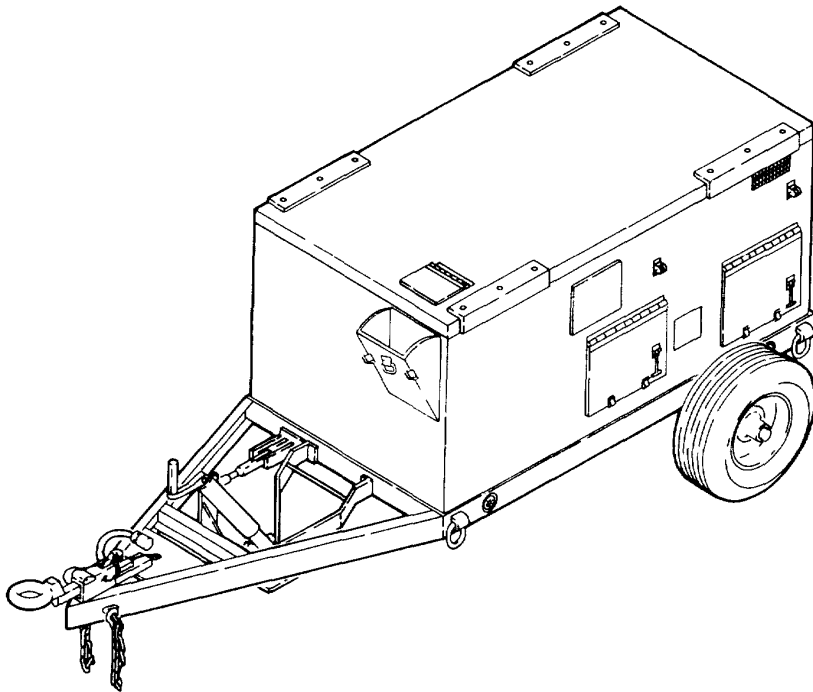


TECHNICAL MANUAL
OPERATOR'S MANUAL

PUMPING ASSEMBLY, WATER
600 GPM
TRAILER MOUNTED
(NSN 4320-01-31448844)



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HEADQUARTERS, DEPARTMENT OF THE ARMY

4 NOVEMBER 1992

TECHNICAL MANUAL

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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D C, 4 NOVEMBER 1992

TECHNICAL MANUAL

Operator's Manual

PUMPING ASSEMBLY, WATER
600 GPM,
TRAILER MOUNTED
(NSN 4320-01-314-8844)**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 the 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 Aviation and Troop Command, ATTN- AMSAT-I-MTS, 4300 Goodfellow Blvd. , St. Louis, MO 63120-1798. A reply will be furnished directly to you.

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HOW TO USE THIS MANUAL

The manual has been divided into chapters, sections, and paragraphs which are all numbered sequentially; figures and tables have also been numbered in the same manner. The manual identifies major components and their location which will aid you, the operator, in performing your PMCS. Detailed lubrication instructions, which are mandatory, are also included within the operator's maintenance section.

Use the front cover locators and "marked/tabbed" pages to quickly find the parts of the manual shown on the cover. The "blocked" titles in the table of contents are the titles for these locators. These portions of the manual were chosen because they are used most often.

Maintenance procedures used by Operator personnel are described in a step by step manner, ensuring the correct, and safe removal or repair of equipment. An alphabetical index at the back of the manual is referenced to the appropriate paragraph in the manual for ease of locating a specific task or procedure.

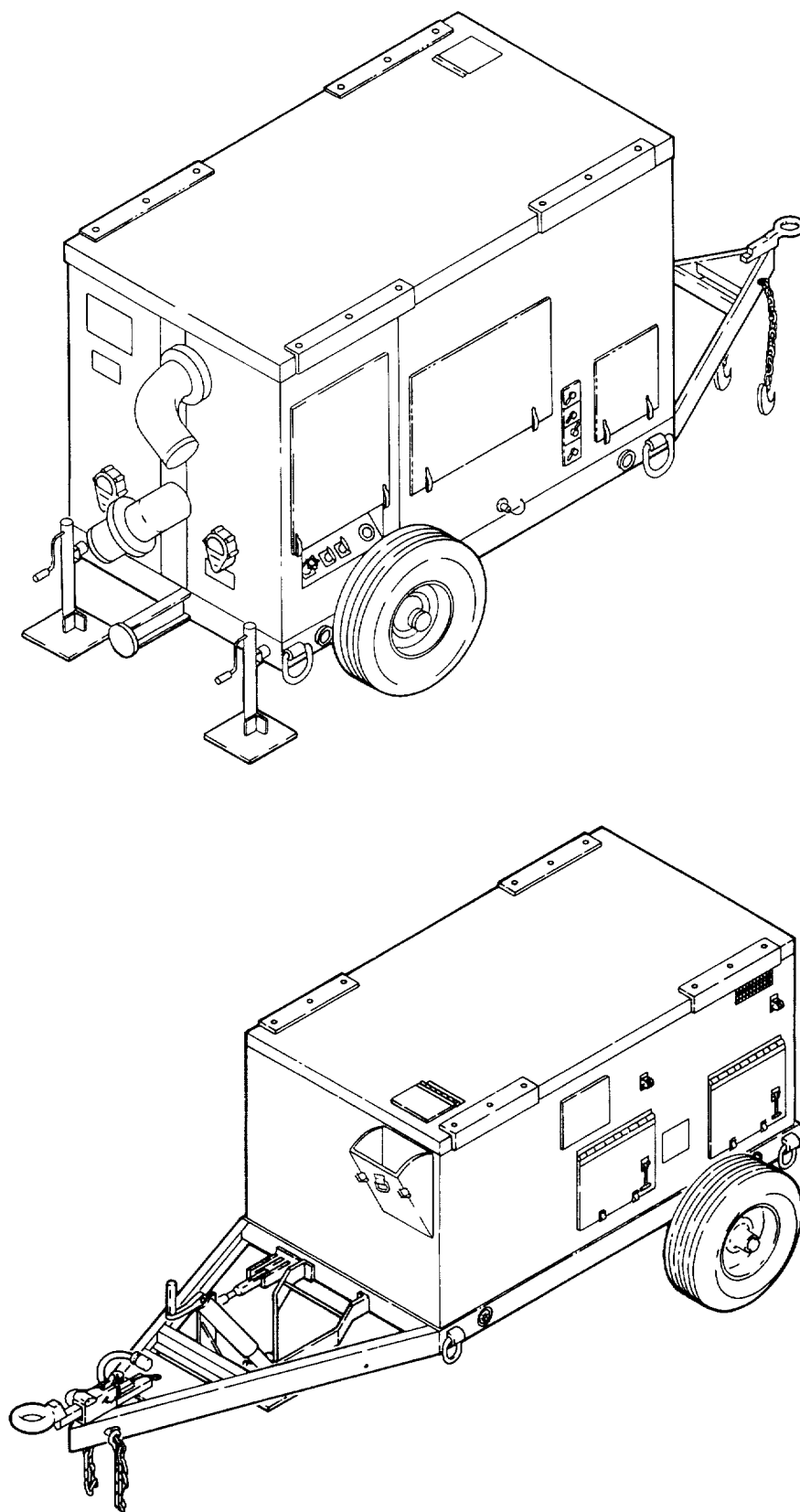


Figure 1-1. Full External View of Pumping Assembly, Water, 600 GPM, Trailer Mounted

CHAPTER 1 INTRODUCTION

PARAGRAPH TITLE	PARAGRAPH
Equipment Data.....	1-9
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Section I. GENERAL INFORMATION

1-1 Scope.

- a. Type of Manual. Operators Manual
- b. Model Number and Equipment Name. Pumping Assembly, Water, 600 GPM, Model No 6 X 6 SP6, NSN 4320-01-314-8844 (hereafter called pumping assembly).
- c. Purpose of Equipment. The pumping assembly is a component of water distribution systems. It is used either singularly or in series with other pumps to supply drinking water from a source to one or more distribution points.

1-2 Maintenance Forms, Records, and Reports. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, The Army Maintenance Management System (TAMMS).

1-3 Hand Receipt (-HR) Manuals. Not applicable

1-4 Reporting Equipment Improvement Recommendations (EIRs). If your pumping assembly 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 an SF 368 (Product Quality Deficiency Report). Mail it to us at Commander, U S Army Troop Support Command, ATTN. AMSAT-i-MDO, 4300 Goodfellow Boulevard, St. Louis, Missouri 63120-1798. We'll send you a reply.

1-5 Warranty Information. The pumping assembly is warranted by Reddy Buffaloes Pump Inc. for 12 months. It starts on the date, found in block 23, DA form 2408-9, in the logbook. Report all defects in material or workmanship to your supervisor, who will take appropriate action through your organizational maintenance shop.

1-6 List of Abbreviations.

AAL	Additional Authorization List
BII	Basic Issue Item
COEI	Components of End Item
dc	Direct Current
EIR	Equipment Improvement Recommendation
hp	horsepower
IAW	In Accordance With

in	inches
kg	kilogram
kPa	kilopascals
kW	kilowatt
l	liters
lb	pounds
m	meters
mm	millimeter
mph	miles per hour
MTOE	Modified Table of Organization and Equipment
N•m	Newton-meters
NSN	National Stock Number
para	paragraph
psi	pounds-per-square-inch
psig	pounds-per-square-inch-gage
spm	stroke-per-minute
TAMMS	The Army Maintenance Management System
TMDE	Test, Measurement, and Diagnostic Equipment
TOE	Table of Organization and Equipment
°C	degrees Celsius
°F	degrees Fahrenheit

Section II. EQUIPMENT DESCRIPTION

1-7 Equipment Characteristics, Capabilities, and Features.

- a. Characteristics. The pumping assembly consists of a diesel-engine driven, self-priming centrifugal pump, control panel, and a noise enclosure mounted on a wheel-mounted trailer assembly.
- b. Capabilities and Features. The pumping assembly has an operational output of 600 gpm at 150 psig when pumping water
 - (1) Self-priming pump.
 - (2) Air-cooled, diesel engine driven.
 - (3) Wheel-mounted trailer unit.
 - (4) Highly mobile.
 - (5) Sound attenuated to 70db².

1-8 Location and Description of Major Components (Figure 1-2).

- a. **PUMP ASSEMBLY (1).** Rated at 600 gpm. Draws water from source or upline boost pump and feeds reservoir or next downline boost pump. Fitted with suction and discharge elbows suitable for connection to 6 in. grooved pipe couplings.
- b. **NOISE ENCLOSURE (2).** Provides for noise reduction.
- c. **DIESEL ENGINE (3).** Engine is a 4-stroke, 6 cylinder, air-cooled diesel engine that drives pump. Operating mode of engine is set on control panel. Operated in manual or automatic mode.
- d. **CONTROL PANEL (4).** Controls system operations.
- e. **JACKS (5).** Used to support and level pumping assembly.

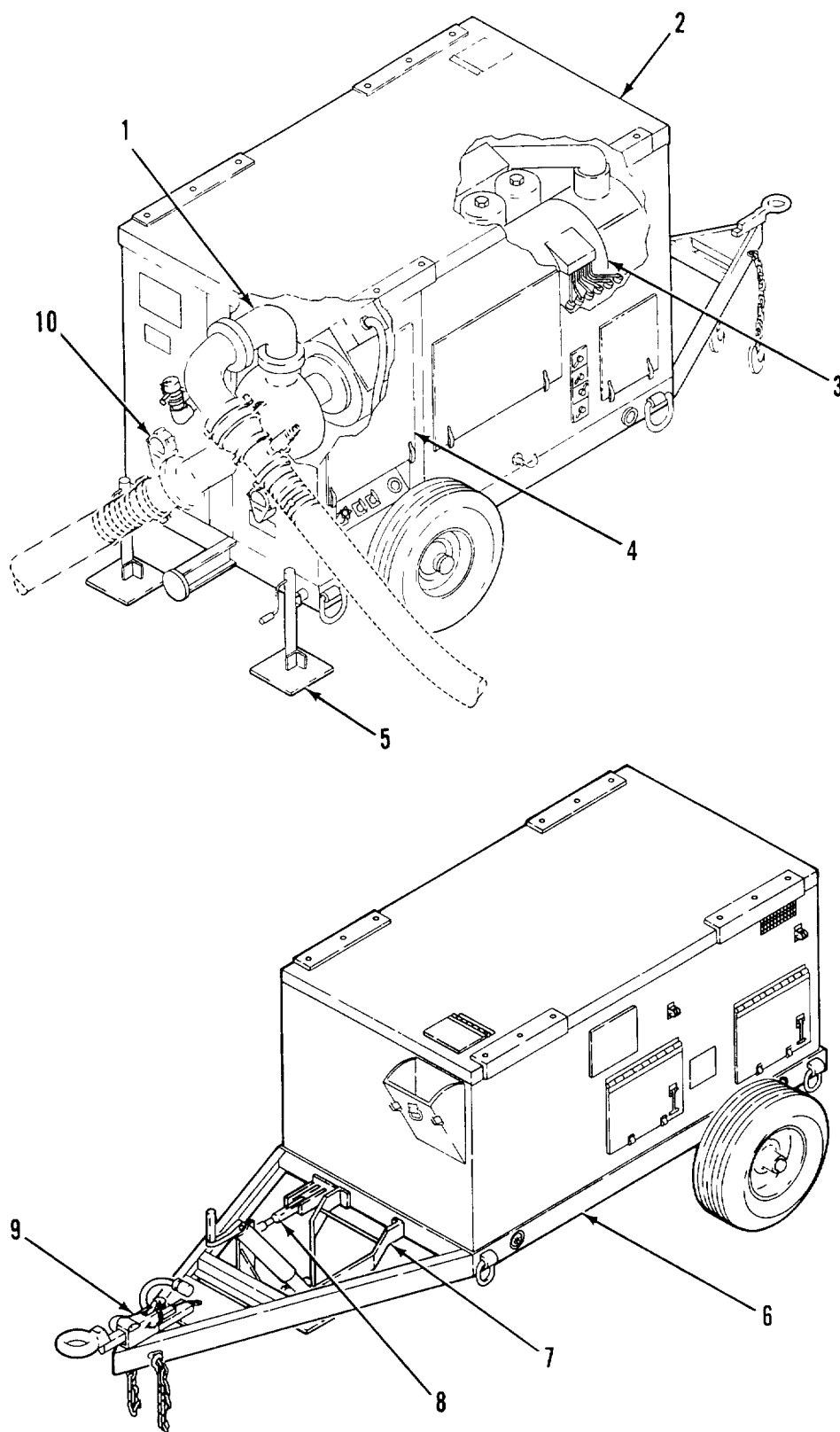


Figure 1-2. Location of Major Components