



## SPECIFICATIONS

## GENERAL SPECIFICATIONS

Model	FZR600W/WC	
	FZR600W	FZR600WC
Model Code Number	3HH1	3HW1
Vehicle Identification Number	JYA3HHE0 * KA000101	JYA3HWC0 * KA000101
Engine Starting Number	3HH-000101	3HW-000101
Dimensions:		
Overall Length	2,095 mm (82.5 in)	
Overall Width	700 mm (27.6 in)	
Overall Height	1,160 mm (45.7 in)	
Seat Height	785 mm (30.9 in)	
Wheelbase	1,420 mm (55.9 in)	
Minimum Ground Clearance	135 mm ( 5.3 in)	
Basic Weight:		
With Oil and Full Fuel Tank	199 kg (439 lb), 204 kg (450 lb) (FZR600WC)	
Minimum Turning Radius:	3,500 mm (138 in)	
Engine:		
Engine Type	Liquid cooled 4-stroke, gasoline, DOHC	
Cylinder Arrangement	4-cylinder parallel	
Displacement	599 cm <sup>3</sup>	
Bore x Stroke	59.0 x 54.8 mm (2.323 x 2.158 in)	
Compression Ratio	12 : 1	
Compression Pressure	1,200 kPa (12 kg/cm <sup>2</sup> , 171 psi)	
Starting System	Electric starter	
Lubrication System:	Wet sump	
Engine Oil Type or Grade:		
	YAMALUBE 4 (20W40) or SAE 20W40 type SE motor oil YAMALUBE 4 (10W30) or SAE 10W30 type SE motor oil	
Engine Oil Capacity:		
Engine Oil:	2.2 L (1.9 Imp qt, 2.4 US qt)	
Periodic Oil Change:	2.5 L (2.2 Imp qt, 2.7 US qt)	
With Oil Filter Replacement	3.0 L (2.6 Imp qt, 3.2 US qt)	
Total Amount		
Coolant Total Amount:		
(Including All Routes)	2.2 L (1.9 Imp qt, 2.3 US qt)	
Air Filter:	Dry type element	
Fuel:		
Type	UNLEADED FUEL RECOMMENDED	
Tank capacity	18 L (4.0 Imp gal, 4.8 US gal)	
Reserve Amount	3.4 L (0.75 Imp gal, 0.90 US gal)	

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Model	FZR600W/WC	
Carburetor: Type x Quantity Manufacturer	BDST32 x 4 MIKUNI	
Spark Plug: Type (Manufacture) Gap	CR9E (NGK), U27ESR-N (N.D.) 0.7 ~ 0.8 mm (0.028 ~ 0.032 in)	
Clutch Type:	Wet, multiple-disc	
Transmission: Primary Reduction System Primary Reduction Ratio Secondary Reduction System Secondary Reduction Ratio Transmission Type Operation Gear Ratio           1st 2nd 3rd 4th 5th 6th	Spur gear 82/48 (1.708) Chain drive 46/15 (3.267) Constant-mesh, 6-speed Left foot operation 42/15 (2.800) 43/22 (1.955) 31/20 (1.550) 28/21 (1.333) 31/26 (1.192) 30/27 (1.111)	
Chassis: Frame Type Caster Angle Trail	Double cradle 25° 94 mm (3.7 in)	
Tire: Type Size Manufacture (Type)	Front	Rear
	Tubeless 110/70V17-V240 Bridgestone (G549) Dunlop (K275F)	Tubeless 130/70V18-V240 Bridgestone (G550) Dunlop (K275)
Maximum Load*	159 kg (351 lb) 154 kg (340 lb) (FZR600WC)	
Tire Pressure (Cold tire): Up to 90 kg (198 lb) load*  90 kg (198 lb) ~ Maximum load*  High speed riding	Front	Rear
	250 kPa (2.5 kg/cm <sup>2</sup> , 36 psi)	250 kPa (2.5 kg/cm <sup>2</sup> , 36 psi)
	250 kPa (2.5 kg/cm <sup>2</sup> , 36 psi)	290 kPa (2.9 kg/cm <sup>2</sup> , 42 psi)
	250 kPa (2.5 kg/cm <sup>2</sup> , 36 psi)	290 kPa (2.9 kg/cm <sup>2</sup> , 42 psi)
* Load is total weight of cargo, rider, passenger, and accessories.		
Brake: Front Brake Type Operation Rear Brake Type Operation	Dual disc brake Right hand operation Single disc brake Right foot operation	
Suspension: Front Suspension Rear Suspension	Telescopic fork Swingarm (Link suspension)	

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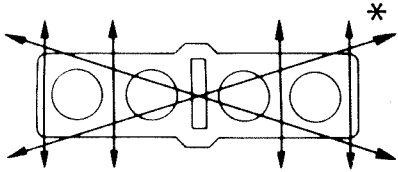
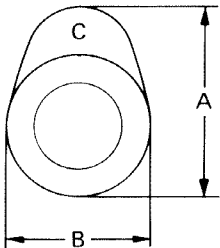
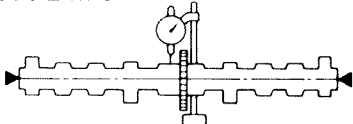
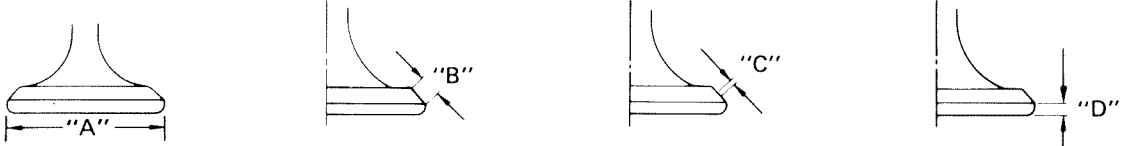


Model	FZR600W/WC
Shock Absorber: Front Shock Absorber Rear Shock Absorber	Coil-air spring, oil damper Coil-gas spring, gas-oil damper
Wheel Travel: Front Wheel Travel Rear Wheel Travel	130 mm (5.12 in) 115 mm (4.53 in)
Electrical: Ignition System Generator System Battery Type or Model Battery Capacity	T.C.I. (Digital ignition) A.C. generator GM12AZ 12V12AH
Headlight type:	Quartz bulb
Bulb Wattage x Quantity: Headlight Tail/Brake Light Flasher Light Meter Light	12V 35W/35W x 2 12V 8W/27W x 2 12V 27W x 4 12V 1.7W x 5
Indicator Light: Wattage x Quantity "NEUTRAL" "NIGH BEAM" "TURN" "OIL LEVEL"	12V 3.4W x 1 12V 3.4W x 1 12V 3.4W x 1 12V 3.4W x 1

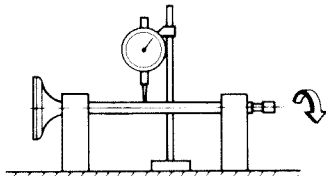
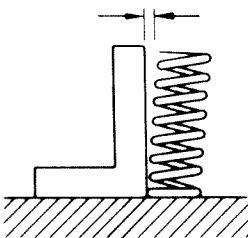



# MAINTENANCE SPECIFICATIONS

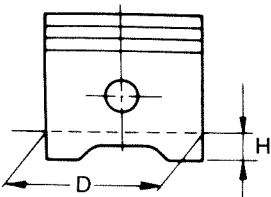
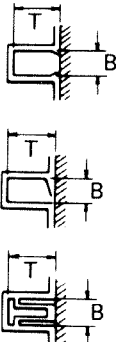
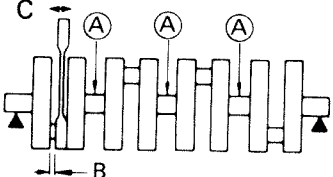
## ENGINE

Model	FZR600W/WC
<p>Cylinder Head: Warp Limit*</p> 	<p>0.05 mm (0.002 in) *Lines indicate straightedge measurement</p>
<p>Cylinder: Bore Size Taper Limit Out of Round Limit</p>	<p>59.00 ~ 59.01 mm (2.3228 ~ 2.3232 in) 0.09 mm (0.004 in) 0.07 mm (0.003 in)</p>
<p>Camshaft: Drive Method Cam Cap Inside Dia.</p> <p>Camshaft Outside Dia. Shaft-to-Cap Clearance &lt; Limit &gt;</p> <p>Cam Dimensions: Intake</p>  <p>Exhaust</p> <p>Camshaft Runout Limit</p> 	<p>Chain drive (Center) 23.000 ~ 23.021 mm (0.9055 ~ 0.9063 in)</p> <p>22.967 ~ 22.980 mm (0.9042 ~ 0.9047 in) 0.020 ~ 0.054 mm (0.0008 ~ 0.0021 in) 0.08 mm (0.0031 in)</p> <p>32.75 ~ 32.85 mm (1.2894 ~ 1.2933 in) 32.7 mm (1.2799 in)</p> <p>24.998 ~ 25.098 mm (0.9842 ~ 0.9881 in) 24.95 mm (0.982 in)</p> <p>32.55 ~ 32.65 mm (1.2815 ~ 1.2854 in) 32.5 mm (1.280 in)</p> <p>24.998 ~ 25.098 mm (0.9842 ~ 0.9881 in) 24.95 mm (0.982 in)</p> <p>0.06 mm (0.0024 in)</p>
<p>Cam Chain: Cam Chain Type/No. of Links Cam Chain Adjustment Method</p> <p>Valve, Valve Seat, Valve Guide: Valve Clearance (Cold):</p> <p>IN. EX.</p> <p>Valve Dimensions:</p>  <p>Head Dia.</p> <p>Face Width</p> <p>Seat Width</p> <p>Margin Thickness</p>	<p>DID215F/118 Links Automatic</p> <p>0.11 ~ 0.20 mm (0.004 ~ 0.008 in) 0.21 ~ 0.30 mm (0.008 ~ 0.012 in)</p>



Model		FZR600W/WC
"A" Head Dia.	IN.	23.9 ~ 24.1 mm (0.941 ~ 0.949 in)
	EX.	20.9 ~ 21.1 mm (0.823 ~ 0.831 in)
"B" Face Width	IN.	1.56 ~ 2.40 mm (0.061 ~ 0.095 in)
	EX.	1.56 ~ 2.40 mm (0.061 ~ 0.095 in)
"C" Seat Width	IN.	0.9 ~ 1.1 mm (0.0354 ~ 0.0433 in)
	EX.	0.9 ~ 1.1 mm (0.0354 ~ 0.0433 in)
< Limit >	IN.	1.6 mm (0.063 in)
	EX.	1.6 mm (0.063 in)
"D" Margin Thickness	IN.	0.6 ~ 0.8 mm (0.0236 ~ 0.0315 in)
	EX.	0.6 ~ 0.8 mm (0.0236 ~ 0.0315 in)
< Limit >	IN.	0.5 mm (0.020 in)
	EX.	0.5 mm (0.020 in)
Stem Outside Diameter	IN.	4.475 ~ 4.490 mm (0.1762 ~ 0.1768 in)
	EX.	4.460 ~ 4.475 mm (0.1756 ~ 0.1762 in)
< Limit >	IN.	4.45 mm (0.1752 in)
	EX.	4.435 mm (0.1746 in)
Guide Inside Diameter	IN.	4.500 ~ 4.512 mm (0.1772 ~ 0.1776 in)
	EX.	4.500 ~ 4.512 mm (0.1772 ~ 0.1776 in)
< Limit >	IN.	4.542 mm (0.179 in)
	EX.	4.542 mm (0.179 in)
Stem-to-Guide Clearance	IN.	0.010 ~ 0.037 mm (0.0004 ~ 0.0015 in)
	EX.	0.025 ~ 0.052 mm (0.001 ~ 0.002 in)
< Limit >	IN.	0.08 mm (0.0031 in)
	EX.	0.1 mm (0.0039 in)
Stem Runout Limit		0.04 mm (0.002 in)
		
Valve Seat Width	IN.	0.9 ~ 1.1 mm (0.0354 ~ 0.0433 in)
	EX.	0.9 ~ 1.1 mm (0.0354 ~ 0.0433 in)
< Limit >	IN.	1.6 mm (0.063 in)
	EX.	1.6 mm (0.063 in)
Valve Spring:		
Free Length	IN.	43.15 mm (1.70 in)
	EX.	43.15 mm (1.70 in)
Installed Length (Valve Closed)	IN.	37.5 mm (1.48 in)
	EX.	37.5 mm (1.48 in)
Compressed Pressure	IN.	11.6 ~ 13.4 kg (25.9 ~ 29.6 lb)
(Valve closed)	EX.	11.6 ~ 13.4 kg (25.9 ~ 29.6 lb)
< Limit >	IN.	10.4 kg (22.1 lb)
	EX.	10.4 kg (22.1 lb)
Tilt Limit	IN.	2.5°/1.8 mm (0.0709 in)
	EX.	2.5°/1.8 mm (0.0709 in)
		
Direction of Winding (Top view)	IN.	
	EX.	



Model	FZR600W/WC
<p>Piston:</p> <p>Piston Size "D"</p> <p>Measuring Point "H"</p>  <p>Piston-to-Cylinder Clearance &lt; Limit &gt;</p> <p>Overize:        2nd                      4th</p>	<p>58.940 ~ 58.955 mm (2.321 ~ 2.322 in) 5 mm (0.197 in) (From bottom line of piston skirt)</p> <p>0.045 ~ 0.070 mm (0.0018 ~ 0.0028 in) &lt; 0.15 mm (0.006 in) &gt; 59.5 mm (2.343 in) 60.0 mm (2.362 in)</p>
<p>Piston Ring:</p> <p>Sectional Sketch</p>  <p>Top Ring</p> <p>2nd Ring</p> <p>Oil Ring</p> <p>End Gap (Installed):</p> <p>Side Clearance:</p>	<p>Barrel B = 0.8 mm (0.0315 in) T = 2.1 mm (0.0827 in)</p> <p>Taper B = 0.8 mm (0.0315 in) T = 2.1 mm (0.0827 in)</p> <p>Expander B = 1.5 mm (0.0591 in) T = 2.2 mm (0.0866 in)</p> <p>Top Ring    0.15 ~ 0.30 mm (0.0059 ~ 0.0118 in) 2nd Ring    0.15 ~ 0.30 mm (0.0059 ~ 0.0118 in) Oil Ring     0.2 ~ 0.6 mm (0.0079 ~ 0.0236 in) Top Ring    0.03 ~ 0.07 mm (0.0012 ~ 0.0028 in) &lt; Limit &gt;    0.10 mm (0.004 in) 2nd Ring    0.02 ~ 0.06 mm (0.0008 ~ 0.0024 in) &lt; Limit &gt;    0.10 mm (0.004 in) Oil Ring     —</p>
<p>Connecting Rod:</p> <p>Connecting Rod Oil Clearance</p> <p>Bearing Size No. Color Code</p>	<p>0.043 ~ 0.066 mm (0.0017 ~ 0.0026 in) 1. Blue    2. Black    3. Brown    4. Green</p>
<p>Crankshaft:</p>  <p>Runout Limit "A"</p> <p>Big End Side Clearance "B"</p> <p>Small End Free Play "C"</p>	<p>0.03 mm (0.0012 in) 0.160 ~ 0.262 mm (0.0063 ~ 0.0103 in) 0.32 ~ 0.50 mm (0.0126 ~ 0.0197 in )</p>



Model	FZR600W/WC	
Main Journal Oil Clearance Bearing Size No. Color Code	0.025 ~ 0.043 mm (0.0010 ~ 0.0017 in) 1. Blue 2. Black 3. Brown 4. Green 5. Yellow	
Clutch: Friction Plate Thickness x Quantity Wear Limit Clutch Plate Thickness x Quantity Warp Limit Clutch Spring Free Length x Quantity Clutch Spring Minimum Length Clutch Housing Thrust Clearance Clutch Release Method Push Rod Bending Limit	2.9 ~ 3.1 mm (0.114 ~ 0.122 in) x 9 2.8 mm (0.11 in) 1.8 ~ 2.2 mm (0.072 ~ 0.085 in) x 8 0.1 mm (0.04 in) 33.5 mm (1.32 in) x 5 32.6 mm (1.28 in) 0.05 ~ 0.13 mm (0.002 ~ 0.005 in) Inner push, screw push 0.5 mm (0.020 in)	
Transmission: Main Axle Deflection Limit Drive Axle Deflection Limit	0.08 mm (0.0031 in) 0.08 mm (0.0031 in)	
Shifter: Shifter Type	Cam Drum	
Carburetor:	FZR600W	FZR600WC
Type/Manufacture x Quantity	BDST32/MIKUNI x 4	←
I.D. Mark	3HH-00	3HW00
Main Jet (M.J.)	#107.5	←
Main Air Jet (M.A.J.)	#65	←
Jet Needle-Clip Position (J.N.)	5CFZ4-2	5CFZ7-1
Needle Jet (N.J.)	Y-0	←
Pilot Jet (P.J.)	#32.5	←
Pilot Outlet Size (P.O.)	0.8	←
Pilot Air Jet (P.A.J.)	#132.5	←
Pilot Screw (P.S.)	3.0	←
Valve Seat Size (V.S.)	1.2	←
Starter Jet (G.S <sub>1</sub> )	#52.5	#50
(G.S <sub>2</sub> )	0.6	0.5
Bypass 1 (B.P. 1)	0.8	←
Bypass 2 (B.P. 2)	0.8	←
Throttle Valve Size (Th. V)	#130	←
Fuel Level (F.L.)	3.8 ~ 4.8 mm (0.15 ~ 0.19 in) From the float chamber line	
Lubrication System:		
Oil Filter Type	Paper	
Oil Pump Type	Trochoid pump	
Tip Clearance	0.03 ~ 0.09 mm (0.0012 ~ 0.0035 in)	
< Limit >	< 0.15 mm (0.006 in) >	
Side Clearance	0.03 ~ 0.08 mm (0.0012 ~ 0.0031 in)	
< Limit >	< 0.15 mm (0.006 in) >	
Bypass Valve Setting Pressure	80 ~ 120 kPa (0.8 ~ 1.2 kg/cm <sup>2</sup> , 11.38 ~ 17.06 psi)	
Relief Valve Operating Pressure	450 ~ 550 kPa (4.5 ~ 5.5 kg/cm <sup>2</sup> , 63.99 ~ 78.21 psi)	



Model	FZR600W/WC
Cooling System:	
Radiator Core Size	Width 350 mm (13.8 in)
	Height 185 mm (7.3 in)
	Thickness 32 mm (1.26 in)
Radiator Cap Opening Pressure	95 ~ 125 kPa (0.95 ~ 1.25 kg/cm <sup>2</sup> , 13.5 ~ 17.8 psi)
Reservoir Tank Capacity	
< To Full level >	0.28 L (0.25 Imp qt, 0.30 US qt)
Water Pump	
Type	Single-suction centrifugal pump
Reduction Ratio	89/41 x 48/49 (2.126)



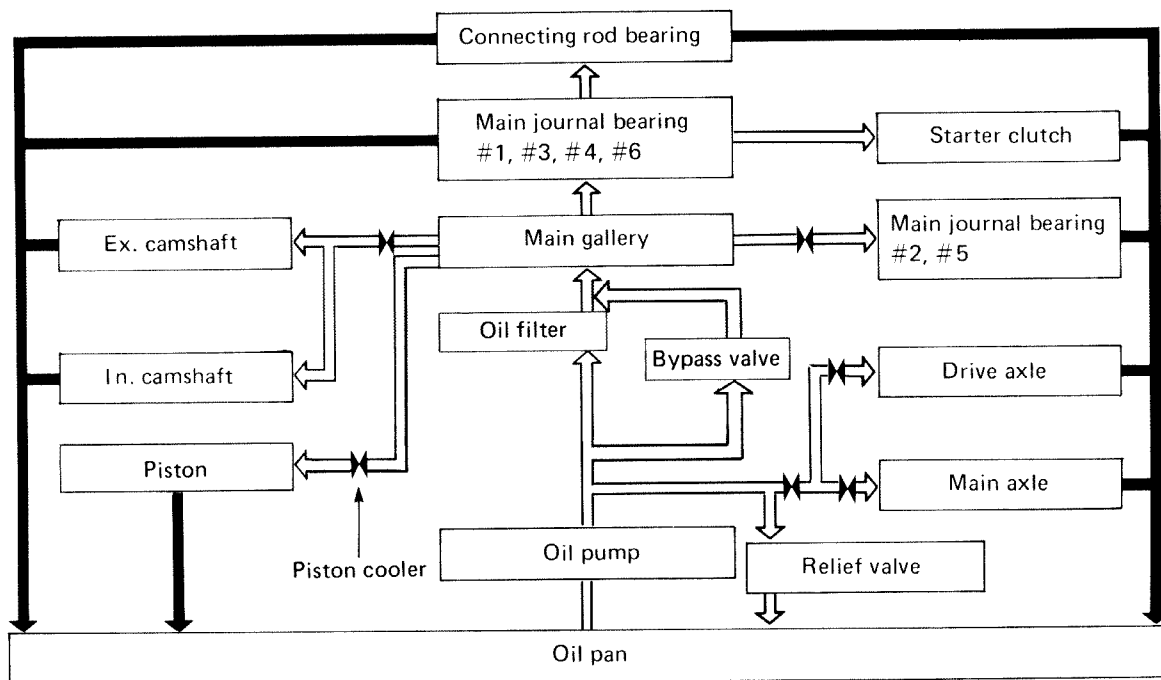


## Lubrication chart:

Pressured feed

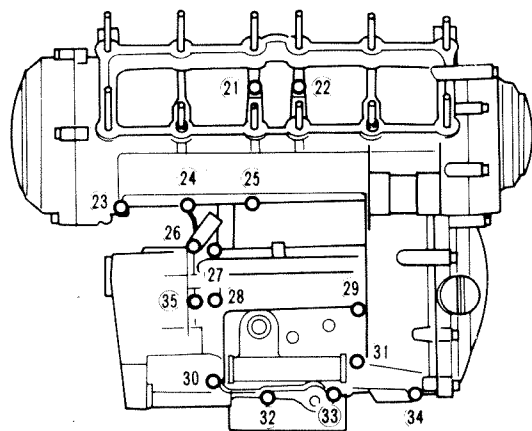
Splashed

Nozzle

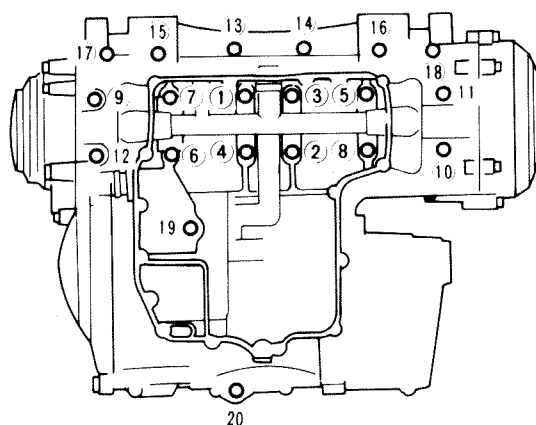


## Crankcase Tightening Sequence:

Crankcase (Upper)



Crankcase (Lower)



① ~ ⑫ , ③① 8 mm Bolt: 24 Nm (2.4 m·kg, 17 ft·lb)

⑬ ~ ⑲ , ③② ~ ③⑤ 6 mm Bolt: 12 Nm (1.2 m·kg, 8.7 ft·lb)



## Tightening torque

Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m · kg	ft · lb	
Camshaft Cap	Bolt	M6	24	10	1.0	7.2	
Stud Bolt (Cylinder head)	—	M6	8	10	1.0	7.2	
Cylinder Head	Nut	M8	12	25	2.5	18	
Spark Plug	—	M10	4	13	1.3	9.4	
Cylinder Head Cover	Bolt	M6	8	10	1.0	7.2	
Blind Plug (Sand)	Screw	M12	6	37	3.7	27	
Blind Plug (Water)	Screw	M6	3	7	0.7	5.1	
Connecting Rod	Nut	M7	8	23	2.3	17	
Timing Chain Sprocket	Bolt	M7	4	24	2.4	17	
Timing Chain Tensioner	Bolt	M6	2	10	1.0	7.2	
Timing Chain Guide (Intake)	Bolt	M6	2	10	1.0	7.2	
Timing Chain Tensioner End	Bolt	M6	1	10	1.0	7.2	
Pipe Stopper	Bolt	M6	6	10	1.0	7.2	
Thermostat Housing Assembly	Bolt	M6	1	7	0.7	5.1	
Thermostat Housing Cover	Bolt	M6	2	10	1.0	7.2	
Radiator	Bolt	M6	2	10	1.0	7.2	
Water Pipe Joint	Bolt	M6	4	10	1.0	7.2	
Water Pump	Bolt	M6	2	10	1.0	7.2	
Water Pump Cover	Bolt	M6	2	10	1.0	7.2	
Radiator Cover	Screw	M5	4	7	0.7	5.1	
Oil Pump Housing	Screw	M6	1	7	0.7	5.1	
Oil Pump Mount	Bolt	M6	3	10	1.0	7.2	
Drain Plug	Bolt	M14	1	43	4.3	31	
Oil Delivery Pipe	Bolt	M10	2	20	2.0	14	
Carburetor Joint	Bolt	M6	8	10	1.0	7.2	
Exhaust Pipe	Nut	M6	8	10	1.0	7.2	
Muffler Bracket	Bolt	M8	1	20	2.0	14	
Exhaust Pipe Blind Plug (CO test)	Bolt	M6	4	10	1.0	7.2	
Exhaust Pipe Joint	Bolt	M8	2	20	2.0	14	
Crankcase	Bolt	M8	12	24	2.4	17	
Stud Bolt (Crankcase)	—	M8	13	12	1.2	9.4	
Crankcase	Bolt	M6	21	12	1.2	8.7	
Oil Baffle Plate	Screw	M6	4	7	0.7	5.1	
Crankcase Cover (Left)	Bolt	M6	5	10	1.0	7.2	
Crankcase Cover (Right)	Bolt	M6	10	10	1.0	7.2	
Bearing Plate	Bolt	M6	2	10	1.0	7.2	
Generator Cover	Bolt	M6	5	10	1.0	7.2	
Starter Clutch Cover	Bolt	M6	7	10	1.0	7.2	
Starter Clutch	Bolt	M10	1	80	8.0	58	
Starter Clutch Outer and Starter Wheel	Bolt	M8	3	30	3.0	22	
Pressure Plate	Bolt	M5	5	6	0.6	4.3	
Clutch Boss	Nut	M18	1	70	7.0	51	
Push Lever	Screw	M5	2	5	0.5	3.6	
Push Rod	Nut	M6	1	16	1.6	11	
Drive Sprocket	Nut	M18	1	70	7.0	51	
Stopper Plate	Bolt	M6	1	10	1.0	7.2	
Stopper Lever	Bolt	M6	1	10	1.0	7.2	

Use lock washer

Use lock washer

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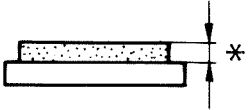
Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m · kg	ft · lb	
A.C. Magneto	Bolt	M10	1	80	8.0	58	
Starter Coil	Bolt	M6	3	10	1.0	7.2	
Pickup Coil	Screw	M5	2	5	0.5	3.6	
Starter Motor	Bolt	M6	2	10	1.0	7.2	
Neutral Switch	Screw	M6	2	4	0.4	2.9	
Oil Level Switch	Bolt	M6	2	7	0.7	5.1	
Ignition Coil	Nut	M6	2	7	0.7	5.1	



CHASSIS

Model			FZR600W/WC							
Steering System: Steering Bearing Type			Taper Roller Bearing							
Front Suspension:										
Front Fork Travel			130 mm (5.12 in)							
Front Spring Free Length			415 mm (16.3 in)							
< Limit >			410 mm (16.1 in)							
Collar Length			160 mm (6.3 in)							
Spring Rate:			4.4 N/mm (0.45 kg/mm, 25.2 lb/in)							
			K2 7.9 N/mm (0.8 kg/mm, 44.8 lb/in)							
Stroke			K1 0.0 ~ 90 mm (0.0 ~ 3.54 in)							
			K2 90 ~ 130 mm (3.54 ~ 5.12 in)							
Optional Spring			No							
Oil Capacity			435 cm <sup>3</sup> (15.3 Imp oz, 15.3 US oz)							
Oil Level (Fully Compression)			101 mm (3.98 in)							
			Bellow the top of inner fork tube without fork spring							
Oil Grade			Fork Oil 10W or equivalent							
Rear Suspension:										
Shock Absorber Travel			43 mm (1.69 in)							
Spring Free Length			180.5 mm (7.11 in)							
< Limit >			170.5 mm (6.71 in)							
Fitting Length			170 mm (6.69 in)							
Spring Rate			K1 130 N/mm (13 kg/mm, 728 lb/in)							
Stroke			K1 0 ~ 43 mm (0.0 ~ 1.69 in)							
Optional Spring			No							



Model	FZR600W/WC
<b>Front Disc Brake:</b> Type Disc Outside Diameter x Thickness < Disc Wear Limit > Pad Thickness                      Inner < Limit > * Pad Thickness                      Outer < Limit > * 	Dual 298 x 4 mm (11.7 x 0.16 in) 3.5 mm (0.14 in) 4.5 mm (0.18 in) 0.5 mm (0.02 in) 4.5 mm (0.18 in) 0.5 mm (0.02 in)
Master Cylinder Inside Diameter Caliper Cylinder Inside Diameter: Brake Fluid Type	15.87 mm (0.62 in) 45.4 mm (1.79 in) DOT # 4
<b>Rear Disc Brake:</b> Type Disc Outside Diameter x Thickness < Disc Wear Limit > Pad Thickness                      Inner < Limit > * Pad Thickness                      Outer < Limit > * 	Single 245 x 5 mm (9.65 x 0.20 in) 4.5 mm (0.18 in) 5.5 mm (0.22 in) 0.5 mm (0.02 in) 5.5 mm (0.22 in) 0.5 mm (0.02 in)
Master Cylinder Inside Diameter Caliper Cylinder Inside Diameter Brake Fluid Type	14.0 mm (0.55 in) 42.85 mm (1.69 in) DOT # 4 If DOT # 4 is not available, # 3 can be used.
<b>Clutch Lever:</b> Clutch Lever Free Play	2 ~ 3 mm (0.08 ~ 0.12 in)
<b>Brake Lever and Brake Pedal:</b> Brake Lever Free Play Brake Pedal Position	2 ~ 5 mm (0.08 ~ 0.20 in) 44 mm (1.73 in) Below the top of the footrest.

Parts to be tightened	Thread size	Tightening torque		
		Nm	m · kg	ft · lb
Front Axle and Outer Tube	M14 x 1.5	58	5.8	42
Front Wheel Axle Holder	M8 x 1.25	20	2.0	14
Rear Axle and Nut	M16 x 1.5	107	10.7	77
Handlebar Crown and Inner Tube	M8 x 1.25	26	2.6	19
Handlebar Crown and Steering Stem	M22 x 1.0	110	11.0	80
Steering ring nut (Upper and lower)	—	See "NOTE"		
Brake Caliper (Front/Rear)	M10 x 1.25	35	3.5	25
Bleed Screw and Brake Caliper	M8 x 1.25	6	0.6	4.3
Brake Hose and Union Bolt	M10 x 1.25	26	2.6	19
Front Master Cylinder and Master Cylinder Holder	M6 x 1.0	9	0.9	6.5
Front Master Cylinder and Cylinder Cap	M5 x 0.8	2	0.2	1.4
Front Fender and Outer Tube	M6 x 1.0	6	0.6	4.3
Handlebar Boss and Front Fork	M8 x 1.25	13	1.3	9.5
Handlebar and Handlebar Boss	M8 x 1.25	23	2.3	17
Engine Mounting: Front	M10 x 1.25	55	5.5	40
Rear — Upper	M10 x 1.25	60	6.0	43
Rear — Lower	M10 x 1.25	55	5.5	40
Down Tube and Frame: Front	M10 x 1.25	60	6.0	43
Rear	M8 x 1.25	33	3.3	24
Footrest Bracket and Frame	M8 x 1.25	28	2.8	20
Pivot Axle and Nut	M14 x 1.5	90	9.0	65
Relay Arm and Frame	M10 x 1.25	40	4.0	29
Connecting Rod and Swingarm	M10 x 1.25	40	4.0	29
Connecting Rod and Relay Arm	M10 x 1.25	40	4.0	29
Swingarm and Frame	M10 x 1.25	40	4.0	29
Rear Shock Absorber	M10 x 1.25	40	4.0	29
Footrest and Footrest Bracket	M10 x 1.25	57	5.7	41
Rear Footrest Bracket and Frame	M8 x 1.25	20	2.0	14
Rear Master Cylinder and Rear Arm Bracket	M8 x 1.25	20	2.0	14
Cowling and Stay	M6 x 1.0	4	0.4	2.9
Compression Bar and Brake Caliper Bracket	M8 x 1.25	23	2.3	17
Front Fork Pinch Bolt	M8 x 1.25	20	2.0	14
Sprocket and Clutch Hub	M8 x 1.25	60	6.0	43
Brake Disc and Clutch Hub	M8 x 1.25	20	2.0	14
Inner Tube and Steering Stem	M8 x 1.25	22	2.2	16
Frame and Rear Frame: Upper	M10 x 1.25	64	6.4	46
Lower	M12 x 1.25	88	8.8	64

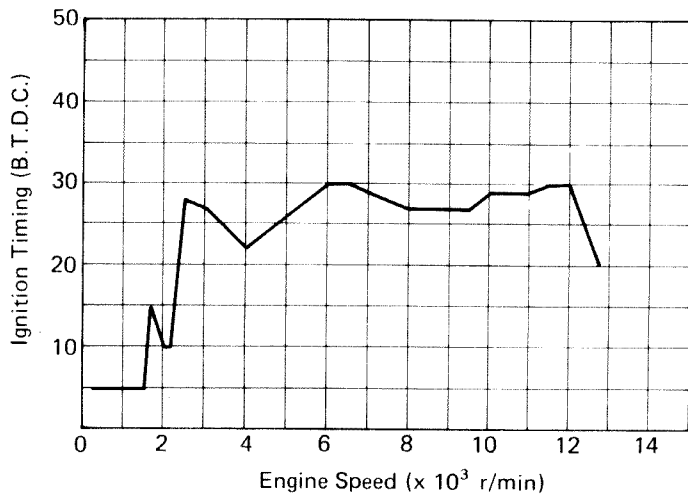
**NOTE:**

1. First, tighten the ring nut (lower) approximately 52 Nm (5.2 m · kg, 37 ft · lb) by using the torque wrench, then loosen the ring nut one turn.
2. Retighten the ring nut (lower) approximately 3 Nm (0.3 m · kg, 2.2 ft · lb).
3. Install the ring nut (upper). And finger tighten the ring nut (upper), then align the slots of both ring nuts. If not aligned, hold the lower ring nut and tighten the other until they are aligned.

**ELECTRICAL**

Model	FZR600W/WC
Voltage:	12V
Ignition System:	
Ignition Timing (B.T.D.C.)	5° at 1,200 r/min
Advancer Type	Electrical

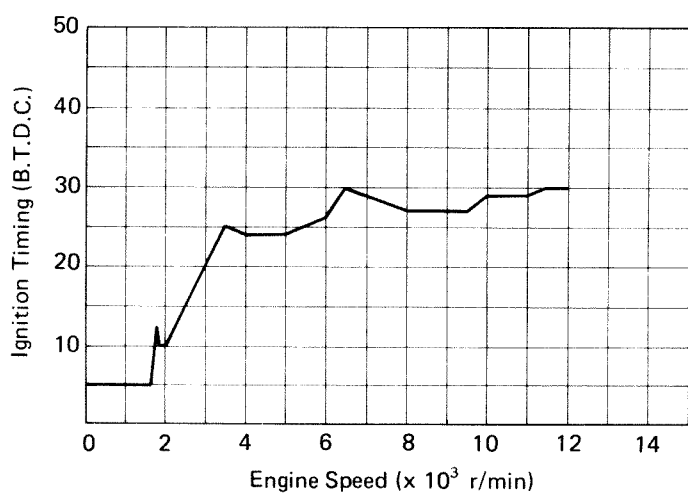
  



Ignition Timing (B.T.D.C.)

Engine Speed ( $\times 10^3$  r/min)

(For California)



Ignition Timing (B.T.D.C.)

Engine Speed ( $\times 10^3$  r/min)



Model	FZR600W/WC
<b>T.C.I.:</b> Pickup Coil Resistance (Color) T.C.I. Unit/Manufacturer	80 ~ 120Ω at 20°C (68°F) (White/Red – White/Black) TID14-73/HITACHI TID14-74/HITACHI (FZR600WC)
<b>Ignition Coil:</b> Model/Manufacturer Minimum Spark Gap Primary Winding Resistance Secondary Winding Resistance Spark Plug Cap Resistance	CM12-39/HITACHI 6 mm (0.24 in) 1.8 ~ 2.2Ω at 20°C (68°F) 9.6 ~ 14.4 kΩ at 20°C (68°F) 10 kΩ
<b>Charging System:</b> Type	A.C. Magneto Genrator
<b>A.C. Generator:</b> Model/Manufacturer Nominal Output Stator Coil Resistance	FL118-15/HITACHI 12V, 21A at 5,000 r/min 0.31 ~ 0.37Ω at 20°C (68°F)
<b>Voltage Regulator:</b> Type Model/Manufacturer No Load Regulated Voltage	Semi conductor – short circuit SH569/SHINDENGEN 14.3 ~ 15.3V
<b>Battery:</b> Capacity Specific Gravity	12V, 12AH 1.280



# MAINTENANCE SPECIFICATIONS

**SPEC**



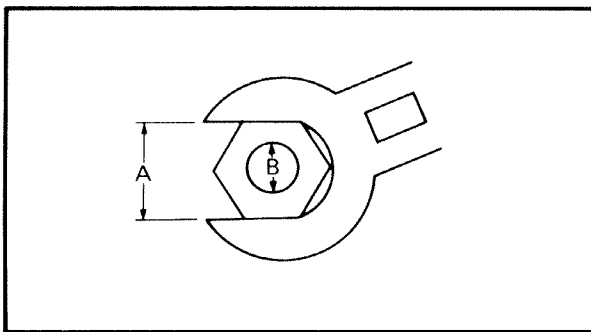
Model	FZR600W/WC
<b>Electrical Starter System:</b> Type Starter Motor: Model/Manufacturer Output Armature Coil Resistance Brush – Overall Length < Limit > Commutator Dia. Wear Limit Mica Undercut Starter Switch: Model/Manufacturer Amperage Rating	Constant mesh type  SM-13/MITSUBA 0.7 kW 0Ω at 20°C (68°F) 12.5 mm (0.49 in) 4 mm (0.16 in) 28 mm (1.10 in) 27 mm (1.06 in) 0.7 mm (0.027 in)  A104-128/HITACHI 100A
<b>Horn:</b> Type/ Model/Manufacturer Maximum Amperage	Plane Type/1 pcs. YF-12/NIKKO 1.5A
<b>Flasher Relay (Relay Assembly):</b> Type Model/Manufacturer Self Cancelling Device Flasher Frequency Wattage	Semi transistor type FX257N/NIPPON DENSO Yes 60 ~ 120 cycle/min 27W x 2 pcs + 3.4W
<b>Oil Level Switch:</b> Model/Manufacturer	1WG/NIPPON DENSO
<b>Starting Circuit Cut-Off Relay:</b> Model/Manufacturer Coil Winding Resistance Diode	G8R-30Y-B/OMRON 203 ~ 248Ω at 20°C (68°F) No
<b>Fuel Pump Relay:</b> Model/Manufacturer Coil Winding Resistance Color Code	G8R-30Y-B/OMRON 203 ~ 248Ω at 20°C (68°F) Black
<b>Electric Fan:</b> Model/Manufacturer	NAAB08/NIPPON DENSO
<b>Thermostat Switch:</b> Model/Manufacturer	47X/NIPPON THERMOSTAT
<b>Thermo Unit:</b> Model/Manufacturer	11H/NIPPON SEIKI
<b>Circuit Breaker:</b> Type Amperage for Individual Circuit x Quantity: MAIN HEADLIGHT SIGNAL IGNITION FAN RESERVE	Fuse  30A x 1 20A x 1 10A x 1 10A x 1 10A x 1 10A x 1, 30A x 1, 20A x 1



## GENERAL TORQUE SPECIFICATIONS

This chart specifies torque for standard fasteners with standard I.S.O. pitch threads. Torque specifications for special components or assemblies are included in the applicable sections of this book. To avoid warpage, tighten multi-fastener assemblies in a crisscross fashion, in progressive stages, until full torque is reached. Unless otherwise specified, torque specifications call for clean, dry threads. Components should be at room temperature.

A (Nut)	B (Bolt)	General torque specifications		
		Nm	m·kg	ft·lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11
14 mm	10 mm	30	3.0	22
17 mm	12 mm	55	5.5	40
19 mm	14 mm	85	8.5	61
22 mm	16 mm	130	13.0	94



A: Distance across flats
































B: Outside thread diameter

## DEFINITION OF UNITS

Unit	Read	Definition	Measure
mm	millimeter	$10^{-3}$ meter	Length
cm	centimeter	$10^{-2}$ meter	Length
kg	kilogram	$10^3$ gram	Weight
N	Newton	$1 \text{ kg} \times \text{m}/\text{sec}^2$	Force
Nm	Newton meter	$\text{N} \times \text{m}$	Torque
m·kg	Meter kilogram	$\text{m} \times \text{kg}$	Torque
Pa	Pascal	$\text{N}/\text{m}^2$	Pressure
N/mm	Newton per millimeter	N/mm	Spring rate
L	Liter		Volume or Capacity
$\text{cm}^3$	Cubic centimeter		
r/min	Rotation per minute		Engine Speed

## LUBRICATION POINT AND GRADE OF LUBRICANT

## ENGINE

Lubrication Point	Symbol
Oil seal lip	
O-Ring	
Bearing	
Piston surface	
Piston pin	
Cylinder head bolt	
Crankshaft pin	
Crankshaft journal	
Connecting rod bolt/Nut	
Camshaft cam lobe/Journal	
Valve stem (IN, EX)	
Valve stem end (IN, EX)	
Valve lifter	
Water pump impeller shaft	
Oil pump rotor (Inner/Outer), housing	
Oil strainer assembly	
O-Ring (Release Valve)	
Oil Level Gauge	
Idle gear surface/Bearing	
O-Ring (Starter Motor)	
Starter idle gear	
Starter idle gear shaft	
Primary driven gear	
Transmission gear (Wheel/Pinion)	
Axe (Main/Drive)	
Push lever assembly	
Push rod	
Shift cam	
Shift fork/Guide bar	
Shift shaft assembly	
Neutral switch O-Ring	



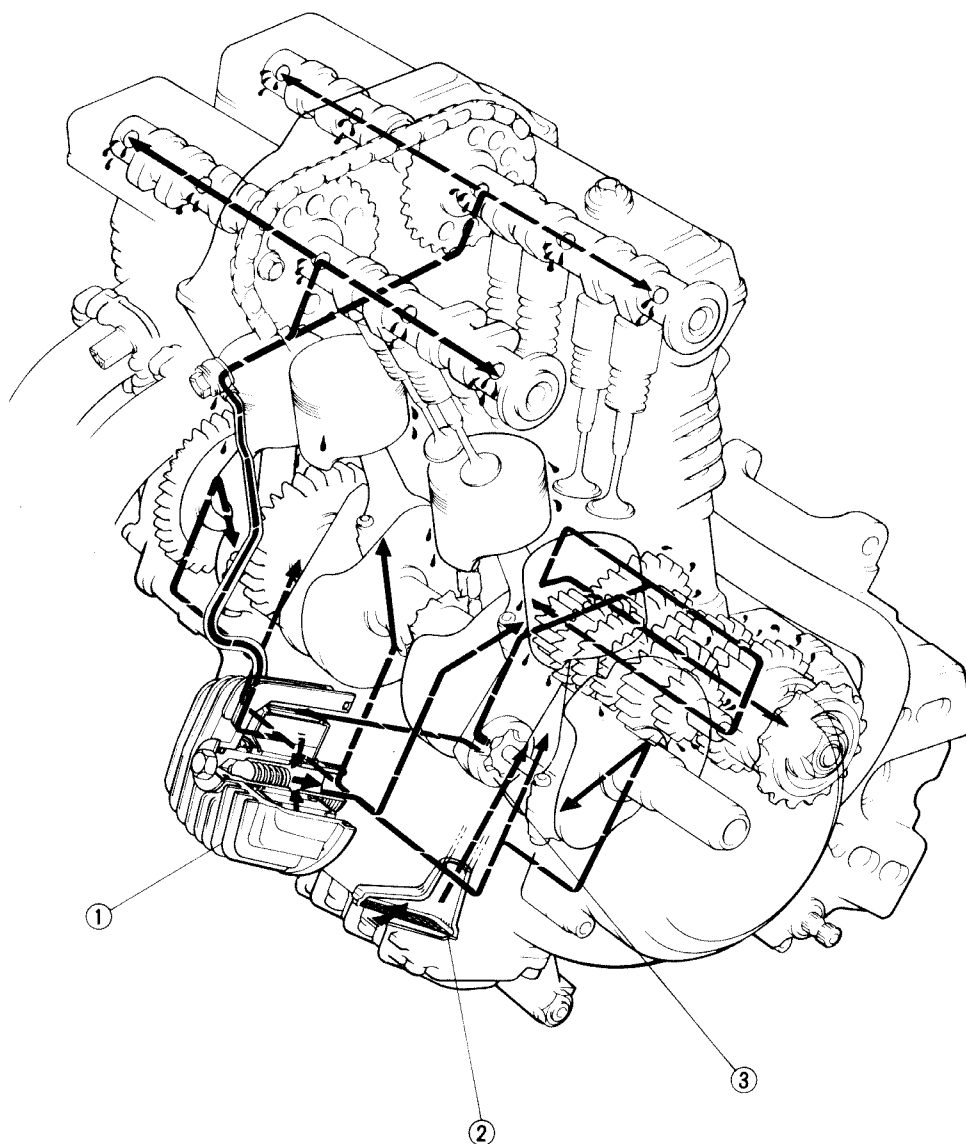
## CHASSIS

Lubrication Point	Symbol
Steering bearing (Upper/Lower)	
Wheel bearing/Axle	
Front wheel oil seal (Right/Left)	
Rear wheel oil seal	
Clutch hub oil seal	
Clutch hub fitting area	
Rear brake pedal shaft	
Change pedal	
Side stand sliding surface	
Tube guide (Throttle grip) inner surface	
Brake lever bolt, sliding surface	
Clutch lever bolt, sliding surface	
Rear shock absorber (Upper/Lower)	
Swingarm pivot bearing	
Pivot shaft	
Arm bearing	
Thrust cover (Inner)	
Swingarm bearing (Inner)	
Rear footrest pivot	
Rear footrest pin	



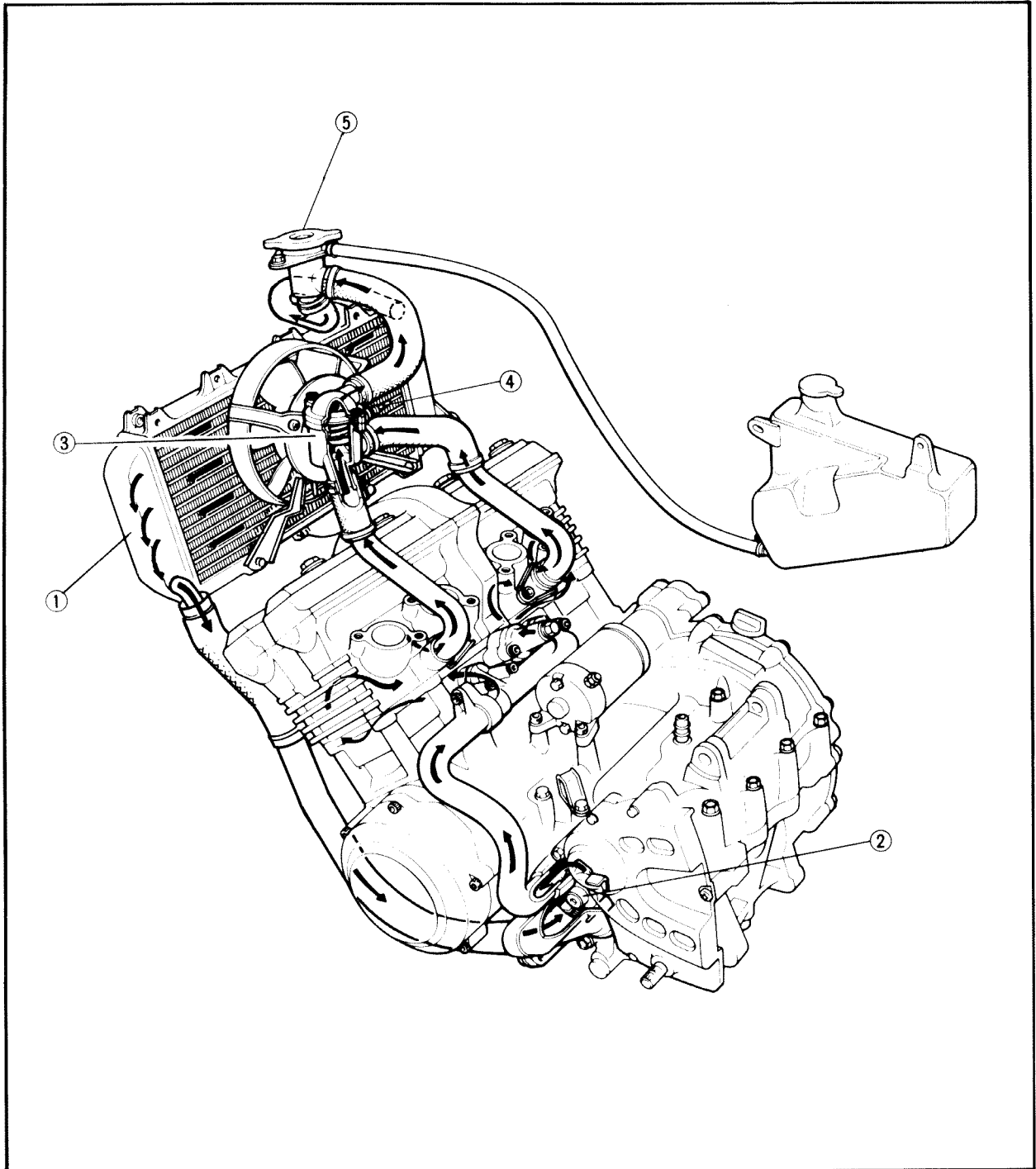
## LUBRICATION DIAGRAM

- ① Oil filter
- ② Oil strainer
- ③ Oil pump



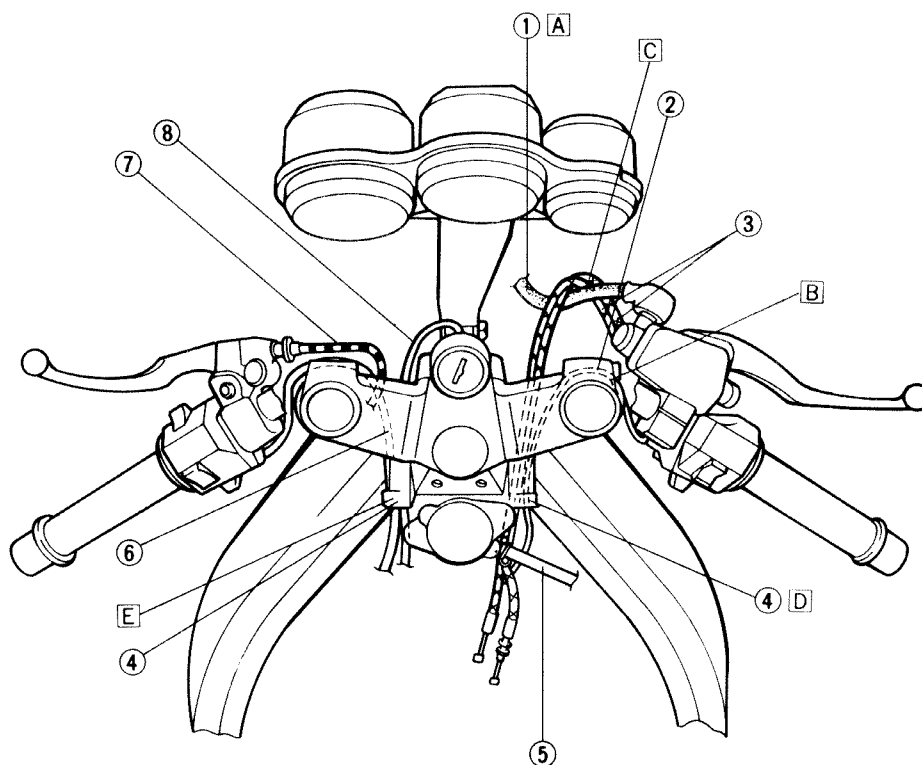
**COOLANT DIAGRAM**

- ① Radiator
- ② Water pump
- ③ Thermostat housing
- ④ Thermostatic valve
- ⑤ Radiator cap



## CABLE ROUTING

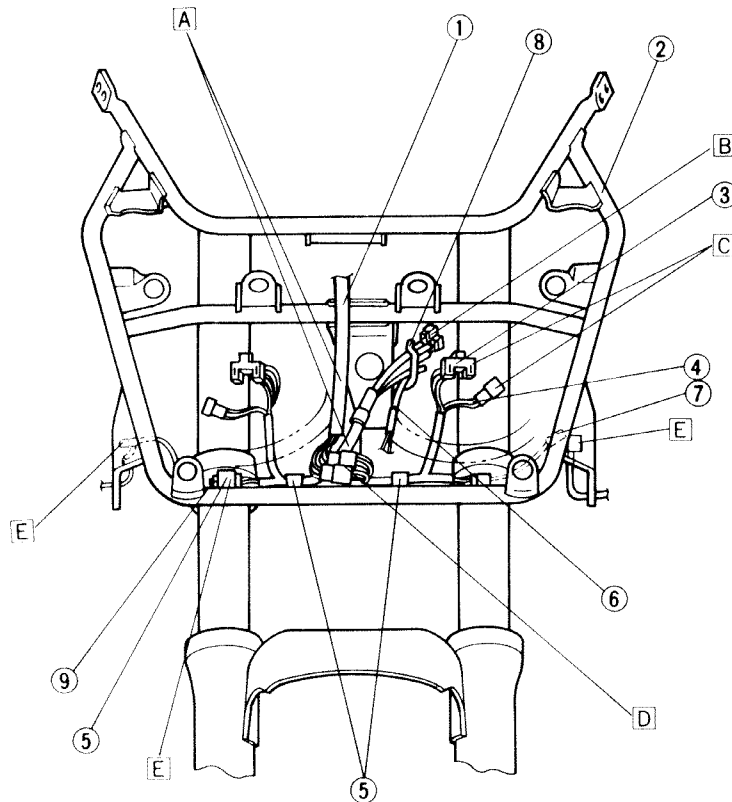
- ① Front brake hose
- ② Handlebar switch (right)
- ③ Throttle cable
- ④ Clamp
- ⑤ Radiator breather hose
- ⑥ Handlebar switch (left) lead
- ⑦ Clutch cable
- ⑧ Main switch lead
- A Pass the brake hose right side of cowling stay.
- B Pass the handlebar switch (left) lead in front of inner tube.
- C Pass the throttle cables in front of brake hose.
- D Clamp the throttle cables and handlebar switch (left) lead.
- E Clamp the handlebar switch (left) and main switch leads.





- ① Meter light lead
- ② Cowling stay
- ③ Headlight lead
- ④ Auxiliary light lead
- ⑤ Clamp
- ⑥ Horn lead
- ⑦ Flasher light (left) lead
- ⑧ Guide
- ⑨ Flasher light (right) lead

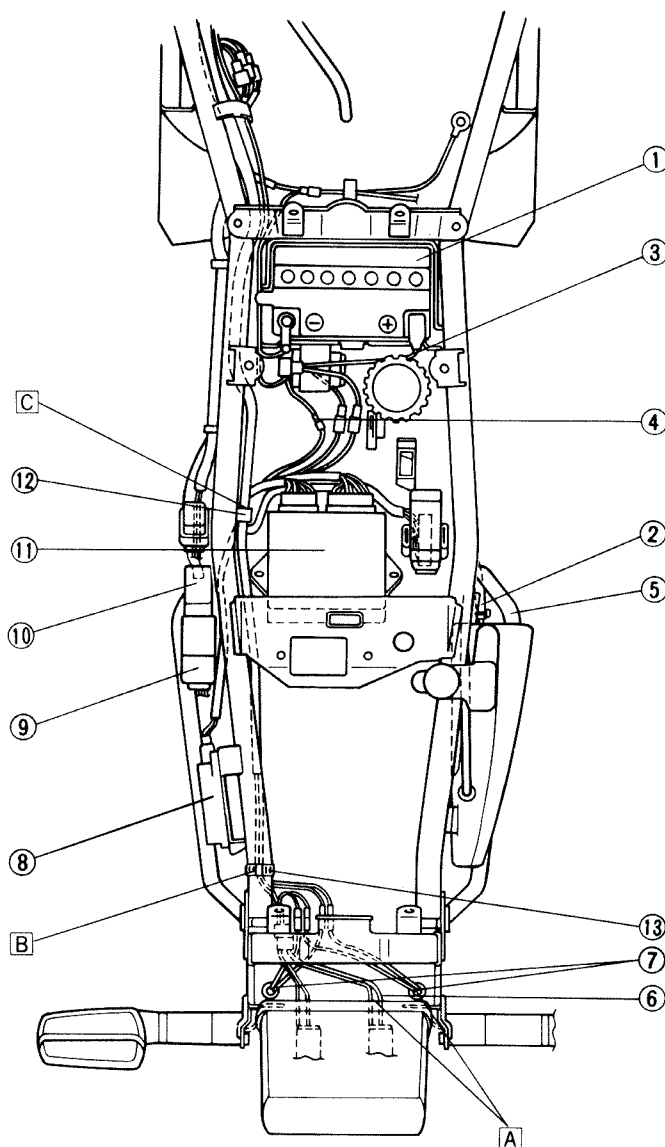
- [A] Pass the headlight and meter light leads between the headlight adjusting screws.
- [B] Pass the headlight and horn leads through the guide.
- [C] Connect the headlight and auxiliary light leads inside of headlight cover.
- [D] Connect the meter light lead between the headlight cover and cowling.
- [E] Clamp the flasher light lead.





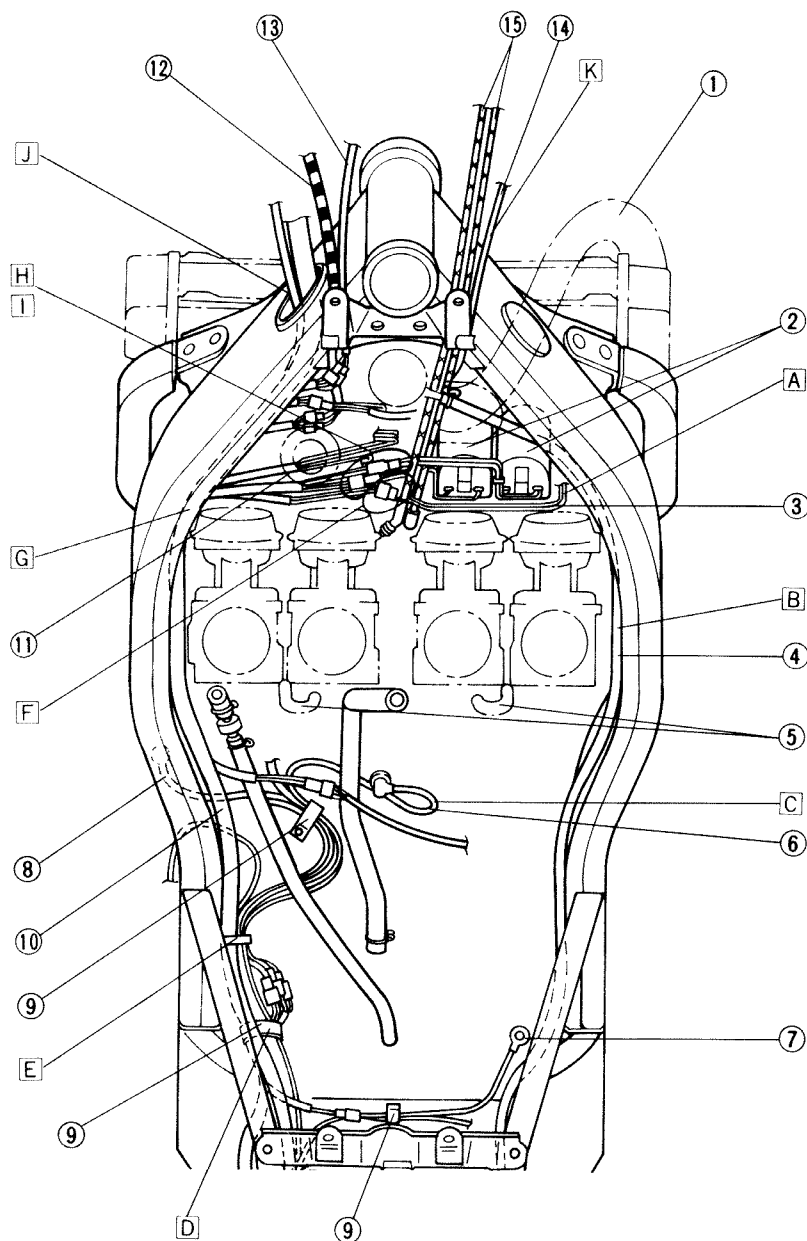


- |   |                  |  |
|---|------------------|--|
| ① Battery                                   | ⑩ Relay assembly | A Pass the flasher light lead through the hole in rear fender. |
| ② Coolant reservoir hose                    | ⑪ Ignitor unit   | B Clamp the taillight and rear flasher light lead.             |
| ③ Battery positive lead                     | ⑫ Clamp          | C Clamp the wireharness.                                       |
| ④ Starter relay lead                        | ⑬ Band           |  |
| ⑤ Breather hose<br>(coolant reservoir hose) |                  |  |
| ⑥ Taillight lead                            |                  |  |
| ⑦ Rear flasher light lead                   |                  |  |
| ⑧ Rectifier/regulator                       |                  |  |
| ⑨ Flasher relay                             |                  |  |

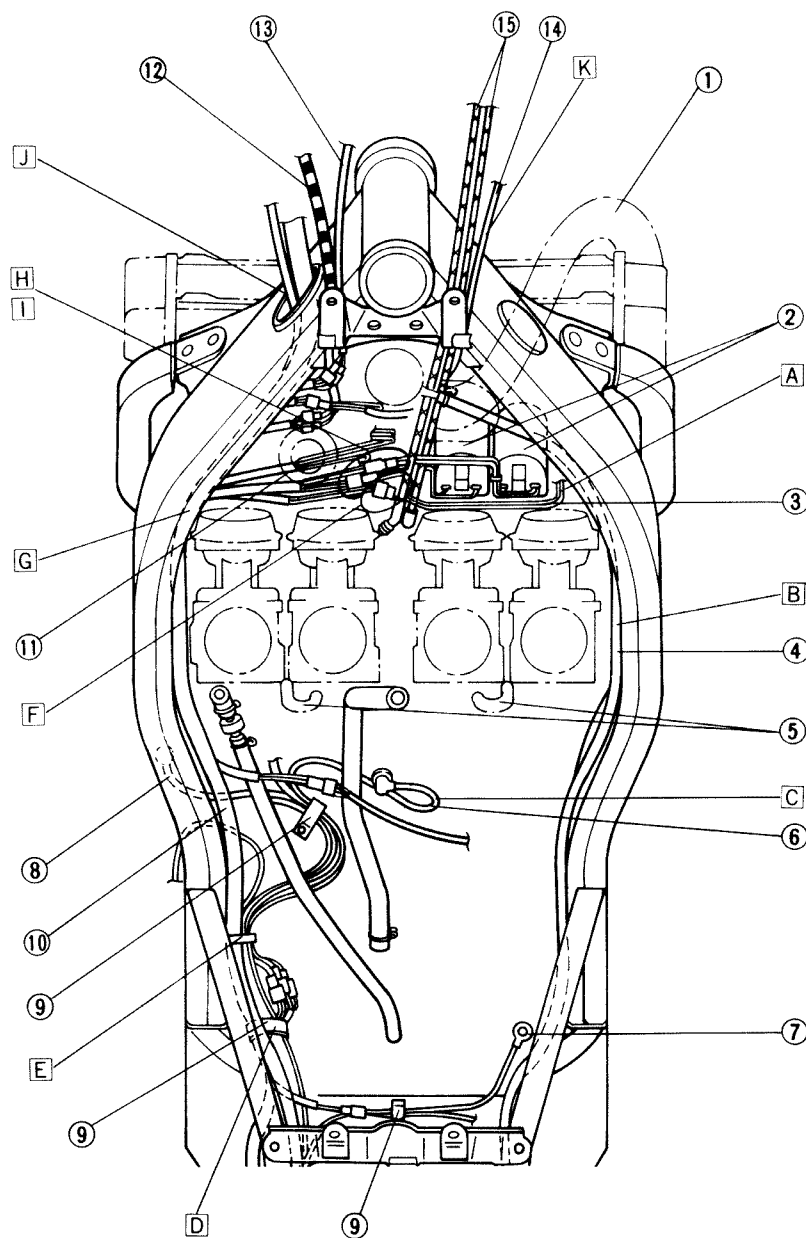




- |                            |                                 |
|----------------------------|---------------------------------|
| ① Radiator hose            | ⑩ Wireharness                   |
| ② Ignition coil            | ⑪ Thermo unit                   |
| ③ Fan motor lead           | ⑫ Clutch cable                  |
| ④ Radiator breather hose   | ⑬ Handlebar switch (left) lead  |
| ⑤ Carburetor breather hose | ⑭ Handlebar switch (right) lead |
| ⑥ Starter motor lead       | ⑮ Throttle cable                |
| ⑦ Ground lead              |                                 |
| ⑧ A.C. Generator lead      |                                 |
| ⑨ Clamp                    |                                 |



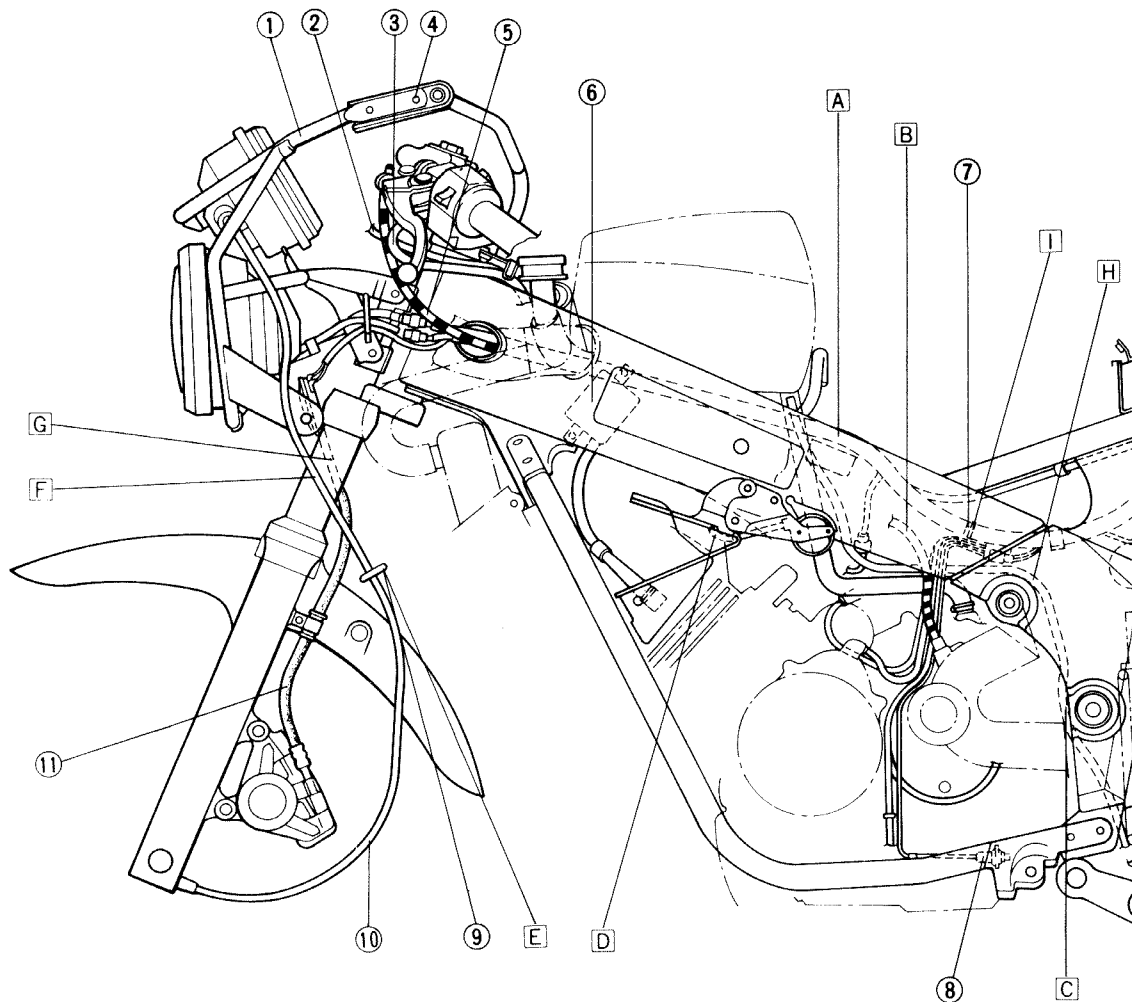
- A** Pass the fan motor lead behind the ignition coil.
- B** Pass the radiator breather hose between the carburetor and frame.
- C** Pass the starter motor lead below the starter motor.
- D** Clamp the wireharness.
- E** Clamp the A.C. magneto, neutral, oil level switch and sidestand switch leads.
- F** Pass the fan motor and ignition coil leads between the throttle cables, and connect them between the conductor and thermo unit.
- G** Position the wireharness so that the white tape is positioned on thermo unit.
- H** Connect the main switch lead between the conductor and thermo unit.
- I** Locate the main switch lead coupler in front of air filter case bracket.
- J** Pass the clutch cable and wireharness through the frame hole.
- K** Pass the throttle cables and handlebar switch lead between the radiator hoses.





- ① Cowling stay
- ② Main switch lead
- ③ Handlebar switch (left) lead
- ④ Rear view mirror stay
- ⑤ Clutch cable
- ⑥ Thermo unit
- ⑦ Clamp
- ⑧ Sidestand switch
- ⑨ Cable guide
- ⑩ Speedometer cable
- ⑪ Front brake hose

- A Pass the wireharness above the fuel tank bracket.
- B Pass the clutch cable inside the frame.
- C Pass the air filter breather hose between the engine and swingarm.
- D Pass the starter cable behind of the air intake duct.
- E Pass the speedometer cable through the holder.
- F Pass the speedometer cable outside of the front fork.
- G Pass the brake hose inside of the front fork.
- H Pass the air filter drain hose above the engine mounting bolt, and in front of pivot shaft.
- I Clamp the sidestand, pickup coil, neutral switch, oil level switch and starter relay leads.





- ① Clamp
- ② Ground lead
- ③ Taillight lead
- ④ Rear flasher lead
- ⑤ Rectifier/regulator
- ⑥ Flasher relay
- ⑦ Relay assembly
- ⑧ Main fuse
- ⑨ Battery breather hose
- ⑩ "EXUP" control cable
- ⑪ "EXUP" servo motor

- A Clamp the sidestand, pickup coil, neutral switch, oil level switch and starter relay leads.
- B Clamp the rear brake switch and ground leads.
- C Secure the ground lead with the screw (rectifier/regulator).
- D Clamp the flasher light lead and taillight leads.
- E Clamp the wireharness on left side of frame.
- F Pass the wireharness above the battery box.
- G For California

