

XS650F

1979 SERVICE DATA

M8-040

MODEL - IBM I.D. NUMBER	XS650F 2F0
Initial Engine Number/Frame Number	2F0-020101 / 2F0-020101
Basic Color(s)	Cobalt Blue
Fuel Type/Fuel Tank Capacity/Reserve Capacity	Regular / 15 Lit (4 Gal.) / 2.5 Lit (0.6 Gal.)
Dry Vehicle Weight	210 kg (463 lbs.)
ENGINE TYPE	4 Stroke, SOHC, Air-Cooled
Bore/Stroke/Number Cylinders/Displacement (cc)	75mm / 74mm / 2 / 654cc
Compression Ratio/Compression Pressure min ~ max	8.5:1 / 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 - Mfr. Stroke/Color Code	φ
Minimum Output @ 200 cycles	φ
Maximum Output @ 200 cycles	φ
CARBURETOR - Mfr./Type/I.D. Number	Mikuni BS38 / 2F000
Main Jet/Pilot Jet	135 / 27.5
Needle Jet/Jet Needle Clip Position	Z 2 / 502.3
Slide Cutaway or Throttle Valve	120
Float Level	24 ± 2.5mm
Idle RPM	1200
CO % @ Idle (Diagnostic Use Only)	3 ± 2%
SUSPENSION	
Front Forks Oil Type/Level/Qty	10 wt. Fork Oil* / φ 164 ~ 172cc
Gas Pressure	φ
Spring Length Std	482mm
Monoshock Oil Type/Qty	φ
Gas Pressure	φ
Minimum Brake Lining Thickness	Front 6.0mm Rear 2.0mm
Tire Size (Nominal Pressure)	F 3.50H19/1.6 kg/cm ² 22 psi-R 4.00H18/2.0 kg/cm ² 28 psi
TRANSMISSION - Oil Type/Qty Chg/Qty Reassemble	See ENGINE Lubricant
Primary Drive Type/Teeth/Ratio	Spur Gear / 22/27 / 2.666
Secondary Drive Type/Teeth/Chain	Chain / 34/17 / DID530HDS 104L
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		14V11A @ 2000 rpm
TROUBLESHOOTING		
Field Coil Color Code / Ω		Rotor: Grn-Blk/5.25 Ω ±10% Stator: Wht-Wht/0.46 Ω ±10%
Charge Coil Color Code / Ω		ϕ
IGNITION SYSTEM		
Ignition Timing		Battery and Coil 15° Mark
Spark Plug Type		Std. 15° @ 1200 rpm Adv. 40° @ 3000 rpm NGK B7ES or Champion N7Y
Spark Plug Gap / Torque / Cap Ω		0.7 ~ 0.8mm / 2.0 n.kg / 10K Ω
Point Gap / Condenser Capacitance		0.3 ~ 0.4mm / 0.22 μ F ± 10%
TROUBLESHOOTING		
Ignition Coil Test Gap / Primary Ω / Secondary Ω		6.0mm / 3.9 Ω ± 10% / 8.0K Ω ± 20%
Pulse Coil or Pick-up Coil Color Code / Ω		ϕ
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: 10.7 m.kg
Front Axle Holder Nut		8 x 1.25: 2.0 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		ϕ
Cylinder Head		6 x 1.0: 0.9 m.kg 8 x 1.25: 2.1 m.kg Cap Nut 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: 4.6 m.kg

ϕ Does Not Apply to This Model

* Available From Yamaha Parts Distributors, Inc