



050-2398-00

M66795

## STORAGE CIRCUIT BOARD REPLACEMENT

For TEKTRONIX (™) 2221 Digital Storage Oscilloscope

Serial Numbers B010100 - B010772

Storage circuit board, P/N 671-0297-04, replaces earlier versions of the Storage circuit board, which are no longer available. Use of the new circuit board requires the addition of C130 and C180, 18pF capacitors, to the Main circuit board.

### NOTE

If the instrument serial number is greater than those listed above or if this kit has been installed previously, disregard the instructions and use Storage circuit board, pn'671-0297-04, as a direct replacement for A10.

# C A U T I O N

## STATIC SENSITIVE DEVICES

Static discharge can damage any semiconductor component in this instrument. Static voltages of 1kV to 30kV are common in unprotected environments.

### TO AVOID DAMAGE, OBSERVE THE FOLLOWING:

1. Minimize handling of static-sensitive components.
2. Transport and store static-sensitive components or assemblies in their original containers, on a metal rail, or on conductive foam. Label any package that contains static-sensitive assemblies or components.
3. Discharge the static voltage from your body by wearing a wrist-strap while handling these components. Servicing static-sensitive assemblies or components should be performed only at a static-free work station by qualified service personnel.
4. Nothing capable of generating or holding a static charge should be allowed on the work station surface.
5. Keep the component leads shorted together whenever possible.
6. Pick up components by the body, never by the leads.
7. Do not slide the components over any surface.
8. Avoid handling components in areas that have a floor or work-surface covering capable of retaining a static-charge.
9. Use a soldering iron that is connected to earth ground.
10. Use only approved, anti-static type, desoldering tools.

**KIT PARTS LIST:**

<u>Circuit Number</u>	<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
C130			
C180	2 ea	283-0159-00	Capacitor, cer, 18pF, 5%, 50V
A10	1 ea	671-0297-04	Circuit board, Storage
	1 ea	--- ---- --	Label, 050- kit

**INSTRUCTIONS:****WARNING**

Dangerous shock hazards may be exposed when the instrument covers are removed. Before proceeding, ensure the power switch is in the off position. Then, disconnect the instrument from the power source. Disassembly should only be attempted by qualified service personnel.

**A. CABINET REMOVAL****NOTE**

For instruments with a power-cord securing clamp, remove the Phillips-head screw holding the power-cord securing clamp before disconnecting the power cord.

- ( ) 1. Disconnect the power cord from the instrument.
- ( ) 2. Remove two screws, one each from the right-rear side and bottom front of the cabinet.

**NOTE**

To ensure that the cabinet is properly grounded to the instrument chassis, the screws at the right-rear side and bottom front of the cabinet must be tightly secured when reassembling the instrument.

- ( ) 3. Remove the two screws from the rear panel (located on each side) and remove it from the instrument.

- ( ) 4. Remove the four screws from the left rear side of the cabinet securing the side panel to the instrument side chassis (if instrument has GPIB, remove two screws and two standoffs or if instrument has RS-232, remove two screws and four standoffs).
- ( ) 5. Remove the side panel from the instrument.
- ( ) 6. Pull the front panel and attached chassis forward and out of the cabinet.
- ( ) 7. Set the instrument cabinet aside.

**B. DISCONNECT INPUT/OUTPUT AND VECTOR GENERATOR BOARDS.**

**NOTE**

Many of the connectors used in this instrument are of the locking type. These must be disconnected by grasping the connector housing, either with your fingers or with a needle-nosed pliers, and pulling straight off. The connectors will not release if the cabling is pulled.

- ( ) 1. Disconnect the following from the Input/Output circuit board, located directly below the Storage board (connectors can be accessed from the right side of the instrument):
  - ( ) a. P6110, the four-wire connector nearest the front of the instrument.
  - ( ) b. P6120, a nine-wire connector adjacent to J6110.
  - ( ) c. P6130, the seven-wire connector nearest the rear of the instrument.
- ( ) 2. Disconnect the following from the Vector Generator circuit board, located directly below the Input/Output circuit board:
  - ( ) a. P6410, the nine-wire connector nearest the front of the instrument.
  - ( ) b. P6420, the seven-wire connector nearest the rear of the instrument.
- ( ) 3. Disconnect the ground clip from the edge of the Storage circuit board chassis (near the rear of the Vector Generator board).

### C. SET STORAGE CIRCUIT BOARD TO THE SERVICING POSITION.

- ( ) 1. Remove the STORE/NON STORE button, four ACQUISITION buttons, SELECT WAVEFORM button, Delta Time button, two REFERENCE buttons, and two PLOT buttons from their respective switches by inserting a small screwdriver between the extension shaft and the switch shaft. Push down and forward until the extension shaft is disengaged and pull the shafts straight back through the front panel.
- ( ) 2. Disconnect the following connectors from the Storage circuit board, noting locations and orientations for later reassembling:
  - ( ) a. P2111, a four-wire connector located near the middle left edge of the Storage circuit board.
  - ( ) b. P2112, a four-wire connector located near the middle left edge of the Storage circuit board.
  - ( ) c. P8100, a fifty-wire connector (Option 10 or Option 12 Only).

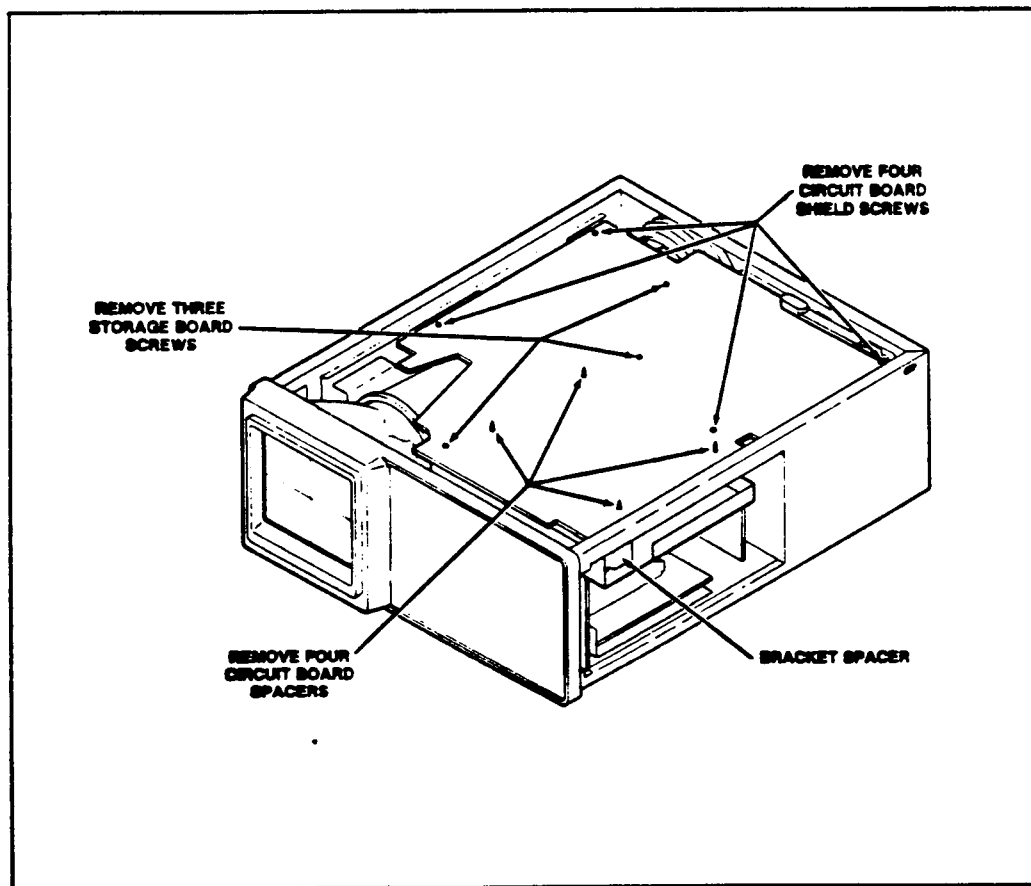


Fig. 1. Locations of Screws and Spacers on the Storage Board.

- ( ) 3. Remove the three Storage circuit board screws that are identified by the etched words "Remove To Lift Board" (see Fig. 1 for the location of the three Storage board screws). Later versions of the instrument may require the removal of a fourth screw, located along the left edge of the Storage circuit board chassis.
- ( ) 4. Lift the Storage assembly up until P9430, which connects the CURSOR control to the Storage circuit board, is accessible; disconnect the plug, noting its location and orientation for later reassembling.
- ( ) 5. Continue to raise the Storage circuit board to its servicing position, ensuring that the board latch clears the top of the chassis side rail. Place the board latch tab in the chassis side rail slot.

#### D. SIDE-CHASSIS ASSEMBLY REMOVAL.

##### NOTE

The side-chassis assembly must be removed to access one of the cables from the Storage circuit board that is connected below the crt shield.

- ( ) 1. Disconnect P4110, a two-wire connector located at the rear of the side-chassis assembly (uppermost connector).
- ( ) 2. **GPIB (OPT 10) AND RS-232 (OPT 12) ONLY.** Disconnect the following:
  - ( ) a. If present, P1316 (GPIB) or P1216 (RS-232) from the upper front corner of the Option circuit board. This connector is present only in field-installed options.
  - ( ) b. P8100, the multi-pin ribbon cable connecting the Option circuit board to the Storage circuit board.
- ( ) 3. Remove the two screws and ground clip from the top of the side chassis and the two screws from the bottom of the side chassis that secure the side-chassis assembly to the instrument.

##### NOTE

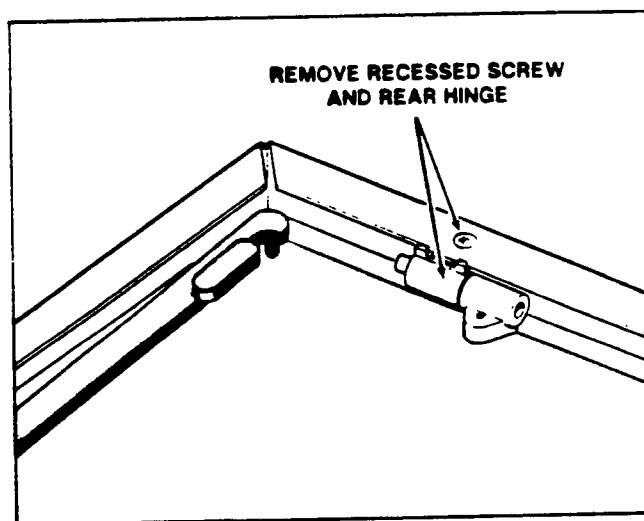
In later versions of the instrument, the ground clip will not be present and only one screw will be securing the top of the side chassis (the second screw was removed prior to lifting the Storage board to the servicing position in section C, step 4).

- ( ) 4. Carefully pivot the front of the side-chassis assembly away from the instrument to gain access to P9210, a seven-wire, multi-pin connector located below the rear of the crt shield.

#### E. STORAGE CIRCUIT BOARD REMOVAL.

- ( ) 1. Disconnect the following seven connectors from the inside of the instrument. Note cable color, location, orientation, and routing for re-installation reference.
  - ( ) a. P9210, a seven-wire connector located on the Main circuit board underneath the crt shield near the delay line.
  - ( ) b. P9320, a four-wire connector located near the front edge of the Main circuit board between the Attenuator and Position Interface circuit boards.
  - ( ) c. P4210, a four-wire connector located on the Main circuit board behind the CH 2 VOLTS/DIV switch.
  - ( ) d. P9410, a seven-wire connector located on the Sweep Referenced circuit board.
  - ( ) e. P9060, a single-wire, black connector located between the Alternate Sweep circuit board and the power-supply shield.
  - ( ) f. P9050, a single-wire, white connector located between the Alternate Sweep circuit board and the power-supply shield.
  - ( ) g. P9010, a nine-wire connector located at the right side of the Main circuit board between the Timing and Alternate Sweep circuit boards.
- ( ) 2. Unsolder the braided wire from the ground clip near the center of the Storage chassis; slide the wire through the slot in the chassis when removing the Storage chassis.
- ( ) 3. Remove the four circuit board shield screws from the Storage circuit board (see Fig. 1 for location of the screws).
- ( ) 4. Carefully remove the Storage circuit board chassis from the solder side of the Storage circuit board. Take care to guide the braided ground wire (disconnected in step 2) through the slot in the chassis. Also, ensure the chassis is free of the metal bracket spacer whose tips protrude through the chassis near the front of the instrument (see Fig. 1).

- ( ) 5. Gently spread the black circuit board spacers securing the Input/Output and Vector Generator circuit boards far enough to release the boards. Set the boards inside the instrument (they are still connected to the Storage board by a cable).
- ( ) 6. Remove the clear plastic shield from the Storage board.
- ( ) 7. Remove the ground clip from the upper right chassis frame (near the front Storage circuit board hinge).
- ( ) 8. Release the latch and lower the Storage circuit board.
- ( ) 9. Disconnect P6100, a 34-wire (gray cable) connector located near the center hinge, from the Storage circuit board.
- ( ) 10. Remove the screw securing the rear plastic hinge to the chassis (refer to Fig. 2). Remove the plastic hinge.
- ( ) 11. Slide the Storage circuit board to the rear until the two remaining hinges separate, then remove it from the instrument.



**FIG. 2. Rear Hinge Removal.**



## F. NEW STORAGE CIRCUIT BOARD INSTALLATION.

- ( ) 1. Transfer the following parts from the old Storage circuit board to the same locations on the new one:
  - ( ) a. the black plastic board latch.
  - ( ) b. the metal bracket spacer.
  - ( ) c. the three plastic hinges.
  - ( ) d. the ground wire, sleeving, and ground clip (if not present on the new board).
  - ( ) e. the four, black circuit board spacers. The spacers may be removed by grasping them firmly and pulling straight out away from the circuit board.

### NOTE

When re-installing the circuit board, ensure that the black spacer tabs and the circuit board bracket align with their respective holes in the shield. Also, check that the braided wire from the Input/Output circuit board (unsoldered in section E, step 2) is inserted through the circuit board shields slot to be resoldered to the ground clip.

- ( ) 2. Install the new Storage circuit board by performing the reverse of the procedure in section E.

## G. MAIN BOARD MODIFICATION.

### NOTE

To access the area of the Main circuit board that is to be modified, the crt and its shield must be removed.

### WARNING

Use care when handling a crt. Breakage of the crt may cause high-velocity scattering of glass fragments (implosion). Protective clothing and safety glasses should be worn. Avoid striking the crt on any object which may cause it to crack or implode. When storing a crt, either place it in a protective carton or set it face down on a smooth surface in a protected location with a soft mat under the faceplate.

- ( ) 1. Disconnect the four deflection plate wires at the middle of the crt neck, noting connection locations of wires for later reassembly.
- ( ) 2. Unplug the Trace Rotation connector (P9006) from the Front Panel circuit board, noting its location and orientation for later reassembling.

#### WARNING

The crt anode lead and the high-voltage multiplier output lead retain a high-voltage charge after the instrument is turned off. To avoid electrical shock, disconnect the high-voltage multiplier lead from the crt anode lead and ground both leads to the main instrument chassis.

- ( ) 3. Disconnect the crt anode lead connector from the high-voltage multiplier lead located between the power supply shield and the crt shield. Discharge both the anode lead connector and the high-voltage multiplier lead to chassis ground.
- ( ) 4. Remove the two front panel screws that retain the plastic crt frame and light filter to the front panel. Remove the crt frame and light filter from the instrument.
- ( ) 5. Remove the crt socket cap from the rear of the crt socket; retain the cap for later reassembly.
- ( ) 6. Orient the instrument with the rear towards you. Place the fingers of both hands over the front edge of the front subpanel. Then, using both thumbs, press forward gently on the crt funnel near the front of the crt. When the crt base pins disengage from the socket, remove the crt and the crt shield through the instrument front panel. Place the crt in a safe place until it is re-installed. If the plastic corner pads fall out, save them for re-installation.

#### NOTE

When installing the crt into the instrument, re-install any loose plastic corner pads that are out of place. Ensure that all crt pins are straight and that the indexing keys on the crt base, socket and shield are aligned. Ensure that the ground clip makes contact only with the outside of the crt shield.

- ( ) 7. Locate U130 on the Main circuit board (near the front edge, directly below where the crt was mounted).

- ( ) 8. Solder one of the 18pF capacitors, provided in the kit, into the vacant pads adjacent to U130, pins 2 and 3.
- ( ) 9. Locate U180 on the Main circuit board (first microcircuit to the rear of U130).
- ( ) 10. Solder the remaining 18pF capacitor, provided in the kit, into the vacant pads adjacent to U180, pins 2 and 3. (The capacitor will be mounted at an angle to U180.)
- ( ) 11. Re-install the crt by performing the reverse of steps 1 through 6 of this section.

#### I. REASSEMBLY AND PERFORMANCE CHECK.

- ( ) 1. Partially reassemble the instrument by performing the reverse of the procedures in sections B through D. However, do not secure the storage assembly to the chassis (section C, step 3) until performance checks and calibration adjustments are performed.
- ( ) 2. Temporarily reconnect the power cord to the instrument and to the power source.
- ( ) 3. Refer to the Performance Check Procedure and Adjustment Procedure sections of the service manual and make any necessary checks and adjustments.
- ( ) 4. Disconnect the power cord from the instrument.
- ( ) 5. Secure the storage assembly to the chassis with the screws removed in section C, step 3.
- ( ) 6. Re-install the cabinet by performing the reverse of the procedure in section A.
- ( ) 7. Remove the protective backing from the 050- kit label, provided in the kit, and apply it to a clean, dry area on the rear cover.
- ( ) 8. For future reference, fasten the attached Manual Modification Insert into the service manual.

# PRODUCT MODIFICATION KIT SUGGESTION/CORRECTION FORM

DATE \_\_\_\_\_

KIT NUMBER \_\_\_\_\_ STEP/PAGE \_\_\_\_\_

FIGURE NUMBER \_\_\_\_\_ PUBLICATION DATE \_\_\_\_\_

DISCREPANCY \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SUGGESTED CORRECTION/COMMENTS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SUGGESTED BY: NAME/ORGANIZATION \_\_\_\_\_

\_\_\_\_ REPLY REQUESTED

(PLEASE TYPE OR PRINT LEGIBLY)

RETURN TO LOCAL FIELD OFFICE/SERVICE CENTER

FIELD OFFICE/SERVICE CENTER/DEL. STA. \_\_\_\_\_

SERVICE CENTER: RETURN TO PTID SERVICE, C1-815

## REPLY

\_\_\_\_ WILL MAKE CHANGE IMMEDIATELY

\_\_\_\_ WILL MAKE CHANGE AT NEXT PRINTING

\_\_\_\_ OTHER \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SIGNED \_\_\_\_\_ DATE \_\_\_\_\_

**TEKTRONIX**  
**MANUAL MODIFICATION INSERT**

**STORAGE CIRCUIT BOARD REPLACEMENT**

for

2221 Digital Storage Oscilloscope, Serial Numbers B010100 -  
B010772

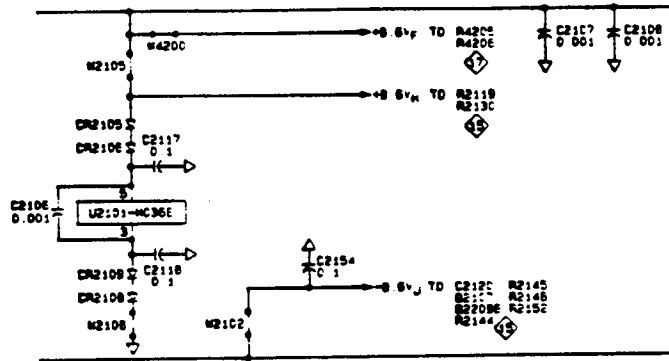
Installed in SN \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_\_

This modification insert is provided to supplement the manual for the above listed product(s). The information given in this insert supersedes that given in the manual.

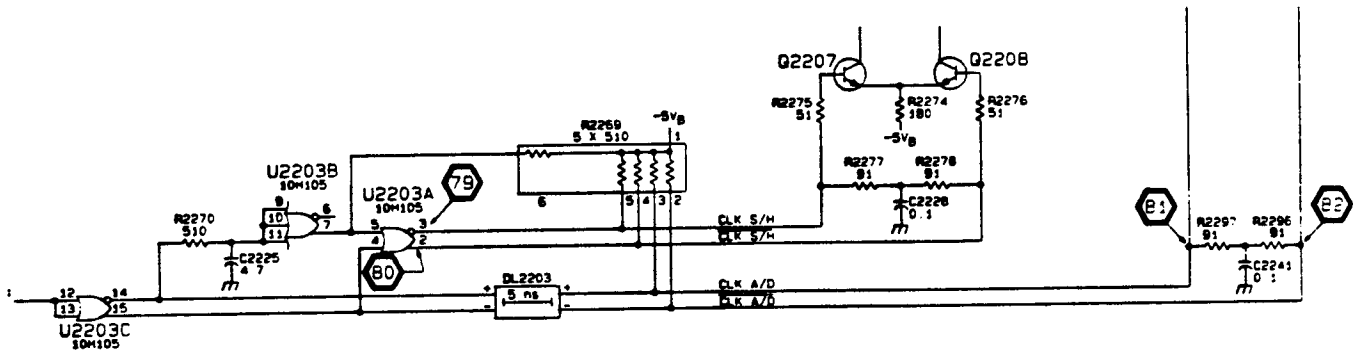
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**GENERAL INFORMATION**

Storage circuit board, P/N 671-0297-04, replaced earlier versions of the Storage circuit board, which are no longer available. Use of the new circuit board required the addition of C130 and C180, 18pF capacitors, to the Main circuit board.



Partial Schematic 10 - STORAGE POWER DISTRIBUTION.



Partial Schematic 15 - STORAGE ACQUISITION.



## REPLACEABLE ELECTRICAL PARTS

Ckt. No.	Part Number	Description
A1C130	283-0159-00	Capacitor, cer, 18pF, 5%, 50V
A1C180	283-0159-00	Capacitor, cer, 18pF, 5%, 50V
A10	671-0297-04	Circuit board, Storage
A10C2101	DELETED	
A10C2102	DELETED	
A10C2104	DELETED	
A10C2105	DELETED	
A10C2106	281-0862-00	Capacitor, cer, 0.001 uF, +80-20%, 100V
A10C2107	281-0862-00	Capacitor, cer, 0.001 uF, +80-20%, 100V
A10C2108	281-0862-00	Capacitor, cer, 0.001 uF, +80-20%, 100V
A10C2109	DELETED	
A10C2110	283-0220-00	Capacitor, cer, 0.01 uF, 20%, 50V
A10C2111	DELETED	
A10C2112	DELETED	
A10C2123	DELETED	
A10C2114	DELETED	
A10C2149	283-0853-00	Capacitor, cer, 2.2pF, 200V
A10C2150	281-0862-00	Capacitor, cer, 0.001 uF, +80-20%, 100V
A10C2151	283-0898-00	Capacitor, cer, 2.7pF, 0.25%, 50V
A10C2160	DELETED	
A10C2225	281-0893-00	Capacitor, cer, 4.7pF, +/- 0.5pF, 100V
A10C9001	DELETED	
A10C9002	290-0847-00	Capacitor, elctlt, 47 uF, +50-10%, 10V
A10C9003	DELETED	
A10C9004	DELETED	
A10C9005	DELETED	
A10C9006	290-0847-00	Capacitor, elctlt, 47 uF, +50-10%, 10V
A10C9007	290-0847-00	Capacitor, elctlt, 47 uF, +50-10%, 10V
A10C9011	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9012	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9013	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9014	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9015	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9021	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9022	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9023	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9024	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9025	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9031	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9032	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9033	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9034	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9035	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9041	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9042	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9043	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9044	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9045	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V



A10C9071	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C907	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9073	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9074	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9075	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9091	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9092	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9093	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9094	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10C9095	281-0775-01	Capacitor, plastic, 0.1 uF, 20%, 50V
A10CR2107	DELETED	
A10CR2111	DELETED	
A10CR2112	DELETED	
A10DL2203	119-3291-00	Delay line, elec, A/D clock delay, 5nS
A10E2107	276-0621-00	Core, em, torroid, ferrite
A10L2137	108-0181-01	Coil, rf, 165nH
A10L2139	108-0181-01	Coil, rf, 165nH
A10L2149	108-0311-00	Coil, rf, 150nH
A10L2160	DELETED	
A10Q4203	151-0188-05	Transistor, PNP, Si, TO-92
A10Q4204	151-0188-05	Transistor, PNP, Si, TO-92
A10R2103	DELETED	
A10R2104	DELETED	
A10R2113	DELETED	
A10R2114	DELETED	
A10R2119	DELETED	
A10R2130	DELETED	
A10R2149	311-2230-00	Resistor, var, nonww, 500 ohm, 20%, 0.5W
A10R2150	313-1221-00	Resistor, film, 220 ohm, 5%, 0.2W
A10R2159	313-1240-00	Resistor, film, 24 ohm, 5%, 0.2W
A10R2160	DELETED	
A10R2203	313-1470-00	Resistor, film, 47 ohm, 5%, 0.2W (Nominal value)
A10R2203	313-1330-00	Resistor, film, 33 ohm, 5%, 0.2W (Test selected)
A10R2203	313-1680-00	Resistor, film, 68 ohm, 5%, 0.2W (Test selected)
A10R2213	313-1470-00	Resistor, film, 47 ohm, 5%, 0.2W(Nominal value)
A10R2213	313-1330-00	Resistor, film, 33 ohm, 5%, 0.2W (Test selected)
A10R2213	313-1680-00	Resistor, film, 68 ohm, 5%, 0.2W (Test selected)
A10R2296	315-0910-00	Resistor, film, 91 ohm, 5%, 0.25W
A10R2297	315-0910-00	Resistor, film, 91 ohm, 5%, 0.25W
A10RT2102	DELETED	
A10RT2103	DELETED	
A10RT2112	DELETED	
A10RT2113	DELETED	
A10U2101	234-0408-20	Microcircuit, dgtrl, channel switch
A10U9113	156-1111-00	Microcircuit, dgtrl, oct bus tranceiver
A10W2101	DELETED	
A10W2108	131-0566-00	Bus, conductor, dummy resistor
A10W9013	DELETED	
A10W9017	DELETED	
A10W9019	DELETED	
A10W9021	DELETED	
A10W9022	DELETED	
A10W9023	DELETED	
A10W9024	DELETED	

### TEXT CHANGES

#### Page 5-13 Replace Step 18 with the following procedure

#### 18. Adjust Acquisition High Frequency Peaking (C2103, R2149, and C2113)

a. Set:

VOLTS/DIV (both)	10 mV
STORE/NON STORE	STORE (button in)
SAVE/CONTINUE	CONTINUE (button out)
PRETRIG/POST TRIG	POST TRIG (button out)

b. Set the generator to produce a 5-division display.

c. Set the top of the display to the center horizontal graticule line using the Channel 2 POSITION control.

d. ADJUST—Ch 2 Acq HF Peak (C2113) and Acq HF Peak (R2149) for best front corner.

e. Set the SAVE/CONTINUE switch to SAVE (button in).

f. CHECK—Display aberrations are within 4% (0.2 division or less).

g. Move the cable from the CH 2 OR Y input connector to the CH 1 OR X input connector. Set the VERTICAL MODE switch to CH 1.

h. Set the SAVE/CONTINUE switch to CONTINUE (button out).

i. Set the generator to produce a 5-division display.

j. Set the top of the display to the center horizontal graticule line using the Channel 1 POSITION control.

k. ADJUST—Ch 1 Acq HF Peak (C2103) for best front corner.

l. Set the SAVE/CONTINUE switch to SAVE (button in).

m. CHECK—Display aberrations are within 4% (0.2 division or less).

n. INTERACTION—It may be necessary to compromise the Ch 2 Acq HF Peak (C2113) and Acq HF Peak (R2149) adjustments in part d and the Ch 1 Acq HF peak (C2103) adjustment in part m, to obtain the best high-frequency match between Channel 1 and Channel 2.

o. Set:

CH 1 VOLTS/DIV	2mV
SAVE/CONTINUE	CONTINUE (button out)

p. Repeat part m checking each of the following VOLTS/DIV switch settings in SAVE mode from 5 mV through 0.5 V. Adjust the generator output and attach or remove the 10X attenuator as necessary to maintain a 5-division display at each VOLTS/DIV switch setting.

q. Repeat parts o and p for Channel 2.

r. Disconnect the test equipment from the instrument.