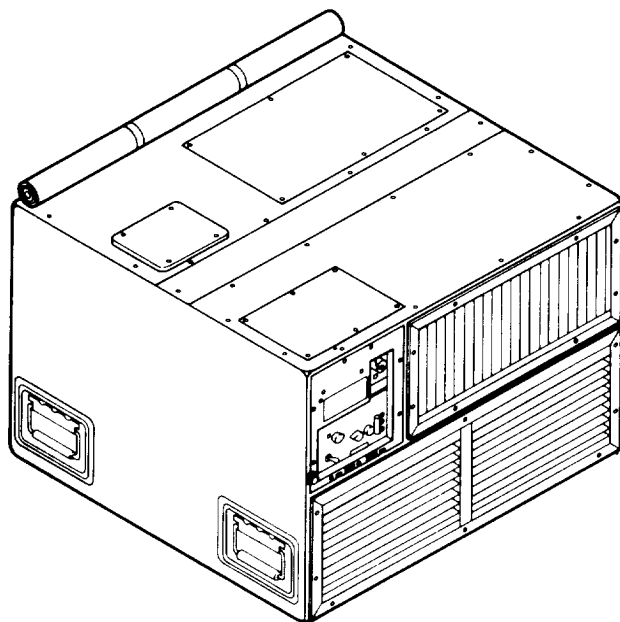


TECHNICAL MANUAL
OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT &
GENERAL SUPPORT
MAINTENANCE MANUAL
AIR CONDITIONER, HORIZONTAL, COMPACT, 18,000 BTU

208 VOLT, 3 PHASE, 50-60 HERTZ
NSN 4120-01-105-5746
MODEL NUMBER MIL-AC-1832



HEADQUARTERS, DEPARTMENT OF THE ARMY
25 NOVEMBER 1982

TECHNICAL MANUAL
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WASHINGTON, D.C., 25 November 1982

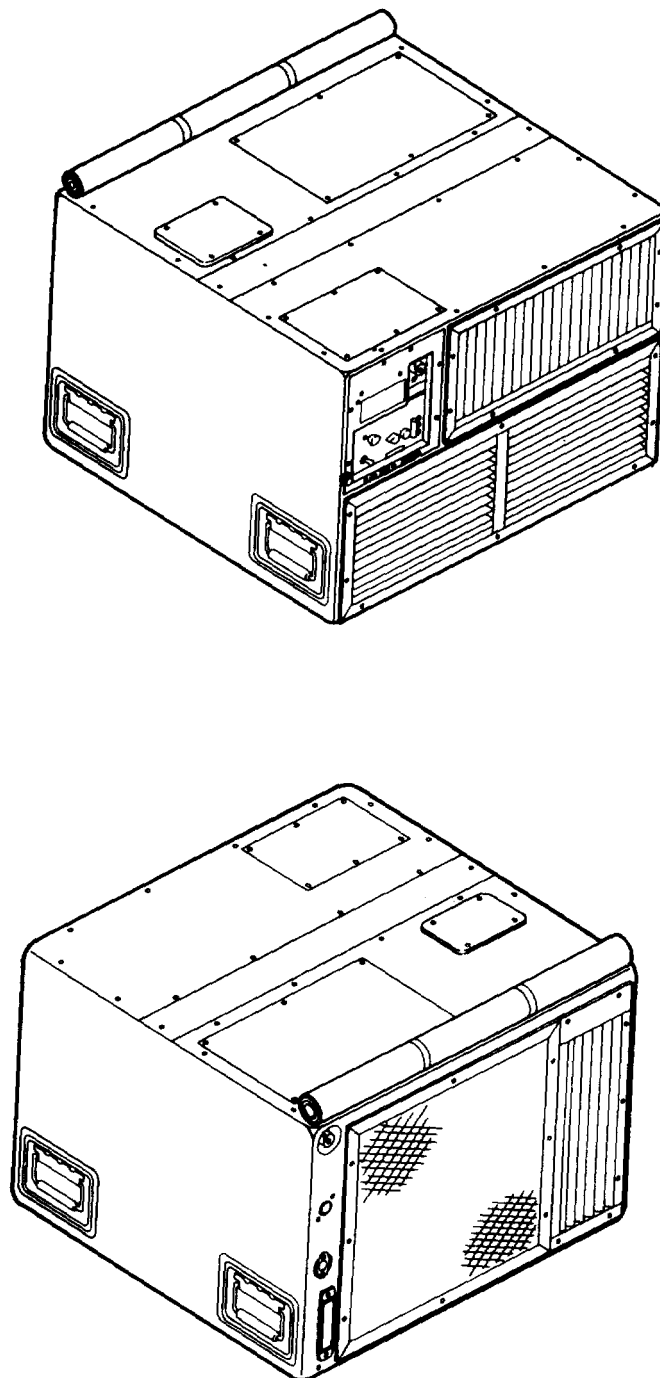
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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, U.S. Army Troop Support & Aviation Material Readiness Command, ATTN: DRSTS-MPSD, 4300 Goodfellow Boulevard, St. Louis, MO 63120. A reply will be furnished to you.

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Shipping Dimensions

Length --- 30.0 in (72.4 cm)
Height --- 20.0 in (48.3 cm)
Width --- 27.9 in (67.3 cm)
Weight --- 265lb (132kg)

Figure 1-1. Air conditioner, three quarter view, with shipping dimensions

CHAPTER 1. INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE.

This manual is for your use in operating and maintaining the MIL-AC-1832 air conditioner.

1-2. MAINTENANCE FORMS AND RECORDS.

Maintenance forms and records that you are required to use are explained in TM 38-750.

1-3. REPORTING OF EQUIPMENT IMPROVEMENTS RECOMMENDATIONS.

EIR can and must be submitted by anyone who is aware of any unsatisfactory condition with the equipment design or use. It is not necessary to show a new design or list a better way to perform a procedure, just simply to tell why the design is unfavorable or why a procedure is difficult. EIR may be submitted on SF 368 (Quality Deficiency Report). Instructions for preparing EIR's are provided in TM 38-750, the Army Maintenance Management System. Send EIR to Commander, US Army Troop Support and Aviation Materiel Readiness Command, ATTN: DRSTS-MPSD, 4300 Goodfellow Blvd., St. Louis, MO 63210. A reply will be forwarded directly to you.

1-4. EQUIPMENT AND SERVICEABILITY CRITERIA.

This equipment is not covered by an ECS.

1-5. HAND RECEIPT MANUAL.

Hand receipts for the End Items/Components of End Item (COEI), Basic Issue Items BII), and Additional Authorization List (AAL) items are published in a Hand Receipt Manual. The Hand Receipt Manual numerical designation is the same as the related Technical Manual with the letters HR added to the number. These manuals are published to aid in property accountability and are available through: Commander, US Army Adjutant General, 2800 Eastern Blvd., Baltimore, MD 21220.

Not applicable to the Marine Corps. Refer to SL-1-3.

Section II. EQUIPMENT DESCRIPTION

1-6. EQUIPMENT PURPOSE, CAPABILITIES AND FEATURES.

Air conditioner (figure 1-1) is a completely self-contained, compact, horizontal unit designed for cooling and heating air to a desired predetermined range, and circulating the conditioned air to provide heating or cooling of equipment or personnel within the air conditioned area. It is designed for continuous operation, with varying loads. It is used primarily in van type enclosures to provide the filtered cooling and ventilating or heated air required to maintain service conditions necessary for efficient operation of electronic equipment and the comfort of operating personnel. It is equipped with internal ducting so that ventilation air may be drawn into the area being air conditioned. The evaporator and condenser sections of the air conditioner are separated by an insulated metal partition that forms part of the unit housing.

1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

a. Evaporator Section. The evaporator section (figure 1-2), located in the front of the air conditioner, contains intake and discharge air louvers, air filter, mist eliminator, evaporator coil, evaporator motor and fans, heater elements, heater thermal protector, primary expansion valve, condensate drain hose, electrical control panel and controls, main input power connector, control module, and the ventilation air damper door and control knob. The evaporator fan draws air into the unit, from the space being conditioned, through the inlet louver and air conditioning filter, or

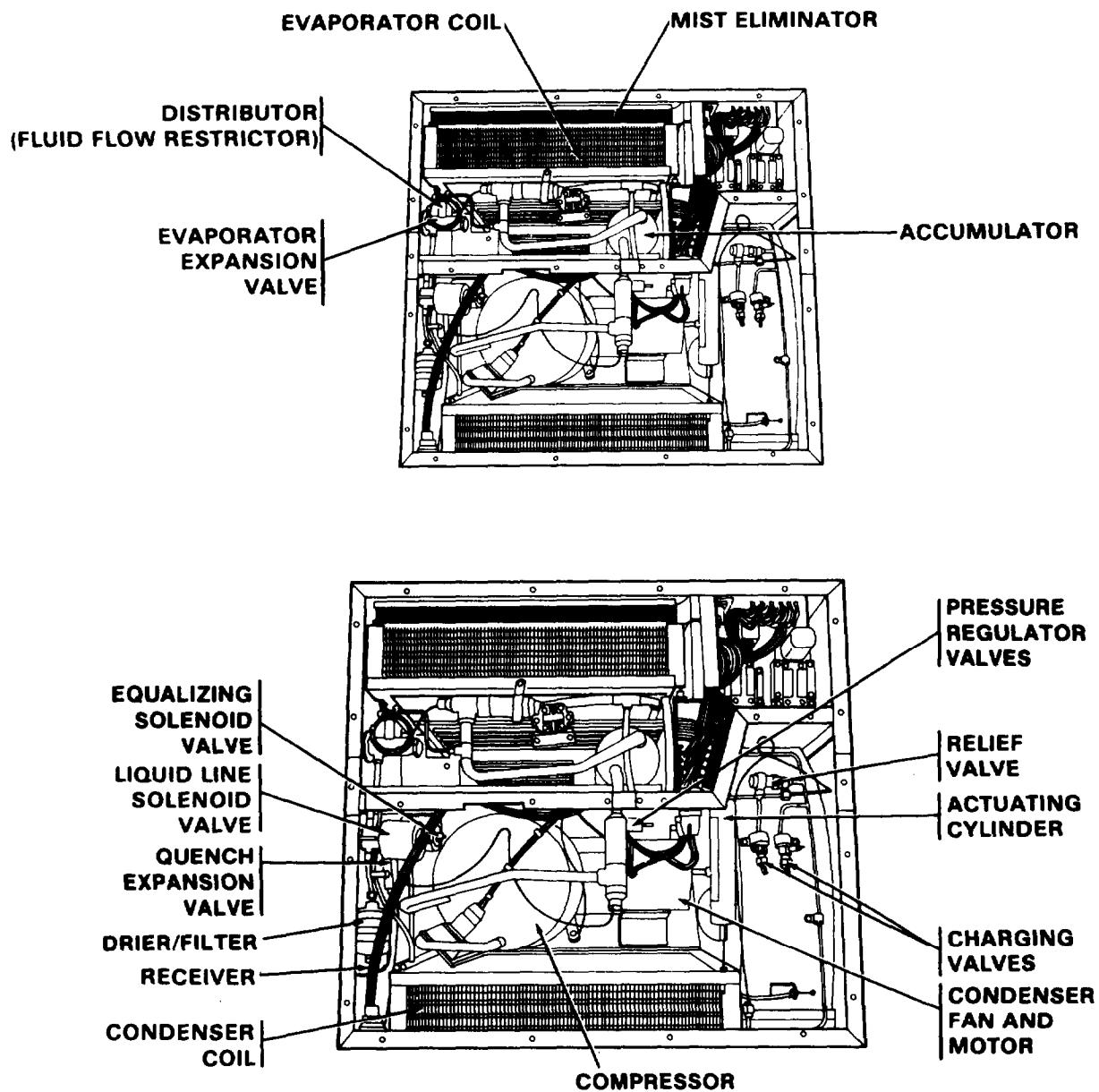


Figure 1-2. Air Conditioner top view, top covers removed