

S E R V I C E N O T E

SUPERSEDES:

HP 8566B Spectrum Analyzer
 HP 8567A Spectrum Analyzer
 HP 8568B Spectrum Analyzer
 HP 85662A IF-Display Section

Serial Numbers:

2813A15812/2816A16023

See text for exceptions.

Duplicate Service Notes:

8566B-20 8567A-04 8568B-14

Misloaded Capacitor Exposed to 130% of Its Rating

To Be Performed By: HP-Qualified Personnel or Customer

Situation:

An assembly process variation was discovered that might have resulted in two large electrolytic power supply capacitors being installed in the wrong location in HP 85662A IF-Display Sections within the serial range listed above. When installed in the wrong location, one of the capacitors can be exposed to as much as 130% of its rating. This would probably result in a premature capacitor failure, with possible venting of the capacitor electrolyte onto the bottom of the IF-Display Section. Venting might cause damage to other components and assemblies.

DATE: 25 May 1990

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		MODIFICATION RECOMMENDED	
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY	LABOR	
	<input type="checkbox"/> ON SPECIFIED FAILURE	STANDARDS: 0.5 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: 01 July 1992	
AUTHOR: TM	ENTITY: 5300	ADDITIONAL INFORMATION:	

The two capacitors affected are A1A10C1, 22000 μ F (HP part number 0180-2808), and A1A10C4, 8700 μ F (HP part number 0180-0453). They are located along the HP 85662A rear frame, behind the CRT. Both capacitors are the same physical size.

Table of Serial Number Exceptions

2816A15860
2816A15968
2816A15971
2816A15974/2816A15976
2816A15988/2816A15990
2816A16001
2816A16006
2816A16008

Solution/Action

Any HP 85662A IF-Display Section within the above serial range should be inspected. If capacitors A1A10C1 and A1A10C4 are found to be installed in the wrong location, replace both capacitors with new ones using the following procedure.

WARNING

These capacitors can store a large charge. Be careful to discharge the capacitors before removing them.

Procedure

1. Remove the power cords and interconnect cables from the rear of the spectrum analyzer.
2. Loosen the lock feet and separate the RF and the IF sections; set the RF section aside.
3. Remove the 2 rear feet near the top of the IF-Display Section.
4. Remove the top cover and check for proper position of the capacitors (A1A10C1 and A1A10C4). See Figure 1.

If the capacitors are in the correct location, reinstall the top cover and rear feet. Mate the IF and RF sections and reconnect cables. No further work is required.

If capacitors are *not* in the correct locations, proceed with the following steps.

5. Remove the 2 screws securing the bracket over the top of the capacitors and remove the bracket.
6. Remove the 2 rear feet near the bottom of the IF-Display Section.
7. Remove the bottom cover.

CAUTION

When each capacitor is installed with the correct polarity, the vent plug in the bottom of the capacitor will be visible through the hole in the A1A10 Motherboard Assembly.

8. Remove the 4 screws securing A1A10C1 and A1A10C4 to the motherboard.
9. Remove the existing capacitors and replace with new capacitors, making sure the A1A10C1, 22000 μ F (HP part number 0180-2808), and A1A10C4, 8700 μ F (HP part number 0180-0453), are in the correct locations.
10. Reinstall the bracket, top cover, bottom cover, and the 4 rear feet.
11. Mate the IF and RF sections and reconnect cables. No calibration is required.

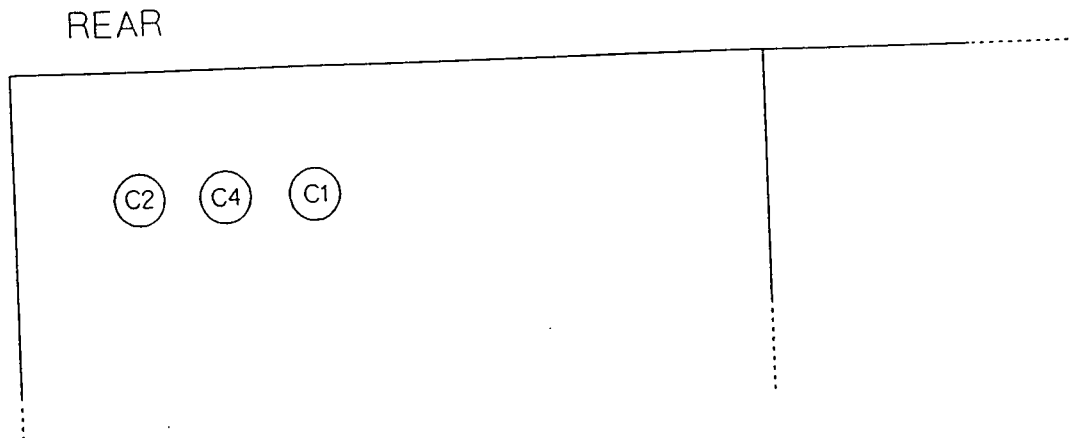


Figure 1. Location of A1A10C1 and A1A10C4