050-1474-00

M40450

P31 PHOSPHOR CRT REPLACEMENT

For TEKTRONIX® 7603/R Oscilloscopes

Serial Numbers B010100 - B349720

Cathode ray tube (crt), pn 154-0841-00, replaces crt, pn 154-0640-00, pn 154-0640-05, or pn 154-0640-10 for use as V1099. The new crt is wrapped with lead tape which must be grounded to the crt shield (through an added piece of shield gasket material) to prevent arcing between the lead tape and the shield.

Installation of the shield gasket requires using EC847 Contact Cement (or a similar adhesive) available from: 3-M Company Adhesives, Coatings and Sealers Division, 2501 Hudson Road, St. Paul, Minnesota 55119. (This is a hazardous material and cannot be shipped with the kit.)

NOTE

If the serial number of your instrument is greater than those listed or if this kit has been installed, disregard the instructions and use crt, pn 154-0841-00, as a direct replacement for V1099.

2-25-81

PARTS INCLUDED IN PARTS REPLACEMENT KIT:

Ckt. No.	Quantity	Part Number	Description
V1099	1 ea	154-0841-00	Electron tube, crt, P-31 int. scale, T7400-31-2 w/lead tape
	0.0833 ft		Shield gasket, D-shaped
	1 ea		Label, 050-kit

WARNING

Use care when handling a crt. Protective clothing and safety glasses should be worn. Avoid striking it on any object which might cause it to crack or implode. When storing a crt, place it in a protective carton or set it face down in a protected location on a smooth surface with a soft mat under the faceplate to protect it from scratches.

INSTRUCTIONS:

WARNING

Before proceeding, ensure the POWER switch is in the off position, then disconnect the power cord from the power source.

NOTE

The following instructions assume a familiarity with the instrument. If more details are required, refer to the Maintenance Section (5) of the 7603/R7603 Instruction Manual.

( ) 1. Remove the left and right side covers (bench model) or the top cover (rackmount model) from the instrument.

( ) 2. Remove the hardware securing the Regulator/heat sink assembly to the chassis.

( ) 3. Disconnect the multi-pin connectors from the Regulator circuit board, noting their locations and color codes for later reassembling.

( ) 4. Remove the Regulator/heat sink assembly.

( ) 5. Remove the crt base socket from the rear of the crt.

( ) 6. Loosen the two screws located on each side of the crt socket until the tension of the springs on these screws is released.

( ) 7. Press in on the screws to be sure the crt clamp is loose.

( ) 8. Disconnect the vertical and horizontal deflection plate leads from the crt neck connectors, noting color codes and locations for later reassembling.

( ) 9. RACKMOUNT MODELS ONLY. Remove the screws securing the Readout circuit board access cover and remove the cover.

( ) 10. Disconnect the crt anode plug from the jack located on the front of the high voltage supply cover. Ground the anode plug to the chassis to dissipate any stored charge.

NOTE

The Readout circuit board must be moved to allow the crt anode plug to pass through the cutout in the crt shield. It may be possible to access this hole without completely removing the Readout circuit board.

( ) 11. Disconnect the multi-pin connectors and coaxial cables from the Readout circuit board, noting color codes and locations for later reassembling.

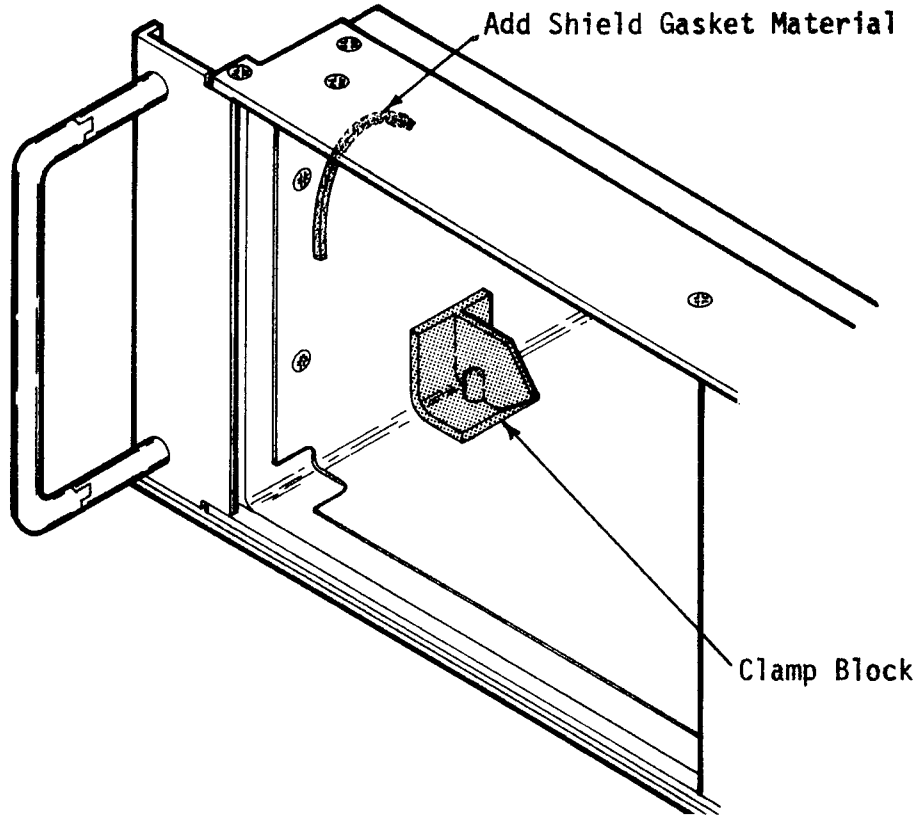
( ) 12. Loosen the captive screw securing the Readout circuit board to the chassis.

( ) 13. Release the Readout circuit board from the two spring tension clips, lift it to clear the circuit board guide, and remove it.

( ) 14. Remove the two screws securing the crt bezel to the front panel. Remove the bezel, the plastic faceplate protector, and the light filter.

( ) 15. Hold one hand on the crt faceplate and push forward on the crt base with the other. As the crt starts out of the shield, grasp it firmly, guiding the anode lead through the hole in the crt shield as the crt is removed.

RACKMOUNT



BENCH

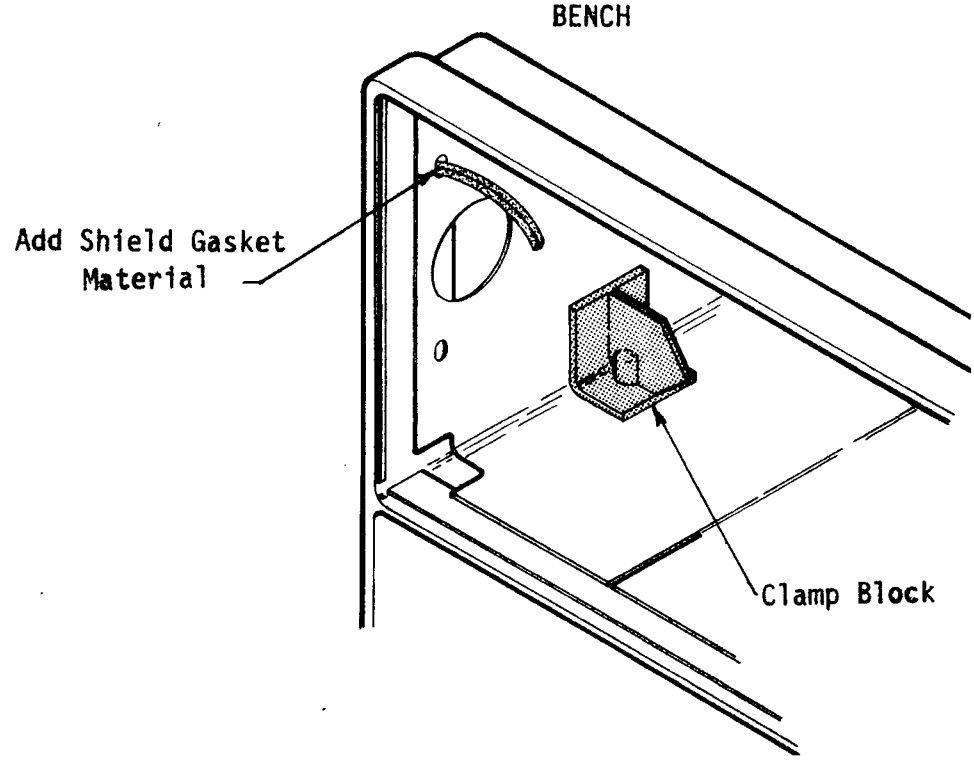


Fig. 1. Location of Added Shield Material

( ) 16. Insert the 1.0-inch piece of D-shaped gasket (provided in the kit) through the hole near the upper left corner of the crt shield. The gasket material should be inserted far enough to touch the upper front cabinet frame. Refer to Fig. 1.

( ) 17. Use EC847 Contact Cement or a similar adhesive to glue the gasket material to the frame.

( ) 18. Hold the gasket material in position until the glue sets.

( ) 19. After glue has set, loosen the screws securing the clamp blocks at each corner of the crt shield.

( ) 20. Insert the crt into the shield, guiding the anode lead through the hole in the crt shield.

( ) 21. Clean the crt faceplate, plastic faceplate protector, and the light filter with a soft non-abrasive material and denatured alcohol.

( ) 22. Reinstall the crt bezel, faceplate protector, and light filter. Tighten the two screws.

( ) 23. Push forward on the crt base to ensure the crt is as far forward as possible, then tighten the two screws beside the crt base until the springs on the screws are fully compressed.

( ) 24. Reposition the clamp blocks to hold the faceplate of the crt tightly against the implosion shield and tighten the clamp block screws.

( ) 25. Reassemble the instrument by performing the reverse of the procedure in steps 2 through 13 (omit steps 6 and 7).

( ) 26. Refer to the Calibration Section (3) of the Instruction Manual and make any necessary checks and adjustments.

( ) 27. Install the cover(s) removed in step 1.

( ) 28. Remove the protective backing from the 050-kit label (provided in the kit) and place it on a clean dry area on top of the crt shield. The label indicates this kit has been installed.

( ) 29. For future reference, update the Replaceable Electrical Parts list in your Instruction Manual, using the information contained in the kit parts list on page 2 of these instructions.