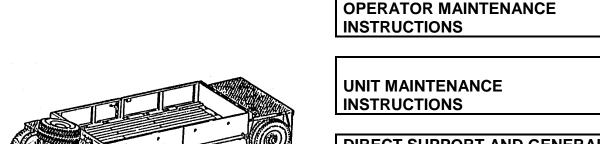
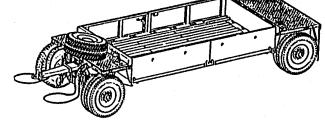
OPERATING INSTRUCTIONS

TECHNICAL MANUAL

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





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TRAILER, AMMUNITION, HEAVY EXPANDED MOBILITY, 11 TON, M989A1 (2330-01-275-7474) (EIC: CAG)

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HEADQUARTERS, DEPARTMENT OF THE ARMY

TECHNICAL MANUAL

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

FOR

TRAILER, AMMUNITION,
HEAVY EXPANDED MOBILITY,
11 TON, M989A1
NSN 2330-01-275-7474 (EIC: CAG)

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CHAPTER 1

INTRODUCTION

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OVERVIEW

This chapter provides general information about the type of data, equipment, forms, Army procedures, and reference material used to make up this manual. Also included in this chapter is a description of the capabilities, features, and components that make up the Heavy Expanded Mobility Ammunition Trailer (HEMAT).

Section I. GENERAL INFORMATION

1-1. SCOPE

- a. $\underline{\text{Type of Manual}}$. Operator, unit, direct, and general support maintenance manual including a Maintenance Allocation Chart (MAC) and a Repair Parts and Special Tools List (RPSTL).
- b. $\underline{\text{Model Number and Equipment Name}}$. M989A1 Heavy Expanded Mobility Ammunition Trailer (HEMAT).
 - c. Purpose of Equipment. To transport 22,000 pounds of payload.
 - (1) Eight 40 x 28 inch ammunition pallets.
 - (2) Four evenly distributed Multiple Launch Rocket System (MLRS) pods.
 - (3) Two fuel bladders and two fuel pods.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS

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. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Refer to TM 750-244-6.

1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If the HEMAT needs improvement, send an EIR. The user can tell if something in the design or performance could be improved. Mail an SF 368 (Quality Deficiency Report) to U.S. Army Tank Automotive Command AMSTA-MP, Warren, MI 48397-5000. We will reply.

1-5. WARRANTY

Refer to TB-9-2330-383-14 for warranty terms.

1-6. PREPARATION FOR STORAGE OR SHIPMENT

Refer to chapter 5, section III.

1-7. SAFETY, CARE, AND HANDLING

Refer to TM 9-1300-206 for general ammunition care, handling, and safety.

1-8. METRIC UNITS

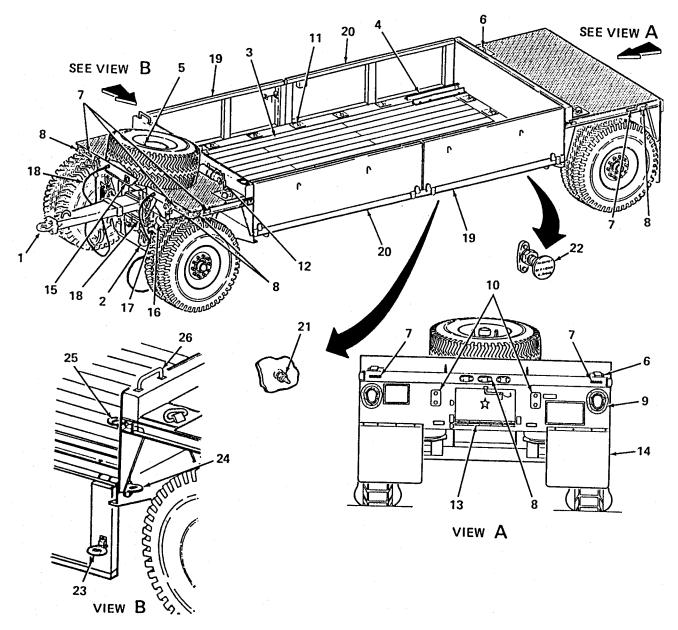
Metric units are not used in this publication. An English to metric conversion table is included on the inside back cover of this publication.

Section II. EQUIPMENT DESCRIPTION

1-9. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

- a. The HEMAT is a four-wheel trailer of lowboy design with a box-beam frame with large tires for off-road capability. The cargo area is constructed of steel with ship lap wood decking. The fore and aft decks are raised above the cargo deck and contain the suspension and steering systems.
- b. The suspension is an air-bag type suspension for smooth riding and off-road stability. The steering system is that of a normal front-wheel truck steering linkage and is controlled by the towbar assembly.
- c. The raised fore and aft decks are constructed with tread plate to minimize slipping or falling when working on the decks.
 - d. The side panels are removable for easier loading from either side.
- e. There are four cargo tiedown rings at each end of the cargo deck and seven on each side. There are also four evenly distributed MLRS pod stops located at each corner of the deck. These pod stops are removable to allow other types of cargo.
- f. Lift rings are located fore and aft on each side of the raised decks to allow the HEMAT to be sling loaded or helicopter transported. There are also four vehicle tiedowns located at each corner of the under deck for railroad transporting.
- g. A storage box located in the box beam frame at the rear of the trailer is used to store tool boxes, parts, and accessories for extended use of the trailer.
- h. The HEMAT will normally be towed by the M985 Heavy Expanded Mobility Tactical Truck (HEMTT). Load capability of the HEMAT is 22,000 pounds of munitions.
- i. The towing vehicle provides electrical power through an intervehicular cable for the HEMAT clearance lights, brake lights, and turn signals.
- j. Air is also supplied from the towing vehicle to the HEMAT air system, which includes three air tanks, air lines, four air suspension bags, and the four-wheel air brakes.
- k. On-board trailer equipment includes a spare tire, jack, jack stand, lug wrench and handle, eight tiedown straps, and a fire extinguisher. Intervehicular electrical cable is stored in the storage box when not in use. Chocks are provided to stabilize the trailer when parked.
- 1. The trailer is equipped with an air hose fitting to allow use of the HEMTT air hose to inflate the tires. On old trailers with serial numbers 2000 and below, with bias ply tires, air pressure in tires should be lowered from 100 psi for highway travel to 65 psi for off-road travel. On new trailers with serial numbers 2001 and up, with radial tires, air pressure is 105 psi under all travel conditions, highway and off-road.

1-10. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS



- a. $\underline{\text{Towbar Assembly}}$. The towbar assembly (1) is used for towing and steering the HEMAT.
- b. <u>Safety Chains</u>. The safety chains (2) are attached from the HEMAT to the towing vehicle to prevent breakaway should the pintle and towbar separate during use.
- c. $\underline{\text{Frame}}$. The frame (3) is constructed of steel with a wood cargo deck. The frame also provides mounting for the axles and air suspension system.
- d. <u>Multiple Launch Rocket System Shoe Assembly</u>. The cargo deck has one removable MLRS pod stop (4) in each of the four corners.