

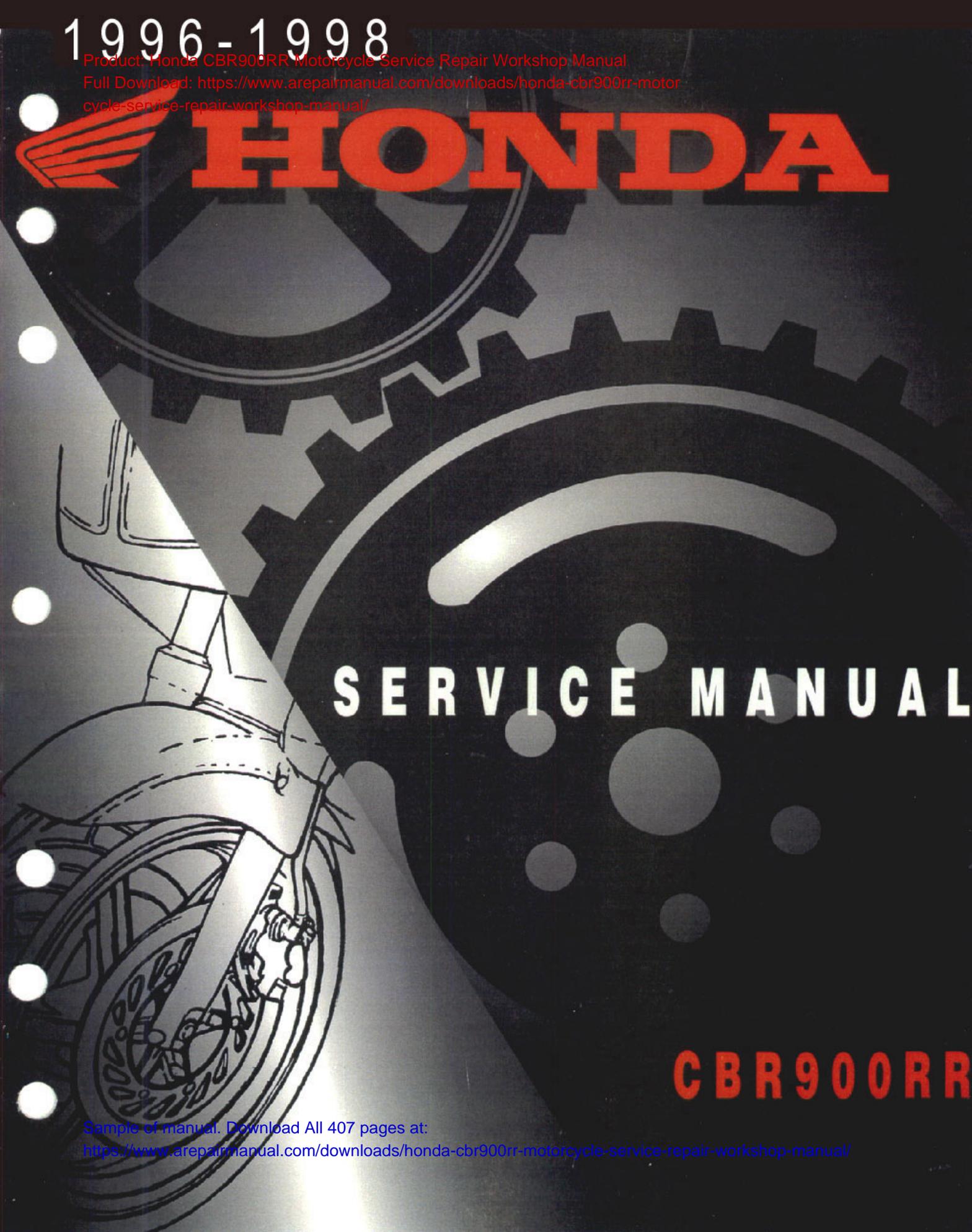
1996-1998

Product: Honda CBR900RR Motorcycle Service Repair Workshop Manual

Full Download: <https://www.aresairmanual.com/downloads/honda-cbr900rr-motorcycle-service-repair-workshop-manual/>



# HONDA



## SERVICE MANUAL

### CBR900RR

Sample of manual. Download All 407 pages at:

<https://www.aresairmanual.com/downloads/honda-cbr900rr-motorcycle-service-repair-workshop-manual/>

# HOW TO USE THIS MANUAL

# CONTENTS

This service manual describes the service procedures for the CBR900RR.

Follow the Maintenance Schedule (Section 3) recommendations to ensure that the vehicle is in peak operating condition and the emission levels are within the standards set by the U.S. Environmental Protection Agency and California Air Resources Board.

Performing the first scheduled maintenance is very important. It compensates for the initial wear that occurs during the break-in period.

Sections 1 and 3 apply to the whole motorcycle. Section 2 illustrates procedures for removal/installation of components that may be required to perform service described in the following sections. Section 4 through 19 describe parts of the motorcycle, grouped according to location.

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

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

If you don't know the source of the trouble, go to section 21, Troubleshooting.

	<b>GENERAL INFORMATION</b>	<b>1</b>
	<b>FRAME/BODY PANELS/EXHAUST SYSTEM</b>	<b>2</b>
	<b>MAINTENANCE</b>	<b>3</b>
<b>ENGINE AND DRIVE TRAIN</b>	<b>LUBRICATION SYSTEM</b>	<b>4</b>
	<b>FUEL SYSTEM</b>	<b>5</b>
	<b>COOLING SYSTEM</b>	<b>6</b>
	<b>ENGINE REMOVAL/INSTALLATION</b>	<b>7</b>
	<b>CYLINDER HEAD/VALVES</b>	<b>8</b>
	<b>CLUTCH/GEARSHIFT LINKAGE</b>	<b>9</b>
	<b>ALTERNATOR/STARTER CLUTCH</b>	<b>10</b>
	<b>CRANKCASE/PISTON/CYLINDER</b>	<b>11</b>
	<b>CRANKSHAFT/TRANSMISSION</b>	<b>12</b>
<b>CHASSIS</b>	<b>FRONT WHEEL/SUSPENSION/STEERING</b>	<b>13</b>
	<b>REAR WHEEL/SUSPENSION</b>	<b>14</b>
	<b>HYDRAULIC BRAKE</b>	<b>15</b>
<b>ELECTRICAL</b>	<b>BATTERY/CHARGING SYSTEM</b>	<b>16</b>
	<b>IGNITION SYSTEM</b>	<b>17</b>
	<b>ELECTRIC STARTER</b>	<b>18</b>
	<b>LIGHTS/METERS/SWITCHES</b>	<b>19</b>
	<b>WIRING DIAGRAM</b>	<b>20</b>
	<b>TROUBLESHOOTING</b>	<b>21</b>
	<b>INDEX</b>	<b>22</b>

Sample of manual. Download All 407 pages at: <https://www.aresairmanual.com/downloads/honda-cbr900rr-motorcycle-service-repair-workshop-manual/>

# 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.

	<p>Replace the part(s) with new one(s) before assembly.</p>
	<p>Use recommended engine oil, unless otherwise specified.</p>
	<p>Use molybdenum oil solution (mixture of the engine oil and molybdenum grease in a ratio of 1 : 1).</p>
	<p>Use multi-purpose grease (Lithium based multi-purpose grease NLGI #2 or equivalent).</p>
	<p>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</p>
	<p>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.          Honda Moly 60 (U.S.A. only)          Rocol ASP manufactured by Rocol Limited, U.K.          Rocol Paste manufactured by Sumico Lubricant, Japan</p>
	<p>Use silicone grease.</p>
	<p>Apply a locking agent. Use a middle strength locking agent unless otherwise specified.</p>
	<p>Apply sealant.</p>
	<p>Use DOT 4 brake fluid. Use the recommended brake fluid unless otherwise specified.</p>
	<p>Use Fork or Suspension Fluid.</p>

GENERAL SAFETY	1-1	LUBRICATION & SEAL POINTS	1-19
SERVICE RULES	1-2	CABLE & HARNESS ROUTING	1-22
MODEL IDENTIFICATION	1-3	EMISSION CONTROL SYSTEMS (U.S.A. ONLY)	1-36
SPECIFICATIONS	1-4	EMISSION CONTROL INFORMATION LABELS (U.S.A. ONLY)	1-39
TORQUE VALUES	1-13		
TOOLS	1-17		

## GENERAL SAFETY

### CARBON MONOXIDE

If the engine must be running to do some work, make sure the area is well ventilated. Never run the engine in an enclosed area.

#### ▲ WARNING

- *The exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness and may lead to death.*

Run the engine in an open area or with an exhaust evacuation system in an enclosed area.

### GASOLINE

Work in a well ventilated area. Keep cigarettes, flames or sparks away from the work area or where gasoline is stored.

#### ▲ WARNING

- *Gasoline is extremely flammable and is explosive under certain conditions. KEEP OUT OF REACH OF CHILDREN.*

### HOT COMPONENTS

#### ▲ WARNING

- *Engine and exhaust system parts become very hot and remain hot for some time after the engine has been running. Wear insulated gloves or wait until the engine and exhaust system have cooled before handling these parts.*

### USED ENGINE OIL

#### ▲ WARNING

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

### BRAKE DUST

Never use an air hose or dry brush to clean the brake assemblies. Use OSHA-approved vacuum cleaner or alternate method approved by OSHA, designed to minimize the hazard caused by airborne asbestos fibers.

#### ▲ WARNING

- *Inhaled asbestos fibers have been found to cause respiratory disease and cancer.*

### BRAKE FLUID

#### CAUTION

- *Spilling fluid on painted, plastic or rubber parts will damage them. Place a clean shop towel over these parts whenever the system is serviced. KEEP OUT OF REACH OF CHILDREN.*

## GENERAL INFORMATION

---

### BATTERY HYDROGEN GAS & ELECTROLYTE

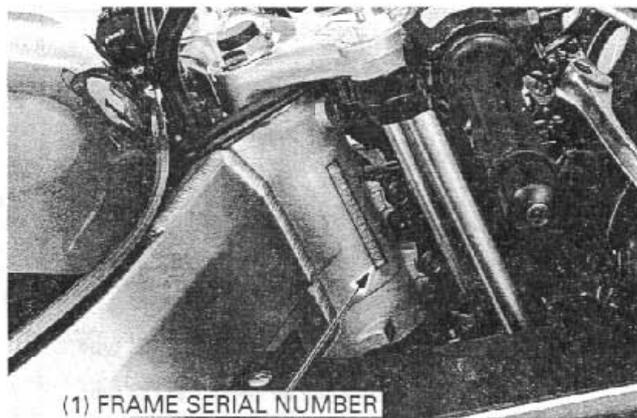
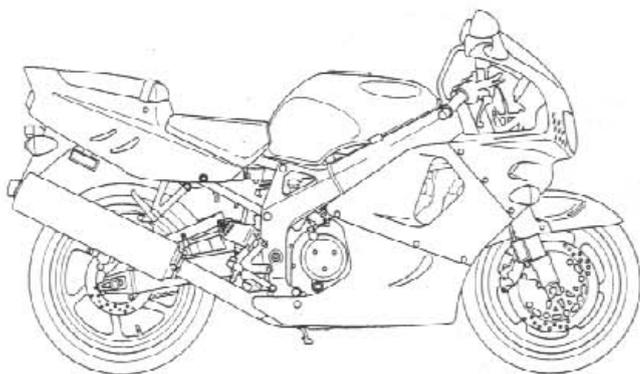
#### **▲ WARNING**

- *The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging.*
  - *The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.*
    - *If electrolyte gets on your skin, flush with water.*
    - *If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.*
  - *Electrolyte is poisonous.*
    - *If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician. KEEP OUT OF REACH OF CHILDREN.*
- 

## 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 show on pages 1-21 through 1-31, Cable and Harness Routing.

## MODEL IDENTIFICATION



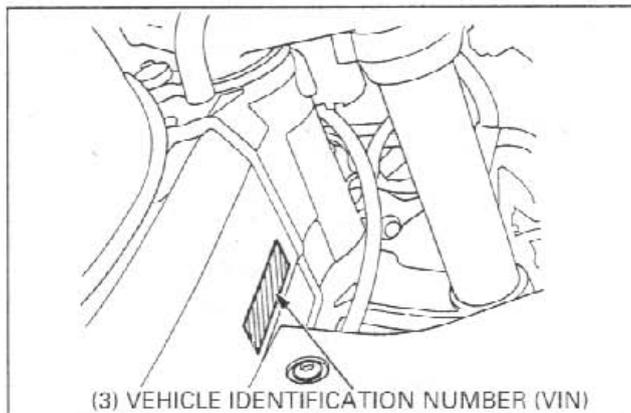
(1) FRAME SERIAL NUMBER

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



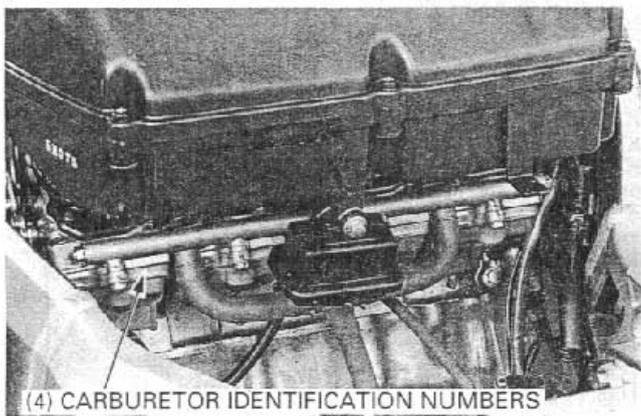
(2) ENGINE SERIAL NUMBER

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



(3) VEHICLE IDENTIFICATION NUMBER (VIN)

- (3) The Vehicle Identification Number (VIN) is located on right side of the frame near the steering head on the Safety Certification Label.



(4) CARBURETOR IDENTIFICATION NUMBERS

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



(5) COLOR LABEL

- (5) The color label is attached as shown. When ordering color-coded parts, always specify the designated color code.

## SPECIFICATIONS

GENERAL					
	ITEM	SPECIFICATIONS			
DIMENSIONS	Overall length	2,055 mm (80.9 in)			
	Overall width	'96 - '97: 675 mm (26.6 in) After '97: 685 mm (26.9 in)			
	Overall height	'96 - '97: 1,130 mm (44.5 in) After '97: 1,135 mm (44.7 in)			
	Wheelbase	1,400 mm (55.1 in)			
	Seat height	810 mm (31.9 in)			
	Footpeg height	'96 - '97: 380 mm (15.0 in) After '97: 383 mm (15.1 in)			
	Ground clearance	140 mm (5.5 in)			
	Dry weight				
		'96 - '97: 49 states/Canada type 183 kg (403 lbs) California type 186 kg (410 lbs) After '97: 49 states/Canada type 180 kg (397 lbs) California type 183 kg (403 lbs)			
	Curb weight				
		'96 - '97: 49 states/Canada type 205 kg (454 lbs) California type 208 kg (459 lbs) After '97: 49 states/Canada type 203 kg (448 lbs) California type 206 kg (454 lbs)			
	Maximum weight capacity				
		'96 - '97: 49 states/Canada type 160 kg (353 lbs) California type 160 kg (353 lbs) After '97: 49 states/California type 160 kg (353 lbs) Canada type 164 kg (352 lbs)			
	FRAME	Frame type	Diamond		
		Front suspension	Telescopic fork		
		Front wheel travel	110 mm (4.3 in)		
		Rear suspension	Swingarm		
Rear wheel travel		125 mm (4.9 in)			
Rear damper		Nitrogen gas-filled damper, with reserve tank			
Front tire size		'96 - '97: 130/70 ZR 16 After '97: 130/70 ZR 16 (61 W)			
Rear tire size		'96 - '97: 180/55 ZR 17 After '97: 180/55 ZR 17 (73 W)			
Tire brand					
		Bridgestone Michelin			
Front brake		Front: BT56F RADIAL/Rear: BT56R RADIAL G Front: TX15/Rear: TX25			
Rear brake		Hydraulic double disc brake Hydraulic single disc brake			
Caster angle		24°			
Trail length		'96 - '97: 90 mm (3.5 in) After '97: 95 mm (3.7 in)			
Fuel tank capacity	18.0 liter (4.76 US gal, 3.96 Imp gal)				
Fuel tank reserve capacity	3.5 liter (0.92 US gal, 0.77 Imp gal)				
ENGINE	Bore and stroke	71.0 x 58.0 mm (2.80 x 2.28 in)			
	Displacement	919 cm <sup>3</sup> (56.1 cu-in)			
	Compression ratio	11.0 : 1			
	Valve train	Chain drive and DOHC			
	Intake valve	opens 15° BTDC closes 35° ABDC	at 1 mm (0.04 in) lift After '97 49 states/Canada type and '96 - '97 all types	0° BTDC 37° ABDC 40° BBDC 0° ATDC	at 1 mm (0.04 in) lift After '97 California type
	Exhaust valve	opens 39° BBDC closes 11° ATDC			
	Lubrication system	Forced pressure and wet sump			
	Oil pump type	Trochoid			
	Cooling system	Liquid-cooled			
	Air filtration	Paper filter			
	Crankshaft type	Unit type			
	Engine dry weight				
		'96 - '97: 49 states/Canada type 66.9 kg (147.5 lbs) California type 68.2 kg (150.4 lbs) After '97: 49 states/Canada type 66.3 kg (146.2 lbs) California type 67.6 kg (149.1 lbs)			
Cylinder arrangement	Four cylinder, inline				

GENERAL (Cont'd)		
ITEM		SPECIFICATIONS
CARBURETOR	Carburetor type Throttle bore	CV (Constant Velocity) type, with flat valve 38 mm (1.5 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 Mechanical type Constant mesh, 6-speed 1.520 (76/50) 2.687 (43/16) 2.727 (30/11) } 1.933 (29/15) } '96 - '97: 1.600 (24/15) } 1.400 (28/20) } 1.263 (24/19) } 1.167 (21/18) } 2.769 (36/13) } 2.000 (26/13) } 1.600 (24/15) } After '97: 1.368 (26/19) } 1.227 (27/22) } 1.130 (26/23) } Left foot operated return system, 1 - N - 2 - 3 - 4 - 5 - 6
ELECTRICAL	Ignition system Starting system Charging system Regulator/rectifier Lighting system	Full transistor digital ignition Electric starter motor Triple phase output alternator SCR shorted/triple phase, full wave rectification Battery

## GENERAL INFORMATION

Unit: mm (in)

LUBRICATION SYSTEM		STANDARD	SERVICE LIMIT
ITEM			
Engine oil capacity	At draining	3.5 liter (3.7 US qt, 3.1 Imp qt)	——
	At disassembly	4.4 liter (4.6 US qt, 3.9 Imp qt)	——
	At oil filter change	3.6 liter (3.8 US qt, 3.2 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 pressure at oil pressure switch		490 kPa (5.0 kgf/cm <sup>2</sup> , 71 psi) at 6,000 rpm (min <sup>-1</sup> )/(80°C/176°F)	——
Oil pump rotor	Tip clearance	0.15 - 0.22 (0.006 - 0.009)	0.20 (0.008)
	Body clearance	0.15 - 0.22 (0.006 - 0.009)	0.35 (0.014)
	Side clearance	0.02 - 0.07 (0.001 - 0.003)	0.10 (0.004)

FUEL SYSTEM			
ITEM		SPECIFICATIONS	
Carburetor identification number	49 states type	'96 - '97:	VP88B
		After '97:	VP8CP
	California type	'96 - '97:	VP89A
		After '97:	VP8DA
	Canada type	'96:	VP88A
		'97:	VP88B
After '97:		VP8CB	
Main jet	49 states type	'96 - '97:	#115 (See page 5-11)
		After '97:	#120
	California type	'96 - '97:	#115
		After '97:	#120
	Canada type	'96:	#115
		'97:	No. 1, 4: #115/No. 2, 3: #118
After '97:		#120	
Slow jet		#40	
Jet needle number	49 states type	'96 - '97:	No. 1, 4: J5FB/No. 2, 3: J5FA
		After '97:	No. 1, 4: J5FH/No. 2, 3: J5DD
	California type	'96 - '97:	No. 1, 4: J5FB/No. 2, 3: J5FA
		After '97:	No. 1, 4: J5FA/No. 2, 3: J5FC
	Canada type	'96:	No. 1, 4: J5FZ/No. 2, 3: J5FY
		'97:	No. 1, 4: J5FB/No. 2, 3: J5FA
After '97:		No. 1, 4: J5FH/No. 2, 3: J5DD	
Pilot screw initial opening	'96 - '97:	3 turns out	
	Except California type	After '97:	1 - 5/8 turns out
	California type		2 turns out
Float level		13.7 mm (0.54 in)	
Idle speed	Except California type	1,100 ± 100 rpm	
	California type	1,200 ± 100 rpm	
Throttle grip free play		2 - 6 mm (1/12 - 1/4 in)	

## COOLING SYSTEM

ITEM		SPECIFICATIONS	
Coolant capacity	Radiator and engine	'96 - '97:	2.77 liter (2.93 US qt, 2.44 Imp qt)
		After '97:	2.64 liter (2.79 US qt, 2.32 Imp qt)
	Reserve tank	'96 - '97:	0.45 liter (0.476 US qt, 0.396 Imp qt)
		After '97:	0.35 liter (0.370 US qt, 0.310 Imp qt)
Radiator cap relief pressure		'96 - '97:	108 - 137 kPa (1.1 - 1.4 kgf/cm <sup>2</sup> , 16 - 20 psi)
		After '97:	107.9 kPa (1.1 kgf/cm <sup>2</sup> , 16 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	

Unit: mm (in)

## CYLINDER HEAD/VALVES

ITEM			STANDARD	SERVICE LIMIT	
Cylinder compression	'96 - '97:		1,177 kPa (12.0 kgf/cm <sup>2</sup> , 171 psi) at 500 - 600 rpm	—	
	After '97:		1.2 kPa (13.0 kgf/cm <sup>2</sup> , 185 psi) at 350 rpm	—	
Cylinder head warpage			—	0.10 (0.004)	
Valve, valve guide	Valve clearance	IN	0.13 - 0.19 (0.005 - 0.007)	—	
		'96 - '97:	EX	0.19 - 0.25 (0.007 - 0.010)	—
		After '97	EX	0.22 - 0.28 (0.009 - 0.011)	—
	Valve stem O.D.	IN	4.475 - 4.490 (0.1762 - 0.1768)	4.465 (0.1758)	
		EX	4.465 - 4.480 (0.1758 - 0.1764)	4.455 (0.1754)	
	Valve guide I.D.	IN	4.500 - 4.512 (0.1772 - 0.1776)	4.540 (0.1787)	
		EX	4.500 - 4.512 (0.1772 - 0.1776)	4.540 (0.1787)	
	Stem-to-guide clearance	IN	0.010 - 0.037 (0.0004 - 0.0015)	—	
		EX	0.020 - 0.047 (0.0008 - 0.0019)	—	
	Valve guide projection above cylinder head	IN	14.60 - 14.80 (0.575 - 0.583)	—	
EX		14.80 - 15.00 (0.583 - 0.591)	—		
Valve seat width	IN/EX	0.90 - 1.10 (0.035 - 0.043)	1.5 (0.06)		
Valve spring free length	Inner	IN/EX	35.77 (1.408)	34.07 (1.341)	
	Outer	IN/EX	39.69 (1.563)	37.79 (1.488)	
Valve lifter	Valve lifter O.D.	IN/EX	25.978 - 25.993 (1.0228 - 1.0233)	25.97 (1.022)	
	Valve lifter bore I.D.	IN/EX	26.010 - 26.026 (1.0240 - 1.0246)	26.04 (1.025)	
Camshaft	Cam lobe height	Except California type	IN	36.040 - 36.280 (1.4189 - 1.4283)	36.01 (1.418)
			EX	35.800 - 36.040 (1.4094 - 1.4189)	35.77 (1.408)
		California type	IN	34.940 - 35.180 (1.3756 - 1.3850)	34.91 (1.374)
			EX	35.100 - 35.340 (1.3819 - 1.3913)	35.07 (1.381)
	Runout			—	0.05 (0.002)
Oil clearance			0.020 - 0.062 (0.0008 - 0.0024)	0.10 (0.004)	

**GENERAL INFORMATION**

Unit: mm (in)

<b>CLUTCH/GEARSHIFT LINKAGE</b>				
ITEM			STANDARD	SERVICE LIMIT
Clutch lever free play			10 - 20 (3/8 - 3/4)	—
Clutch spring free length		'96 - '97:	50.2 (1.98)	49.2 (1.93)
		After '97:	48.8 (1.92)	47.0 (1.85)
Clutch disc thickness		'96 - '97:	2.62 - 2.78 (0.103 - 0.109)	2.3 (0.09)
		After '97:	2.92 - 3.08 (0.11 - 0.12)	2.6 (0.102)
Clutch plate warpage			—	0.30 (0.012)
Clutch outer guide		I.D.	24.9935 - 25.0035 (0.98399 - 0.98451)	25.016 (0.9849)
		O.D.	34.975 - 34.991 (1.3770 - 1.3776)	34.965 (1.3766)
Mainshaft O.D. at clutch outer guide			24.980 - 24.993 (0.9835 - 0.9840)	24.96 (0.983)
Shift fork, fork shaft	Fork	I.D.	12.000 - 12.021 (0.4724 - 0.4733)	12.03 (0.474)
		Claw thickness	5.93 - 6.00 (0.233 - 0.236)	5.9 (0.23)
	Fork shaft O.D.			11.957 - 11.968 (0.4707 - 0.4712)

Unit: mm (in)

<b>ALTERNATOR/STARTER CLUTCH</b>				
ITEM			STANDARD	SERVICE LIMIT
Starter driven gear boss O.D.			51.699 - 51.718 (2.0354 - 2.0361)	51.684 (2.0348)

Unit: mm (in)

<b>CRANKCASE/PISTON/CYLINDER</b>				
ITEM			STANDARD	SERVICE LIMIT
Cylinder	I.D.		71.000 - 71.015 (2.7953 - 2.7963)	71.10 (2.795)
	Out of round		—	0.10 (0.004)
	Taper		—	0.10 (0.004)
	Warpage		—	0.05 (0.002)
Piston, piston rings	Piston mark direction		"IN" mark facing toward the intake side	—
	Piston O.D.		70.965 - 70.985 (2.7939 - 2.7947)	70.90 (2.791)
	Piston O.D. measurement point		15 mm (0.6 in) from bottom of skirt	—
	Piston pin bore I.D.		17.002 - 17.008 (0.6694 - 0.6696)	17.03 (0.670)
	Piston pin O.D.		16.993 - 17.000 (0.6690 - 0.6693)	16.98 (0.669)
	Piston-to-piston pin clearance		0.002 - 0.015 (0.0001 - 0.0006)	—
	Piston ring-to-ring groove clearance	Top	0.030 - 0.065 (0.0012 - 0.0026)	0.08 (0.003)
		Second	0.015 - 0.045 (0.0006 - 0.0018)	0.07 (0.003)
	Piston ring end gap	Top	0.28 - 0.38 (0.011 - 0.015)	0.5 (0.02)
		Second	0.40 - 0.55 (0.016 - 0.022)	0.7 (0.03)
Oil (side rail)		0.2 - 0.7 (0.01 - 0.03)	0.9 (0.04)	
Cylinder-to-piston clearance			0.015 - 0.050 (0.0006 - 0.0020)	—
Connecting rod small end I.D.			17.016 - 17.034 (0.6699 - 0.6706)	17.04 (0.671)
Connecting rod-to-piston pin clearance			0.016 - 0.041 (0.0006 - 0.0016)	—
Crankpin oil clearance			0.030 - 0.052 (0.0012 - 0.0020)	0.06 (0.002)

Unit: mm (in)

## CRANKSHAFT/TRANSMISSION

ITEM		STANDARD	SERVICE LIMIT	
Crankshaft	Side clearance	0.05 – 0.20 (0.002 – 0.008)	0.30 (0.012)	
	Runout	—	0.30 (0.012)	
	Main journal oil clearance	0.017 – 0.035 (0.0007 – 0.0014)	0.05 (0.002)	
Transmission	Gear I.D.	M5, 6	28.000 – 28.021 (1.1024 – 1.1032)	28.04 (1.104)
		C1	24.000 – 24.021 (0.9449 – 0.9457)	24.04 (0.946)
		C2, 3, 4	31.000 – 31.025 (1.2205 – 1.2215)	31.04 (1.222)
	Bushing O.D.	M5, 6	27.959 – 27.980 (1.1007 – 1.1016)	27.94 (1.100)
		C2	30.955 – 30.980 (1.2187 – 1.2197)	30.93 (1.218)
		C3, 4	30.950 – 30.975 (1.2185 – 1.2195)	30.93 (1.218)
	Bushing I.D.	M5	24.985 – 25.006 (0.9837 – 0.9845)	25.02 (0.985)
		C2	27.985 – 28.006 (1.1018 – 1.1026)	28.02 (1.103)
	Gear-to-bushing clearance	M5, 6	0.020 – 0.062 (0.0008 – 0.0024)	0.10 (0.004)
		C2	0.020 – 0.070 (0.0008 – 0.0028)	0.11 (0.004)
		C3, 4	0.025 – 0.075 (0.0010 – 0.0030)	0.11 (0.004)
	Mainshaft O.D.	M5	24.967 – 24.980 (0.9830 – 0.9835)	24.96 (0.983)
		Clutch outer guide	24.980 – 24.993 (0.9835 – 0.9840)	24.96 (0.983)
	Countershaft O.D.	C2	27.967 – 27.980 (1.1011 – 1.1016)	27.96 (1.101)
	Bushing-to-shaft clearance	M5	0.005 – 0.039 (0.0002 – 0.0015)	0.08 (0.003)
		C2	0.005 – 0.039 (0.0002 – 0.0015)	0.08 (0.003)

**GENERAL INFORMATION**

<b>FRONT WHEEL/SUSPENSION/STEERING</b>				Unit: mm (in)	
<b>ITEM</b>		<b>STANDARD</b>		<b>SERVICE LIMIT</b>	
Minimum tire tread depth		—		1.5 (0.06)	
Cold tire pressure	Up to 90 kg (200 lb) load	250 kPa (2.50 kgf/cm <sup>2</sup> , 36 psi)		—	
	Up to maximum weight capacity	250 kPa (2.50 kgf/cm <sup>2</sup> , 36 psi)		—	
Axle runout		—		0.20 (0.008)	
Wheel rim runout	Radial	—		2.0 (0.08)	
	Axial	—		2.0 (0.08)	
Fork	Spring free length	'96 - '97:	248.2 (9.77)	243.2 (9.57)	
		After '97:	250.2 (9.85)	245.2 (9.65)	
	Spring direction		With the tapered end facing down		—
	Tube runout		—		0.20 (0.008)
	Recommended fork fluid		Pro-Honda Suspension Fluid SS-8		—
	Fluid level		114 ± 4 (4.5 ± 0.2)		—
	Fluid capacity	'96 - '97:	561 ± 2.5 cm <sup>3</sup> (19.0 ± 0.02 US oz, 19.7 ± 0.09 Imp oz)		—
		After '97:	540 ± 2.5 cm <sup>3</sup> (18.3 ± 0.02 US oz, 19.0 ± 0.09 Imp oz)		—
	Pre-load adjuster setting		12 mm (0.5 in) from top of fork cap		—
	Rebound adjuster setting		1 turn from full hard		—
Compression adjuster setting	'96 - '97:	1 turn from full hard		—	
	After '97:	1.5 turn from full hard		—	
Steering head bearing preload		1.0 - 1.5 kgf (2.2 - 3.3 lbf)		—	

<b>REAR WHEEL/SUSPENSION</b>				Unit: mm (in)	
<b>ITEM</b>		<b>STANDARD</b>		<b>SERVICE LIMIT</b>	
Minimum tire tread depth		—		2.0 (0.08)	
Cold tire pressure	Up to 90 kg (200 lb) load	290 kPa (2.90 kgf/cm <sup>2</sup> , 42 psi)		—	
	Up to maximum weight capacity	290 kPa (2.90 kgf/cm <sup>2</sup> , 42 psi)		—	
Axle runout		—		0.20 (0.008)	
Wheel rim runout	Radial	—		2.0 (0.08)	
	Axial	—		2.0 (0.08)	
Shock absorber	Spring free length	'96 - '97:	172.6 (6.80)	169.1 (6.66)	
		After '97:	167.7 (6.60)	164.3 (6.47)	
	Spring direction		With the tapered end facing up		—
	Pre-load adjuster setting	'96 - '97:	2nd position		—
		After '97:	3rd position		—
	Rebound adjuster setting		1 turn from full hard		—
Compression adjuster setting		1 turn from full hard		—	
Drive chain	Size/link	DID	DID525HV GC&B - 120ZB		—
		RK	RKGB525ROZ1 - 120LJF		—
	Slack	20 - 30 (1.2 - 1.6)		50 (1.97)	

Unit: mm (in)

HYDRAULIC BRAKE				STANDARD	SERVICE LIMIT
ITEM					
Front	Specified brake fluid		DOT 4		—
	Brake disc thickness		4.5 (0.18)		3.5 (0.14)
	Brake disc runout		—		0.30 (0.012)
	Master cylinder I.D.	'96 - '97:		14.000 - 14.043 (0.5512 - 0.5529)	14.055 (0.5533)
		After '97:		15.870 - 15.913 (0.6248 - 0.6265)	15.925 (0.627)
	Master piston O.D.	'96 - '97:		13.957 - 13.984 (0.5495 - 0.5506)	13.945 (0.5490)
		After '97:		15.827 - 15.854 (0.6231 - 0.6242)	15.815 (0.623)
	Caliper cylinder I.D.	A	'96 - '97:	30.230 - 30.280 (1.1902 - 1.1921)	30.29 (1.193)
			After '97:	32.03 - 32.08 (1.261 - 1.263)	—
		B	'96 - '97:	27.000 - 27.050 (1.0630 - 1.0650)	27.06 (1.065)
			After '97:	33.96 - 34.01 (1.337 - 1.339)	—
	Caliper piston O.D.	A	'96 - '97:	30.148 - 30.198 (1.1869 - 1.1889)	30.140 (1.1866)
After '97:			31.965 - 31.998 (1.2585 - 1.2598)	—	
B		'96 - '97:	26.935 - 26.968 (1.0604 - 1.0617)	26.927 (1.0610)	
		After '97:	33.895 - 33.928 (1.3344 - 1.3357)	—	
Rear	Specified brake fluid		DOT 4		—
	Brake disc thickness		5.0 (0.20)		4.0 (0.16)
	Brake disc runout		—		0.30 (0.012)
	Master cylinder I.D.		15.870 - 15.913 (0.6248 - 0.6265)		15.925 (0.6270)
	Master piston O.D.		15.827 - 15.854 (0.6231 - 0.6242)		15.815 (0.6226)
	Caliper cylinder I.D.		38.18 - 38.23 (1.503 - 1.505)		38.24 (1.506)
	Caliper piston O.D.		38.115 - 38.148 (1.5006 - 1.5019)		38.107 (1.5003)

BATTERY/CHARGING SYSTEM				SPECIFICATIONS
ITEM				
Battery	Capacity		12V - 8 Ah	
	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		0.9 A/5 - 10 h
Quick		4.0 A/0.5 h		
Alternator	Capacity		384 W/5,000 rpm	
	Charging coil resistance (20°C/68°F)		0.1 - 0.3 Ω	
Regulator/rectifier regulated voltage			13.5 - 15.5 V/5,000 rpm	

## GENERAL INFORMATION

### IGNITION SYSTEM

ITEM		SPECIFICATIONS	
Spark plug		NGK	DENSO
	Standard	CR9EH 9	U27FER 9
	Optional	CR8EH 9	U24FER 9
Spark plug gap		0.80 – 0.90 mm (0.031 – 0.035 in)	
Ignition coil peak voltage		100 V minimum	
Ignition pulse generator peak voltage		0.7 V minimum	
Ignition timing	"F" mark	10° BTDC at idle	

Unit: mm (in)

### ELECTRIC STARTER

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

### LIGHTS/METERS/SWITCHES

ITEM		SPECIFICATIONS	
Bulbs	Headlight (High/low beam)	12 V – 45/45 W x 2	
	Position light	12 V – 5 W	
	Brake/tail light	12 V – 32/3 cp	
	Front turn signal/running light	12 V – 32/3 cp	
	Rear turn signal light	12 V – 32 cp	
	License light	12 V – 4 cp	
	Instrument light	'96 – '97:	12 V – 1.7 W x 3
		After '97:	1.1 W x 2
	Turn signal indicator	'96 – '97:	12 V – 1.7 W x 2
		After '97:	12 V – 1.1 W x 2
	High beam indicator	'96 – '97:	12 V – 1.7 W
		After '97:	12 V – 1.1 W
	Neutral indicator	'96 – '97:	12 V – 1.7 W
		After '97:	12 V – 1.1 W
	Oil pressure indicator	'96 – '97:	12 V – 1.7 W
After '97:		12 V – 1.1 W	
Side stand indicator	'96 – '97:	12 V – 1.7 W	
Coolant temperature gauge light	After '97:	12 V – 1.1 W	
Fuse	Main fuse	30 A	
	Sub fuse	10 A x 4, 20 A x 1	
Fan motor switch	Start to close (ON)	98 – 102°C (208 – 216°F)	
	Stop to open -	93 – 97°C (199 – 207°F)	
Coolant temperature sensor resistance (20°C/68°F)		45 – 60 Ω	

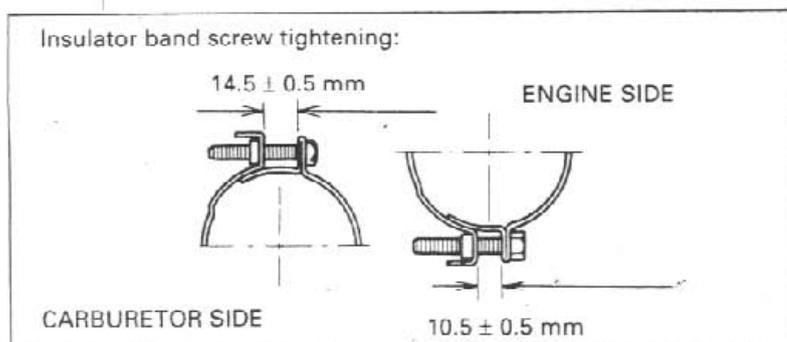
## TORQUE VALUES

FASTENER TYPE	TORQUE N·m (kgf·m, lbfft)	FASTENER TYPE	TORQUE N·m (kgf·m, lbfft)
5 mm hex bolt and nut	5 (0.5, 3.6)	5 mm screw	4 (0.4, 2.9)
6 mm hex bolt and nut	10 (1.0, 7)	6 mm screw and flange bolt (SH type)	9 (0.9, 6.5)
8 mm hex bolt and nut	22 (2.2, 16)	6 mm flange bolt (8 mm head)	9 (0.9, 6.5)
10 mm hex bolt and nut	34 (3.5, 25)	6 mm flange bolt (10 mm head) and nut	12 (1.2, 9)
12 mm hex bolt and nut	54 (5.5, 40)	8 mm flange bolt and nut	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 a locking agent to the threads.
  3. Apply molybdenum disulfide oil to the threads and flange 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, lbfft)	REMARKS	
<b>MAINTENANCE:</b>	Crankshaft hole cap	1	45	18 (1.8, 13)	NOTE 4	
	Spark plug	4	10	12 (1.2, 8.7)		
	<b>LUBRICATION SYSTEM:</b>	Oil drain bolt	1	12	29 (3.0, 22)	
		Oil filter cartridge	1	20	10 (1.0, 7.2)	NOTE 6, 7
		Oil pump driven sprocket bolt	1	6	15 (1.5, 11)	NOTE 2
		Oil cooler boss	1	20	64 (6.5, 47)	NOTE 2
		<b>COOLING SYSTEM:</b>	Water pump coverbolt	3	6	13 (1.3, 9.4)
	Coolant temperature sensor		1	PT1/8	10 (1.0, 7.2)	NOTE 1
	<b>FUEL SYSTEM:</b>	Carburetor assembly bolt, 5 mm	1	5	5 (0.5, 4)	
		6 mm	1	6	10 (1.0, 7.2)	
		Vacuum plug for synchronization	3	5	3.0 (0.30, 2.2)	
		Boost joint for fuel valve	1	5	2.5 (0.25, 1.8)	
		Carburetor insulator band screw	8	5		See below



**GENERAL INFORMATION**

<b>ENGINE (Cont'd)</b>		<b>Q'TY</b>	<b>THREAD DIA. (mm)</b>	<b>TORQUE N-m (kgf-m, lbf-ft)</b>	<b>REMARKS</b>
<b>ITEM</b>					
<b>ENGINE MOUNTING:</b>					
Drive sprocket bolt	1	10	54 (5.5, 40)		
<b>CYLINDER HEAD/VALVES:</b>					
Breather plate flange bolt	3	6	12 (1.2, 8.7)		NOTE 2
Cylinder head stud bolt	8	8	25 (2.6, 19)		
Cylinder head cover special bolt	6	6	10 (1.0, 7.2)		
Camshaft holder flange bolt	10	6	12 (1.2, 8.7)		
Cylinder head socket bolt	10	9	48 (4.8, 35)		NOTE 6
Cam sprocket bolt	4	7	20 (2.0, 14)		NOTE 2
Cam chain tensioner lifter mounting bolt	2	6	12 (1.2, 8.7)		
Air bleed tube joint	1	10	25 (2.5, 18)		
<b>CLUTCH/GEARSHIFT LINKAGE:</b>					
Right crankcase cover SH bolt	7	6	12 (1.2, 8.7)		
Clutch center lock nut	1	22	128 (13.1, 94.8)		NOTE 5, 6
Gearshift pedal spring stopper	1	8	22 (2.2, 16)		
Shift drum center bolt	1	8	23 (2.3, 17)		NOTE 2
Shift drum bearing set plate bolt	2	6	12 (1.2, 8.7)		NOTE 2
<b>ALTERNATOR/STARTER CLUTCH:</b>					
Left crankcase cover SH bolt	10	6	12 (1.2, 8.7)		
Flywheel flange bolt	1	10	93 (9.5, 69)		NOTE 6
Stator mounting socket bolt	4	6	12 (1.2, 8.7)		
Starter one-way clutch socket bolt	6	6	16 (1.6, 12)		NOTE 2
<b>CRANKCASE/PISTON/CYLINDER:</b>					
Crankcase bolt, 10 mm	1	10	39 (4.0, 29)		
9 mm	10	9	35 (3.6, 26)		NOTE 6
8 mm	2	8	24 (2.4, 17)		
6 mm	18	6	12 (1.2, 8.7)		
Connecting rod nut	8	8	34 (3.5, 25)		NOTE 6
Lower crankcase sealing bolt, 20 mm	1	20	29 (3.0, 22)		NOTE 2
18 mm	1	18	44 (4.5, 33)		NOTE 2
<b>CRANKSHAFT/TRANSMISSION:</b>					
Mainshaft bearing set plate bolt	2	6	12 (1.2, 8.7)		NOTE 2
<b>IGNITION SYSTEM:</b>					
Ignition pulse generator cover SH bolt	8	6	12 (1.2, 8.7)		NOTE 1
Ignition pulse generator rotor special bolt	1	10	59 (6.0, 43)		
<b>LIGHTS/METERS/SWITCHES:</b>					
Neutral switch	1	10	12 (1.2, 8.7)		
Oil pressure switch	1	PT1/8	12 (1.2, 8.7)		NOTE 1

FRAME		Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
<b>FRAME/BODY PANELS/EXHAUST SYSTEM:</b>					
Upper cowl stay mounting bolt		2	8	26 (2.7, 20)	
Front fender mounting bolt		8	6	5 (0.5, 3.6)	
Exhaust pipe joint nut		8	7	12 (1.2, 8.7)	
Muffler mounting bolt/nut		2	8	25 (2.6, 19)	
Step holder mounting bolt		4	8	26 (2.7, 20)	
Footpeg mounting bolt		1	10	44 (4.5, 33)	NOTE 9
Bank sensor		2	8	10 (1.0, 7.2)	
Handlebar weight screw		2	6	10 (1.0, 7.2)	
<b>FUEL SYSTEM:</b>					
Fuel valve		1	22	34 (3.5, 25)	
Sub-air cleaner mounting bolt		1	6	7 (0.7, 5.1)	
<b>COOLING SYSTEM:</b>					
Fan motor nut		1	5	2.5 (0.25, 1.8)	NOTE 2
Fan motor switch		1	PT1/8	18 (1.8, 13)	NOTE 1
<b>ENGINE MOUNTING:</b>					
Left engine hanger bolt		2	10	39 (4.0, 29)	
Right engine hanger bolt		1	10	44 (4.5, 33)	
Engine hanger nut (Rear/upper)		1	10	39 (4.0, 29)	
(Rear/lower)		1	10	39 (4.0, 29)	
Engine hanger adjusting bolt		1	22	11 (1.1, 8)	
Engine hanger adjusting bolt lock nut		1	22	54 (5.5, 40)	
Engine hanger plate bolt		4	8	26 (2.7, 20)	
<b>FRONT WHEEL/SUSPENSION/STEERING:</b>					
Steering stem nut		1	24	103 (10.5, 76)	See page 13-28
Top thread A		1	26	—	
Top thread B		1	26	—	
Fork top bridge pinch bolt	'96 - '97:	2	8	23 (2.3, 17)	
	After '97:	2	8	22 (2.2, 16)	
Fork bottom bridge pinch bolt	'96 - '97:	2	10	49 (5.0, 36)	
	After '97:	4	8	27 (2.8, 20)	
Front axle bolt		1	14	59 (6.0, 43)	
Front axle holder bolt		4	8	22 (2.2, 16)	
Front brake disc mounting bolt		12	6	20 (2.0, 14)	NOTE 9
Fork cap	'96 - '97:	2	42	23 (2.3, 17)	
	After '97:	2	42	22 (2.2, 16)	
Fork socket bolt	'96 - '97:	2	8	20 (2.0, 14)	NOTE 2
	After '97:	2	10	34 (3.5, 25)	
<b>REAR WHEEL/SUSPENSION:</b>					
Rear axle nut		1	18	93 (9.5, 69)	
Rear brake disc mounting bolt		4	8	42 (4.3, 31)	NOTE 9
Driven sprocket nut		5	12	108 (11.0, 80)	NOTE 8
Rear shock absorber upper mounting nut		1	10	44 (4.5, 33)	NOTE 8
Shock arm plate nut		2	10	44 (4.5, 33)	NOTE 8
Shock link nut		2	10	44 (4.5, 33)	NOTE 8
Swingarm pivot adjusting bolt		1	30	15 (1.5, 11)	See page 14-22
Swingarm pivot lock nut		1	30	64 (6.5, 47)	
Swingarm pivot nut		1	18	93 (9.5, 69)	NOTE 8
Drive chain slider bolt		2	6	9 (0.9, 6.5)	

**GENERAL INFORMATION**

FRAME (Cont'd)		Q'TY	THREAD DIA. (mm)	TORQUE N-m (kgf-m, lbfft)	REMARKS
<b>HYDRAULIC BRAKE:</b>					
Front brake caliper mounting bolt		4	8	30 (3.1, 22)	NOTE 9
Front brake pipe mounting bolt		2	10	17 (1.7, 12)	
Front brake caliper assembly torx bolt	'96 - '97:	8	8	32 (3.3, 24)	NOTE 2
	After '97:	8	8	23 (2.3, 17)	NOTE 9
Front oil cup mounting nut		1	6	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)	
Brake hose oil bolt		5	10	34 (3.5, 25)	
Pad pin	'96 - '97:	3	10	18 (1.8, 13)	
	After '97:	5	10	18 (1.8, 13)	
Pad pin plug	'96 - '97:	3	10	2.5 (0.25, 1.8)	
	After '97:	1	10	2.4 (0.24, 1.7)	
Brake caliper bleeder		3	8	6 (0.6, 4.3)	
Rear brake hose guide bolt		1	6	12 (1.2, 9)	
Rear master cylinder joint nut		1	8	18 (1.8, 13)	
Rear master cylinder hose joint screw		1	4	1.5 (0.15, 1.1)	
Rear brake caliper pin bolt		1	12	27 (2.8, 20)	
Rear brake caliper bolt	'96 - '97:	1	8	23 (2.3, 17)	
	After '97:	1	8	22 (2.2, 16)	
Rear caliper clamp bolt		1	6	9 (0.9, 6.5)	NOTE 9
<b>LIGHTS/METERS/SWITCHES:</b>					
Side stand mounting bolt		1	10	10 (1.0, 7)	
Side stand lock nut		1	10	29 (3.0, 22)	
Side stand switch mounting bolt		1	6	10 (1.0, 7)	NOTE 9
Side stand bracket bolt		2	10	44 (4.5, 33)	NOTE 9
Ignition switch mounting bolt		2	8	25 (2.5, 18)	NOTE 2

## TOOLS

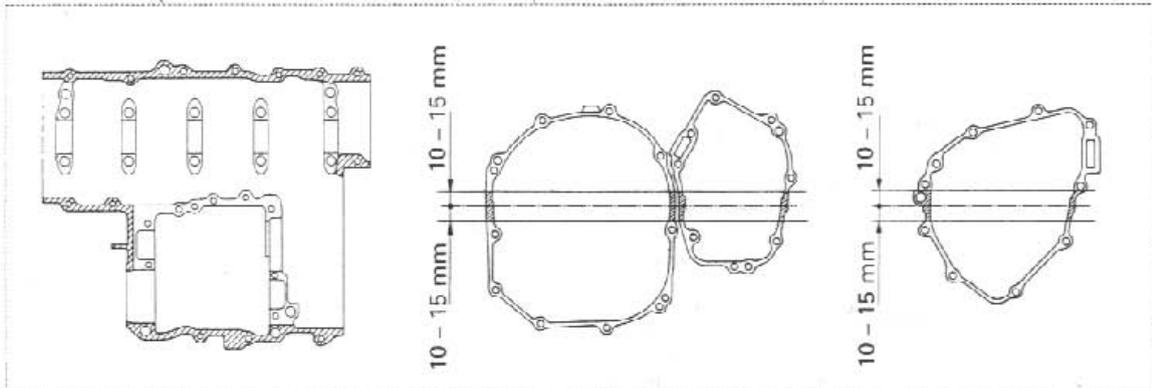
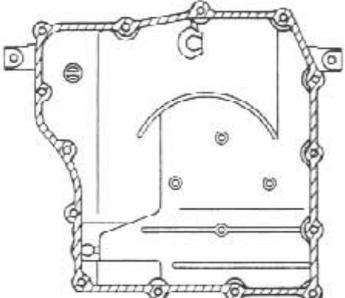
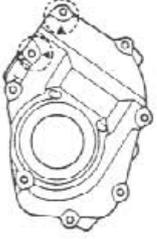
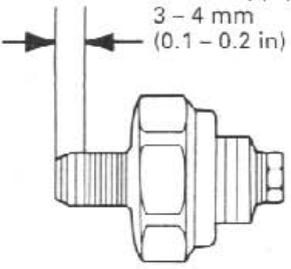
- NOTES: 1. Equivalent commercially available in U.S.A..  
 2. Not available in U.S.A..  
 3. Alternative tool.  
 4. Newly provided tool.

DESCRIPTION	TOOL NUMBER	REMARKS	REF. SEC.
Carburetor float level gauge	07401 - 0010000		5
Oil pressure gauge attachment	07406 - 0030000	NOTE 1	4
Oil pressure gauge	07506 - 3000000	NOTE 1	4
Clutch center holder	07724 - 0050002	NOTE 1	9
Flywheel holder	07725 - 0040000	NOTE 1	10
Rotor puller	07733 - 0020001	NOTE 3: 07933 - 3950000	10
Adjustable valve guide driver	07743 - 0020000	NOTE 2	8
Attachment, 37 x 40 mm	07746 - 0010200		9, 14
Attachment, 42 x 47 mm	07746 - 0010300		9, 13, 14
Attachment, 52 x 55 mm	07746 - 0010400		14
Attachment, 24 x 26 mm	07746 - 0010700		14
Driver B	07746 - 0030100		12
Inner driver, 25 mm	07746 - 0030200		12
Pilot, 17 mm	07746 - 0040400		14
Pilot, 20 mm	07746 - 0040500		13, 14
Pilot, 35 mm	07746 - 0040800		9
Pilot, 28 mm	07746 - 0041100		14
Bearing remover shaft	07746 - 0050100		13, 14
Bearing remover head, 20 mm	07746 - 0050600		13, 14
Driver	07749 - 0010000		9, 13, 14
Valve spring compressor	07757 - 0010000		8
Valve seat cutter		NOTE 1	8
Seat cutter, 27.5 mm (45° IN/EX)	07780 - 0010200		
Flat cutter, 30 mm (32° IN)	07780 - 0012200		
Flat cutter, 27 mm (32° EX)	07780 - 0013300		
Inferior cutter, 30 mm (60° IN/EX)	07780 - 0014000		
Cutter holder, 4.5 mm	07781 - 0010600		
Pilot screw wrench	07908 - 4220201	07908 - 4730001 (Except California type)	5
Pivot adjusting wrench	07908 - 4690003		14
Snap ring pliers	07914 - SA50001	NOTE 2: 07914 - 3230001	15
Steering stem socket	07916 - 3710101	NOTE 2: 07916 - 3710100	13
Bearing remover set	07936 - 3710001		14
— Remover handle	07936 - 3710100		
— Remover head, 20 mm	07936 - 3710600		
— Remover weight	07741 - 0010201	NOTE 2: 07936 - 3710200 07936 - 371020A (U.S.A. only)	
Ball race remover set	07946 - KM90001	NOTE 2:	See page 13-27
— Driver attachment, A	07946 - KM90100		
— Driver attachment, B	07946 - KM90200		
— Driver shaft assembly	07946 - KM90300		
— Bearing remover, A	07946 - KM90401		
— Bearing remover, B	07946 - KM90500		
— Assembly base	07946 - KM90600		

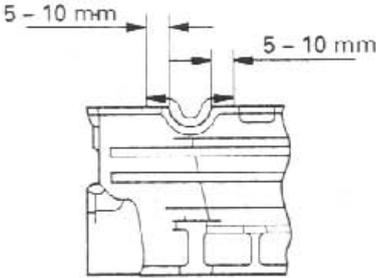
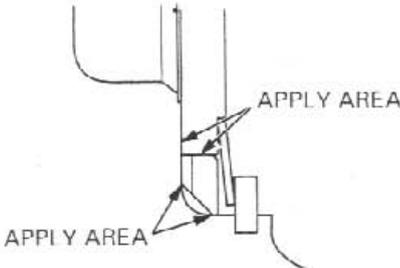
## GENERAL INFORMATION

DESCRIPTION	TOOL NUMBER	REMARKS	REF. SEC.
Steering stem driver	07946 - MB00000		13
Driver shaft	07946 - MJ00100	NOTE 2	14
Valve spring compressor attachment	07959 - KM30101		8
Driver shaft	07964 - MB00200		12
Pin driver	07GMD - KT80100	NOTE 2	14
Shock absorber compressor	07GME - 0010000		14
Inspection adaptor	07GMJ - ML80100	NOTE 2	17
Oil filter wrench	07HAA - PJ70100		4
Peak voltage adaptor	07HGJ - 0020100	NOTE 2	17
Lock nut wrench	07HMA - MR70200	NOTE 3: 07VMA - MAT0100 (Except U.S.A.) 07VMA - MAT010A (U.S.A.only)	7
Needle bearing remover	07HMC - MR70100	NOTE 2	14
Valve guide driver, 4.5 mm	07HMD - ML00101		8
Tappet hole protector	07HMG - MR70002	NOTE 2	8
Valve guide reamer, 4.5 mm	07HMH - ML00101	NOTE 3: 07HMH - ML0010A	8
Drive chain tool set	07HMH - MR10103	NOTE 3: 07HMH - MR1010B (U.S.A. only)	3
Pilot screw wrench	07KMA - MN90100	07KMA - MS60101 with 07PMA - MZ20110 (California type) 07KMA - MV9010A (U.S.A.only)	5
Fork seal driver, 45 mm	07KMD - KZ30100	NOTE 2: 07KMD - KZ3010A	13
Needle bearing remover set	07LMC - KV30100	NOTE 4	14
Shock absorber compressor attachment	07NME - MY70100	NOTE 2	14
Compression gauge attachment	07RMJ - MY50100	NOTE 1	8
Analog tester (SANWA)	SP - 15D	NOTE 1	16, 17, 18, 19
Analog tester (KOWA)	TH - 5H	NOTE 1	16, 17, 18, 19

# LUBRICATION & SEAL POINTS

ENGINE	LOCATION	MATERIAL	REMARKS
<p>Crankcase mating surface</p> 	<p>Liquid sealant (Three Bond 1207B or equivalent)</p>		
<p>Oil pan mating surface</p> 			
<p>Ignition pulse generator cover bolt threads (marked "Δ")</p> 		<p>Coating width: <math>6.5 \pm 1</math> mm</p>	
<p>Oil pressure switch threads</p> <p>Do not apply to the thread head. 3 - 4 mm (0.1 - 0.2 in)</p> 			
<p>Thermo unit threads</p>			

# GENERAL INFORMATION

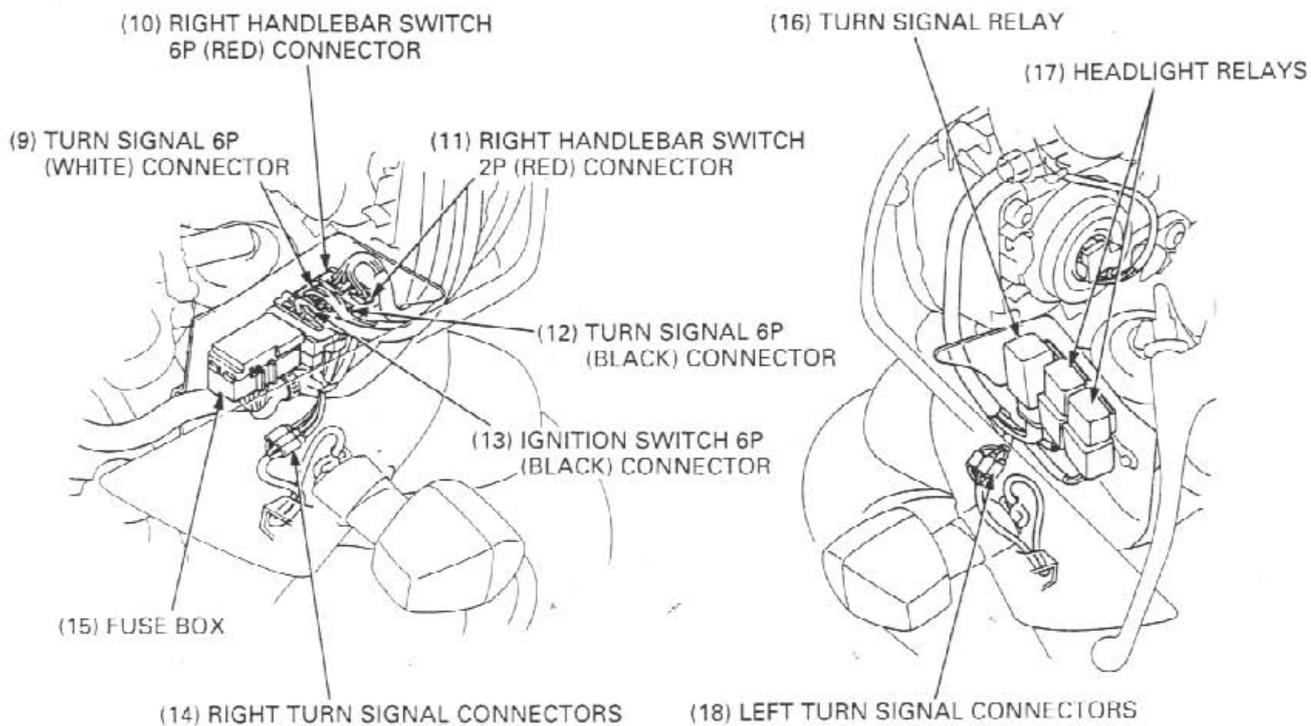
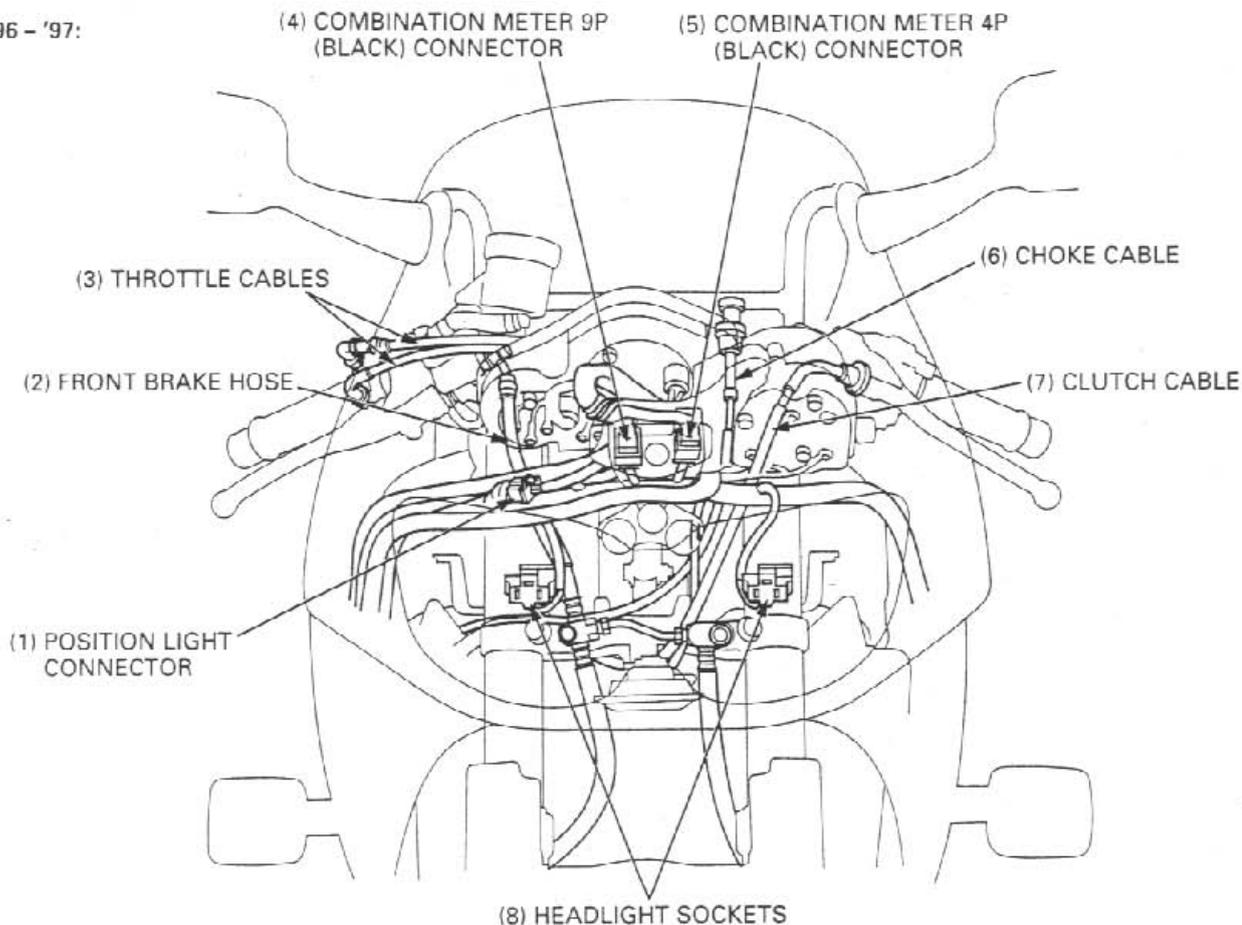
ENGINE (Cont'd) LOCATION	MATERIAL	REMARKS
Cylinder head semi-circular cut-out 	Sealant	
Cylinder head bolt threads and seating surface Camshaft lobes/journals Valve lifter outer sliding surface Valve stem (valve guide sliding surface) Connecting rod small end Piston pin sliding surface Main journal bearing surface Connecting rod bearing surface Crankshaft journals M3/4, C5, C6 shifter gear (shift fork grooves) 10 x 44 mm pin outer surface Primary drive gear and sub gear sliding surface 	Molybdenum disulfide oil (a mixture of 1/2 engine oil and 1/2 molybdenum disulfide grease)	
Clutch outer needle bearing		
Piston ring sliding area Main journal 9 mm bolt threads and seating surface (after removing anti-rust oil additive) Cylinder head special bolt (after removing anti-rust oil additive) Oil strainer packing Oil cooler center bolt threads and seating surface Oil filter cartridge threads and O-ring Flywheel bolt threads and seating surface Starter one-way clutch sliding surface Connecting rod nut threads Clutch center lock nut threads Clutch disc surface Each gear teeth and rotating surface Each bearing Each O-ring Other rotating area and sliding surface	Engine oil	
Crankshaft hole cap threads Each oil seal lips	Multi-purpose grease	

ENGINE (Cont'd)		
LOCATION	MATERIAL	REMARKS
Cylinder head sealing bolt threads Cylinder head cover breather joint threads Lower crankcase sealing bolt threads Starter one-way clutch outer bolt threads Oil pump driven sprocket bolt threads Shift drum set plate bolt threads Shift drum center bolt threads Mainshaft bearing set plate bolt threads Cam sprocket bolt threads Cylinder head cover breather plate bolt threads Air suction valve tightening bolt threads	Locking agent	Coating width: 6.5 + 1 mm

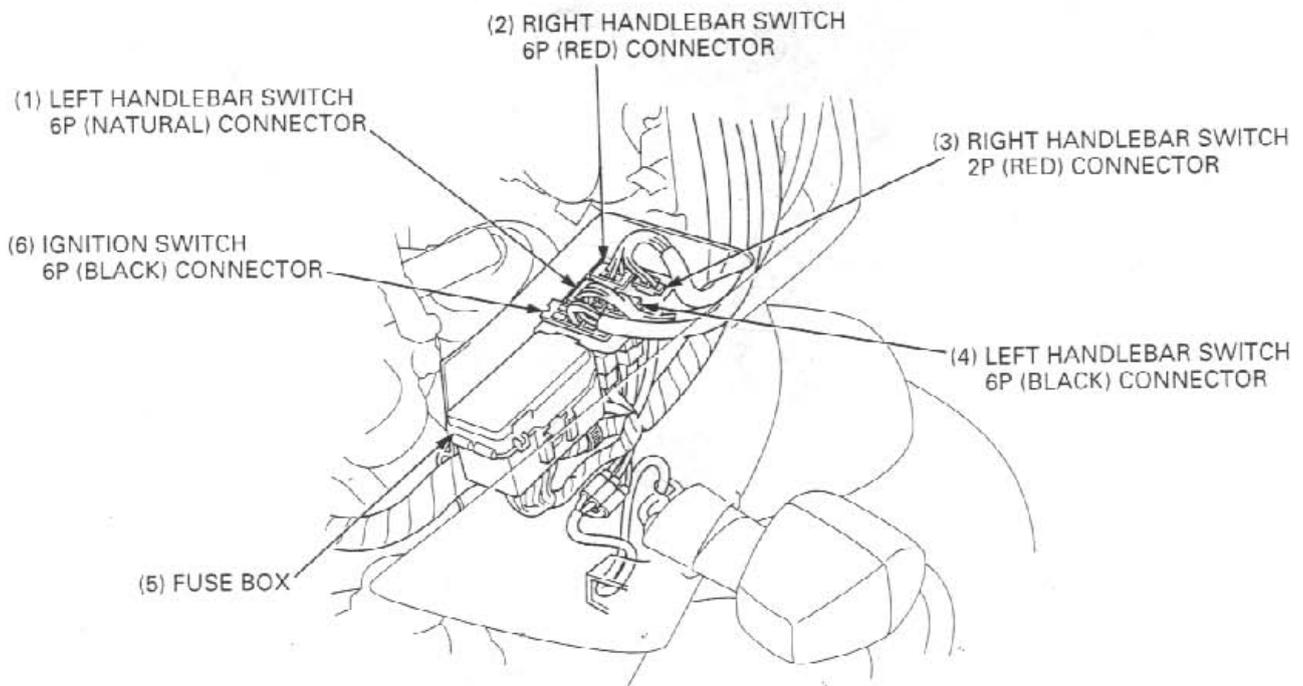
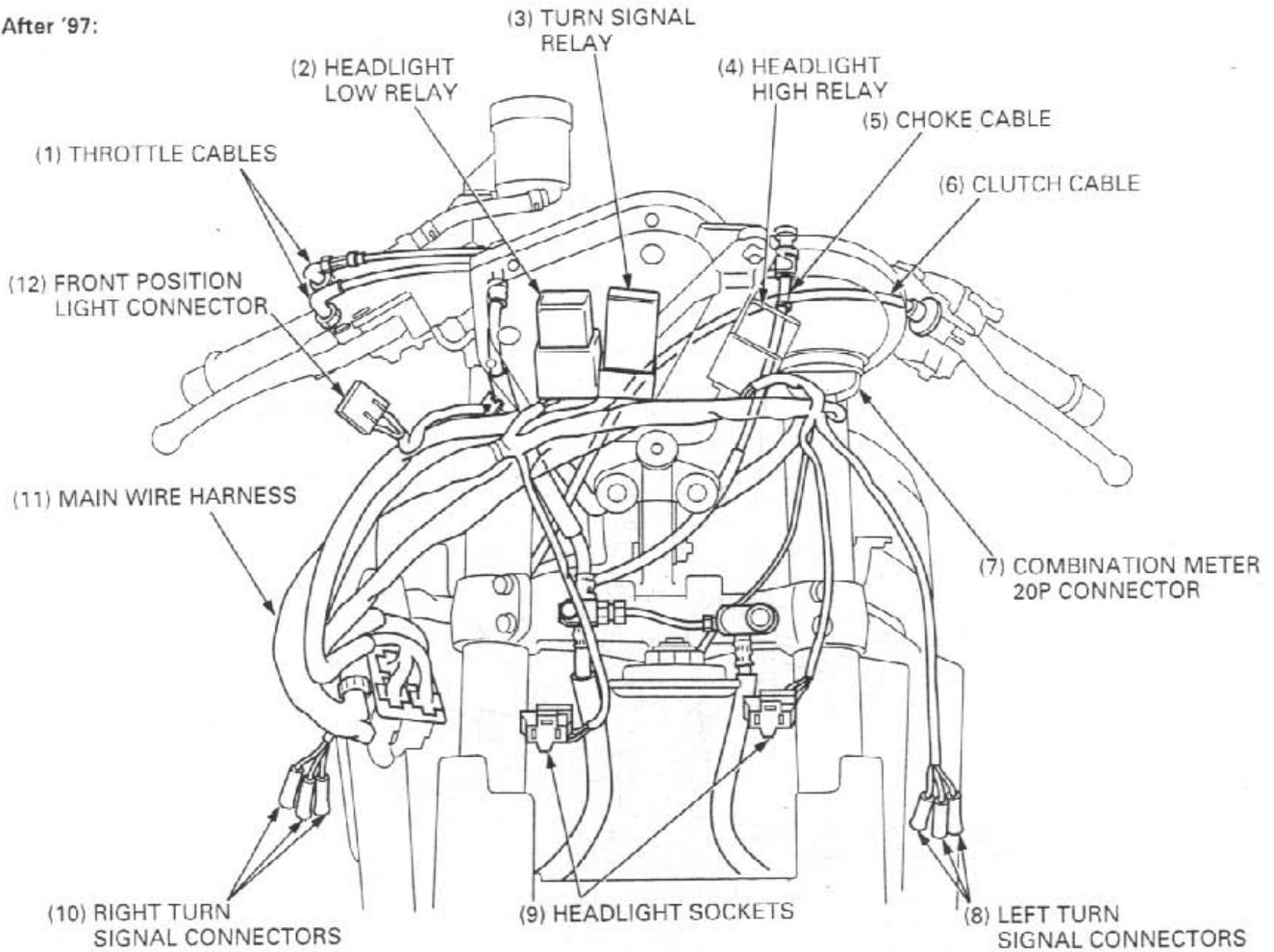
FRAME		
LOCATION	MATERIAL	REMARKS
Steering head bearing sliding surface Steering head dust seal lips Swingarm pivot bearing and dust seal lips Wheel dust seal lips Rear wheel side collar inner surface Shock absorber needle bearing and dust seal lips Shock link needle bearing and dust seal lips Footpeg sliding area Passenger footpeg sliding area Rear brake pedal pivot sliding area Throttle pipe sliding area Clutch lever pivot Pillion seat catch hook Pillion seat pivot Gearshift pedal link pivot Gearshift pedal link tie-rod ball joints Side stand pivot surface	Multi-purpose grease	
Throttle pipe cable end area	Molybdenum disulfide grease	
Shock absorber spring adjuster cam surface	Molybdenum paste	
Steering stem top threads Driven sprocket nut threads and seating surface Throttle cable casing inner Choke cable casing inner Clutch cable casing inner Brake pipe joint threads	Engine oil	
Brake master cylinder cups Brake caliper piston seals	DOT 4 brake fluid	
Brake caliper dust seals Front brake lever pivot and piston tips Rear master cylinder boot inside and push rod tips Brake caliper slide pin surface	Silicone grease	
Front brake caliper assembly torx bolt threads Fork socket bolt threads	Locking agent	
Handle grip rubber inside	Honda Bond A or Honda Hand Grip Cement (U.S.A. only)	
Fork cap O-ring Fork oil seal lips	Pro-Honda Suspension Fluid SS-8	

# CABLE & HARNESS ROUTING

'96 - '97:

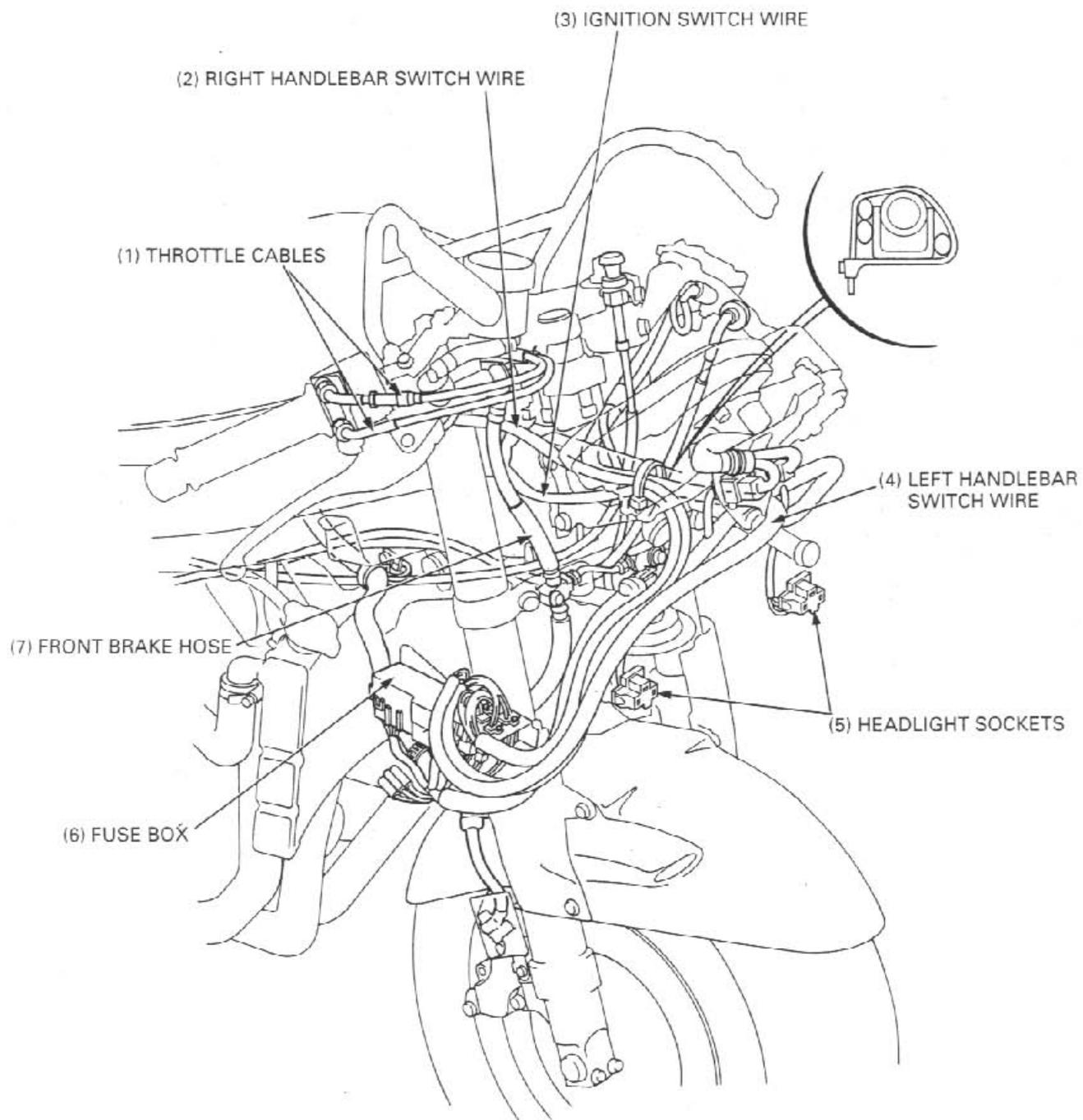


After '97:

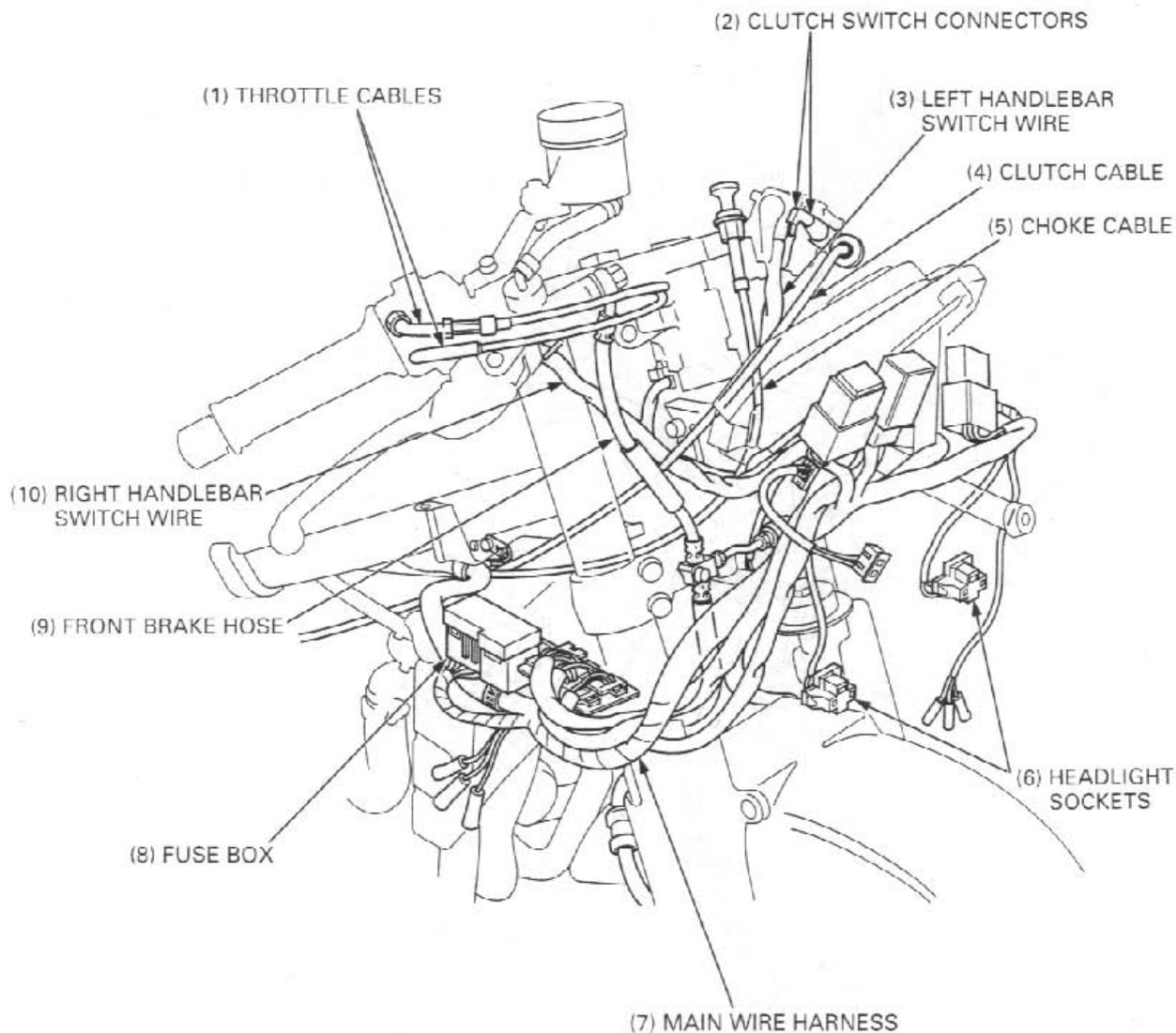


# GENERAL INFORMATION

'96 - '97:



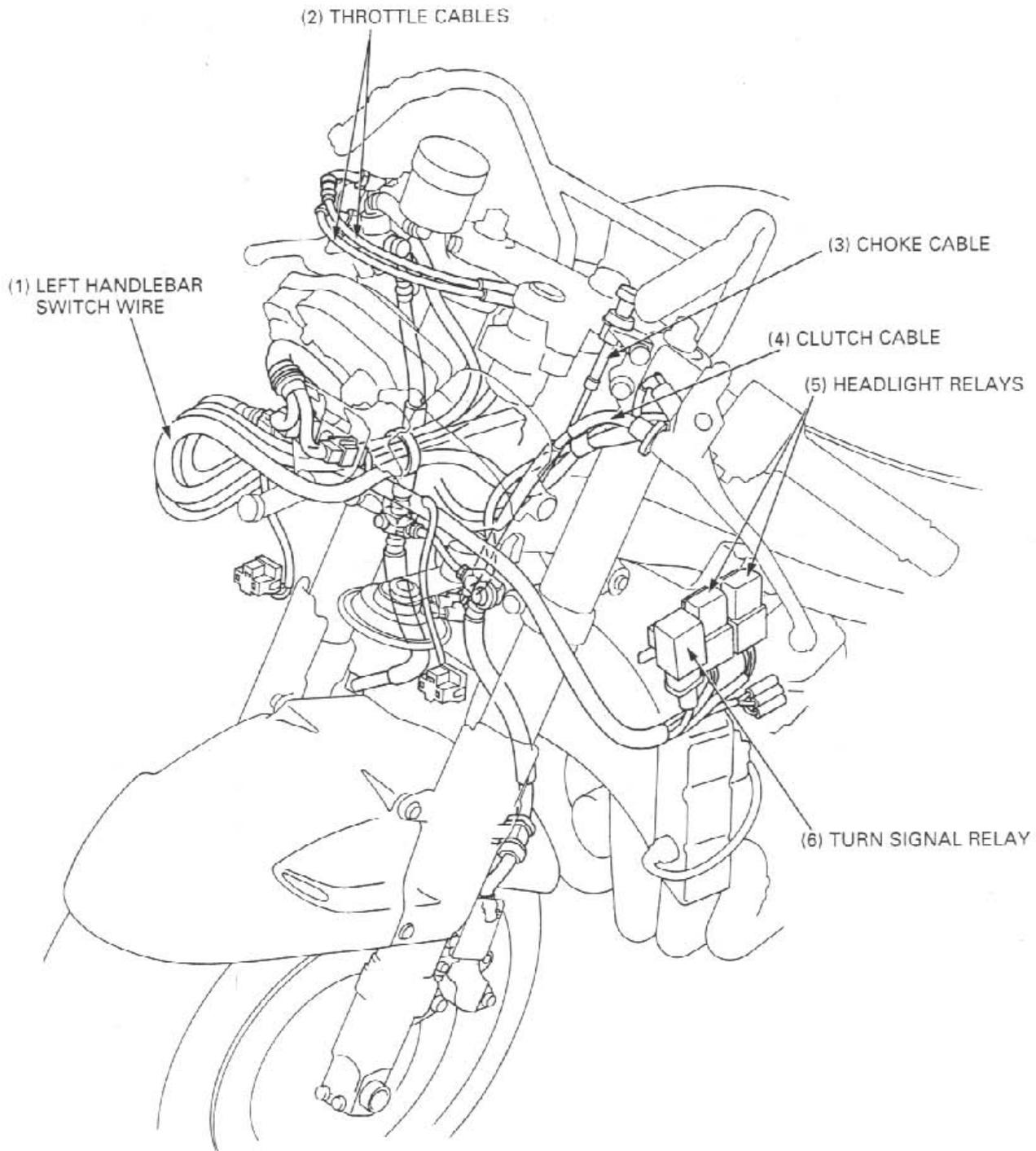
After '97:



## GENERAL INFORMATION

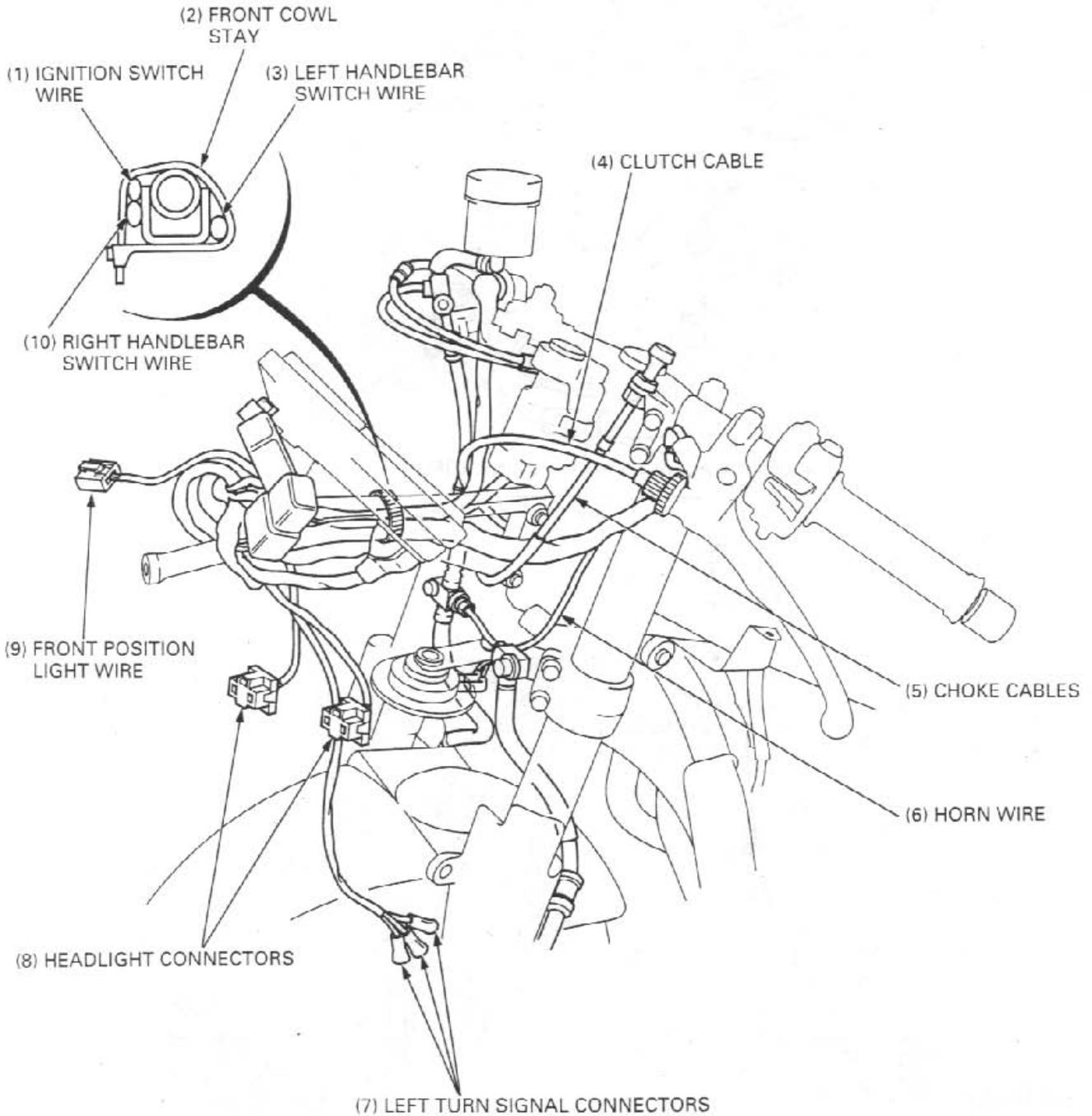
---

'96 - '97:



Product: Honda CBR900RR Motorcycle Service Repair Workshop Manual

Full Download: <https://www.aresairmanual.com/downloads/honda-cbr900rr-motorcycle-service-repair-workshop-manual/>



Sample of manual. Download All 407 pages at:

<https://www.aresairmanual.com/downloads/honda-cbr900rr-motorcycle-service-repair-workshop-manual/>