

W A R D E P A R T M E N T

TECHNICAL MANUAL



**BASIC HALF-TRACK VEHICLES (IHC)
(PERSONNEL CARRIER M5, CAR M9A1
MULTIPLE GUN MOTOR CARRIAGE M14, AND
SIMILAR IHC VEHICLES)**

MAY 21, 1943

TECHNICAL MANUAL }
 No. TM 9-707 }

WAR DEPARTMENT
 Washington, May 21, 1943

BASIC HALF-TRACK VEHICLES (IHC)

(PERSONNEL CARRIER M5, CAR M9A1, MULTIPLE GUN MOTOR CARRIAGE M14, AND SIMILAR IHC VEHICLES)

Prepared under the direction of the
 Chief of Ordnance

(with the cooperation of International Harvester Company)

CONTENTS

PART ONE — Vehicle Operating Instructions

		Paragraphs	Pages
SECTION	I. Introduction	1— 4	3— 21
	II. Driving controls and operation	5— 7	22— 32
	III. Auxiliary equipment controls and operation (winch)	8— 11	33— 35
	IV. Inspection and preventive main- tenance service	12— 20	36— 69
	V. Lubrication	21— 24	70— 76
	VI. Tools and equipment stowage on the vehicle	25— 30	77—112
	VII. Operation under unusual conditions	31— 40	113—120

* This manual supersedes TM 9-711A, Half-track Personnel Carrier M5.

BASIC HALF-TRACK VEHICLES (IHC) (PERSONNEL CARRIER M5, CAR M9A1, MULTIPLE GUN MOTOR CARRIAGE M14, AND SIMILAR IHC VEHICLES)

PART TWO – Vehicle Maintenance Instructions

	Paragraphs	Pages
SECTION VIII. Maintenance allocation	41– 44	121–131
IX. Organization tools and equipment	45	132–134
X. Front axle	46– 49	135–148
XI. Rear axle	50– 53	149–158
XII. Bogie suspension and track	54– 58	159–188
XIII. Brake systems	59– 68	189–236
XIV. Clutch	69– 73	237–242
XV. Cooling system	74– 83	243–261
XVI. Electrical system	84–102	262–311
XVII. Engine	103–118	312–347
XVIII. Exhaust system	119–121	348–351
XIX. Frame	122–124	352–356
XX. Fuel system	125–131	357–376
XXI. Instruments and gages	132–134	377–389
XXII. Propeller shafts	135–137	390–393
XXIII. Springs and shock absorbers	138–141	394–400
XXIV. Steering gear	142–145	401–412
XXV. Transmission and transfer case	146–148	413–421
XXVI. Wheels, tires, and wheel bearings	149–152	422–432
XXVII. Winch	153–158	433–436
XXVIII. References	159–160	437–439
INDEX		440–449

PART ONE – Vehicle Operating Instructions

Section I

INTRODUCTION

	Paragraph
Scope	1
Content and arrangement of text	2
Description	3
Tabulated data	4

1. SCOPE.

a. This manual is published for the information of the using arms and services.

b. It is a basic manual for Half-track Personnel Carrier M5, Half-track Car M9A1, Multiple Gun Motor Carriage M14, and other similar half-track vehicles manufactured by International Harvester Company.

c. In addition to a description of the vehicles, this manual contains technical information required for the identification, use, and care of the materiel.

d. Disassembly, assembly, and such repairs as may be handled by using arm personnel may be undertaken only under the supervision of an officer or the chief mechanic.

e. In all cases where the nature of the repair, modification, or adjustment is beyond the scope or facilities of the unit, the responsible ordnance service should be informed so that trained personnel with suitable tools and equipment may be provided, or proper instructions issued.

2. CONTENT AND ARRANGEMENT OF TEXT.

a. Information for operating personnel (crews) is in Part One, sections I to VII, inclusive. Information for organizational maintenance personnel (using arms unit mechanics) is in Part Two, sections VIII to XXVII, inclusive. A list of references is available in section XXVIII.

3. DESCRIPTION.

a. The armored vehicles described in this manual are of half-track type but have different bodies. Each vehicle has a specially designed, commercial type, front-and-rear drive, truck chassis with an armored hull. Each vehicle is powered by a conventional 6-cylinder gasoline engine.

b. **Half-track Personnel Carrier M5.** This vehicle is illustrated in figures 1, 2, and 3. The personnel carrier is distinguished by the seating

BASIC HALF-TRACK VEHICLES (IHC) (PERSONNEL CARRIER M5, CAR M9A1, MULTIPLE GUN MOTOR CARRIAGE M14, AND SIMILAR IHC VEHICLES)



RA PD 18331

Figure 1 — Half-track Personnel Carrier M5 — Top View

arrangement for a crew of 13, a pedestal mount, and the presence of a rear door. There are 3 driver's compartment seats, and the remaining 10 seats are arranged in 2 lengthwise rows of 5 each.

c. **Half-track Car M9A1.** This vehicle is illustrated in figures 4 to 7, inclusive, and has a seating arrangement for a crew of 10, a gun ring, a radio mast, and a rear door. The driver's seat and commander's seat are in the driver's compartment. A third seat is just behind the driver's compartment but also faces toward the front. The remaining seats are arranged 3 on either side at the fuel tanks and 1 facing the rear just behind the center driver's compartment seat.

d. **Multiple Gun Motor Carriage M14.** This vehicle is illustrated in figures 7 to 11, inclusive, and is distinguished by the seating arrangement for a crew of five, and the twin mount machine gun. There are

INTRODUCTION

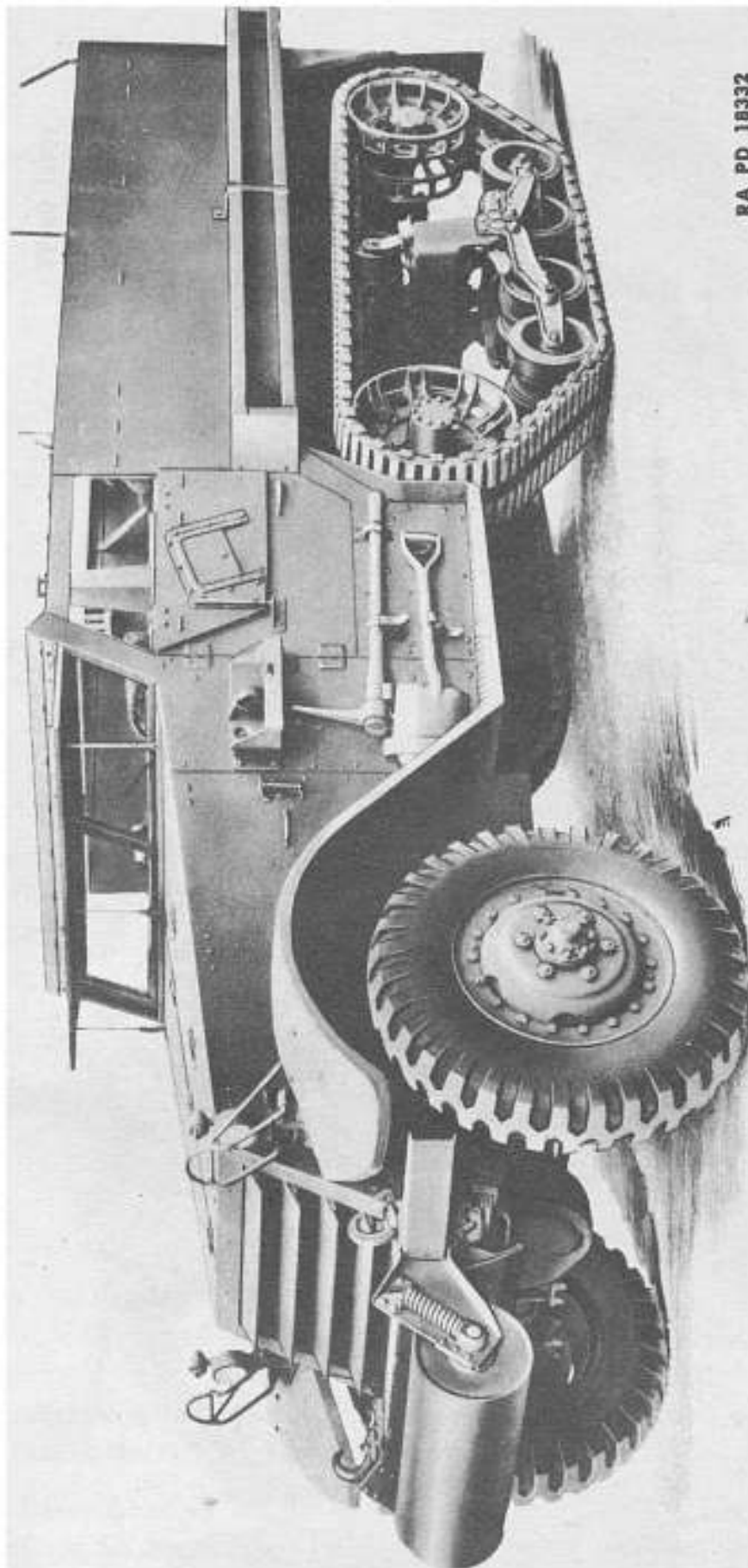


Figure 2 — Half-track Personnel Carrier M5 — Left Front

BASIC HALF-TRACK VEHICLES (IHC) (PERSONNEL CARRIER M5, CAR M9A1, MULTIPLE GUN MOTOR CARRIAGE M14, AND SIMILAR IHC VEHICLES)

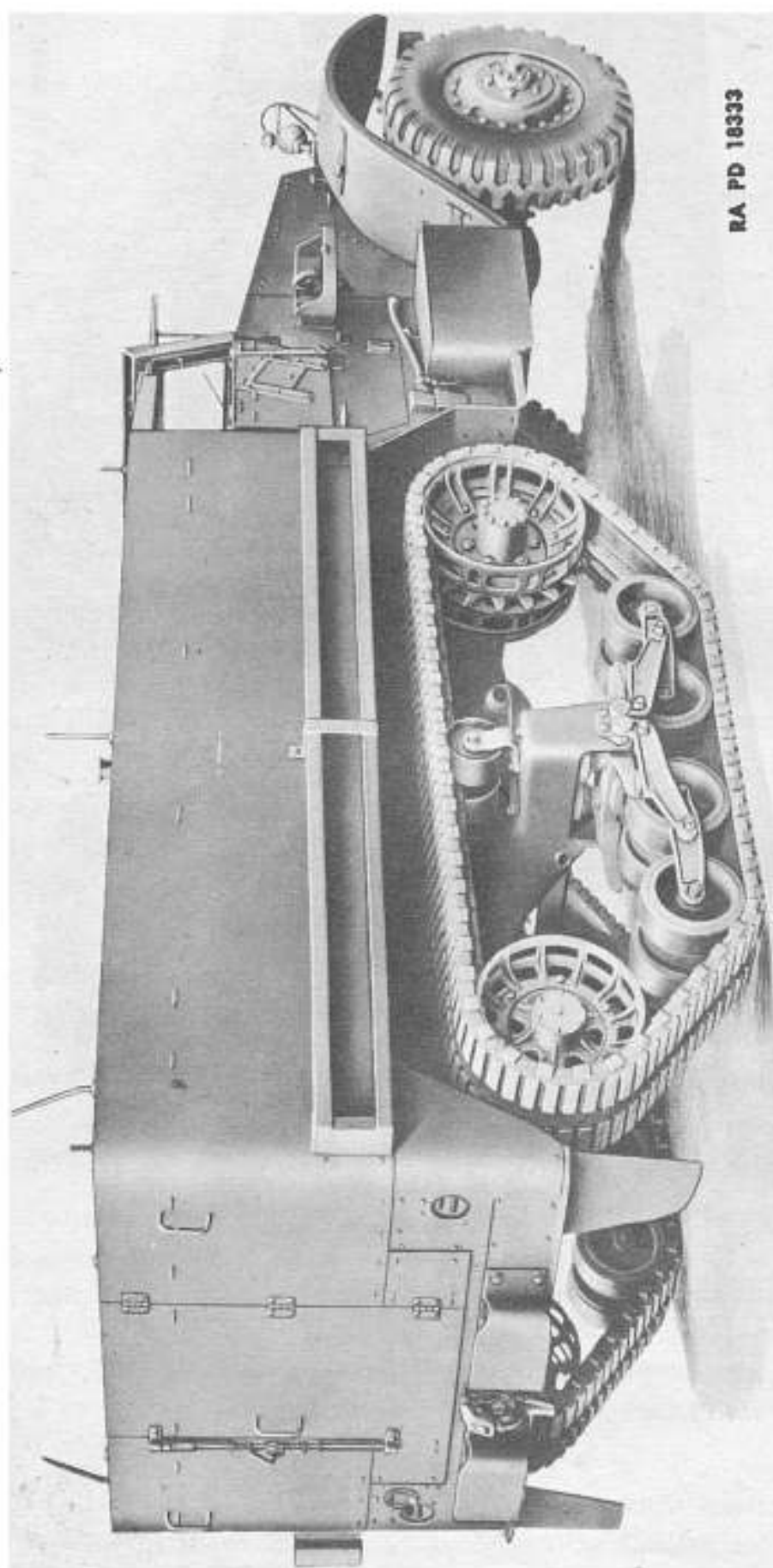
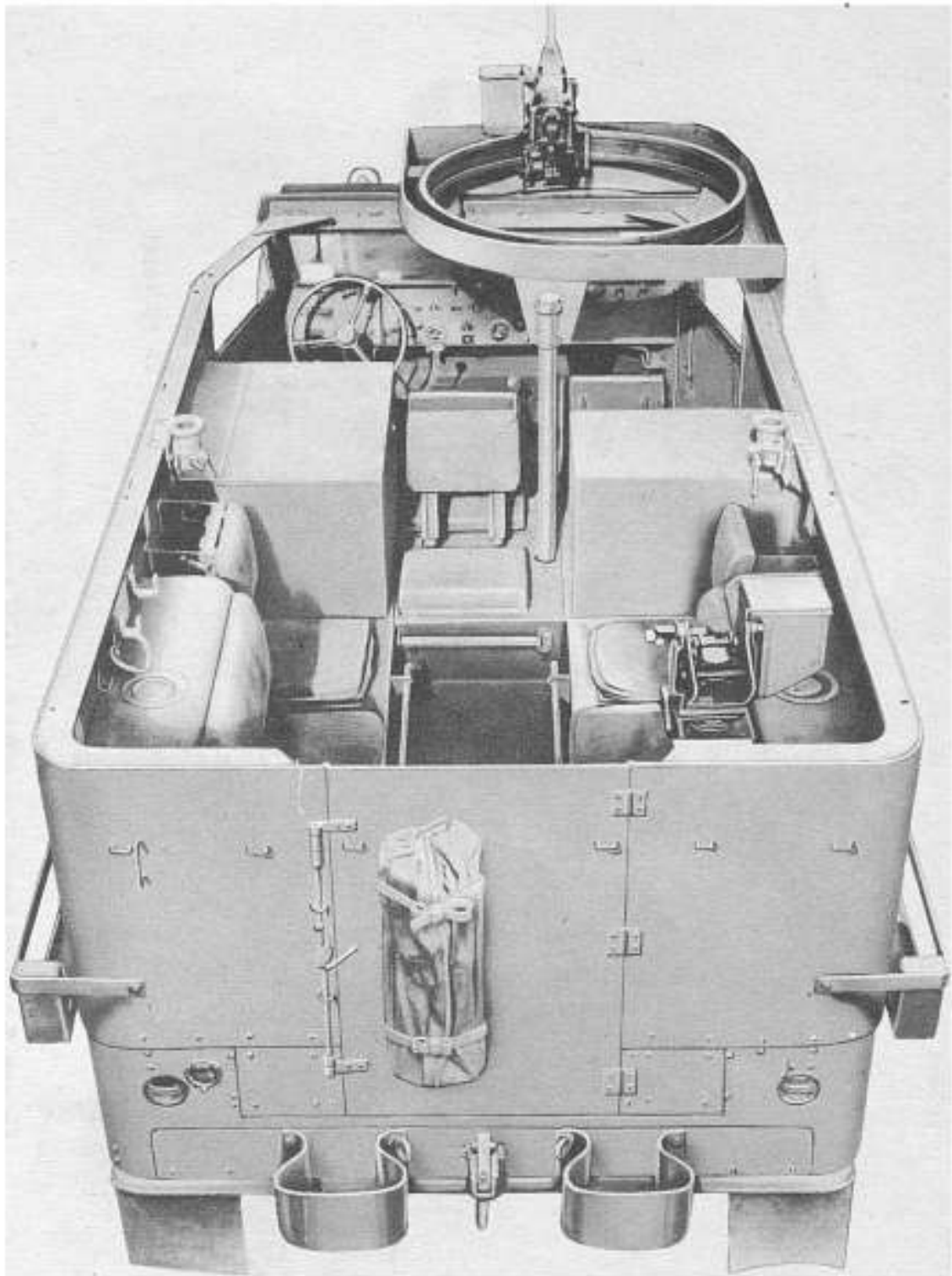


Figure 3 — Half-track Personnel Carrier M5 — Right Rear

INTRODUCTION



RA PD 18540

Figure 4 — Half-track Car M9A1 — Top View

three driver's compartment seats and the remaining two seats face each other just to the rear of the driver's compartment.

e. Identification Numbers. The manufacturer's chassis serial number and model numbers are located on a plate attached to the right side of the instrument panel. The engine number is stamped on a pad on the left side and to the front of the crankcase.

BASIC HALF-TRACK VEHICLES (IHC) (PERSONNEL CARRIER M5, CAR M9A1, MULTIPLE GUN MOTOR CARRIAGE M14, AND SIMILAR IHC VEHICLES)

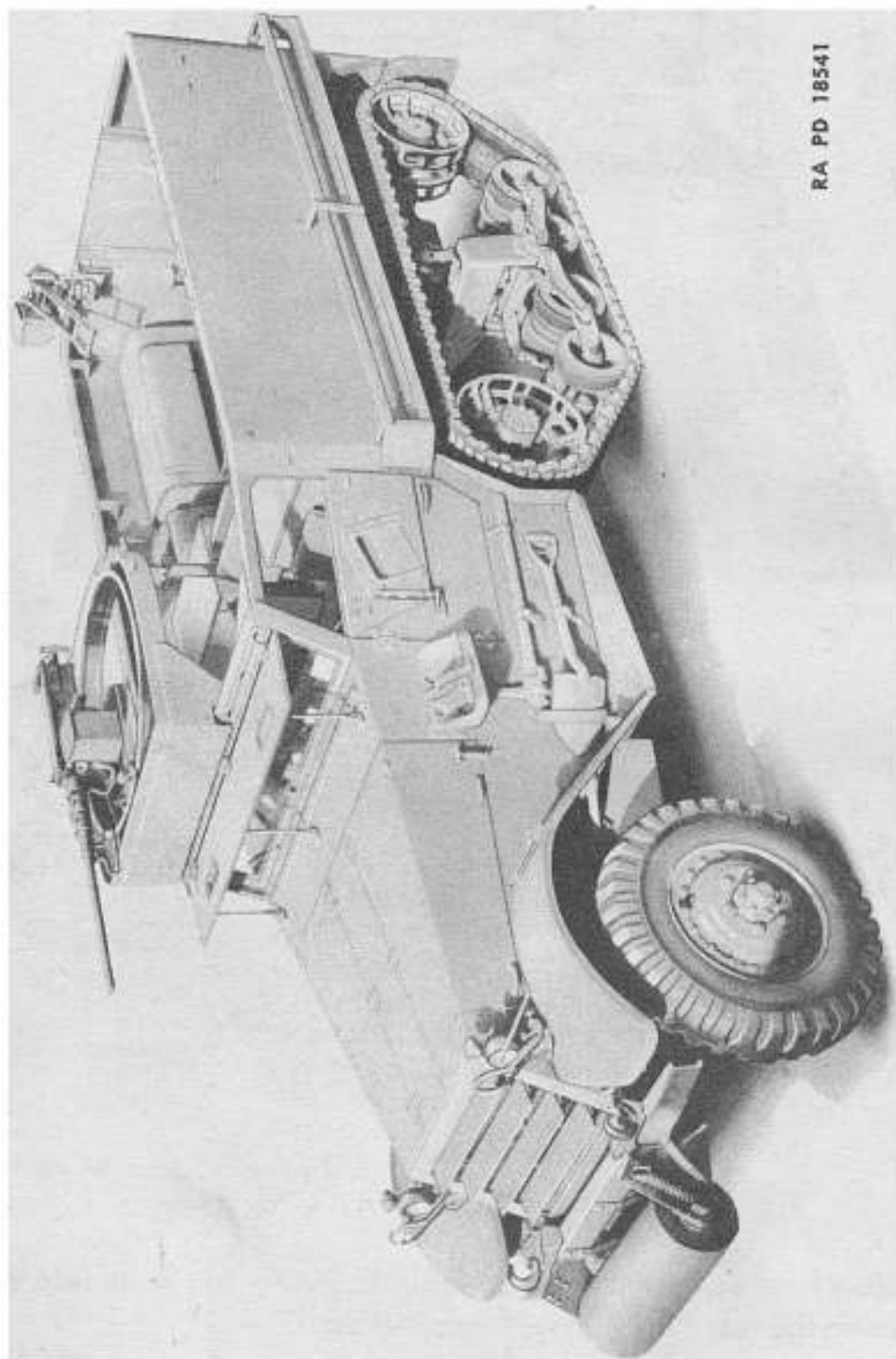


Figure 5 — Half-track Car M9A1 — Left Front