

---

## **CHAPTER 7 APPENDICES**

**SPECIFICATIONS.....7-1**  
    GENERAL SPECIFICATIONS.....7-1  
    MAINTENANCE SPECIFICATIONS .....7-4

**GENERAL TORQUE SPECIFICATIONS.....7-18**

**DEFINITION OF UNITS .....7-19**

**CONVERSION TABLES .....7-19**

**LUBRICATION DIAGRAM .....7-20**

**CABLE ROUTING.....7-22**

**YX600S/YX600SC WIRING DIAGRAM**



## APPENDICES

## SPECIFICATIONS

## GENERAL SPECIFICATIONS

Model	YX600S/YX600SC
Model Code Number:	1UJ (For YX600S) 1UL (For YX600SC)
Vehicle Identification Number:	JYA1UJ00*GA000101 (For YX600S) JYA1UL00*GA000101 (For YX600SC)
Engine Starting Number:	1UJ-000101 (For YX600S) 1UL-000101 (For YX600SC)
Dimensions:	
Overall Length	2,075 mm (81.7 in)
Overall Width	770 mm (30.3 in)
Overall Height	1,095 mm (43.1 in)
Seat Height	765 mm (30.1 in)
Wheelbase	1,385 mm (54.5 in)
Minimum Ground Clearance	145 mm ( 5.7 in)
Basic Weight:	
With Oil and Full Fuel Tank	197 kg (434 lb)
Minimum Turning Radius:	2,400 mm (94.5 in)
Engine:	
Engine Type	Air cooled 4-stroke, gasoline, DOHC
Cylinder Arrangement	4-cylinder parallel
Displacement	599 cm <sup>3</sup>
Bore x Stroke	58.5 x 55.7 mm (2.3 x 2.19 in)
Compression Ratio	10.0 : 1
Compression Pressure	1078.8 kPa (11 kg/cm <sup>2</sup> , 156.4 psi)
Starting System	Electric starter
Lubrication System:	Pressure lubricated, wet sump
Engine Oil Type or Grade:	
	Yamalube 4-cycle oil or SAE 20W40 type SE motor oil SAE 10W30 type SE motor oil
Engine Oil Capacity:	
Engine Oil:	
Periodic Oil Change:	2.2 L (1.9 Imp qt, 2.3 US qt)
With Oil Filter Replacement	2.5 L (2.2 Imp qt, 2.6 US qt)
Total Amount	2.9 L (2.6 Imp qt, 3.0 US qt)
Air Filter	Dry type element

# GENERAL SPECIFICATIONS

APPX



Model	YX600S/YX600SC	
<b>Fuel:</b> Type Tank Capacity Reserve Amount	Regular gasoline 12.0 L (2.6 Imp gal, 3.2 US gal) 2.5 L (0.55 Imp gal, 0.66 US gal)	
<b>Carburetor:</b> Type (Quantity) Manufacturer	BS30 (4 pcs.) MIKUNI	
<b>Spark plug:</b> Type (Manufacture) Gap	D8EA (N.G.K.), X24ESU (N.D.) 0.6 ~ 0.7 mm (0.024 ~ 0.028 in)	
<b>Clutch Type:</b>	Wet, multiple-disc	
<b>Transmission:</b> Primary Reduction System Primary Reduction Ratio Secondary Reduction System Secondary Reduction Ratio Transmission Type Operation Gear Ratio	Spur gear, HY-VO chain 22/21 × 65/28 (2.431) Chain drive 45/16 (2.813) Constant-mesh, 6-speed Left foot operation 1st 41/15 (2.733) 2nd 37/19 (1.947) 3rd 34/22 (1.545) 4th 31/25 (1.240) 5th 29/28 (1.036) 6th 27/30 (0.900)	
<b>Chassis:</b> Frame Type Caster Angle Trail	Tubular steel, double cradle 27° 128 mm (5.04 in)	
<b>Tire:</b> Type Size Manufacture (Type)	Front Tubeless 110/90-16 59H DUNLOP (K355F) BRIDGESTONE (G527)	Rear Tubeless 130/90-16 67H DUNLOP (K355) BRIDGESTONE (G528)
<b>Tire Pressure (Cold tire):</b> Up to 90 kg (198 lb) load* 90 kg (198 lb) ~ 160 kg (353 lb) load* 160 kg (353 lb) ~ Maximum load* High speed riding	Front 177 kPa (1.8 kg/cm <sup>2</sup> , 26 psi) 196 kPa (2.0 kg/cm <sup>2</sup> , 28 psi) 196 kPa (2.0 kg/cm <sup>2</sup> , 28 psi) 196 kPa (2.0 kg/cm <sup>2</sup> , 28 psi)	Rear 196 kPa (2.0 kg/cm <sup>2</sup> , 28 psi) 226 kPa (2.3 kg/cm <sup>2</sup> , 32 psi) 245 kPa (2.5 kg/cm <sup>2</sup> , 36 psi) 226 kPa (2.3 kg/cm <sup>2</sup> , 32 psi)
*Load is total weight of cargo, rider, passenger, and accessories.		

7

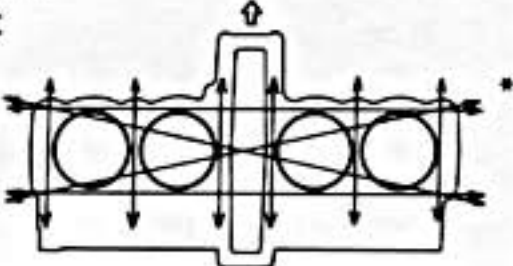
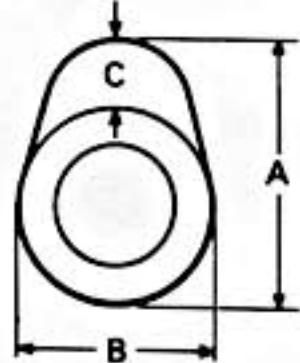
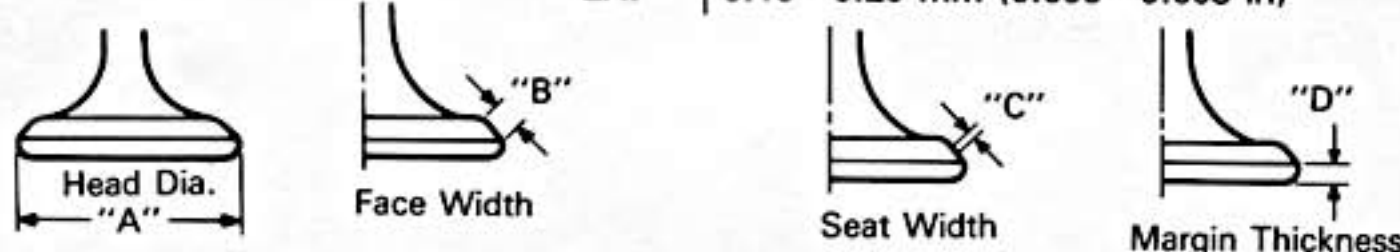


Model	YX600S/YX600SC
<b>Brake:</b> Front Brake Type Operation Rear Brake Type Operation	Dual disc brake Right hand operation Drum brake Right foot operation
<b>Suspension:</b> Front Suspension Rear Suspension	Telescopic fork Swingarm
<b>Shock Absorber:</b> Front Shock Absorber Rear Shock Absorber	Coil spring, oil damper Coil spring, oil damper
<b>Wheel Travel:</b> Front Wheel Travel Rear Wheel Travel	140 mm (5.5 in) 98 mm (3.9 in)
<b>Electrical:</b> Ignition System Generator System Battery Type or Model Battery Capacity	T.C.I. (Full Transistor ignition) A.C. generator 12N12A-4A 12V 12AH
<b>Headlight Type:</b>	Bulb (Quartz bulb)
<b>Bulb Wattage (Quantity):</b> Headlight Tail/Brake Light Flasher Light License Light Meter Light	60W/55W (1 pcs.) 8W/27W (1 pcs.) 27W (4 pcs.) 3.8W (2 pcs.) 3.4W (4 pcs.)
<b>Indicator Light:</b> Wattage (Quantity) "NEUTRAL" "HIGH BEAM" "TURN" "OIL LEVEL"	3.4W (1 pcs.) 3.4W (1 pcs.) 3.4W (1 pcs.) 3.4W (1 pcs.)



MAINTENANCE SPECIFICATIONS



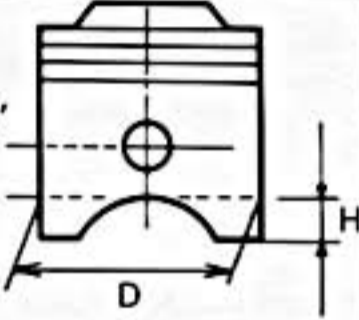
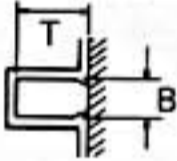
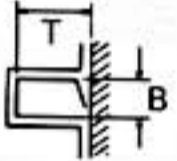
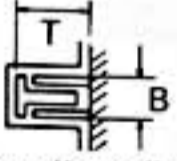
Engine

Model	YX600S/YX600SC
<p>Cylinder Head: Warp Limit</p> 	<p>0.03 mm (0.001 in) *Lines indicate straightedge measurement.</p>
<p>Cylinder: Bore Size Taper Limit Out-of-round Limit</p>	<p>58.50 mm (2.303 in) 0.05 mm (0.002 in) 0.01 mm (0.0004 in)</p>
<p>Camshaft: Drive Method Cam Cap Inside Diameter (Cylinder head direct support) Camshaft Outside Diameter Shaft-to-cap Clearance Cam Dimensions: Intake "A" &lt; Limit &gt; "B" &lt; Limit &gt; "C" &lt; Limit &gt; Exhaust "A" &lt; Limit &gt; "B" &lt; Limit &gt; "C" &lt; Limit &gt; Camshaft Runout Limit Cam Chain Type/Number of Links Cam Chain Adjustment Method</p> 	<p>Chain drive (Center) 25<sup>+0.021</sup> mm (0.9449<sup>+0.0008</sup> in)  25<sup>-0.008</sup> mm (0.9448<sup>-0.0003</sup> in) 0.020 ~ 0.054 mm (0.0008 ~ 0.0021 in) 36.25 ~ 36.35 mm (1.427 ~ 1.431 in) 36.2 mm (1.43 in) 28.1 ~ 28.2 mm (1.106 ~ 1.11 in) 28.05 mm (1.1 in) 8.3 mm (0.327 in) 8.1 mm (0.319 in) 35.75 ~ 35.85 mm (1.408 ~ 1.411 in) 35.7 mm (1.41 in) 28.05 ~ 28.15 mm (1.104 ~ 1.108 in) 28 mm (1.1 in) 7.8 mm (0.307 in) 7.6 mm (0.299 in) 0.05 mm (0.002 in) Bush-chain/114 Manual</p>
<p>Valve, Valve Seat, Valve Guide: Valve Clearance (Cold) IN. EX.</p> 	<p>0.11 ~ 0.15 mm (0.004 ~ 0.006 in) 0.16 ~ 0.20 mm (0.006 ~ 0.008 in)</p>

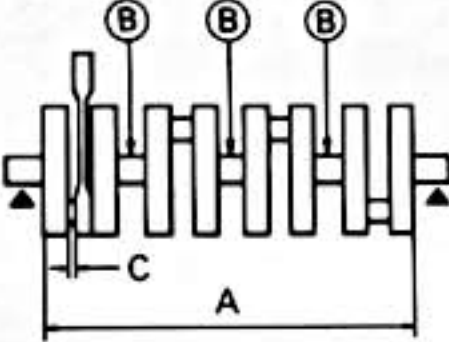


Model		YX600S/YX600SC
"A" Head Dia.	IN.	31.81 mm (1.2208 in)
	EX.	27 ± 0.1 mm (1.063 ± 0.004 in)
"B" Face Width	IN.	2.26 mm (0.0889 in)
	EX.	2.26 mm (0.0889 in)
"C" Seat Limit Width	IN.	1.0 ± 0.1 mm (0.0394 ± 0.004 in)
	EX.	1.0 ± 0.1 mm (0.0394 ± 0.004 in)
"D" Margin Thickness Limit	IN.	1.0 ± 0.2 mm (0.0394 ± 0.008 in)
	EX.	1.0 ± 0.2 mm (0.0394 ± 0.008 in)
Stem Outside Diameter	IN.	5.975 ~ 5.990 mm (0.2352 ~ 0.2358 in)
	EX.	5.960 ~ 5.975 mm (0.2346 ~ 0.2352 in)
Guide Inside Diameter	IN.	6.0 ~ 6.012 mm (0.2362 ~ 0.2367 in)
	EX.	6.0 ~ 6.012 mm (0.2362 ~ 0.2367 in)
Stem-to-guide Clearance	IN.	0.010 ~ 0.037 mm (0.0004 ~ 0.0015 in)
	EX.	0.025 ~ 0.052 mm (0.0010 ~ 0.0020 in)
Stem Runout Limit		0.03 mm (0.001 in)
Valve Seat Width	IN.	0.9 ~ 1.1 mm (0.0390 ~ 0.0398 in)
	EX.	0.9 ~ 1.1 mm (0.0390 ~ 0.0398 in)
< Limit >	IN.	2.0 mm (0.08 in)
	EX.	2.0 mm (0.08 in)
Valve Spring:		
Free Length		
Inner Spring	IN.	35.5 mm (1.398 in)
	EX.	35.5 mm (1.398 in)
Outer Spring	IN.	37.2 mm (1.465 in)
	EX.	37.2 mm (1.465 in)
Installed Length (Valve Closed)		
Inner Spring	IN.	30.5 mm (1.201 in)
	EX.	30.5 mm (1.201 in)
Outer Spring	IN.	32.0 mm (1.260 in)
	EX.	32.0 mm (1.260 in)
Tilt Limit		
Inner Spring	IN. & EX.	2.5°/1.5 mm (0.063 in)
Outer Spring	IN. & EX.	2.5°/1.6 mm (0.063 in)



Model		YX600S/YX600SC	
Direction of Winding (Top View)	Inner spring	Outer spring	
	IN. and EX.	IN. and EX.	
	Clockwise	Counter clockwise	
			
Piston: Piston Size "D" Measuring Point "H"		58.50 mm (2.30 in) 7.0 mm (0.276 in) (From bottom line of piston skirt)	
Clearance Between Piston & Cylinder Oversize:	1st 2nd 3rd 4th	0.025 ~ 0.045 mm (0.0010 ~ 0.0018 in) — 59.00 mm (2.32 in) — 60.00 mm (2.36 in)	
Piston Ring: Sectional Sketch	Top Ring  2nd Ring  Oil Ring 	Barrel B = 1.0 mm (0.039 in) T = 2.3 mm (0.090 in) Taper B = 1.2 mm (0.047 in) T = 2.3 mm (0.090 in) Expander B = 2.5 mm (0.10 in) T = 2.8 mm (0.11 in)	
End Gap (Installed):	Top Ring < Limit > 2nd Ring < Limit > Oil Ring	0.15 ~ 0.30 mm (0.0059 ~ 0.0118 in) 0.7 mm (0.0276 in) 0.15 ~ 0.30 mm (0.0059 ~ 0.0118 in) 0.7 mm (0.0276 in) 0.2 ~ 0.7 mm (0.0079 ~ 0.0276 in)	
Side Clearance:	Top Ring < Limit > 2nd Ring < Limit > Oil Ring	0.03 ~ 0.07 mm (0.0012 ~ 0.0028 in) 0.15 mm (0.0059 in) 0.02 ~ 0.06 mm (0.0008 ~ 0.0024 in) 0.15 mm (0.0059 in) —	

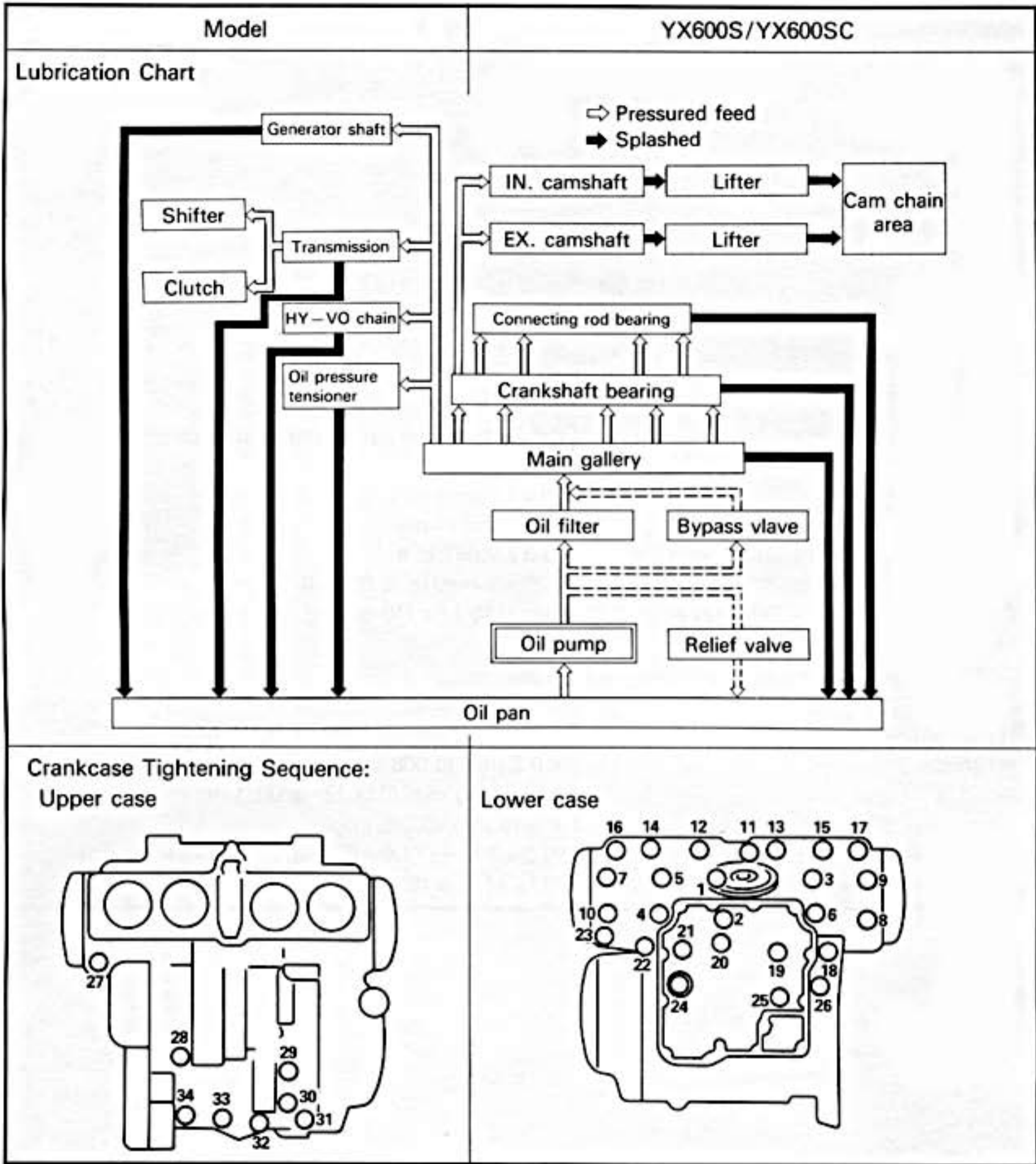


Model	YX600S/YX600SC
Connecting Rod: Oil Clearance Color Code	0.016 ~ 0.040 mm (0.0006 ~ 0.0016 in) 1. Blue 2. Black 3. Brown 4. Green
Crankshaft:  Crank Width "A" Runout Limit "B" Big End Side Clearance "C" Crank Journal Oil Clearance Color Code	312.4 ± 0.6 mm (12.30 ± 0.024 in) 0.03 mm (0.0012 in) 0.16 ~ 0.262 mm (0.006 ~ 0.010 in) 0.021 ~ 0.044 mm (0.0008 ~ 0.0017 in) 1. Blue 2. Black 3. Brown 4. Green 5. Yellow
Clutch: Friction Plate Thickness/Quantity Wear Limit Clutch Plate Thickness/Quantity Warp Limit Clutch Spring Free Length/Quantity Clutch Spring Minimum Length Clutch Release Method	3.0 ± 0.1 mm (0.12 ± 0.0039 in)/8 pcs 2.7 mm (0.106 in) 1.6 ± 0.1 mm (0.063 ± 0.0039 in)/7 pcs. 0.15 mm (0.0059 in) 42.8 mm (1.690 in)/5 pcs. 41.8 mm (1.646 in) Outer Pull, Rack & Pinion Pull
Transmission: Main Axle Deflection Limit Drive Axle Deflection Limit	0.08 mm (0.0031 in) 0.08 mm (0.0031 in)
Shifter: Shifter Type	Guide bar
Carburetor: Type/Manufacture/Quantity I.D. Mark Main Jet (M.J.) Main Air Jet (M.A.J.) Jet Needle-clip Position (J.N.) (For No.1 and 4 Cylinder) (For No.2 and 3 Cylinder)	BS30/MIKUNI/4 pcs. 1UJ00 (For YX600S), 1UL00 (For YX600SC) #97.5 #140 4CHP2 4CHP4





Model	YX600S/YX600SC	
Needle Jet	(N.J.)	0-6 (517)
Pilot Jet	(P.J)	# 30
Pilot Outlet Size	(P.O.)	ø0.8
Pilot Air Jet	(P.A.J)	# 135
Pilot Screw	(P.S.)	Preset
Valve Seat Size	(V.S.)	ø2.3
Starter Jet	(G.S <sub>1</sub> )	# 25
	(G.S <sub>2</sub> )	ø0.6
	(B.P <sub>1</sub> )	ø0.9
Bypath Size	(B.P <sub>2</sub> )	ø0.8
	(B.P <sub>3</sub> )	ø0.8
	(F.L.)	2.0±0.5 mm (0.08±0.02 in)
Fuel Level		Below from the carburetor mixing chamber body edge
Float Height		20±1.0 mm (0.8±0.04 in)
Engine Idling Speed		1,300±50 r/min
Vacuum Pressure at Idling Speed		23.3±0.667 kPa (175±5 mmHg, 6.890±0.1969 inHg)
Vacuum Synchronous Difference		Below 10 kPa (10 mmHg, 0.4 inHg)
Lubrication System:		
Oil Filter Type		Paper
Oil Pump Type		Trochoid pump
Tip Clearance		0.09 ~ 0.15 mm (0.0035 ~ 0.0060 in)
< Limit >		< 0.2 mm (0.008 in) >
Side Clearance		0.03 ~ 0.08 mm (0.0012 ~ 0.0031 in)
< Limit >		< 0.15 mm (0.006 in) >
Bypass Valve Setting Pressure		98.0±20 kPa (1.0±0.2 kg/cm <sup>2</sup> , 14.2±2.8 psi)
Relief Valve Operating Pressure		490±49 kPa (5.0±0.5 kg/cm <sup>2</sup> , 71.1±7.1 psi)



# MAINTENANCE SPECIFICATIONS



Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m•kg	ft•lb	
Cam shaft cap	Bolt	M6 P1.0	24	10	1.0	7.2	Tighten in 3-stages
Cylinder (cam chain)	Stud bolt	M6 P1.0	4	5	0.5	3.6	Apply oil
Cylinder head (Exhaust pipe)	Stud bolt	M6 P1.0	8	10	1.0	7.2	Apply oil
Cylinder head	Stud bolt	M6 P1.0	4	5	0.5	3.6	Apply oil
Cylinder	Nut	M8 P1.25	1	20	2.0	14	
Cylinder	Nut	M6 P1.0	1	10	1.0	7.2	
Cylinder head	Cap nut	M8 P1.25	12	22	2.2	16	Apply oil
Spark plug		M12 P1.25	4	17.5	1.75	13	
Cylinder head cover	Bolt	M6 P1.0	12	10	1.0	7.2	
Cylinder	Stud bolt	M8 P1.25	1	15	1.5	11	Apply oil
Cylinder and crankcase	Nut	M8 P1.25	1	20	2.0	14	
Connecting rod and rod cap	Nut	M7 P0.75	8	25	2.5	18	
Camshaft and sprocket	Bolt	M7 P1.0	4	24	2.4	17	
Cam chain tensioner stopper bolt	Bolt	M8 P1.0	1	8	0.8	5.7	
Cam chain tensioner case and cylinder	Bolt	M6 P1.0	1	10	1.0	7.2	
Cam chain tensioner case and cylinder	Nut	M6 P1.0	1	10	1.0	7.2	
Cam chain tensioner lock nut	Nut	M8 P1.25	1	9	0.9	6.5	
Crankcase	Plug	M10 P1.25	1	10	1.0	7.2	
Rotor housing and pump cover	Screw	M6 P1.0	1	7	0.7	5.1	
Oil pump ass'y and crankcase	Screw	M6 P1.0	3	7	0.7	5.1	
Strainer housing and crankcase	Bolt	M6 P1.0	2	10	1.0	7.2	
Strainer cover and crankcase	Bolt	M6 P1.0	12	10	1.0	7.2	
Filter cover and crankcase	Union bolt	M20 P1.5	1	15	1.5	11	
Drain bolt	Plug	M14 P1.5	1	43	4.3	31	
Carburetor joint and cylinder head	Bolt	M6 P1.0	8	10	1.0	7.2	

7



Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m•kg	ft•lb	
Air filter cover	Screw	M5 P0.8	4	5	0.5	3.6	
Air filter case	Bolt	M6 P1.0	3	7	0.7	5.1	
Exhaust pipe and cylinder head	Nut	M6 P1.0	8	10	1.0	7.2	
Exhaust pipe joint	Bolt	M8 P1.25	6	20	2.0	14	
Muffler	Bolt	M10 P1.25	2	25	2.5	18	
Crankcase	Stud bolt	M8 P1.25	12	13	1.3	9.4	Apply oil
Crankcase (upper and lower)	Bolt	M8 P1.25	11	24	2.4	17	Apply oil
Crankcase (upper and lower)	Bolt	M6 P1.0	23	12	1.2	8.7	Apply oil
Generator cover and crankcase	Bolt	M6 P1.0	3	10	1.0	7.2	
Bearing cover plate (crankcase right)	Screw	M6 P1.0	4	8	0.8	5.7	
Bearing cover plate (crankcase left)	Screw	M6 P1.0	4	8	0.8	5.7	Use LOCTITE®
Clutch cable holder	Screw	M6 P1.0	1	10	1.0	7.2	
Crankcase cover	Bolt	M6 P1.0	13	10	1.0	7.2	
Crankcase (Main gallery blind plug)	Plug	M20 P1.5	2	12	1.2	8.7	Apply oil
Clutch pressure plate	Bolt	M6 P1.0	5	8	0.8	5.8	
Clutch boss	Nut	M20 P1.0	1	70	7.0	50	
Drive sprocket	Bolt	M6 P1.0	2	10	1.0	7.2	
Stopper plate	Screw	M5 P0.8	1	7	0.7	5.1	Use LOCTITE®
Cam segment	Bolt	M6 P1.0	1	10	1.0	7.2	Use LOCTITE®
Change pedal	Bolt	M6 P1.0	1	10	1.0	7.2	
A.C. Generator	Bolt	M10 P1.25	1	35	3.5	25	
A.C. Generator (brush)	Screw	M6 P1.0	2	8	0.8	5.8	
Pickup coil base	Screw	M6 P1.0	2	8	0.8	5.8	Use LOCTITE®
Timing plate	Bolt	M8 P1.25	1	24	2.4	17	
Starter motor	Bolt	M6 P1.0	2	10	1.0	7.2	
Neutral switch	Screw	M5 P0.8	3	3.5	0.35	2.5	Use LOCTITE®



Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m•kg	ft•lb	
Oil level gauge switch	Bolt	M6 P1.0	2	7	0.7	5.1	
Relief valve and crankcase	—		1	20	2.0	14	
HY-VO chain tensioner	Bolt	M6 P1.0	2	10	1.0	7.2	Use LOCTITE®
Primary drive gear	Nut	M16 P1.5	1	50	5.0	36	
Bearing cover plate	Screw	M6 P1.0	2	10	1.0	7.2	Use LOCTITE®
Starter clutch	Bolt	M8 P1.25	3	25	2.5	18	Use LOCTITE®
Shift shaft stopper	Screw	M8 P1.25	1	22	2.2	16	
Shift cam bearing plate	Screw	M6 P1.0	1	10	1.0	7.2	



Chassis

Model	YX600S/YX600SC			
<b>Steering System:</b> Steering Bearing Type No./Size of Steel Balls:	Upper Lower	Ball Bearing 19 pcs/1/4 in 19 pcs/1/4 in		
<b>Front Suspension:</b> Front Fork Travel Fork Spring Free Length Spring Rate/Stroke  Optional Spring Oil Capacity Oil Grade		140 mm (5.5 in) 542 mm (21.3 in) $K_1 = 3.8 \text{ N/mm}$ (0.385 kg/mm, 21.2 lb/in) 0.0 ~ 95 mm (0.0 ~ 3.47 in) $K_2 = 5.6 \text{ N/mm}$ (0.575 kg/mm, 31.7 lb/in) 95 ~ 140 mm (3.74 ~ 5.51 in)  No 320 cm <sup>3</sup> (11.3 Imp oz, 10.8 US oz) Yamaha Fork Oil 10WT or equivalent		
<b>Rear Suspension:</b> Shock Absorber Travel Spring Free Length Spring Rate/Stroke  Optional Spring Adjustment	Spring Position	80 mm (3.1 in) 222.4 mm (8.76 in) $K_1 = 17.6 \text{ N/mm}$ (1.8 kg/mm, 99.1 lb/in) 0.0 ~ 52 mm (0.0 ~ 2.04 in) $K_2 = 25.5 \text{ N/mm}$ (2.6 kg/mm, 143.2 lb/in) 52 ~ 80 mm (2.04 ~ 3.15 in)  No		
			← Stiffer	Std.
			5	4
			3	2
				1
<b>Rear Arm:</b> Swingarm Free Play Limit (End)		1.0 mm (0.039 in)		
<b>Wheel:</b> Front Wheel Type Rear Wheel Type Front Rim Size/Material Rear Rim Size/Material Rim Runout Limit	Vertical Lateral	Cast Wheel Cast Wheel MT2.50 × 16/Aluminum MT3.00 × 16/Aluminum 2.0 mm (0.08 in) 2.0 mm (0.08 in)		
<b>Drive Chain:</b> Type/Manufacturer No. of Links Chain Free Play		50HDL2/DAIDO 104 20 ~ 30 mm (0.78 ~ 1.18 in)		
<b>Front Disc Brake:</b> Type Outside Dia. × Thickness Pad Thickness:	Inner <Limit> * Outer <Limit> *	Dual disc 267 × 5 mm (10.5 × 0.2 in) 5.5 mm (0.21 in) 0.5 mm (0.019 in) 5.5 mm (0.21 in) 0.5 mm (0.019 in)		

7



Model	YX600S/YX600SC
Master Cylinder Inside Dia. Caliper Cylinder Inside Dia. Brake Fluid Type	15.87 mm (0.62 in) 42.8 mm (1.50 in) DOT #3
Rear Drum Brake: Type Brake Drum Inside Diameter < Limit > Lining Thickness < Limit > Shoe Spring Free Length	Leading, Trailing 180 mm (7.08 in) < 181 mm (7.12 in) > 4 mm (0.16 in) < 2 mm (0.08 in) > 68 mm (2.68 in)
Brake Lever & Brake Pedal: Brake Lever Free Play (at lever end) Brake Pedal Free Play Brake Pedal Position	2 ~ 5 mm (0.08 ~ 0.20 in) 20 ~ 30 mm (0.8 ~ 0.12 in) 15 mm (0.6 in) (Vertical height below footrest top)
Clutch Lever Free Play (at lever end):	10 ~ 15 mm (0.4 ~ 0.6 in)

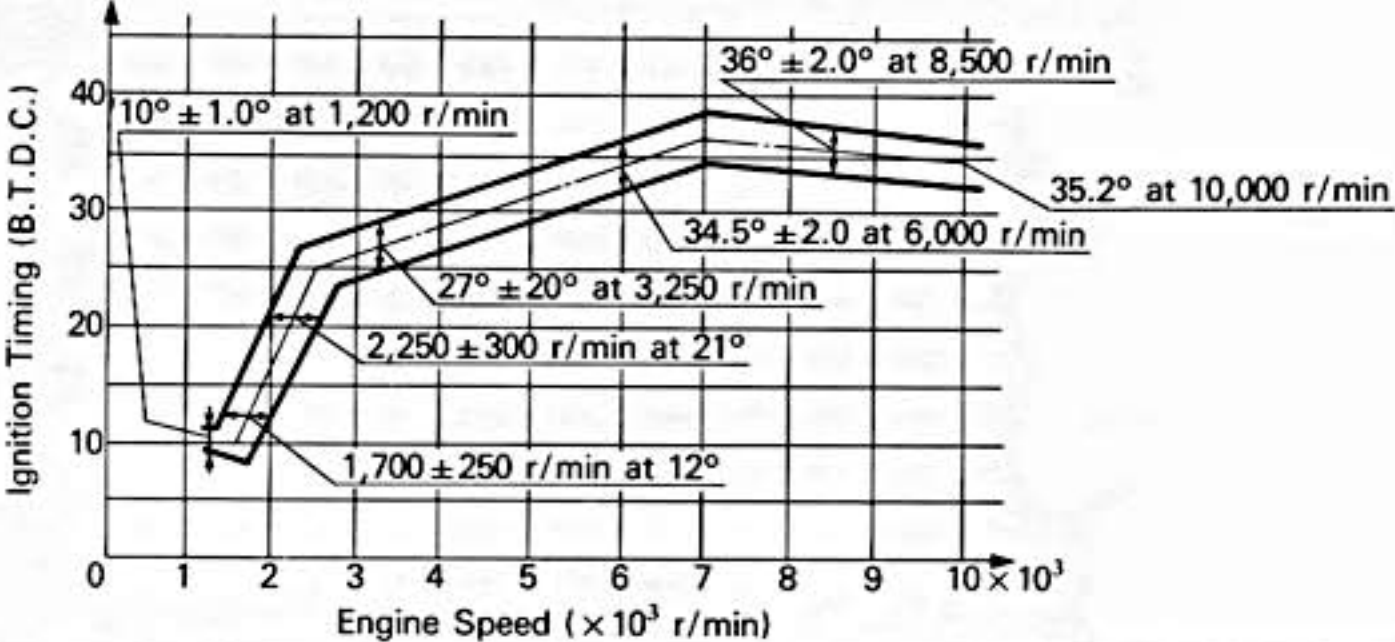


Part to be tightened	Thread size	Tightening torque		
		Nm	m•kg	ft•lb
Front wheel axle	M14 × 1.5	105	10.5	75
Front wheel axle holder	M8 × 1.25	20	2.0	14
Front fender and front fork	M6 × 1.0	80	8.0	58
Handle crown and inner tube	M8 × 1.25	20	2.0	14
Handle crown and steering shaft	M14 × 1.25	54	5.4	39
Steering shaft and ring nut (Refer to NOTE)	M25 × 1.0	38	3.8	27
Caliper and front fork	M10 × 1.25	35	3.5	25
Brake disc and wheel	M10 × 1.25	20	2.0	14
Master cylinder and master cylinder bracket	M6 × 1.0	8	0.8	5.8
Master cylinder and master cylinder cap	M5 × 0.8	2	0.2	1.4
Caliper and bleed screw	M8 × 1.25	6	0.6	4.3
Brake hose	M10 × 1.25	26	2.6	19
Handlebar upper holder	M8 × 1.25	20	2.0	14
Engine mounting: Front upper	M10 × 1.25	42	4.2	30
Front under	M10 × 1.25	42	4.2	30
Rear	M12 × 1.25	70	7.0	50
Engine stay and frame	M8 × 1.25	20	2.0	14
Muffler bracket and frame	M10 × 1.25	42	4.2	30
Footrest	M12 × 1.25	70	7.0	50
Brake pedal and brake shaft	M6 × 1.0	9	0.9	6.5
Pivot axle and locknut	M14 × 1.5	90	9.0	65
Rear shock absorber and frame	M8 × 1.25	20	2.0	14
Rear shock absorber and rear arm	M10 × 1.25	29	2.9	21
Tension bar and rear arm	M8 × 1.25	20	2.0	14
Tension bar and brake shoe plate	M8 × 1.25	20	2.0	14
Rear wheel axle and nut	M14 × 1.5	106	10.6	75
Sproket and clutch hub	M8 × 1.25	32	3.2	23

**NOTE:** \_\_\_\_\_  
 After torquing the steering shaft and ring nut, adjust them for smooth movement of the handlebar.



Electrical

Model	YX600S/YX600SC
Voltage Ignition System: Ignition Timing (B.T.D.C.) Advancer Type	12V  $10^{\circ} \pm 1^{\circ}$ at 1,200 r/min Electrical
 <p>Ignition Timing (B.T.D.C.)</p> <p>Engine Speed (<math>\times 10^3</math> r/min)</p> <p>Key data points from graph:</p> <ul style="list-style-type: none"> <li><math>10^{\circ} \pm 1.0^{\circ}</math> at 1,200 r/min</li> <li><math>12^{\circ}</math> at <math>1,700 \pm 250</math> r/min</li> <li><math>21^{\circ}</math> at <math>2,250 \pm 300</math> r/min</li> <li><math>27^{\circ} \pm 20^{\circ}</math> at 3,250 r/min</li> <li><math>34.5^{\circ} \pm 2.0</math> at 6,000 r/min</li> <li><math>36^{\circ} \pm 2.0^{\circ}</math> at 8,500 r/min</li> <li><math>35.2^{\circ}</math> at 10,000 r/min</li> </ul>	
T.C.I.: Pickup Coil Resistance (Color) T.C.I. Unit—Manufacturer	$108 \sim 132\Omega$ at $20^{\circ}\text{C}$ ( $68^{\circ}\text{F}$ ) (Black—Gray) (Black—Orange) TID14-31 HITACHI
Ignition Coil Model/Manufacturer Minimum Spark Gap Primary Winding Resistance Secondary Winding Resistance Spark Plug Cap Resistance	CM12-10/HITACHI 6 mm (0.24 in) or more at 500 r/min $2.43 \sim 2.97\Omega$ at $20^{\circ}\text{C}$ ( $68^{\circ}\text{F}$ ) $10.56 \sim 15.84\text{K}\Omega$ at $20^{\circ}\text{C}$ ( $68^{\circ}\text{F}$ ) $10\text{K}\Omega$
Charging System: Type	A.C. Generator
A.C. Generator: Model/Manufacturer Nominal Output Field Coil Resistance Starter Coil Resistance	LD117-13/HITACHI 14V, 17A at 5,000 r/min $2.7 \sim 3.3\Omega$ at $20^{\circ}\text{C}$ ( $68^{\circ}\text{F}$ ) (Brown—Green) $0.5 \sim 0.6\Omega$ at $20^{\circ}\text{C}$ ( $68^{\circ}\text{F}$ ) (White—White)
Brush—Overall Length < Limit > —Spring Force	17 mm (0.669 in) 10 mm (0.394 in) 190 ~ 360 gr (6.7 ~ 12.7 oz)
Voltage Regulator: Type Model/Manufacturer No Load Regulated Voltage Rectifier: Model/Manufacturer Capacity Withstand Voltage	Field control SH233-12/SHINDENGEN 14.2 ~ 14.8V SH233-12/SHINDENGEN 15A 300V

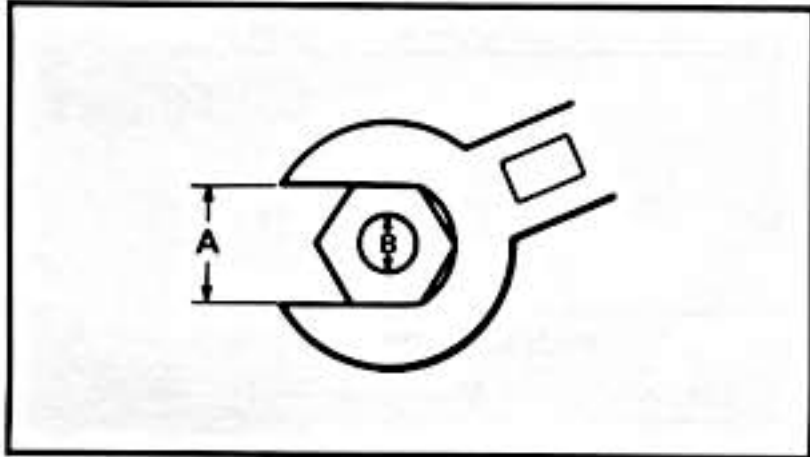


Model	YX600S/YX600SC
<b>Battery:</b> Capacity Specific Gravity	12V 12AH 1.280
<b>Electrical Starter System:</b> Type Starter Motor: Model/Manufacturer Output Armature Coil Resistance Brush—Overall Length < Limit > —Spring Force Commutator Dia. Wear Limit Mica Undercut Starter Relay: Model/Manufacturer Amperage Rating Coil Resistance	Constant mesh type  SM8204/MITSUBA 0.5 kw 0.012Ω ± 10% at 20°C (68°F) 12 mm (0.47 in) 5 mm (0.20 in) 340 ~ 460 g (12.0 ~ 16.2 oz) 28 mm (1.10 in) 27 mm (1.06 in) 1.6 mm (0.06 in)  22U-00/HONDA LOCK 150A 3.4Ω at 20°C (68°F)
<b>Horn:</b> Type/Quantity Model/Manufacturer Maximum Amperage	Plane Type/1 pcs. YF-12./NIKKO 2.5A
<b>Flasher Relay (Relay Assembly):</b> Type Model/Manufacturer Self Cancelling Device Flasher Frequency Wattage	Semi transistor type FX257N/NIPPON DENSO Yes 85 ± 10 cycle/min 27W × 2 pcs + 3.4W
<b>Sidestand Relay:</b> Model/Manufacturer Coil Winding Resistance Diode	4U8-01/OMRON 75Ω ± 10% at 20°C (68°F) No
<b>Safety Relay (Relay Assembly):</b> Model/Manufacturer Diode	FX257N/NIPPON DENSO No
<b>Oil Level Switch:</b> Model/Manufacturer	4U8-00/HIPPON DENSO
<b>Circuit Breaker:</b> Type Amperage for Individual Circuit × Quantity: MAIN HEADLIGHT SIGNAL IGNITION RESERVE	Fuse  20A × 1 pcs. 10A × 1 pcs. 10A × 1 pcs. 10A × 1 pcs. 20A × 1 pcs, 10A × 1 pcs.

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

**CONVERSION TABLES**

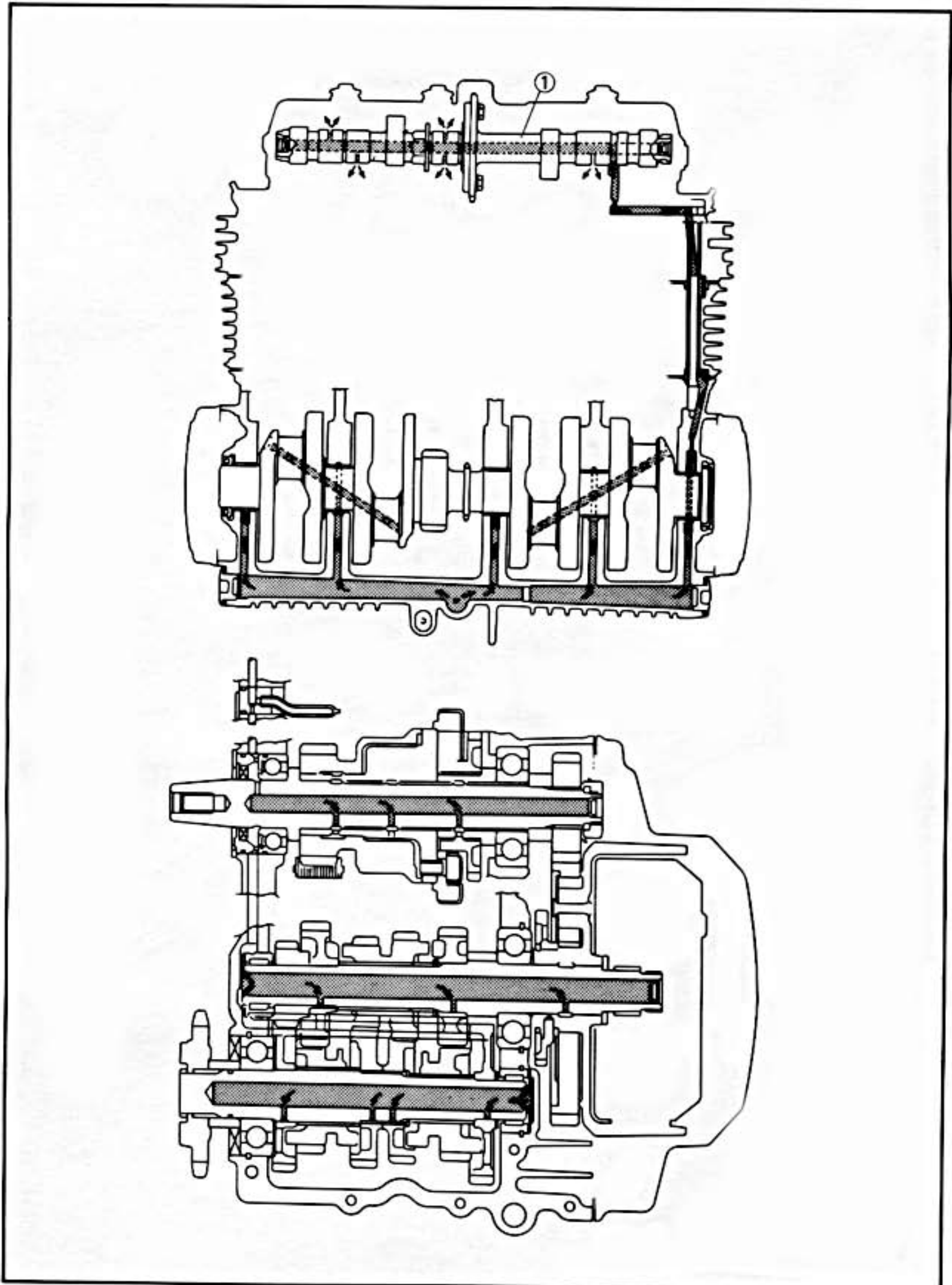
Metric to inch system		
Known	Multiplier	Result
m·kg	7.233	ft·lb
m·kg	86.80	in·lb
cm·kg	0.0723	ft·lb
cm·kg	0.8680	in·lb
kg	2.205	lb
g	0.03527	oz
km/lit	2.352	mpg
km/hr	0.6214	mph
km	0.6214	mi
m	3.281	ft
m	1.094	yd
cm	0.3937	in
mm	0.03937	in
cc (cm <sup>3</sup> )	0.03382	oz (US liq)
cc (cm <sup>3</sup> )	0.06102	cu in
lit (liter)	2.1134	pt (US liq)
lit (liter)	1.057	qt (US liq)
lit (liter)	0.2642	gal (US liq)
kg/mm	56.007	lb/in
kg/cm	14.2234	psi (lb/in)
Centigrade (°C)	$9/5 (°\text{C}) + 32$	Fahrenheit (°F)

Inch to metric system		
Known	Multiplier	Result
ft·lb	0.13826	m·kg
in·lb	0.01152	m·kg
ft·lb	13.831	cm·kg
in·lb	1.1521	cm·kg
lb	0.4535	kg
oz	28.352	g
mpg	0.4252	km/lit
mph	1.609	km/hr
mi	1.609	km
ft	0.3048	m
yd	0.9141	m
in	2.54	cm
in	25.4	mm
oz (US liq)	29.57	cc (cm <sup>3</sup> )
cu in	16.387	cc (cm <sup>3</sup> )
pt (US liq)	0.4732	lit (liter)
qt (US liq)	0.9461	lit (liter)
gal (US liq)	3.785	lit (liter)
lb/in	0.017855	kg/mm
psi (lb/in)	0.07031	kg/cm
Fahrenheit (°F)	$5/9 (F^{\circ}-32)$	Centigrade (°C)



LUBRICATION DIAGRAM

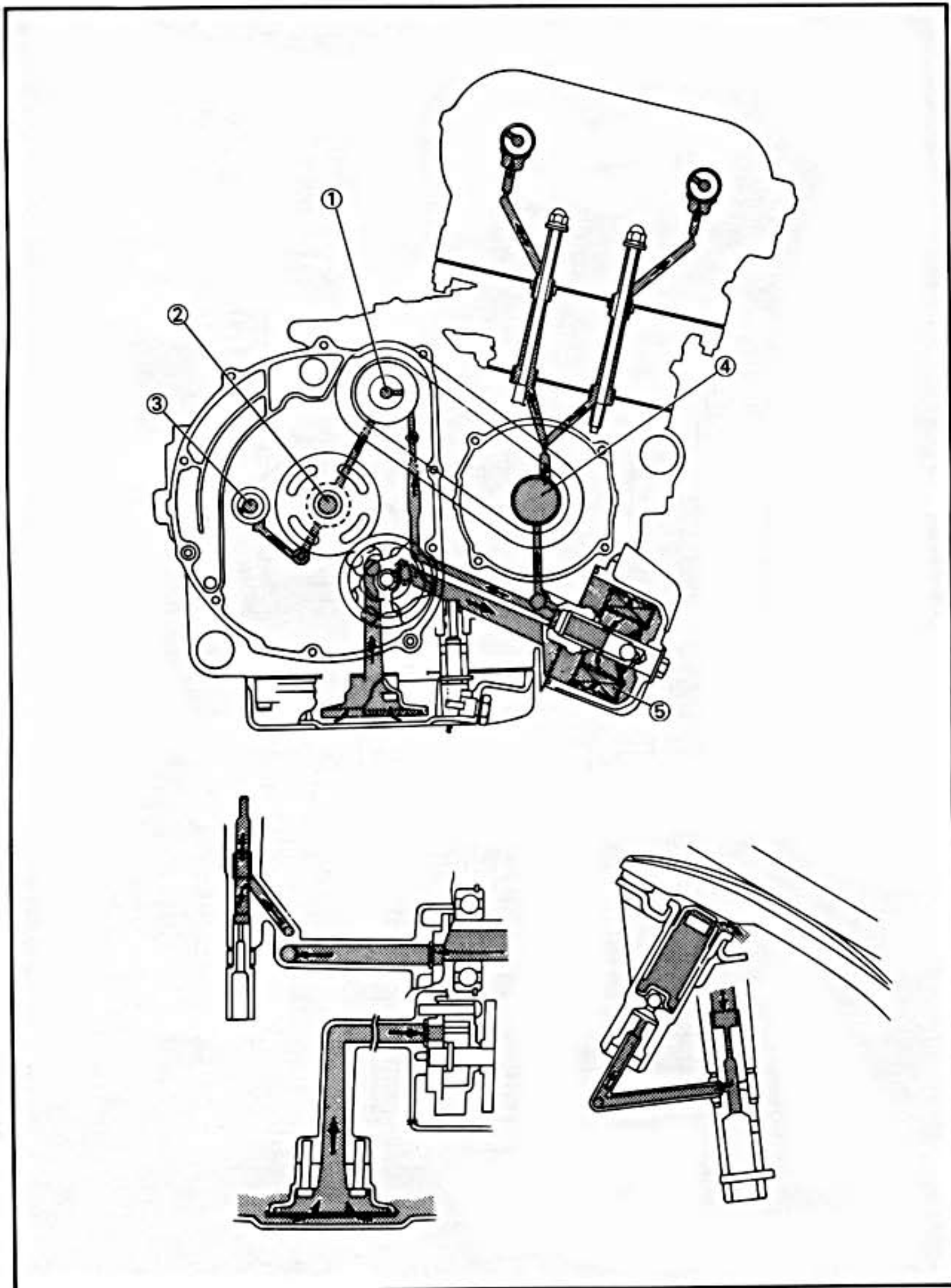
① Crankshaft





- ① Generator shaft
- ② Main axle
- ③ Drive axle

- ④ Crankshaft
- ⑤ Oil filter

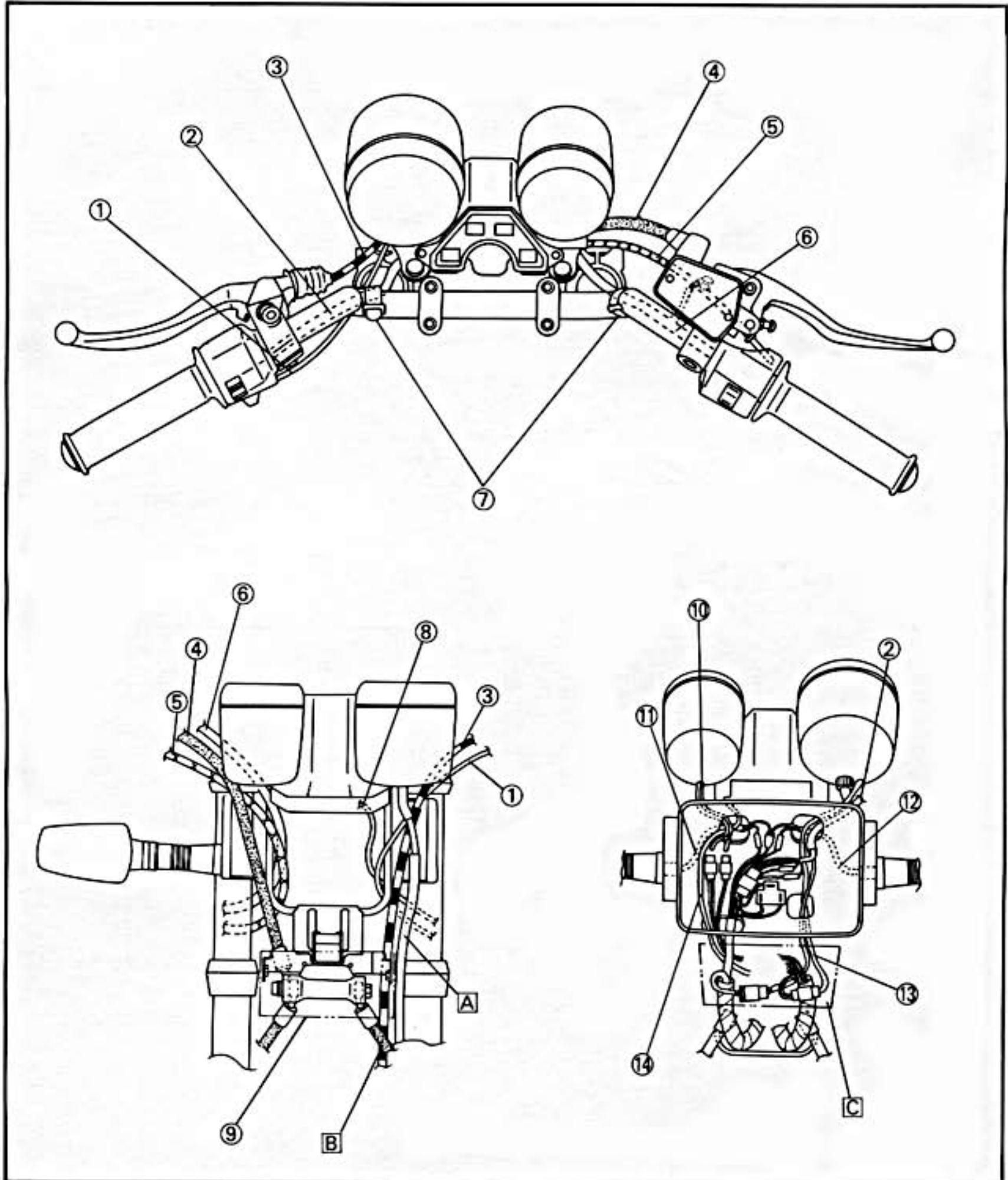


**CABLE ROUTING**

- ① Starter cable
- ② Handlebar switch lead (Left)
- ③ Clutch cable
- ④ Brake hose
- ⑤ Throttle cable
- ⑥ Handlebar switch lead (Right)
- ⑦ Band
- ⑧ Main switch lead

- ⑨ Outer cover
- ⑩ Tachometer lead
- ⑪ Flasher light lead (Right)
- ⑫ Flasher light lead (Left)
- ⑬ Speedometer light lead
- ⑭ Indicator light lead

- A** Speedometer cable:  
Pass the speedometer cable outside the outer cover.
- B** Clutch cable:  
Pass the clutch cable behind the outer cover stay.
- C** Connect the couplers inside the outer cover.



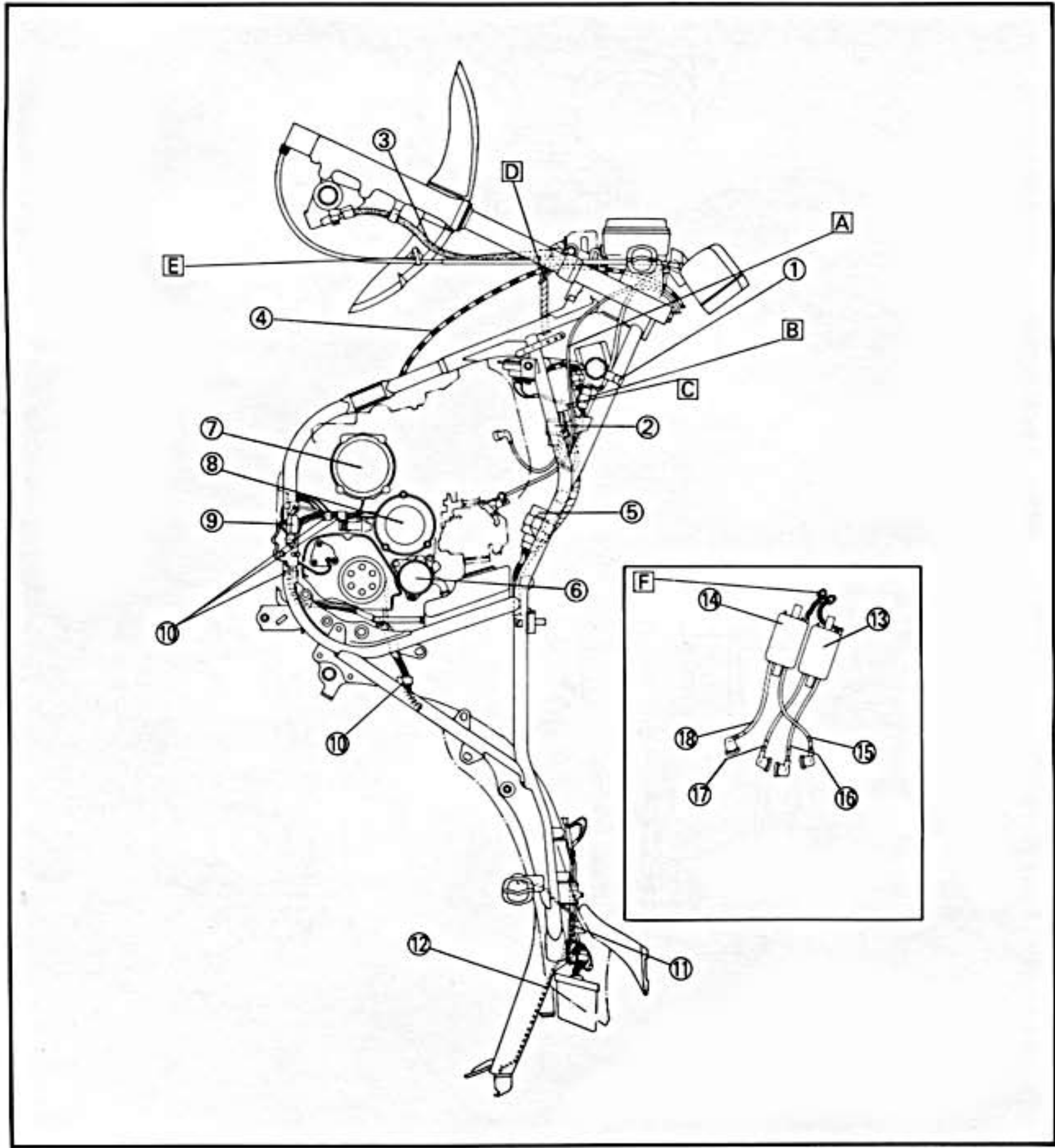
**CABLE ROUTING**

- ① Band
- ② Sidestand relay
- ③ Brake hose
- ④ Clutch cable
- ⑤ Relay assembly
- ⑥ Starter motor
- ⑦ Pickup coil
- ⑧ A.C. generator
- ⑨ Sidestand switch
- ⑩ Clamp
- ⑪ Rear flasher light lead
- ⑫ License light lead
- ⑬ Ignition coil (Right)
- ⑭ Ignition coil (Left)

- ⑮ "4" mark → #4 cylinder
- ⑯ "3" mark → #3 cylinder
- ⑰ "2" mark → #2 cylinder
- ⑱ "1" mark → #1 cylinder

- A** Pass the starter cable between the locating damper and ignition coil.
- B** After connecting the couplers, locate them above the ignition coil.
- C** Pass the horn lead between the ignition coils.

- D** Guide:  
Clamp the wire harness.
- E** Cable holder:  
Pass the speedometer cable through the cable holder.
- F** Pass the ignition coil leads through the coil stay.

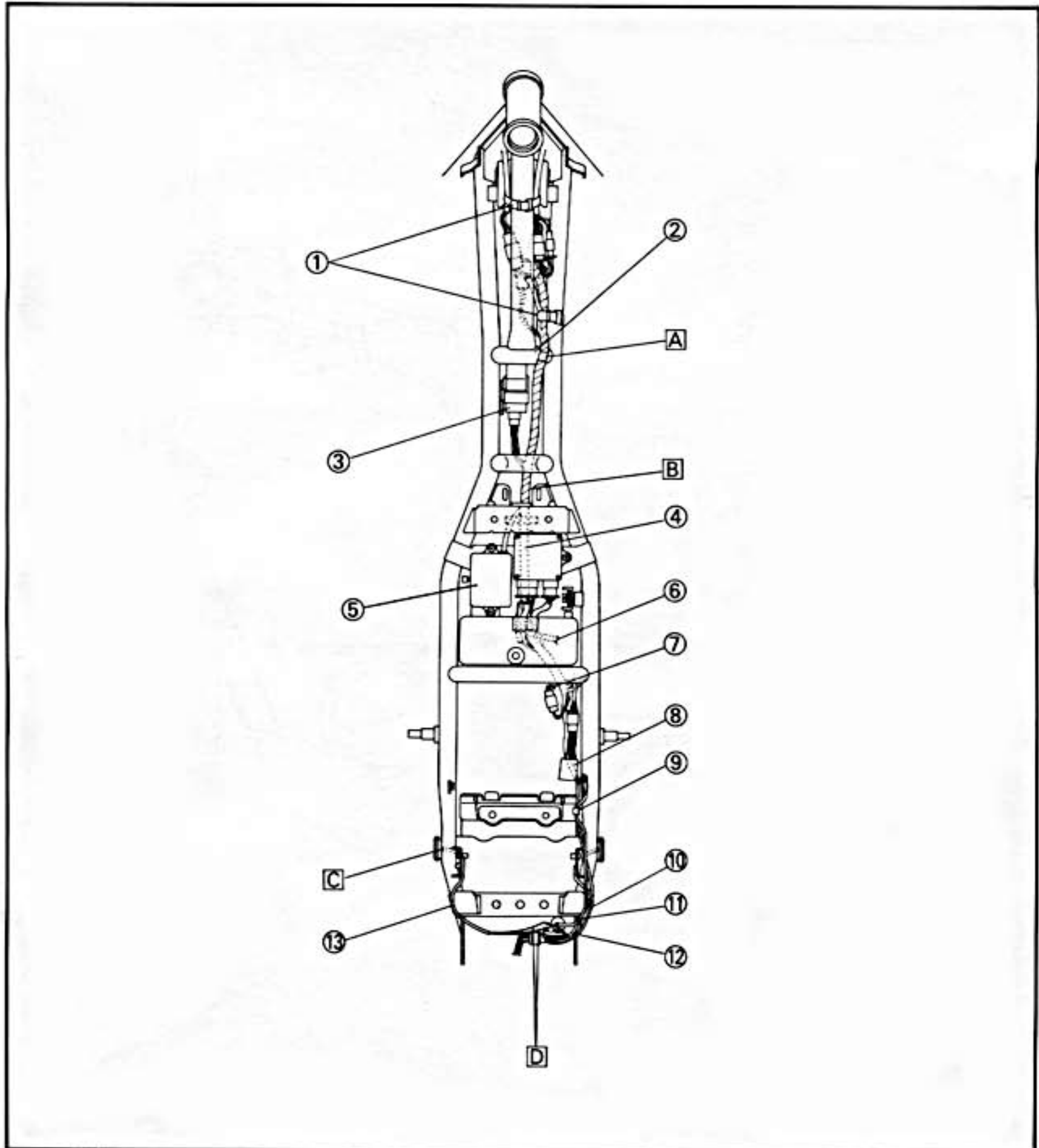






- ① Band
- ② Cross pipe
- ③ Relay assembly
- ④ Ignitor unit
- ⑤ Fuse box
- ⑥ To pickup coil
- ⑦ To starter relay
- ⑧ Diode
- ⑨ Clamp
- ⑩ Rear flasher light lead (Right)
- ⑪ License light lead
- ⑫ Taillight lead
- ⑬ Rear flasher light lead (Left)

- A White tape:  
Align the white tape with the cross pipe as shown.
- B Pass the wire harness between air cleaner box and battery box.
- C Pass the flasher light lead between the frame and rear fender.
- D Locate the couplers and leads inside the rear fender.

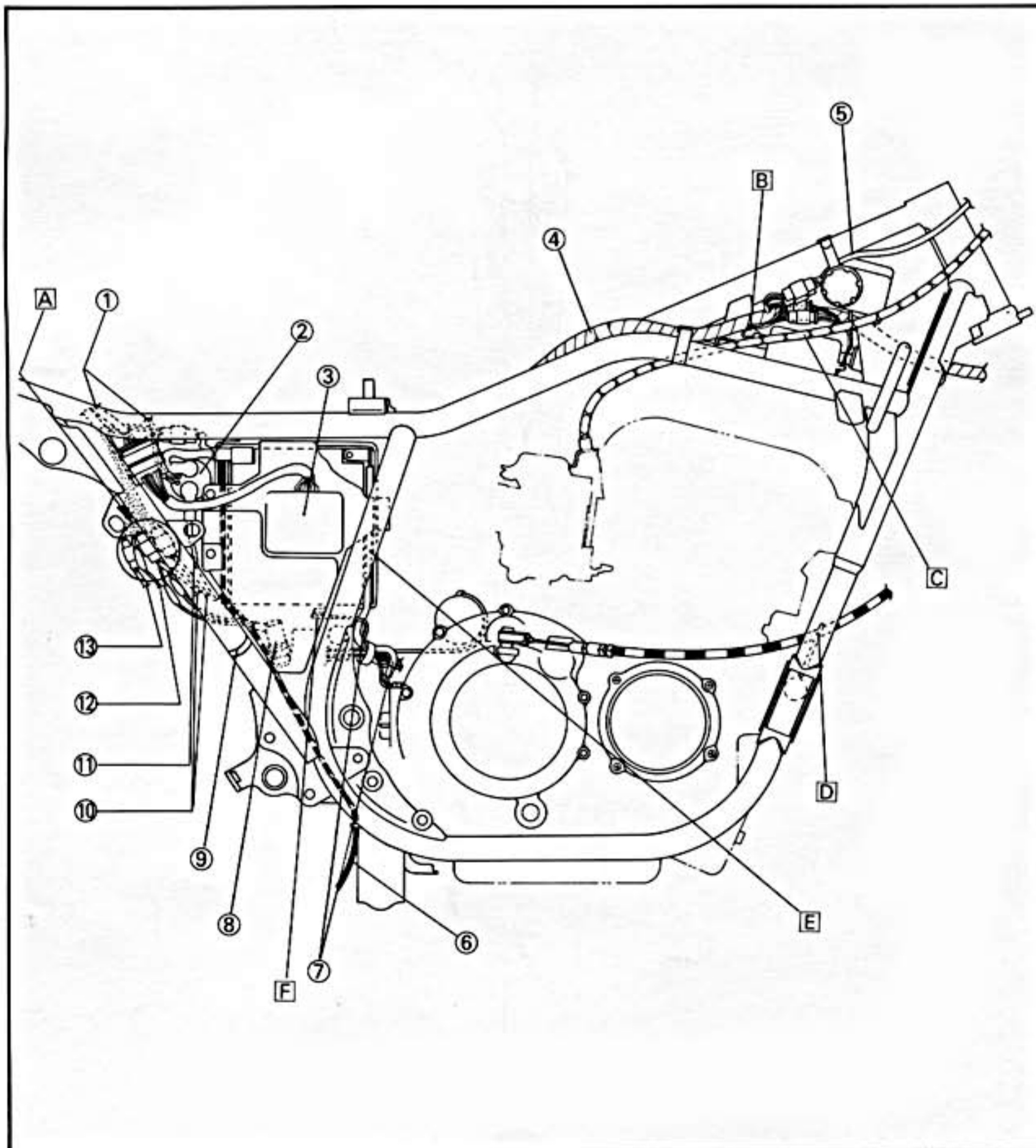




- ① To wire harness
- ② Starter relay
- ③ Rectifier-regulator
- ④ Wire harness
- ⑤ Handlebar switch lead (Right)
- ⑥ Battery breather pipe
- ⑦ Earth lead
- ⑧ Rear brake switch
- ⑨ Clamp
- ⑩ To A.C. generator
- ⑪ Starter relay lead
- ⑫ Oil level switch lead
- ⑬ Sidestand switch lead

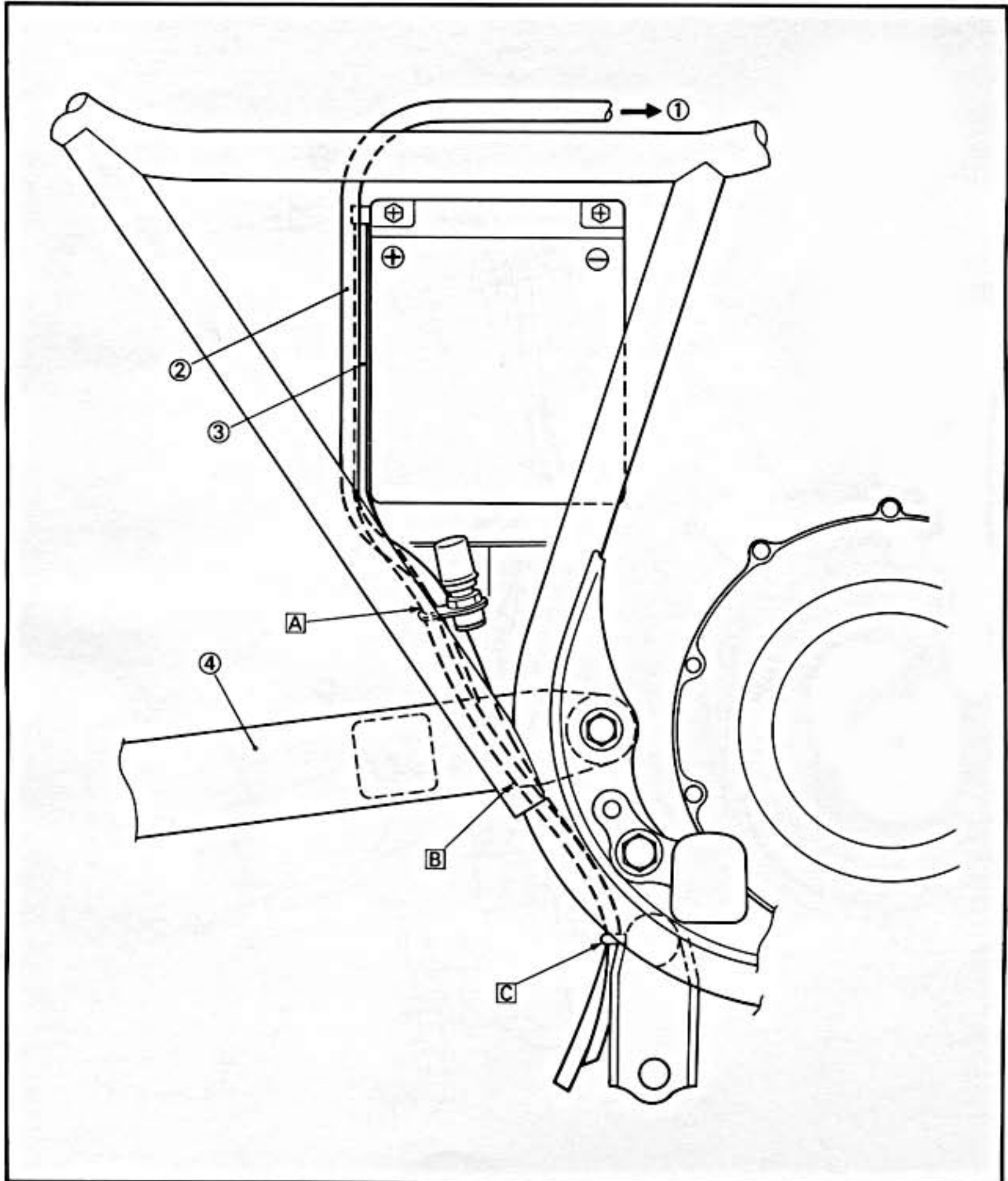
- A After connecting the couplers, locate the couplers behind the battery box.
- B Clamp the earth lead with the ignition coil securing screw.
- C Pass the throttle cable under the locating damper.
- D Pass the clutch cable through the guide and between EX. pipe #2 and #3.

- E Pass the battery negative (-) lead inside the battery box.
- F Clamp the earth lead with the battery cover securing bolt.



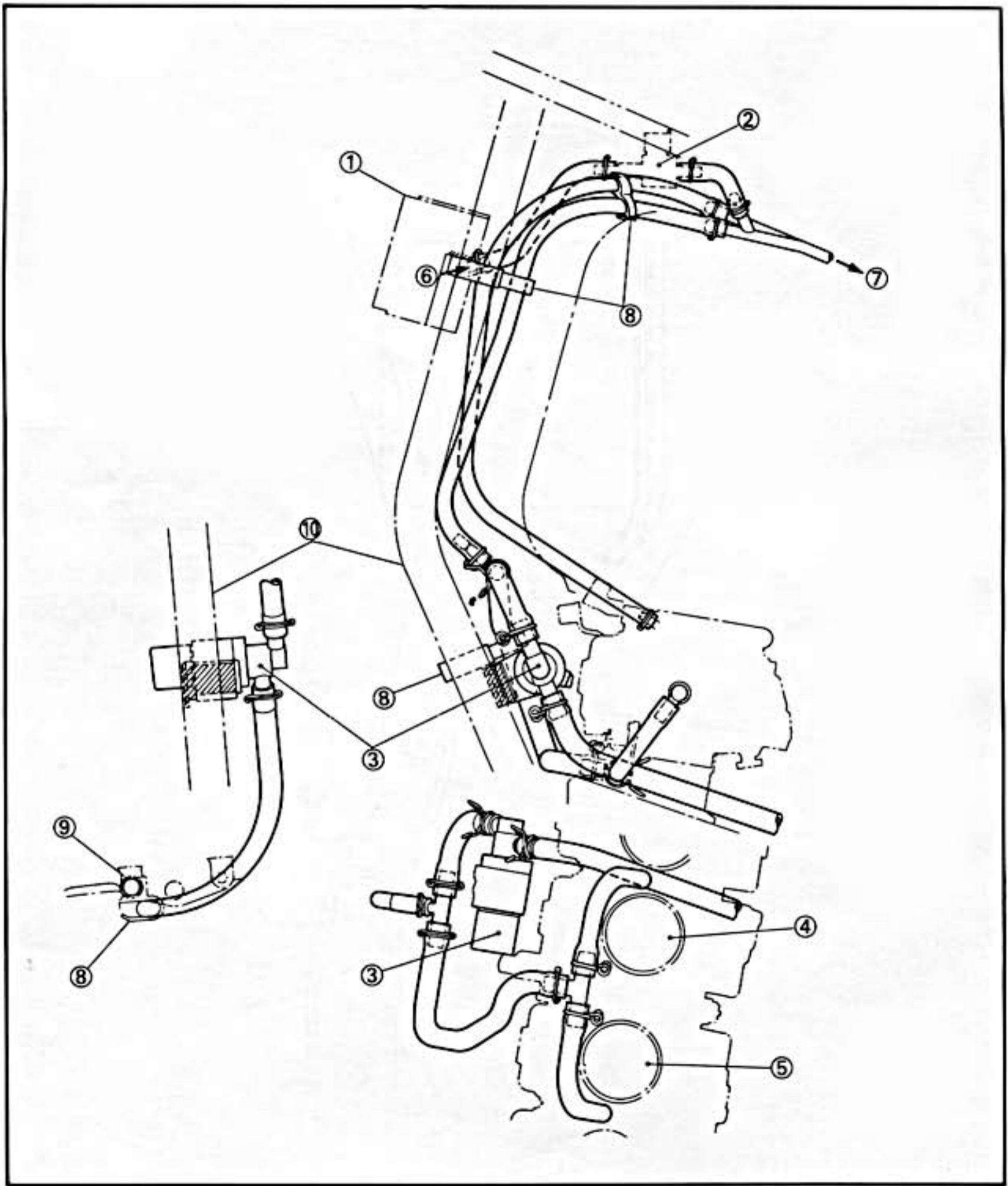


- ① To fuel tank
- ② Fuel tank breather pipe
- ③ Battery breather pipe
- ④ Rear arm
- A Pass the battery breather pipe through the guide hole on the stop switch bracket.
- B Pass the fuel tank and battery breather pipe between the rear arm cross tube and rear arm pivot.
- C Pass the breather pipes through the guide.



CALIFORNIA ONLY

- ① Ignition coil
- ② Roll over valve
- ③ Air vent control valve
- ④ #3 Carburetor
- ⑤ #2 Carburetor
- ⑥ From fuel tank
- ⑦ To canister
- ⑧ Clamp
- ⑨ Crankcase
- ⑩ Frame



7

---

## FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and new data for the YX600U/UC. For complete information on service procedures, it is necessary to use this Supplementary Service Manual together with following manual:

**YX600S/SC Service Manual: LIT-11616-05-06**

**YX600U/YX600UC  
SUPPLEMENTARY SERVICE MANUAL  
©1987 by Yamaha Motor Corporation, U.S.A.  
1st Edition, July 1987  
All rights reserved. Any reprinting or  
unauthorized use without the written  
permission of Yamaha Motor Corporation,  
U.S.A. is expressly prohibited.  
Printed in U.S.A.  
P/N LIT-11616-06-16**

---

## NOTICE

This manual was written by the Yamaha Motor Company primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to put an entire mechanic's education into one manual, so it is assumed that persons using this book to perform maintenance and repairs on Yamaha motorcycles have a basic understanding of the mechanical concepts and procedures inherent in motorcycle repair technology. Without such knowledge, attempted repairs or service to this model may render it unfit to use and/or unsafe.

Yamaha Motor Company, Ltd. is continually striving to improve all models manufactured by Yamaha. Modifications and significant changes in specifications or procedures will be forwarded to all Authorized Yamaha dealers and will, where applicable, appear in future editions of this manual.

TECHNICAL PUBLICATIONS  
SERVICE DIVISION  
MOTORCYCLE OPERATIONS  
YAMAHA MOTOR CO., LTD.

## HOW TO USE THIS MANUAL

### PARTICULARLY IMPORTANT INFORMATION

This material is distinguished by the following notation.

**NOTE:** A NOTE provides key information to make procedures easier or clearer.

**CAUTION:** A CAUTION indicates special procedures that must be followed to avoid damage to the motorcycle.

**WARNING:** A WARNING indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.

### MANUAL FORMAT






















All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all disassembly, repair, assembly, and inspection operations.

In this revised format, the condition of a faulty component will precede an arrow symbol and the course of action required will follow the symbol, e.g.,

- Bearings  
Pitting/Damage → Replace.

### EXPLODED DIAGRAM

Each chapter provides exploded diagrams before each disassembly section for ease in identifying correct disassembly and assembly procedures.

① GEN INFO 	② INSP ADJ 	
③ ENG 	④ COOL 	
⑤ CARB 	⑥ CHAS 	
⑦ ELEC 	⑧ APPX 	
⑨ 	⑩ 	
⑪ 	⑫ 	
⑬ 	⑭ 	
⑮ 	⑯ 	⑰ 
⑱ 	⑲ 	⑳ 
㉑ 		

## ILLUSTRATED SYMBOLS (Refer to the illustration)

Illustrated symbols ① to ⑧ are designed as thumb tabs to indicate the chapter's number and content.

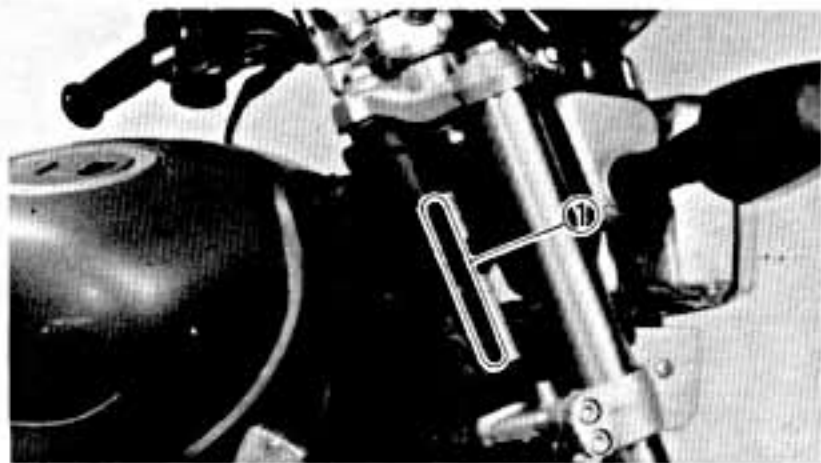
- ① General information
- ② Periodic inspection and adjustment
- ③ Engine
- ④ Cooling system
- ⑤ Carburetion
- ⑥ Chassis
- ⑦ Electrical
- ⑧ Appendices

Illustrated symbols ⑨ to ⑭ are used to identify the specifications appearing in the text.

- ⑨ Filling fluid
- ⑩ Lubricant
- ⑪ Tightening
- ⑫ Wear limit, clearance
- ⑬ Engine speed
- ⑭  $\Omega$ , V, A

Illustrated symbols ⑮ to ㉑ in the exploded diagram indicate grade of lubricant and location of lubrication point.

- ⑮ Apply engine oil
- ⑯ Apply gear oil
- ⑰ Apply molybdenum disulfide oil
- ⑱ Apply wheel bearing grease
- ⑲ Apply lightweight lithium-soap base grease
- ⑳ Apply molybdenum disulfide grease
- ㉑ Apply locking agent (LOCTITE®)



## GENERAL INFORMATION

### MOTORCYCLE IDENTIFICATION VEHICLE IDENTIFICATION NUMBER

The vehicle identification number ① is stamped into the right side of the steering head pipe.

#### Starting Serial Number:

YX600U (Except for California)

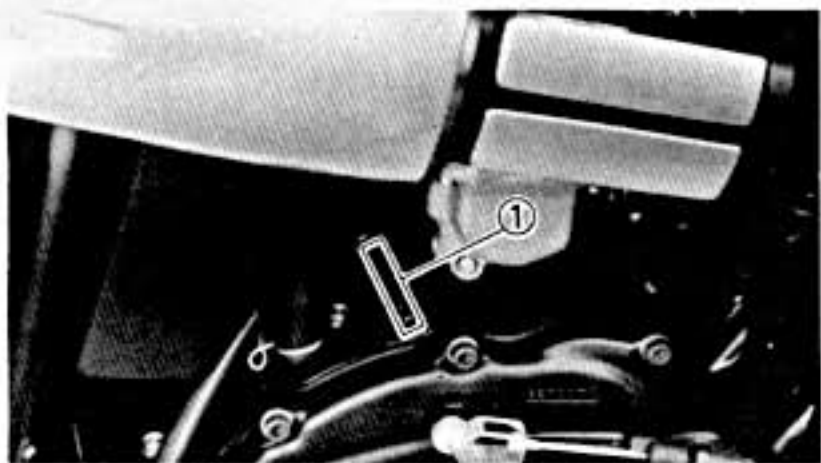
JYA1UJE0\*JA000101

YX600UC (For California)

JYA1ULC0\*JA000101

#### NOTE:

The vehicle identification number is used to identify your motorcycle and may be used to register your motorcycle with the licensing authority in your state.



### ENGINE SERIAL NUMBER

The engine serial number ① is stamped into the elevated part of the left rear section of the engine.

#### Starting Serial Number:

YX600U (Except for California)

1UJ-047101

YX600UC (For California)

1UL-00701

#### NOTE:

- The first three digits of these numbers are for model identifications; the remaining digits are the unit production number.
- Designs and specifications are subject to change without notice.





## APPENDICES

## SPECIFICATIONS

## GENERAL SPECIFICATIONS

Model	YX600U/YX600UC
Model Code Number:	2WY (For YX600U) 2XA (For YX600UC)
Vehicle Identification Number:	JYA1UJE0*JA000101 (For YX600U) JYA1ULC0*JA000101 (For YX600UC)
Engine Starting Number:	1UJ-047101 (For YX600U) 1UL-00701 (For YX600UC)
Bulb Wattage (Quantity):	
Headlight	60W/55W (1 pcs.)
Tail/Brake Light	8W/27W (1 pcs.)
Flasher Light (Front)/Front Position Light	27W/8W (2 pcs.)
Flasher Light (Rear)	27W (2 pcs.)
License Light	3.8W (2 pcs.)
Meter Light	3.4W (4 pcs.)

---

## FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and new data for the YX600W/WC. For complete information on service procedures, it is necessary to use this Supplementary Service Manual together with following manual:

<p><b>YX600S/SC Service Manual: LIT-11616-05-06</b> <b>YX600V/VC Supplementary Service Manual: LIT-11616-06-16</b></p>
--

<p><b>YX600W/YX600WC</b> <b>SUPPLEMENTARY SERVICE MANUAL</b> © 1989 by Yamaha Motor Corporation, U.S.A. 1st Edition, January 1989 All rights reserved. Any reprinting or unauthorized use without the written permission of Yamaha Motor Corporation, U.S.A. is expressly prohibited. Printed in U.S.A. P/N LIT-11616-06-88</p>
---

---

## NOTICE

This manual was written by the Yamaha Motor Company primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to put an entire mechanic's education into one manual, so it is assumed that persons using this book to perform maintenance and repairs on Yamaha motorcycles have a basic understanding of the mechanical concepts and procedures inherent in motorcycle repair technology. Without such knowledge, attempted repairs or service to this model may render it unfit to use and/or unsafe.

Yamaha Motor Company, Ltd. is continually striving to improve all models manufactured by Yamaha. Modifications and significant changes in specifications or procedures will be forwarded to all Authorized Yamaha dealers and will, where applicable, appear in future editions of this manual.

TECHNICAL PUBLICATIONS  
SERVICE DIVISION  
MOTORCYCLE GROUP  
YAMAHA MOTOR CO., LTD.

## HOW TO USE THIS MANUAL

### PARTICULARLY IMPORTANT INFORMATION

This material is distinguished by the following notation.

**NOTE:** A **NOTE** provides key information to make procedures easier or clearer.

**CAUTION:** A **CAUTION** indicates special procedures that must be followed to avoid damage to the motorcycle.

**WARNING:** A **WARNING** indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.

### MANUAL FORMAT






















All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all disassembly, repair, assembly, and inspection operations.

In this revised format, the condition of a faulty component will precede an arrow symbol and the course of action required will follow the symbol, e.g.,

- Bearings  
Pitting/Damage → Replace.

### EXPLODED DIAGRAM

Each chapter provides exploded diagrams before each disassembly section for ease in identifying correct disassembly and assembly procedures.

① GEN INFO 	② INSP ADJ 	
③ ENG 	④ COOL 	
⑤ CARB 	⑥ CHAS 	
⑦ ELEC 	⑧ APPX 	
⑨ 	⑩ 	
⑪ 	⑫ 	
⑬ 	⑭ 	
⑮ 	⑯ 	⑰ 
⑱ 	⑲ 	⑳ 
㉑ 		

## ILLUSTRATED SYMBOLS (Refer to the illustration)

Illustrated symbols ① to ⑧ are designed as thumb tabs to indicate the chapter's number and content.

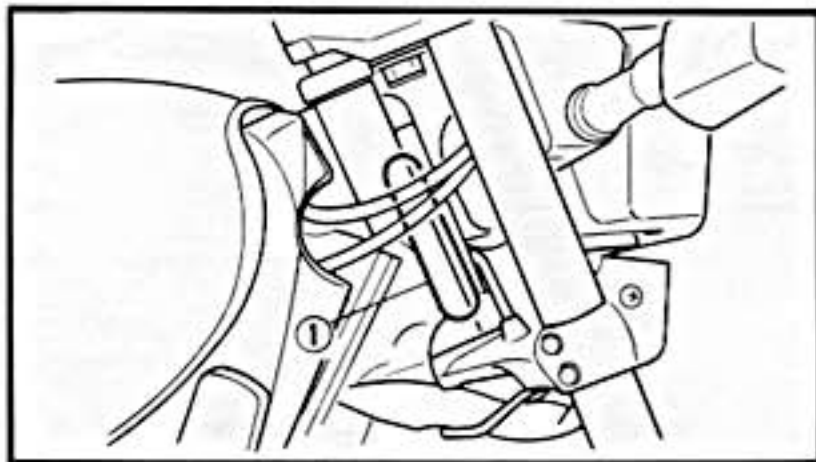
- ① General information
- ② Periodic inspection and adjustment
- ③ Engine
- ④ Cooling system
- ⑤ Carburetion
- ⑥ Chassis
- ⑦ Electrical
- ⑧ Appendices

Illustrated symbols ⑨ to ⑭ are used to identify the specifications appearing.

- ⑨ Filling fluid
- ⑩ Lubricant
- ⑪ Tightening
- ⑫ Wear limit, clearance
- ⑬ Engine speed
- ⑭  $\Omega$ , V, A

Illustrated symbols ⑮ to ㉑ in the exploded diagram indicate grade of lubricant and location of lubrication point.

- ⑮ Apply engine oil
- ⑯ Apply gear oil
- ⑰ Apply molybdenum disulfide oil
- ⑱ Apply wheel bearing grease
- ⑲ Apply lightweight lithium-soap base grease
- ⑳ Apply molybdenum disulfide grease
- ㉑ Apply locking agent (LOCTITE®)



## GENERAL INFORMATION

### MOTORCYCLE IDENTIFICATION VEHICLE IDENTIFICATION NUMBER

The vehicle identification number ① is stamped into the right side of the steering head pipe.

#### Starting Serial Number:

YX600W (Except for California)

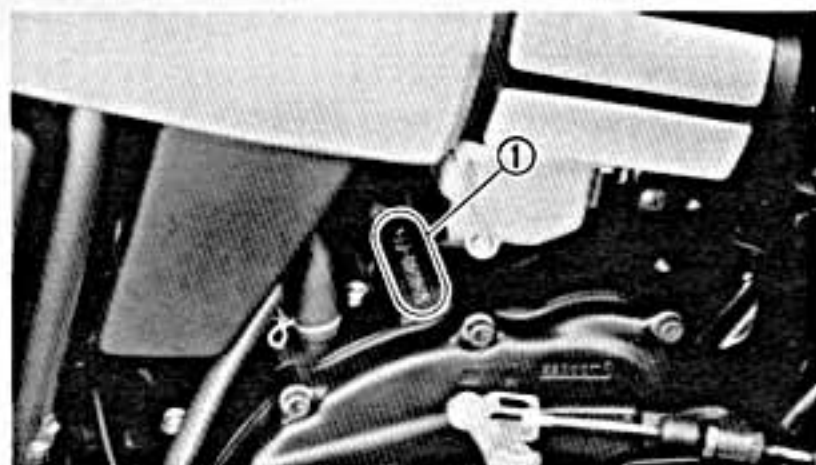
JYA3LTE0 \* KA000101

YX600WC (For California)

JYA3LTC0 \* KA007101

#### NOTE:

The vehicle identification number is used to identify your motorcycle and may be used to register your motorcycle with the licensing authority in your state.



### ENGINE SERIAL NUMBER

The engine serial number ① is stamped into the elevated part of the left rear section of the engine.

#### Starting Serial Number:

YX600W (Except for California)

3LT-000101

YX600WC (For California)

3LT-007101

#### NOTE:

- The first three digits of these numbers are for model identifications; the remaining digits are the unit production number.
- Designs and specifications are subject to change without notice.

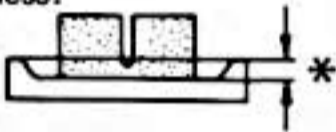
## APPENDICES

### SPECIFICATIONS

#### GENERAL SPECIFICATIONS

Model	YX600W/YX600WC
Model Code Number:	3LT1 (For YX600W) 3LT2 (For YX600WC)
Vehicle Identification Number:	JYA3LTE0 * KA000101 (For YX600W) JYA3LTC0 * KA007101 (For YX600WC)
Engine Starting Number:	3LT-000101 (For YX600W) 3LT-007101 (For YX600WC)

#### Chassis

Model	YX600W/YX600WC
<b>Front Disc Brake:</b> Type Outside Dia. x Thickness Pad Thickness: 	Dual disc 267 x 5 mm (10.5 x 0.2 in) 5.5 mm (0.21 in) Inner < Limit > * 0.5 mm (0.019 in) Outer < Limit > * 5.5 mm (0.21 in) 0.5 mm (0.019 in)
Master Cylinder Inside Dia. Caliper Cylinder Inside Dia. Brake Fluid Type	15.87 mm (0.62 in) 42.8 mm (1.50 in) DOT #3 or DOT #4
Clutch Lever Free Play (At Lever Pivot Point)	2 ~ 3 mm (0.08 ~ 0.10 in)

#### Electrical

Model	YX600W/YX600WC
<b>T.C.I.:</b> Pickup Coil Resistance (Color) T.C.I. Unit – Manufacturer	81 ~ 121 $\Omega$ at 20°C (68°F) (White – Red) (White – Black) TID14-79 HITACHI
<b>Ignition Coil</b> Model/Manufacturer Minimum Spark Gap Primary Winding Resistance Secondary Winding Resistance Spark Plug Cap Resistance	CM12-40/HITACHI 6 mm (0.24 in) or more at 500 r/min 1.8 ~ 2.2 $\Omega$ at 20°C (68°F) 9.6 ~ 14.4 k $\Omega$ at 20°C (68°F) 10 k $\Omega$



Electrical

Model	YX600W/YX600WC
<b>A.C. Generator:</b> Model/Manufacturer Nominal Output Starter Coil Resistance	FL118-16/HITACHI 12V, 21A at 5,000 r/min 0.31 ~ 0.37Ω at 20°C (68°F) (White – White)
<b>Voltage Regulator:</b> Type Model/Manufacturer No Load Regulated Voltage	Field control SH538A-12/SHINDENGEN 14 ~ 15V
<b>Rectifier:</b> Model/Manufacturer Capacity Withstand Voltage	SH538A-12/SHINDENGEN 25A 240V
<b>Electrical Starter System:</b> Type Starter Motor: Model/Manufacturer Output Armature Coil Resistance Brush – Overall Length < Limit > – Spring Force Commutator Dia. Wear Limit Mica Undercut Starter Relay: Model/Manufacturer Amperage Rating Coil Resistance	Constant mesh type  SM-13 MITSUBA 0.5 kw 0.012Ω ± 10% at 20°C (68°F) 12.5 mm (0.50 in) 4 mm (0.16 in) 340 ~ 460 g (12.0 ~ 16.2 oz) 28 mm (1.10 in) 27 mm (1.06 in) 0.8 mm (0.03 in)  3AY/HITACHI 100A 4.3Ω at 20°C (68°F)
<b>Flasher Relay (Relay Assembly):</b> Type Model/Manufacturer Self Cancelling Device Flasher Frequency Wattage	Semi transistor type FB257H/NIPPON DENSO Yes 85 ± 10 cycle/min 27W x 2 pcs + 3.4W
<b>Circuit Breaker:</b> Type Amperage for Individual Circuit x Quantity: MAIN HEADLIGHT SIGNAL IGNITION RESERVE	Fuse  30A x 1 pcs. 20A x 1 pcs. 10A x 1 pcs. 10A x 1 pcs. 30A x 1 pcs, 10A x 1 pcs.

Tightening torque chart

Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m · kg	ft · lb	
Cam shaft cap	Bolt	M6 P1.0	24	10	1.0	7.2	Tighten in 3-stages
Cylinder (cam chain)	Stud bolt	M6 P1.0	4	5	0.5	3.6	Apply oil
Cylinder (cam chain)	Nut	M6 P1.0	4	10	1.0	7.2	
Cylinder head (Exhaust pipe)	Stud bolt	M6 P1.0	8	10	1.0	7.2	Apply oil
Cylinder and crankcase	Nut	M8 P1.25	1	20	2.0	14	
Cylinder head	Cap nut	M8 P1.25	12	22	2.2	16	Apply oil
Spark plug		M12 P1.25	4	17.5	1.75	13	
Cylinder head cover	Bolt	M6 P1.0	12	10	1.0	7.2	
Cylinder	Stud bolt	M8 P1.25	1	15	1.5	11	Apply oil
Connecting rod and rod cap	Nut	M7 P0.75	8	25	2.5	18	
Camshaft and sprocket	Bolt	M7 P1.0	4	24	2.4	17	
Cam chain tensioner stopper bolt	Bolt	M8 P1.0	1	8	0.8	5.7	
Cam chain tensioner case and cylinder	Bolt	M6 P1.0	2	10	1.0	7.2	
Cam chain tensioner case lock nut	Nut	M8 P1.25	1	9	0.9	6.5	
Crankcase	Plug	M10 P1.25	1	10	1.0	7.2	
Rotor housing and pump cover	Screw	M6 P1.0	1	7	0.7	5.1	
Oil pump ass'y and crankcase	Screw	M6 P1.0	3	7	0.7	5.1	
Strainer housing and crankcase	Bolt	M6 P1.0	2	10	1.0	7.2	
Strainer cover and crankcase	Bolt	M6 P1.0	12	10	1.0	7.2	
Filter cover and crankcase	Union bolt	M20 P1.5	1	15	1.5	11	
Drain bolt	Plug	M14 P1.5	1	43	4.3	31	
Carburetor joint and cylinder head	Bolt	M6 P1.0	8	10	1.0	7.2	
Air filter cover	Screw	M5 P0.8	4	5	0.5	3.6	
Air filter case	Bolt	M6 P1.0	3	7	0.7	5.1	
Exhaust pipe and cylinder head	Nut	M6 P1.0	8	10	1.0	7.2	
Exhaust pipe joint	Bolt	M8 P1.25	6	20	2.0	14	
Muffler	Bolt	M10 P1.25	2	25	2.5	18	
Crankcase	Stud bolt	M8 P1.25	12	13	1.3	9.4	Apply oil
Crankcase (upper and lower)	Bolt	M8 P1.25	11	24	2.4	17	Apply oil
Crankcase (upper and lower)	Bolt	M6 P1.0	23	12	1.2	8.7	Apply oil



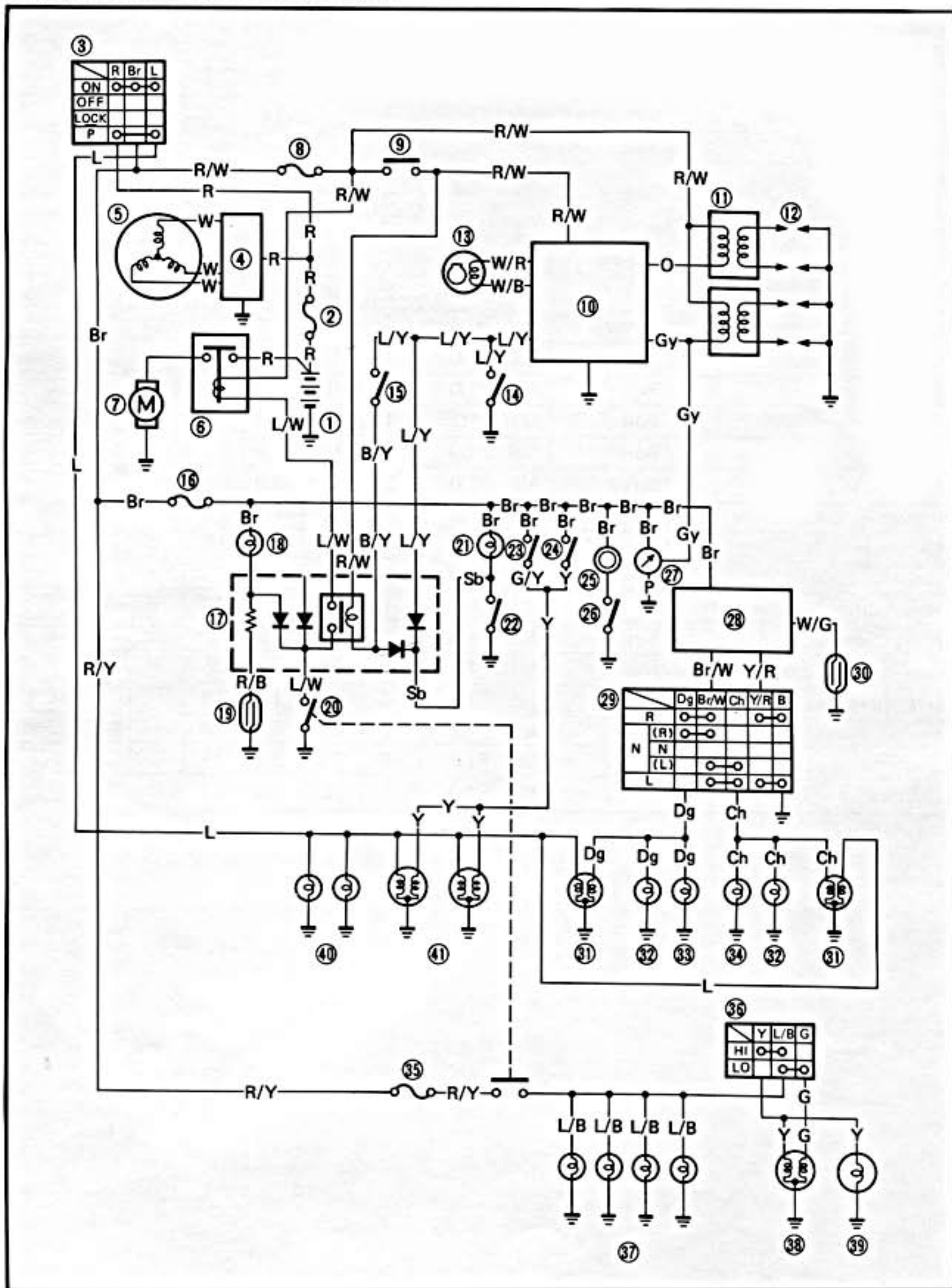
# MAINTENANCE SPECIFICATIONS

**APPX**


Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m · kg	ft · lb	
Generator cover and crankcase	Bolt	M6 P1.0	3	10	1.0	7.2	
Bearing cover plate (crankcase right)	Screw	M6 P1.0	4	8	0.8	5.7	
Clutch cable holder	Screw	M6 P1.0	1	10	1.0	7.2	
Crankcase cover	Bolt	M6 P1.0	13	10	1.0	7.2	
Crankcase (Main gallery blind plug)	Plug	M20 P1.5	2	12	1.2	8.7	Apply oil
Clutch pressure plate	Bolt	M6 P1.0	5	8	0.8	5.8	
Clutch boss	Nut	M20 P1.0	1	70	7.0	50	
Drive sprocket	Bolt	M6 P1.0	2	10	1.0	7.2	
Stopper plate	Screw	M5 P0.8	1	4	0.4	2.9	Use LOCTITE®
Cam segment	Bolt	M6 P1.0	1	10	1.0	7.2	Use LOCTITE®
Change pedal	Bolt	M6 P1.0	1	10	1.0	7.2	
A.C. magneto	Bolt	M10 P1.25	1	80	8.0	58	
Stator	Bolt	M6 P1.0	3	10	1.0	7.2	Use LOCTITE®
Pickup coil base	Screw	M6 P1.0	2	8	0.8	5.8	
Starter motor	Bolt	M6 P1.0	2	10	1.0	7.2	
Neutral switch	Screw	M5 P0.8	3	3.5	0.35	2.5	Use LOCTITE®
Oil level gauge switch	Bolt	M6 P1.0	2	7	0.7	5.1	
Relief valve and crankcase	—		1	20	2.0	14	
HY-VO chain tensioner	Bolt	M6 P1.0	2	10	1.0	7.2	Use LOCTITE®
Primary drive gear	Nut	M16 P1.5	1	50	5.0	36	
Bearing cover plate	Screw	M6 P1.0	2	10	1.0	7.2	Use LOCTITE®
Starter clutch	Bolt	M8 P1.25	3	25	2.5	18	Use LOCTITE®
Shift shaft stopper	Screw	M8 P1.25	1	22	2.2	16	
Shift cam bearing plate	Screw	M6 P1.0	1	10	1.0	7.2	

**ELECTRICAL**

**YX600W/WC CIRCUIT DIAGRAM**





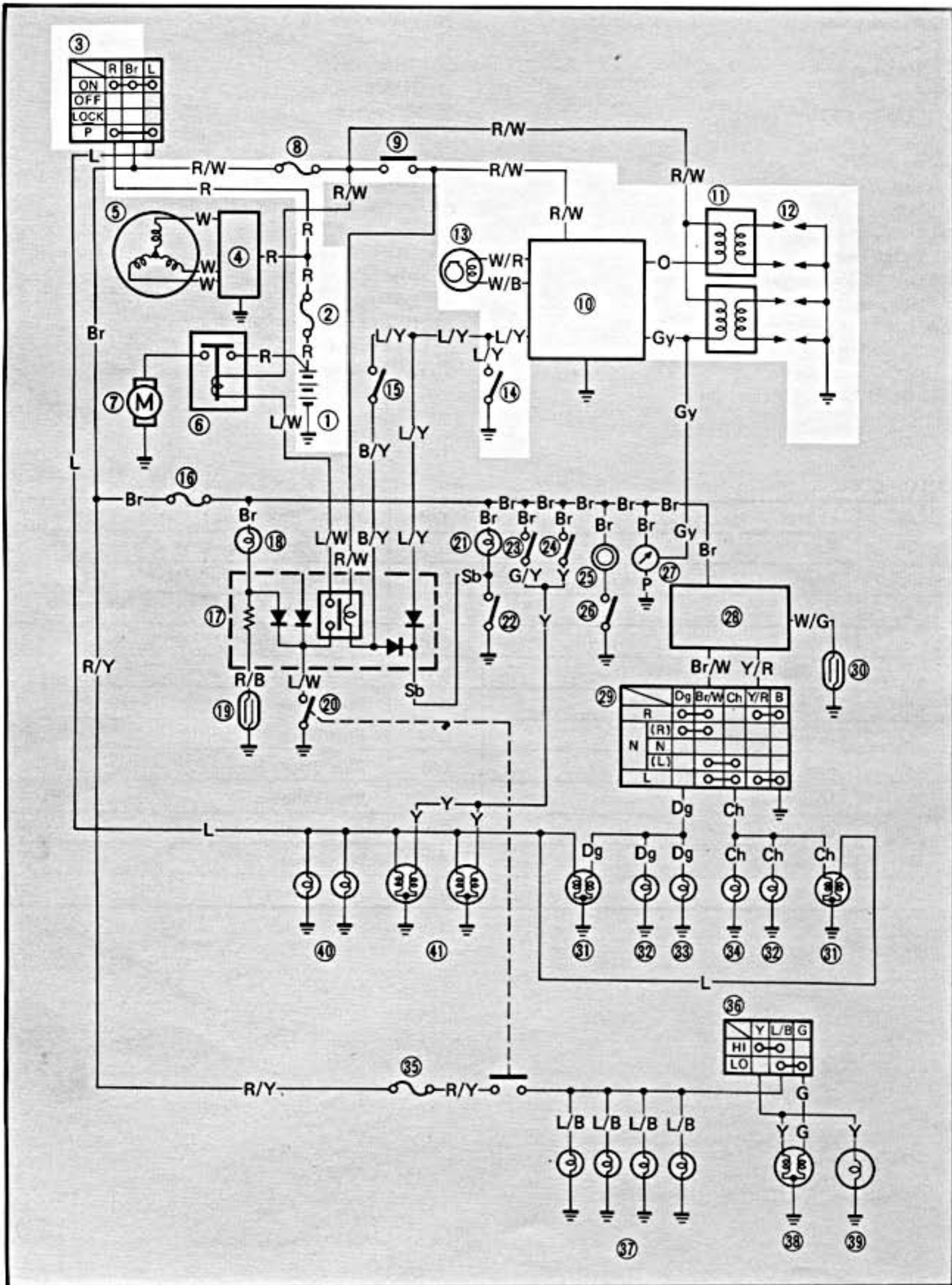
- ① Battery
- ② Fuse (Main)
- ③ "MAIN" switch
- ④ Rectifier/Regulator
- ⑤ A.C. Magneto
- ⑥ Starter relay
- ⑦ Starter motor
- ⑧ Fuse (Ignition)
- ⑨ "ENGINE STOP" switch
- ⑩ Ignitor
- ⑪ Ignition coil
- ⑫ Spark plug
- ⑬ Pick up coil
- ⑭ Sidestand switch
- ⑮ Clutch switch
- ⑯ Fuse "Signal"
- ⑰ Relay assembly
- ⑱ "OIL" indicator light
- ⑲ Oil level switch
- ⑳ "START" switch
- ㉑ "NEUTRAL" indicator light

- ㉒ Neutral switch
- ㉓ Front brake switch
- ㉔ Rear brake switch
- ㉕ Horn
- ㉖ "HORN" switch
- ㉗ Tachometer
- ㉘ Flasher relay
- ㉙ "TURN" switch
- ㉚ Reed switch
- ㉛ Front position light/Flasher light
- ㉜ Rear flasher light
- ㉝ "TURN" indicator light (Right)
- ㉞ "TURN" indicator light (Left)
- ㉟ Fuse "Head"
- ㊱ "LIGHTS" (Dimmer) switch
- ㊲ Meter light
- ㊳ Headlight
- ㊴ "HIGH BEAM" indicator light
- ㊵ Licence light
- ㊶ Tail/Brake light

## COLOR CODE

O	Orange	Y/R	Yellow/Red
R	Red	Br/W	Brown/White
L	Blue	R/W	Red/White
Br	Brown	R/Y	Red/Yellow
B	Black	B/R	Black/Red
Y	Yellow	B/W	Black/White
W	White	B/Y	Black/Yellow
G	Green	L/W	Blue/White
P	Pink	L/B	Blue/Black
Dg	Dark green	L/Y	Blue/Yellow
Ch	Chocolate	G/Y	Green/Yellow
Gy	Gray	W/R	White/Red
Sb	Sky blue	W/G	White/Green

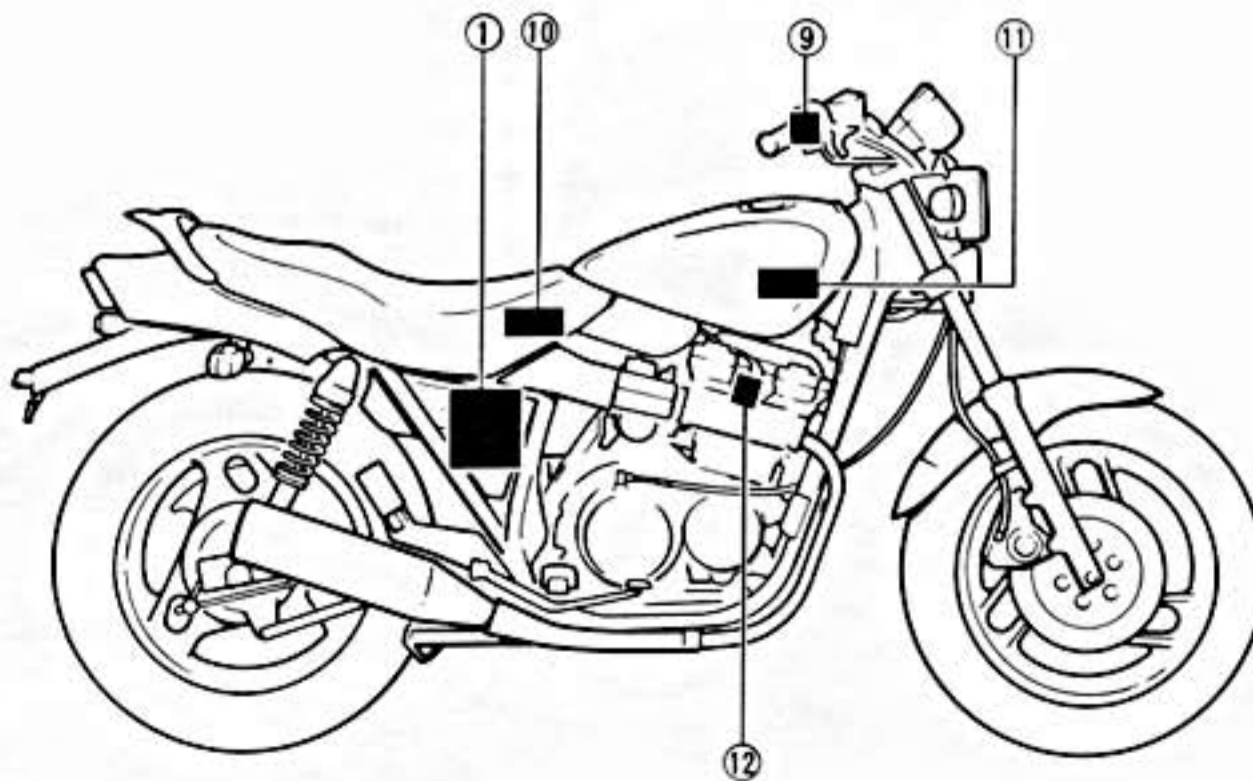
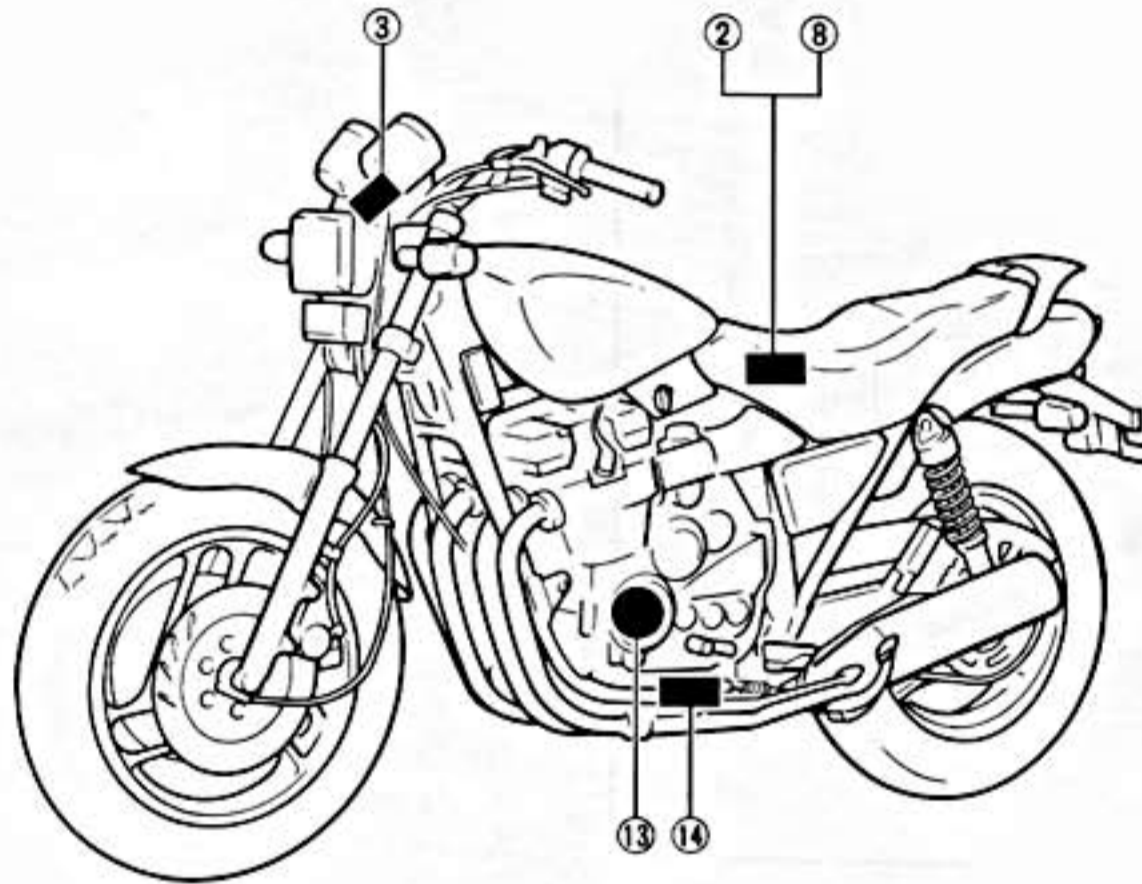
IGNITION SYSTEM  
CIRCUIT DIAGRAM

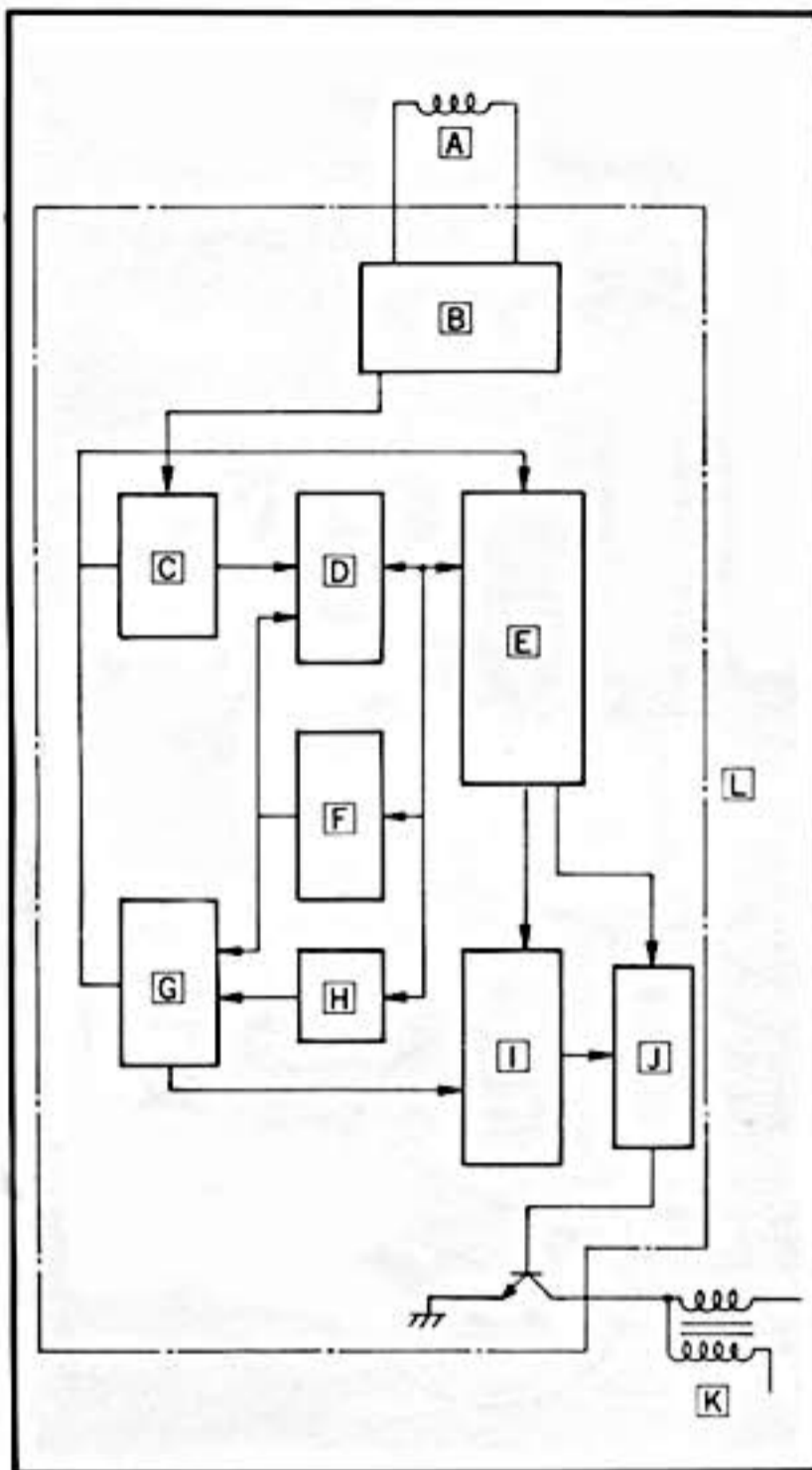




- ① Battery
- ② Fuse (MAIN)
- ③ Main switch
- ⑧ Fuse (IGNITION)
- ⑨ "ENGINE STOP" switch

- ⑩ Ignitor unit
- ⑪ Ignition coil
- ⑫ Spark plug
- ⑬ Pickup coil
- ⑭ Sidestand switch





## DIGITAL IGNITION CONTRL SYSTEM

### DESCRIPTION

The electronic ignition that sparks the engine is computer controlled and operated by the digital microprocessor. It has a pre-programed ignition advance curve.

This programed advance curve closely matches the spark timing to the engine's ignition requirements. Only one pickup coil is needed to meet the requirements of the digital ignitor unit.

The digital ignitor also includes the control unit for the electric fuel pump.

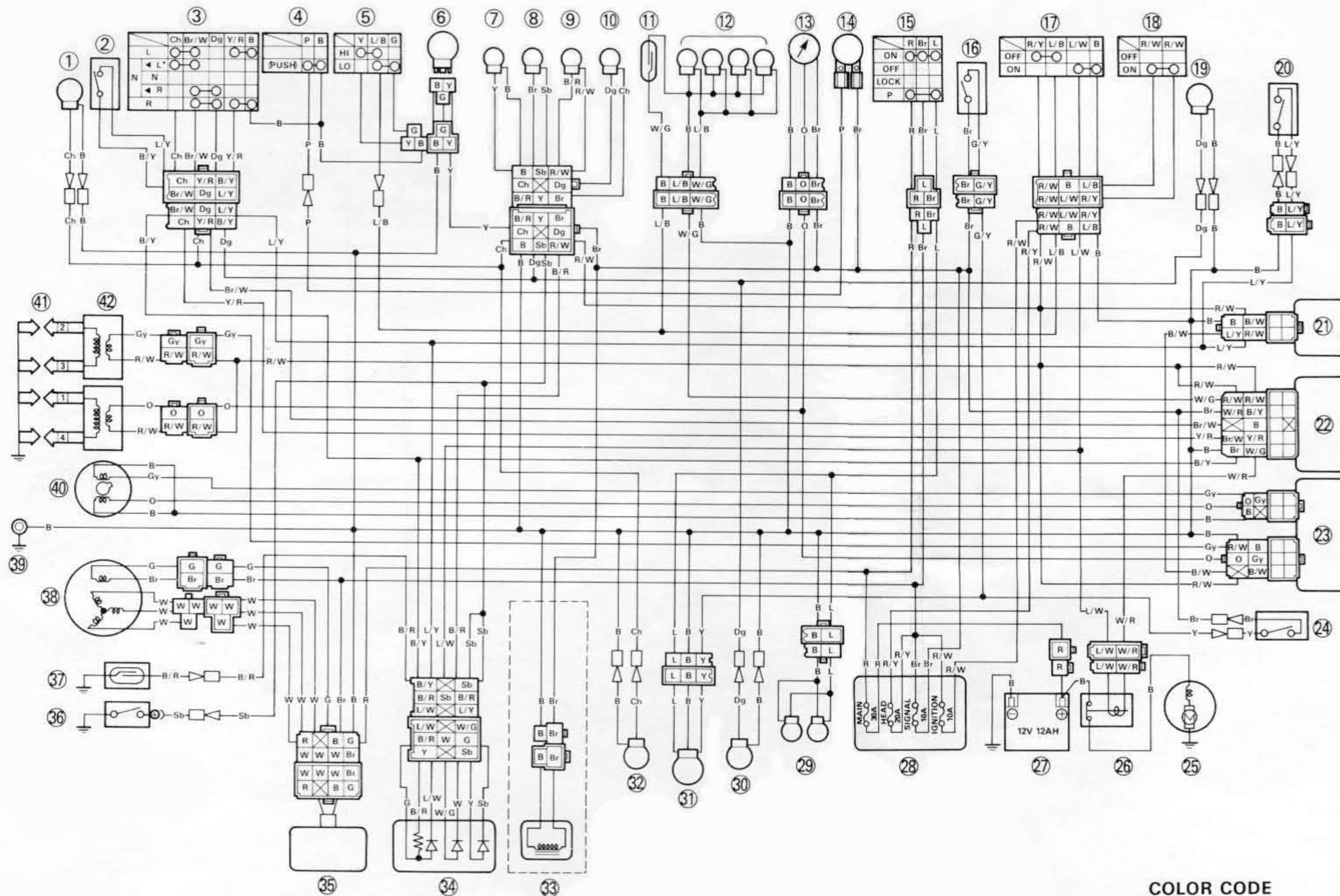
- A** Pickup coil
- B** Wave-shape shaping circuit
- C** Edge detection circuit
- D** Latch circuit
- E** Microprocessor
- F** Free-running counter
- G** Comparison circuit
- H** Register
- I** Flip-flop circuit
- J** Driving circuit
- K** Ignition coil
- L** Digital ignitor unit

### OPERATION

The following operations are digitally-performed by signal from the pickup coil signal:

1. Determing proper ignition timing.
2. Sensing the engine revolution speed.
3. Determing timing for switching on ignition coil (duty control).
4. Increasing ignition coil primary current for starting the engine.
5. Sensing engine stall.
6. Preventing over-revolution of the engine.

# YX600S/YX600SC WIRING DIAGRAM



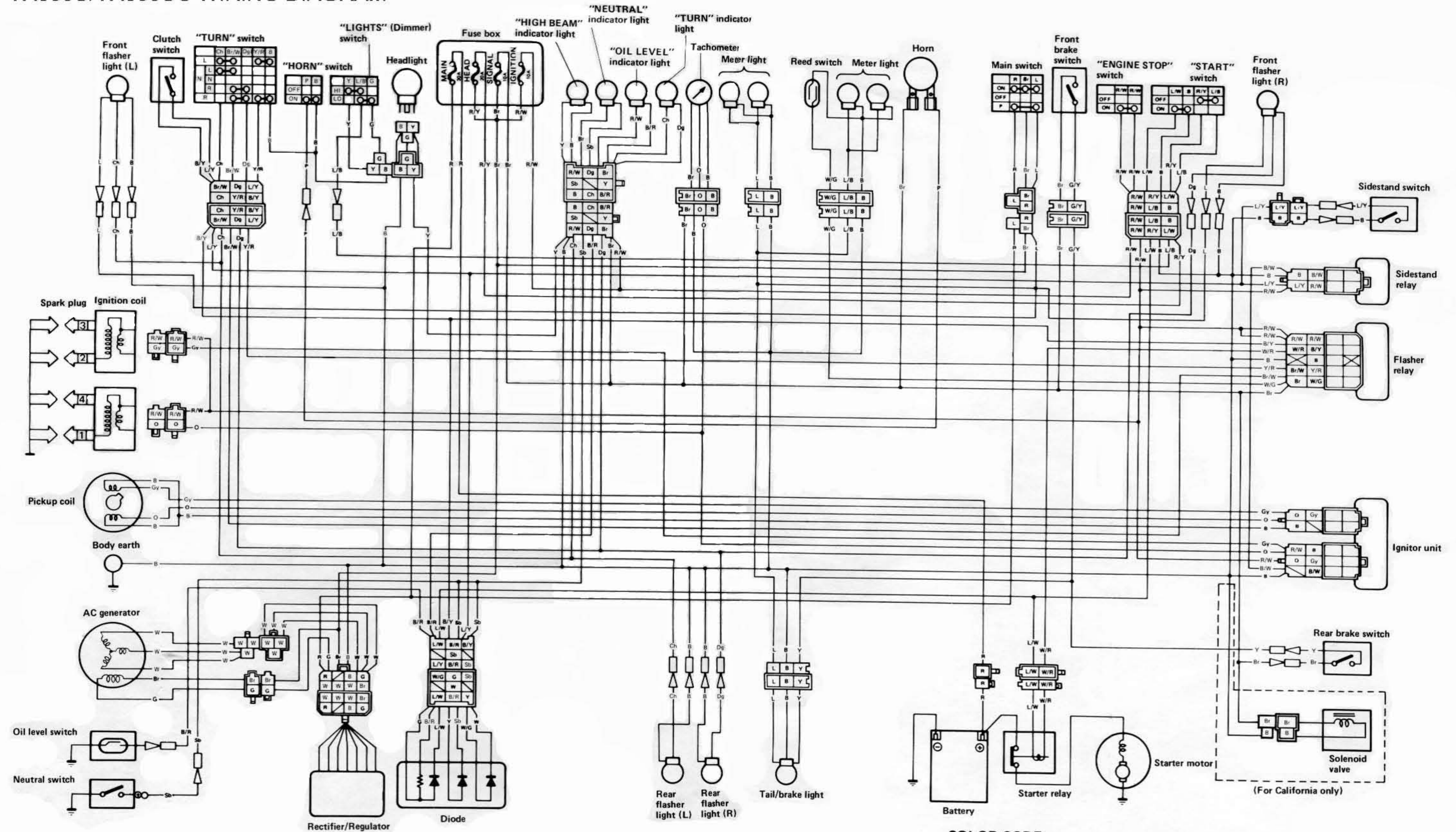
- ① Front flasher light (L)
- ② Clutch switch
- ③ "TURN" switch
- ④ "HORN" switch
- ⑤ "LIGHTS" (dimmer) switch
- ⑥ Headlight
- ⑦ "HIGH BEAM" indicator light
- ⑧ "NEUTRAL" indicator light
- ⑨ "OIL" indicator light
- ⑩ "TURN" indicator light
- ⑪ Reed switch
- ⑫ Meter light
- ⑬ Tachometer
- ⑭ Horn
- ⑮ Main switch
- ⑯ Front brake switch
- ⑰ "START" switch
- ⑱ "ENGINE STOP" switch
- ⑲ Front flasher light (R)
- ⑳ Sidestand switch
- ㉑ Sidestand relay
- ㉒ Relay assembly
- ㉓ Ignitor unit
- ㉔ Rear brake switch
- ㉕ Starter motor
- ㉖ Starter relay
- ㉗ Battery
- ㉘ Fuse
- ㉙ License light
- ㉚ Rear flasher light (R)
- ㉛ Tail/Brake light
- ㉜ Rear flasher light (L)
- ㉝ Air vent control valve (For YX600SC only)
- ㉞ Diode
- ㉟ Rectifier/regulator
- ㊱ Neutral switch
- ㊲ Oil level switch
- ㊳ AC magneto
- ㊴ Body earth
- ㊵ Pickup coil
- ㊶ Spark plug
- ㊷ Ignition coil

## COLOR CODE

- R ..... Red
- B ..... Black
- W ..... White
- Y ..... Yellow
- G ..... Green
- L ..... Blue
- Br ..... Brown
- Ch ..... Chocolate
- Dg ..... Dark green
- P ..... Pink
- O ..... Orange
- Sb ..... Sky blue
- Gy ..... Gray

- R/W ..... Red/White
- R/Y ..... Red/Yellow
- B/W ..... Black/White
- B/Y ..... Black/Yellow
- B/R ..... Black/Red
- W/R ..... White/Red
- W/G ..... White/Green
- Y/R ..... Yellow/Red
- G/Y ..... Green/Yellow
- L/W ..... Blue/White
- L/Y ..... Blue/Yellow
- L/B ..... Blue/Black
- Br/W ..... Brown/White

# YX600U/YX600UC WIRING DIAGRAM



## COLOR CODE

B . . . . .	.Black	Ch . . . . .	.Chocolate	L/Y . . . . .	.Blue/Yellow
L . . . . .	.Blue	Dg . . . . .	.Dark green	L/B . . . . .	.Blue/Black
Y . . . . .	.Yellow	Sb . . . . .	.Sky blue	L/W . . . . .	.Blue/White
O . . . . .	.Orange	Gy . . . . .	.Gray	Y/R . . . . .	.Yellow/Red
P . . . . .	.Pink	Br. . . . .	.Brown	R/Y . . . . .	.Red/Yellow
W . . . . .	.White	B/Y . . . . .	.Black/Yellow	R/W . . . . .	.Red/White
G . . . . .	.Green	B/R . . . . .	.Black/Red	R/B . . . . .	.Red/Black
R . . . . .	.Red	B/W . . . . .	.Black/White	W/G . . . . .	.White/Green