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GENERAL INFORMATION

SERVICE RULES

1. Use Honda Genuine 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 in the CABLE & HARNESS ROUTING (page 1-22).
9. Do not bend or twist control cables. Damaged control cables will not operate smoothly and may stick or bind.

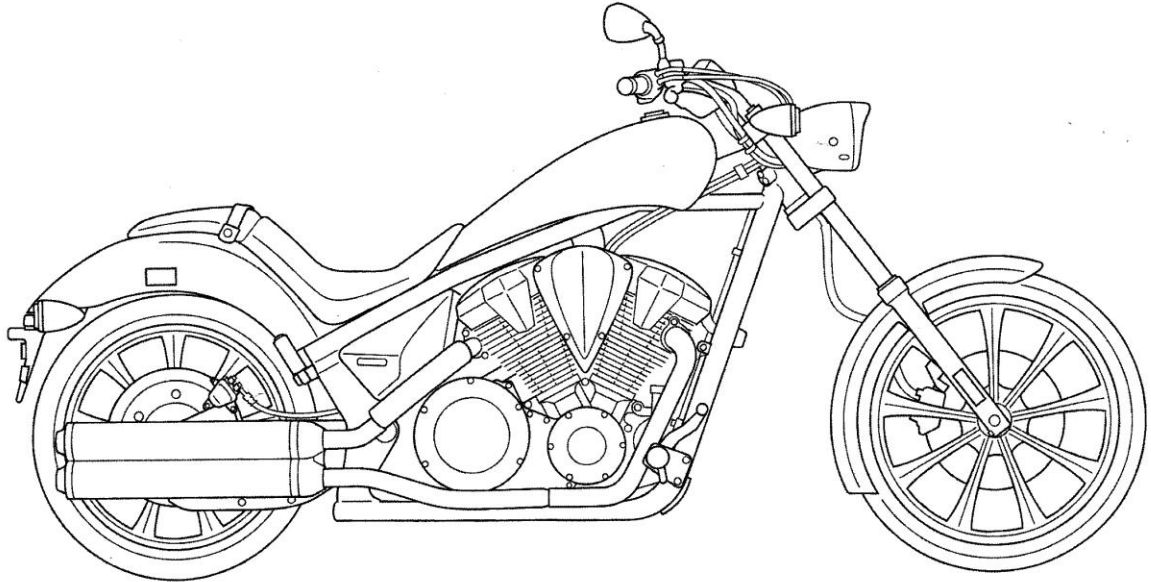
ABBREVIATION

Throughout this manual, the following abbreviations are used to identify the respective parts or systems.

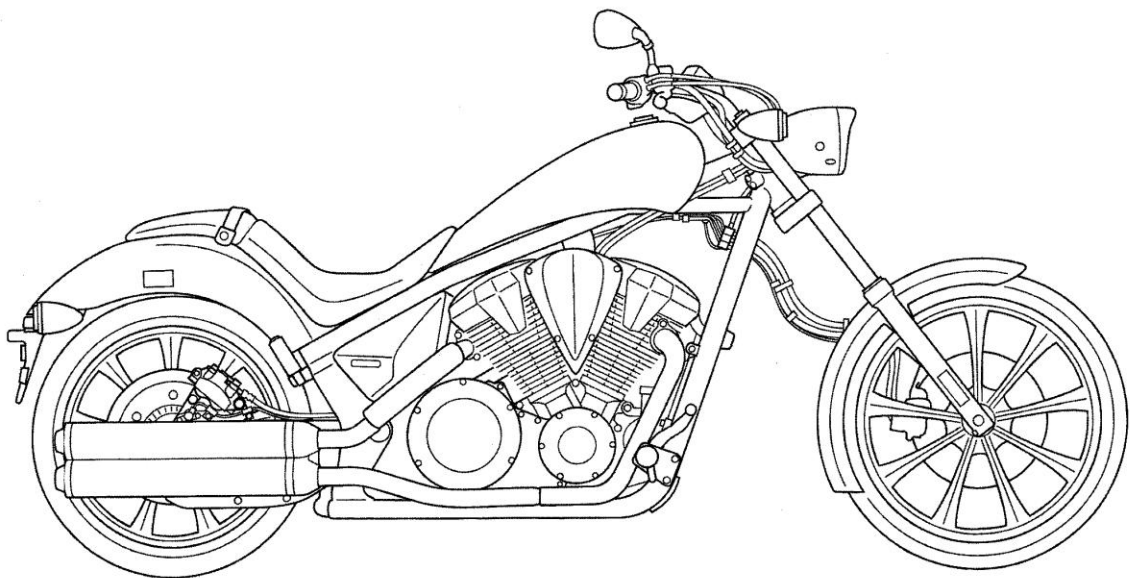
Abbrev. term	Full term
ABS	Anti-lock Brake System
CKP sensor	Crankshaft Position sensor
DLC	Data Link Connector
DTC	Diagnostic Trouble Code
ECM	Engine Control Module
ECT sensor	Engine Coolant Temperature sensor
EEPROM	Electrically Erasable Programmable Read Only Memory
EOP switch	Engine Oil Pressure switch
EVAP	Evaporative Emission
HDS	Honda Diagnostic System
IACV	Idle Air Control Valve
IAT sensor	Intake Air Temperature sensor
MAP sensor	Manifold Absolute Pressure sensor
MIL	Malfunction Indicator Lamp
PAIR	Pulse Secondary Air Injection
PCV	Proportional Control Valve
PGM-FI	Programmed Fuel Injection
SCS connector	Service Check Short connector
TP sensor	Throttle Position sensor
VS sensor	Vehicle Speed sensor

MODEL IDENTIFICATION

VT1300CX:



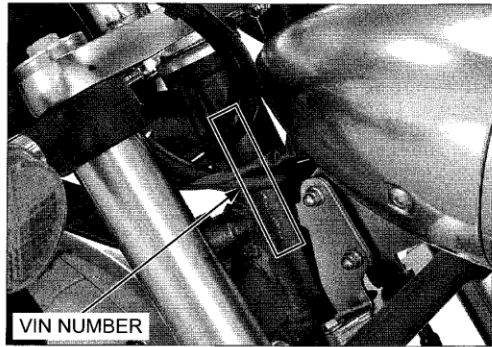
VT1300CXA:



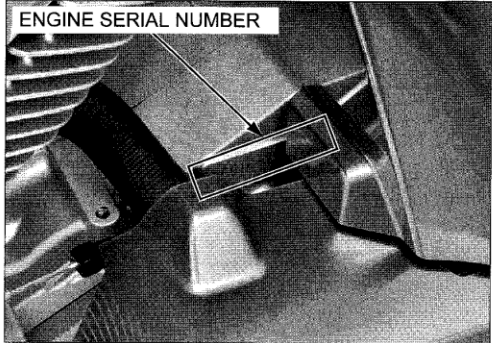
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SERIAL NUMBERS

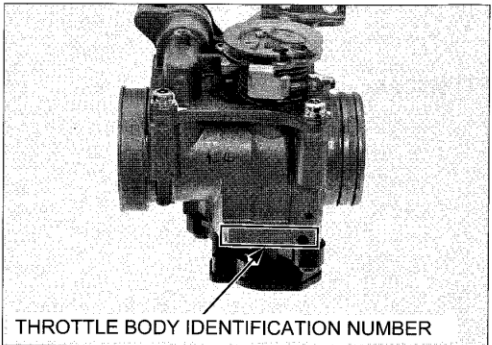
The Vehicle Identification Number (VIN) is stamped on the right side of the steering head.



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



The throttle body identification number is stamped on the sensor unit side of the throttle body.



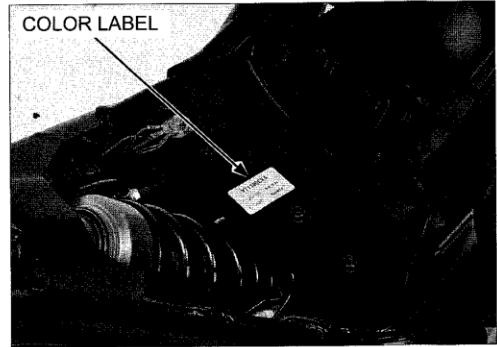
LABELS

The Safety Certification Label is attached on left side of the frame down tube.



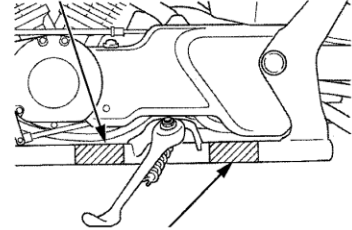
GENERAL INFORMATION

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



The Emission Control Information Label is attached on left side of the frame down tube.

EMISSION CONTROL INFORMATION LABEL
(CANADA TYPE ONLY)



EMISSION CONTROL INFORMATION LABEL
(U.S.A./CANADA TYPE)

GENERAL INFORMATION

GENERAL SPECIFICATIONS

DIMENSION	ITEM	SPECIFICATIONS
	Overall length Overall width Overall height Wheelbase Seat height Footpeg height Ground clearance Curb weight VT1300CX (49 STATES/CANADA TYPE) (CALIFORNIA TYPE) VT1300CXA (49 STATES/CANADA TYPE) (CALIFORNIA TYPE) Maximum weight capacity	2,555 mm (100.6 in) 900 mm (35.4 in) 1,150 mm (45.3 in) 1,805 mm (71.1 in) 685 mm (27.0 in) 293 mm (11.5 in) 125 mm (4.9 in) 302 kg (666 lbs) 303 kg (668 lbs) 308 kg (679 lbs) 309 kg (681 lbs) 146 kg (322 lbs)
FRAME	Frame type Front suspension Front axle travel Rear suspension Rear axle travel Front tire size Rear tire size Front tire brand Rear tire brand Front brake Rear brake Caster angle Trail length Fuel tank capacity	Double cradle Telescopic fork 102 mm (4.0 in) Swingarm 95 mm (3.7 in) 90/90-21M/C 54H 200/50R18M/C 76H ELITE3 (DUNLOP) ELITE3 (DUNLOP) Hydraulic single disc Hydraulic single disc 32° 00' 92 mm (3.6 in) 12.8 liters (3.38 US gal, 2.82 Imp gal)
ENGINE	Cylinder arrangement Bore and stroke Displacement Compression ratio Valve train Intake valve opens (at 1 mm lift) closes (at 1 mm lift) Exhaust valve opens (at 1 mm lift) closes (at 1 mm lift) Lubrication system Oil pump type Cooling system Air filtration Engine dry weight Firing order Cylinder number	2 cylinders 52° V transverse 89.5 x 104.3 mm (3.52 x 4.11 in) 1312.4 cm ³ (80.06 cu-in) 9.2 : 1 Silent cam chain driven, OHC 0° BTDC 50° ABDC Front: 46° BBDC Rear: 54° BBDC Front: 4° ATDC Rear: -4° ATDC Forced pressure and wet sump Trochoid Liquid cooled Viscous paper element 109.1 kg (240.5 lbs) Front - 308° - Rear - 412° - Front Front: #2/Rear: #1
FUEL DELIVERY SYSTEM	Type Throttle bore	PGM-FI 38 mm (1.5 in)

GENERAL INFORMATION

ITEM		SPECIFICATIONS
DRIVE TRAIN	Clutch system	Multi-plate, wet
	Clutch operation system	Cable operating
	Transmission	Constant mesh, 5-speeds
	Primary reduction	1.935 (60/31)
	Secondary reduction	0.944 (17/18)
	Final reduction	2.818 (31/11)
	Gear ratio	1.900 (38/20)
	1st	1.231 (32/26)
	2nd	0.909 (30/33)
	3rd	0.757 (28/37)
	4th	0.676 (23/34)
	5th	
	Gearshift pattern	Left foot operated return system, 1 - N - 2 - 3 - 4 - 5
ELECTRICAL	Ignition system	Computer-controlled digital transistorized with electric advance
	Starting system	Electric starter motor
	Charging system	Triple phase output alternator
	Regulator/rectifier	FET shorted/triple phase full wave rectification
	Lighting system	Battery

GENERAL INFORMATION

LUBRICATION SYSTEM SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT
Engine oil capacity	At draining	3.5 liters (3.7 US qt, 3.1 Imp qt)	-
	At filter change	3.7 liters (3.9 US qt, 3.3 Imp qt)	-
	At disassembly	4.3 liters (4.5 US qt, 3.8 Imp qt)	-
Recommended engine oil		Pro Honda GN4 4-stroke oil (U.S.A. and Canada) or equivalent motor oil API service classification SG or Higher JASO T 903 standard: MA Viscosity: SAE 10W-30	-
Engine oil pressure at oil pressure switch at 5,000 rpm/ (80°C/176°F)		530 kPa (5.4 kgf/cm ² , 77 psi)	-
Oil pump rotor	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	0.04 - 0.09 (0.002 - 0.004)	0.10 (0.004)

FUEL SYSTEM (PGM-FI) SPECIFICATIONS

ITEM	SPECIFICATIONS
Throttle body identification number	GQ9HA
Engine idle speed	930 ± 100 rpm
Throttle grip freeplay	2 - 6 mm (1/16 - 1/4 in)
Fuel injector resistance (20°C/68°F)	11 - 13 Ω
PAIR control solenoid valve resistance (20°C/68°F)	20 - 24 Ω
EVAP purge control solenoid valve resistance (20°C/68°F) (CALIFORNIA TYPE)	30 - 34 Ω
Fuel pressure at idle	336 - 350 kPa (3.4 - 3.6 kgf/cm ² , 49 - 51 psi)
Fuel pump flow (at 12 V)	150 cm ³ (5.1 US oz, 5.3 Imp oz) minimum/10 seconds

COOLING SYSTEM SPECIFICATIONS

ITEM	SPECIFICATIONS	
Coolant capacity	Radiator and engine	2.30 liters (2.43 US qt, 2.02 Imp qt)
	Reserve tank	0.24 liter (0.25 US qt, 0.21 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 distilled water)	

CYLINDER HEAD/VALVES SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT
Cylinder compression at 300 rpm		1,157 kPa (17.8 kgf/cm ² , 168 psi)	—
Valve clearance	IN	0.15 ± 0.02 (0.006 ± 0.001)	—
	EX	0.30 ± 0.02 (0.012 ± 0.001)	—
Cam chain tensioner wedge B length		—	9.0 (0.35)
Camshaft	Cam lobe height	IN	38.866 – 39.106 (1.5302 – 1.5396)
		EX	39.030 – 39.270 (1.5366 – 1.5461)
	Runout	IN/EX	—
	Journal O.D.	IN/EX	23.959 – 23.980 (0.9433 – 0.9441)
	Oil clearance	A, B	0.040 – 0.101 (0.0016 – 0.0040)
C		0.055 – 0.121 (0.0022 – 0.0048)	0.140 (0.0055)
Rocker arm, rocker arm shaft		Rocker arm shaft O.D.	IN/EX
	Rocker arm I.D.	IN/EX	14.000 – 14.018 (0.5512 – 0.5519)
	Rocker arm-to-shaft clearance		0.016 – 0.052 (0.0006 – 0.0020)
Valve, valve guide	Valve stem O.D.	IN	6.575 – 6.590 (0.2589 – 0.2594)
		EX	6.560 – 6.575 (0.2583 – 0.2589)
	Valve guide I.D.	IN/EX	6.600 – 6.615 (0.2598 – 0.2604)
	Stem-to-guide clearance	IN	0.010 – 0.040 (0.0004 – 0.0016)
		EX	0.025 – 0.055 (0.0010 – 0.0022)
	Valve guide projection above cylinder head	IN	14.5 (0.57)
		EX	15.5 (0.61)
Valve seat width	IN/EX	0.90 – 1.10 (0.035 – 0.043)	
Valve spring	Free length	IN	45.70 (1.799)
		EX	43.50 (1.713)
Cylinder head warpage		—	0.10 (0.004)

CYLINDER/PISTON SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT	
Cylinder	I.D.	89.500 – 89.515 (3.5236 – 3.5242)	89.55 (3.326)	
	Out-of-round	—	0.10 (0.004)	
	Taper	—	0.10 (0.004)	
	Warpage	—	0.10 (0.004)	
Piston, piston pin, piston rings	Piston O.D. at 15 mm (0.6 in) from bottom	89.470 – 89.490 (3.5224 – 3.5232)	89.41 (3.520)	
	Piston pin hole I.D.	20.002 – 20.008 (0.7875 – 0.7877)	20.018 (0.7881)	
	Piston pin O.D.	19.994 – 20.000 (0.7872 – 0.7874)	19.984 (0.7868)	
	Piston-to-piston pin clearance	0.002 – 0.014 (0.0001 – 0.0006)	0.034 (0.0013)	
	Piston ring end gap	Top	0.200 – 0.300 (0.0079 – 0.0118)	0.45 (0.018)
		Second	0.300 – 0.400 (0.0118 – 0.0157)	0.55 (0.022)
		Oil (side rail)	0.200 – 0.700 (0.0079 – 0.0276)	0.90 (0.035)
	Piston ring-to-ring groove clearance	Top	0.015 – 0.050 (0.0006 – 0.0020)	0.070 (0.0028)
Second		0.015 – 0.045 (0.0006 – 0.0018)	0.065 (0.0026)	
Cylinder-to-piston clearance		0.010 – 0.045 (0.0004 – 0.0018)	0.32 (0.013)	
Connecting rod small end I.D.		20.016 – 20.034 (0.7880 – 0.7887)	20.044 (0.7891)	
Connecting rod-to-piston pin clearance		0.016 – 0.040 (0.0006 – 0.0016)	0.063 (0.0025)	

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CLUTCH/GEARSHIFT LINKAGE SPECIFICATIONS

ITEM		STANDARD	SERVICE LIMIT
Clutch lever freeplay		10 – 20 (3/8 – 13/16)	–
Clutch	Spring free length	58.2 (2.29)	56.7 (2.23)
	Disc thickness	3.72 – 3.88 (0.146 – 0.153)	3.1 (0.12)
	Plate warpage	–	0.30 (0.012)
Clutch outer guide I.D.		27.995 – 28.012 (1.1022 – 1.1028)	28.03 (1.104)
Mainshaft O.D. at clutch outer guide		27.980 – 27.993 (1.1016 – 1.1021)	27.97 (1.101)
Clutch outer guide-to-mainshaft clearance		0.002 – 0.032 (0.0001 – 0.0013)	0.06 (0.002)
Clutch outer I.D.		42.005 – 42.030 (1.6537 – 1.6547)	42.05 (1.656)
Clutch outer needle bearing O.D.		41.989 – 42.000 (1.6531 – 1.6535)	41.98 (1.653)
Clutch outer-to-outer needle bearing clearance		0.005 – 0.041 (0.0002 – 0.0016)	0.07 (0.003)

ALTERNATOR/STARTER CLUTCH SPECIFICATIONS

ITEM		STANDARD	SERVICE LIMIT
Starter driven gear	I.D.	44.000 – 44.016 (1.7323 – 1.7329)	44.10 (1.736)
	O.D.	57.749 – 57.768 (2.2736 – 2.2743)	57.639 (2.2692)
Starter clutch outer I.D.		74.414 – 74.440 (2.9297 – 2.9307)	74.46 (2.931)
Torque limiter slip torque		52.9 – 84.3 N·m (5.4 – 8.6 kgf·m, 39 – 62 lbf·ft)	–

CRANKSHAFT/BALANCER/TRANSMISSION SPECIFICATIONS

ITEM		STANDARD	SERVICE LIMIT	
Crankshaft	Connecting rod big end side clearance	0.10 – 0.25 (0.004 – 0.010)	0.28 (0.011)	
	Crankpin bearing oil clearance	0.038 – 0.062 (0.0015 – 0.0024)	0.070 (0.0028)	
	Main journal O.D.	52.986 – 53.000 (2.0861 – 2.0866)	52.972 (2.0855)	
	Main journal oil clearance	0.030 – 0.054 (0.0012 – 0.0021)	0.068 (0.0027)	
	Crankshaft runout	–	0.05 (0.002)	
Main journal bearing I.D.		53.030 – 53.040 (2.0878 – 2.0881)	53.054 (2.0887)	
Shift fork, fork shaft	I.D.	14.000 – 14.018 (0.5512 – 0.5519)	14.04 (0.553)	
	Claw thickness	5.93 – 6.00 (0.233 – 0.236)	5.83 (0.230)	
	Fork shaft O.D.	13.973 – 13.984 (0.5501 – 0.5506)	13.963 (0.5497)	
Shift drum O.D. at left end		13.966 – 13.984 (0.5498 – 0.5506)	13.94 (0.549)	
Shift drum journal I.D. at left crankcase		14.000 – 14.027 (0.5512 – 0.5522)	14.05 (0.553)	
Shift drum-to-shift drum journal clearance		0.016 – 0.061 (0.0006 – 0.0024)	0.09 (0.004)	
Transmission	Gear I.D.	M4, M5	31.000 – 31.025 (1.2205 – 1.2215)	31.035 (1.2218)
		C1	30.000 – 30.025 (1.1811 – 1.1821)	30.035 (1.1825)
		C2, C3	33.000 – 33.025 (1.2992 – 1.3002)	33.035 (1.3006)
	Gear busing O.D.	M4	30.955 – 30.980 (1.2187 – 1.2197)	30.99 (1.220)
		M5	30.950 – 30.975 (1.2185 – 1.2195)	30.94 (1.218)
		C1	25.987 – 26.000 (1.0231 – 1.0236)	25.977 (1.0227)
		C2/C3	32.950 – 32.965 (1.2972 – 1.2978)	32.94 (1.297)
	Gear-to-bushing clearance	M4	0.020 – 0.070 (0.0008 – 0.0028)	0.090 (0.0035)
		M5	0.025 – 0.075 (0.0010 – 0.0030)	0.095 (0.0037)
		C2, C3	0.035 – 0.075 (0.0014 – 0.0030)	0.095 (0.0037)
	Gear bushing I.D.	M4	27.985 – 28.006 (1.1018 – 1.1026)	28.03 (1.104)
		C1	22.050 – 22.150 (0.8681 – 0.8720)	22.170 (0.8728)
		C2/C3	30.000 – 30.030 (1.1811 – 1.1823)	30.050 (1.1831)
	Mainshaft O.D.	at M4 bushing	27.959 – 27.980 (1.1007 – 1.1016)	27.940 (1.1000)
	Countershaft O.D.	at C1 bushing	21.980 – 21.993 (0.8654 – 0.8659)	21.97 (0.865)
		at C2/C3 bushing	29.959 – 29.980 (1.1795 – 1.1803)	29.94 (1.179)
	Bushing-to-shaft clearance	M4	0.005 – 0.047 (0.0002 – 0.0019)	0.067 (0.0026)
		C1	0.057 – 0.170 (0.0022 – 0.0067)	0.190 (0.0075)
		C2/C3	0.020 – 0.071 (0.0008 – 0.0028)	0.091 (0.0036)

FINAL DRIVE SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT
Recommended final drive oil		Hypoid gear oil, SAE #80	-
Final drive oil capacity	At draining	130 cm ³ (4.4 US oz, 4.6 Imp oz)	-
	At disassembly	170 cm ³ (5.7 US oz, 6.0 Imp oz)	-
Final drive gear backlash		0.05 – 0.15 (0.002 – 0.006)	0.30 (0.012)
Backlash difference between measurements		-	0.10 (0.004)
Ring gear-to-stop pin clearance		0.30 – 0.60 (0.012 – 0.024)	-
Final drive gear assembly pre-load		0.2 – 0.4 N·m (0.02 – 0.04 kgf·m, 0.1 – 0.3 lbf·ft)	-

FRONT WHEEL/SUSPENSION/STEERING SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT	
Minimum tire tread depth		-	1.5 (0.06)	
Cold tire pressure	Up to 90 kg (200 lbs) load	225 kPa (2.25 kgf/cm ² , 33 psi)	-	
	Up to maximum weight capacity	225 kPa (2.25 kgf/cm ² , 33 psi)	-	
Axle runout		-	0.2 (0.01)	
Wheel rim runout	Radial	-	2.0 (0.08)	
	Axial	-	2.0 (0.08)	
Wheel balance weight		-	60 g (2.1 oz) max.	
Fork	Spring free length	471.2 (18.55)	461.8 (18.18)	
	Tube runout	-	0.2 (0.01)	
	Recommended fork fluid		Pro Honda Suspension Fluid SS-47 (10W)	-
	Fluid level	Left side	119 (4.7)	-
		Right side	131 (5.2)	-
	Fluid capacity	Left side	682 ± 2.5 cm ³ (23.1 ± 0.08 US oz, 24.0 ± 0.09 Imp oz)	-
Right side		712 ± 2.5 cm ³ (24.1 ± 0.08 US oz, 25.1 ± 0.09 Imp oz)	-	
Steering head bearing pre-load		8.2 – 12.3 N (0.8 – 1.3 kgf)	-	

REAR WHEEL/SUSPENSION SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT
Minimum tire tread depth		-	2.0 (0.08)
Cold tire pressure	Up to 90 kg (200 lbs) load	280 kPa (2.80 kgf/cm ² , 41 psi)	-
	Up to maximum weight capacity	280 kPa (2.80 kgf/cm ² , 41 psi)	-
Axle runout		-	0.2 (0.01)
Wheel rim runout	Radial	-	2.0 (0.08)
	Axial	-	2.0 (0.08)
Wheel balance weight		-	60 g (2.1 oz) max.
Shock absorber	Spring pre-load adjuster standard position	6 clicks out from full soft	-
	Rebound damping adjuster standard position	3/4 turns out from full hard	-

GENERAL INFORMATION

HYDRAULIC BRAKE SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT	
Recommended brake fluid		DOT 4 brake fluid *	—	
Front	Brake disc thickness	5.9 – 6.1 (0.23 – 0.24)	5.0 (0.20)	
	Brake disc runout	—	0.30 (0.012)	
	Master cylinder I.D.	12.700 – 12.743 (0.5000 – 0.5017)	12.755 (0.5022)	
	Master piston O.D.	12.657 – 12.684 (0.4983 – 0.4994)	12.645 (0.4978)	
	VT1300CX	Caliper cylinder I.D.	27.000 – 27.050 (1.0630 – 1.0650)	27.060 (1.0654)
		Caliper piston O.D.	26.918 – 26.968 (1.0598 – 1.0617)	26.91 (1.059)
	VT1300CXA	Caliper cylinder I.D.	Upper	27.000 – 27.050 (1.0630 – 1.0650)
			Middle	22.650 – 22.700 (0.8917 – 0.8937)
			Lower	27.000 – 27.050 (1.0630 – 1.0650)
		Caliper piston O.D.	Upper	26.918 – 26.968 (1.0598 – 1.0617)
Middle			22.585 – 22.618 (0.8892 – 0.8905)	
Lower			26.918 – 26.968 (1.0598 – 1.0617)	
Rear	Brake disc thickness	5.8 – 6.2 (0.23 – 0.24)	5.0 (0.20)	
	Brake disc runout	—	0.30 (0.012)	
	VT1300CX	Master cylinder I.D.	14.000 – 14.043 (0.5512 – 0.5529)	14.055 (0.5533)
		Master piston O.D.	13.957 – 13.984 (0.5495 – 0.5506)	13.945 (0.5490)
		Caliper cylinder I.D.	38.18 – 38.23 (1.503 – 1.505)	38.24 (1.506)
		Caliper piston O.D.	38.098 – 38.148 (1.4999 – 1.5019)	38.09 (1.500)
		Caliper cylinder I.D.	17.460 – 17.503 (0.6874 – 0.6891)	17.515 (0.6896)
	VT1300CXA	Master piston O.D.	17.417 – 17.444 (0.6857 – 0.6848)	17.405 (0.6852)
		Caliper cylinder I.D.	32.030 – 32.080 (1.2610 – 1.2630)	32.090 (1.2634)
		Caliper piston O.D.	31.948 – 31.998 (1.2578 – 1.2598)	31.940 (1.2575)
Caliper piston O.D.		31.948 – 31.998 (1.2578 – 1.2598)	31.940 (1.2575)	

BATTERY/CHARGING SYSTEM SPECIFICATIONS

ITEM		SPECIFICATIONS	
Battery	Capacity	12 V – 11.2 Ah	
	Current leakage	0.5 mA maximum	
	Voltage (20°C/68°F)	Fully charged	13.0 – 13.2 V
		Needs charging	Below 12.4 V
	Charging current	Normal	1.1 A/5 – 10 h
Quick		5.5 A/1.0 h	
Alternator	Capacity	0.381 kW/5,000 rpm	
	Charging coil resistance (20°C/68°F)	0.2 – 0.4 Ω	

IGNITION SYSTEM SPECIFICATIONS

ITEM		SPECIFICATIONS
Spark plug	Standard	DCPR6E (NGK), XU20EPR-U (DENSO)
	For extended high speed riding	DCPR7E (NGK), XU22EPR-U (DENSO)
Spark plug gap		0.8 – 0.9 mm (0.03 – 0.04 in)
Ignition coil primary peak voltage		100 V minimum
Ignition timing	Front ("F – F" mark)	13° BTDC at idle
	Rear ("R – F" mark)	5° BTDC at idle
CKP sensor peak voltage (20°C/68°F)		0.7 V minimum

ELECTRIC STARTER SPECIFICATIONS

Unit: mm (in)

ITEM	STANDARD	SERVICE LIMIT
Starter motor brush length	12.0 – 13.0 (0.47 – 0.51)	4.5 (0.18)

LIGHTS/METERS/SWITCHES SPECIFICATIONS

	ITEM	SPECIFICATIONS
Bulbs	Headlight	12 V – 60/55 W
	Brake/tail light	LED
	License light	12 V – 5 W
	Front turn signal/position light	12 V – 21/5 W x 2
	Rear turn signal light	12 V – 21 W x 2
	Instrument light	LED
	Turn signal indicator	LED
	High beam indicator	LED
	Fuel reserve indicator	LED
	Neutral indicator	LED
	Engine oil pressure indicator	LED
	Coolant temperature indicator	LED
	MIL	LED
	ABS indicator (VT1300CXA)	LED
Fuse	Main fuse	30 A
	Sub fuse	10 A x 5, 20 A x 2
	ABS fuse (VT1300CXA)	30 A x 2, 10 A x 1

GENERAL INFORMATION

TORQUE VALUES

STANDARD TORQUE VALUES

FASTENER TYPE	TORQUE N·m (kgf·m, lbf·ft)	FASTENER TYPE	TORQUE N·m (kgf·m, lbf·ft)
5 mm bolt and nut	5.2 (0.5, 3.8)	5 mm screw	4.2 (0.4, 3.1)
6 mm bolt and nut (Includes SH flange bolt)	10 (1.0, 7)	6 mm screw	9 (0.9, 6.6)
8 mm bolt and nut	22 (2.2, 16)	6 mm flange bolt (8 mm head, large flange) and nut	12 (1.2, 9)
10 mm bolt and nut	34 (3.5, 25)	8 mm flange bolt and nut	27 (2.8, 20)
12 mm bolt and nut	54 (5.5, 40)	10 mm flange bolt and nut	39 (4.0, 29)

ENGINE & FRAME TORQUE VALUES

- Torque specifications listed below are for important fasteners.
- Others should be tightened to standard torque values (page 1-14).

FRAME/BODY PANELS/EXHAUST SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS	
Left crankcase rear cover socket bolt	1	6	10 (1.0, 7)	See page 3-18	
Exhaust pipe joint stud bolt	4	8	—		
Over head cover socket bolt	4	6	10 (1.0, 7)		
Rear seat mounting socket bolt	2	8	22 (2.2, 16)		
Exhaust pipe joint nut	4	8	23 (2.3, 17)		
Muffler stay mounting bolt	2	8	27 (2.8, 20)		
Muffler bracket mounting bolt	2	10	79 (8.1, 58)		
Exhaust pipe band socket bolt	2	8	17 (1.7, 13)		
Exhaust pipe cover band screw	3	6	3.25 (0.3, 2.4)		
Muffler tail cover socket screw	2	6	9 (0.9, 6.6)		
Muffler cover socket bolt	1	6	10 (1.0, 7)		
Muffler front cover socket screw	3	6	9 (0.9, 6.6)		
Rear fender A stay socket bolt	4	6	11 (1.1, 8)		
Main step cap bolt	2	8	21.5 (2.2, 16)		
Main step rubber stopper bolt	2	6	10 (1.0, 7)		
Main step bracket bolt	4	8	27 (2.8, 20)		Apply engine oil to the threads.
Pillion step bracket bolt	4	8	27 (2.8, 20)		
Gearshift pedal bolt	1	6	12 (1.2, 9)		
Gearshift pedal pivot shaft nut	1	8	27 (2.8, 20)		
Gearshift tie rod lock nut	2	6	10 (1.0, 7)		

MAINTENANCE

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Spark plug	4	12	18 (1.8, 13)	Apply grease to the threads.
Timing hole cap	1	45	18 (1.8, 13)	
Timing hole cap cover socket bolt	6	6	10 (1.0, 7)	Apply engine oil to the threads.
Valve adjusting screw lock nut	6	7	23 (2.3, 17)	
Exhaust valve adjusting hole cap	2	36	15 (1.5, 11)	Apply grease to the threads.
Engine oil filter cartridge	1	20	26 (2.7, 19)	
Engine oil filter boss	1	20	—	See page 4-14
Engine oil drain bolt	2	12	30 (3.1, 22)	
Air cleaner cover socket screw	4	5	1.5 (0.2, 1.1)	U-nut
Final drive oil filler cap	1	30	12 (1.2, 9)	
Final drive oil drain bolt	1	8	12 (1.2, 9)	
Sidestand pivot bolt	1	10	10 (1.0, 7)	
Sidestand pivot lock nut	1	10	30 (3.1, 22)	

GENERAL INFORMATION

LUBRICATION SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
EOP switch	1	PT 1/8	12 (1.2, 9)	Apply liquid sealant to the threads. Apply engine oil to the threads and seating surface.
EOP switch terminal screw	1	4	2.2 (0.2, 1.6)	
Oil pump assembly bolt	1	6	13 (1.3, 10)	
Oil strainer bolt	1	6	13 (1.3, 10)	
Oil orifice bolt	1	8	14 (1.4, 10)	

FUEL SYSTEM (PGM-FI)

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Fuel pump assembly bolt	6	6	8.8 (0.9, 6.5)	For tightening sequence (page 6-41)
PAIR check valve cover bolt	4	5	5.2 (0.5, 3.8)	See page 6-48
Insulator band screw (Throttle body side)	1	5	—	
Insulator band screw (Intake manifold side)	1	5	—	See page 6-56
Manifold base band screw	1	5	—	See page 6-56
Intake manifold mounting socket bolt	4	6	10 (1.0, 7)	
Sensor unit torx screw	3	5	3.4 (0.3, 2.5)	U-nut
Fuel injector mounting bolt	4	5	5.1 (0.5, 3.8)	
IACV setting plate torx screw	2	5	2.1 (0.2, 1.5)	
Throttle cable guide screw	2	5	3.4 (0.3, 2.5)	
Clamp stay screw	1	5	3.4 (0.3, 2.5)	
ECT sensor	1	12	24.5 (2.5, 18)	
Fuel tank mounting nut	1	6	12 (1.2, 9)	
Air cleaner case screw	4	5	1.5 (0.2, 1.1)	
Air cleaner connecting tube band screw	1	4	0.7 (0.1, 0.5)	
Bank angle sensor mounting bolt	2	4	2 (0.2, 1.5)	

COOLING SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Water pump cover bolt	2	6	13 (1.3, 10)	See page 7-18
Water pump stud bolt	1	6	—	
Thermostat housing cover bolt	3	6	13 (1.3, 10)	
Fan motor mounting nut	3	5	5.1 (0.5, 3.8)	Apply locking agent to the threads.
Cooling fan mounting nut	1	5	2.7 (0.3, 2.0)	
Water hose band screw	8	—	—	See page 7-15
Fan motor assembly mounting bolt	3	6	8.4 (0.9, 6.2)	

ENGINE REMOVAL/INSTALLATION

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Front upper engine mounting nut	1	10	39 (4.0, 29)	Apply engine oil to the threads.
Front lower engine mounting nut	1	10	49 (5.0, 36)	
Rear upper engine mounting nut	1	10	39 (4.0, 29)	
Rear lower engine mounting nut	1	10	39 (4.0, 29)	
Rear upper engine hanger plate nut	2	10	64 (6.5, 47)	
V-bank engine mounting bolt	2	8	27 (2.8, 20)	
Front cross pipe mounting bolt	2	8	27 (2.8, 20)	
Rear lower engine mounting plate bolt	2	8	27 (2.8, 20)	
Rear lower engine pivot plate bolt	2	10	39 (4.0, 29)	

GENERAL INFORMATION

CYLINDER HEAD/VALVES

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Spark plug sleeve	2	30	18 (1.8, 13)	Apply engine oil to the threads.
Cylinder head cover bolt	4	8	26 (2.7, 19)	Apply engine oil to the threads and seating surface.
Cylinder head cover cap nut (10 mm)	8	10	43 (4.4, 32)	
Cylinder head cover cap nut (8 mm)	4	8	26 (2.7, 19)	Apply engine oil to the threads and seating surface.
Cam sprocket bolt	4	7	23 (2.3, 17)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Cam chain tensioner bolt	4	6	12 (1.2, 9)	
V-bank engine hanger plate nut	1	10	39 (4.0, 29)	

CYLINDER/PISTON

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Cylinder stud bolt (8 mm)	4	8	—	See page 10-8
Cylinder stud bolt (10 mm)	8	10	—	See page 10-8

CLUTCH/GEARSHIFT LINKAGE

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Right crankcase cover bolt	16	6	10 (1.0, 7)	Lock nut; replace with a new one and stake. Apply engine oil to the threads and seating surface.
Clutch pressure plate bolt	6	6	12 (1.2, 9)	
Clutch center lock nut	1	25	186 (19.0, 137)	
Oil pump driven sprocket bolt	1	6	18 (1.8, 13)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Clutch cover socket bolt	4	6	10 (1.0, 7)	Apply engine oil to the threads. Lock nut; replace with a new one and stake. Apply engine oil to the threads and seating surface.
Timing hole cap cover socket bolt	6	6	10 (1.0, 7)	
Primary drive gear bolt	1	12	138 (14.1, 102)	
Primary driven gear lock nut	1	25	186 (19.0, 137)	
Gearshift spindle return spring pin	1	8	23 (2.3, 17)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Shift drum cam plate socket bolt	1	8	23 (2.3, 17)	
Shift drum stopper arm pivot bolt	1	6	12 (1.2, 9)	

GENERAL INFORMATION

ALTERNATOR/STARTER CLUTCH

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Left crankcase cover socket bolt	13	6	12 (1.2, 9)	Apply engine oil to the threads. Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Flywheel bolt	1	12	138 [*] (14.1, 102)	
Stator mounting bolt	3	6	10 (1.0, 7)	
Starter clutch socket bolt	6	8	29 (3.0, 21)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
CKP sensor mounting bolt	2	6	10 (1.0, 7)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Stator wire clamp bolt	1	6	10 (1.0, 7)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip

CRANKSHAFT/BALANCER/TRANSMISSION

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Crankcase bolt	16	8	26 (2.7, 19)	Apply engine oil to the threads and seating surface.
Connecting rod bearing cap nut	4	10	59 (6.0, 44)	
Output gear case mounting bolt	4	8	31 (3.2, 23)	Apply engine oil to the threads. Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Shift drum bearing set plate bolt	2	6	12 (1.2, 9)	
Mainshaft bearing set plate bolt	2	6	12 (1.2, 9)	
Rear balancer shaft bearing set plate bolt	2	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Cam chain tensioner set plate bolt	1	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip

FINAL DRIVE

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Pinion retainer	1	70	147 (15.0, 108)	Apply locking agent to the threads.
Pinion retainer lock tab bolt	1	6	10 (1.0, 7)	
Pinion joint bolt	1	12	147 (15.0, 108)	
Dust guard plate bolt	1	6	10 (1.0, 7)	Apply locking agent to the threads.
Final gear case cover bolt (10 mm)	2	10	63 (6.4, 46)	
Final gear case cover bolt (8 mm)	6	8	26 (2.7, 19)	U-nut
Torque arm nut	2	10	83 (8.5, 61)	
Final gear case assembly layout bolt	1	8	21 (2.1, 15)	

GENERAL INFORMATION

FRONT WHEEL/SUSPENSION/STEERING

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Clutch lever pivot bolt	1	6	1 (0.1, 0.7)	
Clutch lever pivot nut	1	6	6 (0.6, 4.4)	
Handlebar mounting nut	2	12	55 (5.6, 41)	Lock nut; replace with a new one.
Front brake disc socket bolt	6	8	29 (3.0, 21)	ALOC bolt; replace with a new one.
Front axle bolt	1	14	64 (6.5, 47)	
Front axle pinch bolt	4	8	22 (2.2, 16)	
Front brake hose clamp bolt (VT1300CX)	1	6	12 (1.2, 9)	ALOC bolt; replace with a new one.
Front brake hose guide bolt	2	6	12 (1.2, 9)	ALOC bolt; replace with a new one.
Fork center socket bolt	2	8	20 (2.0, 15)	Apply locking agent to the threads.
Fork cap	2	42	22 (2.2, 16)	
Fork damper rod lock nut (Left side)	1	10	20 (2.0, 15)	
Fork top bridge pinch bolt	2	8	27 (2.8, 20)	
Fork bottom bridge pinch bolt	2	8	27 (2.8, 20)	
Steering top thread	1	26	-	Apply engine oil to the threads (page 15-42).
Steering stem nut	1	24	103 (10.5, 76)	
Brake hose/harness guide bolt	2	6	12 (1.2, 9)	

REAR WHEEL/SUSPENSION

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Rear brake disc socket bolt	6	8	42 (4.3, 31)	ALOC bolt; replace with a new one.
Rear axle nut	1	22	127 (13.0, 94)	U-nut
Rear axle pinch bolt	1	8	27 (2.8, 20)	
Driven flange nut	5	12	88 (9.0, 65)	U-nut
Rear brake caliper stopper pin bolt	1	18	69 (7.0, 51)	ALOC bolt; replace with a new one.
Shock absorber mounting nut	2	10	44 (4.5, 32)	U-nut
Shock absorber upper holder nut	1	12	64 (6.5, 47)	U-nut
Swingarm pivot bolt	1	18	142 (14.5, 105)	
Rear brake hose clamp bolt	1	6	12 (1.2, 9)	

GENERAL INFORMATION

HYDRAULIC BRAKE

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N-m (kgf-m, lbf-ft)	REMARKS
Brake caliper bleed valve	2	8	5.5 (0.6, 4.1)	
Brake pad pin	2	10	18 (1.8, 13)	
Brake pad pin plug	2	10	2.5 (0.3, 1.8)	
Brake hose oil bolt	4	10	34 (3.5, 25)	
Front master cylinder reservoir cap screw	2	4	1.5 (0.2, 1.1)	
Front brake lever pivot bolt	1	6	1 (0.1, 0.7)	
Front brake lever pivot nut	1	6	6 (0.6, 4.4)	
Front brake light switch screw	1	4	1.2 (0.1, 0.9)	
Front master cylinder holder socket bolt	2	6	12 (1.2, 9)	
Front brake caliper bracket pin	1	8	13 (1.3, 10)	Apply locking agent to the threads.
Front brake caliper pin	1	12	27 (2.8, 20)	Apply locking agent to the threads.
Front brake caliper mounting bolt	2	8	31 (3.2, 23)	ALOC bolt; replace with a new one.
Rear brake reservoir mounting bolt	1	6	10 (1.0, 7)	
Rear master cylinder mounting bolt	2	6	12 (1.2, 9)	
Rear master cylinder push rod nut	1	8	18 (1.8, 13)	
Rear brake caliper bracket pin	1	8	23 (2.3, 17)	ALOC bolt; replace with a new one.
Rear brake caliper pin	1	12	27 (2.8, 20)	Apply locking agent to the threads.
Rear brake pipe mounting bolt	1	10	14 (1.4, 10)	

ABS (VT1300CXA)

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N-m (kgf-m, lbf-ft)	REMARKS
Brake pipe joint nut	21	10	14 (1.4, 10)	Apply brake fluid to the threads.
Front pulser ring mounting bolt	3	5	7 (0.7, 5.2)	ALOC bolt; replace with a new one.
Rear pulser ring mounting bolt	3	5	7 (0.7, 5.2)	ALOC bolt; replace with a new one.

ELECTRIC STARTER

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N-m (kgf-m, lbf-ft)	REMARKS
Starter motor cable terminal nut	1	6	7 (0.7, 5.2)	
Starter motor assembly bolt	2	5	4.9 (0.5, 3.6)	
Negative brush screw	1	5	3.7 (0.4, 2.7)	
Starter relay switch terminal socket bolt	2	5	5.2 (0.5, 3.8)	

LIGHTS/METERS/SWITCHES

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N-m (kgf-m, lbf-ft)	REMARKS
Neutral switch	1	10	12 (1.2, 9)	
VS sensor mounting bolt	2	6	10 (1.0, 7)	
Headlight ring mounting screw	2	5	0.9 (0.1, 0.7)	
Turn signal light lens screw	4	4	1 (0.1, 0.7)	
Brake/tail light mounting bolt	2	6	5.2 (0.5, 3.8)	
License light lens screw	2	4	1 (0.1, 0.7)	
License light mounting nut	2	5	4.5 (0.5, 3.3)	
Speedometer upper cover screw	2	4	1 (0.1, 0.7)	
Ignition switch mounting torx bolt	2	6	10 (1.0, 7)	
Sidestand switch bolt	1	6	10 (1.0, 7)	ALOC bolt; replace with a new one.
Fuel reserve sensor	1	18	23 (2.3, 17)	
Horn mounting bolt	1	8	27 (2.8, 20)	

GENERAL INFORMATION

LUBRICATION & SEAL POINTS

ENGINE

MATERIAL	LOCATION	REMARKS
Molybdenum disulfide oil (a mixture of 1/2 engine oil and 1/2 molybdenum disulfide grease)	Camshaft lobes and journal surface Valve stem (valve guide sliding surface) Rocker arm slipper surface Rocker arm shaft outer surface Rocker arm shaft O-ring Crankpin sliding surface Crankshaft main journals Starter idle gear shaft outer surface Transmission gear shifter groove Transmission bushing sliding surface Connecting rod small end inner surface	
Engine oil	Piston outer surface Piston ring outer surface Piston pin outer surface Starter clutch outer sliding surface Clutch lifter arm sliding surface Clutch joint piece sliding surface Clutch lifter piece sliding surface Clutch outer guide outer surface Clutch outer guide washer entire surface Clutch center boss sliding area Clutch disc entire surface Valve adjusting screw threads and seating surface Cylinder wall Cylinder stud bolt lower threads Front balancer sub-gear sliding surface Shift fork shaft outer surface Shift fork sliding area Transmission gear teeth Cam chain whole surface Oil strainer seal ring entire surface Oil filter cartridge threads Injector seal ring Each bearing rotating area and contact surface Each O-ring Other sliding and rotating area	
Multi-purpose grease	Timing hole cap O-ring Exhaust valve adjusting hole cap O-ring Each oil seal lips	
Liquid sealant (Three Bond 1207B or equivalent)	Left crankcase mating surface Right crankcase cover mating surface Left crankcase cover mating surface Alternator/CKP sensor wire grommet sealing surface	
Liquid sealant (Three Bond 1207B, 1215 or equivalent)	Cylinder head cover mating surface Camshaft rubber plug seating surface	
Locking agent	Oil filter boss threads (crankcase side)	

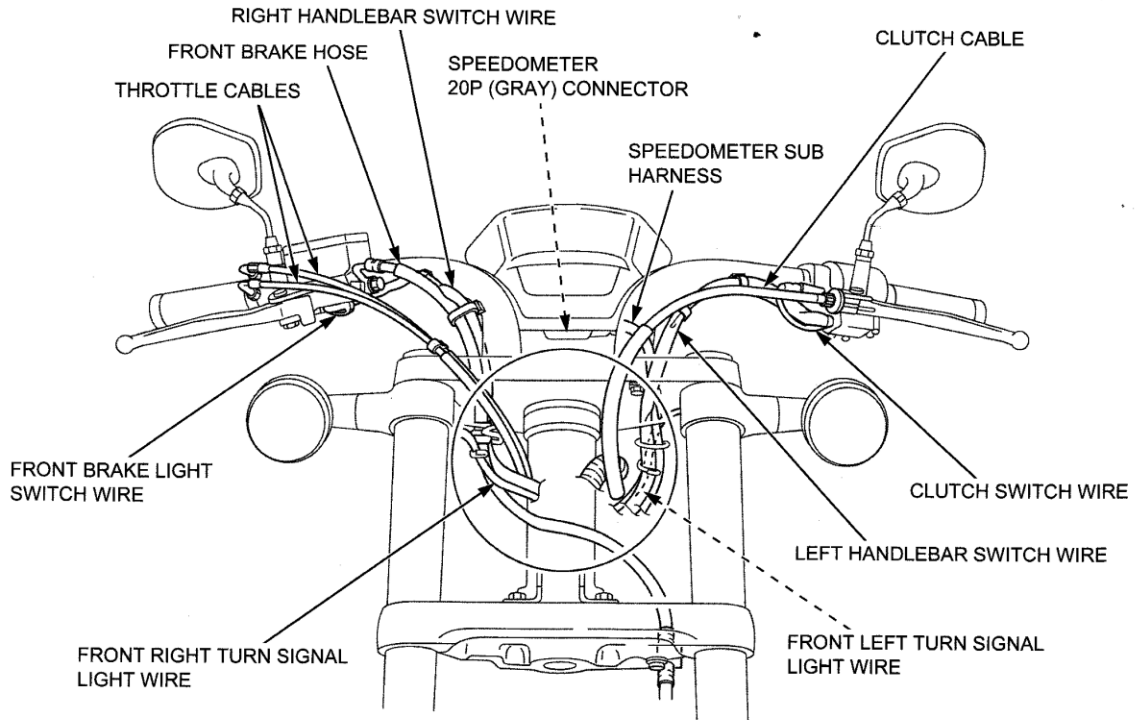
FRAME

MATERIAL	LOCATION	REMARKS
Liquid sealant (Three Bond 1216 or LOCTITE 5699)	Final gear case cover mating surface	
Multi-purpose grease	Sidestand pivot bolt sliding area Main step sliding area Pillion step sliding area Throttle pipe flange groove and throttle cable end Clutch lever pivot bolt sliding surface Gearshift pedal pivot shaft sliding area Axle sliding surface Swingarm pivot bolt sliding surface Brake pedal pivot shaft sliding surface Brake pedal dust seal lips Wheel dust seal lips Final gear case O-ring Final gear case oil seal lips Final gear case dust seal lips Shock absorber lower mounting dust seal lips	Apply 1 g (0.04 oz) Spreading 0.2 – 0.3 g (0.007 – 0.011 oz)
Urea based multi-purpose grease with extreme pressure (example: EXCELITE EP2 manufactured by KYODO YUSHI, Japan) or equivalent	Steering head bearings Steering head bearing dust seal lips	Apply 3 – 5 g (0.11 – 0.18 oz) for each bearing
Molybdenum disulfide grease	Swingarm pivot needle bearing Swingarm pivot dust seal lips Brake pedal joint pin sliding area Torque arm bushing outer surface Final drive ring gear needle bearing Final drive shaft oil seal lips Final drive shaft and output shaft splines (universal joint side)	Apply 0.5 g (0.017 oz) Apply 1 g (0.04 oz)
Molybdenum disulfide paste	Final driven pinion joint splines Final driven flange O-ring groove Final driven flange splines Rear wheel hub O-ring groove Rear wheel hub and O-ring	Apply 2 g (0.07 oz) minimum Apply 5 g (0.18 oz) minimum Apply 4 – 5 g (0.14 – 0.18 oz) minimum Apply 3 g (0.11 oz) minimum
Cable lubricant	Throttle cable casing inside Clutch cable casing inside	
Honda Bond A or Pro Honda handgrip cement (U.S.A. only)	Handlebar grip inside Air cleaner connecting tube matching surface	
Silicone grease	Fuel pump O-ring Front brake lever pivot bolt sliding surface Front brake lever-to-master piston contacting area Rear brake push rod-to-master piston contacting area Brake caliper and bracket pins sliding surface Brake caliper dust seal lips	Apply 0.1 g (0.004 oz) Apply 0.1 g (0.004 oz) Apply 0.1 g (0.004 oz) Apply 0.4 g (0.014 oz) minimum
DOT 4 brake fluid	Brake master piston outer surface and cups Brake caliper piston outer surface Hose joint O-ring Brake caliper piston seal lips	
Pro Honda Suspension Fluid SS-47 (10 W)	Fork dust seal and oil seal lips Fork cap O-ring	
Locking agent	Final driven flange stud bolt threads	
Engine oil	Final gear case filler cap O-ring	

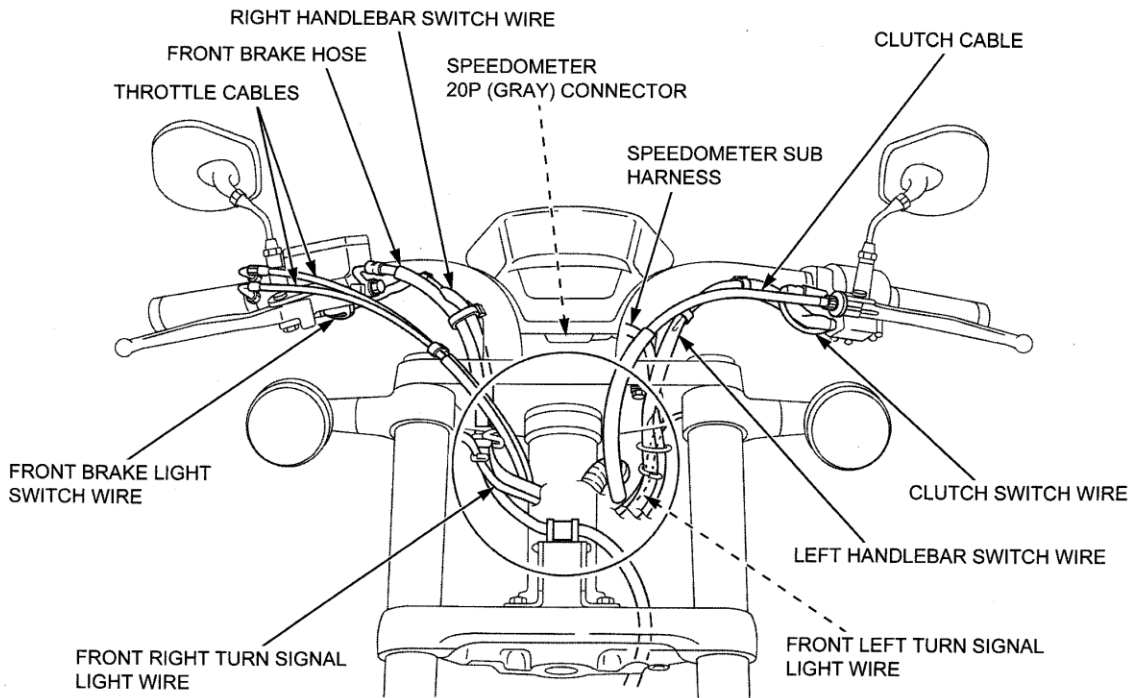
GENERAL INFORMATION

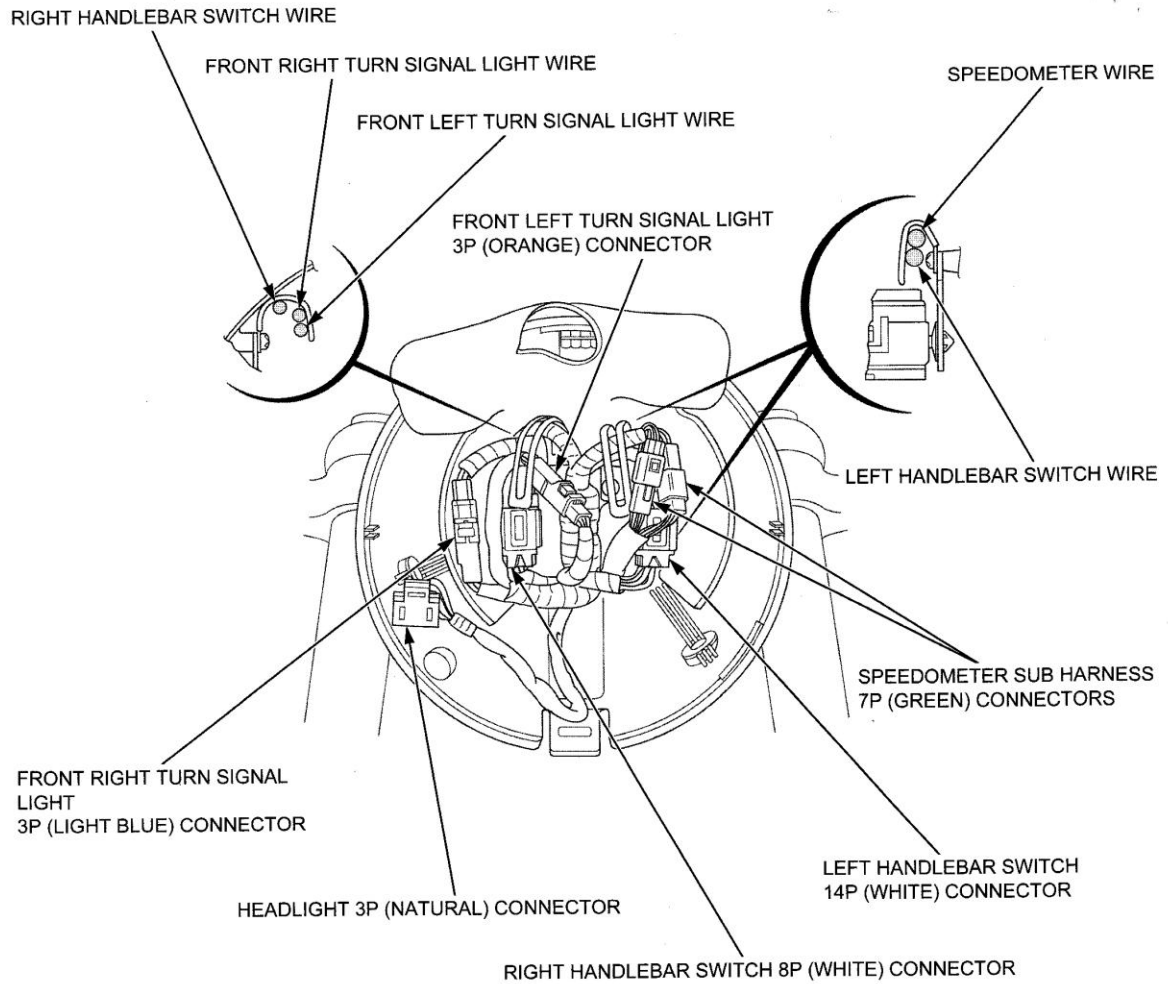
CABLE & HARNESS ROUTING

VT1300CX:



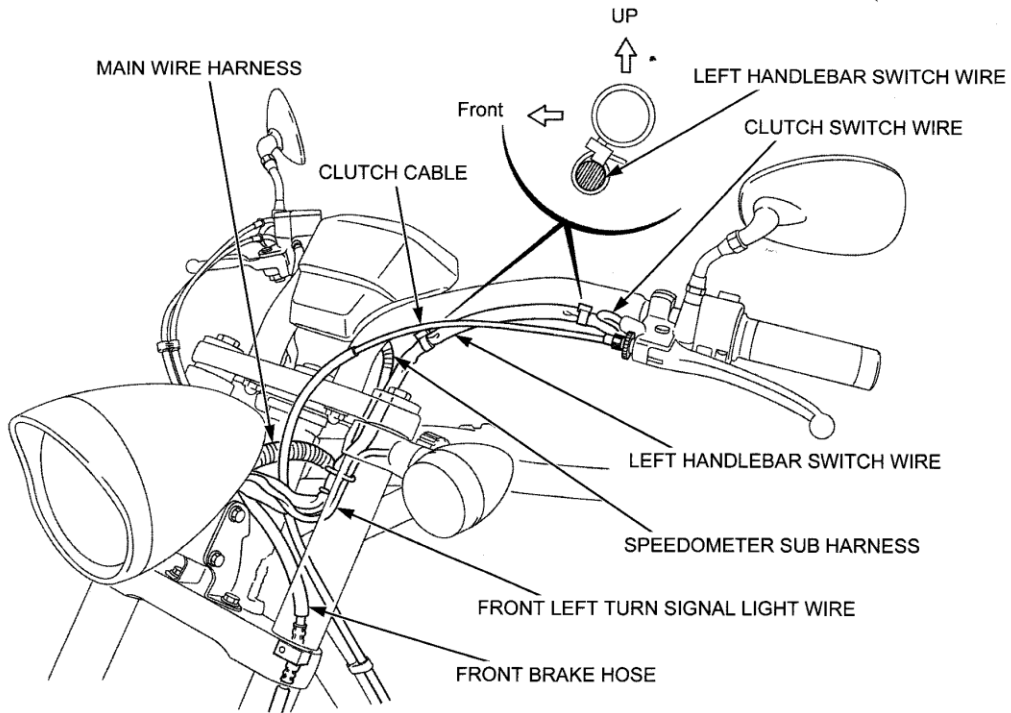
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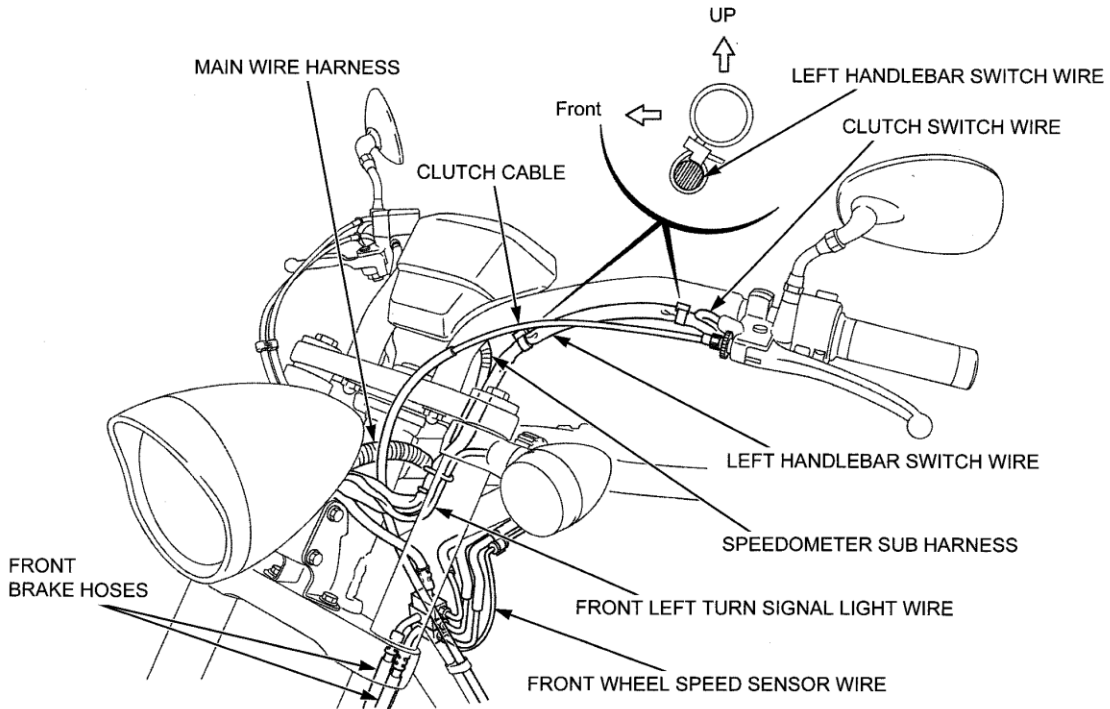


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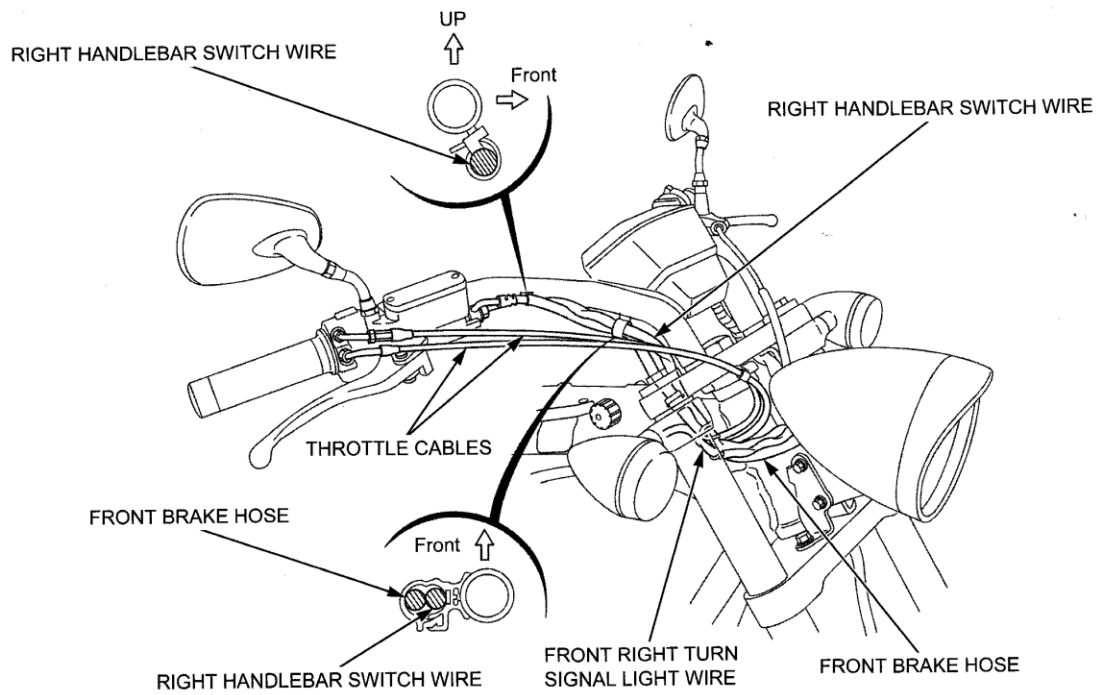
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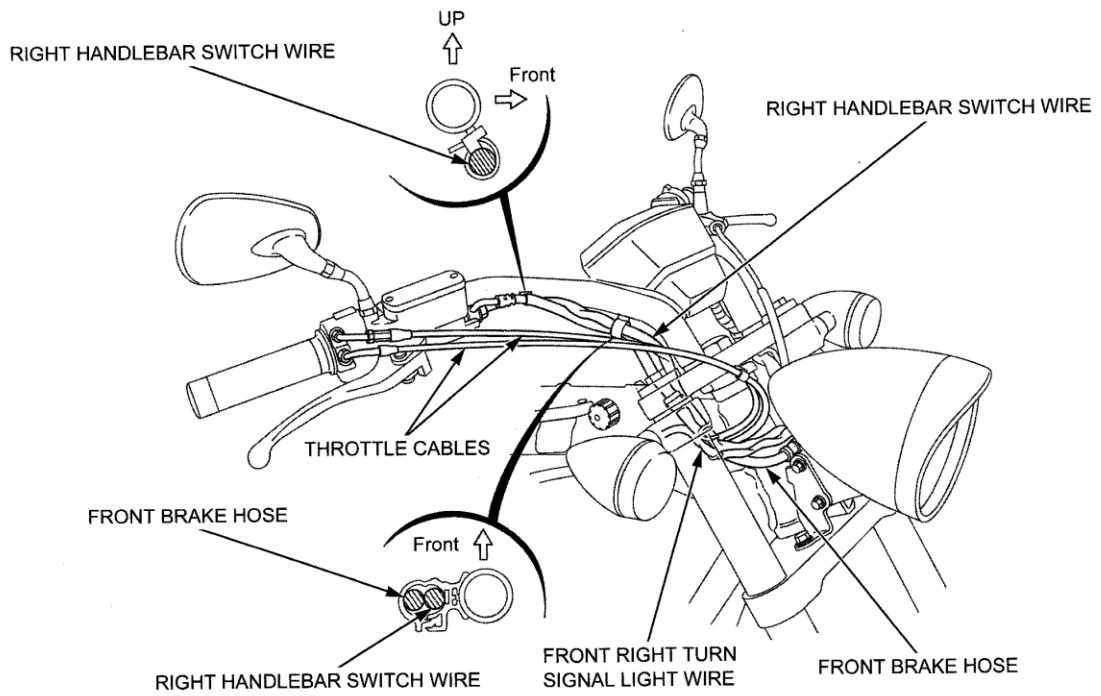
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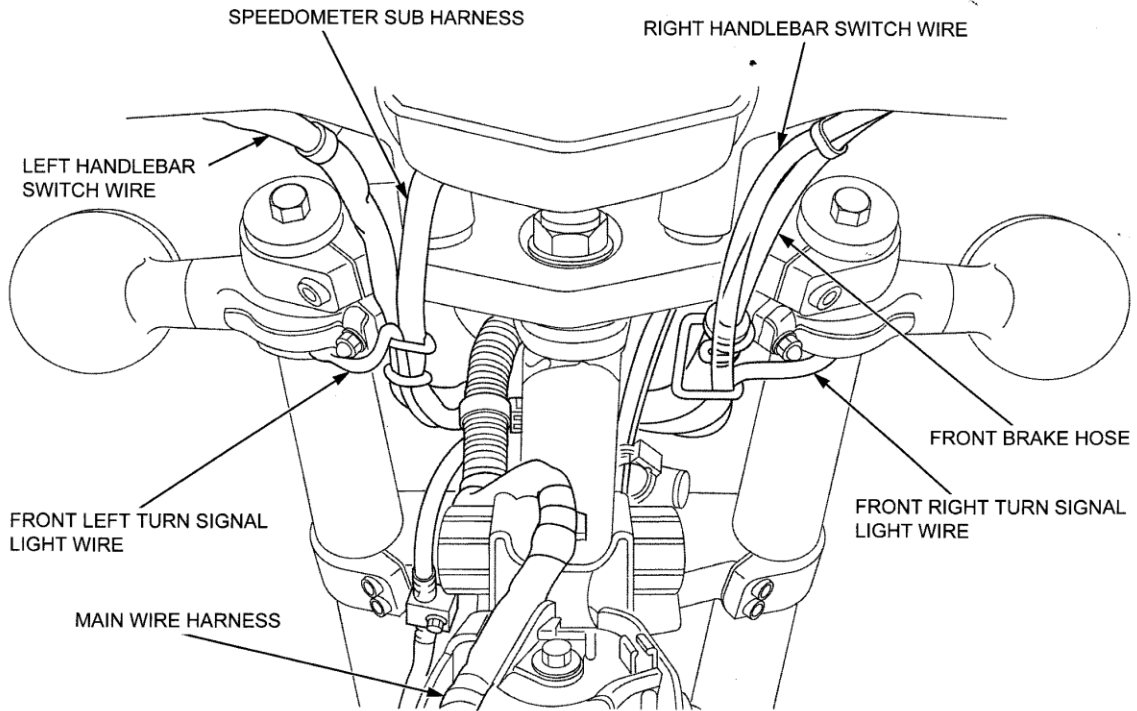


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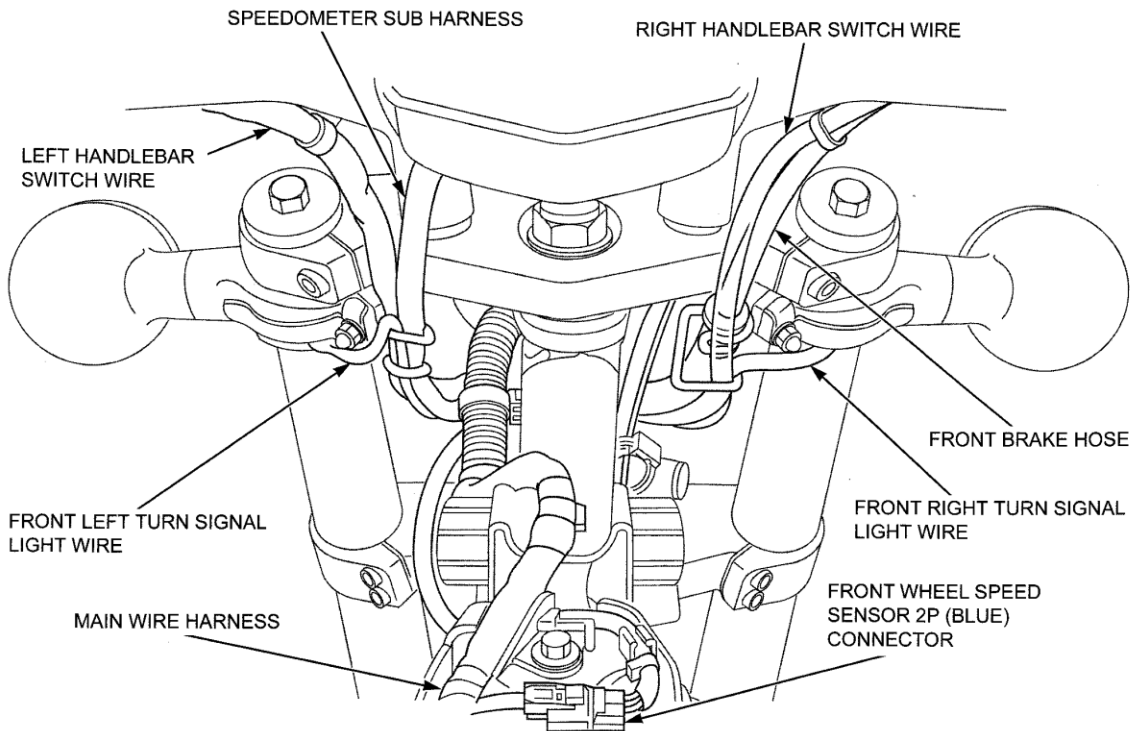


GENERAL INFORMATION

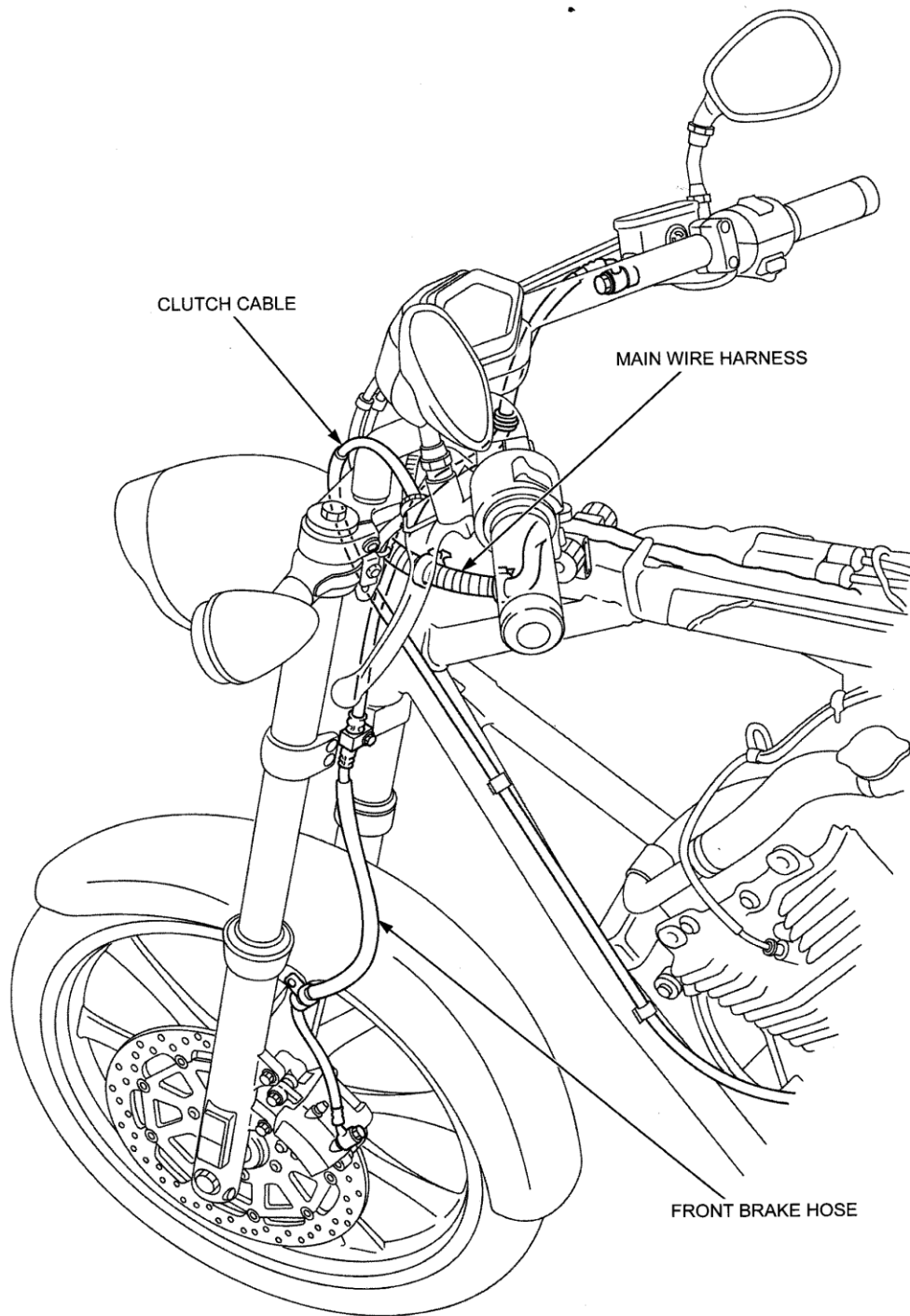
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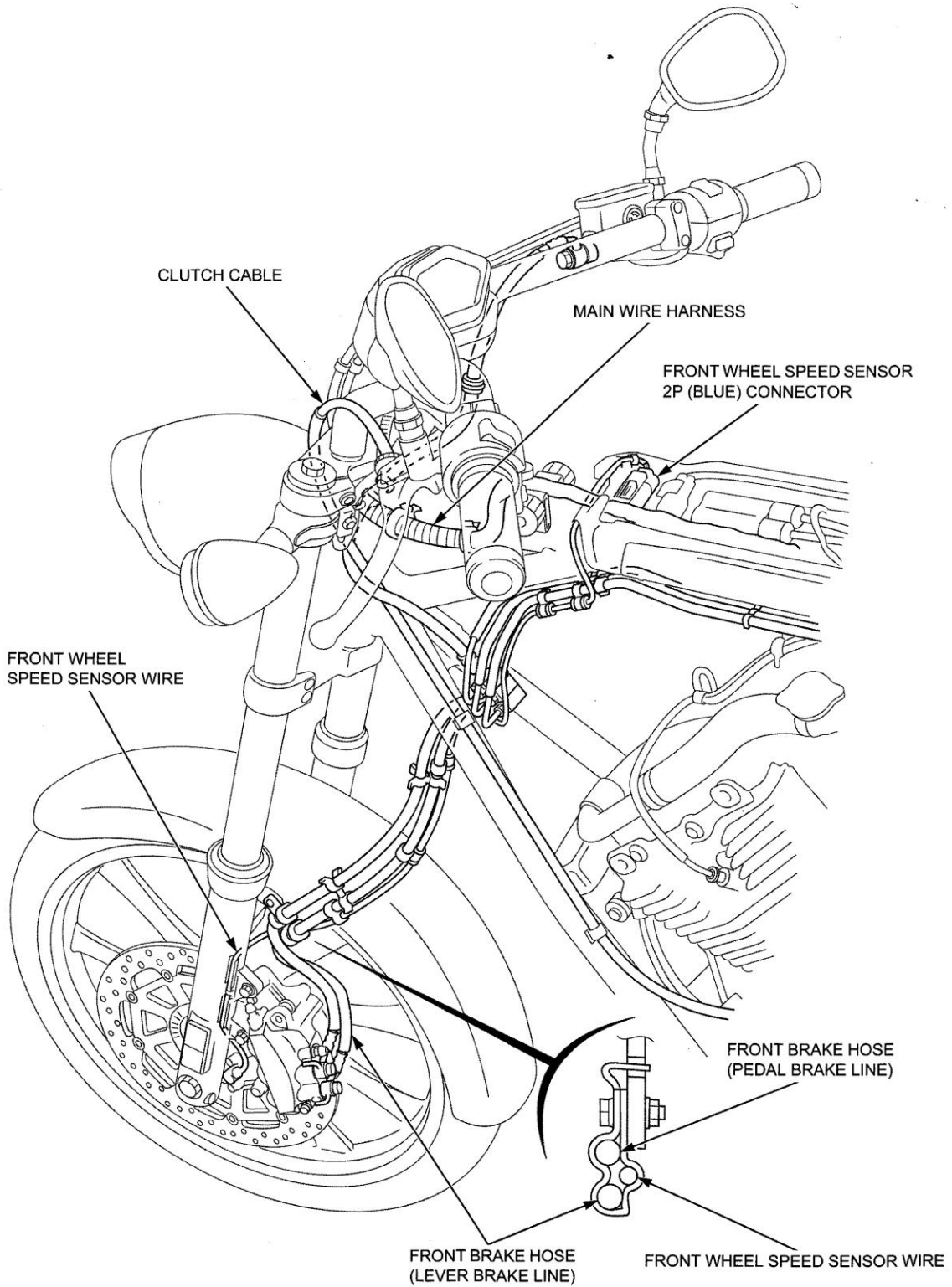


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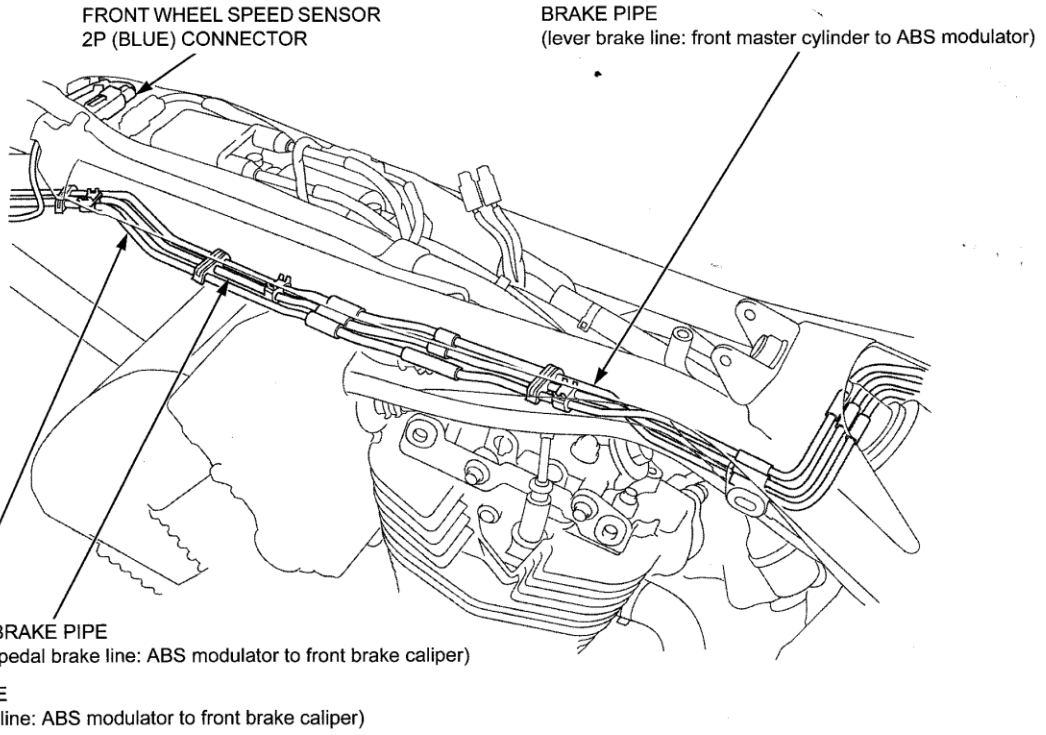


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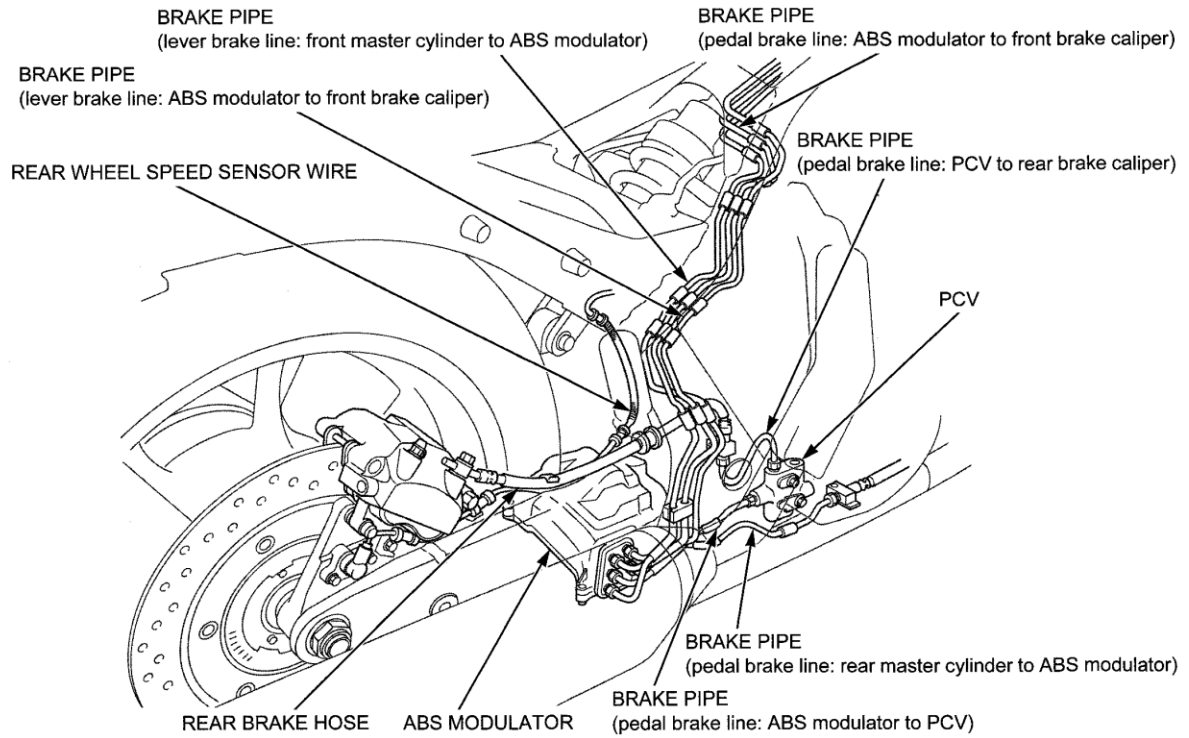
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VT1300CXA:

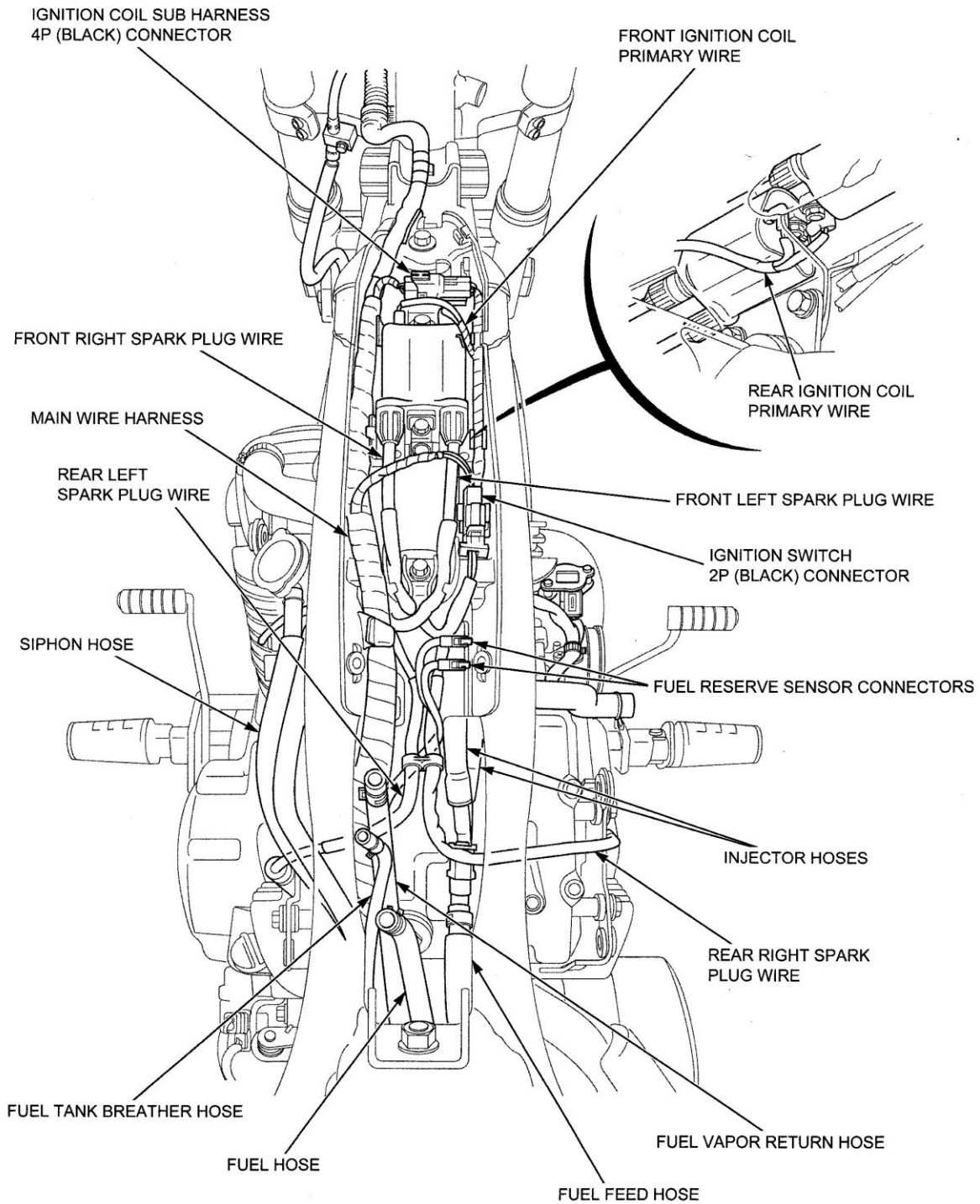


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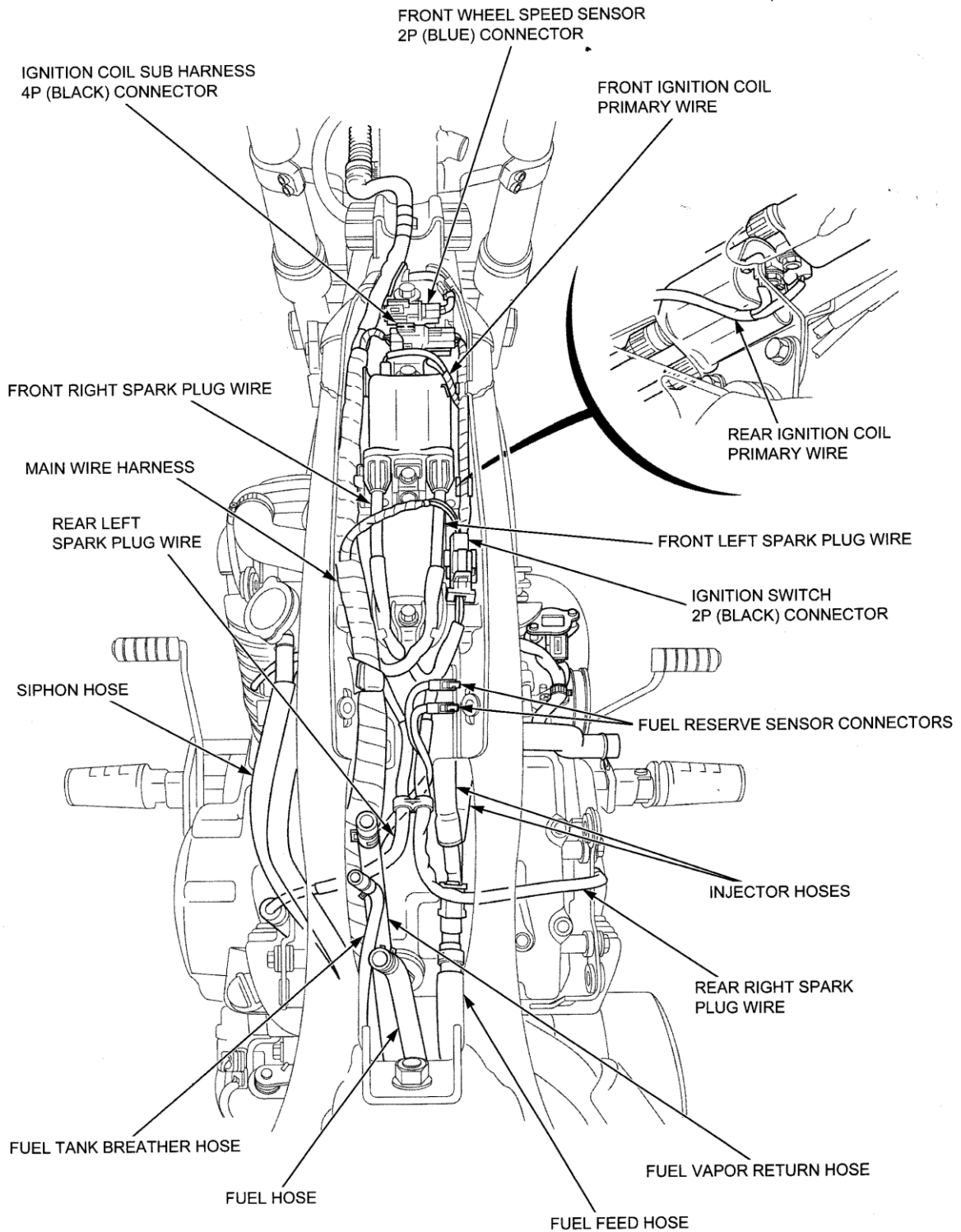


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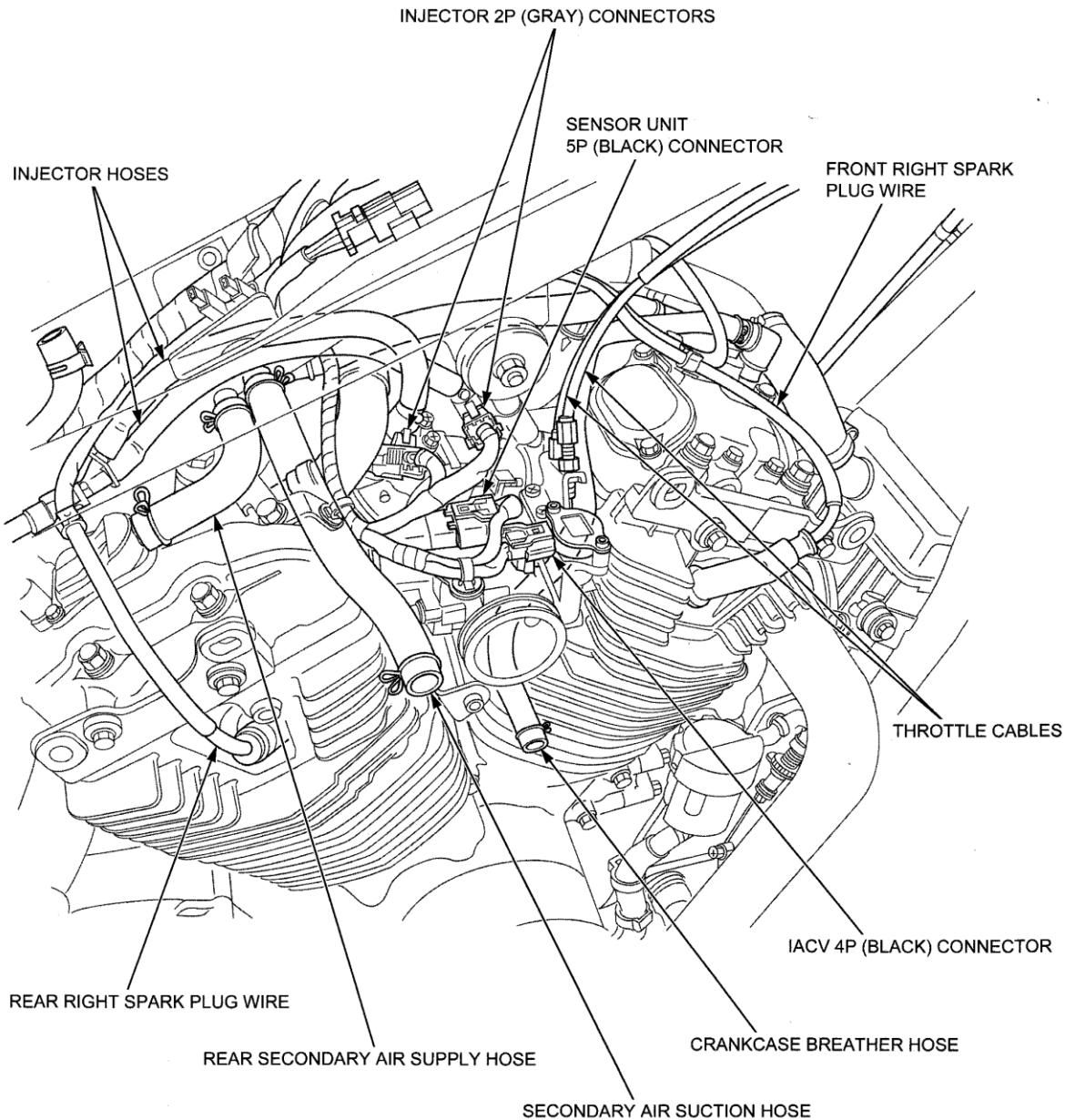
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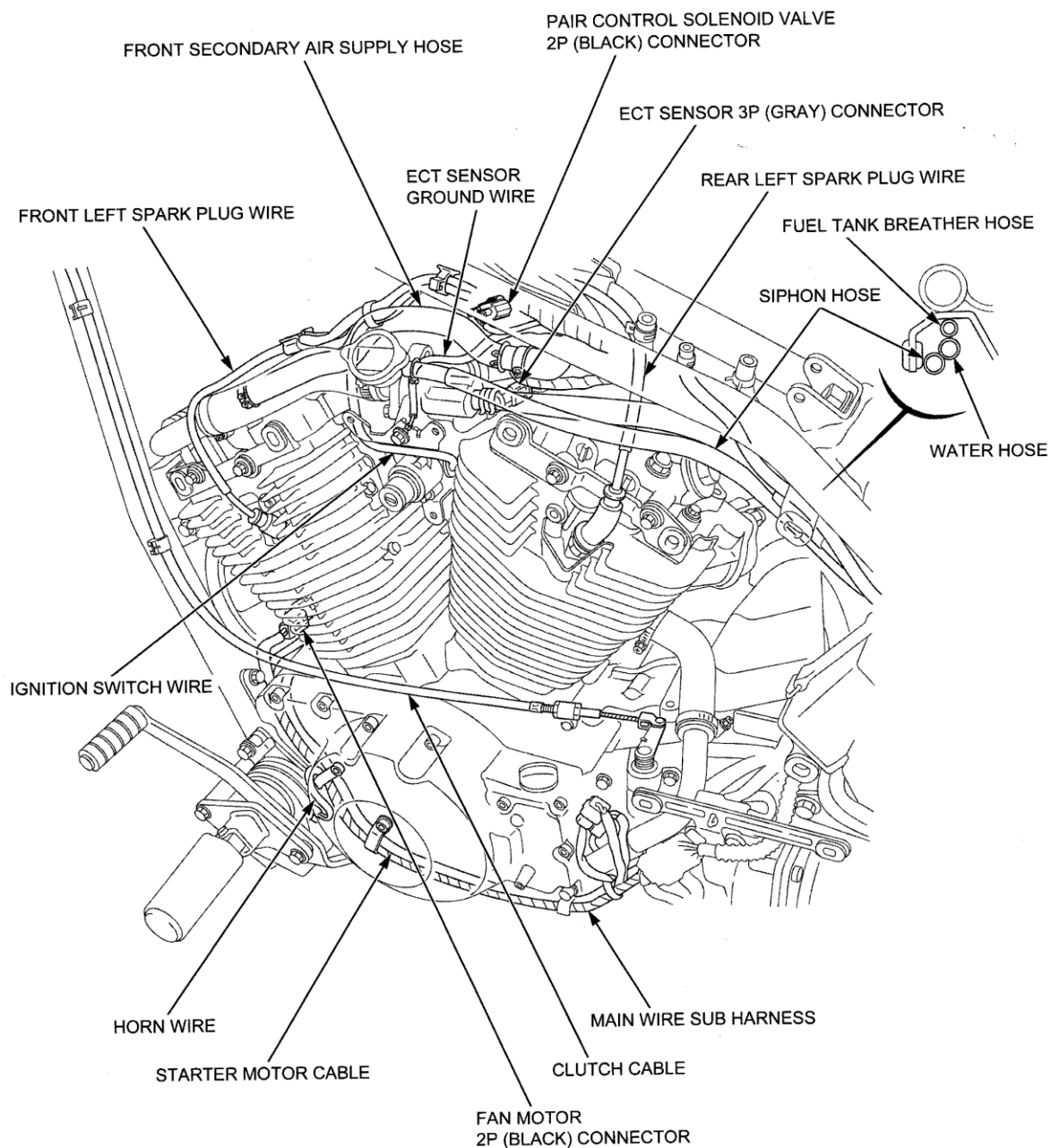
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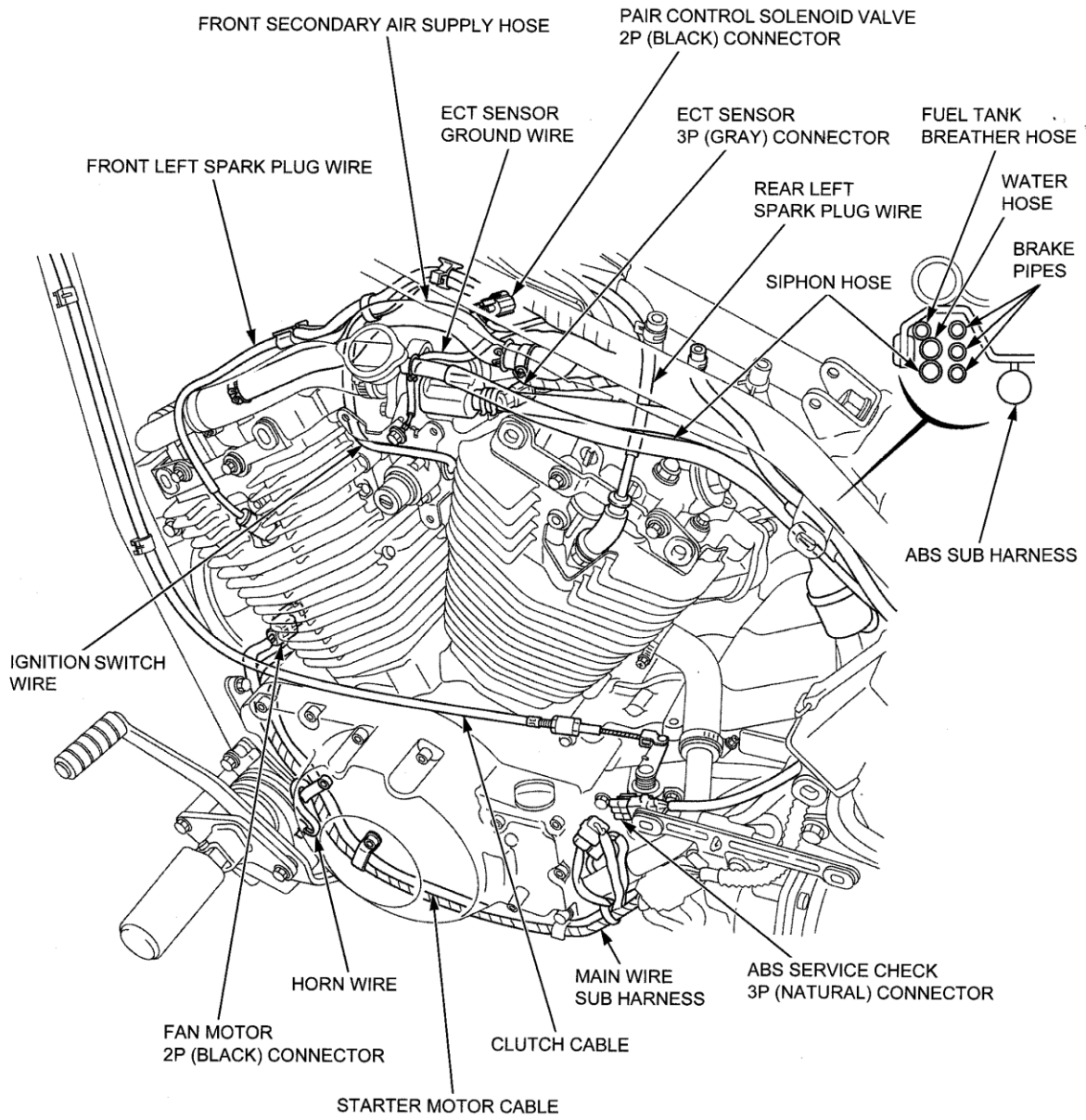


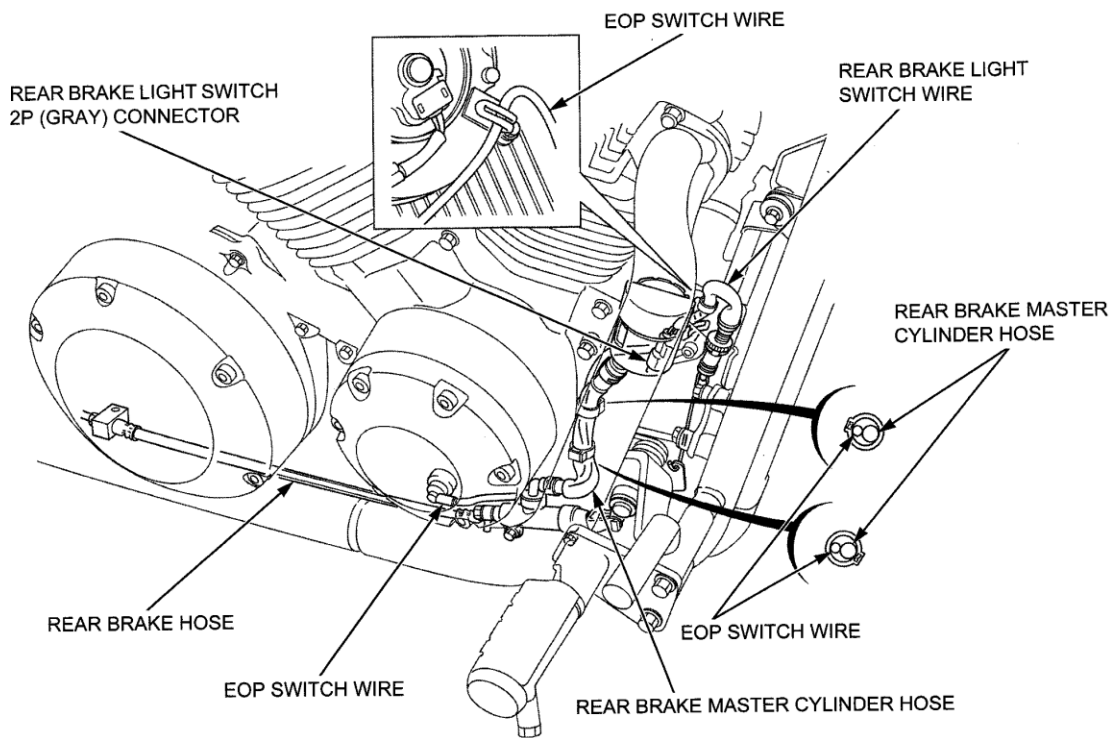
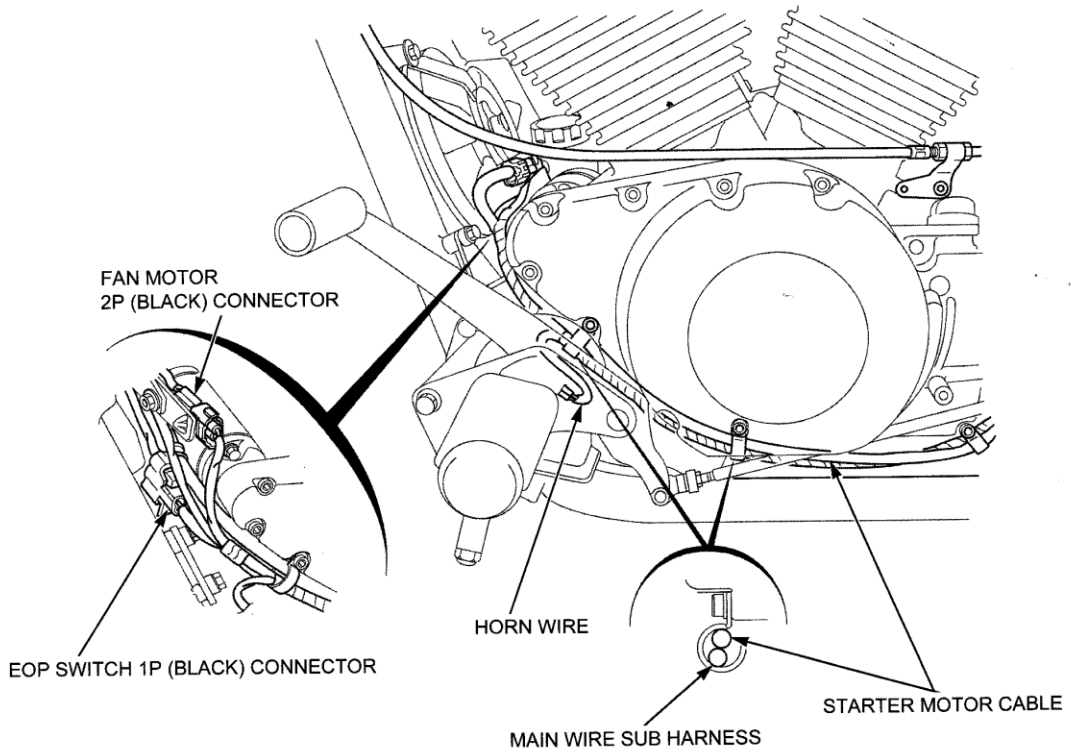
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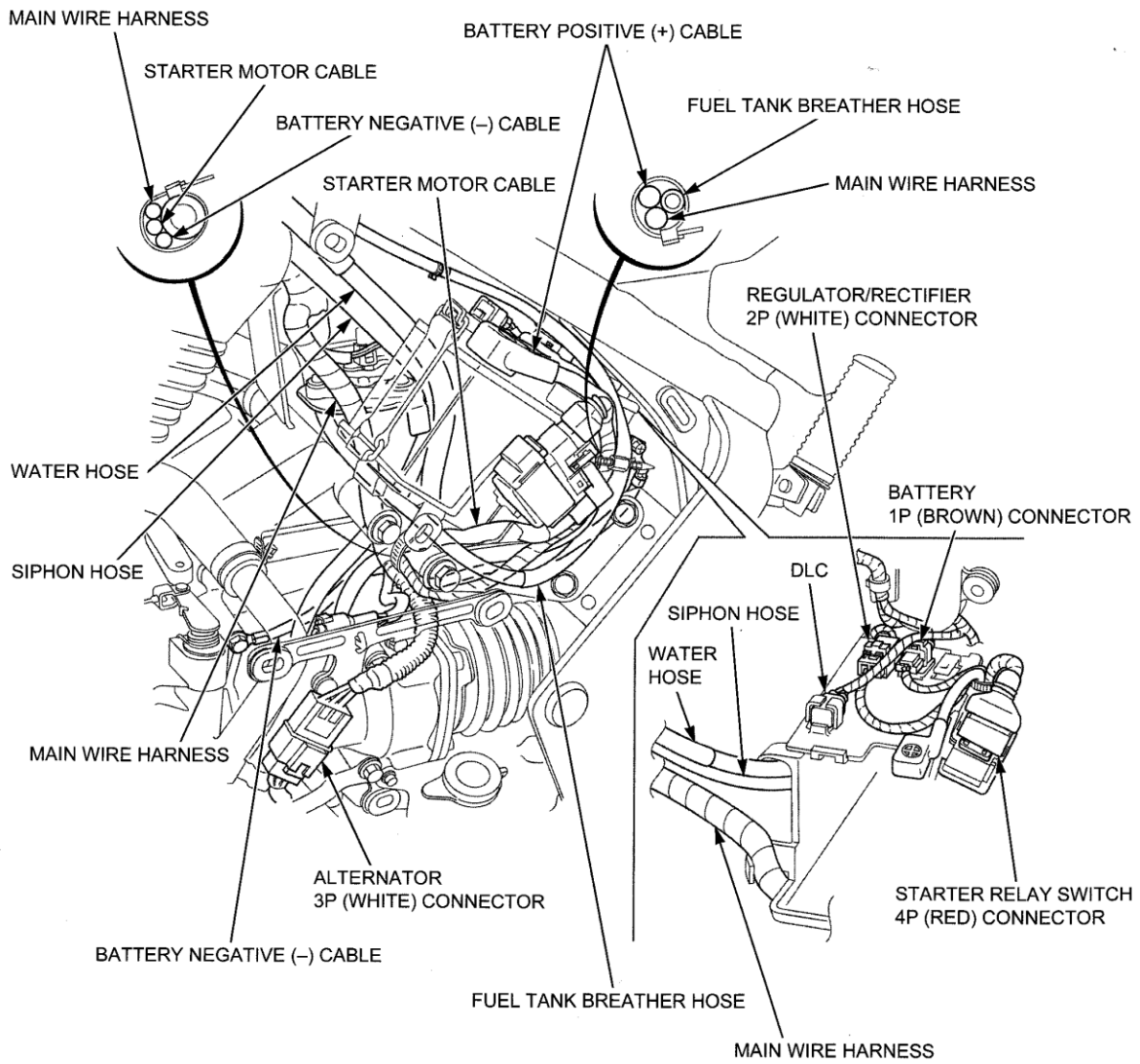
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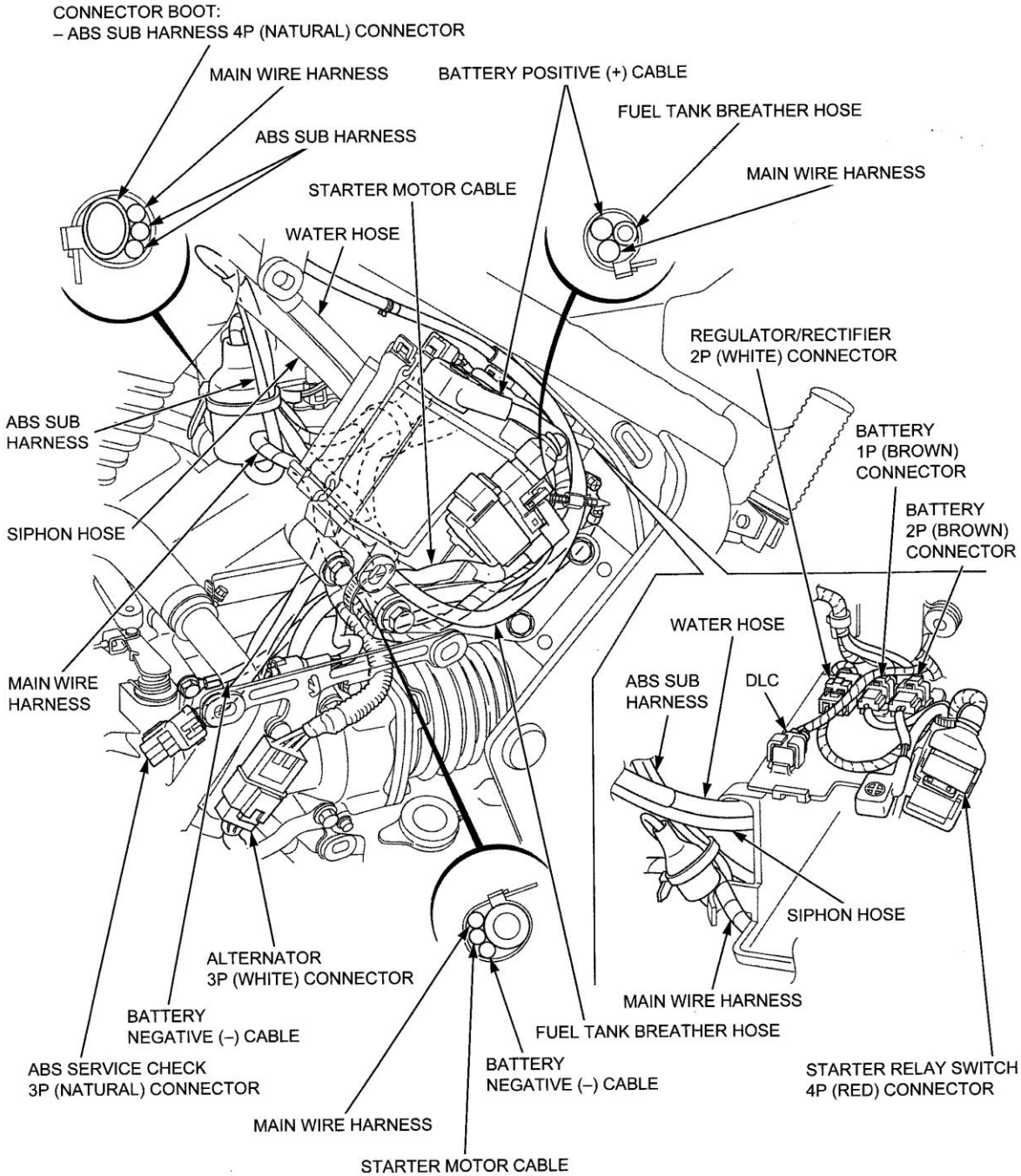


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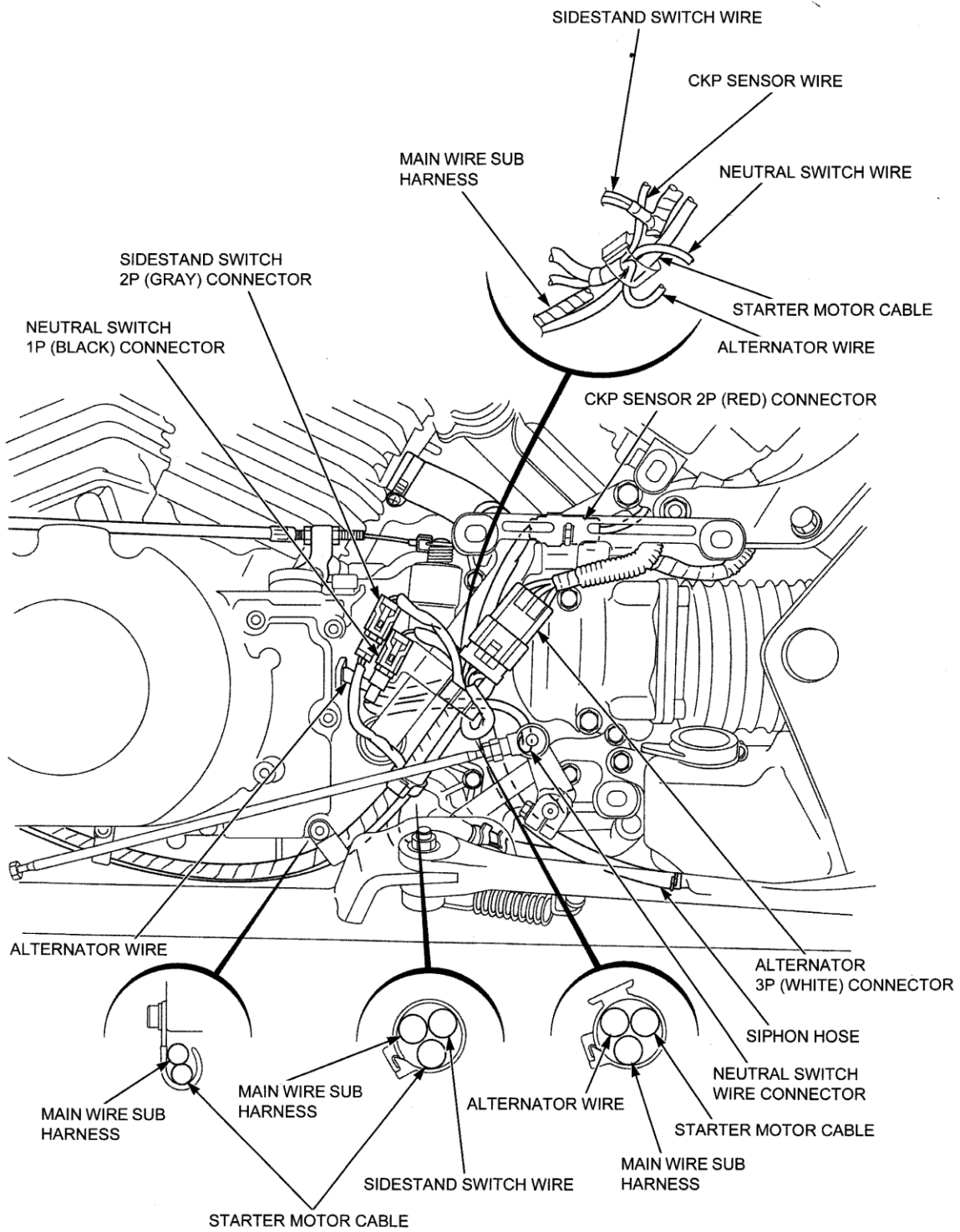


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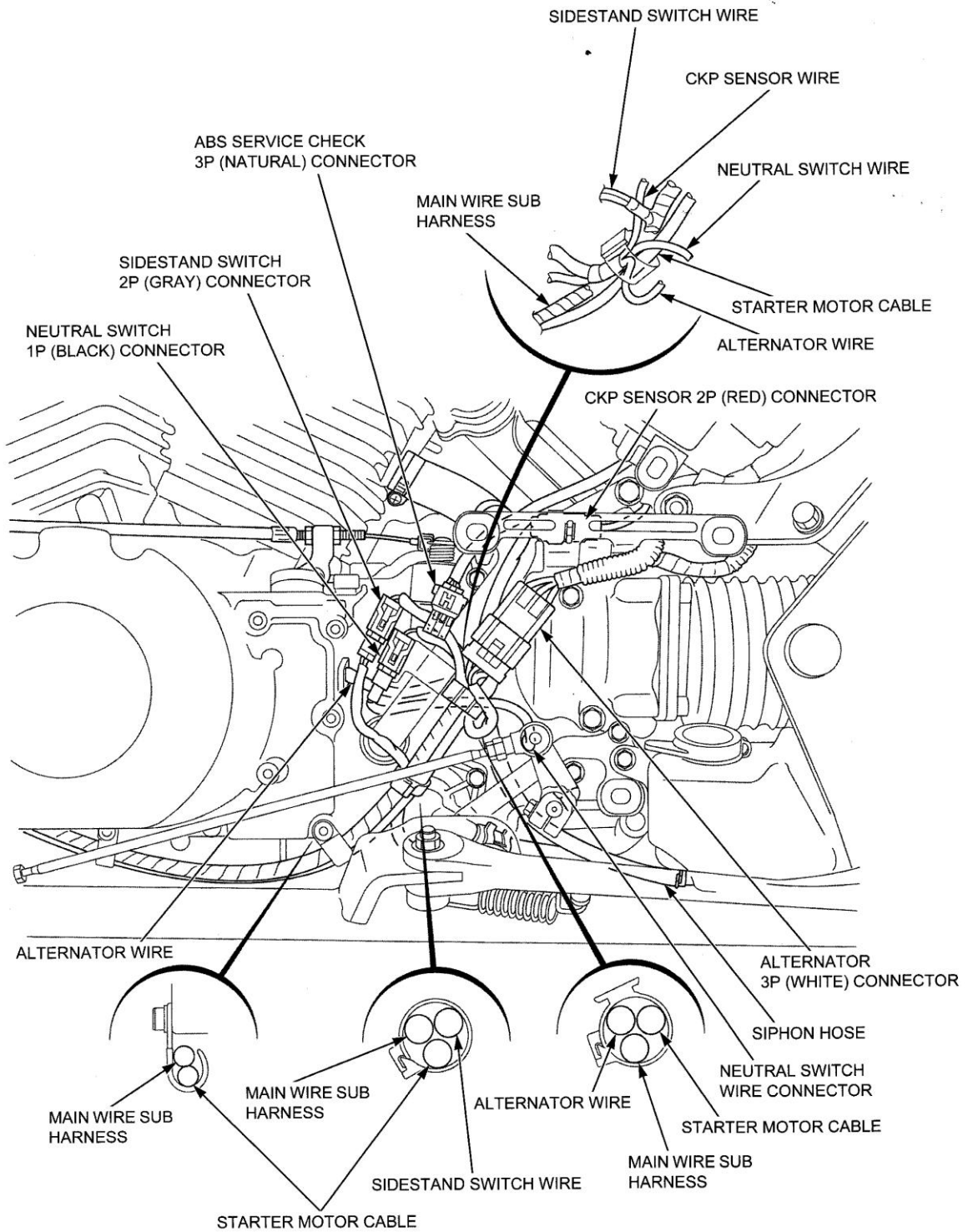


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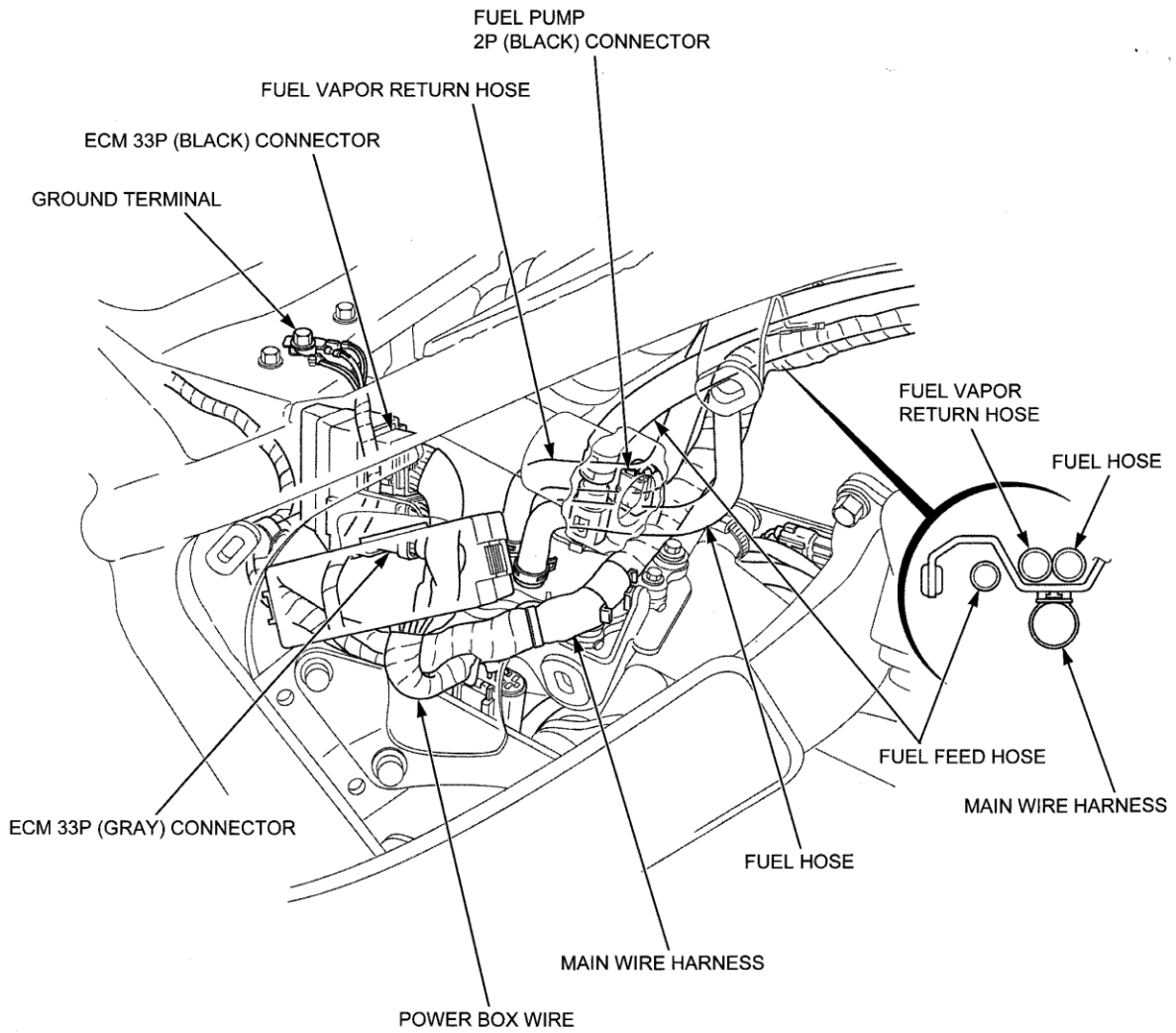


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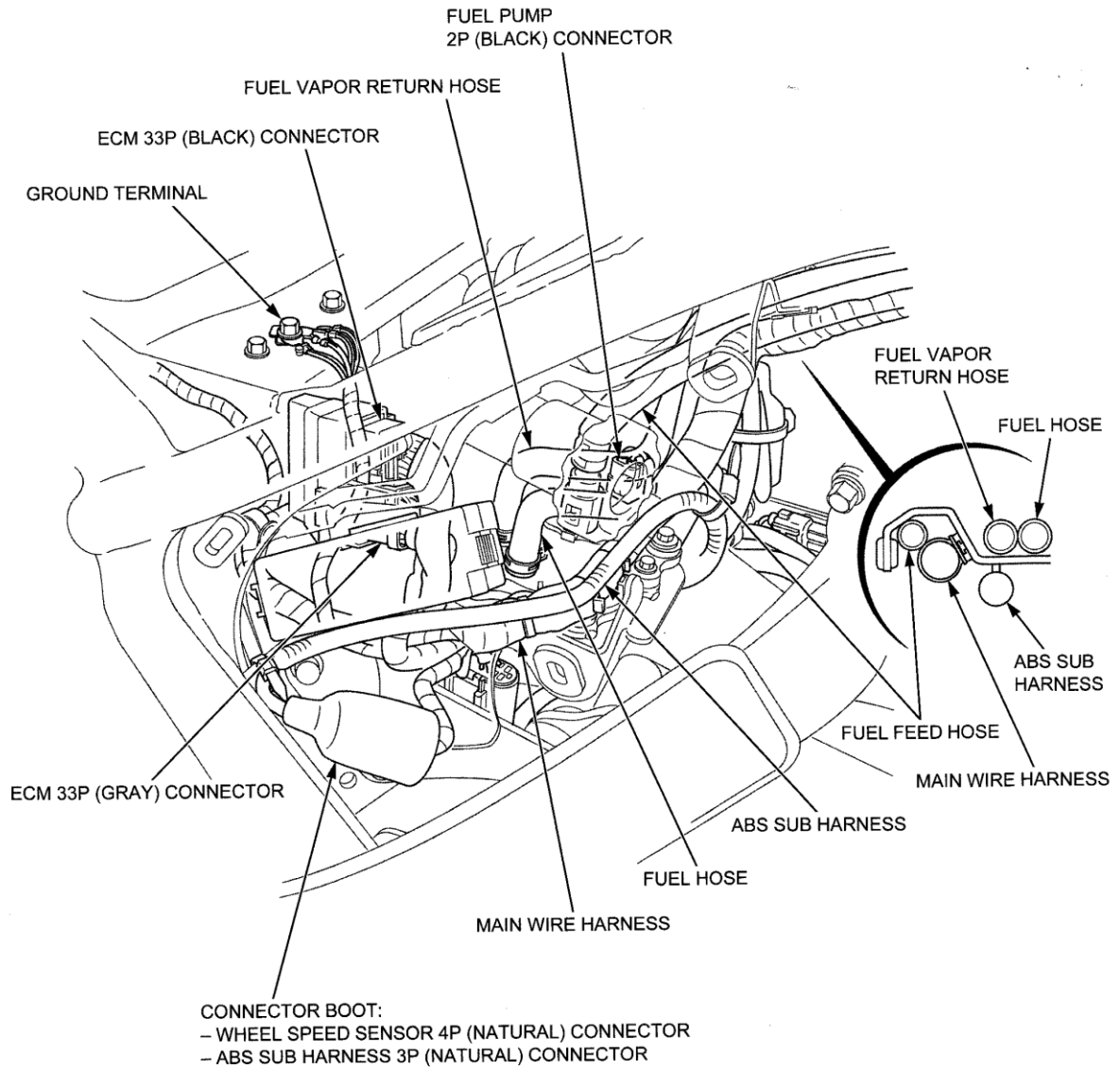


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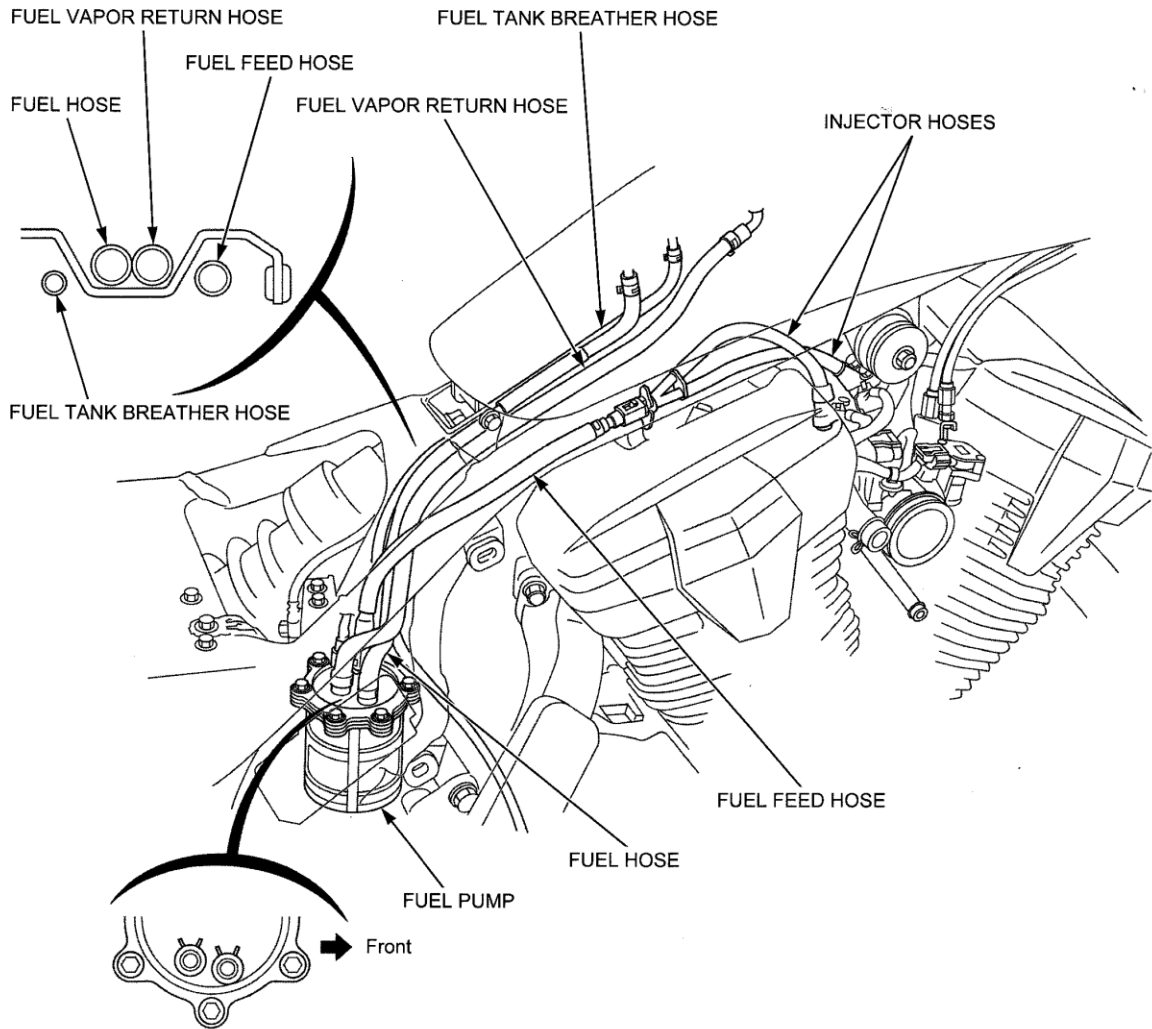
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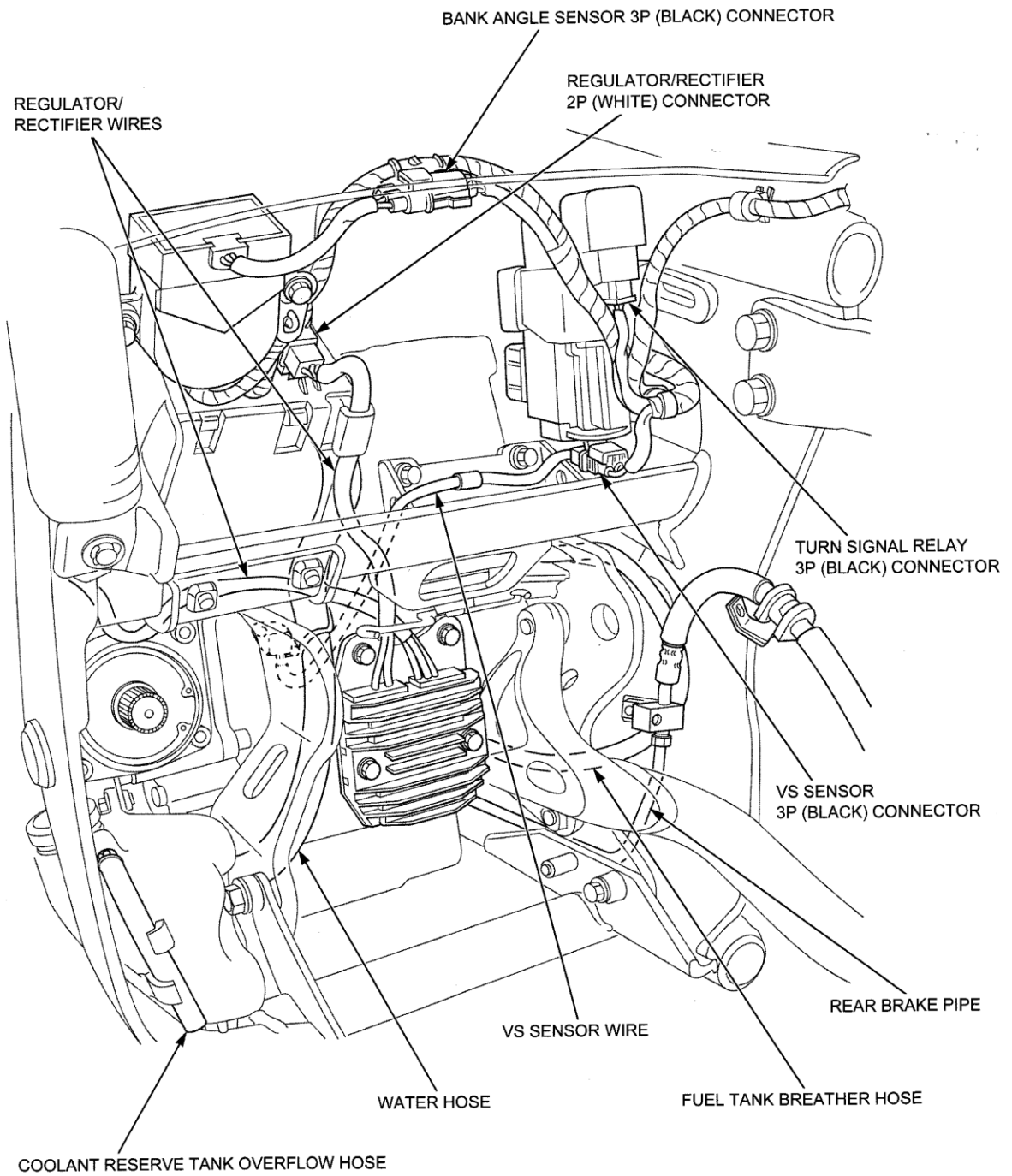
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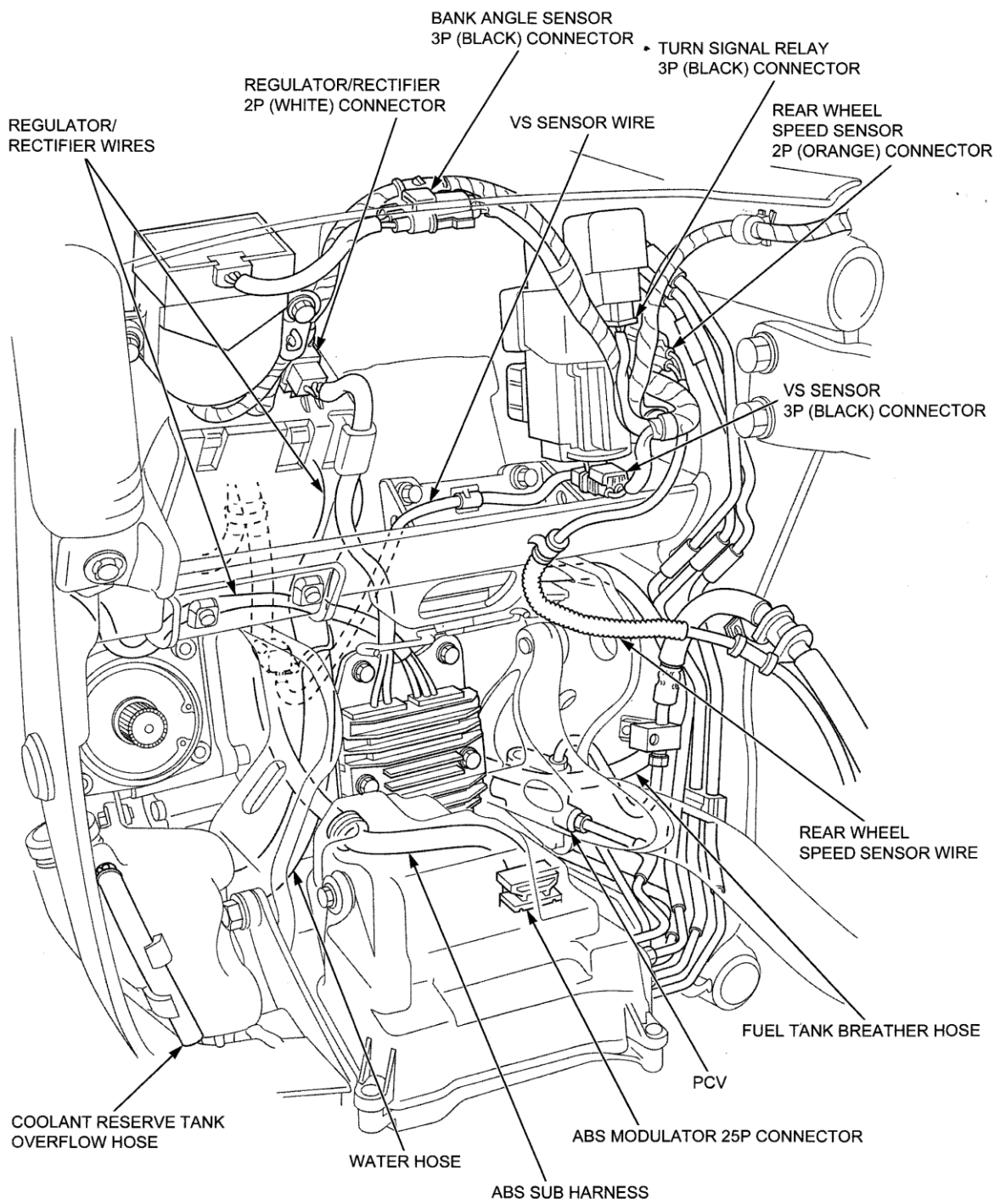


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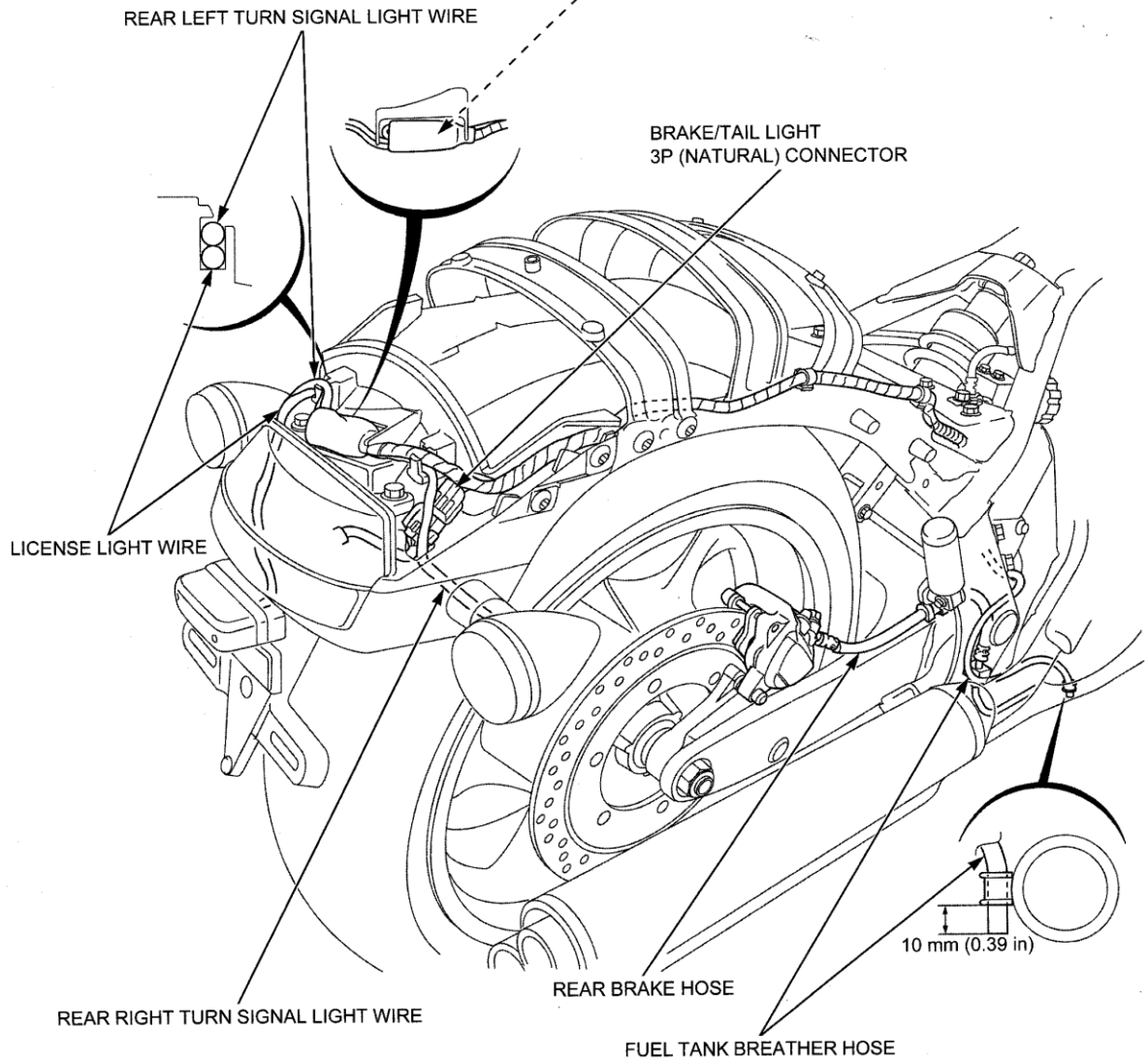
VT1300CXA:



VT1300CX:

CONNECTOR BOOT:

- REAR LEFT TURN SIGNAL LIGHT 2P (ORANGE) CONNECTOR
- REAR RIGHT TURN SIGNAL LIGHT 2P (LIGHT BLUE) CONNECTOR
- LICENSE LIGHT 2P (WHITE) CONNECTOR

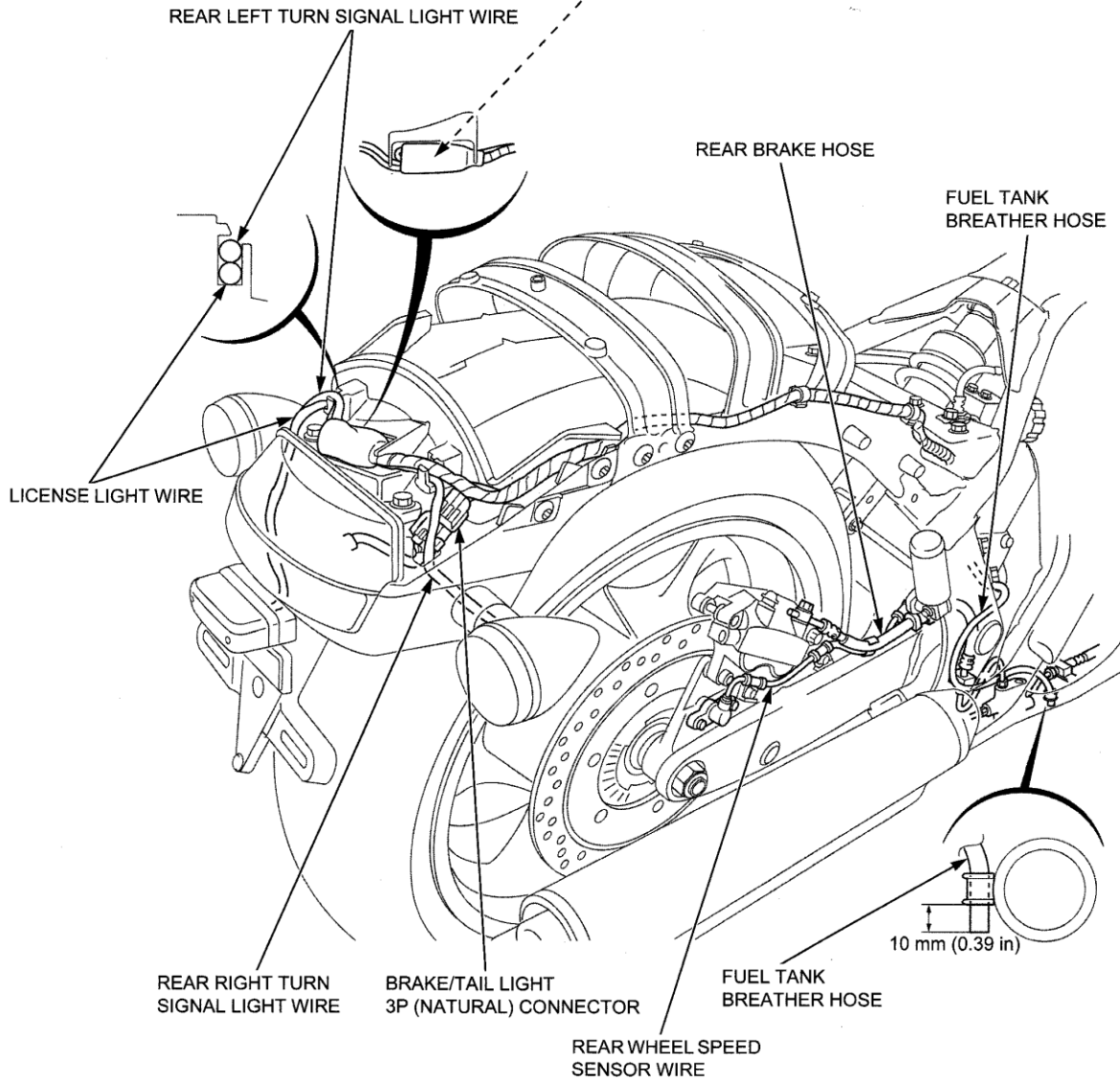


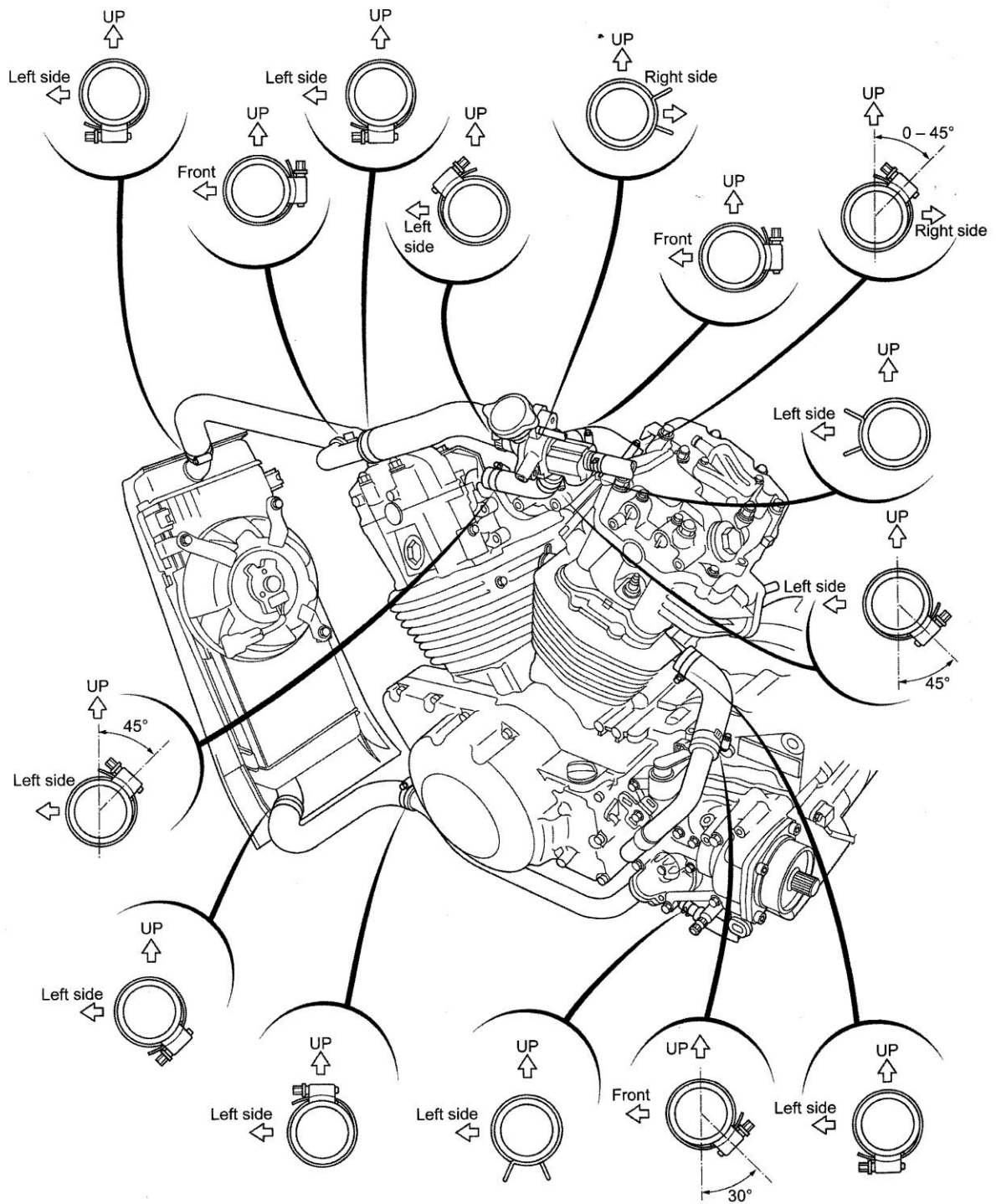
GENERAL INFORMATION

VT1300CXA:

CONNECTOR BOOT:

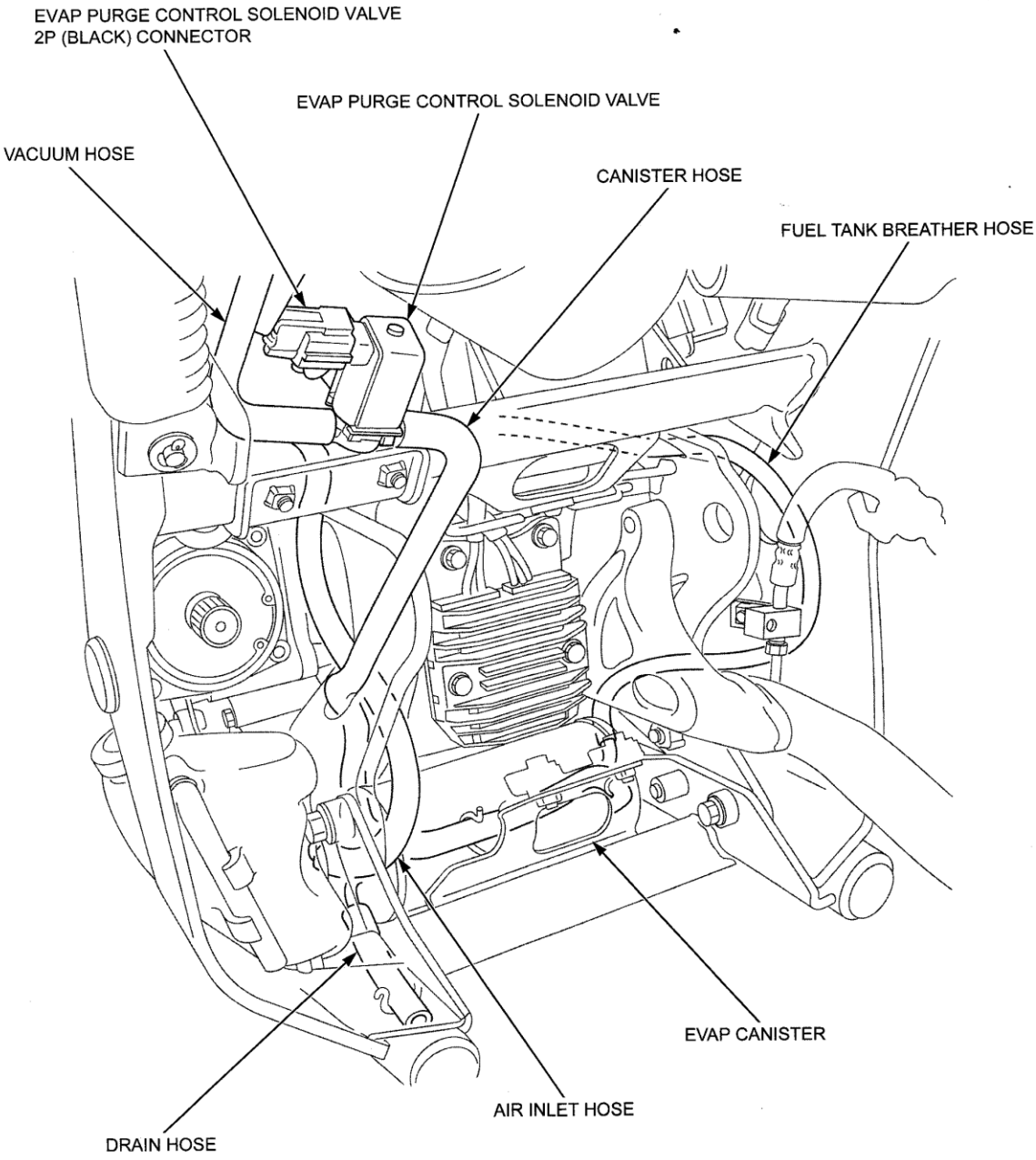
- REAR LEFT TURN SIGNAL LIGHT 2P (ORANGE) CONNECTOR
- REAR RIGHT TURN SIGNAL LIGHT 2P (LIGHT BLUE) CONNECTOR
- LICENSE LIGHT 2P (WHITE) CONNECTOR

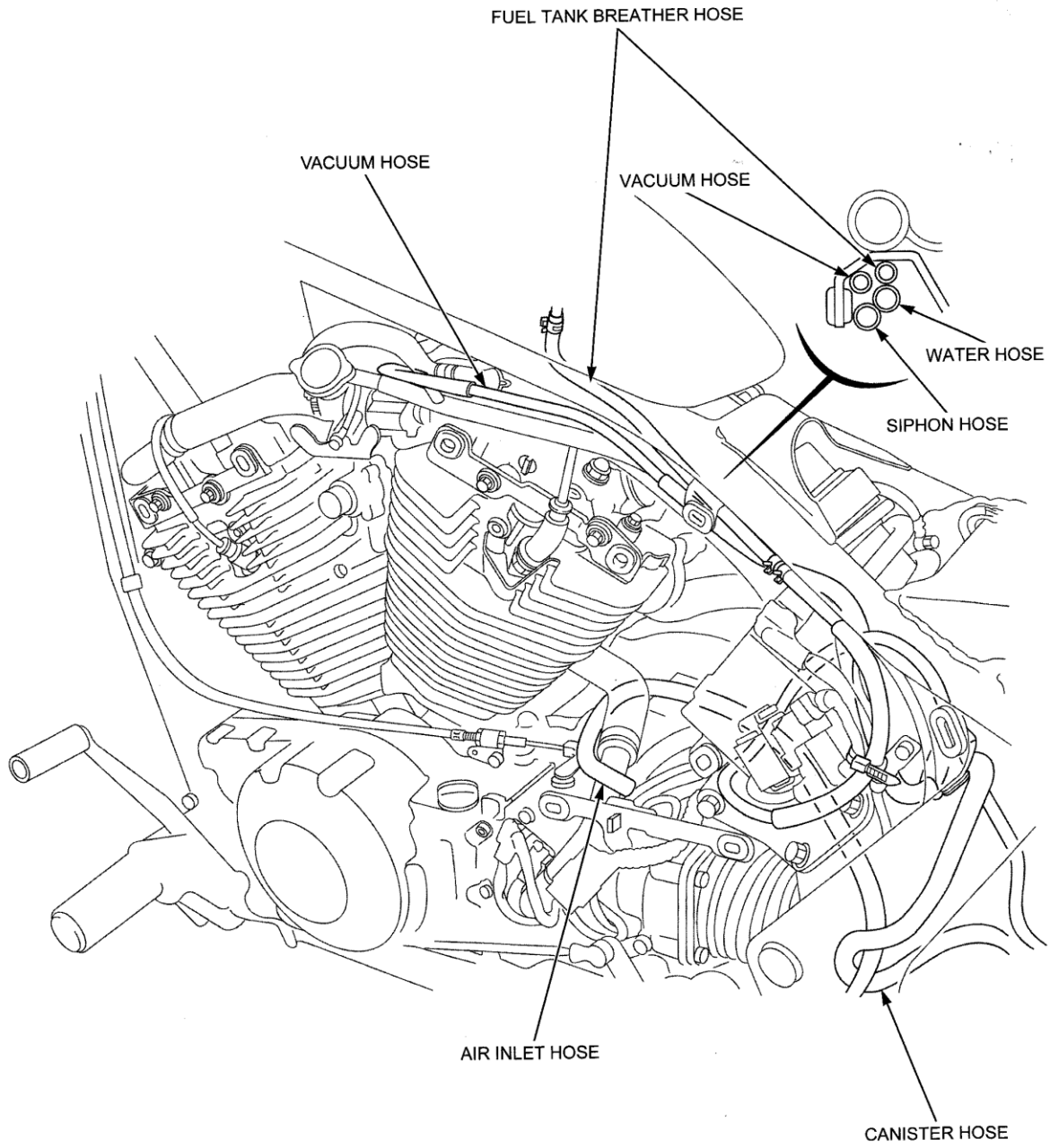




GENERAL INFORMATION

EVAP CONTROL SYSTEM (CALIFORNIA TYPE)





GENERAL INFORMATION

EMISSION CONTROL SYSTEMS

EXHAUST EMISSION REQUIREMENT

The U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB) and Transport Canada require manufacturers to certify that their motorcycles comply with applicable emissions standards during their useful life, when operated and maintained according to the instructions provided.

NOISE EMISSION REQUIREMENT

The EPA also requires that motorcycles built after January 1, 1983 comply with applicable noise emission standards for one year or 3,730 miles (6,000 km) after the time of sale to the ultimate purchaser, when operated and maintained according to the instructions provided.

WARRANTY COMPLIANCE

Compliance with the terms of the Distributor's Limited Warranty for Honda Motorcycle Emission Control Systems is necessary in order to keep the emissions system warranty in effect.

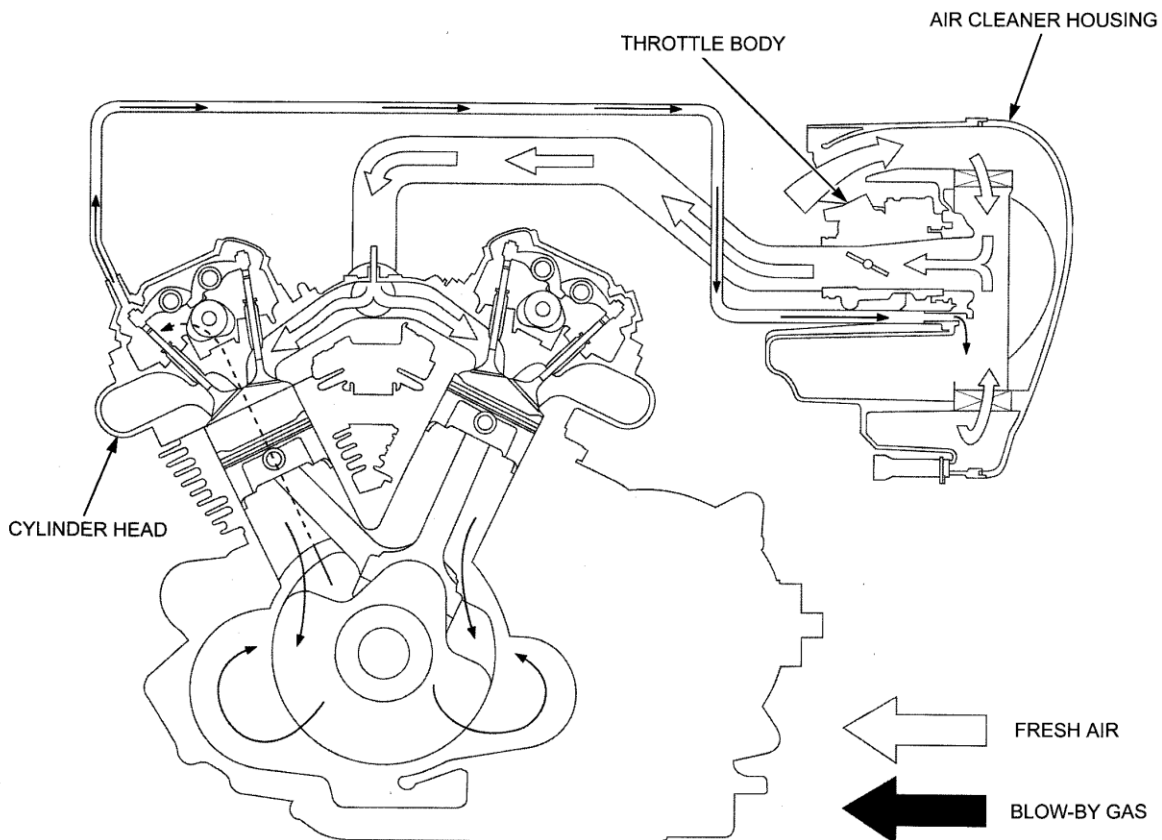
SOURCE OF EMISSIONS

The combustion process produces carbon monoxide (CO), oxides of nitrogen (NOx) and hydrocarbons (HC). Fuel evaporation produces hydrocarbon emissions. The control of hydrocarbons and oxides of nitrogen is very important because, under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic. Uncontrolled fuel evaporation also releases hydrocarbons to the atmosphere.

Honda Motor Co., Ltd. utilizes various systems (page 1-51) to reduce carbon monoxide and hydrocarbons.

CRANKCASE EMISSION CONTROL SYSTEM

The engine is equipped with a closed crankcase system to prevent discharging crankcase emissions into the atmosphere. Blow-by gas is returned to the combustion chamber through the front cylinder head, air cleaner housing and throttle body.



EXHAUST EMISSION CONTROL SYSTEM

The exhaust emission control system is composed of a pulse secondary air supply system, an oxidation catalytic converter and PGM-FI system.

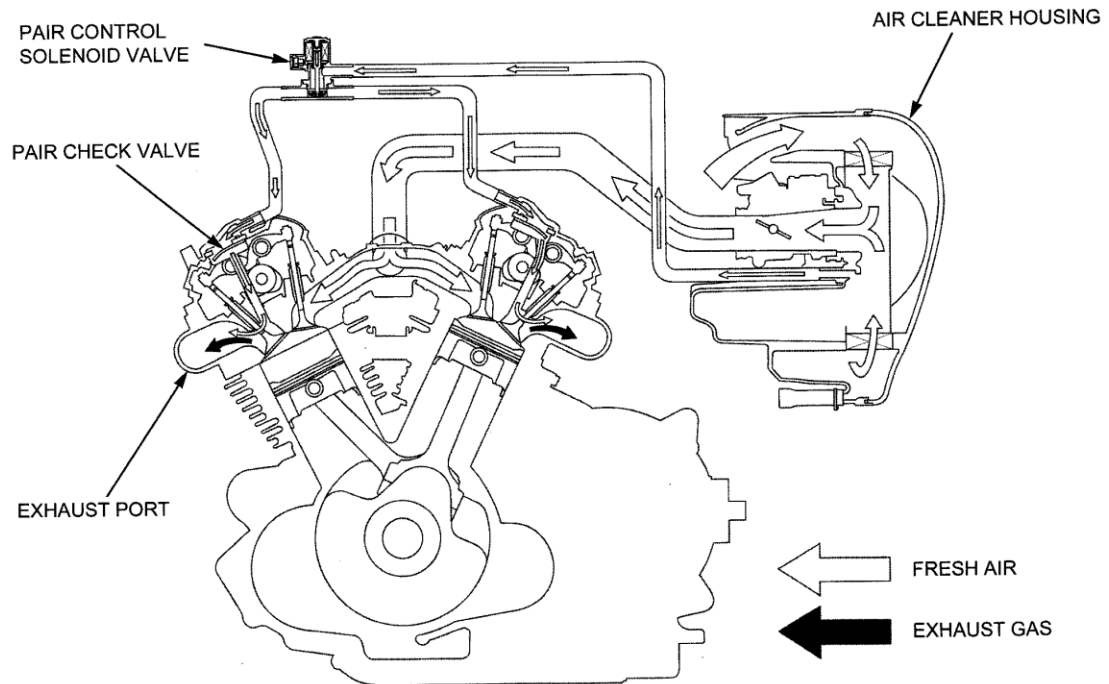
SECONDARY AIR SUPPLY SYSTEM

The pulse secondary air supply system introduces filtered air into the exhaust gases in the exhaust port. Fresh air is drawn into the exhaust port by the function of the PAIR control solenoid valve.

This charge of fresh air promotes burning of the unburned exhaust gases and changes a considerable amount of hydrocarbons and carbon monoxide into relatively harmless carbon dioxide and water vapor.

The PAIR check valve prevents reverse air flow through the system. The PAIR control solenoid valve is operated by the solenoid valve. The solenoid valve is controlled by the ECM, and the fresh air passage is opened/closed according the running condition (ECT/IAT/TP/MAP sensor and engine revolution).

No adjustments to the secondary air supply system should be made, although periodic inspection of the components is recommended.



OXIDATION CATALYTIC CONVERTER

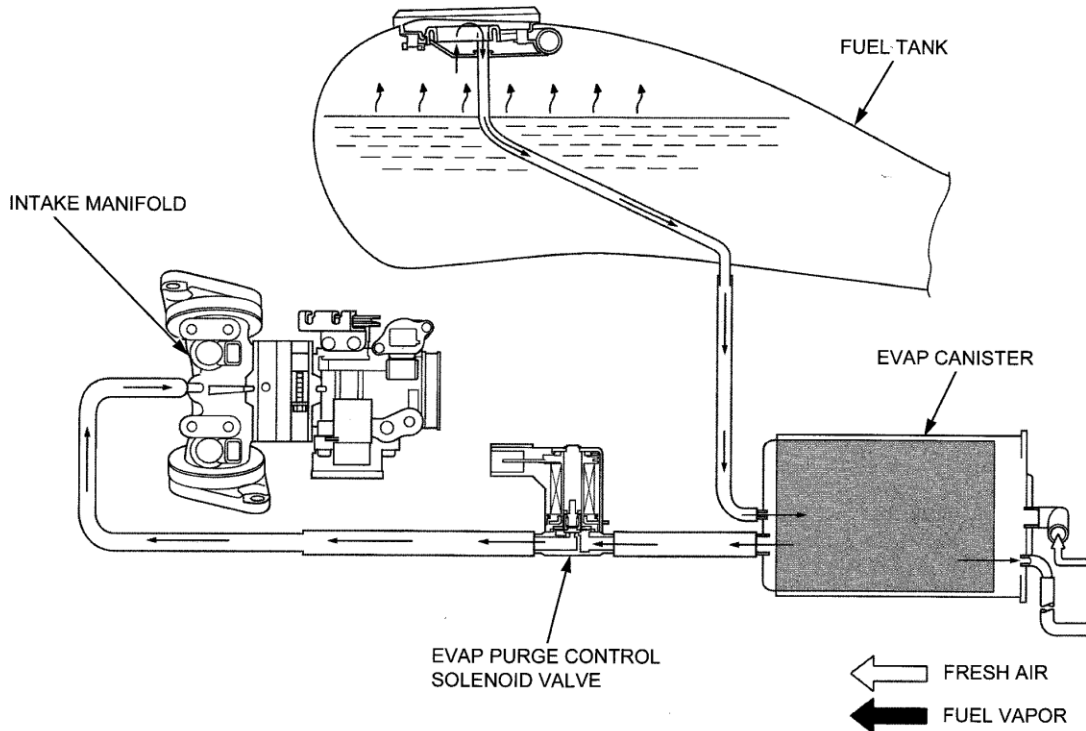
This motorcycle is equipped with an oxidation catalytic converter.

The oxidation catalytic converter is in the exhaust system. Through chemical reactions, it converts HC and CO in the engine's exhaust to carbon dioxide (CO₂) and water vapor.

GENERAL INFORMATION

EVAPORATIVE EMISSION CONTROL SYSTEM (CALIFORNIA TYPE)

This model complies with CARB evaporative emission requirements. Fuel vapor from the fuel tank is routed into the evaporative emission (EVAP) canister where it is absorbed and stored while the engine is stopped. When the engine is running and the EVAP purge control solenoid valve is open, fuel vapor in the EVAP canister is drawn into the engine through the intake manifold.



NOISE EMISSION CONTROL SYSTEM

TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED: U.S. Federal law prohibits, and Canadian provincial law may prohibit, the following acts or the causing thereof: (1) The removal or rendering inoperative by any person, other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any vehicle for the purpose of noise control prior to its sale or delivery to the ultimate customer or while it is in use; (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW:

1. Removal of, or puncturing of the muffler, baffles, header pipes or any other component which conducts exhaust gases.
2. Removal of, or puncturing of any part of the intake system.
3. Lack of proper maintenance.
4. Replacing any moving parts of the vehicle, or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.

FUEL PERMEATION EMISSION CONTROL SYSTEM

This motorcycle complies with the Fuel Permeation Emission Control regulations of the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment Canada (EC). The fuel tank, fuel hoses, and fuel vapor charge hoses used on this motorcycle incorporate fuel permeation control technologies. Tampering with the fuel tank, fuel hoses, or fuel vapor charge hoses to reduce or defeat the effectiveness of the fuel permeation technologies is prohibited by federal regulations.