



product modification

050-0517-00
M16628

Type 453/R

HIGH VOLTAGE TRANSFORMER REPLACEMENT

For TEKTRONIX® Type 453/R Oscilloscopes

Serial Number 100-44359

Parts Replacement Kit, PN 050-0517-00, replaces
High Voltage transformer, PN 120-0360-00.

The kit provides an improved transformer, PN
120-0360-00, and two silicon diodes to replace
vacuum tubes V952 and V962. These changes help to
prevent high voltage failures due to arcing
between the transformer core and secondary windings.

NOTE: If the serial number of your
instrument is above those listed, or
if this kit has been installed, disregard
the instructions as PN 120-0360-00 is
a direct replacement.

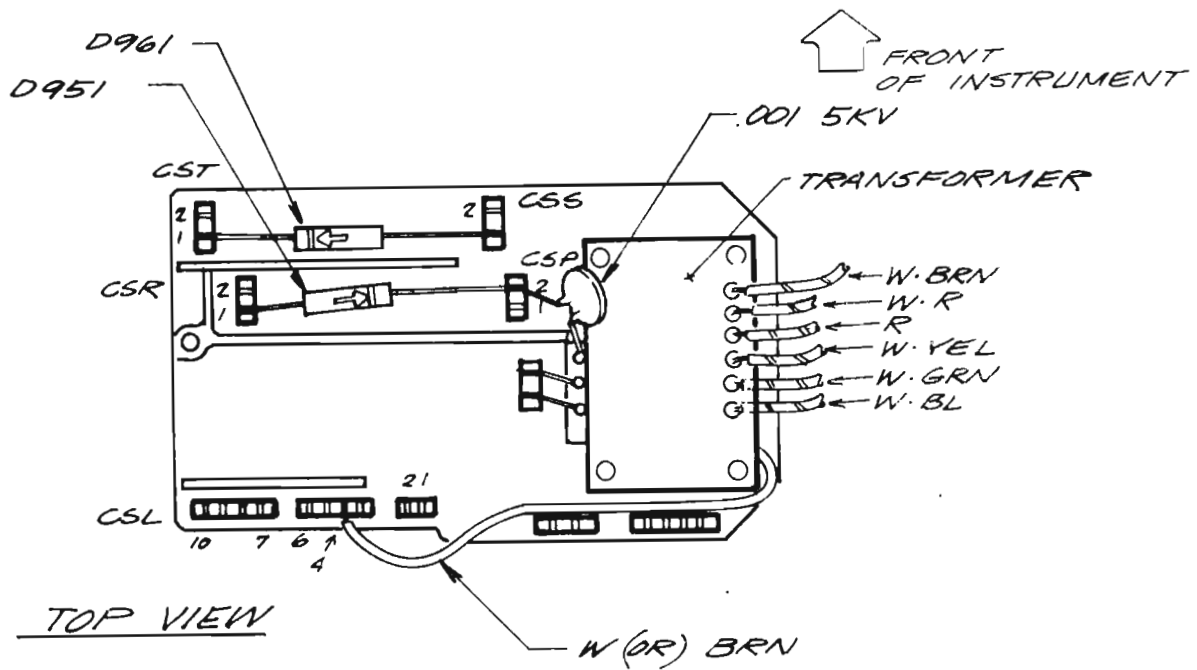


FIG. 1

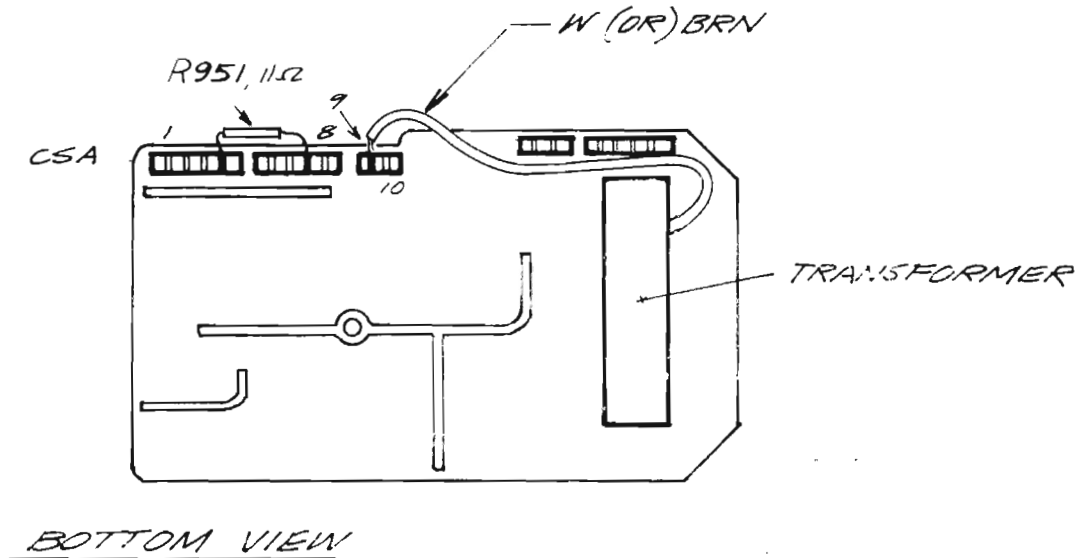


FIG. 2

PARTS INCLUDED IN PARTS REPLACEMENT KIT:

Ckt. No.	Quantity	Part Number	Description
T930	1 ea	120-0360-00	Transformer, HV
D951 D961	2 ea	152-0408-00	Diode, Silicon 10kV 5mA
R951	1 ea	308-0589-00	Resistor, WW 11Ω 1/2W 1%

INSTRUCTIONS:

- () 1. Remove the bottom cover from the instrument.
- () 2. Remove the high voltage shield.
- () 3. Remove the three screws which hold the cover on the high voltage compartment. Remove the cover.
- () 4. Unsolder the post-deflection anode lead (heavily insulated lead at side of compartment).
- () 5. Remove the two screws in the HV transformer and lift the inner assembly out of the compartment.
- () 6. Unsolder the leads going to the transformer terminal board.
- () 7. Remove the nylon screw holding the two sections of the assembly together.
- () 8. Pull the sections apart.
- () 9. Unsolder and remove the V952 and V962 filament leads.
- () 10. Unsolder the black and red CRT filament wires and remove the transformer.
- () 11. Remove the V952 and V962 vacuum diodes.
- () 12. Install D951 and D961, HV silicon diodes, from the kit, as shown in Fig. 1.
- () 13. If R951 is not 11Ω, replace with new 11Ω resistor from the kit. See Fig. 2
- () 14. Install the new HV transformer, from the kit. Wire as shown in Figs.1 & 2.
- () 15. Join the two sections of the assembly together with the nylon screw.
- () 16. Replace assembly into the compartment. Replace the two screws in the HV transformer. Make sure the beryllium oxide heat sink block is positioned between the chassis and the HV transformer core.
- () 17. Resolder anode lead.
- () 18. Replace compartment cover, HV shield and bottom cover.

() Correct your Instruction Manual Schematic and Electrical Parts List as follows:

V952	becomes	D951	152-0408-00	Diode, Silicon 10kV 5mA
V962	becomes	D961	152-0408-00	Diode, Silicon 10kV 5mA
R951	changes	to	308-0589-00	Resistor, 11Ω 1/2W 1%