

## Errata

**Title & Document Type: 86260B RF Plug-In Manual Supplement**

**Manual Part Number: 86260-90064**

**Revision Date: December 1980**

---

### 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 HP86260B is now model number Agilent 86260B.

### 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](http://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.

This page has been intentionally left blank.

**86260B**  
**RF PLUG-IN**  
**10–15.5 GHz**  
**OPTION 001**  
**OPTION 004**  
**OPTION 005**

SUPPLEMENT  
PART NO. 86260-90064

USE THIS SUPPLEMENT WITH  
MANUAL PART NO. 86260-90012  
PRINTED AUGUST 1975

DECEMBER 1980



**HEWLETT  
PACKARD**

## INTRODUCTION

This Manual Supplement describes the differences in the 86260B RF Plug-in compared to the 86260A. In addition, this supplement describes the manual changes necessary to document the instrument.

## DESCRIPTION

The Model 86260B RF Plug-in, when compared with the Model 86260A RF Plug-in, has a lower frequency range: 10.0 to 15.5 GHz. All other specifications and supplementary performance characteristics published in the 86260A Operating and Service Manual also apply to the 86260B.

## MANUAL CHANGES NECESSARY TO DOCUMENT THE HP 86260B

The following manual changes assume that the corrections from the current Manual Changes Supplement are incorporated first, then the changes in this supplement are incorporated in the manual. The primary changes in this supplement are (1) the frequency BAND set to "10 to 15.5 GHz", (2) the START frequency set to 10.0 GHz, (3) the CW frequency set to 12.7 GHz, (4) the STOP frequency set to 15.5 GHz, and (5) component number changes due to the change in frequency range.

### All Sections:

Change all references from 86260A to 86260B, change references from 8620A to 8620C and delete all references to 8620B.

### Page 1-0, Figure 1-1:

Change the frequency range shown on the instrument and on the scale to "10.0 to 15.5 GHz", and delete the scale for the 8620B. Change the caption for the top scale to: "Scale for 8620C, 86260-00033".

Add "PROM for 11869A (not shown), 86260-80001" to the bottom of the illustration.

### Page 1-2, Paragraph 1-22:

In the second sentence, change the frequency range to "10.0 to 15.5 GHz".

### Page 1-3, Paragraph 1-34:

Delete Paragraphs 1-34 and 1-35.

### Page 1-3, Paragraph 1-37:

Change text to read:

"1-37. A 10.0 to 15.5 GHz scale is supplied for use with the 8620C mainframe. The HP Part Number for this scale is 86260-00033. Also included with the 86260B is a PROM, HP Part Number 86260-80001. This PROM plugs into an HP 11869A RF Plug-in Adapter when the 86260B is used in an HP 8350A Sweep Oscillator. The 86260B PROM supplies the 8350A with frequency band information."

### Page 1-4, Figure 1-3:

Change Part Numbers for YIG Oscillator to 0960-0616.

### Page 1-5, Table 1-1:

Change Frequency Range: Calibrated to: 10.0 to 15.5 GHz.

### Page 1-6, Table 1-2:

Change Frequency Range to: Usable: 10.0 to 15.5 GHz.

**Page 1-8, Table 1-3:**

Change Frequency Range of Spectrum Analyzer to: 10 to 40 GHz.

Change the recommended Model for the Oscilloscope to HP 180C/1801A/1820C.

Change Range of Frequency Counter, Frequency Meter, Power Meter and Thermistor Mount, Directional Coupler, and Crystal Detector to: 10 to 15.5 GHz.

Change the Frequency Counter Model to 5343A.

Add under Frequency Meter the Model X532B

Change DC Digital Voltmeter to HP 3455A.

Change Directional Coupler to HP 11691D.

Change Crystal Detector to HP 8470B Option 012.

Change DC Power Supply to HP 6214A.

**Page 3-4, Figure 3-2:**

Change item 4 FREQ REF connector J5 to the following description: "Provides 10.0 to 15.5 Volt ramp signal from the Plug-in. The signal is used as a dc analog of frequency".

**Page 3-6, Figure 3-3 (2 of 2):**

In step 1, change BAND frequency to "10.0 to 15.5 GHz".

**Page 3-8, Figure 3-7 (1 of 2):**

Change Oscilloscope to HP 180C/1801A/1820C

Change Crystal Detector to HP 8470B Option 012.

Change Directional Coupler to HP 11691D.

Delete NOTE prior to "PROCEDURE".

**Page 3-9, Figure 3-7 (2 of 2):**

In step 2, change BAND to "10.0 to 15.5 GHz", change START (green) to 10.0 GHz, and change STOP (red) to 15.5 GHz.

**Page 3-10, Figure 3-8 (1 of 2):**

In step 2, change BAND to "10.0 to 15.5 GHz" and change START (green) to 10.0 GHz.

Change STOP (red) to 15.5 GHz.

**Page 4-1, Paragraph 4-7:**

Change the frequency range to "10.0 to 15.5 GHz".

**Page 4-2, Paragraph 4-7:**

In step b, change BAND to 10.0 to 15.5 GHz, change START pointer to 10.0 GHz, change CW pointer to 12.7 GHz, and change STOP pointer to 15.5 GHz.

**Page 4-3, Paragraph 4-7:**

In step d, change the CW setting to 10.0 GHz and the counter indication to 10.000 GHz  $\pm$ 50 MHz.

In step e, change the CW setting to 12.7 GHz and the counter indication to 12.700 GHz  $\pm$ 50 MHz.

In step f, change the CW setting to 15.5 GHz and the counter indication to 15.500 GHz  $\pm$ 50 MHz.

Change the last sentence in step g to: "Frequency Counter should indicate 10.000 GHz  $\pm$ 70 MHz."

Change the last sentence in step h to: "Frequency Counter should indicate 15.500 GHz  $\pm$ 70 MHz."

**Page 4-5, Paragraph 4-9:**

In step a, change BAND to "10.0 to 15.5 GHz", and change CW Pointer to "12.7 GHz".

**Page 4-6, Paragraph 4-10:**

Change frequency range under SPECIFICATIONS as follows: "Maximum leveled power: 10.0 to 15.5 GHz >10 dBm (10 mW)".

**Page 4-7, Paragraph 4-10:**

Under EQUIPMENT, change Directional Coupler to 11691D, and change Frequency Counter to 5343A.

**Page 4-8, Paragraph 4-10:**

In step b, change BAND to "10.0 to 15.5 GHz", START pointer to "10.0 GHz", CW pointer to "12.7 GHz", and STOP pointer to "15.5 GHz".

**Page 4-9, Paragraph 4-10:**

In step h, change BAND to "10.0 to 15.5 GHz", START pointer to "10.0 GHz", CW pointer to "12.7 GHz", and STOP pointer to "15.5 GHz".

**Page 4-11, Paragraph 4-11:**

In step b, change BAND to "10.0 to 15.5 GHz", and change CW pointer to "12.7 GHz".

**Page 4-12, Paragraph 4-11:**

In step d, change the first sentence to: "d. Adjust 8620C CW control through the 10.0 to 15.5 GHz band and observe harmonics and spurious signals".

**Page 4-13, Paragraph 4-12:**

In step b, change BAND to "10.0 to 15.5 GHz", and change CW pointer to "12.7 GHz".

**Page 4-15, Paragraph 4-13:**

Under EQUIPMENT, change Crystal Detector to 8470B Option 012, and change Directional Coupler to 11691D.

In step b, change BAND to "10.0 to 15.5 GHz", change START (green) to 10.0 GHz, and change STOP (red) to 15.5 GHz.

**Page 4-18, Paragraph 4-14:**

In step a, change BAND to "10.0 to 15.5 GHz", and CW to "12.7 GHz".

## Page 4-20, Paragraph 4-15:

Under EQUIPMENT, change Crystal Detector to 8470B Option 012, Oscilloscope to 180C/1801A/1820C, and Directional Coupler to 11691D.

In step b, change BAND to "10.0 to 15.5 GHz", CW pointer to "12.7 GHz", START pointer to "10.0 GHz", and STOP pointer to "15.5 GHz".

## Page 4-21, Paragraph 4-15:

Change step d Frequency Band of 8555A to "10 to 15.5 GHz".

## Page 4-23, Table 4-1:

## Paragraph 4-7:

Change step d to: "d. CW pointer to 10.0 GHz; Lower limit, 9.950 GHz; Upper Limit, 10.050 GHz."

Change step e to: "e. CW pointer to 12.7 GHz; Lower limit, 12.650 GHz; Upper limit, 12.750 GHz."

Change step f to: "f. CW pointer to 15.5 GHz; Lower limit, 15.450 GHz; Upper limit, 15.550 GHz."

Change step g to: "g. START-STOP, MANUAL control ccw; Lower limit, 9.930 GHz; Upper limit, 10.070 GHz."

Change step h to: "h. START-STOP, MANUAL control cw; Lower limit, 15.430 GHz; Upper limit, 15.570 GHz."

## Page 5-3, Paragraph 5-13:

Under EQUIPMENT, change Digital Voltmeter to HP 3455A.

## Page 5-6, Paragraph 5-14:

Under EQUIPMENT, change Digital Voltmeter to HP 3455A, and change Frequency Counter to HP 5343A.

Change the counter indication in step b to 10.000 GHz  $\pm$  70 MHz.

Change the counter indication in step c to 15.500 GHz  $\pm$  70 MHz.

## Page 5-7, Table 5-3:

Replace Table 5-3 with Table 5-3A included in this supplement.

Table 5-3A. Frequency Tracking Adjustment

Set CW for DVM Indication at 86260B-A1TP2 (Vdc)	Frequency Counter Indications (GHz)	Compromise Adjustment
0.000 $\pm$ 0.005	10.000 $\pm$ 0.025	} A1R3
2.000 $\pm$ 0.005	11.100 $\pm$ 0.025	
4.000 $\pm$ 0.005	12.200 $\pm$ 0.025	
6.000 $\pm$ 0.005	13.300 $\pm$ 0.025	} A1R6
8.000 $\pm$ 0.005	14.400 $\pm$ 0.025	
10.000 $\pm$ 0.005	15.500 $\pm$ 0.025	

## Page 5-7, Paragraph 5-15:

Under EQUIPMENT, change Digital Voltmeter to HP 3455A, and change Oscilloscope to HP 180C/1801A/1820C.

## Page 6-4, Table 6-2:

Change A1 to HP Part Number 86260-60055

Change A1R11 to HP Part Number 0811-3457, Resistor, 7.5K 0.12W

Change A1R15 to HP Part Number 0811-3053, Resistor, 3.16K 1% 0.12W

Change A1R19 to HP Part Number 0811-3207, Resistor, 2.5K 0.1% 0.06W

Change A1R26 to HP Part Number 0811-3146, Resistor, 7.5K 1% 0.12W

## Page 6-5, Table 6-2:

Change A1R36 to HP Part Number 0698-8485, Resistor, 6.69K 0.1% 0.1W

## Page 6-7, Table 6-2:

Change A4 to HP Part Number 86260-60061, Includes 0960-0616 YIG Oscillator and selected Value of Zener Diode A1CR5.

Change A5 to HP Part Number 0955-0073, Isolator-Modulator, 10 to 15.5 GHz.

Add after J1, HP Part Number 1251-1039, Connector Lockring

Add after XA3, HP Part Number 1251-2205, Connector Polarizing Key

Under "Miscellaneous", change knob: lever switch from 0370-1810 to 0370-0929.

Change HP Part Number 86260-00008 to 86260-00033, Scale: For use with 8620C Mainframe.

## Page 6-8, Table 6-2:

Add HP Part Number 86260-80001, PROM for 11869A RF Plug-in Adapter.

## Page 6-10, Figure 6-2:

Change item 30 to HP Part Number 0370-1097.

Change item 37 to HP Part Number 0370-0929.

Change item 38 to HP Part Number 86260-00052.

## Page 8-8, Figure 8-10:

Change Oscilloscope to HP 180C/1801A/1820C.

Change DC Digital Voltmeter to HP 3455A.

Change START pointer to 10.0 GHz.

Change CW pointer to 12.7 GHz.

Change STOP pointer to 15.5 GHz.



**Page 8-9, Figure 8-11:**

Change DC Digital Voltmeter to HP 3455A.

Change Frequency Counter to HP 5343A.

Change Oscilloscope to HP 180C/1801A/1820C.

Change Directional Coupler to HP 11691D.

**Page 8-11, Table 8-1 (2 of 2):**

In the bottom block, change step 1 in "Possible Cause" column to: "1. CW frequency set below 10.0 GHz".

**Page 8-13, Figure 8-14:**

Change part number of A1 at top of page to 86260-60055.

Change A1R19 to 2500 Ohms.

Change A1R26 to 7500 Ohms.

Change A1R36 to 6690 Ohms.

**Page A-1, Paragraph A-6:**

Under page 1-5, Table 1-1, change Maximum Leveled Power to +9.0 dBm (8 mW).

Under page 4-6, Paragraph 4-10, change Maximum Leveled Power to +9.0 dBm (8 mW).

Under page 4-23, Table 4-1, Paragraph 4-10: change step q Lower Limit to +9.0 dBm.

**Page A-3, Paragraph 4-10:**

Under EQUIPMENT, change Crystal Detector to HP 8470B Option 012, and Oscilloscope to HP 180C/1801A/1820C.

Under step p, change BAND to 10.0 to 15.5 GHz, START pointer to 10.0 GHz, CW pointer to 12.7 GHz, and STOP pointer to 15.5 GHz.

**Page A-4, Paragraph 4-10:**

In step q, change the power meter indication to >+9.0 dBm.

**Page A-5, Paragraph 5-16:**

Under EQUIPMENT, change Crystal Detector to HP 8470B Option 012, and Oscilloscope to HP 180C/1801A/1820C.

**Page A-6, Paragraph 5-16:**

In step f, change 12.4 GHz to 10.0 GHz.

**Page A-9:**

Under page 6-7, Table 6-2, change A7 Crystal Detector to 86290-60045.

Under page 6-8, Table 6-2, change the entry for Lower Front Panel to: "Change HP Part Number 86260-00043 to HP Part Number 86260-00055, Panel: Front, Lower (Option 001)".

**Page A-11, Figure A-7:**

Change A7 Detector to HP Part Number 86290-60045.

**Page B-1:**

Under page 6-7, Table 6-2, add the entries:

W2, HP Part Number 86260-20006, Cable Assembly, RF Rear Output.

J6, HP Part Number 86260-20007, Bushing, Panel.

Under page 6-8, Table 6-2, delete the entry to delete the lower front panel.

Add entries:

HP Part Number 2190-0458, Washer, Flat.

HP Part Number 08691-20121, Plug Button.

**Page C-1, Paragraph C-6:**

Under Page 1-5, Table 1-1, change maximum leveled power (Option 001) to  $>+9.0$  dBm (8 mW).

Under Page 4-6, Paragraph 4-10, change specifications for maximum leveled power to  $>+9.0$  dBm (8 mW).

Under Page 4-23, Table 4-1, Paragraph 4-10, change the Lower Limit for step q to  $+9$  dBm.

Delete Appendix E.



**Agilent Technologies**