
June 12, 1967

HP-23
AC Power Supply

Bulletin No:
HP-23-1D

Increase Fuse Capacity

Increase the fuse capacity from 3 Amps [PN 421-2], to 4 Amps SLO-BLO [PN 421-5]. This will avoid needless failure in use and will not overtax the fused circuits.

May 23, 1974

HP-23 & HP-23A
No:
AC Power Supply

Bulletin
HP-23-1

HP-23 & HP-23A Service Guide

Check the resistance to ground at the power plug pins:

PIN 1	48K OHM
PIN 3	50K OHM
PIN 4	100K OHM
PIN 7	ZERO RESISTANCE
PIN 11	11K OHM

The filter choke L1 has a resistance of OF 100 ohms.

The silicon diodes used in the HP-23 are standard power diodes rated at 500V PIV & 705MA.

Make forward & reverse resistance measurements on the diodes D1 through the diode, a resistance reading through the diode, a resistance reading of about 10 ohm in one direction is correct. Reversing the leads should show a reading of infinity for a normal diode. Should the readings be more or less, it would indicate an open or shorted diode.

Following are the resistance of the transformer windings as measured with a 11 Megohm VTVM:

Black to Black	1 OHM
Red to Red Yellow	12 OHM
Brown to Brown Yellow	1.4 OHM
Brown Yellow to Blue	4.5 OHM
Green Yellow to Yellow	.2 OHM
Green Yellow to Green	.1 OHM
Green to Yellow	.1K OHM

Should you experience fuse blowing, this could be caused by the surge charging of the filter capacitors. In the early HP-23 supplies, a 30 AMP fuse was used. Now the supply is furnished with a 4 Amp Slo-Blo fuse. Note: HP-23A uses circuit breaker.

Check for loose hardware, intermittent solder connections & check ground connection between the capacitor mounting tab and metal mounting wafer.

June 21, 197

HP-23A, B
AC Power Supply

Bulletin No:
HP-23-2

Failure of Power Connector When Used In Service

Failure of the HP-23B power connector wiring will occur when the HP-23B is used on the Service Bench, caused by pulling on the power cable to disconnect the plug, or as a result of repeated rotation or movement of the cable while units are being serviced.

These failures can be reduced by changing the 11-pin plug cap to a cap with cable clamp [PN 440-8]. The clamp prevents lead separation caused by the cable rotating in the cap as the unit is being serviced, and will relieve some of the strain placed on the connector when the connector is removed by pulling on the power cable.

Sept 20, 1976

HP-23B
No:
AC Power Supply

Bulletin
HP-23-3

PN 57-27 Replacement Diode Leads Too Short

QA now cuts the leads of diodes to remove them from a strip on which they are received. This results in a diode lead length about one inch shorter than the older diodes.

To use this shorter lead diode at D7 of this power supply, it is necessary to splice wire onto the leads.

The next production run of these kits will have the AC switch S1 rewired, so D7 connects to a switch lug next to the terminal strip; permitting use of the shorter lead diodes. The screening of switch S1 position on the chassis will be changed so that the LV 250 DC and LV 300 DC are interchanged.

(This change will be in 04 level kits)

October 13, 1978

HP-23 Series
AC Power Supply

Bulletin No:
HP-23-4

Intermittent Operation

Ripple and voltage variations on the DC output lines when the supply is bumped or vibrated may cause intermittent operation.

Check the twist tab connections on C2 and C4 which may be making poor connection to the grounded mounting wafer.

Be sure the metal twist tabs are soldered to the wafer. Also, you may want to add a wire from lug 4 of terminal strip H [Ground] to the grounding tabs on capacitors C2 and C4 to insure proper grounding.
