

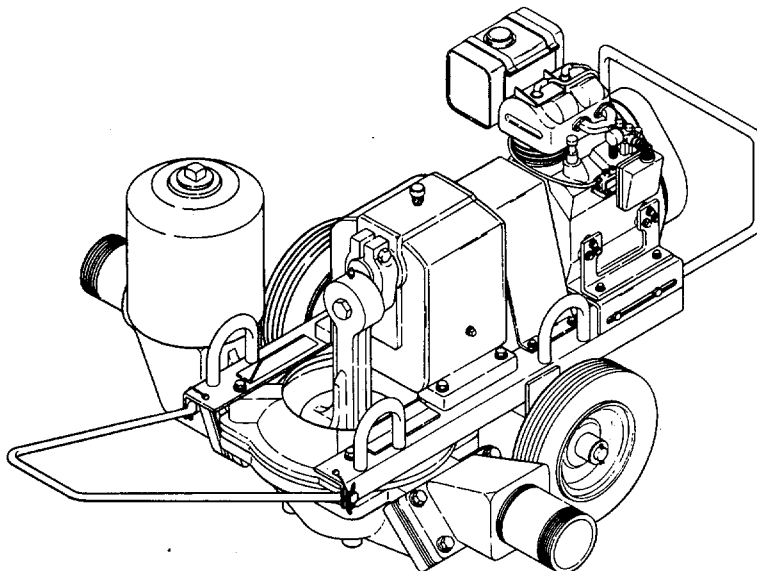
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# TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, AND  
DIRECT SUPPORT MAINTENANCE MANUAL,  
INCLUDING REPAIR PARTS  
AND SPECIAL TOOLS LIST  
FOR

PUMP, RECIPROCATING, POWER-DRIVEN,

DIAPHRAGM, GASOLINE-ENGINE-DRIVEN,  
WHEEL-MOUNTED  
PEABODY BARNES MODEL  
US40CDG  
4320-01-092-2210



INTRODUCTION 1-1

OPERATING INSTRUCTIONS 2-1

OPERATOR/CREW  
MAINTENANCE INSTRUCTIONS 3-1

ORGANIZATIONAL  
MAINTENANCE INSTRUCTIONS 4-1

DIRECT SUPPORT  
MAINTENANCE INSTRUCTIONS 5-1

REFERENCES A-1

MAINTENANCE  
ALLOCATION CHART B-1

REPAIR PARTS AND  
SPECIAL TOOLS LIST C-1

EXPENDABLE SUPPLIES  
AND MATERIALS LIST D-1

GLOSSARY

ALPHABETICAL INDEX

HEADQUARTERS, DEPARTMENT OF THE ARMY

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TM 5-4320-275-13 & P

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DEPARTMENT OF THE ARMY  
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WHEEL-MOUNTED PEABODY BARNES MODEL  
US40CDG  
4320401-092-2210  
Current as of 1 October 1982**

**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 directly to: Commander, U. S. Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd. , St. Louis, MO 63120. A reply will be furnished to you.

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|              |                                                                 | <b>Page</b> | <b>Illus<br/>Figure</b> |
|--------------|-----------------------------------------------------------------|-------------|-------------------------|
| CHAPTER 1.   | INTRODUCTION .....                                              | 1-1         |                         |
| Section I.   | General Information .....                                       | 1-1         |                         |
| Section II.  | Equipment Description and Data .....                            | 1-2         |                         |
| Section III. | Principles of Operation .....                                   | 1-5         |                         |
| CHAPTER 2.   | OPERATING INSTRUCTIONS .....                                    | 2-1         |                         |
| Section I.   | Description and Use of Operator's Controls and Indicators ..... | 2-1         |                         |
| Section II.  | Operator/Crew Preventive Maintenance Checks and Services .....  | 2-2         |                         |
| Section III. | Operation Under Usual Conditions .....                          | 2-5         |                         |
| Section IV.  | Operation Under Unusual Conditions .....                        | 2-10        |                         |
| CHAPTER 3.   | OPERATOR/CREW MAINTENANCE INSTRUCTIONS .....                    | 3-1         |                         |
| Section I.   | Lubrication Instructions .....                                  | 3-1         |                         |
| Section II.  | Troubleshooting Procedures .....                                | 3-1         |                         |
| Section III. | Maintenance Procedures .....                                    | 3-4         |                         |
| CHAPTER 4.   | ORGANIZATIONAL MAINTENANCE INSTRUCTIONS .....                   | 4-1         |                         |
|              | Chapter Overview .....                                          | 4-1         |                         |
| Section I.   | Repair Parts, Special Tools, TMDE, and Support Equipment .....  | 4-1         |                         |
| Section II.  | Service Upon Receipt.....                                       | 4-2         | 4-1                     |
| Section III. | Operational Checks .....                                        | 4-5         |                         |
| Section IV.  | Preventive Maintenance Checks and Services .....                | 4-7         |                         |
| Section V.   | Troubleshooting .....                                           | 4-14        |                         |
| Section VI.  | Maintenance Procedures .....                                    | 4-23        |                         |
| Section VII. | Preparation for Storage or Shipment .....                       | 4-84        |                         |

|                    |                                                                                            | Page       | Illus<br>Figure |
|--------------------|--------------------------------------------------------------------------------------------|------------|-----------------|
| CHAPTER 5.         | DIRECT SUPPORT MAINTENANCE INSTRUCTIONS .....                                              | 5-1        |                 |
|                    | Chapter Overview .....                                                                     | 5-1        |                 |
| Section I.         | Repair Parts, Special Tools, TMDE, and Support Equipment ...                               | 5-1        |                 |
| Section II.        | Troubleshooting .....                                                                      | 5-2        |                 |
| Section III.       | Maintenance Procedures .....                                                               | 5-3        |                 |
| APPENDIX A.        | REFERENCES .....                                                                           | A-1        |                 |
| APPENDIX B.        | MAINTENANCE ALLOCATION CHART .....                                                         | B-1        |                 |
| Section I.         | Introduction .....                                                                         | B-1        |                 |
| Section II.        | Maintenance Allocation Chart .....                                                         | B-4        |                 |
| Section III.       | Tool and Test Equipment Requirements .....                                                 | B-5        |                 |
| Section IV.        | Remarks .....                                                                              | B-5        |                 |
| APPENDIX C.        | ORGANIZATIONAL AND DIRECT SUPPORT MAINTENANCE<br>REPAIR PARTS AND SPECIAL TOOLS LIST ..... | C-1        |                 |
| Section I.         | Introduction .....                                                                         | C-1        |                 |
| Section II.        | Repair Parts List .....                                                                    | C-7        |                 |
|                    | Group 01 Engine .....                                                                      |            |                 |
|                    | Engine Assembly .....                                                                      | C-7        | 1               |
|                    | Group 02 Fuel System .....                                                                 |            |                 |
|                    | Tank, Line, Fittings and Filter .....                                                      | C-9        | 2               |
|                    | Group 03 Frame .....                                                                       |            |                 |
|                    | Frame Assembly and Wheels .....                                                            | C-11       | 3               |
|                    | Group 04 Accessory Items .....                                                             |            |                 |
|                    | Data Plates .....                                                                          | C-13       | 4               |
|                    | Suction Hose .....                                                                         | C-15       | 5               |
|                    | Group 05 Pump .....                                                                        |            |                 |
|                    | Accumulator, Check Valve Assemblies and<br>Discharge Port .....                            | C-17       | 6               |
|                    | Diaphragm .....                                                                            | C-19       | 7               |
|                    | Connecting Rod Assembly .....                                                              | C-21       | 8               |
|                    | Gear Reducer .....                                                                         | C-23       | 9               |
| Section III.       | Special Tools List (Not Applicable) .....                                                  |            |                 |
| Section IV.        | National Stock Number and Part Number Index .....                                          | C-25       |                 |
| APPENDIX D.        | EXPENDABLE SUPPLIES AND MATERIALS LIST .....                                               | D-1        |                 |
| GLOSSARY           | .....                                                                                      | Glossary 1 |                 |
| ALPHABETICAL INDEX | .....                                                                                      | Index 1    |                 |

## HOW TO USE THIS MANUAL

This manual consists of:

1. Introduction to Model US40CDG Diaphragm Pump.
2. Principles of operation describing the functions of the diaphragm pump.
3. Maintenance instructions for operator, organizational, and direct support maintenance. These chapters contain:
  - a. Information on repair parts, special tools, test, measurement and diagnostic equipment (TMDE), and support equipment
  - b. Instructions for service upon receipt of the diaphragm pump
  - c. Operational checks
  - d. Preventive maintenance checks and services (PMCS)
  - e. Troubleshooting
  - f. Maintenance procedures
4. Appendixes in the back of the manual list:
  - a. References
  - b. Maintenance Allocation Chart
  - c. Repair parts and special tools
  - d. Expendable supplies and materials

You will need to perform operational checks and PMCS on a regular basis. The information in these sections is in tabular form so you can use it more easily.

The troubleshooting data is coded by malfunction number. The symptom index on page 4-14 or 5-2 is your guide to these malfunctions. Read through the applicable symptom index if the diaphragm pump is not working right.

Instructions for

- Inspecting the diaphragm pump
- Testing the diaphragm pump
- Adjusting the diaphragm pump
- Replacing authorized assemblies

are presented in tabular form to make them easier to use. Each repair paragraph describes one specific task. As much as possible, complete instructions are included. There are some paragraphs which make you look in other places in the manual, but this has been avoided whenever possible. For procedures that apply to the engine refer to TM 5-2805-257-14. The engine Repair Parts and Special Tool List is TM 5-2805-257-24P.

## CHAPTER 1 INTRODUCTION

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### Section I. GENERAL INFORMATION

#### 1-1. SCOPE

Type of Manual: Operator's, Organizational, and Direct Support Maintenance  
Model Number and Equipment Name: US40CDG Diaphragm Pump  
Purpose of Equipment: Pumps water containing solids

#### 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.

#### 1-3. DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE

Refer to TM 750-244-3 for instructions.

#### 1-4. PREPARATION FOR STORAGE AND EQUIPMENT

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

#### 1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

EIR's can and must be submitted by anyone who is aware of an unsatisfactory condition with the equipment design or use. It is not necessary to show a new design or list a better way to perform a procedure; simply tell why the design is unfavorable or why a procedure is difficult. EIR's may be submitted on SF 368 (Quality Deficiency Report). Mail directly to Commander, U. S. Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Blvd., St. Louis, MO 63120. A reply will be furnished to you.