

SYMBOLS

The symbols used throughout this manual show specific service procedures. If supplementary information is required pertaining to these symbols, it would be explained specifically in the text without the use of the symbols.

	Replace the part(s) with new one(s) before assembly.
	Use recommended engine oil, unless otherwise specified.
	Use molybdenum oil solution (mixture of the engine oil and molybdenum grease in a ratio of 1:1).
	Use multi-purpose grease (lithium based multi-purpose grease NLGI # 2 or equivalent).
	Use molybdenum disulfide grease (containing more than 3 % molybdenum disulfide, NLGI # 2 or equivalent). Example: Molykote® BR-2 plus manufactured by Dow Corning, U. S. A. Multi-purpose M-2 manufactured by Mitsubishi Oil, Japan
	Use molybdenum disulfide paste (containing more than 40 % molybdenum disulfide, NLGI # 2 or equivalent). Example: Molykote® G-n paste, manufactured by Dow Corning, U. S. A. Honda Moly 60 (U. S. A. only) Rocol ASP manufactured by Rocol Limited, U. K. Rocol Paste manufactured by Sumico Lubricant, Japan
	Use silicone grease.
	Apply a locking agent. Use a medium strength locking agent unless otherwise specified.
	Apply sealant.
	Use DOT 4 brake fluid. Use the recommended brake fluid unless otherwise specified.
	Use fork or suspension fluid.

1 GENERAL INFORMATION

Product: 2000-2004 Honda RC51 Motorcycle Service Repair Workshop Manual

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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 cause 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 the 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 bolt first. Then tighten to the specified torque diagonally in incremental steps 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.
8. Route all electrical wires as shown on pages 1-18 through 1-40, Cable & Harness Routing.

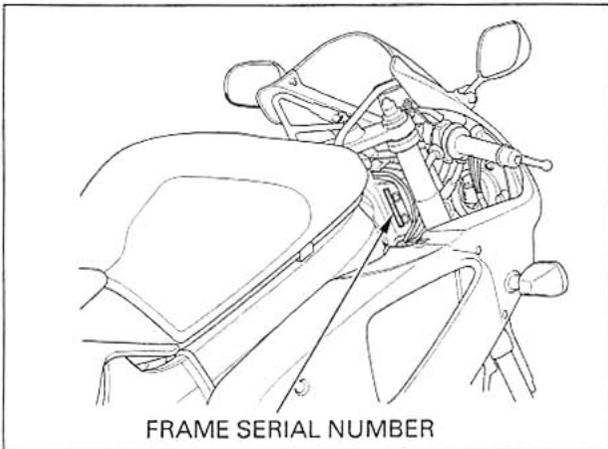
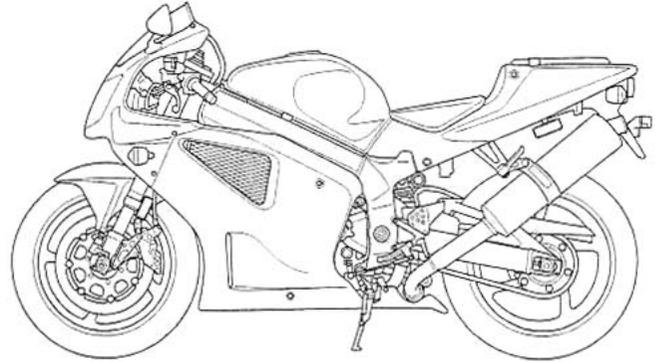
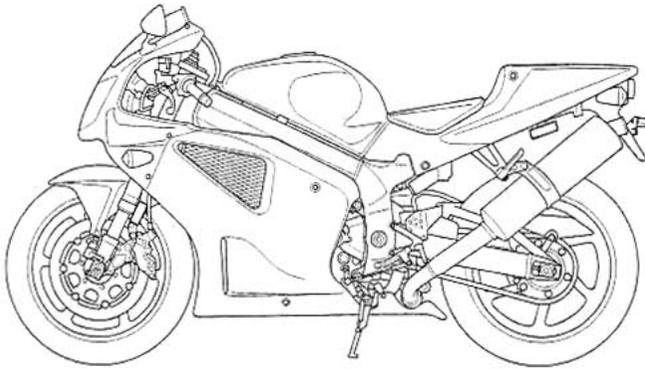
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MODEL IDENTIFICATION

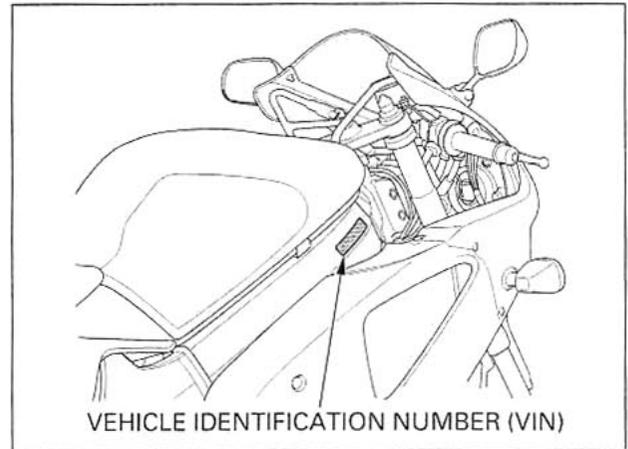
'00-'01:

After '01:



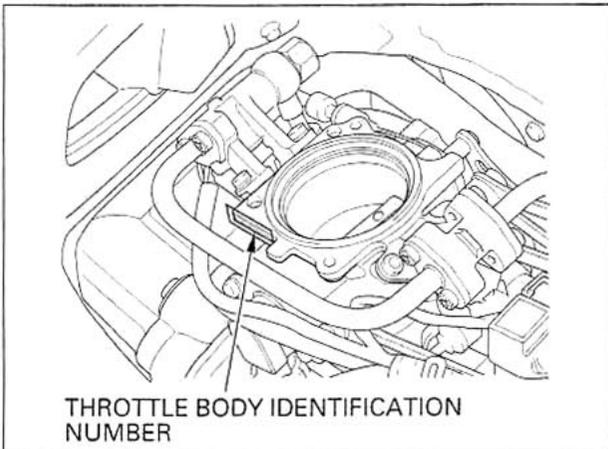
FRAME SERIAL NUMBER

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



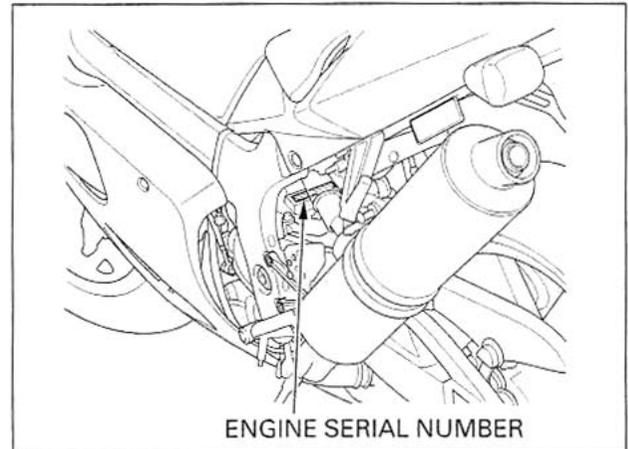
VEHICLE IDENTIFICATION NUMBER (VIN)

The Vehicle Identification Number (VIN) is located on the right side of the frame near the steering head.



THROTTLE BODY IDENTIFICATION NUMBER

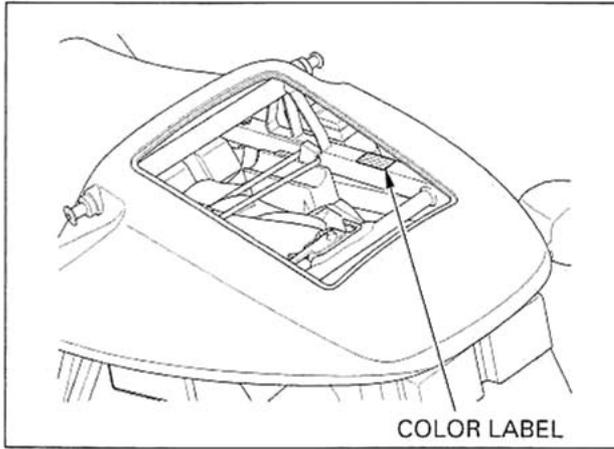
The throttle body identification number is stamped on the left front side of the throttle body.



ENGINE SERIAL NUMBER

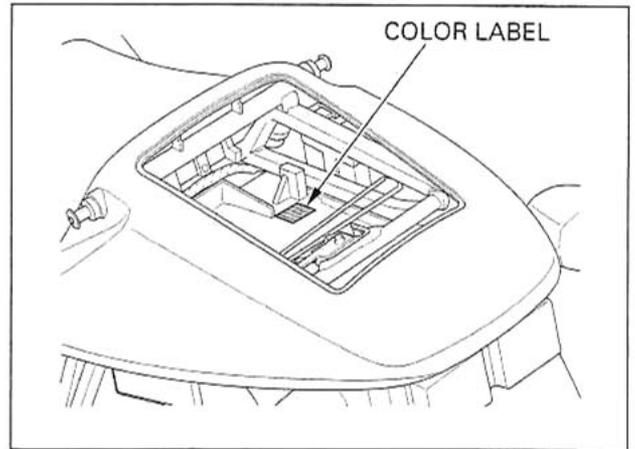
The engine serial number is stamped on the rear of the upper crankcase.

'00-'01:



The color label is attached on the seat rail under the seat. When ordering color-coded parts, always specify the designated color code.

After '01:



The color label is attached on the rear fender under the passenger seat. When ordering color-coded parts, always specify the designated color code.

GENERAL INFORMATION

SPECIFICATIONS

GENERAL		SPECIFICATIONS
	ITEM	
DIMENSIONS	Overall length	2,060 mm (81.1 in)
	Overall width	725 mm (28.5 in)
	Overall height	('00 - '01) 1,120 mm (44.1 in)
		(After '01) 1,145 mm (45.1 in)
	Wheelbase	('00 - '01) 1,410 mm (55.5 in)
		(After '01) 1,420 mm (55.9 in)
	Seat height	('00 - '01) 815 mm (32.1 in)
		(After '01) 825 mm (32.5 in)
	Footpeg height	('00 - '01) 384 mm (15.1 in)
		(After '01) 393 mm (15.5 in)
	Ground clearance	('00 - '01) 135 mm (5.3 in)
		(After '01) 130 mm (5.1 in)
	Dry weight	
	Except California type	('00 - '01) 200 kg (441 lbs)
		(After '01) 199 kg (439 lbs)
	California type	('00 - '01) 201 kg (443 lbs)
		(After '01) 200 kg (441 lbs)
Curb weight		
Except California type	('00 - '01) 223 kg (492 lbs)	
	(After '01) 219 kg (483 lbs)	
California type	('00 - '01) 224 kg (494 lbs)	
	(After '01) 220 kg (485 lbs)	
Maximum weight capacity		
Except Canada type	166 kg (366 lbs)	
Canada type	170 kg (375 lbs)	
FRAME	Frame type	Diamond
	Front suspension	Telescopic fork
	Front axle travel	('00 - '01) 118 mm (4.6 in)
		(After '01) 119 mm (4.7 in)
	Front fork stroke	130 mm (5.1 in)
	Rear suspension	Swingarm
	Rear axle travel	('00 - '01) 120 mm (4.7 in)
		(After '01) 126 mm (5.0 in)
	Front tire size	('00 - '01) 120/70 ZR 17 (58W)
		(After '01) 120/70 ZR 17 M/C (58W)
	Rear tire size	('00 - '01) 190/50 ZR 17 (73W)
		(After '01) 190/50 ZR 17 M/C (73W)
	Front tire brand	('00 - '01) D207FR (DUNLOP), MEZ3H FRONT RACING (METZELER)
		(After '01) D208FN (DUNLOP), MEZ3H FRONT RACING (METZELER)
	Rear tire brand	('00 - '01) D207P (DUNLOP), MEZ3H RACING (METZELER)
		(After '01) D208N (DUNLOP), MEZ3H RACING (METZELER)
	Front brake	Hydraulic double disc
Rear brake	Hydraulic single disc	
Caster angle	('00 - '01) 24°30'	
	(After '01) 23°30'	
Trail length	('00 - '01) 101 mm (4.0 in)	
	(After '01) 95 mm (3.7 in)	
Fuel tank capacity	18.0 ℓ (4.76 US gal , 3.96 Imp gal)	

GENERAL (Cont'd)		
	ITEM	SPECIFICATIONS
ENGINE	Cylinder arrangement Bore and stroke Displacement Compression ratio Valve train Intake valve opens closes Exhaust valve opens closes Lubrication system Oil pump type Cooling system Air filtration Engine dry weight Firing order	2 cylinders 90° V transverse 100.0 × 63.6 mm (3.94 × 2.50 in) 999 cm ³ (60.9 cu-in) 10.8 : 1 Gear driven, DOHC 20° BTDC (At 1 mm lift) 50° ABDC (At 1 mm lift) 50° BBDC (At 1 mm lift) 20° ATDC (At 1 mm lift) Forced pressure and wet sump Trochoid Liquid cooled Paper element 70.5 kg (155.4 lbs) Front – 270° – Rear – 450° – Front
CARBURETION	Type Throttle bore ('00 – '01) (After '01)	Programmed Fuel Injection (PGM-FI) 54 mm (2.1 in) 62 mm (2.4 in)
DRIVE TRAIN	Clutch system Clutch operation system Transmission Primary reduction Final reduction Gear ratio 1st 2nd 3rd 4th 5th 6th Gearshift pattern	Multi-plate, wet Hydraulic operating Constant mesh, 6-speeds 1.700 (68/40) 2.500 (40/16) 2.461 (32/13) 1.812 (29/16) 1.428 (30/21) 1.240 (31/25) 1.080 (27/25) 0.962 (25/26) Left foot operated return system, 1 – N – 2 – 3 – 4 – 5 – 6
ELECTRICAL	Ignition system Starting system Charging system Regulator/rectifier Lighting system	Computer-controlled digital transistorized Electric starter motor Triple phase output alternator SCR shorted, triple phase full wave rectification Battery

GENERAL INFORMATION

Unit: mm (in)

LUBRICATION		STANDARD	SERVICE LIMIT
ITEM			
Engine oil capacity	After draining	3.5 ℓ (3.7 US qt, 3.1 Imp qt)	————
	After draining/filter change	3.9 ℓ (4.1 US qt, 3.4 Imp qt)	————
	After disassembly	4.3 ℓ (4.5 US qt, 3.8 Imp qt)	————
Recommended engine oil		Honda GN4 4-stroke oil or equivalent motor oil API service classification SF or SG Viscosity: SAE 10W-40	————
Oil pressure (at oil filter)		431 kPa (4.4 kgf/cm ² , 63 psi) at 5,000 rpm/80°C (176°F)	————
Oil pump	Tip clearance	0.15 (0.006)	0.20 (0.008)
	Body clearance	0.15–0.21 (0.006–0.008)	0.35 (0.014)
	Side clearance	0.02–0.09 (0.001–0.004)	0.12 (0.005)

FUEL SYSTEM (Programmed Fuel Injection)		SPECIFICATIONS	
ITEM			
Throttle body identification number	'00–'01	Except California type: GQ51B, California type: GQ51C	
	After '01	Except California type: GQ76B, California type: GQ76C	
Base starter valve for synchronization		Rear	
Idle speed		1,300 ± 100 rpm	
Throttle grip free play		2–6 (1/16–1/4)	
Intake air temperature sensor resistance (at 20°C/68°F)		1–4 kΩ	
Engine coolant temperature sensor resistance (at 20°C/68°F)		2.3–2.6 kΩ	
Fuel injector resistance (at 20°C/68°F)		11.1–12.3 Ω	
Cam pulse generator peak voltage		0.7 V minimum	
Ignition pulse generator peak voltage		0.7 V minimum	
Manifold absolute pressure at idle		200–250 mm Hg (7.9–9.8 in Hg)	
Fuel pressure at idle		343 kPa (3.5 kgf/cm ² , 50 psi)	
Fuel pump flow (at 12 V)		190 cm ³ (6.4 US oz, 6.7 Imp oz) minimum/10 seconds	

COOLING SYSTEM		SPECIFICATIONS	
ITEM			
Coolant capacity	Radiator and engine	'00–'01	2.5 ℓ (2.6 US qt, 2.2 Imp qt)
		After '01	2.9 ℓ (3.1 US qt, 2.6 Imp qt)
	Reserve tank	0.43 ℓ (0.45 US qt, 0.38 Imp qt)	
Radiator cap relief pressure		108–137 kPa (1.1–1.4 kgf/cm ² , 16–20 psi)	
Thermostat	Begin to open	80–84 °C (176–183 °F)	
	Fully open	95 °C (203 °F)	
	Valve lift	8 mm (0.3 in) minimum	
Recommended antifreeze		Pro Honda HP Coolant or an equivalent high quality ethylene glycol antifreeze containing silicate-free corrosion inhibitors	
Standard coolant concentration		1:1 mixture with soft water	

GENERAL INFORMATION

Unit: mm (in)

CRANKCASE/TRANSMISSION			STANDARD	SERVICE LIMIT
ITEM				
Shift fork	I.D.	Left, Right	12.000 – 12.021 (0.4724 – 0.4733)	12.03 (0.474)
		Center	12.000 – 12.018 (0.4724 – 0.4731)	12.03 (0.474)
	Claw thickness		5.93 – 6.00 (0.233 – 0.236)	5.9 (0.23)
Shift fork shaft	O.D.		11.957 – 11.968 (0.4707 – 0.4712)	11.95 (0.470)
Transmission	Gear I.D.	M5	31.000 – 31.025 (1.2205 – 1.2215)	31.05 (1.222)
		M6	31.000 – 31.016 (1.2205 – 1.2211)	31.04 (1.222)
		C2, C3, C4	33.000 – 33.025 (1.2992 – 1.3002)	33.05 (1.301)
	Gear bushing O.D.	M5, M6	30.955 – 30.980 (1.2187 – 1.2197)	30.93 (1.218)
		C2	32.955 – 32.980 (1.2974 – 1.2984)	32.93 (1.296)
		C3, C4	32.950 – 32.975 (1.2972 – 1.2982)	32.93 (1.296)
	Gear-to-bushing clearance	M5	0.020 – 0.070 (0.0008 – 0.0028)	0.11 (0.004)
		M6	0.020 – 0.061 (0.0008 – 0.0024)	0.10 (0.004)
		C2	0.020 – 0.070 (0.0008 – 0.0028)	0.11 (0.004)
		C3, C4	0.025 – 0.075 (0.0010 – 0.0030)	0.11 (0.004)
	Gear bushing I.D.	M5	27.985 – 28.006 (1.1018 – 1.1026)	28.02 (1.103)
		C2	29.985 – 30.006 (1.1805 – 1.1813)	30.02 (1.182)
	Mainshaft O.D.	at M5	27.967 – 27.980 (1.1011 – 1.1016)	27.94 (1.100)
	Countershaft O.D.	at C2	29.950 – 29.975 (1.1791 – 1.1801)	29.92 (1.178)
Bushing-to-shaft clearance	M5	0.005 – 0.039 (0.0002 – 0.0015)	0.06 (0.002)	
	C2	0.010 – 0.056 (0.0004 – 0.0022)	0.06 (0.002)	

Unit: mm (in)

CRANKSHAFT/PISTON/CYLINDER			STANDARD	SERVICE LIMIT
ITEM				
Crankshaft	Connecting rod side clearance		0.10 – 0.30 (0.004 – 0.012)	0.40 (0.016)
	Crankpin bearing oil clearance		0.032 – 0.050 (0.0013 – 0.0020)	0.060 (0.0024)
	Main journal bearing oil clearance		0.020 – 0.038 (0.0008 – 0.0015)	0.048 (0.0019)
	Runout		—	0.10 (0.004)
Piston, piston pin, piston ring	Piston O.D. at 10 (0.4) from bottom		99.970 – 99.990 (3.9358 – 3.9366)	99.900 (3.9331)
	Piston pin hole I.D.		23.002 – 23.008 (0.9056 – 0.9058)	23.03 (0.907)
	Piston pin O.D.		22.994 – 23.000 (0.9053 – 0.9055)	22.984 (0.9049)
	Piston-to-piston pin clearance		0.002 – 0.014 (0.0001 – 0.0006)	0.046 (0.0018)
	Piston rig end gap	Top	0.20 – 0.30 (0.008 – 0.012)	0.45 (0.018)
		Second	0.30 – 0.40 (0.012 – 0.016)	0.55 (0.022)
		Oil (side rail)	0.10 – 0.50 (0.004 – 0.020)	0.65 (0.026)
Piston ring-to-ring groove clearance	Top	0.065 – 0.100 (0.0026 – 0.0039)	0.115 (0.0045)	
	Second	0.035 – 0.070 (0.0014 – 0.0028)	0.085 (0.0033)	
Cylinder	I.D.		100.005 – 100.025 (3.9372 – 3.9380)	100.100 (3.9409)
	Out-of-round		—	0.10 (0.004)
	Taper		—	0.10 (0.004)
	Warpage		—	0.05 (0.002)
Cylinder-to-piston clearance			0.015 – 0.055 (0.0006 – 0.0022)	0.200 (0.0079)
Connecting rod small end I.D.			23.020 – 23.041 (0.9063 – 0.9071)	23.051 (0.9075)
Connecting rod-to-piston pin clearance			0.020 – 0.047 (0.0008 – 0.0019)	0.067 (0.0026)

GENERAL INFORMATION

BATTERY/CHARGING SYSTEM			SPECIFICATIONS
ITEM			
Battery	Capacity		12V – 10AH
	Current leakage		0.1 mA max.
	Voltage (20°C/68°F)	Fully charged	13.0 – 13.2 V
		Needs charging	Below 12.3 V
	Charging current	Normal	1.2 A × 5 – 10 h
Quick		5.0 A × 1.0 h	
Alternator	Capacity		0.329 kW/5,000 rpm
	Charging coil resistance (20°C/68°F)		0.2 – 0.5 Ω

IGNITION SYSTEM			SPECIFICATIONS
ITEM			
Spark plug	Standard	'00 – '01	FR9BI – 11 (NGK) , IK27C11 (DENSO)
		After '01	IFR9H11 (NGK) , VK27PRZ11 (DENSO)
	For cold climate (below 5°C/41°F)	'00 – '01	FR8BI – 11 (NGK) , IK24C11 (DENSO)
		After '01	IFR8H11 (NGK) , VK24PRZ11 (DENSO)
Spark plug gap			1.00 – 1.10 mm (0.039 – 0.043 in)
Ignition coil primary peak voltage			100 V minimum
Ignition pulse generator peak voltage			0.7 V minimum
Ignition timing ("F" mark)			15° BTDC at idle

Unit: mm (in)

ELECTRIC STARTER		STANDARD	SERVICE LIMIT
ITEM			
Starter motor brush length		12.0 – 13.0 (0.47 – 0.51)	6.5 (0.26)

LIGHTS/METERS/SWITCHES			SPECIFICATIONS
ITEM			
Bulbs	Headlight (High beam)		12 V – 55 W
	Headlight (Low beam)		12 V – 55 W
	Front turn signal/running light		12V – 32/3 cp × 2
	Rear turn signal light	'00 – '01	12V – 32 cp × 2
		After '01	12V – 23W × 2
	Brake/taillight	'00 – '01	12V – 21/5W × 2
		After '01	12V – 23/8W × 2
License light		12V – 8W	
Fuse	Main fuse		30A
	FI fuse		30A
	Sub-fuse	'00 – '01	10 A × 5, 20 A × 1
		After '01	10 A × 4, 20 A × 2
Thermosensor resistance	At 80°C (176°F)		47 – 57 Ω
	At 120°C (248°F)		14 – 18 Ω
Fan motor switch ('00 – '01)	Starts to close (ON)		98 – 102 °C (208 – 216 °F)
	Starts to open (OFF)		93 – 97 °C (199 – 207 °F)
ECT sensor resistance (After '01)	Pink/White –	At 80°C (176°F)	310 – 326 Ω
	Green/Orange	At 110°C (230°F)	139.9 – 143.5 Ω

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	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 (8 mm head, small flange)	10 (1.0, 7)
10 mm bolt and nut	34 (3.5, 25)	6 mm flange bolt (8 mm head, large flange)	12 (1.2, 9)
12 mm bolt and nut	54 (5.5, 40)	6 mm flange bolt (10 mm head) and nut	12 (1.2, 9)
		8 mm flange bolt and nut Engine	23 (2.3, 17)
		Frame	26 (2.7, 20)
		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 sealant to the threads.
 2. Apply locking agent to the threads.
 3. Plastic region torque bolt; replace with a new one
 4. Stake.
 5. Apply oil to the threads and seating surface.
 6. Apply oil to the O-ring.
 7. U-nut.
 8. ALOC bolt/screw: replace with a new one.
 9. Apply grease to the threads.

ENGINE					
ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS	
MAINTENANCE:					
Spark plug	2	14	18 (1.8, 13)		
Crankshaft hole cap	1	30	15 (1.5, 11)	NOTE 9	
Timing hole cap	1	14	10 (1.0, 7)	NOTE 9	
Engine oil filter cartridge	1	20	25 (2.6, 19)	NOTE 5, 6	
Engine oil drain bolt	1	12	29 (3.0, 22)		
LUBRICATION SYSTEM:					
Oil pump bolt	1	6	8 (0.8, 5.8)		
FUEL SYSTEM (Programmed Fuel Injection):					
Throttle body insulator band bolt	4	5	1 (0.1, 0.7)		
PAIR check valve cover bolt	4	5	5 (0.5, 3.6)	NOTE 2	
Pressure regulator nut	1	18	27 (2.8, 20)		
Pipe stay bolt	8	5	5 (0.5, 3.6)		
Fuel feed pipe bolt	12	5	5 (0.5, 3.6)		
Starter valve nut	2	10	2 (0.2, 1.4)		
Throttle stop screw cable stay screw	2	4	2 (0.2, 1.4)		
MAP sensor stay screw ('00-'01)	2	5	3 (0.3, 2.2)		
(After '01)	2	5	2.1 (0.21, 1.5)		
Throttle cable stay screw	2	5	3 (0.3, 2.2)		
ENGINE MOUNTING:					
Drive sprocket bolt	1	10	54 (5.5, 40)		
CYLINDER HEAD/VALVE:					
Cylinder head cover bolt	6	6	10 (1.0, 7)		
Camshaft holder bolt	16	7	23 (2.3, 17)	NOTE 5	
Cylinder head bolt	8	11	64 (6.5, 47)*	NOTE 5	
Cam gear train setting bolt	2	8	25 (2.5, 18)		
Cam gear train mounting bolt	8	6	12 (1.2, 9)		
Cylinder head sealing bolt	2	14	18 (1.8, 13)	NOTE 2	

*Torque if a new cylinder head bolt is used; 70 N·m (7.1 kgf·m, 51 lbf·ft) for used bolt.

GENERAL INFORMATION

ENGINE (Cont'd)				
ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
CLUTCH/GEARSHIFT LINKAGE:				
Clutch slave cylinder bleed valve	1	8	9 (0.9 , 6.5)	
Clutch bolt	6	6	12 (1.2 , 9)	
Clutch center lock nut	1	25	127 (13.0 , 94)	NOTE 4, 5
Oil pump driven sprocket bolt	1	6	15 (1.5 , 11)	NOTE 2
Gearshift cam bolt	1	8	23 (2.3 , 17)	NOTE 2
Shift drum stopper arm pivot bolt	1	6	12 (1.2 , 9)	
Gearshift spindle return spring pin	1	8	23 (2.3 , 17)	
Primary drive gear bolt	1	12	88 (9.0 , 65)	NOTE 5
Right crankcase cover sealing bolt	1	8	23 (2.3 , 17)	NOTE 2
Clutch cover plate bolt	1	6	12 (1.2 , 9)	NOTE 2
ALTERNATOR/STARTER CLUTCH:				
Flywheel bolt	1	12	157 (16.0 , 116)	NOTE 5
Starter clutch bolt	6	8	23 (2.3 , 17)	NOTE 2
Alternator stator bolt	3	6	12 (1.2 , 9)	
CRANKCASE/TRANSMISSION:				
Crankcase flange bolt	3	10	39 (4.0 , 29)	NOTE 5
Crankcase special bolt (black)	4	10	52 (5.3 , 38)	NOTE 5
Crankcase special bolt (gray)	4	10	20 (2.0 , 14) + 120°	NOTE 3, 5
Shift drum bearing washer/bolt	2	6	12 (1.2 , 9)	NOTE 2
Crankcase sealing bolt	1	14	18 (1.8 , 13)	NOTE 2
CRANKSHAFT/PISTON/CYLINDER:				
Connecting rod bolt	4	9	29 (3.0 , 22) + 120°	NOTE 3, 5
Oil jet	2	5	2 (0.2 , 1.4)	NOTE 2
IGNITION SYSTEM:				
Ignition pulse generator bolt	2	6	12 (1.2 , 9)	NOTE 2
ELECTRIC STARTER:				
Starter motor cable terminal nut	1	6	10 (1.0 , 7)	
LIGHTS/METERS/SWITCHES:				
Neutral switch	1	10	12 (1.2 , 9)	
Engine coolant temperature (ECT)/thermosensor	1	12	23 (2.3 , 17)	
Oil pressure switch	1	PT 1/8	12 (1.2 , 9)	NOTE 1
Oil pressure switch terminal screw	1	4	2 (0.2 , 1.4)	

FRAME		Q'TY	THREAD DIA. (mm)	TORQUE N-m (kgf-m, lbf-ft)	REMARKS
FRAME/BODY PANELS/EXHAUST SYSTEM:					
Lower fairing-to-upper fairing bolt	('00-'01)	6	5	2 (0.2, 1.4)	
	(After '01)	6	5	1.5 (0.15, 1.1)	
Lower inner fairing-to-lower fairing bolt	('00-'01)	2	5	2 (0.2, 1.4)	
	(After '01)	2	5	1.5 (0.15, 1.1)	
Windscreen attaching bolt	('00-'01)	6	5	2 (0.2, 1.4)	
Windscreen attaching screw	(After '01)	6	5	0.4 (0.04, 0.3)	
Exhaust pipe joint nut		4	7	12 (1.2, 9)	
Muffler band bolt		4	8	26 (2.7, 20)	
Rider footpeg holder bolt		4	8	26 (2.7, 20)	
Passenger footpeg holder bolt		4	8	26 (2.7, 20)	
Seat rail mounting bolt		4	10	44 (4.5, 33)	
FUEL SYSTEM:					
Fuel feed hose banjo bolt		1	12	22 (2.2, 16)	
Fuel feed hose nut		1	12	22 (2.2, 16)	
Fuel pump unit mounting nut		7	6	12 (1.2, 9)	
Fuel fill cap mounting bolt	('00-'01)	3	4	2 (0.2, 1.4)	
	(After '01)	3	4	1.8 (0.18, 1.3)	
Air cleaner cover screw	(After '01)	7	—	1.1 (0.11, 0.8)	
ENGINE MOUNTING:					
Center engine hanger bolt		2	12	64 (6.5, 47)	
Front/rear upper engine hanger nut		2	12	64 (6.5, 47)	
Rear lower engine hanger nut		1	10	39 (4.0, 29)	
Front engine hanger adjusting bolt	('00-'01)	1	20	4 (0.4, 2.9)	
Center/rear engine hanger adjusting bolt	('00-'01)	3	20	10 (1.0, 7)	
Engine hanger adjusting bolt lock nut	('00-'01)	4	20	54 (5.5, 40)	
CLUTCH/GEARSHIFT LINKAGE:					
Clutch reservoir mounting screw		1	4	2 (0.2, 1.4)	NOTE 2
Clutch reservoir cap stopper plate screw		1	4	1 (0.1, 0.7)	
Clutch lever pivot bolt		1	6	1 (0.1, 0.7)	
Clutch lever pivot nut		1	6	6 (0.6, 4.3)	
Clutch hose oil bolt		2	10	34 (3.5, 25)	
FRONT WHEEL/SUSPENSION/STEERING:					
Handlebar weight mounting screw		2	6	10 (1.0, 7)	NOTE 8
Front axle bolt		1	14	59 (6.0, 43)	
Front axle holder bolt		4	8	22 (2.2, 16)	
Front brake disc bolt		12	6	20 (2.0, 14)	NOTE 8
Fork cap		2	46	34 (3.5, 25)	
Fork center bolt		2	22	34 (3.5, 25)	
Fork top bridge pinch bolt		2	8	26 (2.7, 20)	
Fork bottom bridge pinch bolt		4	8	26 (2.7, 20)	
Front brake hose clamp nut (front fender side)		2	6	10 (1.0, 7)	
Front brake caliper bracket bolt		4	10	49 (5.0, 36)	NOTE 2
Steering stem nut	('00-'01)	1	24	103 (10.5, 76)	Page 13-35
	(After '01)	1	33	137 (14.0, 101)	
Steering bearing adjustment nut	('00-'01)	1	26	32 (3.3, 24)	
	(After '01)	1	35	52 (5.3, 38)	
Steering bearing adjustment nut lock nut		1	26	—	
Front brake hose clamp bolt (stem side)		1	6	10 (1.0, 7)	
Front brake hose 3-way joint bolt		1	6	10 (1.0, 7)	

GENERAL INFORMATION

FRAME (Cont'd)

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
REAR WHEEL/SUSPENSION:				
Rear axle nut	1	22	127 (13, 94)	
Rear brake disc bolt	4	8	42 (4.3, 31)	NOTE 8
Final driven sprocket nut	6	10	64 (6.5, 47)	
Shock absorber upper mounting nut	1	10	44 (4.5, 33)	NOTE 7
Shock absorber lower mounting nut	1	10	44 (4.5, 33)	NOTE 7
Shock arm-to-swingarm nut	1	10	44 (4.5, 33)	NOTE 7
Shock arm-to-shock link nut	1	10	44 (4.5, 33)	NOTE 7
Shock link-to-frame nut	1	10	44 (4.5, 33)	NOTE 7
Swingarm pivot adjusting bolt	2	36	15 (1.5, 11)	
Swingarm pivot adjusting bolt lock nut	2	36	64 (6.5, 47)	
Swingarm pivot nut	1	22	127 (13.0, 94)	NOTE 7
	(After '01)	18	93 (9.5, 69)	NOTE 7
Drive chain slider bolt	2	6	9 (0.9, 6.5)	NOTE 2
Rear brake hose clamp bolt	1	6	12 (1.2, 9)	NOTE 2
Rear brake hose clamp screw	1	5	4.2 (0.43, 3.1)	NOTE 2
HYDRAULIC BRAKE:				
Brake caliper bleed valve	3	8	6 (0.6, 4.3)	
Front brake reservoir cap screw	2	4	2 (0.2, 1.4)	
Rear brake caliper pad pin plug	1	10	3 (0.3, 2.2)	
	(After '01)	1	2.5 (0.25, 1.8)	
Pad pin	3	10	18 (1.8, 13)	
Brake hose oil bolt	5	10	34 (3.5, 25)	
Front brake lever pivot bolt	1	6	1 (0.1, 0.7)	
Front brake lever pivot nut	1	6	6 (0.6, 4.3)	
Front brake reservoir mounting nut	1	6	6 (0.6, 4.3)	NOTE 7
Front brake reservoir stay bolt	1	6	12 (1.2, 9)	
Front brake light switch screw	1	4	1 (0.1, 0.7)	
	(After '01)	1	1.2 (0.12, 0.9)	
Front master cylinder holder bolt	2	6	12 (1.2, 9)	
Rear brake reservoir mounting bolt	1	6	9 (0.9, 6.5)	
Rear master cylinder mounting bolt	2	6	10 (1.0, 7)	
Rear master cylinder joint nut	1	8	18 (1.8, 13)	
Rear brake reservoir hose joint screw	1	4	2 (0.2, 1.4)	NOTE 2
	(After '01)	1	1.5 (0.15, 1.1)	NOTE 2
Front brake caliper mounting bolt	4	8	30 (3.1, 22)	NOTE 2
Front brake caliper assembly bolt	8	8	23 (2.3, 17)	NOTE 2
Rear brake caliper bolt	1	8	23 (2.3, 17)	
Rear brake caliper pin bolt	1	12	27 (2.8, 20)	
LIGHTS/METERS/SWITCHES:				
Side stand switch bolt	1	6	10 (1.0, 7)	
Ignition switch mounting bolt	2	8	25 (2.5, 18)	
Fan motor switch	1	16	18 (1.8, 13)	
OTHERS:				
Side stand pivot bolt	1	10	10 (1.0, 7)	
Side stand pivot lock nut	1	10	29 (3.0, 22)	
Side stand bracket bolt	2	10	44 (4.5, 33)	NOTE 8
Bank sensor bolt	2	6	10 (1.0, 7)	
Gearshift pedal pivot bolt	1	8	26 (2.7, 20)	
Rear shock absorber upper mounting bracket nut	1	16	93 (9.5, 69)	NOTE 7

GENERAL INFORMATION

DESCRIPTION	TOOL NUMBER	REMARKS	REF. SECTION
Mechanical seal driver attachment	07945-4150400	NOTE 3: 07965-415000A (U.S.A. only)	6
Attachment, 28 × 30 mm	07946-1870100		6, 14 (After '01)
Driver attachment A ('00-'01)	07946-KM90100	NOTE 2	13
Driver shaft assembly	07946-KM90300	NOTE 2	13
Race remover A ('00-'01)	07946-KM90401	NOTE 2	13
Assembly base	07946-KM90600	NOTE 2	13
Main bearing driver attachment	07946-ME90200		13
Fork seal driver weight	07947-KA50100		13
Driver	07949-3710001		14
Oil seal driver	07965-MA60000		13
Remover base	07965-SD90100		6
Socket wrench, 39 × 41 mm (After'01)	07GMA-KS40100	NOTE 1	13
Oil filter wrench	07HAA-PJ70100		3, 4
Peak voltage adaptor	07HGJ-0020100	NOTE 2 NOTE 3: Peak voltage tester (U.S.A. only) or IgnitionMate peak voltage tester, MTP-08-0193 (U.S.A. only)	5, 17, 19
Drive chain tool set	07HMH-MR10103	NOTE 3: 07HMH-MR1010B or 07HMH-MR1010C (U.S.A. only)	3
Seal driver, 58 mm	07JAD-PH80101		6
Pilot, 32 mm ('00-'01)	07MAD-PR90200		14
Race remover B	07NMF-MT70110	NOTE 2	13
Driver attachment B	07NMF-MT70120	After '01: two required NOTE 2	13
Pilot collar, 22 mm	07PAF-0010680	NOTE 3: 07KMF-MT20200	6
Oil pressure gauge joint adaptor	07RMK-MW40100	NOTE 2	4
Lock nut wrench, 20 mm ('00-'01)	07VMA-MBB0100	NOTE 3: 07VMA-MBB0101	7
Installer shaft	07VMF-KZ30200		13
Installer attachment A ('00-'01)	07VMF-MAT0100		13
Installer attachment B	07VMF-MAT0200	After '01: two required	13
Remover attachment A ('00-'01)	07VMF-MAT0300		13
Remover attachment B	07VMF-MAT0400		13
Cutter holder, 6 mm	07VMH-MBB0100	NOTE 1	8
Valve guide reamer, 6.0 mm	07VMH-MBB0200	NOTE 3: 07VMH-MBB020A (U.S.A. only)	8
Inspection adaptor	07VMJ-0020100	NOTE 1	17
Lock nut wrench, 5.8 × 46 mm	07YMA-MCF0100	NOTE 3: 07YMA-MCFA100 (U.S.A. only)	7, 14
Fork damper holder	07YMB-MCF0101	NOTE 3: 07YMB-MCFA100 (U.S.A. only)	13
Fork seal driver, 43 mm	07YMD-MCF0100	NOTE 3: 07KMD-KZ30100 with 07NMD-KZ30101 (except U.S.A.) or 07NMD-KZ3010A (U.S.A. only)	13
Torque limiter inspection tool A	07YMJ-MCF0100	NOTE 2	10
Torque limiter inspection tool B	07YMJ-MCF0200	NOTE 2	10
ECM test harness	07YMZ-0010100		5
Banjo bolt, 12 mm	90008-PD6-010		5
Sealing washer, 12 mm	90428-PD6-003		5

LUBRICATION & SEAL POINTS

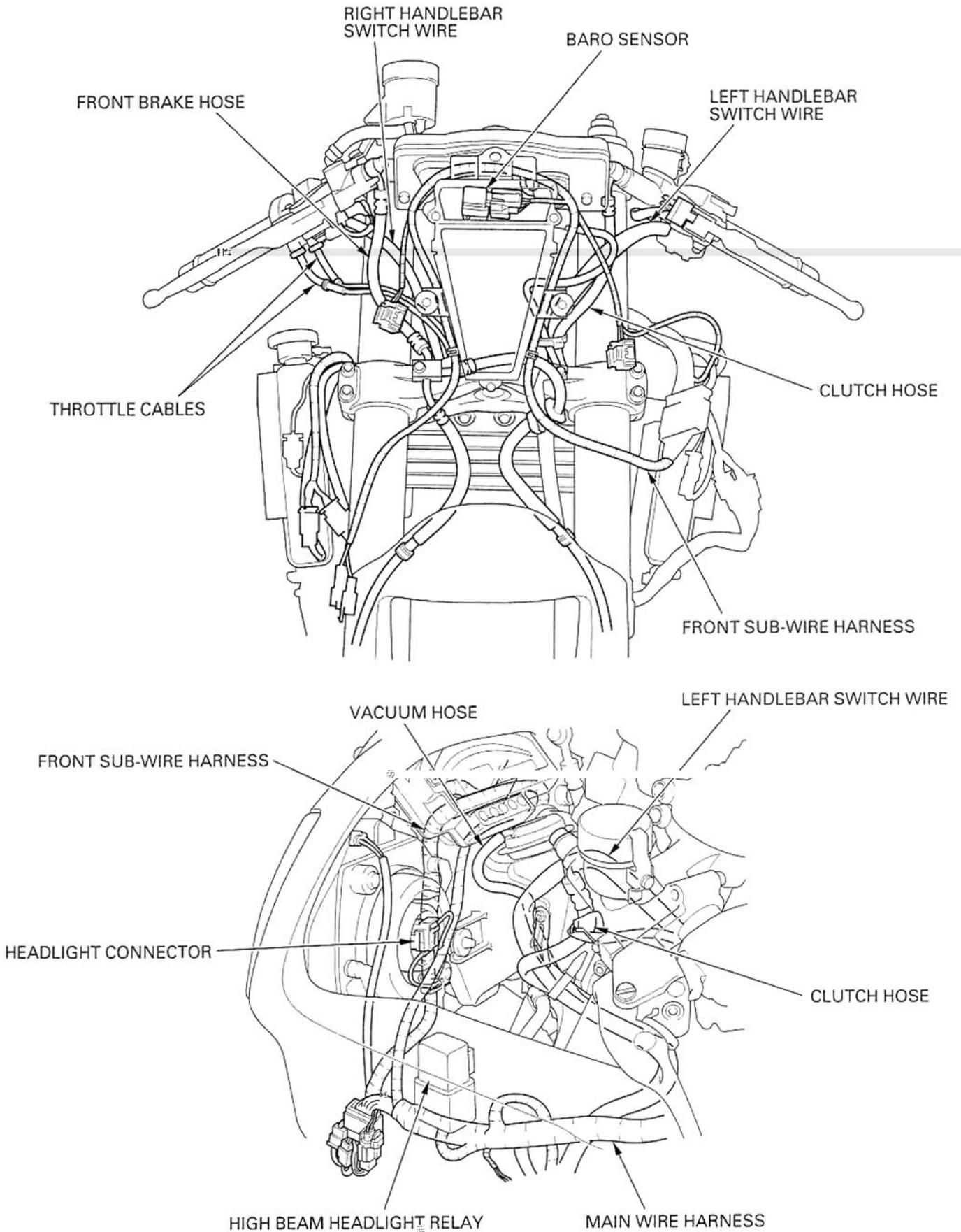
ENGINE	LOCATION	MATERIAL	REMARKS
	Crankcase mating surfaces Right crankcase cover mating surfaces Crankcase mating surfaces (left side) Oil pan mating surface Cylinder head semi-circular area Cylinder head cover gasket mating surface (cover side) Oil pressure switch threads Ignition pulse generator wire grommet seating surface Alternator stator wire grommet seating surface	Sealant	See page 11-9 See page 6-16 See page 10-4 Do not apply to the sensor head.
	Crankshaft main journal bearing sliding surface Crankpin bearing sliding surface Connecting rod small end inner surface Valve stem sliding surface Valve lifter outer surface Camshaft journals and cam lobes Clutch outer sliding surface M3/4, C5, C6 gear shift fork grooves Primary drive gear and sub gear sliding surface Piston pin Piston pin holes Each gear teeth and sliding surface Other rotating and sliding area	Molybdenum oil solution (a mixture of 1/2 engine oil and 1/2 molybdenum disulfide grease)	
	Engine oil filter cartridge threads and seating surface Camshaft holder bolt threads and seating surface Cylinder head bolt threads and seating surface Clutch disc lining surface Clutch center lock nut threads and seating surface Primary drive gear bolt threads and seating surface Piston outer surface Piston ring whole surface Connecting rod bolt threads and seating surface Flywheel bolt threads and seating surface 10 mm crankcase bolt threads and seating surface Each bearing rotating area Each O-ring whole surface	Engine oil	
	Timing hole cap threads Crankshaft hole cap threads Each oil seal lips	Multi-purpose grease	
	Reed valve cover bolt threads Oil filter boss threads Cylinder head 14 mm sealing bolt threads Oil pump driven sprocket bolt threads Gearshift cam bolt threads Right crankcase cover sealing bolt threads Clutch cover plate bolt threads Starter clutch bolt threads Ignition pulse generator bolt threads Alternator wire clamp bolt threads Crankcase 14 mm sealing bolt threads Mainshaft bearing set plate bolt threads Shift drum bearing washer/bolt threads Oil jet threads	Locking agent	

GENERAL INFORMATION

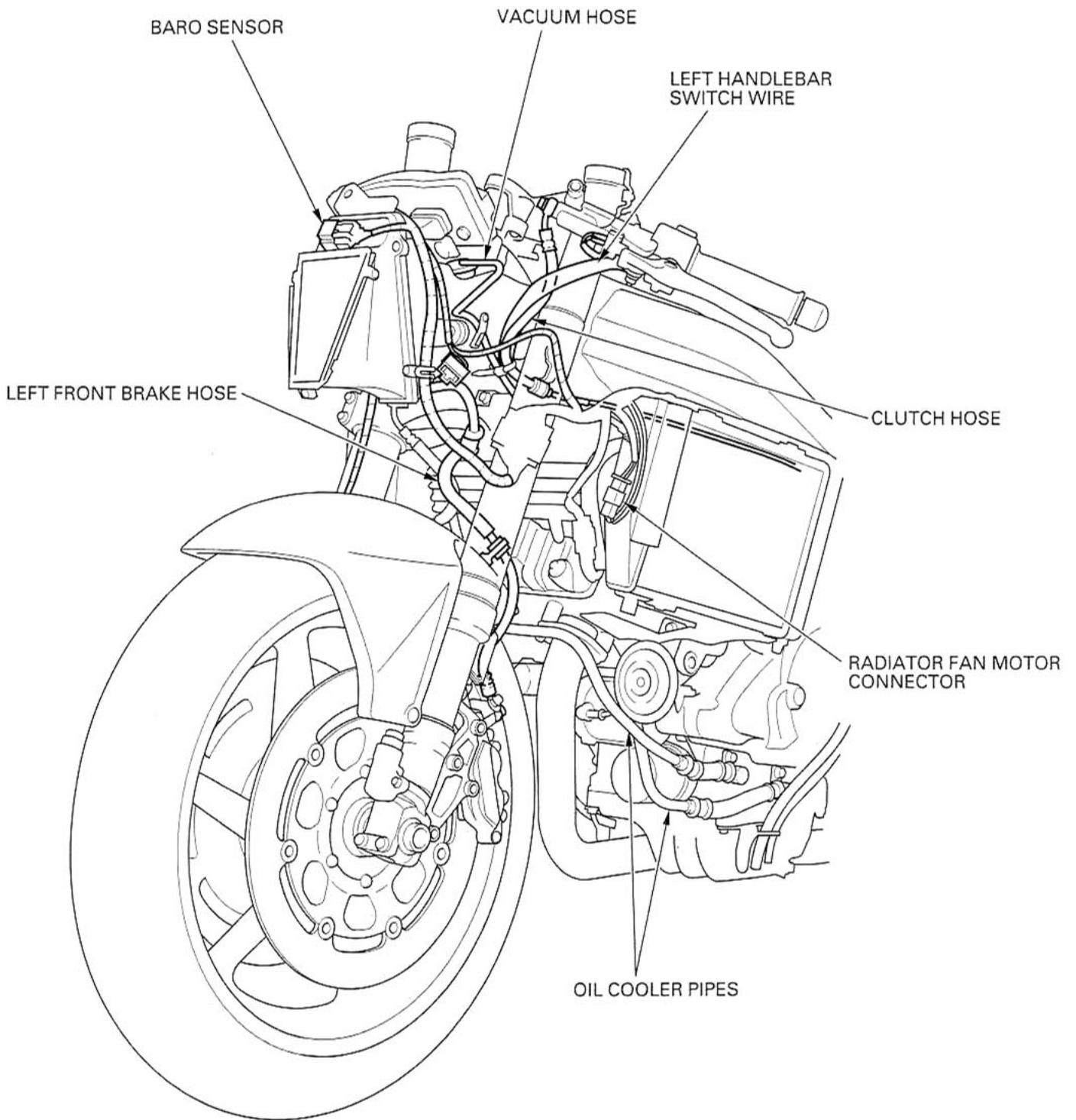
FRAME LOCATION	MATERIAL	REMARKS
Side stand pivot Rider footpeg sliding area Passenger footpeg sliding area Throttle grip pipe flange Seat catch hook sliding area Gearshift pedal link tie-rod ball joints Gearshift pedal pivot Rear brake pedal pivot Front wheel dust seal lips Rear wheel dust seal lips Rear wheel side collar inner surfaces	Multi-purpose grease	
Steering head bearings Steering head bearing dust seal lips	'00-'01: Molybdenum disulfide grease After '01: Extreme pressure agent mixed with water resistant UREA grease	
Shock arm and link dust seal lips Shock arm and link needle bearings Swingarm pivot bearings Swingarm pivot dust seal lips	'00-'01: Molybdenum disulfide grease After '01: Extreme pressure agent mixed with grease	
Throttle cable outer inside Choke cable outer inside	Cable lubricant	
Handlebar grip rubber inside	Honda bond A, Honda Hand Grip Cement (U.S.A. only) or equivalent	
Steering bearing adjustment nut threads	Engine oil	
Clutch lever pivot Clutch lever joint piece-to-push rod contacting area Clutch master piston-to-push rod contacting area Front brake lever-to-master piston contacting area Front brake lever pivot Rear brake caliper pin bolt sliding surfaces Rear brake master piston-to-push rod contacting area	Silicone grease	
Clutch master piston and cups Brake master piston and cups Brake caliper piston and piston seals	DOT 4 brake fluid	
Fork dust seal and oil seal lips	Pro Honda Suspension Fluid SS-8	
Oil hose joint bolt threads Oil pipe joint bolt threads Clutch fluid reservoir mounting screw threads Front brake caliper bracket bolt threads Drive chain slider bolt threads Rear brake hose clamp bolt threads Rear brake reservoir hose joint screw threads Front brake caliper assembly bolt threads Front brake caliper mounting bolt threads Caliper bracket retainer seating surface	Locking agent	

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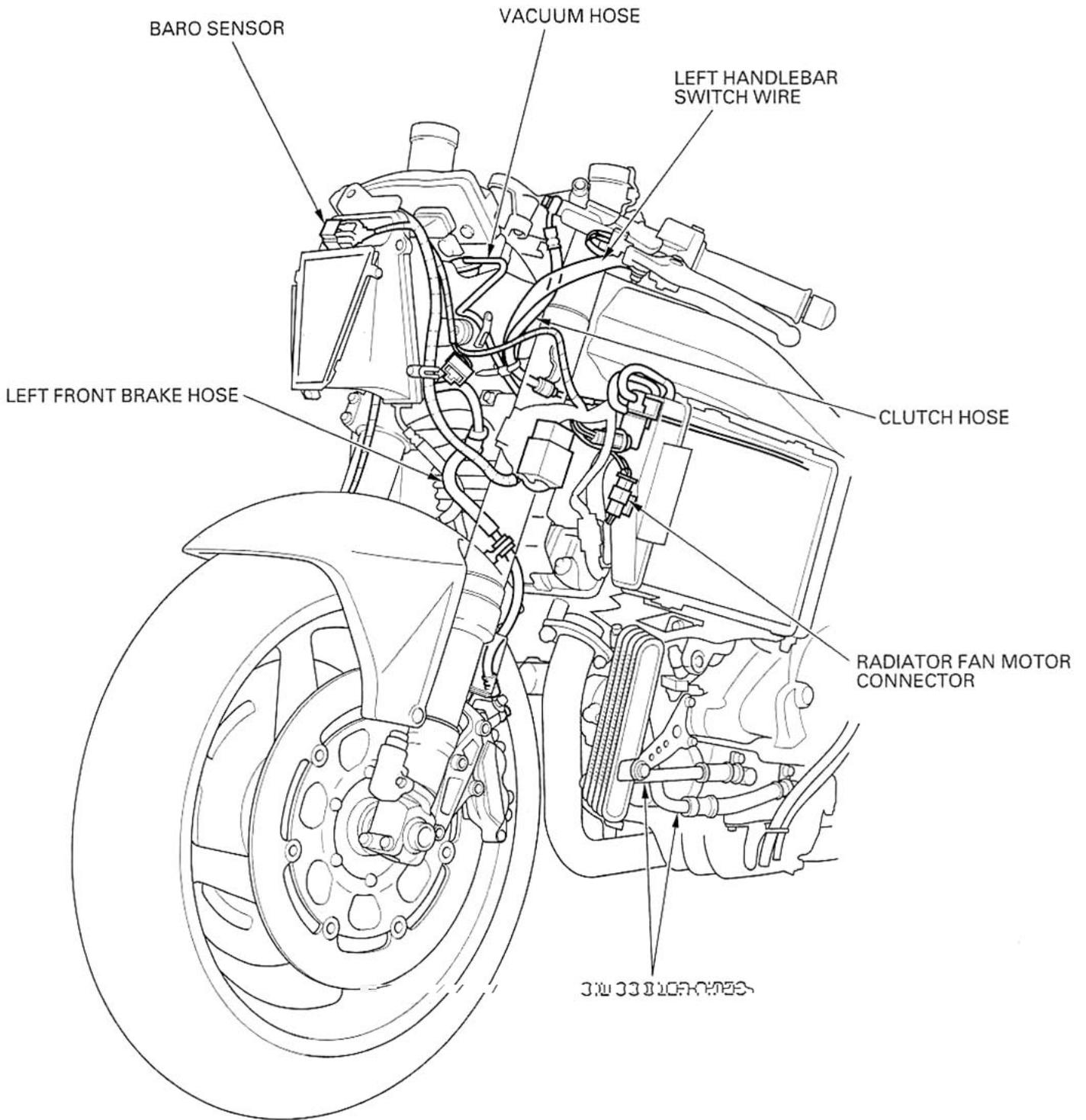


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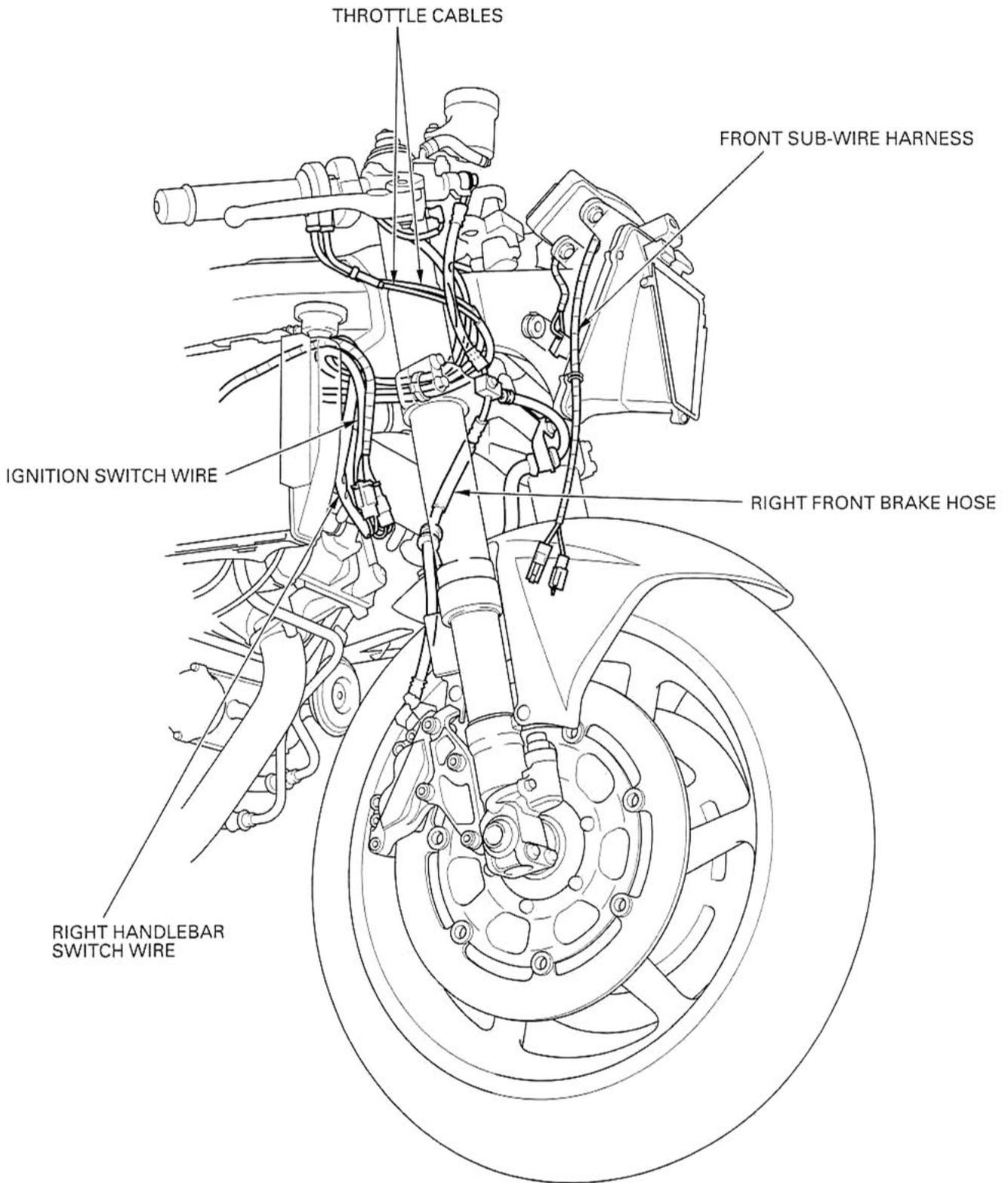


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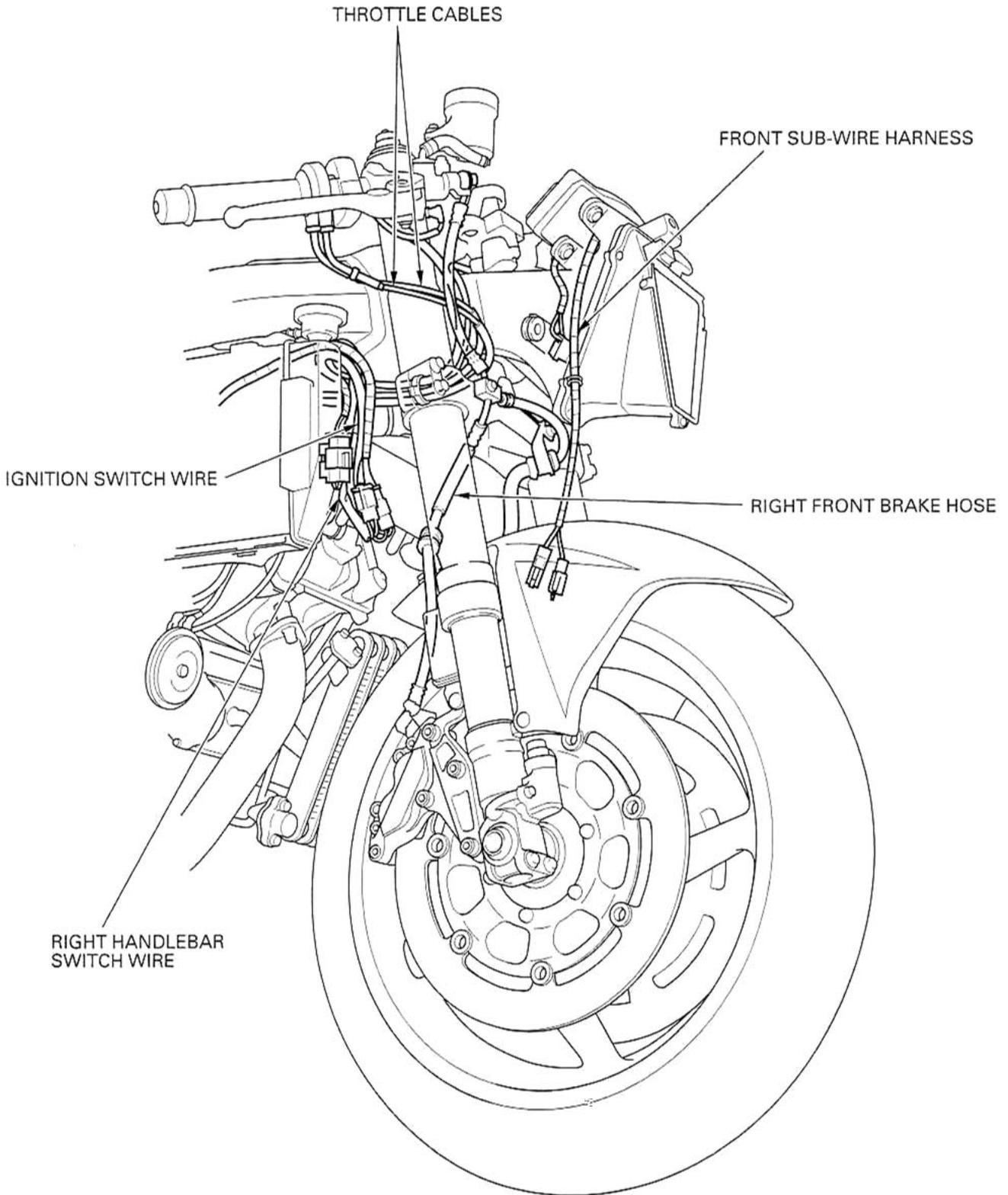


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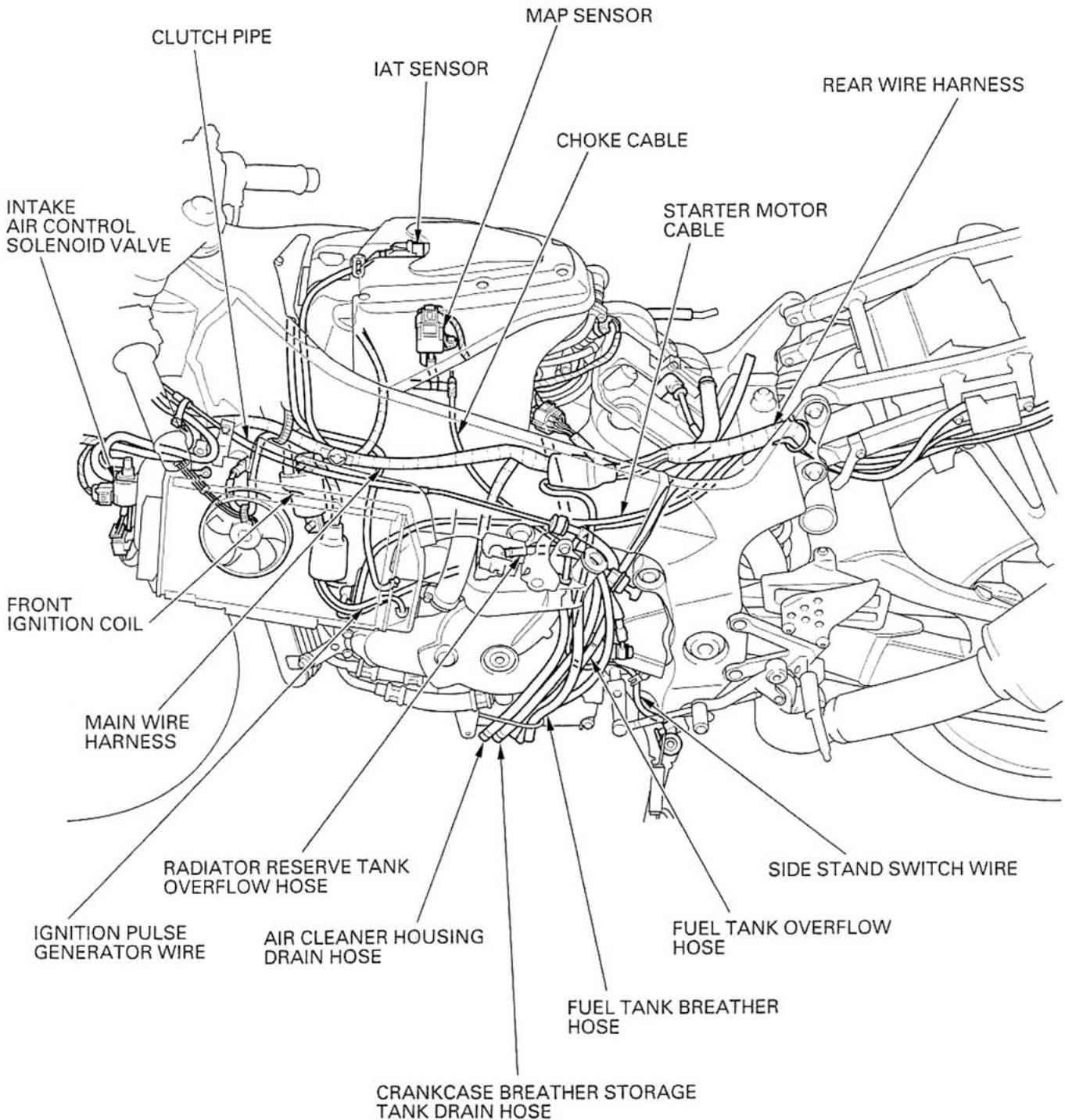
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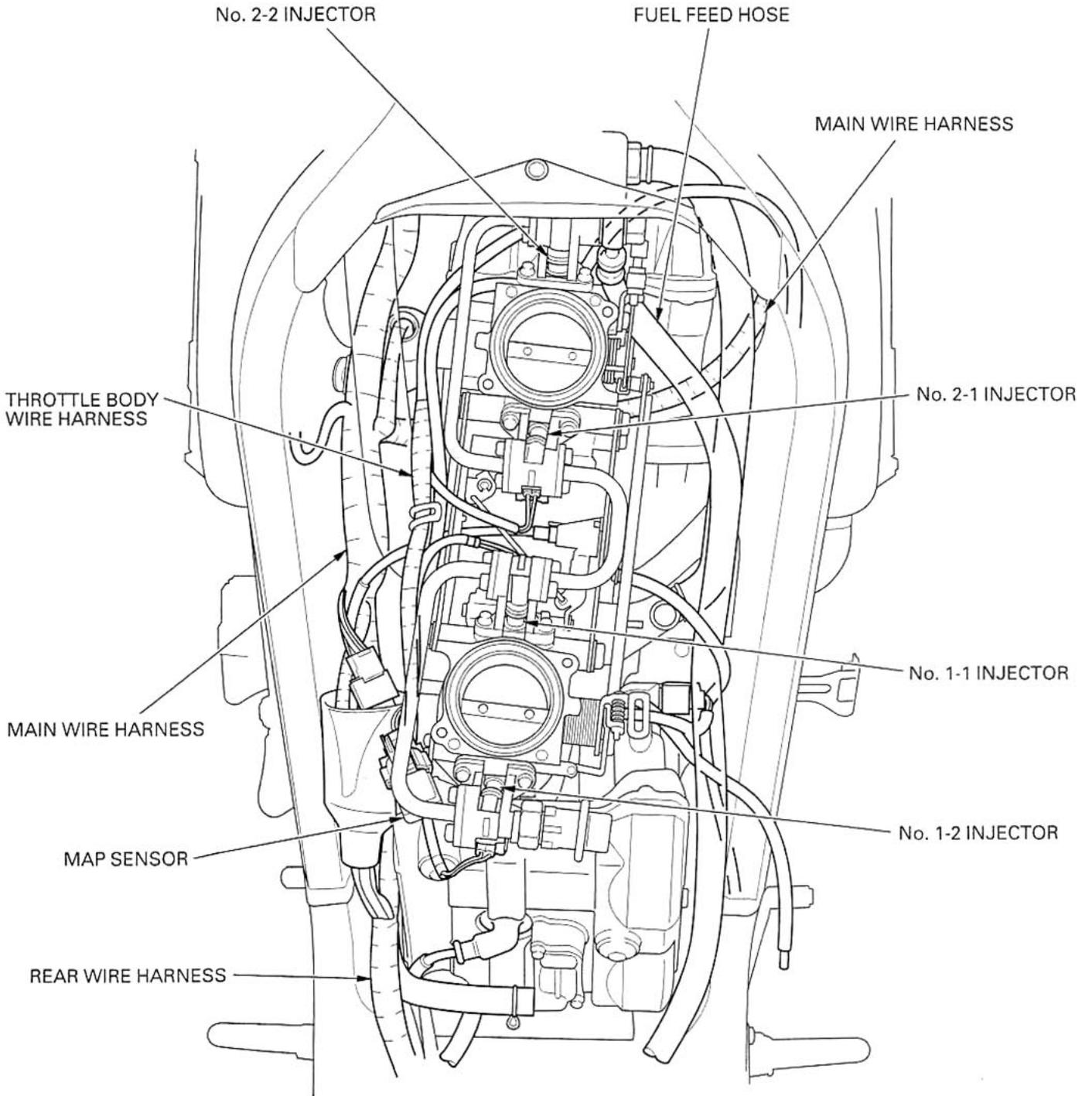


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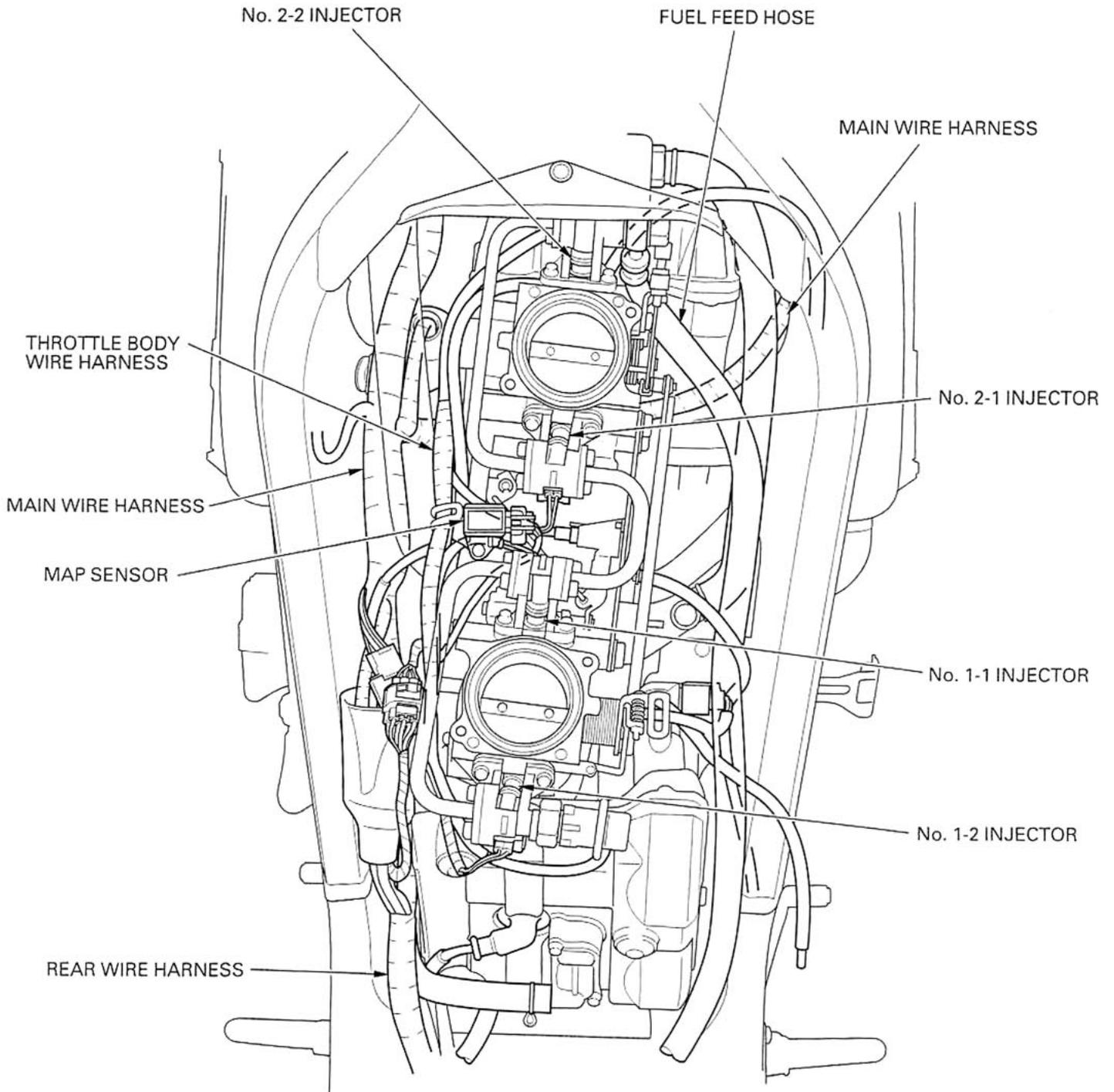


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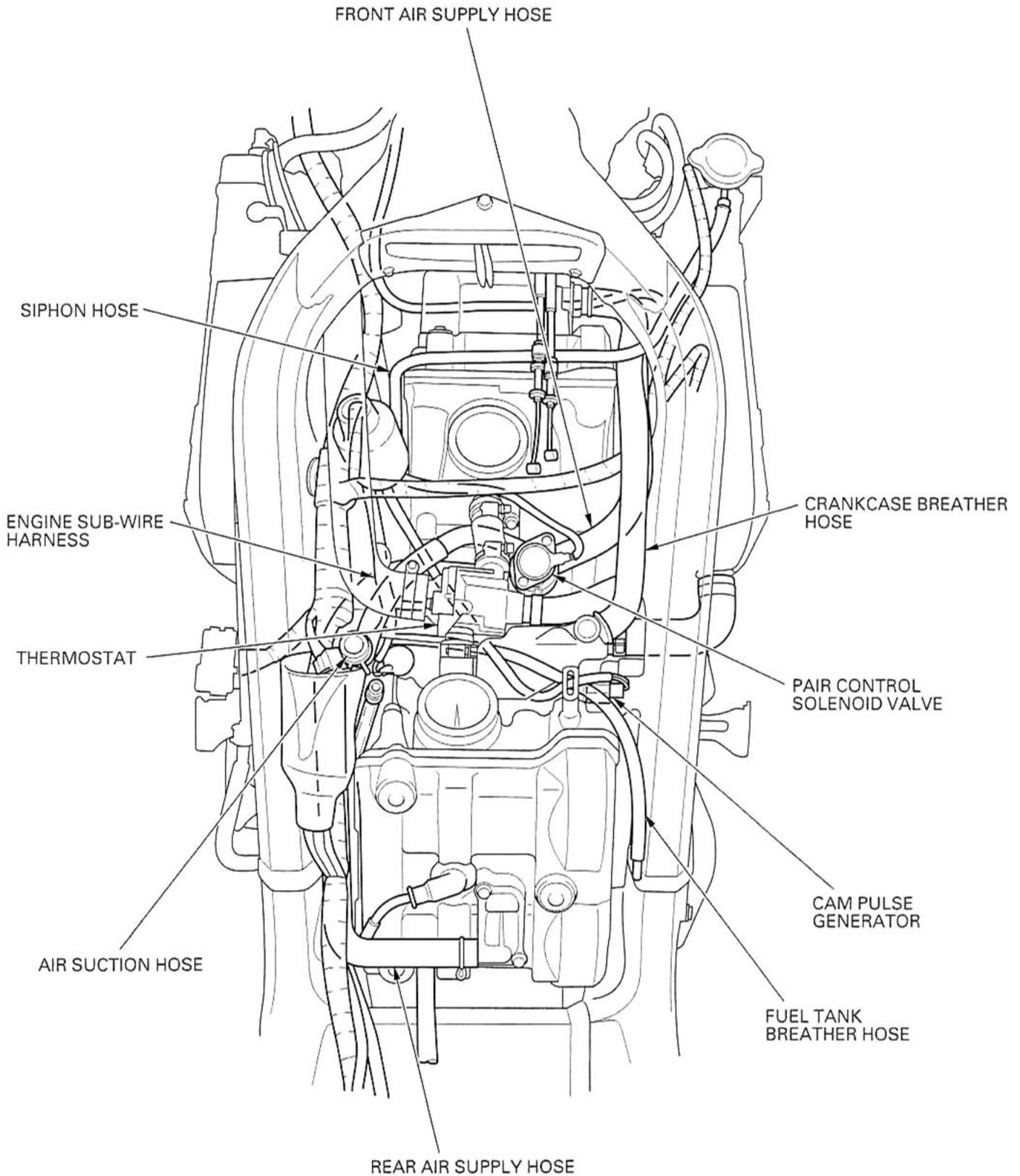


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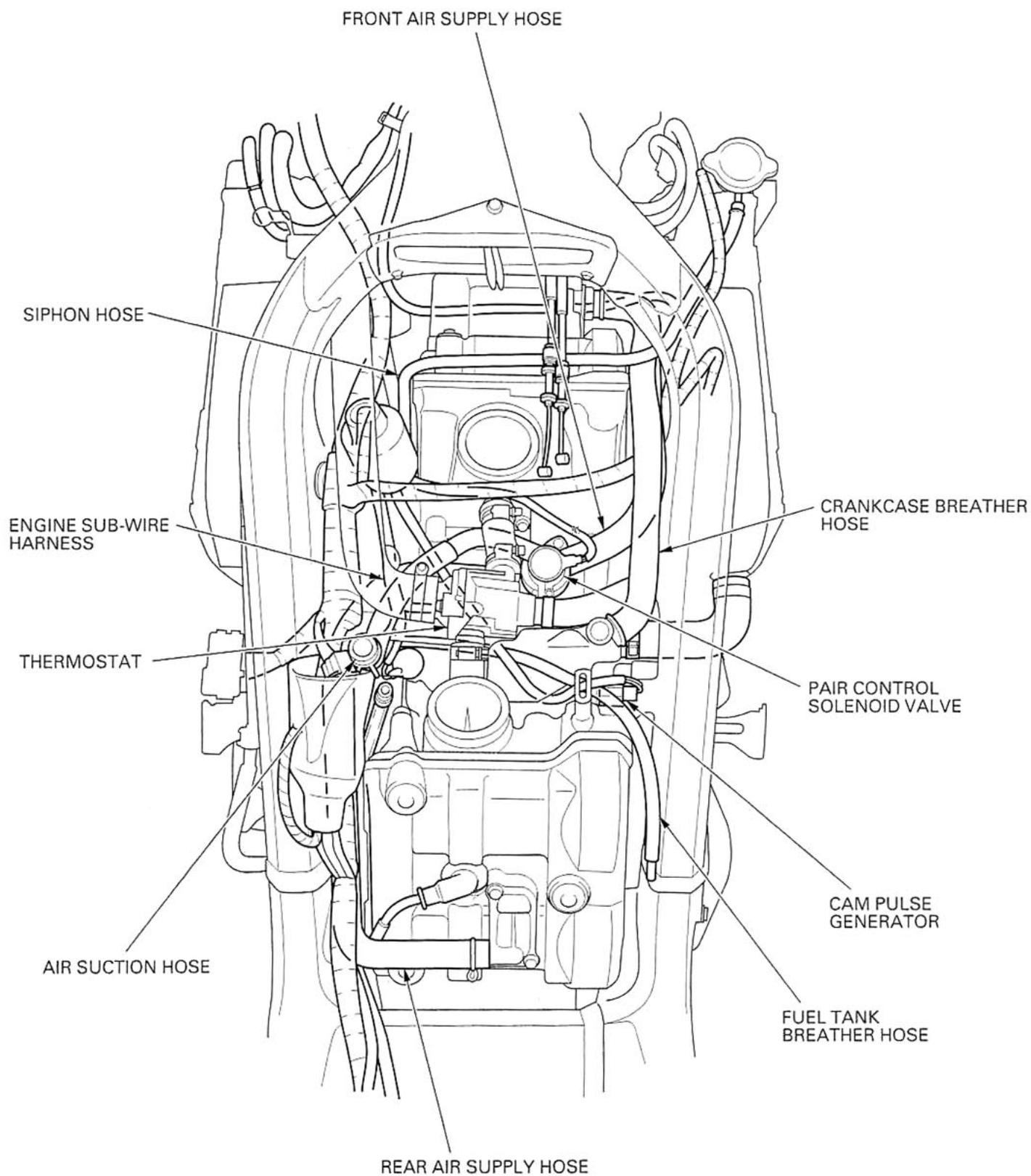


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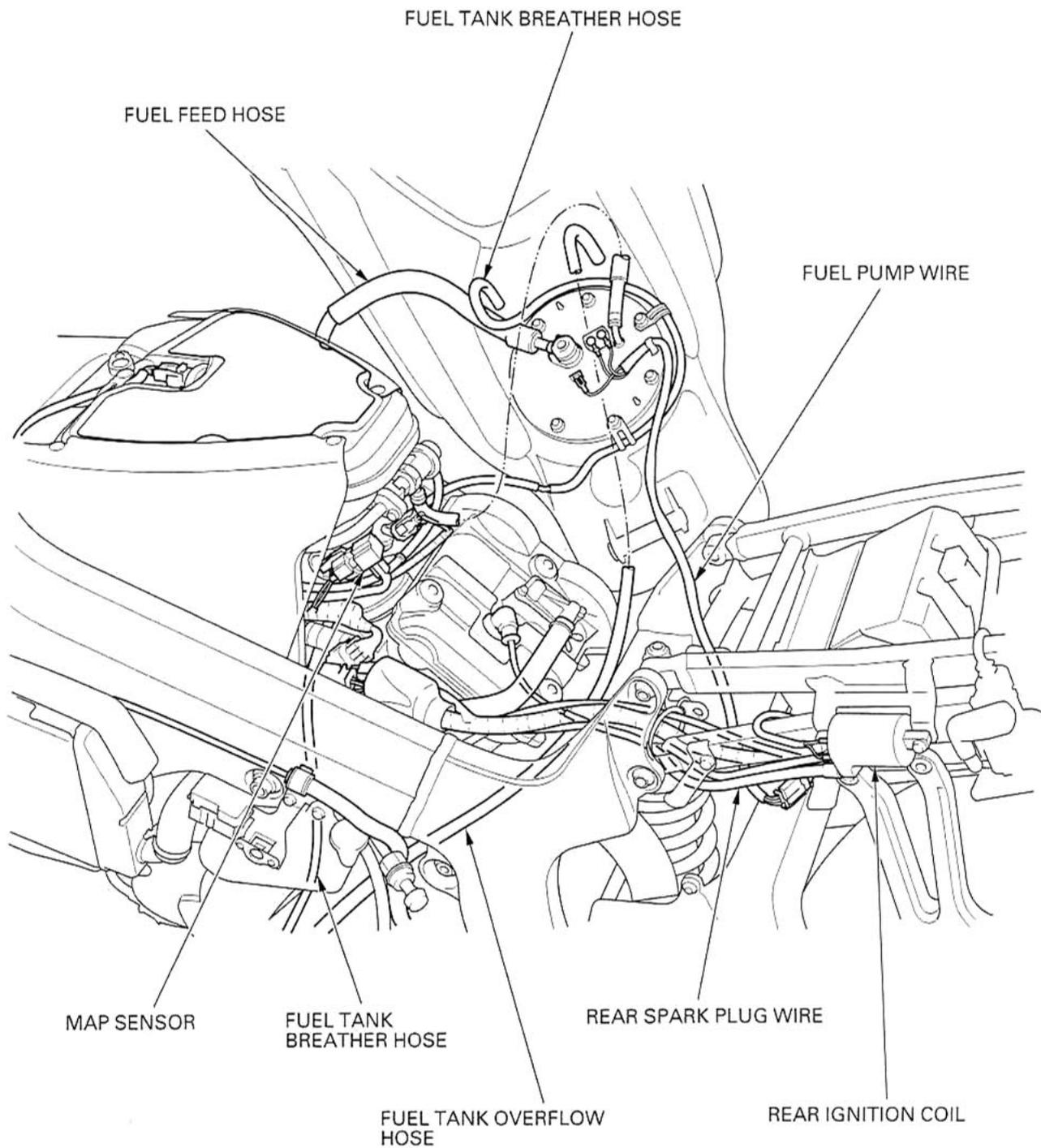


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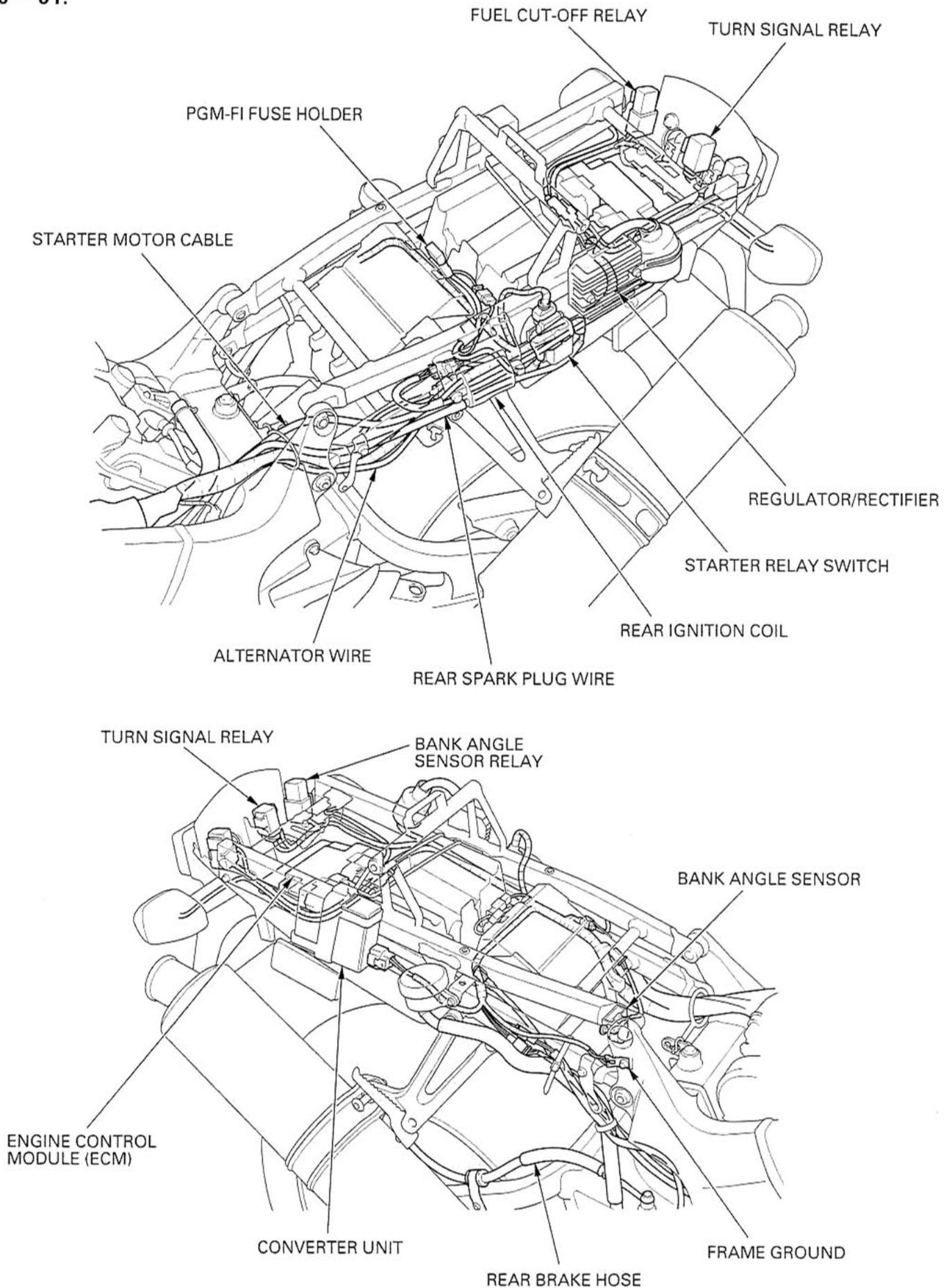
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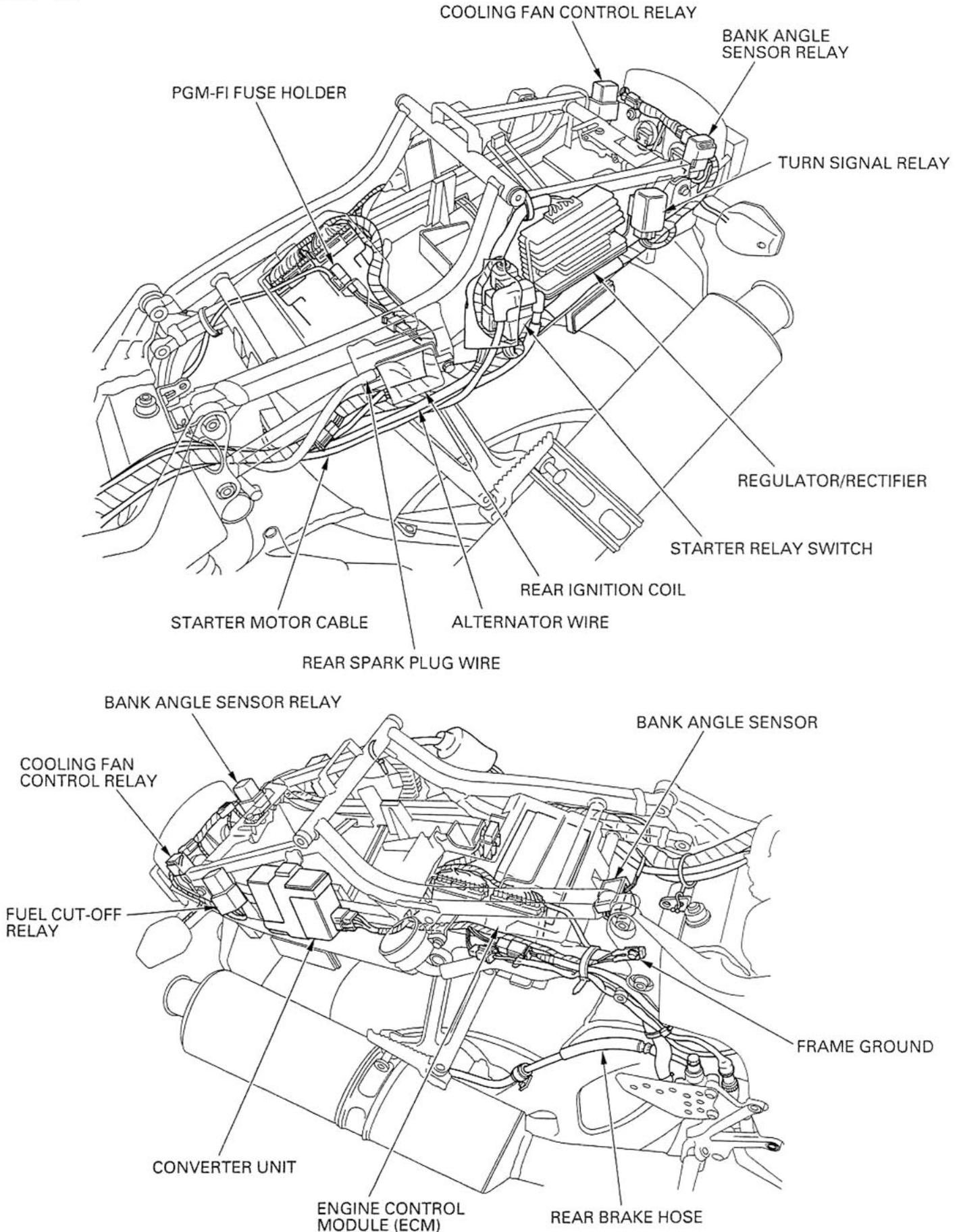


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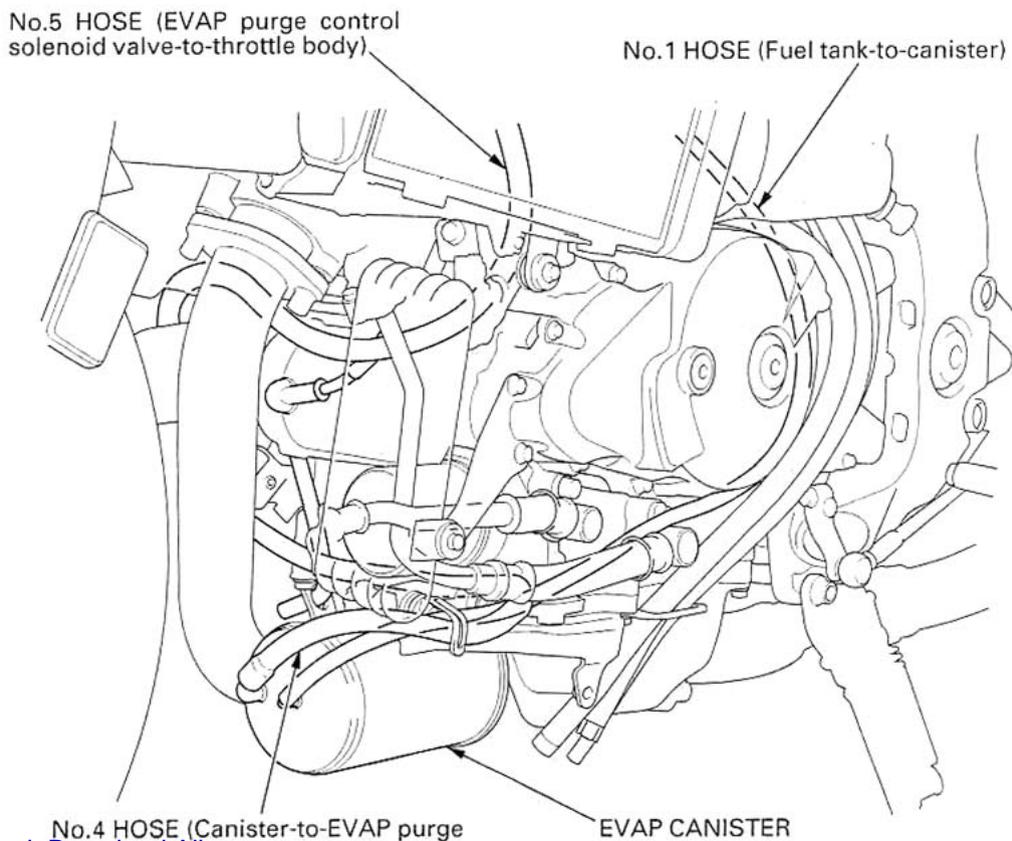
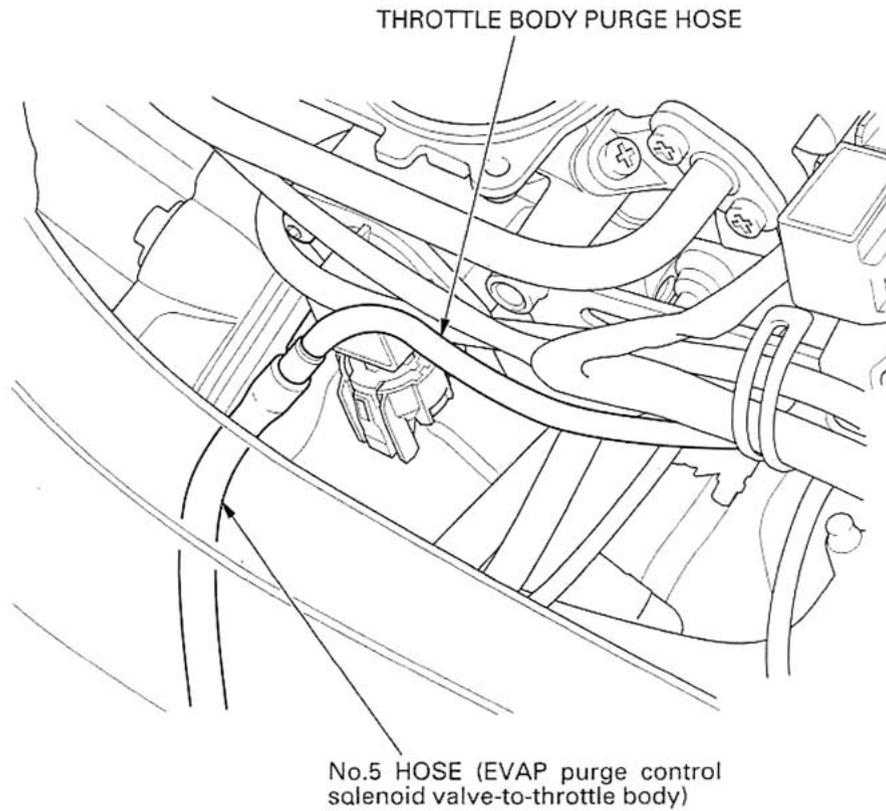


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