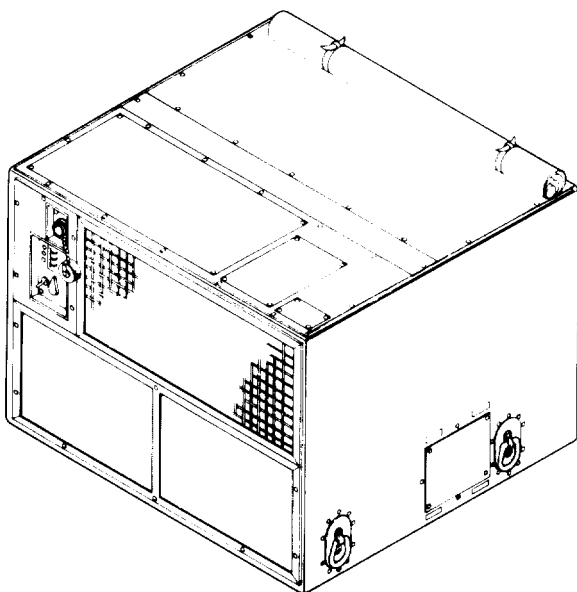


TECHNICAL MANUAL OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

AIR CONDITIONER, HORIZONTAL COMPACT
36,000 BTU/HR, COOLING
31,000 BTU/HR, HEATING
208 VOLT, 3 PHASE, 50/60 HERTZ
MODEL CH40-5/ 6-08
4120-01-122-0628



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HEADQUARTERS, DEPARTMENT OF THE ARMY
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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 10 April 1985

Operator's, Organizational, Direct Support
and General Support Maintenance Manual

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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of away to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publication sand 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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WARNINGS

Dry cleaning solvent, P-D-680 or P-S-661, used to clean parts is potentially dangerous to personnel and property. Avoid repeated and prolonged skin contact. Do not use near open flame or excessive heat. Flash point of solvent is 100°F (38°C).

Purge system with dry nitrogen prior to soldering. Refrigerant heated to 1200°F (649°C) creates phosgene gas.

Avoid contact with refrigerant acid. Burns could result from contact with refrigerant.

Refrigerant R-22 is contained in the refrigerant system under high pressure. Extreme care must be exercised to prevent refrigerant from coming in contact with exposed skin and eyes. Provide adequate ventilation when discharging the system in a confined area. All refrigerant gas must be discharged from system before performing any removal procedures of refrigerant components.

Polyurethane foam insulation breaks down to form toxic gases when heated to brazing temperatures.

Acetone and methyl-ethyl ketone (MEK) are flammable and their vapors are explosive. Prolonged or repeated inhalation of fumes on contact with the skin can be toxic. Use in a well ventilated area, wear gloves and keep away from sparks or flames.

Do not use compressed air for cleaning purposes except where reduced to less than 30 psi (2.11 kg/cm²) and then only with effective chip guarding and personal protective equipment.

Be careful when working with high voltage. Failure to comply can result in serious injury or death.

Do not wire connectors J1 and J12 for use at the same time, or apply power source to connectors J1 and J12 at the same time. You could have an unknown HOT connector, radio interference, or you could place two separate power supplies in opposition to each other.

Allow heater to cool before touching heaters. They can cause severe burns.

Use compressed air at 30 psi (1.36 kg) or less. Hold compressed air nozzle at least six to eight inches away from mist eliminator.

WARNINGS (Cont)

Do not use steam to clean the coil. Hot steam will splash and cause burns. The high heat could cause high system pressure.

Wear safety glasses when cleaning coil.

Use compressed air at 30 psi (1.36 kg) or less. Hold compressed air nozzle at least six to eight inches away from coil.

Allow heaters to cool before attempting removal or test of heater thermostat.

Make sure the power supply is off at the source before disconnecting the power supply line.

Dry nitrogen is always used to purge the refrigeration system during brazing or debrazing of connections to prevent internal oxidation scaling.

You must clean the entire refrigeration system after a burnout has occurred, since contaminants will have been carried to many corners and restrictions in the piping and fittings. These contaminants will soon be mixed with new refrigerant gas and compressor oil to cause repeated burnouts. To clean the system thoroughly, act as follows:

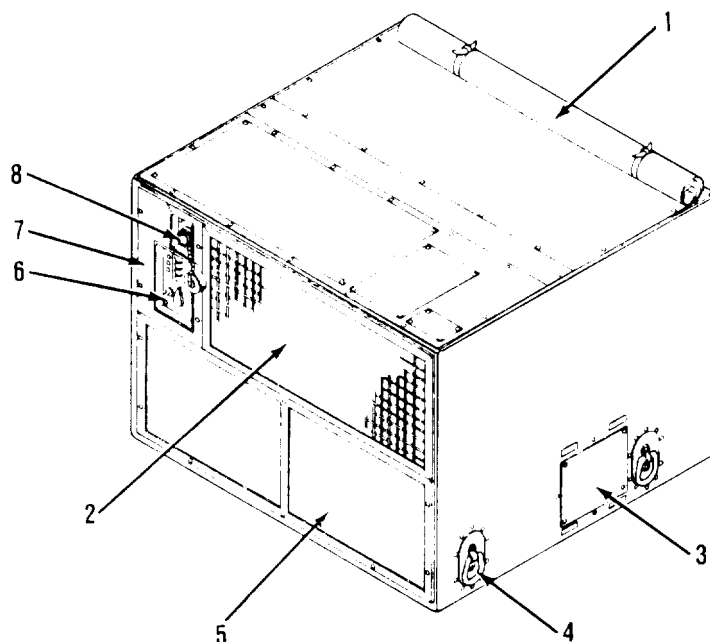
CHAPTER 1

INTRODUCTION

1-1. INTRODUCTION. The purpose of this manual is to acquaint you with the Air Conditioner Model CH 40-5/6-08. 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. Complete instructions are covered in detail for Operation and Maintenance for this unit.

SECTION I. GENERAL INFORMATION

1. Fabric cover
2. Front louver (evaporator discharge)
3. Access cover (service valves)
4. Lifting ring and clip
5. Front louver (evaporator inlet)
6. Control module assembly
7. Junction box
8. Input power receptacle (J-1)



FRONT VIEW