XS1100H
1981 SERVICE DATA

MODEL - IBM I.D. NUMBER	XS1100H 4R1
Initial Engine Number / Frame Number	4R1-000101 / 4R1-000101
Basic Color(s)	Indigo Blue
Fuel Type / Fuel Tank Capacity / Reserve Capacity	Regular / 24 Lit. (6.3 Gal.) / 4.6 Lit. (1.2 Gal.)
Dry Vehicle Weight	287 kg (633 lbs.)
ENGINE TYPE	4-Stroke, DOHC, Air-Cooled, Transverse Four
Bore / Stroke / Number Cylinders / Displacement (cc)	71.5mm / 68.6mm / 4 / 1101cc
Compression Ratio / Compression Pressure Min ~ Max	9.0:1 / 9.0 ~ 11.0 kg/cm²
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 / 0.2 ~ 0.9mm
Valve Clearance (Cold) Intake / Exhaust	0.11mm ~ 0.15mm / 0.21mm ~ 0.25mm
Oil Pressure Hot / rpm	1.5 kg/cm² @ 80°C / 1100 rpm @ Oil Pressure Switch
Oiling System	Wet Sump
Capacity: Dry	4200cc
Oil and Filter Change	3500cc
Oil Change	3000cc
Lubricant: Temp. Above 5°C (40°F)	Yamalube 4* or SAE 20W40 SE
Temp. Below 15°C (60°F)	SAE 10W30 SE
AUTOLUBE - Min Stroke / Color Code	ø
Minimum Output @ 200 Cycles	ø
Maximum Output @ 200 Cycles	ø
CARBURETOR - Mfr. / Type / I.D. Number	Mikuni / BS34-iii / 3H5-00
Main Jet / Pilot Jet	Cyl. #1 & #4: 115 Cyl. #2 & #3: 120 / 42.5
Needle Jet / Jet Needle-Clip Position	X-2 / 51Z7 Fixed
Slide Cutaway or Throttle Valve	135
Float Level / Fuel Level	23 ± 1.0mm / NA
Idle rpm	1100 rpm
Max CO* / Max HC* / Set CO	3.0 % / 500 ppm / 2.0 % (All Settings @ Idle)
SUSPENSION	
Front Forks: Oil Type / Level / Qty	10 Wt. Fork Oil* / ø / 235cc ± 4cc
Gas Pressure	0.4 kg/cm² (5.7 psi)
Spring Length Std	516mm
Monoshock: Oil Type / Qty	ø
Gas Pressure	ø
Minimum Brake Lining Thickness	Front: 6.0mm Rear: 6.0mm
Tire Size (Nominal Pressure)	F:3.50H19 (2.8 kg/cm²/40 psi) R:4.50H17 (2.8 kg/cm²/40 psi) †
TRANSMISSION - Oil Type / Qty Chg / Qty Reassemble	See ENGINE Above
Primary Drive Type / Teeth / Ratio	Spur Gear / 25-25 x 58-35 / 1.667
Secondary Drive Type / Teeth / Chain	Shaft / 44-47 x 19-18 x 33-10 / 3.261
Clutch Friction Plate Thickness Std ~ Min	3.0 ~ 2.8mm
Clutch Spring Length Std ~ Min	42.8 ~ 41.8mm
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

CHARGING SYSTEM	AC Generator / 3-Phase / Full Wave
Battery: Model / Specific Gravity / Charge Rate	GS GM18Z-3A (12V 20AH) / 1.28 / 2.0A
Maximum Output	14V 20A @ 5000 rpm
TROUBLESHOOTING	
Field Coil Color Code / Ω	Rotor Grn ~ Blk / 3.5 Ω ± 10% Stator Wht ~ Wht 0.4 Ω ± 10%
Charge Coil Color Code / Ω	ø
IGNITION SYSTEM	Transistor-Controlled Ignition
Ignition Timing	5° Mark
	Std: (°F) 5° @ 1100 rpm Adv: 36.5° @ 3900 rpm
Spark Plug Type	NGK BP6ES or Champion N8Y
Spark Plug Gap / Torque / Cap Ω	0.7 ~ 0.8mm / 2.0 m-kg / 5K Ω ± 10%
Point Gap / Condenser Capacitance	ø / ø
TROUBLESHOOTING	
Ignition Coil Test Gap / Primary Ω / Secondary Ω	8mm / 2.5 Ω ± 10% / 11K Ω ± 10%
Pulser Coil or Pickup Coil Color Code / Ω	Org ~ Blu / Gry ~ Blk / 720 Ω ± 20%
Source Coil Color Code / Ω	ø
LIGHTING SYSTEM	
Headlight / Taillight / Signal Rating	12V80-50W / 12V27-8W / 12V27W
TROUBLESHOOTING	
Lighting Coil Color Code / Ω	ø
TORQUE VALUES	
Front Axle Nut	14 x 1.5: 10.7 m-kg
Front Axle Holder Nut	8 x 1.5: 2.0 m-kg
Rear Axle Nut	18 x 1.5: 15.0 m-kg
Rear Axle Pinch Bolt	8 x 1.25: 0.6 m-kg
Clutch Nut	18 x 1.0: 7.0 m-kg
Drain Plug	14 x 1.5: 4.25 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: 20.0 m-kg
Engine Mounting Bolts: Front, Upper	10 x 1.25: 6.7 m-kg
Front, Lower	10 x 1.25: 6.7 m-kg
Rear	12 x 1.25: 10.0 m-kg

ø = Does Not Apply To This Model
NA = Information Not Available

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