TM 9-2350-247-20-1

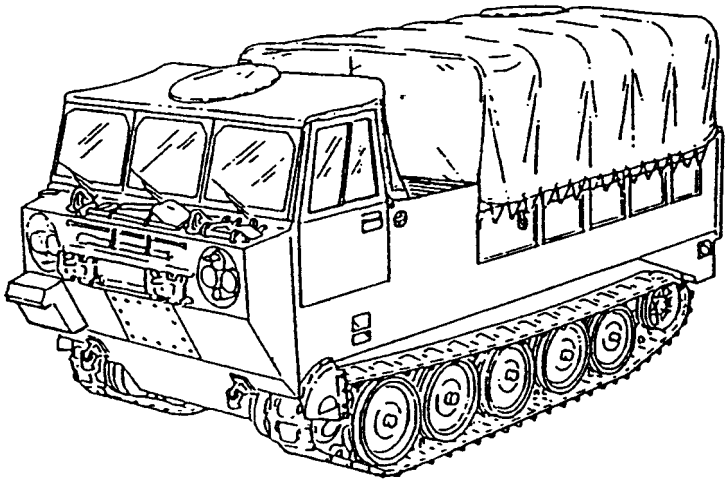
TECHNICAL MANUAL

UNIT MAINTENANCE 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

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HOW TO USE THIS MANUAL

HOW TO USE THIS MANUAL

This manual tells you how to perform unit maintenance for the M548A1 and M548A3 carriers.

Before starting a task or procedure, read HOW TO USE THIS MANUAL and the General Maintenance Procedures Work Package.

USE YOUR MANUAL ON THE JOB

The best way to learn about this manual is to practice using it. Knowing how to use this manual will save both time and energy.

HOW TO USE THE WORK PACKAGES (WP)

How to find the Work Package you need

Pick a key word from the vehicle 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 WP titled REPLACE TOWING PINTLE could be found under the two headings “Pintle”, and “Towing”.

How to read the Work Package

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 on the vehicle. Closeup illustrations show the details you need to do the procedure.

Maintenance Procedures Work Packages

Maintenance Procedures Work Packages keep the carrier in shape to operate. Maintenance Procedures are used to present maintenance instructions. Each maintenance procedure details steps which you need to perform. If the vehicle and parts need maintenance that is not included in any procedure in the manual, notify your supervisor.

Read the INITIAL SETUP section carefully before you start any procedure. Get the tools and supplies listed and the personnel needed. Be sure the equipment is in the condition required.

Read all of the Work Package before starting. Follow the steps in the order given.

FOLLOW-THROUGH STEPS tell you what to do after the maintenance task is done. The words END OF TASK will tell you when you have finished the procedure.

Troubleshooting Work Packages

Troubleshooting Work Packages help you locate faulty parts. They direct you to the maintenance procedure to correct these faults. Chapter 2, Troubleshooting, contains detailed information on how to perform troubleshooting procedures. Read HOW TO USE TROUBLESHOOTING Work Package (WP 0005 00) before performing the troubleshooting procedures in the chapter.

Preventive Maintenance Checks and Services (PMCS) Work Package

Preventive maintenance is required to keep your carrier in good running condition. The PMCS procedures for unit maintenance are performed on a periodic basis.

HOW TO USE THIS MANUAL (cont)

If anything seems wrong with the carrier systems and you cannot fix it yourself, notify unit maintenance. Common things to watch for are loose bolts or damaged welds. Watch for worn insulation, loose clamps, and loose connectors when checking wiring harnesses.

DEFINITION OF WORK PACKAGE TERMS

Warnings, Cautions, And Notes

Pay attention to all warnings and cautions within the WP. Ignoring a warning could cause death or injury to yourself or other personnel. Ignoring a caution could cause damage to equipment. Notes contain facts to make the procedure easier. Warnings, cautions, and notes always appear just above the step to which they apply.

WARNINGS	Call attention to things that could kill or injure personnel. Warnings are also listed in the Warning Summary section (page a).
CAUTIONS	Call attention to actions or materials that could damage equipment.
NOTES	Contain important facts to make the procedure easier.

Helper

Helpers are needed in procedures that require more than one person. A helper may be needed to help lift objects or act as an outside observer.

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

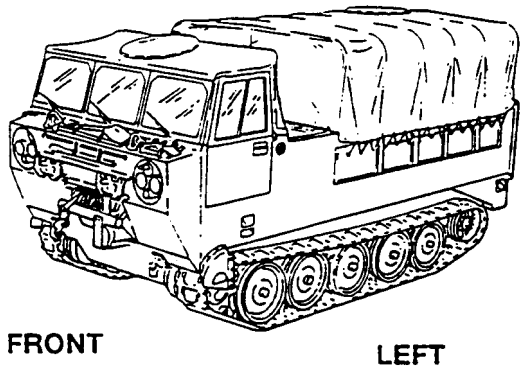
If a helper assists with a step or substep, the step or substep will include: “Have helper assist”.

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 vehicle. The point of reference for these terms is different for *Carrier* items and *Power Unit* items. (Carrier items are items which are not on the power unit. Power unit items are items on the engine, transmission, differential, or transfer gearcase.)

If you are working with carrier items, use this point of reference. Think of the location as if you were sitting in the driver’s seat looking forward.



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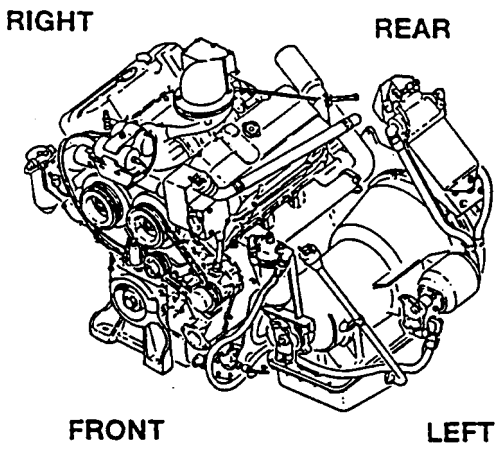
HOW TO USE THIS MANUAL (cont)

If you are working with power unit items, use this point of reference. Think of the location as if you were standing at the transfer gearcase end of the power unit and facing the flywheel. This rule applies whether the power unit is IN or OUT of the carrier.



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REFERENCES

References within a procedure refer to a different manual or to another procedure in the same manual. They are found in the INITIAL SETUP and in the FOLLOW-THROUGH steps. For example.

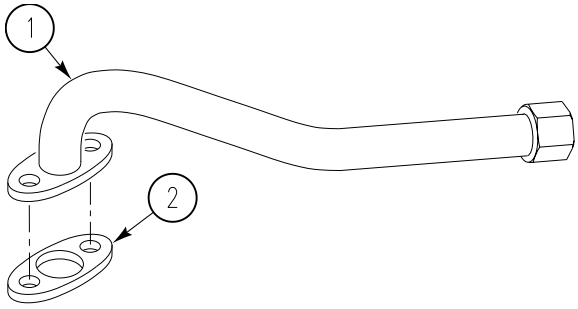
MASTER SWITCH OFF (see your -10)
Battery ground lead disconnected (WP 0310 00, WP 0311 00, or WP 0312 00)

For all procedures, the following comments apply:

- Parts which are discarded when removed will be referred to as “new” in the procedure step when installed. Examples are: gaskets, lockwashers, some preformed packings, and some retaining rings.
- These and other new parts are listed under MATERIALS/PARTS in the INITIAL SETUP.

GENERAL MAINTENANCE

Cleaning, inspecting, checking for leaks, and similar procedures which apply to most procedures are found in the GENERAL MAINTENANCE PROCEDURES section of the PMCS (WP 0128 00). Use these steps to clean and inspect any part being removed, repaired, or installed. Special cleaning will be covered in the procedure step. Below is a step that would require general cleaning.



5. Remove gasket (1) from upper tube flange (2). Discard gasket.

HOW TO USE THIS MANUAL (cont)

After performing this step, you would clean the mating surface with cleaning compound and a wiping rag according to the general cleaning procedures. In other procedures, hoses or rubber hatch seals will need to be checked for leaks. Refer to Chapter 3 for general procedures.

HOW TO USE THE REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) WITH THIS MANUAL

The RPSTL (TM 9-2350-247-24P) gives the National Stock Number (NSN) required to order parts used in the maintenance procedure. To use the RPSTL to identify and order a part, do the following:

1. In this manual, turn to the first page of the procedure to be performed.
2. Find Materials/Parts under INITIAL SETUP and read the part(s) that need replacement. If required, find the illustrated part in the procedure steps.
3. Go to the RPSTL and find the same illustrated part. That part will have an item number assigned to it. Look this item number up in the listing for that figure. Use the figure and item number index to find the NSN.
4. If you inspect an item and find that it is damaged, go to the RPSTL and find the SMR code for the item. If the SMR code does not authorize you to repair the item, reassemble it and send it to the authorized level of maintenance.
5. The usable on code in the RPSTL appears in the lower left corner of the Description column heading. Usable on codes are shown as 'UOC.....' in the Description column (justified left) on the first line following the item description/ nomenclature. Uncoded items are applicable to all models. Identification of the usable on codes in the RPSTL are:

Table 1. RPSTL Usable Codes

Code	Used On
V96	M548A1 Carrier, Cargo, tracked
AP4	M548A3 Carrier, Cargo, Tracked

CHAPTER 1

UNIT INTRODUCTORY INFORMATION WITH THEORY OF OPERATION

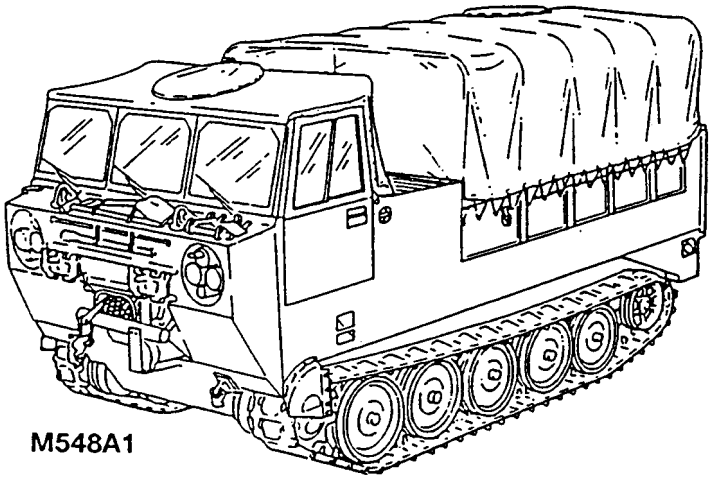
WORK PACKAGE INDEX

Title	Sequence No.
GENERAL INFORMATION	0001 00
EQUIPMENT DESCRIPTION	0002 00
THEORY OF OPERATION	0003 00
REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT	0004 00

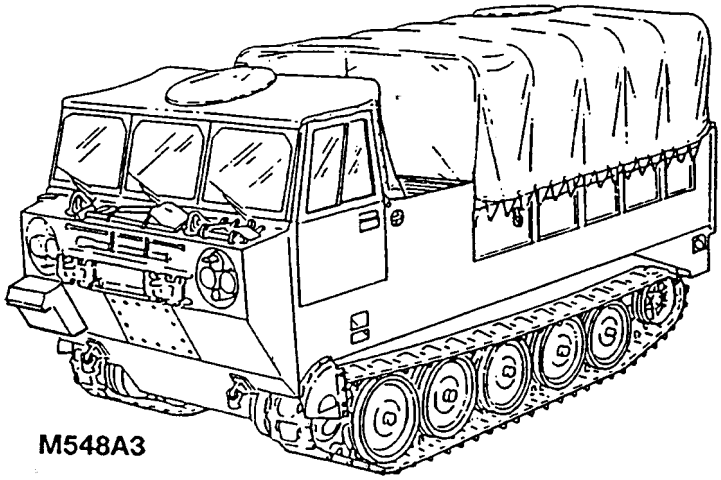
GENERAL INFORMATION 0001 00

SCOPE

Type of Manual: Unit Maintenance
Model Number and Equipment Name: M548A1/M548A3 - Carrier, Cargo Tracked, 6-Ton
Purpose of Equipment: Transportation and positioning combat troops and supplies.



M548A1



M548A3

The terms left and right as used in this manual are defined as standing at the rear and looking toward the front of the carrier.

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). Forms needed by units maintaining this material are listed in the References work package (WP 0539 00).

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your M548A1 or M548A3 carrier 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. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to: Commander, US Army Tank-Automotive Command, ATTN: AMSTA-TR-QCL, Warren, MI 48090. We will send you a reply.

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 Electronics Materiel 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.

PREPARATION FOR STORAGE OR SHIPMENT

See MIL-C-62015 for information about administrative storage or shipment of the M548A1 and M548A3 and their components.

NOMENCLATURE CROSS-REFERENCE

This listing includes nomenclature cross references used in this manual.

Adapter	Nipple, pipe, union
Air vent, personnel	Register, metal: personnel air vent
Assembly	Adapter assembly
Bilge pump	Rotary pump
Breather	Air filter intake
Bulb	Incandescent lamp
Coolant	Antifreeze and water
Coolant gauge	Temp indicator
Detector	Liquid transmitter
Dipstick	Liquid level gauge rod
Drain plug	Pipe plug
Engine oil filter	Fluid pressure filter
Engine oil gauge	Dial pressure gauge
Exhaust collector	Exhaust connection
Fastener	Toggle pin
Fire bottle	Compression gas cylinder
Fluid level detector	Liquid transmitter
Fuel control cable	Fuel control
Fuel filter	Fluid filter
Fuel gauge	Liquid quantity gauge
Fuel tank	Fuel compartment