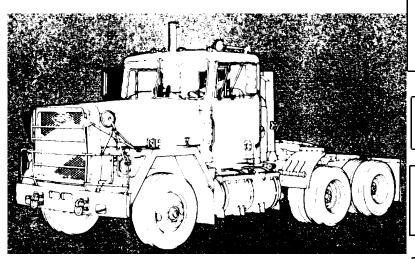
OPERATOR'S MANUAL



GENERAL INFORMATION PAGE 1-2

TRUCK TRACTOR, LINE HAUL, 50,000 GVXR, 6X4, M915A1 (NSN 2320-01-125-2640) EQUIPMENT DESCRIPTION PAGE 1-7

DESCRIPTION AND
USE OF OPERATOR'S
CONTROLS AND
INDICTORS
PAGE 2-1



PREVENTIVE
MAINTENANCE
CHECKS AND
SERVICES (PMCS)
PAGE 2-29

OPERATION UNDER USUAL CONDITIONS PAGE 2-55

O P E R A T I O N UNDER UNUSUAL C O N D I T I O N S P A G E 2 - 8 6

LUBRICATION INSTRUCTIONS

PAGE 3-1

This copy is a reprint which includes current pages from Changes 1 thru 3.

TROUBLESHOOTING
PROCEDURES
PAGES 3-2

MAINTENANCE PROCEDURES PAGE 3-15

HEADQUARTERS

DEPARTMENT OF THE ARMY

JUNE 1983

MAINTENANCE UNDER UNUSUAL CONDITIONS PAGE 3-27

TABLE OF CONTENTS

Page			
HOW TO USE THIS MANUAL v			
CHAPTER 1 INTRODUCTION			
Section I General Information			
Section II Equipment Description 1-7			
CHAPTER 2 OPERATING INSTRUCTIONS 2-1			
Section I Description and Use of Operator's Controls & Indicators2-1			
Section II Preventive Maintenance Checks and Services (PMCS) 2-29			
Section III Operation Under Usual Conditions 2-55			
Section IV Operation Under Unusual Conditions 2-86			
CHAPTER 3 MAINTENANCE INSTRUCTIONS 3-1			
Section I Lubrication Instructions			
Section II Troubleshooting Procedures			
Section III Maintenance Procedures			
Section IV Maintenance Under Unusual Conditions			
APPENDIX A REFERENCES			
APPENDIX B COMPONENTS OF END ITEM LIST			
APPENDIX C ADDITIONAL AUTHORIZATION LIST			
APPENDIX D EXPENDABLE SUPPLIES AND MATERIALS			
SUBJECT INDEX			

HOW TO USE THIS MANUAL

This manual is designed to help you to operate and maintain the M915A1 truck tractor. Listed below are special features which have been included to make it easier to locate and to use the information you need.

- A front cover Table of Contents is provided, giving you a quick reference to chapters and sections that you will be using often.
- Warnings, subject headings, procedural steps, and certain other modules of information are highlighted in bold print or red as a visual aid for you.
- Upper case type is used to emphasize statements of particular importance.

FOLLOW THESE GUIDELINES WHEN YOU USE THIS MANUAL:

- Read all warnings and cautions.
- Within a chapter or section, boxed headings are used to help categorize the material and to assist in finding subjects quickly.
- The driver should read through this manual and become familiar with the content before attempting to operate the truck.

Equipment description herein is non-metric and does not require metric conversion, common or special tools. Metric units are, therefore, not supplied. Tactical instructions, for sake of clarity, will also remain non-metric.

WARNING

This vehicle has been designed to operate safely and efficiently within the limits specified in this TM. Operation beyond these limits is prohibited IAW AR 70-1 without written approval from the Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-CM-S, Warren, MI 48397-5000.

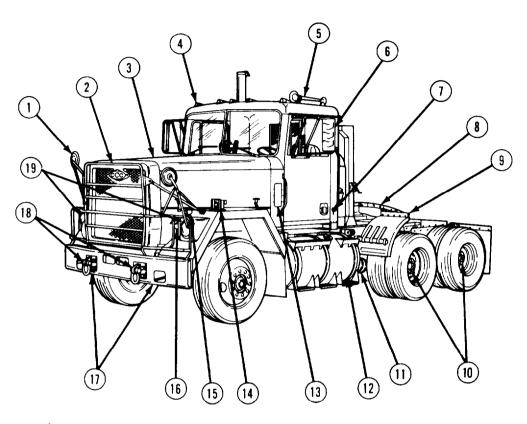
CHAPTER 1

INTRODUCTION

INDEX

Page
GENERAL INFORMATION 1-1
Identification of Equipment Major Components
Scope 1-4
Maintenance Forms and Records
Hand Receipt (-HR Manuals)
Reporting Equipment Improvement Recommendations (EIR's) 1-5
Warranty Information
Nomenclature
Abbreviations
EQUIPMENT DESCRIPTION
Equipment Purposes, Capabilities, and Features
Performance Data

Section I. GENERAL INFORMATION

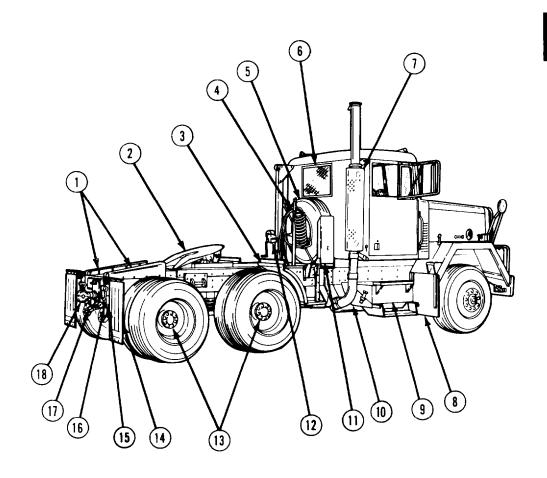


- 1 FRONT SPOTTER MIRRORS
- 2 BRUSH GUARD
- 3 NTC-400 BIG CAM III DIESEL ENGINE
- 4 CLEARANCE LAMPS
- 5 AIR HORN
- 6 SIDE MIRRORS
- 7 WORK LAMP RECEPTACLES
- 8 CAB CONTROLLED FIFTH WHEEL
- 9 FORWARD REAR AXLE QUARTER FENDER

- 10 DRIVING AXLES
- 11 AIR DRYER
- 12 FUEL TANK
- 13 FRESH AIR VENTS
- 14 TURN SIGNAL LAMPS
- 15 BLACKOUT MARKER LAMPS
- 16 BLACKOUT DRIVE LAMP
- 17 FRONT AIR LINE CONNECTORS
- 18 TOWING EYES SERVICE HEADLAMPS

Figure 1-1. M915A1 - Left Front View.

TA 236633



- 1 TRAILER RAMPS
- 2 CAB CONTROLLED FIFTH WHEEL
- 3 FORWARD-REAR AXLE QUARTER FENDER
- 4 AIR HOSE TENDER
- 5 SPARE WHEEL & TIRE
- 6 SLIDING REAR CAB WINDOW & STONE SHIELD
- 7 EXHAUST MUFFLER
- 8 FRONT WHEEL MUD FLAPS
- 9 BATTERIES BOX
- 10 HT 754CRD FIVE SPEED AUTOMATIC TRANSMISSION

- 11 SPARE WHEEL & TIRE CARRIER
- 12 SPARE WHEEL & TIRE HOIST
- 13 DRIVING AXLES
- 14 REAR WHEEL MUD FLAPS
- 15 BLACKOUT TAIL AND STOPLAMPS
- 16 SERVICE TAIL AND STOPLAMPS
- 17 REAR AIR LINE CONNECTORS
- 18 TOWING PINTLE

Figure 1-2. M915A1 - Right Rear View.

1-1. Scope.

This operator's manual is for use in operating and maintaining the M915A1 line haul truck tractor. This vehicle is used to tow the M-872 Trailer with a towed load capacity of 30,000 lbs (on the King Pin).

1-2. Maintenance Forms and Records.

Every mission begins and ends with the paperwork. There isn't much of it, but you have to keep it up. The forms and records you will fill out have several uses. They are a permanent record of the services, repairs, and modifications made on your carrier. They are reports to organizational maintenance and to your commander. And they are a checklist for you when you want to know what is wrong with the carrier after its last use, and whether those faults have been fixed. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-756, 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 TM 9-2320-283-10-HR consists of preprinted hand receipts (DA Form 2062) that list end item related equipment (i.e., COEI, 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:

Commander, Baltimore Adjutant General Publications Center 2800 Eastern Blvd.
Baltimore, MD 21220

1-4. Reporting Equipment Improvement Recommendations (EIR's).

If your M915A1 Truck 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 us at:

Commander, U.S. Army Tank-Automotive Command ATTN: DRSTA-MP Warren, Michigan 48090

We'll send you a reply.

1-5. Warranty Information.

The M915A1 Trucks are warranted by AM General Corporation in accordance with TB 9-2300-295-15/20 for a period of 15 months from date of acceptance, as shown on the Material Inspection and Receiving Report (DD Form 250), or 12,000 miles road travel, whichever occurs first. Report all defects in material or workmanship to your supervisor, who will take appropriate action through your Organizational Maintenance Shop.

TM 9-2320-283-10

1-6. Nomenclature.

COMMON TERM

OFFICIAL NAME

Engine Coolant -Antifreeze, ethylene glycol

mixture

Cold Start system
 Ether quick-start system

Jake brake, Jacobs@ brakeEngine retarder

• Cable -Wire rope

Glad Hand
 - Quick disconnect coupling

Pogo Stick
 -Air hose tender

1-7. Abbreviations.

CID Cubic Inch Displacement

EIR's Equipment Improvement Recommendations

F Fahrenheit

FWD Forward

GCWR Gross Combination Weight Rating

GVW Gross Vehicle Weight

GVWR Gross Vehicle Weight Rating

hp Horsepower

KP King Pin

lbs pounds

mph miles per hour

N/A Not Applicable

PM Preventive Maintenance

PMCS Preventive Maintenance Checks and Services

(A)	PMCS	After Operation Preventive Maintenance Checks and Services
(B)	PMCS	Before Operation Preventive Maintenance Checks and Services
(D)	PMCS	During Operation Preventive Maintenance Checks and Services
(M)	PMCS	Monthly Preventive Maintenance Checks and Services
(W)	PMCS	Weekly Preventive Maintenance Checks and Services
	psi	pounds per square inch
	rpm	revolutions per minute
	vdc	volts direct current

Section II. EQUIPMENT DESCRIPTION

1-8. Equipment Purposes, Capabilities and Features.

WARNING

This vehicle has been designed to operate safely and efficiently within the limits specified in this TM. Operation beyond these limits is prohibited IAW AR 70-1 without written approval from the Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-CM-S, Warren, MI 48397-5000.

PURPOSE

 The M915A1 is a line haul truck tractor used to haul semitrailers such as the M-872, on Class I good roads only with a maximum load of 30,000 pounds on 5th wheel.

CAPABILITIES AND FEATURES

- The M915A1 truck tractor is capable of operation in temperatures from 25°F to 125°F and to -50°F with Arctic engine and personnel heater kits installed.
- While operating on Class I good roads, the M915A1 tractor can maintain a speed of 55 mph on level roads and 25 mph while ascending a 3.0 percent grade at Gross Combination Weight Rating (GCWR).
- The M915A1 can climb a 17 percent grade at GCWR in both forward and reverse directions (adequate traction assumed). It is capable of operating on side slopes up to 10 percent where adequate traction is available.
- The M915A1 truck tractor can ford hard bottom water crossings up to 20 inches deep for 5 minutes without damage or requiring maintenance before operations con continue.
- Average cruising ranges at GCWR with a full tank of fuel (118 gallons) will vary based on many conditions. During on highway use under full power at 2100 rpm with 373 to 400 hp, the fuel rate will be 20.5 to 21.4 gallons per hour. Varying loads, prolonged idle, offroad driving, and climatic conditions will affect the rate of fuel consumption. Traveling at an average of 40 miles per hour (mph) at rated GCWR will result in a 300 mile operating range with full fuel tank.
- The vehicle clearance circle, wall to wall, is 72.00 feet. Curb to curb vehicle clearance circle is 69.00 feet.

1-9. Performance Data.

Performance data for the M915A1 truck tractor is listed in table 1 - 1.