

## S E R V I C E N O T E

SUPERSEDES: None

**8563A Portable Spectrum Analyzer**

Serial Numbers: 3110A00553 / 3128A00791

**Eliminating Graticule "Hooks"****Duplicate Service Notes:**

8560A-15  
 8561A-31  
 8561B-17  
 8562A-62  
 8562B-60  
 8563A-11

**Parts Required:**

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

*Continued*

DATE: 07 November 1992

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
<b>MODIFICATION AVAILABLE</b>		
ACTION CATEGORY:	<b>AGREEABLE TIME</b>	<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"/> SERVICE CENTER	AVAILABLE UNTIL: December 1993
AUTHOR: GPB	ENTITY: 5300	ADDITIONAL INFORMATION:

**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. The hooks in no way reduce the instrument’s measurement accuracy.

The hooks are mainly caused by capacitance in the X Line Generator on the A2 Controller assembly. The critical capacitance are the internal capacitance 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.