ARMY TM 9-2320-366-10-1
AIR FORCE T.0. 36A12-1C-1091-1

TECHNICAL MANUAL
OPERATOR'S INSTRUCTIONS
M1083 SERIES, 5 TON, 6x6,
MEDIUM TACTICAL VEHICLES (MTV)

VOLUME NO. 1 OF 2

MODEL	NSN	EIC
TRK, CAR., MTV, M1083		
W/WN	**2320-01-360-1895**	**BT3**
W/O WN	**2320-01-354-3386**	**BR2**
TRK, CAR., MTV, W/MATL HDLG EQPT (MHE) M1084	**2320-01-354-3387**	**BR3**
TRK, CAR., MTV, LWB, M1085		
W/WN	**2320-01-360-1897**	**BT5**
W/O WN	**2320-01-354-4530**	**BR7**
TRK, CAR., MTV, LWB, W/MATL HDLG EQPT (MHE) M1086	**2320-01-354-4531**	**BR8**
TRK, TRACTOR, MTV, M1088		
W/WN	**2320-01-360-1892**	**BTY**
W/O WN	**2320-01-355-4332**	**BTJ**
TRK, WKR, MTV, M1089	**2320-01-354-4528**	**BR4**
TRK, DUMP, MTV, M1090		
W/WN	**2320-01-360-1893**	**BTZ**
W/O WN	**2320-01-354-4529**	**BR5**
TRK, CHAS, MTV, M1092	**2320-01-354-3382**	**BRZ**
TRK, CAR., MTV, AIR DROP, M1093		
W/WN	**2320-01-360-1896**	**BT4**
W/O WN	**2320-01-355-3063**	**BR9**
TRK, DUMP, MTV, AIR DROP, M1094		
W/WN	**2320-01-360-1894**	**BT2**
W/O WN	**2320-01-355-3062**	**BTK**
TRK, CHAS, MTV, LWB, M1096	**2320-01-354-4527**	**BR6**

HEADQUARTERS, DEPARTMENTS OF THE ARMY AND THE AIR FORCE
15 September 1998

TECHNICAL MANUAL
NO. 9-2320-366-10-1

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NO. 36A12-1C-1091-1

HEADQUARTERS
DEPARTMENTS OF THE ARMY
AND THE AIR FORCE

Washington, D.C., 15 September 1998

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TRK, CHAS, MTV, LWB, M1096	2320-01-354-4527	BR6

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://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 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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HOW TO USE THIS MANUAL

OVERVIEW

This Technical Manual (TM) is provided to help you operate and maintain the Medium Tactical Vehicles (MTV). This volume, volume 1, contains general information, equipment description, and operating instructions. Volume 2 contains the remainder of chapter 2, lubrication, troubleshooting, and maintenance procedures. Volume 1 is divided into the following major sections in order of appearance.

- **FRONT COVER INDEX.** The front cover index contains a list of the most important topics contained in the volume. It features a black box at the right edge of the cover which corresponds with a black box on the page containing the topic. The topics listed on the front cover are highlighted in the table of contents with a box.

- **WARNING SUMMARY.** Provides a summary of the most important warnings that apply throughout the manual. Read all warnings and cautions before performing any operation, troubleshooting or maintenance procedures.

- **TABLE OF CONTENTS.** Lists the chapters, sections, appendixes, and alphabetical index with page number in order of appearance.

- **CHAPTER 1, INTRODUCTION.** Describes the MTV and provides equipment data.

- **CHAPTER 2, OPERATING INSTRUCTIONS (PARAGRAPH 2-1 THROUGH 2-40).** Describes operator's controls and indicators, preventive maintenance checks and services (PMCS), and operating instructions.

- **APPENDIX A, REFERENCES.** Lists publications used with the MTV and reference publications which contain information regarding the equipment.

- **APPENDIX B, COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS.** Lists and illustrates COEI and BII items issued with the MTV.

- **APPENDIX C, ADDITIONAL AUTHORIZATION LIST (AAL).** Lists additional items you are authorized for support of the MTV.

- **APPENDIX D, EXPENDABLE AND DURABLE ITEMS LIST.** Lists expendable and durable items used in the performance of maintenance procedures.

- **APPENDIX E, STOWAGE AND DECAL/DATA PLATE GUIDE.** Shows the location of signs and details the location of COEI, BII, and AAL items.

- **APPENDIX F, LUBRICATION INSTRUCTIONS.** Gives operator lubrication instructions and the time interval at which lubrication is conducted. Lubrication points are also illustrated.

- **SUBJECT INDEX.** Lists important subjects contained in Volume 1 and Volume 2 in alphabetical order and gives the paragraph number where they are located.

OVERVIEW (CONT)

Volume 2 contains the following major sections in order of appearance:

- **WARNING SUMMARY.** Provides a summary of the warnings that appear throughout the manual. Read all WARNINGS and CAUTIONS before performing any operation, troubleshooting or maintenance procedures.
- **TABLE OF CONTENTS.** Lists the chapters, sections, appendixes, and alphabetical index with page number in order of appearance.
- **CHAPTER 2, OPERATING INSTRUCTIONS (PARAGRAPH 2-41 THROUGH 2-80).** Describes the remaining operating instructions.
- **CHAPTER 3, MAINTENANCE INSTRUCTIONS.** Provides instructions for lubrication, troubleshooting, and operator maintenance.
- **APPENDIX A, REFERENCES.** Lists publications used with the MTV and reference publications which contain information regarding the equipment.
- **APPENDIX B, COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS.** Lists and illustrates COEI and BII items issued with the MTV.
- **APPENDIX C, ADDITIONAL AUTHORIZATION LIST (AAL).** Lists additional items you are authorized for support of the MTV.
- **APPENDIX D, EXPENDABLE AND DURABLE ITEMS LIST.** Lists expendable and durable items used in the performance of maintenance.
- **APPENDIX E, STOWAGE AND DECAL/DATA PLATE GUIDE.** Shows the location of signs and details the location of COEI, BII, and AAL items.
- **APPENDIX F, LUBRICATION INSTRUCTIONS.** Gives operator lubrication instructions and the time interval at which lubrication is conducted. Lubrication points are also illustrated.
- **SUBJECT INDEX.** Lists important subjects contained in Volume 2 in alphabetical order and gives the paragraph number where they are located.

FINDING INFORMATION

There are several ways to find the information you need in this manual. They are as follows:

- **TABLE OF CONTENTS.** Lists chapters, sections, appendixes, and indexes with page numbers in order of appearance.
- **CHAPTER INDEXES.** List paragraphs contained in the individual chapters with paragraph and page numbers in order of appearance.
- **MALFUNCTION INDEX.** Lists malfunctions contained in the troubleshooting table with page numbers in order of appearance.
- **ALPHABETICAL (SUBJECT) INDEX.** Lists all important topics with page numbers in alphabetical order.

TROUBLESHOOTING

Troubleshooting is contained in Volume 2, Chapter 3. When you have a problem with the operation of your equipment, look at Table 3-1, Malfunction Index on page 3-2. Find the malfunction in the index. Turn to the page number listed for the malfunction in Table 3-2, Troubleshooting. Perform the steps required to correct the malfunction. If you can not find the malfunction, or the malfunction is not corrected, notify Unit Maintenance.

OPERATION AND MAINTENANCE

- **OPERATION.** Before you operate the MTV, familiarize yourself with the controls and indicators (Chapter 2, Section I). Perform your BEFORE preventive maintenance (Chapter 2, Section II). Read the operating instructions contained in Chapter 2, Sections III and IV. Always follow the WARNINGS and CAUTIONS. During operation, perform your DURING preventive maintenance, and after operation perform your AFTER preventive maintenance (Chapter 2, Section II).
- **MAINTENANCE.** When you perform maintenance, look over the entire procedure before starting. Make sure you have the necessary tools and materials at hand. Always observe WARNINGS and CAUTIONS.

CHAPTER 1
INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

This chapter provides general information, equipment description, and principles of operation for the M1083 series Medium Tactical Vehicle (MTV). The MTV will herein be referred to as the vehicle.

a. Type of Manual. This manual provides instructions for operation and Operator maintenance of the vehicle.

1-1. SCOPE (CONT)

b. Name and Model. The vehicle model numbers and names are listed below:

M1083 Truck, Cargo: 5-Ton, 6x6, Dropside (Figure 1-1).
M1084 Truck, Cargo: 5-Ton, 6x6, Dropside, W/MHC (Figure 1-2).
M1085 Truck, Cargo: 5-Ton, 6x6, Dropside, LWB (Figure 1-3).
M1086 Truck, Cargo: 5-Ton, 6x6, Dropside, LWB, W/MHC (Figure 1-4).
M1088 Truck, Tractor: 5-Ton, 6x6 (Figure 1-5).
M1089 Truck, Wrecker: 5-Ton, 6x6 (Figure 1-6).
M1090 Truck, Dump: 5-Ton, 6x6 (Figure 1-7).
M1092 Truck, Chassis: 5-Ton, 6x6 (Figure 1-8).
M1093 Truck, Cargo 5-Ton, 6x6, Dropside, Air Drop (Figure 1-9).
M1094 Truck, Dump: 5-Ton, 6x6, Air Drop (Figure 1-10).
M1096 Truck, Chassis: 5-Ton, 6x6, LWB (Figure 1-11).

c. Purpose of Equipment. The MTV series is a family of 6x6 wheeled vehicles. The purpose of these vehicles is as follows:

(1) M1083 - Cargo hauling vehicle; can be outfitted for troop transport when equipped with a troopseat kit.
(2) M1084 - Cargo hauling vehicle; it is equipped with a Material Handling Crane (MHC).
(3) M1085 - Long Wheelbase (LWB) cargo hauling vehicle; can be outfitted for troop transport when equipped with a troopseat kit.
(4) M1086 - Long wheelbase (LWB) cargo hauling vehicle; it is equipped with a Material Handling Crane (MHC).
(5) M1088 - Tractor with fifth wheel; used to pull various types of fifth wheel trailers.
(6) M1089 - Wrecker with two winches, an underlift assembly, and Material Handling Crane (MHC); used for recovering disabled vehicles.
(7) M1090 - Dump truck; can be outfitted for troop transport when equipped with a troopseat kit.
(8) M1092 - Standard wheelbase vehicle chassis; this chassis will accept a standard cargo bed or may be modified for special missions.
(9) M1093 - Cargo hauling vehicle; can be airdropped and outfitted for troop transport when equipped with a troopseat kit.
(10) M1094 - Dump truck; can be airdropped and outfitted for troop transport when equipped with a troopseat kit.
(11) M1096 - Long Wheelbase (LWB) vehicle chassis; this chassis will accept a long cargo bed or may be modified for special missions.

1-2. MAINTENANCE FORMS AND PROCEDURES

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750 as contained in the Maintenance Management Update.

1-3. CORROSION PREVENTION AND CONTROL (CPC)

The vehicle has a total service life of 20 years which allows for extended periods of operation in a corrosive environment. A corrosive environment includes exposure to high humidity, salt spray, road de-icing chemicals, gravel damage, and atmospheric contamination. No action beyond normal washing and repair of damaged areas is needed to control corrosion. To prevent moisture accumulation, drain holes are provided on structural and sheet metal areas where needed, and stowage boxes are provided with seals and baffled drains.

Corrosion Prevention and Control (CPC) of Army material is a continuing concern. It is important that any corrosion problems with the vehicle be reported so that the problem can be corrected and improvements made to prevent the problem in the future.
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 form SF 368 (Product Quality Deficiency Report). Using keywords such as "corrosion", "rust", "cracking", or "deterioration" will ensure that the information is identified as a CPC problem.
Form SF 368 should be submitted to the address specified in DA PAM 738-750.

1-4. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Command decision, according to the tactical situation, will determine when the using organization is to destroy a vehicle. A destruction plan will be prepared by the using organization, unless one was prepared by a higher authority. For general vehicle destruction procedures, refer to TM 750-244-6, Procedures for Destruction of Tank-Automotive Equipment to Prevent Enemy Use (U.S. Army Tank-automotive and Armaments Command).

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

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. Put it on an SF 368. Mail it to us at: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/MPA, Warren, MI 48397-5000. We'll send you a reply.

1-6. WARRANTY INFORMATION

The vehicle is warranted by Stewart & Stevenson Services, Inc., Tactical Vehicle Systems Division for 18 months or 12,000 miles (19,308 km), whichever comes first. For complete information covering this warranty, refer to TB 9-2300-366-15, Warranty Program for M1083 Series, 5 Ton, 6x6, Medium Tactical Vehicles (MTV).

1-7. NOMENCLATURE CROSS-REFERENCE LIST

COMMON NAME	OFFICIAL NOMENCLATURE
Cold Start System	Ether quick-start system
Engine Coolant	Antifreeze, ethylene glycol mixture
Gladhand	Quick-disconnect coupling
Parking Brake	SYSTEM PARK Control
Throttle Pedal	Accelerator pedal

1-8. LIST OF ABBREVIATIONS

ABBREVIATION	NAME
AAL	Additional Authorization List
amp	Amperes
AOAP	Army Oil Analysis Program
ATAAC	Air to Air Aftercooler
BII	Basic Issue Item
°C	Degrees Celsius
CAC	Charge Air Cooler
CBR	Chemical, Biological, and Radiological
CCW	Counterclockwise
cid	Cubic Inch Displacement
cm	Centimeter
COEI	Component of End Item
CPC	Corrosion Prevention and Control
CTIS	Central Tire Inflation System
CW	Clockwise
DA	Department of the Army
ECU	Electronic Control Unit
EIR	Equipment Improvement Recommendation
°F	Degrees Fahrenheit
FMVSS	Federal Motor Vehicle Safety Standard

1-8. LIST OF ABBREVIATIONS (CONT)

ABBREVIATION	NAME
ft	Foot
gal	Gallon, U.S.
GCWR	Gross Combination Weight Rating
GPFU	Gas Particulate Filter Unit
GVW	Gross Vehicle Weight
HI	High
hp	Horse Power
in.	Inch
kg	Kilogram
km/h	Kilometer Per Hour
kPa	Kilopascal
kw	Kilowatt
L	Liter
lb	Pound
LED	Light Emitting Diode
LH	Left Hand
m	Meter
MGVW	Maximum Gross Vehicle Weight
MHC	Material Handling Crane
mi	Mile
mm	Millimeter
mph	Miles Per Hour
MTOE	Modified Table of Organization and Equipment
MTV	Medium Tactical Vehicle
NBC	Nuclear, Biological, Chemical
PMCS	Preventive Maintenance Checks and Services
psi	Pounds Per Square Inch
PTO	Power Take-Off
PDP	Power Distribution Panel
qt	Quart
RH	Right Hand
RPM	Revolutions Per Minute
SAE	Society of Automotive Engineers
SRW	15K Self-Recovery Winch
TAMMS	The Army Maintenance Management System
TM	Technical Manual
vac	Volts Alternating Current
vdc	Volts Direct Current
WTEC II	World Transmission Electronic Control II
WTEC II TEPSS	WTEC II Transmission ECU Pushbutton Shift Selector
WTEC III	World Transmission Electronic Control III
WTEC II TPSS	WTEC III Transmission Pushbutton Shift Selector
XMSN	Transmission

1-9. GLOSSARY

NOMENCLATURE	DEFINITION
Alternator	Engine-driven generator used to charge batteries.
Fuel Injection	Method that fuel enters engine cylinders; through specially designed nozzles (injectors).
Parallel Connection	More than one battery connected together from positive to positive and from negative to negative.
Power Take-Off (PTO)	Gear-driven device used to power hydraulic equipment (e.g., 15K Self-Recovery Winch [SRW]).
Rigging	Cable, chains and straps used to secure loads.
Series Connection	More than one battery connected together from positive to negative.
Turbocharger	Air compressor driven by exhaust gases. Used to increase engine power.

Section II. EQUIPMENT DESCRIPTION

1-10. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

a. Characteristics. The MTVs are a series of 6x6 tactical vehicles designed for use over all types of roads, cross-country terrain, and in all weather conditions. The cab and chassis for all vehicle models are similar. Each vehicle model is equipped with a unique body and may be equipped with other auxiliary equipment depending on vehicle mission.

b. Capabilities.

(1) The vehicle operates in temperatures from -25°F to 120°F (-32°C to 49°C).

(2) The vehicle can ford water up to 30 in. (76 cm) deep for 15 minutes without damage or requiring maintenance before operation can continue.

1-10. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES (CONT)

(3) The normal operating range for the vehicle is 300 mi (483 km), based on 54 gal (204 L) of fuel and vehicle at maximum gross combination weight (wrecker at Maximum Gross Vehicle Weight (MGVW)) when operated at an average speed of 25 mph (40 km/h). Varying loads, prolonged idle, use of Power Take-Off (PTO), off-road driving, and climatic conditions will affect operating range.

(4) Tiedown points are located so that the vehicle can be restrained in all directions during air transport in C-130 and C-141 aircraft. The vehicles are capable of being transported by highway, rail, and sea.

c. Features.

(1) An in-line, six-cylinder, 403 cid (6.6 L), turbocharged diesel engine, producing 290 hp (216 kW).

(2) An automatic transmission with seven forward speeds and one reverse speed. The transmission incorporates an integral transfer case. Normal mode is used when operating the vehicle under usual conditions. Off-road mode is used when operating on unimproved road surfaces. When operating in the normal mode, 70 percent of the power is distributed to the rear axles and 30 percent to the front axle. When operating in the off-road mode, power is evenly distributed between the front and rear axles.

(3) A power steering system consisting of a recirculating ball type steering gear box with hydraulic boost. Mechanical linkage provides the Operator with control in the event of steering oil pressure loss.

(4) A fuel system that includes; a 56 gal (212 L) capacity, 54 gal (204 L) usable fuel tank, fuel/water separator with fuel priming pump, fuel transfer pump, secondary fuel filter, and fuel injectors.

(5) Two front and two rear towing eyes with shackles.

(6) A manually operated pintle hook for towing a trailer or a disabled vehicle.

(7) A Central Tire Inflation System (CTIS) that allows the Operator to adjust tire pressure, with the touch of a button, to suit terrain conditions.

(8) A cab with accommodations for three personnel, or two personnel if a radio is installed.

(9) Service and emergency gladhands at the rear and front of the vehicle for towing a trailer or disabled vehicle, or for being towed.

(10) An air powered hydraulically operated system that allows the Operator to raise and lower the cab and spare tire quickly and easily. This system also provides the Operator with the means to safely and easily lower and raise the vehicle suspension for internal air transport. In addition, a back-up hydraulic pump is provided in the event that there is not enough air pressure available to operate the primary system.

1-11. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

a. Major External Components Common to All Vehicle Variants.

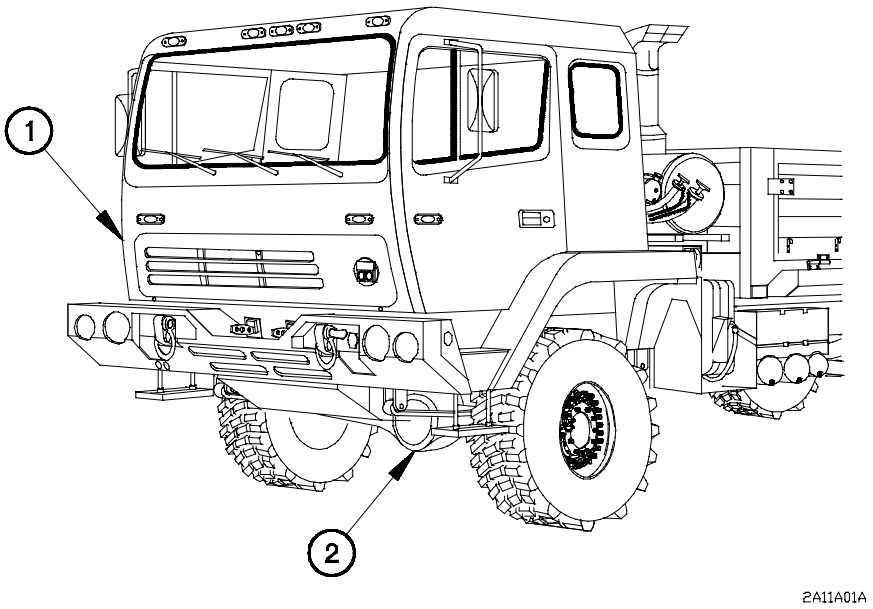

Figure 1-12. Common Vehicle Components Location

(1) CAB. The cab provides the crew with protection from the weather and contains the controls, gages, and indicators needed to operate the vehicle. The cab accommodates three fully-equipped personnel if no radio is installed, and two fully-equipped personnel if a radio is installed. The cab can be raised and lowered from the hydraulic manifold located on the passenger side of the vehicle.

(2) FRONT DRIVING AXLE. Supports the weight of the vehicle and transmits power to drive the front wheels.

1-11. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (CONT)

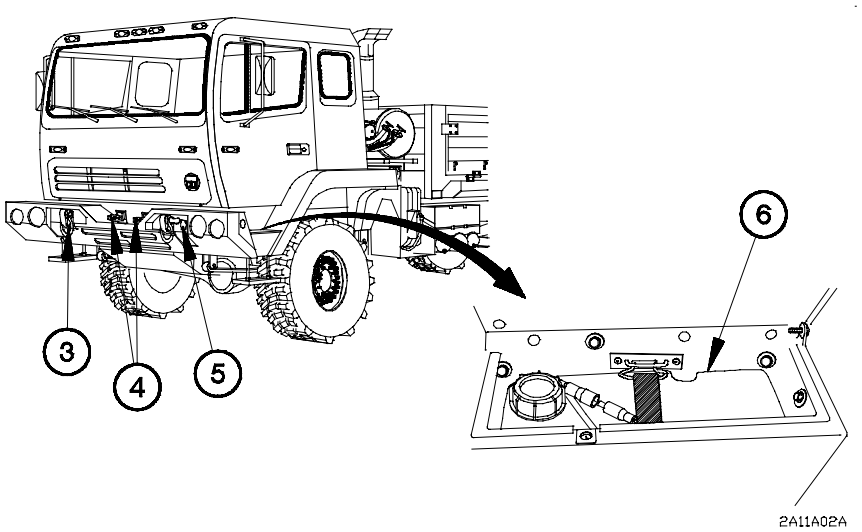

Figure 1-12. Common Vehicle Components Location (Cont)

(3) FRONT TOW EYES/SHACKLES. Provides attachment points for towing.

(4) FRONT GLADHANDS. Allows connection of brake air supply between vehicles during towing operations.

(5) FRONT ELECTRICAL CONNECTOR. A connector that receives 12 vdc power from a towing vehicle through an intervehicular cable.

(6) WINDSHIELD WASHER RESERVOIR. A three quart (3 L) reservoir that stores fluid used to clean the windshield.

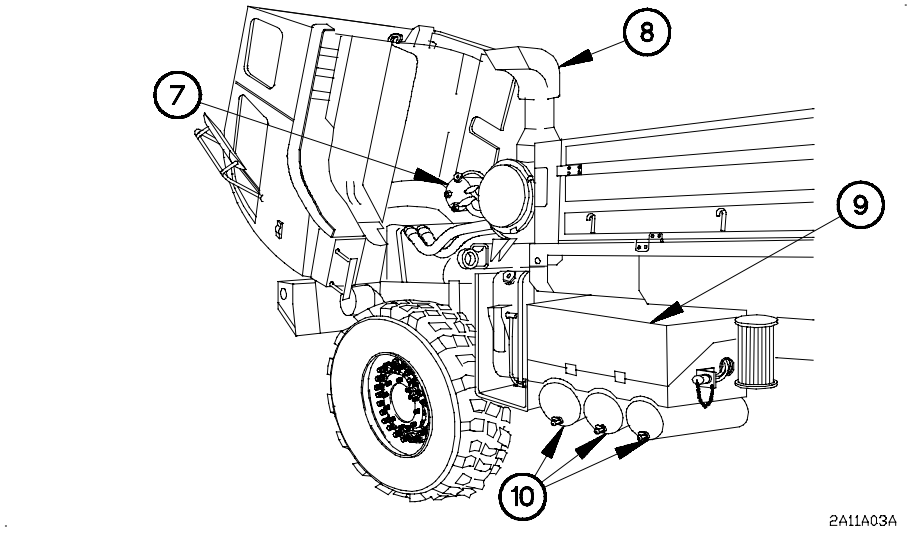

Figure 1-12. Common Vehicle Components Location (Cont)

(7) RADIATOR OVERFLOW TANK. A reservoir that can store up to eight quarts (7 L) of engine coolant.

(8) INTAKE AIR CLEANER ASSEMBLY. A cartridge-type filter that removes particles from the air before it enters the turbocharger.

(9) BATTERY BOX. The battery box contains four 12 vdc batteries connected in series and parallel.

(10) AIR TANKS. The primary and secondary air tanks and the wet tank store compressed air for operation of the brakes, CTIS, and the air/hydraulic power unit.

1-11. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (CONT)

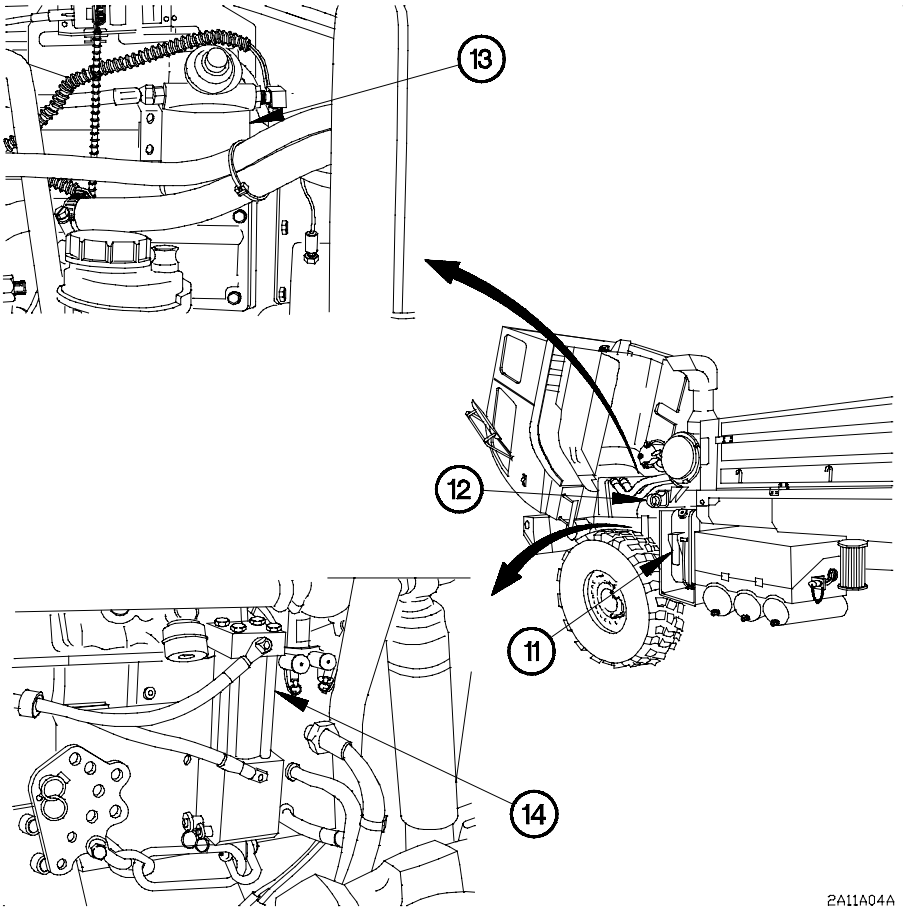

Figure 1-12. Common Vehicle Components Location (Cont)

(11) HYDRAULIC RESERVOIR. A 27 gal (102 L) reservoir that stores the oil needed to operate the 15K Self-Recovery Winch (SRW) and/or the Material Handling Crane (MHC). May be installed on any vehicle model except M1089.

(12) FRONT LIFT BEAM. Provides attachment points for lifting/loading operations.

(13) FUEL/WATER SEPARATOR. Removes moisture and contaminants from the fuel before it enters the fuel pump. The fuel/water separator incorporates a fuel priming pump and an electric heater to prevent gelling of the fuel in cold weather.

(14) SUSPENSION CYLINDER. Provides a means of compressing the vehicle suspension in preparation for internal air transport.

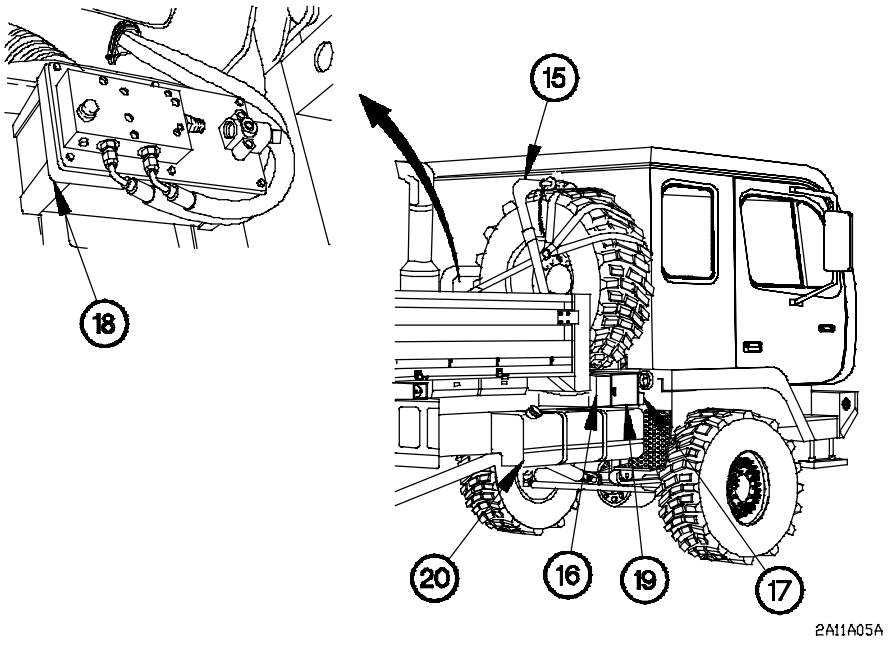

Figure 1-12. Common Vehicle Components Location (Cont)

(15) SPARE TIRE RETAINER. Provides a stowage location for the spare tire. The operation of the spare tire retainer is controlled from the hydraulic manifold.

(16) HYDRAULIC MANIFOLD. The hydraulic manifold contains the valves and controls used to raise and lower the cab, spare tire, and vehicle suspension.

(17) BACK-UP HYDRAULIC PUMP. This manual pump serves as a backup for the hydraulic manifold. This pump is used in the event that there is not enough air pressure in the air tanks to operate the air/hydraulic power unit.

(18) AIR/HYDRAULIC POWER UNIT. Converts air pressure into hydraulic pressure to operate the cylinders used to raise and lower the cab, spare tire, and vehicle suspension.

(19) TOOL BOX. Used to stow Basic Issue Items (BII), Components of End Item (COEI), and Additional Authorization List (AAL) items. ■

(20) FUEL TANK. A 56 gal (212 L) capacity, 54 gal (204 L) usable tank stores fuel used to operate the engine. ■

1-11. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (CONT)

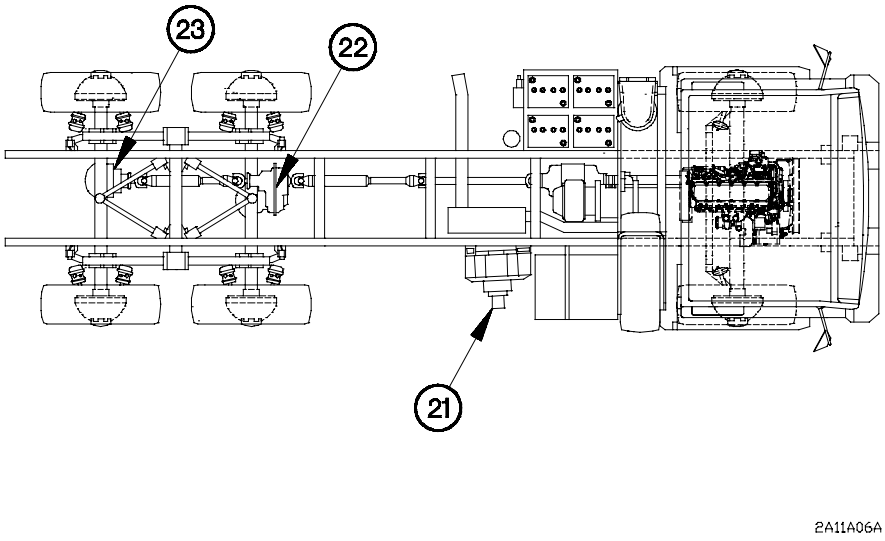

Figure 1-12. Common Vehicle Components Location (Cont)

(21) 15K SELF-RECOVERY WINCH (SRW) (if equipped). Provides the Operator with the ability to recover the vehicle from a stranded condition. It also allows the Operator to attempt retrieval of a medium or light vehicle not equipped with a 15K SRW.

(22) INTERMEDIATE DRIVING AXLE. Supports the weight of the vehicle and transmits power to drive the intermediate wheels.

(23) REAR DRIVING AXLE. Supports the weight of the vehicle and transmits power to drive the rear wheels.

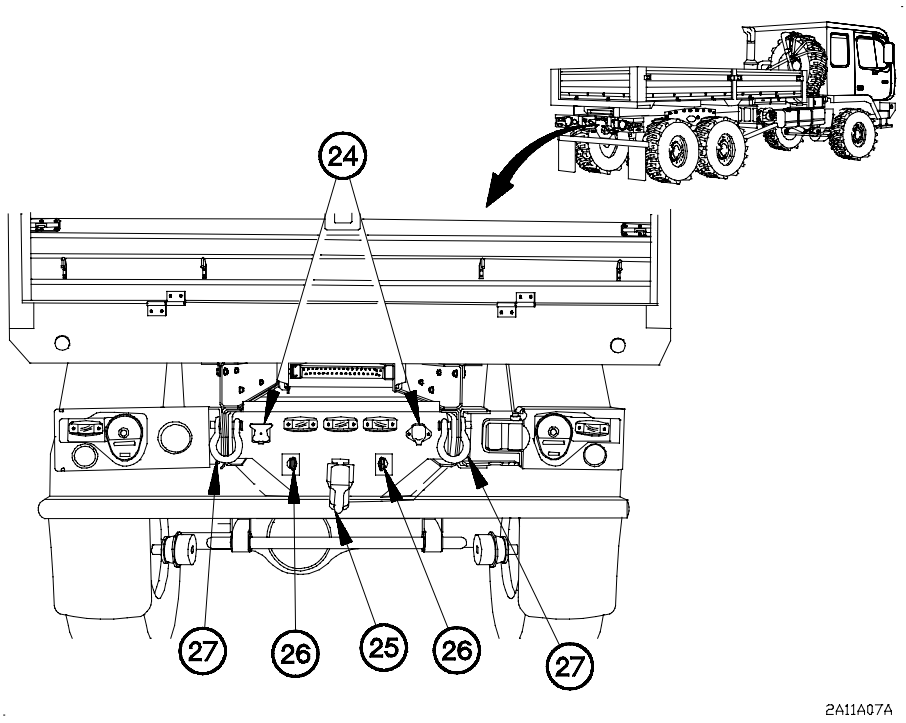

Figure 1-12. Common Vehicle Components Location (Cont)

(24) REAR ELECTRICAL CONNECTORS. Two connectors (24 vdc/12-pin and 12-vdc/7-pin) that supply electrical power to a trailer or a towed vehicle through an intervehicular cable.

(25) PINTLE HOOK. Hook used for towing a trailer. Model M1089 is equipped with towing pintle assembly that is attached to the underlift assembly when required by the mission. The towing pintle assembly on model M1089 is stowed in a tool box when not in use.

(26) REAR GLADHANDS. Allows connection of brake air supply between vehicles or between the towing vehicle and the trailer during towing operations.

(27) REAR TOW EYES/SHACKLES. Provides attachment points for towing.

1-11. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (CONT)

b. Major External Components Common to M1083 and M1085 Cargo Vehicles and M1093 Air Drop Cargo Vehicles.

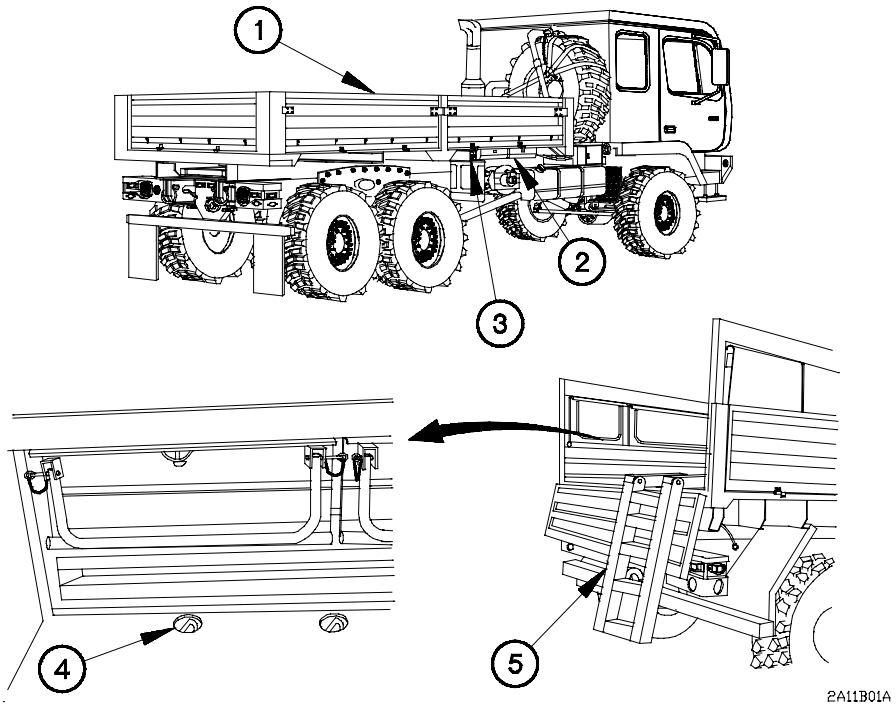

Figure 1-13. M1083 and M1085 Cargo Vehicles and M1093 Air Drop Cargo Vehicles Components Location

(1) CARGO BED SIDE PANELS. Aluminum panels used to keep cargo from falling out of cargo bed. They may be raised or lowered, or removed and stowed under the cargo bed.

(2) CARGO BED SIDE STOWAGE BOXES. Two boxes used to stow cargo bed side panels when removed.

(3) LIFT BEAM ASSEMBLIES. Two extendable beams that act as sling spreaders, when deployed, to prevent damage to cargo bed side panels during external air transport.

(4) CARGO BED TIE DOWNS. Anchor points for securing cargo.

(5) ACCESS LADDER. Used to assist personnel when climbing into or out of cargo bed. The access ladder is stored underneath the cargo bed when not in use.