E8663B-04 <u>S E R V I C E N O T E</u>

Supersedes: None

E8663B Analog Signal Generator

Serial Numbers: US47491358 – US47491396

Intermittent power supply shutdown

To Be Performed By: Agilent-Qualified Personnel or Customer

Parts Required:
P/NDescriptionQty.N8210-40002Insulator Ribbon Cable1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:				
MODIFICATION RECOMMENDED				
ACTION CATEGORY: :	[[[]] IMMEDIATELY [[]] ON SPECIFIED FAILURE X AGREEABLE TIME	STANDARDS LABOR: 1.0 Hours		
LOCATION CATEGORY:	X CUSTOMER INSTALLABLE X ON-SITE X SERVICE CENTER	SERVICE [[]] RETURN INVENTORY: [[]] SCRAP [[]] SEE TEXT	USED [PARTS: [[]] RETURN []] SCRAP []] SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: ALWAYS		
AUTHOR: DMc		PRODUCT LINE: PL15		
ADDITIONAL INFORMATION:				

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Situation:

A via on the E8251-60441 mother board may intermittently short to the card cage causing the power supply to reset or shut down. The intermittent short does not cause permanent damage.

Solution/Action:

The solution is to place insulating material between the card cage and the mother board for instruments shipped with the serial number ranges listed. Instruments shipped after this data range and replacement mother boards are to ship with the insulation material applies or the divider changed so the via can not short.

The following procedure outlines the required steps:

1. Remove the external cover using the procedure outlined in the service guide.

2. Position the instrument so the mother board is up. Loosen the 4 screws on the mother board stiffener shown in Figure 1.



Figure 1

3. Reposition the instrument over so the internal cover is up and remove the internal cover to gain access to the card cage.

4. Cut the N8210-40002 into strips 3" long and $\frac{3}{4}$ " wide as shown in Figure 2. Only 1 strip is needed per instrument. The remaining material can be used for other instruments.



5. The next step is to slide the insulating material (sticky side up) between the card cage and the mother board. To position the insulating material, lightly attach it to a steel ruler or some other ESD safe item that can be used reach down into the tight space. Refer to Figure 3.

6. Start by placing the insulating material against the back wall (sticky side away from the wall) and then slide it down until the front edge of the strip is against the mother board. Once the front edge is against the mother board slide the insulator forward under the divider. If it does not want to slide forward under the divider lightly press down on the mother board near C435. Refer to Figure 3.

Figure 3



7. Position the insulator so that it can be seen on both sides of the divider and that it covers the area under the divider between the 4 larger capacitors on the right side as shown in Figure 4.



8. Once into place, press up on the bottom of the mother board to stick the insulator to the bottom of the divider and remove the tool.

9. Position the instrument so the mother board divider is visible and tighten the 4 screws that were loosened in Step 2 Figure 1. (Torque the T-10 screws to 9 in-lbs.)

10. Next position the instrument so the card cage is up and install the internal and external covers per the procedure in the service guide. (Torque the 12 internal cover T-10 screws to 9 in-lbs, and the torque the external T-15 and T-20 screws to 21 in-lbs.)

The update is complete, no adjustments or performance tests are required.