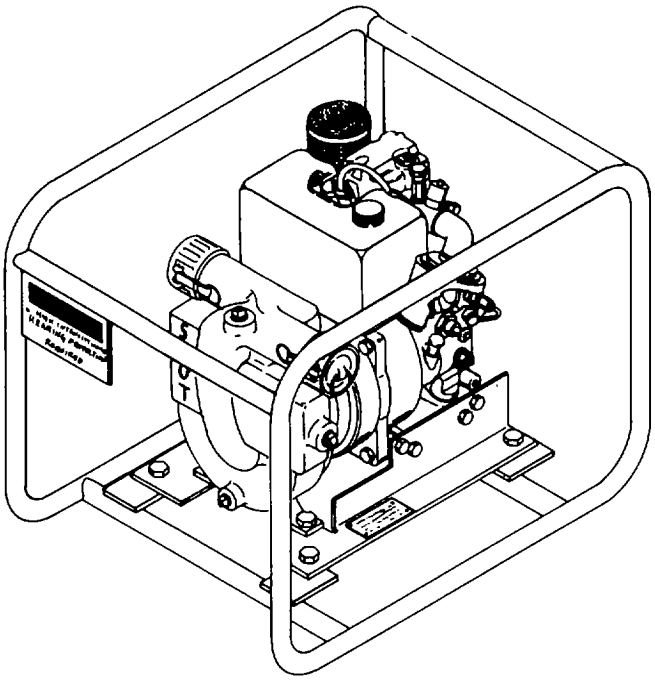
TECHNICAL MANUAL

OPERATORS, UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL



PUMP UNIT, FLAMMABLE LIQUID CENTRIFUGAL SELF-PRIMING, 2-INCH, 100 GPM DIESEL ENGINE DRIVEN NSN 4320-01-263-3604

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HEADQUARTERS, DEPARTMENT OF THE ARMY
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TECHNICAL MANUAL

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HEADQUARTERS
DEPARTMENT OF THE ARMY
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Operator's, Unit, Direct Support and General Support Maintenance Manual

for

PUMP UNIT, FLAMMABLE LIQUID, CENTRIFUGAL, SELF-PRIMING, 2 INCH, 100 GPM, DIESEL ENGINE DRIVEN
NSN 4320-01-307-0538

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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help to 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, 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-MMTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120- 1798. A reply will be furnished directly to you.

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HOW TO USE THIS MANUAL

Be sure to read all Warnings before using your equipment

This manual contains operating instructions for the Operator, Unit and Direct Support and General Support Maintenance instructions for the Diesel Engine Driven, 100 GPM, 2 Inch, Self-Priming, Centrifugal Flammable Liquid, 88D SPEC3199K6 Pump Unit. Becoming familiar with this manual will enable you to operate and maintain the equipment in good working order.

- **t** Chapter 1 - Introduces you to the equipment and gives you information such as weight, height, length, a reference for generally used abbreviations, cross reference information and principles of operation. This chapter is incorporates a full page illustration of the equipment.

- **t** Chapter 2 - Provides information necessary to identify and use the equipment's operating controls. Operating procedures tell you how to use the equipment in both usual and unusual weather conditions. In addition, preventive maintenance instructions provide information needed to inspect and service the centrifugal pump unit.

- **t** Chapter 3 - Provides operator lubrication and maintenance instructions for troubleshooting the equipment malfunctions.

- **t** Chapter 4 - Provides unit maintenance instructions including service upon receipt, preventive maintenance and troubleshooting information, detailed maintenance and repair procedures for the Unit Maintenance repairer, and storage and shipment instructions.

- **t** Chapter 5 - Provides detailed component repair instructions for the Direct Support maintenance group.

- **t** Chapter 6 - Provides detailed component repair instructions for the General Support maintenance group.

- **t** Appendix A gives you a list of frequently used forms and publications.

- **t** Appendix B is the Maintenance Allocation Chart (MAC).

- **t** Appendix C describes components that make up the end item and are shipped with the basic equipment. It also lists components that are not mounted on the centrifugal pump unit but are required to make the unit functional. Components in the Components of End Item and Basic Issue Items Lists are illustrated for easy identification.

- **t** Appendix D lists additional equipment authorized for your unit for use with, but are not supplied with the centrifugal pump unit.

- **t** Appendix E provides you with information about expendable supplies such as sealants, paints, lubricants, etc. required during operation or maintenance of the centrifugal pump unit.

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

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

Model Number and Equipment Name: 88D SPEC3199K6 Pump Unit, Flammable Liquid, Centrifugal, Self-Priming, 2 Inch, 100 GPM, Diesel Engine Driven

Purpose of Equipment: Pumps Flammable Liquid

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. 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 368 (Quality Deficiency Report). Mail it to us at U. S. Army Troop Support Command, ATTN: AMSTR-MOF, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. We'll send you a reply.

1-4. LIMITED WARRANTY

a. The centrifugal pump unit is warranted by Scot Pump Division of Ardox Corporation against defective workmanship and materials for 12 months from the date of manufacture. The installation date may be found in block 23, DA form 2408-9. The date manufactured appears on the identification plate.

b. Report all defects in material or workmanship to your supervisor who will take appropriate action through your unit maintenance shop.

c. Scot Pump Division of Ardox Corporation limits its obligation under this warranty to furnishing or replacing any product to be defective as a result of workmanship or materials. They reserve the right to have the defective product returned at the expense of the user in order to establish the claim. If the responsibility for the failure is that of Scot Pump Division of Ardox Corporation they will absorb the transportation charges. The costs of labor, such as for removal and reinstallation of the product, are not covered under this warranty.

d. Scot Pump Division of Ardox Corporation does not guarantee to maintain this product in working order when its capacity is too small for the requirements, or where the unit is subject to extraordinary use.

e. Soot Pump Division of Ardox Corporation assumes no liability for incidental and consequential damages which may result from the use or misuse of its products. Some states do not allow the exclusion or limitation of incidental or consequential damages, however, so this limitation or exclusion may not apply.

f. This warranty provides specific legal rights, and you may also have other rights which vary from state to state.

1-5. DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE

CAUTION

Demolition of the centrifugal pump unit will not be attempted , except upon receipt of orders from proper authority.

a. General. Methods of destruction should achieve such damage to equipment and repair parts that it will not be possible to restore the equipment to usable condition in the combat zone either by repair of cannibalization.

(1) Mechanical Destruction. Using an ax, pick, sledge hammer, or any heavy implement, damage the engine and pump.

(2) Destruction by Explosives. Place as many charges as time permits in vital areas such as under engine and pump or any other place that will assure complete destruction of the centrifugal pump unit. Use a suitable detonator to detonate all charges simultaneously.

b. Additional information. For additional information on procedures for destruction of equipment to prevent enemy use, refer to TM 750-244-3.

1-6. PREPARATION FOR STORAGE OR SHIPMENT

Contact organizational maintenance for centrifugal pump unit preparation for storage and shipment (paragraph 423).

1-7. 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

Common Name	Official Nomenclature
Centrifugal Pump Unit Engine Driven	Pump Unit, Flammable Liquid, Self-Priming, 2 Inch, 100 GPM, Diesel
Engine	Diesel Engine
Pump	Centrifugal Pump

1-8. ABBREVIATIONS

Abbreviations used in this manual are in accordance with MIL-STD-12.

Section II. EQUIPMENT DESCRIPTION

1-9. PURPOSE OF CENTRIFUGAL UNIT

General purpose flammable liquid pumping applications.