

S E R V I C E N O T E

SUPERSEDES:

HP 8566B Spectrum Analyzer
HP 85660B RF Section

Serial Numbers:

2747A05521/2950A06360

Oven Oscillator Thermal Fuse Failure**Parts Required:**

Thermal Fuse Kit, HP part number 10811-67001

Situation:

The thermal fuse (HP part number 2110-0801) in the Oven Oscillator (HP part number 10811-60111) of the A22 Frequency Standard (HP part number 5062-1916) will fail after 3 months to 2 years of operation.

The defective fuses are in Oven Oscillators with serial prefix 2850A. The serial number label is located under the top isolation mount on the oscillator and cannot be seen without removing the isolation mount. Therefore, use the instrument serial number to identify units with defective fuses.

DATE: 10 April 1990

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		MODIFICATION RECOMMENDED	
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY	LABOR	
	<input type="checkbox"/> ON SPECIFIED FAILURE	STANDARDS: 1.0 Hour	
	<input checked="" type="checkbox"/> AGREEABLE TIME	SERVICE INVENTORY:	USED PARTS:
LOCATION CATEGORY:	<input checked="" type="checkbox"/> CUSTOMER INSTALLABLE	<input type="checkbox"/> RETURN	<input type="checkbox"/> RETURN
	<input type="checkbox"/> ON-SITE	<input type="checkbox"/> SCRAP	<input checked="" type="checkbox"/> SCRAP
	<input checked="" type="checkbox"/> HP LOCATION	<input checked="" type="checkbox"/> SEE TEXT	<input type="checkbox"/> SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE	RESPONSIBLE ENTITY: 5300 UNTIL: 1 May 1992		
AUTHOR: BS	ENTITY: 5300	ADDITIONAL INFORMATION: Refer to Service Note 10811A/B-03	

Symptoms of an open fuse are as follows:

- OVEN COLD error message appears on screen
- Frequency drift
- Decrease in Center Frequency accuracy
- Unable to adjust the frequency standard within specifications

Solution:

Any HP 8566B within the serial number range listed above and all Frequency Standards in Service Stock having Oven Oscillators with serial prefix 2850A should have the fuse replaced with HP part number 10811-80008. For convenience all parts required to replace the fuse are included in the Thermal Fuse Kit (HP part number 10811-67001).

This service note and Service Note 10811A/B-03 describe how to identify modified oscillators and instruments.

Repair and Recalibration Procedure

1. Remove the YTO Loop. Refer to the A11 YTO Loop and A11A3 YTO replacement information in the HP 8566B Troubleshooting and Repair manual.
2. Remove the A22 Frequency Standard by removing the two vibration mount screws, the power supply connector from the motherboard and disconnecting the coax cable (grey and violet) from the A22 Frequency Standard.
3. Service Note 10811A/B-03 describes how to replace the defective fuse once the Frequency Standard has been removed from the instrument.
4. Reinstall the Frequency Standard and the YTO Loop.

CAUTION

Be careful reinstalling the YTO Loop to ensure the coax and ribbon cables are not damaged.

5. Allow the instrument to warm up for at least 30 minutes.
6. Perform the Center Frequency Readout Accuracy Test. Use HP part number 5010-4653 Performance Test part 2 software.
7. If the Center Frequency Readout Test fails, the Time Base Adjustment should be performed.

A recommended method for further identification of instruments with replaced fuse is to use a label (HP part number 9320-5559). Type or print the service note number (8566B-33) in the space above "PSSN Installed". Attach the label to the rear panel of the instrument near the serial number label.