TM 9-2350-247-10

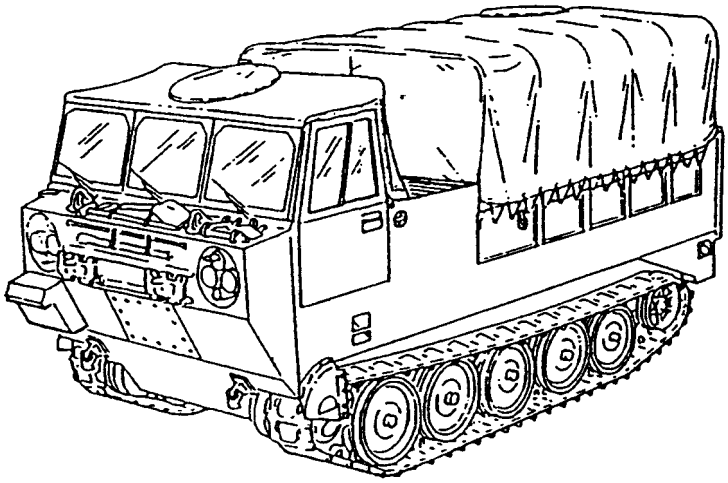
TECHNICAL MANUAL

OPERATOR'S MANUAL

FOR

CARRIER, CARGO TRACKED, 6–TON M548A1
2350–01–096–9356 (EIC AEU)

M548A3
2350–01–369–6081 (EIC AE9)



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HEADQUARTERS, DEPARTMENT OF THE ARMY

30 June 2001

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 30 June 2001

TECHNICAL MANUAL

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CARRIER, CARGO TRACKED, 6–TON M548A1
NSN 2350–01–096–9356
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M548A3
NSN 2350–01–369–6081
(EIC AE9)

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HOW TO USE THIS MANUAL

HOW TO USE THIS MANUAL

This manual tells you how to use the M548A1 and M548A3 6–ton cargo carriers.

Before starting a task or procedure, read HOW TO USE THIS MANUAL and DESCRIPTION AND USE OF OPERATOR'S CONTROLS AND INSTRUMENTS.(WP 0004 00).

WHAT'S IN THE MANUAL — FRONT TO BACK

SUMMARY OF WARNINGS AND FIRST AID lists the Warnings and first aid information in this manual. The Warnings cover hazards that could kill or injure personnel. Shorter versions of these warnings may appear in the task procedure.

TABLE OF CONTENTS lists the Work Packages for each chapter.

CHAPTER 1 covers General Information. It gives a brief description of the major parts and features of the carrier.

CHAPTER 2 covers descriptions and functions of all controls and indicators.

CHAPTER 3 covers Troubleshooting Work Packages.

CHAPTER 4 covers Preventive Maintenance Checks and Services, including Lubrication Instructions and Maintenance Work Packages.

CHAPTER 5 covers maintenance instructions for the use of auxiliary equipment.

CHAPTER 6 provides supporting information for the Technical Manual. It includes the following Work Packages:

- The REFERENCES Work Package (WP 0080 00) lists references to be used by personnel in operating and maintaining the carriers. These references include technical manuals and other publications.
- The COEI/BII Work Package (WP 0081 00) lists Components of End Item and Basic Issue Items. Components of End Item are those items which are assembled and become a permanent part of the carrier. Basic Issue Items are items needed to put the carrier in operation, operate it, and do emergency repairs.
- The ADDITIONAL AUTHORIZATION LIST Work Package lists additional items required to support the carrier during operation (WP 0082 00).
- The EXPENDABLE/DURABLE SUPPLIES AND MATERIALS Work Package (WP 0083 00) lists expendable supplies and materials that will be needed to operate and maintain the carrier.
- The STOWAGE GUIDE Work Package (WP 0084 00) is a stowage guide for all removable equipment carried in and on the carriers. This work package includes a guide to identification (ID) plates on the carriers.

The INDEX is an alphabetical listing of all the major controls, procedures, indicators, systems, and subsystems covered in this manual. Each entry is cross-referenced to the Work Package number and page number.

DA FORM 2028–2 is used to report errors and to recommend improvements for procedures in this manual. Three blank DA Forms 2028–2 are in the back of this manual. A sample is provided to show you how to fill out the DA Form 2028–2.

The back cover includes a METRIC CONVERSION CHART that can be used to convert U.S. customary measurements to their metric equivalents. Measurements in this manual are given in U.S. customary unit with metric units in parentheses.

HOW TO USE THE WORK PACKAGES

How to find the Work Package you need

Pick a key word from the carrier part or system to be used. Look in the INDEX for this key word or the name of the action you will perform. Turn to the Work Package and page indicated.

The INDEX lists each Work Package under one or more headings. For example, the Work Package titled ADJUST DRIVER'S SEAT could be found under the two headings, "Driver", and "Seat".

HOW TO USE THIS MANUAL (cont)

How to read the Work Package

Work Packages provide either descriptive/supporting information or detailed procedures for operating and maintaining the equipment. The Work Packages in Chapter 1 include General Information only. Chapter 2 includes descriptive information on Controls and Indicators, and Operating Procedures. Chapter 3 includes Troubleshooting Procedures. Chapter 4 covers PMCS, including Lubrication Instructions and Maintenance Procedures. Chapter 5 includes maintenance of auxiliary equipment. Chapter 6 includes Supporting Information.

Pay attention to all Warnings, Cautions, and Notes. These can appear in all types of procedures. They help you avoid harm to yourself, other personnel, and equipment. They also tell you things you should know about the procedure.

Before you start a procedure, get all the tools, supplies, and personnel you need to do the procedure. These items will be listed in the INITIAL SETUP of the Work Package.

Start with step 1 and do each step in the order given. Numbered primary steps tell you WHAT to do. Alpha substeps tell you HOW to do it.

Look at the illustrations. Locators show you where the equipment and parts are located in the carrier. Closeup illustrations show the details you need to do the procedure.

Operator and Maintenance Instructions Work Packages

Operation Work Packages tell you how to operate the carrier and its equipment. Each operation Work Package details steps which need to be performed to complete the task.

Maintenance Work Packages help the crew to keep the carrier in operating condition. Crew members are authorized to remove, clean, inspect, lubricate, and install certain parts on the carrier.

Operation and maintenance Work Packages are written in the same format.

Read the INITIAL SETUP section carefully before you start a task. Get the tools and supplies listed and the personnel needed to perform the task. Be sure that the equipment is in the condition called out under the Equipment Condition step.

Read all of the Work Package before starting. Follow the steps in the order. END OF TASK indicates the end of the procedure.

Preventive Maintenance Checks and Services (PMCS), Including Lubrication Instructions Work Package

Preventive Maintenance Checks and Services (PMCS) must be done to keep your carrier operating correctly. Do the PMCS procedures both daily and weekly as required. There are four types of PMCS:

The BEFORE (B) PMCS must be done before you operate the carrier.

The DURING (D) PMCS must be done when you operate the carrier. Monitor the carrier systems as you perform your mission. Perform DURING (D) PMCS on a system only when the system is required to complete your mission.

The AFTER (A) PMCS must be done after completing your mission.

The WEEKLY (W) PMCS must be done weekly.

Notify unit maintenance if anything seems wrong with the carrier or its systems and you cannot fix it yourself. Loose bolts or damaged welds are common things to watch for in every area. When checking hoses and fluid lines, look for wear, leaks, loose clamps and loose fittings.

Troubleshooting Work Packages

Troubleshooting Work Packages help solve common problems and malfunctions. The Troubleshooting Symptom Index (WP 0055 00) lists malfunctions common to your carrier and the Index will guide you to the Troubleshooting Table.

DEFINITION OF WORK PACKAGE TERMS

Warnings, Cautions, And Notes

Read all Warnings, Cautions and Notes in the Work Package. Warning, Cautions and Notes are placed just before the step for which they apply. Ignoring a Warning can cause death or injury to you or other personnel. Ignoring a Caution can cause damage to equipment. Notes have facts to make the step and Work Package easier.

HOW TO USE THIS MANUAL (cont)

WARNINGS call attention to the things that could kill or injure personnel. Warnings are also listed at the front of the manual.

WARNING

Hot oil and coolant can burn you. Let power unit cool before you start work.

A sample WARNING is shown above.

CAUTIONS call attention to actions or material that could damage equipment.

CAUTION

Improper cable removal can cause a short circuit. remove negative cable before you remove positive cable.

A sample CAUTION is shown above.

NOTES contain information that makes the step and Work Package easier to do.

NOTE

When quick release pin is removed, mirror control knob will spring back into locked position.

A sample NOTE is shown above.

HELPER

Helpers are needed for Work Packages that require more that one person such as lifting heavy objects or acting as an observer.

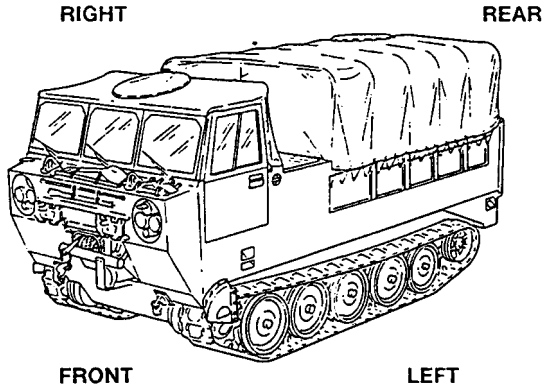
If a helper is needed to perform a procedure, the INITIAL SETUP will list “Helper” under the PERSONNEL REQUIRED heading.

If helper assists with a step, the step will include: “Have helper assist”.

If a helper performs the action alone, the step will start with “(H)”.

Locational Terms

The terms FRONT, REAR, LEFT, and RIGHT are used to indicate where items are located on the carrier. Think of these locations as if you were standing at the rear of the carrier facing the inside of the carrier.



CHAPTER 1

OPERATOR INTRODUCTORY INFORMATION WITH THEORY OF OPERATION

WORK PACKAGE INDEX

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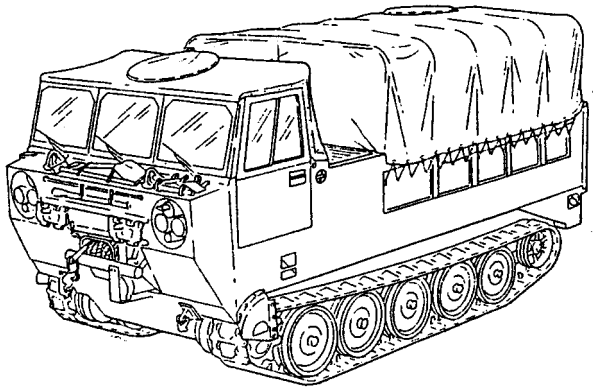
THEORY OF OPERATION	0003 00

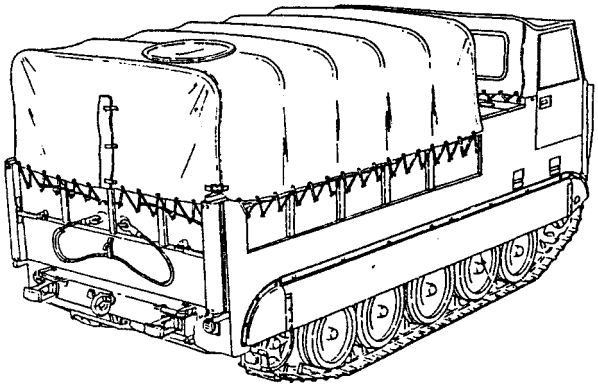
GENERAL INFORMATION 0001 00

SCOPE

M548A1 — Cargo Carrier, 6 Ton



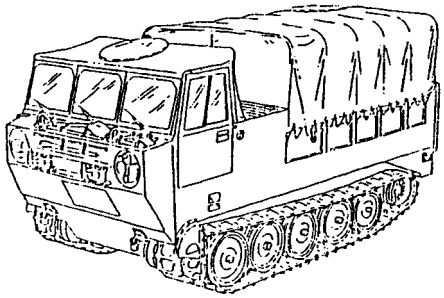
LEFT FRONT VIEW



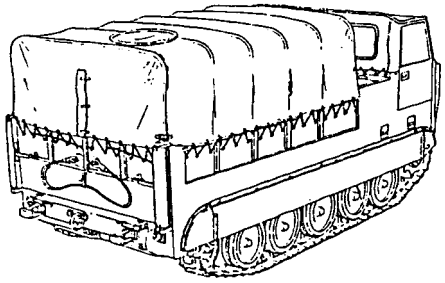
RIGHT REAR VIEW

NOTE

Components that are peculiar to the M548A1 and M548A3 carriers are marked within each specific paragraph and figure title throughout this manual. All components and systems not marked are common to the M548A1 and M548A3.



M548A3 LEFT FRONT VIEW



M548A3 RIGHT REAR VIEW

This manual is for your use in operating and maintaining the M548A1 and M548A3, 6–Ton Tracked Cargo Carriers. It contains information you need to operate the carriers under various conditions. It shows you how to take care of your carrier. There are major differences in the driver's operation of the M548A3 versus the M548A1. Make sure you read all the information supplied in the manual for driver's controls and operation for the type of carrier you are using.

MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pamphlet 738-750, The Army Maintenance Management System (TAMMS).

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

EIR can and must be submitted by anyone who is aware of an unsatisfactory condition with the equipment design or use . It is not necessary to show design or list a better way to perform a procedure, just simply tell why the design is unfavorable or why a procedure is difficult. EIR may be submitted on SF 368 (Quality Deficiency Report). Mail directly to Commander, U.S. Army Tank-Automotive and armaments Command, Attn: AMSTA-TR-QCL, Warren, MI., 48397-5000.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

See the following technical manuals for information on destruction of Army materiel:

TM 750-244-2 Procedures for destruction of Electronic Materiel to Prevent Enemy Use.

TM 750-244-5-1 Procedures for Destruction of Conventional Ammunition and Improved Conventional Munitions to Prevent Enemy Use.

TM 750-244-6 Procedures for Destruction of Tank Automotive Equipment to Prevent Enemy Use.

TM 750-244-7 Procedures for Destruction of Equipment in Federal Supply Classifications 1000, 1005, 1010, 1520, 2530, 5590, 5595 to Prevent Enemy Use.

NOMENCLATURE CROSS-REFERENCE

This listing includes nomenclature cross references used in this manual.

CVC helmet	DH 132 helmet
Dipstick	Liquid measure gauge rod
M25A1 Mask	Mask, Chemical-Biological: Tank, M25A1
Track and sprocket	Track tension, track bushing and sprocket
gauge	wear gauge
Transmission	Transmission, Cross Drive
Slave Cable	Adapter Cable Assembly

LIST OF ABBREVIATIONS / ACRONYMS

Many abbreviations are used in this manual. They are listed below. Learn what each one means. It will make your job easier.

A	After
B	Before
BATT	Battery
BO	Blackout
BRT	Bright
CB	Circuit Breaker or common battery
COEIL	Components of end items list
CVC	Combat Vehicle Communications
D	During
ENG	Engine
FOV	Field-of-view
GEN	Generator
HI-TEMP	High Temperature
Intercom	Intercommunication
IR	Infrared
LO	Lubrication Order
NBC	Nuclear, biological and chemical
N2	Nitrogen gas

OVE	On Vehicle Equipment
PMCS	Preventive Maintenance Checks and Services
PRESS	Pressure
TEMP	Temperature
TRANS	Transmission
Vent	Ventilation
W	Weekly

SAFETY, CARE, AND HANDLING

Read the Warnings in the Warning Summary in front of the manual.