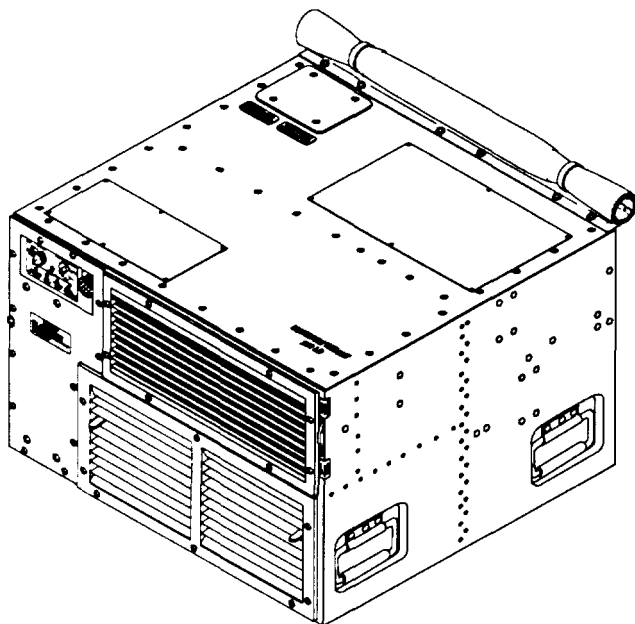


TECHNICAL MANUAL

OPERATOR'S, UNIT, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL



AIR CONDITIONER,
HORIZONTAL, COMPACT
18,000 BTU/HR

MODEL F18H-MPI
208 VOLT, 3-PHASE, 50/60/400 HZ
230 VOLT, SINGLE-PHASE, 50/60 HERTZ
NSN 4120-01-327-1316

OPERATING INSTRUCTIONS 2-1	
OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) 2-4	
OPERATOR TROUBLESHOOTING 3-1	
UNIT MAINTENANCE INSTRUCTIONS 4-1	
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DIRECT SUPPORT MAINTENANCE INSTRUCTIONS 5-1	
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TECHNICAL MANUAL
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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON D. C., 1 FEBRUARY 1993

TECHNICAL MANUAL

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

For
Air Conditioner, Horizontal, Compact,
Multiple Power Unit, 18,000 BTU/HR,
KECO Model F18h-MPI
208 Volts, 3-Phase, 50/60/400 HERTZ
230 Volts, Single-phase, 50/60 HERTZ
(4120-01-327-1316)

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 these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-LC-LEO-D-CS-CFO, Fort Monmouth, NJ 07703 5006. Fax number is 732-532-1413, DSN 992-1413.

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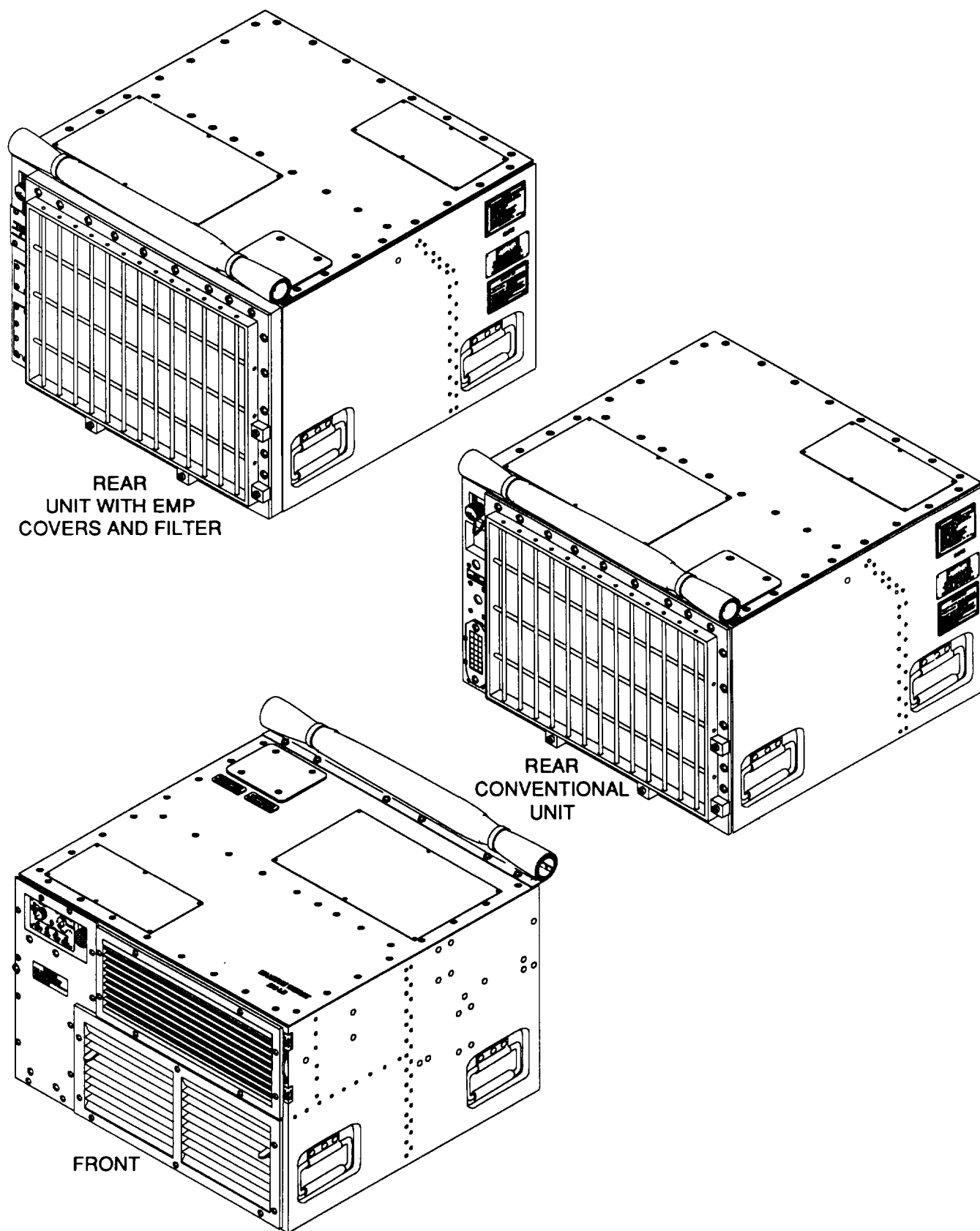


Figure 1-1. Air Conditioner

CHAPTER 1
INTRODUCTION

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Section I GENERAL INFORMATION

1-1. SCOPE.

- a. Type of Manual. Operator's, Unit, Direct Support, and General Support Maintenance Manual.
- b. Model Number and Equipment Name. Keco Model F18H-MPI, Horizontal, Compact, Multiple Power Input, 18,000 BTU/HR, 208 Volt, 3 Phase, 50/60/400 Hertz or 230 Volt, Single Phase, 50/60 Hertz Air Conditioner.
- c. Purpose of Equipment. Cools and heats enclosed space (shelter). The unit covered by this manual is designed for cooling and heating air to a desired predetermined range and circulating the conditioned air to provide heating and cooling of equipment or personnel within the conditioned area.

1-2. MAINTENANCE FORMS AND RECORDS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pamphlet 738-750, The Army Maintenance Management System (TAMMS).

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

For destruction of Army materiel to prevent enemy use see TM 750-244-3.

1-4. PREPARATION FOR STORAGE OR SHIPMENT.

See Chapter 4, Section VII for administrative storage or shipment information.

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR's).

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 or performance. Put it on a SF 368 (Product Quality Deficiency Report). Mail it to us at:

Commander, U.S. Army Aviation and Troop Command
Attention: AMSAT-I-MDO
4300 Goodfellow Boulevard
St. Louis, Missouri 63120-1798.

We will send you a reply.

1-6. WARRANTY INFORMATION.]

See Warranty Technical Bulletin TB 9-4120-401-24.

Section II EQUIPMENT DESCRIPTION

1-7. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

a. The Model F18H-MPI Air Conditioner is designed to circulate, filter, and cool or heat air in the room or enclosure in which it is installed.

b. The Model F18H-MPI has the capability of providing a maximum of 18,000 BTU/HR of cooling or 12,000 BTU/HR of heating. It is designed to automatically maintain the air in the room or enclosure at the desired temperature selected on the control panel.

c. The unit is self-contained in a single cabinet that is ideally suited for van or shelter type installations. The external requirements are a source of 208 volt ac, 3 phase, 50/60/400 hertz or 230 volt ac, single phase, 50/60 hertz input power, a suitable ground and an entry to a suitable drain. The drain must be lower than the base of the cabinet, in its operating location, for disposal of condensate waste water. It is designed to operate in almost any environmental condition from arctic to tropic and is fully portable for movement from one location to another.

d. The primary installation requirement is that the exhaust air from the compressor/condenser section must be vented to the outside atmosphere. This subject is fully covered in the installation instructions contained in Chapter 4, 'Unit Maintenance Instructions.'

e. When using this equipment in a secure area, caution must be exercised in meeting the established electromagnetic radiation standards. These standards may limit the use of the equipment's remote capability and require additional shielding for the ducts.

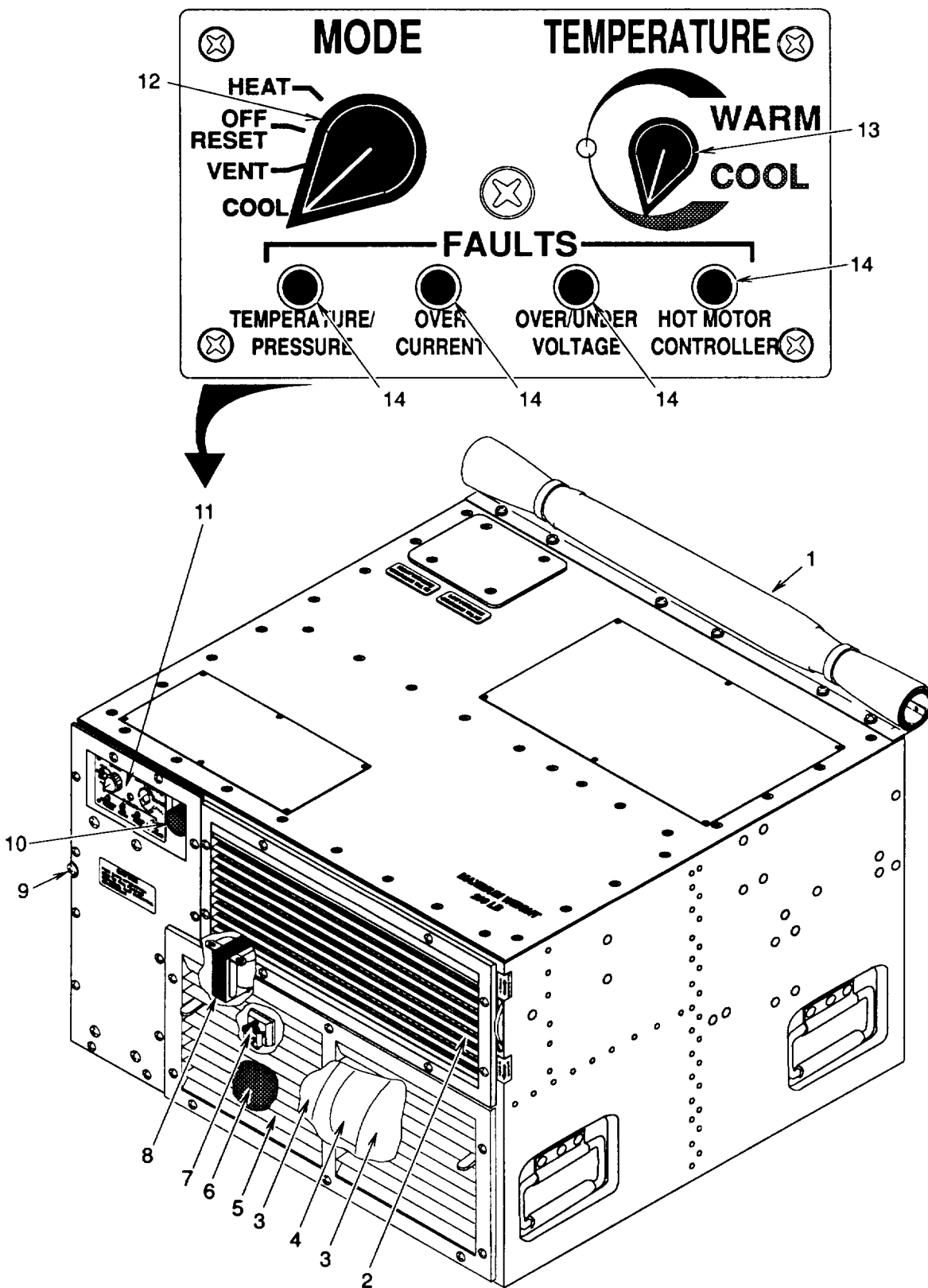


Figure 1-2. Location of Major Components (Sheet 1 of 2)

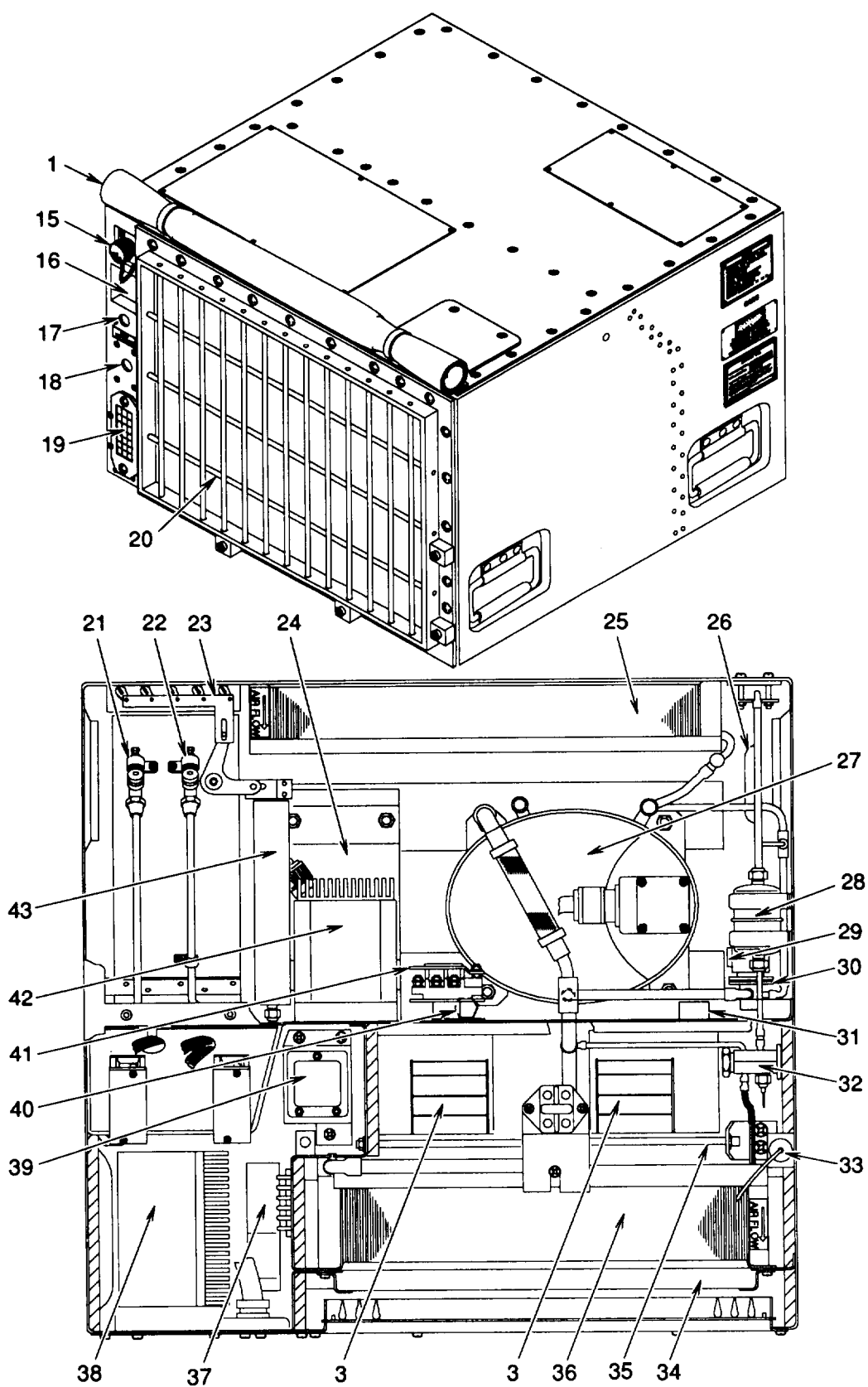


Figure 1-2. Location of Major Components (Sheet 2 of 2)