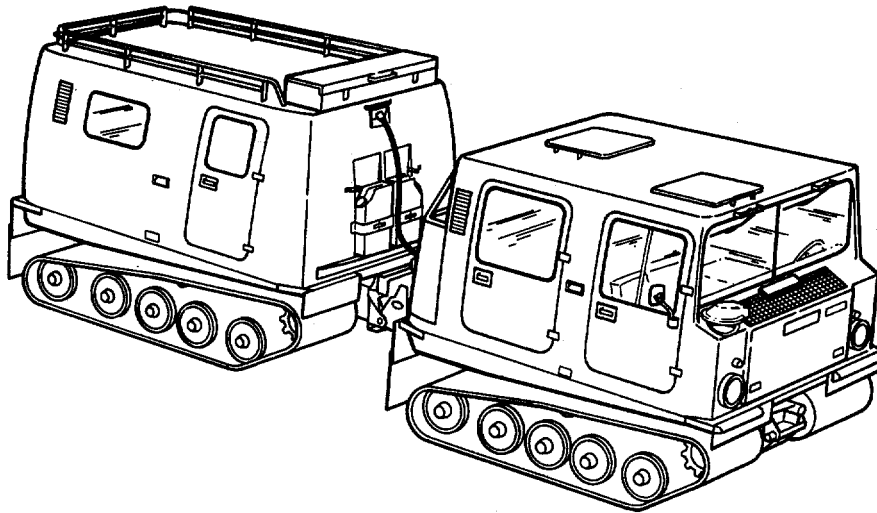


OPERATOR'S MANUAL

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**CARRIER, CARGO, TRACKED,  
1 / 2 TON, M973  
SMALL UNIT SUPPORT VEHICLE (SUSV)  
(NSN 2350-01-132-9099)**

**This copy is a reprint which includes current  
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MARCH 1984**

TECHNICAL MANUAL  
No. 9-2350-272-10

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DEPARTMENT OF THE ARMY  
Washington, D.C., 15 March 1984

OPERATOR'S MANUAL  
CARRIER, CARGO, TRACKED, 1 1/2 TON, M973  
SMALL UNIT SUPPORT VEHICLE (SUSV)  
(NSN 2350-01-132-9099)

REPORTING OF ERRORS

You can help improve this publication. 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 Publication and Blank Forms), or DA Form 2028-2 located in the back of this publication direct to: US Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

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## HOW TO USE THIS MANUAL

This manual is designed to help you operate and maintain the M973 cargo carrier and accessory equipment. Listed below are special features which will help you locate the information you need:

- Front cover table of contents for quick reference to chapters and sections.
- An index in the final pages of this manual helps you find specific items of information.

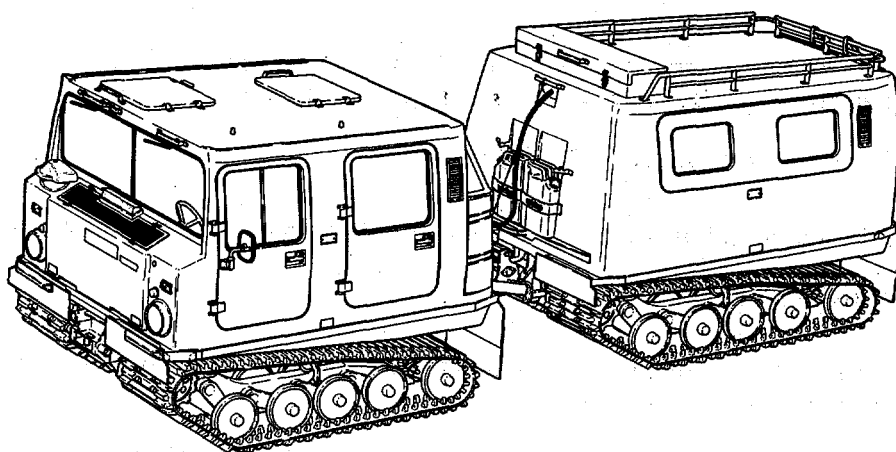
Measurements in this manual are given in both English and Metric units.

- A Metric to English conversion chart is also provided on the inside back cover of this manual.

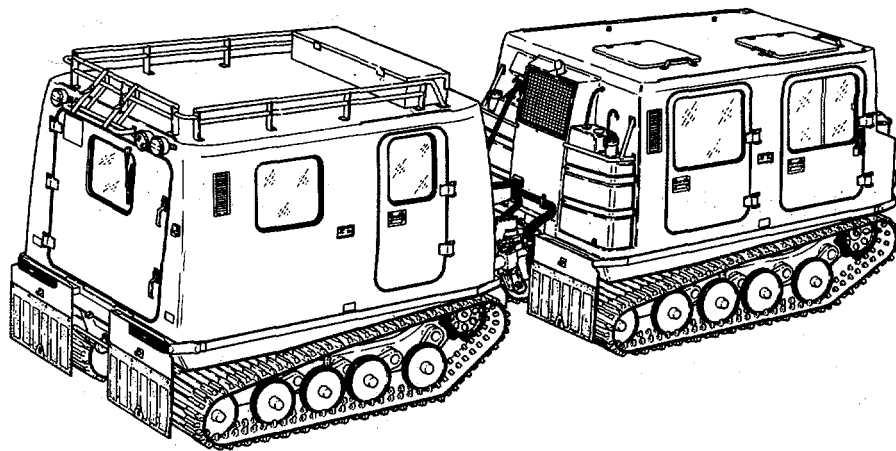
Read all preliminary information found at the beginning of each task. It has important information and safety instructions you must follow before beginning the task.

Warning pages are located in the front of this manual. You should learn the warnings before operating or doing maintenance on the carrier. Important warnings and cautions are also located on other pages in the manual. They appear before a step that may result in personnel injury, or damage to equipment. If the instructions are not followed, or care is not taken, you may injure yourself. Notes are located before or after a step to make the step or steps easier. Always read all cautions, warnings, and notes before performing the steps.

A troubleshooting index is located in chapter III. The troubleshooting index lists the common vehicle malfunctions you may find. Do all tests, inspections and corrective actions in the same order they appear in the troubleshooting table. Report any malfunctions you can not correct to organizational maintenance.



**M973, CARGO CARRIER LEFT FRONT VIEW**



**M973, CARGO CARRIER RIGHT REAR VIEW**

## CHAPTER 1 INTRODUCTION

### Section I. GENERAL INFORMATION

---

#### 1-1. SCOPE.

This operator's manual has instructions for operation and maintenance of the M973 cargo carrier. Your manual takes a positive approach. Do the procedures in the same order as in the manual.

#### 1-2. MAINTENANCE FORMS AND RECORDS.

DA PAM 738-750 tells you what forms to complete and how to complete maintenance forms and records.

#### 1-3. METRIC SYSTEM.

Equipment and system is metric. Metric tools are required for equipment maintenance. Metric to English conversion tables are on the inside back cover.

#### 1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

If your equipment 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. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at US ARMY TANK-AUTOMOTIVE COMMAND, ATTN: AMSTA-QR, Warren, MI, 48397-5000. We will send you a reply.

#### 1-5. DESTRUCTION TO PREVENT ENEMY USE.

Refer to TM 750-244-6.

### Section II. EQUIPMENT DESCRIPTION AND PERFORMANCE DATA

#### 1-6. GENERAL.

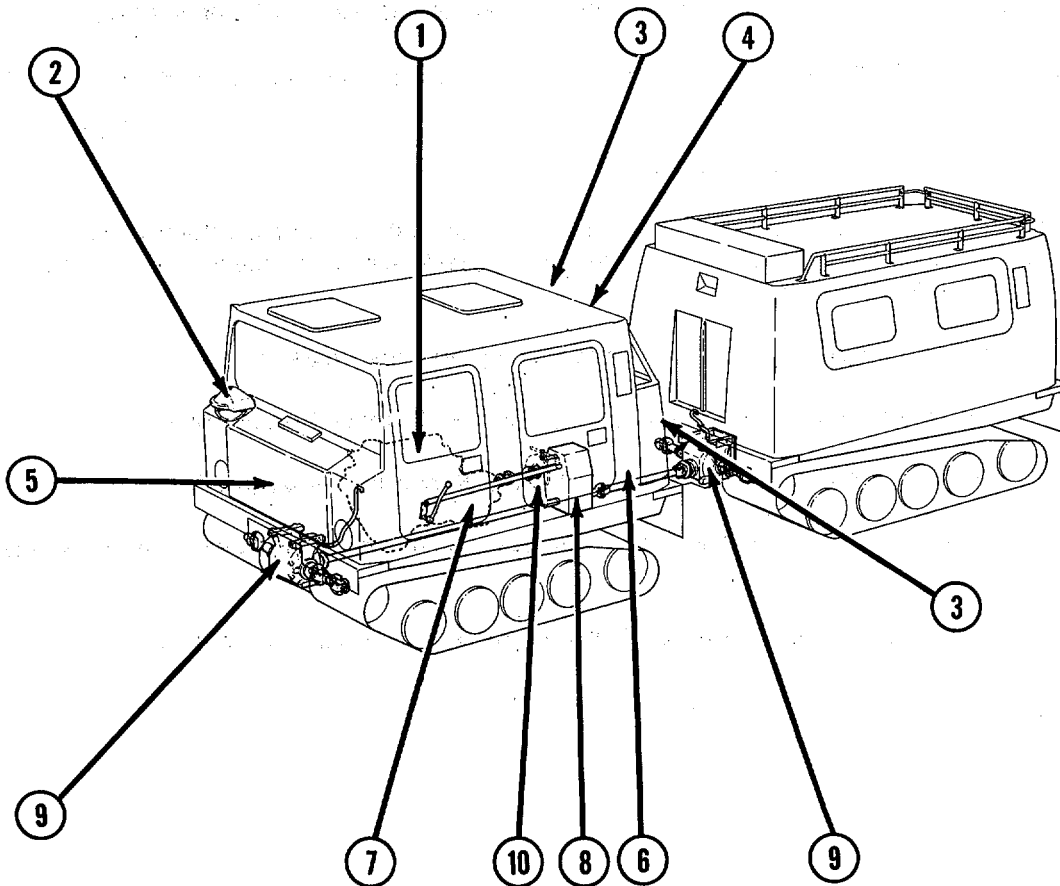
The M973 cargo carrier is designed for use as an all terrain transport vehicle. The vehicle has two track driven cars. Both cars are made of reinforced-fiberglass plastic. They are coupled together by an articulated steering assembly. The cars are steered by hydraulic cylinders in the steering assembly. The front car contains the power pack, (engine and transmission), transfer, braking and steering systems. Both cars have their own differentials. The differentials transmit the power to the track drive sprockets. The cargo carrier has a fording and swimming capability. When swimming, the carrier is propelled by the tracks.

**1-7. DESCRIPTION AND LOCATION OF MAJOR COMPONENTS.****a. Description of major components and systems.**

- (1) Engine: 5 cylinder inline turbocharged diesel, model OM 617.952.
- (2) Air cleaner: Dry type.
- (3) Fuel system: Engine is fuel injected.
- (4) Exhaust system: Engine has a single exhaust.
- (5) Cooling system: Engine is liquid cooled.
- (6) Electrical system: Vehicle has a 24 volt system.
- (7) Transmission: Transmission is automatic 4 speed forward and one reverse.
- (8) Transfer: Transfer is a 2 speed type (high and low range)
- (9) Differential: Differential is heavy duty high traction type.
- (10) Brakes: Vehicle has a hydraulic disk service brake and a mechanical disk parking brake.
- (11) Steering: The vehicle is steered by an articulated steering unit. Hydraulic power controls the turning.
- (12) Frame: Cars have a center chassis beam.
- (13) Suspension: Cars are supported by two leaf springs. The leaf springs are attached from the center chassis beam to track beams. Attached to the track beams are rubber torsion bars, wheel arm and solid rubber wheels.
- (14) Carrier body: Carrier body is constructed of reinforced-fiberglass plastic.
- (15) Wheels (road, support and tensioning): Cast aluminum with bonded rubber tires.-
- (16) Drive sprocket: Drive sprockets are steel web disks with bonded rubber teeth.
- (17) Track: Tracks are corded rubber, reinforced with steel cross members. Guides and tracks are the endless type.
- (18) Winch: Winch is electrical. It is detachable from front car and stored inside when not in use.

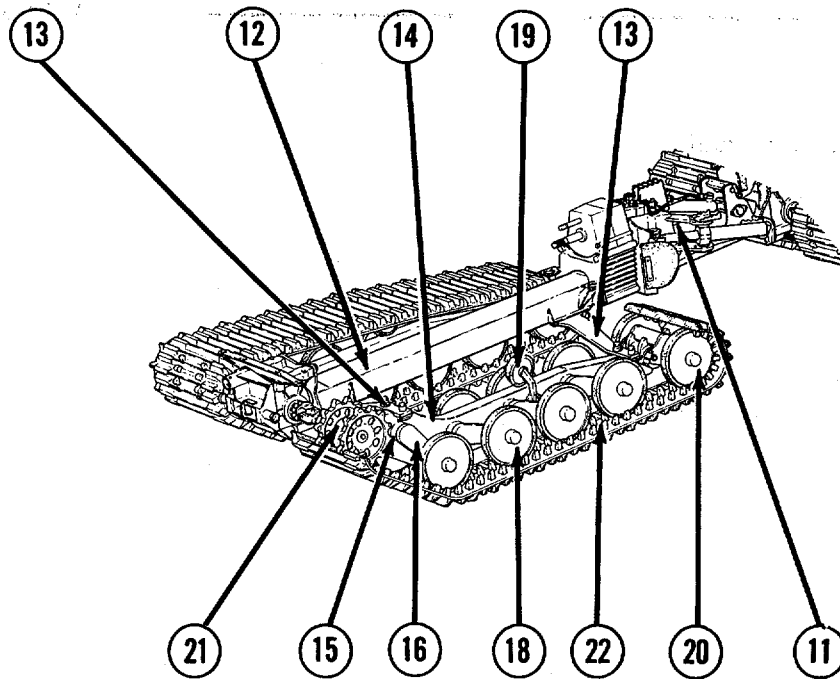
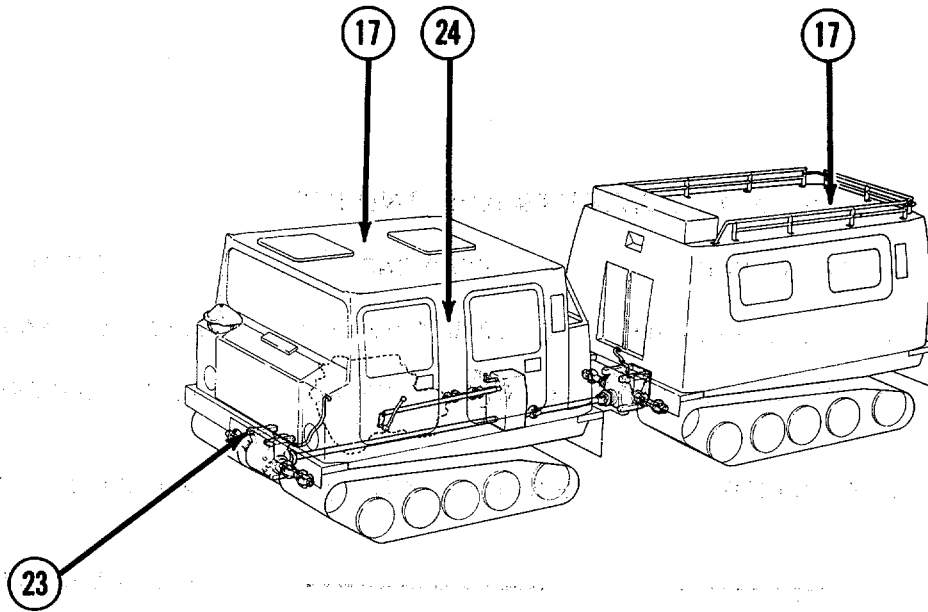
**b. Location of Major Components.**

- (1) Engine
- (2) Air Cleaner
- (3) Fuel Tanks
- (4) Exhaust (Outlet)
- (5) Radiator
- (6) Batteries
- (7) Transmission
- (8) Transfer
- (9) Differential
- (10) Brake Unit





- |      |                    |      |                        |
|------|--------------------|------|------------------------|
| (11) | Steering Unit      | (18) | Wheel                  |
| (12) | Chassis Beam       | (19) | Support Wheel          |
| (13) | Leaf Spring        | (20) | Tensioning Wheel       |
| (14) | Track Beam         | (21) | Drive Sprocket         |
| (15) | Rubber Torsion Bar | (22) | Track with Guides      |
| (16) | Wheel Arm          | (23) | Winch Mount            |
| (17) | Car Body           | (24) | Winch Storage Location |



**1-8. SPECIFICATIONS AND PERFORMANCE DATA.**

Weight: See Table 1-1.

Dimensions: See Table 1-2.

Permissible Fuel: See Table 1-3.

Capacities: See Table 1-4.

Performance Data: See Table 1-5.

**TABLE 1-1. WEIGHTS (LBS AND KG)**

	<b>FRONT CAR</b>	<b>REAR CAR</b>	<b>TOTAL</b>
CURB WEIGHT	6,108 lb (2,770 Kg)*	3,682 lb (1,670 Kg)	9,790 lb (4,440 Kg)*
Maximum Weight Full Load	7,211 lb (3,270 Kg)	6,769 lb (3,07.0 Kg)	13,980 lb (6340 Kg)
Maximum Payload	1,103 lb (500 Kg)	3,087 lb (1,400 Kg)**	4,190 lb (1,900 Kg)**
Maximum Towed Load	_____	_____	5,513 lb (2,500 Kg)
Ground Pressure, Full Load	_____	_____	1.8 PSI (-12.7 kPa)

\* Includes Operator

\*\*441 lb (200 Kg) secured on roof.