

8561B-17

S E R V I C E N O T E

SUPERSEDES: None

HP 8561B Portable Spectrum Analyzer

Serial Numbers: 3049A00555 / 3128A00736

Duplicate Service Notes:

- 8560A-15
- 8561A-31
- 8562A-62
- 8562B-60
- 8563A-11

Eliminating Graticule "Hooks"

Parts Required:

HP Part No.	Description	Qty.
0160-4517	Capacitor, 1.2pf Ceramic	1
0890-0096 or equivalent	1/4 inch length sleeve	1
1855-0241	Transistor, FET	1

Situation:

Small "hooks" can sometimes be seen on vertical graticule lines on the spectrum analyzer display. These hooks appear where the vertical lines intersect the top and center horizontal graticule lines. The hooks are not visible with the earlier CRTs made by HP. The hooks in no way reduce the instrument's measurement accuracy.

Continued

DATE: 07 November 1992

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION AVAILABLE		
ACTION CATEGORY:	AGREEABLE TIME	<input checked="" type="checkbox"/> PERFORMANCE ENHANCEMENT <input type="checkbox"/> SERVICE/RELIABILITY ENHANCEMENT
LOCATION CATEGORY:	<input checked="" type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> HP LOCATION	AVAILABLE UNTIL: December 1993
AUTHOR: GPB	ENTITY: 5300	ADDITIONAL INFORMATION:

The hooks are mainly caused by capacitances in the X Line Generator on the A2 Controller assembly. The critical capacitances are the internal capacitances of A2Q205 and that of A2C236.

Solution/Action:

Prepare the replacement transistor for A2Q205 by bending the source and drain leads so that they will be swapped when the transistor is installed. (When looking at the bottom of the transistor with the tab pointing to the right, the drain and source are the two closest to the viewer.) Slide a piece of insulation sleeving over one of the prepared leads before installing the transistor. This places the drain at the output of the stage. (Drain-to-gate capacitance is more tightly controlled than source-to-drain capacitance.)

Some instruments were shipped with a 2.7pf capacitor for A2C236. Change this capacitor to a 1.2pf.