

TECHNICAL MANUAL
DIRECT SUPPORT AND GENERAL SUPPORT
MAINTENANCE MANUAL

FOR

TRUCK, FORKLIFT; 6, 000 LB.
VARIABLE REACH, ROUGH TERRAIN
NSN 3930-01-158-0849

**This manual supersedes the Direct Support and General Support
maintenance portion of TM 10-3930-660-24 dated 14 Oct 89.**

Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY
MARCH 1993

TECHNICAL MANUAL
No. 10-3930-660-34

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 30 March 1993

**DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL
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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, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2020-2 located in back of this manual direct to: Commander, US Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

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HOW TO USE THIS MANUAL

1. ABOUT YOUR MANUAL

Spend some time looking through this manual. You'll find that it has a new look, different than most of the TMs you've been using.

New features added to make this manual easier for you to use are:

- a. **Finding Information** - These include entry features such as the thumb indexing indicators on the cover and edge of the manual. Extensive troubleshooting guides for specific systems lead directly to step-by-step directions for problem solving and maintenance tasks.
- b. **Illustrations** - Many methods are used to make finding and fixing parts much easier. Locator illustrations with keyed text, exploded views, and cutaway diagrams make the information in this manual easier to understand and follow.
- c. **Keying Text With Illustrations** - Instructions/text are located together with figures that illustrate the specific task you are working on. In most cases, the task steps and figures are located side by side.

This TM is organized so that the information and procedures, needed to perform maintenance tasks, is easily located. Take a few minutes to read through this How To Use part of the manual to learn how it is put together and how to find the information you need.

2. BEFORE YOU START

- a. Read and understand all and first aid data in the front of this manual. This data contains general shop safety practices not included in maintenance tasks.
- b. Read Chapter 1 to learn more about the 6KVRRTFL purpose, capabilities and features.

3. CONTENTS OF MANUAL

- a. This TM contains direct support and general support maintenance instructions at the intermediate level for the 6KVRRTFL. Included are principles of operation, fault isolation troubleshooting, and corrective maintenance tasks as authorized by the Maintenance Allocation Chart (MAC).
- b. This TM is made up of:
 - (1) Chapters. There are 16 chapters.
 - (a) Chapter 1, Introduction. This chapter contains general 6KVRRTFL information of interest to intermediate level maintenance technicians.

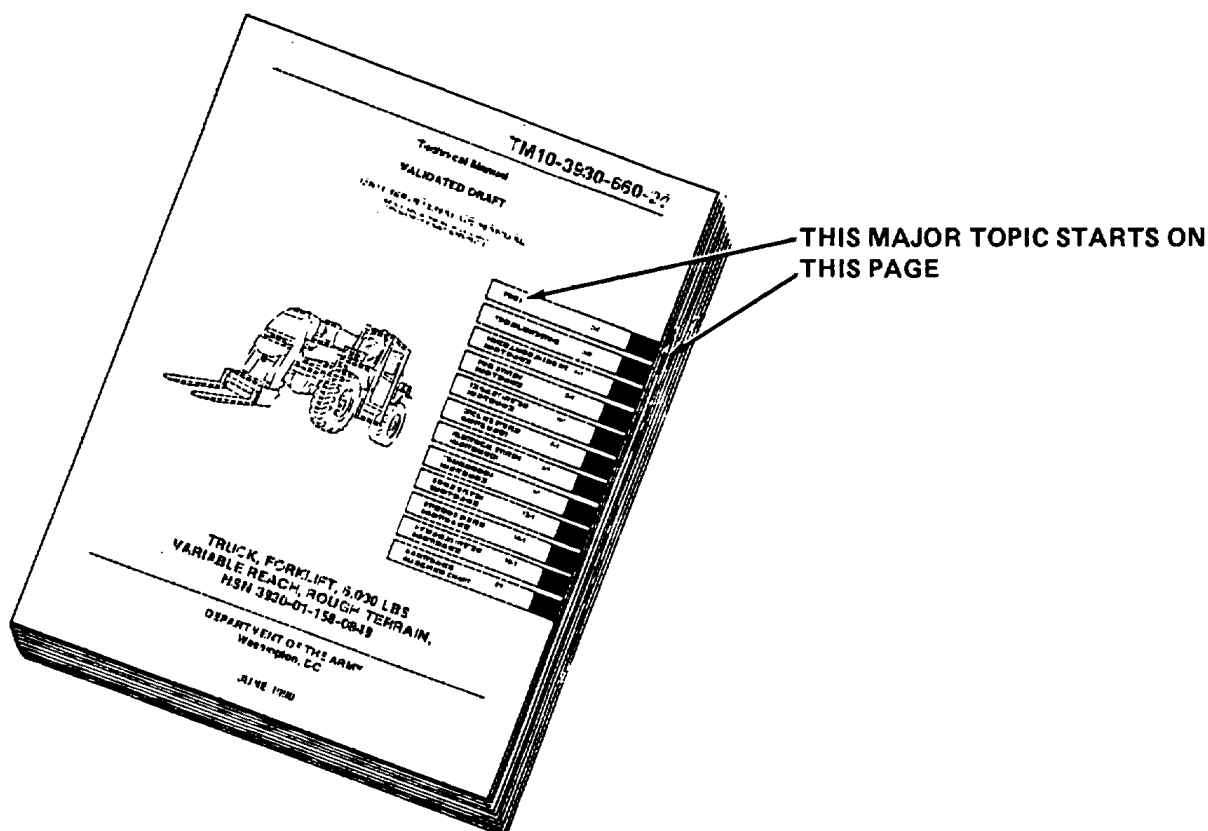
HOW TO USE THIS MANUAL (Cont'd)

- (b) Chapter 2, Maintenance Instructions. This chapter contains instructions of interest to intermediate level maintenance technicians on tools, equipment, preventive maintenance and troubleshooting.
 - (c) Chapter 3, Engine System Maintenance. This chapter contains engine maintenance divided by major systems.
 - (d) Chapter 4, Fuel System Maintenance. This chapter contains maintenance of fuel system components.
 - (e) Chapter 5, Cooling System Maintenance. This chapter contains maintenance of cooling system components.
 - (f) Chapter 6, Electrical Systems Maintenance. This chapter contains electrical maintenance divided by major systems.
 - (g) Chapter 7, Transmission Maintenance. This chapter contains maintenance of transmission components.
 - (h) Chapter 8, Front Axle Maintenance. This chapter contains maintenance of front axle components.
 - (i) Chapter 9, Rear Axle Maintenance. This chapter contains maintenance of rear axle components.
 - (j) Chapter 10, Brake Maintenance. This chapter contains maintenance of brake components.
 - (k) Chapter 11, Wheel and Tire Maintenance. This chapter contains maintenance of wheels and tires.
 - (l) Chapter 12, Steering System Maintenance. This chapter contains maintenance of steering components.
 - (m) Chapter 13, Frame and Towing Attachment Maintenance. This chapter contains maintenance of frame and towing attachment components.
 - (n) Chapter 14, Body, Cab, and Hood Maintenance. This chapter contains maintenance of body, cab, and hood components.
 - (o) Chapter 15, Body and Chassis Accessory Items Maintenance. This chapter contains maintenance of accessory components.
 - (p) Chapter 16, Hydraulic System Maintenance. This chapter contains maintenance of hydraulic components.
- (2) Sections. All chapters are further subdivided into sections. Sections allow for easier break-up of material. They are:
- (a) Chapter 1 has two sections: General Information and Equipment Description.

HOW TO USE THIS MANUAL (Cont'd)

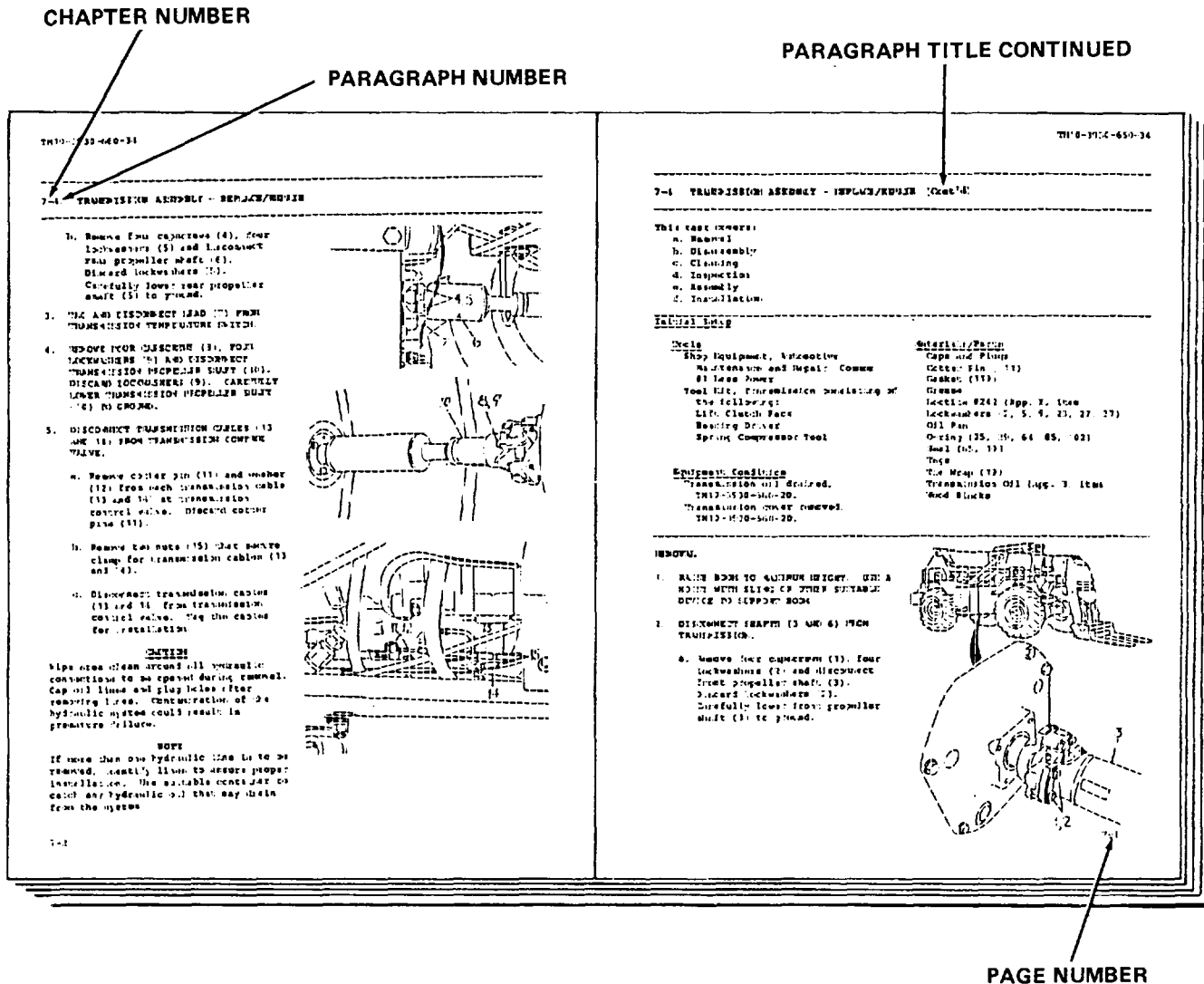
- (b) Chapter 2 has three sections: Repair Parts, Special Tools, TMDE and Support Equipment; General Maintenance, and Troubleshooting.
- (3) Paragraphs. Paragraphs make up sections. The paragraphs have the information needed to do the job properly. Each paragraph is the start of a major topic within the chapter.
- (4) Pages. Pages are numbered consecutively within each chapter. The first part is the chapter number followed by a dash and the consecutive page number. For example, page 3 of Chapter 2 is numbered 2-3.
- (5) Appendices. Appendices are found in the back of the manual. They provide reference information required for maintenance.
 - (a) Appendix A, References. This appendix contains other information you may need to do your job.
 - (b) Appendix B, Expendable/Durable Supplies and Materials List. This appendix contains information on expendable/durable items you need for maintenance.
 - (c) Appendix C, Illustrated List of Manufactured Items. This appendix contains information you need to make parts that are not procured.
- (6) Index. The index is located in the back of the manual. It lists topics in alphabetical order and references the paragraph numbers where information on the topic can be found.

4. HOW TO FIND INFORMATION QUICKLY



HOW TO USE THIS MANUAL (Cont'd)

- Using the Front Cover. The front cover of the manual has boxed titles for major topics. At the right side of each box is a blackened area. The blackened area matches black markings on the first page of that major topic in the manual. Fan the outer edge of the manual to find the topic material.
- Using the Table of Contents. The table of contents lists all chapters, appendices, sections and other important information in this manual and the page number where each starts.



- Using Chapter Indexes. On the first page of each chapter is an alphabetical summary listing of all paragraphs in that chapter and the page number where each can be found.
- Using Paragraph Numbers and Titles. Paragraph numbers include the chapter number. The paragraph number appears before the title of the paragraph title line. Paragraphs that are longer than one page will have the paragraph number and title continued at the top of each following page.



Each test or inspection is followed by step-by-step instructions needed to find the problem and the page number needed in the maintenance chapter to correct the problem.

HOW TO USE THIS MANUAL (Cont'd)

6. HOW TO USE A PROCEDURE

Each procedure consists of two parts, an initial setup table and a task section. You must familiarize yourself with the entire maintenance procedures before beginning the maintenance task.

The initial setup table contains all or some of the following headings:

Tools - Describes tools needed to perform the procedure.

Test Equipment - Describes test equipment needed to perform the procedure.

Equipment Condition - Refers to other procedures that must be performed before attempting the procedure.

Materials/Parts - Describes miscellaneous materials and parts needed to perform the procedure.

Personnel Required - Describes quantity of personnel needed to perform the procedure.

7. HOW TO FIND CRITICAL INFORMATION

Critical information in maintenance chapters has been highlighted for experienced technicians so that they may scan a task quickly and pick out the information needed without reading the entire task. This way, the level of detail needed by low-experienced technicians will not interfere with critical information.

Information of interest to experienced users is highlighted with all capital letters. More detailed information is shown with lower case letters.

CHAPTER 1 INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

- a. Type of Manual. This manual contains direct support (ds) and general support (gs) maintenance instructions for the 6KVRRTFL.
- b. Model Numbers and Equipment Name. The 6KVRRTFL, 6000 lb. Variable Reach Rough Terrain Forklift Truck. Equipped with Multiple Launch Rocket System (MLRS) lifting tool.
- c. Purpose of Equipment. The 6KVRRTFL is designed for loading and unloading Multiple Launch Rocket System (MLRS) pods and other munitions from transport vehicles and containers. The 6KVRRTFL is also designed for use as a standard rough terrain forklift.
- d. Special Limitations on Equipment. The 6KVRRTFL has no special limitations. Normal limitations such as travel speed, lift capacity, etc. are given in para. 1-8.

1-2. MAINTENANCE FORMS AND RECORDS.

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. OFFICIAL NOMENCLATURE, NAMES, AND DESIGNATIONS.

Refer to the nomenclature cross-reference list below. This listing gives nomenclature cross-references used in this manual. The common name is in the left column and the official name is in the right.

NOMENCLATURE CROSS-REFERENCE LIST

Common Name

Official Nomenclature

6KVRRTFL

6000 lb. Variable Reach Rough Terrain
Forklift Truck

MLRS

Multiple Launch Rocket System

1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR'S).

If your 6KVRRTFL 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 Commander, U.S. Army Tank-Automotive Command, Attn: AMSTA-QRD, Warren, MI 48397-5000. We'll send you a reply.