

S E R V I C E N O T E

SUPERSEDES: NONE

4934A Transmission Impairment Measuring Set

Serial Numbers: 0000U00000/3737U15010

All units with RS-232 option fitted within the above serial number range.

Instructions for ground modifications

Situation:

To improve the impulse noise measurement, the removal of Pin 31 of connector J11 on the A1 card of 4934A should be carried out. This removes an analogue ground between A1, the control board and A3, the transmitter/receiver card. This has the effect of decoupling digital noise generated on the A1 control board from the input stages of A3.

Tools required:

Pozi-drive screwdriver, set of small long-nosed engineer's pliers and an anti-static wrist-strap.

NOTE:

Modifications should be performed at an ESD safe workstation using a wrist-strap connected to an approved earth point. The unit should be disconnected from the mains supply.

Continued

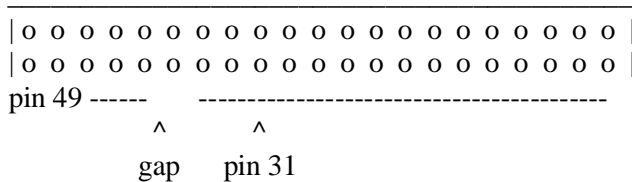
DATE: July 1998

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR 1.0 Hours
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY:	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AUTHOR: GS	ENTITY: E600	AGILENT RESPONSIBLE UNTIL: July 2000	
		ADDITIONAL INFORMATION:	

Instructions:

1. Turn the unit upside-down.
2. Use the pozi-drive screwdriver to remove 4 screws holding the feet and the top and bottom halves of the case together.
3. Gently shake the bottom cover (viz, cover now at the top) at the same time as pulling it upward. Put the cover to one side.
4. Slide bail-handle up out of its retaining slots and put to one side.
5. The three boards which make up the 4934A can now be seen. The A1 board upon which we have to perform the pin extraction is the one at the "bottom" of the stack.
6. With the unit still lying upside-down and the front panel facing towards the operator, the connector which must be removed can be seen on the left hand side connecting to the A1 board right at the bottom of the unit. There are two ribbon cables around here - we are interested only in the large 50-way connector plugged into the grey connector on the board. The "J11" component designator can be seen at the end nearest to the mains input module.
7. Use the pull-tab to remove the connector from the J11 plug on the board. This should be all that needs to be removed - the ribbon cable can be held up sufficiently to allow access to the connector on the board.
8. Locate pin 31 on the J11 connector - to do this turn the unit through 90 degrees, such that the front panel is to the right hand side. The J11 connector should now be facing the operator. The row of pins on J11 now closest to the operator are numbered, from left to right, 1,3,5,7,9,11,13, etc all the way up to 49 at the extreme right - the pin numbers 1 and 49 can be seen screened on the board. Pin 31 is the third pin along from the polarizing slot on the plastic body.



9. Grip the tip of the pin with the long nosed pliers and bend it at an angle, up and left as in the above diagram. Take care not to disturb any of the adjacent pins - bend back and forward until the pin breaks off at the base of the connector body. This saves laboriously pulling the 3 board stack out of the cover.
10. Discard the broken pin and examine the connector making sure all remaining pins are in line and not bent. Also check correct pin has been removed.
11. Replace ribbon cable connector and press down to ensure complete engagement. Make sure this step is carried out correctly.
12. Replace handle, ensuring the "Agilent" logo moulded on the grip is the right way up when the unit is finished.

13. Fit the cover back on, making sure everything goes in the correct slot.
14. Replace the long fixing screws, making sure the feet sit correctly in the slots milled on the bottom cover. Ensure screws go straight into the cover as they can get stuck at an angle.
15. Tighten up the screws and turn the instrument the right way up. The calibration should not have been affected by the modification, but some basic checks should be done along with the Impulse Noise check to ensure integrity.