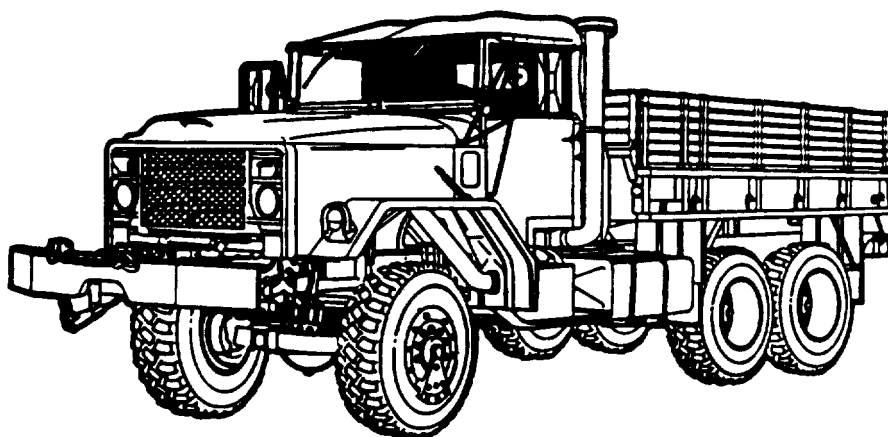


TRANSPORT GUIDANCE TECHNICAL MANUAL



**TRUCK 5-TON, 6X6
M939-SERIES/M939A1-SERIES/M939A2-SERIES**

APPROVED FOR PUBLIC RELEASE DISTRIBUTION IS UNLIMITED

HEADQUARTERS, DEPARTMENT OF THE ARMY

SEPTEMBER 1993

Description	NSN
M939-Series	
M923 Truck, Cargo, Dropside, 5-ton, 6x6, WO/W	2320-01-050-2064
M925 Truck, Cargo, Dropside, 5-ton, 6x6, W/W	2320-01-047-8763
M927 Truck, Cargo, Dropside, 5-ton, 6x6, WO/W	2320-01-047-8771
M928 Truck, Cargo, Dropside, 5-ton, 6x6, W/W	2320-01-047-8770
M929 Truck, Dump, 5-ton, 6x6, WO/W	2320-01-047-8756
M930 Truck, Dump, 5-ton, 6x6, W/W	2320-01-047-8755
M931 Truck, Tractor, 5-ton, 6x6, WO/W	2320-01-047-8753
M932 Truck, Tractor, 5-ton, 6x6, W/W	2320-01-047-8752
M934 Truck, Van, Expansible, 5-ton, 6x6, WO/W	2320-01-047-8750
M935 Truck, Van, Expansible, W/Hyd Tailgate, 5-ton, 6x6, WO/W	2320-01-047-8751
M936 Truck, Wrecker, 5-ton, 6x6, W/W	2320-01-047-8754
M939A1-Series	
M923A1 Truck, Cargo, Dropside, 5-ton, 6x6, WO/W	2320-01-206-4087
M925A1 Truck, Cargo, Dropside, 5-ton, 6x6, W/W	2320-01-206-4088
M927A1 Truck, Cargo, Dropside, 5-ton, 6x6, WO/W	2320-01-206-4089
M928A1 Truck, Cargo, Dropside, 5-ton, 6x6, W/W	2320-01-206-4090
M929A1 Truck, Dump, 5-ton, 6x6, WO/W	2320-01-206-4079
M930A1 Truck, Dump, 5-ton, 6x6, W/W	2320-01-206-4080
M931A1 Truck, Tractor, 5-ton, 6x6, WO/W	2320-01-206-4077
M932A1 Truck, Tractor, 5-ton, 6x6, W/W	2320-01-205-2684
M934A1 Truck, Van, Expansible, 5-ton, 6x6, WO/W	2320-01-205-2682
M935A1 Truck, Van, Expansible, W/Hyd Tailgate, 5-ton, 6x6, WO/W	2320-01-205-2683
M936A1 Truck, Wrecker, 5-ton, 6x6, W/W	2320-01-206-4078
M939A2-Series	
M923A2 Truck, Cargo, Dropside, 5-ton, 6x6, WO/W	2320-01-230-0307
M925A2 Truck, Cargo, Dropside, 5-ton, 6x6, W/W	2320-01-230-0308
M927A2 Truck, Cargo, Dropside, 5-ton, 6x6, WO/W	2320-01-230-0309
M928A2 Truck, Cargo, Dropside, 5-ton, 6x6, W/W	2320-01-230-0310
M929A2 Truck, Dump, 5-ton, 6x6, WO/W	2320-01-230-0305
M930A2 Truck, Dump, 5-ton, 6x6, W/W	2320-01-230-0306
M931A2 Truck, Tractor, 5-ton, 6x6, WO/W	2320-01-230-0302
M932A2 Truck, Tractor, 5-ton, 6x6, W/W	2320-01-230-0303
M934A2 Truck, Van, Expansible, 5-ton, 6x6, WO/W	2320-01-230-0300
M936A2 Truck, Wrecker, 5-ton, 6x6, W/W	2320-01-230-0304

TRANSPORT GUIDANCE

Truck, 5-ton, 6x6

M939-series/M939A1-series/M939A2-series

		Paragraph	Page
Chapter	1.	INTRODUCTION	
Section	I.	GENERAL	
		Purpose and Scope	1-1
		Related Publications	1-1
		User Comments,	1-1
		Definitions	1-1
		Warnings, Cautions, and Notes.	1-1
	II.	SAFETY	
		General,	1-2
	III.	EQUIPMENT DESCRIPTION	
		General	1-2
		Technical Data and Transportability Drawings,	1-2
		Reduced Configuration,	1-2
Chapter	2.	HIGHWAY TRANSPORT	
Section	I.	GENERAL	
		General	2-1
		Self-Delivery	2-1
		Vehicle Recovery.....,.....,.....	2-1
Chapter	3.	RAIL TRANSPORT	
Section	I.	GENERAL	
		General	3-1
	II.	RAIL LOADING	
		Railcar Selection	3-1
		Vehicle Preparation	3-2
		Loading Procedures	3-2
		Blocking and Tiedown Procedures.	3-2
Chapter	4.	MARINE TRANSPORT	
Section	I.	GENERAL	
		General	4-1
		Safety	4-1
	II.	SHIPLOADING	
		Vehicle Preparation	4-1
		Loading Procedures	4-1
		Tiedown Procedures.....,.....,.....	4-1
Chapter	5.	AIR TRANSPORT	
Section	I.	GENERAL	
		General	5-1
		Safety	5-1
		Hazardous Material	5-1
	II.	TRANSPORT BY CARGO AIRCRAFT	
		USAF Cargo Aircraft	5-1
		U. S. Army Aircraft	5-1
		Civil Reserve Air Fleet (CRAF),	5-2
		Vehicle Preparation.....,.....,.....	5-2
		Vehicle Loading	5-2
APPENDIX		Conversion Tables	A-1

This manual supersedes TM 55-2320-272-14-1, dated 3 September 1986.

Section I. GENERAL

1-1. Purpose and Scope

This manual is for transportation officers and other personnel responsible for safe transport of the M939-, M939A1-, and M939A2-series, 5-ton, 6x6 trucks. In this manual, "the trucks" refers to all of the vehicles, while a specific series, or vehicle, will be identified by its model number. This manual provides transportability guidance for safe shipping and receiving of the trucks. It includes significant technical and physical characteristics of the vehicles as well as safety requirements for worldwide movement by various transport modes.

1-2. Related Publications

Additional information on transport procedures can be found in:

MTMCTEA Pamphlet 55-19, *Tiedown Handbook for Rail Movements*
MTMCTEA Reference 92-55-20, *Tiedown Handbook for Truck Movements*
MTMCTEA Pamphlet 56-1, *Surface Transportation, Marine Terminal Lifting Guidance*
MTMCTEA Pamphlet 70-1, *Transportability for Better Strategic Mobility*
FM 10-526, *Airdrop of Supplies and Equipment, Rigging 5-ton trucks*
FM 55-65, *Strategic Deployment by Surface Transportation*
TM 38-250/AFR 71-4, *Preparation of Hazardous Materials for Military Air Shipment*
USAREUR Regulation 55-1, *United States Army Motor Vehicle Operations on Public Roads*
USAREUR Regulation 55-8, *Loading and Securing Military Wheeled and Tracked Vehicles on European Railcars*
AFP 76-2, *Airlift Planning Factors*
AR 55-162, *Permits for Oversize, Overweight, or Other Special Military Movements on Public Highways in the United States*
AR 55-228, *Transportation by Water of Explosives and Hazardous Cargo*
46 CFR, *Code of Federal Regulations, Title 46*
49 CFR, *Code of Federal Regulations, Title 49*

1-3. User Comments

Users of this manual are invited to send comments and recommend suggested improvements on DA Form 2028 (Recommended Changes to DA Publica-

tions and Blank Forms) or on a marked copy of a page or pages of the manual. Forward these suggestions directly to Director, Military Traffic Management Command Transportation Engineering Agency, ATTN: MTTE-TR, 720 Thimble Shoals Boulevard, Suite 130, Newport News, VA 23606-2574. Address electronically transmitted messages to DIR MTMCTEA FORT EUSTIS VA //MTTE-TR/. This command will furnish a reply.

1-4. Definitions

The following definitions will be used throughout this manual:

- a. *CONUS*. Continental United States.
- b. *OCONUS*. Outside the continental United States.
- c. *Curb Weight (CW)*. Weight of base vehicle including materials handling equipment (MHE), if applicable, with all kits, attachments, accessories, equipment, basic issue items (BII), and all fuels, lubricants, coolants, and hydraulic fluids topped off.
- d. *Gross Vehicle Weight (GVW)*. Curb weight plus payload and crew weight.
- e. *Payload*. Any load placed in or on the vehicle that increases the GVW above the curb weight. The trailer tongue load and crew weight are not considered part of the payload for a 5-ton truck.
- f. *Working Load Limit (WLL)*. The maximum load that can be applied to a chain or wire rope and maintain a safety factor of 5.
- g. *W/W*. With winch.
- h. *WO/W*. Without winch.
- i. *CTIS*. Central tire inflation system.

1-5. Warnings, Cautions, and Notes

Throughout this manual, warnings, cautions, and notes emphasize important or critical guidance. They are used for the following conditions:

WARNING

Instructions that must be followed to prevent serious injury to or death of personnel.

CAUTION

Instructions that must be followed to prevent damage to or destruction of equipment.

Note

An operating procedure or condition that must receive special attention.

Section II. SAFETY

1-6. General

Safety requirements for individual transport modes are in the corresponding chapters and appear as warnings, cautions, and notes. General safety considerations and precautions for all transport modes including self-delivery are as follows:

- a. *The drivers must:*
 - (1). Be qualified to operate the trucks.
 - (2). Ensure all loose items have been secured before operating the trucks.
 - (3). Remain with the trucks while the engines are running.
 - (4). Bring the trucks to a complete stop before the trucks enter or leave a building.
 - (5). Not operate the trucks in an enclosed area unless proper ventilation for engine combustion and removal of exhaust gases is available and operating.
 - (6). Have a ground guide when operating the trucks in reverse or within 20 feet of another vehicle or a building.
- b. *Personnel must not:*
 - (1). Mount or dismount moving trucks.

(2). Smoke in or on the trucks, or within 50 feet of a refueling area.

(3). Ride in a truck's bed area when the truck is being used as a mobile refueler.

WARNING

Fire extinguishers must be readily available during all unloading/offloading operations.

WARNING

Proper ventilation must be provided when unloading/offloading with the engine running. Prolonged inhalation of carbon monoxide fumes may prove fatal.

NOTE

Regulations and/or transportation procedures normally associated with vehicles containing diesel fuel will apply.

NOTE

Unless the trucks are shipped with ammunition, they will not present any special hazardous or dangerous characteristics during their exposure to normal transportation environments.

Section III. EQUIPMENT DESCRIPTION

1-7. General

The M939-, M939A1-, and M939A2-series, 5-ton, 6x6 trucks have various wheelbase and body styles. The trucks are designed for use on roads, highways, and cross-country terrain and in all types of weather.

- The M939-series trucks have tandem axles with dual tires. The M939A1 and M939A2-series trucks have tandem axles with single radial tires. The M939A2-series trucks also have a central tire inflation system (CTIS). Each truck series is easily identified by the tires and CTIS.
- The M939- and M939A1-series trucks have four tiedown provisions. Two on the front bumper and two on the rear bumper. The M939A2-series truck has these same provisions plus two additional tiedown provisions on the bottom of the front bumper.

—The weight and overall dimensions of the trucks differ, depending on the model number and series. Information specific to the transportability of each truck is the following section.

1-8. Technical Data and Transportability Drawings

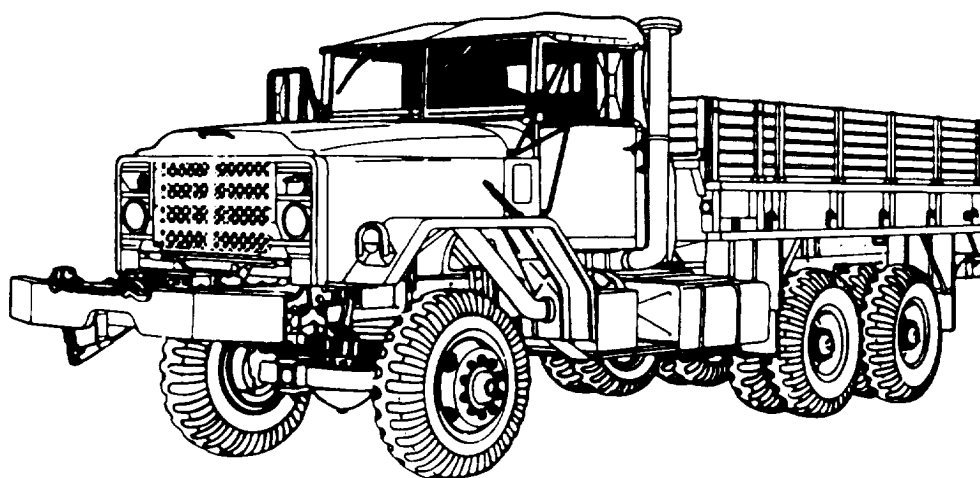
Modified data sheets and line drawings are grouped according to the series. Military load classification (MLC) is provided for trucks empty (E) and cross-country/highway (CC/HWY).

1-9. Reduced Configuration

Removable items such as bows, tarpaulin, and exhaust pipe extensions can be stowed within the truck cargo or crew compartments. Windshields can be folded down and the mirrors folded in. The spare tire may be removed and placed in the cargo compartment when the windshield is folded down.

M939-SERIES

The M939-series trucks are easily identified by the tandem axles with dual tires.



**M923 WO/W AND M925 W/W
NOMENCLATURE: TRUCK, CARGO, DROPSIDE, 5-TON, 6X6**

DESIGNATIONS		VEHICLE DATA	
		M923	M925
ARMY PART NO	8736986-2		8736986-1
NSN	2320-01-050-2084		2320-01-047-8763
CURB WEIGHT, FULLY EQUIPPED			
LESS PAYLOAD AND CREW			
FRONT (LB)	9,700		10,750
REAR BOGIE (LB)	11,770		11,820
TOTAL (LB)	21,470		22,750
PAYLOAD	10,000		10,000
GROSS WEIGHT, FULLY EQUIPPED			
WITH PAYLOAD, LESS CREW*			
FRONT (LB)	9,855		10,905
REAR BOGIE (LB)	21,615		21,665
TOTAL (LB)	31,470		32,570
TOWED LOAD ALLOWANCE	15,000		15,000
MAXIMUM VERTICAL LOAD ON PINTLE	1,500		1,500
CENTER OF GRAVITY (AT CURB WEIGHT)			
ABOVE GROUND (IN.)	40.1		40.6
REAR OF CENTERLINE OF FRONT AXLE (IN.)	98.0		93.7
PERFORMANCE			
AT GROSS WEIGHT W/O TOWED LOAD			
MAXIMUM SPEED (MPH)	55		55
CRUISING RANGE (MI)	350		350
TURNING RADIUS (FT)	38		38
MILITARY LOAD CLASSIFICATIONS			
E	9		10
CC/HWY	15		16

*ADD 600 LB FOR 3-SOLDIER CREW W/EQUIPMENT