

TM 9-1808A

WAR DEPARTMENT TECHNICAL MANUAL

POWER PLANT, CLUTCH,
AND ELECTRICAL SYSTEM
FOR BASIC VEHICLES $\frac{3}{4}$ -TON 4x4
and $1\frac{1}{2}$ -TON 6x6 DODGE

This is a reprint of TM 9-1808A, Power Plant and Electrical system for basic vehicles $\frac{3}{4}$ -ton and $1\frac{1}{2}$ -ton 6x6 (Dodge). No distribution will be made to personnel possessing the original publication.

WAR DEPARTMENT

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3 SEPTEMBER 1943

POWER PLANT, CLUTCH,
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WAR DEPARTMENT

Washington 25, D. C., 3 September 1943

TM 9-1808A, Power Plant, Clutch and electrical system for basic vehicles $\frac{3}{4}$ -ton 4 x 4 and 1 $\frac{1}{2}$ -ton 6 x 6 (Dodge) is published for the information and guidance of all concerned.

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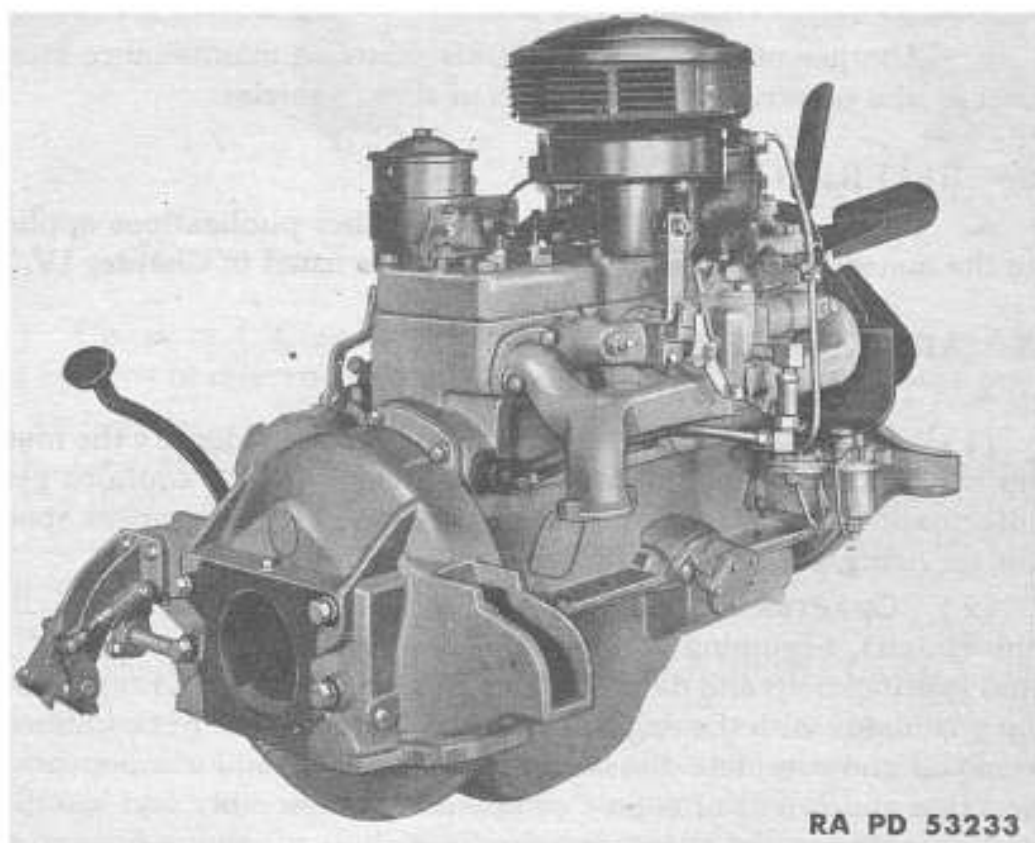
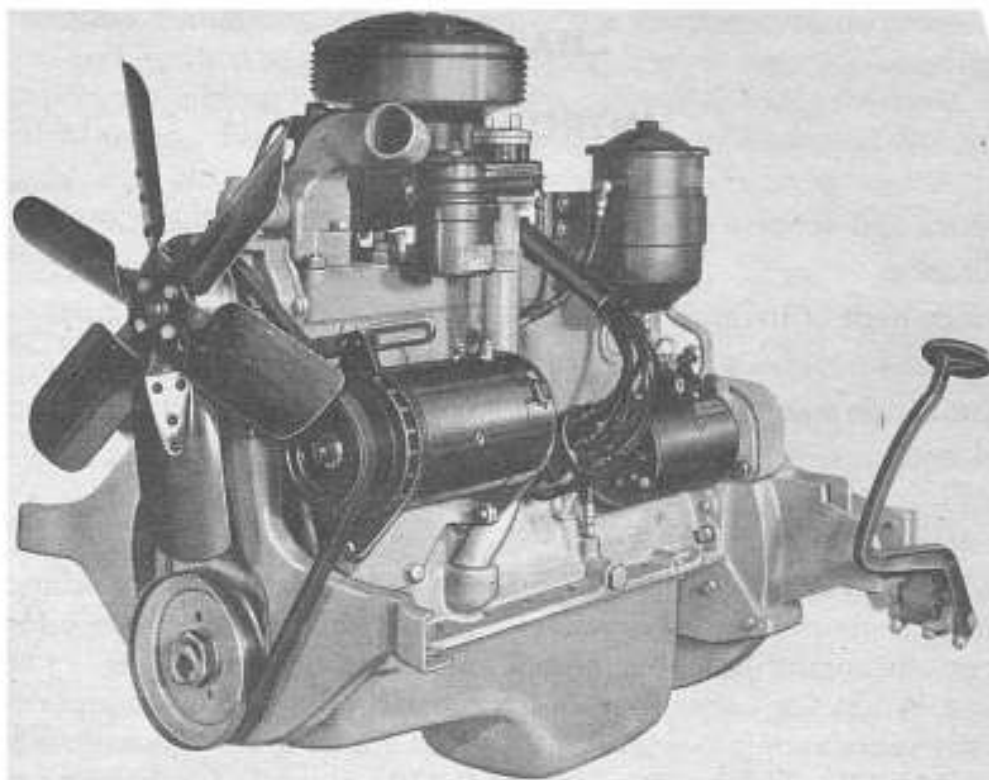
(For explanation of symbols, see FM 21-6.)

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CARTER CARBURETOR AND GOVERNOR REBUILDING		(See supplement in back of manual)



RA PD 53233

Figure 1—Dodge 3 Ton 4 x 4 and 1½ Ton 6 x 6 Engine

ORDNANCE MAINTENANCE—POWER PLANT, CLUTCH, AND ELECTRICAL SYSTEM— $\frac{3}{4}$ AND $1\frac{1}{2}$ TON VEHICLES (DODGE)

CHAPTER 1

INTRODUCTION

	Paragraph
Purpose and scope	1
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1. PURPOSE AND SCOPE

a. This manual is published for the information and guidance of Ordnance maintenance personnel. It contains maintenance information on the engine assembly, clutch and electrical system (fig. 1) of the Dodge $\frac{3}{4}$ ton 4 x 4 and $1\frac{1}{2}$ ton 6 x 6 basic vehicles. Maintenance instructions are supplementary to those contained in the Operator's Manuals TM 9-808, TM 9-750A and TM 9-810 published for the using arms.

b. In addition to the instructions contained in this manual on carburetors, maintenance information is also contained in TM 9-1826A for the Carter carburetor and TM 9-1826C for the Zenith carburetor.

c. Another manual, TM 9-1808B, contains maintenance information on the power train and chassis of these vehicles.

2. REFERENCES

a. Standard nomenclature lists and other publications applicable to the materiel described in this manual are listed in Chapter IV.

3. ARRANGEMENT OF MANUAL

a. The manual is arranged as follows:

(1) CHAPTER 1. Contains information to help identify the materiel on which maintenance information is given. It also contains general information on maintenance terms used and tool equipment specified for servicing, repairing and rebuilding the materiel.

(2) CHAPTER 2. Concerns the engine and components (including the clutch), beginning with general description and function of parts and specifications and data. Engine trouble shooting and repairs which may be made with the engine in the truck are treated next, followed by removal and complete disassembly of the engine and components. Inspection and repair of engine components, reassembly and installation of the engine in the truck, and finally a chart of engine fits and tolerances completes Chapter 2.

INTRODUCTION

(3) CHAPTER 3. Concerns the electrical system which is divided into sections containing information on the starting system, generating system and ignition system. It contains electrical trouble shooting information, rebuilding instructions and a table of fits and tolerances for electrical units. Wiring circuit diagrams show all electrical circuits of the vehicles. No maintenance information is given covering the lighting system, replacement of wiring, or miscellaneous electrical equipment, as these subjects are treated fully in TM 9-808 and TM 9-810.

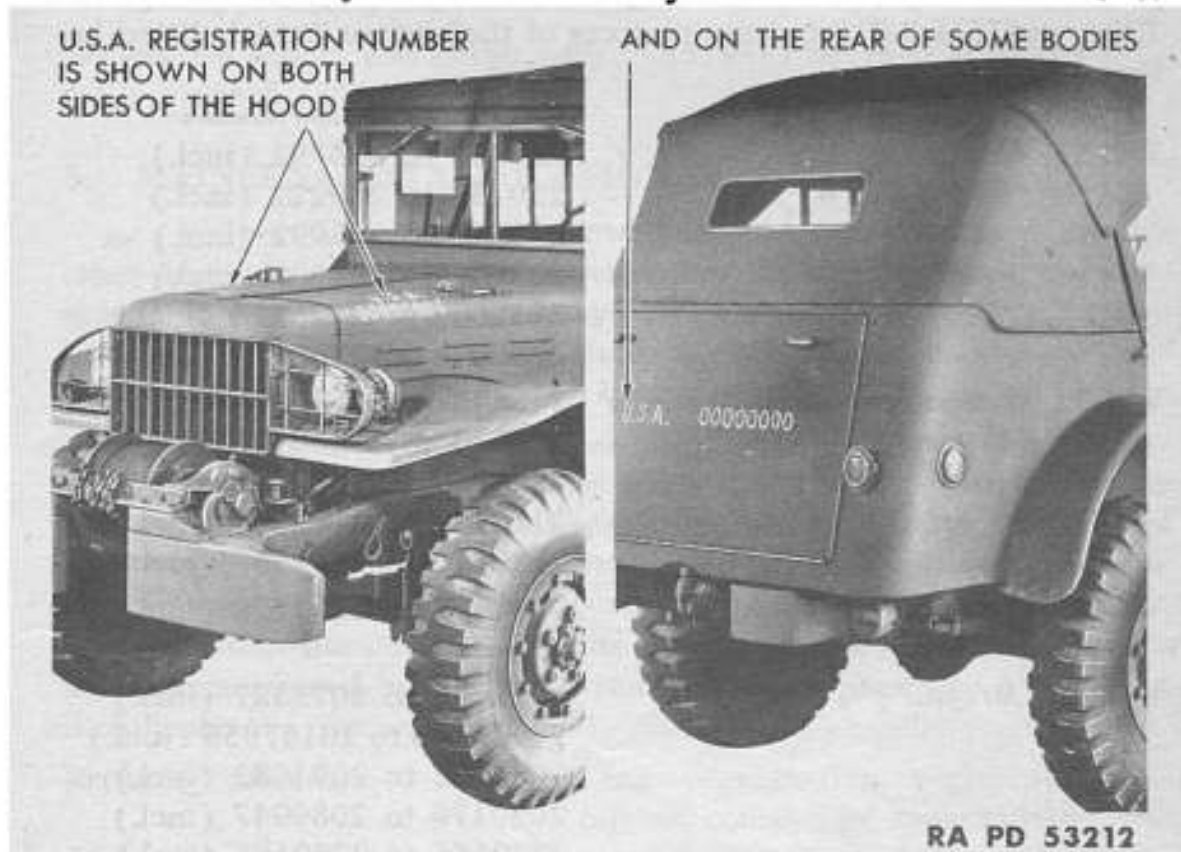


Figure 2—U. S. A. Registration Numbers

(4) CHAPTER 4. Contains a list of special tools. Chapter 4 is followed by a list of references to other publications applicable to the materiel described.

(5) CARTER CARBURETOR SUPPLEMENT. A supplement has been added to the back of this manual containing maintenance instructions on the Carter ETW1 carburetor with which later model vehicles are equipped.

4. DISTINGUISHING CHARACTERISTICS OF MATERIEL

a. General. The $\frac{3}{4}$ ton, 4 x 4 basic vehicles are manufactured in different models for various tactical uses. The electrical systems of the various models differ insofar as the voltage output is concerned, however, to provide for the installation of radio equipment in certain body styles. The $1\frac{1}{2}$ ton, 6 x 6 vehicle is manufactured in one body

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style with a 6-volt electrical system identical to that used in $\frac{3}{4}$ ton 4 x 4 models equipped with 6-volt systems. The electrical system is explained in paragraphs 79 through 85. The stripped engine and components is identical in all $\frac{3}{4}$ ton, 4 x 4 and 1 $\frac{1}{2}$ ton, 6 x 6 models.

b. **U. S. A. Registration Numbers** (fig. 2). The following tabulation of U. S. A. registration numbers is given to help identify the materiel described in this manual. Operator's Manuals TM 9-808, TM 9-720A and TM 9-810 contain pictures of the various models listed below:

Model	Body Style	U. S. A. Registration Numbers
WC-51	Weapon carrier ($\frac{3}{4}$ ton, 4 x 4)	252293 to 254792 (incl.)
		259135 to 289212 (incl.)
		291910 to 291992 (incl.)
		293685 to 294209 (incl.)
		2110000 to 2125113 (incl.)
WC-52	Weapon carrier with winch ($\frac{3}{4}$ ton, 4 x 4)	2232075 to 2233424 (incl.)
		245845 to 246394 (incl.)
		289213 to 291384 (incl.)
		291993 to 292512 (incl.)
		2160419 to 2179292 (incl.)
WC-53	Command field sedan ($\frac{3}{4}$ ton, 4 x 4)	2180276 to 2199555 (incl.)
		2092777 to 2092778 (incl.)
WC-53	Carryall ($\frac{3}{4}$ ton, 4 x 4)	2072128 to 2073327 (incl.)
		20163146 to 20167956 (incl.)
		2089952 to 2091083 (incl.)
		2089176 to 2089947 (incl.)
		2080156 to 2089175 (incl.)
WC-54	Ambulance ($\frac{3}{4}$ ton, 4 x 4)	20260793 to 20261257 (incl.)
		77841 to 79999 (incl.)
		710000 to 719045 (incl.)
		750068 to 750083 (incl.)
WC-55	37mm. gun motor carriage M6 ($\frac{3}{4}$ ton, 4 x 4)	721000 to 732635 (incl.)
		6016072 to 6021066 (incl.)
WC-56	Command ($\frac{3}{4}$ ton, 4 x 4)	6022453 to 6022837 (incl.)
		20167957 to 20182608 (incl.)
WC-57	Command with winch ($\frac{3}{4}$ ton, 4 x 4)	2091084 to 2091983 (incl.)
		20184953 to 20185868 (incl.)
		2092119 to 2092618 (incl.)
WC-58	Radio ($\frac{3}{4}$ ton, 4 x 4)	20291158 to 20295751 (incl.)
		20182690 to 20184952 (incl.)
WC-59	Telephone maintenance (L.I.U. body) ($\frac{3}{4}$ ton, 4 x 4)	0015366 to 0015914 (incl.)