

Errata

Title & Document Type: 5342A Option 006 Microwave Limiter Operating and Service Manual

Manual Part Number: 05342-90037

Revision Date: August 1981

HP References in this Manual

This manual may contain references to HP or Hewlett-Packard. Please note that Hewlett-Packard's former test and measurement, semiconductor products and chemical analysis businesses are now part of Agilent Technologies. We have made no changes to this manual copy. The HP XXXX referred to in this document is now the Agilent XXXX. For example, model number HP8648A is now model number Agilent 8648A.

About this Manual

We've added this manual to the Agilent website in an effort to help you support your product. This manual provides the best information we could find. It may be incomplete or contain dated information, and the scan quality may not be ideal. If we find a better copy in the future, we will add it to the Agilent website.

Support for Your Product

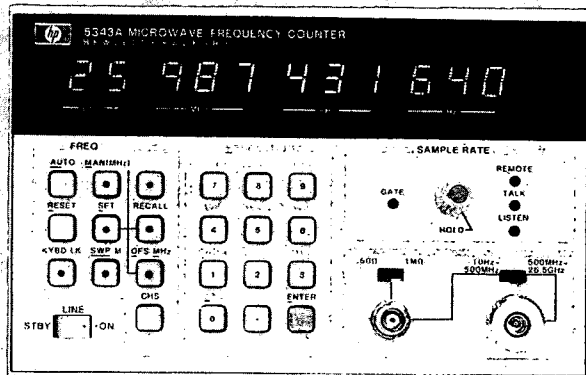
Agilent no longer sells or supports this product. You will find any other available product information on the Agilent Test & Measurement website:

www.tm.agilent.com

Search for the model number of this product, and the resulting product page will guide you to any available information. Our service centers may be able to perform calibration if no repair parts are needed, but no other support from Agilent is available.

OPERATING AND SERVICE MANUAL

5342A Option 006 Microwave Limiter



5342A
OPTION 006 MICROWAVE LIMITER

OPERATING AND SERVICE MANUAL

First Edition — August 1981

©Copyright 1981
by
HEWLETT-PACKARD COMPANY
5301 Stevens Creek Boulevard
Santa Clara, California 95050

MANUAL PART NUMBER 05342-90037
Microfiche Part Number 05342-90038



5342A OPTION 006 MICROWAVE LIMITER

1-1. INTRODUCTION

1-2. This manual provides information pertaining to the specifications, operation, removal, testing, and installation of the Microwave Limiter in the 5342A Frequency Counter.

1-3. SPECIFICATIONS

1-4. *Table 1-1* is a chart of the new specifications for the 5342A Frequency Counter with the Microwave Limiter installed.

Table 1-1. 5342A Specifications with Option 006 Installed

5342A	
DAMAGE LEVEL CW	+39 dBm (8W), 500 MHz - 6 GHz +36 dBm (4W), 6-18 GHz
SENSITIVITY	-21 dBm, 500 MHz - 12.4 GHz -15 dBm, 12.4 - 18 GHz
SWR TYPICAL	<2.5:1, 500 MHz - 10 GHz <3.5:1, 10 - 18 GHz
OPTION 006 COMPATIBILITY	Cannot be ordered with Option 002 Amplitude or Option 003 Extended Dynamic Range. Also cannot be ordered with Option 005 24 GHz Frequency Range but consult factory special to combine Option 005 and 006.

1-5. OPERATION

1-6. Operation of the 5342A Frequency Counter remains unchanged except as specified in *Table 1-1*.

1-7. REMOVAL

- 1-8. Use the following steps to remove or install the Option 006 Microwave Limiter:
- Remove the plastic feet from 5342A (removal instructions molded into each foot).
 - Loosen the 6-32 machine screw at the rear of the bottom cover and slide the bottom cover off the instrument. Position the instrument on its side, with the top oriented to the left.

NOTE

For convenience and accessibility to the limiter, it may be desirable to disconnect various cables.

NOTE

When removing or installing the limiter, refer to *Figure 1-1*.

- To remove the limiter, hold the connector at point ① stationary with a 1/4-inch wrench while loosening the connector at point ② with a 5/16-inch wrench.
- Loosen the ring nut on the type "N" input connector on the front panel. Continue unscrewing the ring nut approximately five or more turns to allow free movement of the rigid coax.

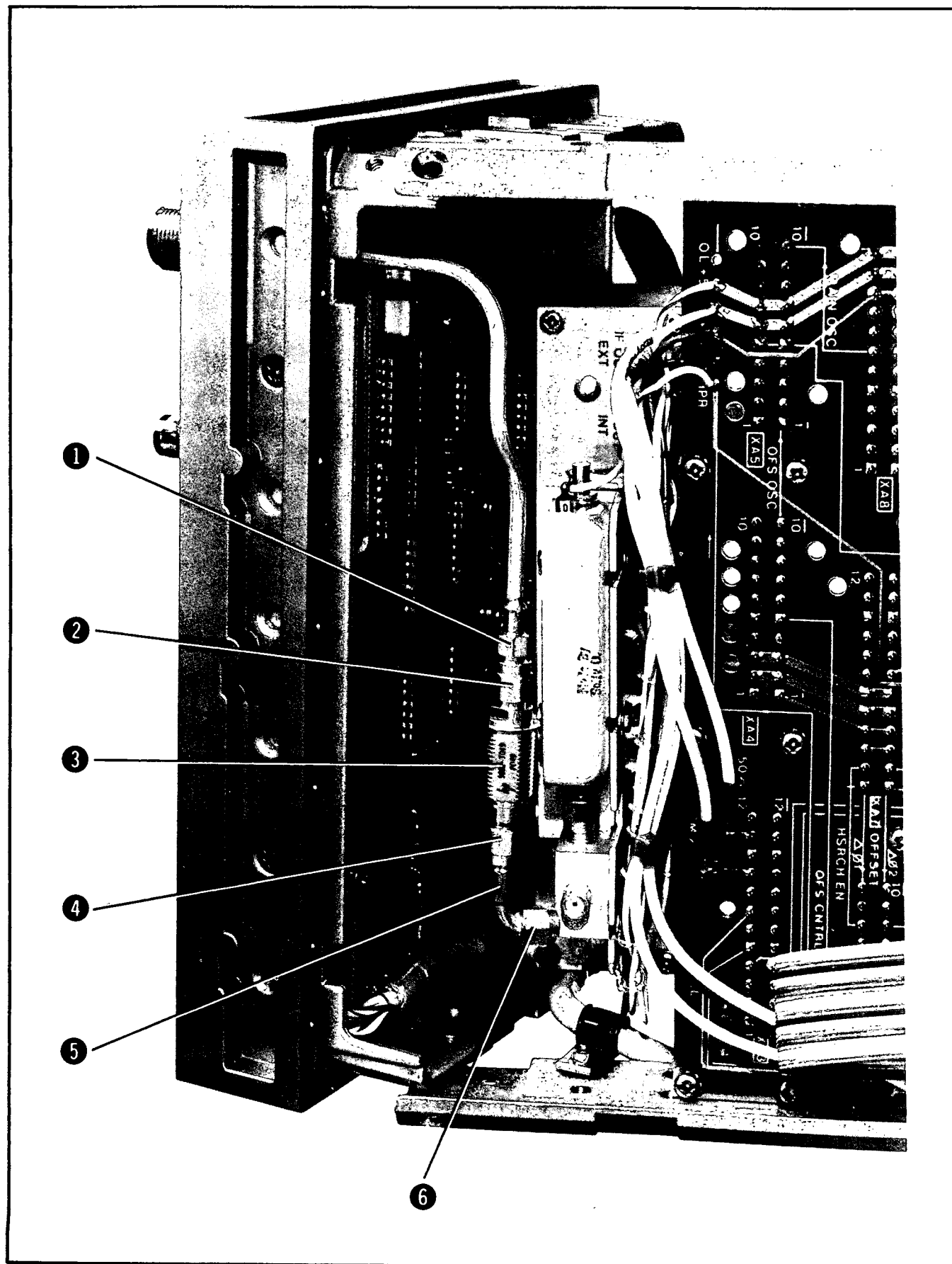


Figure 1-1. Location of the Option 006 Microwave Limiter Installed in the 5342A

- e. While unscrewing the connector at point ② with one hand, gently press upward with the other hand at the 90 degree bend of the rigid coax. The connector will unseat.
- f. Hold the connector at point ⑤ stationary with a 1/4-inch wrench and loosen the connector at point ④ with the 5/16-inch wrench.
- g. Unscrew the connector and remove the limiter (point ③).

NOTE

See *Figure 1-2* and *Table 1-2* for full parts identification.

1-9. The following is the part number for the part that has been deleted to accommodate the Option 006 Limiter.

Cable Assembly, semi-rigid 8120-2482

1-10. The following procedure describes the steps for removing the cable assembly listed in paragraph 1-10.

CAUTION

Protect the front panel against scratches.

- a. Unscrew the SMA connector at point ⑥ in *Figure 1-1*. Use a 5/16-inch wrench.
- b. Unscrew the ring nut on the type "N" connector on the front panel. Use a 3/4-inch wrench.

1-11. INSTALLATION

NOTE

The limiter is nondirectional. It may be connected into the circuit in either direction.

1-12. Use the following steps to install the limiter in the 5342A. The following instructions refer to *Figure 1-1*.

- a. Install (or tighten) the right angle connector at point ⑥.
- b. Insure the type "N" connector is loose.
- c. Attach Option 006 Microwave Limiter (③) and tighten connectors ④ and ⑤. Use 5/16-inch and 1/4-inch wrenches respectively.
- d. Connect and tighten connectors ① and ② as in Step c.
- e. Tighten the ring nut on the type "N" connector on the front panel.
- f. Install bottom cover and plastic feet.

1-13. TESTING

1-14. Perform the sensitivity test given in the Operation Verification Procedures, paragraphs 4-13 through 4-18 of the Operating and Service Manual.

1-15. Refer to *Table 1-1* for the new specifications for the 5342A with the Option 006 Microwave Limiter installed.

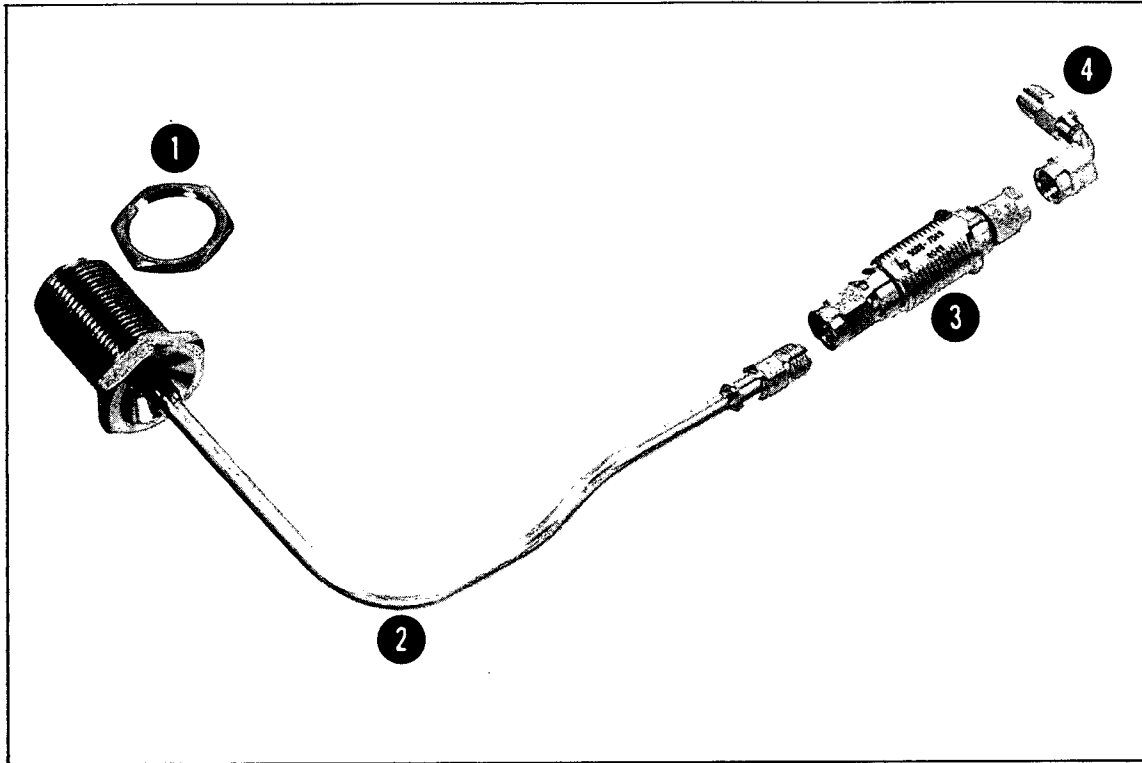


Figure 1-2. Components Required to Install the Option 006 Microwave Limiter

Table 1-2. List of Part Numbers for Option 006 Microwave Limiter

Item Number	Description	Part Number
1	Hex Nut, Brass, Nickel plated, 5/8 - 24 THD	2950-0079
2	Cable Assembly	8120-3219
3	Microwave Limiter Assembly	5088-7049
4	Connector, Right Angle	1250-1741