

## S E R V I C E N O T E

SUPERSEDES: None

**85942A Video Signal Monitor**

Serial Numbers: 0000U00000 / 3607U00187

**WARNING****POSSIBLE SHOCK HAZARD**

Lack of instrument earth/ground, combined with possible detachment of internal line module wires due to manufacturing defect, may create shock hazard.

**To Be Performed By:** Agilent-Qualified Personnel - (US and A/P instruments must be returned to Englewood CSC for repair. European instruments must be returned to Winnersh CSC)

**Parts Required:**

P/N	Description
85942-61032	Line Module Assembly

*Continued*

DATE: June 1996

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
<b>PRIORITY SAFETY</b>		
ACTION CATEGORY:	IMMEDIATELY	STANDARDS: LABOR: 0.5 Hour
LOCATION CATEGORY:	<input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	ALWAYS	USED PARTS: <input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AUTHOR: DC	ENTITY: E600	AGILENT RESPONSIBLE UNTIL: ALWAYS
ADDITIONAL INFORMATION:		

**Situation:**

The 85942A has a line module assembly (85942-61002) that includes 3 wires, connecting to the power supply assembly. The power supply connection is made using crimps on each wire. On some line module assemblies, these wires have been inadequately attached to the crimp, and can become easily disconnected. This could result in the instrument chassis going live under a double fault condition - failure of the crimp contact, and failure of the customer to earth/ground the instrument via the power cord. Also, at the line module end of the cable, the earth/ground wire may be attached only by solder on some assemblies, rather than being mechanically attached before soldering. The hazard is a particular risk in countries without an earth/ground on the mains system.

**Solution/Action:**

The repair consists of replacing the old line module assembly (85942-61002) with the new assembly (85942-61032), as follows:

**1. Line Module Replacement**

- a) Remove the instrument's top cover.
- b) Remove the 2 screws attaching the line module to the rear panel.
- c) Remove the 4 screws securing the power supply cover, and lift off cover to expose the line module assembly, and power supply assembly.
- d) Disconnect the line module assembly from J1 on the power supply assembly.
- e) Unbolt the line module assemblies earth/ground connection to the instrument's bottom panel, and remove the line module assembly.
- f) Insert new line module assembly (85942-61032), and attach earth/ground wire to bottom panel. Reconnect to J1 on the power supply assembly.
- g) Replace the power supply cover and 4 screws.
- h) Replace the 2 screws attaching the line module to rear panel.
- i) Replace instrument cover and screws.

**2. Electrical Checks**

- a) Test for continuity of the safety earth/ground between the power cord earth/ground and chassis.
- b) Test for mains isolation by performing a "Hi-Pot" test between the mains terminals connected together on one side and the earth/ground on the other. The test voltage should be 1.5 kV at nominal mains frequency applied for at least 2 seconds. No breakdown or repeated flashover should occur.

**3. Operational Checks**

- a) Connect the video monitor & keyboard to the 85942A.
- b) Power up the instrument, and wait until boot-up sequence has completed.
- c) Ensure the monitor displays "Calan 85942A Video Signal Monitor," followed by the DLP revision number. If it does not, then the DLP should be reloaded using the Calan Windows Interface software.
- d) Press F3, then F4 to select the internal Test Signal, and ensure a signal is displayed on the video monitor. This confirms that the basic analogue paths are functioning correctly, and completes the repair.