

Supplies  
None

## HP MODEL 1710A OSCILLOSCOPES

All Serial Prefixes

### PROBE POWER MODIFICATION

Kit Part Number 01710-69503

This kit, HP Part No. 01710-69503, modifies the HP Model 1710A probe power voltages from +15 V and -15 V to +15 V and -12.6 V for optimum probe performance. Parts included in the kit are:

PC Board	01720-66516
2 Screws	2200-0149
2 Nuts	2260-0001
2 Lock washers	2190-0004
2 Spacers	0380-0034
Wht/Vio Wire 24 gauge - 14-1/2 inches	8150-0464
Wht/Orange Wire 24 gauge - 16 inches	8150-0460
Black Wire 22 gauge - 3 inches	8150-0005
Ground Lug	0360-0005
Service Note	1710A-4

To install the kit, proceed as follows:

1. Remove instrument covers.
2. Unsolder both White/Violet wires that are connected to the probe power jack next to the Channel B attenuator.
3. Disconnect the White/Violet wire from the square pin connector on vertical preamplifier board (see Figure 1). Pull this wire completely out of the wire harness assembly and discard.

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Printed in U.S.A.

4. Solder the remaining White/Violet wire back to the probe power connector from which it was removed in Step 2.
5. Using the PC board as a template, mark, centerpunch and drill 2 1/8 inch holes in the low voltage power supply board aluminum holder (see Figure 1).
6. If wires have not been soldered to the PC board, solder them as follows:
  - Black wire to 0V
  - White/Violet wire to -12.6V
  - White/Orange wire to -15V(No connections are necessary for the +15V)
7. Mount the PC board on the inside of the aluminum holder, using the hardware provided. The spacers should be placed between board and metal to allow access to the PATT and ORTH adjustments underneath.
8. Connect the Black wire and ground lug to the adjacent ground screw that secures the LVPS mother board to the chassis. Take care not to allow ground lug to short out components on board.
9. Connect the White/Orange wire to the square-pin connector discussed in Step 3.
10. Solder the White/Violet wire to the existing White/Violet already connected to the probe power jack closest to the Channel A attenuator.
11. Apply power and check for proper voltage (refer to Figure 2).
12. No instrument recalibration is necessary.

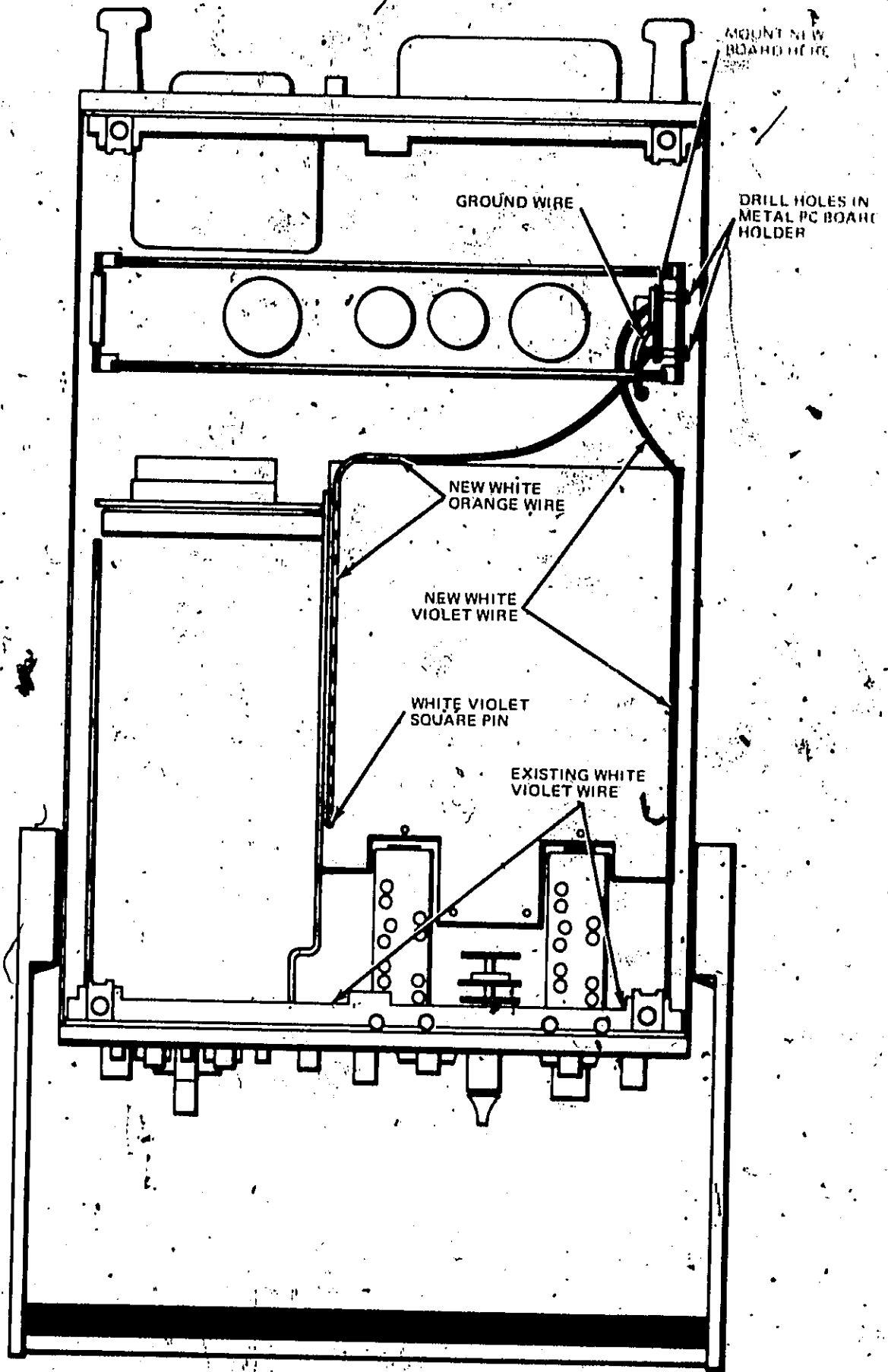


FIGURE 1. BOTTOM VIEW OF MODEL 1710A

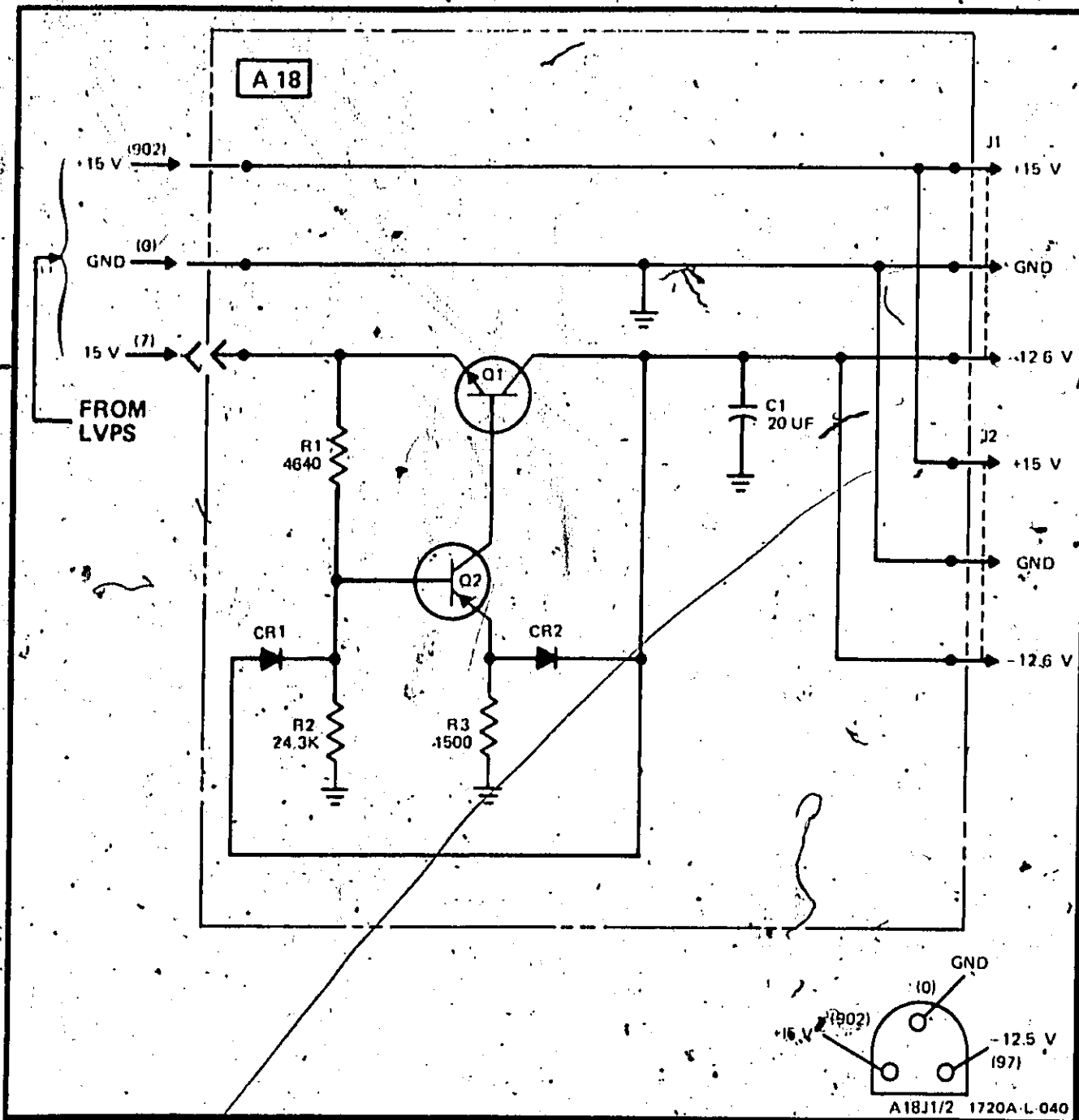


Figure 2. Probe Power Schematic

Table 1. Parts on PC Board

Ref. Desig.	HP Part No.	Description
C1	0180-0045	C: 20 µF, 25 VDCW
CR1,2	1901-0028	CR: Diode SI
Q1	1854-0039	TSTR: SI NPN
Q2	1853-0086	TSTR: SI PNP
R1	0698-3155	R: 4.64 K 1/8 W
R2	0757-0451	R: 24.3 K 1/8 W
R3	0683-1525	R: 1.5 K 1/4 W