

Installation Note

11884B 6 GHz Operation Upgrade Kit for the 8753D Network Analyzer



Agilent Technologies

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11884B 6 GHz Operation Upgrade Kit

Product Affected: 8753D Network Analyzer
To Be Performed By: Agilent Technologies Qualified Personnel

Purpose

The 11884B 6 GHz upgrade kit provides the 8753D network analyzer with optional 6 GHz operation. The upgrade kit is keyed to the serial number of an individual network analyzer.

Items Included in the Kit

Table 1 describes the parts included in the 11884B upgrade kit. Check the contents of the kit against this table.

Table 1 **11884B Upgrade Kit Contents**

Quantity	Description
1	6 GHz source assembly
1	Customer letter
1	6 GHz registration number label
1	Keyword label
1	Installation note
1	Option installation label
1	6 GHz Nameplate

Equipment and Tools Required

Table 2 Required Equipment and Tools

Item	Part or Model Number
Power meter	436A/437B/438A
Power sensor	8482A
Power sensor	8481A
Cable, 24 inch APC-7 (2)	8120-4779
Cable, BNC-to-BNC	8120-1840
Adapter, APC-7 to N (f)	11524 A
Adapter APC-7 to 3.5 mm (m)	1250-1746
Adapter APC-7 to 3.5 mm (f)	1250-1747
Adapter, BNC-Alligator clip	8120-1292
GPIB cable assembly	10833A
Low pass filter	9135-0198
Small needle-nose pliers	
T-10 TORX screwdriver	
T-15 TORX screwdriver	
T-20 TORX screwdriver	
5/16 inch open-end wrench	
5/16 inch torque wrench (10 in-lbs)	
Electrostatic discharge (ESD) grounding wrist strap and mat	

Safety Considerations

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

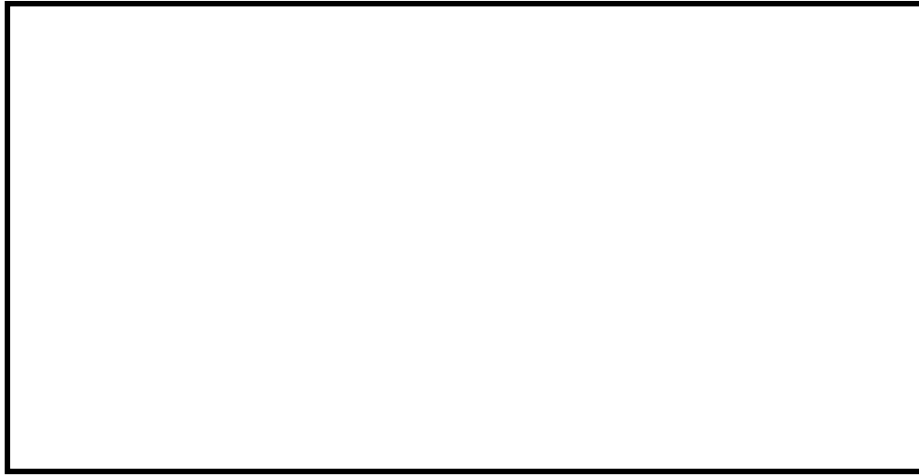
Electrostatic discharge (ESD) can damage or destroy electronic components. Perform these procedures only at a static-safe workstation and wear a grounding strap. Refer to the documentation that pertains to your instrument for information about static-safe workstations and ordering static-safe accessories.

Installation Procedure for the 8753D

Verify the Serial Number

Refer to the keyword label in the box below. Verify that the analyzer's serial number matches the serial number below. This keyword will not work on any other analyzer. If the serial numbers do not match, contact your nearest Agilent Technologies sales or service office for assistance.

Keyword Label

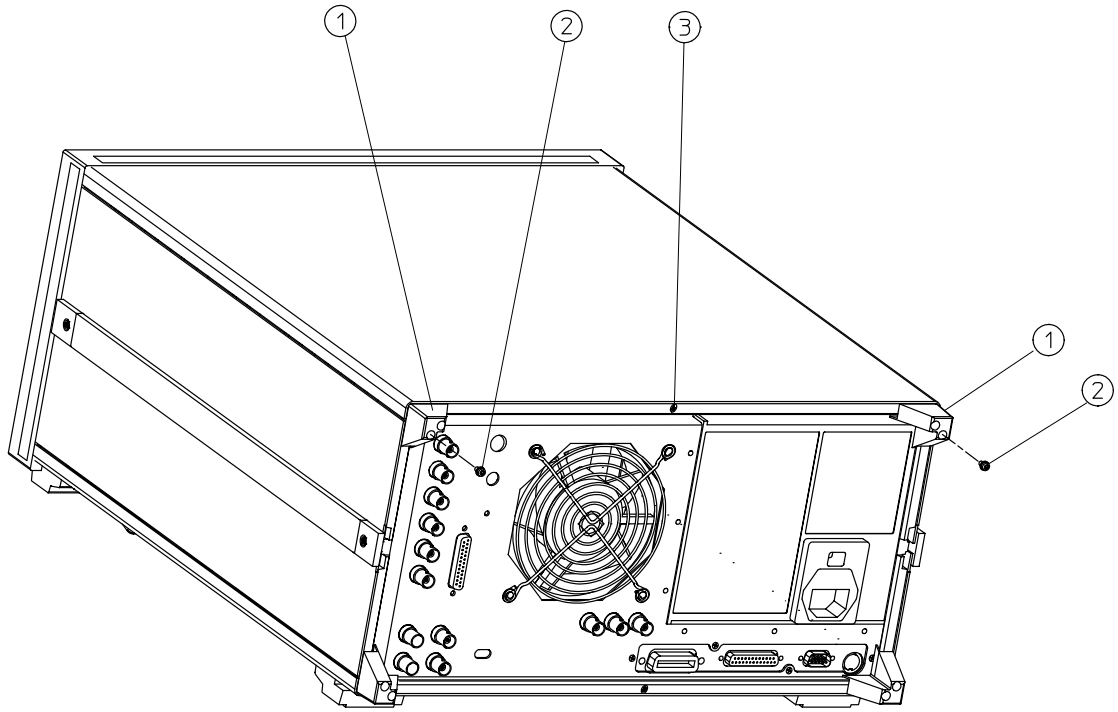


Remove the Feet and Covers

Refer to Figure 1.

1. Disconnect the power cord.
2. Remove the top cover:
 - a. Remove both of the upper rear feet (item 1) by loosening the attaching screws (item 2).
 - b. Loosen the top cover screw (item 3).
 - c. Slide the cover towards the back of the instrument.

Figure 1 **Cover and Feet Removal**



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Remove the 3 GHz Source Assembly

Refer to Figure 2

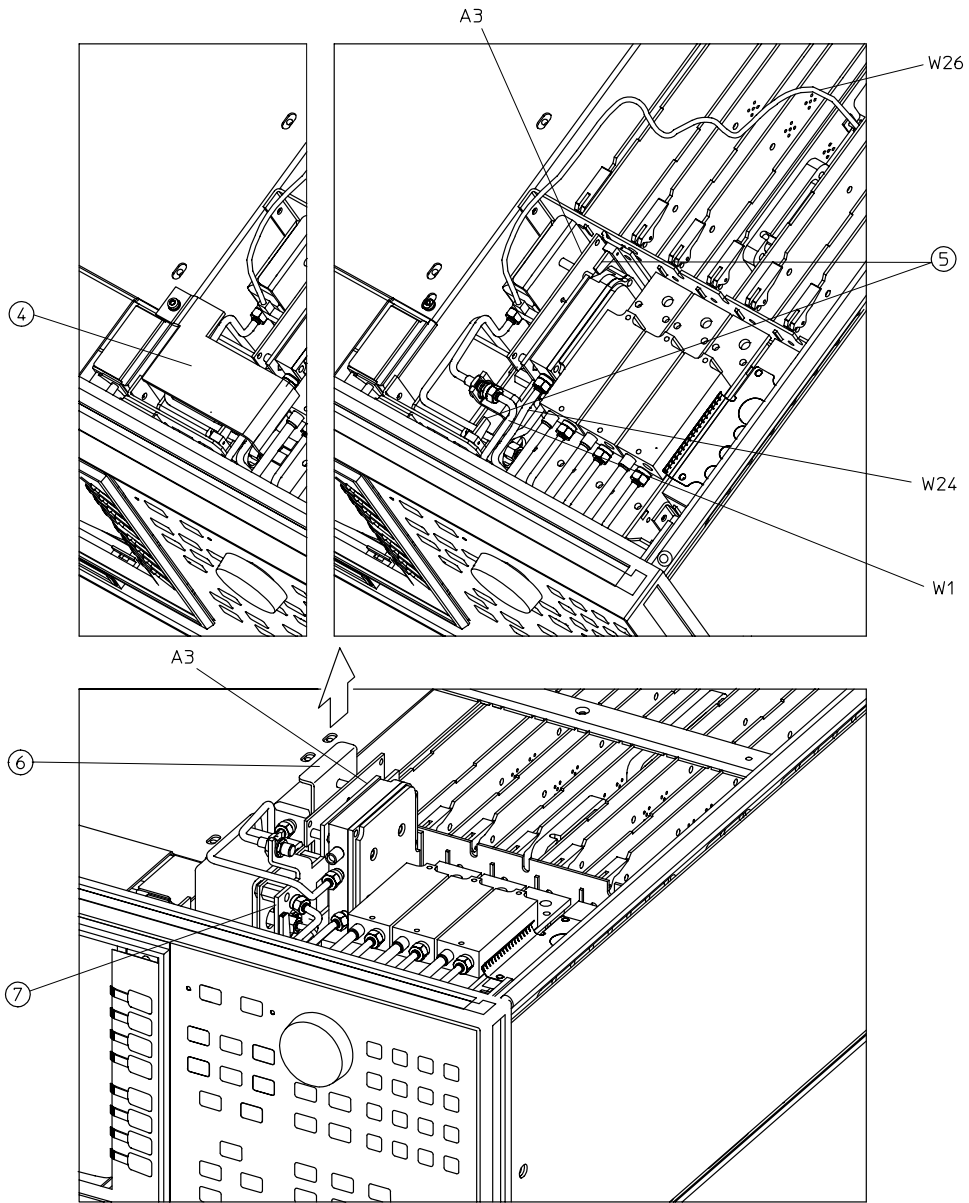
3. Remove the source bracket (item 4).
4. Disconnect the two semi-rigid cables (W1 and W24) and one flexible cable (W26) from the source assembly (A3).
5. Lift the two retention clips (item 5) at the front and rear of the source module to an upright position.
6. The source is seated in a motherboard edge connector. Hold the two loose semi-rigid cables (W1 and W24) to the right and gently pull up on the source bracket handle (item 6) to lift the source assembly out of the instrument.

Replace the Source

Refer to Figure 2.

7. Slide the edges of the sheet metal partition (item 7) of the 6 GHz source assembly into the guides at the front and back of the source compartment.
8. Press down on the assembly to ensure that it is well seated in the motherboard connector.
9. Push the retention clips down.
10. Reconnect the two semi-rigid cables (W1 and W24) and one flexible cable (W26) to the source assembly. Torque these connections to 10 in-lbs.
11. Replace the source bracket.

Figure 2 A3 Source Assembly Removal



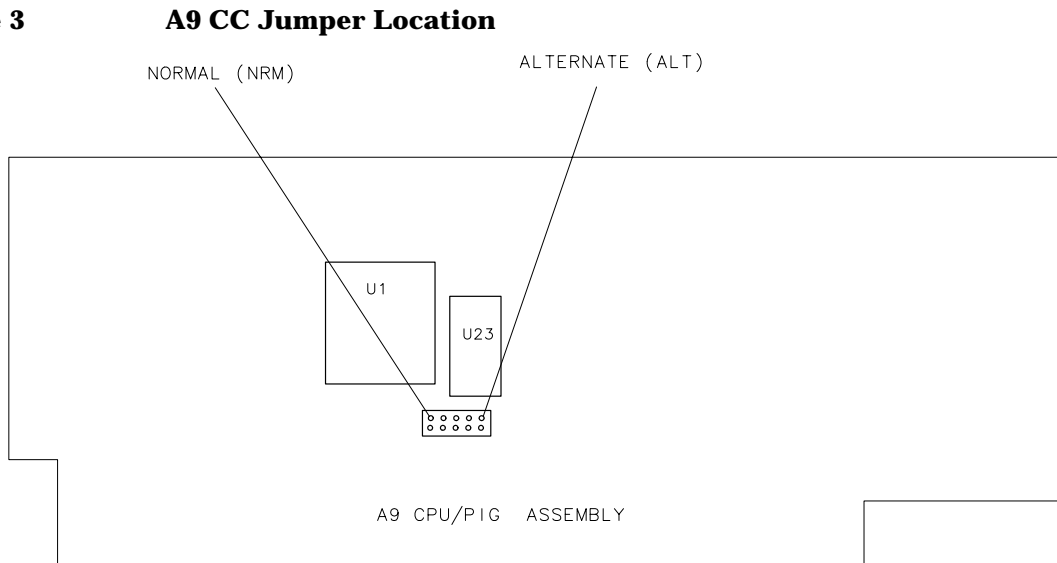
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Configure the 8753D for 6 GHz Operation

Refer to [Figure 3](#).

12. Remove the instrument bottom cover.
13. Move the A9 CC Jumper to the ALT position.

Figure 3



14. Switch on the power for the 8753D.
15. Press **PRESET**, **DISPLAY**, **MORE**, **TITLE**, **ERASE**, **TITLE** to erase the logo.
16. Enter the keyword from the label located on page 6. You may use an external keyboard or use the analyzer's front panel knob to position the arrow below each character of the keyword. Press **SELECT LETTER** to enter each character. When all characters are entered, press **DONE**.
17. Press **SYSTEM**, **SERVICE MENU**, **TESTS**, **56**, **x1**. At the prompt, press **EXECUTE TEST**, **YES**.
The analyzer will display Option Cor DONE when the test is complete.
18. Press **RETURN**, **TESTS**, **44**, **x1**. At the prompt, press **EXECUTE TEST**, **YES**.
The analyzer will display *Source Def DONE when the test is complete.
19. Press **RETURN**, **TESTS**, **45**, **x1**. At the prompt, press **EXECUTE TEST**, **YES**.
The analyzer will display *Pretune Def DONE when the test is complete.
20. Press **RETURN**, **TESTS**, **46**, **x1**. At the prompt, press **EXECUTE TEST**, **YES**.
The analyzer will display ABUS Cor DON Ewhen the test is complete.
21. Press **RETURN**, **TESTS**, **48**, **x1**. At the prompt, press **EXECUTE TEST**, **YES**.
The analyzer will display Pretune Cor DONE when the test is complete.

22. Refer to "Adjustments" in the *8753D Network Analyzer Service Guide* and perform the following adjustments:

- RF Output Power Correction Constants
- Sampler Magnitude and Phase Correction Constants
- Cavity Oscillator Frequency Correction Constants
- Source Spur Avoidance Tracking Adjustment
- EEPROM Backup Disk Procedure

23. Refer to "System Verification and Performance Tests" in the *8753D Network Analyzer Service Guide* and perform the following system tests:

- Test Port Output Power Accuracy
- Test Port Input Frequency Response
- Output/Input Test Port Harmonics (necessary only for analyzers with both Option 002 and 006)

24. Switch off the analyzer and disconnect the power cord. Move the A9 CC Jumper back to the NRM position.

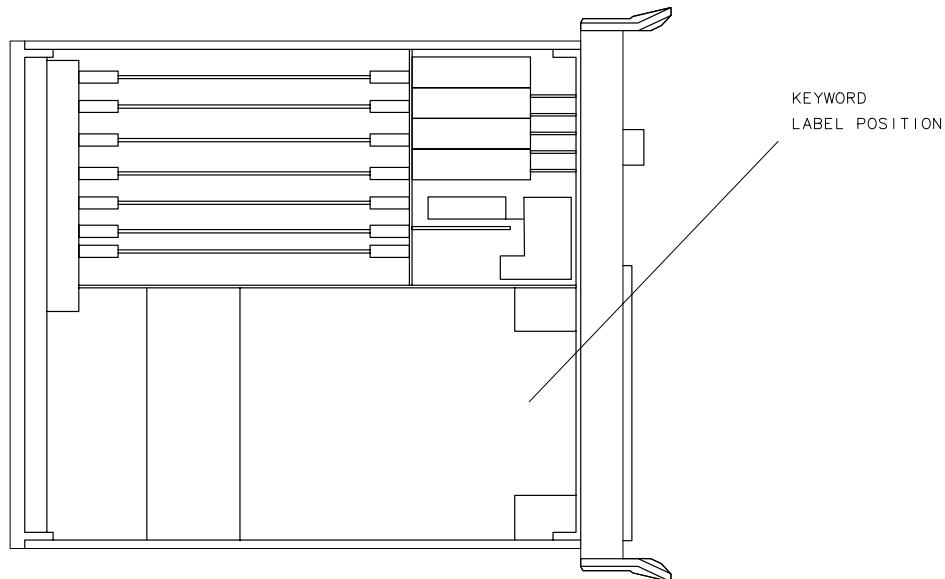
Refer to [Figure 3](#).

Install the Keyword Label

Refer to [Figure 4](#).

25. Place the keyword label inside the instrument at the location shown.

Figure 4 **Option Keyword Label Location for the 8753D**



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Reassemble the Instrument

26. Replace the instrument top and bottom covers and all of the rubber feet.

27. Place the 11884B installation label on the rear panel of the network analyzer. Write the date of the installation in the space provided.

Replace the Analyzer's Nameplate

28. Use a sharp knife to slowly peel away the old nameplate.

29. Adhere the new nameplate, which is included in the upgrade kit, onto the analyzer's front panel.

This completes the 11884B 6GHz operation upgrade kit installation for the 8753D.

Contacting Agilent

By internet, phone, or fax, get assistance with all your test and measurement needs.

Online Assistance: www.agilent.com/find/assist