

ARMY TM 9-2320-280-20-1
AIR FORCE TO 36A12-1A-2092-1-1
MARINE CORPS TM 2320-20/7B

Volume No. 1

(SUPERSEDES TM 9-2320-280-20-1, 19 JANUARY 1990)

TECHNICAL MANUAL UNIT MAINTENANCE

TRUCK, UTILITY: CARGO/TROOP CARRIER, 1-1/4 TON, 4X4, M998 (2320-01-107-7155) (EIC: BBD); M998A1 (2320-01-371-9577) (EIC: BBN);

TRUCK, UTILITY: CARGO/TROOP CARRIER, 1-1/4 TON, 4X4, W/WINCH, M1038 (2320-01-107-7156) (EIC: BBE); M1038A1 (2320-01-371-9578) (EIC: BBP);

TRUCK, UTILITY: HEAVY VARIANT, 4X4, M1097 (2320-01-346-9317) (EIC:BBM); M1097A1 (2320-01-371-9583) (EIC: BBU); M1097A2 (2320-01-380-8604) (EIC: BB6); M1123 (2320-01-455-9593) (EIC: B6G);

TRUCK, UTILITY: TOW CARRIER, ARMORED, 1-1/4 TON, 4X4, M966 (2320-01-107-7153) (EIC: BBC); M966A1 (2320-01-372-3932) (EIC: BBX); M1121 (2320-01-456-1282) (EIC: B6H);

TRUCK, UTILITY: TOW CARRIER, ARMORED, 1-1/4 TON, 4X4, W/WINCH, M1036 (2320-01-107-7154) (EIC: BBH);

TRUCK, UTILITY: TOW CARRIER, W/SUPPLEMENTAL ARMOR, 1-1/4 TON, 4X4, M1045 (2320-01-146-7191); M1045A1 (2320-01-371-9580) (EIC: BBR); M1045A2 (2320-01-380-8229) (EIC: BB5);

TRUCK, UTILITY: TOW CARRIER, W/SUPPLEMENTAL ARMOR, 1-1/4 TON, 4X4, W/WINCH, M1046 (2320-01-146-7188); M1046A1 (2320-01-371-9582) (EIC: BBT);

TRUCK, UTILITY: ARMAMENT CARRIER, ARMORED, 1-1/4 TON, 4X4, M1025 (2320-01-128-9551) (EIC: BBF); M1025A1 (2320-01-371-9584) (EIC: BBV); M1025A2 (2320-01-380-8233) (EIC: BB3);

TRUCK, UTILITY: ARMAMENT CARRIER, ARMORED, 1-1/4 TON, 4X4, W/WINCH, M1026 (2320-01-128-9552) (EIC: BBG); M1026A1 (2320-01-371-9579) (EIC: BBQ);

TRUCK, UTILITY: ARMAMENT CARRIER, W/SUPPLEMENTAL ARMOR, 1-1/4 TON, 4X4, M1043 (2320-01-146-7190); M1043A1 (2320-01-372-3933) (EIC: BBY); M1043A2 (2320-01-380-8213) (EIC: BB4);

TRUCK, UTILITY: ARMAMENT CARRIER, W/SUPPLEMENTAL ARMOR, 1-1/4 TON, 4X4, W/WINCH, M1044 (2320-01-146-7189); M1044A1 (2320-01-371-9581) (EIC: BBS);

TRUCK, UTILITY: S250 SHELTER CARRIER, 4X4, M1037 (2320-01-146-7193) (EIC: BBK);

TRUCK, UTILITY: S250 SHELTER CARRIER, 4X4, W/WINCH, M1042 (2320-01-146-7187);

TRUCK, AMBULANCE, 2-LITTER, ARMORED, 4X4, M996 (2310-01-111-2275) (EIC: BBB); M996A1 (2310-01-372-3935) (EIC: BB2);

TRUCK, AMBULANCE, 4-LITTER, ARMORED, 4X4, M997 (2310-01-111-2274) (EIC: BBA); M997A1 (2310-01-372-3934) (EIC: BBZ); M997A2 (2310-01-380-8225) (EIC: BB8);

TRUCK, AMBULANCE, 2-LITTER, SOFT TOP, 4X4, M1035 (2310-01-146-7194); M1035A1 (2310-01-371-9585) (EIC: BBW); M1035A2 (2310-01-380-8290) (EIC: BB9).

HOW TO USE THIS MANUAL	v
INTRODUCTION	1-1
SERVICE AND TROUBLESHOOTING INSTRUCTIONS	2-1
ENGINE SYSTEMS MAINTENANCE	3-1
ELECTRICAL SYSTEMS MAINTENANCE	4-1
TRANSMISSION AND TRANSFER CASE MAINTENANCE	5-1
PROPELLER SHAFTS AXLES AND SUSPENSION MAINTENANCE	6-1
BRAKE SYSTEM MAINTENANCE	7-1
WHEELS AND STEERING MAINTENANCE	8-1
FRAME MAINTENANCE	9-1
BODY AND ACCESSORIES MAINTENANCE	10-1
SPECIAL PURPOSE BODIES MAINTENANCE	11-1
SPECIAL PURPOSE KITS MAINTENANCE	12-1
PREPARATION FOR STORAGE OR SHIPMENT	13-1

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

JANUARY 1996

TECHNICAL MANUAL
NO. 9-2320-280-20-1
NO. 2320-20/7B

HEADQUARTERS
DEPARTMENTS OF THE ARMY,
THE AIR FORCE, AND MARINE CORPS
Washington, D.C., 31 JANUARY 1996

TECHNICAL ORDER
NO. 36A12-1A-2092-1-1

TECHNICAL MANUAL
VOLUME 1 OF 3
UNIT MAINTENANCE

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REPORTING OF 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 2028-2 (Recommended Changes to Equipment Technical Publications), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeps.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, DA Form 2028, or DA Form 2028-2 direct to: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-LC-CIP-WT, Rock Island, IL 61299-7630. The email address is amsta-ac-nml@ria.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726. (Marine Corps) Submit NAVMC 10772 to the Commanding General (826), MCLB, 814 Radford Blvd., Albany, GA 31704-1128.

This manual is published in three parts. TM 9-2320-280-20-1 contains chapters 1 and 2, TM 9-2320-280-20-2 contains chapters 3 through 9, and TM 9-2320-280-20-3 contains chapters 10 through 13 and appendices A through G.

This manual contains a table of contents for all three volumes 1, 2, and 3 and alphabetical index for chapters 1 and 2.

*This publication supersedes TM 9-2320-280-20-1 dated 19 January 1990 and all changes.

VOLUME 1 OF 3

Page

	HOW TO USE THIS MANUAL	v
CHAPTER 1	INTRODUCTION	1-1
Section I.	General Information	1-1
II.	Equipment Description and Data	1-2
III.	Principles of Operation	1-35
CHAPTER 2	SERVICE AND TROUBLESHOOTING INSTRUCTIONS	2-1
Section I.	Repair Parts, Special Tools, Test, Measurement, and Diagnostic Equipment (TMDE), and Support Equipment	2-1
II.	Service Upon Receipt	2-1
III.	Preventive Maintenance Checks and Services	2-2
IV.	Electrical/Mechanical Systems Troubleshooting	2-30

VOLUME 2 OF 3

CHAPTER 3	ENGINE SYSTEMS MAINTENANCE	3-1
Section I.	Lubrication System Maintenance	3-1
II.	Fuel System Maintenance	3-19
III.	Accelerator System Maintenance	3-77
IV.	Exhaust System Maintenance	3-86
V.	Cooling System Maintenance	3-107
CHAPTER 4	ELECTRICAL SYSTEM MAINTENANCE	4-1
Section I.	Generating and Protective Control Box/Distribution Box System Maintenance ..	4-1
I.1.	Dual Voltage Alternator and Regulator System Maintenance	4-12.5
II.	Starter and Starting Control System Maintenance	4-14
III.	Instruments, Sending Units, Switches, and Horn Maintenance	4-23
IV.	Transfer Case and Transmission Electrical Maintenance	4-58
V.	Lighting System Maintenance	4-77
VI.	Battery System Maintenance	4-113

	Page
CHAPTER 5	TRANSMISSION AND TRANSFER CASE MAINTENANCE 5-1
Section I.	Transmission Maintenance 5-1
II.	Transfer Case Maintenance 5-47
CHAPTER 6	PROPELLER SHAFTS, AXLES, AND SUSPENSION MAINTENANCE 6-1
Section I.	Propeller Shafts Maintenance 6-1
II.	Front and Rear Axles Maintenance. 6-16
III.	Suspension Maintenance 6-54
CHAPTER 7	BRAKE SYSTEM MAINTENANCE 7-1
Section I.	Parking Brake System Maintenance 7-1
II.	Service Brake System Maintenance 7-19
III.	Rear Dual Service/Parking Brake System Maintenance 7-45
CHAPTER 8	WHEELS AND STEERING MAINTENANCE 8-1
Section I.	Wheel and Runflat System Maintenance 8-1
II.	Steering Components Maintenance 8-43
CHAPTER 9	FRAME MAINTENANCE 9-1

VOLUME 3 OF 3

CHAPTER 10	BODY AND ACCESSORIES MAINTENANCE. 10-1
Section I.	Body Maintenance. 10-1
II.	Body Accessories Maintenance 10-115
III.	Winch Maintenance. 10-179
CHAPTER 11	SPECIAL PURPOSE BODIES MAINTENANCE 11-1
Section I.	Weapon Carrier Body Maintenance. 11-1
II.	S250 Shelter Carrier Body Maintenance 11-161
III.	Ambulance Body Maintenance 11-173

	Page
CHAPTER 12	
SPECIAL PURPOSE KITS MAINTENANCE	12-1
Section I.	
I. Deep Water Fording Kit Maintenance	12-1
II. Troop Seat Kit Maintenance	12-19
III. 100 Ampere Alternator Kit Maintenance	12-23
IV. Arctic Winterization Kits Maintenance	12-36
V. Arctic Winterization Crew Top Kits Maintenance	12-104
VI. Troop/Cargo Winterization Kit Maintenance	12-114
VII. Communications Kits Maintenance	12-201
VIII. 81 MM Mortar Kit Maintenance	12-235
IX. Traversing Bar Kit Maintenance	12-251
X. M1097, M1097A1, and M1097A2 Special Purpose Kits Maintenance	12-254
XI. Accessory Kits Installation	12-282
XII. Cargo Barrier and Net Kit Maintenance	12-314
CHAPTER 13	
PREPARATION FOR STORAGE OR SHIPMENT	13-1
Section I.	
I. General Instructions	13-1
II. Preparation for Storage and Shipment	13-2
APPENDIX A	REFERENCES
APPENDIX B	MAINTENANCE ALLOCATION CHART
APPENDIX C	EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST
APPENDIX D	ILLUSTRATED LIST OF MANUFACTURED ITEMS
APPENDIX E	TORQUE LIMITS
APPENDIX F	WIRING DIAGRAMS AND SCHEMATIC
APPENDIX G	MANDATORY REPLACEMENT PARTS
INDEX	Index 1

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

a. This technical manual contains instructions for organizational maintenance of the 1-1/4 ton, 4X4, M998 series vehicles.

b. Models included are:

- (1) M998 and M998A1, Cargo/Troop Carrier
- (2) M1038 and M1038A1, Cargo/Troop Carrier, W/Winch
- (3) M1097, M1097A1, M1097A2, and M1123 Heavy Variant
- (4) M966, M966A1, and M1121 TOW Carrier, Armored
- (5) M1036, TOW Carrier, Armored, W/Winch
- (6) M1045, M1045A1, and M1045A2 TOW Carrier, W/Supplemental Armor
- (7) M1046 and M1046A1, TOW Carrier, W/Supplemental Armor, W/Winch
- (8) M1025, M1025A1, and M1025A2 Armament Carrier, Armored
- (9) M1026 and M1026A1, Armament Carrier, Armored, W/Winch
- (10) M1043, M1043A1, and M1043A2 Armament Carrier, W/Supplemental Armor
- (11) M1044 and M1044A1, Armament Carrier, W/Supplemental Armor, W/Winch
- (12) M1037, S250 Shelter Carrier
- (13) M1042, S250 Shelter Carrier, W/Winch
- (14) M996 and M996A1 2-Litter Ambulance, Armored
- (15) M997, M997A1, and M997A2 4-Litter Ambulance, Armored
- (16) M1035, M1035A1, and M1035A2 2-Litter Ambulance, Soft Top

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS

(Army) 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). (Marine Corps) Refer to TM 4700-15/1-.

1-3. DESTRUCTION OF ARMY EQUIPMENT TO PREVENT ENEMY USE

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

1-4. PREPARATION FOR STORAGE AND SHIPMENT

(Army) Refer to TM 740-90-1, Administrative Storage of Equipment and TM 746-10, Marking, Packaging and Shipment of Supplies and Equipment: General Packaging Instructions for Field Use. (Marine Corps) Refer to MCO 4450-7.

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

(Army) If your M998 series vehicles need 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 vehicle. Let us know why you don't like 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-TR-Q, Warren, Michigan 48397-5000. We'll send you a reply. (Marine Corps) Submit QDR's in accordance with MCO 4855-10.

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 the equipment covered in this manual. The information in the TB 43-0001-39 series is compiled from some of the Equipment Improvement Reports that you prepared on the vehicles covered in this manual. Many of these articles resulted 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 2028's (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. For those with access to the World Wide Web (WWW), the EIR MD can be viewed through the Army Electronic Product Support. The site is <http://aeprs.ria.army.mil>.

1-7. METRIC SYSTEM

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

1-8. MANDATORY REPLACEMENT PARTS

The maintenance instructions contained herein make reference to removing and discarding piece parts such as: gaskets, lockwashers, cotter pins, O-rings, seals; etc.; these items should be considered mandatory replacement items and replaced with new parts during assembly/installation.

1-9. BREAK-IN PROCEDURE

Upon receipt of vehicles, or after engine replacement, break-in procedures must be observed during the first 500 miles (804 kilometers) of operation. For break-in procedure, refer to TM 9-2320-280-10.

Section II. EQUIPMENT DESCRIPTION AND DATA

1-10. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

The 1-1/4 ton, 4x4, M998 series of 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, diesel engine. Four-wheel hydraulic service brakes and a mechanical parking brake are common to all models in the M998 series. All vehicles are equipped with a pintle hook for towing. Tiedown and lifting eyes are provided for air, rail, or sea shipment.