S E R V I C E N O T E

SUPERSEDES: None

HP 8562A Portable Spectrum Analyzer

Serial Numbers: 0000A00000 / 9999A99999

Duplicate Service Notes: None

YTF adjustment procedure

To Be Performed By: HP-Qualified Personnel, Customer

Situation:

The most recent version of the HP8562A/B Service Manual (08562-90123) contains the adjustment procedure for the A10 Yig-Tuned Filter (YTF) for the HP8561A. This procedure only adjusts the YTF up to 6GHz. Using this procedure for an HP8562A will result in signal loss above 6GHZ. Earlier versions of the Service Manual, 08562-90009 and 08562-90062, describe proper YTF adjustment for the HP8562A.

Solution/Action:

Use the YTF adjustment procedure in the 08562-90009 or 08562- 90062 to manually adjust the HP8562A. The proper procedure is also described in this service note.

Note: Use the same equipment and setup as described in the HP8562A Service Manual.

1. Set the HP8562A [LINE] switch OFF and disconnect the line cord. Remove the analyzer's cover and connect the line cord. Connect the equipment as illustrated in Figure 2-11 of the 08562-90123 Service Manual. Set the [LINE] switch ON.

Continued

DATE: 19 November 1993

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION	ON:	
	INFORMA	TION ONLY
AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
GPB	5300	A10 YTF ADJUSTMENT PROCEDURE FOR HP8562A

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Move the WR PROT/WR ENA jumper on the A2 Controller Assembly to the WR ENA position.

3. Press [PRESET] on the HP8562A and set the controls as follows:

CENTER FREQ 5.8GHz SPAN

4. On the HP8562A, press [AMPLITUDE], MORE, IF ADJUST, IF ADJUST OFF, [INT], PRESEL ADJ, and PRESET ALL DACS.

0Hz

5. Press [PRESET] on the HP8340A and set the controls as follows:

CW 5.8GHz POWER LEVEL -10dBm FREQ STANDARD SWITCH (Rear Panel) EXT

6. Press PRESEL OFFSET on the HP8562A. Use the front-panel knob to peak the displayed trace. Note the offset value below.

Offset at 5.8GHz

- 7. Set the HP8562A CENTER FREQ and the HP8340A [CW] to 19.2GHz
- 8. On the HP8562A, press [INT], PRESEL ADJ, and PRESEL OFFSET. Enter the offset value noted in step 6.
- 9. Press PRESEL SLOPE on the HP8562A. Use the front-panel knob to peak the displayed trace. Note the slope value below.

Slope at 19.2GHz

- 10. Set the HP8562A CENTER FREQ and the HP8340A [CW] to 5.8GHz.
- 11. On the HP8562A, press [INT], PRESEL ADJ and PRESEL SLOPE. Enter the slope value noted in step 9.
- 12. Repeat steps 6 through 11 until both the slope and offset are peaked. Adjust the offset only at 5.8GHz and the slope only at 19.2GHz.
- 13. On the HP8562A, press [INT], PRESEL ADJ and PRESEL OFFSET. Press the Up Arrow key until OFFSET FOR BAND #2 is displayed in the active function block. Enter the offset value noted in step 6.
- 14. Press PRESEL SLOPE on the HP8562A. Enter the slope value noted in step 9.
- 15. If Option 026 is not installed, perform steps 16 through 21. If Option 026 is installed, perform steps 22 through 33.
- 16. Press the Up Arrow key on the HP8562A until SLOPE FOR BAND #4 is displayed in the active function block. Enter the slope value noted in step 9.
- 17. Set both the HP8562A CENTER FREQ and HP8340A [CW] to 20GHz.

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18. On the HP8562A, press [INT], PRESEL ADJ and PRESEL OFFSET. Press the Up Arrow key, if necessary, until OFFSET FOR BAND #4 is displayed in the active function block.

- 19. Use the data entry knob to peak the displayed trace.
- 20. Press PREV MENU, STORE DATA and YES on the HP8562A.
- 21. Place the WR PROT/WR ENA jumper on the A2 Controller Assembly in the WR PROT position.
- 22. Set both the HP8562A CENTER FREQ and HP8340A [CW] to 19.2GHz. On the HP8562A, press [INT] and PRESEL ADJ.
- 23. On the HP8562A, press PRESEL OFFSET. Use the data entry knob to peak the displayed trace. Note the offset value below.

Offset at	19.2GHz	

- 24. Set both the HP8562A CENTER FREQ and the HP8340A [CW] to 26.2GHz
- 25. On the HP8562A, press [INT], PRESEL ADJ and PRESEL OFFSET. Enter the offset value noted in step 23.
- 26. Press PRESEL SLOPE on the HP8562A. Use the data entry knob to peak the displayed trace. Note the slope value below.

Slope at 26.2GHz	
01000 at 20.20112	

- 27. Set both the HP8562A CENTER FREQ and the HP8340A [CW] to 19.2 GHz.
- 28. On the HP8562A, press [INT], PRESEL ADJ and PRESEL SLOPE. Enter the slope value noted in step 26.
- 29. Repeat steps 23 through 28 until both the slope and offset are peaked. Adjust the offset only at 19.2GHz and the slope at 26.2GHz.
- 30. On the HP8562A, press [INT], PRESEL ADJ and PRESEL OFFSET. Press the Up Arrow key until OFFSET FOR BAND #3 is displayed in the active function block. Enter the offset value noted in step 6.
- 31. Press PRESEL SLOPE. Enter the slope value noted in step 9.
- 32. Press PREV MENU, STORE DATA and YES on the HP8562A.
- 33. Place the WR PROT/WR ENA jumper on the A2 Controller Assembly in the WR PROT position.
- 34. On the HP8562A press [RECALL], MORE, FACTORY PRESEL PK, SAVE and SAVE PRESEL PK.