

TM 9-821

WAR DEPARTMENT

TECHNICAL MANUAL



2½-TON 4 x 2 TRUCK
(FEDERAL)

9 OCTOBER 1943

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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 the using arms personnel charged with the operation, maintenance, and minor repair of this materiel.

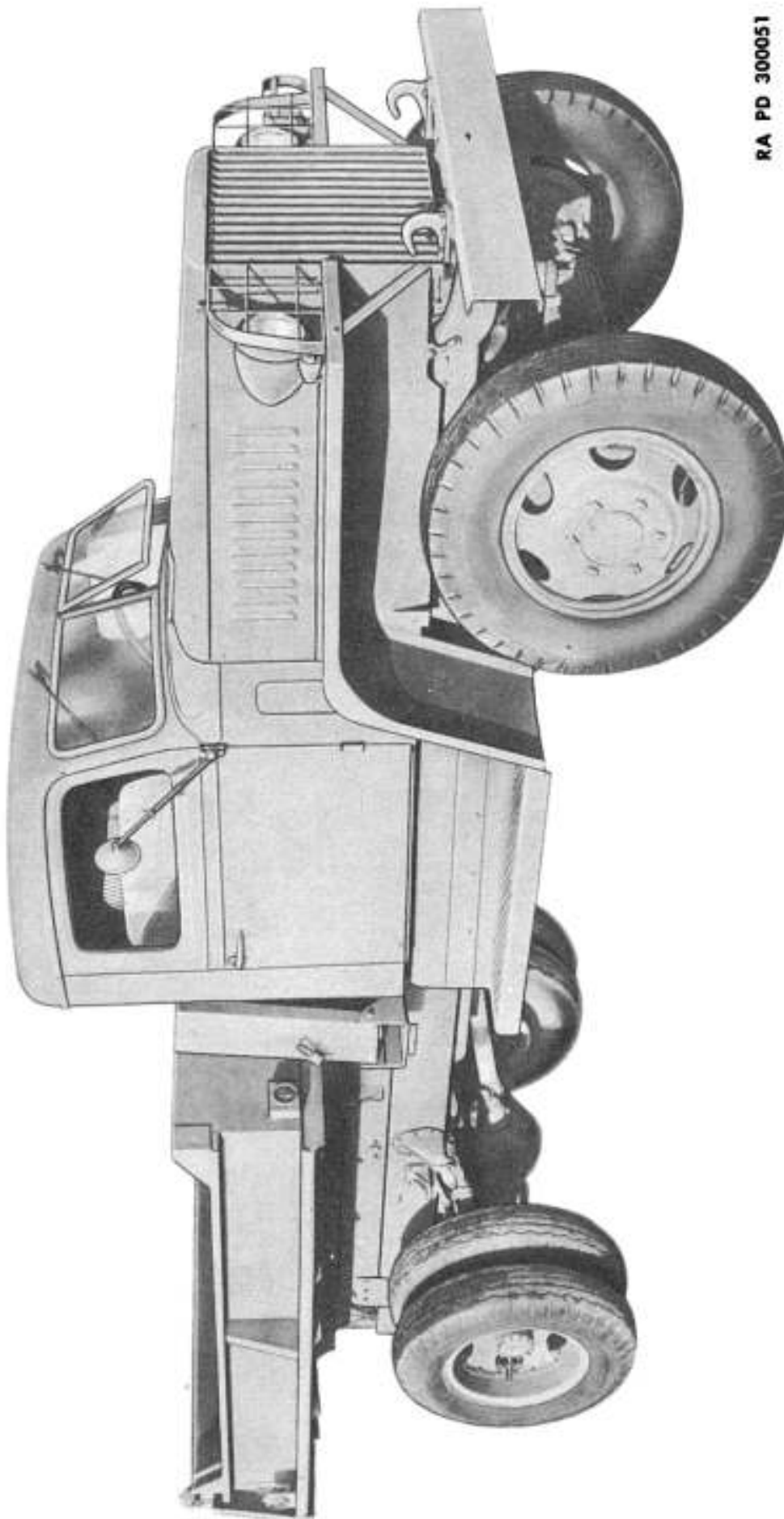
b. In addition to a description of 2½-ton 4 x 2 truck (Federal) this manual contains technical information required for the identification, use, and care of the materiel. The manual is divided into two parts. Part One, section I through section VII, gives vehicle operating instructions. Part Two, section VIII through section XXXIII, gives vehicle maintenance instructions to using arms 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.

*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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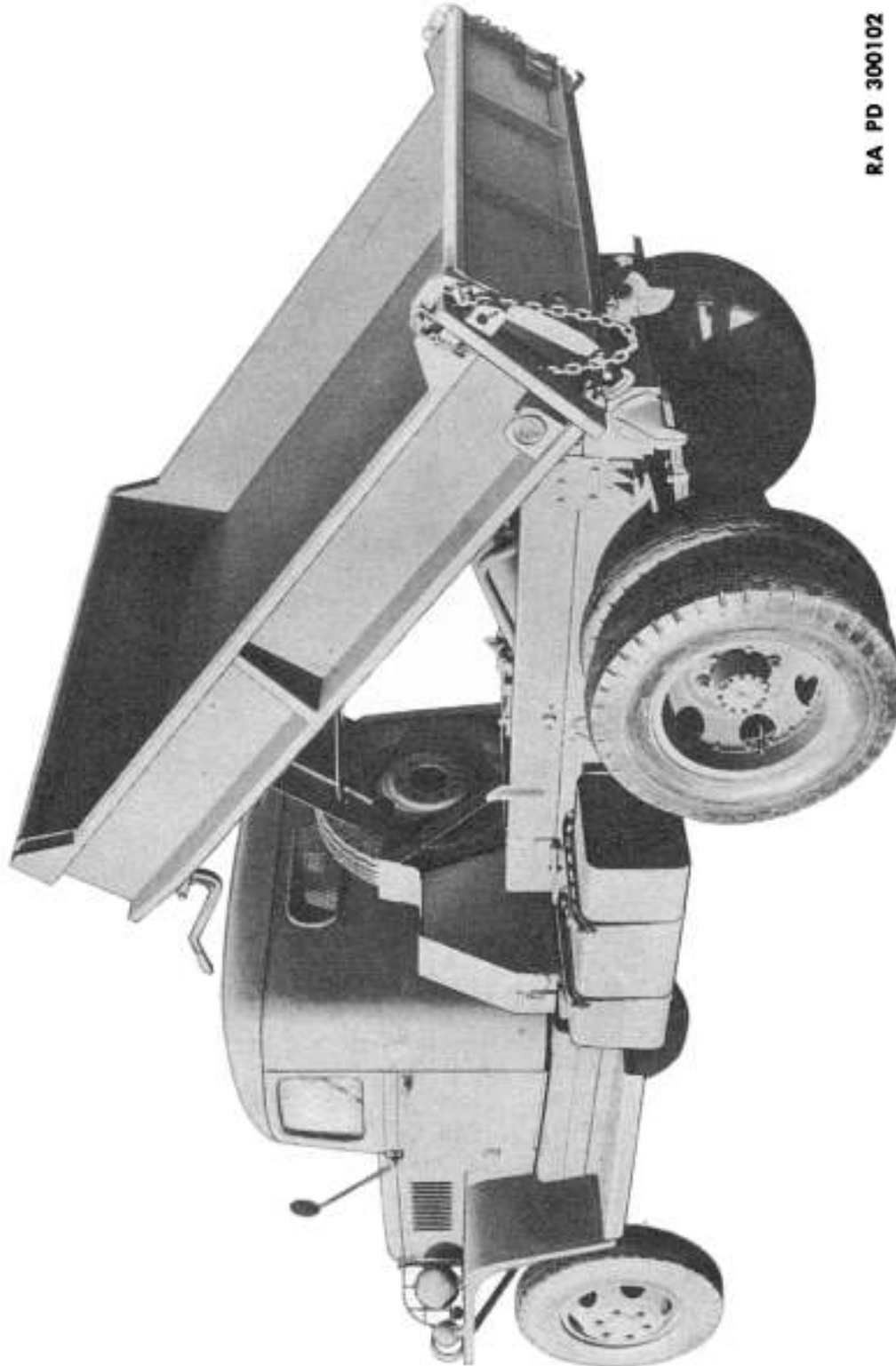
2½-TON 4 x 2 TRUCK (FEDERAL)



RA PD 300051

Figure 1—2½-Ton 4 x 2 Truck (Right-side View)

INTRODUCTION



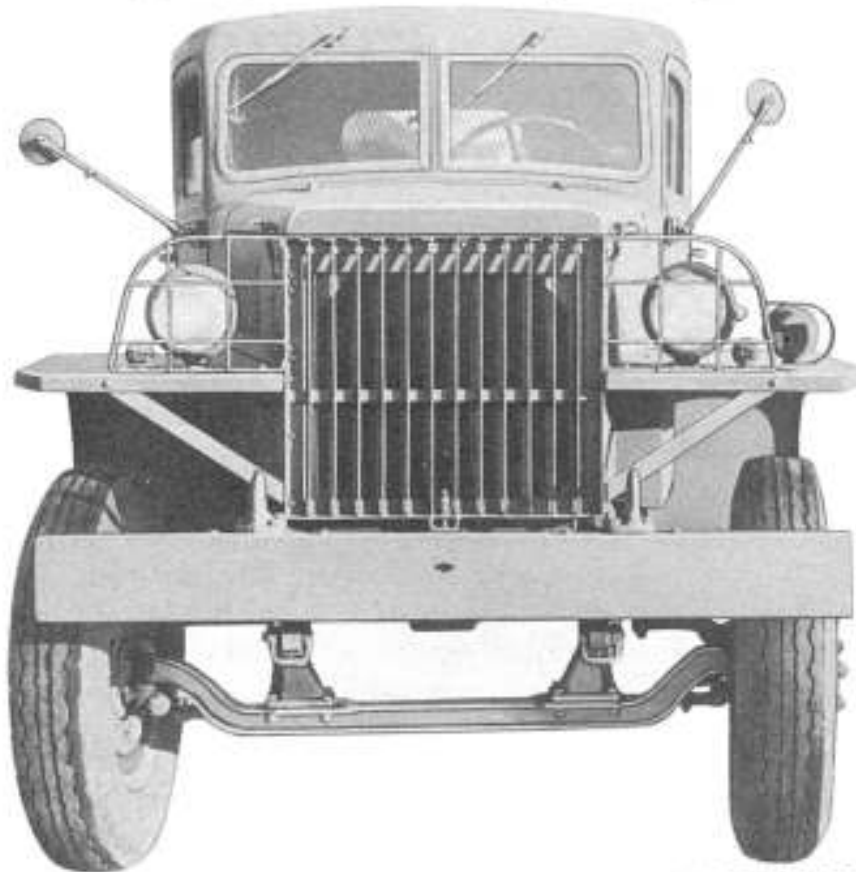
RA PD 300102

Figure 2—2½-Ton 4 x 2 Truck (Left-side View)

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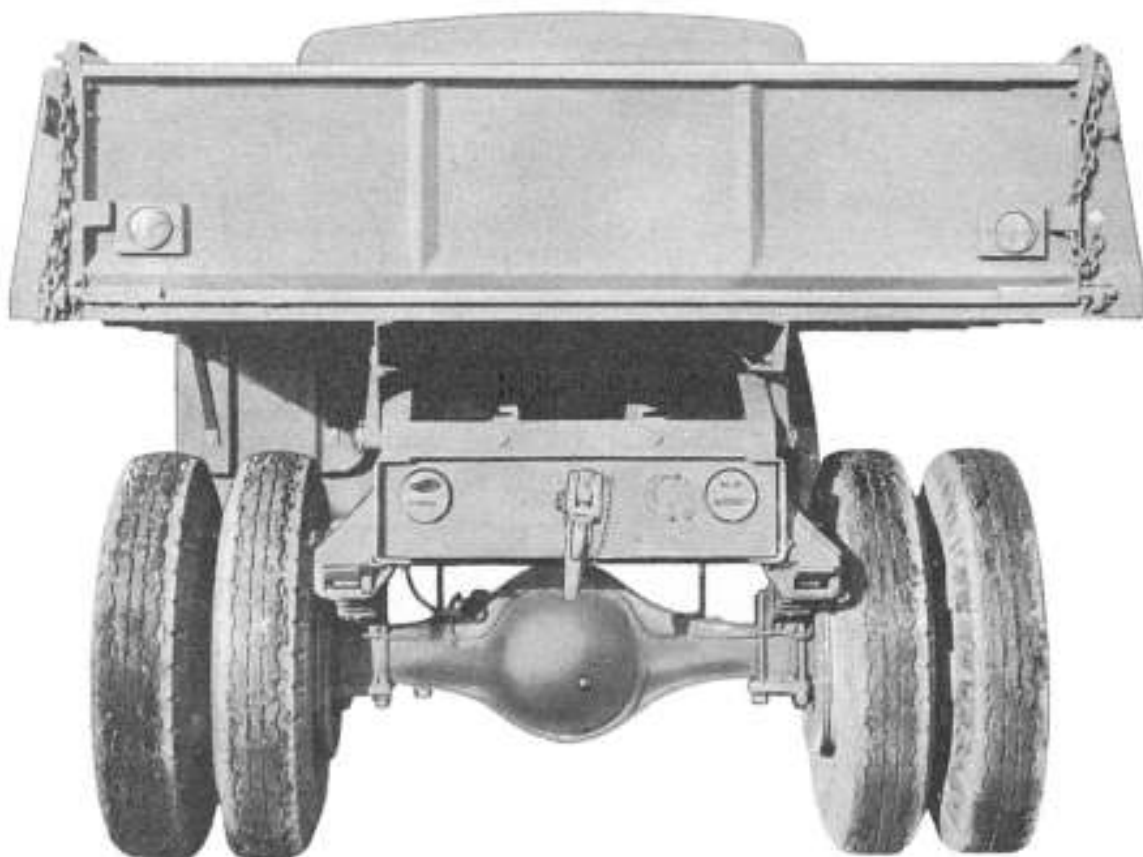
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2½-TON 4 x 2 TRUCK (FEDERAL)



RA PD 300103

Figure 3—2½-Ton 4 x 2 Truck (Front View)



RA PD 300104

Figure 4—2½-Ton 4 x 2 Truck (Rear View)

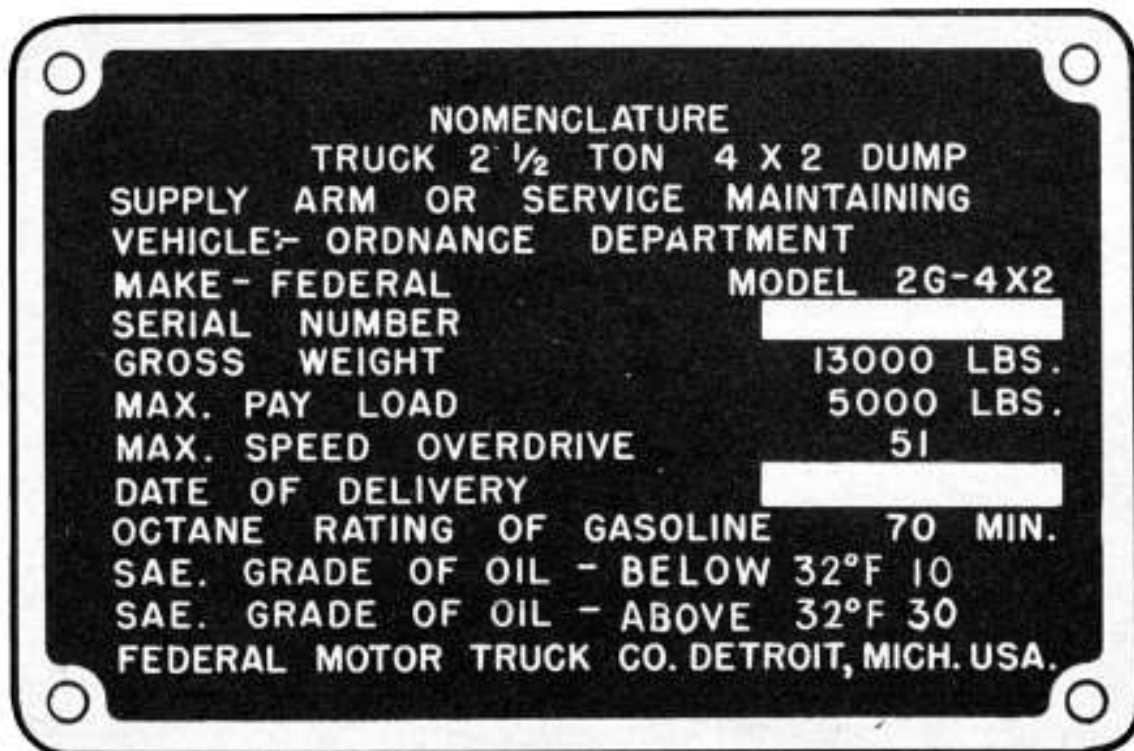
Section II

DESCRIPTION AND TABULATED DATA

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Data	4

2. DESCRIPTION.

a. The truck described in this manual is designed for transporting and unloading sand, gravel, coal, and such commodities peculiar to its bulk cargo handling features. The vehicle is equipped with hydraulically operated metal dump body. It is identified by the two driving wheels, the conventional cab, and the conventional dump body of 2-cubic-yard capacity. The identification plate showing the nomenclature, model, and payload ratings, and the publication plate showing the TM number of the technical manuals and the parts lists is mounted on the left-hand riser of the driver's seat.



RA PD 300105

Figure 5—Identification Plate**3. DIFFERENCES AMONG MODELS.**

a. **Dump Bodies.** This truck is equipped with two types of all-steel welded dump bodies of 2-cubic-yard capacity, each mounted on an all-steel subframe assembly. These two body types are known as Anthony and Galion and are described and illustrated in detail under their respective headings (par. 173-178).

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(1) **ANTHONY BODY.** This type of body is attached to subframe by means of two forged sections welded to the body frame. Pivot action is obtained by two large hinge pins fitted at the rear corners of the subframe.

(2) **GALION BODY.** This type of body is attached to the subframe by means of two heavy hinge brackets that bolt to body side and pivot on a cross bar fitted in the subframe.

4. DATA.**a. Vehicle Specifications.**

Nominal wheel base	151 in.
Length, over-all	217 ⁵ / ₈ in.
Width, over-all	90 in.
Height, over-all	dump body up, 120 in. dump body down, 89 in.
Wheel size	20 x 7 in.
Tire size	8.25 in. x 20 in.
Tire type	Highway
Tread (center to center)	front, 63 ⁵ / ₁₆ in. rear, 65 ¹³ / ₁₆ in.
Crew	2 men
Weight of vehicle—empty	7,251 lb
Weight of vehicle—loaded	12,975 lb
Ground pressure	57 psi
Ground contact	228 si
Ground clearance	10 in.
Pintle height	31 in.
Kind of fuel	70 octane

b. Performance.

First speed	6 mph
Second speed	12 mph
Third speed	23 mph
Fourth speed direct	41 mph
Fifth speed overdrive	51 mph
Reverse speed	6 mph
Maximum governed speed	51 mph
Approach angle	61½ degrees
Departure angle	45 degrees
Minimum turning radius (left)	25 ft
(right)	25 ft
Fording depth	24 in.
Towing facilities (front)	Tow hooks
(rear)	Pintle hook
Maximum draw-bar pull (direct drive)	875 lb