

S E R V I C E N O T E

SUPERSEDES:

None

HP MODEL 8690A/B SWEEP OSCILLATORS
Serials Below 937-01151

IMPROVE RESIDUAL FM
WITH
NEW REPLACEMENT POWER TRANSFORMER

Residual FM can be reduced in RF Units used with the HP Model 8690A/B Sweep Oscillator, serials below 937-01151, by replacing the high voltage power transformer with a new low leakage transformer, HP Part Number 9100-2882.

PARTS REQUIRED FOR INSTALLATION:

Qty	Description	HP Part Number
1	terminal strip, 5 lug . . .	0360-0018
4	8:32 x 5/8" machine screw	2510-0109
4	#8 flatwasher	3050-0001
4	#8 lockwasher	2190-0010

INSTALLATION PROCEDURE:

1. Remove instrument line cord.
2. Remove top and bottom covers and left side cover.
3. Remove plastic protective shield from back side of A8 High Voltage Power Supply board.
4. Turn instrument upside down and locate the white wire, gray wire, orange wire and yellow wire connected to the A8 High Voltage

Power Supply Board. Clip the wiring harness ties binding these wires together back to the point where they enter the main harness.

5. Disconnect both ends of the orange wire running from T1 Pin 10 to A8. Pull wire out of harness and discard it.
6. Disconnect both ends of the gray wire running from T1 to A8. Pull wire out of harness and discard it.
7. Disconnect both ends of the yellow wire running from T1 pin 9 to A8. Pull wire out of harness and discard it.
8. Disconnect both white wires at T1 pin 6. One of these wires runs to chassis mounted capacitor C1. Disconnect other end of this wire at C1. Pull the wire out of the harness and discard.
9. The remaining white wire which was removed from T1 pin 6 should now be connected to the C1 terminal that the other white wire was just disconnected from. Solder the connection at C1.
10. Remove screw holding cable clamp to deck between C1 and C2. Remount cable clamp with same screw but on other (top) side of deck.

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For more information, call your local HP Sales Office or East (201) 265-5000 • Midwest (312) 677-0400 • South (404) 436-6181
 West (213) 877-1282. Or, write: Hewlett-Packard, 1501 Page Mill Road, Palo Alto, California 94303. In Europe, 1217 Meyrin-Geneva, Switzerland

11. Mount new terminal strip under the C1 mounting screw farthest from the side of the instrument.
12. Clip remaining wires connected to T1. Remove four mounting screws and remove T1 transformer assembly from instrument.
13. Locate wiring harness which crosses behind T1 and just in front of C1 and C2. Clip wiring harness ties as necessary and push harness toward back of the instrument so it crosses directly over C1 and C2.
14.
 - a. Remove four screws mounting A9 rectifier board.
 - b. Locate wiring harness crossing in front of old T1 mounting position. Push this harness inside the A9 board stand-offs to make room for the larger transformer.
 - c. Locate wiring harness running from front to back of instrument under the edge of the A9 rectifier board. Pull this harness out from under the A9 board and position it as close to the vertical instrument divider as possible.
 - d. Remount the A9 rectifier board.
15. Mount new transformer using the four 8:32 x 5/8 inch screws, flatwashers and lockwashers.
16. Solder the orange wire, yellow wire and gray wire from the transformer to the A8 high voltage power supply board. Wire connections at the A8 board are labeled on the board photo in the 8690 Operating and Service Manual.
17. Connect the white wire from T1 to the terminal of C2 which also has a white jumper wire connected. Solder the connection.
18. Connect the remaining wires from T1 and the remaining wires from the instrument wiring harness to the new terminal strip as shown in Figure 1 below.
19. Replace plastic protective shield on back of A8 High Voltage Board.
20. Replace top, bottom and left side covers.

This completes the installation. Change the parts list and schematics of your manual to show this new part.

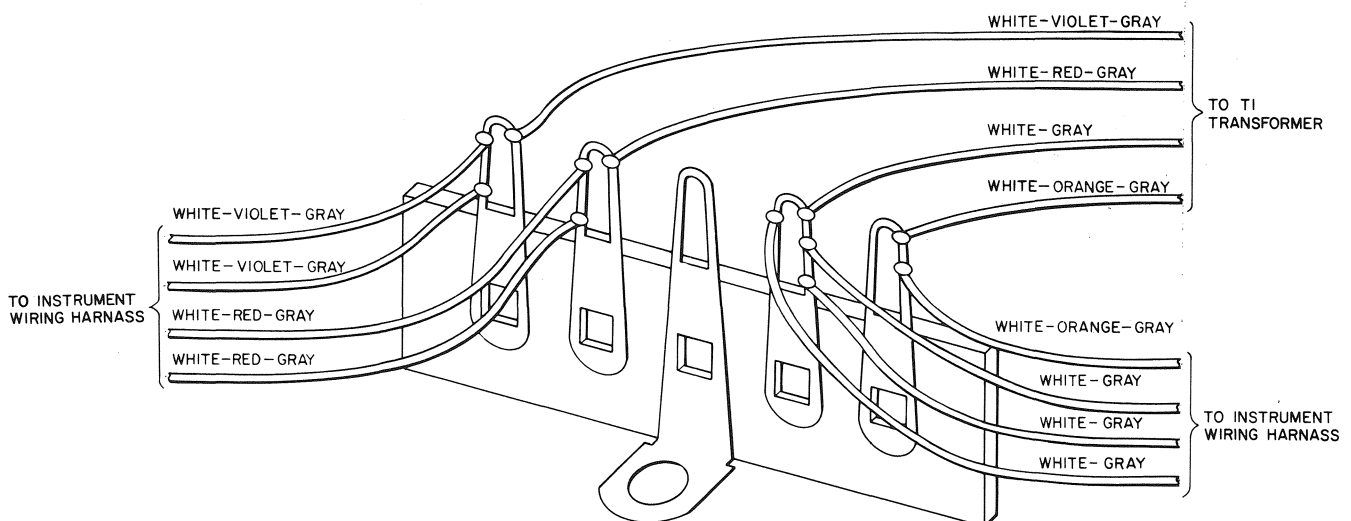


Figure 1.