

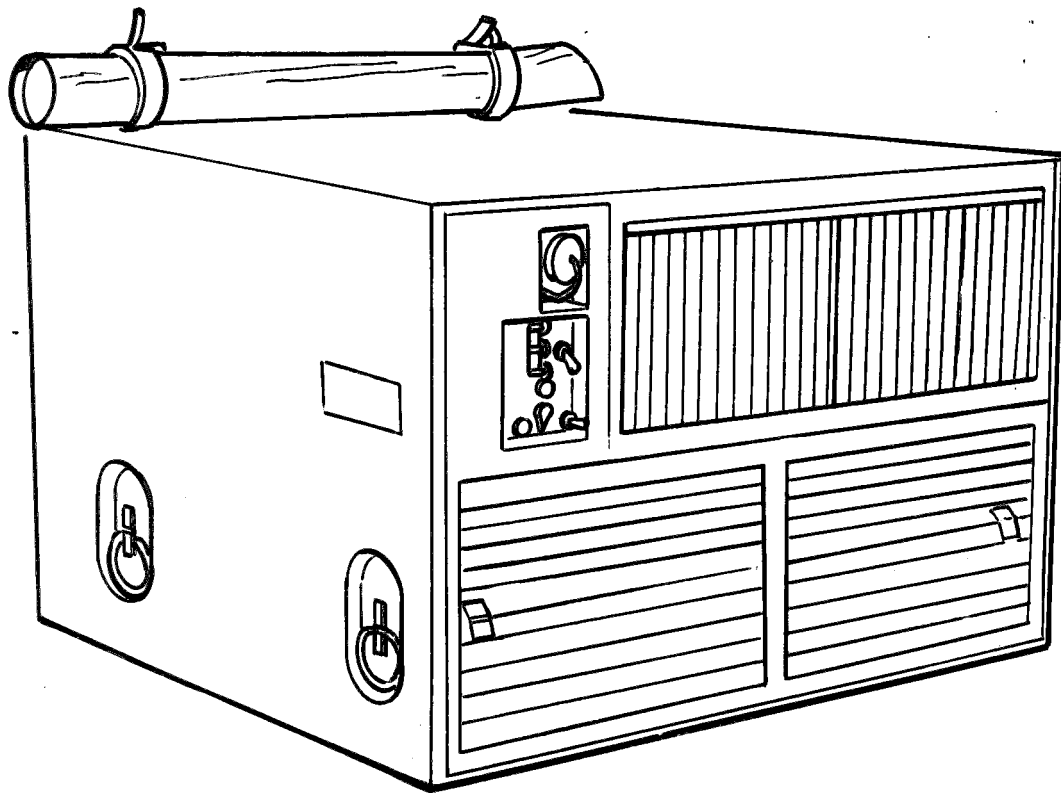
TECHNICAL MANUAL

OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT & GENERAL SUPPORT

MAINTENANCE MANUAL

FOR

AIR CONDITIONER, HORIZONTAL, COMPACT, 36000 BTUH



208 VOLT, 3 PHASE 400 HERTZ

NSN 4120-00-063-8182

AMERICAN AIR FILTER CO. MODEL CH436-1

AND

208 VOLT, 3 PHASE, 50/60 HERTZ

NSN 4120-00-063-7575

AMERICAN AIR FILTER CO. MODEL CH636-1

DEPARTMENT OF THE ARMY

30 MAY 1980

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DEPARTMENT OF THE ARMY

WASHINGTON, D.C., 30 May 1980

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DIRECT SUPPORT AND GENEML SUPPORT
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AIR CONDITIONER, HORIZONTAL, COMPACT, 36,000 BTUH

208 VOLT, 3 PHASE, 400 HERTZ

NSN 4120-01-063-8182

(AMERICAN AIR FILTER CO., MODEL CH436-1)

208 VOLT, 3 PHASE, 50/60 HERTZ

NSN 4120-01-063-7573

(AMERICAN AIR FILTER CO., MODEL CH636-1)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of a way to improve the 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 Command, ATTN: AMSTR-MCTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished directly to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. Scope.

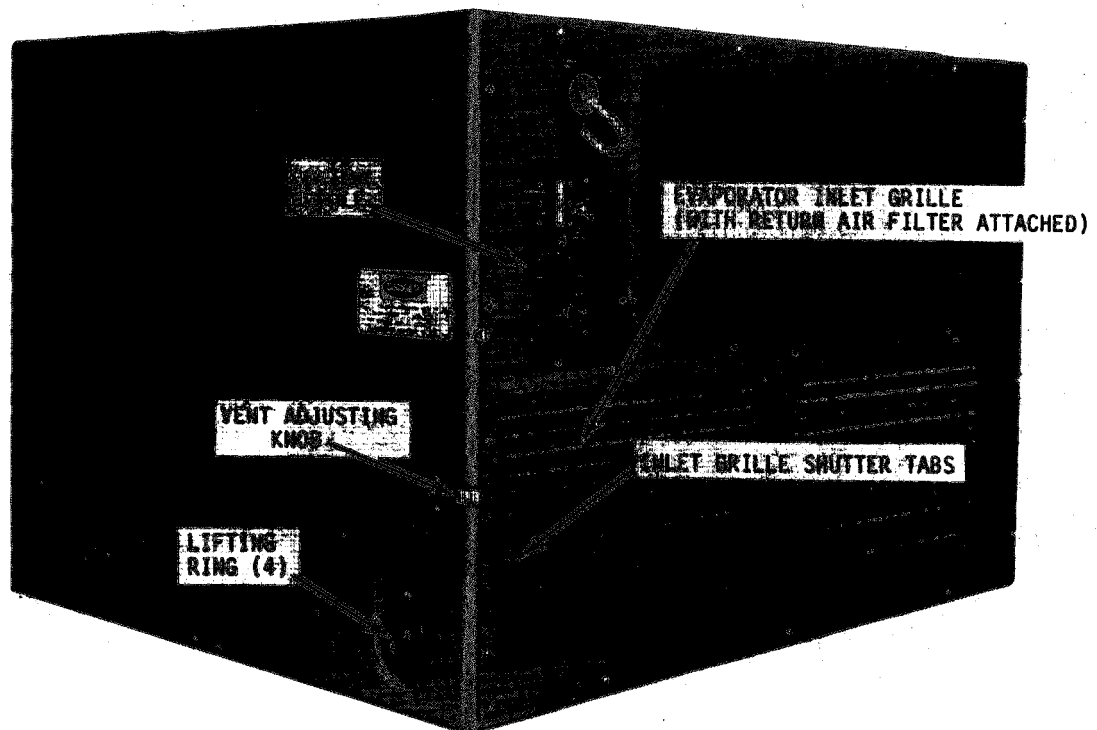
This manual is for your use in operating and maintaining the AAF Models CH436-1 and CH636-1 air conditioners.

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



SHIPPING DIMENSIONS	
LENGTH	34.8 IN (88.4 cm)
HEIGHT	27.0 IN (68.6 cm)
WIDTH	38.0 IN (96.5 cm)
WEIGHT	435 LB (198 kg)

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

SF 368 (Quality Deficiency Report). Instructions for preparing EIR's are provided in TM 38-750, the Army Maintenance Managements System. Mail directly to Commander Headquarters, U. S. Army Troop Support and Aviation Material Command, ATTN: DRSTS-MEM, 4300 Goodfellow

Blvd., St. Louis, MO 63120. A reply will be forwarded directly to you.

1-4. Equipment and Serviceability Criteria.

This equipment is not covered by an ECS.

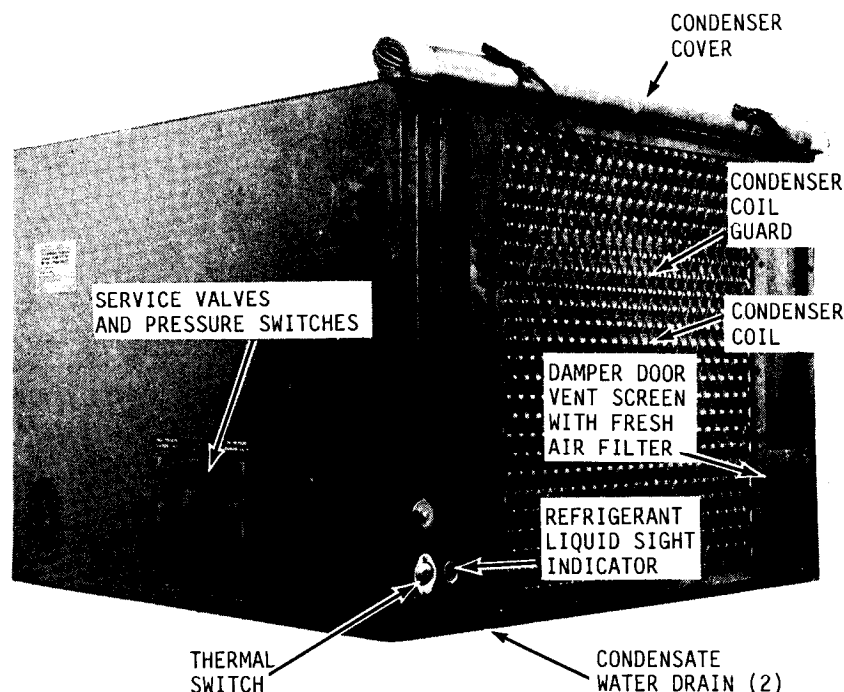


Figure 1-2. Air conditioner left rear, three quarters view

Section II. EQUIPMENT DESCRIPTION

1-5. Equipment Purpose, Capabilities and Features.

Air conditioner Model CH436-1 or CH636-1 (figures 1-1 and 1-2) 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.

1-6. Location and Description of Major Components.

a. Evaporator Section. The evaporator section (fig. 1-3), 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