

TECHNICAL MANUAL

ORGANIZATIONAL

MAINTENANCE MANUAL

VOLUME I

PREVENTIVE MAINTENANCE

TURRET

FOR

COMBAT ENGINEER VEHICLE,

M728

(2350-00-795-1797)

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This copy is a reprint which includes current pages from Changes 1 through 3.

Technical Manual
NO. 9-2350-222-20-2-1

HEADQUARTERS,
DEPARTMENT OF THE ARMY
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Technical Manual
Organizational Preventive Maintenance

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FOR
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M728
(2350-00-795-1797)

REPORTING 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 procedures, please let us know.

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ATTN: AMSMC-MAS
Rock Island, IL 61299-6000

A reply will be furnished to you.

*This manual in conjunction with TM 9-2350-222-20-2-2-1, TM 9-2350-222-20-2-2-2, TM 9-2350-222-20-2-3-1, TM 9-2350-222-20-2-3-2, TM 9-2350-222-20-2-3-3 supersedes the turret portion of TM 9-2350-222-20, September 1965, including all changes.

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CHAPTER 1

INTRODUCTION AND SERVICE UPON RECEIPT OF EQUIPMENT

SECTION 1. INTRODUCTION

1-1. SCOPE.

This manual contains preventive maintenance information, checkout procedures, alignments, and adjustments pertaining to organizational maintenance of the turret for the 165 MM Gun Full Tracked Combat Engineer Vehicle M728.

1-2. SERVICE UPON RECEIPT OF EQUIPMENT (Chapter 1 Section 2).

This section contains procedures to be done when receiving a vehicle that has been prepared for shipment. Whenever practicable, the crew will assist in doing the procedures outlined in this section.

1-3. PREVENTIVE MAINTENANCE (Chapter 2).

This chapter describes the periodic preventive maintenance and other preventive maintenance that you should perform at various times.

1-4. CHECKOUT PROCEDURES (Chapter 3 Section 1).

Each paragraph contains a checkout procedure for an equipment area or system. The paragraphs can be performed individually or as a whole, and can be referenced from other parts of this manual as well as other TMs.

1-5. ALIGNMENT AND ADJUSTMENT PROCEDURES (Chapter 3 Section 2).

Each paragraph contains an alignment or adjustment for an equipment area or system. They are usually performed when alignment or adjustment is required after installation of a new part.

1-6. LUBRICATION (Chapter 4).

Lubrication information used during maintenance is given.

1-7. LIST OF SUPPLIES AND MATERIALS (Appendix A).

This appendix supplies a table of expendable supplies and materials you will need to operate and maintain the vehicle. An explanation of how to use this table is also given.

1-8. MAINTENANCE ALLOCATION CHART (Appendix B).

The maintenance allocation chart provides information designating overall responsibility for performance of maintenance functions on all end items or components in the turret. This appendix also gives an explanation on how to use the maintenance allocation than.

1-9. EQUIPMENT NOMENCLATURE LIST (APPENDIX C).

In parts of this manual, component/assembly nomenclature may differ. Refer to Appendix C for the component/assembly name used in the Maintenance Allocation Chart and the associated common name used in the maintenance procedures.

SECTION 2 SERVICE UPON RECEIPT OF EQUIPMENT**1-10. SCOPE**

This chapter contains procedures to be done when receiving an engineer vehicle that has been prepared for shipment. Whenever practicable, the crew will assist in doing the procedure outlined in this chapter.

1-11. SERVICE UPON RECEIPT OF EQUIPMENT

SUPPLIES: Waste wiping cloths
Cleaning solvent (PD 126)
Pencil and paper

PERSONNEL: Two

REFERENCES: TM 9-2350-222-10 for procedures to:
Inspect, install, and operate turret fire control/armament equipment
TM 9-2350-222-20-2-3 for equipment installation procedure
LO 9-2360-222-12 for lubrication procedures

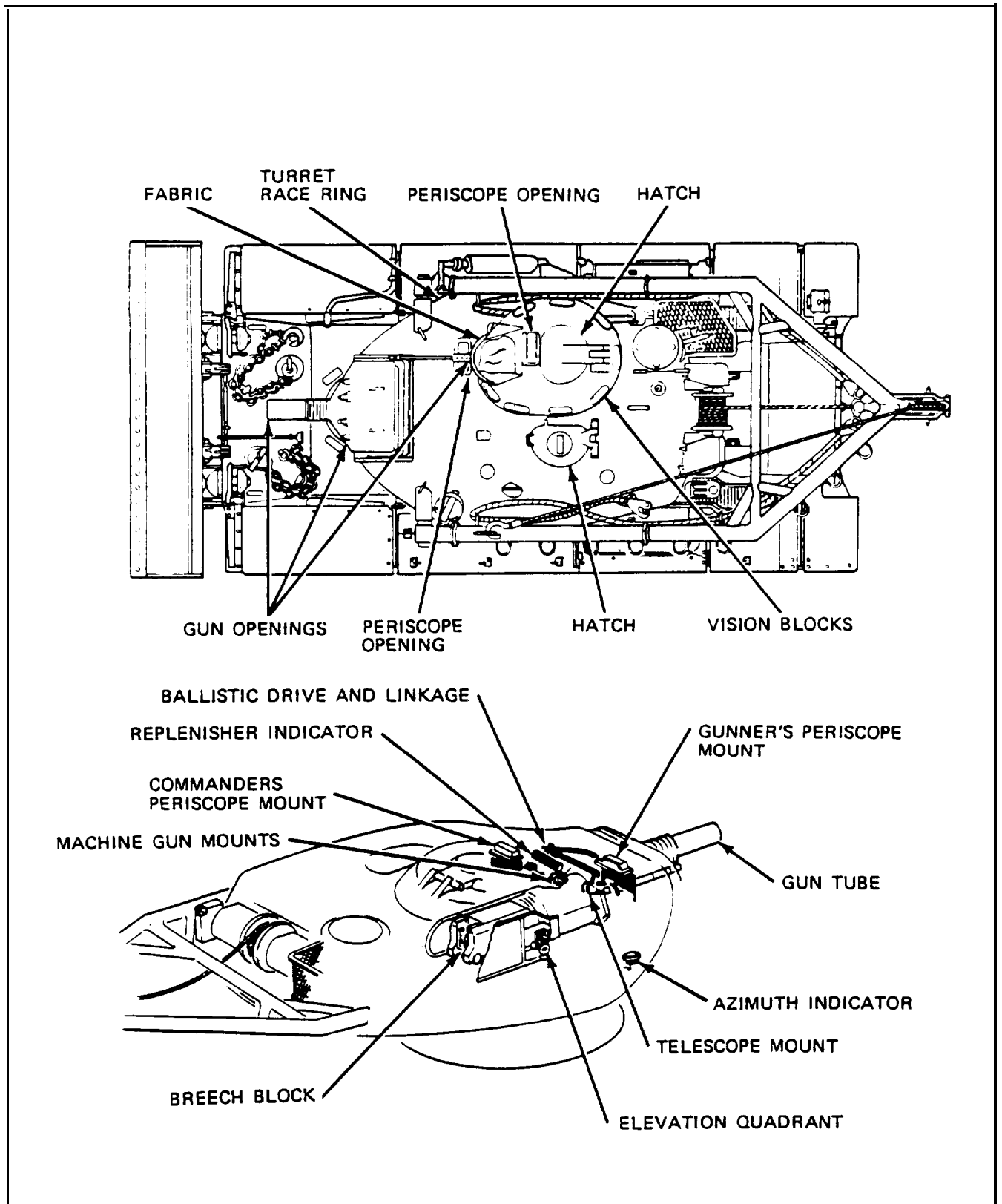
FRAME 1		
STEP	PROCEDURE	REFERENCE
1.	Open each container. Check items in container against packing list and write down any missing items.	TM 9-2350-222-10 for basic issue item list
2.	Check packing list against basic issue items list to make sure all items in list have been received.	
3.	Open inner packages. Remove preservative material from equipment.	
4.	Visually check equipment for damage.	
5.	Prepare armament equipment for installation: a. Clean parts with cleaning compound PD 126. b. Lubricate parts.	TM 9-2350-222-10 LO 9-2350-222-12
6.	Remove preservative material (wrapping, barrier material, tape) from hatches, periscope openings, cupola vision blocks, and gun openings. GO TO FRAME 2	

1-11. SERVICE UPON RECEIPT OF EQUIPMENT (CONT)

FRAME 2

STEP	PROCEDURE	REFERENCE
1.	Remove fabric from telescope and machine gun openings.	
2.	Remove excess grease from turret race ring.	
3.	Remove preservative, tape, and wrappings from equipment inside turret as shown.	
4.	Stow basic issue items in their proper place on vehicle.	
5.	Install following fire control items: a. Infinity sight 8635466 b. Gunner's periscope M32C/M32CE1 c. Telescope M105F d. Commander's periscope M36/M36E1	TM 20-2-3 (para 55-3) TM 9-2350-222-10 TM 20-2-3 (para 57-3) TM 9-2350-222-10
6.	Install and check operation of communication equipment.	TM 9-2350-222-10
7.	Check operation of turret controls.	TM 9-2350-222-10
8.	Do semiannual preventive maintenance procedures (para 2-2 through 2-6). END OF TASK	

1-11. SERVICE UPON RECEIPT OF EQUIPMENT (CONT)



CHAPTER 2

PREVENTIVE MAINTENANCE

2-1. SCOPE

Preventive maintenance procedures for the M728 combat engineer vehicle are arranged by time intervals and hard time replacement. The following list establishes the intervals and gives the appropriate paragraph reference. Maintenance of the armament, turret traversing and elevation, and sighting and fire control equipment under adverse conditions such as bad weather, extreme temperature, desert environment, dust, mud etc, are contained in the TM 9-2350-222-10.

Interval	Procedure (para)
Time	
Semiannually	2-2 thru 2-7
Annually	2-8
Hard Time Replacement	
Condition Monitored	2-9
War Time	2-10

2-2. SEMIANNUAL (180 DAY) PREVENTIVE MAINTENANCE

a. Turret

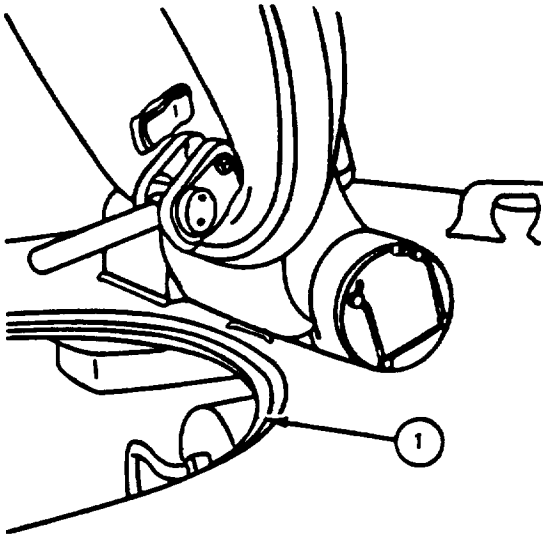
SUPPLIES: Lubricating oil

PERSONNEL: Two

REFERENCES: TM 9-2350-222-10 for procedures to:
 Operate gun elevating and turret traversing mechanism
 Balance equilibrator
 TM 9-2350-222-20-2-3 for procedures to:
 Service main accumulator
 Service equilibrator accumulator
 LO 9-2350-222-12 for lubrication instructions

2 - 2 . SEMIANNUAL (180 DAY) PREVENTIVE MAINTENANCE (CONT)

a. Turret (Cont)

FRAME 1			
Step	Item to be Inspected	Procedure	Reference
1.	Loader's Escape Hatch	Lubricate lock hinges (1), and leaf spring with grease.	LO 9-2350-222-12
2.	Ammunition Rack Retainers	Lubricate retainers with oil.	LO 9-2350-222-12
3.	7.62 mm Ammunition Box Latches	Lubricate latches with oil.	LO 9-2350-222-12
4.	Gunner's Manual Elevation Handle	Lubricate handle.	LO 9-2350-222-12
5.	Gunner's Manual Traversing Handle	Lubricate the handle and universal gear on drive linkage.	LO 9-2350-222-12
6.	Gunner's Periscope Mount	Oil the gunner's periscope mount and ballistic shield handle.	LO 9-2350-222-12
7.	Gunner's Seat	Lubricate moving parts.	LO 9-2350-222-12
			

2-2. SEMIANNUAL (180 DAY) PREVENTIVE MAINTENANCE (CONT)**a. Turret (Cont)****FRAME 2**

Step	Item to be Inspected	Procedure	Reference
1.	Main Accumulator	Check main accumulator for proper nitrogen pressure. Recharge pressure using accumulator charging device or reduce pressure as required. Add oil if necessary.	TM 20-2-3 (para 1-18, 1-19) LO 9-2350-222-12
2.	Manual Elevation Accumulator	Check manual elevation accumulator for proper nitrogen pressure. Recharge pressure using accumulator charging device or reduce pressure as required. Add oil if necessary.	TM 20-2-3 (para 1-20) LO 9-2350-222-12
	GO TO FRAME 3		