

TM 10-3930-660-10

TECHNICAL MANUAL

OPERATOR'S MANUAL

FOR

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

This manual supersedes TM 10-3930-660-10 dated 14 Oct 89.

Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

MARCH 1993

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No. 10-3930-660-10

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DEPARTMENT OF THE ARMY
Washington D. C., 30 March 1993

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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.

	Page
HOW TO USE THIS MANUAL	
CHAPTER 1 INTRODUCTION	1-1
Section I General Information	1-1
Section II Equipment Description	1-3
Section III Technical Principles of Operation	1-7
CHAPTER 2 OPERATING INSTRUCTIONS	2-1
Section I Description and Use of Operator's Controls and Indicators	2-1
Section II Preventive Maintenance	2-14
Section III Operation Procedures	2-24
Section IV Operation Under Unusual Conditions	2-46
CHAPTER 3 OPERATOR MAINTENANCE	3-1
Section I Lubrication Instructions	3-1
Section II Troubleshooting Procedures	3-1
Section III Operator Maintenance Procedures	3-6
APPENDIX A REFERENCES	A-1
APPENDIX B BASIC ISSUE ITEMS (BII) LIST	B-1
Section I Introduction	B-1
Section II Basic Issue Items	B-1
APPENDIX C ADDITIONAL AUTHORIZATION LIST	C-1
Section I Introduction	C-1
Section II Additional Authorization List	C-1
APPENDIX D EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST	D-1
Section I Introduction	D-1
Section II Expendable/Durable Supplies and Materials List	D-1
APPENDIX E LOAD RATING CHART	E-1
ALPHABETICAL INDEX	Index-1

I This manual supersedes TM 10-3930-860-10 dated 14 Ott 89.

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HOW TO USE THIS MANUAL

This manual (TM10-3930 -660-10) is divided into 3 chapters and 5 appendixes with a subject index located after the last appendix. Chapters are divided into sections and sections are further divided into paragraphs.

Look in Chapter 1 for standard data found in all TM's, Chapter 1 will also help you to become familiar with the 6KVRRTFL through physical and functional descriptions of the equipment. All right and left indications noted in this manual are to be taken as viewed from the operator's seat.

Look in Chapter 2 for information regarding the safe operation of the 6KVRRTFL under a variety of conditions. Also find details on the operator's controls and indicators, as well as your PMCS responsibilities.

Chapter 3 begins with a troubleshooting table which will help you isolate and deal with problems which may occur. Operator's maintenance tasks are also contained in this chapter.

The table of contents will direct you to chapters and sections. But if you need to find a specific subject, go to the alphabetical subject index for its location in the manual.

CHAPTER 1

INTRODUCTION

SECTION L General Information

1-1. SCOPE.

- a. Type of Manual. This manual contains operation and operator maintenance instructions for the 6KVRRTFL.
- b. Model Number and Equipment Name. The 6KVRRTFL, 6000 lb. Variable Reach Rough Terrain Forklift Truck is equipped with a 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 paragraph 1-10.

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. HAND RECEIPT (-HR) MANUALS.

This manual has a companion document with a TM number followed by "-HR" (which stands for Hand Receipt). The TM5-3930-660-10-H R consists of preprinted hand receipts (DA Form 2062) that list end item related equipment (i.e., COEII, BII, and AAL) you must account for. As an aid to property accountability, additional -HR manuals may be requisitioned from the following source in accordance with procedures in Chapter 3, AR 310-2:

The US Army Adjutant General Publications Center
AITN: AGLD-OD
1655 Woodson Road
St. Louis, MO 63114

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 a SF 368 (Quality Deficiency Report). Mail it to Commander, U.S. Army Tank-Automotive Command, Attn: AMSTA-QRT, Warren, MI 48397-5000. We'll send you a reply.

1-5. EQUIPMENT IMPROVEMENT REPORT AND MAINTENANCE DIGEST (EIR MD).

The quarterly Equipment Improvement Report and Maintenance Digest, TB 43-0001-39 series, contains valuable field information on the equipment covered in this manual. The information in the TB 43-0001-39 series is compiled from some of the Equipment Improvement Reports that you prepared on the vehicles covered in this manual. Many of these articles result from comments, suggestions, and improvement recommendations that you submitted to the EIR program. The TB 43-0001-39 series contains information on equipment improvements, minor alterations, proposed Modification Work Orders (MWOs) warranties (if applicable), actions taken on some of your DA Forms 2028-2 (Recommended Changes to Publications), and advance information which will help you in doing your job better and will help in keeping you advised of the latest changes to this manual. Also refer to DA PAM 310-1, Consolidated Index of Army Publications and Blank Forms, and Appendix A, References, of this manual.

1-6. WARRANTY INFORMATION.

Refer to the Warranty Technical Bulletin TB5-3930-660-15.

1-7. LIST OF ABBREVIATIONS.

This list consists of special or unique abbreviations, acronyms or descriptors not contained in MIL-STD-12.

<u>Abbreviation</u>	<u>Description</u>
MLRS	Multiple Launch Rocket System
6KVRRTFL	Variable Reach, Rough Terrain Forklift
ROPS	Roll Over Protective Structure
FOPS	Falling Object Protective Structure

Section II. Equipment Description

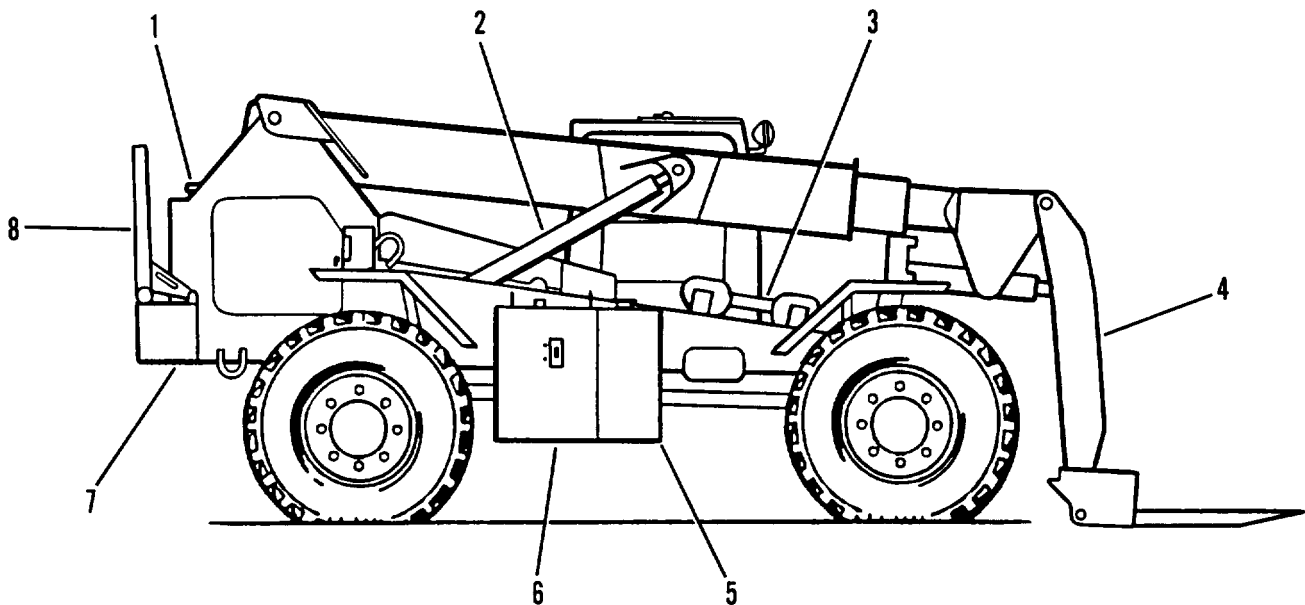
1-8. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

- a. Purpose. The 6KVRRTFL is designed for loading and unloading munitions from transport vehicles and containers. Also, the 6KVRRTFL can be used as a forklift truck.
- b. Equipment Characteristics, Capabilities, and Features.
 - (1) With the MLRS lifting tool and stop tube on the forks, the 6KVRRTFL can handle MLRS pods.
 - (2) With the MLRS lifting tool and stop tube removed and the backrest installed on carriage, the 6KVRRTFL can handle boxes and palletized ammunition loads.
 - (3) The lifting tool stop tube fits over the forks. It prevents the lifting tool from moving too far back on the forks and prevents the MLRS pod from contacting the frame or vehicle wheels when in the carry position.
 - (4) The vehicle frame can be tilted 9 degrees to left or right which allows vehicle to be level when traversing a sideslope.
 - (5) The MLRS attachment can be raised to a horizontal position for loading and unloading munitions.
 - (6) The forks tilt, level, and sideshift to maneuver loads.
 - (7) Lifts loads of 6,000 lbs to a height of 23 ft. and 4,000 lbs to a height of 26 ft.
 - (8) Can tow other vehicles weighing 27,100 pounds or less.
 - (9) The operator can select one of three steering modes: two wheel, four wheel, and crab wheel.
 - (10) All weather operational.
 - (11) Can ford in up to 30 inches of water.

1-9. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

a. Right Side View of the 6KVRRTFL.

- (1) Radiator. Contains coolant which provides engine cooling.
- (2) Boom Hoist Cylinder. Raises and lowers the boom.
- (3) MLRS Lifting Tool and Stop Tube (shown in storage position). The stop tube prevents the lifting tool from moving too far back on the forks and prevents the MLRS pod from contacting the frame or vehicle wheels when in the carry position.
- (4) MLRS Attachment. This attachment is required for MLRS and forklift operations. The MLRS attachment can be raised to a horizontal position, creating a low profile and extended reach configuration. This configuration is useful in loading and unloading munitions from transport vehicles and containers.
- (5) Fuel Tank. Contains diesel fuel for engine operation.
- (6) Hydraulic Oil Reservoir. Contains hydraulic fluid for the hydraulic system.
- (7) Frame and Counterweight. The frame is a heavy-duty design constructed of 1-3/16 in. thick steel plates. The frame is equipped with tie-down lugs meeting air transport specifications, tow lugs, a pintle hook, and a 3,600 lb. counterweight. The counterweight is removable so that axle loading can be adjusted to meet air transport requirements for some aircraft.
- (8) Load Backrest (Shown in storage position). Used to rest a load during non-MLRS operations. The backrest can be attached to the fork carriage and serves as a backstop or support for materials being carried on the forks.



b. Left Side View of the 6KVRRTFL.

- (1) Forks and Carriage. Serve as an anchoring point of the forks. The fork carriage is also equipped with automatic fork leveling. Moving a switch will keep the forks level when raising or lowering the boom.
- (2) Load Backrest (Shown in fork carriage position). Serves as a backstop or support for materials being carried on the forks.
- (3) Boom. The telescopic, three stage boom is constructed of welded high strength steel. The boom will retract or extend the reach and height of the forks.
- (4) Boom Angle Indicator. Shows the angle of the boom relative to the horizon.
- (5) NATO Slave Receptacle. Connection point for starting a disabled vehicle or for receiving starting assistance when disabled.
- (6) Battery Box. Holds the batteries which provide current for the electric system.
- (7) Engine. Provides the necessary power to drive the transmission. The engine also contains sending units for the Simplified Test Equipment for Internal Combustion Engines (STE/ICE) diagnostics.
- (8) Tool Box. Storage area for tools and basic issue items.
- (9) Attachment Hoist Cylinder. Moves the MLRS attachment forward and back.

