

TM 9-746

★ **RESTRICTED**

**WAR DEPARTMENT**

**TECHNICAL MANUAL**



**UNIVERSAL CARRIER T16**

**11 AUGUST 1943**

★ *Dissemination of restricted matter — The information contained in restricted documents and the essential characteristics of restricted materiel may be given to any person known to be in the service of the United States and to persons of undoubted loyalty and discretion who are cooperating in Government work, but will not be communicated to the public or to the press except by authorized military public relations agencies. (See also paragraph 18 b, AR 380-5, 28 September 1942.)*



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WAR DEPARTMENT  
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# UNIVERSAL CARRIER T16

Prepared under the direction of the  
 Chief of Ordnance

(with the cooperation of the Ford Motor Company)

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**PART ONE — Vehicle Operating Instructions****Section I****INTRODUCTION**

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**1. SCOPE.**

**a. Manual is Directed to Using Arms.** This Technical Manual is intended to give information and guidance to the personnel of the using arms charged with the operation, maintenance, and minor repair of this materiel.

**b. Content and Arrangement of the Manual.** Sections I through VII contain information chiefly for the guidance of the operating personnel. Sections VIII through XXIII contain information intended chiefly for the guidance of personnel doing maintenance work.

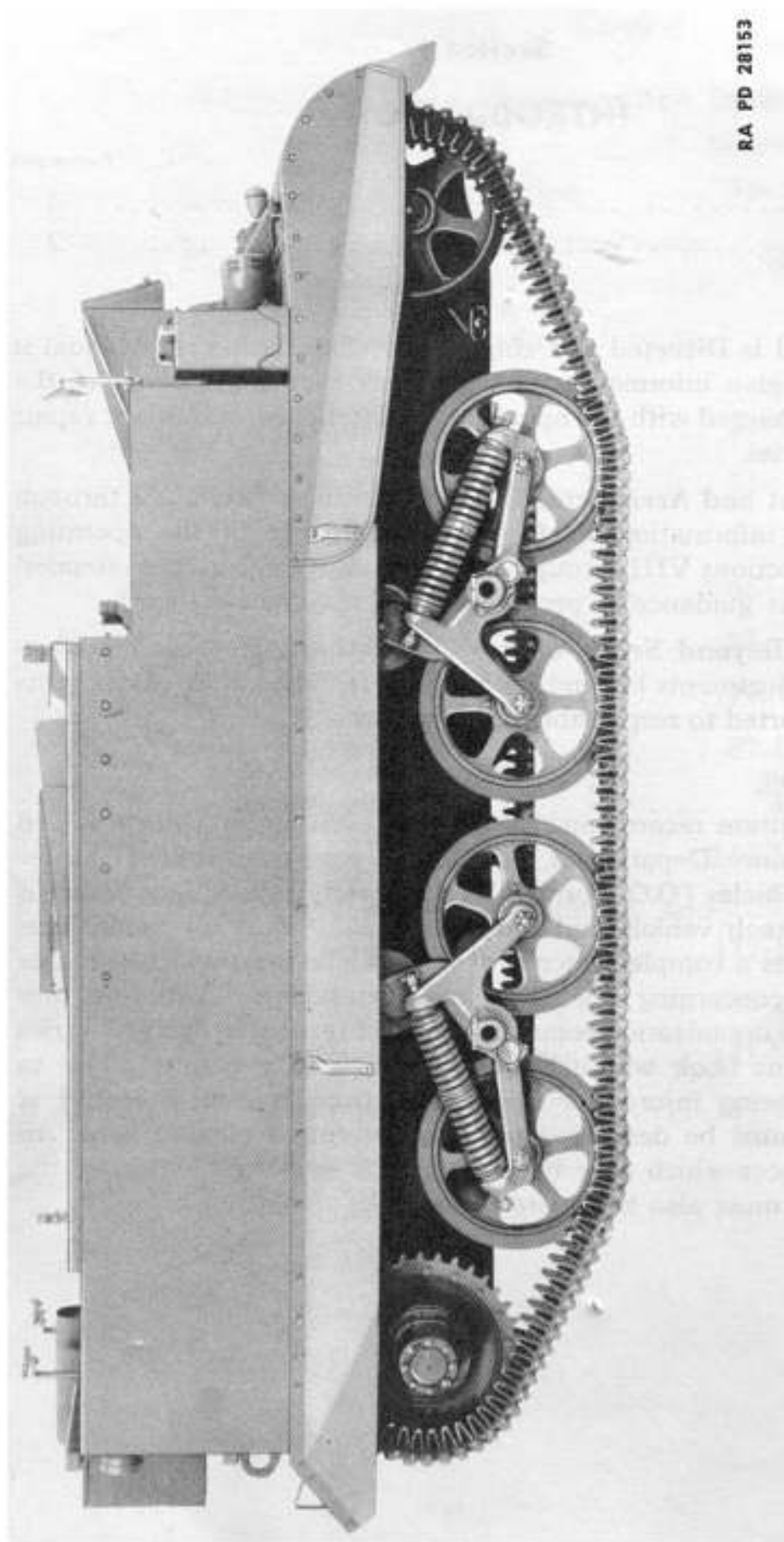
**c. Work Beyond Scope of the Using Arms.** Repairs, modifications, and adjustments beyond the scope or facilities of the using arms must be reported to responsible ordnance service.

**2. RECORDS.**

**a. An accurate record must be kept of each motor vehicle issued by the Ordnance Department.** For this purpose the Motor Book for Ordnance Vehicles (O.O. Form 7255), generally called "Log Book", is issued with each vehicle and must accompany it at all times. This book furnishes a complete record of the vehicle, from which valuable information concerning operation and maintenance costs, etc., are obtained, and organization commanders must insist that correct entries be made. This book will habitually be kept in a canvas cover to prevent its being injured or soiled. The page bearing a record of assignment must be destroyed prior to entering a combat zone. All other references which may be posted regarding the identity of the organization must also be deleted.

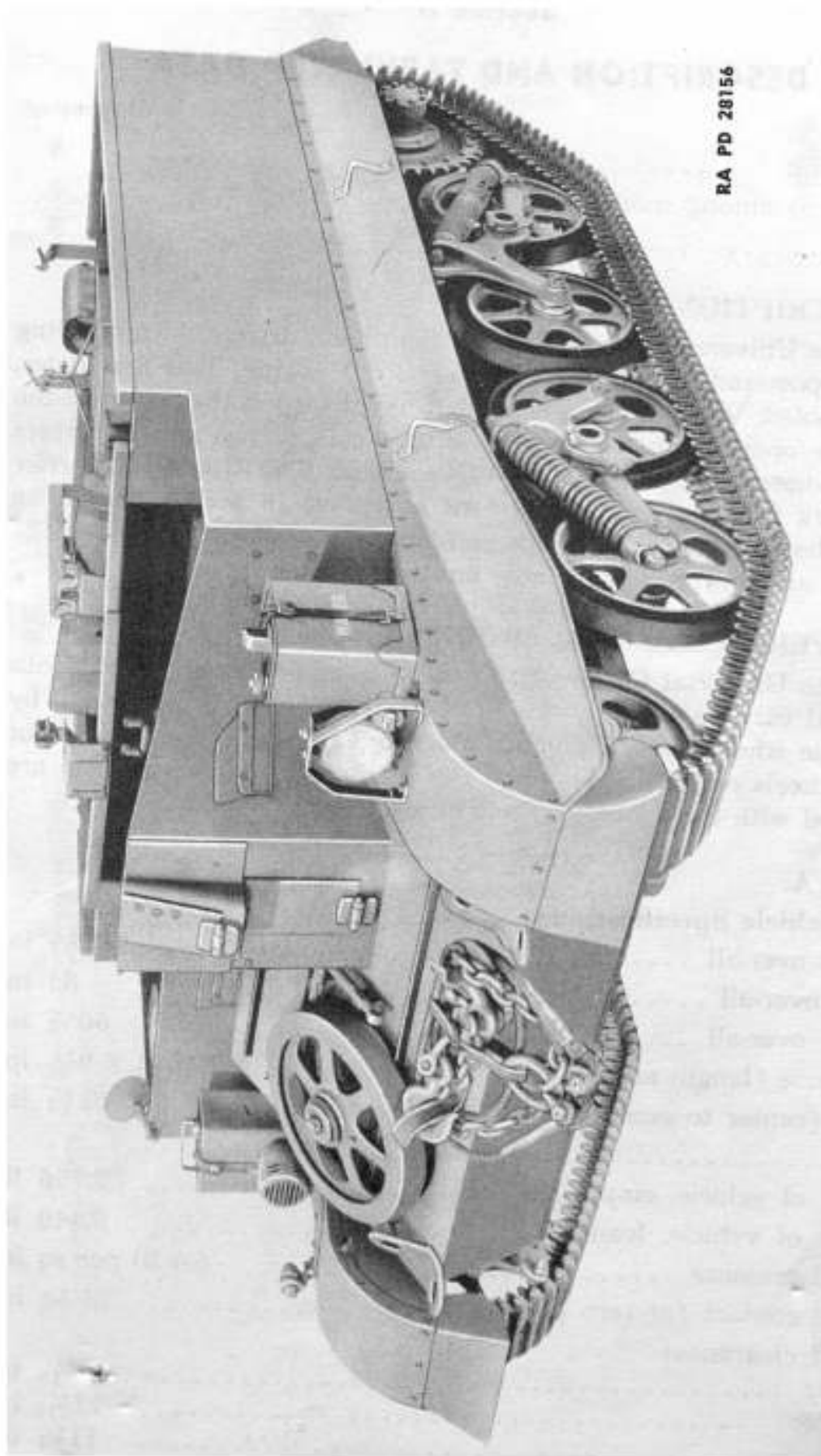
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### UNIVERSAL CARRIER T16



**Figure 1 — Universal Carrier T16 — Right Side View**

## INTRODUCTION



**Figure 2 — Universal Carrier T16 — Left Front View**

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## UNIVERSAL CARRIER T16

### Section II

## DESCRIPTION AND TABULATED DATA

	Paragraph
Description .....	3
Differences among models .....	4
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### 3. DESCRIPTION.

a. The Universal Carrier T16 is a right-hand drive, full-tracklaying vehicle, powered by a 100-horsepower Ford engine. This 8-cylinder, liquid-cooled, V-type engine is located lengthwise in the center of the hull. The operator steers the vehicle by means of two steering levers located directly in front of the driver's seat. The Universal Carrier T16, with full equipment, will ford a stream 36 inches deep. The vehicle has four forward speeds and one reverse. A percentage of the vehicles are equipped with radio and intraphone.

### 4. DIFFERENCES AMONG MODELS.

a. The Universal Carrier T16 can be identified from the previous universal carriers built by the Ford Motor Company of Canada by the bogie wheels. The Universal Carrier T16 is equipped with four bogie wheels on each side, while the previous Canadian carriers are equipped with three bogie wheels on each side.

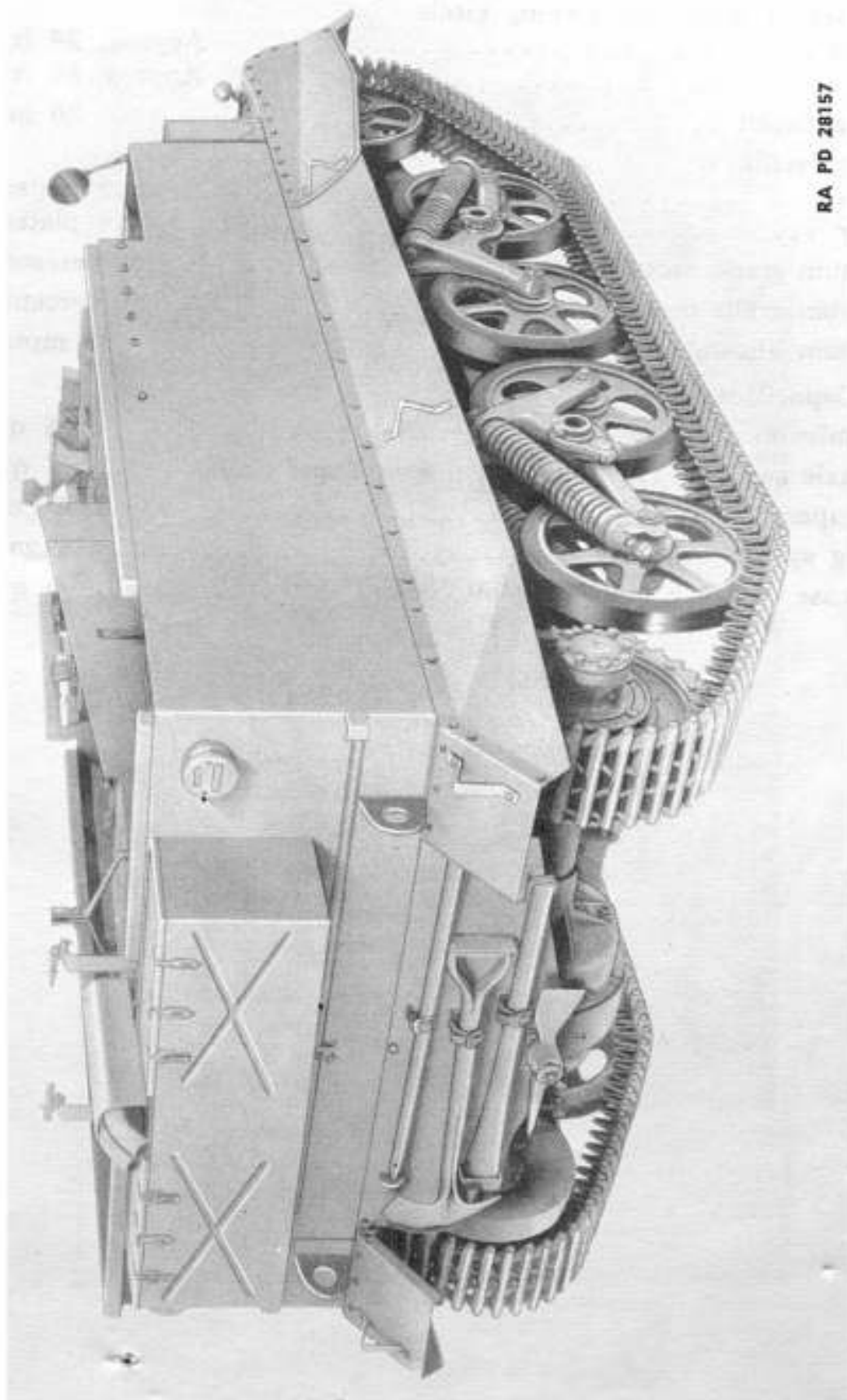
### 5. DATA.

#### a. Vehicle Specifications.

Length, over-all .....	152½ in.
Width, over-all .....	83 in.
Height, over-all .....	60½ in.
Track size (length and width) .....	296 in. x 9½ in.
Tread (center to center) .....	62½ in.
Crew .....	4
Weight of vehicle, empty .....	7,756 lb
Weight of vehicle, loaded .....	9,440 lb
Ground pressure .....	6.4 lb per sq in.
Ground contact (at zero penetration) .....	73 sq in.
Ground clearance:	
Front .....	12 <sup>5</sup> / <sub>16</sub> in.
Center .....	12 <sup>3</sup> / <sub>16</sub> in.
Rear .....	11 <sup>1</sup> / <sub>8</sub> in.
Octane rating of fuel .....	70 or higher



**DESCRIPTION AND TABULATED DATA**



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**Figure 3 — Universal Carrier T16 — Right Rear View**

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**UNIVERSAL CARRIER T16****b. Performance.**

Diameter of minimum turning circle:

Right .....	Approx. 34 ft
Left .....	Approx. 34 ft

Fording depth .....	36 in.
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Towing facilities:

Front .....	Eye plates
Rear .....	Eye plates

Maximum grade ascending ability .....	60 percent
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Maximum grade descending ability .....	60 percent
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Maximum allowable vehicle speed .....	33 mph
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**c. Capacities.**

Transmission capacity .....	2½ qt
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Rear axle capacity (including oil reservoir and cooler).....	7 qt
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Fuel capacity .....	23.6 gal
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Cooling system capacity .....	6½ gal
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Crankcase capacity (including oil cooler) .....	6 qt
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