(ATTACHING PARTS).....                    |             |                 |
| -109                   | 210-0586-00           |                  |         | 2   |           | ..NUT,PL,ASSEM WA:4-40 X 0.25,STL<br>.....(END ATTACHING PARTS).....           | 83385       | ORD BY DESCR    |
| -110                   | 355-0159-00           |                  |         | 2   |           | ..TERMINAL,STUD:0.156 HEX X 0.58 INCH L.BR                                     | 80009       | 355-0159-00     |
| -111                   | 136-0254-01           | B010100          | B111235 | 2   |           | ..CONTACT,ELEC:0.178 INCH LONG   | 00779       | 1-332095-2      |
| -112                   | 344-0236-00           |                  |         | 1   |           | ..CLIP,SPR TNSN:   | 80009       | 344-0236-00     |
| -113                   | 131-1857-00           |                  |         | 2   |           | ..TERM. SET,PIN:36/0.025 SQ PIN,ON 0.1 CTR                                     | 22526       | 65500136        |
| -114                   | 131-1792-00           |                  |         | 2   |           | ..CONTACT ASSY,EL:12 MALE CONTACT,FLAT WAF                                     | 27264       | 09-70-2121      |
| -115                   | 136-0269-02           | B010100          | B050598 | 1   |           | ..SKT,PL-IN ELEC:MICROCIRCUIT,14 DIP,LOW C                                     | 73803       | CS9002-14       |
| -116                   | 136-0514-00           | B010100          | B050598 | 1   |           | ..SKT,PL-IN ELEC:MICROCIRCUIT,8 DIP  | 73803       | CS9002-8        |
| -117                   | 386-0978-00           | B010100          | B101164 | 2   |           | ..INSULATOR,PLATE:TRANSISTOR,MICA  | 80009       | 386-0978-00     |
|                        | 342-0311-00           | B101165          |         | 2   |           | ..INSULATOR,PLATE:TRANSISTOR,MICA  | 01295       | 64-21-023-212   |
| -118                   | 342-0202-00           | B010100          | B100776 | 6   |           | ..INSULATOR,PLATE:TRANSISTOR   | 01295       | 10-21-023-106   |
|                        | 342-0202-00           | B100777          |         | 1   |           | ..INSULATOR,PLATE:TRANSISTOR   | 01295       | 10-21-023-106   |
|                        | 342-0203-00           | B100777          |         | 5   |           | ..INSULATOR,PLATE:XSTR,0.675 X 0.625 X 0.00                                    | 18722       | DF103C          |
| -119                   | -----                 |                  |         | 1   |           | ..XFMR,PWR,STPON:(SEE T5404 REPL)<br>.....(ATTACHING PARTS).....               |             |                 |
| -120                   | 210-0457-00           |                  |         | 2   |           | ..NUT,PLASSEM WA:6-32 X 0.312,STL CD PL  | 83385       | ORD BY DESCR    |
| -121                   | 211-0504-00           |                  |         | 2   |           | ..SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL<br>.....(END ATTACHING PARTS).....    | 83385       | ORD BY DESCR    |
| -122                   | 441-1412-00           |                  |         | 1   |           | ..CHAS,DIGITIZER:<br>.....(ATTACHING PARTS).....                               | 80009       | 441-1412-00     |
| -123                   | 211-0507-00           |                  |         | 2   |           | ..SCREW,MACHINE:6-32 X 0.312 INCH,PNH STL<br>.....(END ATTACHING PARTS).....   | 83385       | ORD BY DESCR    |
| -124                   | 343-0003-00           |                  |         | 1   |           | ..CLAMP,LOOP:0.25 ID,PLASTIC<br>.....(ATTACHING PARTS).....                    | 95987       | 1-4-6B          |
| -125                   | 211-0008-00           |                  |         | 1   |           | ..SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ                                       | 83385       | ORD BY DESCR    |
| -126                   | 210-0994-00           |                  |         | 1   |           | ..WASHER,FLAT:0.125 ID X 0.25" OD,STL  | 86928       | 5702-201-20     |
| -127                   | 210-0863-00           |                  |         | 1   |           | ..WSHR,LOOP CLAMP:0.187 ID U/W 0.5 W CLP,ST<br>.....(END ATTACHING PARTS)..... | 95987       | C191            |
| -128                   | 200-2135-01           |                  |         | 1   |           | ..COVER,INSULATOR:STEEL<br>.....(ATTACHING PARTS).....                         | 80009       | 200-2135-01     |
| -129                   | 211-0008-00           |                  |         | 2   |           | ..SCREW,MACHINE:4-40 X 0.250,PNH,STL,POZ<br>.....(END ATTACHING PARTS).....    | 83385       | ORD BY DESCR    |
| -130                   | 348-0239-00           |                  |         | 1   |           | ..GROMMET,PLASTIC:DK GRAY,U-SHAPE,0.27 ID                                      | 80009       | 348-0239-00     |
| -131                   | -----                 |                  |         | 1   |           | ..TRANSFORMER,RF:(SEE L5400 REPL)<br>.....(ATTACHING PARTS).....               |             |                 |
| -132                   | 210-0586-00           |                  |         | 1   |           | ..NUT,PL,ASSEM WA:4-40 X 0.25,STL  | 83385       | ORD BY DESCR    |
| -133                   | 210-0994-00           |                  |         | 1   |           | ..WASHER,FLAT:0.125 ID X 0.25" OD,STL  | 86928       | 5702-201-20     |
| -134                   | 211-0018-00           |                  |         | 1   |           | ..SCREW,MACHINE:4-40 X 0.875 PNH,STL   | 83385       | ORD BY DESCR    |
| -135                   | 200-0848-00           |                  |         | 1   |           | ..CAP,INSERT,KNOB:0.765 OD X 0.118 H,BLACK<br>.....(END ATTACHING PARTS).....  | 80009       | 200-0848-00     |
| -136                   | 342-0409-01           |                  |         | 1   |           | ..INSULATOR,PLATE:W/PINS,PLASTIC<br>.....(ATTACHING PARTS).....                | 80009       | 342-0409-01     |
| -137                   | 129-0273-00           |                  |         | 3   |           | ..POST,ELEC-MECH:0.625 X 0.188 INCH OD<br>.....(END ATTACHING PARTS).....      | 80009       | 129-0273-00     |
| -138                   | 131-0827-00           |                  |         | 4   |           | ..CONTACT,ELEC:0.55 INCH LONG  | 22526       | 48283-028       |
| -139                   | 129-0457-00           |                  |         | 2   |           | ..SPACER,POST:1.07L,W/4-40 TAP 1 END<br>.....(ATTACHING PARTS).....            | 80009       | 129-0457-00     |
| -140                   | 211-0012-00           |                  |         | 4   |           | ..SCREW,MACHINE:4-40 X 0.375,PNH STL CD PL<br>.....(END ATTACHING PARTS).....  | 83385       | ORD BY DESCR    |
| -141                   | -----                 |                  |         | 1   |           | ..SWITCH,SLIDE:(SEE S5401 REPL)<br>.....(ATTACHING PARTS).....                 |             |                 |
| -142                   | 210-0457-00           |                  |         | 2   |           | ..NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL                                       | 83385       | ORD BY DESCR    |
| -143                   | 211-0510-00           |                  |         | 2   |           | ..SCREW,MACHINE:6-32 X 0.375,PNH,STL,CD PL<br>.....(END ATTACHING PARTS).....  | 83385       | ORD BY DESCR    |
| -144                   | 361-0838-00           |                  |         | 1   |           | ..SPACER,SWITCH:2.35 X 1.0 X 0.125,AL  | 80009       | 361-0838-00     |

| Fig. & Index No. | Tektronix Part No. | Serial/Model No. |         | Qty | Name & Description  |   |   |   |   | Mfr Code | Mfr Part Number  |
|------------------|--------------------|------------------|---------|-----|---|---|---|---|---|----------|------------------|
|                  |                    | Eff              | Dscont  |     | 1   | 2 | 3 | 4 | 5 |          |                  |
| 5-145            | 210-0202-00        |                  |         | 2   | .TERMINAL,LUG:0.146 ID,LOCKING,BRZ TINNED<br>.....(ATTACHING PARTS).....    |   |   |   |   | 78189    | 2104-06-00-2520N |
| -146             | 210-0407-00        |                  |         | 2   | .NUT,PLAIN,HEX.:6-32 X 0.25 INCH,BRS<br>.....(END ATTACHING PARTS).....     |   |   |   |   | 73743    | 3038-0228-402    |
| -147             | 200-1903-00        |                  |         | 1   | .COVER,ELEC SW:POWER  |   |   |   |   | 80009    | 200-1903-00      |
| -148             | 200-0237-03        |                  |         | 1   | .COVER,FUSE HLDR:   |   |   |   |   | 80009    | 200-0237-03      |
| -149             | 352-0362-00        |                  |         | 1   | .FUSEHOLDER: W/MOUNTING HARDWARE  |   |   |   |   | 75915    | 345603           |
|                  | 210-1039-00        |                  |         | 1   | .WASHER,LOCK:INT,0.521 ID X 0.625 INCH OD                                   |   |   |   |   | 24931    | ORD BY DESCR     |
| -150             | -----              |                  |         | 1   | .SWITCH,ROCKER:(SEE S5400 REPL)   |   |   |   |   |          |                  |
| -151             | 346-0045-00        |                  |         | 2   | .STRAP,CONN COV:BNC ONE END,POLYPROPYLENE                                   |   |   |   |   | 80009    | 346-0045-00      |
| -152             | 200-0678-00        |                  |         | 2   | .COVER,ELEC CONN:BNC,SHORTING   |   |   |   |   | 91836    | KC89-58TR5       |
| -153             | 131-0274-00        |                  |         | 1   | .CONNECTOR,RCPT.:BNC  |   |   |   |   | 91836    | KC79-67          |
| -154             | 131-0955-00        |                  |         | 1   | .CONN,RCPT,ELEC:BNC,FEMALE  |   |   |   |   | 13511    | 31-279           |
| -155             | 131-1084-00        |                  |         | 1   | .CONNECTOR,RCPT.:3 BLADE,6A,250V  |   |   |   |   | 82389    | EAC-302          |
| -156             | 200-2222-00        |                  |         | 1   | .GUARD,FAN:<br>.....(ATTACHING PARTS).....                                  |   |   |   |   | 81041    | 6-182-033        |
| -157             | 210-0457-00        |                  |         | 4   | .NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL                                     |   |   |   |   | 83385    | ORD BY DESCR     |
| -158             | 211-0514-00        |                  |         | 4   | .SCREW,MACHINE:6-32 X 0.750 INCH,PNH STL<br>.....(END ATTACHING PARTS)..... |   |   |   |   | 83385    | ORD BY DESCR     |
| -159             | 407-1934-00        | B010100          | B010303 | 1   | .BRACKET,FAN:ALUMINUM   |   |   |   |   | 80009    | 407-1934-00      |
|                  | 407-1934-01        | B010304          |         | 1   | .BRACKET,FAN:ALUMINUM<br>.....(ATTACHING PARTS).....                        |   |   |   |   | 80009    | 407-1934-01      |
| -160             | 211-0507-00        |                  |         | 4   | .SCREW,MACHINE:6-32 X 0.312 INCH,PNH STL<br>.....(END ATTACHING PARTS)..... |   |   |   |   | 83385    | ORD BY DESCR     |
|                  | 386-4641-00        | B080000          |         | 1   | .SUPPORT,CKT BD:PLASTIC<br>.....(ATTACHING PARTS).....                      |   |   |   |   | 80009    | 386-4641-00      |
|                  | 211-0523-00        | B080000          |         | 1   | .SCREW,MACHINE:6-32 X 0.875,FLH,100 DEG,ST                                  |   |   |   |   | 83385    | ORD BY DESCR     |
|                  | 210-0457-00        | B080000          |         | 1   | .NUT,PL,ASSEM WA:6-32 X 0.312,STL CD PL<br>.....(END ATTACHING PARTS).....  |   |   |   |   | 83385    | ORD BY DESCR     |
| -161             | -----              |                  |         | 1   | .FAN,VENTILATION:(SEE B5400 REPL)   |   |   |   |   |          |                  |
| -162             | 406-0908-00        |                  |         | 2   | .BRACKET,ANGLE:CHASSIS LATCH<br>.....(ATTACHING PARTS).....                 |   |   |   |   | 80009    | 406-0908-00      |
| -163             | 211-0504-00        |                  |         | 2   | .SCREW,MACHINE:6-32 X 0.25 INCH,PNH STL<br>.....(END ATTACHING PARTS).....  |   |   |   |   | 83385    | ORD BY DESCR     |
| -164             | 333-2409-00        |                  |         | 1   | .PANEL,REAR:  |   |   |   |   | 80009    | 333-2409-00      |
| -165             | 179-2611-00        |                  |         | 1   | .WIRING HARNESS,:POWER SUPPLY   |   |   |   |   | 80009    | 179-2611-00      |
| -166             | 204-0749-00        |                  |         | 1   | .CONN BODY,PLUG:CKT CD,5 CONT W/O LKG RAM                                   |   |   |   |   | 27264    | 2139-052         |
| -167             | 131-1790-00        |                  |         | 3   | .CONTACT,ELEC:18-24 AWG,FEMALE,BRASS  |   |   |   |   | 27264    | 08-56-0105       |
|                  | 343-0549-00        |                  |         | 6   | .STRAP,TIEDOWN:0.091 W X 3.62 INCH LONG                                     |   |   |   |   | 06383    | PLT1M            |
|                  | 198-3965-00        |                  |         | 1   | .WIRE SET,ELEC:   |   |   |   |   | 80009    | 198-3965-00      |
| -168             | 131-0707-00        |                  |         | 107 | .CONNECTOR,TERM:22-26 AWG,BRS & CU BE GOL                                   |   |   |   |   | 22526    | 47439            |
|                  | 131-0792-00        |                  |         | 36  | .CONNECTOR,TERM:18-20 AWG,CU BE GOLD PL                                     |   |   |   |   | 22526    | 46221            |
| -169             | 134-0153-00        | B010100          | B089999 | 4   | .KEY,PLZN CONN:MINI LATCH HSG   |   |   |   |   | 80009    | 134-0153-00      |
|                  | 134-0153-00        | B090000          |         | 8   | .KEY,PLZN CONN:MINI LATCH HSG   |   |   |   |   | 80009    | 134-0153-00      |
| -170             | 352-0161-00        |                  |         | 2   | .HLDR,TERM CONN:3 WIRE,BLACK  |   |   |   |   | 80009    | 352-0161-00      |
| -171             | 352-0165-04        |                  |         | 2   | .CONN BODY,PL,EL:7 WIRE YELLOW  |   |   |   |   | 80009    | 352-0165-04      |
| -172             | 352-0167-00        |                  |         | 1   | .HLDR,TERM CONN:9 WIRE BLACK  |   |   |   |   | 80009    | 352-0167-00      |
|                  | 352-0167-05        |                  |         | 2   | .CONN BODY,PL,EL:9 WIRE GREEN   |   |   |   |   | 80009    | 352-0167-05      |
| -173             | 352-0206-00        |                  |         | 4   | .HLDR,TERM CONN:10 WIRE BLACK   |   |   |   |   | 80009    | 352-0206-00      |
| -174             | 352-0330-01        |                  |         | 1   | .CONN BODY,PL,EL:38 WIRE,BLACK DBL ROW                                      |   |   |   |   | 80009    | 352-0330-01      |
| -175             | 175-0825-00        |                  |         | FT  | .WIRE,ELECTRICAL:2 WIRE RIBBON  |   |   |   |   | 80009    | 175-0825-00      |
| -176             | 175-0860-00        |                  |         | FT  | .WIRE,ELECTRICAL:5 WIRE RIBBON  |   |   |   |   | 08261    | SS-0522-7(1061)  |
| -177             | 175-0830-00        |                  |         | FT  | .WIRE,ELECTRICAL:7 WIRE RIBBON  |   |   |   |   | 08261    | SS-0726-710610C  |
|                  | 175-0858-00        |                  |         | FT  | .WIRE,ELECTRICAL:7 WIRE RIBBON  |   |   |   |   | 08261    | SS-0722-7(1061)  |
| -178             | 175-0832-00        |                  |         | FT  | .WIRE,ELECTRICAL:9 WIRE RIBBON  |   |   |   |   | 08261    | SS-0926(1061)0C  |
| -179             | 175-0855-00        |                  |         | FT  | .WIRE,ELECTRICAL:10 WIRE RIBBON   |   |   |   |   | 08261    | SS-1022(1061)0C  |



REV A JUN 1980

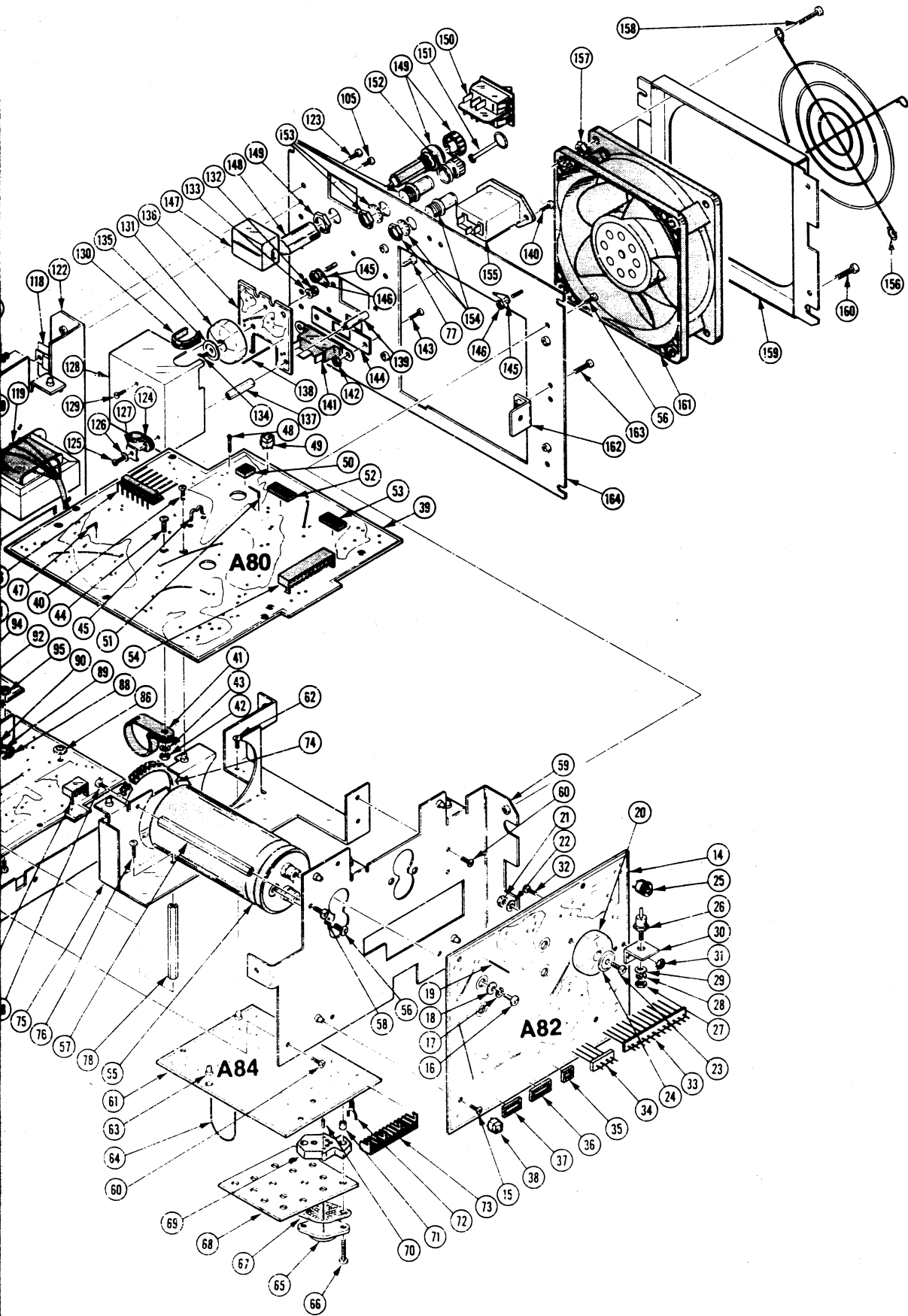
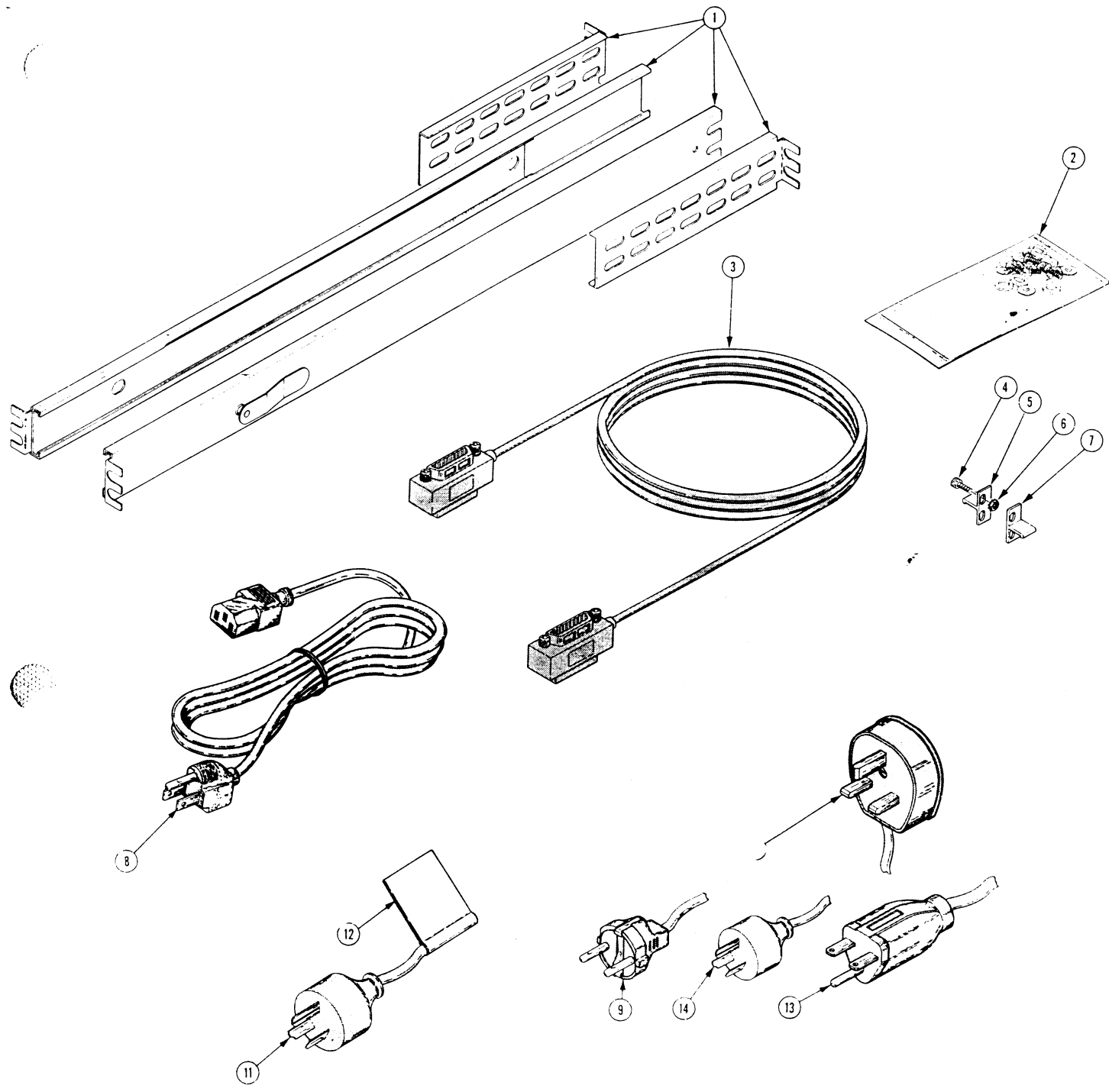


FIG. 5 POWER SUPPLY

REV A JUN 1980

7912 AD PROGRAMMABLE DIGITIZER



REV APR 1983

7912 AD PROGRAMMABLE DIGITIZER

| Fig. &<br>Index<br>No. | Tektronix<br>Part No. | Serial/Model No. |         | Qty | 1 2 3 4 5 | Name & Description                        | Mfr   |                 |
|------------------------|-----------------------|------------------|---------|-----|-----------|---|-------|-----------------|
|                        |                       | Eff              | Dscont  |     |           |   | Code  | Mfr Part Number |
| 6-1                    | 351-0375-00           | B010100          | B070688 | 1PR |           | SLIDE,DWR,EXT:24.0 X 1.69                 | 80009 | 351-0375-00     |
|                        | 351-0375-01           | B070689          |         | 1PR |           | SLIDE,DWR,EXT:W/CLOSED MOUNTING SLOTS     | 80009 | 351-0375-01     |
| -2                     | 016-0099-00           |                  |         | 1   |           | HDW KIT,ELEK EQ:RACKMOUNT HDW             | 80009 | 016-0099-00     |
| -3                     | 012-0630-03           |                  |         | 1   |           | CABLE,INTCON:2 METERS L                   | 74868 | AC30147-102     |
|                        | -----                 |                  |         | -   |           | (NOT USED ON OPTION 30)                   |       |                 |
|                        | 020-0398-00           |                  |         | 1   |           | COMPONENT KIT:                            | 80009 | 020-0398-00     |
| -4                     | 212-0615-00           |                  |         | 4   |           | .SCREW,CAP:10-32 X 0.625 INCH,STL         | 83385 | ORD BY DESCR    |
| -5                     | 105-0757-00           |                  |         | 1   |           | .STRIKE,LATCH:LEFT                        | 80009 | 105-0757-00     |
| -6                     | 220-0410-00           |                  |         | 4   |           | .NUT,EXTENDED WA:10-32 X 0.375 INCH,STL   | 83385 | ORD BY DESCR    |
| -7                     | 105-0758-00           |                  |         | 1   |           | .STRIKE,LATCH:RIGHT                       | 80009 | 105-0758-00     |
| -8                     | 161-0066-00           |                  |         | 1   |           | CABLE ASSY,PWR.:3,18 AWG,115V,98.0 L      | T1372 | OBD             |
|                        | 161-0066-01           | B010100          | B060642 | 1   |           | CABLE ASSY,PWR.:3,18 AWG,230V,98.0 L      | 80009 | 161-0066-01     |
|                        | -----                 |                  |         | -   |           | (OPTION 09 ONLY)                          |       |                 |
| -9                     | 161-0066-09           | B060643          |         | 1   |           | CABLE ASSY,PWR:3,0.75MM SQ,220V,96.0 L    | S3109 | OBD             |
|                        | -----                 |                  |         | -   |           | (OPTION A1 CNLY)                          |       |                 |
| -10                    | 161-0066-10           | B060643          |         | 1   |           | CABLE ASSY,PWR:3,0.75MM SQ,240V,96.0 L    | S3109 | OBD             |
|                        | -----                 |                  |         | -   |           | (OPTION A2 ONLY)                          |       |                 |
| -11                    | 161-0066-11           | B060643          |         | 1   |           | CABLE ASSY,PWR:3,0.75MM,240V,96.0L        | S3109 | 1600            |
|                        | -----                 |                  |         | -   |           | (OPTION A3 ONLY)                          |       |                 |
| -12                    | 334-3995-00           | B060643          |         | 1   |           | MARKER,IDENT:MARKED CAUTION               | 80009 | 334-3995-00     |
|                        | -----                 |                  |         | -   |           | (OPTION A3 ONLY)                          |       |                 |
| -13                    | 161-0066-12           | B060643          |         | 1   |           | CABLE ASSY,PWR:3,18 AWG,240V,96.0 L       | T1105 | OBD             |
|                        | -----                 |                  |         | -   |           | (OPTION A4 ONLY)                          |       |                 |
| -14                    | 161-0154-00           | B060643          |         | 1   |           | CABLE ASSY,PWR:3,0.75MM SQ,240V,6A,2.5M L | 000JA | A25SW           |
|                        | -----                 |                  |         | -   |           | (OPTION A5 ONLY)                          |       |                 |
|                        | CP56004               |                  |         | 1   |           | CHECKOUT SOFTWA:4051/7912AD(W/MANUAL)     | 80009 | CP56004         |
|                        | 070-2384-01           |                  |         | 1   |           | MANUAL,TECH:OPERATORS                     | 80009 | 070-2384-01     |
|                        | 070-2407-00           |                  |         | 1   |           | MANUAL,TECH:SERVICE,VOL 1                 | 80009 | 070-2407-00     |
|                        | 070-2385-00           |                  |         | 1   |           | MANUAL,TECH:SERVICE,VOL 11                | 80009 | 070-2385-00     |



## **MANUAL CHANGE INFORMATION**

At Tektronix, we continually strive to keep up with latest electronic developments by adding circuit and component improvements to our instruments as soon as they are developed and tested.

Sometimes, due to printing and shipping requirements, we can't get these changes immediately into printed manuals. Hence, your manual may contain new change information on following pages.

A single change may affect several sections. Since the change information sheets are carried in the manual until all changes are permanently entered, some duplication may occur. If no such change pages appear following this page, your manual is correct as printed.

**DESCRIPTION**

EFF SN B111166

REPLACEABLE ELECTRICAL PARTS & SCHEMATIC CHANGES

CHANGE TO:

A56                    670-4946-04                    CKT BOARD ASSY:7912AD/GPIB INTERFACE

REMOVE:

A52                    670-4953-01                    CKT BOARD ASSY:MPU MEMORY  
 A54                    670-4948-05                    CKT BOARD ASSY:MPU  
 A56U432                160-0112-03                    MICROCKT,DGTL:2048 X 8 EPROM,PRGM'D  
 A56U330                156-0982-03                    MICROCKT,DGTL:OCTAL D-EDGE TRIG FF

ADD:

A54                    670-7642-00                    CKT BOARD ASSY:MPU

The new MPU circuit board consists of the following:

|          |             |                                     |
|----------|-------------|-------------------------------------|
| A54C110  | 283-0177-00 | CAP,FXD,CER DI:1 UF,+80-20%,25V     |
| A54C120  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C210  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C310  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C410  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C411  | 281-0812-00 | CAP,FXD,CER DI:1000 PF,10%,100V     |
| A54C500  | 281-0773-00 | CAP,FXD,CER DI:0.01 UF,10%,100V     |
| A54C510  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C520  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C540  | 281-0812-00 | CAP,FXD,CER DI:1000 PF,10%,100V     |
| A54C610  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C700  | 283-0635-00 | CAP,FXD,MICA DI:51 PF,1%,100V       |
| A54C701  | 283-0635-00 | CAP,FXD,MICA DI:51 PF,1%,100V       |
| A54C800  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C900  | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1100 | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1110 | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1120 | 283-0177-00 | CAP,FXD,CER DI:1 UF,+80-20%,25V     |
| A54C1200 | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1300 | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1320 | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1330 | 281-0812-00 | CAP,FXD,CER DI:1000 PF,10%,100V     |
| A54C1400 | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1420 | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1510 | 283-0422-00 | CAP,FXD,CER DI:0.047 UF,+80-20%,50V |
| A54C1511 | 281-0812-00 | CAP,FXD,CER DI:1000 PF,10%,100V     |
| A54C1512 | 290-0804-00 | CAP,FXD,ELCTLT:10 UF,+50-10%,25V    |
| A54C1520 | 283-0177-00 | CAP,FXD,CER DI:1 UF,+80-20%,25V     |

## DESCRIPTION

(Cont.)

|           |             |  |
|-----------|-------------|--|
| A54C1530  | 290-0776-00 | CAP,FXD,ELCTLT:22 UF,+50-10%,10V           |
| A54C1531  | 283-0177-00 | CAP,FXD,CER DI:1 UF,+80-20%,25V            |
| A54CR410  | 152-0141-02 | SEMICONDUCTOR DVC:SI,30V,150MA             |
| A54CR1340 | 152-0141-02 | SEMICONDUCTOR DVC:SI,30V,150MA             |
| A54CR1530 | 152-0075-00 | SEMICONDUCTOR DVC:GE,25V,40MA              |
| A54F1531  | 159-0059-00 | FUSE,WIRE LEAD:5A,125V,18SEC               |
| A54J700   | 131-0608-00 | TERMINAL,PIN:0.365L X 0.025 PH BRZ GOLD PL |
|           | 131-0993-00 | BUS,CONDUCTOR:SHUNT ASSY,BLK               |
| A54J900   | 131-0608-00 | TERMINAL,PIN:0.365L X 0.025 PH BRZ GOLD PL |
|           | 131-0993-00 | BUS,CONDUCTOR:SHUNT ASSY,BLK               |
| A54L1520  | 108-0858-00 | COIL,RF:FIXED,3.2NH                        |
| A54Q410   | 151-0192-00 | TRANSISTOR:SI,NPN,SEL                      |
| A54Q540   | 151-0192-00 | TRANSISTOR:SI,NPN,SEL                      |
| A54R120   | 315-0102-00 | RES,FXD,CMPSN:1K OHM,5%,0.25W              |
| A54R121   | 315-0102-00 | RES,FXD,CMPSN:1K OHM,5%,0.25W              |
| A54R410   | 321-0373-00 | RES,FXD,FILM:75K OHM,1%,0.125W             |
| A54R411   | 315-0102-00 | RES,FXD,CMPSN:1K OHM,5%,0.25W              |
| A54R412   | 315-0512-00 | RES,FXD,CMPSN:5.1K OHM,5%,0.25W            |
| A54R500   | 321-0281-00 | RES,FXD,FILM:8.25K OHM,1%,0.125W           |
| A54R501   | 321-0264-00 | RES,FXD,FILM:5.49K OHM,1%,0.125W           |
| A54R502   | 315-0332-00 | RES,FXD,CMPSN:3.3K OHM,5%,0.25W            |
| A54R503   | 321-0152-00 | RES,FXD,FILM:374 OHM,1%,0.125W             |
| A54R504   | 321-0264-00 | RES,FXD,FILM:5.49K OHM,1%,0.125W           |
| A54R510   | 307-0445-00 | RES NTW,FXD,FI:(9)4.7K OHM,±20%,0.15W      |
| A54R540   | 315-0201-00 | RES,FXD,CMPSN:200 OHM,5%,0.25W             |
| A54R600   | 315-0472-00 | RES,FXD,CMPSN:4.7K OHM,5%,0.25W            |
| A54R700   | 321-0269-00 | RES,FXD,FILM:6.19K OHM,1%,0.125W           |
| A54R701   | 321-0231-00 | RES,FXD,FILM:2.49K OHM,1%,0.125W           |
| A54R1110  | 315-0511-00 | RES,FXD,CMPSN:510 OHM,5%,0.25W             |
| A54R1111  | 315-0202-00 | RES,FXD,CMPSN:2K OHM,5%,0.25W              |
| A54R1112  | 315-0302-00 | RES,FXD,CMPSN:3K OHM,5%,0.25W              |
| A54R1120  | 307-0445-00 | RES NTW,FXD,FI:(9)4.7K OHM,±20%,0.15W      |
| A54R1240  | 315-0511-00 | RES,FXD,CMPSN:510 OHM,5%,0.25W             |
| A54R1330  | 315-0201-00 | RES,FXD,CMPSN:200 OHM,5%,0.25W             |
| A54R1510  | 315-0203-00 | RES,FXD,CMPSN:20K OHM,5%,0.25W             |
| A54R1511  | 315-0104-00 | RES,FXD,CMPSN:100K OHM,5%,0.25W            |
| A54R1520  | 315-0102-00 | RES,FXD,CMPSN:1K OHM,5%,0.25W              |
| A54R1530  | 315-0512-00 | RES,FXD,CMPSN:5.1K OHM,5%,0.25W            |
| A54TP300  | 214-0579-00 | TERM,TEST POINT:BRS CD PL                  |
| A54TP430  |             |  |
| A54TP432  |             |  |
| A54TP434  |             |  |
| A54TP436  |             |  |
| A54TP500  |             |  |
| A54TP700  |             |  |
| A54TP800  |             |  |
| A54TP1110 |             |  |
| A54TP1130 |             |  |

## DESCRIPTION

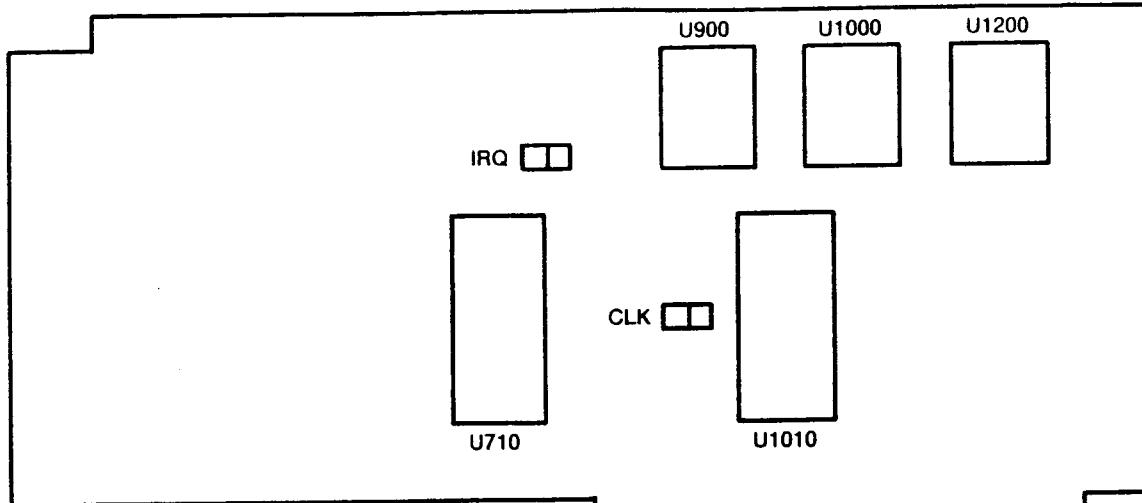
(Cont.)

|           |             |   |
|-----------|-------------|---|
| A54TP1330 | 214-0579-00 | TERM, TEST POINT: BRS CD PL                                   |
| A54U130   | 156-0479-02 | MICROCKT, DGTL: QUAD 2-INP OR GATE                            |
| A54U200   | 156-0541-02 | MICROCKT, DGTL: DUAL 2-TO 4-LINE DCDR/DEMUX                   |
| A54U210   | 156-0479-02 | MICROCKT, DGTL: QUAD 2-INP OR GATE                            |
| A54U220   | 156-0388-02 | MICROCKT, DGTL: DUAL D F-F                                    |
| A54U230   | 156-0388-02 | MICROCKT, DGTL: DUAL D F-F                                    |
| A54U300   | 156-0479-02 | MICROCKT, DGTL: QUAD 2-INP OR GATE                            |
| A54U310   | 156-0480-02 | MICROCKT, DGTL: QUAD 2-INP AND GATE                           |
| A54U320   | 156-0384-02 | MICROCKT, DGTL: QUAD 2-INP NAND GATE                          |
| A54U330   | 156-0391-02 | MICROCKT, DGTL: HEX LATCH W/CLR                               |
| A54U400   | 156-0479-02 | MICROCKT, DGTL: QUAD 2-INP OR GATE                            |
| A54U420   | 156-0384-02 | MICROCKT, DGTL: QUAD 2-INP NAND GATE                          |
| A54U430   | 156-0720-02 | MICROCKT, DGTL: HEX DRVR, 4-2 LINE ENABLE, W/3ST OT           |
| A54U510   | 155-0014-01 | MICROCKT, DGTL: A-D CONVERTER                                 |
| A54U520   | 156-0392-03 | MICROCKT, DGTL: QUAD LATCH W/CLR                              |
| A54U530   | 156-0385-02 | MICROCKT, DGTL: HEX INVERTER                                  |
| A54U600   | 156-1126-01 | MICROCKT, DGTL: VOLTAGE COMPARATOR, SEL                       |
| A54U610   | 156-1177-01 | MICROCKT, DGTL: STET LINE PRIORITY ENCODER                    |
| A54U620   | 156-0720-02 | MICROCKT, DGTL: HEX DRVR, 4-2 LINE ENABLE, W/3ST OT           |
| A54U630   | 156-0730-02 | MICROCKT, DGTL: QUAD 2-INP NOR BFR                            |
| A54U710   | 156-0427-04 | MICROCKT, DGTL: PERIPHERAL INTFC ADPTR                        |
| A54U730   | 156-0093-02 | MICROCKT, DGTL: HEX INV BFR                                   |
| A54U800   | 156-0733-02 | MICROCKT, DGTL: DUAL MONOSTABLE MV, W/ST INP                  |
| A54U810   | 156-0865-02 | MICROCKT, DGTL: HEX DRVR, W/3 ST INP                          |
| A54U820   | 156-0914-02 | MICROCKT, DGTL: OCT ST BFR, W/3 ST OUTPUT                     |
| A54U830   | 156-0865-02 | MICROCKT, DGTL: HEX DRVR W/3 ST INP                           |
| A54U900   | 160-1900-00 | MICROCKT, DGTL: 4096 X 8 EPROM, PRGM                          |
| A54U910   | 156-0567-02 | MICROCKT, DGTL: DUAL J-K NEG EDGE TRIG F-F                    |
| A54U920   | 156-0956-02 | MICROCKT, DGTL: OCT BFR, W/3 ST OUT                           |
| A54U930   | 156-0852-02 | MICROCKT, DGTL: HEX DRVR, W/3 ST INP                          |
| A54U1000  | 160-1899-00 | MICROCKT, DGTL: 4096 X 8 EPROM, PRGM                          |
| A54U1010  | 156-1342-00 | MICROCKT, DGTL: 8 BIT W/CLK & RAM, 6802                       |
| A54U1030  | 156-1025-02 | MICROCKT, DGTL: INVERTING QUAD BUS XCVR                       |
| A54U1120  | 156-1111-02 | MICROCKT, DGTL: OCT BUS XCVR W/3 ST OUT                       |
| A54U1130  | 156-1025-02 | MICROCKT, DGTL: INVERTING QUAD BUS XCVR                       |
| A54U1200  | 160-1901-00 | MICROCKT, DGTL: 4096 X 8 EPROM, PRGM                          |
| A54U1210  | 156-0465-02 | MICROCKT, DGTL: 8-INP NAND GATE                               |
| A54U1220  | 156-0469-02 | MICROCKT, DGTL: 3/8 LINE DCDR                                 |
| A54U1230  | 156-0720-02 | MICROCKT, DGTL: HEX DRVR, 4-2 LINE ENABLE, W/3ST OT           |
| A54U1310  | 156-0385-02 | MICROCKT, DGTL: HEX INVERTER                                  |
| A54U1320  | 156-0480-02 | MICROCKT, DGTL: QUAD 2-INP AND GATE                           |
| A54U1330  | 156-0382-02 | MICROCKT, DGTL: QUAD 2-INP NAND GATE                          |
| A54U1400  | 156-1028-00 | MICROCKT, DGTL: 1024 X 4 STATIC RAM, W/3 ST OUT               |
| A54U1410  | 156-0733-02 | MICROCKT, DGTL: DUAL MONOSTABLE MV, W/ST INP                  |
| A54U1420  | 156-0382-02 | MICROCKT, DGTL: QUAD 2-INP NAND GATE                          |
| A54U1430  | 156-0388-02 | MICROCKT, DGTL: DUAL D F-F                                    |
| A54U1500  | 156-1028-00 | MICROCKT, DGTL: 1024 x 4 STATIC RAM, W/3 ST OUT               |
| A54W1310  | 131-0566-00 | BUS, CONDUCTOR: DUMMY RES, 0.094 OD X 0.225 L<br>W/WIRE LEADS |
| A54W1531  | 131-0566-00 | BUS, CONDUCTOR: DUMMY RES, 0.094 OD X 0.225 L<br>W/WIRE LEADS |

DESCRIPTION

TEXT CHANGES

For Page 4-16, Fig. 4-13A  
ADD:



The IRQ and CLK straps must be in place for correct operation.

Removal only for certain diagnostic testing.

A54 JUMPER LOCATION

Fig. 4-13A. MPU Board (A54) Jumper Positions (SN B111166 & UP)

**DESCRIPTION**

**For Page 4-26, Paragraph 3 (Center of Page)  
CHANGE TO READ:**

**Using the Diagnostic Commands**

Three diagnostic commands allow the user to enter and run routines on the 6802 MPU system. Access to the MPU memory space via the IEEE 488 bus is gained by using the diagnostic commands. These commands should be used with caution; used improperly, they can put the 7912AD into illegal modes of operation.

**For Page 4-28, Last Paragraph  
CHANGE TO READ:**

**Required Equipment.** The minimum equipment required to trace problems that become apparent at power-up is an oscilloscope with a 10X probe. If a logic probe is substituted, it may be necessary to connect its strobe to MPU clock E, so the probe does not respond to glitches between cycles. A more effective tool would be a logic analyzer, such as the TEKTRONIX 7D01. Extender boards included in the 7912AD Calibration Kit (listed in the required equipment for the calibration procedure) may also be useful.

**For Page 4-29, Step 3, parts a. and b.  
CHANGE TO READ:**

a. Check the MPU system power supplies, +5.1 V and +15 V at the test points on the Power Connector board (A62).

b. Check the MPU system clocks. The clocks are derived from 10 MHz supplied by the Data Buffer (A20); it can be checked at B13 of the MPU (A54) edge connector. This signal is available on the B13 pad of the connector on the bottom of the Main Interconnect board (A68) — see Fig. 7-42 for the pinout. The 6802 clock E is available at A19 of the edge connector.  $\overline{STB}$ , a 100-nanosecond pulse near the center of the clock E on-time, is available at B30 of the edge connector. Clock E and  $\overline{STB}$  are all generated on the MPU board (A54).

DESCRIPTION

For Page 4-30  
CHANGE TO READ:

c. For the MPU to power-up,  $\overline{RST}$  must be generated for 750 milliseconds. Check that this signal (A14 of the A54 edge connector) goes low for 750 milliseconds after power is turned on and then goes high. If it does not, check that PON (B15 of the A54 edge connector) goes low for 750 milliseconds after turn-on and then goes high. PON is generated by the power supply,  $\overline{RST}$  on the MPU board.

To find out if the 6802 is hung, and if so, what it means, look at the 6802 address bus. These signals are available on the MPU edge connector pads on the bottom of the Main Interconnect, the lower 12 address lines are buffered; the upper three lines are decoded to represent blocks of memory – see diagram 15 for the decoding scheme. With the MPU board on an extender, all the above lines can be accessed at either the IC pins or the edge connector pads on the MPU board.



*Turn off the 7912AD power before removing or installing any circuit boards of circuit board extenders.*

All addresses are given in hexadecimal.

d. If the 6802 address bus does not indicate that the MPU is hung in a tight loop in the range 7CXX, then a problem is indicated on the MPU board (A54).

e. If the 6802 is hung in a tight loop, compare the address or addresses to the following:

7C1F – The 6802 vectors to 7C1F to start its power-up sequence. Its first action is to clear the main and graticule intensity levels, although this is not apparent since the instrument is still in digital mode. The 6802 MPU then writes the value of each address into the pair of bytes at that address in RAM.

7C2E to 7C35 – If the 6802 hangs in this sequence of code, it is failing to load the RAM or the 6802 is not executing instructions properly.

7C3A to 7C43 – Hanging here results from a failure to read the RAM or an execution problem while reading back and verifying RAM contents.

**DESCRIPTION**

**For Page 4-31  
CHANGE TO READ:**

**7C47** – A loop at this address indicates the RAM contents did not match the word stored.

**7C4C to 7C59** – Within this sequence the 6802 is reading, complementing, writing, and verifying each byte of RAM.

**7C5D** – A loop here indicates the RAM contents did not match the byte written.

**7C5F to 7C68** – When the 6802 executes the code at these addresses, it clears all RAM locations.

**7C6D to 7C75** – All RAM is verified to be zero.

**7C79** – A loop at this address indicates a RAM location did not clear.

**7C83 to 7C8A** – A fault on the MPU board can cause a hang here.

f. Faults detected above may be isolated to the MPU or the MPU Memory. Faults involving the following addresses occur during ROM tests, however, and can indicate a problem in either of these two areas. ROMs are checked beginning with the power-up ROM (7000) and then the operating system, beginning at the highest address and continuing down through decreasing addresses with the interface ROM (2000) last.

**7C8C to 7CB8** – Within this loop, the 6802 verifies that each ROM is at the correct address.

**7CA6 to 7CB2** – Within this smaller loop, the 6802 MPU verifies the ROM checksums by summing all memory locations in each ROM.

**7CBD** – Indicates a bad ROM checksum.

**7CBF** – Indicates wrong ROM at an address.



DESCRIPTION

For Page 4-32, Step 4, parts b, c, & d.  
CHANGE TO READ:

b. Check to see if A15 pulses high every 100 milliseconds or faster. If so, check the following interrupt lines. If asserted, the problem may be isolated to the indicated board or boards.

DFI (A20 of edge connector) – Translator (A22) or MPU (A54).

IOI (A18 of edge connector) – IEEE 488 Interface (A56) or MPU (A54).

PMCI (A16 of edge connector) – Memory Control (A16) or MPU (A54).

FPI (A12 of edge connector) – Translator (A22) or MPU (A54).

SND (U220-3 of A54) – Plug-Ins, Plug-In Interface (A46) or MPU (A54).

If none of these interrupts is asserted, a fault in the MPU (A54) is indicated.

c. Check for a tight loop at 7DC9 to 7DCD, which may result in partial readout. This indicates a Translator (A22) or MPU (A54) fault.

d. Check for a halt or tight loop on the 6802 address bus in the range 2819 to 2FD5, the IEEE 488 initialization routine, indicated by pulses on IOSEL (B20 of the MPU edge connector). If the MPU is stuck in this range, check R-ATN (U500-6 on the IEEE 488 Interface board, A56); if R-ATN is asserted (IEEE 488 cable should have been disconnected) a fault on either the interface or MPU board is indicated. If R-ATN is not

DESCRIPTION

For Page 4-35  
CHANGE TO READ:

78C5 to 78CB – TV interrupt handler; waits for PMCI interrupt.

2988 to 2997 – IOI handler; waits for  $\overline{7KSND}$  to stay false.

29A0 to 29AE – IOI handler; waits for DATVAL flag false.

29EF to 2A0F – 7KSRQ handler; waits for  $\overline{7KSRQ}$  to stop toggling.

2AD5 to 2AE2 –  $\overline{DAV}$  handler; waits for  $\overline{IFC}$  or  $\overline{7KNDAC}$  (unasserted).

2AED to 2AFE –  $\overline{DAV}$  handler; waits for  $\overline{IFC}$  or  $\overline{7KNRFD}$  (unasserted).

2BB7 to 2BBB –  $\overline{ATN}$  byte handler; waits for 7KNDAC (unasserted).

2D67 to 2D77 – CLRBZY, ATNFLS; waits for  $\overline{IFC}$  or  $\overline{7KNRFD}$  (unasserted) if plug-in is listener.

2EAB to 2EBD – Send a byte on the IEEE 488 bus; waits for  $\overline{IFC}$  or  $\overline{ATN}$  and  $\overline{DAV}$  or SENT from IEEE 488 interface.

2F5A to 2F60 –  $\overline{IFC}$  service; waits for  $\overline{IFC}$  false.

252B to 252F – Memory Controller output; waits for output in progress to complete.

25CE to 25D2 – Memory Controller busy loop; waits for PMCI interrupt.

25D4 to 25D0 – Memory Controller output busy loop; waits for PMCI interrupt.

25E1 to 25ED - Memory Controller digitize busy loop; waits for PMCI interrupt.

Step 7. Does the digitize operation complete? If the instrument hangs when a digitize operation is started:

a. Check the data buffer clock,  $\overline{EYCA}$  (pin 14 of U346B on the Data Buffer, A20). It should be a negative pulse with a 20 MHz repetition rate. A problem with this clock indicates a fault on the Data Buffer (A20).

**DESCRIPTION**

**For Page 4-40, Paragraph 2.  
CHANGE TO READ:**

**6802 Version 3.** The following part-numbered PROMs contain the 6802 MPU operating system, version 3:

**Version 3**

**MPU BOARD (A54)**

|       |             |
|-------|-------------|
| U900  | 160-1900-00 |
| U1000 | 160-1899-00 |
| U1200 | 160-1901-00 |

**For Page 4-41  
DELETE FIG. 4-16**





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