

TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LISTS)
FOR

COMPRESSOR UNIT, RECIPROCATING:
POWER-DRIVEN, FLAMETHROWER,
3-1/2 CFM,

AN-M4 (Walter Kidde)
NSN 4310-00-592-8560

AN-M4B (Stewart-Warner)
NSN 4310-00-848-6075

AN-M4C (Stewart-Warner)
NSN 4310-00-078-5431

AN-M4D (Walter Kidde)
NSN 4310-00-181-5054

HEADQUARTERS, DEPARTMENT OF THE ARMY

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Current as of September 1976

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"This manual supersedes TM 3-1040-210-20P, 27 April 1972; TM 3-1040-244-20. 26 October 1973; TM 3-1040-244-20P, 15 August 1970; and TM 3-1040-263-20P, 30 Jan 1971; and, together with TM 3-4310-100-10. 12 November 1976, supersedes TM 3-1040-210-12, 15 February 1963 and TM 3-1040-263-12, 21 September 1970.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

These instructions are for use by organizational maintenance personnel. They apply to Compressor Unit. Reciprocating Power-Driven, Flamethrower, 3-1/2 CFM. AN-M4 (Walter Kidde) NSN 4310-00-592-8560; AN-M4B (Stewart-Warner) NSN 4310-00-848-6075; AN-M4C (Stewart-Warner) NSN 4310-00-078-5431 and AN-M4D (Walter Kidde) NSN 4310-00-181-5054.

1-2. Record and Report Forms

- a. Equipment maintenance forms and procedures for their use are prescribed in TM-38-750.
- b. Refer to TM 43-0002-31 for destruction instructions on this equipment.
- c. Refer to TM 740-90-1 for administrative storage instructions on their equipment.
- d. Refer to TM 43-0139 for painting instructions on this equipment.

Section II. DESCRIPTION AND DATA

1-3. Description

- a. *General.* A general description of AN-M4, M4 AN-M4B, AN-M4C. and AN-M4D. Compressor unit models. and information on identification plates and

instruction plates are contained in operator's manual TM 3-4310-100-10. The following paragraphs describe the major components of the compressor units (fig. 1-1).

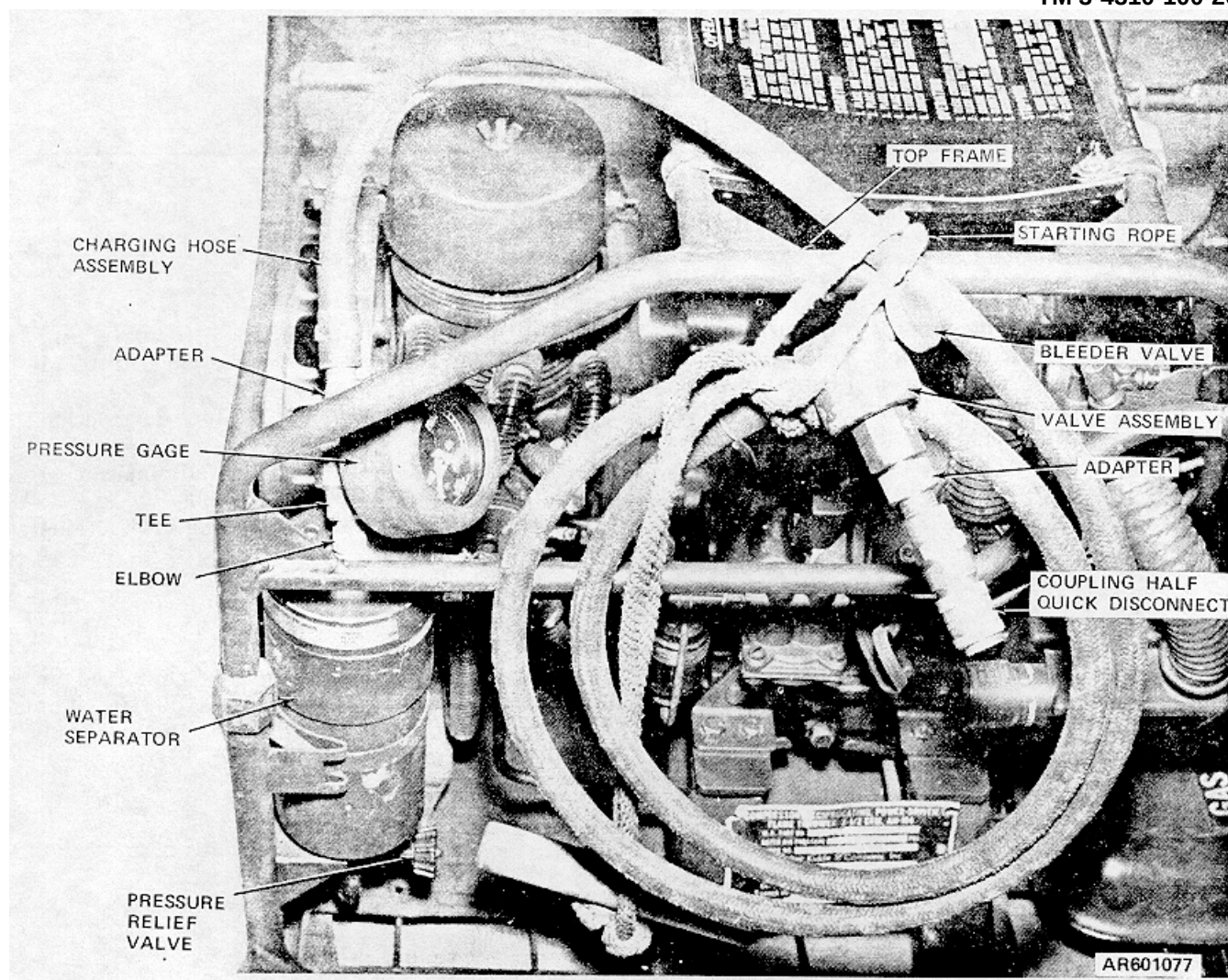


Figure 1-1. A typical AN-M4 Compressor unit model with charging hose assembly connected to water separator.

b. Components.

(1) *Air Compressor.* The air compressor is a three stage radial reciprocating compressor that will deliver 3-1/2 CFM of high pressure air at 2,000 psi, when the engine operates at a speed of 3,600 rpm. The compressor operating temperature range is 0 to 100 F.

(2) *Water Separator.* The operating pressure of the water separator is 2,000 psi with a minimum burst pressure of 5,000 psi. The assembly contains a high-pressure relief valve, with a condensate globe valve at the base to permit discharge of accumulated air-water-oil emulsion.

(3) *Pressure Relief Value.* The pressure relief valve has a relief pressure of 2,250 psig, and a reseating pressure of 1,950 psig.

(4) *Gasoline Engine.* The engine is a one-cylinder, 4-cycle, overhead valve, air-cooled type. It will develop 1.5 horse-power at 3,600 rpm. The engine is fungus-proof and fully suppressed to climate radio interference.

(5) *Fuel Tank.* The fuel tank holds approximately 3 quarts of fuel; sufficient for 3 hours of operation.

(6) *Bottom Frame and Top Frame.* The rigid tubular bottom frame provides mounting for the gasoline fuel tank, gasoline engine, compressor, water separator, strap assemblies and the back rest harness. A removable top frame is assembled to the bottom frame to protect both the gasoline engine and air compressor. The top frame also supports the canvas cover.

(7) *Back Rest Harness and Strap Assemblies.* The back rest provides a comfortable support when carrying the compressor unit. The web shoulder and waist strap assemblies are bolted to the bottom frame and are provided with quick release buckles and snaps.

(8) *Canvas Cover.* The cotton duck canvas cover is designed to fit snugly over the