

S E R V I C E N O T E

SUPERSEDES: NONE

37717B PDH/SDH/Jitter Test Set

Serial Numbers: GB00000000/GB00000988

Intermittent Operation due to PSU Module Problem.

To be Performed by: Qualified Service Personnel

Parts Required

Description	Part Number	Quantity
PSU Low-Voltage Cable Adaptor Kit	37717-60155	01
PSU Low-Voltage Cable	37717-60028	01

Situation

A problem with the cable which connects the low voltage supplies from Power Supply Module to the Motherboard can cause intermittent operation of the instrument. In the worst case, the display will be blank, the fans will not be turning and the front panel leds will not be lit.

The problem is caused by high-resistance on the crimp connections on this low-voltage cable. The connection will deteriorate over time as a result of overheating and eventually fail either intermittently or permanently.

Continued

DATE: April 1997

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:	IMMEDIATELY ON SPECIFIED FAILURE AGREEABLE TIME	STANDARDS:	LABOR 1.0 Hours	
LOCATION CATEGORY:	CUSTOMER INSTALLABLE ON-SITE SERVICE CENTER	SERVICE INVENTORY:	RETURN SCRAP SEE TEXT	USED PARTS: RETURN SCRAP SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: April 1999		
AUTHOR: GH	ENTITY: 1400	ADDITIONAL INFORMATION:		

Solution/Action

If the above specified failure occurs or is suspected on any 37717B unit in the above serial range, it is recommended that a Replacement Cable and Adaptor Kit be ordered and fitted. The new cable has improved crimps and the Adaptor Kit is designed for improved electrical contact and to distribute the current load into the PSU Module thereby reducing the possibility of overheating.

CAUTION

Suitable safety precautions must be observed when working with the Power Supply Module as lethal voltages are present on and near this assembly. Always ensure the instrument is disconnected from the line supply before starting this replacement procedure.

Follow the procedure below when fitting the adaptor kit and cable.

1. Switch off the 37717B and DISCONNECT THE POWER CORD.
2. Remove the rear panel feet.
3. If Optical Modules are fitted, unscrew optical shields from the input and output connectors.
4. Withdraw the outer cabinet sleeve back and out of the instrument.
5. Remove the clamp screws along the top and bottom right-hand side of the chassis which secure blanking plates and modules.
6. Withdraw modules and blanking plates (including the CPU module) from the instrument using the two knobs to help with removal.

Hint : If a module is difficult to remove, insert an 8mm (5/16AF) open-ended spanner under one of the module knobs and lever out against the knob on the adjacent module.

CAUTION

Never use a screwdriver or other sharp implement to lever the module as circuit tracks may be cut or the module metalwork irreparably damaged.

7. With the instrument face-up on the bench, unplug the cables/connectors from J8, J15 and J18 on the Motherboard (A3).
8. Cut the plastic tie-wrap which joins the fan cable to A3 J18 cable.
9. Unscrew the screws securing the Line Input Assembly to the top, bottom and rear of the instrument.
10. Unscrew the screws securing the Power Supply Module to the top, bottom and rear of the instrument.
11. Remove the Line Input Assembly and Power Supply Module together from the instrument.
12. With the PSU Module on the bench, remove all screws securing the Low-voltage Cable to the Connector Block.

Discard the Low-voltage Cable.

13. Fit the parts from the Adaptor Kit to the PSU Module Low-voltage Connector Block as shown in Figure 1.
14. Attach each wire from the new Low-voltage Cable onto the new adaptors on the PSU module as shown in Figure 2.
15. Replace the PSU Module as a reversal of steps 7 to 12. (Fit a new tie-wrap in step 8).
16. Replace all the modules back into the instrument in the same order as they were removed.
17. Replace the outer cabinet sleeve, optical module shields and rear panel feet - this is a reversal of the removal procedure.

Testing

CAUTION

Ensure the voltage selector switch on the instrument rear panel is set correctly for the line voltage in use.

1. Switch on the instrument and check for a valid display.
2. Obtain a pass on all instrument Selftests.

The instrument is now ready for use.

Table 1 - PSU Low-Voltage Cable Adaptor Kit Contents

Description	Part Number	Quantity	Reference (Figure 1)
Terminal Block	37717-20200	4	A
Machine Screw M3 x 6mm	0515-0886	8	B
Machine Screw M4 x 16mm	0515-1106	4	C
Lock Washer M3	2190-0584	8	D
Lock Washer M4	2190-0586	4	E

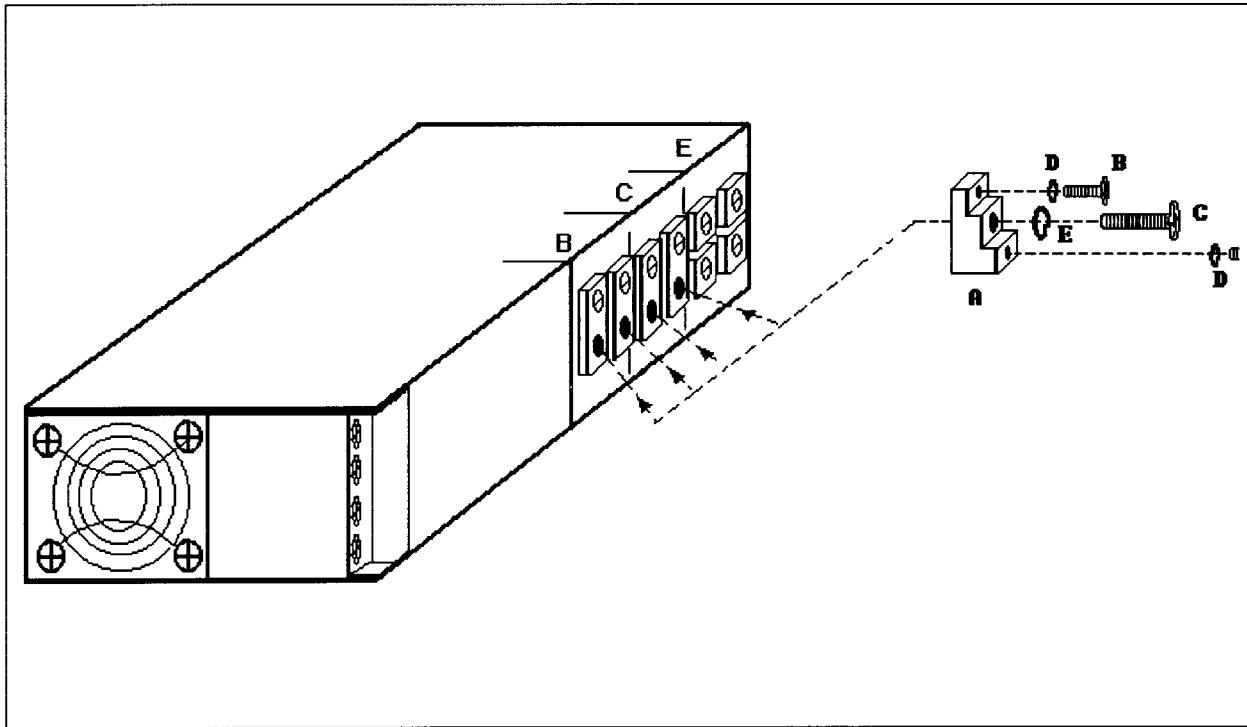


Figure 1 - Fitting Parts from Adaptor Kit to PSU Module Low-voltage Connector Block

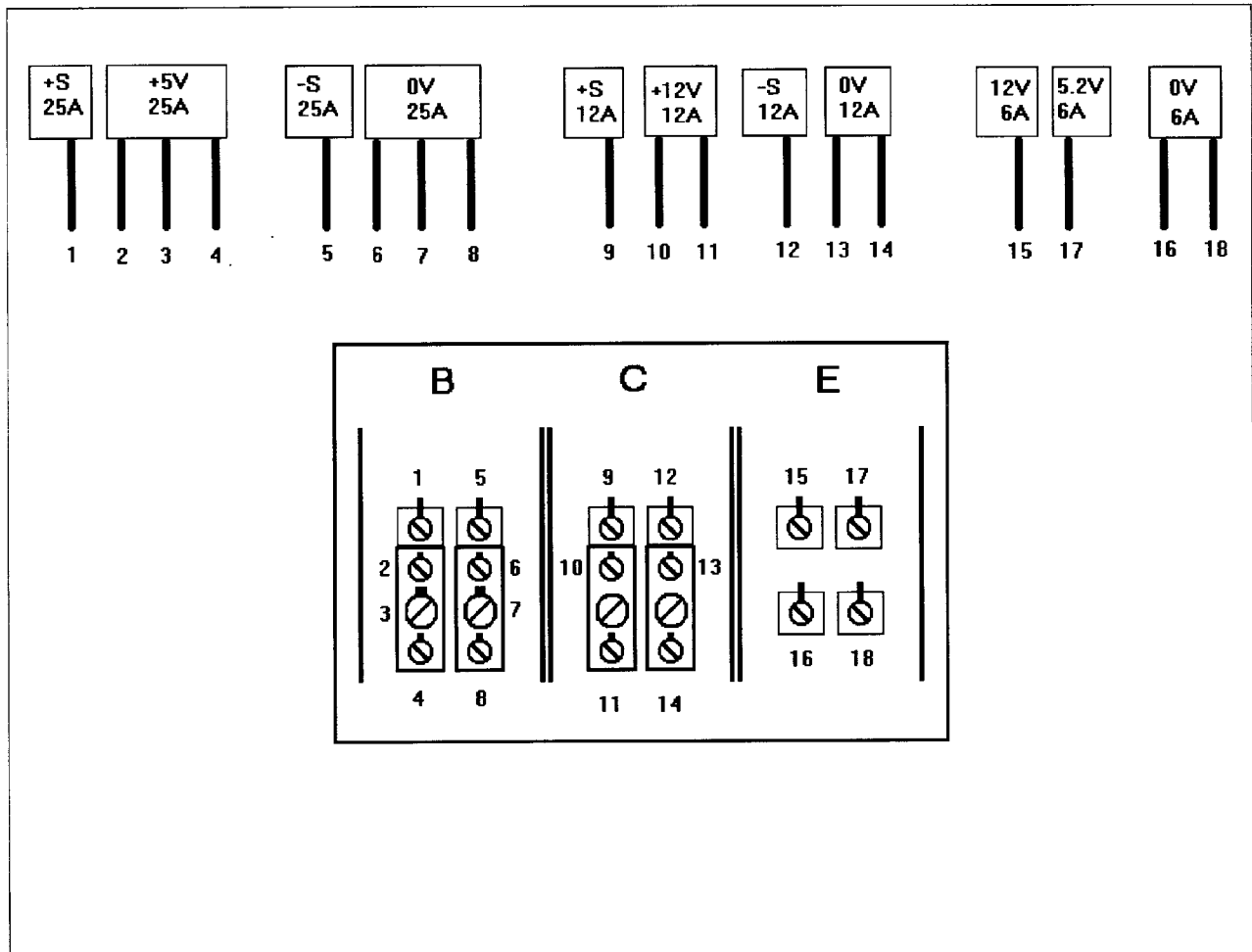


Figure 2 - Wiring New Low-voltage Cable Onto New Adaptors on the PSU Module