

1977 SERVICE DATA

MODEL - I&M I.D. NUMBER	XS650D	113
Starting Engine and Frame Number	447-700101	
Basic Color (fuel tank)	Max. Maroon, Bountiful Blue	
Net Weight	467 lbs.	
ENGINE (type, induction system)	4-stroke, Twin, O.H.C., Air-cooled	
Bore x Stroke x Cylinder(s) Displacement	75 x 74mm x 2	653cc (39.85 CID)
Compression Ratio (pressure)	8.4:1	
Piston Skirt Clearance (new/max.)	.050 ~ .055mm (.0020 ~ .0022") / 0.1mm (.004")	
Ring End Gap (top/2nd/3rd)	0.2 ~ 0.4mm (.008 ~ .016") / Same / ϕ	
Ring Groove Clearance (top/2nd/3rd)	.04 ~ .08mm (.0016 ~ .0032") / .03 ~ .07mm / ϕ	
Valve Clearance (eng. cold) Intake/Exhaust	IN: .05mm (.002") / EX: 0.15mm (.005")	
AUTOLUBE - Minimum Pump Stroke/Color Code	ϕ	
CARBURETOR (mfr.) (type) (I.D. number)	Mikuni / BS38 / 58400	
Main Jet	No. 122.5 / M.A.J. 10	
Needle Jet	Z-8	
Jet Needle/Clip Position	4M1-3	
Cutaway	No. 120	
Pilot Jet	No. 25	
Air Jet	(1.0) (1.4)	
Starter Jet	No. 1: No. 80 / No. 2: 0.5	
Air Screw (turns out) (idle speed)	1 1/2 \pm 1/8 (mixture screw - with cap removed)	
Float Level	25.0 \pm 1.0mm	
Air Filter (type & quantity)	Dry Foam Rubber x 2 @ 200rpm	
DRIVE - Primary (type) (teeth) (ratio)	Spur Gear	72/27 2.667
Secondary (type) (teeth) (ratio)	DK530HDS, '03L	34/17 2.000
Transmission Ratios 1st (teeth) (ratio) (O.A.)	32/13	2.461 11.879
2nd	27/17	1.588 8.470
3rd	26/20	1.300 6.933
4th	23/21	1.095 5.841
5th	22/23	0.956 5.101
6th	ϕ	
CAPACITIES - Transmission	(See Engine Oil) Yamalube 4-cycle* SAE20W40	
Oil Tank or Engine Sump	Change=2,000cc Total=2,500cc	
Fuel Tank	4.0 gals. Low Lead (Regular) or unleaded	
Front Forks	168cc (5.7 oz) 120wt. Fork Oil*	
Rear Shocks	ϕ	
Tires (size normal pressure)	Front: 3.50H-19/23psi Rear: 4.00H-18/28psi	
ELECTRICAL - Charging System (mfr.) (type)	Hitachi / Regulated A.C. Generator	
No. Load Voltage Adj. (AC & DC generators)	14.5 \pm 0.5V @ 3,000rpm	
Max. Generator (Magnetic) Output	14V 11A @ 2,000rpm	
Field Coil (and/or) Charging Coil Resistance	N/A	
Battery (mfr.) (model) (rating) (charge rate)	YUASA / YB14L A2 12V 14AH / 1.4A x 10 hrs	
Headlight/Taillight Ratings	12V50W/40W 12V8W	
Ign. Coil Min. Spark Gap/Prim. Res./Sec. Res.	7mm @ 7,000rpm 3.9 Ω 8.0K Ω	
Source Coil Res./Pulse Coil Res.	ϕ	
Condenser Capacity	0.22 μ F	
Point Gap/Spark Plug (type/gap)	0.35mm (.014") NGK BP 7ES / 0.6 ~ 0.7mm	
Timing (advanced) (retarded)	(41.5 $^\circ$ @ 3,300rpm) (13 ~ 17 $^\circ$ @ 1,200rpm)	