

TM 9-879

RESTRICTED*

WAR DEPARTMENT

TECHNICAL MANUAL



MOTORCYCLE, SOLO
(Harley-Davidson Model WLA)

18 OCTOBER 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 18b, AR 380-5, 28 September 1942.)***

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CONTENTS**PART ONE—VEHICLE OPERATING INSTRUCTIONS**

SECTION		Paragraphs	Pages
I	Introduction	1-2	3-6
II	Description and tabulated data	3-4	7-8
III	Controls and operation	5-13	9-19
IV	First echelon preventive maintenance services	14-18	20-29
V	Lubrication	19-20	30-34
VI	Tools and equipment stowage on the vehicle	21-23	35-38

PART TWO—ORGANIZATIONAL MAINTENANCE

SECTION	VII	Maintenance allocation	24-25	39-44
	VIII	Second echelon preventive maintenance services	26	45-59
	IX	Organization tools and equipment	27	60
	X	Trouble shooting	28-38	61-71
	XI	Engine	39-44	72-77
	XII	Engine—removal and installation	45-46	78-84
	XIII	Clutch	47-52	85-95

*For supersession of quartermaster manuals, refer to paragraph 2.

MOTORCYCLE, SOLO (HARLEY-DAVIDSON MODEL WLA)

CONTENTS—Cont'd

			Paragraphs	Pages
SECTION	XIV	Transmission	53-58	96-104
	XV	Chains and sprockets	59-66	105-114
	XVI	Fuel system	67-74	115-121
	XVII	Intake and exhaust system	75-81	122-128
	XVIII	Ignition system	82-89	129-141
	XIX	Generating system	90-95	142-148
	XX	Brake system	96-97	149-153
	XXI	Steering control	98-101	154-166
	XXII	Sheet metal and equipment	102-111	167-180
	XXIII	Battery, lighting system, horn	112-118	181-190
	XXIV	Instrument panel	119-121	191-192
	XXV	Tires, wheels, and hubs	122-127	193-199
REFERENCES			200
INDEX			201

PART ONE—OPERATING INSTRUCTIONS

Section I

INTRODUCTION

	Paragraph
Scope	1
Supersession of quartermaster manuals	2

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 this materiel.

b. In addition to a description of the Harley-Davidson motorcycle, 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 VI, gives vehicle operating instructions. Part Two, section VII through section XXV, 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.

2. SUPERSESSION OF QUARTERMASTER MANUALS.

a. This technical manual, together with TM 9-1879, supersedes and replaces the following Quartermaster Corps publications:

- (1) TM 10-1175—Maintenance manual, motorcycle, solo, Harley-Davidson (Model 42-WLA), 11 September 1941.
- (2) TM 10-1177—Maintenance manual, motorcycle, solo, Harley-Davidson (Models 1940-41-42), 11 September 1941.
- (3) TM 10-1331—Maintenance manual, motorcycle, chain drive Harley-Davidson (Model 42 WLA, solo).
- (4) TM 10-1359—Instruction folder (45-A) motorcycles, solo, Harley-Davidson (Model 1941 WLA 45), 25 November 1941.
- (5) TM 10-1361—Instruction folder (45-B) motorcycle, solo, Harley-Davidson (Model 1941 WLA 45), 25 November 1941.

*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.

MOTORCYCLE, SOLO (HARLEY-DAVIDSON MODEL WLA)

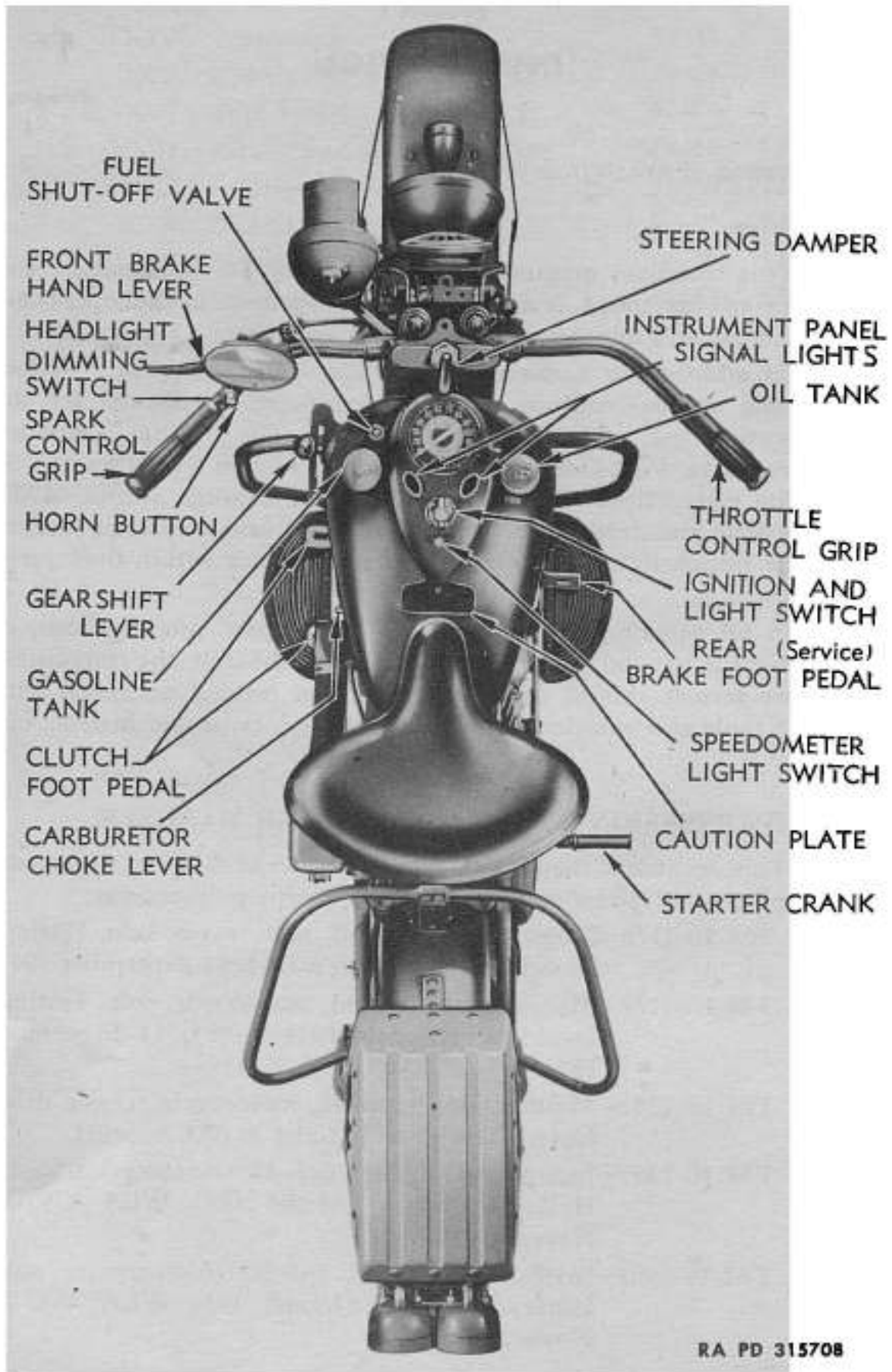
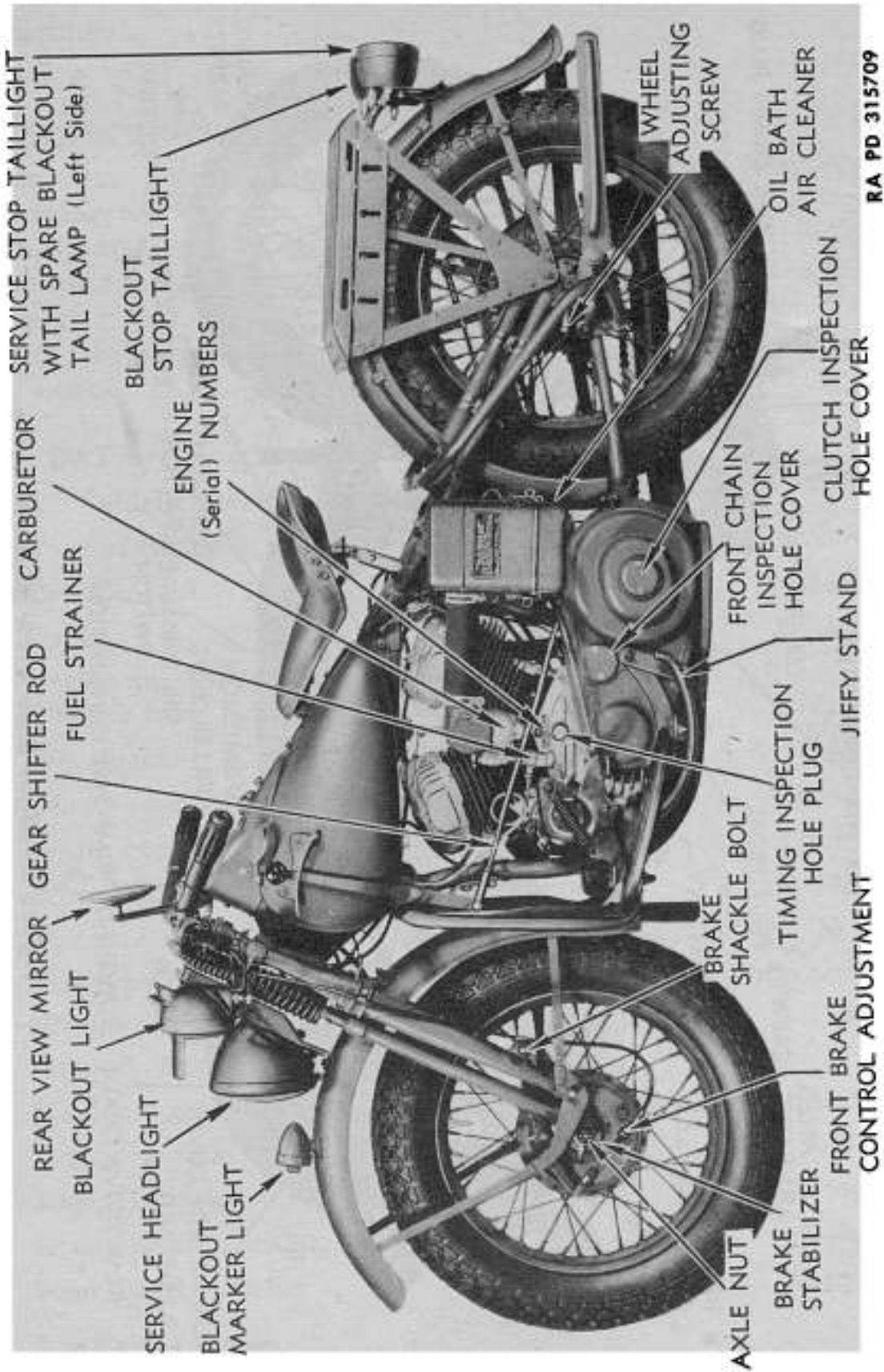


Figure 1—Top View of Motorcycle

INTRODUCTION



RA PD 315709

Figure 2—Left Side View of Motorcycle

MOTORCYCLE, SOLO (HARLEY-DAVIDSON MODEL WLA)

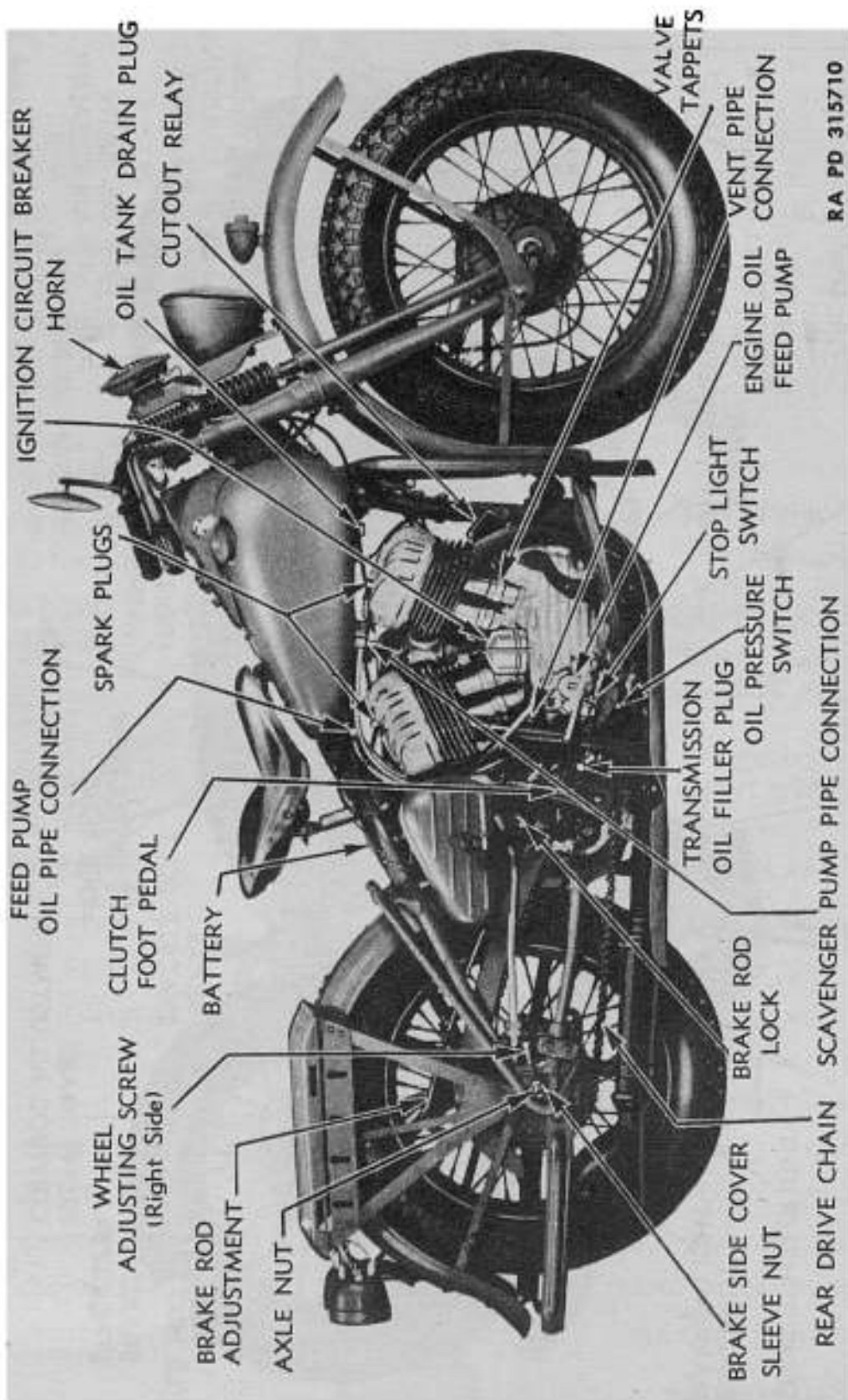


Figure 3--Right Side View of Motorcycle

Section II

DESCRIPTION AND TABULATED DATA

	Paragraph
Description	3
Data	4

3. DESCRIPTION (figs. 1, 2, and 3).

a. This 2-cylinder solo motorcycle is powered by a V-type, air-cooled gasoline engine, operating on conventional 4-stroke, 4-cycle principles. Air-cooled engines rely upon movement of air over cylinder and head radiating fins, and upon circulation of oil for dissipation of excessive heat. Motorcycle engines, therefore, under no conditions should be operated for more than 1 minute when motorcycle is not in motion.

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

Type of engine 2-cylinder, V-type L-head, air-cooled

Cylinder bore 2 $\frac{3}{4}$ in.

Stroke 3 $\frac{13}{16}$ in.

Engine number (serial) left side engine base,
below front cylinder.

Wheelbase 4 ft 11 $\frac{1}{2}$ in.

Length over-all 7 ft 4 in.

Width over-all (handle bars) 3 ft 5 in.

Wheel size 18 in.

Tire size 4.00 x 18 in.

Tire type Drop center

Weight of vehicle (without rider or armament) 540 lb

Ground clearance (skid plate) 4 in.

Kind and grade of fuel Gasoline: 72 octane or higher

High gear ratio 4.59:1

Engine sprocket 31-tooth

Countershaft sprocket 17-tooth

Rear wheel sprocket 41-tooth

b. Performance.

Maximum allowable speed 65 mph

Miles per gallon (hard surface) 35

MOTORCYCLE, SOLO (HARLEY-DAVIDSON MODEL WLA)

Cruising range (without refill) 100 miles
Fording depth (carburetor) 18 in.

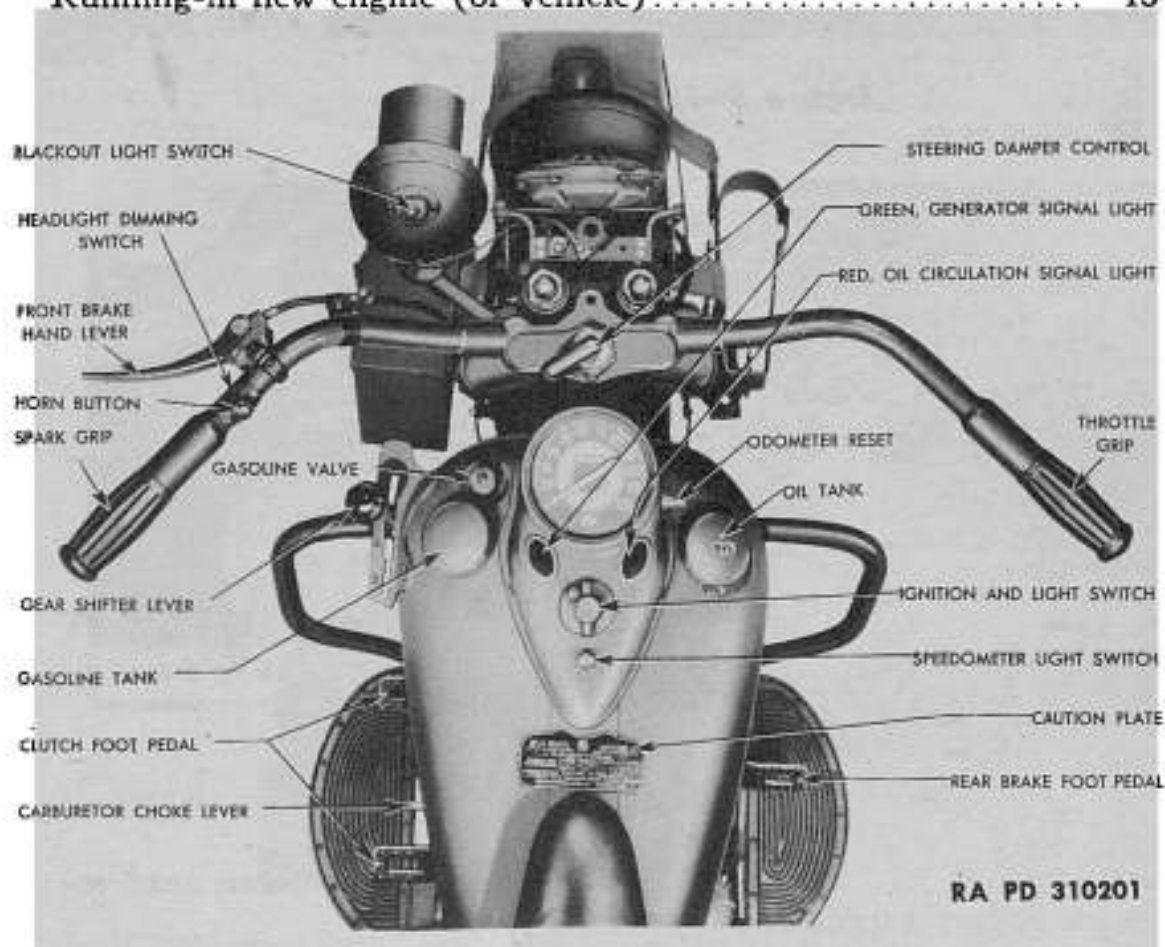
c. Capacities.

Fuel capacity (left tank) $3\frac{3}{8}$ U.S. gal
Oil tank capacity (right tank) $1\frac{1}{8}$ U.S. gal
Transmission capacity $\frac{3}{4}$ pt

Section III

CONTROLS AND OPERATION

	Paragraph*
Controls	5
Engine prestarting instructions	6
Starting the engine	7
Stopping the engine	8
Operation of vehicle	9
Driving precautions	10
Stopping and parking vehicle	11
Towing vehicle to start engine	12
Running-in new engine (or vehicle).....	13

**Figure 4—Controls****5. CONTROLS** (fig. 4).

a. Controls are peculiar to the motorcycle. The rider must become thoroughly familiar with the location and use of all control devices before attempting to operate vehicle.

b. **Gasoline Valve** (figs. 5 and 6). Gasoline valve is located in left tank, forward. Valve is closed by turning to the right, finger tight. Turning to left opens valve. Valve is in normal operating position