

TM 11-6625-2781-14-6

TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND
GENERAL SUPPORT MAINTENANCE MANUAL INCLUDING
REPAIR PARTS AND SPECIAL TOOLS LIST
FOR**

**FILTER, VARIABLE F-1414/U(HP-8445B)
(NSN 6625-00-253-4833)**

HEADQUARTERS, DEPARTMENT OF THE ARMY

30 NOVEMBER 1978

TECHNICAL MANUAL }
NO. 11-6625-2781-14-6 }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 30 November 1978

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REPORTING OF ERRORS

You can improve this manual by recommending improvements using DA Form 2028-2 located in the back of the manual. Simply tear out the self-addressed form, fill it out as shown on the sample, fold it where shown, and drop it in the mail.

If there are no blank DA Forms 2028-2 in the back of your manual, use the standard DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward to the Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703.

In either case a reply will be furnished direct to you.

This manual is an authentication of the manufacturer's commercial literature which, through usage, has been found to cover the data required to operate and maintain this equipment. The manual was not prepared in accordance with military specifications; therefore, the format has not been structured to consider categories of maintenance.

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SECTION 0

INTRODUCTION

0-1. Scope

This manual contains instructions for the operation, organizational maintenance, and general support maintenance of Filter, Variable F-1414/U hereinafter referred to as Hewlett-Packard Model HP-8445B Automatic Preselector.

NOTES

Appendix C contains a list of applicable references, Appendix D contains the maintenance allocation chart (MAC). No direct support maintenance is authorized for this equipment.

0-2. Indexes of Publications

a. DA Pam 310-4. Refer to latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. DA Pam 310-7. Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO'S) pertaining to the equipment.

0-3. Forms and Records

a. Reports of Maintenance of Unsatisfactory Equipment. Maintenance forms, records, and reports which are to be used by maintenance personnel at all levels are listed in and prescribed by TM 38-750.

b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR

700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DLAR 4145.8.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33 B/AFR 75-18/MCO P4610.19C, and DLAR 4500.15.

0-4. Administrative Storage

Before placing the F-1414/U in temporary storage (90 days), determine the serviceability of the equipment by performing the maintenance procedures described in paragraphs 8-32 and 8-34.

0-5. Destruction of Army Electronics Materiel.

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

0-6. Reporting Equipment Improvement Recommendations (EIR)

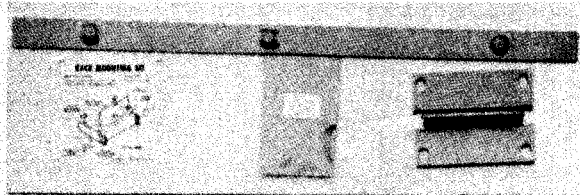
EIR's will be prepared using Standard Form 368, Quality Deficiency Report. Instructions for preparing EIR's are provided in TM 38-750, The Army Maintenance Management System. EIR's should be mailed direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

0-7. Items Comprising an Operable Equipment

Filter, Variable F-1414/U comprises an operable equipment.



MODEL 8445B (OPTION 002/003)



RACK MOUNTING KIT

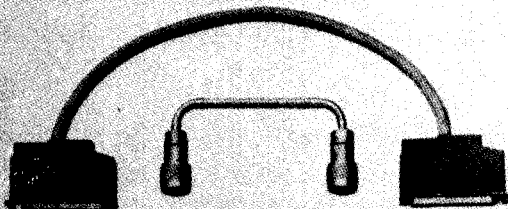


JOINING BRACKET KIT

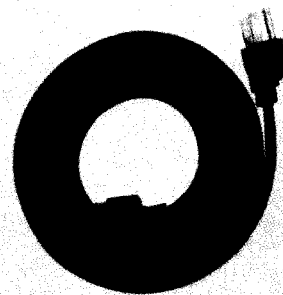
INTERCONNECT CABLE



FUSE



**RF INTERCONNECT
CABLE**



LINE POWER CABLE

NOTE: See ACCESSORIES SUPPLIED in Table 1-3 for part number information.

Figure 1-1. Model 8445B and Accessories Supplied

SECTION I GENERAL INFORMATION

1-1. INTRODUCTION

1-2. This manual contains all information required to install, operate, test, adjust and service the Hewlett-Packard Model 8445B Automatic Preselector. This section covers instrument identification, description, options, accessories, specifications and other basic information.

1-3. Figure 1-1 shows the Hewlett-Packard Model 8445B Automatic Preselector with Option 002 (manual tuning controls) and Option 003 (digital readout of center frequency).

1-4. The various sections in this manual provide information as follows:

SECTION II, INSTALLATION, provides information relative to incoming inspection, power requirements, mounting, packing and shipping, etc.

SECTION III, OPERATION, provides information relative to operating the instrument.

SECTION IV, PERFORMANCE TESTS, provides information required to ascertain that instrument is performing in accordance with published specifications.

SECTION V, ADJUSTMENTS, provides information required to properly adjust and align the instrument after repairs are made.

SECTION VI, REPLACEABLE PARTS, provides ordering information for all replaceable parts and assemblies.

SECTION VII, MANUAL CHANGES, normally will contain no relevant information in the original issue of a manual. This section is reserved to provide back-dated and up-dated information in manual revisions or reprints.

SECTION VIII, SERVICE, includes all information required to service the instrument

1-5. Supplied with this manual is an Operating Information Supplement. The Supplement is a copy of the first three sections of the manual, and should

be kept with the instrument for use by the operator. Also included with the manual is an Overall Schematic Diagram. Additional copies of both the Operating Information Supplement and the Overall Schematic Diagram can be ordered separately through your nearest Hewlett-Packard office. The part numbers are listed on the title page of this manual.

1-6. Also listed on the title page of this manual is a Microfiche part number. This number can be used to order 4 x 6-inch microfilm transparencies contains up to 60 photoduplicates of the manual pages. The Microfiche package also includes the latest Manual Changes supplement and all pertinent Service Notes.

1-7. SPECIFICATIONS

1-8. Specifications for the instrument are listed in Table 1-1. These are the performance standards the instrument is tested against. A list of typical operating characteristics is provided in Table 1-2. They are included as additional information only; they are not specifications.

1-9. SAFETY CONSIDERATIONS

1-10. General

1-11. This is an International Electrotechnical Commission (IEC) Safety Class I instrument, designed and tested according to IEC Publication 348, "Safety Requirements for Electronic Measuring Apparatus." It has been supplied in safe condition.

1-12. Operation

1-13. BEFORE APPLYING POWER, make sure the ac input to the instrument is set for the available ac line voltage, that the correct fuse is installed (Figure 2-1), and that all normal safety precautions have been taken.

1-14. Service

1-15. Although the instrument has been designed in accordance with international safety standards,