

TECHNICAL MANUAL

DIRECT SUPPORT
AND GENERAL SUPPORT
MAINTENANCE MANUAL

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PART 1

MAINTENANCE

TURRET
FOR
COMBAT ENGINEER VEHICLE,
M728
(2350-00-795-1797)

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

Technical Manual
No. 9-2350-222-34-2-1

HEADQUARTERS.
DEPARTMENT OF THE ARMY
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Technical Manual
Direct Support and General Support Maintenance

TURRET
FOR
COMBAT, ENGINEER VEHICLE,
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.

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 directly to:

Commander
U.S. Army Armament Materiel Readiness Command
ATTN: DRSAR-MAS
Rock Island, IL 61299

A reply will be furnished to you.

*This manual in conjunction with TM 9-2350-222-34-2-2, TM 9-2350-222-34-2-3, TM 9-2350-222-34-2-4, and TM 9-2350-222-34-2-5 supersedes so much of the DS/GS portion of TM 9-2300-378-35/2, January 1968, as pertains to the M728 CEV, so much of the DS/GS Portion of TM 9-2350-222-35/2, October 1965, as pertains to the M728 CEV, and so much of the DS/GS portion of TM 9-2300-378-35/1, January 1968, as pertains to the Slipping Assembly, Turret and Miscellaneous Components for the M728 CEV, including all changes.

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INTRODUCTION

SCOPE

This manual is one of a series of manuals for your use in performing direct support, general support maintenance of the turret and turret components of the M728 combat engineer vehicle.

Descriptions of components and maintenance procedures for these components as allocated by the Maintenance Allocation Chart (MAC) are included.

MANUAL ORGANIZATION

This manual is arranged in 5 parts with each part divided into chapters as follows:

- Chapter 1 - contains system and component functional descriptions
- Chapter 2 and subsequent chapters - contains maintenance procedures for equipment items in the turret. Each equipment item is covered in a separate chapter.

HOW TO USE THIS MANUAL

- 1 Go to Table of Contents in front of manual or Index in back of manual to find equipment item that you are looking for.
- 2 Go to chapter or section listed in Table of Contents or Index.
- 3 Use maintenance procedures index to find maintenance task paragraph reference.
- 4 Go to paragraph references in maintenance procedures index.
- 5 Each maintenance procedure has a listing of resources (tools, personnel, etc) required to do the task. The resource listing items are explained as follows:

- Tools: Hand tools or special tools required to do task
- Supplies: Expendable material or parts required to do task
- Personnel: Minimum number of soldiers required to do task
- References: Lists other technical manuals where related procedures can be found
- Equipment Location Information: Refers to foldout illustrations at end of each part that show where equipment item is located in turret
- Equipment Condition: Condition of tank or equipment item necessary to start task
- Preliminary Procedures: Lists procedures that must be done before starting task
- General Instructions: Provides instructions that you should be made aware of when performing entire procedure

NOTE

If any resource is not applicable to the procedure, the resource will not be listed.

HOW TO USE THIS MANUAL (CONT)

6 Obtain resources

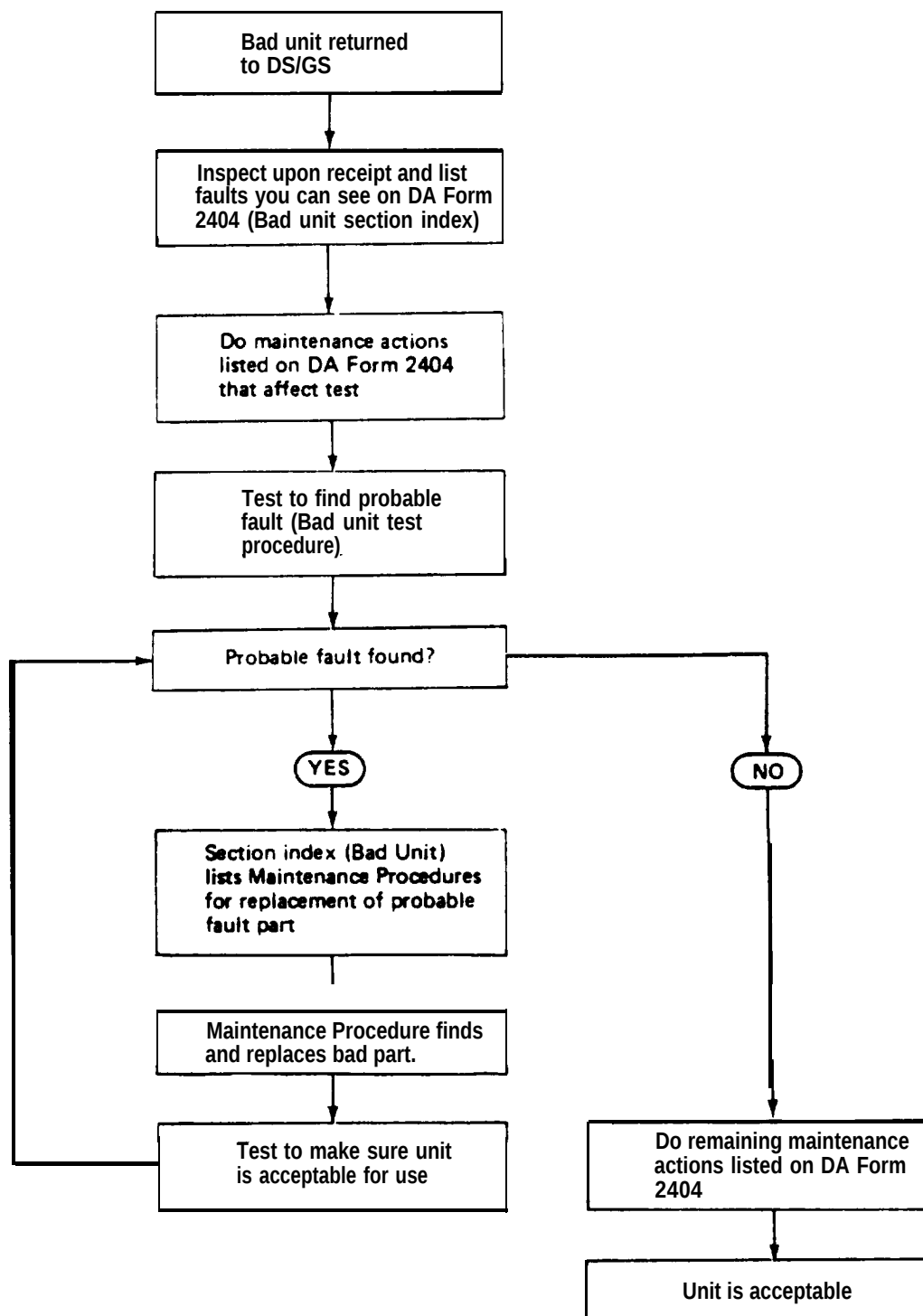
7 Continue with procedure:

- Procedures are arranged in frames beginning with Frame 1.
- Each frame provides instructions in a series of steps.
- Parts named in each step are followed by a number in parentheses ().
- Illustrations support each frame and are either on same page or on facing page.
- Number callouts on each illustration match number in procedure step.
- Following last step on each frame are instructions to either go to next frame or end task.
- Some tasks will require other procedures be done before task is completed. This will be denoted as: Follow-on Maintenance Action Required.

NOTE

In parts of this manual component/assembly nomenclature may differ. Refer to TM 9-2350-222-20-2-1, Appendix C for component/assembly name used on Maintenance Allocation Chart and associated common name used in maintenance procedures.

HOW TO REPAIR BAD UNIT



CHAPTER 1

GENERAL MAINTENANCE INFORMATION

Section 1. SCOPE

1-1. This technical manual contains instructions for direct support and general support of turret and turret components of the full-tracked combat engineer vehicle M728. The vehicle is designed to provide maximum ballistic protection for the crew and is heavily armed, being a basic M60A1 tank modified to provide a mobile and maneuverable weapon for combat support of ground troops and vehicles. It is equipped with a hydraulically operated bulldozer mounted to the front of the hull. A winch and boom are mounted to the turret for lifting, carrying, and winching. Erecting and stowing the boom are accomplished hydraulically. The M728 vehicle is used for breaching, obstacle removal, transportation of demolition teams, and pioneering operations. The crew consists of a commander, gunner, loader and driver.

1-2. The turret, which fits into the hull opening, is a one-piece homogeneous armor steel casting. A platform (turret basket) attached to the turret permits the commander, gunner, and loader to traverse with the turret. Openings provided in the turret accommodate the 165-mm combination gun mount commander's cupola, ventilating blower, antennas, boom and winch hydraulic lines, sighting and fire control components and loader's hatch. The turret contains electrical and hydraulic controls, communications equipment, sighting, and firing controls. Externally the turret has racks for stowing miscellaneous items such as a 5-gallon water can, cargo and combat packs, towing cables, water fording equipment and the Xenon searchlight. Internal racks are provided for stowage of items such as periscopes, binoculars, flashlights, canteens, rations, a portable carbon dioxide (CO₂) fire extinguisher, ammunition and various hand tools. A winch-boom assembly is mounted to the turret for lifting, carrying, and winching operations.

1-3. TABULATED DATA**a. Vehicle**

Armor (hull and turret)	cast homogeneous armor steel
Capacities (fuel and oil):	
Fuel tanks (total)	375 gal
Engine crankcase (fill, approximate)	18 gal
Engine crankcase, (refill. approximate)	13 gal
Transmission (fill, approximate)	23 gal
Transmission (refill, approximate)	17 gal
Hydraulic reservoir (boom, winch, and bulldozer) (fill, approximate)	50 gal
Hydraulic reservoir (boom, winch, and bulldozer) (refill, approximate)	48 gal
Crew	4 (commander, driver, gunner and loader)
Controls:	
Brakes:	
Operation	hydraulically-linked foot pedal
Type	multiple disc wet plate
Steering:	
Type	mechanical, steering control
Turning radius	pivot to infinity
Transmission shift lever positions:	
"N" (Neutral)	pivot steer
"P" (Park)	lock vehicle brakes to park, start position
"L" (Low)	ascending and descending steep grades and soft or very rough terrain - forward at 10 mph maximum descending steep grades for maximum engine braking power - rearward at 5 mph maximum
"H" (High)	normal driving conditions - forward at 30 mph maximum
"R" (Reverse)	normal driving conditions and ascending steep grades for maximum engine power - rearward at 5 mph maximum descending steep grades for maximum braking power - forward at 5 mph maximum
Dimensions:	
Length (with boom and bulldozer, in travel position)	350.80 in.
Length (with boom in erected position)	366.30 in.