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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 an enclosed. The exhaust contains poisonous carbon monoxide gas that may cause loss of consciousness and lead to death.

▲ WARNING

- *The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging.*
- *The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.*
- *Electrolyte is poisonous.*
 - *If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.*

▲ WARNING

- *Inhaled asbestos fibers have been found to cause respiratory disease and cancer. Never use an air hose or dry brush to clean brake assemblies.*

▲ WARNING

Gasoline is extremely flammable and is explosive under certain conditions work in a well ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the work area or where gasoline is stored.

CAUTION

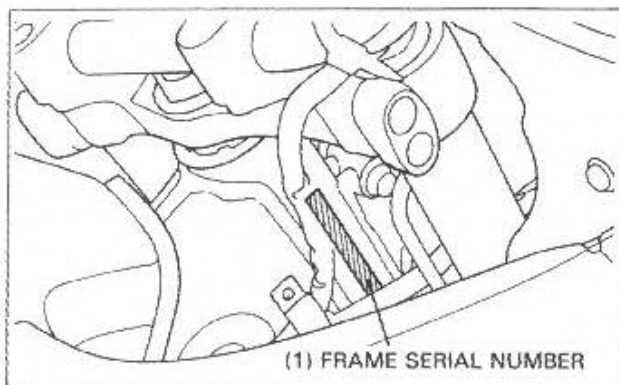
Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

SERVICE RULES

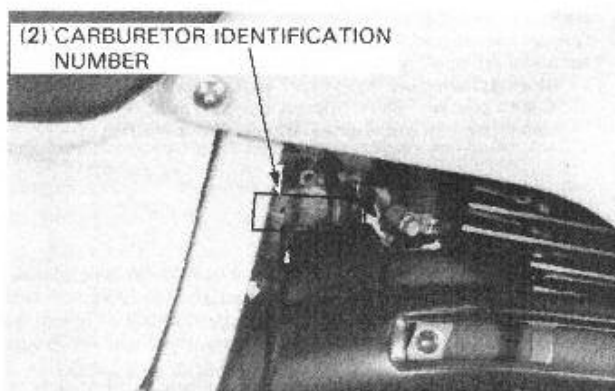
1. Use genuine HONDA or HONDA-recommended parts and lubricants or their equivalents. Parts that don't meet HONDA's design specifications may damage to the motorcycle.
2. Use the special tools designed for this product to avoid damage and incorrect assembly.
3. Use only metric tools when servicing this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

GENERAL INFORMATION

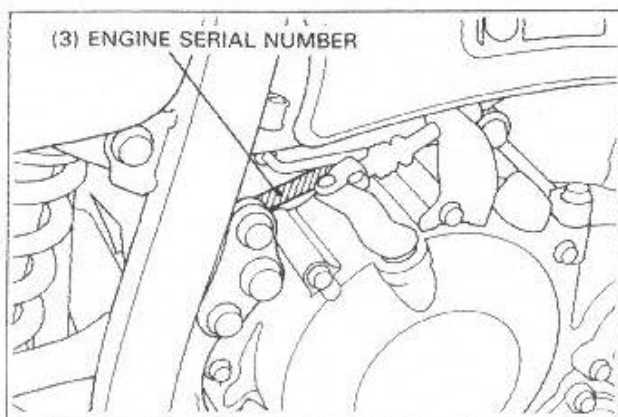
MODEL IDENTIFICATION



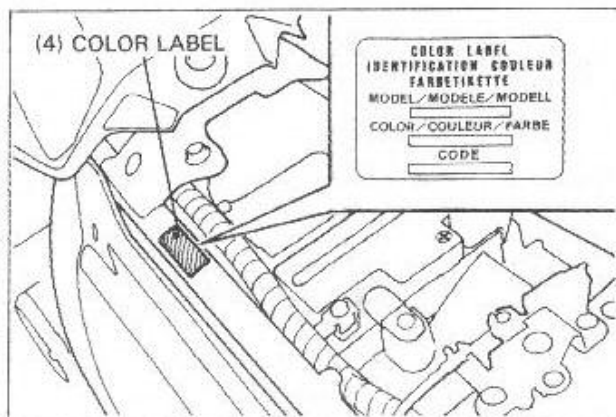
The frame serial number is stamped on the right side of the steering head.



The carburetor identification number is on the right side of the carburetor body.



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



The color code label is attached on the left frame tube under the seat. When ordering a color coded part, always specify its designated color code.

GENERAL INFORMATION

SPECIFICATIONS

ITEM		SPECIFICATIONS		
DIMENSIONS	Overall length	2,085 mm (82.1 in) ND, G, GII types: 2,095 mm (82.5 in)		
	Overall width	805 mm (31.7 in)		
	Overall height	1,120 mm (44.1 in)		
	Wheelbase	1,350 mm (53.1 in)		
	Ground clearance	250 mm (9.8 in)		
	Dry weight	118 kg (260 lbs)		
	Curb weight	128 kg (282 lbs)		
FRAME	Type	Diamond		
	Front suspension, travel	Telescopic fork, 220 mm (8.7 in)		
	Rear suspension, travel	Swingarm, 200 mm (7.8 in)		
	Front tire size	90/100-19 55P		
	Rear tire size	120/90-16 63P		
	Cold tire pressure	Driver only	Front	150 kPa (1.50 kg/cm ² , 22 psi)
			Rear	150 kPa (1.50 kg/cm ² , 22 psi)
		Driver and one passenger	Front	150 kPa (1.50 kg/cm ² , 22 psi)
			Rear	175 kPa (1.75 kg/cm ² , 25 psi)
	Front brake, lining swept area	Single disc, 306 cm ² (47.4 sq in)		
Rear brake, lining swept area	Internal expanding shoe, 103.6 cm ² (16.1 sq in)			
Fuel capacity	9.0 liters (2.38 US gal, 1.98 Imp gal)			
Fuel reserve capacity	1.6 liters (0.42 US gal, 0.35 Imp gal)			
Caster angle	25°30'			
Trail	89 mm (3.5 in)			
Fork fork oil capacity	412 cm ³ (13.9 US oz, 14.5 Imp oz)			
ENGINE	Type	Water cooled 4-stroke		
	Cylinder arrangement	Single cylinder inclined 15° from vertical		
	Bore and stroke	70.0 x 64.8 mm (2.76 x 2.55 in) F type: 68.5 x 64.8 mm (2.70 x 2.55 in)		
	Displacement	249 cm ³ (15.1 cu in) F type: 239 cm ³ (14.6 cu in)		
	Compression ratio	11.0:1		
	Valve train	Chain drive DOHC		
	Oil capacity	1.6 liters (1.69 US qt, 1.41 Imp qt) after disassembly		
		1.3 liters (1.37 US qt, 1.14 Imp qt) after draining		
	Coolant capacity	1.0 liter (1.06 US qt, 0.98 Imp qt)		
	Lubrication system	Forced pressure and wet sump		
	Air filtration	Paper filter		
	Cylinder compression	1,569 ± 96 kPa (16.0 ± 1.0 kg/cm ² , 228 ± 14 psi)		
	Intake valve	Opens	10° BTDC	} at 1 mm lift
		Closes	40° ABDC	
	Exhaust valve	Opens	40° BBDC	
Closes		5° ATDC		
Valve clearance (Cold)	Intake	0.23 mm (0.009 in)		
	Exhaust	0.23 mm (0.009 in)		
Idle speed	1,300 ± 100 min ⁻¹ (rpm)			

GENERAL INFORMATION

ITEM		SPECIFICATIONS		
CARBURETOR	Carburetor type/venturi dia. Identification number	KEIHIN/32 mm (1.3 in) PD 6BA		
	Pilot screw opening	F type: PD 6BC GII type: PD 6BB 1-1/2		
	Float level	GII type: 2-5/8 14 mm (0.55 in)		
DRIVE TRAIN	Clutch	Wet multi-plate		
	Transmission	6-speed constant mesh		
	Primary reduction	2.7272 (60/22)		
	Final reduction	3.1538 (41/13)		
	Gear ratio I	2.8461 (37/13)		
	II	1.7777 (32/18)		
	III	1.3333 (28/21)		
	IV	1.0416 (25/24)		
V	0.8846 (23/26)			
VI	0.7857 (22/28)			
Gear shift pattern	Left foot operated return system, 1-N-2-3-4-5-6			
ELECTRICAL	Ignition	CDI		
	Ignition timing	Initial	8° BTDC at idle	
		Full advance	30° BTDC at 4,500 min ⁻¹ (rpm)	
	Alternator	200W/5,000 min ⁻¹ (rpm)		
	Battery capacity	12 V-6 AH		
	Spark plug		NGK	ND
		Standard	CR9EH-9	U27FER-9
Spark plug gap	0.8-0.9 mm (0.031-0.035 in)			
Main fuse	20 A			
Fuse	10 A x 3, 15 A x 1			
LIGHTS	Headlight (high/low beam)	12 V 60 W/55 W		
	Position light	12 V 4 W		
	Turn signal light	12 V 21 W		
	Tail/brake light	12 V 5 W/21W		
	Instrument light	12 V 1.7 W x 3		
	Neutral indicator	12 V 3.4 W		
	High beam indicator	12 V 1.7 W		
	Turn signal indicator	12 V 3.4 W		

GENERAL INFORMATION

TORQUE VALUES

ENGINE

ITEM	Q'TY	Thread dia. (mm)	TORQUE N·m (kg-m, ft-lb)	REMARKS
Cylinder head cover bolt	8	6	12 (1.2, 9)	
Camshaft holder bolt	8	6	12 (1.2, 9)	
Cylinder head cap nut	4	10	46 (4.6, 33)	
Crankcase cover bolt	19	6	10 (1.0, 7)	
Flywheel bolt	1	12	110 (11.0, 80)	
Primary drive gear nut	1	18	95 (9.5, 69)	
Clutch center lock nut	1	16	60 (6.0, 43)	
Oil drain bolt	1	12	25 (2.5, 18)	
Spark plug	1	10	12 (1.2, 9)	
Crankcase bolt	12	6	12 (1.2, 9)	
Camplate bolt	1	6	12 (1.2, 9)	
Stopper arm bolt	1	6	12 (1.2, 9)	Apply locking agent to the threads
Oil pipe bolt	1	7	12 (1.2, 9)	
	2	8	14 (1.4, 10)	
Water pump	1	7	12 (1.2, 9)	
Starter clutch outer bolt	6	6	16 (1.6, 12)	Apply locking agent to the threads
Temperature sensor	1	—	10 (1.0, 7)	Apply sealant

FRAME

ITEM	Q'TY	Thread dia. (mm)	TORQUE N·m (kg-m, ft-lb)	REMARKS
Steering stem nut	1	24	118 (11.8, 85)	
Steering bearing adjustment nut	1	26	5 (0.5, 4)	
Handlebar holder bolt	4	8	24 (2.4, 17)	
Spoke	72	—	3.8 (0.38, 2.7)	
Front axle	1	12	65 (6.5, 47)	
Front axle holder nut	4	6	12 (1.2, 9)	
Rear axle nut	1	16	95 (9.5, 69)	
Shock absorber mounting bolt (Lower)	1	10	45 (4.5, 33)	
(Upper)	1	10	65 (6.5, 47)	
Fork top pinch bolt	4	8	33 (3.3, 24)	
Fork bottom pinch bolt	4	8	33 (3.3, 24)	
Swingarm pivot bolt	1	14	90 (9.0, 65)	
Shock link-to-swingarm bolt	1	12	105 (10.5, 76)	
Shock link-to-shock arm bolt	1	12	105 (10.5, 76)	
Shock arm-to-frame bolt	1	12	105 (10.5, 76)	
Brake hose oil bolt	3	10	35 (3.5, 25)	
Brake hose joint (master cylinder side)	1	10	35 (3.5, 25)	
(brake hose side)	1	10	14 (1.4, 10)	
Brake pipe nut	2	10	14 (1.4, 10)	

GENERAL INFORMATION

ITEM	Q'TY	Thread dia. (mm)	TORQUE N-m (kg-m, ft-lb)	REMARKS
Caliper mounting bolt	2	3	25 (2.5, 18)	Apply a locking agent to the threads
Master cylinder cover screw	2	4	1.5 (0.15, 1.1)	
Brake lever pivot nut	1	6	10 (1.0, 7)	
Front brake light switch screw	1	4	1.0 (0.1, 0.7)	
Brake pedal bolt	1	8	18 (1.8, 13)	
Caliper pin bolt	1	8	23 (2.3, 17)	
Caliper bracket pin bolt	1	8	13 (1.3, 9)	
Shock absorber lower joint	1	12	49 (4.9, 35)	
Fork cap	2	—	23 (2.3, 17)	
Fork socket bolt	2	8	20 (2.0, 14)	
Brake pad pin	2	10	18 (1.8, 13)	
Brake pad pin plug	2	10	2.5 (0.25, 1.8)	
Brake disc bolt	8	6	15 (1.5, 11)	
Gearshift pedal bolt	1	6	10 (1.0, 7)	
Fuel tank mounting bolt	1	6	10 (1.0, 7)	
Fuel valve lock nut	1	18	40 (4.0, 29)	
Engine mounting bolt	5	10	75 (7.5, 54)	
bracket bolt	8	8	27 (2.7, 20)	
Muffler pipe band	1	8	23 (2.3, 17)	
Exhaust pipe joint nut	2	8	27 (2.7, 20)	
Exhaust pipe cover bolt	3	6	10 (1.0, 7)	
Exhaust muffler bolt	3	8	35 (3.5, 25)	
	1	10	55 (5.5, 40)	
Thermostatic switch	1	—	18 (1.8, 13)	
Brake caliper bleed valve	1	7	6 (0.6, 4.3)	

Torque specifications listed above are for specific tightening points. If a specification is not listed, follow the standard torque values below.

STANDARD TORQUE VALUES

TYPE	TORQUE N-m (kg-m, ft-lb)	TYPE	TORQUE N-m (kg-m, ft-lb)
5 mm bolt, nut	5 (0.50, 3.6)	5 mm screw	4 (0.40, 2.9)
6 mm bolt, nut	10 (1.0, 7.2)	6 mm screw, 6 mm bolt with 8 mm head	9 (0.9, 6.5)
8 mm bolt, nut	22 (2.2, 16)	6 mm flange bolt, nut	12 (1.2, 9)
10 mm bolt, nut	35 (3.5, 25)	8 mm flange bolt, nut	27 (2.7, 20)
12 mm bolt, nut	55 (5.5, 40)	10 mm flange bolt, nut	40 (4.0, 29)

GENERAL INFORMATION

TOOLS

SPECIAL

DESCRIPTION	TOOL NUMBER	REF. TO SECTION
* Valve hole protector	07HMG-MR70001	9
Driver base	07947-KR10100	5
Driver shaft	07947-KR10000	5
Fork seal driver	07947-3710101	5
Universal bearing puller	07631-0010000	11
Snap ring pliers	07914-3230001	14
Steering stem socket	07916-KA50100	12
Clutch center holder	07923-KE10000	7
Needle bearing remover	07931-MA70000	13
Bearing remover, 15 mm	07936-KC10000	11
- remover assembly, 15 mm	07936-KC10500	11
- remover shaft, 15 mm	07936-KC10100	11
- remover head, 15 mm	07936-KC10200	11
- remover weight	07741-0010201	11
Valve guide driver	07HMD-ML00100	9
Steering stem driver	07946-4300101	12
Remover shaft	07946-MJ00100	13
Ball race remover	07953-MJ10000	12
- driver attachment	07953-MJ10100	12
- driver handle	07953-MJ10200	12
Shock absorber compressor attachment	07959-MB10000	13
Valve compressor attachment	07959-KM30101	9
Crankcase assembly tool	07965-VM00000	11
- collar assembly	07965-VM00100	11
- threaded shaft	07965-VM00200	11
- threaded adaptor	07965-VM00300	11
Valve guide reamer, 4.5 mm	07HMH-ML00100	9
Pilot screw wrench	07908-4730001	4

* New for this model.

GENERAL INFORMATION

COMMON

DESCRIPTION	TOOL NUMBER	REF. TO SECTION
Floot level gauge	07401-0010000	4
Lock nut wrench, 20 x 24 mm	07716-0020100	7
Gear holder	07724-0010100	7
Retainer wrench body	07710-0010401	13
Retainer wrench B	07710-0010200	13
Flywheel holder	07725-0040000	8
Rotor puller	07733-0020001	8
Attachment, 32 x 35 mm	07746-0010100	11, 12, 13
Attachment, 37 x 40 mm	07746-0010200	11, 13
Attachment, 42 x 47 mm	07746-0010300	11, 12, 13
Attachment, 52 x 55 mm	07746-0010400	11
Attachment, 62 x 68 mm	07746-0010500	11
Attachment, 24 x 26 mm	07746-0010700	13
Pilot, 15 mm	07746-0040300	5, 11, 12, 13
Pilot, 17 mm	07746-0040400	11, 13
Pilot, 20 mm	07746-0040500	11, 13
Pilot, 22 mm	07746-0041000	11, 13
Pilot, 28 mm	07746-0041100	11
Bearing remover head, 15 mm	07746-0050400	12
Bearing remover shaft	07746-0050100	12, 13
Bearing remover head, 17 mm	07746-0050500	13
Fork seal driver body	07747-0010100	12
Fork seal driver attachment	07747-0010600	12
Driver	07749-0010000	5, 11, 12, 13
Valve spring compressor	07757-0010000	9
Shock absorber compressor	07GME-0010000	13
— screw assembly	07GME-0010100	13
Spoke wrench, 5.8 x 6.1 mm	07701-0020300	3
Digital multimeter	07411-0020000	16, 17, 18, 19
or circuit tester (KOWA)	TH-5H	16, 17, 18, 19
or circuit tester (SANWA)	07308-0020001	16, 17, 18, 19

VALVE SEAT CUTTER

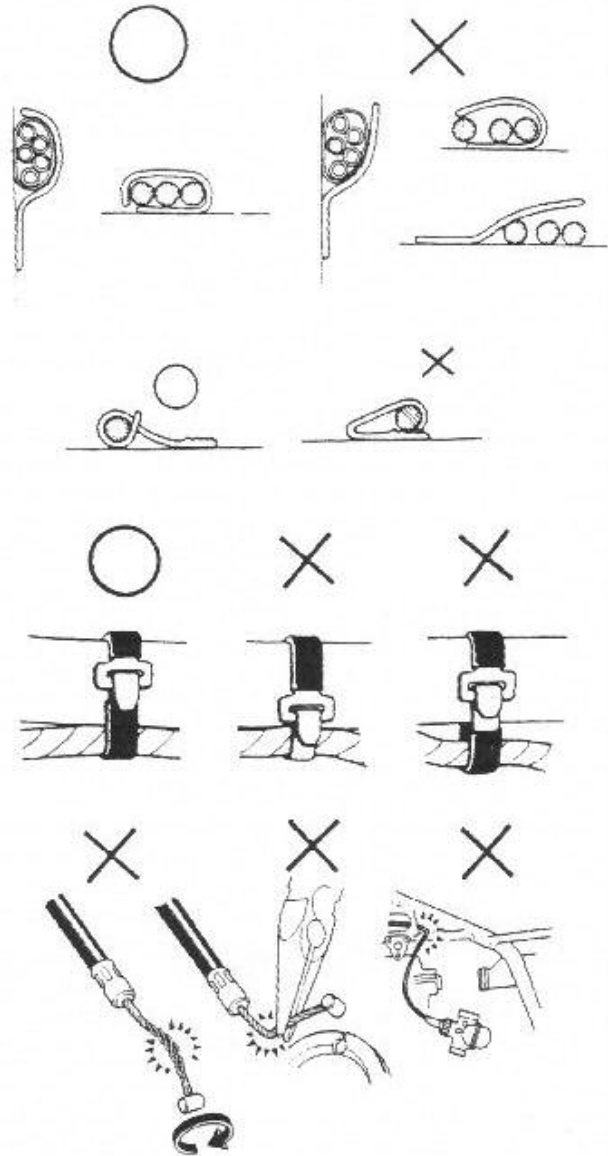
DESCRIPTION	TOOL NO.	REF. TO SECTION
Seat cutter, 24.5 mm (45° EX)	07780-0010100	9
Seat cutter, 27.5 mm (45° IN)	07780-0010200	
Flat cutter, 25 mm (32° EX)	07780-0012000	
Flat cutter, 28 mm (32° IN)	07780-0012100	
Interior cutter, 30 mm (60° IN)	07780-0014000	
Interior cutter, 26 mm (60° EX)	07780-0014500	
Cutter holder, 4.5 mm	07781-0010600	

GENERAL INFORMATION

CABLE & HARNESS ROUTING

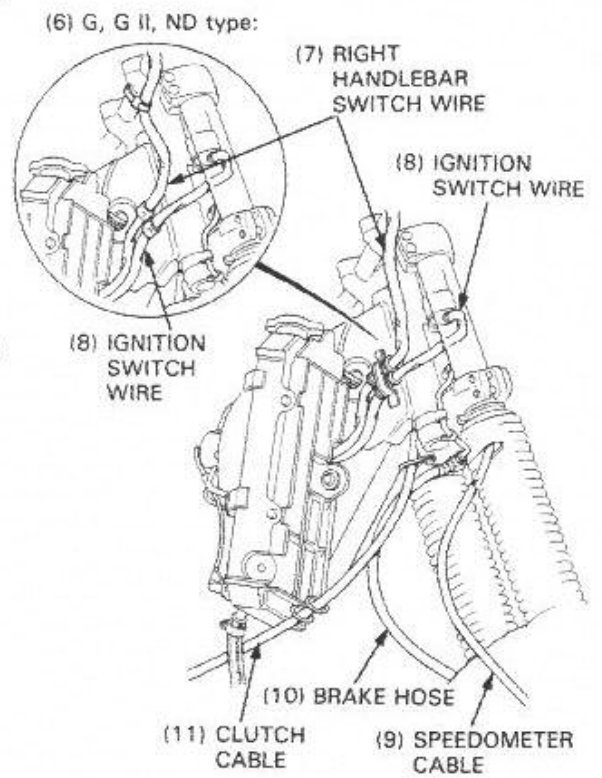
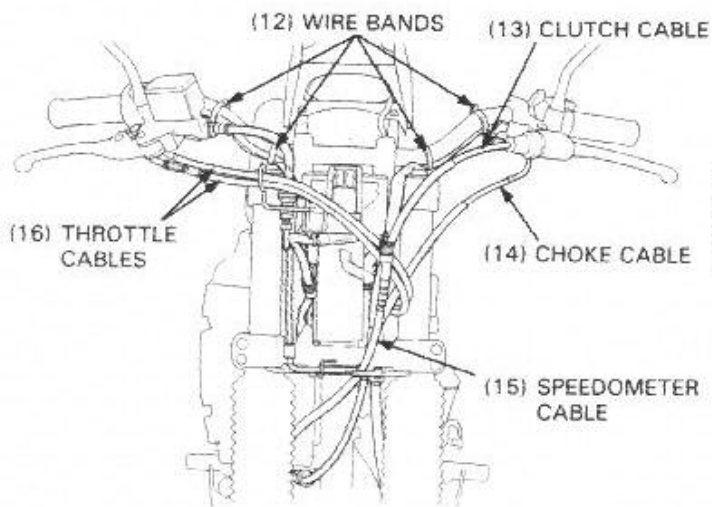
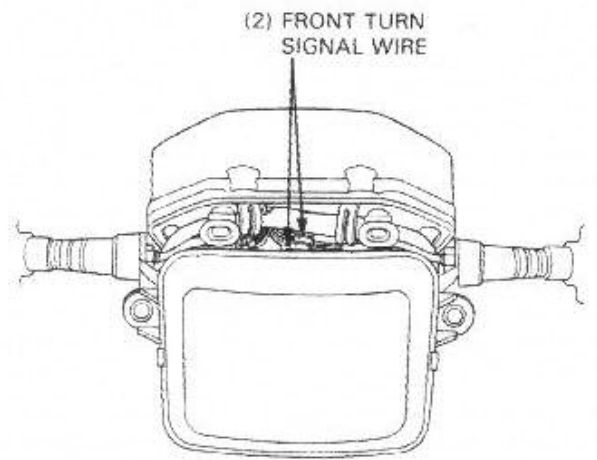
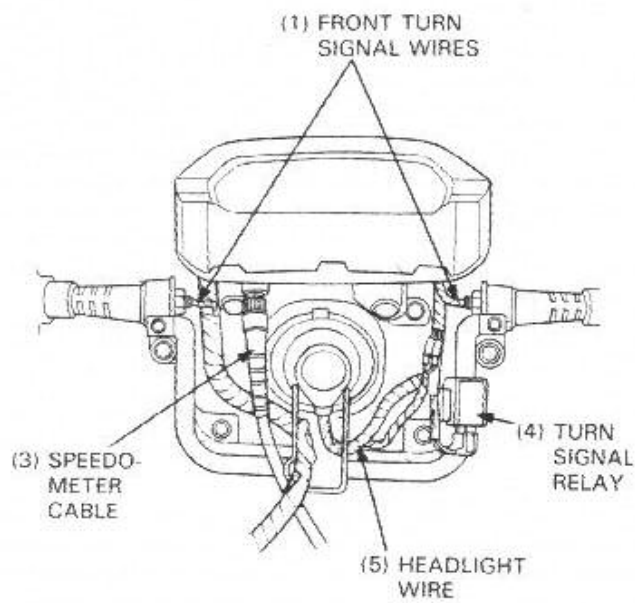
Note the following when routing cables and wire harnesses:

- A loose wire, harness or cable can be a safety hazard. After clamping, check each wire to be sure it is secure.
- Do not squeeze wires against welds or clamps.
- Secure wires and wire harnesses to the frame with their respective wire bands at the designated locations. Tighten the bands so that only the insulated surfaces contact the wires or wire harnesses.
- Route harnesses so they are neither pulled taut nor have excessive slack.
- Protect wires and harnesses with electrical tape or a tube if they contact a sharp edge or corner. Clean the attaching surface thoroughly before applying tape.
- Do not use a wire or harness with broken insulation. Repair by wrapping them with protective tape or replace them.
- Route wire harnesses to avoid sharp edges or corners. Also avoid the projected ends of bolts and screws.
- Keep wire harnesses away from the exhaust pipes and other hot parts.
- Be sure grommets are seated in their grooves properly.
- After clamping, check each harness to be certain that it does not interfere with any moving or sliding parts.
- After routing, check that the wire harnesses are not twisted or kinked.
- Wire harnesses routed along the handlebars should not be pulled taut, have excessive slack, be pinched by or interfere with adjacent or surrounding parts in all steering positions.
- Do not bend or twist the control cables. Damaged control cables will not operate smoothly and may stick or bind.

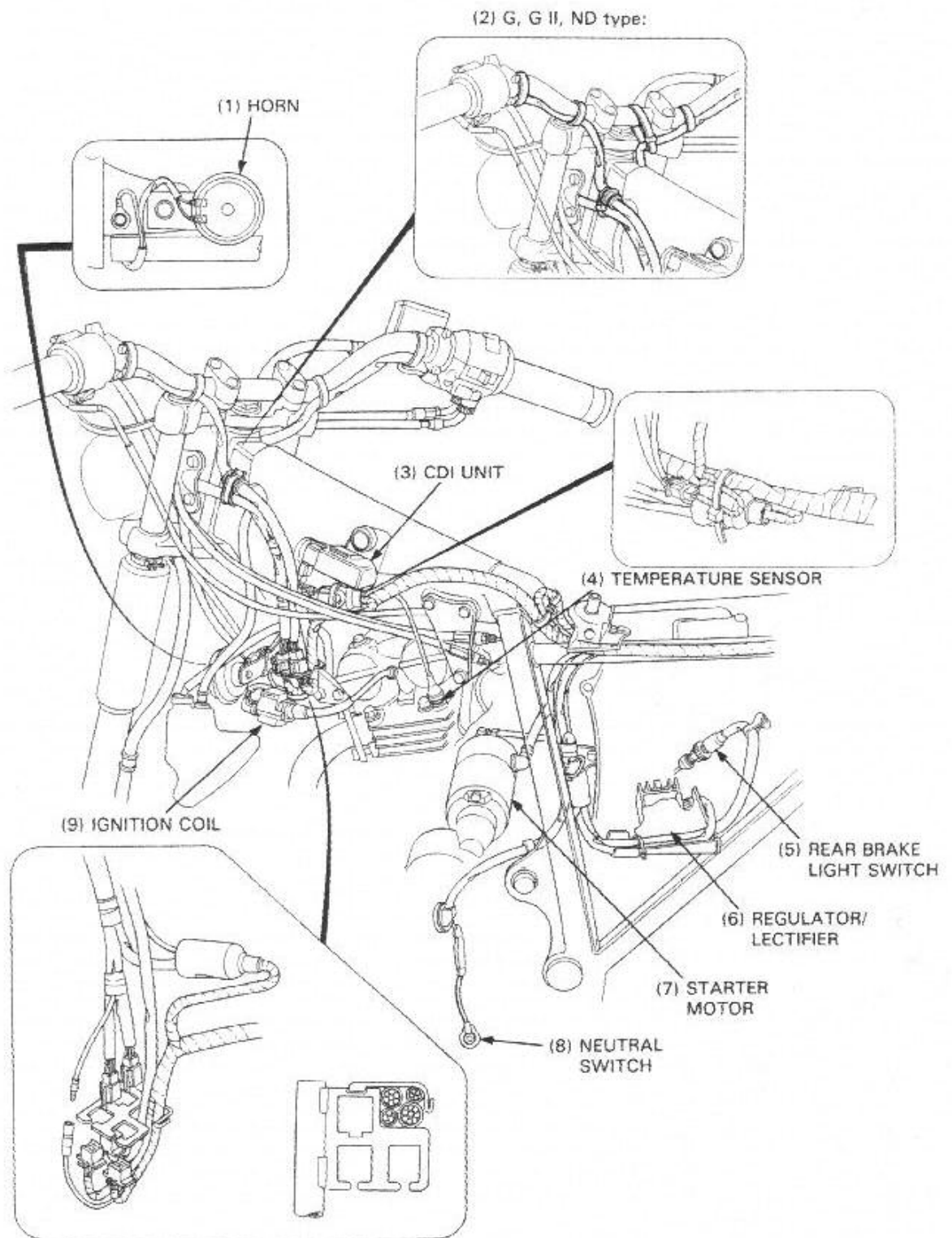


O: CORRECT
X: INCORRECT

GENERAL INFORMATION



GENERAL INFORMATION



GENERAL INFORMATION

