# **Installation Note**

HP ESG-D Series Options UN8 and UN8+9 Signal Generators Data Generator Assembly Replacement Kit HP Kit Part Numbers E4400-60209 and E4400-60210



#### Notice.

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# **Data Generator Assembly Replacement Kit**

Product Affected:	HP E4430B, E4431B, E4432B, E4433B Signal Generators
Serial Numbers:	All
Options:	UN8, UN8+9
To Be Performed By:	<ul><li>(X) HP Service Center</li><li>(X) Personnel Qualified by HP</li><li>(X) HP Personnel on Site</li><li>(X) Technical Customer</li></ul>
Estimated Installation Time:	1.0 Hour
Estimated Verification Time:	None

#### Introduction

The Options UN8 or UN8+9 Data Generator Assembly Replacement Kit is intended to repair an ESG-D series signal generator which has a faulty data generator assembly. For an ESG-D series signal generator that already has an Options UN8 or UN8+9 installed, this kit can also be used to upgrade the signal generator to the latest shipping version of Options UN8 or UN8+9.

There are no performance or verification tests associated with this kit except what may be required for the installation of the firmware. An I/Q calibration should be conducted after installation of the data generator assembly.

# **Replacement Kit Parts Lists**

 Table 1
 Option UN8 Replacement Kit Contents

Item	Quantity	Description	Part Number
1	1	A8 1 Mbyte Data Generator Assembly	E4400-60154
2	1	Special Firmware Upgrade Kit, Digital	E4400-60208
3	1	Installation Note	E4400-90312

Table 2 Option UN8+9 Replacement Kit Contents

Item	Quantity	Description	Part Number
1	1	A8 8 Mbyte Data Generator Assembly	E4400-60195
2	1	Special Firmware Upgrade Kit, Digital	E4400-60208
3	1	Installation Note	E4400-90312

### **Tools Required**

☐ T-10 TORX screwdriver

☐ T-15 TORX screwdriver

☐ T-20 TORX screwdriver

**□** Long nose pliers

WARNING Before you disassemble the instrument, turn the power switch off and

unplug the instrument. Failure to unplug the instrument can result in

personal injury.

CAUTION Electrostatic discharge (ESD) can damage or destroy electronic components. All

work on electronic assemblies should be performed at a static-safe workstation.

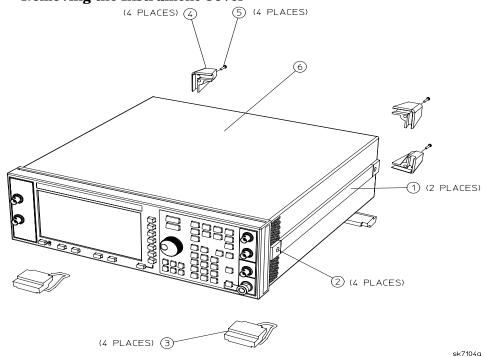
#### **Procedure**

#### **Removing Option Hardware**

1. Remove the instrument cover. (Refer to Figure 1.)

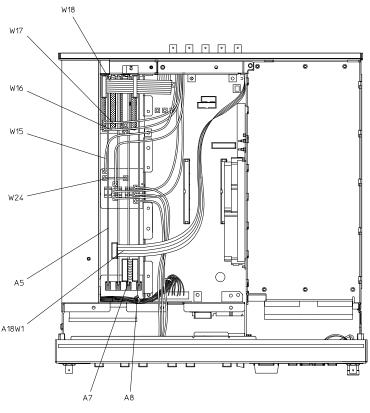
- a. Remove the two strap handles (item 1) from each side of the signal generator by loosening the two screws (item 2) on each handle.
- b. Remove the four bottom feet (item 3).
- c. Remove the four rear feet (item 4) from the signal generator by removing the four screws (item 5) that secure them.
- d. Slide the instrument cover (item 6) off the back of the signal generator.

Figure 1 Removing the Instrument Cover



- 2. Perform the following steps to remove the A8 data generator assembly. (Refer to Figure 2.)
  - a. Remove the top cover by removing the screws that secure it.
  - b. Depending on your particular combination of installed options, there can be multiple flexible cables associated with the existing A8 data generator assembly. First note the locations of these cables, so that you can correctly reconnect them; and then disconnect them.
  - c. Pull up on the A8 data generator assembly to remove it from the motherboard connector.

Figure 2 Removing the A8 Data Generator Assembly



#### **Installing the New A8 Data Generator Assembly**

- 1. Align the new A8 data generator into the slot and slide it into position. Firmly connect the A8 assembly to the motherboard connector.
- 2. Reconnect the cables to their appropriate assemblies.
- 3. Reinstall the instrument top cover.
- 4. Reinstall the instrument cover by reversing the removal procedure. Torque the screws as indicated:
  - Torque the four rear feet screws to 21 in-lbs.
  - Torque the strap handle screws to 21 in-lbs.
- 5. Perform the front panel I/Q calibration procedure.

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## **Installing and Verifying the New Firmware**

- 1. Install the new firmware following the instructions in the firmware upgrade installation note.
- 2. Perform the verification procedure that is described in the firmware upgrade installation note.