

S E R V I C E N O T E

SUPERSEDES: NONE

83599A RF Plug-in (.01 to 50 GHz)

Serial Numbers: 0000A00000 / 9999Z99999

Adjustments to correct band 0 harmonics

Duplicated Service Notes: 83597B-01

Situation:

The following adjustment should be used to correct band 0 harmonics.

Continued

DATE: January 1997

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	☐ IMMEDIATELY ☒ ON SPECIFIED FAILURE ☐ AGREEABLE TIME	STANDARDS: LABOR 2.0 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: January 1999			
AUTHOR: DM	ENTITY: 5320	ADDITIONAL INFORMATION:	

Solution/Action:

If Band 0 Harmonic test fails (section 4-5), then follow this procedure.

1. Adjust "Internal Level Flatness" per section 5-13. 2. Do "Power Accuracy Calibration " for band 0 using section 5-14 with the following changes:
 - a. Step 3. Set the RF power on the plug-in to -2dBm. Using the FREQUENCY/TIME RPG, manually sweep through the frequency range and adjust A4R38 (0 Off) to obtain an equal amount or power above the -2.5 dBm reference level as below.
 - b. Step 4. Set the power on the plug-in to -12dBm. Repeat step 3, adjusting A4R40 (0 LO) to obtain an equal amount or power above the -12.5 dBm reference level as below.
 - c. Step 5. Set the power on the plug-in to +10dBm. Repeat step 3, adjusting A4R40 (0 LO) to obtain an equal amount or power above the +9.5 dBm reference level as below.
3. Perform the "Output Amplitude Test" for band 0 using section 4-2.
4. Perform "Spurious Signal Test" for band 0 harmonics using section 4-5
5. If band 0 harmonics pass, continue testing. If band 0 harmonics fail, replace A17 Amplifier