



HOW TO USE THIS MANUAL

Follow the Maintenance Schedule (Section 3) recommendations to ensure that the vehicle is in peak operating condition and the emission levels are with the standards set by the U.S. Environmental Protection Agency. Performing the first scheduled maintenance is very important. It compensates for the initial wear that occurs during the break-in period.

Sections 1 through 3 apply to the whole motorcycle, while sections 4 through 20 describe parts of the motorcycle, grouped according to location.

Find the section you want on this page, then turn to the table of contents on page 1 of that section.

Most sections start with an assembly or system illustration, service information and troubleshooting for the section. The subsequent page give detailed procedures.

If you don't know the source of the trouble, go to section 22, TROUBLESHOOTING.

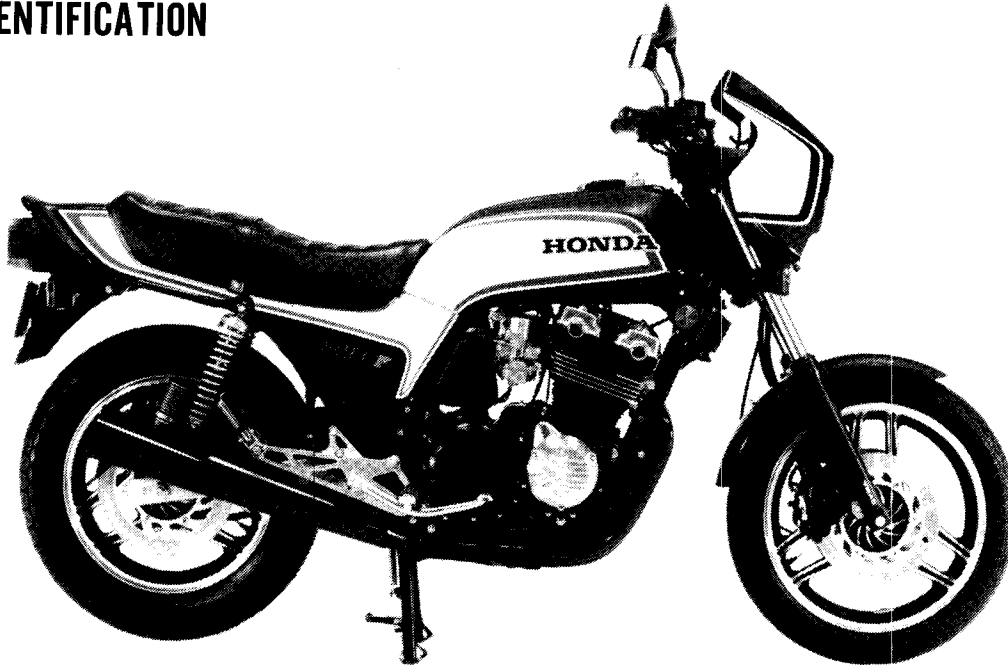
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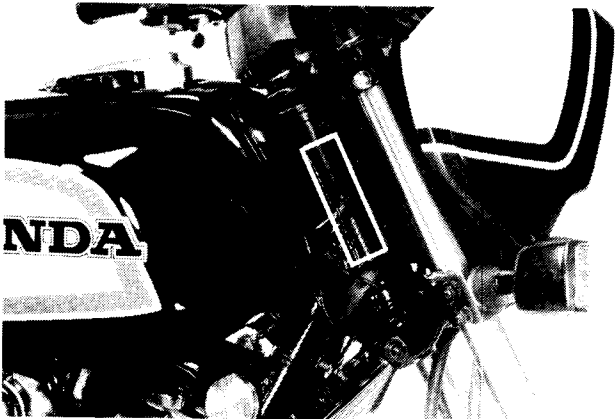
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MODEL IDENTIFICATION



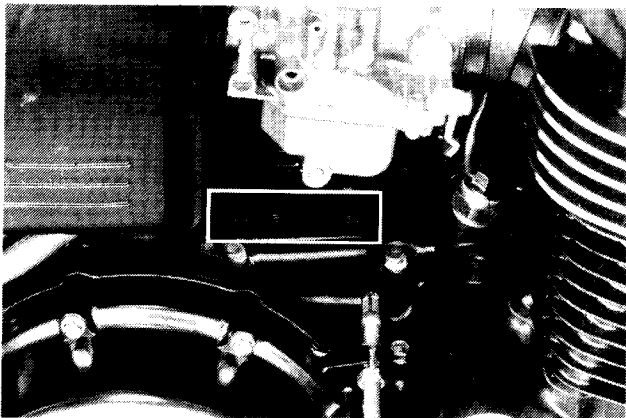
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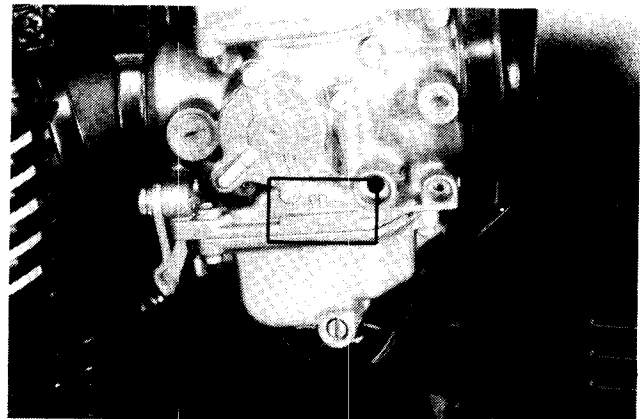
The frame serial number is stamped on the steering head right side.



The vehicle identification number (VIN) is on the steering head left side.



The engine serial number is stamped on top of the right crankcase.



The carburetor identification number is on the carburetor body left side.



1. GENERAL INFORMATION

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GENERAL SAFETY

WARNING

If the engine must be running to do some work, make sure the area is well-ventilated. Never run the engine in a closed area. The exhaust contains poisonous carbon monoxide gas.

WARNING

Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks in your working area.

WARNING

The battery electrolyte contains sulfuric acid. Protect your eyes, skin and clothing. In case of contact, flush thoroughly with water and call a doctor if electrolyte gets in your eyes.

WARNING

The battery generates hydrogen gas which can be highly explosive. Do not smoke or allow flames or sparks near the battery, especially while charging it.

SERVICE RULES

1. Use genuine HONDA or HONDA-recommended parts and lubricants or their equivalents. Parts that do not meet HONDA's design specifications may damage the motorcycle.
2. Use the special tools designed for this product.
3. Use only metric tools when servicing this motorcycle. Metric bolts, nuts, and screws are not interchangeable with English fasteners. The use of incorrect tools and fasteners may damage the motorcycle.
4. Install new gaskets, O-rings, cotter pins, lock plates, etc. when reassembling.
5. When tightening bolts or nuts, begin with the larger-diameter or inner bolts first, and tighten to the specified torque diagonally, unless a particular sequence is specified.
6. Clean parts in cleaning solvent upon disassembly. Lubricate any sliding surfaces before reassembly.
7. After reassembly, check all parts for proper installation and operation.



GENERAL INFORMATION

SPECIFICATIONS

Item		
DIMENSIONS	Overall length	2,175 mm (85.6 in)
	Overall width	810 mm (31.9 in)
	Overall height	1,200 mm (47.2 in)
	Wheelbase	1,520 mm (59.8 in)
	Seat height	820 mm (32.3 in)
	Foot peg height	335 mm (13.2 in)
	Ground clearance	145 mm (5.7 in)
	Dry weight	243 kg (536 lb)
Curb weight	264 kg (582 lb)	
FRAME	Type	Double cradle
	Front suspension, travel	Telescopic air forks, 150 mm (5.9 in)
	Rear suspension, travel	Swing arm/Shock absorber 110 mm (4.3 in)
	Gross vehicle weight rating	431.5 kg (950 lb)
	Vehicle capacity load	168 kg (370 lb)
	Front tire size	100/90 V-18, Universal pattern
	Rear tire size	130/90 V-17, Universal pattern
Cold tire pressures	Up to 90 kg (200 lbs) load	Front 250 kPa (2.50 kg/cm ² , 36 psi) Rear 250 kPa (2.50 kg/cm ² , 36 psi)
	Up to vehicle capacity load	Front 250 kPa (2.50 kg/cm ² , 36 psi) Rear 290 kPa (2.90 kg/cm ² , 42 psi)
Front brake, lining swept area	Double disc, 904 cm ² (140 sq in)	
Rear brake, lining swept area	Single disc, 490 cm ² (76 sq in)	
Fuel capacity	20 liters (5.3 US gal, 4.4 Imp gal)	
Fuel reserve capacity	3.5 liters (0.9 US gal, 0.8 Imp gal)	
Caster angle	28°30'	
Trail	120 mm (4.7 in)	
Front fork oil capacity	280 cc (9.5 ozs)	
ENGINE	Type	Air cooled 4-stroke, DOHC
	Cylinder arrangement	Vertical in-line four
	Bore and stroke	70 x 69 mm (2.76 x 2.72 in)
	Displacement	1,062 cm ³ (64.8 cu in)
	Compression ratio	9.7 : 1
	Valve train	Chain driven DOHC, 4 Valves per cylinder
	Maximum horsepower	108 BHP/8,500 rpm
	Maximum torque	9.4 kg-m (68.0 ft-lb)/7,500 rpm
	Oil capacity	4.5 liters (4.8 US qt, 4.0 Imp qt) after disassembly 3.5 liters (3.7 US qt, 3.0 Imp qt) after draining
	Lubrication system	Forced pressure and wet sump
	Air filtration	Paper filter
	Cylinder compression	12.0 ± 2.0 kg/cm ² (170 ± 28 psi)
	Intake valve	Opens 15° (BTDC) } Closes 35° (ABDC) } at 1 mm lift, 63° (BTDC) } 40° (BBDC) } at 0 lift, 98° (ABDC) }
	Exhaust valve	Opens 10° (ATDC) } Closes 10° (ATDC) } at 1 mm lift, 70° (BBDC) } 93° (ATDC) }
	Valve clearance (Cold)	IN: } 0.06 – 0.13 mm (0.002 – 0.005 in) EX: }
	Engine weight	92 kg (203 lb)
	Idle speed	1,000 ± 100 rpm



Item		
CARBURETION	Carburetor type	CV, 33 mm (1.30 in) venturi bore
	Identification number	VB56A
	Pilot screw initial setting	1-3/4
	Idle speed	1,000 ± 100 rpm
	Main jet	122
	Float level	15.5 mm (0.61 in)
DRIVE TRAIN	Clutch	Wet, multi-plate
	Transmission	5-speed constant-mesh
	Primary reduction	1.000/2.042
	Final reduction	2.471
	Gear ratio I	2.533 : 1
	Gear ratio II	1.789 : 1
	Gear ratio III	1.391 : 1
	Gear ratio IV	1.160 : 1
	Gear ratio V	1.000 : 1
	Gearshift pattern	Left foot operated return system, 1-N-2-3-4-5
Drive chain	D.I.D. 50ZL or RK 50LO	
ELECTRICAL	Ignition	Transistorized
	Ignition timing "F-1" mark	10° BTDC at idle
	Full advance	38.5° BTDC at 3,500 rpm
	Starting system	Starting motor
	Alternator	Three phase Alternator 260 W/5,000 rpm
	Battery capacity	12V-14AH
	Spark plug	Standard : DRBES (NGK), X27ESR-U (ND) Optional (for high speed riding): X31ESR-U (ND)
	Spark plug gap	0.6 - 0.7 mm (0.024 - 0.028 in)
Firing order	1-2-4-3	
Fuse/Main fuse	15A/30A (Main)	
LIGHTS	Headlight (high/low beam)	60/55W H4 BULB (MATSUSHITA (E4) 222 or equivalent)
	Tail/stoplight	8/27W 3/32 cp SAE NO. 1157
	Front turn signal/running light	23/8W 32/3 cp SAE NO. 1034
	Rear turn signal	23W 32 cp SAE NO. 1073
	Speedometer light	3.4W 2 cp SAE NO. 57
	Tachometer light	3.4W 2 cp SAE NO. 57
	Neutral indicator	3.4W 2 cp SAE NO. 57
	Turn signal indicator	3.4W 2 cp SAE NO. 57
	High beam indicator	3.4W 2 cp SAE NO. 57
	Oil pressure warning light	3.4W 2 cp SAE NO. 57



TORQUE VALUES

• ENGINE

Item	Q'ty	Thread Dia (mm)	Torque N·m (kg·m, ft·lb)	Remarks
Cylinder head cover bolts	8	6	8-12 (0.8-1.2, 6-9)	Apply engine oil to threads and underside of nuts.
Cam holder bolts	24	6	12-16 (1.2-1.6, 9-12)	
Cylinder head bolts	12	10	36-40 (3.6-4.0, 26-29)	
Cam sprocket bolts	4	7	18-20 (1.8-2.0, 13-14)	
Spark plugs	4		12-19 (1.2-1.9, 9-14)	Apply engine oil to threads and underside of bolts.
Crankcase bolts	17	8	21-25 (2.1-2.5, 15-18)	
Alternator	1	12	80-100 (8.0-10.0, 58-72)	
Primary shaft	1	12	80-100 (8.0-10.0, 58-72)	
Mainshaft	1	16	38-42 (3.8-4.2, 28-30)	Apply liquid sealant.
Drive sprocket	1	10	45-55 (4.5-5.5, 33-40)	
Connecting rod nuts	8		32 (3.2, 23)	
Oil filter center bolt	1		28-32 (2.8-3.2, 20-23)	
Oil pressure switch	1		15-20 (1.5-2.0, 11-14)	
Neutral switch	1		16-20 (1.6-2.0, 12-14)	
Oil drain plug	1	14	35-40 (3.5-4.0, 25-29)	
Oil hose bolts	2	10	21-25 (2.1-2.5, 15-18)	
Spark advancer bolt	1	8	33-37 (3.3-3.7, 24-27)	
Starting clutch	3	8	26-30 (2.6-3.0, 19-22)	

• CHASSIS

Item	Q'ty	Thread Dia (mm)	Torque N·m (kg·m, ft·lb)	Remarks
Steering stem nut	1	24	80-120 (8.0-12.0, 58-87)	Apply grease to threads.
Steering top thread nut	1	26	14-16 (1.4-1.6, 10-12)	
Handlebar holder bolts	4	8	25-30 (2.5-3.0, 18-22)	
Handlebar pinch bolt	2	8	25-30 (2.5-3.0, 18-22)	
Front fork bridge	2	8	9-13 (0.9-1.3, 7-9)	
Front fork cap bolts	2	31	15-30 (1.5-3.0, 11-22)	
Steering stem pinch bolts	4	8	45-55 (4.5-5.5, 33-40)	
Front acle holder nuts	4	10	30-40 (3.0-4.0, 22-29)	
Front axle nut	1	12	55-65 (5.5-6.5, 40-47)	
Front fork socket bolt	2	8	15-25 (1.5-2.5, 11-18)	
Front fork drain bolt	2	6	6-9 (0.6-0.9, 4.3-7)	
Front fork joint air tube connector	1	8	4-7 (0.4-0.7, 2.9-5.1)	
Front fork air valve	1	8	4-7 (0.4-0.7, 2.9-5.1)	



Item	Q'ty	Thread Dia (mm)	Torque N·m (kg-m, ft-lb)	Remarks	
Brake hose bolts	7	10	25-35 (2.5-3.5, 18-25)	UBS	
Front/rear brake disc	5	8	27-33 (2.7-3.3, 20-24)		
Brake caliper carrier	2	10	30-40 (3.0-4.0, 22-29)		
Caliper bolt	3	8	22-25 (2.2-2.5, 16-18)		
Caliper pivot bolt	3	10	25-30 (2.5-3.0, 18-22)		
Rear master cylinder bolts	2	6	30-40 (3.0-4.0, 22-29)		
Rear axle nut	1	18	80-100 (8.0-10.0, 58-72)		
Final driven sprocket	4	12	80-100 (8.0-10.0, 58-72)		UBS
Swing arm pivot nut	1	14	60-70 (6.0-7.0, 43-51)		
Rear brake torque link nut	1	8	18-25 (1.8-2.5, 13-18)		
Rear shock absorber nuts	4	10	30-40 (3.0-4.0, 22-29)		
Engine hanger bolts	4	10	35-45 (3.5-4.5, 25-33)		
	2	8	18-25 (1.8-2.5, 13-18)		
Right sub-frame pinch bolt	1	10	35-45 (3.5-4.5, 25-33)		
Right sub-frame bolts	2	8	18-25 (1.8-2.5, 13-18)		

Torque specifications listed above are for important fasteners. Others should be tightened to the standard torque values below.

● **STANDARD TORQUE VALUES**

Item	Torque N·m (kg-m, ft-lb)	Item	Torque N·m (kg-m, ft-lb)
5 mm bolt and nut	4-6 (0.4-0.6, 3-4)	5 mm screw	3-5 (0.3-0.5, 3-4)
6 mm bolt and nut	8-12 (0.8-1.2, 6-9)	6 mm screw	7-11 (0.7-1.1, 5-8)
8 mm bolt and nut	18-25 (1.8-2.5, 13-18)	6 mm flange bolt and nut	10-14 (1.0-1.4, 7-10)
10 mm bolt and nut	35-40 (3.5-4.0, 22-29)	8 mm flange bolt and nut	20-30 (2.0-3.0, 14-22)
12 mm bolt and nut	50-60 (5.0-6.0, 36-43)	10 mm flange bolt and nut	30-40 (3.0-4.0, 22-29)

**GENERAL INFORMATION****TOOLS**● **SPECIAL**

Description	Part No.	Alternate	Part No.	Ref Page
Vacuum gauge set	07404-0020000	Carburetor Vacuum Gauge Set (U.S.A. only)	M937B-021-XXXXX	3-12
Oil pressure gauge	07506-3000000			2-5
Oil pressure gauge attachment	07510-4220100			2-5
Primary gear holder	07924-4250000	Use commercially available holder (Grabbit in U.S.A.)		6-6, 6-7
Rotor puller	07933-4250000			8-3
Race remover	07953-4250002			14-36, 14-37
Carburetor adjusting wrench	07908-4220100			3-13
Carburetor pilot screw wrench	07908-4220201			4-19
Snap ring pliers	07914-3230001			14-23, 14-30 16-8, 16-15
Steering stem socket	07916-3710100			14-36, 14-38
Hex wrench, 6 mm	07917-3230000	Commercially available in U.S.A.		14-23, 14-29
Race remover	07946-3710500			14-37
Steering stem driver	07946-MB0000	Steering Stem Driver	07946-3710600	14-37
Piston base (2 required)	07958-3000000			10-8
Tappet holder set	07946-4220001	Valve Adjusting Tool Set (U.S.A. only)	M9501-277-94752	3-9
Valve guide reamer, 5.5 mm	07984-2000000			9-14, 9-16
Piston ring compressor (2 required)	07954-2830000			10-8
Valve lifter bore protector	07999-4220000			9-12, 9-17
Valve seat cutter, 27.5 mm	07780-0010200	Equivalent commercially available in U.S.A.		9-17
Valve seat cutter, 29 mm	07780-0010300			
Valve seat flat cutter, 25 mm	07780-0012000			
Valve seat flat cutter, 30 mm	07780-0012200			
Valve seat interior cutter, 30 mm	07780-0014000			
Valve seat cutter holder, 5.5 mm	07781-0010100			
Clutch center holder	07923-3710000	Clutch Center Holder	07923-4610000	6-4, 6-9
Bearing driver	07936-4250001			15-13
Bearing driver attachment		Attachment U.S.A. only	M9310-277-91775	15-13
Bearing remover	07936-4250101	Bearing remover U.S.A. only	M9310-277-91774	15-12
Fork seal driver	07947-4630100			14-30
Attachment	07946-3710701	Attachment	07946-3710700	
Hex bit, 10 mm	07917-3710000	Commercially available in U.S.A.		

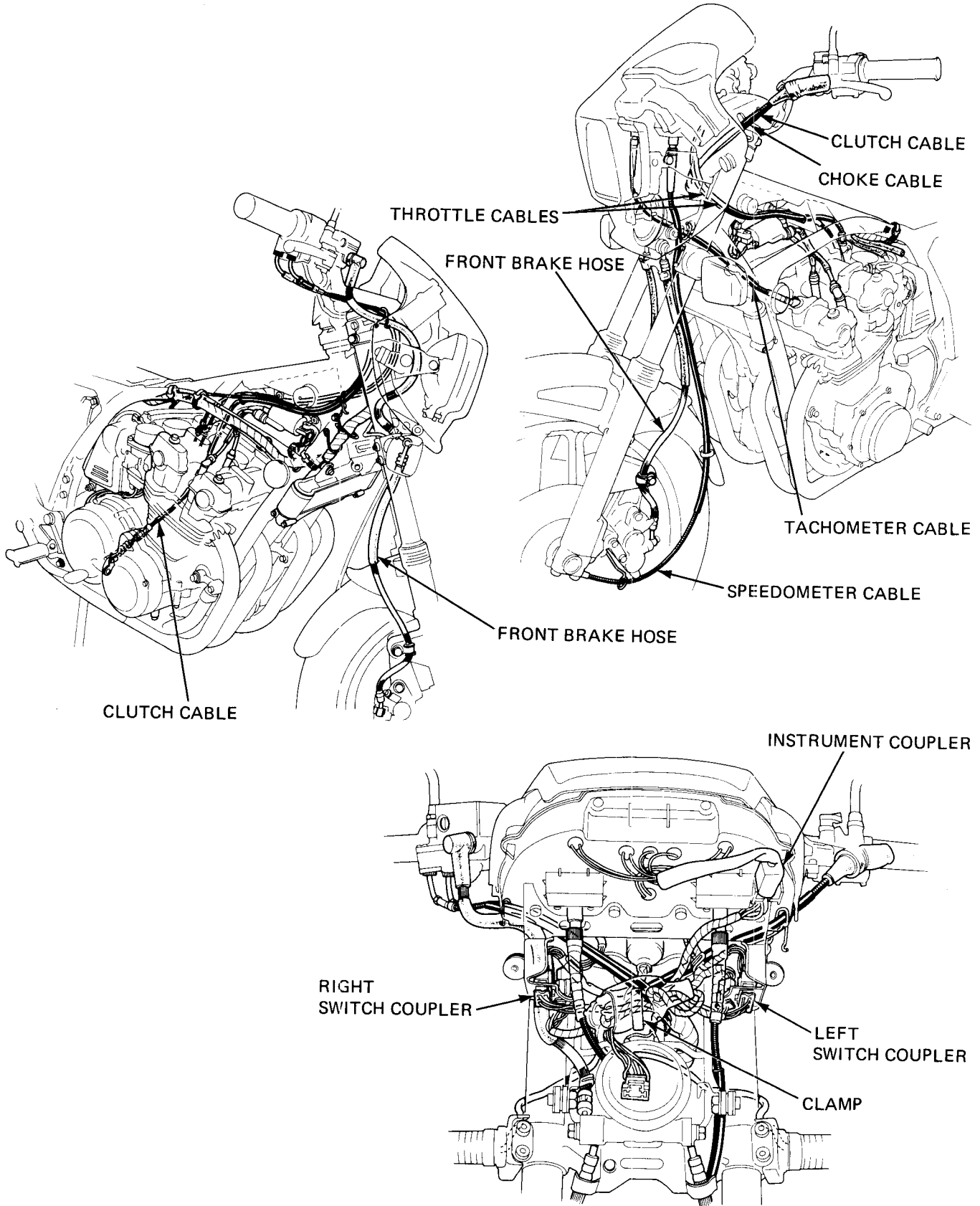


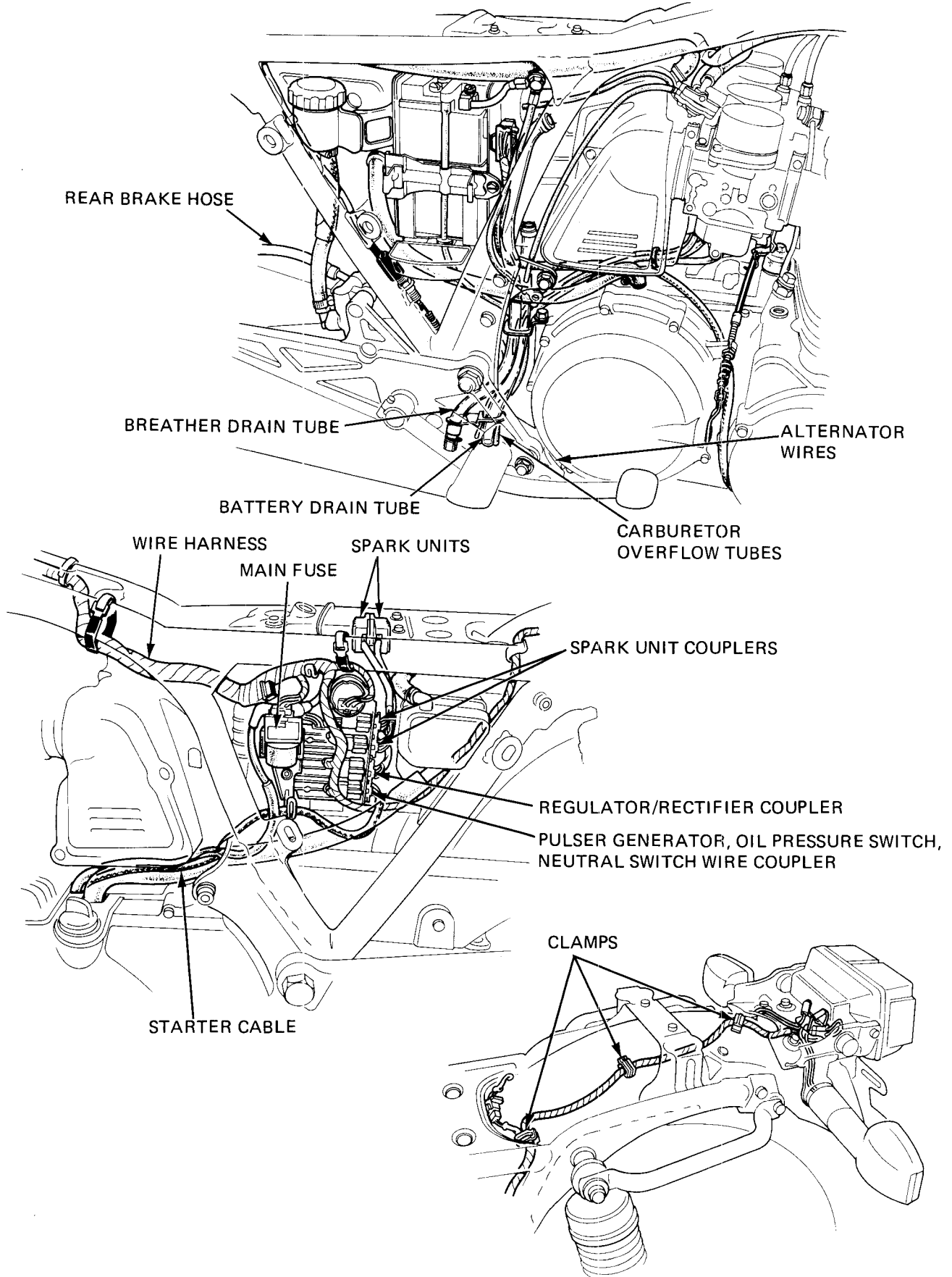
● COMMON

Description	Part No.	Alternate	Part No.	Ref Page
Float level gauge	07401-0010000			4-8
Lock nut wrench socket 30 x 32 mm	07716-0020400	Commercially available in U.S.A.		14-35, 14-39
Lock nut wrench, 20 x 24 mm	07716-0020100	Lock nut wrench	07916-3710000	6-4, 6-9
Extension bar	07716-0020500	Commercially available in U.S.A.		6-4, 14-39
Valve guide remover, 5.5 mm	07742-0010100	Valve guide driver	07942-3290100	9-15
Valve guide driver B	07742-0020200	Valve guide driver	07942-3290200	9-15
Attachment, 42 x 47 mm	07746-0010300	Attachment	07945-3330100	14-16, 14-38
Attachment, 52 x 55 mm	07746-0010400	Attachment	07946-9370100 or 07946-3290000	14-38, 15-6
Attachment, 62 x 68 mm	07746-0010500	Attachment	07946-3600000	15-6
Driver	07749-0010000	Driver	07949-6110000	14-16, 14-38, 15-6 15-13
Driver	07746-0020100	Driver	07945-3230201	12-14
Driver	07746-0030100			13-8
Attachment, 25 mm I.D.	07746-0030200	Driver	07945-3710200	12-14, 13-8
Valve spring compressor	07757-0010000	Valve spring compressor	07957-3290001	9-12, 9-17
Pilot, 15 mm	07746-0040300			14-16
Pilot, 20 mm	07746-0040500			15-6
Pilot, 25 mm	07746-0040600	Attachment	07946-3600000	15-6
Shock absorber compressor	07959-3290001			15-9
Attachment	07746-0020400			12-14



CABLE & HARNESS ROUTING







GENERAL INFORMATION

EMISSION CONTROL SYSTEM

The 1100F is equipped with two Emission Control Systems.

EXHAUST EMISSION CONTROL SYSTEM

The exhaust emission control system is composed of lean carburetor settings, and no adjustments should be made except idle speed adjustment with the throttle stop screw.

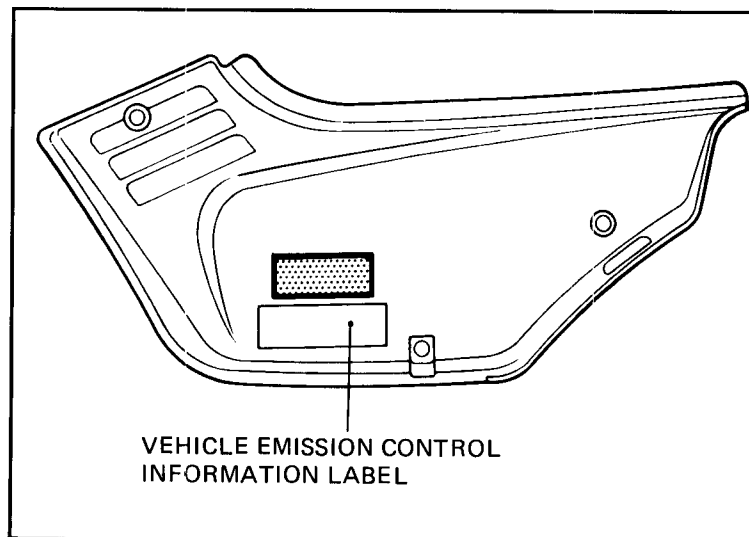
The exhaust emission control system is separate from the crankcase emission control system.

CRANKCASE EMISSION CONTROL SYSTEM

The engine is equipped with a closed crankcase system which routes crankcase emissions through the air cleaner and into the combustion chamber. Condensed crankcase vapors are accumulated in a storage tank which must be emptied periodically. See the Maintenance Schedule in section 3.

EMISSION CONTROL INFORMATION LABEL

An Emission Control Information Label is located inside the right side cover. It contains basic tune-up specifications.





HONDA
CB1100F

MEMO