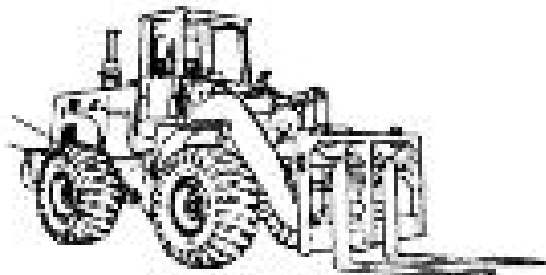
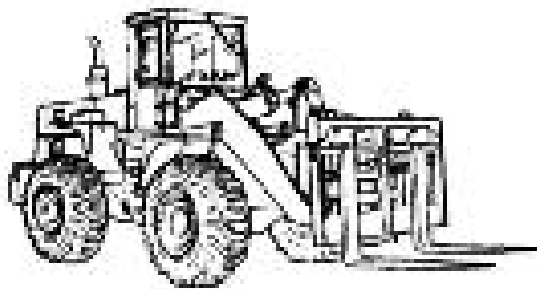


TECHNICAL MANUAL  
**MAINTENANCE INSTRUCTIONS**  
 ORGANIZATIONAL MAINTENANCE



5T 2000 AND BELOW



5T 2001 AND ABOVE

**TRUCK, FORKLIFT, DED  
 PNEUMATIC TIRE,  
 10,000 LB. CAPACITY  
 ROUGH TERRAIN,  
 ARTICULATED FRAME STEER  
 (DRESSER INDUSTRIES  
 MODEL M10A, MHE 236)  
 (NSN 3930-01-054-3833)**

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\*This TM supersedes the Organizational Maintenance portion of  
 TM 10-3930-643-148P, dated 30 November 1981, and the  
 Organizational Maintenance portions of all changes.

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HEADQUARTERS  
DEPARTMENT OF THE ARMY  
Washington D.C., 30 January 1990

## ORGANIZATIONAL MAINTENANCE MANUAL

TRUCK, FORKLIFT, DED  
PNEUMATIC TIRE, 10,000 LB. CAPACITY  
ROUGH TERRAIN, ARTICULATED FRAME STEER  
(DRESSER INDUSTRIES MODEL M10A9 MHE 236)  
(NSN 3930-01-054-3833)

## 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: U.S. Army Tank-Automotive Command, ATTENTION: A14STA--MBS, Warren, MI 48397-5000. A reply will be furnished to you.

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\* This TMsupersedes the Organizational Maintenance portion of TM 10-3930-843-14&P, dated 30 November 1981, and the Organizational Maintenance portions of all changes.

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HOW TO USE THIS MANUAL

This manual is designed to help you maintain the M10A Forklift. It is divided into chapters, sections and appendices. Chapter 1 contains information concerning the vehicle, its characteristics, systems and components. Chapters 2 through 15 contain procedures necessary for troubleshooting, maintenance and general upkeep. The maintenance procedures contained in these chapters tell you several things:

- . . . . what tools you need to do the job
- . . . . materials or parts required
- . . . . what condition the vehicle is to be in before work is started

The appendices contain supplemental information which you need to assist you in the performance of the maintenance procedures.

In addition to the text, you will have either an assembled view or disassembled view illustration of the associated parts. Sometimes, the illustration will be keyed by an arrow to an overall view of the vehicle to help you determine the approximate location of the parts. The illustration is keyed to the text by numbers and shows you how to take the part off and put it on. The following example will show some of the features of this manual.

## EXAMPLE

An operator brings his M10A Forklift into the shop with an engine cooling problem: the engine overheats frequently. The best way to solve this problem is by using your manual. This is what you do:

1. How do you start?

Look at the cover of the manual. On the cover you will find a listing for Troubleshooting Symptom Index. To find the page fast, open the manual by using the black tab that lines up with the listing on the cover.

2. What kind of problem do you have?

Find it in the symptom index. The symptom index is a list of problems covered by a chapter. It tells you that your problem, "OVERHEATING," is covered in paragraph 4-6, malfunction entry B.

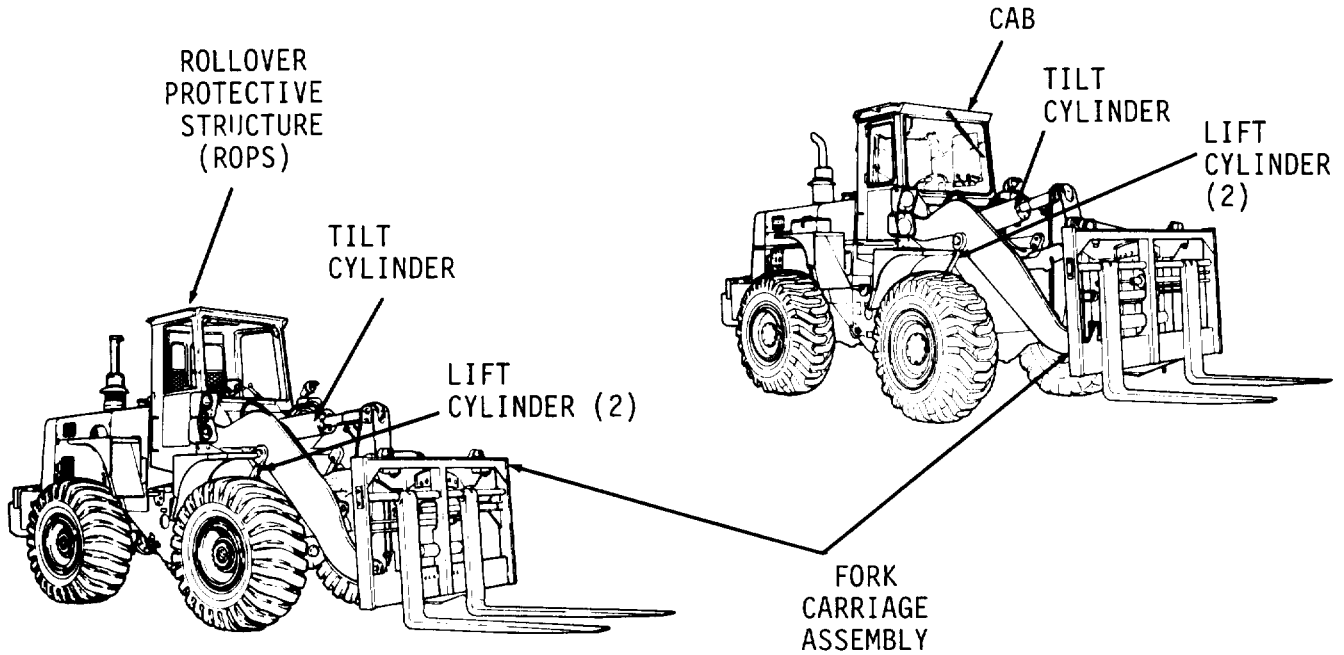
3. How do you determine what is causing the problem?

Go to paragraph 4-6, malfunction entry B. There you will find the troubleshooting procedures you will need. The procedure has columns with the headings: malfunction, test or inspection and corrective action. Starting at Step 1, read the procedure. Each step tells you what to do and what to look for. Follow the steps, in order, until you find your problem. The corrective action column will tell you what to do next.

4. Let's assume that the troubleshooting procedures lead you to a bad water pump. The replacement procedure is in paragraph 4-31. The procedure contains all information you will need to replace the water pump. First check the introductory material. It tells you what you will need before you start the job. Below the introductory material is an assembled view of the vehicle showing the approximate location of the fuel injection nozzle and an illustration which shows you how to do the job.

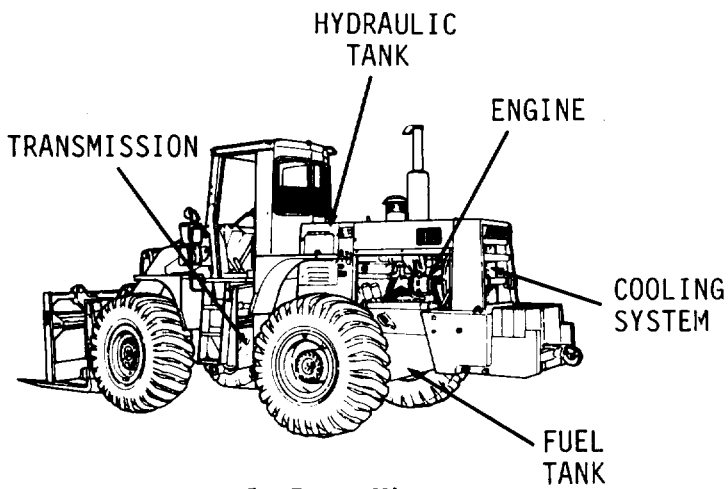
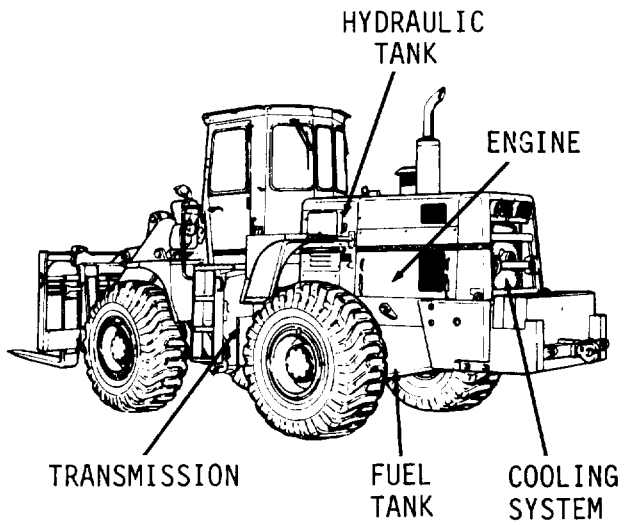
5. If on the other hand, you know the cause of the problems, refer to the alphabetical index located at the rear of this manual. Find the name of the part to be replaced and the paragraph number for the maintenance procedure. For example, the engine is overheating. On filling the radiator with water you notice that coolant is pouring on to the ground, indicating a hose may have broken. Removing the engine shield you see that water is dripping from the water pump, indicating that the gasket may have broken. Refer to the alphabetical index. Under the listing "Water Pump Assembly," page 4-130 is referenced. Turn to this page for removal and installation procedures.

M10A FORKLIFT



Right Front View  
(S/N 2001 and above)

Right Front View  
(S/N 2000 and below)



Left Rear View  
(S/N 2000 and below)

Left Rear View  
(S/N 2001 and above)

## CHAPTER 1

## INTRODUCTION

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## Section I. GENERAL INFORMATION

### INTRODUCTION. (cont)

1-1. Scope. This chapter provides general descriptive data to aid the maintenance specialist in understanding the various mechanical functions of the M10A Forklift.

a. Type of Manual. Organizational Maintenance Manual.

b. Model Number and Equipment Name. MHE 236, (NSN 3930-01-054-3833) Rough Terrain 10,000 Pound Capacity, Articulated Frame Steer, Pneumatic Tire, DED, M10A Forklift Truck.

c. Purpose of Equipment. Handle, transport and stock materials on various types of terrain. The M10A Forklift has a capacity of 10,000 pounds, 48 inch load *center* and can lift the load to a maximum height of 121.6 inches.

d. Metric Dimensions. The equipment described herein is non-metric and does not require metric common *or* special tools. Therefore, metric units are *not* supplied.

1-2. Maintenance Forms, Records and Reports. Department of the Army forms and procedures used for equipment will be those prescribed by DA PAM 738-750, The Army Management System (TAMMS).

1-3. Destruction of Army Material to Prevent Enemy Use. "Procedures for Destruction of Equipment to Prevent Enemy Use" TM 750-244-6.

1-4. Quality Assurance/Quality Control (QA/QC).

a. No particular quality assurance or quality control technical manuals pertain specifically to the M10A Forklift. Use standard QA/QC procedures.

b. Defective material received through the supply system should be reported on a Quality Deficiency Report (QDR), SF368. QDR's should be mailed directly to: Commander U.S. Army Tank Automotive Command, ATTN: AMSTA-QRT, Warren, MI 48397-5000. A reply will be furnished directly to you.

INTRODUCTION.

1-5. Nomenclature Cross Reference. This listing includes nomenclature cross-references used in this manual.

<u>Official Nomenclature</u>	<u>Common Name</u>
Truck, Forklift, DED Pneumatic Tire, 10,000 Lbs. Capacity, Rough Terrain, Articulated Frame Steer Technical Manual	Forklift      TM
Lubrication Order	LO, Lube Order
Level Indicator	Sight Gage, Dipstick
Capscrew	Bolt
Safety Wire	Lockwire
Gauge	Gage
Water Temperature Regulator	Thermostat
Servicemeter	Hourmeter
O-Ring	Preformed Packing
XMSN	Transmission
Hydraulic Tank	Hydraulic Reservoir
Air Reservoir	Air Tank
Self-Locking Nut	Locknut
Drive Shaft	Propeller Shaft
Fork Carriage	Boom
Final Filter	Secondary Filter

1-6. Reporting Equipment Improvement Recommendations (EIR). If your M10A Forklift needs improvement, let us know. Send 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. Put it on a SF 368 Quality Deficiency Report (QDR). EIR's should be mailed direct to: Commander, U.S. Army Tank Automotive Command, ATTN: AMSTA-QRT, Warren, MI 48397-5000.

A reply will be furnished directly to you.

1-7. Warranty Information. The model, MHE Forklift is warranted by Dresser Industries for 15 months or 1500 hours of operation, whichever occurs first. The warranty starts on the date found on DA Form 2408-9 in the logbook. Report all defects in material or workmanship to your supervisor. He will take appropriate action through your organizational maintenance shop.

For warranty processing information see DA PAM 738-750.