

DT100H

1981 SERVICE DATA

MODEL - IBM I.D. NUMBER	DT100H	3A3
Initial Engine Number / Frame Number	3A3-040101 / 3A3-040101	
Basic Color(s)	Crystal Silver	
Fuel Type / Fuel Tank Capacity / Reserve Capacity	Regular / 4.5 Lit. (1.2 Gal.) / 0.3 Lit. (0.07 Gal.)	
Dry Vehicle Weight	80 kg (176 lbs.)	
ENGINE TYPE	2-Stroke, Air-Cooled, Reed Valve	
Bore/Stroke/Number Cylinders/Displacement (cc)	52mm / 45.6mm / 1 / 97cc	
Compression Ratio/Compression Pressure Min~Max	9.7:1 (6.7:1 Corrected) / $\emptyset$	
Piston Skirt Clearance New / Max	0.035 ~ 0.040mm / 0.1mm	
Ring End Gap Top / 2nd / 3rd	0.15 ~ 0.35mm / 0.15 ~ 0.35mm / $\emptyset$	
Valve Clearance (Cold) Intake / Exhaust	$\emptyset$	
Oil Pressure Hot / rpm	$\emptyset$	
Oiling System	Autolube	
Capacity: Dry	1.0 Lit. (1.1 Qt.)	
Oil and Filter Change	$\emptyset$	
Oil Change	$\emptyset$	
Lubricant: Temp. Above 5°C (40°F)	Yamalube 2* or Equivalent	
Temp. Below 15°C (60°F)	Yamalube 2* or Equivalent	
AUTOLUBE - Min Stroke / Color Code	0.2 ~ 0.25mm / Green	
Minimum Output @ 200 Cycles	0.50 ~ 0.63cc	
Maximum Output @ 200 Cycles	4.65 ~ 5.15cc	
CARBURETOR - Mfr. / Type / I.D. Number	Mikuni / VM20SS / 3A3-60	
Main Jet / Pilot Jet	130 / 15	
Needle Jet / Jet Needle-Clip Position	0-6 / 4L17 Fixed	
Slide Cutaway or Throttle Valve	2.0	
Float Level / Fuel Level	21 $\pm$ 0.5mm / NA	
Idle rpm	1300 ~ 1450 rpm	
Max CO* / Max HC* / Set CO	$\emptyset$	
SUSPENSION		
Front Forks: Oil Type / Level / Qty	10 Wt. Fork Oil* / $\emptyset$ / 116cc $\pm$ 2cc	
Gas Pressure	$\emptyset$	
Spring Length Std	418.5mm (16.48")	
Monoshock: Oil Type / Qty	$\emptyset$	
Gas Pressure	$\emptyset$	
Minimum Brake Lining Thickness	Front: 2mm Rear: 2mm	
Tire Size (Nominal Pressure)	F:2.50-18 (1.8 kg/cm ² /22 psi) R:3.00-18 (2.0 kg/cm ² /28 psi)	
TRANSMISSION - Oil Type/Qty Chg/Qty Reassemble	Yamalube 4* or SAE 10W30 SE / 650cc / 650cc	
Primary Drive Type / Teeth / Ratio	Helical Gear / 74-19 / 3.895	
Secondary Drive Type / Teeth / Chain	Chain / 45-14 / RS420-102L	
Clutch Friction Plate Thickness Std ~ Min	3.0 ~ 2.7mm	
Clutch Spring Length Std ~ Min	31.5 ~ 30.5mm	
Middle Gear Case Capacity	$\emptyset$	
Final Gear Case Capacity	$\emptyset$	
Gear Case Lubricant: Temp. Above 5°C (40°F)	$\emptyset$	
Temp. Below 15°C (60°F)	$\emptyset$	
All Weather Conditions	$\emptyset$	

CHARGING SYSTEM	Flywheel Magneto / Single Phase / Half Wave
Battery: Model / Specific Gravity / Charge Rate	GS 6N4-2A-2 / 1.26 / 0.4A*
Maximum Output	7.5V 3.5A @ 8000 rpm
TROUBLESHOOTING	
Field Coil Color Code / Ω	$\emptyset$
Charge Coil Color Code / Ω	Grn-Red ~ Blk / $0.32 \Omega \pm 10\%$
IGNITION SYSTEM	Capacitor-Discharge Ignition
Ignition Timing	21° BTDC @ 2000 rpm
	1.8mm BTDC
Spark Plug Type	NGK B7ES
Spark Plug Gap / Torque / Cap Ω	0.6 ~ 0.8mm / 2.5 m-kG / $5K \Omega \pm 10\%$
Point Gap / Condenser Capacitance	$\emptyset$ / $\emptyset$
TROUBLESHOOTING	
Ignition Coil Test Gap / Primary Ω / Secondary Ω	6mm / $1.0 \Omega \pm 10\%$ / $5.9K \Omega \pm 20\%$
Pulser Coil or Pickup Coil Color Code / Ω	Wht ~ Blk / $10 \Omega \pm 10\%$
Source Coil Color Code / Ω	Brn ~ Gnd / $300 \Omega \pm 10\%$
LIGHTING SYSTEM	
Headlight / Taillight / Signal Rating	6V30-30W / 6V25W-5.3W / 6V17W
TROUBLESHOOTING	
Lighting Coil Color Code / Ω	Yel-Blk / $2.2 \Omega \pm 10\%$
TORQUE VALUES	
Front Axle Nut	12 x 1.25: 4.5 m-kG
Front Axle Holder Nut	$\emptyset$
Rear Axle Nut	10 x 1.00: 4.0 m-kG
Rear Axle Pinch Bolt	$\emptyset$
Clutch Nut	12 x 1.0: 5.0 m-kG
Drain Plug	12 x 1.5: 2.5 m-kG
Cylinder Head Cover	$\emptyset$
Cylinder Head:	8 x 1.25: 2.5 m-kG
Engine Mounting Bolts: Front, Upper	8 x 1.25: 2.5 m-kG
Rear, Upper	8 x 1.25: 2.5 m-kG
Rear, Lower	10 x 1.25: 4.0 m-kG

$\emptyset$ = Does Not Apply To This Model
NA = Information Not Available

*Available From Yamaha Parts Distributors Inc.
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