



050-0762-11
M24051, M23870
S30218

STORAGE CRT REPLACEMENT

For TEKTRONIX® Type 466 Portable Storage Oscilloscopes:

Serial Numbers B010100 - B079999

Storage crt with 0.5W heater, pn 154-0708-00 was replaced with a new storage crt with 2W heater, pn 154-0750-00, to eliminate flashes in the display due to arcing between the flood gun heater and the flood gun cathode in the NON-STORE MODE.

NOTE: If the serial number of your instrument is above those listed, or if this kit or 050-0762-01 has been installed, disregard the instructions and use pn 154-0750-00 as a direct replacement.

PARTS INCLUDED IN PARTS REPLACEMENT KIT:

Ckt. No.	Quantity	Part Number	Description
Q1752	1 ea	151-0136-00	Transistor, silicon
V1555	1 ea	154-0750-00	Tube, vacuum, crt
S1702	1 ea	260-0551-00	Switch, Thermo cutout, 86.1°C 10A
R2099	1 ea	308-0290-00	Resistor, WW 8Ω 5W 5%
R1754	1 ea	315-0122-00	Resistor, cmpsn, 1.2kΩ 5% 0.25W
-----	1 ea	-----	Marker, identification

INSTRUCTIONS:

DISCONNECT THE INSTRUMENT FROM THE POWER SOURCE!

- () 1. Unwrap the power cord from the accessory pouch on the top of the instrument.
 - () 2. Remove the DM40 or DM43 cover, if present.
 - () 3. Remove the four rear feet and two ring assembly mounting screws and remove the ring assembly.
 - () 4. Slide the wraparound cover to the rear to remove it.
- A. TO REMOVE CRT:
- () 1. Remove the gray plastic bezel and crt shield assembly, from the front of the instrument, by removing the four mounting screws.
 - () 2. Remove the oscilloscope rear plastic cover by removing two flat head screws. DO NOT UNSOLDER WIRES.
 - () 3. Remove the bell-shaped cover to expose the crt socket (held with two screws). It will be necessary to remove one screw, loosen one screw, and swivel the plate under the fan impeller to gain access to one of the cover mounting screws.
 - () 4. Unplug the crt socket.
 - () 5. Set the instrument on its left side.
 - () 6. Disconnect the vertical deflection plate leads from the left side of the crt neck.
 - () 7. Disconnect the horizontal deflection plate leads from the bottom side of the crt neck.
 - () 8. Unplug the storage plug P1951 from the Storage Board.
 - () 9. Disconnect the crt anode connector and discharge the connector pin to the instrument chassis.

INSTRUCTIONS (continued)

- () 10. Holding one hand on the crt face, push forward (slowly) on the crt base with the other hand. Guide the anode connector and the storage plug through crt shield openings while slowly pulling the crt out of the instrument. The plastic corner pads may fall loose when the crt is removed; save them for reinstallation. Also, the white plastic centering bracket should remain inside the crt shield.

B. TO INSTALL NEW CRT:

- () 1. Make sure the plastic centering bracket is in place inside the shield and that the black plastic corner pads are in place at the front corners of the crt opening.
- () 2. Insert a wire or string through the hole in the upper right rear corner of the crt shield, to facilitate installation of the anode lead. Be sure to dress the wire or string across the upper right opening of the plastic centering bracket.
- () 3. Connect the wire or string to crt anode lead connector and add tape to hold it firmly.
- () 4. Insert the neck of the crt part way into the crt shield and into the plastic centering bracket. Orient the crt with the anode lead towards the top of the instrument.
- () 5. While holding the front of the crt with one hand, carefully insert the storage plug through the grommet hole in the bottom of the crt shield. Be sure to pull wires through while inserting the crt.
- () 6. Draw the anode lead through the hole in the shield.
- () 7. While still holding the crt with one hand, make sure the plastic centering bracket is in place on the crt neck.
- () 8. Slowly push the crt the rest of the way into the crt shield. If the crt does not go in all the way, pull it out part way and move the plastic centering bracket farther up on the crt neck.
- () 9. Install the bezel and crt filter on the front of the crt.
- () 10. Make the following crt connections:
- a. Crt anode lead.
 - b. Crt base socket.
 - c. Storage plug (P1951). Be sure to match arrows.
 - d. Horizontal-deflection-plate leads to neck pins. (White-green wire to right pin and white-red wire to left pin).
 - e. Vertical-deflection-plate leads to neck pins. (White-blue to upper pin and white-brown to lower pin).

INSTRUCTIONS (continued)

- () 11. Install bell-shaped crt socket cover (two screws).
- () 12. Secure plate under fan impeller.
- () 13. Install plastic rear cover (two flat head screws).

C. TO MODIFY INTERFACE CIRCUIT BOARD: (For parts location, see page 5).

- () 1. Replace R1754, a 680Ω 0.25W resistor, with the $1.2k\Omega$ resistor from the kit.
- () 2. Replace R2099, a 22Ω 0.50W resistor, with the 8Ω 5W wire-wound resistor from the kit.
- () 3. Replace Q1752 with the transistor from the kit.

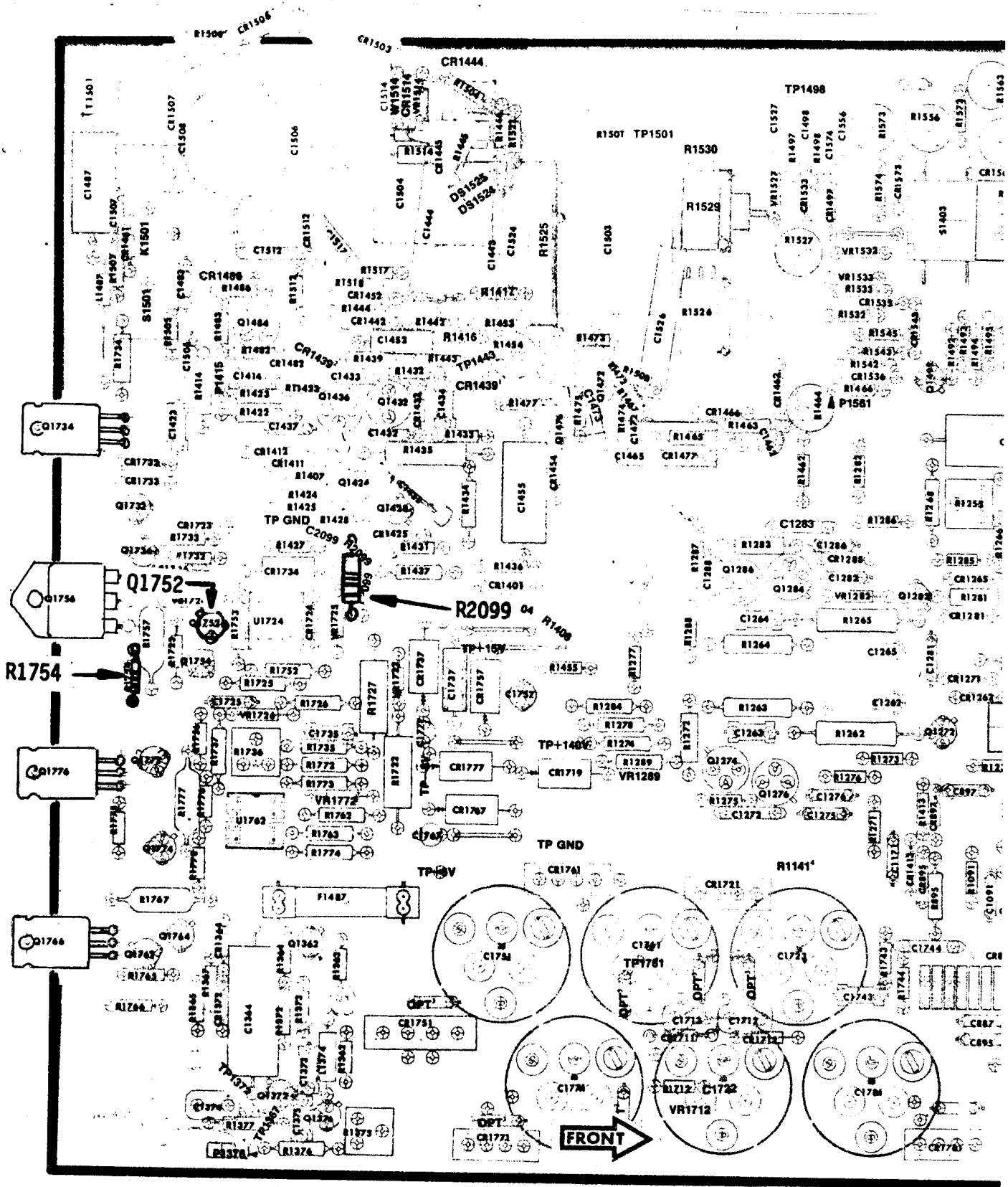
D. TO REPLACE S1702: (S1702, the thermo-cutout switch, is located on the chassis below the power transformer.)

- () 1. Remove the two mounting screws that fasten S1702, a 79.4°C thermo switch to the chassis. Lift it out above the transformer and unsolder the leads.
- () 2. Solder the wires to the new thermo switch (86.1°C) and fasten it to the chassis with the screws removed in step D-1.

E. TO CHECK PERFORMANCE AND REINSTALL COVERS:

- () 1. Recalibrate your oscilloscope as directed in the Calibration Section of the Instruction Manual.
- () 2. Slide the wraparound cover over the instrument, being careful not to bump any components, and seat the front edge of the cabinet in the groove in the front casting.
- () 3. Reinstall the cabinet retaining ring and the hardware removed in Step 3 on page 2.
- () 4. Reinstall the plastic cover on top of the instrument over the Digital Multimeter, if present, using the 8-32 x 0.500 inch screws removed in Step 2 on page 2.
- () Change the Electrical Parts List in your Instruction Manual as indicated by the parts list on page 2 of this document.
- () Install the identification marker (included in the kit) on the rear panel of the Type 466 to indicate this kit has been installed.

KM:cs



Partial A6 Interface Circuit Board.

