S E R V I C E N O T E

SUPERSEDES: NONE

HP 8591E, HP 8590L, HP 8590D, 8591C Spectrum Analyzers

Serial Numbers:

8590D-08: 0000A00000 / 9999Z99999 8590L-05: 0000A00000 / 3619A01223 8591C-08: 0000A00000 / 3619A01418 8591E-10: 0000A00000 / 3619A05248

Low Frequency Residual improvement.

Duplicate Service Notes: See Above

To Be Performed By: HP-Qualified Personnel

Parts Required:

HP P/N Description

08590-60197 Analog Board 08591-60072 Analog Board

Situation:

Instruments may fail for low frequency residuals. This is believed to be a day one problem. Failures will occur between 20-30 Mhz. center frequency.

Continued

DATE: August 1996

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION RECOMMENDED		
ACTION CATEGORY:	☐ IMMEDIATELY ■ ON SPECIFIED FAILURE ☐ AGREEABLE TIME	STANDARDS: LABOR 1.0 Hours
LOCATION CATEGORY:	☐ CUSTOMER INSTALLABLE☐ ON-SITE☐ HP LOCATION	SERVICE ☐ RETURN USED ☐ RETURN PARTS: ☐ SCRAP ■ SEE TEXT ■ SEE TEXT
AVAILABILITY:	PRODUCTS SUPPORT LIFE	HP RESPONSIBLE UNTIL: August 1998
AUTHOR: BD	ENTITY: 5320	ADDITIONAL INFORMATION:

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Page 2 Service Note 8590D-08

Solution/Action:

The low frequency residual can be eliminated by changing C54 from 0160-4832 .01uf to 0161-5412 16pf. This part can be changed automatically whenever one of the above models is in the service center or you can measure the residuals and see if they are out of spec and then opt to change the part on the A7 Analog board. Below is a procedure for testing the residual:

- 1) Set the center frequency to 20 Mhz. step size 100 Khz.
- 2) Res. BW 3 Khz., Input Attenuator 0dB, Ref. Level -60dBm.
- 3) Press the UP arrow key with center frequency active and look for residual responses -90 dBm for 50-ohm inputs and -38dBmV for 75-ohm inputs. If you notice a failure you will need to change out C54.