

# DT100G

## 1980 SERVICE DATA

MODEL - IBM I.D. NUMBER	DT100G-R	DT100G-S	3A3
Initial Engine Number/Frame Number	3A3-000101 / 3A3-000101		
Basic Color(s)	Maximum Red (R)	Frost Silver (S)	
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.)		
<b>ENGINE TYPE</b>	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) / $\phi$		
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 / $\phi$		
Valve Clearance (cold) Intake/Exhaust	$\phi$		
Oil Pressure hot/rpm	$\phi$		
Oiling System	Autolube		
Capacity: Dry	1.0 Lit. (1.1 Qt.)		
Oil and Filter Change	$\phi$		
Oil Change	$\phi$		
Lubricant: Temp above 5°C (40°F)	Yamalube 2° or Equivalent		
Below 15°C (60°F)	Yamalube 2° or Equivalent		
<b>AUTOLUBE - Min. Stroke/Color Code</b>	0.2 ~ 0.25mm / Green		
Minimum Output @ 200 cycles	0.50 ~ 0.63cc		
Maximum Output @ 200 cycles	4.65 ~ 5.15cc		
<b>CARBURETOR - Mfr./Type/I.D. Number</b>	Mikuni / VM20SS / 3A360		
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	21 ± 0.5mm		
Idle RPM	1300 ~ 1450 rpm		
CO % @ Idle (Diagnostic Use Only)	N/A		
<b>SUSPENSION</b>			
Front Forks: Oil Type/Level/Qty.	10 Wt. Fork Oil° / $\phi$ / 116 ± 2cc		
Gas Pressure	$\phi$		
Spring Length Std.	418.5mm (16.48")		
Monoshock: Oil Type/Qty.	$\phi$		
Gas Pressure	$\phi$		
Minimum Brake Lining Thickness	Front: 2mm	Rear: 2mm	
Tire Size (Nominal Pressure)	F:2.50-18 (1.6kg/cm <sup>2</sup> /(22 psi) R:3.00-16 (2.0kg/cm <sup>2</sup> /(28 psi)		
<b>TRANSMISSION - Oil Type/Qty Chg/Qty Reassemble</b>	Yamalube 4° or SAE 10W 30SE / 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	$\phi$		
Final Gear Case Capacity	$\phi$		
Gear Case Lubricant: Temp above 5°C (40°F)	$\phi$		
Temp below 15°C (60°F)	$\phi$		
All Weather Conditions	$\phi$		



<b>CHARGING SYSTEM</b>	Flywheel Magneto / Single Phase / Half Wave
Battery: Model / Spec. Grav. / Chg. Rate	G.S. 6N4-2A-2 / 1.26 / 0.4A
Maximum Output	7.5V 3.5A @ 8000 rpm
<b>TROUBLESHOOTING</b>	
Field Coil Color Code / $\Omega$	$\phi$
Charge Coil Color Code / $\Omega$	Grn-Red ~ Blk / $0.32 \Omega \pm 10\%$
<b>IGNITION SYSTEM</b>	Capacitor Discharge Ignition
Ignition Timing	21° BTDC @ 2000 rpm
	1.8mm BTDC
Spark Plug Type	NGK B-7ES
Spark Plug Gap / Torque / Cap $\Omega$	0.6 ~ 0.8mm / 2.5 m-kG / 5K $\Omega \pm 10\%$
Point Gap / Condenser Capacitance	$\phi$ / $\phi$
<b>TROUBLESHOOTING</b>	
Ignition Coil Test Gap / Primary $\Omega$ / Secondary $\Omega$	6mm / $1.0 \Omega \pm 10\%$ / $5.9K \Omega \pm 20\%$
Pulse Coil or Pick-up Coil Color Code / $\Omega$	Wht ~ Red / $10 \Omega \pm 10\%$
Source Coil Color Code / $\Omega$	Brn ~ Gnd / $300 \Omega \pm 10\%$
<b>LIGHTING SYSTEM</b>	
Headlight / Taillight / Signal Rating	6V30-30W / 6V25-5.3W / 6V17W
<b>TROUBLESHOOTING</b>	
Lighting Coil Color Code / $\Omega$	Yel-Blk / $2.2 \Omega \pm 10\%$
<b>TORQUE VALUES</b>	
Front Axle Nut	12 x 1.25: 4.5 m-kG
Front Axle Holder Nut	$\phi$
Rear Axle Nut	10 x 1.00: 4.0 m-kG
Rear Axle Pinch Bolt	$\phi$
Clutch Nut	12 x 1.0: 5.0 m-kG
Drain Plug	12 x 1.5: 2.5 m-kG
Cylinder Head Cover	$\phi$
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

$\phi$  Does Not Apply to This Model

\* Available From Yamaha Parts Distributors, Inc.