

S E R V I C E N O T E

SUPERSEDES: NONE

37717B PDH/SDH/Jitter Test Set

Serial Numbers: N/A

Options: All

Build Status: 2:23 to 2:69

Instrument Fails to Download Firmware via Floppy disk

To be Performed by: Qualified Service Personnel

Parts Required:

Description	Part Number	Quantity	Build Status Affected
Screened disk- drive Kit	37717-60190	1	2:23 to 2:40 (inc)
Insulated Wire		0.25 Metre	2:23 to 2:69(inc)

Situation

Problems may be encountered when downloading firmware via disks on 37717B units with Build Status Number in the above range (the instrument Build Status is recorded on a label attached to the rear panel).

Continued

DATE: March 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: March 1999		
AUTHOR: DBG	ENTITY: E610	ADDITIONAL INFORMATION:		

Typically the process (described in Service Note 37717B-01A) will not complete and a Fatal Error may occur.

These problems are due to insufficient RFI screening on the new version of disk drive introduced at BS2:23. Improved screening was introduced into production units at BS2:41.

A wire-link modification to the processor PCB to improve the stability of the disk-drive supply voltage should also be done on these units. This modification was introduced at BS 2:69.

Solution/Action

If any 37717B unit with Build Status between 2:23 and 2:69 (inclusive) is encountered, carry out the wire-link modification to the processor PCB as described below.

In addition, if the Build Status is between 2:23 and 2:40, order the special Screened disk-drive Assembly Kit and fit this by following the procedure below. This specially screened disk drive is more resistant to PSU generated RFI and will prevent the corruption of data which causes the downloading problem to occur.

Procedure

Removing the Processor (CPU) Module

1. Switch off the 37717B and DISCONNECT THE POWER CORD.
2. Remove the rear panel feet.
3. If Optical Modules are fitted, unscrew the optical shield from the input and output connectors.
4. Withdraw the outer cabinet sleeve back and out of the instrument.
5. Remove the clamp screws on the top and bottom right-hand side of the chassis which secure the CPU Module (see Figure 2).
6. Withdraw the CPU module from the instrument.

Hint: If this 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.

Adding the Wire-Link (See Figure 1)

Dismantling the Processor

The old disk-drive is replaced together with the processor front panel as this makes for easier dismantling and assembly procedures and removes the requirement for precision alignment.

1. Unscrew the four posidrive screws which secure the Disk Drive with its metal shield to the disk-drive supports on the CPU Board (Figure 2 item A).
2. Unscrew the nut which secures the Disk Drive to the CPU module front panel (Figure 2 item B).

3. Unclip the GPIB and RS-232 ribbon cables from their sockets on the CPU board. Feed the GPIB ribbon cable out through the slot in the disk drive metal shield.
4. Unclip the disk-drive ribbon cable from it's socket on the CPU board and place the disk-drive and metal shield to one side in an anti-static bag.
5. Unscrew the two nuts which secure the PARALLEL Interface Connector to the module Front Panel (Figure 2 item C).
6. Using a long posidrive screwdriver, unscrew the two screws which secure the module Front Panel to the CPU Board (Figure 2 item D).
7. Remove the module Front Panel and place to one side.
8. Unscrew the nuts (Figure 2 item E) securing the four disk-drive supports to the CPU Board. Discard these supports (Figure 2 items F and G).
9. Fit the two new supports from the kit in the rear two support holes only (Figure 2 item G).

Fitting the New Disk-Drive/Front Panel

1. Clip the GPIB ribbon cable from the new Front Panel into it's socket on the CPU board.
2. Clip the new disk-drive ribbon cable into it's socket on the CPU board.
3. Align the CPU Board with the holes in the new front panel and secure using the original two screws.
4. Clip the RS232 ribbon cable from the new Front Panel into J2 socket on the CPU board.
5. Secure the new Disk Drive to the new rear disk-drive supports on the CPU Board using two of the original screws.
6. Replace the two nuts which secure the PARALLEL Interface Connector to the new Front Panel.

Fitting the CPU Module and Re-assembling the Instrument.

11. Replace the CPU module back into the instrument.

VERY IMPORTANT NOTE

To prevent removal of, or damage to the metal RFI STRIP on the module next to the CPU, you **MUST** use special tool part number 03776-00016 or a thin LOW-STATIC plastic or fibre card (200mm x 135mm x 0.5mm) when inserting the CPU module back into the instrument. Place this card against the RFI Strip, then slide the CPU Module back into the instrument. Push the CPU Module fully home, then pull out the card - see Figure 3.

CAUTION

Severe damage can result if an RFI Strip is dislodged and falls inside the instrument. Always ensure that RFI strips are securely in position and unbroken.

12. Replace the outer cabinet sleeve, optical module shields and rear panel feet - this is a reversal of the removal procedure.

Testing

1. Switch on the instrument and check for a sensible display.
2. Carry out the procedure for downloading the new firmware described in Service Note 37717B-01. Ensure the new firmware upgrade has completed successfully.
3. Obtain a pass on all instrument Selftests.

The instrument is now ready for use.

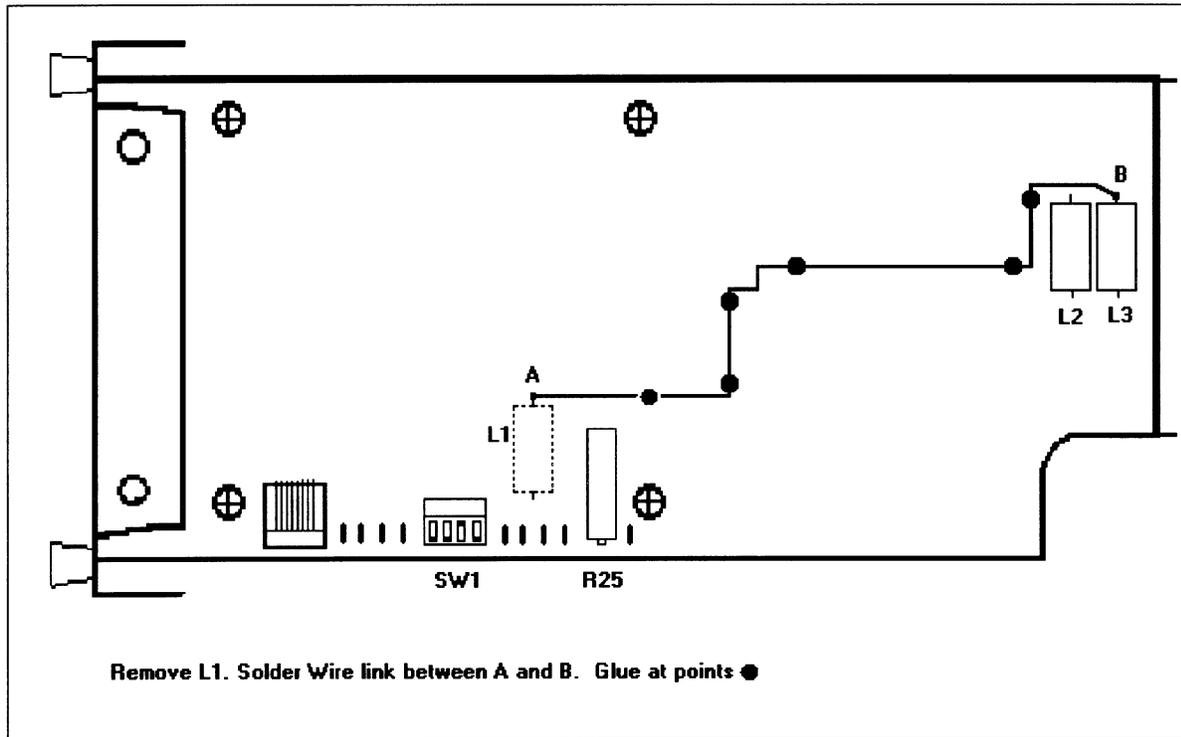


Figure 1 - Showing the Wire-Link modification to the Processor Board

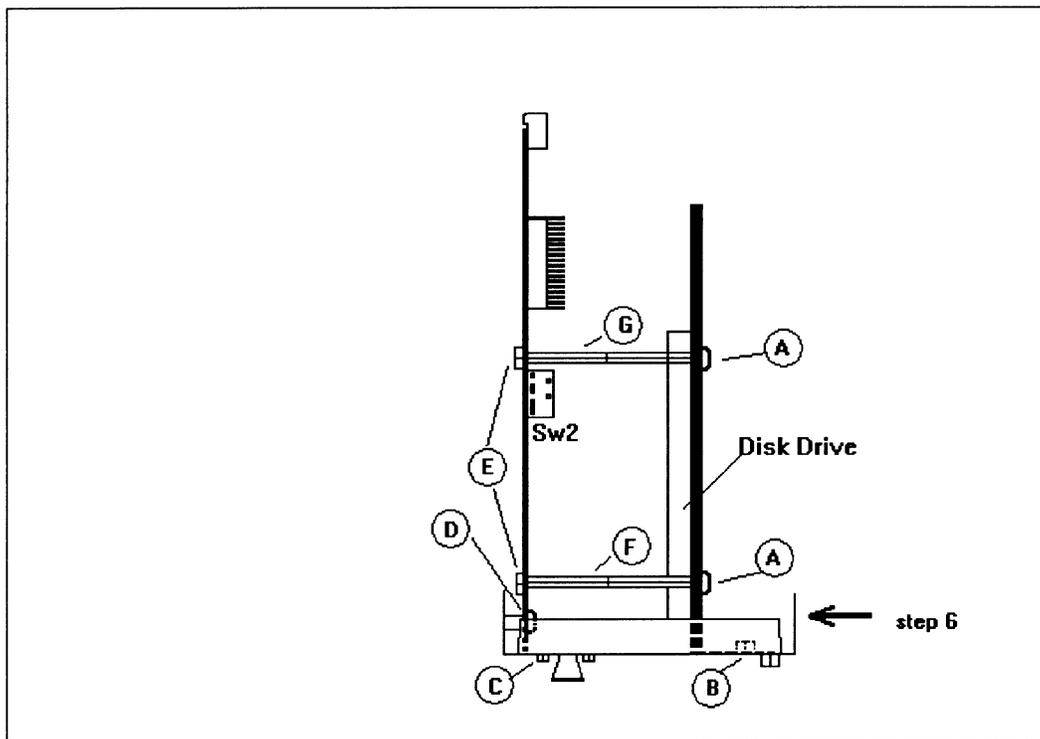


Figure 2 Processor Module (viewed from top)

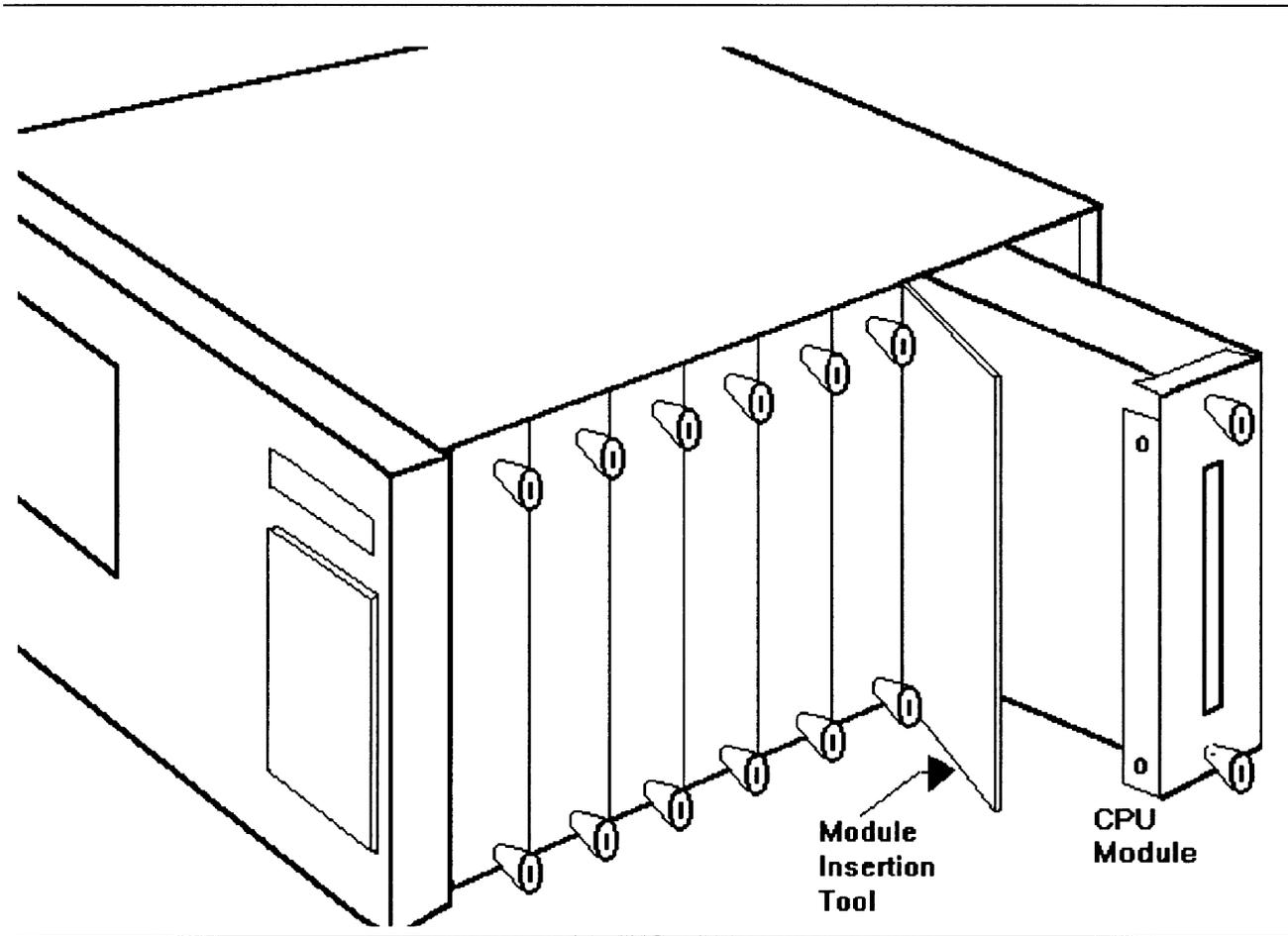


Figure 3 Position of Processor Module and Insertion Tool