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VT 125 C1

IMPORTANT SAFETY NOTICE

⚠ WARNING

Indicates a strong possibility of severe personal injury or death if instructions are not followed.

CAUTION

Indicates a possibility of equipment damage if instructions are not followed.

NOTE

Gives helpful information.

Detailed descriptions of standard workshop procedures, safety principles and service operations are not included. It is important to note that this manual contains some warnings and cautions against some specific service methods which could cause **PERSONAL INJURY** to service personnel or could damage a vehicle or render it unsafe. Please understand that those warnings could not cover all conceivable ways in which service, whether or not recommended by Honda, might be done or of the possible hazardous consequences of each conceivable way, nor could Honda investigate all such ways. Anyone using service procedures or tools, whether or not recommended by Honda must satisfy himself thoroughly that neither personal safety nor vehicle safety will be jeopardized by the service method or tools selected.

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Type Code

- Throughout this manual, the following abbreviations are used to identify individual type.

Code	Area type
ED	European direct sales (Spain, Belgium, Portugal, Austria, Italy, Sweden, Denmark, Norway, Germany, Netherland, Finland)
E	U. K.
F	France
SW	Switzerland

HOW TO USE THIS MANUAL

This addendum contains information for the VT125C (1). Refer to VT125C Shop Manual (No.62KGB00) for service procedures and data not included in this addendum.

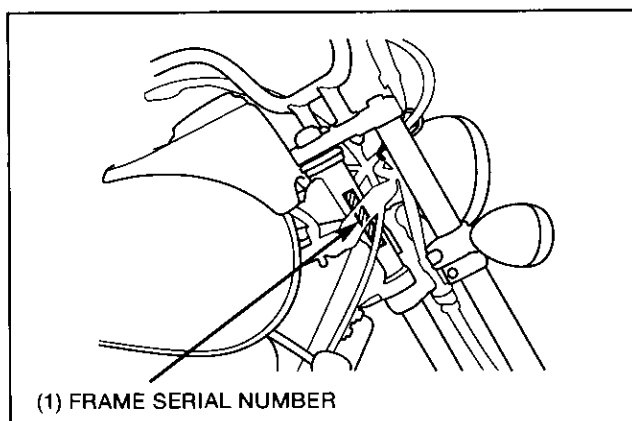
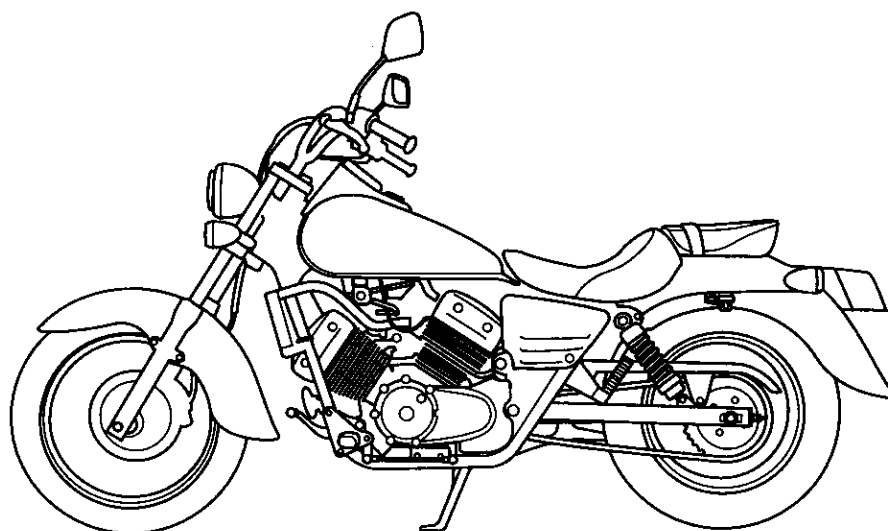
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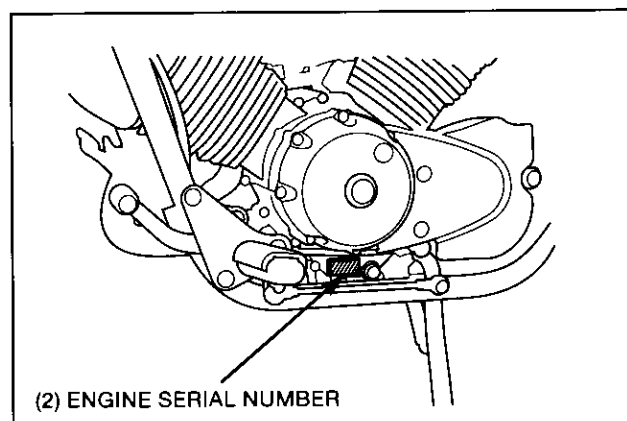
Contents

Model Identification	22-1
Specifications	22-2
Torque Values	22-11
Tools	22-14
Lubrication & Seal Points	22-16
Cable & Harness Routing	22-18
Maintenance Schedule	22-25
Clutch System	22-26
Cylinder Head System Diagram	22-27
Camshaft	22-28
Front Wheel/Suspension/Steering/System Diagram	22-29
Battery	22-30
Regulator/Rectifier	22-30
Bulb Replacement	22-31
Wiring Diagrams	22-33

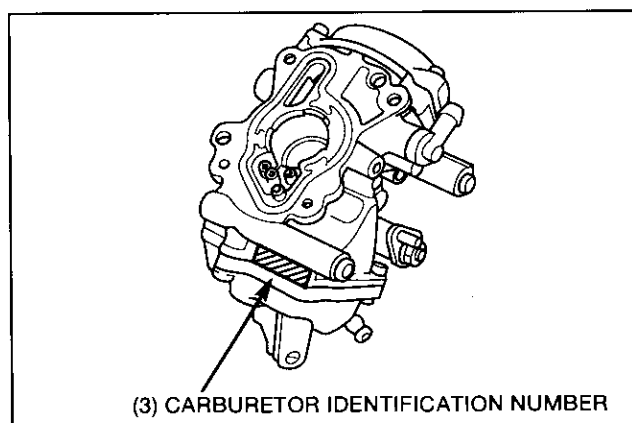
Model Identification



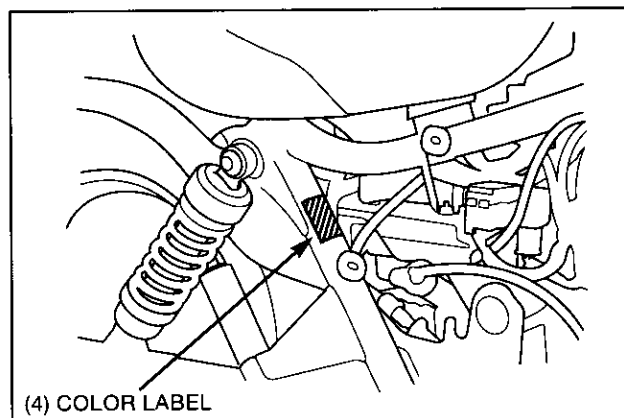
- (1) The frame serial number is stamped on the right side of the steering head.



- (2) The engine serial number is stamped on the left side of the crankcase.



- (3) The carburetor identification numbers are stamped on the intake side of the carburetor body as shown.



- (4) The color label is attached on the frame under the right side cover.
When ordering color-coded parts, always specify the designated color code.

Specifications

Unit: mm (in)

General		
	Item	Specifications
Dimensions	Overall length	2,300 mm (90.6 in)
	Overall width	890 mm (35.0 in)
	Overall height	1,110 mm (43.7 in)
	Wheelbase	1,530 mm (60.2 in)
	Seat height	680 mm (26.8 in)
	Footpeg height	275 mm (10.8 in)
	Ground clearance	145 mm (5.7 in)
	Dry weight	145 kg (320 lbs)
	Curb weight	160 kg (353 lbs)
	Maximum weight capacity	180 kg (397 lbs)
Frame	Frame type	Double cradle
	Front suspension	Telescopic fork
	Front wheel travel	110 mm (4.3 in)
	Rear suspension	Swingarm
	Rear wheel travel	81 mm (3.2 in)
	Front tire size	100/90-17 55P
	Rear tire size	130/90-15 M/C 66P
	Tire brand (Front/Rear)	Bridgestone Dunlop
	Front brake	Front: L309 / Rear: G508
	Rear brake	Front: F17 / Rear: D404G
	Caster angle	Hydraulic single disc brake
	Trail length	Internal expanding shoe
	Fuel tank capacity	32°
	Fuel tank reserve capacity	122 mm (4.8 in)
Engine	Bore and stroke	42.0 x 45.0 mm (1.65 x 1.77 in)
	Displacement	125 cm ³ (7.6 cu-in)
	Compression ratio	11.8: 1
	Valve train	Silent, multi-link chain drive and OHC with rockerarm
	Intake valve, opens	6° BTDC
		closes
	Exhaust valve, opens	24° ABDC
		31° BBDC
		9° ATDC
		— at 1 mm (0.04 in) lift
	Lubrication system	Forced pressure and dry sump
	Oil pump type	Trochoid
	Cooling system	Liquid cooled
	Air filtration	Paper filter
Carburetor	Crankshaft type	Unit type, two main journals
	Engine dry weight	41.80 kg (92.15 lbs)
	Firing order	Rear: 450° - Front: 270° - Rear
	Cylinder arrangement	Two cylinders, 90° V transverse
	Cylinder number	Front: #2, Rear: # 1
	Carburetor type	CV (Constant Velocity) dual carburetor
	Throttle bore	22 mm (0.9 in)

Unit: mm (in)

General (Cont'd)		
	Item	Specifications
Drive Train	Clutch system	Multi-plate, wet
	Clutch operation system	Mechanical type
	Transmission	Constant mesh, 5-speeds
	Primary reduction	3.722 (67/18)
	Final reduction	2.928 (41/14)
	Gear ratio 1st	3.083 (37/12)
	2nd	1.933 (29/15)
	3rd	1.428 (30/21)
	4th	1.173 (27/23)
	5th	1.000 (25/25)
	Gearshift pattern	Left foot operated return system, 1 - N - 2 - 3 - 4 - 5
Electrical	Ignition system	Full transistor digital ignition
	Starting system	Electric starter motor
	Charging system	Triple phase output alternator
	Regulator/rectifier	SCR shorted triple/phase, full wave rectification
	Lighting system	Battery

Unit: mm (in)

Lubrication System

Item		Standard	Service Limit
Engine oil capacity	At draining	1.2 liters (1.3 US qt, 1.1 Imp qt)	—
	At disassembly	1.5 liters (1.6 US qt, 1.3 Imp qt)	—
	At oil filter change	1.3 liters (1.4 US qt, 1.1 Imp qt)	—
Recommended engine oil		Honda 4-stroke oil or equivalent motor oil API service classification SE, SF or SG Viscosity: SAE 10W-40	—
Oil pump rotor	Tip clearance	0.15 (0.006)	0.20 (0.008)
	Body clearance	0.15-0.21 (0.006-0.008)	0.25 (0.010)
	End clearance	0.03-0.11 (0.001-0.004)	0.15 (0.006)

Fuel System

Item		Specifications
Carburetor identification number	Except SW type	VPU3A
	SW type	VPU3B
Main jet	Front	# 78
	Rear	# 78
Slow jet		# 35
Pilot screw	Initial/final opening	See page 5-19
Float level		13.7 mm (0.54 in)
Base carburetor (for synchronization)		Front cylinder (#2)
Idle speed		1,500 ± 100 min ⁻¹ (rpm)
PAIR control valve specified vacuum		27 kPa (200 mm Hg)
Throttle grip free play		2-6 mm (1/12—1/4 in)

Cooling System

Item		Specifications
Coolant capacity	Radiator and engine	1.2 liters (1.3 US qt, 1.1 Imp qt)
	Reserve tank	0.4 liters (0.4 US qt, 0.4 Imp qt)
Radiator cap relief pressure		108 kPa (1.1 kgf/cm ² , 16 psi)
Thermostat	Begin to open	81 - 84° C (178 - 183° F)
	Fully open	95° C (203° F)
	Valve lift	4.5 mm (0.18 in) minimum

Unit: mm (in)

Clutch System/Gearshift Linkage

Item		Standard	Service Limit
Clutch lever free play		10-20 (3/8—13/16)	—
Clutch spring free length		42.1 (1.66)	39.8 (1.57)
Clutch disc thickness	A	2.92-3.08 (0.115-0.121)	2.6 (0.10)
	B	2.92-3.08 (0.115-0.121)	2.6 (0.10)
Clutch plate warpage		—	0.30 (0.012)
Clutch outer guide	I.D.	20.010-20.035 (0.7878-0.7888)	20.05 (0.789)
	O.D.	25.959-25.980 (1.0220-1.0228)	25.94 (1.021)
Mainshaft O.D. at clutch outer guide		19.959-19.980 (0.7858-0.7866)	19.94 (0.785)

Unit: mm (in)

Cylinder Head/Valves

Item			Standard	Service Limit
Cylinder compression			1,304 kPa (13.3 kgf/cm ² , 189 psi) at 500 min ⁻¹ (rpm)	—
Cylinder head warpage			—	0.05 (0.002)
Valve, valve guide	Valve clearance	IN	0.15 ± 0.02 (0.006 ± 0.001)	—
		EX	0.20 ± 0.02 (0.008 ± 0.001)	—
	Valve stem O.D.	IN	4.975-4.990 (0.1959-0.1965)	4.965 (0.1955)
		EX	4.955-4.970 (0.1951-0.1957)	4.945 (0.1947)
	Valve guide I.D.	IN	5.000-5.012 (0.1969-0.1973)	5.03 (0.198)
		EX	5.000-5.012 (0.1969-0.1973)	5.03 (0.198)
	Stem-to-guide clearance	IN	0.010-0.037 (0.0004-0.0015)	0.065 (0.0026)
		EX	0.030-0.057 (0.0012-0.0022)	0.085 (0.0033)
	Valve guide projection above cylinder head	IN	12.10 (0.476)	—
		EX	12.10 (0.476)	—
Valve spring free length	Valve seat width	IN/EX	0.90-1.10 (0.035-0.043)	1.5 (0.06)
Camshaft	Cam lobe height	IN	38.00 (1.496)	36.5 (1.44)
		EX	38.51 (1.516)	37.0 (1.46)
	Cam lobe height	IN	28.8527-29.0927 (1.13593-1.14538)	28.82 (1.135)
		EX	28.8849-29.1249 (1.13720-1.14665)	28.85 (1.136)
	Runout		0.030 (0.0012)	0.050 (0.0020)
Rocker arm	Identification marks		Front "F" / Rear "R"	—
	Rocker arm I.D.	IN/EX	10.000-10.015 (0.3937-0.3943)	10.05 (0.396)
	Rocker arm shaft O.D.	IN/EX	9.972-9.987 (0.3926-0.3932)	9.92 (0.391)
Rocker arm-to-rocker arm shaft clearance			0.013-0.043 (0.0005-0.0017)	0.10 (0.004)

VT125 C (1) ADDENDUM

Unit: mm (in)

Cylinder/Piston		Item	Standard	Service Limit
Cylinder	I.D.		42.00-42.01 (1.654-1.654)	42.10 (1.657)
	Out of round		—	0.06 (0.002)
	Taper		—	0.06 (0.002)
	Warpage		—	0.05 (0.002)
Piston, piston ring	Piston mark direction		“IN” mark facing toward intake side	—
	Piston O.D.		41.97-41.99 (1.652-1.653)	41.90 (1.650)
	Piston O.D. measurement point		14.0 (0.55) from bottom of skirt	—
	Piston pin bore I.D.		13.002-13.008 (0.5119-0.5121)	13.04 (0.513)
	Piston pin O.D.		12.994-13.000 (0.5116-0.5118)	12.98 (0.511)
	Piston-to-piston pin clearance		0.002-0.014 (0.0001-0.0006)	0.04 (0.002)
	Piston ring-to-ring groove clearance	Top	0.015-0.05 (0.0006-0.002)	0.080 (0.0031)
		Second	0.015-0.05 (0.0006-0.002)	0.080 (0.0031)
	Piston ring end gap	Top	0.05-0.15 (0.002-0.006)	0.30 (0.012)
		Second	0.20-0.35 (0.008-0.014)	0.50 (0.020)
		Oil (side rail)	0.10-0.60 (0.004-0.024)	0.80 (0.031)
	Piston ring mark	Top	“R” mark	—
		Second	“RN” mark	—
Cylinder-to-piston clearance			0.010-0.040 (0.0004-0.0016)	0.10 (0.004)
Connecting rod small end I.D.			13.016-13.034 (0.5124-0.5131)	13.044 (0.5135)
Connecting rod-to-piston pin clearance			0.010-0.040 (0.0004-0.0016)	0.06 (0.002)

Unit: mm (in)

Crankcase/Transmission/Crankshaft

Crankcase/Transmission/Crankshaft				
Item			Standard	Service Limit
Transmission	Gear I.D.	M4, M5, C1, C2	23.000-23.021 (0.9055-0.9063)	23.04 (0.907)
		C3	25.020-25.041 (0.9850-0.9859)	25.06 (0.987)
	Bushing O.D.	M4, M5, C1, C2	22.959-22.980 (0.9039-0.9047)	22.94 (0.903)
		C3	24.979-25.000 (0.9834-0.9843)	24.96 (0.983)
	Bushing I.D.	M4	20.020-20.041 (0.7882-0.7890)	20.06 (0.790)
		C1	18.000-18.018 (0.7087-0.7094)	18.04 (0.710)
		C2	20.000-20.021 (0.7874-0.7882)	20.04 (0.789)
		C3	22.000-22.021 (0.8661-0.8670)	22.04 (0.868)
	Gear-to-bushing clearance	M4, M5 C1, C2, C3	0.020-0.062 (0.0008-0.0024)	0.10 (0.004)
	Mainshaft O.D.	M4 bushing	19.959-19.980 (0.7858-0.7866)	19.94 (0.785)
	Countershaft O.D.	C1 bushing	17.966-17.984 (0.7073-0.7080)	17.95 (0.707)
		C2 bushing	19.974-19.987 (0.7864-0.7869)	19.95 (0.785)
		C3 bushing	21.959-21.980 (0.8645-0.8654)	21.94 (0.864)
	Bushing-to-shaft clearance	M4	0.040-0.082 (0.0016-0.0032)	0.10 (0.004)
		C1	0.016-0.052 (0.0006-0.0020)	0.08 (0.003)
		C2	0.013-0.047 (0.0005-0.0019)	0.08 (0.003)
		C3	0.020-0.062 (0.0008-0.0024)	0.09 (0.004)
Shift fork	I.D.		12.000-12.018 (0.4724-0.4731)	12.03 (0.474)
	Claw thickness		4.930-5.000 (0.1941-0.1969)	4.9 (0.19)
Shift fork shaft O.D.			11.957-11.968 (0.4707-0.4712)	11.95 (0.470)
Shift drum O.D. (at left side journal)			13.966-13.984 (0.5498-0.5506)	13.94 (0.549)
Crankshaft	Connecting rod big end side clearance		0.05-0.70 (0.002-0.028)	0.80 (0.031)
	Runout		—	0.05 (0.002)

Unit: mm (in)

Front Wheel/Suspension/Steering

Item		Standard	Service Limit
Minimum tire tread depth		—	1.5 (0.06)
Cold tire pressure	Up to 90 kg (200 lbs) load	200 kPa (2.00 kgf/cm ² , 29 psi)	—
	Up to maximum weight capacity	200 kPa (2.00 kgf/cm ² , 29 psi)	—
Axle runout		—	0.20 (0.008)
Wheel rim runout	Radial	—	2.0 (0.08)
	Axial	—	2.0 (0.08)
Wheel hub-to-rim distance		(page 12-13)	—
Wheel balance weight		—	60 g (2.1 oz)
Fork	Spring free length	463.7 (18.26)	459.1 (18.07)
	Tube runout	—	0.20 (0.008)
	Recommended fork fluid	Fork fluid	—
	Oil level	125 (4.9)	—
	Oil capacity	317 ± 2.5 cm ³ (10.7 ± 0.08 US oz, 11.6 ± 0.09 Imp. oz)	—
Steering head bearing pre-load		0.10-0.15 kgf (0.220-0.330 lbf)	—

VT125 C (1) ADDENDUM

Unit: mm (in)

Rear Wheel/Brake/Suspension

Item		Standard	Service Limit
Minimum tire tread depth		—	2.0 (0.08)
Cold tire pressure	Up to 90 kg (200 lbs) load	200 kPa (2.00 kgf/cm ² , 29 psi)	—
	Up to maximum weight capacity	200 kPa (2.00 kgf/cm ² , 29 psi)	—
Axle runout		—	0.20 (0.008)
Wheel rim runout	Radial	—	2.0 (0.08)
	Axial	—	2.0 (0.08)
Wheel hub-to-rim distance		(page 13-8)	—
Drive chain slack		20-30 (13/16-1 3/16)	50 (1 15/16)
Drive chain link		112	—
Drive chain size	REG	REG 1350RNV2	—
Rear brake drum I.D.		130.0-130.3 (5.12-5.13)	131 (5.2)
Brake pedal free play		20-30 (13/16-1 3/16)	—
Shock absorber spring pre-load adjuster setting		2nd position	—

Unit: mm (in)

Hydraulic Brake

Item		Standard	Service Limit
Specified brake fluid		DOT 3 or DOT 4	—
Brake pad wear indicator		—	To groove
Brake disc thickness		3.80-4.20 (0.150-0.165)	3.5 (0.14)
Brake disc runout		—	0.10 (0.004)
Master cylinder I.D.		11.000-11.043 (0.4331-0.4348)	11.05 (0.435)
Master piston O.D.		10.957-10.984 (0.4314-0.4324)	10.945 (0.4309)
Caliper cylinder I.D.		25.400-25.450 (1.0000-1.0020)	25.450 (1.0020)
Caliper piston O.D.		25.318-25.368 (0.9968-0.9987)	25.31 (0.996)

Unit: mm (in)

Charging System/Alternator

Item		Specifications
Battery	Capacity	12 V - 6 Ah
	Current leakage	0.1 mA max
	Voltage (20° C/68° F)	Fully charged
		Needs charging
	Charging current	Normal
		Quick
Alternator	Capacity	260 kW/5,000 min ⁻¹ (rpm)
	Charging coil resistance (20° C/68° F)	0.1-0.5 Ω

Ignition System

Item		Specifications	
Spark plug		NGK	DENSO
	Standard	CR8EH-9 NGK	U24FER-9 DENSO
Spark plug gap		0.80-0.90 mm (0.031-0.035 in)	
Ignition coil primary peak voltage		100 V minimum	
Ignition pulse generator peak voltage		0.7 V minimum	
Ignition timing "F" mark		12° ± 1° BTDC at 1,500 ± 100 min ⁻¹ (rpm)	
Full advance		BTDC 40°	

VT125 C (1) ADDENDUM

Unit: mm (in)

Electric Starter/Starter Clutch

Item	Standard	Service Limit
Starter motor brush lenght	10.00-10.05 (0.394-0.396)	3.5 (0.14)
Starter clutch gear O.D.	45.657-45.673 (1.7975-1.7981)	45.64 (1.797)
Starter clutch outer I. D.	62.317-62.347 (2.4534-2.4546)	62.33 (2.454)

Lights/Meters/Switches

Item		Specifications
Bulbs	Headlight (High/low beam)	12 V - 60/55 W
	Position light	12 V - 4 W
	Brake/tail/license light	12 V - 21/5 W
	Turn signal light	12 V - 21W x 4
	Instrument light	12 V - 1.7 W
	Turn signal indicator	12 V - 3.4 W
	High beam indicator	12 V - 3.4 W
	Neutral indicator	12 V - 3.4 W
	Temp indicator	12 V - 3.0 W
Fuse	Main fuse	30 A
	Sub fuse	10 A x 5
Thermo switch	OFF → ON	112 - 118° C (234 - 244° F)
	ON → OFF	Below 108° C (226° F)

Torque Values

Standard

Fastener Type	Torque N·m (kgf·m, lbf·ft)	Fastener Type	Torque N·m (kgf·m, lbf·ft)
5 mm bolt and nut	5 (0.5, 3.6)	5 mm screw	4 (0.4, 2.9)
6 mm bolt and nut (Include SH flange bolt)	10 (1.0, 7)	6 mm screw	9 (0.9, 6.5)
8 mm bolt and nut	22 (2.2, 16)	6 mm flange bolt (Include NSHF)	12 (1.2, 9)
10 mm bolt and nut	34 (3.5, 25)	8 mm flange bolt and nut	26 (2.7, 20)
12 mm bolt and nut	54 (5.5, 40)	10 mm flange bolt and nut	39 (4.0, 29)

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

Notes:

1. Apply a sealant to the threads.
2. Apply a locking agent to the threads.
3. Apply molybdenum disulfide oil to the threads and seating surface.
4. Apply grease to the threads.
5. Stake.
6. Apply oil to the threads and flange surface.
7. Apply clean engine oil to the O-ring.
8. U-nut.
9. ALOC bolt: replace with a new one.

Engine

Item	Q'TY	Thread Dia. (mm)	Torque N·m (kgf·m, lbf·ft)	Remarks
MAINTENANCE:				
Spark plug	2	10	12 (1.2, 9)	
Crankshaft hole cap	1	30	15 (1.5, 11)	
Timing hole cap	1	14	10 (1.0, 7)	
Valve adjusting screw lock nut	4	6	17 (1.7, 12)	NOTE 6
Oil drain bolt	1	12	25 (2.5, 18)	
LUBRICATION SYSTEM:				
Oil pump mounting bolt	2	6	14 (1.4, 10)	
FUEL SYSTEM:				
Carburetor insulator band screw	4	5	5 (0.5, 3.6)	
PAIR control check valve cover screw	4	5	5 (0.5, 3.6)	
COOLING SYSTEM:				
Water pump drain bolt	1	10	13 (1.3, 9)	
Water pump impeller	1	7	12 (1.2, 9)	
Cooling fan nut	1	3	1 (0.1, 0.7)	NOTE 2
ENGINE REMOVAL/INSTALLATION:				
Drive sprocket setting plate bolt	2	6	12 (1.2, 9)	
CLUTCH/GEARSHIFT LINKAGE:				
Clutch center lock nut	1	16	108 (11, 80)	NOTE 5, 6
Clutch pressure plate bolt	5	6	12 (1.2, 9)	
Gear shift stopper arm pivot bolt	1	6	12 (1.2, 9)	NOTE 6
Gear shift cam plate bolt	1	8	23 (2.3, 17)	NOTE 2

VT125 C (1) ADDENDUM

Engine (Cont'd)

Item	Q'TY	Thread Dia. (mm)	Torque N·m (kgf·m, lbf·ft)	Remarks
CYLINDER HEAD/VALVES:				
Cylinder head side cover bolt	8	6	10 (1.0, 7)	
Cylinder head cover bolt	8	6	10 (1.0, 7)	
Cam sprocket bolt	4	7	20 (2.0, 14)	NOTE 2
Cylinder head flange nut 8 mm (0.3 in)	8	8	32 (3.3, 24)	NOTE 6
6 mm (0.2 in)	4	6	12 (1.2, 9)	NOTE 6
Camshaft holder bolt	12	6	12 (1.2, 9)	
Rocker arm shaft bolt	4	5	5 (0.5, 3.6)	
Cam chain tensioner lifter bolt	4	6	12 (1.2, 9)	
Cam chain tensioner lifter plug	2	6	4 (0.4, 2.9)	
CRANKCASE/TRANSMISSION/CRANKSHAFT:				
Mainshaft bearing setting plate bolt	2	6	10 (1.0, 7)	
Shift drum bearing setting plate bolt	2	6	10 (1.0, 7)	NOTE 2
CHARGING SYSTEM/ALTERNATOR:				
Flywheel nut	1	12	64 (6.5, 47)	NOTE 6
Stator mounting bolt	3	6	12 (1.2, 9)	
Ignition pulse generator mounting bolt	2	5	5 (0.5, 3.6)	
Stator/Ignition pulse generator wire clamp bolt	1	5	5 (0.5, 3.6)	
IGNITION SYSTEM:				
Engine coolant temperature (ECT) sensor	1	12	23 (2.3, 17)	
ELECTRIC STARTER/STARTER CLUTCH:				
Starter motor terminal nut	1	6	12 (1.2, 9)	
Starter motor front cover bolt	2	5	5 (0.5, 3.6)	
Primary drive gear lock nut	1	16	88 (9.0, 65)	NOTE 6
OTHERS:				
Neutral switch	1	10	12 (1.2, 9)	
Neutral switch terminal nut	1	4	2 (0.2, 1.4)	

Frame

Item	Q'TY	Thread Dia. (mm)	Torque N·m (kgf·m, lbf·ft)	Remarks
FRAME/BODY PANELS/EXHAUST SYSTEM:				
Exhaust pipe joint nut	4	8	27 (2.8, 20)	
Exhaust pipe/muffler protector bolt	4	6	10 (1.0, 7)	
Exhaust pipe/muffler bracket nut	2	10	27 (2.8, 20)	
Fuel valve nut	1	22	34 (3.5, 25)	
MAINTENANCE:				
Chain adjuster lock nut	2	6	10 (1.0, 7)	
COOLING SYSTEM:				
Fan motor switch	1	16	18 (1.8, 13)	
ENGINE REMOVAL/INSTALLATION:				
Front engine mounting nut	1	10	39 (4.0, 29)	
Rear engine mounting nut (upper)	1	10	39 (4.0, 29)	
(lower)	1	10	39 (4.0, 29)	
Front engine bracket bolt	2	8	27 (2.8, 20)	
Rear upper engine bracket bolt	2	8	27 (2.8, 20)	

Frame (Cont'd)

Item	Q'TY	Thread Dia. (mm)	Torque N·m (kgf·m, lbf·ft)	Remarks
FRONT WHEEL/SUSPENSION/STEERING:				
Steering stem nut	1	24	103 (10.5, 76)	
Top thread	1	26	15 (1.5, 11)	
Fork top bridge pinch bolt	2	8	27 (2.8, 20)	
Fork bottom bridge pinch bolt	2	8	34 (3.5, 25)	
Handlebar mounting nut	2	10	39 (4.0, 29)	
Front axle	1	12	61 (6.2, 45)	
Front axle pinch bolt	1	8	22 (2.2, 16)	
Front brake disc mounting bolt	5	8	42 (4.3, 31)	NOTE 8
Fork cap	2	28	22 (2.2, 16)	
Fork socket bolt	2	8	20 (2.0, 14)	NOTE 8
Spoke	36	BC 3.2	4 (0.4, 2.9)	
REAR WHEEL/BRAKE/SUSPENSION:				
Rear axle nut	1	14	88 (9.0, 65)	NOTE 8
Driven sprocket nut	5	10	64 (6.5, 47)	NOTE 8
Rear shock absorber mounting bolt (upper)	2	8	26 (2.7, 20)	
(lower)	2	10	42 (4.3, 31)	
Swingarm pivot nut	1	14	88 (9.0, 65)	
Chain slider screw	2	5	3 (0.3, 2.2)	
Brake arm nut	1	6	10 (1.0, 7)	
Spoke	36	BC 3.2	4 (0.4, 2.9)	
HYDRAULIC BRAKE:				
Brake caliper mounting bolt	2	8	30 (3.1, 22)	
Pad pin	2	10	18 (1.8, 13)	
Pad pin plug	2	10	2 (0.2, 1.4)	
Brake caliper bleeder	1	8	6 (0.6, 4.3)	
Brake lever pivot bolt	1	6	1 (0.1, 0.7)	
Brake lever pivot nut	1	6	6 (0.6, 4.3)	
Master cylinder holder bolt	2	6	12 (1.2, 9)	
Reservoir cover screw	2	4	2 (0.2, 1.4)	
Front brake light switch screw	1	4	1 (0.1, 0.7)	
Brake hose oil bolt	2	10	34 (3.5, 25)	
Brake hose clasper	1	6	12 (1.2, 9)	
LIGHT/METERS/SWITCHES:				
Thermo switch	1	PT 1/8	8 (0.8, 5.8)	
Side stand switch mounting bolt	1	6	10 (1.0, 7)	
Speedometer cover bolt	2	6	9 (0.9, 6.5)	
Headlight case mounting nut	1	10	34 (3.5, 25)	
Ignition switch bolt	2	6	10 (1.0, 7)	
OTHERS:				
Main step bracket bolt	4	8	27 (2.8, 20)	
Side stand pivot bolt	1	10	10 (1.0, 7)	
nut	1	10	30 (3.1, 22)	

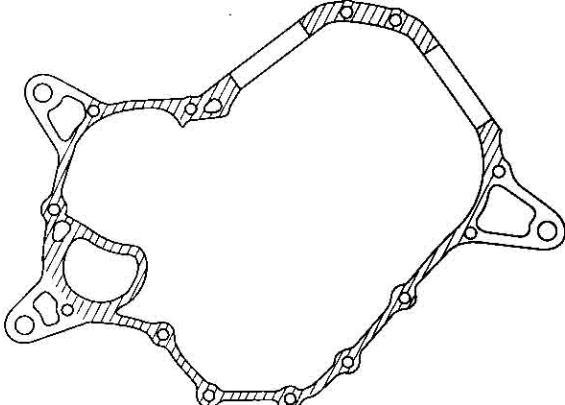
Tools

NOTES: 1. Alternative tool.
2. Newly provided tool.

Description	Tool Number	Remarks	Ref. Section
Attachment, 22 x 24 mm	07746-0010800		13
Attachment, 24 x 26 mm	07746-0010700		6
Attachment, 28 x 30 mm	07746-1870100		8
Attachment, 32 x 35 mm	07746-0010100		11, 13, 6
Attachment, 42 x 47 mm	07746-0010300		11, 12, 13
Bearing installer, 37.42	07XMF-KGB0100	NOTE 2	11
Bearing installer, 37.5	07XMF-KGB0200	NOTE 2	11
Bearing remover head	07746-0050400		12, 13
Bearing remover head	07936-GE00200		6
Bearing remover head	07936-KC10200		11
Bearing remover shaft	07936-GE00100		6
Bearing remover shaft	07936-KC10100		11
Bearing remover shaft	07746-0050100		12, 13
Bearing remover weight	07741-0010201		11
Carburetor float level gauge	07401-0010000		5
Clutch center holder	07724-0050002		8
Crankshaft assembly collar	07965-VM00100		11
Crankshaft assembly shaft	07965-VM00200		11
Driver	07749-0010000		6, 8, 11, 12, 13
Drive shaft	07946-MJ00100		13
Flywheel holder	07725-0040000		15
Flywheel puller	07KMC-HE00100		15
Fork seal driver body	07747-0010100		12
Fork seal driver attachment	07947-KA20200		12
Gear holder	07724-0010200		17
Mechanical seal driver attachment	07945-4150400		6
Mechanical seal driver	07PMD-KBP0100		11
Peak voltage adapter	07HGJ-0020100		16
Pilot, 10 mm	07746-0040100		6
Pilot, 12 mm	07746-0040200		8
Pilot, 15 mm	07746-0040300		11, 12, 13
Pilot, 17 mm	07746-0040400		11
Pilot, 20 mm	07746-0040500		11
Pilot, 25 mm	07746-0040600		11
Pilot screw wrench	07908-4730002		5
Plate, 200 x 300 x 20	07XMF-KGB0300	NOTE 2	11
Snap ring pliers	07914-SA50001		14
Spoke wrench, 5.8 x 6.1 mm	07701-0020300		12
Driver handle	07953-MJ10200		12
Steering stem driver	07946-MB00000		12
Driver attachment	07953-MJ10100		12
Attachment	07946-3290000		12
Attachment	07946-6920100		12
Steering stem socket	07916-3710101		12
Universal bearing puller	07631-0010000		11

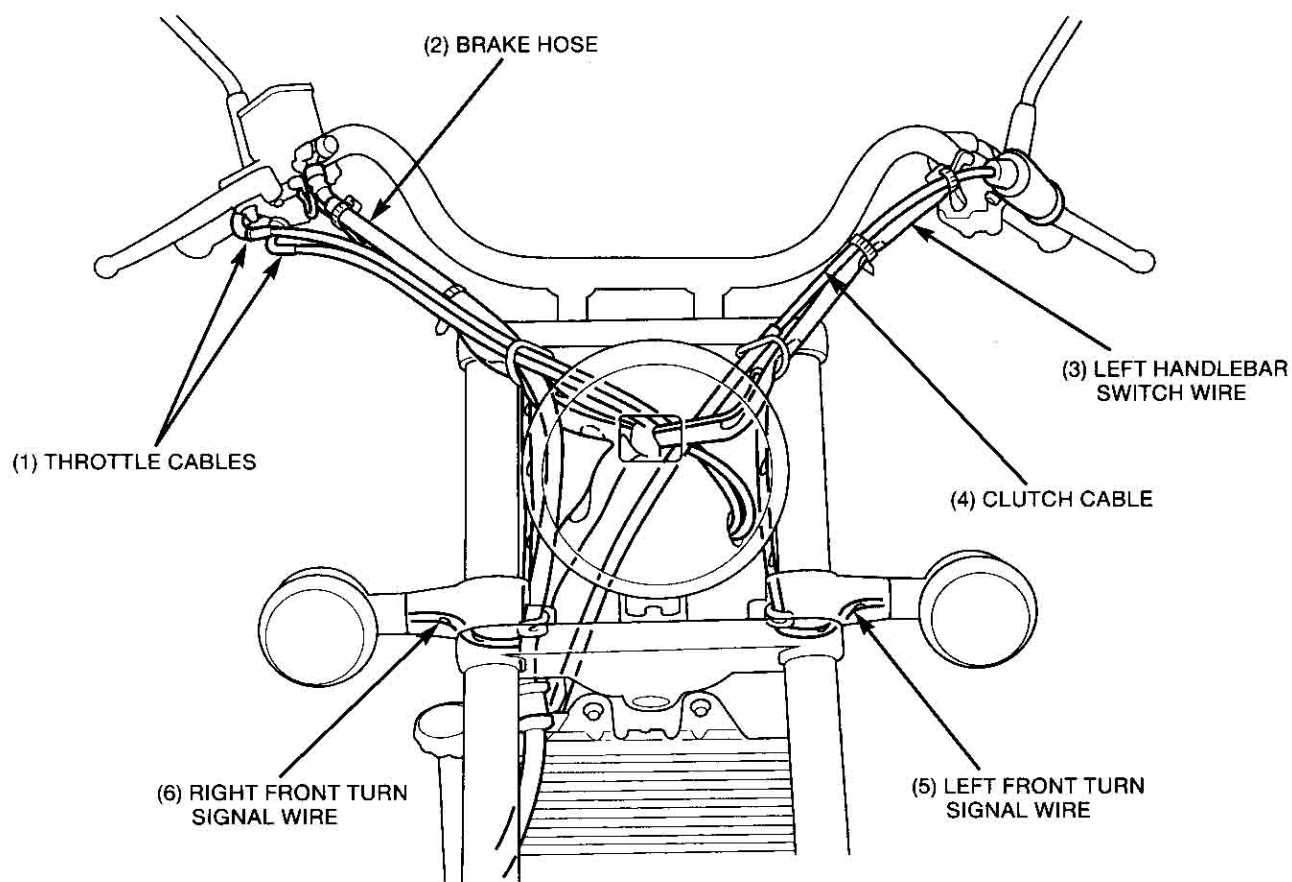
Description	Tool Number	Remark	Ref. Section
Vacuum gauge attachment	07510-3000100		3
Valve guide driver, 5 mm	07942-MA60000		9
Valve guide reamer	07984-MA60001		9
Valve spring compressor	07757-0010000		9
Valve spring compressor attachment	07959-KM30101		9
Valve seat cutter			
Seat cutter, 24.5 mm (45° IN)	07780-0010100		9
Seat cutter, 22 mm (45° EX)	07780-0010701		9
Flat cutter, 25 mm (32° IN)	07780-0012000		9
Flat cutter, 22 mm (32° EX)	07780-0012601		9
Interior cutter, 22 mm (60° IN/EX)	07780-0014202		9
Cutter holder, 5 mm	07781-0010400		9

Lubrication & Seal Points

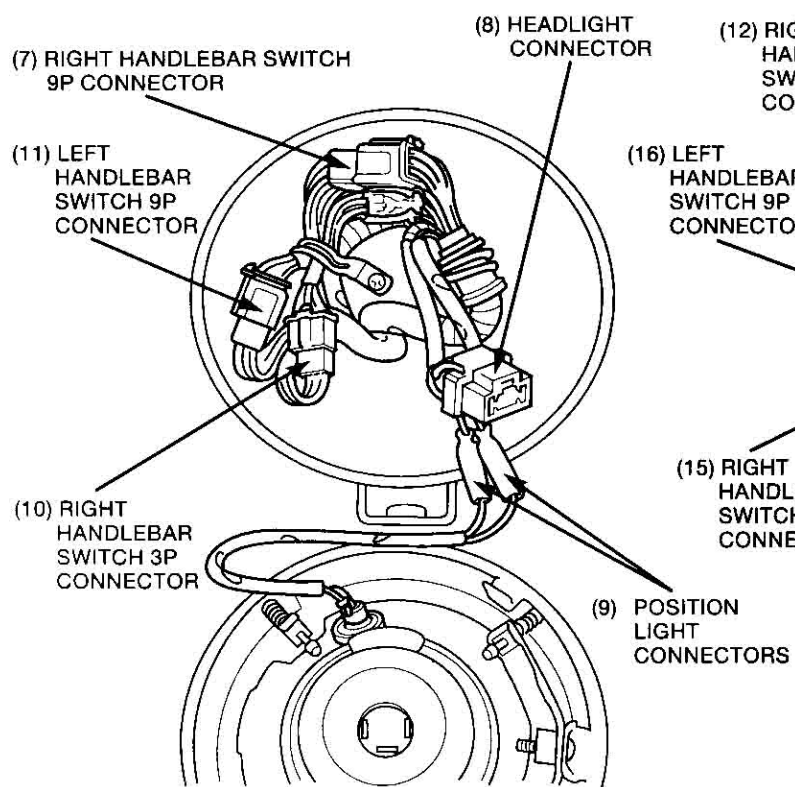
Engine		
Location	Material	Remarks
Camshaft camsurf/journals Valve stem (valve guide sliding surface)/stem end Rocker arm slipper surface Rocker arm shaft sliding surface Connecting rod small end inner surface Clutch outer sliding surface M-3, C-4, C-5 gear (shift fork grooves) Clutch outer guide bearing surface Gear (engaging and bearing portion) Piston pin outer surface	Molybdenum disulfide oil (a mixture of 1/2 engine oil and 1/2 molybdenum disulfide grease)	
Piston pin hole and outer cylindrical surface Piston ring whole surface Primary drive gear lock nut threads and seating surface Flywheel lock nut threads and seating surface Clutch disk lining surface Cylinder stud bolt threads Valve adjusting nut threads Cam chain whole surface Connecting rod bearing surface Clutch center lock nut threads and seating surface Oil pump inner rotor Cylinder inner surface Camshaft holder bolt threads and seating surface Clutch lifter pin outer surface Clutch lifter arm shaft outer surface Gear shift fork inner surface and shaft Starter clutch sliding area Each ball/needle bearing sliding area Each O-ring	Engine oil	
Right and left crankcase mating surface  Thermo switch threads Alternator and ignition pulse generator grommets	Sealant	
Cam chain tensioner tightening bolt threads Gearshift cam plate bolt threads Mainshaft bearing set plate bolt threads Gearshift drum bearing set plate bolt threads	Locking agent	
Cylinder head cover gasket	Honda Bond A or equivalent	

Frame		
Location	Material	Remarks
Steering head upper bearing sliding surface Steering head dust seal lips Front wheel dust seal lips Rear wheel dust seal lips Side stand pivot sliding area Throttle grip rolled up portion Clutch lever pivot bolt sliding surface Rear brake middle arm sliding area Rear brake pedal pivot shaft sliding area Final driven flange gap with rear hub Final driven flange dust seal lip area Rear brake shaft pivot sliding area Gearshift pedal pivot shaft sliding area Gearshift pedal link joint bolt sliding area Steering head lower bearing sliding area Rear wheel O-ring whole Rear brake anchor pin sliding surface Rear brake cam shaft sliding surface Swingarm pivot dust seal lips Swingarm pivot bush and collar sliding surface Caliper bracket pin Pad pin Crankshaft/Timing hole cap and each oil seal lips	Multi-purpose grease	No sticking to lining surface
Steering top threads Rear brake cam dust seal whole	Engine oil	No sticking to lining surface
Brake caliper piston seal sliding surface	DOT 4 brake fluid	
Brake lever pivot sliding area Brake lever pivot and piston contact area Brake caliper bracket pin bolt surface	Silicone grease	0.1 g 0.1 g 0.4 g
Final driven flange bolt threads Fork socket bolt threads	Locking agent	
Handle grip rubber inside	Honda Bond A or equivalent	
Fork seal lips	Fork fluid	
Throttle cable casing inside Clutch cable casing inside	Cable lubricant	

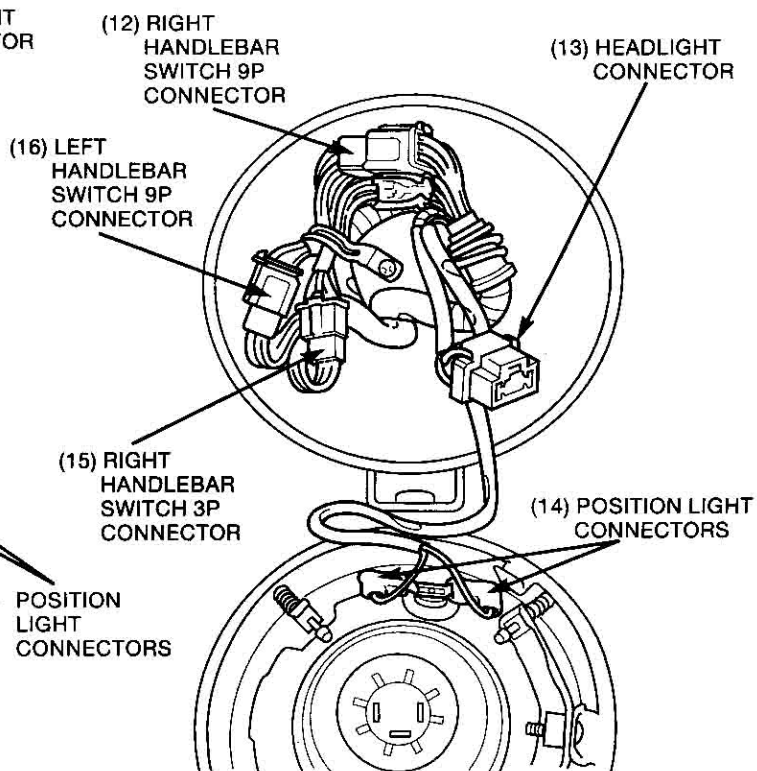
Cable & Harness Routing

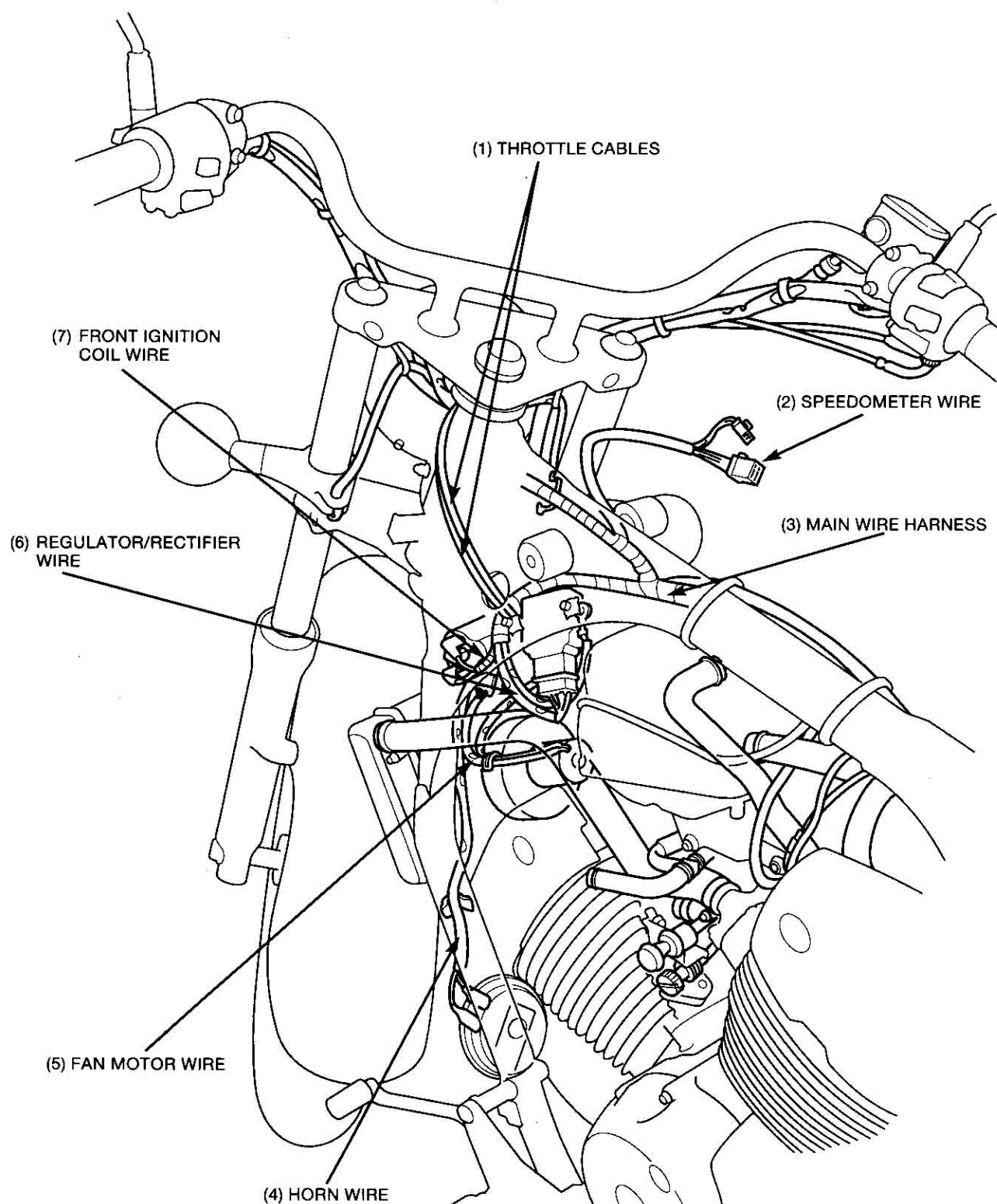


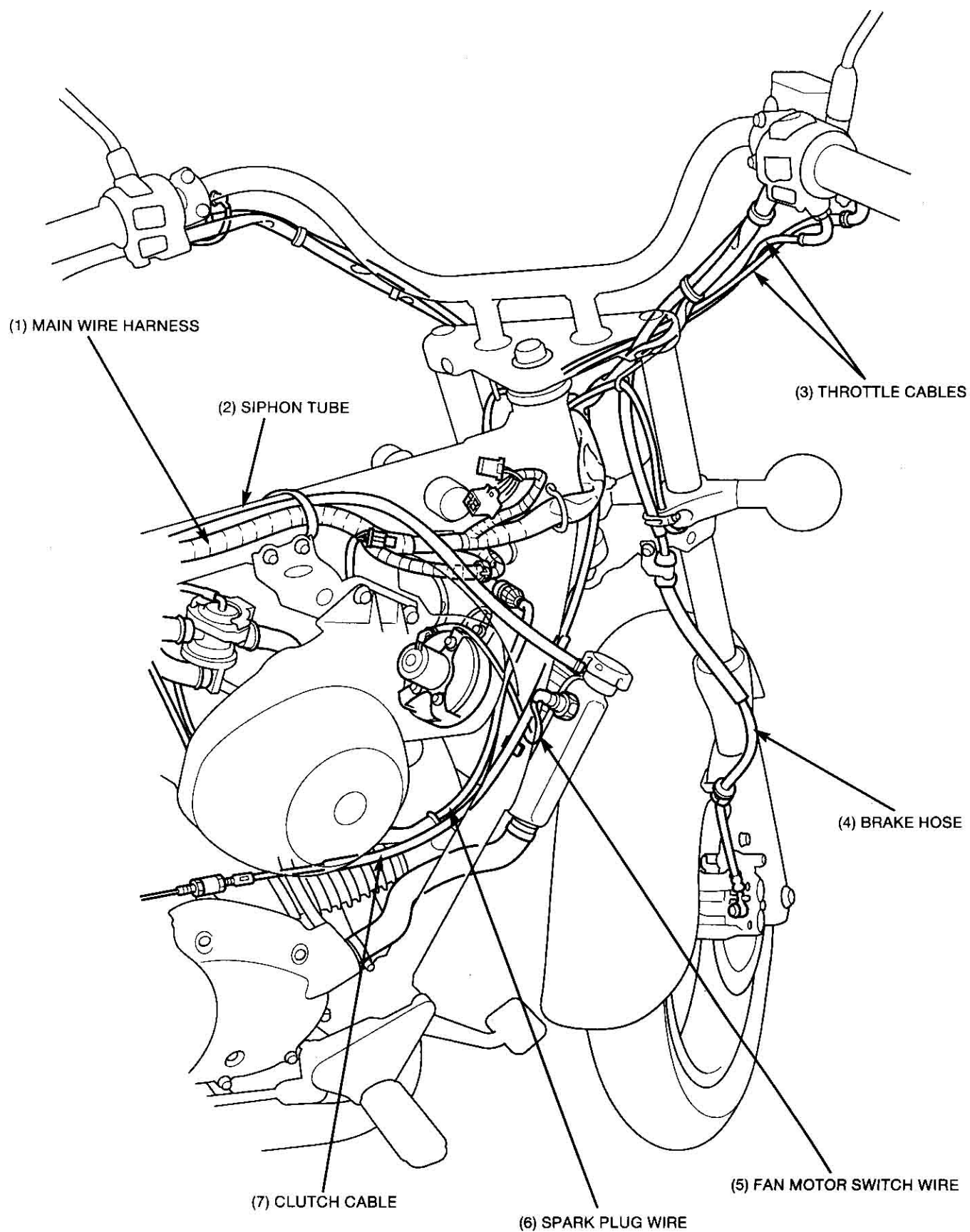
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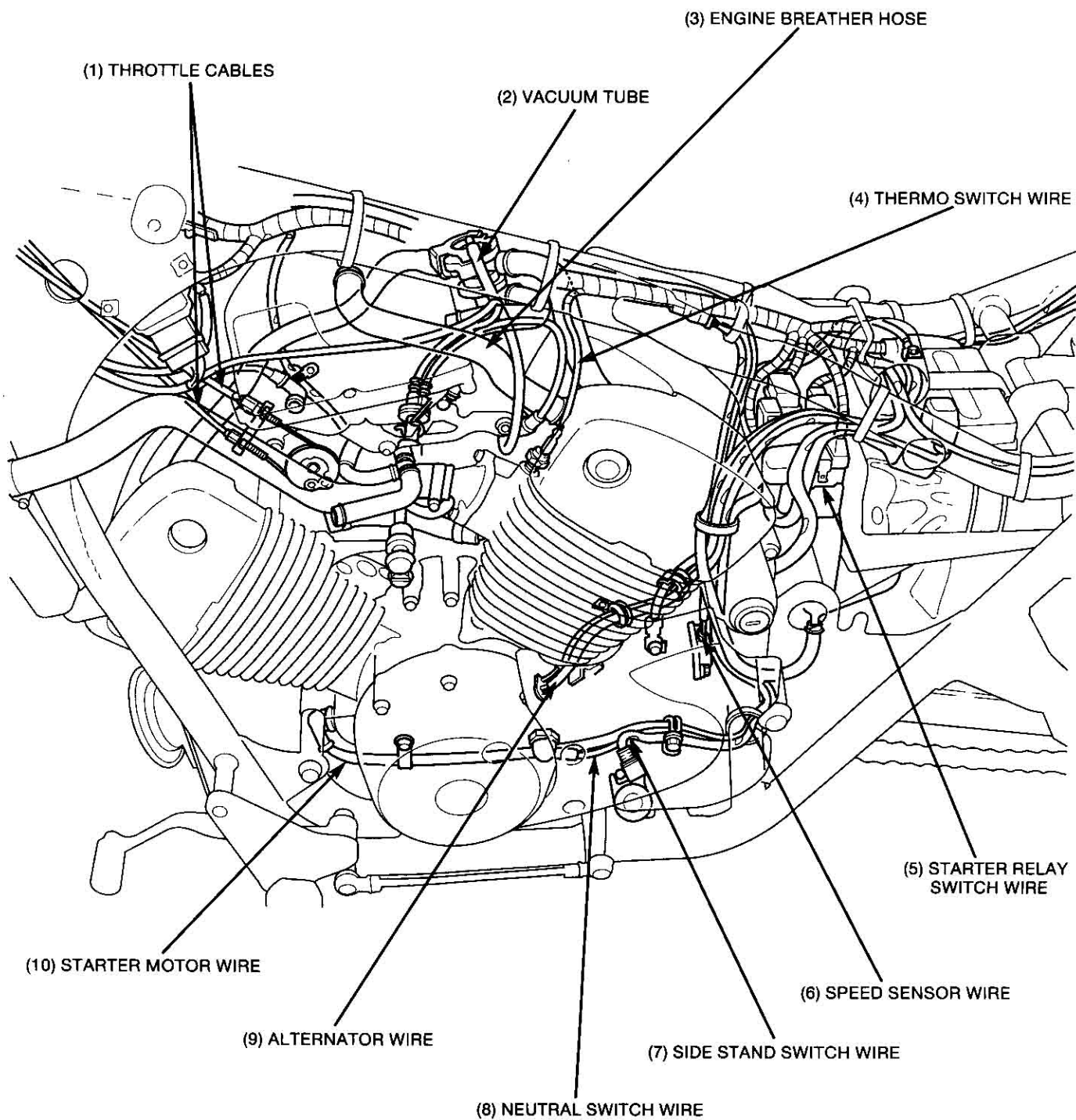


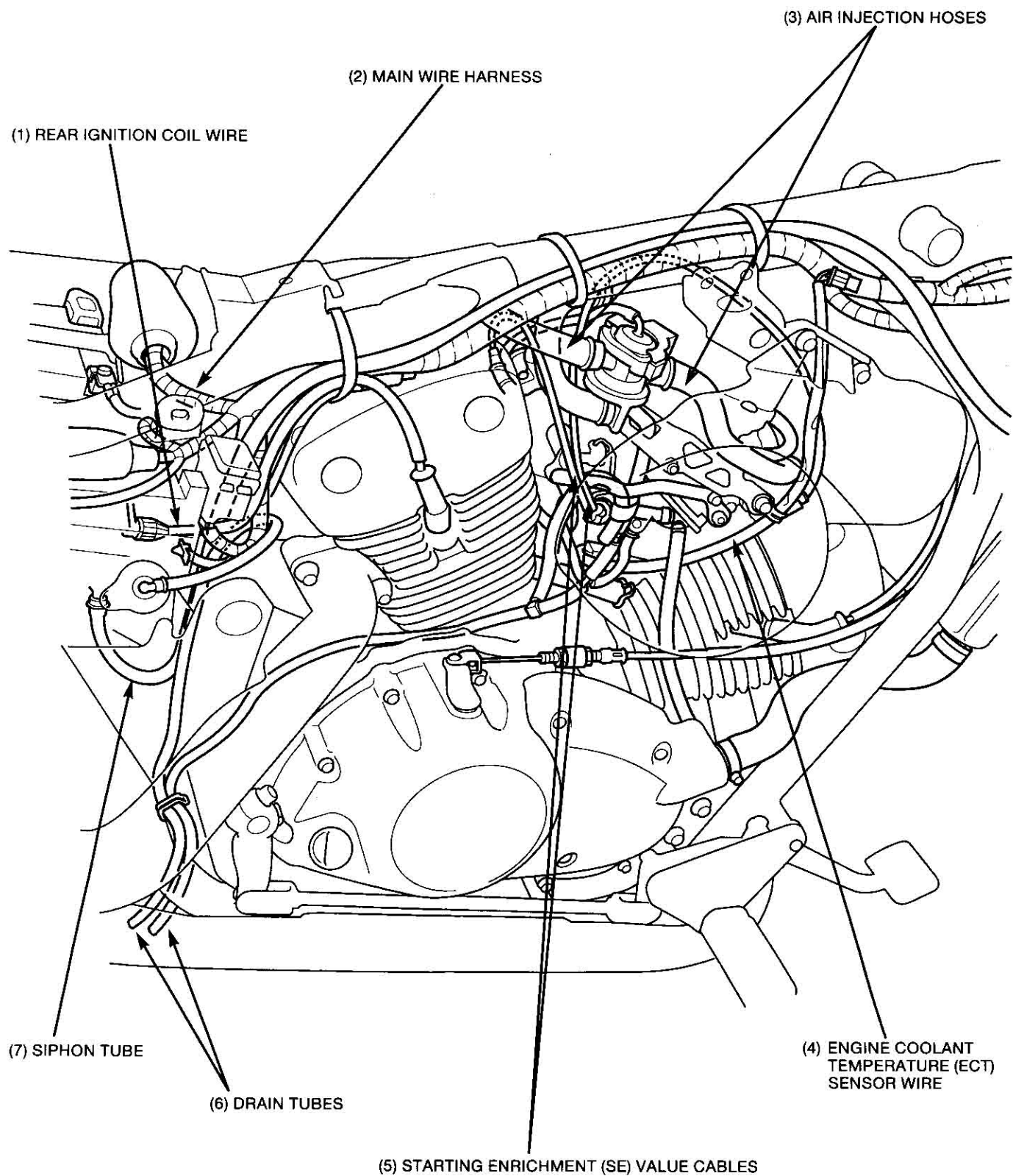
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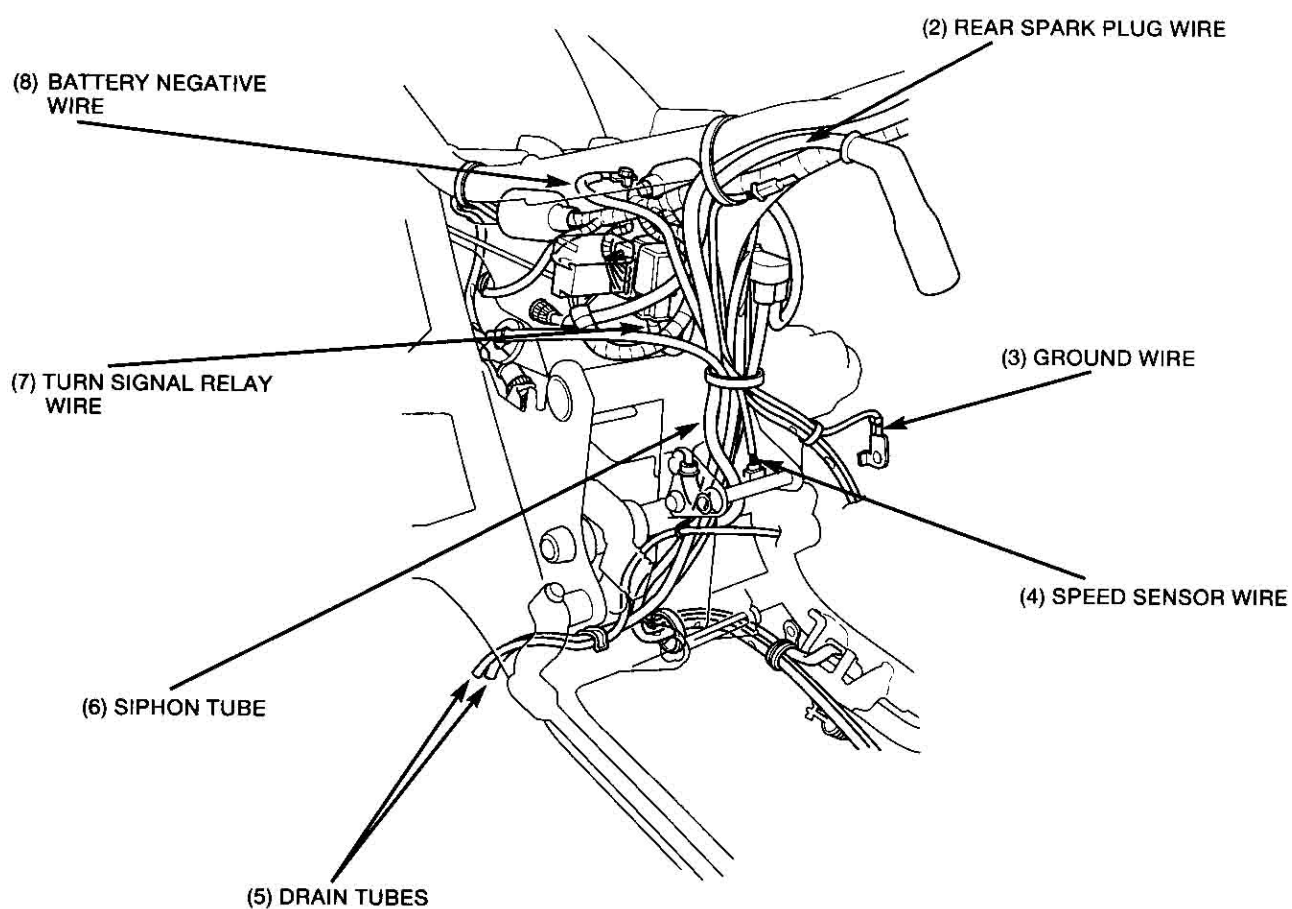
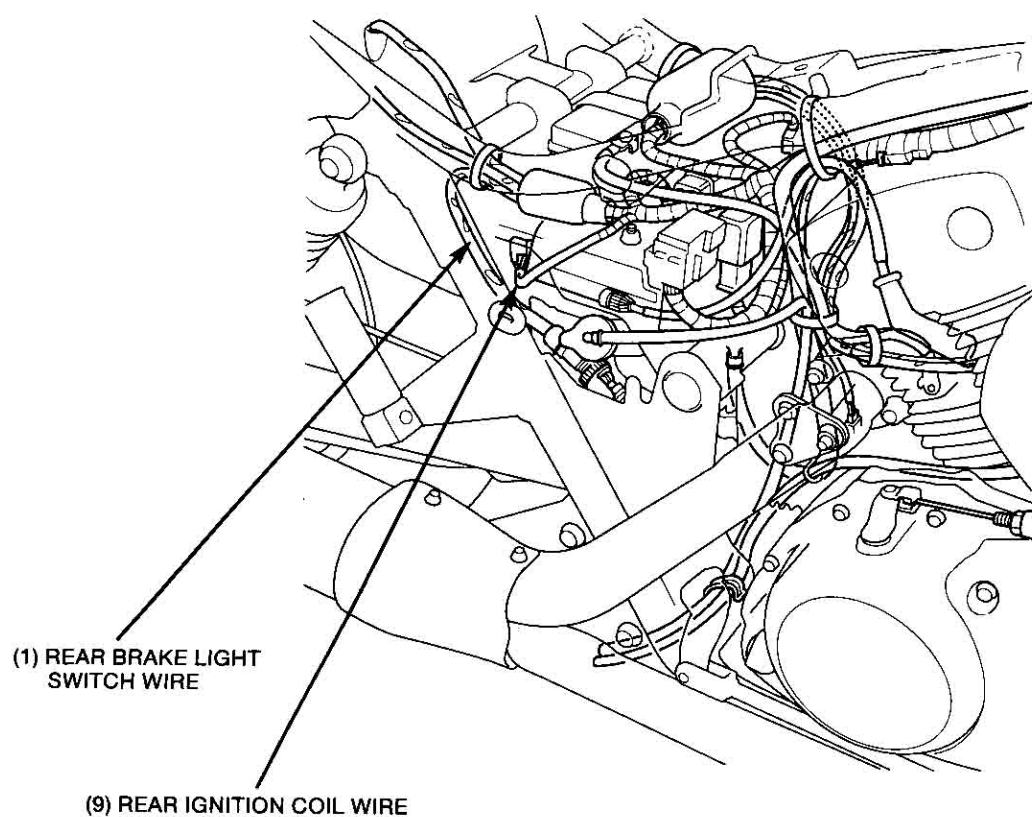


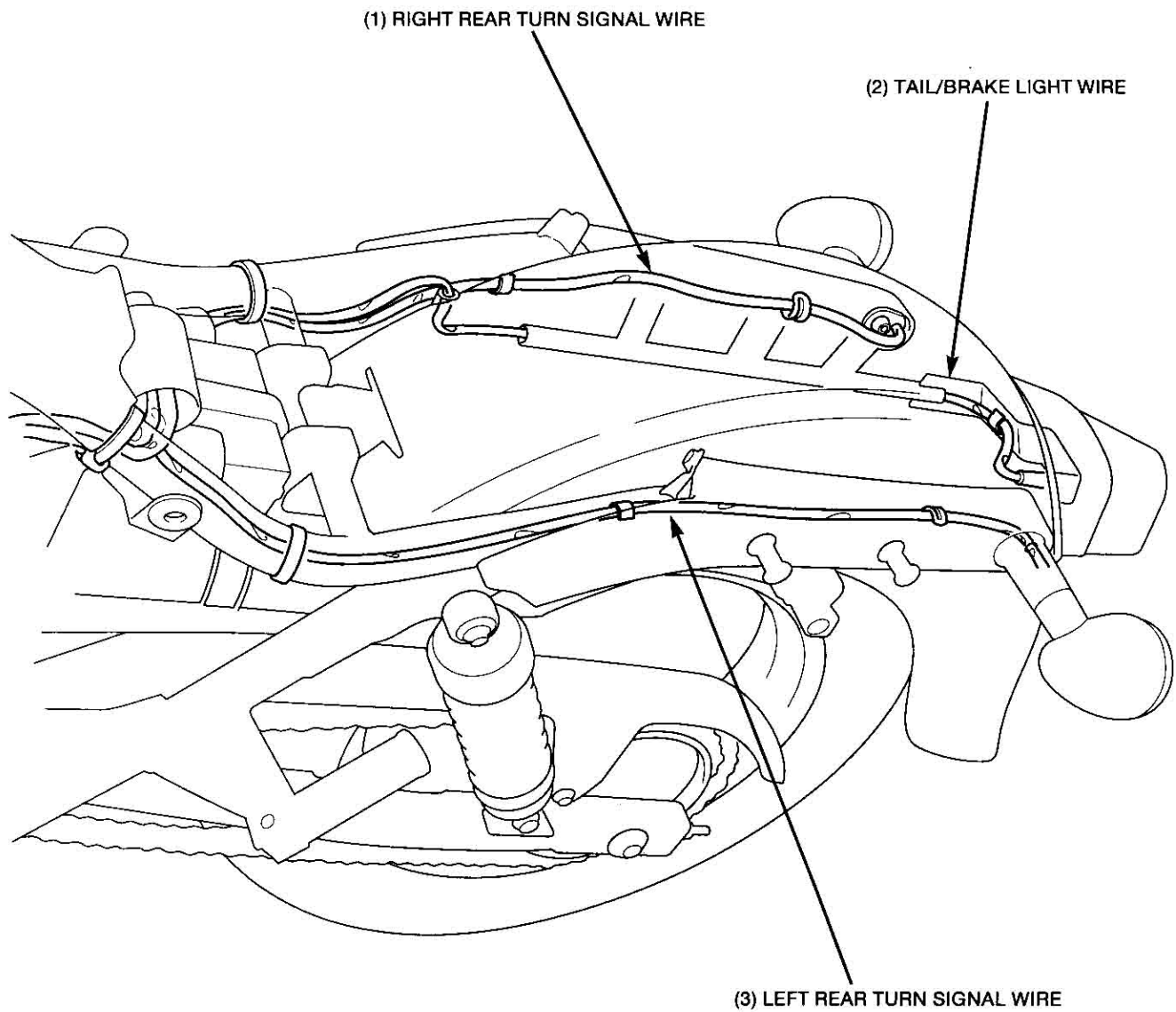












Maintenance Schedule

Perform the Pre-ride inspection in the Owner's Manual at each scheduled maintenance period.

I: Inspect and Clean, Adjust, Lubricate or Replace if necessary.

C: Clean. R: Replace. A: Adjust. L: Lubricate.

The following items require some mechanical knowledge. Certain items (particularly those marked * and **) may require more technical information and tools. Consult their authorized HONDA dealer.

ITEMS	FREQUENCY	WHICHEVER COMES FIRST ↓	ODOMETER READING (NOTE 1)					Refer to page
			X 1,000 km	1	4	8	12	
			X 1,000 mi	0.6	2.5	5	7.5	
			MONTHS		6	12	18	
* FUEL LINE					I	I	I	3-4
* THROTTLE OPERATION					I	I	I	3-4
* CARBURETOR CHOKE					I	I	I	3-5
AIR CLEANER	NOTA 2						R	3-6
SPARK PLUG						R		3-6
* VALVE CLEARANCE				I			I	3-8
ENGINE OIL				R			R	3-9
ENGINE OIL FILTER				R			R	3-9
* CARBURETOR SYNCHRONIZATION					I	I	I	3-13
* ENGINE IDLE SPEED				I	I	I	I	3-14
RADIATOR COOLANT	NOTA 3					I		3-14
* COOLING SYSTEM						I		3-15
* SECONDARY AIR SUPPLY SYSTEM							I	3-16
DRIVE CHAIN			Every 1,000 km (600 mi) I, L					3-17
DRIVE CHAIN SLIDER					I	I	I	3-19
BRAKE FLUID	NOTA 3				I	I	I	3-19
BRAKE SHOE/PAD WEAR					I	I	I	3-20
BRAKE SYSTEM				I	I	I	I	3-20
* BRAKE LIGHT SWITCH					I	I	I	3-21
* HEADLIGHT AIM					I	I	I	3-22
CLUTCH SYSTEM				I	I	I	I	3-22
SIDE STAND					I	I	I	3-23
* SUSPENSION					I	I	I	3-23
* NUTS, BOLTS, FASTENERS				I		I		3-24
** WHEELS/TIRES				I		I	I	3-24
** STEERING HEAD BEARINGS				I			I	3-25

* Should be serviced by an authorized HONDA dealer, unless the owner has proper tools and service data and is mechanically qualified.

** In the interest of safety, we recommend these items be serviced only by an authorized HONDA dealer.

NOTES: 1. At higher odometer reading, repeat at frequency interval established here.

2. Service more frequently when riding in unusually wet or dusty areas.

3. Replace every 2 years, or at indicated odometer interval, whichever comes first. Replacement requires mechanical skill.

Clutch System

Measure the free play at the end of the clutch lever.

FREE PLAY: 10-20 mm (3/8-13/16)

Adjust as follows:

Minor adjustments are made at the adjuster near the lever.
Pull the rubber dust cover back.

Loosen the lock nut and turn the adjuster.
Tighten the lock nut.

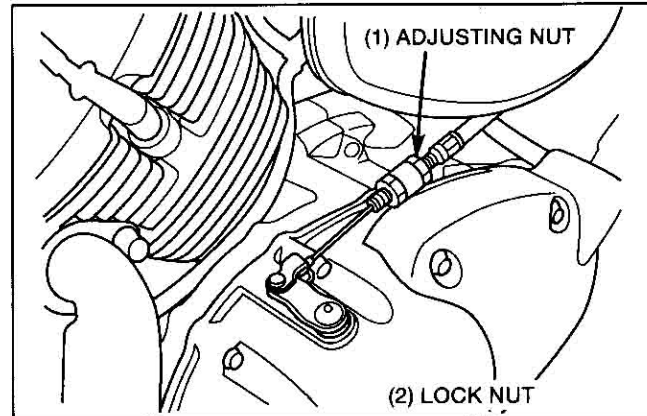
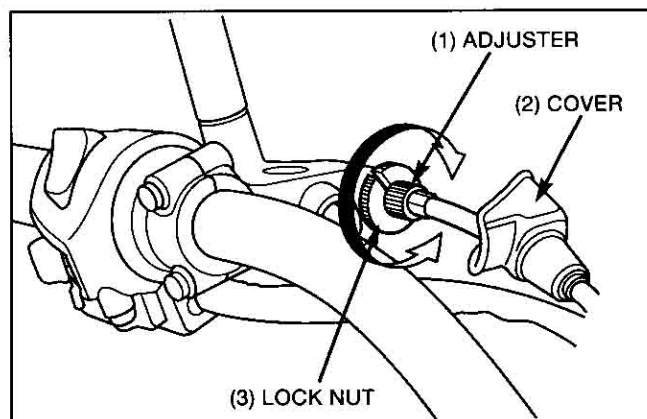
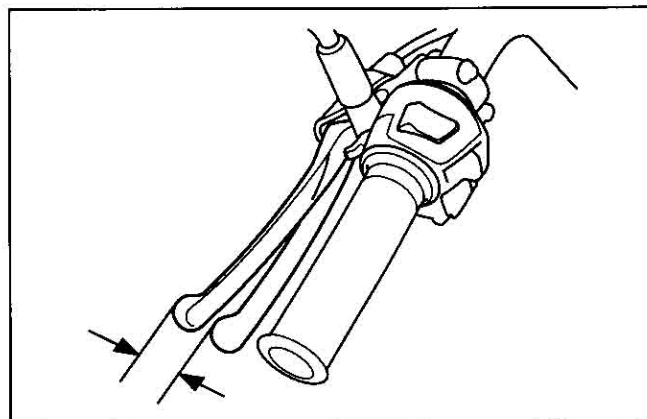
CAUTION

- The adjuster may be damaged if it is positioned too far out, leaving minimal thread engagement.

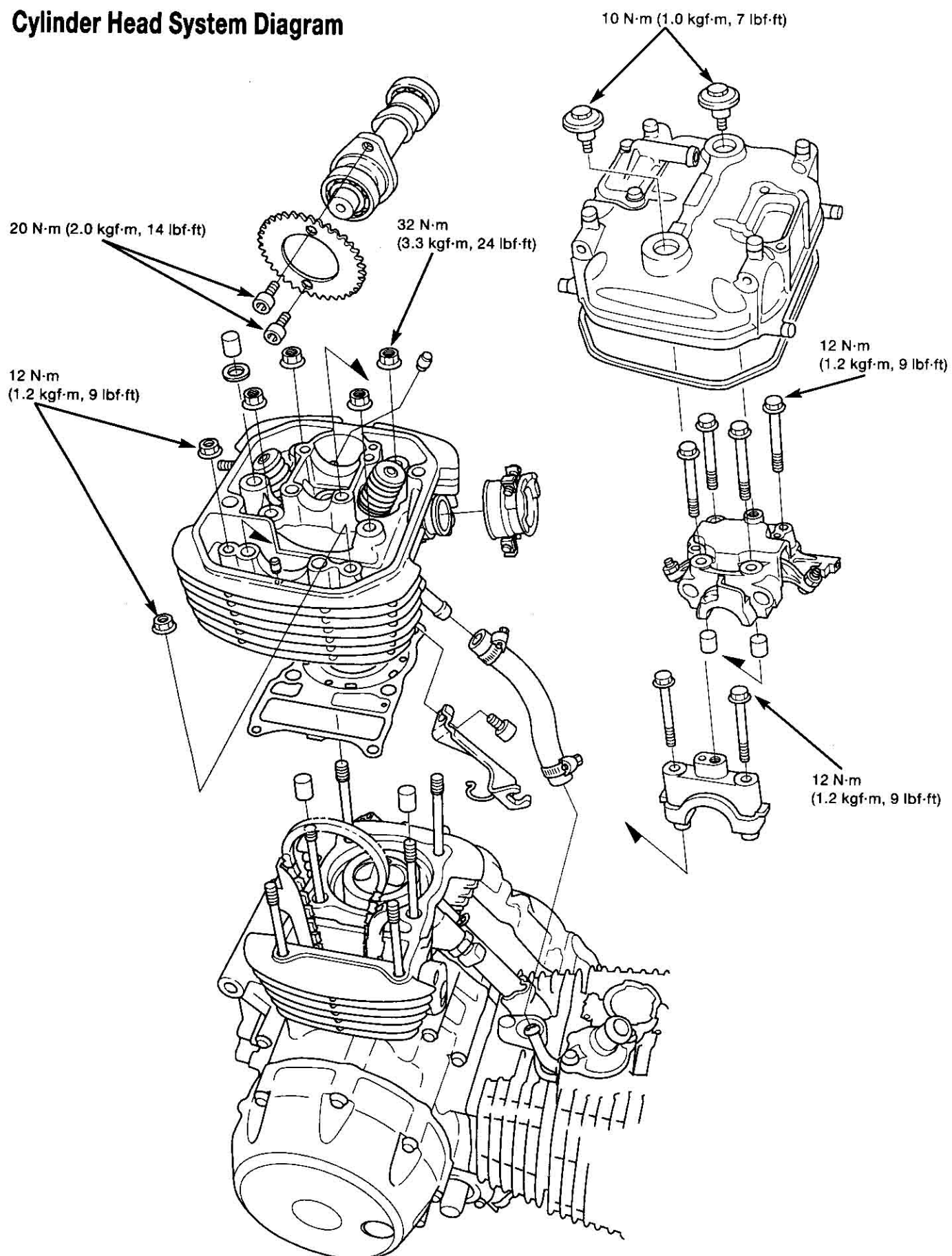
If the adjuster is threaded out near its limit and the correct free play cannot be obtained, turn the adjuster all the way in and back out one turn.
Tighten the lock nut and make a major adjustment as described below.

Major adjustments are performed at the clutch arm.
Loosen the lock nut and turn the adjusting nut to adjust free play. Hold the adjusting nut securely while tightening the lock nut.

If proper free play cannot be obtained, or the clutch slips during the test ride, disassemble and inspect the clutch (see section 8).



Cylinder Head System Diagram

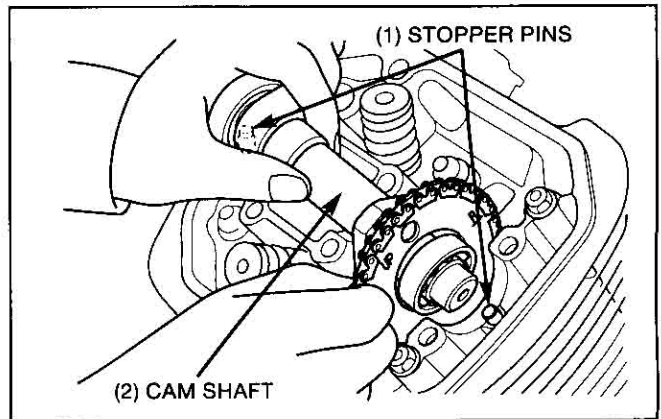


Camshaft

REMOVAL/INSTALLATION

Remove the camshaft holder (page 9-7).

Remove the camshaft and two stopper pins.



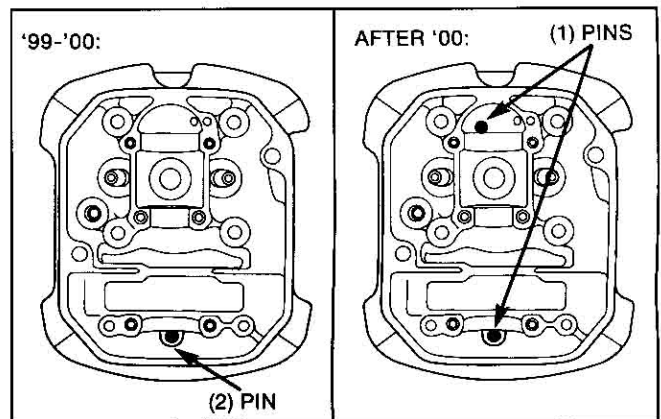
Install the two stopper pins as shown.

NOTE:

- After '00 model have two stopper pins.

Make sure the stopper pins are in the proper locations. Install the camshaft through the cam chain and cam sprocket with the camshaft.

Install the camshaft holder (page 9-22).



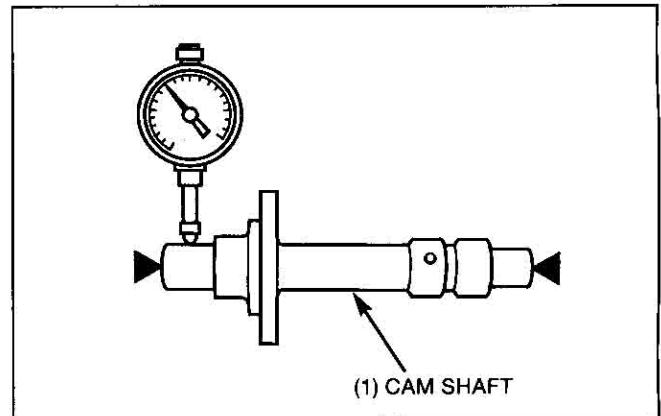
INSPECTION

CAMSHAFT RUNOUT

Support bolt ends of the camshaft and check the camshaft runout with a dial indicator.

Actual runout is 1/2 the total indicator reading.

SERVICE LIMIT: 0.050 mm (0.0020 in)



CAM LOBE HEIGHT

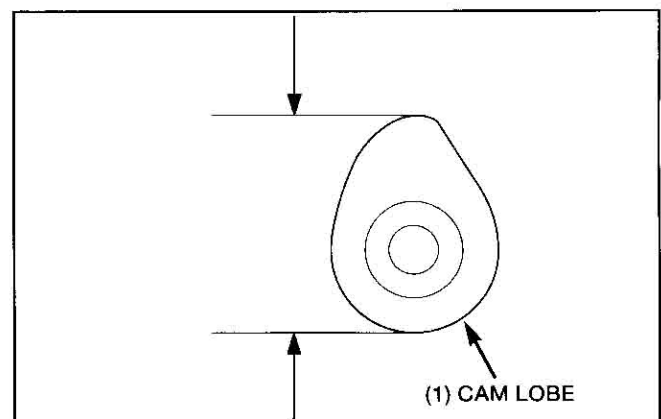
Inspect the cam lobe surface for scoring or evidence of insufficient lubrication.

Measure the height of each cam lobe using a micrometer.

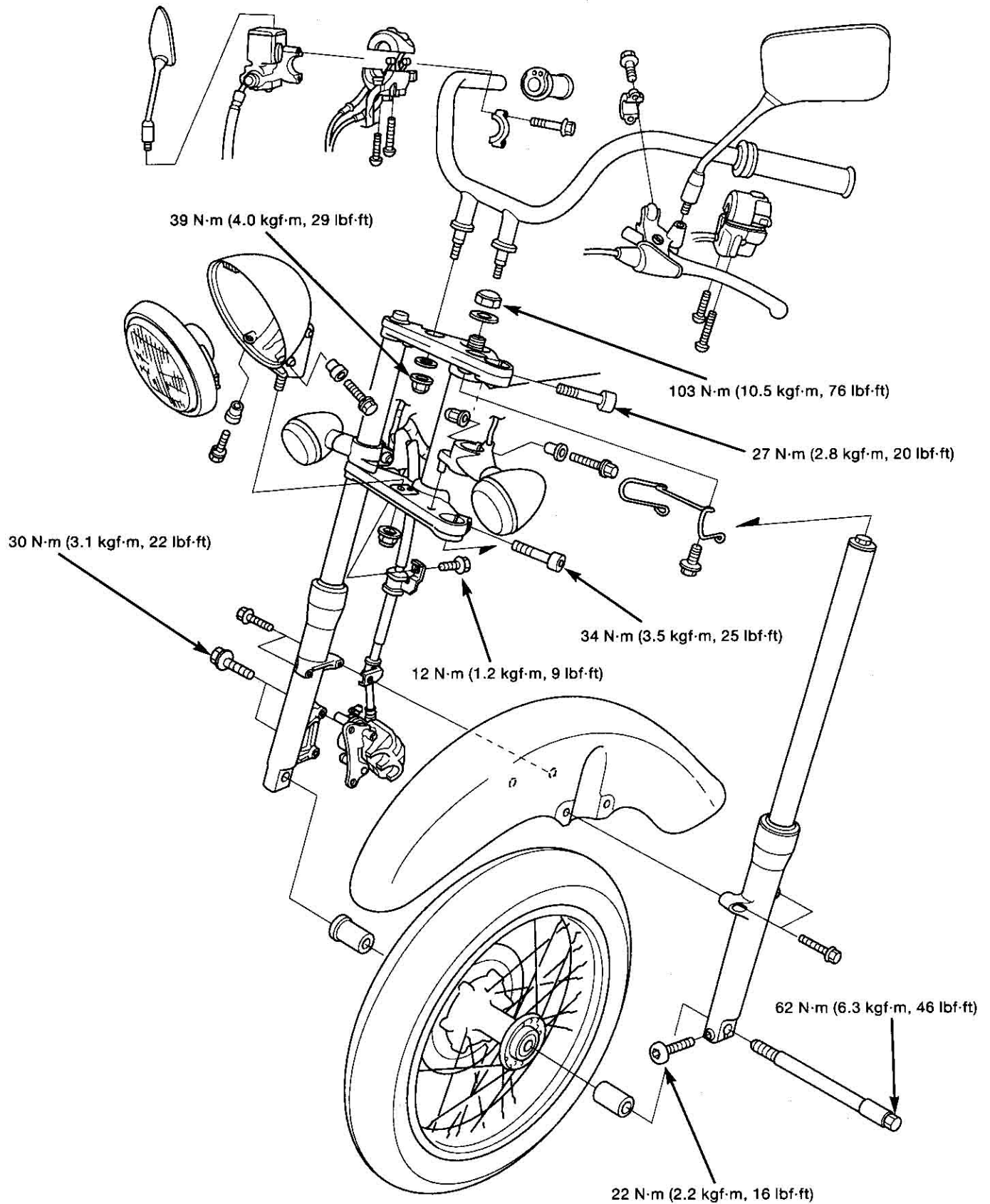
SERVICE LIMITS: IN: 28.82 mm (1.135 in)
EX: 28.85 mm (1.136 in)

NOTE:

- Inspect the rocker arm if the cam lobe is worn or damaged.



Front Wheel/Suspension/Steering System Diagram



Battery

REMOVAL

NOTE:

- Always turn the ignition switch OFF before removing or installing the battery.

Remove the seat (page 2-2).
Remove the battery band.

NOTE:

- Disconnect the battery negative cable first, then positive cable from the battery.

Remove the bolt and disconnect the battery negative terminal.
Remove the positive terminal cover.
Remove the bolt and disconnect the battery positive terminal.
Pull the battery out of the battery case.

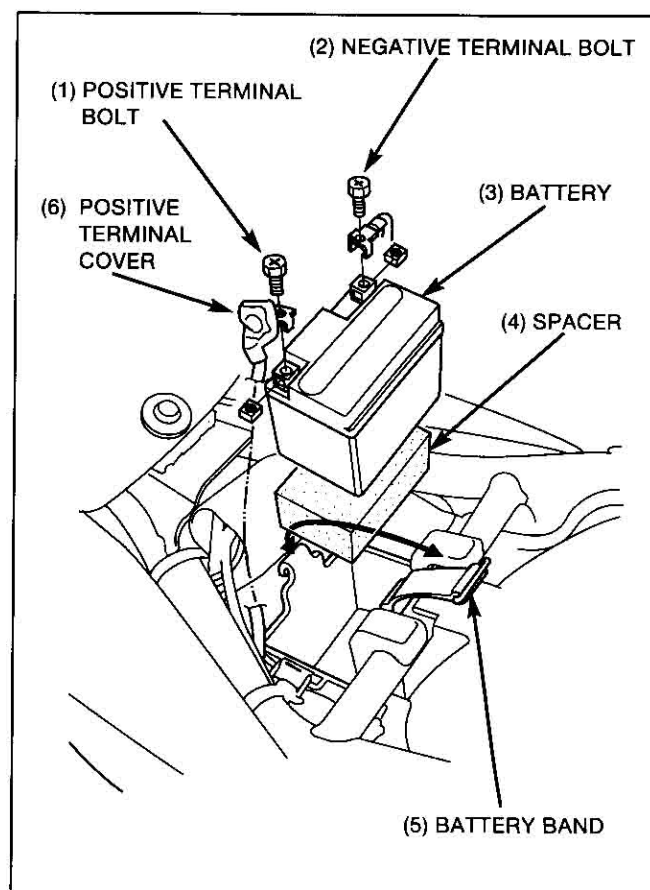
Remove the spacer.

INSTALLATION

Install the spacer.
Coat the battery terminal with clean grease.
Place the battery into the case and connect the battery positive cable to the battery terminal and install the terminal cover first from the left side, then connect the negative cable from the right side.

Install the battery band.

Install the seat (page 2-2).



Regulator/Rectifier

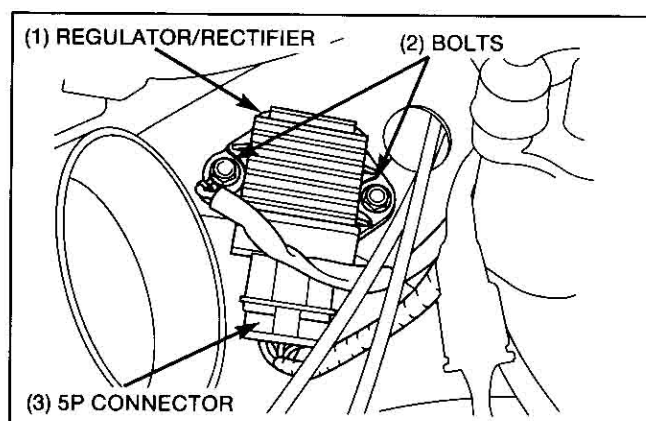
REMOVAL/INSTALLATION

Remove the air cleaner housing (page 5-4).

Disconnect the regulator/rectifier 5P connector.
Remove the bolts and regulator/rectifier unit.
Installation is in the reverse order of removal.

NOTE:

- Route the wire harness properly (page 1-21).



Bulb Replacement

HEADLIGHT/POSITION LIGHT (E Type only)

HEADLIGHT

WARNING

- A halogen headlight bulb becomes very hot while the headlight is ON, and remains hot for a while after it is turned OFF. Be sure to let it cool down before servicing.

CAUTION

- Wear clean gloves while replacing the bulb. Do not put finger prints on the headlight bulb, as they may create hot spots on the bulb and cause it to break.
- If you touch the bulb with your bare hands, clean it with a cloth moistened with alcohol to prevent its early failure.
- Be sure to install the dust cover after replacing the bulb.

Remove the bolts, collars and headlight.

Disconnect the headlight bulb socket and position light connectors.

Remove the headlight.

Remove the dust cover.

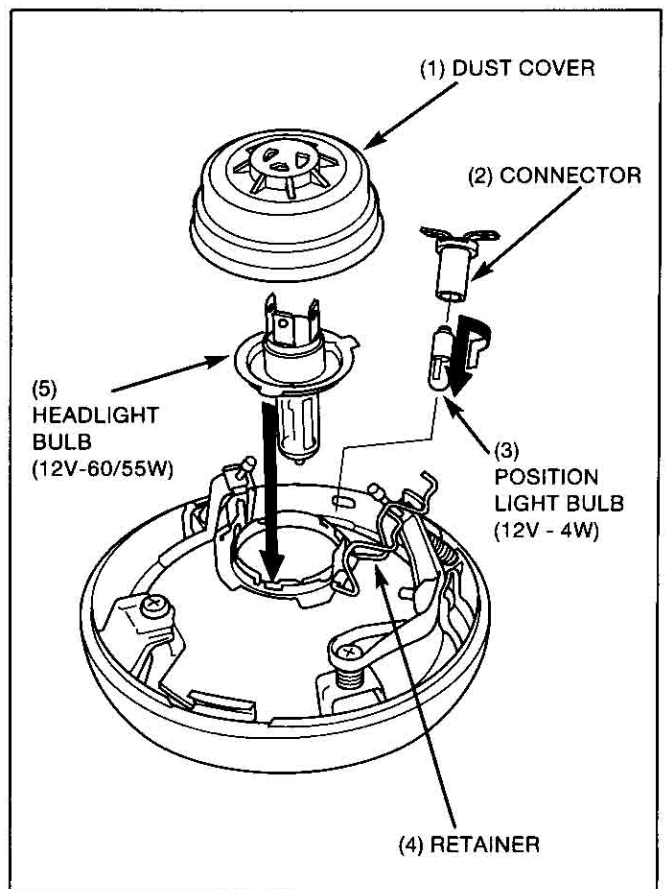
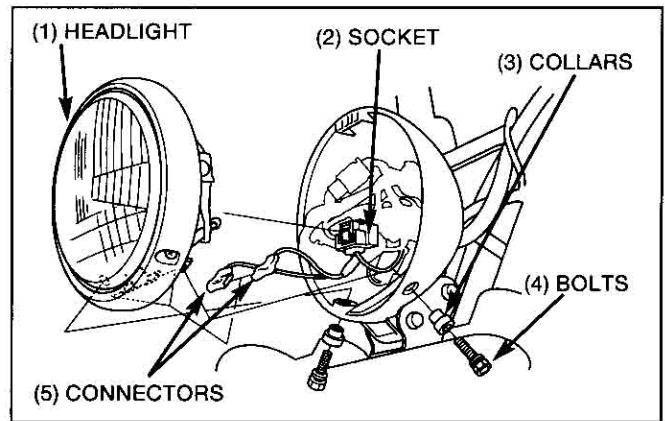
Unhook the bulb retainer and remove the headlight bulb.

POSITION LIGHT

Remove the position light bulb socket.

While pushing in, turn the bulb counterclockwise to remove it and replace with a new one.

Installation is in the reverse order of removal.



TURN SIGNAL LIGHT

Remove the screw and turn signal lens.

Pull the bulb out with the reflector.

Hold the reflector base and while pushing in, turn the bulb counterclockwise to remove it and replace with a new one.

NOTE:

- At the installation, align the tab on the lens with the groove of the reflector.

