TM 9-2320-211-34-2-1
T.O. 36A12-1C-422-2-2

TECHNICAL MANUAL

VOLUME 2 OF 2

PART 1 OF 4

MAINTENANCE

DIRECT SUPPORT AND GENERAL SUPPORT LEVEL

5-TON, 6X6, M39 SERIES TRUCKS (MULTIFUEL)

TRUCK, CHASSIS: M40A2C, M61A2, M63A2; TRUCK, CARGO: M54A2, M54A2C, M55A2; TRUCK, DUMP: M51A2; TRUCK, TRACTOR: M52A2; TRUCK, WRECKER, MEDIUM: M543A2

NOTE:

THE STYLE OF THIS TM IS EXPERIMENTAL. IT IS BEING TRIED BY THE ARMY ONLY ON A LIMITED BASIS

Chapter 1
General Maintenance Information

Chapter 2
Engine System

Chapter 3
Clutch System

Chapter 4
Fuel System

Chapter 5
Cooling System

Chapter 6
Electrical System

Chapter 7
Transmission System

Chapter 8
Transmission Transfer System

Chapter 9
Front Axle

Chapter 10
Rear Axle

DEPARTMENTS OF THE ARMY AND THE AIR FORCE

FEBRUARY 1981

*TM 9-2320-211-34-2-1
T.O. 36A12-1C-422-2-2

TECHNICAL MANUAL
NO. 9-2320-211-34-2-1
TECHNICAL ORDER
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DEPARTMENTS OF THE ARMY
AND
THE AIR FORCE
WASHINGTON, DC, 25 February 1981

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DIRECT SUPPORT AND GENERAL SUPPORT LEVEL

5-TON, 6X6, M39 SERIES TRUCKS
(MULTIFUEL)

Model		NSN without Winch	NSN with Winch
Truck, Chassis	M40A2C	2320-00-969-4114	
	M61A2	2320-00-055-9264	2320-00-965-0321
	M63A2	2320-00-226-6251	2320-00-285-3757
Truck, Cargo	M54A2	2320-00-055-9266	2320-00-055-9265
	M54A2C	2320-00-926-0874	2320-00-926-0874
	M55A2	2320-00-073-8476	2320-00-055-9259
Truck, Dump	M51A2	2320-00-055-9262	2320-00-055-9263
Truck, Tractor	M52A2	2320-00-055-9260	2320-00-055-9261
Truck, Wrecker, Medium	M543A2		2320-00-055-9258

Current as of 25 Jul 80.

* This manual together with TM 9-2320-211-34-1, 25 February 1981; TM 9-2320-211-34-2-2, 25 February 1981; TM 9-2320-211-34-2-3, 25 February 1981 and TM 9-2320-211-34-2-4, 25 February 1981 supersedes so much of TM 9-2320-211-35, 13 September 1964 as pertains to multifuel vehicles including all changes.

REPORTING OF 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 procedure, 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 direct to: Commander, US Army Tank-Automotive Command, ATTN: DRSTA-MB, Warren, Michigan 48090. A reply will be furnished to you.

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CHAPTER 1

GENERAL MAINTENANCE INFORMATION

1-1. SCOPE. This manual contains the direct support and general support maintenance instructions for the trucks listed below. This manual includes procedures for disassembly, cleaning, inspection, repair, test, adjustment and overhaul as authorized by the maintenance allocation chart.

Truck, Cargo:	5 ton, 6 x 6, M54A2, M54A2C and M55A2
Truck, Dump:	5 ton, 6 x 6, M51A2
Truck, Tractor:	5 ton, 6 x 6, M52A2
Truck, Wrecker, Medium:	5 ton, 6 x 6, M543A2

Information is provided on maintenance of trucks which is beyond the scope of tools, equipment, personnel, or supplies normally available to operator or using organization.

1-2. GENERAL MAINTENANCE . The general maintenance and repair covered by other manuals and called out in this manual are as follows:

TM 9-214 Inspection, Care and Maintenance of Antifriction Bearings.
TM 9-237 Operator's Manual: Welding Theory and Application (TO 34W4-1-5).
FM 43-3 General Repair for Canvas and Webbing.
TM 9-247 Materials Used for Cleaning, Preserving, Abrading and Cementing Ordnance Materiel and Related Materials Including Chemicals.
FM 43-2 Metal Body Repair and Related Operations.
TB 750-254 Cooling Systems: Tactical Vehicles Changes 1, 2.
TB 43-0212 Purging, Cleaning and Coating Interior Ferrous and Terne Sheet Vehicle Fuel Tanks.
TM 43-0139 Painting Instructions for Field Use.
TB 43-0209 Color, Marking and Camouflage Painting of Military Vehicles, Construction Equipment, and Materials Handling Equipment.
TB 43-0213 (Rustproofing)
TM 9-2300-422-20 Security of Tactical Wheeled Vehicles.

WARNING

Dry cleaning solvent is flammable. Do not use near an open flame. Keep a fire extinguisher nearby when solvent is used. Use only in well–ventilated places. Failure to do this may result in injury to personnel and damage to equipment.

1-3. CLEANING. All parts must be cleaned before inspection and assembly and after repair. Clean inner and outer surfaces of metallic parts and all areas subject to oil or grease with dry cleaning solvent, type II (SD-2), FED. SPEC P-D-680. Clean out sludge and gum with a stiff brush. Use steam cleaning to take off accumulated grease and dirt after dry cleaning solvent has been applied. Dry with clean rags. To clean bearings refer to TM 9-214. The general cleaning covered by other manuals and references called out in this manual are as follows:

TM 9-247	Materials Used for Cleaning, Preserving, Abrading and Cementing Ordnance Materiel and Related Materials Including Chemicals.
TM 9-214	Inspection, Care and Maintenance of Antifriction Bearings.

1-4. PAINTING. Instructions for the preparation of the material for painting, how to paint and material to be used are in TM 43-0139. Instructions for camouflage painting are contained in TB 43-0209. Stenciling and marking must be done periodically due to weathering or repainting. Instructions for marking military trucks is called out in TB 746-93-1.

1-5. TORQUE VALUES. Critical torque values for a particular component are given in the maintenance procedures. When torque values are not given, bolts, screws and nuts are to be tightened as given in table 1-1.

1-6. SPECIAL TOOLS AND EQUIPMENT. Speical tools and equipment are provided to make it easier to do particular maintenance tasks and to keep the truck in good repair. Table 1-2 lists the special tools and equipment and gives a reference to the maintenance paragraph where they are used and what they are used for.

1-7. SAFETY INSPECTION AND TESTING OF LIFTING DEVICES. Refer to TB 43-0142 for safety inspection and testing of lifting devices used in this manual.

1-8. FORMS AND RECORDS. Maintenance forms, records, and reports which are to be used by maintenance personnel at all levels are listed in and prescribed by TM 38-750.

1-9. EQUIPMENT IMPROVEMENT REPORT AND MAINTENANCE DIGEST (EIR MD) AND EQUIPMENT IMPROVEMENT REPORT AND MAINTENANCE SUMMARY (EIR MS). 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 result from comments, suggestions, and improvement recommendations that you submitted to the EIR program. The TB 43-0001-39 series contains information on equipment improvement, minor alterations, proposed Modifi–cation Work Orders (MWO's), 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. In addition, the more maintenance significant articles, including minor alterations, field–fixes, etc., that have a more permanent and continuing need in the field are republished in the Equipment Improvement Report and Maintenance Summary (EIR MS) for TARCOM Equipment (TM 43-0143). Refer to both of these publications (TB 43-0001-39 series and TM 43–0143) periodically, especially the TB 43-0001-39 series, for the most current and authoritative information on your equipment. 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 310-4, Index of Technical Publications, and Appendix A, References, of this manual.