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TM 9-738

WAR DEPARTMENT TECHNICAL MANUAL

TANK RECOVERY VEHICLES

**M32, M32B1, M32B2,
M32B3, AND M32B4**

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Washington 25, D. C., 9 December 1943

TM 9-738, Tank Recovery Vehicles M32, M32B1, M32B2, M32B3, and M32B4, 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.

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

TANK RECOVERY VEHICLES M32, M32B1, M32B2, M32B3, AND M32B4

CONTENTS

PART ONE—VEHICLE OPERATING INSTRUCTIONS

SECTION		Paragraphs	Pages
I	Introduction	1	4-5
II	Description and tabulated data . . .	2-5	6-16
III	Controls	6	17-21
IV	Operation	7-11	22-40
V	First echelon preventive maintenance service	12-16	41-47
VI	Lubrication	17-18	48-51
VII	Tools and equipment stowage on vehicle	19-21	52-64

PART TWO—VEHICLE MAINTENANCE INSTRUCTIONS

VIII	Maintenance allocation	22-23	65-68
IX	Second echelon preventive maintenance	24	69-73
X	Organization tools and equipment	25-26	74-75
XI	Trouble shooting	27-29	76-78
XII	Power take-off and winch transmission	30-34	79-90
XIII	Winch and winch controls	35-39	91-102
XIV	Boom assembly	40-46	103-111
XV	Turret	47-49	112-119
XVI	Deck and hull interior	50-55	120-132

PART THREE—ARMAMENT

XVII	Introduction	56	133-136
XVIII	Operating instructions	57-64	137-143

PART FOUR—SHIPMENT AND TEMPORARY STORAGE

XIX	Shipment and temporary storage	65-67	144-147
REFERENCES		148-150
INDEX		151

RESTRICTED**TM 9-738****1****TANK RECOVERY VEHICLES M32, M32B1,
M32B2, M32B3, AND M32B4****PART ONE****VEHICLE OPERATING INSTRUCTIONS**

Section I**INTRODUCTION****Paragraph**Scope **1****1. SCOPE.**

a. This technical manual* is published for the information and guidance of using arm personnel charged with the operation and maintenance of Tank Recovery Vehicles M32, M32B1, M32B2, M32B3, and M32B4.

b. The Tank Recovery Vehicle M32 is manufactured from the Medium Tank M4 chassis, the M32B1 vehicle is manufactured from the M4A1 chassis, the M32B2 from the M4A2 chassis, the M32B3 from the M4A3, and the M32B4 from the M4A4. This manual contains information concerning the equipment mounted on these chassis. It contains descriptions of the major recovery units and their functions, as well as instructions for operation, inspection, minor repairs, and unit replacement. Part One, sections I through VII, contains information chiefly for the guidance of operating personnel; Part Two, sections VIII through XVI, contains information intended chiefly for the guidance of using arm personnel doing maintenance work; Part Three, section XVII through section XVIII, contains information concerning the armament provided on the vehicles, and Part Four, section XIX, contains information on shipment and temporary storage.

c. For information on the medium tank chassis from which any particular tank recovery vehicle is built, refer to the technical manual pertaining to the chassis. The manuals covering the various medium tank chassis are: M4 and M4A1 chassis, TM 9-731A; M4A2 chassis, TM 9-731B; M4A3 chassis, TM 9-759, and M4A4 chassis, TM 9-754.

d. Do not attempt repairs, modifications, or adjustments beyond the scope or facilities of the unit. In such cases notify the responsible ordnance service so that trained personnel and suitable equipment may be provided, or proper instructions issued.

*To provide operating instructions with the materiel, this technical manual has been published in advance of complete technical review. Any errors or omissions will be corrected by changes or, if extensive, by an early revision.

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INTRODUCTION

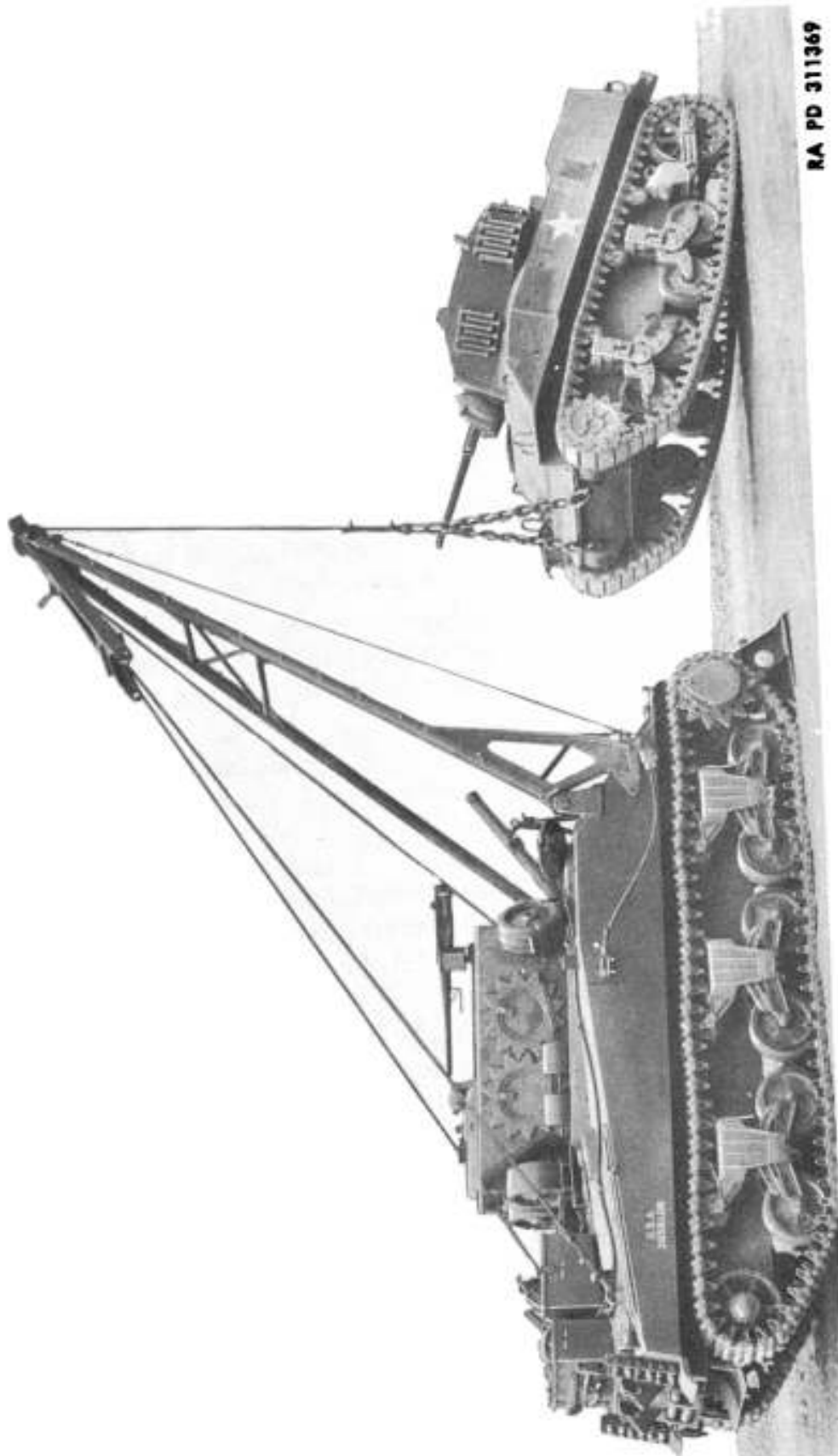


Figure 1—Lifting Disabled Vehicle

TM 9-738**2****TANK RECOVERY VEHICLES M32, M32B1,
M32B2, M32B3, AND M32B4****Section II****DESCRIPTION AND TABULATED DATA**

	Paragraph
Description	2
Differences among models	3
Tabulated data	4
Glossary of unusual terms	5

2. DESCRIPTION (figs. 2-6).

a. Purpose. The tank recovery vehicle is a full track-laying, armored tank designed to recover mechanized equipment which has been bogged down, turned over, or which has become so disabled that it cannot be towed readily. It is used to pick up the front or rear of a disabled vehicle and tow it from the field of operation, to tow another tank or similar vehicle, as a crane at a repair base, or as a carrying vehicle for spare tank parts or maintenance personnel.

b. Chassis. Regardless of the type of medium tank chassis from which the tank recovery vehicle is built, it has the same controls, performance characteristics, and armored plate hull as the tank chassis from which it was built.

c. Turret. In converting medium tank chassis into tank recovery vehicles, the tank turret, turret armament basket and roller race are omitted, and a fixed turret installed. The turret has approximately the same contour as the standard tank turret, and is equipped with a machine gun mounting ring. Special armament is provided for the vehicle (sec. XVII). The standard medium escape hatch, fitted with a periscope, is also mounted to the top of the turret at the rear of the turret machine gun mounting ring.

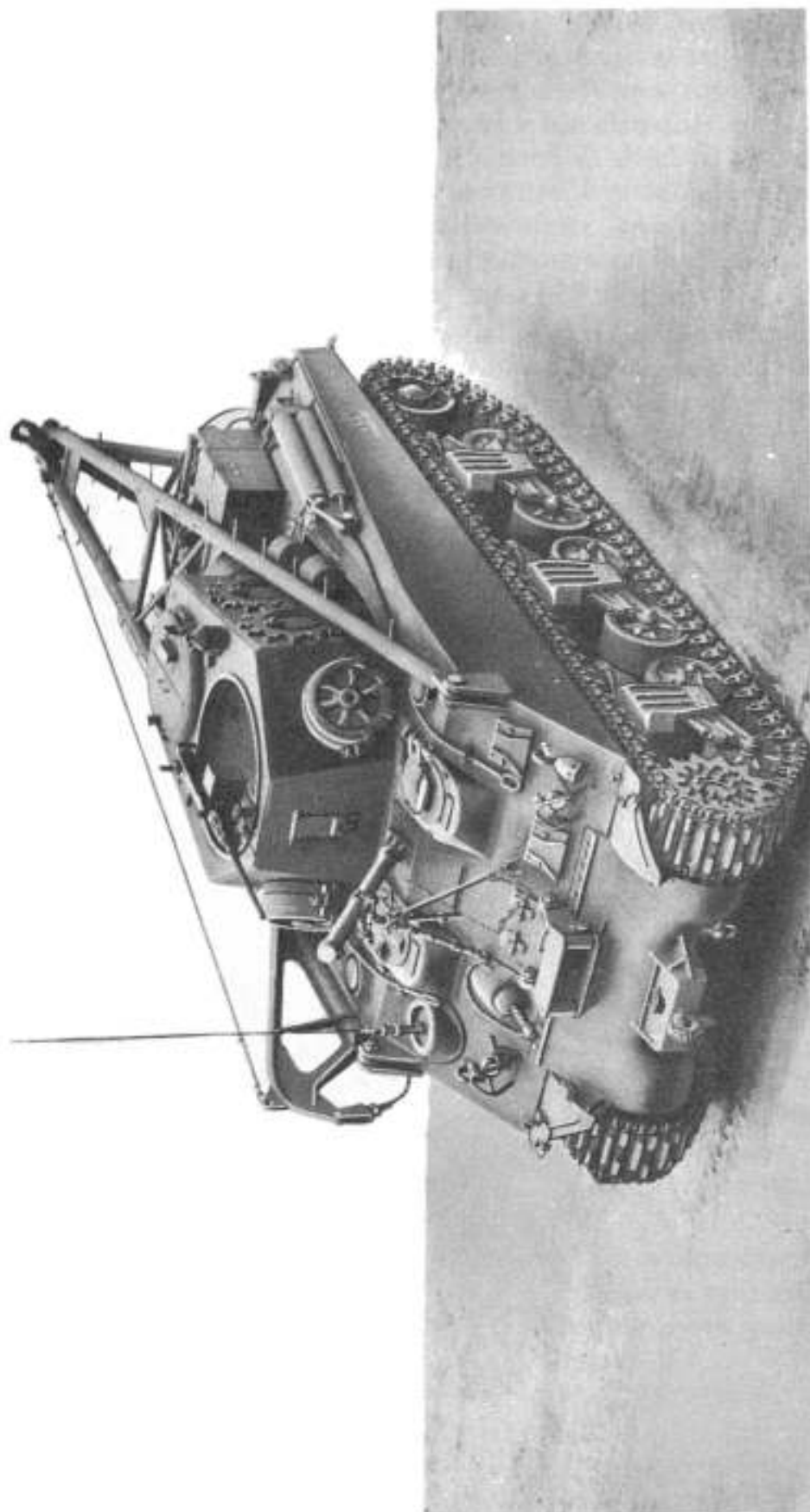
d. Winch and Boom. The vehicle is equipped with a 60,000-pound capacity winch, and a movable crane-type boom and winch cable. A power take-off and winch transmission provide power for operating the winch. The boom is hinged at the front of the hull and supported over the deck by an A-frame seated in sockets welded to the rear of the hull. The boom is used in either the traveling (rear) position, or in the forward position.

e. Stowage and Equipment. Spare tank parts, tools, and equipment are stowed on the deck of the hull (sec. VII). Stowage boxes and drawers are provided inside the hull on both sides. These are for tools and spare parts. Due to the space required for installing the winch mounting angles on the floor of the hull, the battery box for the recovery unit is at the right rear on the hull floor. The left-hand box at the end of the winch accommodates rations; the box at the right is used to stow caliber .30 ammunition. Brackets on the inside of the turret hold

TM 9-738

2

DESCRIPTION AND TABULATED DATA

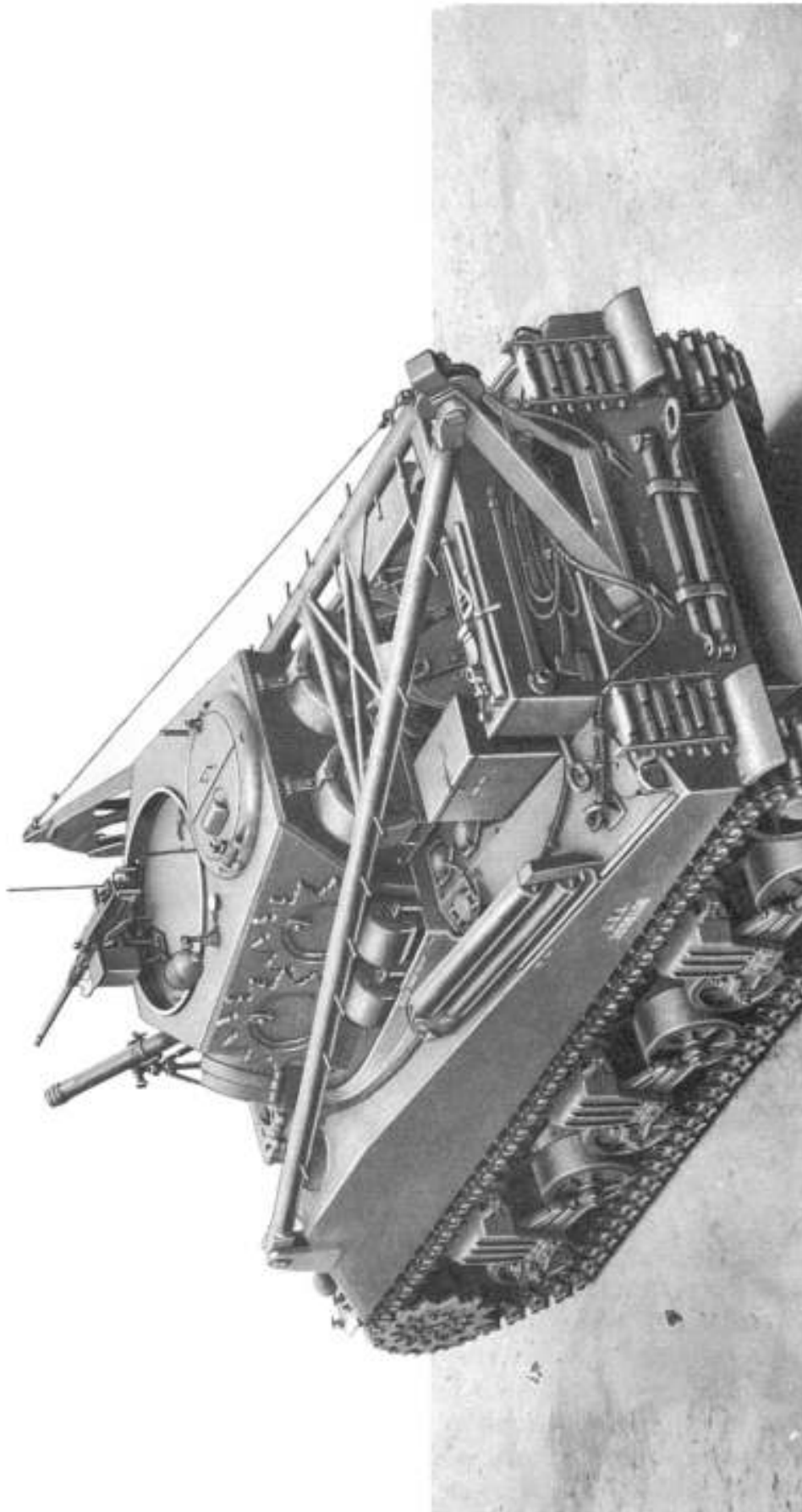


RA PD 311370

Figure 2—Tank Recovery Vehicle, Three-Quarters Elevated View

TM 9-738
2

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Figure 3—Tank Recovery Vehicle, Three-Quarters Left Rear View