

XS650G

1980 SERVICE DATA

MODEL - IBM I.D. NUMBER	XS650G	3G0
Initial Engine Number/Frame Number	3G0-000101 / 3G0-000101	
Basic Color(s)	Black Gold	
Fuel Type/Fuel Tank Capacity/Reserve Capacity	Regular / 11.5 Lit. (3.0 Gals.) / 2.3 Lit. (0.5 Gals.)	
Dry Vehicle Weight	205 kg (452 lbs.)	
ENGINE TYPE	4-Stroke, SOHC, Air-Cooled	
Bore/Stroke/Number Cylinders/Displacement (cc)	75mm / 74mm / 2 / 654cc	
Compression Ratio/Compression Pressure min ~ max	8.7:1 / 9.5 ~ 11.5 kg/cm ²	
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	0.06mm / 0.15mm	
Oil Pressure hot/rpm	φ	
Oiling System	Wet Sump	
Capacity: Dry	2500cc	
Oil and Filter Change	2000cc	
Oil Change	2000cc	
Lubricant Temp above 5°C (40°F)	Yamalube 4* or SAE 20W40 SE	
Below 15°C (60°F)	Yamalube 4* or SAE 20W40 SE	
AUTOLUBE - Min. Stroke/Color Code	φ	
Minimum Output @ 200 cycles	φ	
Maximum Output @ 200 cycles	φ	
CARBURETOR - Mfr./Type/I.D. Number	Mikuni / BS34 / 3G1-00	
Main Jet/Pilot Jet	132.5 / 42.5	
Needle Jet/Jet Needle Clip Position	Y.O. / 5HX12-F xed	
Slide Cutaway or Throttle Valve	135	
Float Level	27.3 ± 0.5mm	
Idle RPM	1200	
CO % @ Idle (Diagnostic Use Only)	N/A	
SUSPENSION		
Front Forks Oil Type/Level/Qty	10 W* Fork Oil* / φ / 169cc	
Gas Pressure	φ	
Spring Length Std	482mm	
Monoshock Oil Type/Qty	φ	
Gas Pressure	φ	
Minimum Brake Lining Thickness	Front 6.0mm Rear 6.0mm	
Tire Size (Nominal Pressure)	F: 3.50S19(1.6 kg/cm ² /22 psi) R: 130/90 16 67S(2.0 kg/cm ² /28 psi)	
TRANSMISSION - Oil Type/Qty Cl. g/Qty Reassemble	See ENGINE Lubricant	
Primary Drive Type/Teeth/Ratio	Spur Gear / 72/27 2.665	
Secondary Drive Type/Teeth/Chain	Chain / 34-17 / DID530HDS-1041	
Clutch Friction Plate Thickness Std ~ min	3.0 ~ 2.7mm	
Clutch Spring Length Std ~ min	34.6 ~ 33.6mm	
Middle Gear Case Capacity	φ	
Final Gear Case Capacity	φ	
Gear Case Lubricant Temp above 5°C (40°F)	φ	
Temp below 15°C (60°F)	φ	
All Weather Conditions	φ	

CHARGING SYSTEM		A.C. Generator / 3 Phase / Full Wave
Battery: Model / Spec. Grav. / Chg. Rate		Yuasa YB14L-A2 (12V14AH) / 1.28 / 1.4A
Maximum Output		14 / 16A @ 5000 rpm
TROUBLESHOOTING		
Field Coil Color Code / Ω		Rotor: Grn~Brn/5.3 $\Omega \pm 10\%$ Stator: Wht~Wht/0.46 $\Omega \pm 10\%$
Charge Coil Color Code / Ω		ϕ
IGNITION SYSTEM		Transistor Controlled Ignition
Ignition Timing		15° Mark
		Std: 15° @ 1200 rpm Adv: 40° @ Approx. 3200 rpm
Spark Plug Type		NGK BP7ES or Champion N7Y
Spark Plug Gap / Torque / Cap Ω		0.7 ~ 0.8mm / 2.0 m·kg / 10K Ω
Point Gap / Condenser Capacitance		ϕ / ϕ
TROUBLESHOOTING		
Ignition Coil Test Gap / Primary Ω / Secondary Ω		6.0mm / 2.5 $\Omega \pm 10\%$ / 13K $\Omega \pm 20\%$
Pulse Coil or Pick-up Coil Color Code / Ω		Org ~ Blk, Gry ~ Blk / 700 $\Omega \pm 20\%$
Source Coil Color Code / Ω		ϕ
LIGHTING SYSTEM		
Headlight / Taillight / Signal Rating		12V50-40W / 12V27-8W / 12V27W
TROUBLESHOOTING		
Lighting Coil Color Code / Ω		ϕ
TORQUE VALUES		
Front Axle Nut		14 x 1.5: 10.8 m·kg
Front Axle Holder Nut		8 x 1.25: 1.4 m·kg
Rear Axle Nut		18 x 1.5: 15.0 m·kg
Rear Axle Pinch Bolt		ϕ
Clutch Nut		18 x 1.0: 8.0 m·kg
Drain Plug		30 x 1.5: 4.2 m·kg
Cylinder Head Cover		8 x 1.25: 2.1 m·kg
Cylinder Head		6 x 1.0: 0.9 m·kg
		10 x 1.25: 3.7 m·kg
Engine Mounting Bolts	Engine, Upper	8 x 1.25: 1.8 m·kg 10 x 1.25: 3.0 m·kg
	Engine, Front	10 x 1.25: 4.6 m·kg
	Engine, Rear	10 x 1.25: 4.0 m·kg
	Rear, Lower	10 x 1.25: 4.6 m·kg
	Engine, Lower	10 x 1.25: 9.0 m·kg

ϕ Does Not Apply to This Model

* Available From Yamaha Parts Distributors, Inc