

S E R V I C E N O T E

SUPERSEDES: None

70908A RF Section**Serial Numbers:** 0000A00000 / 3021A00796**Replacement of A12U7 EEPROM to eliminate baseband (100 Hz to 2.9 GHz) N*40 Hz spurious****To Be Performed By:** Agilent-Qualified Personnel**Parts Required:**

Part No.	Description
70908-80075	EEPROM

Situation:

Spurious products occur in the first 20 KHz of the 70908A 1H- band around the LO feedthrough signal at N*40 Hz in the 70908A RF sections within the serial number range listed above. These spurious products are caused by the search oscillator in the discriminator lock loop. This oscillator tunes the SYTFMD at about a 40 Hz rate and induces pulses into the RF signal path. The spurious products are especially noticeable with a 70900B as the LO module due to improved phase noise performance. The spurious are barely noticeable with a 70900A as the LO module in the system.

Continued

DATE: 27 August 1992

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	☐ IMMEDIATELY ☐ ON SPECIFIED FAILURE ☒ AGREEABLE TIME	STANDARDS: Labor 3.0 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: 01 September 1993
AUTHOR: RDS,SJR		ENTITY: 5300	
ADDITIONAL INFORMATION:			



Solution/Action:

The 70908A firmware was revised in order to toggle a control line to the search oscillator driver. This effectively prevents the search oscillator from tuning the main coil in the 100 Hz to 2.9 GHz (1H-) band.

Modification:

1. Remove A12U7 (part number 70908-80001) from the A12 MSIB Control board in the 70908A RF section.
2. Replace A12U7 with the new EEPROM (part number 70908-80075).

Note:

An alternative to replacing the EEPROM is to order the new 70908A A12 MSIB-Control board part number 70908-60057. This board will have all of the latest changes including the new EEPROM, and the write enable Test Point Pins; TP4 and TP5 (see Service Note 70908A-16).

3. Run the 70908A RF Section Module Verification software to enter the module serial number.
4. Perform and pass the “FLATNESS” test from the 70908A RF Section Module Verification software. This test will generate the appropriate frequency response correction factors that will be programmed into the EEPROM.
5. Perform and pass the “NOISE FIGURE” test from the 70908A RF Section Module Verification software. This test provides added assurance that the module is aligned and functioning properly.
6. Perform Limited Cal utilizing the 11990A System Performance Test software.