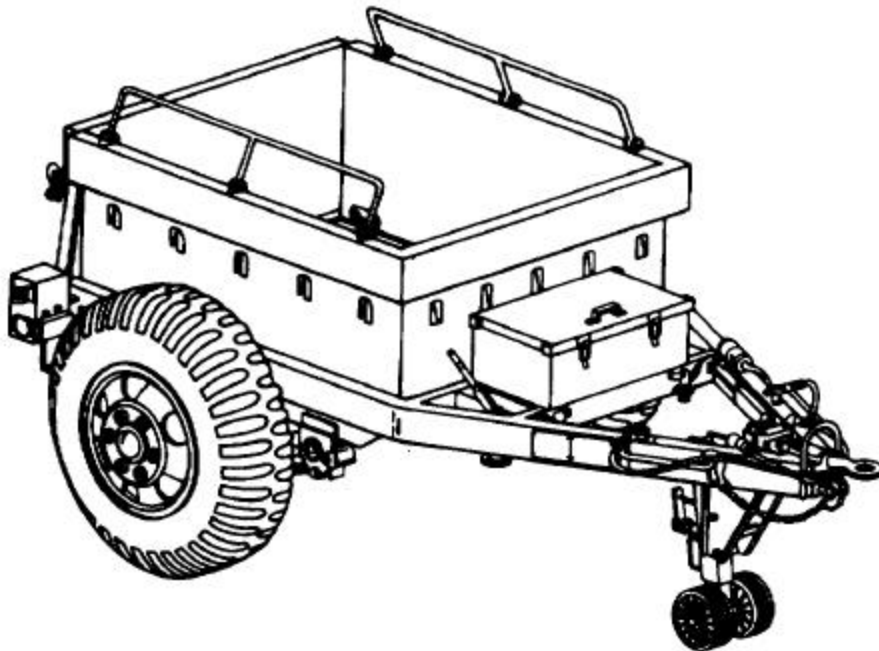


**TECHNICAL MANUAL  
OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,  
AND GENERAL SUPPORT MAINTENANCE  
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)**



**TRAILER, AMMUNITION:  
1 1/2-TON, 2-WHEEL, M332  
(NSN 2330-00-200-1785)**

**OPERATING  
INSTRUCTIONS  
PAGE 2-1**

**OPERATOR  
PMCS  
PAGE 2-4**

**OPERATOR  
MAINTENANCE  
PAGE 3-1**

**OPERATOR  
TROUBLESHOOTING  
PAGE 3-1**

**ORGANIZATIONAL  
MAINTENANCE  
PAGE 4-1**

**ORGANIZATIONAL  
PMCS  
PAGE 4-7**

**ORGANIZATIONAL  
TROUBLESHOOTING  
PAGE 4-9**

**DIRECT SUPPORT AND  
GENERAL SUPPORT  
MAINTENANCE  
PAGE 5-1**

**MAINTENANCE  
ALLOCATION CHART  
PAGE B1**

**REPAIR PARTS AND  
SPECIAL TOOLS LIST  
PAGE F-1**

TECHNICAL MANUAL

NO. 9-2330-231-14&P

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, DC 20 September 1984

**Operator's, Organizational,  
Direct Support, and General Support  
Maintenance Manual  
(Including Repair Parts and Special Tools List)  
TRAILER, AMMUNITION:  
1 1/2-TON, 2-WHEEL, M332  
(NSN 2330-00-200-1785)**

Current as of 27 October, 1989

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

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

**TABLE OF CONTENTS**

	Page
How to Use This Manual .....	iv
<b>CHAPTER 1 INTRODUCTION.....</b>	<b>1-1</b>
Section I. General Information.....	1-1
Section II. Equipment Description and Data.....	1-2
Section III. Technical Principles of Operation.....	1-6
<b>CHAPTER 2 OPERATING INSTRUCTIONS .....</b>	<b>2-1</b>
Section I. Description and Use of Operator's Controls.....	2-1
Section II. <b>Operator/Crew Preventive Maintenance Checks and Services (PMCS)</b> .....	<b>2-4</b>
Section III. Operation Under Usual Conditions.....	2-9
Section IV. Operation Under Unusual Conditions .....	2-14

\*This manual supersedes TM 9-2330-231-14, 23 March 1972; including all changes.

## TABLE OF CONTENTS - CONTINUED

	Page
CHAPTER 3	<b>OPERATOR MAINTENANCE</b> .....3-1
Section I.	Lubrication Instructions .....3-1
Section II.	<b>Operator troubleshooting Procedures</b> .....3-1
Section III.	Operator Maintenance Procedures .....3-3
CHAPTER 4	<b>ORGANIZATIONAL MAINTENANCE</b> .....4-1
Section I.	Lubrication instructions .....4-2
Section II.	Repair Parts, Special Tools; Test, Measurement, and Diagnostic Equipment (TMDE); and Support Equipment .....4-5
Section III.	Service Upon Receipt.....4-5
Section IV.	<b>Organizational Preventive Maintenance Checks and Services (PMCS)</b> .....4-7
Section V.	<b>Organizational Troubleshooting Procedures</b> .....4-9
Section VI.	General Maintenance Instructions .....4-14
Section VII.	Electrical System.....4-16
Section VIII.	A x l e.....4-38
Section IX.	Brake System.....4-46
Section X.	Hub and Brakedrum.....4-103
Section XI.	Frame and Towing Attachment .....4-109
Section XII.	Springs and Shock Absorber .....4-115
Section XIII.	Body .....4-126
Section XIV.	Body Accessory.....4-131
Section XV.	Preparation for Storage and Shipment .....4-133
CHAPTER 5.	<b>DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE</b> .....5-1
Section I.	Repair Parts, Special Tools; Test, Measurement, and Diagnostic Equipment (TMDE); and Support Equipment .....5-1
Section II.	Maintenance Procedures.....5-1
APPENDIX A	REFERENCES .....A-1
APPENDIX B	<b>MAINTENANCE ALLOCATION CHART (MAC)</b> .....B-1
APPENDIX C	COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LISTS .....C-1
APPENDIX D	ADDITIONAL AUTHORIZATION LIST.....D-1
APPENDIX E	EXPENDABLE SUPPLIES AND MATERIALS LIST.....E-1

## TABLE OF CONTENTS - CONTINUED

		Page	Illus. Fig.
APPENDIX F	REPAIR PARTS AND SPECIAL TOOLS LIST.....	1	
SECTION I.	INTRODUCTION.....	1	
SECTION II.	REPAIR PARTS LIST.....	1-1	
GROUP 06	ELECTRICAL SYSTEM		
	0609-LIGHTS .....	1-1	
	STOPLIGHT TAILLIGHT ASSEMBLY (EARLY MODELS).....	1-1	1
	BLACKOUT STOPLIGHT ASSEMBLY (EARLY MODELS).....	2-1	2
	REAR COMPOSITE MARKER LIGHT ASSEMBLY (LATE MODELS).....	3-1	3
	MARKER LIGHT ASSEMBLY.....	4-1	4
	0613-HULL OR CHASSIS WIRING HARNESS.....	5-1	
	WIRING HARNESS.....	5-1	5
	INTERVEHICULAR CABLE ASSEMBLY .....	6-1	6
	WIRING HARNESS ATTACHING PARTS .....	7-1	7
GROUP 11	REAR AXLE		
	1100-REAR AXLE ASSEMBLY.....	8-1	
	AXLE ASSEMBLY.....	8-1	8
GROUP 12	BRAKES		
	1201-HAND BRAKES.....	9-1	
	HAND BRAKE ASSEMBLY .....	9-1	9
	1202-SERVICE BRAKES.....	10-1	
	SERVICE BRAKES.....	10-1	10
	BRAKE RELATED ITEMS.....	11-1	11
	1204-HYDRAULIC BRAKE SYSTEM.....	12-1	
	HYDRAULIC MASTER CYLINDER AND WHEEL CYLINDER .....	12-1	12
	HYDRAULIC BRAKE LINES AND FITTINGS.....	13-1	13
	HYDRAULIC BRAKE LINES.....	14-1	14
	1208-AIR BRAKE SYSTEM.....	15-1	
	AIR HYDRAULIC CHAMBER ASSEMBLY.....	15-1	15
	AIR FILTER ASSEMBLY AND EMERGENCY RELAY VALVE .....	16-1	16
	AIR BRAKE RESERVOIR .....	17-1	17
	AIR HOSE ASSEMBLY .....	18-1	18
	AIR LINES.....	19-1	19
GROUP 13	WHEELS AND TRACKS		
	1311-WHEEL ASSEMBLY.....	20-1	
	HUB AND DRUM ASSEMBLY.....	20-1	20
	WHEELS.....	21-1	21
	1313-TIRES, TUBES, TIRE CHAINS.....	22-1	
	TIRES, TUBES, AND VALVES.....	22-1	22
GROUP 15	FRAME TOWING ATTACHMENTS, DRAWBARS AND ARTICULATION SYSTEMS		
	1503-PINTLES AND TOWING ATTACHMENTS.....	23-1	
	TOWING ATTACHMENTS.....	23-1	23
	1507-LANDING GEAR, LEVELING JACKS, (MECHANICAL OR HYDRAULIC).....	24-1	
	ADJUSTABLE CASTER ASSEMBLY .....	24-1	24

TABLE OF CONTENTS - CONTINUED

Page Fig.			
GROUP 16		SPRINGS AND SHOCK ABSORBERS	
		1601-SPRINGS.....	25-1
		SPRINGS.....	25-1 25
		1604-SHOCK ABSORBER EQUIPMENT.....	26-1
		SHOCK ABSORBERS.....	26-1 26
		1605-TORQUE, RADIUS AND STABILIZER RODS .....	27-1
		RADIUS ROD ASSEMBLY.....	27-1 27
GROUP 18		BODY, CAB HOOD AND HULL	
		1801-BODY, CAB HULL ASSEMBLIES.....	28-1
		BODY .....	28-1 28
		1808-STOWAGE RACKS ,BOXES, STRAPS, CARRYING CASES, CABLE REELS, HOSE REELS, ECT.....	29-1
		FUZE BOX ASSEMBLY .....	29-1 29
GROUP 22		BODY CHASSIS AND HULL ACCESSORY ITEMS	
		2202-ACCESSORY ITEMS .....	30-1
		REFLECTORS.....	31-1 30
		2210-DATA PLATES AND INSTRUCTION HOLDERS .....	31-1
		DATA PLATES.....	31-1 31
GROUP 95		GENERAL USE STANDARDIZED PARTS	
		9501-BULK MATERIEL.....	BULK-1
		BULK .....	BULK1 BULK-1
SECTION III.		TOOLS AND TEST EQUIPMENT	
GROUP 2604		TOOLS AND TEST EQUIPMENT	
		2604-SPECIAL TOOLS .....	32-1
		SPECIAL TOOL .....	32-1 32
SECTION IV.		CROSS REFERENCE INDEXES	
		NATIONAL STOCK NUMBER INDEX.....	I-1
		PART NUMBER INDEX.....	I-4
		FIGURE AND ITEM INDEX.....	I-11
APPENDIX G		ILLUSTRATED LIST OF MANUFACTURED ITEMS.....	G-1
APPENDIX H		TORQUE LIMITS .....	H-1
INDEX		.....	INDEX-1

## HOW TO USE THIS MANUAL

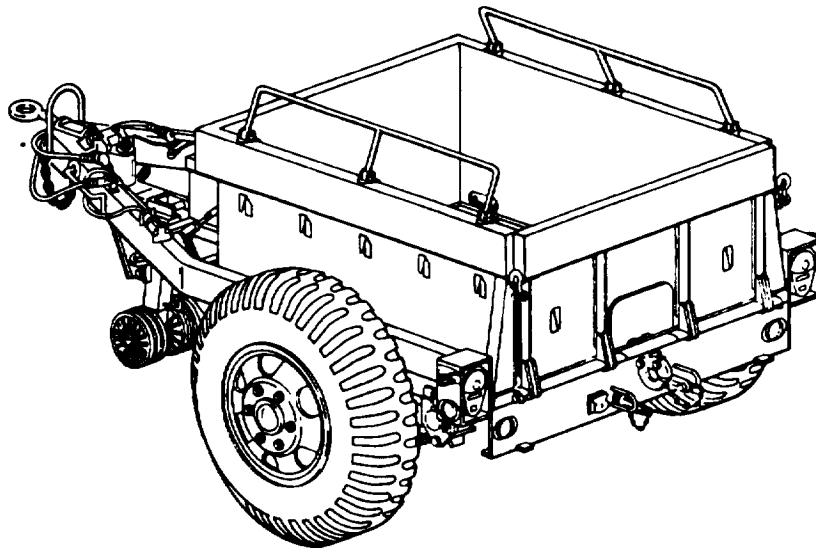
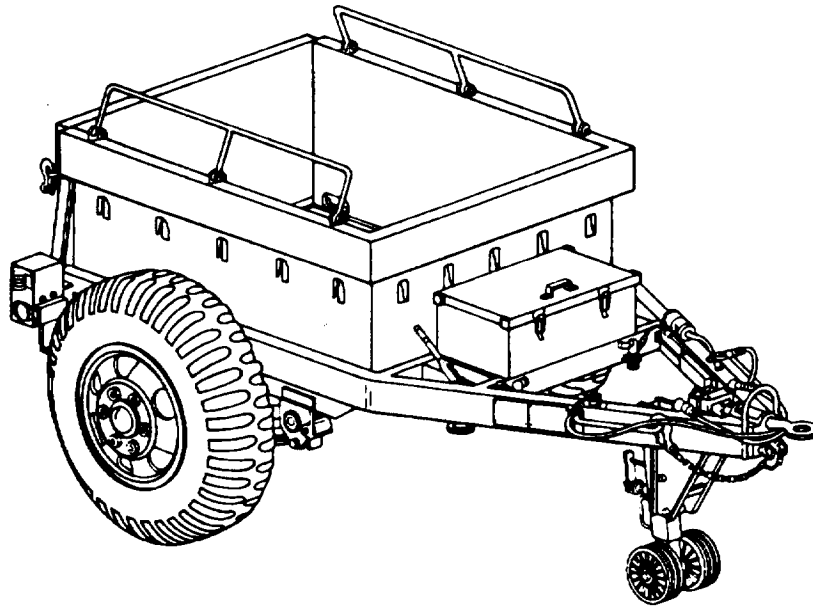
This manual is designed to help you operate and maintain the M332 ammunition trailer. The front cover table of contents is provided for quick reference to important information. There is also an index located in the final pages for use in locating specific items of information. Three separate indexes are also available for use in the back of Appendix F (The Repair Parts and Special Tools List).

Measurements in this manual are given in both U S Standard and metric units. A metric to U S Standard conversion chart can be found on the inside back cover.

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 read the warnings before operating or doing maintenance on the equipment.

A subject index appears at the beginning of each chapter listing sections that are included in that chapter. A more specific subject index is located at the beginning of each section to help you find the exact paragraph you're looking for.



**CHAPTER 1**  
**INTRODUCTION**  
**OVERVIEW**

The purpose of this chapter is to give you information on the ammunition trailer size, shape, major equipment, and how it works.

	Page
Section I. General Information.....	1-1
Section II. Equipment Description and Data.....	1-2
Section III. Technical Principles of Operation.....	1-6

**Section I. GENERAL INFORMATION**

	Page		Page
Destruction of Army Materiel to Prevent Enemy Use.....	1-1	Reference Information .....	1-2
Maintenance Forms and Records.....	1-1	Reporting Equipment improvement	
Preparation for Storage and .....		Recommendations (EIRs).....	1-2
Shipment.....	1-1	Scope .....	1-1

**SCOPE**

Type of Manual: Operator's, Organizational, Direct Support, and General Support Maintenance Manual (including Repair Parts and Special Tools List).

Model Number and Equipment Name: Trailer Ammunition, 1 1/2-Ton, 2-Wheel, M332.

Purpose of Equipment: The trailer is used to transport ammunition in tactical situations.

**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).

**DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE**

Refer to TM 750-244-6, Procedures for Destruction of Tank-Automotive Equipment to Prevent Enemy Use.

**PREPARATION FOR STORAGE AND SHIPMENT**

See chapter 4, section XV for instructions on preparation for storage and shipment.



REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs)

If your ammunition 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 why you don't like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Tank Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

REFERENCE INFORMATION

This list includes the nomenclature used in this manual.

Common Name	Nomenclature
glad-hand	coupling half, quick, airbrake
landing leg	retractable support assembly
tow hook	pintle
tow ring	lunette
trailer	trailer, ammunition, 1 1/2-ton, M332

**Section II. EQUIPMENT DESCRIPTION AND DATA**

	Page		Page
Equipment Characteristics, Capabilities, and Features .....	1-2	Location and Description of Data Plates .....	1-5
Equipment Data .....	1.5	Location and Description of Major Components .....	1-3

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

CHARACTERISTICS

Open-frame trailer chassis with ammunition cargo compartment and fuse cap container mounted on frame

Has two-wheel single axle with leaf spring suspension

Has retractable landing leg to support front of trailer when uncoupled from towing vehicle

Has air-operated hydraulic brake system controlled from towing vehicle

Has manually operated parking brakes

Operates on 24-volt electrical system

Has automatic emergency braking in event of trailer breakaway or emergency air line break