

TM 9-1750 K

WAR DEPARTMENT TECHNICAL MANUAL

ORDNANCE MAINTENANCE

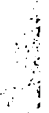
TRACKS AND SUSPENSION, TURRET AND HULL FOR MEDIUM TANK M4 AND MODIFICATIONS

RESTRICTED

Dissemination of restricted matter.—The information contained in restricted documents and the essential characteristics of restricted materiel may be given to any person known to be in the service of the United States and to persons of undoubted loyalty and discretion who are cooperating in Government work, but will not be communicated to the public or to the press except by authorized military public relations agencies. (See also paragraph 18b, AR 380-5, 28 September 1942.)

WAR DEPARTMENT

17 NOVEMBER 1943



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Washington 25, D. C., 17 November 1943

TM 9-1750K—Ordnance Maintenance, Tracks and Suspension, Turret and Hull for Medium Tanks M4 and Modifications, is published for the information and guidance of all concerned.

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BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

J. A. ULIO,
Major General,
The Adjutant General.

DISTRIBUTION: R 9 (4); Bn 9 (2); C 9 (8).

(For explanation of symbols, see FM 21-6.)

ORDNANCE MAINTENANCE

TRACKS AND SUSPENSION

TURRET AND HULL FOR MEDIUM TANKS M4 AND MODIFICATIONS

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TM 9-1750K**1-2****ORDNANCE MAINTENANCE—TRACKS AND SUSPENSION, TURRET
AND HULL, FOR MEDIUM TANK M4 AND MODIFICATIONS****Section I****INTRODUCTION**

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1. SCOPE.

a. The instructions contained in this manual are for the information and guidance of personnel charged with the maintenance and repair of Medium Tanks M4, M4A1, M4A2, M4A3, M4A4, and M4A6. Figure 1 illustrates Medium Tank M4. These instructions are supplementary to the Field and Technical Manuals prepared for the using arms. This manual does not contain information which is intended primarily for the using arms, since such information is available to ordnance personnel in the 100-series TM's and FM's.

b. This manual contains a description of, and procedure for, removal, disassembly, inspection, repair and assembly of the tracks and suspension, turret and hull, and turret electrical system for Medium Tanks M4 and modifications. Refer to pertinent operator's manuals and pertinent 1700-series maintenance manuals for information not contained in this TM. (See list of references in the back of this manual.)

2. MAINTENANCE ALLOCATION.

a. **Scope.** The scope of maintenance and repair by the crew and other units of the using arms is determined by the availability of suitable tools, availability of necessary parts, capabilities of the mechanics, time available and the tactical situation. No exact system of procedure can be prescribed.

b. **Allocation of Maintenance.** The maintenance duties for which, under normal circumstances, tools and parts have been provided for the using arm and ordnance maintenance personnel are indicated in pertinent using arm 100-series manuals. Certain replacements and repairs are the responsibility of ordnance personnel but may be performed by the using arm personnel when circumstances permit or require, within the discretion of the commander concerned. Echelons and words as used in this list of maintenance allocations are defined as follows:

INTRODUCTION

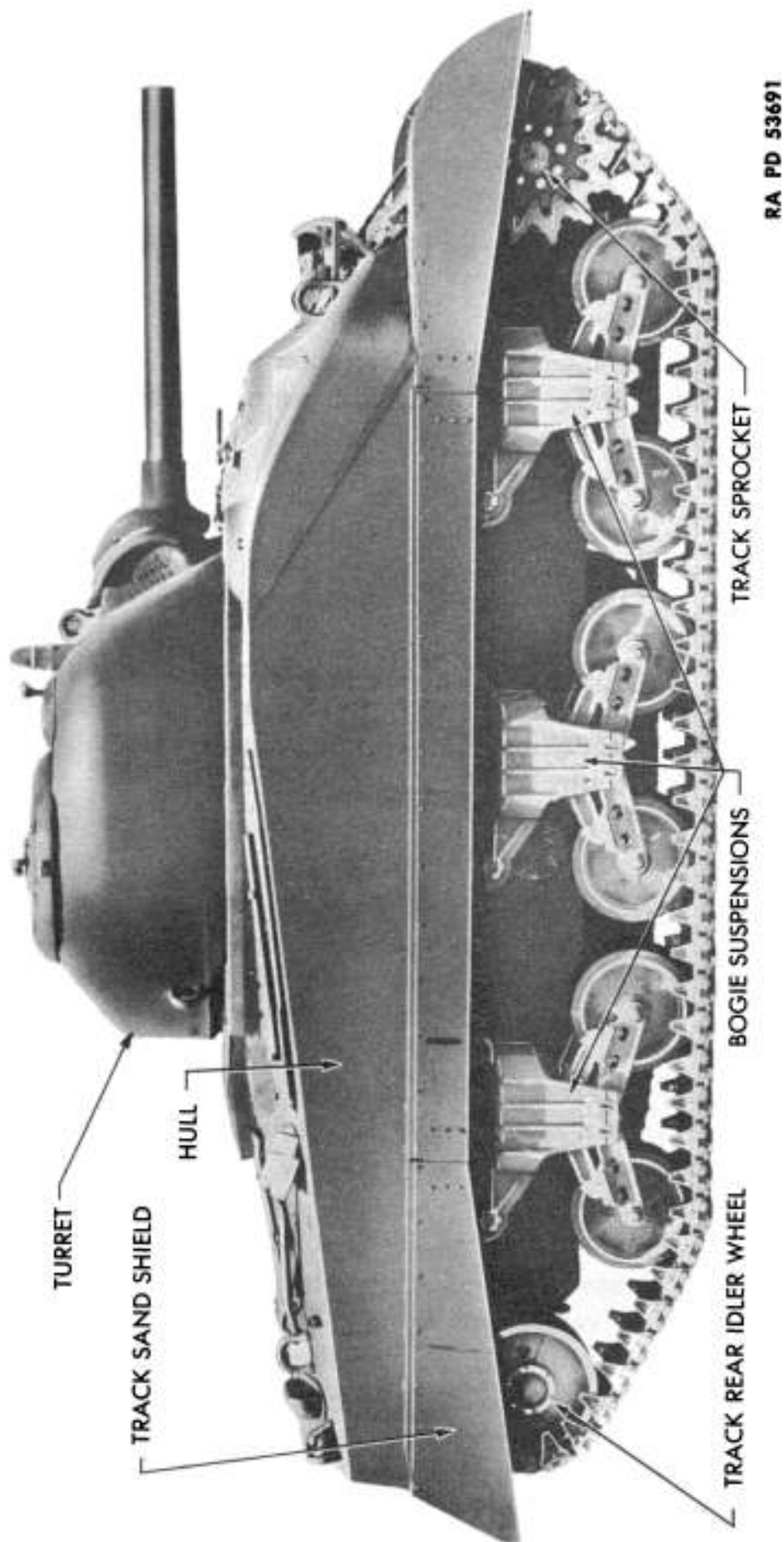


Figure 1—Medium Tank, M4

TM 9-1750K**2****ORDNANCE MAINTENANCE—TRACKS AND SUSPENSION, TURRET AND HULL, FOR MEDIUM TANK M4 AND MODIFICATIONS**

FIRST AND SECOND ECHELON: Operating organizations, driver, operator, or crew, companies and detachments, battalions, squadrons, regiments, and separate companies and detachments (first and second echelons, respectively).
 Table III
 AR 850-15

THIRD ECHELON: Technical light and medium maintenance units, including post and port shops.
 Table III
 AR 850-15

FOURTH ECHELON: Technical heavy maintenance and field depot units, including designated post and service command shops.
 Table III
 AR 850-15

FIFTH ECHELON: Technical base units.
 Table III
 AR 850-15

SERVICE: Preventive maintenance, checking and replenishing fuel, oil, grease, water and antifreeze, air, and battery liquid; checking and tightening nuts and bolts; cleaning; and making external adjustment of subassemblies or assemblies and controls.
 Par 24 a (2) and (3) in part
 AR 850-15

REPLACE: To remove an unserviceable part, assembly, or subassembly from a vehicle and replace it with a serviceable one.
 Par. 24 a (5)
 AR 850-15

REPAIR: To restore to a serviceable condition, such parts, assemblies or subassemblies as can be accomplished without completely disassembling the assembly or subassembly, and where heavy riveting, or precision machining, fitting, balancing, or alining is not required.
 Par. 24 a (4) in part
 AR 850-15

REBUILD: Consists of stripping and completely reconditioning and placing in serviceable condition any vehicle or unserviceable part, subassembly, or assembly of the vehicle, including welding, riveting, machining, fitting, alining, balancing, assembling, and testing.
 Par. 24 a (6)
 AR 850-15

RECLAMATION: Salvage of serviceable or economically repairable units and parts removed from vehicles, and their return to stock. This includes the process which recovers and/or reclaims unusable articles or component parts thereof and places them in a serviceable condition.
 AR 850-15
 Par. 24 a (7) and in part CIR. 75, dated 3/16/43

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- NOTES:** (1) Operations allocated will normally be performed in the echelon indicated by "X."
- (2) Operations allocated to the third echelon as indicated by "E" may be performed by these units in emergencies only.
- (3) Operations allocated to the fourth echelon by "E" are normal fifth echelon operations. They will not be performed by the fourth echelon, unless the unit is expressly authorized to do so by the chief of the service concerned.
- (4) Technical Bulletins of the 2830-series should not be consulted for detailed information relative to reclamation procedure.

	ECHELONS			
	2nd	3rd	4th	5th
ELECTRICAL GROUP				
Batteries—service (recharge) and/or replace	X			
Batteries—repair		X		
Batteries—rebuild			X	
Box, terminal—replace	X			
Box, terminal—repair		X		
Box, turret collector ring—replace	X			
Box, turret collector ring—repair		X		
Box, turret collector ring—rebuild			X	
Brackets, mounting and supports—replace	X			
Brackets, mounting and supports—repair		X		
Breakers, circuit—replace and/or repair	X			
Cables, battery—replace and/or repair	X			
Conduits—replace	X			
Conduits—repair		X		
Filters—replace	X			
Filters—repair		X		
Generator assembly, auxiliary—adjust and/or replace	X			
Generator assembly, auxiliary—repair		X		
Generator assembly, auxiliary—rebuild			E	X
Lamp assemblies—service and/or replace	X			
Lamp assemblies—repair		X		
Regulators, current and voltage—replace	X			
Regulators, current and voltage—adjust and/or repair		X		
Regulators, current and voltage—rebuild			X	

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ORDNANCE MAINTENANCE—TRACKS AND SUSPENSION, TURRET AND HULL, FOR MEDIUM TANK M4 AND MODIFICATIONS

	ECHELONS			
	2nd	3rd	4th	5th
ELECTRICAL GROUP (Cont'd)				
Relays—replace	X			
Siren assembly—replace	X			
Siren assembly—repair		X		
Siren assembly—rebuild			X	
Solenoids—replace	X			
Solenoids—repair		X		
Switch assemblies—replace	X			
Switch assemblies—repair		X		
Wiring—replace and/or repair	X			
HULL				
Clevis, towing—replace	X			
Doors and cover plates—replace	X			
Doors and cover plates—repair		X		
Guards, mud—replace	X			
Guards, mud—repair		X		
Housing, propeller shaft—replace	X			
Housing, propeller shaft—repair		X		
Hull—repair		X		
Hull—rebuild			E	X
Insulation and padding—replace	X			
Periscope—replace	X			
Periscope—repair		X		
Periscope—rebuild			X	
Seats—replace	X			
Seats—repair		X		
TRACK SUSPENSION GROUP				
Bogie components—replace	X			
Bogie components—repair		X		
Bogie components—rebuild			E	X
Idler components—replace	X			
Idler components—repair		X		
Idler components—rebuild			E	X
Roller assemblies, track supporting—replace	X			
Roller assemblies, track supporting—repair		X		
Roller assemblies, track supporting—rebuild			E	X
Track assembly—replace and/or repair	X			
Track assembly—rebuild			E	X