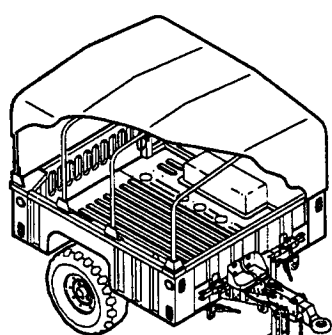
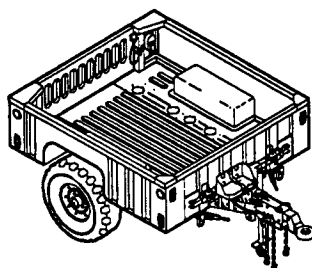


TECHNICAL MANUAL

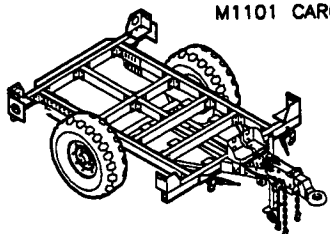
OPERATOR'S, UNIT, DIRECT SUPPORT AND  
GENERAL SUPPORT MAINTENANCE MANUAL  
(INCLUDING REPAIR PARTS AND  
SPECIAL TOOLS LISTS)



M1102 CARGO TRAILER



M1101 CARGO TRAILER



TRAILER CHASSIS

12572268

TRAILER, CARGO: LIGHT,  
2-WHEEL M1101  
(2330-01-387-5443)  
EIC: CBC

TRAILER, CARGO: HEAVY,  
2-WHEEL M1102  
(2330-01-387-5426)  
EIC: CBB

CHASSIS, TRAILER:  
2-WHEEL  
(2330-01-387-5424)  
EIC: CCL

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**OPERATOR'S, UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT  
MAINTENANCE MANUAL (INCLUDING REPAIR PARTS  
AND SPECIAL TOOLS LIST)**

**FOR**

**TRAILER, CARGO: LIGHT, 2-WHEEL M1101  
(2330-01-387-5443)**

**TRAILER, CARGO: HEAVY, 2-WHEEL M1102  
(2330-01-387-5426)**

**CHASSIS, TRAILER: 2-WHEEL  
(2330-01-387-5424)**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

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. Submit your DA Form 2028 (*Recommended Changes to Equipment Technical Publications*), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeprs.ria.army.mil>. If you need a password, scroll down and click on "ACCESS REQUEST FORM". The DA Form 2028 is located in the ONLINE FORMS PROCESSING section of the AEPS. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax or e-mail your letter, DA Form 2028 direct to: AMSTA-LC-CI/TECH PUBS, TACOM-RI, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The e-mail address is: TACOM-TECH-PUBS@ria.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

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## HOW TO USE THIS MANUAL

### DESCRIPTION OF THE MANUAL.

**Manual Organization.** This manual is designed to help you operate and maintain the M1101 Cargo Trailer, M1102 Cargo Trailer, and Trailer Chassis, also called the High Mobility Trailer (HMT). Warning pages are located in the front of this manual. Read the warnings before operating or performing maintenance on the equipment.

The major elements of this manual are chapters and appendices. There are six chapters and ten appendices. The Table of Contents is provided for quick reference to the subjects covered by each chapter, section, and appendix. Most chapters contain a chapter index that lists the chapter sections and paragraphs.

The front cover of this manual has an index that lists the most important topics of the manual. Each item indicated on the front cover has a black mark at the edge of the cover. There is a corresponding black mark on the first text page for each subject listed on the cover index.

**Chapters.** Each chapter is divided into sections. Each section is divided into descriptive paragraphs. The paragraphs have specific information about the HMTs and their major components. Tables and illustrations are used to provide information in a concise form.

**Paragraphs, Tables, and Illustrations.** All major paragraphs are numbered and have a name (sidehead). All tables have table numbers and titles (names). Some illustrations have figure numbers and titles (names). Those illustrations that are used only to identify or locate equipment items do not have numbers or titles. The paragraph sideheads and table and figure titles are chosen to describe the information in that paragraph, table, or figure. The alphabetical index at the back of this technical manual lists all paragraphs, all tables, and all titled figures. This helps you to find specific information. The paragraph, table, and figure numbers consist of the chapter number, followed by a dash and a sequential number. For example:

Paragraph 4-4 is the fourth major paragraph in chapter 4.

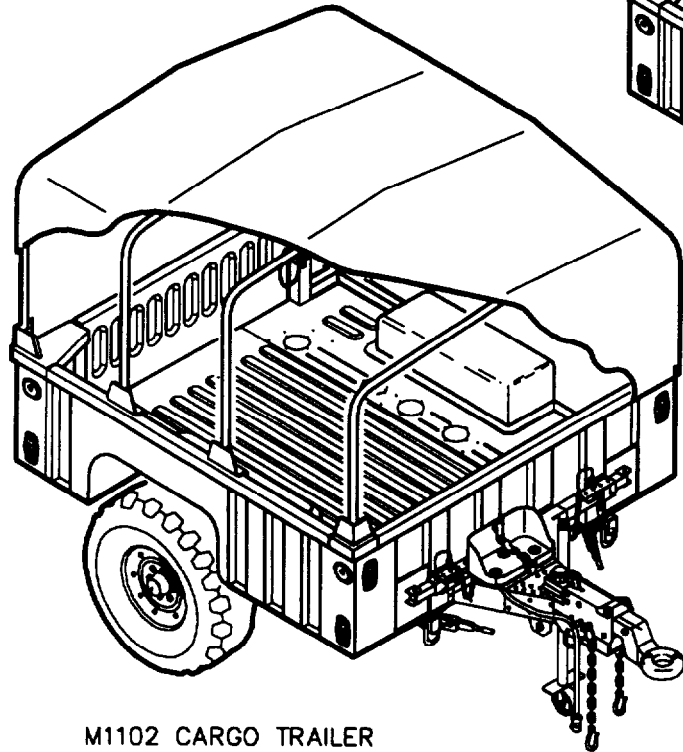
Figure 2-2 is the second numbered illustration in chapter 2.

Table 2-1 is the first table in chapter 2.

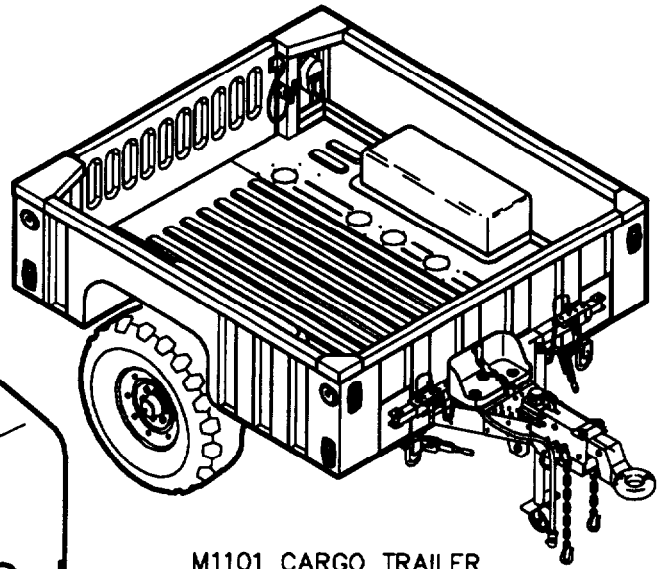
**Appendices.** Each appendix covers a specific subject, such as the Maintenance Allocation Chart in Appendix B, or detailed information, such as the Repair Parts and Special Tools List in Appendix F.

A glossary follows the last appendix. The glossary lists and defines the special or unique abbreviations and the unusual terms used in this manual.

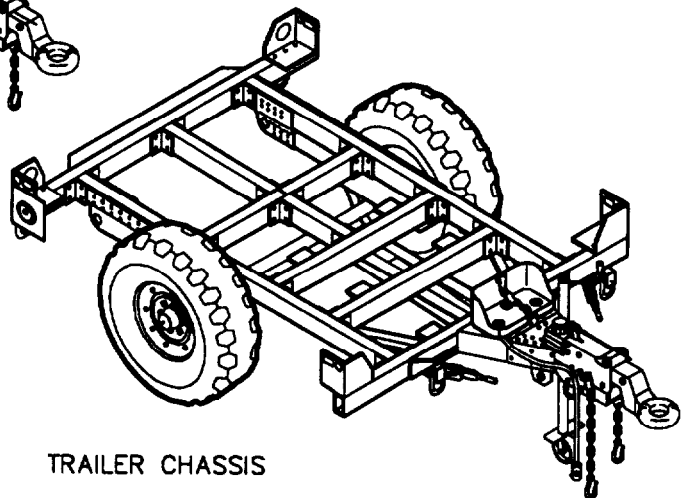
An alphabetical index follows the glossary. This index is for use in locating specific items of information.



M1102 CARGO TRAILER



M1101 CARGO TRAILER



TRAILER CHASSIS

12572051

# CHAPTER 1 INTRODUCTION

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## Section I. GENERAL INFORMATION

### 1-1 SCOPE.

- a. Type of Manual: Operator’s, Unit, Direct Support, and General Support Maintenance Manual, including Repair Parts and Special Tools List.
- b. Model Numbers and Equipment Names:
  - Trailer, Cargo, 2-Wheel: Light, M1101
  - Trailer, Cargo, 2-Wheel: Heavy, M1102
  - Chassis, Trailer, 2-Wheel
- c. Purpose of Equipment: Used to carry payloads over primary, secondary, or cross-country roads.
  - M1101 Cargo Trailer - High Mobility Multipurpose Wheeled Vehicle (HMMWV) M998/M1038 Series or HMMWV M1097/M1114 Series
  - M1102 Cargo Trailer - HMMWV M1097/M1114 Series
  - Trailer Chassis - HMMWV M998/M1038 Series or HMMWV M1097/M1114 Series (depending on weight of installed equipment)



**1-1 SCOPE (Con't).**

- d. Location Terms: Throughout this manual, the terms “front,” “rear,” “curbside,” and “roadside” are used to describe views of the trailer. The trailer drawbar is located at front of the trailer. The stoplights and taillights are at the rear. As viewed from the rear, “curbside” is the right side and “road-side” is the left side.

**1-2 MAINTENANCE FORMS AND PROCEDURES.**

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750 as contained in the Maintenance Management Update.

**1-3 CORROSION PREVENTION AND CONTROL.**

Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or braking of these materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using Standard Form 368, Product Quality Deficiency Report. Use of keywords such as “corrosion,” “rust,” “deterioration,” or “cracking” will ensure that the information is identified as a CPC problem.

The form should be submitted to the address specified in DA Pam 738-750.

**1-4 DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.**

For information on destruction of Army materiel to prevent enemy use, refer to TM 750-244-6.

**1-5 REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRS).**

If your trailer 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 what you don't like about the design or performance. Put it on an SF 368 (Product Quality Deficiency Report). Mail it to us at: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-LC-CIP-W, Rock Island, IL 61299-7630. We'll send you a reply.

**1-6 WARRANTY INFORMATION.**

No Warranty.

## Section II. EQUIPMENT DESCRIPTION AND DATA

### 1-7 EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

#### a. Characteristics.

- (1) All trailers are designed to be towed by a towing vehicle without airbrake connections. A handbrake lever and cable assembly located on each side of the trailer activate a service brake at each wheel. Control of each service brake is independent.
- (2) In addition to handbrake-activated service brakes, the trailers are equipped with an inertia-actuated hydraulic brake system. For technical principles of operation of this system, refer to section III of this chapter.
- (3) All trailers have a single axle with two wheels.
- (4) The trailer suspension consists of one shock absorber on each end of the axle.
- (5) Two stabilizers, stored in the front and installed in the rear, provide greater stability when loading or unloading cargo when the trailer is not coupled to the towing vehicle.

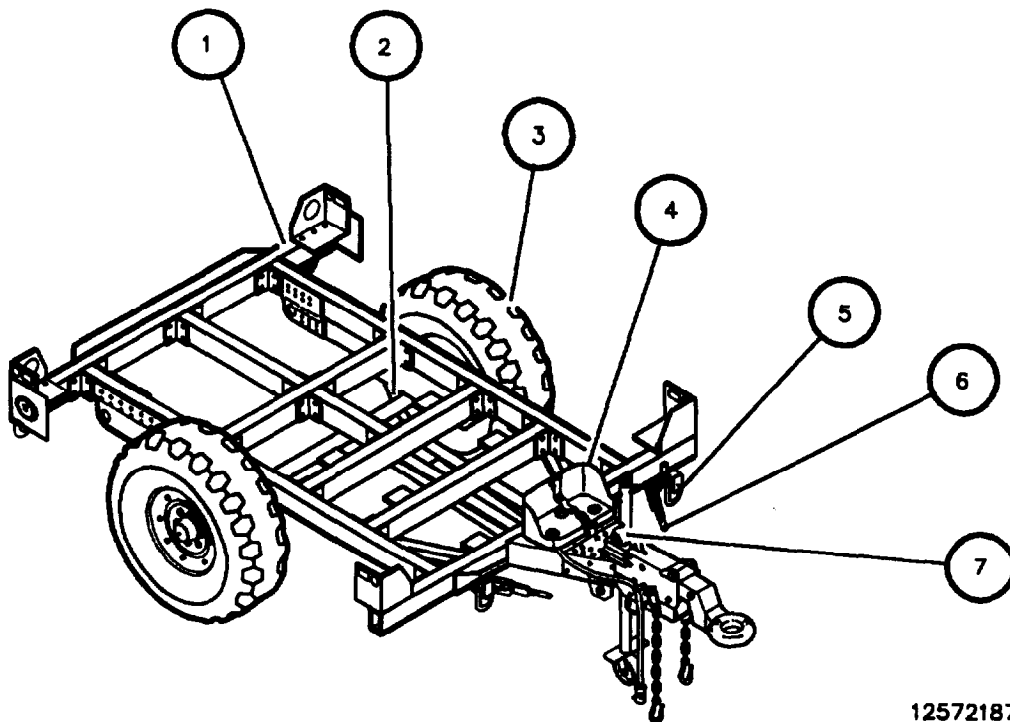
#### b. Capabilities and Features.

- (1) Maximum towing speeds with maximum payload evenly distributed are:

Highway	55 mph (66.5 km/h)
Secondary Roads	35 mph (56.3 km/h)
Cross-Country	20 mph (32.2 km/h)

- (2) Maximum payload varies with model designation. Refer to Paragraph 1-11, Equipment Data.

1-8 LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.



12572187

Key	Component	Description
1	Chassis	Provides mounting for cargo body of M1101 and M1102 trailers.
2	Shock Absorbers	Dampen chassis and axle movement.
3	Wheel and Tire Assemblies	Support trailer load. Attached to ends of axle.
4	Decontamination Bracket	Holds and secures NBC decontamination equipment.
5	Tiedown Shackles	Tie down trailer during shipment. Located at front and rear of chassis.
6	Handbrake Levers	Apply service brake when trailer is stopped or parked.
7	Hydraulic Brake Actuator Assembly	Transmits braking forces from towing vehicle to trailer and service brakes by means of a lunette ring, master cylinder, hydraulic brake tubes, and wheel cylinders.