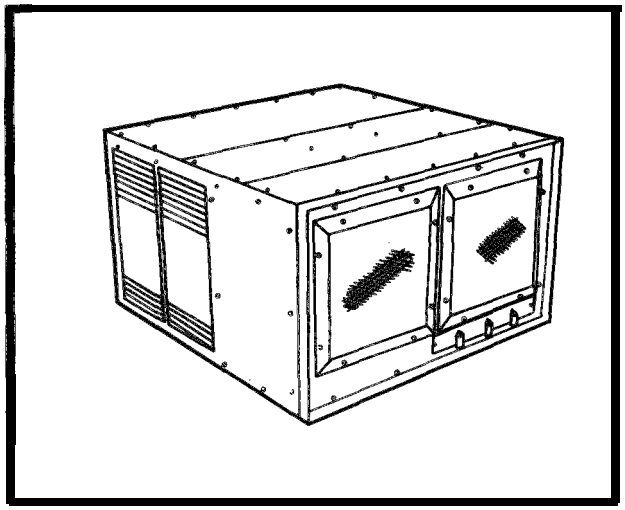
TM 5-4120-341-13

TECHNICAL MANUAL

OPERATOR'S ORGANIZATIONAL,
AND DIRECT SUPPORT
MAINTENANCE MANUAL

AIR CONDITIONER

9,000 BTU/HR COOLING



(HOTTEL MODEL HAC-751)
(4120-01-085-4732)

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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HEADQUARTERS, DEPARTMENTS OF
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WASHINGTON, D.C.,

Operator's, Organizational, and Direct Support Maintenance Manual

AIR CONDITIONER 9,000 BTU/HR COOLING (HOTTEL MODEL HAC-751)

(4120-01-085-4732)

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 the procedures, please let us know. Reports shall be submitted as follows: A reply will be furnished to you.
(A) Army - 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.
(F) Air Force - AFTO Form 22 directly to: Commander, Sacramento Air Logistics Center, ATTN: MMST, McClellan Air Force Base, CA 95652 in accordance with TO-00-5-1.

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CHAPTER 1
INTRODUCTION

CHAPTER OVERVIEW

The purpose of this chapter is two-fold:

a. To provide you with the standard data required in all manuals (i.e. forms and record data).

b. To acquaint you with the air conditioner. This is done by giving you a physical and functional description of those major equipment parts that you are likely to come in contact with.

Section I. GENERAL INFORMATION

1-1. SCOPE

Type of Manual: Operator's, Organizational, and Direct Support Maintenance

Model Number and Equipment Name: HAC-751 Air Conditioner: Floor Mounted, Air Cooled, Electric Motor Driven, 3/4 HP, 60 Hertz AC, Single Phase, 9,000 BTU/HR

Purpose of Equipment: Provide filtered, cooled air to a desired predetermined range and circulating the air to provide cooling of equipment or personnel within the air conditioned area.

1-2. MAINTENANCE FORMS AND RECORDS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, the Army Maintenance Management Systems (TAMMS).

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Refer to TM 750-244-3, Procedures for Destruction of Equipment to Prevent Enemy Use, for information about destruction.

1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs)

If your air conditioner needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it directly to Commander, U.S. Army Troop and Aviation Materiel Readiness Command, ATT: DRSTS-MEM, 4300 Goodfellow Boulevard, St. Louis, MO 63120.

1-5. LIST OF ABBREVIATIONS

a	ampere	l	liter
BTU/HR	British Thermal Units Per Hour	lb	pound
C	Celsius	OD	Outside Diameter
COMPR	Compressor	psi	pounds per square inch
DB	Dry Bulb	pt	pint
F	Fahrenheit	rpm	revolutions per minute
hpr	Horsepower	SHR	Sensible Heat Ratio
in	inch	v	volts
kg	kilogram	vac	volts alternating current
kglm	kilograms per square meter	vdc	volts direct current

1-6. HAND RECEIPT

Hand receipts for Components of End Item (COEI), Basic Issue Items (Bll), and Additional Authorization List (AAL) items are published in a Hand Receipt manual, TM 5-4120-341-13-HR. This manual is published to aid in property accountability and is available through Commander, U.S. Army Adjutant General Publication Center, ATTN: AGDL-OD, 1655 Woodson Road, St. Louis, MO 63114.

Section II. EQUIPMENT DESCRIPTION

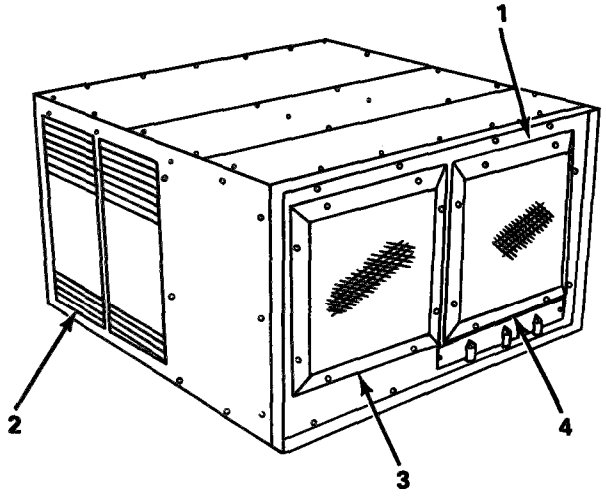
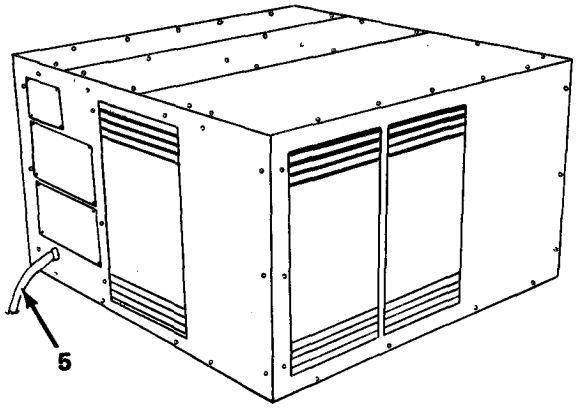
1-7. PURPOSE OF AIR CONDITIONER

The air conditioner is used primarily in van type enclosures. The units provide filtered, cooled air, as required, to maintain the service conditions necessary for the efficient operation of electronic equipment in the vans. The air conditioners also provide for the comfort of operating personnel housed within the vans.

Capabilities and Features

Floor mounted and air cooled
Electric motor driven and designed for continuous operation under varying loads
Furnishes 9,000 BTU/HR for cooling

1. Air conditioner housing and panels
2. Fan motor and fans
3. Control panel
4. Compressor
5. Evaporator coil, expansion valves, and piping
6. Condenser coil, dehydrator, valves and piping

1-8. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

1. Return Air Grill - Adjustable and controls the amount of air passing through the air conditioner.
2. Condenser Inlet - Directs flow of air to condenser.
3. Air Diffuser Grill - Directs flow of evaporator outlet air.
4. Control Panel - Contains all control switches.
5. Power Cable - For connection to 115 volts, 60 Hz, single phase power source.