

TECHNICAL MANUAL

**OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE MANUAL**

**REFRIGERATION UNIT,
MECHANICAL: PANEL TYPE; 10,000
BTU/HR, GASOLINE ENGINE
DRIVEN (GED) (R & H METAL
PRODUCTS CORP. MODEL RMP-
J/1-10G) NSN 4110-01-010-5970
(R & H METAL PRODUCTS CORP.
MODEL RMP-J/11-10E ELECTRIC
MOTOR DRIVEN)
NSN 4110-01-015-9003**

**This copy is a reprint which includes
current pages from Changes 1 through 5.**

HEADQUARTERS, DEPARTMENT OF THE ARMY

OCTOBER 1976

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ELECTRIC MOTOR DRIVEN)
NSN 4110-01-003-5213**

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 and Aviation Materiel Readiness Command, ATTN DRSTS-MPSD, 4300 Goodfellow Boulevard, St. Louis, MO 63120. A reply will be furnished directly to you

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CHAPTER 1 INTRODUCTION

Section I. GENERAL

1-1. Scope.

a. This manual is for your use in operating and maintaining the R&H Metal Products Corp. Model RMP-J/1-10G and Model RMP-J/11-1OE refrigeration unit. Chapters 1 through 3 provide operation, preventive maintenance and organizational maintenance of the equipment. Chapters 4 through 7 provide information for direct and general support maintenance. Chapter 8 covers information on the electric motor.

b. Appendix A contains a list of publications applicable to this manual. Appendix B contains the maintenance allocation chart. The organizational direct and general support maintenance repair parts and special tools are listed in TM 5-4110-217-24P.

1-2. Maintenance Forms and Records.

Maintenance forms and records that you are required to use are explained in TM 38-750.

1-3. Equipment Serviceability Criteria (ESC).

This equipment is not covered by an ESC.

1-4. Destruction of Army Material to Prevent Enemy Use.

NOTE

The authority for ordering the destruction of equipment is to be vested in the divisional and higher commanders, who may delegate authority to subordinate commanders, when the situation requires it.

Demolition of gasoline engine driven refrigeration equipment is as follows:

a. *Demolition by Mechanical Means.* Use an axe, pick, mattock, sledge, or any other heavy implement, damage the following items:

- (1) Controls
- (2) Fuel pump
- (3) Carburetor
- (4) Alternator
- (5) Cylinder block
- (6) Engine starter, starter solenoid and distributor.

b. *Demolition by Misuse.* The refrigeration unit can be rendered useless by the following units:

- (1) Pinch refrigerant discharge tubing completely shut.

(2) Bend fan blades so they will strike evaporators and condenser.

(3) Remove cap from service part of suction service valve. Allow the refrigerant to escape, and pour in sand and abrasive material. Start and operate the unit until the compressor fails.

(4) Remove the leads from the high pressure switch and connect them together.

NOTE

The above steps are minimum requirements for this method.

c. *Demolition with explosives.* Place as many of the following charges as the situation permits and detonate them simultaneously with detonating cord and a suitable detonator.

(1) One 1/2 pound (0.225 kg) charge on top of engine.

(2) One 1/2 pound (0.225 kg) charge on the compressor.

(3) One 1/2 pound (0.225 kg) charge on the evaporator coil.

(4) One 1/2 pound (0.225 kg) charge between condenser coil and control box.

NOTE

The above steps are the minimum requirements for demolition with explosives. For semi-trailer van refrigerators, the following additional steps are also desirable.

(5) One 2 pound (0.90 kg) charge on the axle close to the left wheel.

(6) One 2 pound (0.90 kg) charge on the axle close to the right wheel.

(7) Destroy each tire by placing an incendiary grenade under each tire.

NOTE

The detonation of the explosive charges should be delayed until the fires are well started. This will prevent the fires from being extinguished by the blast when the charges are detonated.

1-5. Administrative Storage.

The refrigeration unit is prepared for administrative storage according to the instructions provided in TM-740-90-1.

1-6. Differences in Models. (Fig. 1-1 and 1-2)

This manual covers the gasoline engine powered model RMP-J/1-10G and the electric motor powered model

RMP-J/11-10E refrigeration units manufactured by the R & H Metal Products Corp. The basic refrigeration components are identical; the major difference is the source of power for the operation of the compressor unit.

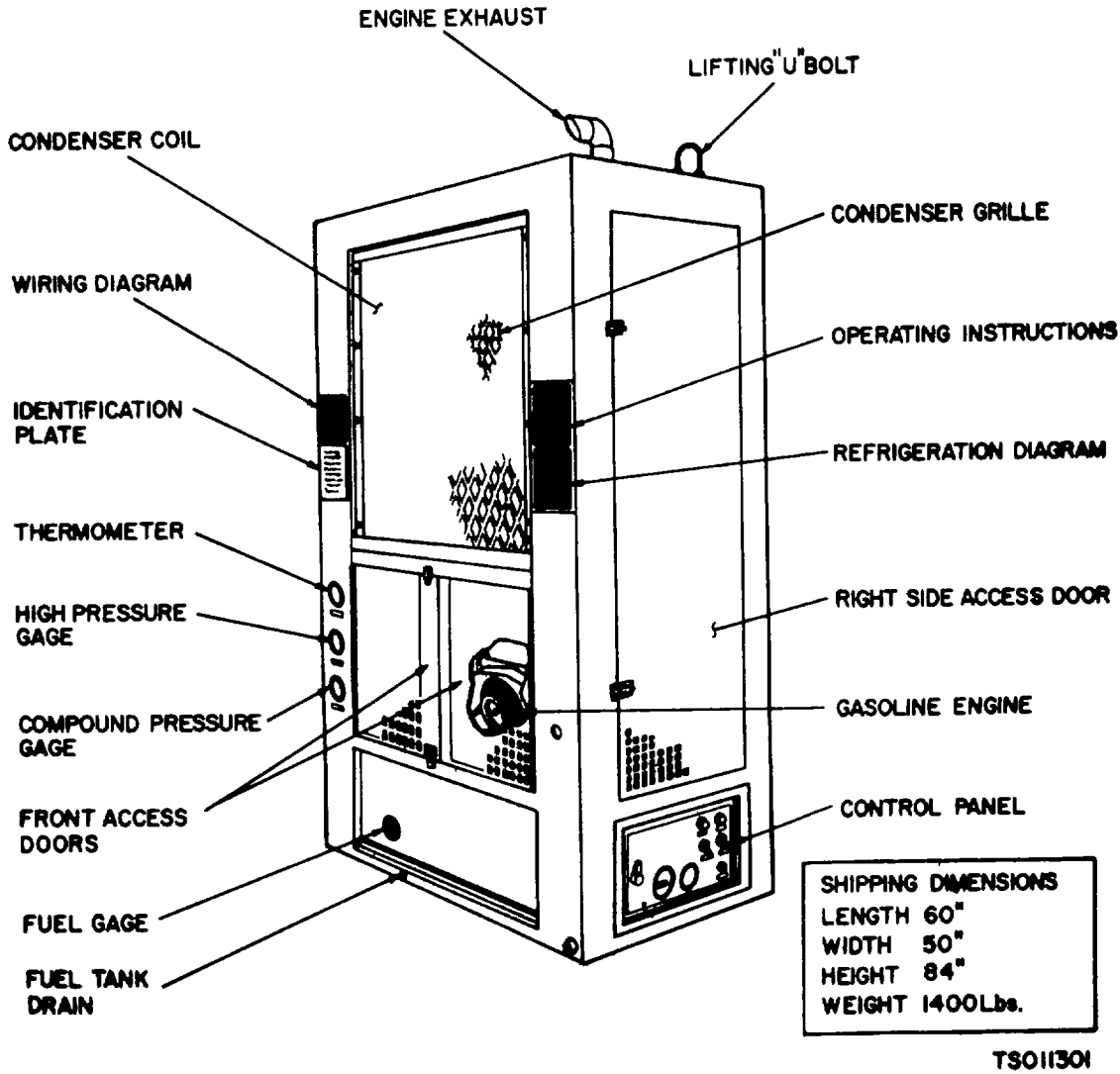


Figure 1-1. Refrigeration Unit, Model RMP-J/10G, right-front, three-quarter view, with shipping dimensions (Sheet 1 of 2)