GENERAL INFORMATION

GROUP 1

CONTENTS

1-1 SERIAL NUMBER 1
1-2 KEY SYSTEM 2
1-3 TECHNICAL DATA 3
a. Dimensional drawing 3
b. Specifications 4
c. Driving performance 10
1-4 THREAD SIZE 11
1-5 SERVICE TOOLS 12

1-1 SERIAL NUMBER

Fig. 1-1 ① Frame serial number

Fig. 1-2 ① Engine serial number

The frame serial number is stamped on the left side of the steering head pipe and engine serial number is located on the top of the crankcase left side. Whenever ordering replacement parts or making inquiries concerning the particular motorcycle, always included the frame or the engine number whichever is applicable. **(Fig. 1-1, 2)**

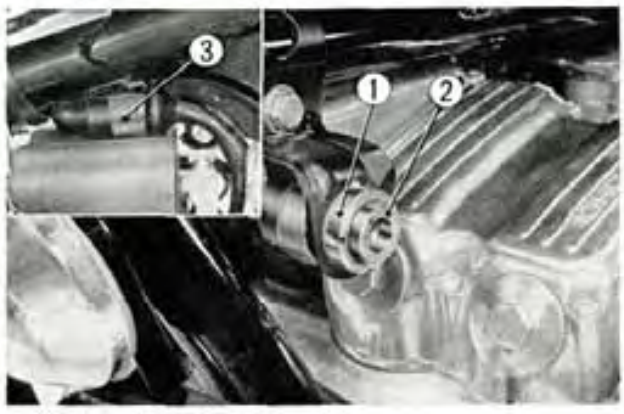


Fig. 1-3 ① Lock nut
② Main ignition switch
③ Coupler

Fig. 1-4 ① Lock spring
② Handle lock
③ Key

1-2 KEY SYSTEM

The key is used to operate both the main ignition switch and the handle lock.

Four keys are provided for each motorcycle, two are to be given to the user and the remaining two are to be kept in custody of the dealer from whom the motorcycle is purchased so that they can be supplied as a spare to the user when they are lost. A rubber cap is provided to cover the head of the key which is in use. The same code number is stamped on the key and ignition switch. When the key is lost refer to the switch code. In case all spare keys are waste, the main ignition switch and the handle lock (key, main ignition switch and handle lock are sold in sets) must be replaced in set.

a. Replacement of main ignition switch

1. Loosen the main ignition switch lock nut and remove the switch from the switch bracket. **(Fig. 1-3)**
2. Disconnect the main switch coupler.
3. Install the new switch on the switch bracket and positively connect the coupler.

b. Replacement of handle lock

1. Remove the handle lock case mounting screw with a cross point screw driver and remove the lock case
2. Insert the key into the handle lock and turn counter clockwise approximately 60° and then the handle lock can be removed from the steering stem. **(Fig. 1-4)**
3. Install the new handle lock in the reverse order of removal procedure described above.

   Do not forget to assemble the handle lock spring.

1-3 TECHNICAL DATA

a. Dimensional drawing

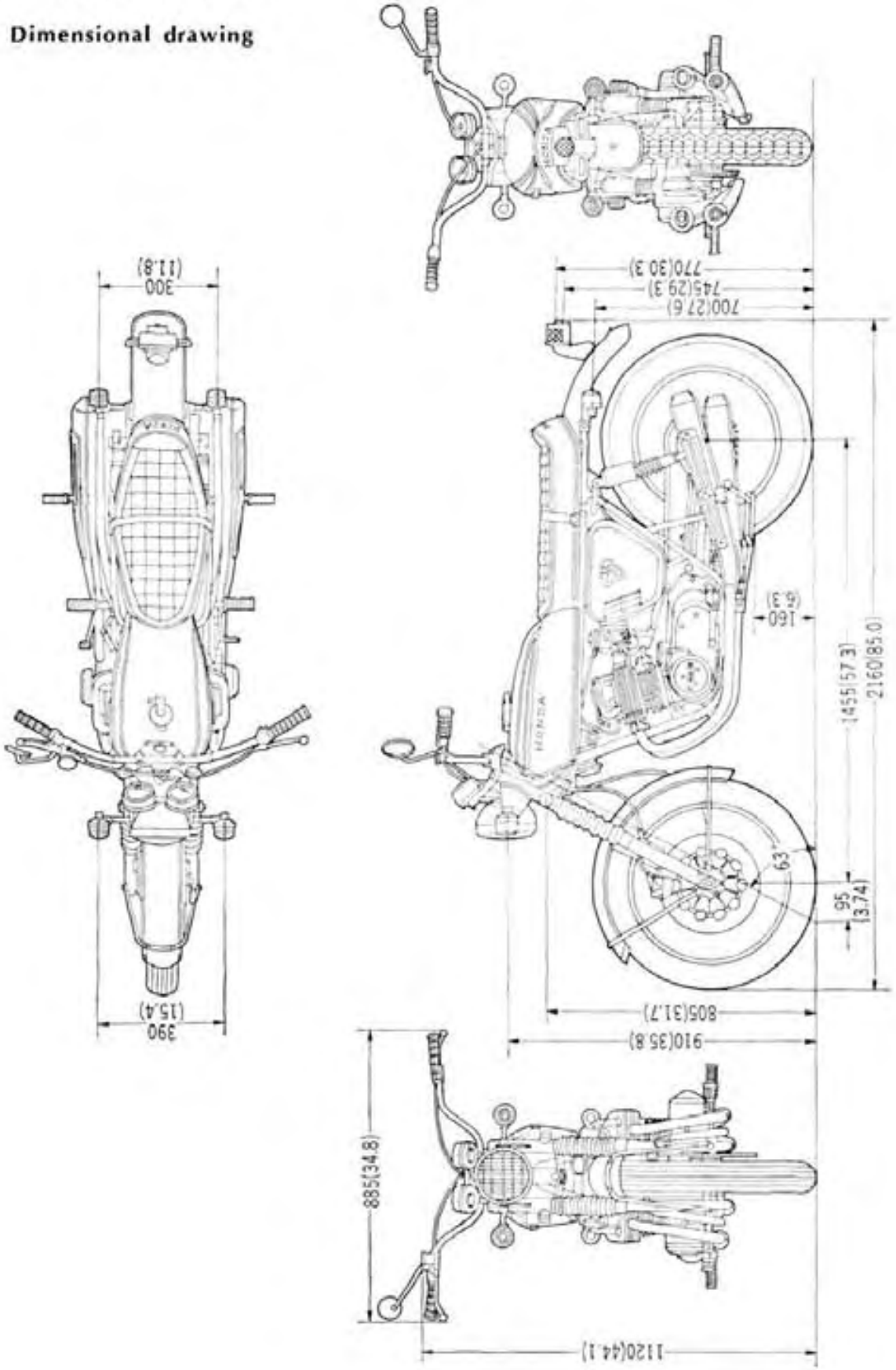


Fig. 1-3

b. Specifications CB 750

	Item	English	Metric
DIMENSION	Overall Length	85.0 in.	2,160 mm
	Overall Width	34.8 in.	885 mm
	Overall Height	45.5 in.	1,155 mm
	Wheel Base	57.3 in.	1,455 mm
	Seat Height	31.5 in.	800 mm
	Foot Peg Height	12.2 in.	310 mm
	Ground Clearance	5.5 in.	160 mm
	Curb Weight	517.3 lb.	235 kg
	Weight Distribution L/R	271.1/209.5 lb.	123/205 kg
FRAME	Type	Double cradle tubular steel	
	F. Suspension, Travel	Telescopic fork, travel 5.6 in.	143 mm
	R. Suspension, Travel	Swing arm, travel 3.3 in.	85 mm
	F. Tire Size, Type	3.25-19 (4 PR) Rib tire,	tire air pressure 2.0 kg/cm², 28 psi
	R. Tire Size, Type	4.00-18 (4 PR) Block tire,	tire air pressure 2.0 kg/cm², 28 psi
	F. Brake, Lining Area	Disc brake,	lining area 2.9 in²×2, 19 cm²×2
	R. Brake, Lining Area	Internal exanding shoe,	lining area 8.2 in²×2, 53 cm²×2
	Fuel Capacity	4.7 U.S. gal. 3.9 Imp. gal.	18 lit.
	Fuel Reserve Capacity	1.3 U.S. gal. 1.1 Imp. gal.	5 lit.
	Caster Angle	63°	
	Trail Length	3.74 in.	95 mm
	Front Fork Oil Capacity	7.0-7.3 ozs	220-230 cc
ENGINE	Type	Air-cooled, 4-stroke, O.H.C. engine	
	Cylinder Arrangement	4-cylinder in line	
	Bore and Stroke	2.401×2.408 in.	61×63 mm
	Displacement	44.93 cu in.	736 cc
	Compression Ratio	9.0	
	Carburetor, Venturi Dia	Four, piston valve, 28 mm dia.	
	Valve Train	Cnain drive overhead camshaft	
	Maximum Horsepower	67 BHP/8,000 rpm	
	Maximum Torque	44.12 lb-ft/7,000 rpm	6.1 kg-m/7,000 rpm
	Oil Capacity	7.39 U.S. pt., 6.16 Imp. pt.	3.5 lit.
	Oil Tank Capacity	4.22 U.S. pt., 3.55 Imp. pt.	2 lit.
	Lubrication System	Forced pressure and dry sump	
	Air Filtration	Paper element	

	Item	English	Metric
	Valve Tappet Clearance	IN: 0.002, EX: 0.003 in.	IN: 0.05, EX: 0.08 mm
	Engine weight (include oil)	176.3 lb.	80 kg
	Air Screw Opening	1±1/8	
	Idle Speed	900 rpm	
DRIVE TRAIN	Clutch	Wet, multi-plate	
	Transmission	5-speed, constant mesh	
	Primary Reduction, Secondary Reduction	Primary: 1.708, Secondary: 1.167	
	Gear Ratio I	2.500	
	〃 II	1.708	
	〃 III	1.333	
	〃 IV	1.097	
	〃 V	0.939	
	Final Reducion	2.667, drive sprocket 18 T, driven sprocket 48 T	
	Gear Shift Pattern	Left foot return type	
	Ignition	Battery and ignition coil	
	Starting System	Electrical motor and kick pedal	
	Alternator	Three phase A.C. 12 V-0.12 kW/5,000 rpm	
	Battery Capacity	12 V-14 AH	
	Spark plug	NGK D-8 ES	

CB 750 K 1

	Item		English	Metric
Dimension	Overall length		85.0 in.	2,160 mm
	Overall width		34.8 in.	885 mm
	Overall height		44.5 in.	1,155 mm
	Wheel base		57.3 in.	1,455 mm
	Seat height		31.5 in.	800 mm
	Foot peg height		12.2 in.	310 mm
	Ground clearance		5.5 in.	140 mm
	Dry weight		479 lb.	218 kg
Frame	Type		Double cradle	
	F. suspension, travel		Telescopic fork, travel 5.6 in. (143 mm)	
	R. suspension, travel		Swing arm, travel 3.3 in. (85 mm)	
	F. tire size, pressure		3.25-19 (4 PR) Rib pattern, tire air pressure 2.0 kg/cm² (28 psi)	
	R. tire size, pressure		4.00-18 (4 PR) Block pattern, tire air pressure 2.0 kg/cm² (28 psi)	
	F. brake, lining area		Disk brake, lining swept area 59.3 sq. in. (382.9 cm²)	
	R. brake, lining area		Internal expanding shoe, lining swept 33.2 sq. in. (220.5 cm²)	
	Fuel capacity		4.5 U.S. gal. 3.7 Imp. gal.	17 lit
	Fuel reserve capacity		1.3 U.S. gal. 1.1 Imp. gal.	5 lit
	Caster angle		63°	
	Trail leugth		3.7 in	95 mm
	Front fork oil capacity		7.5-7.8 ozs	220-230 cc (to fill if dry)
	Front fork oil capacity		6.9-7.1 ozs	200-210 cc (to fill after draining)
Engine	Type		Air cooled, 4 stroke O.H.C. engine	
	Cylinder arrangement		4 cylinder in line	
	Bore and stroke		2.402×2.480 in.	61.0×63.0 mm
	Displacement		44.9 cu-in.	736 cc
	Compression ratio		9.0 : 1	
	Valve train		Chain driven over head camshaft	
	Oil capacity		3.7 U.S. qt. 3.1 Imp. qt.	3.5 lit
	Lubrication system		Forced pressure and dry sump	
	Cylinder head compression pressure		12 kg/cm² (170.7 psi)	
	Intake valve	Open	At 5° (before top dead center)	
		Close	At 30° (after bottom dead center)	
	Exhaust valve	Open	At 35° (before bottom dead center)	
		Close	At 5° (after top dead center)	
	Valve tappet clearance		IN: 0.002, EX: 0.003 in.	IN: 0.05, EX: 0.08 mm
	Idle Speed		950 rmp	

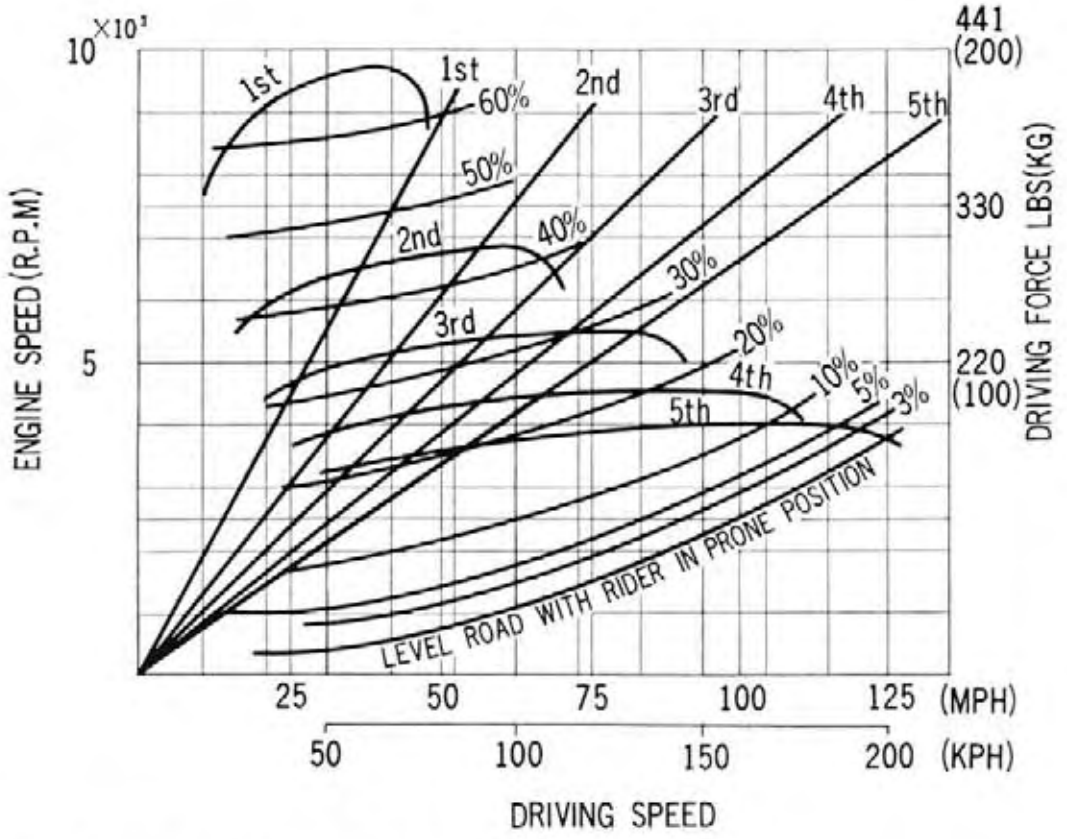
	Item	English	Metric
Carburetor	Type	Piston valve	
	Setting mark	7A	
	Main jet	#120	
	Slow jet	# 40	
	Air screw opening	1±3/8 turns	
	Float height	0.866 in.	26 mm
Drive train	Clutch	Wet multi plate type	
	Transmission	5-speed constant mesh	
	Primary reduction	1.708	
	Gear ratio I	2.500	
	Gear ratio II	1.708	
	Gear ratio III	1.333	
	Gear ratio VI	1.097	
	Gear ratio V	1.939	
	Final reduction	2.667, drive sprocket 18 T, driven sprocket 48 T	
	Gear shift pattern	Left foot operated return system	
Electrical	Ignition	Battery and ignition coil	
	Starting system	Starting motor or kick starter	
	Alternator	Three phase A.C. generator 12 V/0.21 kW/5,000 rpm	
	Battery capacity	12 V-14 AH	
	Spark plug	NGK D8ES-L, NDX 24ES	
	Headlight	Low/high	12 V-40 W/50 W
	Tail/stoplight	Tail/stop	12 V-7/23 W (SEA TRADE No. 1157)
	Turn signal-light	Front/rear	12 V-23/23 W
	Speedometer light	12 V-3 W	
	Tachometer light	12 V-3 W	
	Neutral indicator light	12 V-3 W	
	Turn signal indicator light	12 V-3 W	
	High bean indicator light	12 V-3 W	

CB 750 K2, K3, K4

	Item		English	Metric
Dimension	Overall length		85.6 in.	2,175 mm
	Overall width		34.3 in.	870 mm
	Overall height		46.1 in.	1,170 mm
	Wheel base		57.3 in.	1,455 mm
	Seat height		31.9 in.	810 mm
	Foot peg height		12.2 in.	310 mm
	Ground clearance		5.5 in.	140 mm
	Dry weight		479 lb.	218 kg
Frame	Type		Double cradle	
	F. suspension, travel		Telescopic fork, travel 5.6 in. (143 mm)	
	R. suspension, travel		Swing arm, travel 3.3 in. (85 mm)	
	F. tire size, pressure		3.25-19 (4 PR) Rib pattern, tire air pressure 2.0 kg/cm² (28 psi)	
	R. tire size, pressure		4.00-18 (4 PR) Block pattern, tire air pressure 2.0 kg/cm² (28 psi)	
	F. brake, lining area		Disk brake, lining swept area 59.3 sq. in. (382.9 cm²)	
	R. brake, lining area		Internal expanding shoe, lining swept 34.2 sq. in. (220.5 cm²)	
	Fuel capacity		4.5 U.S. gal. 3.7 Imp. gal.	17 lit
	Fuel reserve capacity		1.3 U.S. gal. 1.1 Imp. gal.	5 lit
	Caster angle		63°	
	Trail length		3.7 in.	95 mm
	Front fork oil capacity		7.5-7.8 ozs	220-230 cc (to fill if dry)
	Front fork oil capacity		5.3-5.4 ozs	155-160 cc (to fill after draining)
Engine	Type		Air cooled, 4 stroke O.H.C. engine	
	Cylinder arrangement		4 cylinder in line	
	Bore and stroke		2.402×2.480 in.	61.0×63.0 mm
	Displacement		44.9 cu-in.	736 cc
	Compression ratio		9.0 : 1	
	Valve train		Chain driven over head camshaft	
	Oil capacity		3.7 U.S. qt. 3.1 Imp. qt.	3.5 lit
	Lubrication system		Forced pressure and dry sump	
	Cylinder head compression pressure		12 kg/cm² (170.7 psi)	
	Intake valve	Open	At 5° (before top dead center)	
		Close	At 30° (after bottom dead center)	
	Exhaust valve	Open	At 35° (before bottom dead center)	
		Close	At 5° (after top dead center)	
	Valve tappet elearance		IN: 0.002, EX: 0.003 in.	IN: 0.05, EX: 0.08 mm
	Idle speed		950 rpm	

	Item	English	Metric
Carburetor	Type	Piston valve	
	Setting mark	7A	
	Main jet	#120 (K3, #105)	
	Slow jet	# 40	
	Air screw opening	1±3/8 turns	
	Float height	0.866 in.	26 mm
Drive train	Clutch	Wet multi plate type	
	Transmission	5-speed constant mesh	
	Primary reduction	1.708	
	Gear ratio I	2.500	
	Gear ratio II	1.708	
	Gear ratio III	1.333	
	Gear ratio VI	1.097	
	Gear ratio V	1.939	
	Final reduction	2.667, drive sprocket 18 T, driven sprocket 48 T	
	Gear shift pattern	Left foot operated return system	
Electrical	Ignition	Battery and ignition coil	
	Starting system	Starting motor or kick starter	
	Alternator	Three phase A.C. generator 12 V/0.21 kW/5,000 rpm	
	Battery capacity	12 V-14 AH	
	Spark plug	NGK D8ES-L, NDX 24ES	
	Headlight	Low/high	12 V-40 W/50 W
	Tail/stoplight	Tail/stop	12 V-3/32 CP (SAE TRADE No. 1157)
	Turn signal-light	Front/rear	12 V-32/32 CP (SAE TRADE No. R1034, L1073)
	Speedometer light	12 V-2 CP (SAE TRADE No. 57)	
	Techometer light	12 V-2 CP (SAE TRADE No. 57)	
	Neutral indicator light	12 V-2 CP (SAE TRADE No. 57)	
	Turn signal indicator light	12 V-2 CP (SAE TRADE No. 57)	
	High beam indicator light	12 V-2 CP (SAE TRADE No. 57)	
	Position Light	12 V-4 CP (SAE TRADE No. —)	

c. Driving Performance Curve (One Rider)



Driving Performance Curve (Two Rider)

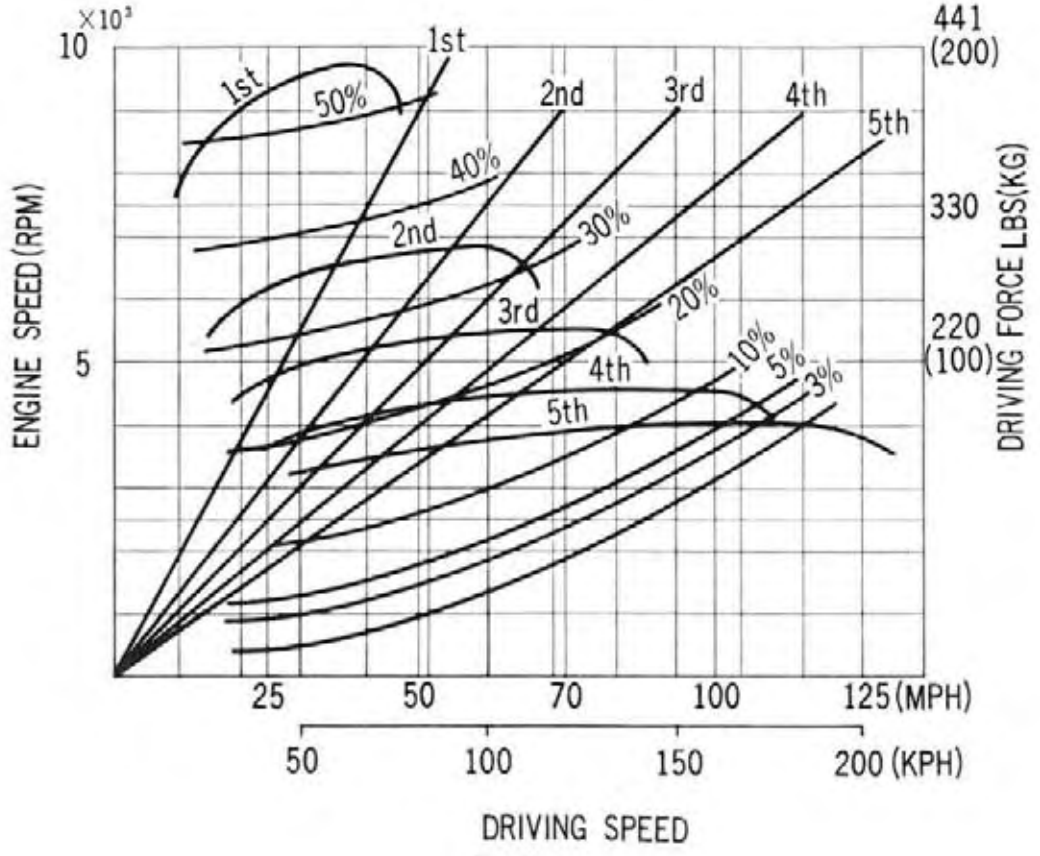


Fig. 1-6

1-4 THREAD SIZE

All threaded parts used on the HONDA CB 750 conform to ISO Standard (International Standardization Organization).

The differences between the dimensions of the JIS (Japan Industrial Standard) bolts, which were previously used, and the ISO bolts are in the thread pitch, width across flat and the thickness of the head. Do not use any JIS thread to fit ISO thread, otherwise the thread will be damaged. The width across flat is also different from JIS standard except 6 mm bolt or nut, thus the wrenches are not common to the ones based on JIS standard except 10 mm. The table below lists these dimensions for the ISO standard bolts.

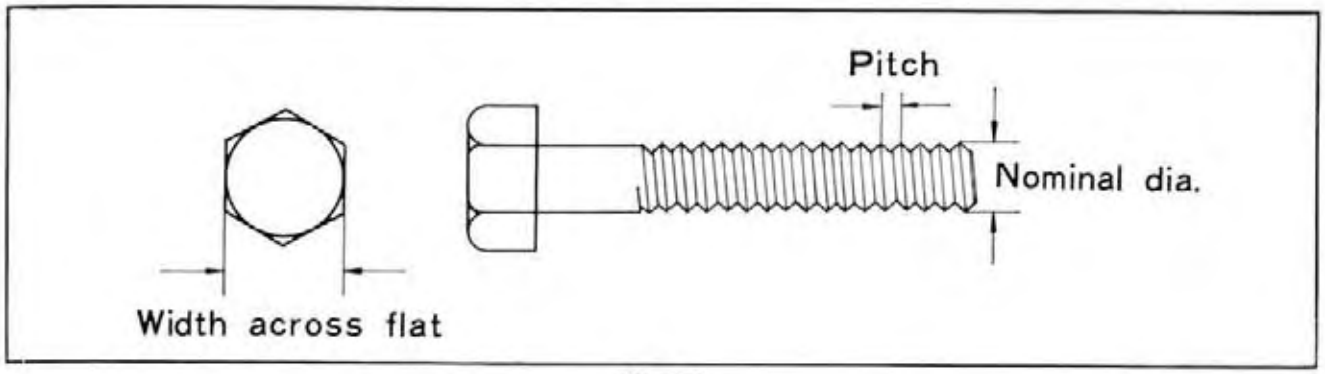


Fig. 1-7

Unit : mm

Nominal dia	Width across flat		Pitch	
	ISO	JIS	ISO	JIS
3	5.5	6	0.5	0.6
4	7	8	0.7	0.75
5	8	9	0.8	0.9
6	10 (Same as JIS std.)	10	1.0 (Same as JIS std.)	1.0
8	12	14	1.25 (Same as JIS std.)	1.25
10	14	17	1.25 (Same as JIS std.)	1.25
12	17	19	1.25	1.5
14	19	21	1.5 (Same as JIS std.)	1.5
16	22	23	1.5 (Same as JIS std.)	1.5
18	24	26	1.5 (Same as JIS std.)	1.5
20	27	29	1.5 (Same as JIS std.)	1.5

To make it possible to identify the ISO threads, they are marked as shown below.

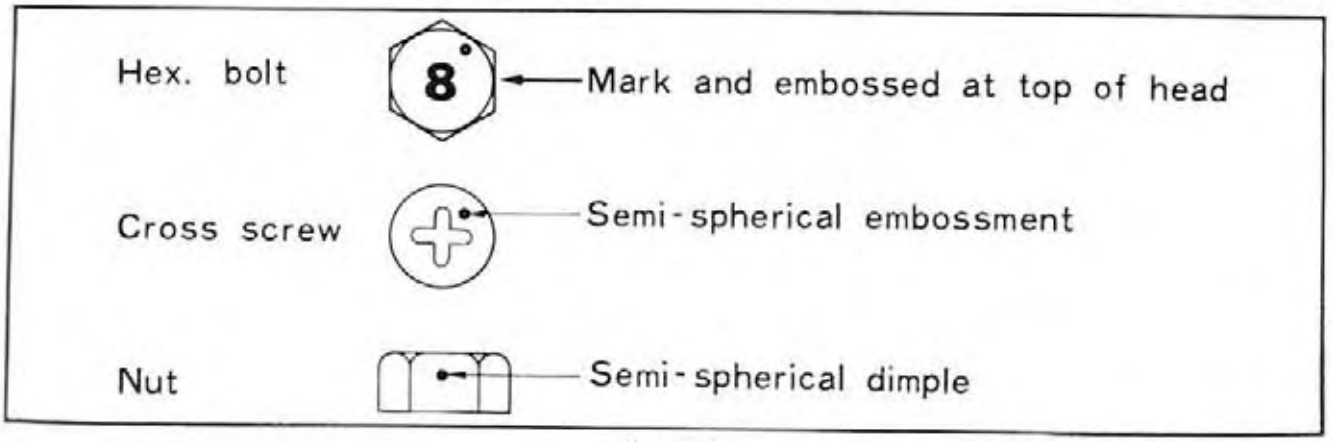
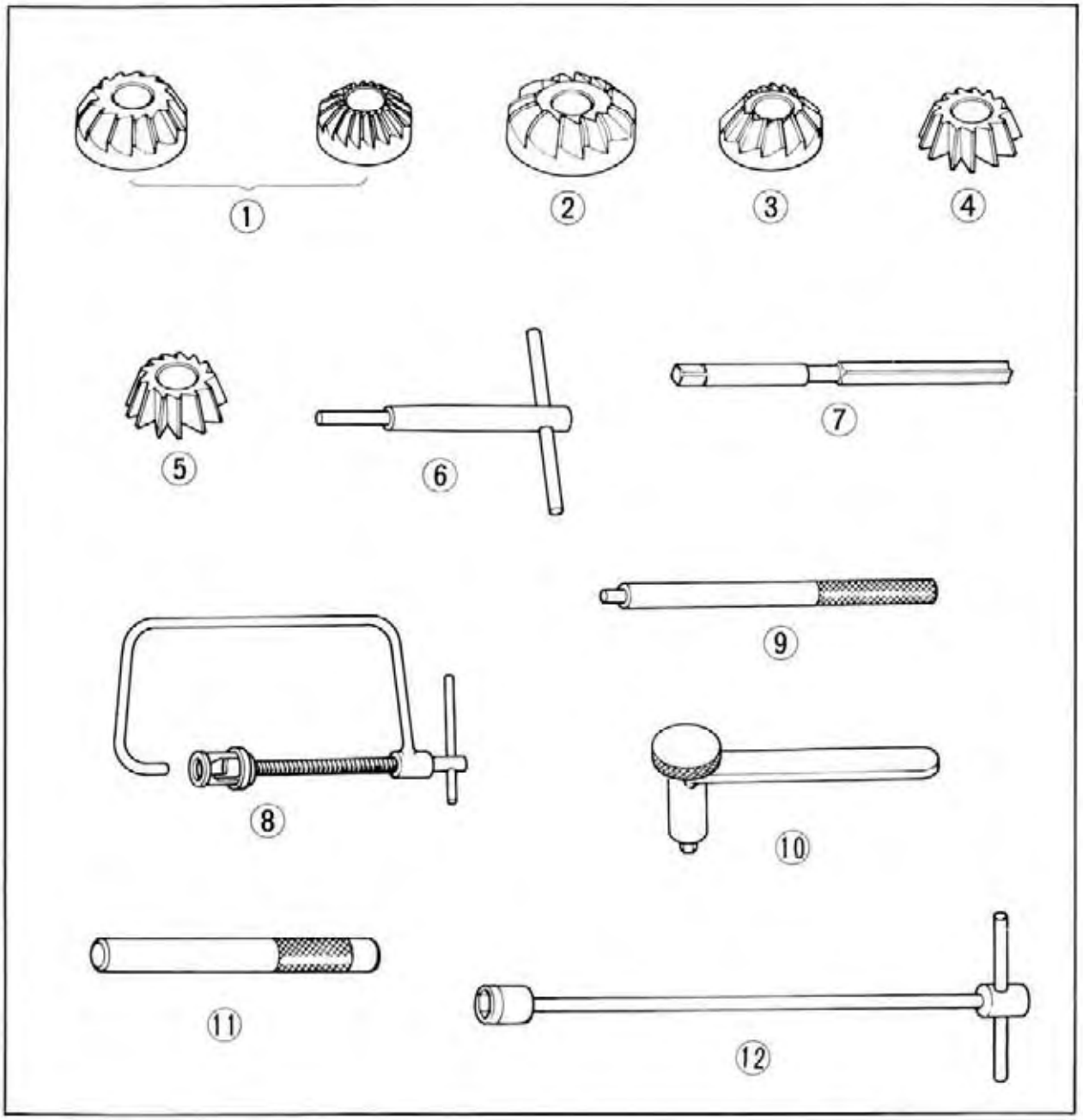
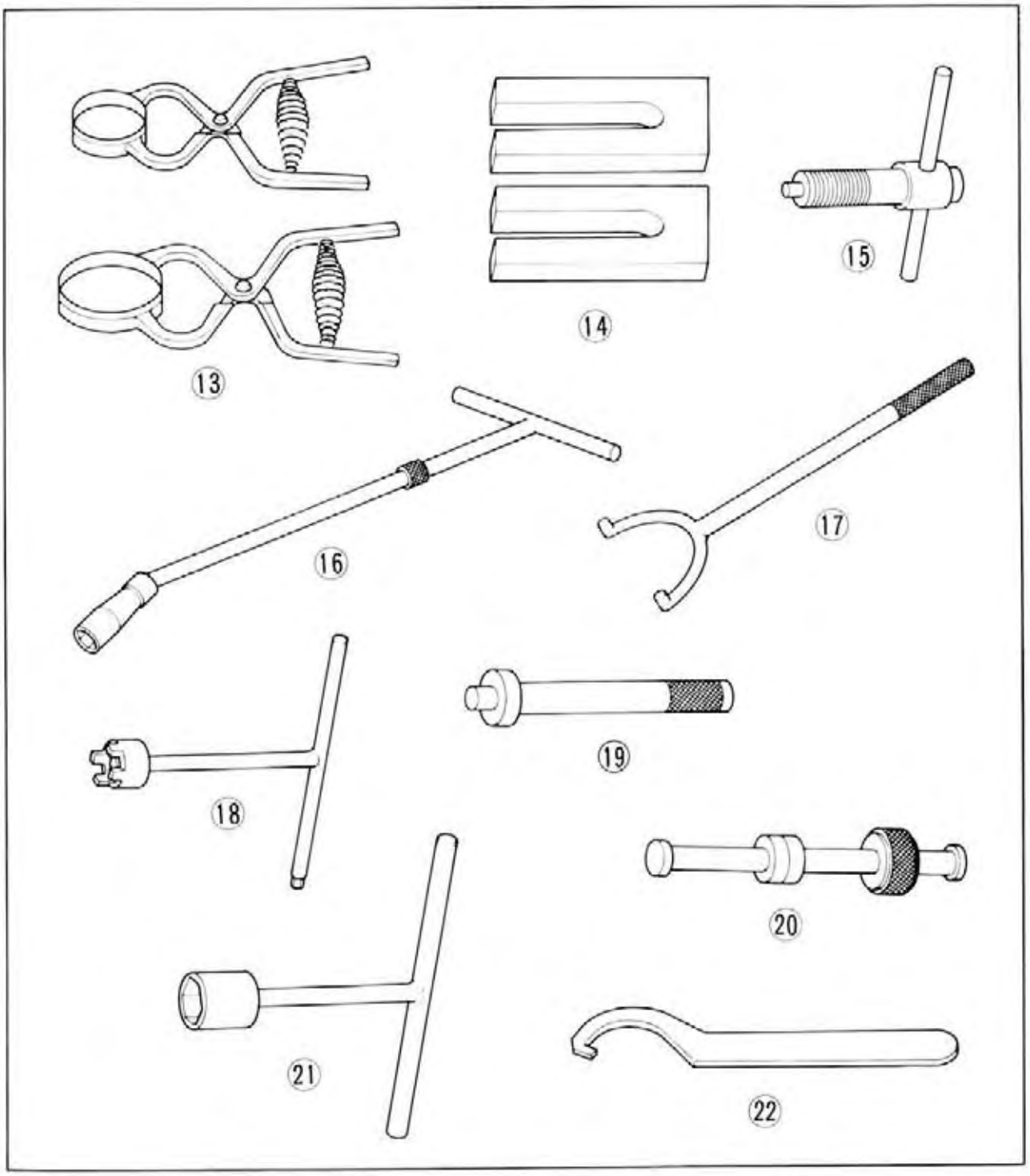


Fig. 1-8

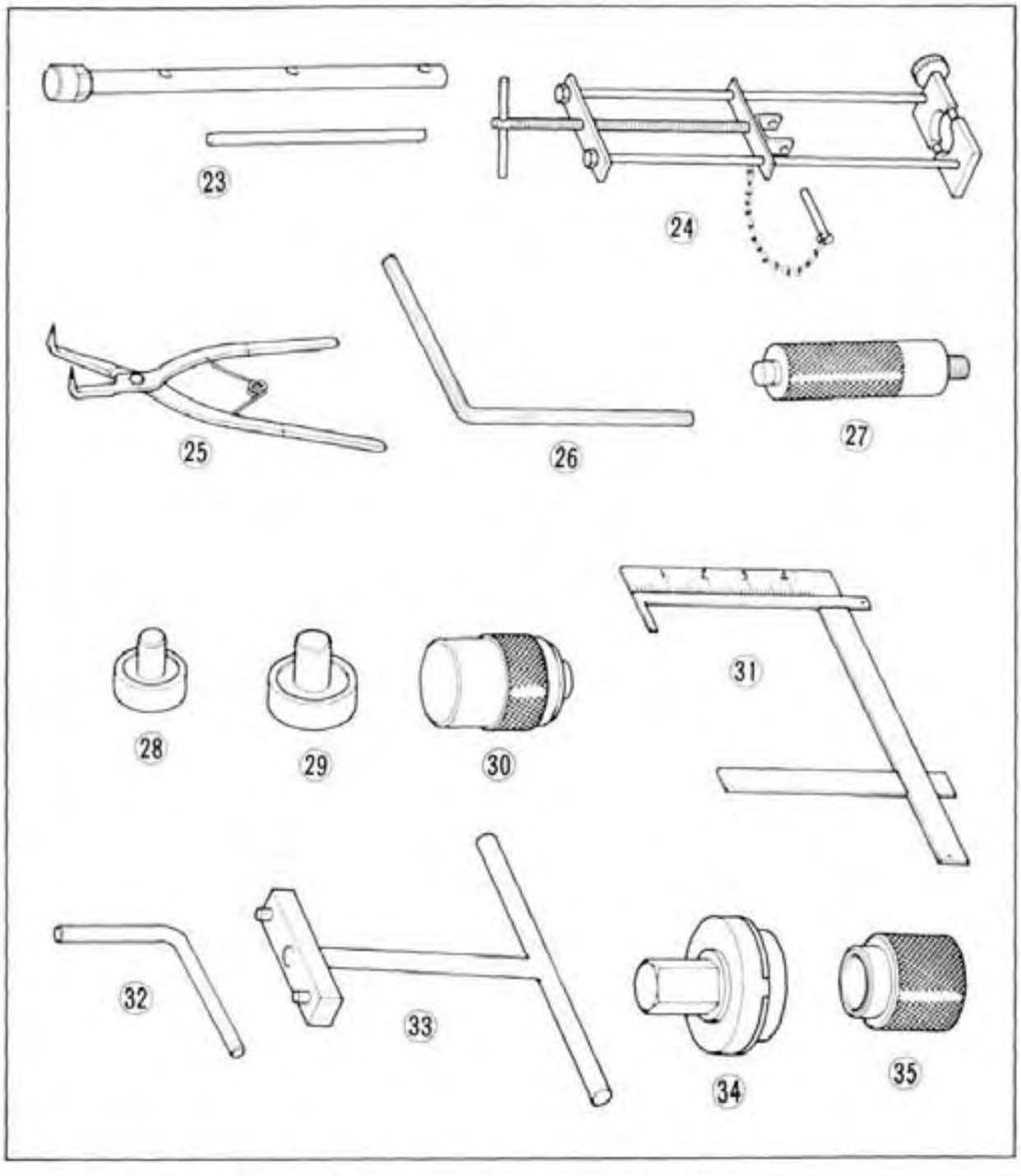
1-5 SERVICE TOOLS



Ref. No.	TOOL No.	DESCRIPTION
	07900-3000000	Special Tool Set for CB 750
①	07980-3000100	Inlet/Exhaust valve seat cutter 90°
②	07980-5680400	Inlet valve seat top cutter
③	07980-5510400	Exhaust valve seat top cutter
④	07980-5510500	Inlet valve seat interior cutter
⑤	07980-5510500	Exhaust valve seat interior cutter
⑥	07981-5510000	Valve seat cutter holder
⑦	07984-6110000	Valve guide reamer
⑧	07957-3290000	Valve spring compressor
⑨	07942-3000000	Valve guide driving & removing tool
⑩	07908-3230000	Valve tappet lock nut wrench
⑪	07942-3000200	Valve guide driver
⑫	07906-3230000	Heat bolt 12 mm wrench

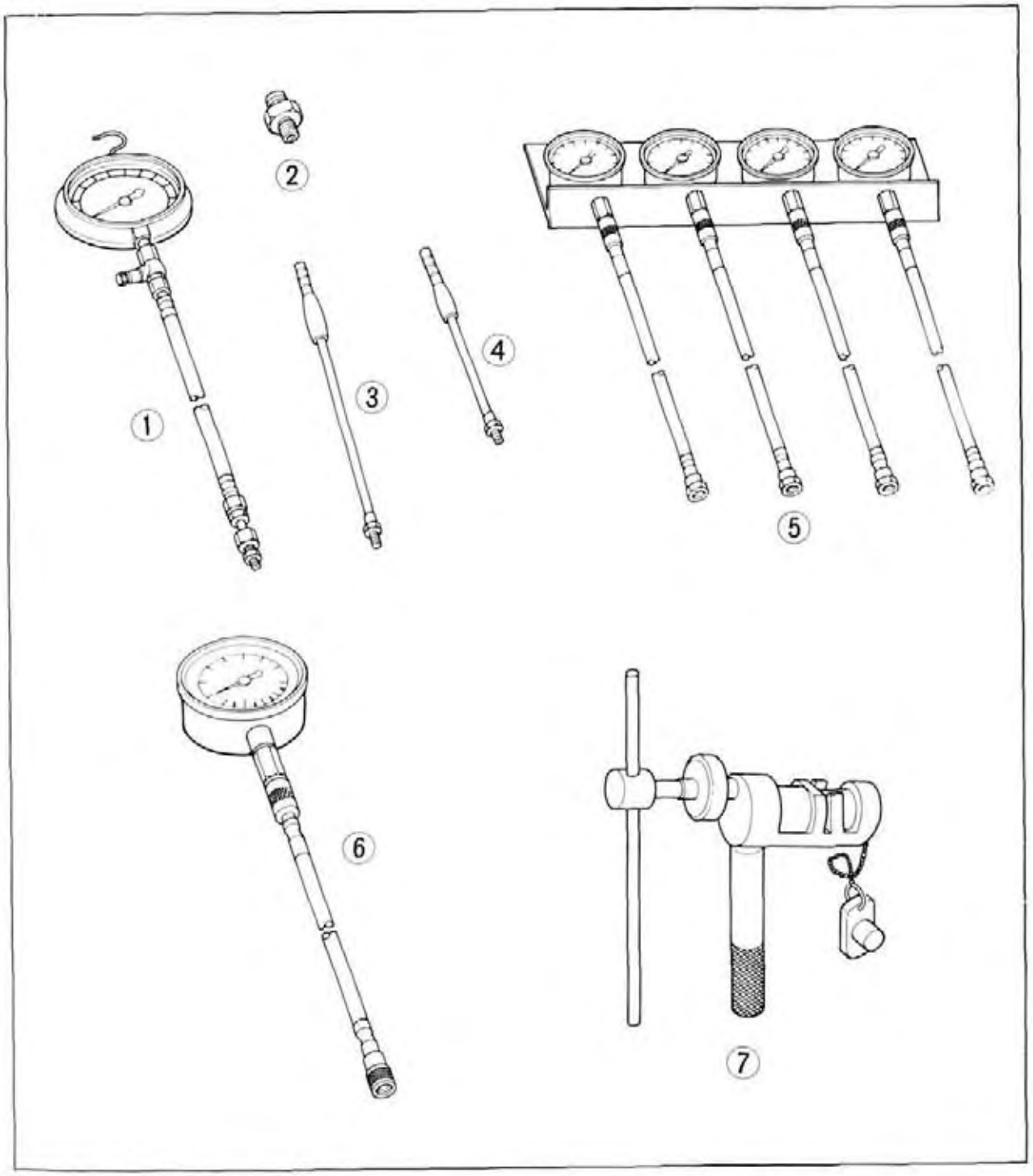


Ref. No.	TOOL No.	DESCRIPTION
⑬	07954-3000000	Piston ring compressor (2 pcs)
⑭	07958-3000000	Piston base (2 pcs)
⑮	07933-3000000	AC generator rotor puller
⑯	07909-3000000	Spark plug wrench
⑰	07922-3000000	Drive sprocket holder
⑱	07916-2830000	Clutch lock nut wrench
⑲	07945-3000400	Counter shaft bearing removing tool
⑳	07945-3000500	Counter shaft bearing removing tool
㉑	07915-2160000	Stem nut box wrench
㉒	07902-2000000	Steering stem top thread wrench



Ref. No.	TOOL No.	DESCRIPTION
㉓	07967-3000000	Front fork assembling bar
㉔	07959-3290000	Rear cushion disassembling & assembling tool
㉕	07914-3230000	Master cylinder circlip pliers
㉖	07917-3000000	Hollow set wrench
㉗	07949-3000000	Bearing driver handle
㉘	07946-3000100	Front wheel bearing driver
㉙	07946-3000200	Pear wheel bearing driver
㉚	07945-3000000	Final drive shaft bearing driver
㉛	07401-0010000	Carburetor float level gauge
㉜	07999-3000000	Crankshaft turning handle
㉝	07910-3230101	Retainer wrench
㉞	07910-2830000	Retainer wrench
㉟	07947-3290000	Oil seal guide

GAUGES AND ATTACHMENT



Ref. No.	TOOL No.	DESCRIPTION
①	07506-3000000	Oil pressure gauge (10 kg)
②	07510-3000000	Oil pressure gauge adaptor
③	07510-3000100	Vacuum gauge attachment (A) (2 pcs)
④	07510-3000200	Vacuum gauge attachment (B) (2 pcs)
⑤	07504-3000100	Vacuum gauge set (4 pcs)
⑥	07504-3000200	Vacuum gauge (1pcs)
⑦	07975-3000001	Joint tool set

ENGINE REMOVAL AND INSTALLATION

GROUP 2

CONTENTS

2-1 DESCRIPTION 17
2-2 ENGINE REMOVAL 17
2-3 ENGINE INSTALLATION 19

2-1 DESCRIPTION

The engine is made as single-unit including clutch and transmission and mounted to the frame with four mounting bolts.

The single-unit engine may be dismounted by disconnecting wiring system, fuel system, exhaust system, air intake system and final drive system, and removing engine mounting bolts. However, the following parts can be disassembled from the engine without dismounting the engine from the frame.

Clutch assembly, a. c. generator, cam chain tensioner, gear shift arm, gear shift drum stopper, gear shift positive stopper, contact breaker assembly and carburetor.

2-2 ENGINE REMOVAL

1. Shut off the fuel tank valve and disconnect the fuel tubes from the fuel tank valve. Raise the seat and remove the fuel tank. (refer to page 82).
2. Remove the oil filter and drain the engine oil by removing both the oil tank drain plug (refer to **Fig.** 15-7 on page 154) and the engine oil drain plug. **(Fig. 2-1)**
3. Remove the exhaust mufflers.
4. Disconnect the tachometer cable at the cylinder head cover and remove the high tension cord caps from the spark plugs. **(Fig. 2-2)**
5. After removing the throttle valves from the respective carburetor, detach the carburetors from the inlet pipes.
6. Remove the air cleaner case.
7. Remove the kick starter pedal and the clutch cover.

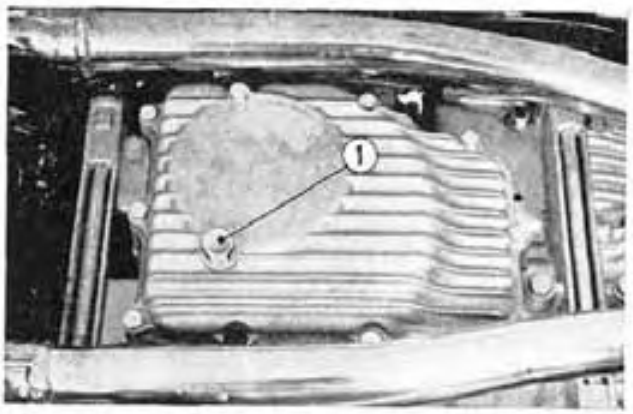


Fig. 2-1 ① Engine oil drain plug

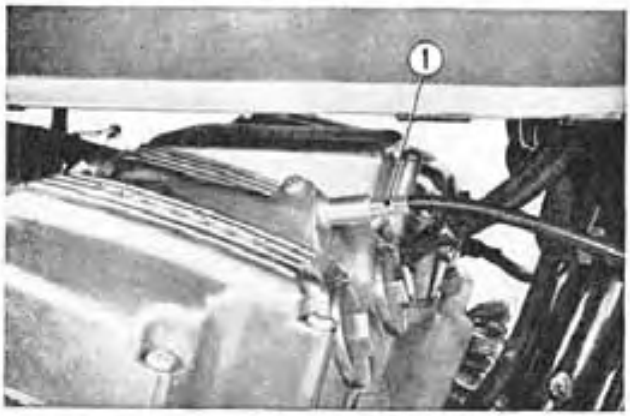


Fig. 2-2 ① Tachometer cable

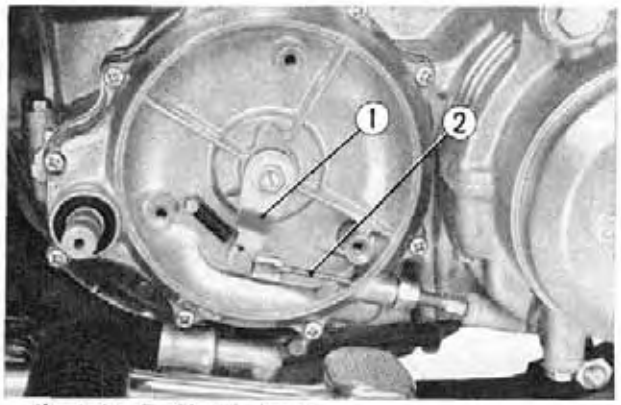


Fig. 2-3 ① Clutch lever
② Clutch cable

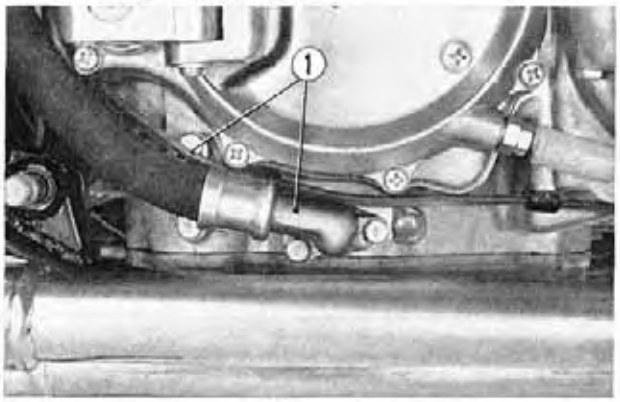


Fig. 2-4 ① Engine oil hoses

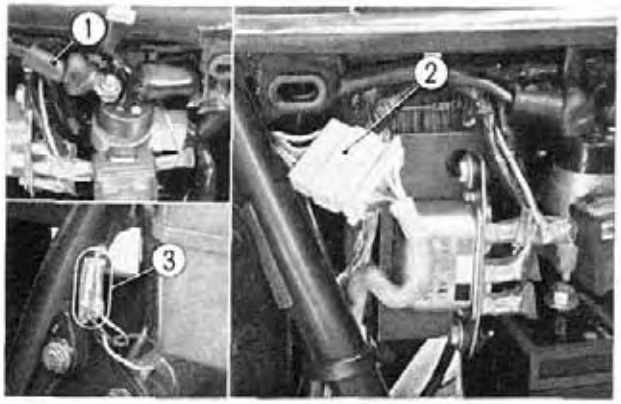


Fig. 2-5 ① Starter motor cable
② Dynamo leads connector
③ Stop switch lead

8. Disconnect the clutch cable from the clutch lever. **(Fig. 2-3)**

9. Disconnect the stop switch spring and remove the brake pedal and the step bar.

10. Disconnect the two engine oil hoses at the engine and remove the oil tank. Disconnect the oil tank breather pipe from the upper crankcase. **(Fig. 2-4)**

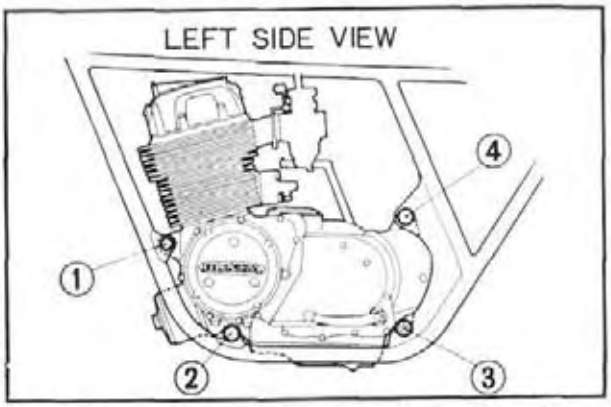
11. Remove the gear change pedal and the drive chain cover and disconnect the drive chain. After disconnecting the chain, the both ends together with a piece of wire to prevent chain from coiling.

12. Disconnect the starter motor cable, dynamo lead connector and the stop switch lead wire. **(Fig. 2-5)**

Note : Disconnect the starter motor cable at the magnetic switch and disconnect the negative terminal of the battery to prevent accidental shorting.

13. Unscrew the engine hanger bolts and nuts. **(Fig. 2-6)**

14. Raise the rear of the engine and remove it from the right side.



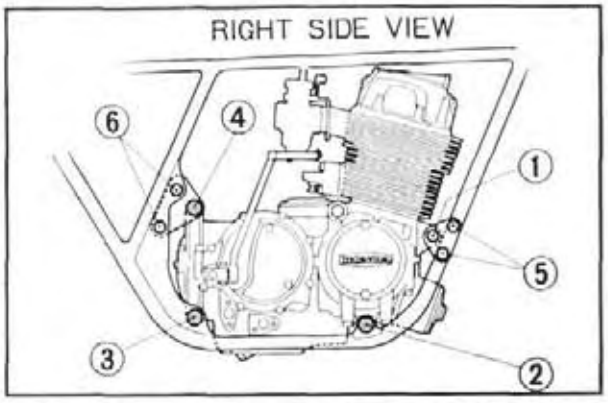


Fig. 2-6 ① 10 mm bolt
② Engine hanger bolt A
③ Rear engine hanger lower bolt
④ Engine hanger bolt C
⑤ 8 mm×56 bolt
⑥ 8 mm×45 bolt