

S E R V I C E N O T E

SUPERSEDES: None

70621A Preamplifier

Serial Numbers: 0000A00000 / 3005A00160

Exceptions: 2951A00195, 2951A00197, 2951A00198, 2951A00199,
2951A00202 3005A00157 to 3005A00160

Eliminate residual responses caused by a noisy power supply

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

Part No.	Description
9140-0565	A2L6 43 uH
0757-0403	A2R154 121 ohms 26 ga. jumper wire
0470-0634	Hardman Adhesive
9320-5105	Blank Label
1 of the following	
70620-60116	W5 70620B Harness Assembly
or	
70621-60007	W5 70621A Harness Assembly

Continued

DATE: 01 November 1992

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:					
MODIFICATION RECOMMENDED					
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	STANDARDS:	Labor 3.0 Hour		
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 type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT	USED PARTS:	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: 01 November 1993			
AUTHOR: DWH	ENTITY: A100	ADDITIONAL INFORMATION:			

Situation:

Residual responses are occurring in the 1.5 to 3.5 MHz range in systems using the 70620B Option 001 or the 70621A Preamplifiers. The responses are caused by digital signals that are present on the A2 Power Supply/Controller Board which are conducted onto the +5V supply and also onto A4 Hi/Lo Band switch control line. The +5V supply is shared by the A7 RF amplifier microcircuit which is highly sensitive to a contaminated supply.

Solution/Action:

The biasing for the RF amplifier is changed from the +5V to a +6V supply which is isolated from the digital signals. An inductor is also added in series with the switch control line to work with the feedthru capacitor in the switch to create a low pass filter. R154 is in parallel with L6 to limit the Q of the filter to 2.

Modification:

A2 Power Supply/Controller Board Modification.

1. Jumper A2W2 with 26 ga. wire to A2J5 pin 13. See Fig 1.
2. Secure the wire to the A2 board with Hardman Adhesive.
3. Remove the original A2R154 and replace it with a 121 ohm resistor.
4. Load A2L6 "piggy back" onto A2R154 and solder into place. See Fig 1.
5. Remove original W5 wiring harness assembly and replace with the 70620-60116 for the 70620B or 70621-60007 for the 70621A.

Note: The 70620-60116 and the 70621-60007 wiring harnesses are not backwards compatible unless the above modification is made to the 70620-60100 board.

6. Type the new part number 70620-60117 on the blank label and attach over the old board number.
7. Perform all adjustments and verification tests using the 70620B/70621A Module Verification Rev. B.01.01 or later.

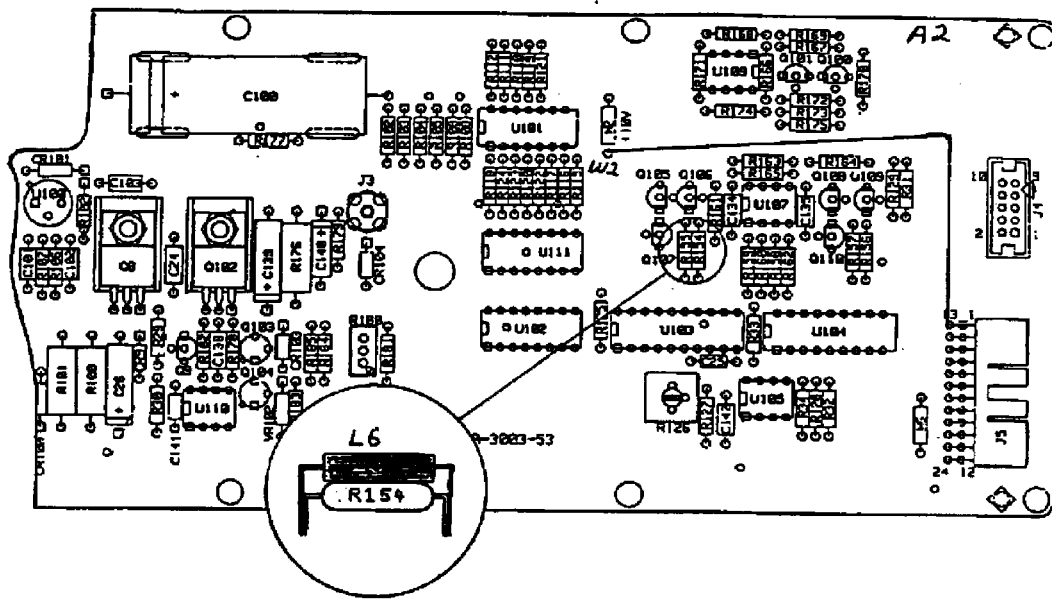


Figure 1. A2 Power Supply/Controller Board