

# DT175H

## 1981 SERVICE DATA

<b>MODEL - IBM I.D. NUMBER</b>	DT175H	3J1
Initial Engine Number / Frame Number	3J1-060101 / 3J1-060101	
Basic Color(s)	Chappy Red	
Fuel Type / Fuel Tank Capacity / Reserve Capacity	Regular / 6.8 Lit. (1.8 Gal.) / 0.9 Lit. (0.2 Gal.)	
Dry Vehicle Weight	98 kg (216 lbs.)	
<b>ENGINE TYPE</b>	2-Stroke, Air-Cooled, Reed Valve	
Bore/Stroke/Number Cylinders/Displacement (cc)	66mm / 50mm / 1 / 171cc	
Compression Ratio/Compression Pressure Min~Max	10.1:1 (6.8:1 Corrected) / $\emptyset$	
Piston Skirt Clearance New / Max	0.040 ~ 0.045mm / 0.1mm	
Ring End Gap Top / 2nd / 3rd	0.3 ~ 0.5mm / 0.3 ~ 0.5mm / $\emptyset$	
Valve Clearance (Cold) Intake / Exhaust	$\emptyset$	
Oil Pressure Hot / rpm	$\emptyset$	
Oiling System	Autolube	
Capacity: Dry	0.9 Lit. (0.9 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	
<b>AUTOLUBE - Min Stroke / Color Code</b>	0.20 ~ 0.25mm / Gray	
Minimum Output @ 200 Cycles	0.50cc	
Maximum Output @ 200 Cycles	5.13cc	
<b>CARBURETOR - Mfr. / Type / I.D. Number</b>	Mikuni / VM24SS / 3J1-00	
Main Jet / Pilot Jet	150 / 22.5	
Needle Jet / Jet Needle-Clip Position	N-4 / 5GL13 Fixed	
Slide Cutaway or Throttle Valve	2.0	
Float Level / Fuel Level	21.0 $\pm$ 0.5mm / NA	
Idle rpm	1350 ~ 1500 rpm	
Max CO* / Max HC* / Set CO	$\emptyset$	
<b>SUSPENSION</b>		
Front Forks: Oil Type / Level / Qty	10 Wt. Fork Oil* / $\emptyset$ / 186cc	
Gas Pressure	$\emptyset$	
Spring Length Std	546.5mm	
Monoshock: Oil Type / Qty	Not Rebuildable	
Gas Pressure	15 kg/cm <sup>2</sup> (213 psi)	
Minimum Brake Lining Thickness	Front: 2mm      Rear: 2mm	
Tire Size (Nominal Pressure)	F:2.75-21 (1.7 kg/cm <sup>2</sup> /24 psi) R:3.50-18 (2.0 kg/cm <sup>2</sup> /28 psi)	
<b>TRANSMISSION - Oil Type/Qty Chg/Qty Reassemble</b>	Yamalube 4* or SAE 10W30 SE / 650cc / 750cc	
Primary Drive Type / Teeth / Ratio	Helical Gear / 71-22 / 3.227	
Secondary Drive Type / Teeth / Chain	Chain / 49-16 / DID428HM-118L	
Clutch Friction Plate Thickness Std ~ Min	3.0 ~ 2.8mm	
Clutch Spring Length Std ~ Min	33.0 ~ 32.0mm	
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	$\emptyset$	

<b>CHARGING SYSTEM</b>	Flywheel Magneto / Single Phase / Half Wave
Battery: Model / Specific Gravity / Charge Rate	GS 6N6-3B-1 (6V 6AH) / 1.26 / 0.6A
Maximum Output	8.7V 2.5A @ 8000 rpm
<b>TROUBLESHOOTING</b>	
Field Coil Color Code / $\Omega$	$\emptyset$
Charge Coil Color Code / $\Omega$	Grn-Wht ~ Blk / $0.30 \Omega \pm 10\%$
<b>IGNITION SYSTEM</b>	Capacitor-Discharge Ignition
Ignition Timing	17.5° BTDC @ 3000 rpm (1.45mm BTDC)
Spark Plug Type	NGK B9ES
Spark Plug Gap / Torque / Cap $\Omega$	0.6 ~ 0.8mm / 2.5 m-kG / 5K $\Omega \pm 10\%$
Point Gap / Condenser Capacitance	$\emptyset$ / $\emptyset$
<b>TROUBLESHOOTING</b>	
Ignition Coil Test Gap / Primary $\Omega$ / Secondary $\Omega$	6mm / $1.0 \Omega \pm 10\%$ / $5.9K \Omega \pm 20\%$
Pulser Coil or Pickup Coil Color Code / $\Omega$	Wht-Red ~ Blk / $10 \Omega \pm 10\%$
Source Coil Color Code / $\Omega$	Brn ~ Blk / $300 \Omega \pm 10\%$
<b>LIGHTING SYSTEM</b>	
Headlight / Taillight / Signal Rating	6V35-35W / 6V25-5.3W / 6V17W
<b>TROUBLESHOOTING</b>	
Lighting Coil Color Code / $\Omega$	Yel ~ Blk / $0.18 \Omega \pm 10\%$
<b>TORQUE VALUES</b>	
Front Axle Nut	10 x 1.25: 3.7 m-kG
Front Axle Holder Nut	$\emptyset$
Rear Axle Nut	14 x 1.5: 8.5 m-kG
Rear Axle Pinch Bolt	$\emptyset$
Clutch Nut	14 x 1.0: 5.5 m-kG
Drain Plug	12 x 1.5: 2.0 m-kG
Cylinder Head Cover	$\emptyset$
Cylinder Head:	8 x 1.25: 2.5 m-kG
Engine Mounting Bolts: Front	8 x 1.25: 2.5 m-kG
Rear, Upper	8 x 1.25: 2.5 m-kG
Rear, Lower	10 x 1.25: 3.7 m-kG

$\emptyset$  = Does Not Apply To This Model

NA = Information Not Available

\*Available From Yamaha Parts Distributors Inc.

\*For Diagnostic Use Only