SERVICE NOTE

SUPERSEDES: None

HP MODEL 8671B SYNTHESIZED SIGNAL GENERATOR Serial Prefix 2703A and below INSULATORS FOR A3A12CR13 AND A3A12CR14

If during normal trouble shooting of the Rectifier Assembly A3A12 (08673-60133) it is found that regulator U1 is defective, the most probable cause of the defect is that the anode of CR13 or CR14 has shorted through the anodized surface of the heat sink MP9 (HP part number 86701-00018) to the case of regulator U1. This may be verified by using a digital multimeter to measure the resistance between the case of U1 and the Anodes of CR13 and CR14. If the measured resistance is less than 1 K Ohms, then the anodized surface of the heat sink (MP9) may have been damaged. If the anodized surface has been damaged, it is recommended that a mica insulator (HP part number 3050-0876) be added between the heat sink (MP9) and each of the rectifiers, CR13 and CR14.

Procedure

- 1. Remove the mains source from the instrument. For procedure to remove the Top cover. Refer to Section VIII of the Operating and Service Manual.
- 2. Remove the Rectifier Assembly A3A12 (08673-60133) from the unit, refer to Section VIII of the Operating and Service Manual.

NOTE

Use proper ESD precautions when removing and handling static sensitive devices or assemblies. Ensure that all work is done at an ESD certified work station.

- 3. Using a 3/8 inch open-end wrench remove the two 10-32 nuts securing CR13 and CR14 to the assembly. Carefully remove CR13 and CR14 from the rectifier assembly. It may be necessary to desolder the wires from the cathodes of the diodes to facilitate the removal of CR13 and CR14.
- 4. Place the two mica insulators (HP part number 3050-0876) between the heat sink (MP9) and anodes of CR13 and CR14.

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- 5. Reinstall CR13 and CR14 using the two 10-32 nuts removed in step 3.
- 6. Using a digital multimeter, measure the resistance between the anodes of CR13 and CR14 and the case of U1. The resistance measured should be greater than 10 Megohms.
- 7. Reinstall the rectifier assembly A3A12 into the unit.
- 8. Reapply the mains power source to the instrument.
- 9. Turn on the instrument and enter RCL "0", to preset the instrument.
- 10. Verify that the Signal Generator presets correctly. Refer to the Operating and Service Manual Section III or the information pullout card for proper preset conditions.

Adjustment

Refer to Section V of the Operating and Service Manual for Post-Repair Adjustments of the Power Supplies.