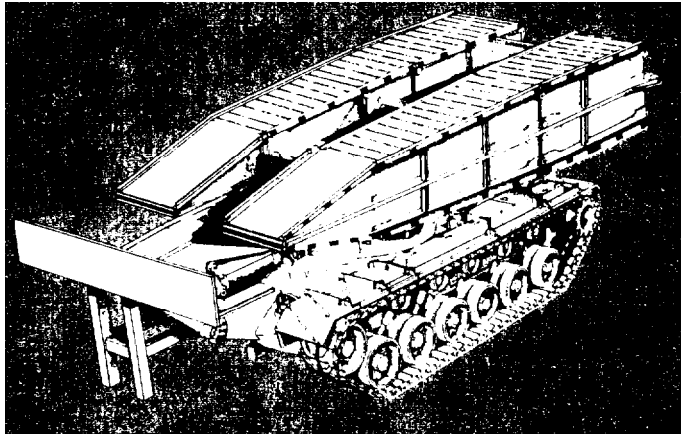


OPERATOR'S MANUAL



LAUNCHER AND M48A5 TANK CHASSIS, TRANSPORTING: FOR BRIDGE, ARMORED-VEHICLE-LAUNCHED SCISSORING TYPE, CLASS 60 5420-01-076-6096

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HEADQUARTERS, DEPARTMENT OF THE ARMY

20 FEBRUARY 1981

This copy is a reprint which includes current pages from Changes 1 through 8.

TA106155

TECHNICAL MANUAL

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 20 February 1981

OPERATOR'S MANUAL
LAUNCHER AND M48A5 TANK CHASSIS,
TRANSPORTING:
FOR BRIDGE, ARMORED-VEHICLE-LAUNCHED,
SCISSORING TYPE, CLASS 60
NSN 5420-01-076-6096

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 Tank-automotive and Armaments Command, Attn: AMSTA-IM-MCP, Warren, MI 48397-5000. A reply will be furnished to you.

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*This manual supersedes TM 5-5420-226-10, 15 December 1975.

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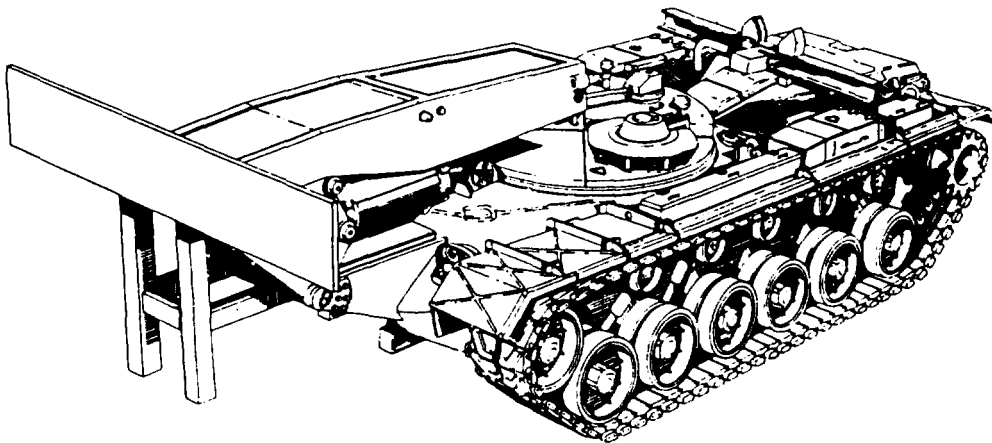
CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

SCOPE

This manual is for your use in operating and maintaining the M48A5 AVLB. This heavily armored vehicle is used for launching and retrieving a scissoring type, class 60 bridge. The two-man crew consists of an operator and a commander.



MAINTENANCE FORMS AND RECORDS

Department of the Army forms and procedures used for equipment maintenance are those prescribed by DA PAM 738-750, The Army Maintenance Management System (TAMMS).

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR'S)

EIR's must be submitted by anyone who knows of an unsatisfactory condition with equipment design or use. You do not have to show a new design or list a better way to do a procedure, just tell why the design is unfavorable or why a procedure is hard. EIR's may be submitted on SF 368, Quality Deficiency Report. Mail directly to Commander, U.S. Army Tank-automotive and Armaments Command, AMSTA-TR-T, Warren, MI 48397-5000. A reply will be sent directly to you.

Section II. EQUIPMENT DESCRIPTION

EQUIPMENT PURPOSE

- Launch, retrieve, and transport scissoring type bridge.

EQUIPMENT CAPABILITIES

- Can be operated in nuclear, biological, or chemical environments.
- Can be operated on rough ground.
- Can be forded in water up to 4 feet deep (1.2 meters) without special equipment.
- Can launch or retrieve bridge on uphill or downhill slope of 15% or side slope of 8%.

EQUIPMENT FEATURES

- Quick launch (2-5 minutes).
- Only two persons needed for launch/retrieval of bridge.
- Heavy armor protection for personnel.

WARNING

Before launching mine clearing line charge (MICLIC) (if equipped), wear hearing protection, close all crew hatches, and turn off vehicle exhaust fans. Failure to do so may result in injury or death to personnel from rocket launching fumes and hazardous noise.

- If vehicle is equipped with mine clearing line charge (MICLIC), refer to TM 9-1375 -215-14&P for operating instructions.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

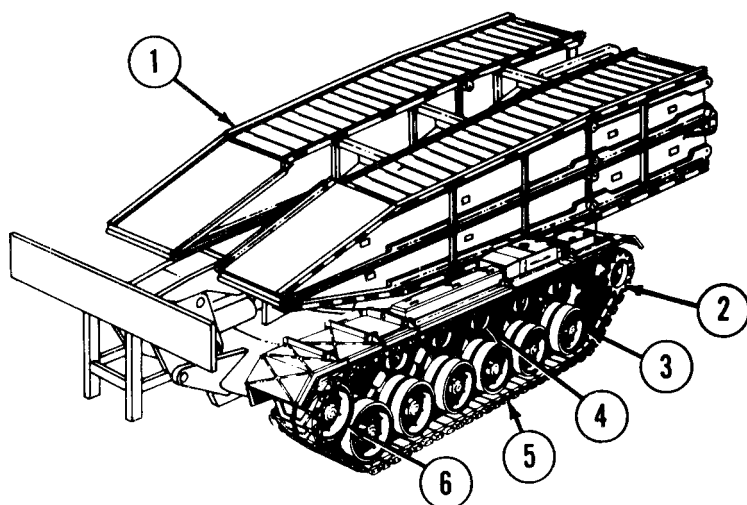
The M48A5 AVLB is divided into two sections - hull and launching mechanism. The hull contains the:

- Crew compartment with all controls for operating the launching mechanism.
- Engine compartment with engine and transmission that supplies power for operating hull and launching mechanism.
- Operator and commander cupolas to enter crew compartment.
- Cupola vision blocks and periscopes for visual operation when openings (hatches) are closed.
- Bridge seat on which bridge rests during transporting.

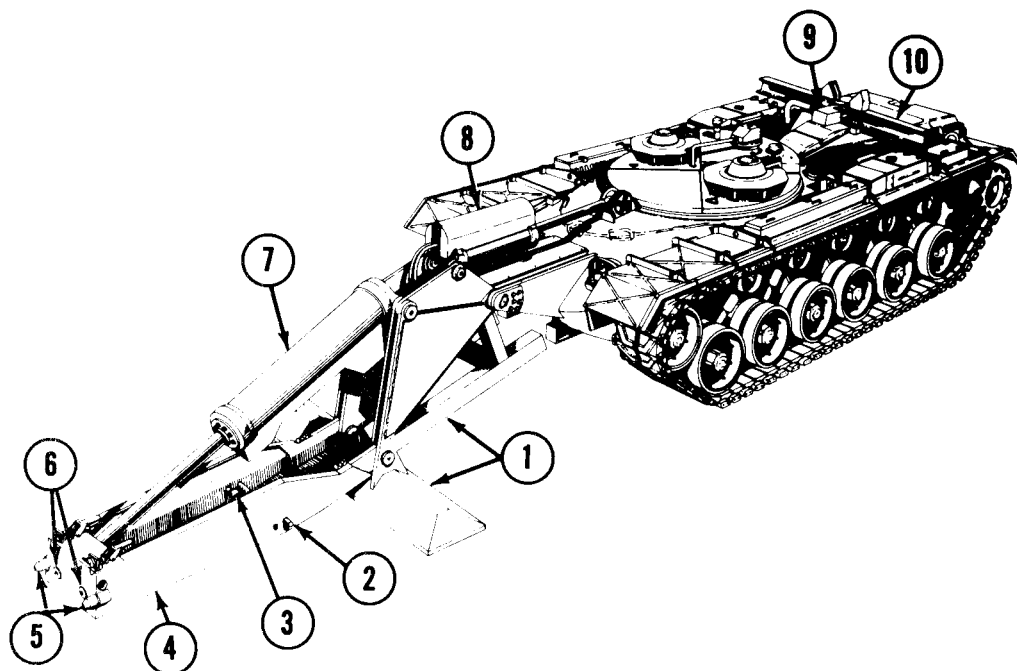
The launcher mechanism contains the:

- Hydraulic system - pump, fluid, cylinders, hoses, and other parts for moving the bridge, outrigger, and tongue during launch and retrieval.
- Outrigger - steadies vehicle during bridge launch and retrieval.
- Tongue - connects vehicle to bridge.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued



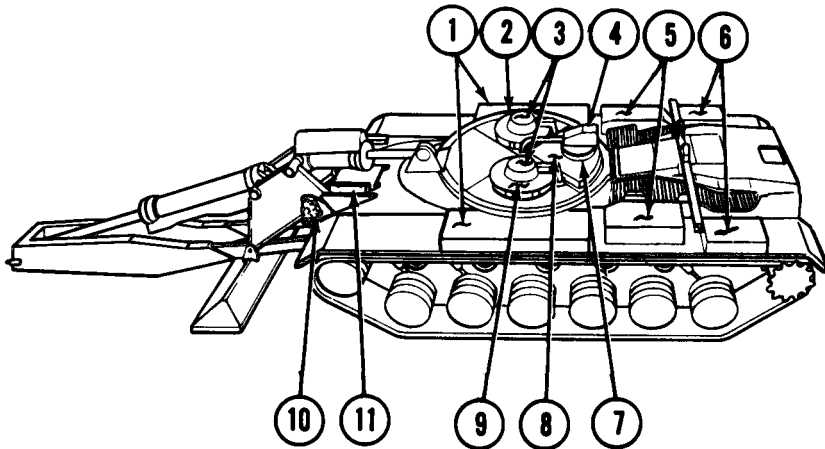
- | | |
|-------------------------|-----------------------------------|
| 1. Bridge | 4. Support roller (either 3 or 5) |
| 2. Final drive sprocket | 5. Track |
| 3. Roadwheel | 6. Compensating idler wheel |



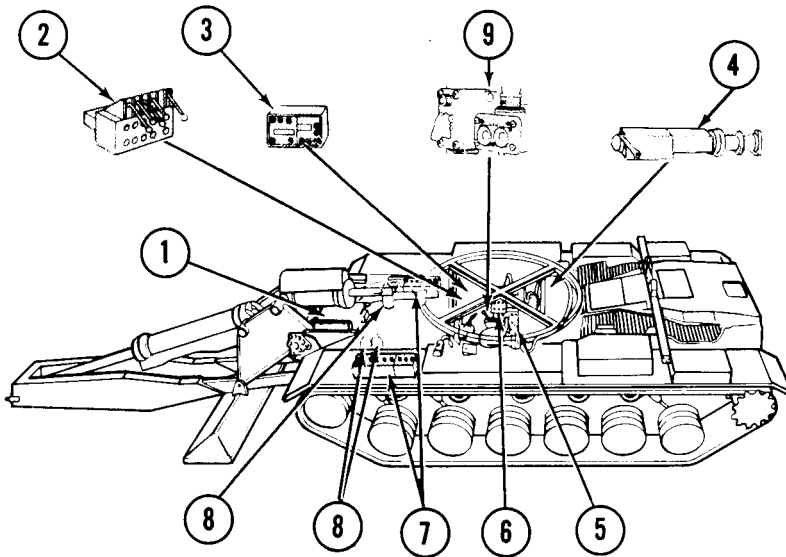
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|-----------------------|-----------------------|
| 1. Boom and outrigger | 6. Ejection cylinders |
| 2. Guide pin | 7. Tongue cylinder |
| 3. Locking cylinder | 8. Overhead cylinder |
| 4. Tongue | 9. Holddown cylinder |
| 5. Pintles | 10. Bridge seat |

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LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued

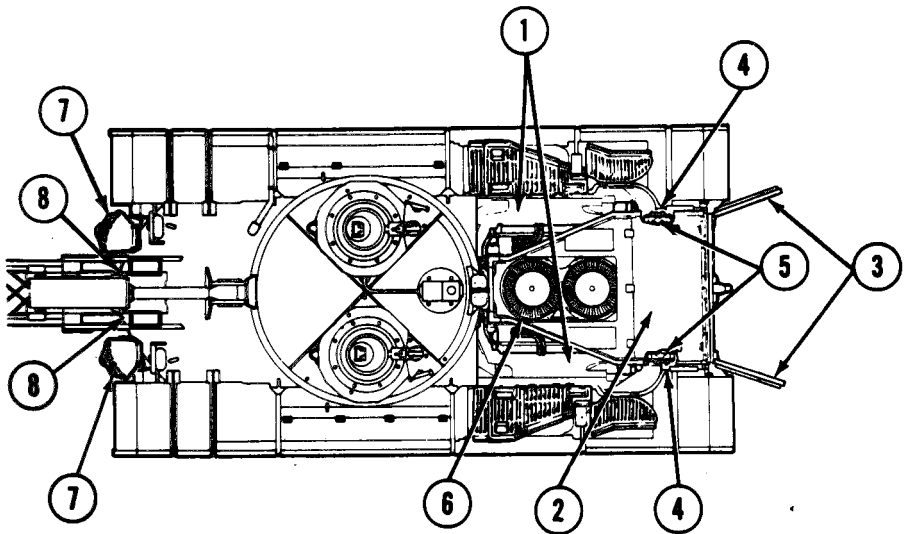


- | | |
|-------------------------------|---------------------------------|
| 1. Front fender stowage boxes | 7. Ventilating blower cover |
| 2. Commander's cupola | 8. Hydraulic oil reservoir |
| 3. Hatches | 9. Operator's cupola |
| 4. Antenna mount | 10. Smoke grenade discharger ■ |
| 5. Engine air cleaners | 11. Smoke grenade stowage boxes |
| 6. Rear fender stowage boxes | |



1. Personnel heater
2. Valve bank control
3. Radio
4. Power take off (PTO), pump-clutch assembly
5. Operator's master control panel
6. Indicator panel
7. Batteries (6)
8. Fire extinguishers (3)
9. Grenade launcher controls

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued



- 1. Fuel tanks
- 2. Transmission
- 3. Grille doors
- 4. Final drives

- 5. Universal joints
- 6. Engine
- 7. Smoke grenade dischargers
- 8. Smoke grenade stowage boxes