

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL, DS, GS, AND DEPOT
MAINTENANCE MANUAL

AIR CONDITIONER:
COMPACT VERTICAL
208V, 3 PHASE, 60,000 BTUH COOLING;
49,000 BTUH HEATING
(TRANE MODELS)
50/60 CYCLE-MODEL MAC6V60-360-2
FSN 4120-935-5416
400 CYCLE-MODEL MAC4V60-360-3
FSN 4120-935-5417

This copy is a reprint which includes current pages from Changes 1 and 2.
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TECHNICAL MANUAL

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HEADQUARTERS
DEPARTMENT OF THE ARMY
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CHAPTER 1 INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual is published for use of personnel to whom Military Models HIAC4V60-360-3 and MAC6V60-360-2 air conditioners are issued. Chapters 1 through 3 provide information on operation, preventive maintenance services, and organizational maintenance of the equipment, accessories, components, and attachments. Chapters 4 through 6 provide instructions for direct and general support and depot maintenance. Also included are description of main units and their relationship to other components.

b. Numbers in parentheses on illustrations indicate quantity. Numbers preceding nomenclature callouts on illustrations indicate the preferred maintenance sequence.

c. Report of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be

submitted on DA Form 2028 (Recommended Changes to DA Publications) and forwarded direct to the Commanding General, U. S. Army Mobility Equipment Command, ATTN: AMSME-MPP, 4300 Goodfellow Boulevard, St. Louis, Mo. 63120.

d. Report all equipment improvement recommendations as prescribed by TM 38-750.

1-2. Record and Report Forms

a. DA Form 2258 (Depreservation Guide of Engineer Equipment).

b. For other record and report forms applicable to the operator and organizational maintenance, refer to TMI 38-750.

Note. Applicable forms, excluding Standard Form 46 (United States Government Motor Vehicles Operator's Identification Card) which is carried by the operator, will be kept in a canvas bag mounted on the equipment.

Section II. DESCRIPTION AND TABULATED DATA

1-3. Description

a. General. The air conditioner (fig. 1-1 through 13) is used primarily in van type enclosures for providing filtered, conditioned, or heated air as required to maintain service conditions necessary for the efficient operation of electronic equipment and for the comfort of operating personnel housed within the specified vans. It is a completely self-contained, air cooled, electric motor driven unit designed for continuous operation with varying loads. It is equipped with internal ducting to the low side of the evaporator fans so that ventilation air from the Chemical, Biological, and Radiological (CBR) filter unit may be supplied by the evaporator fans.

b. Condensing Section. The condensing section located at the bottom of the unit, contains the hermetically sealed compressor, condensing coil, receiver, condenser air intake opening, condense

air discharge opening, control panel, junction box, condenser fan, fan motor, dehydrator, system access valves, solenoid valve, expansion valve, check valve and pressure release safety valve.

c. Evaporator Section. The evaporator section, located in the top of the unit, contains an evaporator coil, evaporator fans, air conditioning filters, intake and discharge grilles, evaporator coil drain pan, expansion valve, solenoid valve, back pressure regulating valve, electrical heaters, sight glass, accumulators and a damper to regulate the amount of outdoor air entering the air conditioner.

1-4. Identification and Tabulated Data

a. Identification. The air conditioner has 14 major identification plates. The information contained on the plates is listed below. See figure 1-4 for location

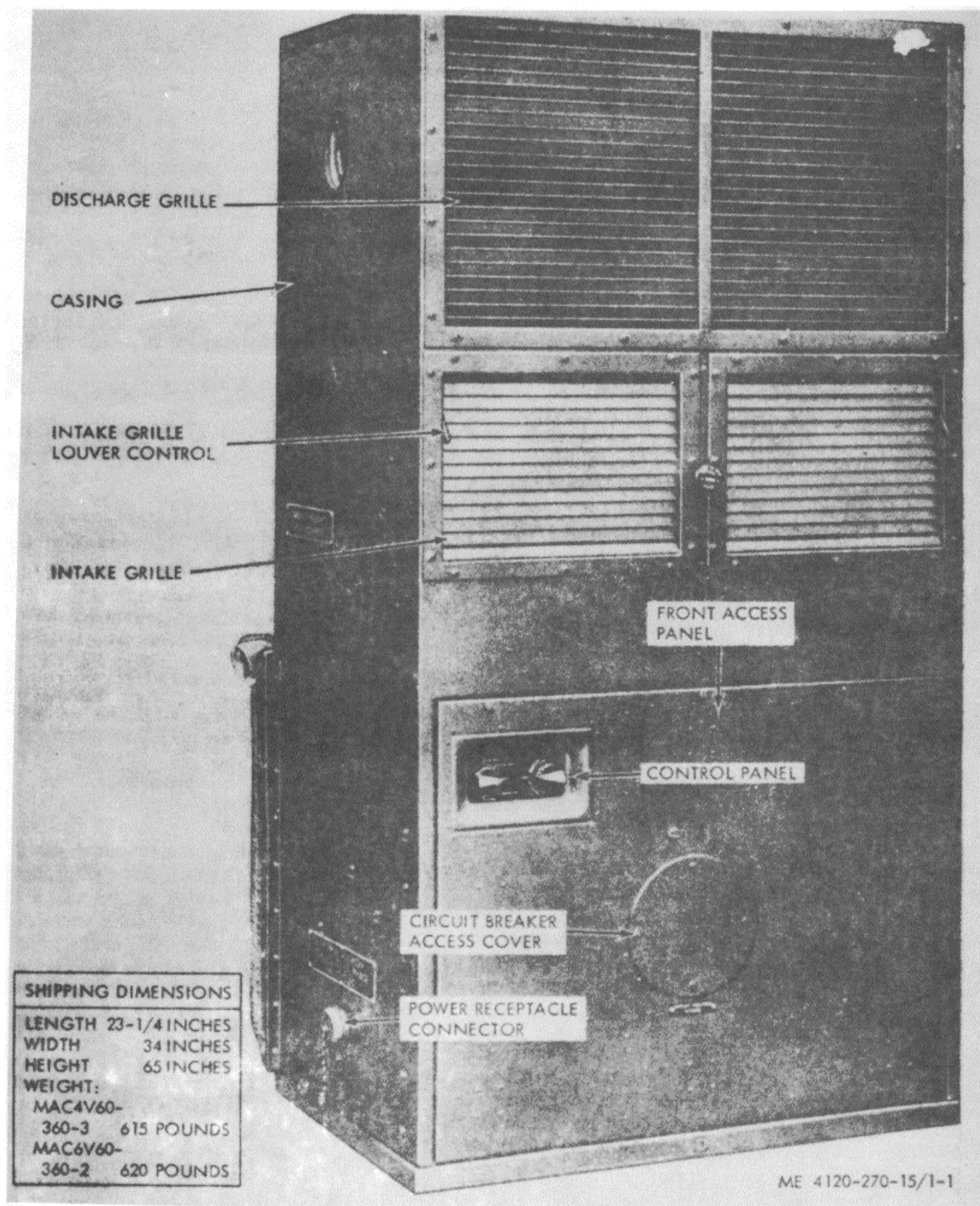


Figure 1-1. Air Conditioner, left front 3/4 view with shipping dimensions.