

TM 10-3930-660-20

**TECHNICAL MANUAL
UNIT MAINTENANCE MANUAL**

FOR

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

This manual supersedes the Unit 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. 10-3930-660-20

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 25 March 1993

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NSN 3930-01-158-0849**

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 2028-2 located in the 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.

*This manual supersedes the Unit Maintenance portion of TM 10-3930-660-24 dated 14 Oct 89 with all changes.

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TABLE OF CONTENTS

	Page
HOW TO USE THIS MANUAL	
CHAPTER 1	INTRODUCTION 1-1
Section I	General Information 1-1
Section II	Equipment Description and Data 1-3
Section III	Technical Principles of Operation 1-8
CHAPTER 2	UNIT MAINTENANCE INSTRUCTIONS 2-1
Section I	Repair Parts, Special Tools, TMDE and Support Equipment 2-1
Section II	Service Upon Receipt of Materiel 2-1
Section III	Preventative Maintenance Checks and Services (PMCS) 2-2
Section IV	Troubleshooting Procedures 2-9
CHAPTER 3	GENERAL MAINTENANCE PRACTICES 3-1
CHAPTER 4	ENGINE MAINTENANCE 4-1
CHAPTER 5	FUEL SYSTEM MAINTENANCE 5-1
CHAPTER 6	EXHAUST SYSTEM MAINTENANCE 6-1
CHAPTER 7	COOLING SYSTEM MAINTENANCE 7-1
CHAPTER 8	ELECTRICAL SYSTEM MAINTENANCE 8-1
CHAPTER 9	TRANSMISSION MAINTENANCE 9-1
CHAPTER 10	PROPELLER AND DRIVE SHAFT MAINTENANCE 10-1
CHAPTER 11	FRONT AND REAR AXLE ASSEMBLY MAINTENANCE 11-1
CHAPTER 12	SERVICE AND PARKING BRAKE MAINTENANCE 12-1
CHAPTER 13	WHEEL AND TIRE MAINTENANCE 13-1
CHAPTER 14	STEERING SYSTEM MAINTENANCE 14-1
CHAPTER 15	FRAME AND TOWING ATTACHMENT MAINTENANCE 15-1
CHAPTER 16	BODY AND CAB MAINTENANCE 16-1
CHAPTER 17	BODY AND CHASSIS ACCESSORIES MAINTENANCE 17-1
CHAPTER 18	HYDRAULIC SYSTEM MAINTENANCE 18-1

TABLE OF CONTENTS (Cont' d)

	Page
CHAPTER 19	NON-ELECTRICAL GAUGES MAINTENANCE 19-1
CHAPTER 20	PREPARATION FOR STORAGE AND SHIPMENT 20-1
APPENDIX A	REFERENCES A-1
APPENDIX B	MAINTENANCE ALLOCATION CHART B-1
Section I	Introduction B-1
Section II	Maintenance Allocation Chart B-5
Section III	Tool and Test Equipment Requirements B-20
Section IV	Remarks B-23
APPENDIX C	EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST C-1
Section I	Introduction C-1
Section II	Expendable/Durable Supplies and Materials List C-2
APPENDIX D	ILLUSTRATED LIST OF MANUFACTURED ITEMS D-1
Section I	Introduction D-1
Section II	Manufactured Items Illustrations D-1
ALPHABETICAL INDEX	INDEX 1
ELECTRICAL SYSTEM SCHEMATIC	F/O-1

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 warning 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 truck and its purpose, capabilities and features.

3. CONTENTS OF MANUAL

- a. This TM contains unit maintenance instructions at the organizational 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 20 chapters.

- (a) Chapter 1, Introduction. This chapter contains general truck information of interest to organizational level maintenance technicians.

HOW TO USE THIS MANUAL (Cont'd)

- (b) Chapter 2, Organizational Maintenance Instructions. This chapter contains instruction of interest to organizational level maintenance technicians on tools, equipment, preventive maintenance and troubleshooting.
- (c) Chapter 3, General Maintenance Practices. This chapter contains general instructions of interest to organizational level maintenance technicians on work safety, cleaning, disassembly and assembly, inspection, repair, lubrication, and painting.
- (d) Chapter 4, Engine Maintenance. This chapter contains engine maintenance instructions for the lubrication system and various engine components.
- (e) Chapter 5, Fuel System Maintenance. This chapter contains maintenance of engine fuel system components.
- (f) Chapter 6, Exhaust System Maintenance. This chapter contains maintenance of engine exhaust system components.
- (g) Chapter 7, Cooling System Maintenance. This chapter contains maintenance of engine cooling system components.
- (h) Chapter 8, Electrical System Maintenance. This chapter contains maintenance of vehicle electrical components and wiring harnesses.
- (i) Chapter 9, Transmission Maintenance. This chapter contains maintenance of transmission components.
- (j) Chapter 10, Propeller and Drive Shaft Maintenance. This chapter contains maintenance of propeller and drive shafts.
- (k) Chapter 11, Front and Rear Axle Assembly Maintenance. This chapter contains maintenance of front and rear axle assembly components.
- (l) Chapter 12, Service and Parking Brake Maintenance. This chapter contains maintenance of service and parking brakes.
- (m) Chapter 13, Wheel and Tire Maintenance. This chapter contains maintenance of wheel assemblies and tires.
- (n) Chapter 14, Steering System Maintenance. This chapter contains maintenance of steering system components.
- (o) Chapter 15, Frame and Towing Attachment Maintenance. This chapter contains maintenance of pintle hook and counterweight.
- (p) Chapter 16, Body and Cab Maintenance. This chapter contains maintenance of body and cab components.

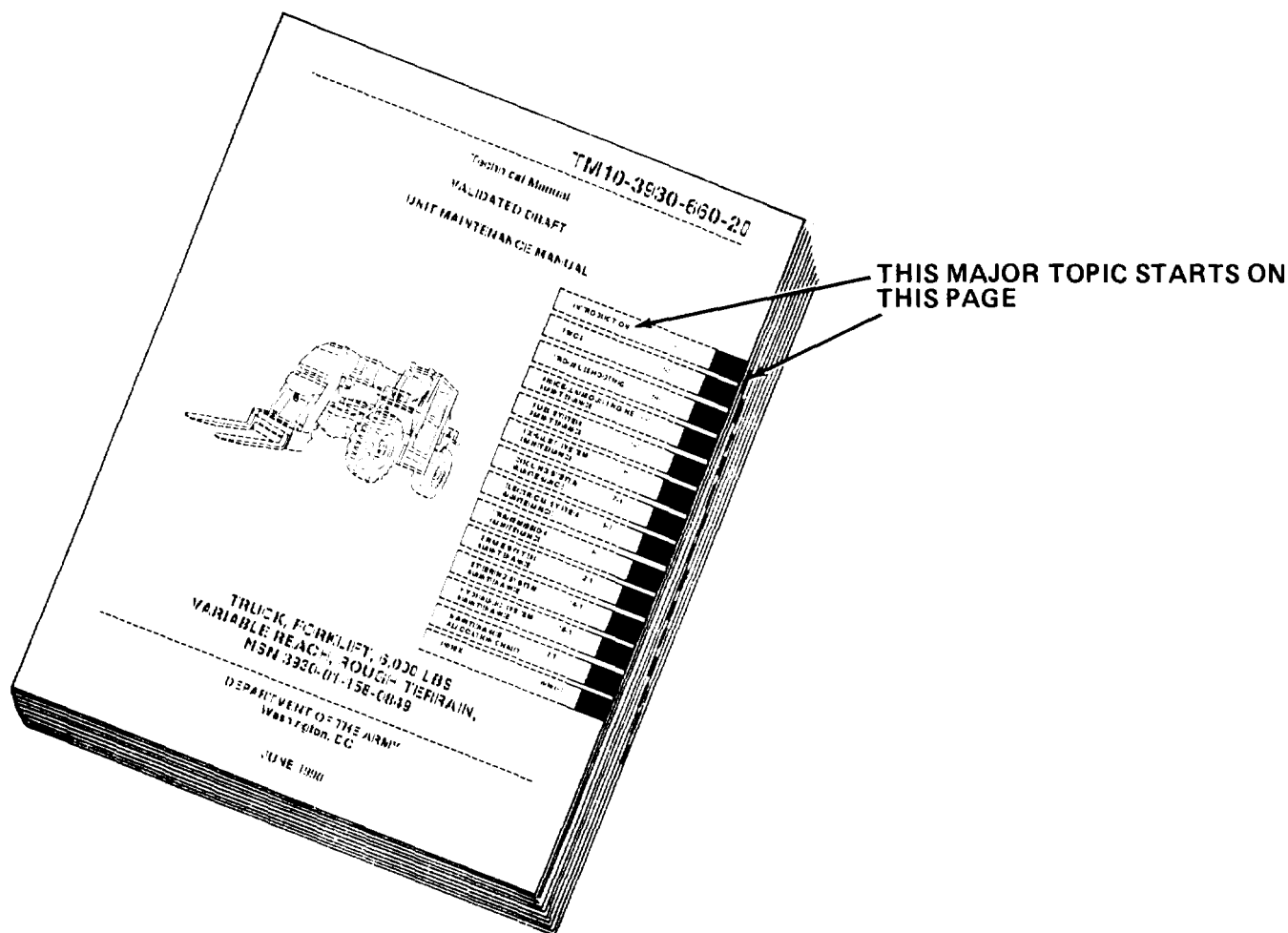
How TO USE THIS MANUAL (Cont'd)

- (q) Chapter 17, Body and Chassis Accessories Maintenance. This section contains maintenance of body and chassis accessories.
 - (r) Chapter 18, Hydraulic System Maintenance. This chapter contains maintenance of hydraulic system components.
 - (s) Chapter 19, Non-Electrical Gauges Maintenance. This chapter contains maintenance of non-electrical gauges.
 - (t) Chapter 20, Preparation For Storage and Shipment. This chapter contains information on storing the truck for extended periods of time.
- (2) Sections. Some chapters are further subdivided into sections. Sections allow for easier break-up of material. They are:
- (a) Chapter 1 has three sections: General Information, Equipment Description and Data, and Technical Principles of Operation.
 - (b) Chapter 2 has four sections: Repair Parts, Special Tools, TMDE and Support Equipment, Service upon Receipt of Material, Preventive Maintenance Checks and Services, and Troubleshooting Procedures.
- (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, Maintenance Allocation Chart (MAC). This appendix contains information needed by all maintenance levels. The MAC lists all tasks assigned to each maintenance level and grouped by functional group code. Refer to Section I of Appendix B for more information.
 - (c) Appendix C, Expendable/Durable Supplies and Materials List. This appendix contains information on expendable items you need for maintenance.
 - (d) Appendix D, Illustrated List of Manufactured Items. This appendix contains information you need to make parts that are not procured.

HOW TO USE THIS MANUAL (Cont'd)

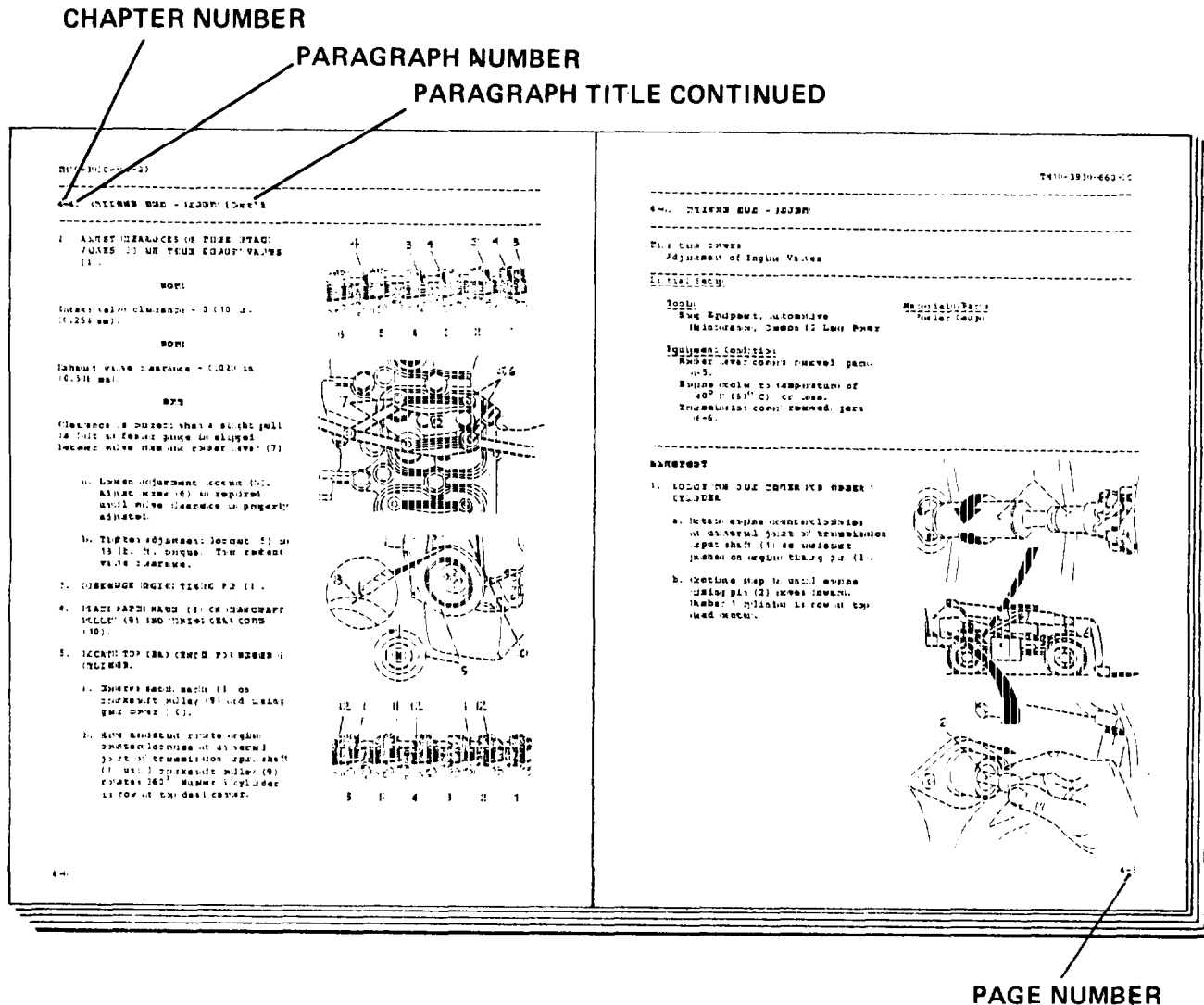
- (6) Alphabetical Index. The alphabetical index is located in the back of the manual. It lists topics in alphabetical order and references the paragraph numbers where information on the topic can be found.

4. HOW TO FIND INFORMATION QUICKLY



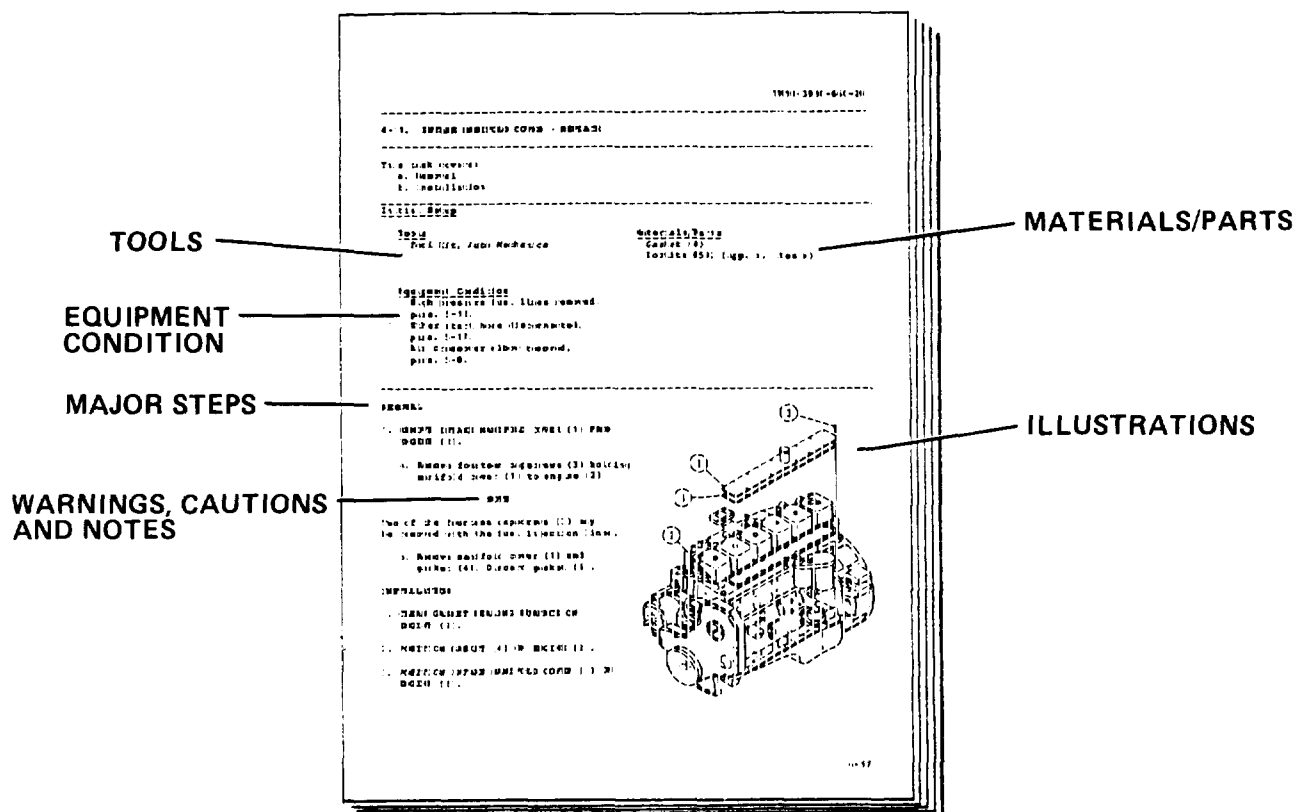
- a. Using the Front Cover. The front cover of the manual has boxed titles for major topics. At the right side of each box is a blackened area. The blackened area matches black markings on the first page of that major topic in the manual. Fan the outer edge of the manual to find the topic material.
- b. 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.

HOW TO USE THIS MANUAL (Cont'd)



- c. 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.
- d. 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.

HOW TO USE THIS MANUAL (Cont'd)



5. HOW TO USE THE TROUBLESHOOTING CHARTS

Troubleshooting is divided into two parts, electrical and mechanical. At the start of the section is an alphabetical summary listing of the paragraphs in that section and the page number where each can be found. No of the paragraphs contain a symptom index, one for electrical and one for mechanical.

The symptom index lists common problems that you may have with the 6KVRRTFL and the page number where each can be found.

Each problem is followed by several tests or inspections that may indicate the cause of the problem. The tests or inspections are arranged from the most likely (1) to the least likely.

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.