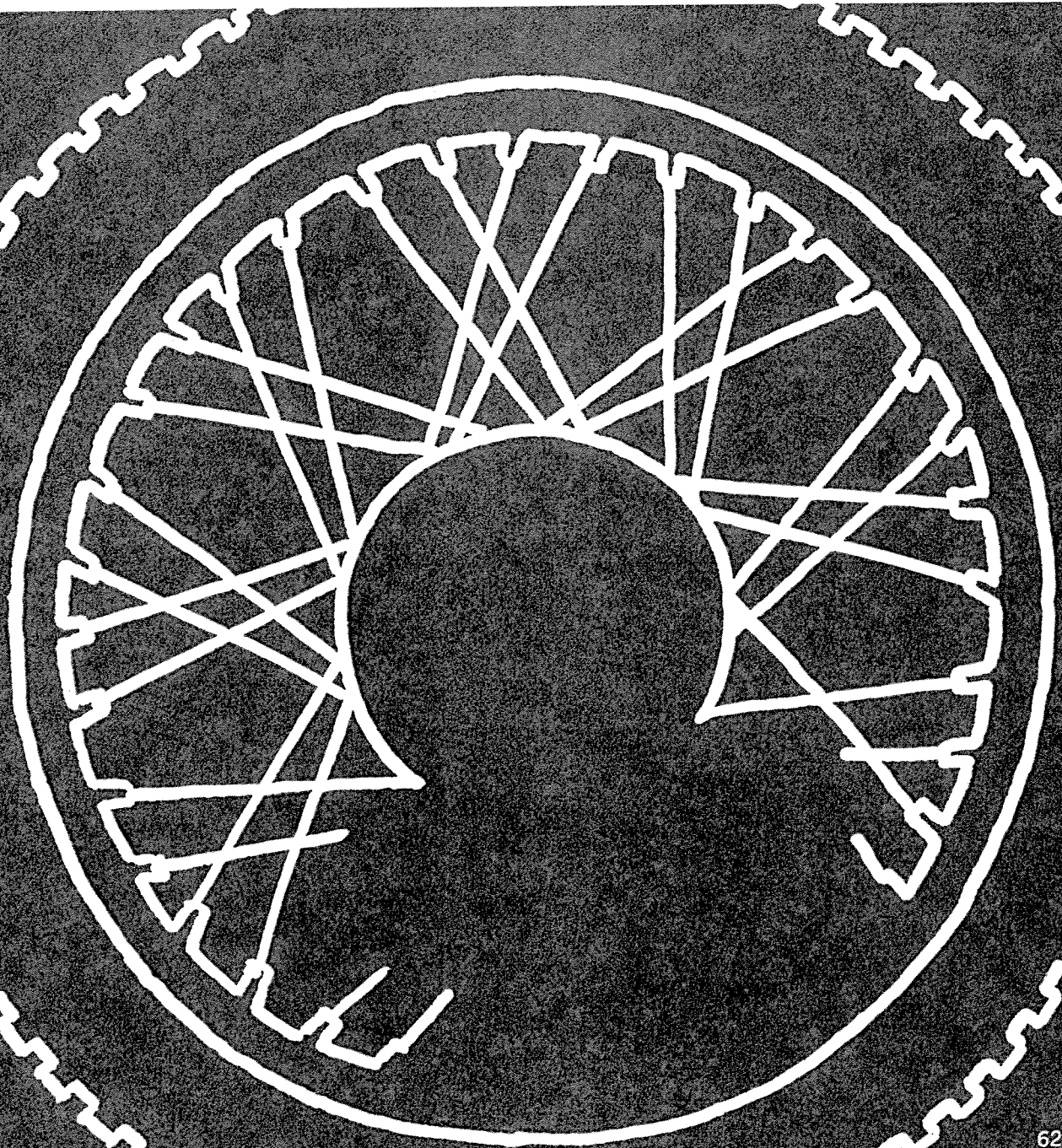


SHOP MANUAL

HONDA CB 125-160



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PREFACE

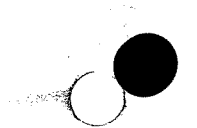
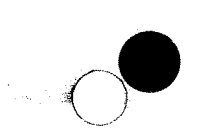
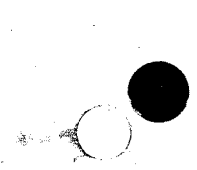
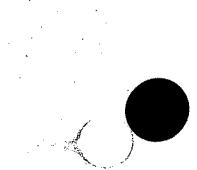
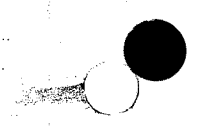
This manual has been compiled as a guide for disassembly and assembly of Honda Models CB 125 and 160

The manual is divided into six sections, each of which gives details of construction, disassembly, and assembly. Required inspection and maintenance procedures are also included.

To further clarify the details contained herein, as many illustrations as possible were used.

This manual, if read carefully, will supply the techniques of correct maintenance and the fundamental technical knowledge required of both mechanics and sales staff.

SERVICE DEPARTMENT
FOREIGN SALES DIVISION
HONDA MOTOR CO., LTD.



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I FEATURES

Features of CB 125 and 160

A. Engine

1. This engine is a parallel two cylinder engine, and each cylinder has special carburetor. The intake pipe is quite smooth, with low resistance, for high intake efficiency, and has an overhead cam for high rotation and high output.
2. The camshaft drive is by chain, and is between the right and left cylinders ; and steady performance and durability maintain low cylinder temperature.
3. Lubricating oil is filtering by both filtering mesh and a centrifugal filter. It is forced by a plunger pump to the crankshaft, camshaft, and transmission shaft. Care has been given to wear and seizure resistance of each unit.
4. For power transmission from the crankshaft to the transmission shaft, double spur gears and shock absorbers reduce gear noise and increase durability by increasing the practical effective engagement ratio.

B. Frame

1. The frame has two sub-tubes which are horizontally extended from the head pipe and have high twist rigidity, in addition to strength required for a sports vehicle.
2. The front wheel suspension is telescopic and the rear wheel is of swinging arm type, with hydraulic shock absorbers. Superb riding comfort, steering, and stability is obtained.
3. The brake unit is a " front two leading " type and rear leading, and trailing type. Due to the semimetallic lining used for brake lining, brake performance is high.
4. The handlebar of semi-raised type, which together with the large speedometer, enables the rider maintain a natural posture while cruising.

II SPECIFICATIONS

MODEL	CB 125	CB 160
ENGINE		
Fuel	Gasoline (petrol)	
Cooling system and cycles	Air-cooled, 4-stroke	Air-cooled, 4-stroke
Number of cylinders and mounting angle	2 cylinders, parallel 30° up from horizontal	2 cylinders, parallel 30° up from horizontal
Valves	Overhead type	Overhead type
Combustion chamber	Semi-spherical	Semi-spherical
Cylinder capacity	0.1246 lit (7.6 cu in)	0.161 lit (9.84 cu in)
Bore × Stroke	44 × 41 mm (1.73 × 1.61 in)	50 × 41 mm (1.97 × 1.61 in)
Compression ratio	9.0	8.5
Compression	10 kg/sq cm (141.9 psi)	10 kg/sq cm (141.9 psi)
Max. output	15 hp/10500 rpm	16.5 hp/10,000 rpm
Max. torque	1.07 mkg (7.7 ft lb)/9200 rpm	1.24 (9 ft. lb)/8 500 rpm
Min. fuel consumption at full load	250 gr (8.8 oz)/hp/h	250 gr (8.8 oz)/hp/h
Starting	Electric motor and kick systems combined	Electric motor and kick systems combined
Ignition	Battery spark	Battery spark
Spark timing	5° to 45° before top dead center	5° to 45° before top dead center
Spark coil		
Model	R 208 29700-097 CM 12	R 208 29700-097 CM 12
Manufacturer	Kokusen Denki, Nihon Denso, Hitachi Seisakusho	Kokusen Denki, Nihon Denso, Hitachi Seisakusho
Spark plug		
Type	D-8 H	D-8 H
Manufacturer	Nihon Tokushu Togyo	Nihon Tokushu Togyo
Carburetor		
Type and number	Piston valve type, 2 each	Piston valve type, 2 each
Manufacturer	TK Kikaki (K.K.) Keihin Seiki (K.K.)	TK Kikaki (K. K.) Keihin Seiki (K. K.)
Air cleaner		
Type	Filter paper	Filter paper
Manufacturer	Tokyo Roki (K. K.)	Tokyo Roki (K. K.)
Fuel tank capacity	10.5 lit (2.8 US gal, 2.3 Imp gal)	10.5 lit (2.8 US gal, 2.3 Imp gal)
Lubrication system	Pump and splash system combined	Pump and splash system combined
Type of oil pump	Plunger	Plunger
Type of oil filter	Wire mesh and centrifugal system combined	Wire mesh and centrifugal system combined
Lubricating oil capacity	1.0 lit (.27 US gal .22 Imp gal)	1.0 lit (.27 US gal .22 Imp gal)
Battery		
Model and number	MBW 3-12 C, 1 each	MBW 3-12 C, 1 each
Voltage/capacity	12 V 9 AH	12 V 9 AH

MODEL	CB 125	CB 160
Charging generator		
Model	EG 19 37000-024 K 107	EG 19 37000-024 K 107
Manufacturer	Kokusan Denki, Nihon Denso, Hitachi Seisakusho	Kokusan Denki, Nihon Denso, Hitachi Seisakusho
Starting motor		
Model	CC 03 28000-111 S 106	CC 03 28000-111 S 106
Manufacturer	Kokusan Denki, Nihon Denso, Hitachi Seisakusho	Kokusan Denki, Nihon Denso, Hitachi Seisakusho
Power transmission device		
Mechanism from engine to gear shifting	Gear system	Gear system
Reduction ratio	3.700	3.700
Model of clutch	Wet multi-plate	Wet multi-plate
Transmission		
Model	Constant engaged gear system	Constant engaged gear system
Shifting	Left foot system	Left foot system
Transmission gear ratio		
first	2.769	2.769
second	1.778	1.778
third	1.318	1.318
fourth	1.040	1.040
Mechanism from transmission device to rear axle	Chain	Chain
Reduction ratio	2.625	2.625
CHASSIS		
Dimensions		
Overall length	1.947 m (6.39 ft)	1.947 m (6.39 ft)
Overall width	0.745 m (2.45 ft)	0.745 m (2.45 ft)
Overall height	0.990 m (3.25 ft)	0.990 m (3.25 ft)
Wheelbase	1.277 m (5.08 ft)	1.277 m (5.08 ft)
Ground clearance	0.145 m (0.48 ft)	0.145 m (0.48 ft)
Weight		
Weight unloaded	127.0 kg (279 lb)	127.0 kg (279 lb)
Number of riders	2	2
Weight distribution at no load, Front	60.5 kg (133 lb)	60.5 kg (133 lb)
Rear	66.5 kg (146 lb)	66.5 kg (146 lb)
Performance		
Max. speed	130 km/h (81 mile/hr)	135 km/h (85 mile/hr)
Fuel consumption ratio on paved road	65 km/lit (40 mile/gall)	55 km/lit (35 mile/gall)
Climbing ability	18°30'	18°30'
Min turning radius	2,120 mm (7 ft)	2,120 mm (7 ft)
Braking distance	7 m (at 35 km/h) 23 ft (at 22 miles/hr)	7 m (at 35 km/h) 23 ft (at 22 miles/hr)
Steering		
Steering angle	40° (right and left)	40° (right and left)
Length of handlebar	0.678 m	0.678 m
Running		
Caster	64°	64°
Trail	0.086 m (0.25 ft)	0.086 m (0.25 ft)
Tire size		
Front	2.50-18 (4 ply)	2.50-18 (4 Ply)
Rear	2.75-18 (4 Ply)	2.75-18 (4 Ply)

II SPECIFICATIONS

MODEL	CB 125	CB 160
Brake		
Types		
Front	"Two leading" internal expansion	"Two leading" internal expansion
Rear	Leading, trailing internal expansion	Leading, trailing internal expansion
Operation		
Front	Right grip manual	Right grip manual
Rear	Right foot	Right foot
Suspension		
Front	Telescopic	Telescopic
Rear	Swinging arm	Swinging arm
Shock absorber		
Front	Coil spring with oil absorber	Coil spring with oil absorber
Rear	Coil spring with oil absorber	Coil spring with oil absorber
Type of frame	Tubular	Tubular
Lamps		
Head lamp		
Model	ASS 13	ASS 13
Manufacturer	Stanley Electric	Stanley Electric
V-W	12 V, 30 W/30 W (white)	12 V, 30 W/30 W (white)
Tail lamp		
V-W	12 V, 8 W (red)	12 V, 8 W (red)
Other use	License lamp	License lamp
License lamp		
V-W	12 V, 8 W	12 V, 8 W
Brake lamp		
V-W color	12 V, 25 W (red)	12 V, 25 W (red)