



# product modification

050-0471-00

S15095, M15592  
M18288

## HIGH VOLTAGE TRANSFORMER REPLACEMENT

For TEKTRONIX® 576 Curve Tracers:

Serial Numbers B010100 - B089999

The provided high voltage transformer (pn 120-0612-03) replaces the high voltage transformer (pn 120-0612-00 or pn 120-0612-01) used for T850. The older versions of the transformer are no longer available. The new transformer requires the replacement of R860 and R862 on the HV Power Supply circuit board.

### NOTE

If the instrument serial number is greater than those listed above or if this kit has been previously installed, these instructions may be disregarded and the included transformer used as a direct replacement for T850.

PARTS INCLUDED IN PARTS REPLACEMENT KIT:

CKT No	Quantity	Part Number	Description
T850	1 ea	120-0612-03	Transformer, pwr, step-up, HV
R860	1 ea	321-0337-00	Resistor, film, 31.6k $\Omega$ , 1%, 0.125W
R862	1 ea	323-0385-00	Resistor, film, 100k $\Omega$ , 1%, 0.5W

INSTRUCTIONS:

**WARNING**

Dangerous electric-shock hazards exist within the instrument. Before proceeding, ensure the POWER switch is in the OFF position. Then disconnect the power cord from the power source.

- ( ) 1. Remove the left cabinet side.
- ( ) 2. Remove the screws securing the high voltage power supply shield and remove the shield.
- ( ) 3. Replace the following resistors on the HV Power Supply circuit board with the indicated resistor:
  - ( ) a. R860, the 21.5k $\Omega$  resistor located near transistor Q868, with the provided 31.6k $\Omega$  resistor.
  - ( ) b. R862, the 102k $\Omega$  resistor located near terminal P, with the provided 100k $\Omega$  resistor.
- ( ) 4. Unsolder the leads of the high voltage transformer, T850, from the power transistor, Q851; the diode, D870; and the HV Power Supply circuit board.
- ( ) 5. Remove the screws which attach the high voltage power supply chassis to the power supply support chassis and allow the chassis to swing outward. This will provide access to the back of the chassis.
- ( ) 6. Remove the nuts which secure the transformer retaining band to the high voltage power supply chassis.
- ( ) 7. Remove the retaining band.
- ( ) 8. Replace the high voltage transformer with the provided transformer.
- ( ) 9. Secure the new high voltage transformer to the chassis, using the retaining band and nuts removed above.
- ( ) 10. Move the high voltage power supply chassis back to the correct position and attach to the support chassis, using the screws removed earlier.

- ( ) 11. Solder the transformer leads as follows (refer to Fig. 1 for lead configuration details):

NOTE

In instruments within serial number range B010100 to B019999, terminal 1 of the old high voltage transformer was connected to the collector of transistor Q851 and terminal 2 connected to the base of Q851. The new transformer requires the connection to be made as described below.

- ( ) a. Terminal 1 to the base of Q851.
- ( ) b. Terminal 2 to the collector of Q851.
- ( ) c. Terminal 3 to terminal G on the HV Power Supply circuit board.
- ( ) d. Terminal 4 to terminal F on the board.
- ( ) e. Terminal 5 to terminal D on the board.
- ( ) f. Terminal 6 to terminal C on the board.
- ( ) g. Terminal 7 to terminal B on the board.
- ( ) h. Terminal 8 to the cathode of D870.

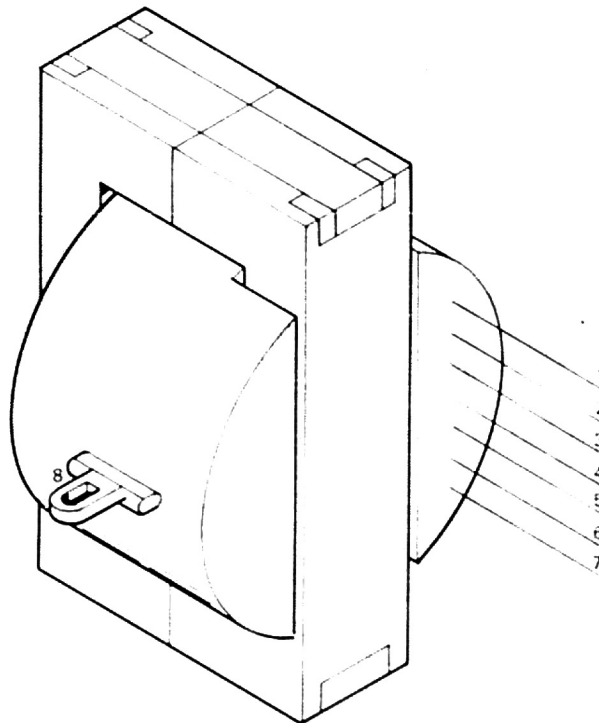


Fig. 1. High voltage transformer terminal configuration.

- ( ) 12. Attach the high voltage power supply shield to the power supply chassis with the screws removed earlier.
- ( ) 13. Refer to the Performance Check/Calibration Section (5) of the 576 Curve-Tracer Instruction Manual and check instrument performance, making any necessary adjustments.
- ( ) 14. Install the left cabinet side.
- ( ) 15. Attach the following manual insert to the 576 Curve-Tracer Instruction Manual.

DRL:pa