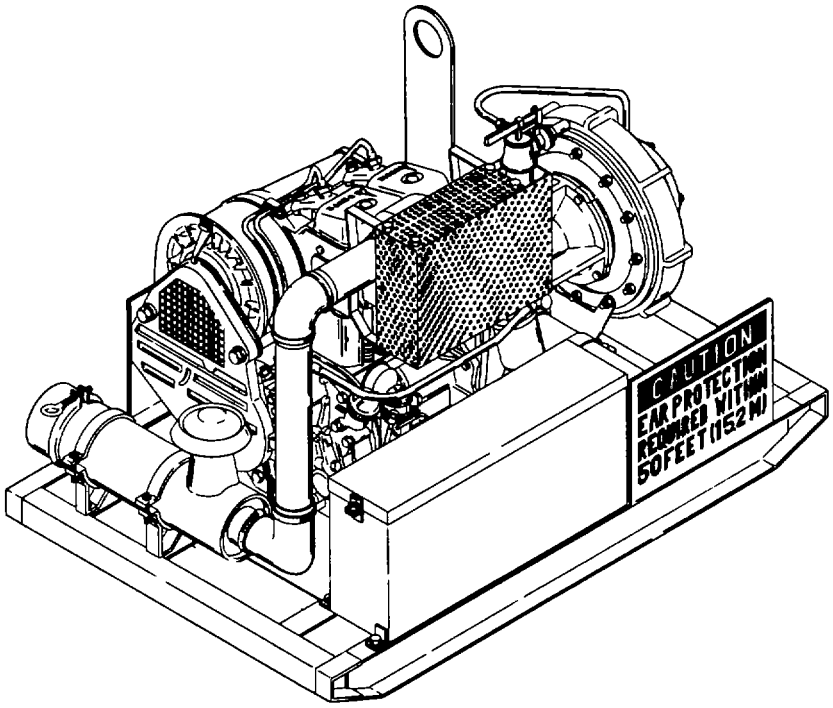
OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL



PUMP UNIT, CENTRIFUGAL, WATER, DIESEL-ENGINE-DRIVEN, 2-1/2-INCH, SKID-MOUNTED 200 GPM AT 300 FEET TOTAL HEAD

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HEADQUARTERS, DEPARTMENT OF THE ARMY
1 APRIL 1986

TECHNICAL MANUAL

No. 5-4320-302-14

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 1 April 1986

Operator's, Organizational, Direct Support, and General Support Maintenance Manual
PUMP UNIT, CENTRIFUGAL, WATER, DIESEL-ENGINE-DRIVEN, 2-1/2-INCH, SKID-MOUNTED, 200 GPM AT 300 FEET TOTAL HEAD
MODEL US2520 HCCD-1

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 Command, ATTN: AMSTR-MCTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished directly to you.

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CHAPTER 1
INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

Type of Manual: Operator's, Organizational, Direct Support, and General Support Maintenance

Model Number and Equipment Name: US2520 HCCD-1 Pump Unit, Centrifugal, Water, Diesel-Engine-Driven, 2-1/2-Inch, Skid-Mounted, 200 GPM at 300 Feet Total Head

Purpose of Equipment: Pumps Water

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS

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

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

Refer to TM 750-244-3, Procedures for Destruction of Equipment to Prevent Enemy Use, for instructions.

1-4. PREPARATION FOR STORAGE AND SHIPMFNT

Instructions for preparation for storage and shipment are in Chapter 4.

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

If your centrifugal pump unit 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 268 (Quality Deficiency Report). Mail it to us at U.S. Army Troop Support Command, ATTN: AMSTR- QX, 4300 Goodfellow Blvd., St. Louis, MIVU 63120-1798. We'll send you a reply.

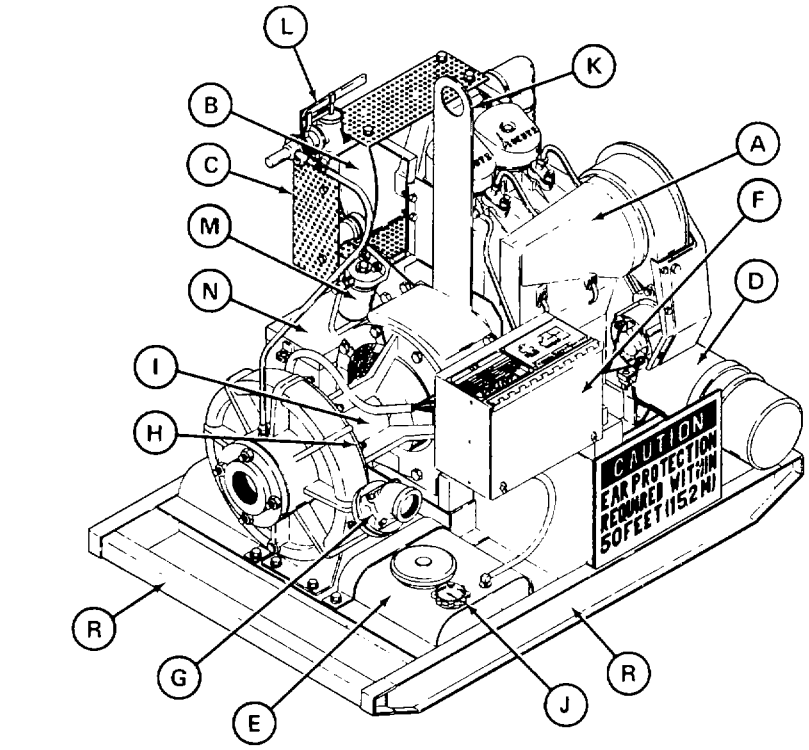
1-6. NOMENCLATURE CROSS-REFERENCE

For precise identification, simplified nomenclature has been established for clarity and is shown in the nomenclature cross-reference list.

NOMENCLATURE CROSS-REFERENCE LIST

This listing includes nomenclature cross-references used in this manual.

Common Name	Official Nomenclature
Centrifugal Pump Unit	Pump Unit, Centrifugal, Water, Diesel-Engine-Driven, 2-1/2-Inch, Skid-Mounted, 200 GPM at 300 Feet Total Head
Engine	Diesel Engine
Pump	Centrifugal Pump
Starter	Starter Motor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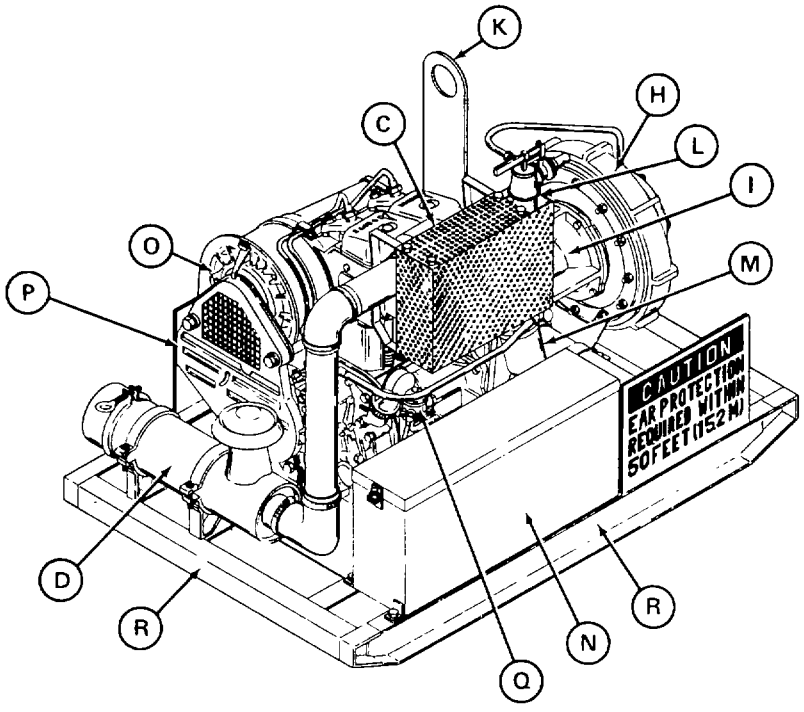
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Section II. EQUIPMENT DESCRIPTION AND DATA

1-7. PURPOSE OF CENTRIFUGAL PUMP UNIT
General purpose water pumping applications associated with construction work.

1-8. CHARACTERISTICS
- Variable speed operation
- Skid-mounted
- Exhaust priming

1-9. CAPABILITIES AND FEATURES
- Pumps at a rate of 200 gpm
- Integral check valve retains fluid in the pump body when the pump is shut down
- Twelve-volt alternator
- Twelve-volt starter
- Twelve-volt automatic shutdown for high temperature, low oil pressure, and overspeed
- Variable speed governor
- Throttle control
- Horizontal mount dry-type air cleaner and rain cap
- Horizontal mount exhaust silencer and muffler guard
- Enclosed control panel with tachometer, throttle control, ON-OFF switch and lighted gages

1-10. LOCATION AND DESCRIPTION OF EXTERNAL COMPONENTS
(A) ENGINE. Power source

(B) EXHAUST SILENCER. Mounts horizontally on engine.

(C) MUFFLER GUARD. Metal safety cover for exhaust silencer.

(D) AIR CLEANER. Dry-type, mounts horizontally on skid.

(E) FUEL TANK ASSEMBLY. Mounts on skid assembly.

(F) CONTROL PANEL. Mounts on rear of engine.

(G) CHECK VALVE BODY ASSEMBLY. Mounts to pump body.

(H) PUMP AND BEARING ASSEMBLY. Mounts to engine.