

# TM 9-816

TO 19-75AH-8

WAR DEPARTMENT TECHNICAL MANUAL

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## 4- to 5-Ton 4x4 Tractor Truck (Autocar Model U-7144T)



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(Autocar Model U-7144T)



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*WAR DEPARTMENT*



*MARCH 1944*

WAR DEPARTMENT  
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TM 9-816, 4- to 5-ton 4 x 4 Tractor Truck (Autocar Model U-7144T), is published for the information and guidance of all concerned.

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BY ORDER OF THE SECRETARY OF WAR:

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*The Adjutant General.*

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

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★This manual supersedes pertinent information in TB ORD-20, 24 Jan 44 and OFSTB 800-21, 30 Nov 43. This manual includes pertinent information from TM 10-1569, 6 Mar 42. Together with TM 9-1816 and TM 9-1832A, this manual supersedes TM 10-1569.

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# PART ONE — VEHICLE OPERATING INSTRUCTIONS

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## Section I

### INTRODUCTION

#### 1. SCOPE.\*

a. This Technical Manual is published for the information and guidance of the using arm personnel charged with the operation, maintenance, and minor repair of the materiel.

b. In addition to a description of the 4- to 5-ton 4 x 4 Tractor Truck (Autocar Model U-7144T), this manual contains technical information required for the identification, use, and care of the materiel. The manual is divided into two parts. Part one, section I through section VII, gives operating instructions. Part two, section VIII through section XXXVI, gives vehicle maintenance instructions to using arm personnel charged with the responsibility of doing maintenance work within their jurisdiction.

c. In all cases where the nature of the repair, modifications, 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.

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## Section II

### DESCRIPTION AND TABULATED DATA

#### 2. DESCRIPTION (figs. 1 and 2).

a. The 4- to 5-ton 4 x 4 Tractor Truck (Autocar Model U-7144T) is a cab-over-engine vehicle. Power is furnished by an RXC model Hercules engine. When necessary power can be transmitted to the front wheels through a centrally located transfer case. Hub construction allows the wheels to be mounted dually at both front and rear. A support bracket behind the cab carries two spare tires. A large rectangular tank attached to the frame midway between the wheels on the left side carries fuel. A battery box and two air reservoir tanks are located in a similar position on the right side.

b. This tractor truck is manufactured in both open and closed cab-type vehicles.

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\*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.

4- TO 5-TON 4 x 4 TRACTOR TRUCK (AUTOCAR MODEL U-7144T)



Figure 1 — Truck — Right Front

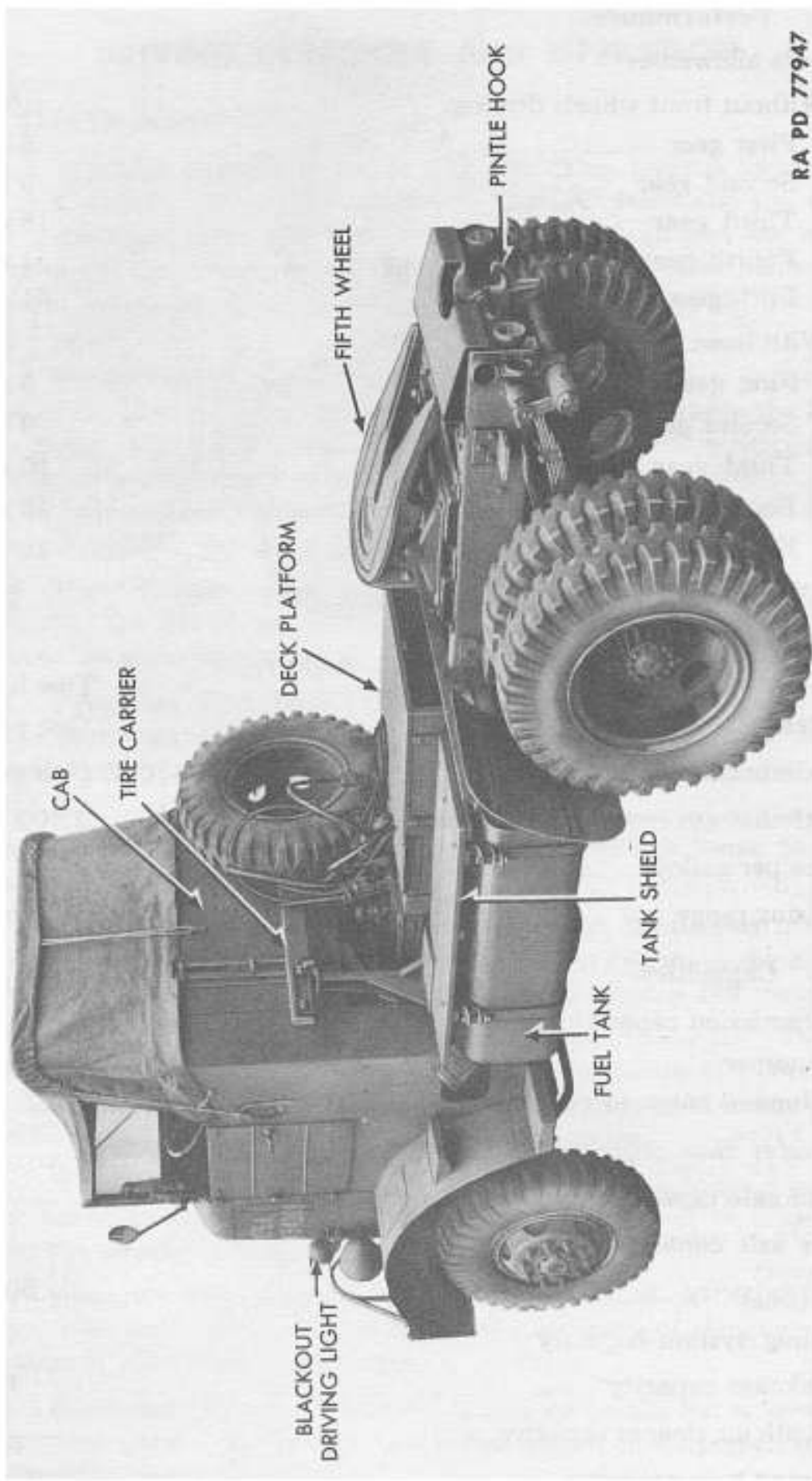
3. DATA.

a. Vehicle Specifications.

Model .....	U-7144T
Wheel base .....	134½ in.
Length, over-all .....	203½ in.
Width, over-all .....	95 <sup>5</sup> / <sub>16</sub> in.
Height, over-all .....	112 <sup>3</sup> / <sub>4</sub> in.
Tire:	
Size .....	9.00 x 20
Type .....	10-ply, lug tread
Tread (center to center)	
Front .....	73 <sup>3</sup> / <sub>4</sub> in.
Rear (inside) .....	59 <sup>3</sup> / <sub>4</sub> in.
Rear (outside) .....	84½ in.
Weight of vehicle:	
Empty .....	11,660 lb
Loaded .....	21,010 lb
Ground clearance:	
Front .....	11 <sup>7</sup> / <sub>8</sub> in.
Rear .....	12¼ in.
Pintle height .....	38 in.
Grade of fuel .....	68 octane (min)



DESCRIPTION AND TABULATED DATA



RA PD 77947

Figure 2 — Truck — Left Rear

**4- TO 5-TON 4 x 4 TRACTOR TRUCK (AUTOCAR MODEL U-7144T)**

**b. Performance.**

Speeds allowable:

Without front wheels driving:

First gear .....	5 mph
Second gear .....	9 mph
Third gear .....	18 mph
Fourth gear .....	33 mph
Fifth gear .....	41 mph

With front wheels driving:

First gear .....	5 mph
Second gear .....	9 mph
Third gear .....	10 mph
Fourth gear .....	10 mph
Fifth gear .....	10 mph

Minimum turning radius ..... 30 ft

Towing facilities:

Front .....	Two hooks
Rear .....	One pintle

Maximum drawbar pull ..... 450 lb (4th gear)

Maximum governed engine speed..... 2,300 rpm

Miles per gallon ..... 3 to 5

Cruising range ..... 180 miles

**c. Capacities.**

Transmission capacity:

Summer .....	7 qt
Winter .....	9 qt

Transfer case capacity... .. 2 qt

Front axle capacity..... 8 qt

Rear axle capacity ..... 10 qt

Fuel capacity ..... 60 gal

Cooling system capacity ..... 40 qt

Crankcase capacity ..... 12 qt

Oil bath air cleaner capacity ..... 3 pt

Steering gear capacity ..... 1½ pt