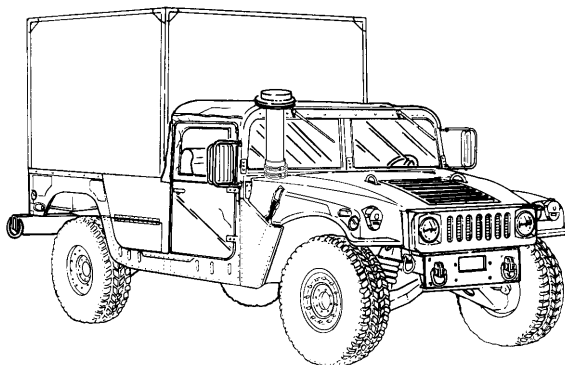


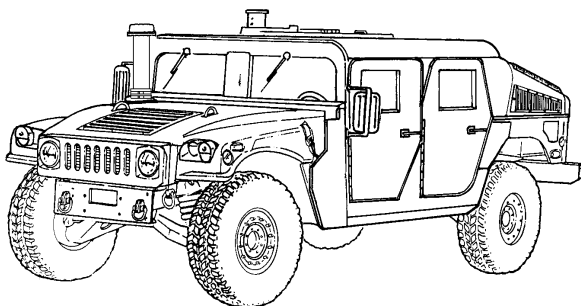
**ARMY TM 9-2320-387-10
AIR FORCE TO 36A12-1A-3061-1**

**OPERATOR'S MANUAL
FOR**

**TRUCK, UTILITY: S250 SHELTER
CARRIER, 4X4, M1113
(2320-01-412-0143) (EIC: B6B)**



**TRUCK, UTILITY: UP-ARMORED
CARRIER, 4X4, M1114
(2320-01-413-3739) (EIC: B6C)**



Approved for public release; distribution is unlimited.

**HEADQUARTERS, DEPARTMENTS OF THE ARMY AND
THE AIR FORCE**

**ARMY TM 9-2320-387-10
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**TECHNICAL MANUAL
NO. 9-2320-387-10**

**TECHNICAL ORDER
NO. 36A12-1A-3061-1**

**HEADQUARTERS,
DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
WASHINGTON, D.C., 17 October 1997**

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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 email your letter or DA Form 2028 direct to: AMSTA-LC-CI Tech Pubs, TACOM-RI, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The email address is TACOM-TECH-PUBS@ria.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

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CHAPTER 1 INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

a. This manual contains instructions for operating and servicing M1113 S250 shelter carriers and M1114 up-armored carriers.

b. The material presented here provides operators with information and procedures needed to provide the safest and most efficient operation of these vehicles. This information includes:

- (1) Operator forms and records.
- (2) Descriptions of each vehicle and its operation.
- (3) The purpose of each vehicle.
- (4) Vehicle limitations.
- (5) The function of all controls and indicators.
- (6) Operating instructions for each vehicle.
- (7) Cautions and warnings to operators regarding safety to personnel and equipment.
- (8) How and when to use special purpose kits.
- (9) Operator maintenance checks and service procedures.
- (10) Troubleshooting procedures to be followed by operators if the vehicle malfunctions.

1-2. MAINTENANCE FORMS AND RECORDS

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

1-3. HAND RECEIPT MANUAL

This operator's manual has a companion document with a TM number followed by -HR (which stands for Hand Receipt). TM 9-2320-387-10-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 12, AR 25-30:

Commander
U.S. Army Publications Distribution Center
2800 Eastern Blvd.
Baltimore, MD 21220-2896

1-4. CORROSION PREVENTION AND CONTROL (CPC)

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 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 breaking of these materials may be a corrosion problem. If a corrosion problem is identified, it can be reported using SF 368 Product Quality Deficiency Report (PQDR). Use of key words 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.

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs)

If your vehicle 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. The preferred method for submitting QDRs is through the Army Electronic Product Support (AEPS) website under the Electronic Deficiency Reporting System (EDRS). The web address is: <https://aeps.ria.army.mil>. This is a secured site requiring a password which can be applied for on the front page of the website. If the above method is not available to you, put it on an SF 368, Product Quality Deficiency Report (PQDR), and mail it to us at: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/PQDR MS 267, 6501 E. 11 Mile Road, Warren, MI 48397-5000. We'll send you a reply.

1-6. EQUIPMENT IMPROVEMENT REPORT AND MAINTENANCE DIGEST (EIR MD)

The quarterly Equipment Improvement Report and Maintenance Digest, TB 43-0001-39 series, contains valuable field information on equipment covered in this manual. Information in TB 43-0001-39 series is compiled from some of the Equipment Improvement Reports you prepared on vehicles covered in this manual. Many of these articles result from comments, suggestions, and improvement recommendations that you submitted to the EIR program. The TB 43-0001-39 series contains information on equipment improvements, minor alterations, proposed Modification Work Orders (MWOs), warranties (if applicable), actions taken on some of your DA Form 2028s (Recommended Changes to Publications), and advance information on proposed changes that may affect this manual. The information will help you in doing your job better and will help in keeping you advised of the latest changes to this manual. Also refer to DA Pam 25-30, Consolidated Index of Army Publications and Blank Forms, and appendix A, References, of this manual.

1-7. BREAK-IN SERVICE

Upon receipt of vehicle, or after engine replacement, break-in precautions must be observed during the first 500 miles (805 kilometers) of operation. For break-in procedure, refer to paragraph 2-11.

Section II. EQUIPMENT DESCRIPTION

1-8. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

The 1-1/4 ton, 4x4, M1113 and M1114 vehicles are tactical vehicles designed for use over all types of roads, as well as cross-country terrain, in all weather conditions. The vehicles have four driving wheels, powered by a V-8 liquid-cooled turbocharged diesel engine. Four-wheel hydraulic service brakes and a mechanical parking brake are standard. All vehicles are equipped with a pintle hook for towing. Tiedowns and lifting eyes are provided for air, rail, or sea shipment.

1-9. METRIC SYSTEM

The equipment/system described herein contains metric components and requires metric, common, and special tools; therefore, both metric and standard units will be used throughout this publication. In addition, a metric conversion table is located on the inside back cover of this publication.

1-10. S250 SHELTER CARRIER (M1113)

a. Purpose of Vehicle. M1113 shelter carrier provides the capability to secure and transport the S250 electrical equipment shelter with a total payload, including crew, of 5,310 pounds (2,411 kilograms). The optional winch permits recovery operations of similar vehicles.

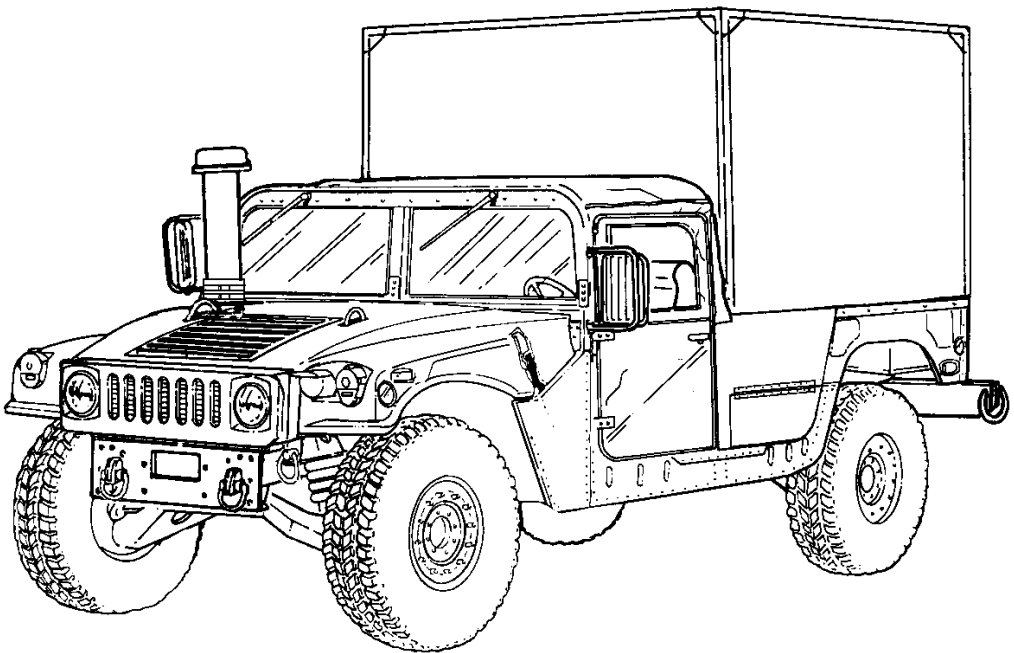
b. Performance. Fully-loaded M1113 shelter carriers will climb road grades as steep as 40% (22°) and traverse a side slope of up to 30% (17°). The vehicle fords hard bottom water crossings up to 30 inches (76 centimeters) without a deep water fording kit and 60 inches (152 centimeters) with the kit. Refer to table 1-10 for cruising range.

c. Special Limitations. None.

d. Special Instructions in the Manual.

(1) Refer to para. 2-2, Controls, Indicators, and Equipment.

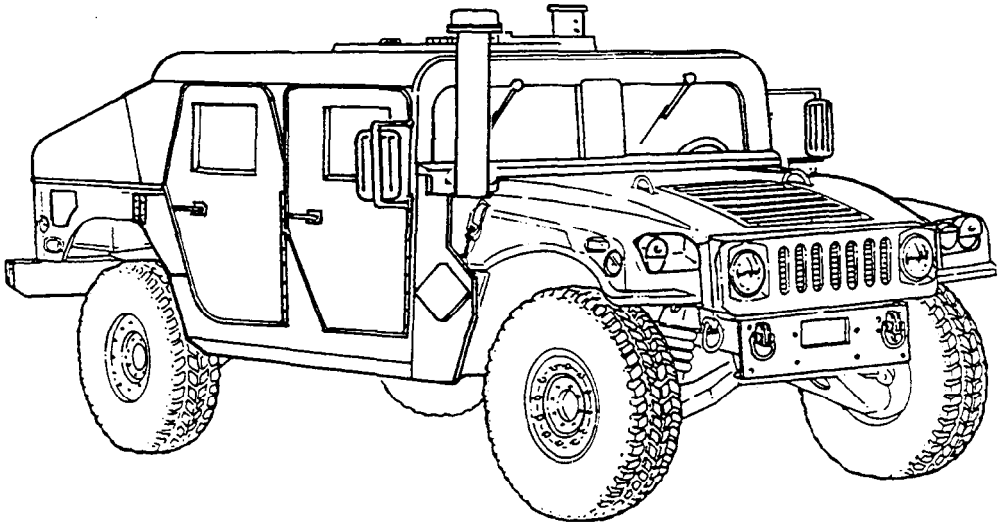
(2) Refer to chapter 2, section V, S250 Shelter Carrier Operation.



M1113

1-11. UP-ARMORED CARRIER (M1114)

- a. **Purpose of Vehicle.** The M1114 up-armored vehicle carrier provides added ballistic protection for armament components, crew, and ammunition. The optional rear winch permits recovery operations of similar vehicles.
- b. **Performance.** The M1114 up-armored vehicle carrier will climb road grades as steep as 40% (22°) and traverse a side slope of up to 30% (17°). The vehicle fords hard bottom water crossings up to 30 inches (76 centimeters). Refer to table 1-10 for cruising range.
- c. **Special Limitations.** None.
- d. **Special Instructions in the Manual.**
- (1) Refer to para. 2-2, Controls, Indicators, and Equipment.
 - (2) Refer to para. 2-33, Up-Armored Weapon Station Operation.



M1114