

# XS850G

## 1980 SERVICE DATA

MODEL - IBM I.D. NUMBER	XS850G-B	XS850G-R	3J3
Initial Engine Number - Frame Number	3J3-000101 / 3J3-000101		
Basic Color(s)	Black Blue (B)	New Ruby Red (R)	
Fuel Type, Fuel Tank Capacity, Reserve Capacity	Regular / 17 Lit. (4.5 Gal.) / 3.0 Lit. (0.8 Gal.)		
Dry Vehicle Weight	241 kg (531 lbs.)		
<b>ENGINE TYPE</b>	4-Stroke, DOHC, Air Cooled, Transverse Triple		
Bore, Stroke, Number Cylinders, Displacement (cc)	71.5mm / 68.6mm / 3 / 826cc		
Compression Ratio, Compression Pressure Min~Max	9.2: 1 / 9 ~ 11 kg/cm <sup>2</sup>		
Piston Skirt Clearance New, Max	0.050 ~ 0.055mm / 0.1mm		
Ring End Gap Top / 2nd / 3rd	0.2 ~ 0.4mm / 0.2 ~ 0.4mm / 0.3 ~ 0.9mm		
Valve Clearance (Cold) Intake, Exhaust	0.11 ~ 0.15mm / 0.21 ~ 0.25mm		
Oil Pressure Hot, rpm	2.0 kg/cm <sup>2</sup> @ 60°C / 1100 rpm @ Oil Pressure Switch		
Oiling System	Wet Sump		
Capacity: Dry	3700cc		
Oil and Filter Change	3100cc		
Oil Change	2800cc		
Lubricant: Temp. above 5°C (40°F)	Yamalube 4* or SAE 20W40 SE Motor Oil		
Below 15°C (60°F)	SAE 10W30 SE Motor Oil		
<b>AUTOLUBE - Min. Stroke / Color Code</b>	∅		
Minimum Output @ 200 Cycles	∅		
Maximum Output @ 200 Cycles	∅		
<b>CARBURETOR - Mfr./Type/I.D. Number</b>	Hitachi / HSC34-10 3J3-00		
Main Jet / Pilot Jet	142 / 40		
Needle Jet / Jet Needle Clip Position	2.6 / Y-01 Fixed		
Slide Cutaway or Throttle Valve	13° (#130)		
Float Level	12.5 ± 1.0mm		
Idle rpm	1100 ± 50 rpm		
CO % @ Idle (Diagnostic, Use Only)	NA		
<b>SUSPENSION</b>			
Front Forks: Oil Type, Level, Qty	10 Wt. Fork Oil* or Equivalent ∅ : 195cc		
Gas Pressure	0.4 kg/cm <sup>2</sup> (5.7 psi)		
Spring Length Std.	508.5mm		
Monoshock: Oil Type, Qty	∅		
Gas Pressure	∅		
Minimum Brake Lining Thickness	Front: 6.0mm Rear: 6.0mm		
Tire Size (Nominal Pressure)	F: 3.25H19(1.8kg/cm <sup>2</sup> 26psi) R: 4.50H17(2.0kg/cm <sup>2</sup> 28psi)		
<b>TRANSMISSION - Oil Type/Qty Chg/Qty Reassemble</b>	See ENGINE above		
Primary Drive Type, Teeth, Ratio	Sour Gear, Silent Chain, 45/27, 1.665		
Secondary Drive Type, Teeth, Chain	Shaft Drive / 35-31 x 19-18 x 32-11 ∅		
Clutch Friction Plate Thickness Std. ~ Min.	2.8 ~ 2.6mm		
Clutch Spring Length Std. ~ Min.	42.8 ~ 41.5mm		
Middle Gear Case Capacity	375cc		
Final Gear Case Capacity	300cc		
Gear Case Lubricant, Temp. above 5°C (40°F)	SAE 90 Hypoid Gear Oil GL 4		
Temp. below 15°C (60°F)	SAE 80 Hypoid Gear Oil GL 4		
All Weather Conditions	SAE 80W90 Hypoid Gear Oil GL 4		

<b>CHARGING SYSTEM</b>	AC Generator / 3 Phase / Full Wave
Battery Model Spec. Grav. / Chg. Rate	Yuasa YB14L (12 / 14AH) / 1.28 / 1.4A
Maximum Output	14V20A @ 5000 rpm
<b>TROUBLESHOOTING</b>	
Field Coil Color Code - $\Omega$	Rotor Grn ~ Blk / 3.5 $\Omega$ $\pm$ 10% Stator Wht ~ Wht / 48 $\Omega$ $\pm$ 10%
Charge Coil Color Code - $\Omega$	$\emptyset$
<b>IGNITION SYSTEM</b>	Transistor Controlled Ignition
Ignition Timing	10° Mark
	Std: 10° @ 1100 rpm Adv: 34° @ 4000 rpm
Spark Plug Type	NGK BP-7ES or Champion N-7Y
Spark Plug Gap Torque / Cap $\Omega$	0.7 ~ 0.8mm / 2.0 m kg / 5K $\Omega$ $\pm$ 20%
Point Gap / Condenser Capacitance	$\emptyset$ / $\emptyset$
<b>TROUBLESHOOTING</b>	
Ignition Coil Test Gap Primary $\Omega$ / Secondary $\Omega$	6mm / 2.75 $\Omega$ $\pm$ 10% / 7.9K $\Omega$ $\pm$ 20%
Pulse Coil or Pick up Coil Color Code - $\Omega$	Org ~ Blk / Yel ~ Blk / Gry ~ Blk / 700 $\Omega$ $\pm$ 20%
Source Coil Color Code - $\Omega$	$\emptyset$
<b>LIGHTING SYSTEM</b>	
Headlight Tail Light Signal Rating	12V60 55W / 12V27 8W / 12V27W
<b>TROUBLESHOOTING</b>	
Lighting Coil Color Code - $\Omega$	$\emptyset$
<b>TORQUE VALUES</b>	
Front Axle Nut	14 x 1.5: 10.0 m kg
Front Axle Holder Nut	8 x 1.25: 2.0 m kg
Rear Axle Nut	18 x 1.5: 16.0 m kg
Rear Axle Pinch Bolt	8 x 1.25: 0.6 m kg
Clutch Nut	24 x 1.5: 11.0 m kg
Drain Plug	14 x 1.5: 4.3 m kg
Cylinder Head Cover	6 x 1.0: 1.0 m kg
Cylinder Head	10 x 1.25: 3.5 m kg (Use Oil)
	8 x 1.25: 2.3 m kg (Use Oil)
Engine Mounting Bolts - Front	10 x 1.25: 5.5 m kg
Rear	12 x 1.25: 2.6 m kg

$\emptyset$  Does Not Apply To This Model

\*Available From Yamaha Parts Distributors, Inc.