

# IT250H

## 1981 SERVICE DATA

<b>MODEL - IBM I.D. NUMBER</b>	IT250H	4V5
Initial Engine Number / Frame Number	4V5-000101 / 4V5-000101	
Basic Color(s)	White	
<b>Fuel Type</b> / Fuel Tank Capacity / Reserve Capacity	Premium / 13 Lit. (3.4 Gal.) / ∅	
Dry Vehicle Weight	106 kg (233 lb)	
<b>ENGINE TYPE</b>	2-Stroke, Air-Cooled, Reed Valve	
<b>Bore</b> /Stroke/Number Cylinders/Displacement (cc)	70mm / 64mm / 1 / 246cc	
Compression Ratio/Compression Pressure Min~Max	7.8:1 / NA	
Piston Skirt Clearance New / Max	0.045 ~ 0.050mm / 0.1mm	
Ring End Gap Top / 2nd / 3rd	0.3 ~ 0.5mm / 0.3 ~ 0.5mm / ∅	
Valve Clearance (Cold) <b>Intake</b> / Exhaust	∅	
Oil Pressure Hot / rpm	∅	
Oiling System	Premix 16:1 Yamalube R*	
Capacity: Dry	∅	
Oil and Filter Chan	Close	∅
Oil Change	∅	
Lubricant: Temp. Above 5°C (40°F)	Yamalube R*	
Temp. Below 15°C (60°F)	Yamalube R*	
<b>AUTOLUBE - Min Stroke / Color Code</b>	∅	
Minimum Output @ 200 Cycles	∅	
Maximum Output @ 200 Cycles	∅	
<b>CARBURETOR - Mfr. / Type / I.D. Number</b>	Mikuni / VM36SS / 4V5-00	
Main Jet / Pilot Jet	380 / 50	
Needle Jet / Jet Needle-Clip Position	N-8 / 6F34-3	
Slide Cutaway or Throttle Valve	2.0	
Float Level / Fuel Level	18.1 ± 1mm / 33.0 ± 1.0mm	
Idle rpm	∅	
Max CO* / Max HC* / Set CO	∅	
<b>SUSPENSION</b>		
Front Forks: Oil Type / Level / Qty	10 Wt. Fork Oil* / ∅ / 415cc	
Gas Pressure	0 kg/cm <sup>2</sup>	
Spring Length Std	603mm	
Monoshock: Oil Type / Qty	Not Rebuildable	
Gas Pressure	15 kg/cm <sup>2</sup> (213 psi)	
Minimum Brake Lining Thickness	Front: 2.0mm      Rear: 2.0mm	
Tire Size (Nominal Pressure)	F:3.00-21 (psi Optional)    R:5.10-18 (psi Optional)	
<b>TRANSMISSION - Oil Type/Qty Chg/Qty Reassemble</b>	SAE 10W30 SE / 750cc / 800cc	
Primary Drive Type / Teeth / Ratio	Helical Gear / 63-24 / 2.628	
Secondary Drive Type / Teeth / Chain	Chain / 50-14 / DK520DS-108L	
Clutch Friction Plate Thickness Std ~ Min	36.4mm ~ 35.4mm	
Clutch Spring Length Std ~ Min	34.8 ~ 33.8mm	
Middle Gear Case Capacity	∅	
Final Gear Case Capacity	∅	
Gear Case Lubricant: Temp. Above 5°C (40°F)	∅	
Temp. Below 15°C (60°F)	∅	
All Weather Conditions	∅	



<b>CHARGING SYSTEM</b>	Flywheel Magneto
Battery: Model / Specific Gravity / Charge Rate	∅
Maximum Output	∅
<b>TROUBLESHOOTING</b>	
Field Coil Color Code / Ω	∅
Charge Coil Color Code / Ω	∅
<b>IGNITION SYSTEM</b>	Capacitor-Discharge Ignition
Ignition Timing	1.65mm BTDC
Spark Plug Type	Champion N-2G
Spark Plug Gap / Torque / Cap Ω	0.6 ~ 0.7mm / 2.5 m-kG / 0K Ω
Point Gap / Condenser Capacitance	∅ / ∅
<b>TROUBLESHOOTING</b>	
Ignition Coil Test Gap / Primary Ω / Secondary Ω	6mm / 1.0 Ω ± 10% / 5.9K Ω ± 10%
Pulser Coil or Pickup Coil Color Code / Ω	Wht-Red ~ Blk / 9.0 Ω ± 10%
Source Coil Color Code / Ω	Lo: Brn ~ Gry / 360 Ω ± 10% Hi: Red ~ Blue / 14 Ω ± 10%
<b>LIGHTING SYSTEM</b>	
Headlight / Taillight / Signal Rating	6V25-25W / 6V5.3W / ∅
<b>TROUBLESHOOTING</b>	
Lighting Coil Color Code / Ω	Yel-Red ~ Blk / 0.48 Ω ± 10%
<b>TORQUE VALUES</b>	
Front Axle Nut	15 x 1.5: 5.8 m-kG
Front Axle Holder Nut	6 x 1.0: 1.0 m-kG
Rear Axle Nut	18 x 1.5: 10.0 m-kG
Rear Axle Pinch Bolt	∅
Clutch Nut	20 x 1.0: 7.5 m-kG
Drain Plug	14 x 1.25: 2.0 m-kG
Cylinder Head Cover	∅
Cylinder Head:	8 x 1.25: 2.5 m-kG
Engine Mounting Bolts: Front, Upper	8 x 1.25: 3.0 m-kG
Front, Lower	8 x 1.25: 3.0 m-kG
Rear, Upper	10 x 1.25: 6.5 m-kG
Stay, Front Nut	8 x 1.25: 3.0 m-kG
Bolt	8 x 1.25: 1.5 m-kG

∅ = Does Not Apply To This Model

NA = Information Not Available

\*Available From Yamaha Parts Distributors Inc.

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