

## MANUAL IDENTIFICATION

Model Number: 8445B  
 Date Printed: May 1973  
 Part Number: 08445-90103

This supplement contains important information for correcting manual errors and for adapting the manual to instruments containing improvements made after the printing of the manual.

To use this supplement:

Make all ERRATA corrections

Make all appropriate serial number related changes indicated in the tables below.

Serial Prefix or Number	Make Manual Changes	Serial Prefix or Number	Make Manual Changes
1318A	1		
1326A	1, 2		

► NEW ITEM

## ERRATA

Page 1-2, Table 1-1:

► Change "Digital Frequency Readout (Option 003)" as follows:

Resolution: 1 MHz

Accuracy: 0.01 to 1.0 GHz:  $\pm 6$  MHz

1.0 to 4.0 GHz:  $\pm 8$  MHz

4.0 to 18.0 GHz:  $\pm 0.2\%$

Delete the Differential Input Resistance and Common Mode Rejection Ratio.

Page 3-11, Figure 3-8:

Delete S3.

Page 4-2, Paragraph 4-8:

Change step m. to: Adjust Preselector FREQ OFFSET to peak display signal.

Change step n. to: Connect a  $-30$  dBm signal at 8 to 14 GHz and select the appropriate band (2+ or 3+).

Page 5-3, Paragraph 5-9:

Change the first sentence to: . . . , the A1 Predriver Assembly is checked and adjusted for an output voltage that tracks the tuned frequency of the Spectrum Analyzer.

Page 5-5, Paragraph 5-9 (step 15):

Change  $n = 1^{+*}$  to  $n = 1^{-*}$ .

## NOTE

Manual change supplements are revised as often as necessary to keep manuals as current and accurate as possible. Hewlett-Packard recommends that you periodically request the latest edition of this supplement. Free copies are available from all HP offices. When requesting copies quote the manual identification information from your supplement, or the model number and print date from the title page of the manual.

**ERRATA (Cont'd)**

Page 5-5, Paragraph 5-10:

Add to paragraph title: (Applies to instruments with Serial Prefix 1251A only.)

Page 5-6, Paragraph 5-10:

Add a sentence to step 3: Ground the negative terminal of the Power Supply with the shorting bar.

Page 5-9, Paragraph 5-11 (step 4):

Change to: Couple the negative terminal of the Power Supply to ground with the shorting bar. Adjust A3R7 to  $0 \pm 1$  mVdc at A3TP3.

Page 8-19, Figure 8-8 (Service Sheet 4):

Delete the Test Point 2 which is to the left of R24 and R29. TP 2 is shown twice on this schematic.

Page 8-23, Figure 8-10 (Service Sheet 6):

Change the diagram as shown in the partial schematic of Figure 1.

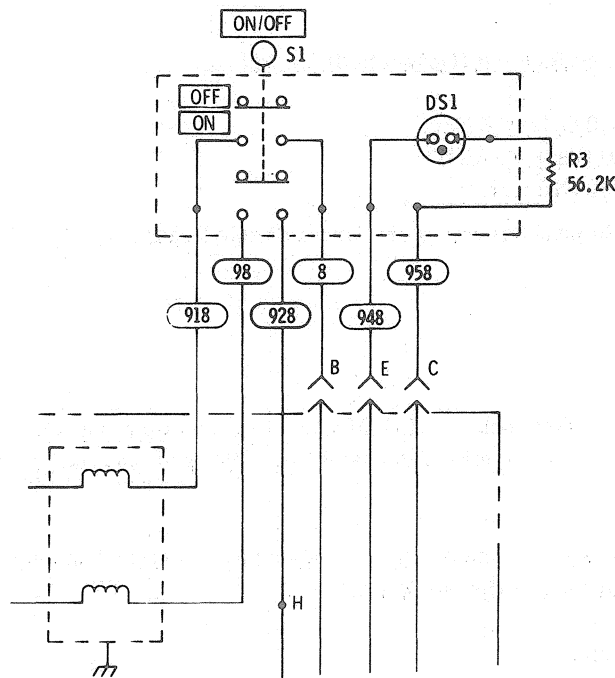


Figure 1. Partial Schematic of Figure 8-10

Page preceding the office list:

Add the warranty on the following page to the manual.



**CONDITIONS OF WARRANTY**  
**FOR**  
**YIG FILTERS**

Microwave YIG Filters are warranted to be free from manufacturing defects. The operating warranty will be 12 months unconditional from date of shipment from Hewlett-Packard. If a filter carrying this warranty fails and must be replaced, only the applicable remaining warranty of the first filter is transferred to the replacement filter, or 90 days, which ever is greater. The Hewlett-Packard Company will process warranty claims for customers on filters which were supplied by Hewlett-Packard for use in Hewlett-Packard instruments. The serial number of the filter and the serial number of the replacement filter must be noted on the warranty claim form.

"*In Warranty*" filters purchased from Hewlett-Packard must be returned immediately (not to exceed 30 days from date of failure) with a completed Warranty Claim Form, to your local Hewlett-Packard Sales and Service Office. Addresses are listed in the Instrument Manual. Be sure to pack the filter in accordance with the Packing Instructions listed on the Warranty Claim Form; warranty allowance cannot be made on damage due to improper packaging or showing evidence of tampering.

Instructions for filing a warranty claim are listed on the "*Microwave Tube Warranty Claim*" form which is included with the Operating and Service Manual for your instrument. This form is also included with replacement YIG filters supplied by Hewlett-Packard. Additional copies may be obtained from your local Hewlett-Packard Sales and Service Office. (Please ref: HP Stock No. 9320-1865.)

Hewlett-Packard specified replacement filters can be obtained from your local Hewlett-Packard Sales and Service Office.

**CHANGE 1**

Page 5-5, Paragraph 5-10:

Delete the Remote Amplifier Adjustment procedure.

Page 6-7, Table 6-2:

Add:

A2R30 and R33, 0698-3241, R:FXD FLM 250 OHM 0.25% 1/8W, 28480, 0698-3241.

A2R31 and R32, 0811-3007, R:FXD WW 10K OHM 0.01% 1/32W, 28480, 0811-3007.

A2R34 and R35, 0757-0442, R:FXD MET FLM 10K OHM 1% 1/8W, 28480, 0757-0422.

Delete A2R15, A2R20-23 and A2VR1-3.

Page 8-9, Figure 8-21 (Service Sheet 5):

Change the circuit diagram as shown in the partial schematic Figure 2.

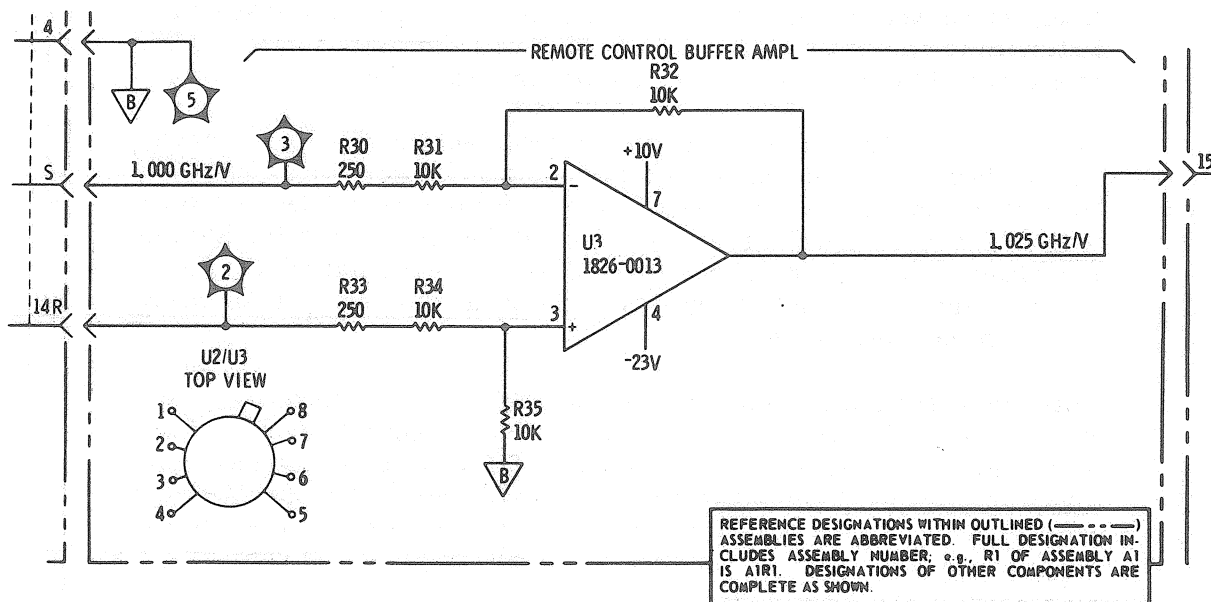


Figure 2. Partial Schematic of Figure 8-9.

**CHANGE 2**

Page 6-11, Table 6-2:

Delete TB1

Add TB2, 0360-1665, TERMINAL STRIP, 28480, 0360-1665.

Page 8-19, Figure 8-8 (Service Sheet 4)

Add terminal strip TB2 as shown in partial schematic Figure 3.

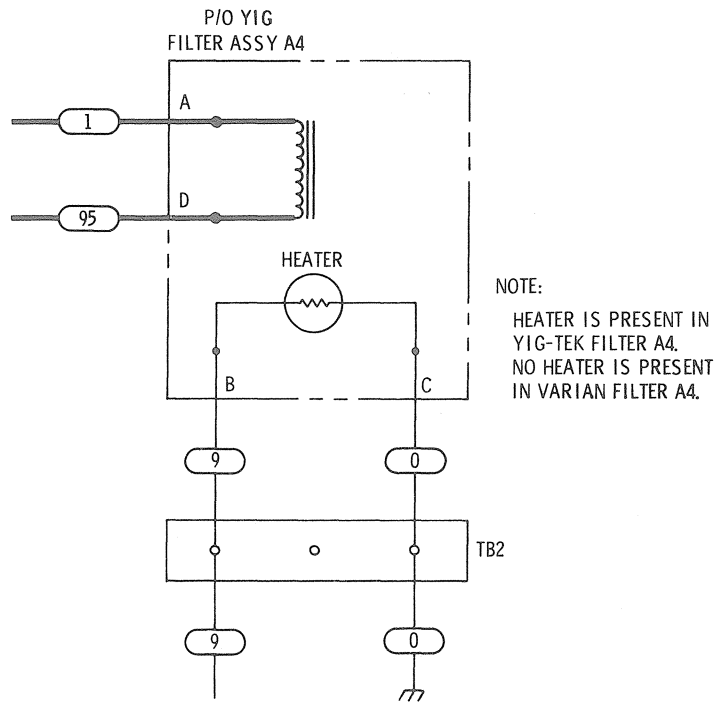


Figure 3. Partial Schematic of Figure 8-8.

The first part of the report is devoted to a description of the experimental conditions and the results obtained. The second part is devoted to a discussion of the results and a comparison with the theoretical predictions.

The experimental conditions were as follows: the temperature was kept constant at 25°C, the pressure at 1 atm, and the concentration of the reactants at 0.1 M. The reaction was initiated by the addition of a small amount of a catalyst. The results obtained are shown in the following table:

Time (min)	Concentration (M)
0	0.100
10	0.095
20	0.090
30	0.085
40	0.080
50	0.075
60	0.070
70	0.065
80	0.060
90	0.055
100	0.050

The results show that the concentration of the reactants decreases linearly with time, which is in agreement with the theoretical predictions. The rate of reaction is therefore constant and equal to 0.005 M/min.