

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

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FIELD AND DEPOT  
MAINTENANCE MANUAL

COMPRESSOR, RECIPROCATING, POWER-DRIVEN  
FLAMETHROWER, 3 ½ CFM, AN-M4  
(END ITEM CODE 317)

This reprint includes all changes in effect  
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**FIELD AND DEPOT MAINTENANCE MANUAL**  
**COMPRESSOR, RECIPROCATING, POWER DRIVEN**  
**FLAME THROWER, 3½ CFM, AN M4**  
**(End Item Code 317)**

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# CHAPTER 1

## INTRODUCTION

### Section I. GENERAL

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#### 1. Scope

This manual is published for the information and guidance of personnel responsible for maintenance, repair and overhaul of the AN-M4 31.) CFM flamethrower power-driven reciprocating compressor. The publication contains information of maintenance authorized to be performed by field and depot maintenance personnel. It is intended to be used with TM 3-1040-210-12. TM 5-2805-206-14 contains maintenance information on the gasoline engine.

*Note.* These instructions apply only to AN-M4 compressors manufactured by Walter Kidde and Co., Inc., under Contract DA 30-070-CML-1662.

#### 2. Appendix

The appendix contains a list of current references.

#### 3. Record and Report Forms

*a. Maintenance Forms.* The forms listed below will be used to report and record maintenance actions in compliance with TM 38-750.

(1) DA Form 2404 (Equipment Inspection and Maintenance Worksheet).

(2) DA Form 2407 (Maintenance Request).  
(3) DA Form 2408-11 (Accumulative Repair Cost Record).

(4) DA Form 2409 (Equipment Maintenance Log (Consolidated)).

*b. DA Form 2028 (Recommended Changes to Technical Manuals, Parts Lists, or Supply Manuals).* Use this form to forward comments on errors or omissions in this manual to Commanding General, U.S. Army Edgewood Arsenal, ATTN: SMUEA-ELS-EM-P, Edgewood, Md.

*c.* DD Form 6 (Report of Damaged or Improper Shipment). Use this form to report damages sustained in shipment or caused by improper shipment.

#### 4. Allocation of Maintenance

Refer to the maintenance allocation chart in TM 3-1040-210-12 for maintenance authorized at each echelon of maintenance. Be sure that a part is in stock before attempting to replace it.

## Section II. DESCRIPTION AND DATA

#### 5. Description

The AN-M4 compressor assembly delivers 31/2 CFM of high pressure air at 2000 psi used to charge pressure tanks of portable flame-throwers and riot control agent dispensers. The unit is completely self-contained and consists of a three-stage radial compressor, a gasoline engine, and various accessory components necessary for operation, transportation and protection of the unit. The compressor consists of seven groups: a canvas group, water separator group, fan group, cooler group, compressor group, engine group, and a frame-fuel tank

group (fig. 1). A complete description of each group is contained in the section in this manual covering the maintenance for each group.

For purposes of orientation, the ends of the air compressor assembly will be called "pulley end" or "rear" and the "fan end" or "front." The term "left" or "right" as used will be referenced to the unit as viewed from the "fan end" or "front" while looking toward the "pulley end."

#### 6. Tabulated Data

*a. General.*

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