

GENERAL SPECIFICATIONS

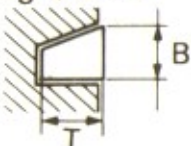
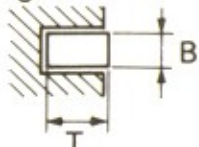
Model	RD250LC	RZ250	RD350LC	RZ350
Model code number	38K	34J	38J	35G
Frame starting number	38K-000101	34J-000101	31K-025101	35G-000101
Engine starting number	38K-000101	34J-000101	31K-025101	35G-000101
Dimension:				
Overall length	2,095 mm (82.48 in)		2,120 mm (83.46 in)	
Overall width	710 mm (28.0 in)		←	
Overall height	1,175 mm (46.3 in)		←	
Seat height	800 mm (31.5 in)		←	
Wheelbase	1,385 mm (54.5 in)		←	
Minimum ground clearance	175 mm (6.89 in)		←	
Weight:				
With oil and full fuel tank	164 kg (361.6 lb)		←	
Minimum turning radius	2,400 mm (94.5 in)		←	
Engine:				
Type	Liquid cooled 2-stroke, gasoline, torque induction		←	
Cylinder arrangement	Twin, forward inclined		←	
Displacement	247 cm ³		347 cm ³	
Bore × Stroke	54.0 × 54.0 mm (2.126 × 2.126 in)		64.0 × 54.0 mm (2.520 × 2.126 in)	
Compression ratio	6.0 : 1		6.0 : 1	
Starting system	Primary kick starter		←	
Lubrication system	Separate lubrication (Yamaha Autolube)		←	
Engine oil:				
Type	Air cooled 2-stroke engine oil		←	
Tank capacity	1.6 L (1.41 Imp qt, 1.69 US qt)		←	

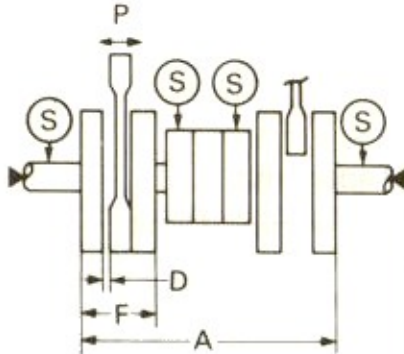
Model	RD250LC	RZ250	RD350LC	RZ350
Transmission oil:				
Type	SAE 10W/30 type SE motor oil		←	
Oil capacity Total	1.7 L (1.50 Imp, qt, 1.80 US qt)		←	
Exchange	1.5 L (1.32 Imp qt, 1.59 US qt)		←	
Radiator capacity (Including all routes)	1.5 L (1.32 Imp qt, 1.59 US qt)		←	
Spark plug:				
Type	BR8ES BR9ES		BR8ES ←	
Gap	0.7 ~ 0.8 mm ((0.02 ~ 0.03 in)		←	
Carburetor × Quantity	VM26SS × 2		←	
Air cleaner	Wet foam rubber		←	
Clutch type	Wet, multiple-disc		←	
Transmission:				
Primary reduction system	Helical gear		←	
Primary reduction ratio	66/ 23 (2.870)		←	
Secondary reduction system	Chain		←	
Secondary reduction ratio	40/ 16 (2.500) /		39/ 17	
Transmission type	Constant mesh, 6-speed		←	
Operation system	Left foot operation		←	
Gear ratio 1st	36/ 14 (2.571)		←	
2nd	32/ 18 (1.778)		←	
3rd	29/ 22 (1.318)		←	
4th	26/ 24 (1.083)		←	
5th	25/ 26 (0.962)		←	
6th	24/ 27 (0.889)		←	
Chassis:				
Frame type	Double cradle		←	
Caster	27°		←	
Trail	96 mm (3.78 in)		←	
Fuel:				
Tank capacity, Total	20.0 L (4.4 Imp gal, 5.28 US gal)		←	
Reserve	2.0 L (0.44 Imp gal, 0.53 US gal)		←	

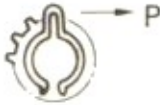
Model	RD250LC	RZ250	RD350LC	RZ350
Tire size: Front Rear	90/90-18 51S 110/80-18 58S		90/90-18 51H 110/80-18 58H	
Braking system: Front Rear	Double disc brake/ Right hand operation Single disc brake/ Right foot operation		← ←	
Suspension: Front Rear	Telescopic fork Swing arm (New mono-cross suspension)		← ←	
Shock absorber: Front Rear	Air, coil spring/ oil damper Gas, coil spring/ oil damper		← ←	
Wheel Travel: Front Rear	140 mm (5.51 in) 100 mm (3.94 in)		← ←	
Electrical: Voltage	12V		←	
Battery: Type/ Capacity	12N5.5-3B/ 12V, 5.5AH		←	
Bulb wattage × Quantity: Headlight Tail/ brake light Turn light Meter light Auxiliary light	60W/55W (Quartz bulb) 8W/27W × 2 27W × 4 3.4W × 3 3.4W		← ← ← ← ←	
Indicator light: Neutral High beam Oil warning Turn	3.4W 3.4W 3.4W 3.4W × 2		← ← ← ←	

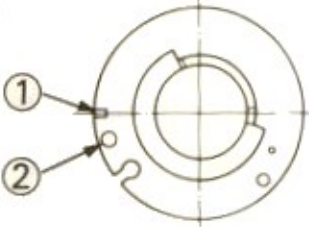
MAINTENANCE SPECIFICATION

Engine

Model	RD250LC	RZ250	RD350LC	RZ350
Cylinder head: Combustion chamber volume Distortion limit Head gasket thickness	15.5 ~ 16.1 cm ³ 0.03 mm (0.0012 in) 1.2 mm (0.047 in)		21.3 ~ 21.9 cm ³ ← 0.7 mm (0.026 in)	
Cylinder: Material Bore size/ Limit Taper limit Out of round limit	Aluminum alloy with cast iron sleeve (Cast in) 54 ^{+0.02} ₋₀ mm (2.126 ^{+0.0008} ₋₀ in)/ 54.1 mm (2.13 in) 0.05 mm (0.0020 in) 0.01 mm (0.0004 in)		← 64 ^{+0.02} ₋₀ mm (2.52 ^{+0.0008} ₋₀ in)/ 64.1 mm (2.524 in) ← ←	
Piston: 				
Piston size/ Measuring point* Piston clearance Piston oversize Piston offset	54.0 mm (2.126 in)/ 10 mm (0.39 in) 0.050 ~ 0.055 mm (0.0019 ~ 0.0021 in) 54.25, 54.50 mm (2.136, 2.146 in) 0 mm (0 in)		64.0 mm (2.520 in)/ 10 mm (0.39 in) 0.060 ~ 0.065 mm (0.0024 ~ 0.0026 in) 64.25, 64.50 mm (2.53, 2.54 in) 0 mm (0 in)	
Piston ring: Piston ring design/ B × T (Top)  Piston ring design/ B × T (2nd)  Ring end gap (installed) (Top) Ring end gap (installed) (2nd) Ring groove side clearance (Top) Ring groove side clearance (2nd)	Keystone/ 1.2 × 2.2 mm (0.047 × 0.087 in) Keystone (With ex- pander) 1.5 × 1.7 mm (0.06 × 0.067 in) 0.30 ~ 0.45 mm (0.012 ~ 0.018 in) 0.30 ~ 0.45 mm (0.012 ~ 0.018 in) 0.02 ~ 0.06 mm (0.0008 ~ 0.0024 in) 0.02 ~ 0.06 mm (0.0008 ~ 0.0024 in)		Keystone/ 1.2 × 2.6 mm (0.047 × 0.102 in) Plain (With ex- pander) 1.5 × 2.15 mm (0.059 × 0.085 in) ← 0.35 ~ 0.50 mm (0.014 ~ 0.020 in) ← 0.03 ~ 0.07 mm (0.0012 ~ 0.0028 in)	

Model	RD250LC	RZ250	RD350LC	RZ350
Crankshaft:				
Crankshaft assembly width (F)	54.00 ⁺⁰ _{-0.05} mm (2.13 ⁺⁰ _{-0.002} in)		←	
(A)	156 ^{+0.05} _{-0.10} mm (6.14 ^{+0.002} _{-0.004} in)		←	
Crankshaft deflection (S)	0.05 mm (0.002 in)		←	
Connecting rod big end side clearance (D)	0.25 ~ 0.75 mm (0.01 ~ 0.03 in)		←	
Connecting rod small end deflection (P)	0.36 ~ 0.98 mm (0.0142 ~ 0.0386 in)		←	
				
Clutch:				
Friction plate				
— Thickness/ Quantity	3.0 mm (0.12 in) × 7		←	
— Wear limit	2.7 mm (0.106 in)		←	
Clutch plate				
— Thickness/ Quantity	1.2 mm (0.047 in) × 6		←	
— Wear limit	0.05 mm (0.002 in)		←	
Clutch spring				
— Free length/ Quantity	34.9 mm (1.37 in) × 6		36.4 mm (1.43 in) × 6	
Clutch housing				
— Thrust clearance	0.07 ~ 0.12 mm (0.003 ~ 0.005 in)		←	
— Radial clearance	0.011 ~ 0.048 mm (0.0004 ~ 0.0019 in)		←	
Clutch release method	Inner push, Cam push		←	
Push rod bending limit	0.2 mm (0.008 in)		←	
Primary reduction gear back lash tolerance	154 ~ 156		←	
Primary drive gear back lash number	90 ~ 98		←	
Primary driven gear back lash number	57 ~ 65		←	

Model	RD250LC	RZ250	RD350LC	RZ350
Shifter: Type Guide bar bending limit	Cam drum 0.025 mm (0.001 in)	←	←	
Kick starter: Type Kick clip friction force 	Kick and mesh type $P = 0.8 \sim 1.3 \text{ kg}$ $(1.8 \sim 2.9 \text{ lb})$	←	←	
Air filter — Oil grade	SAE 10W30 SE motor oil	←		
Reed valve: Material Bending limit Valve lift 	SUS 0.5 mm (0.02 in) $9.0 \pm 0.3 \text{ mm}$ $(0.35 \pm 0.012 \text{ in})$	←	←	$10.3 \pm 0.2 \text{ mm}$ $(0.41 \pm 0.008 \text{ in})$
Carburetor: Type/ Manufacturer/ Quantity I.D. mark Main jet (M.J.) Air jet (A.J.) Jet needle - Clip position (J.N.) Needle jet (N.J.) Cutaway (C.A.) Pilot jet (P.J.) Air screw (turns out) (A.S.) Starter jet (G.S.) Float height (F.H.) Engine idling speed	VM26SS/ MIKUNI/ 2 29L 00 # 180 $\phi 0.9$ 4N10-3 P-2 (345) 2.0 # 25 1 and 1/4 #80 $21 \pm 0.5 \text{ mm}$ $(0.83 \pm 0.02 \text{ in})$ $1,200 \pm 50 \text{ r/min}$	VM26SS/ MIKUNI/ 2 31K 00 # 240 $\phi 0.7$ 5K1-4 P-0 (345) ← # 22.5 ← ← ← ←		
Lubrication: Autolube pump — Color code — Minimum stroke	Red 0.10 ~ 0.15 mm $(0.004 \sim 0.006 \text{ in})$	Yellow	←	

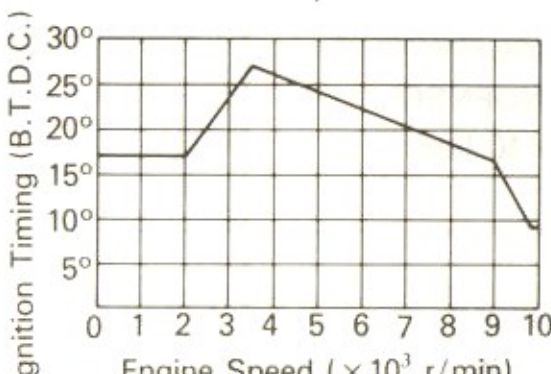
Model	RD250LC	RZ250	RD350LC	RZ350
- Maximum stroke - Minimum output/ 200 stroke - Maximum output Pulley adjusting position (Adjusting mark) 	2.05 ~ 2.27 mm (0.08 ~ 0.09 in) 0.12 ~ 0.19 cm ³ (0.004 ~ 0.007 Imp oz, 0.004 ~ 0.006 US oz) 2.58 ~ 2.85 cm ³ (0.091 ~ 0.101 Imp oz, 0.087 ~ 0.096 US oz)		←	←
	① (Full throttle)		② (Full throttle)	
Cooling: Radiator core size - Width - Height - Thickness Radiator cap opening pressure	290.6 mm (11.44 in) 180 mm (7.08 in) 16 mm (0.63 in)		←	←
	89.3 ± 14.7 kPa (0.9 ± 0.15 kg/cm ² , 12.8 ± 2.13 psi)		←	←
Coolant capacity (Total)	1.5L (1.32 Imp qt, 1.59 US qt)		←	←
Water pump				
— Type	Single-suction centrifugal pump		←	
— Reduction ratio	32/20 (1.60)		←	

Chassis

Model	RD250LC	RZ250	RD350LC	RZ350
Steering system:	Ball bearing		←	
Steering bearing type				
No./Size of balls				
Upper				
Lower				
Lock to lock angle	80°		←	
Front suspension:	140 mm (5.51 in) 506.2 mm (19.9 in) $K_1 = 3.33 \text{ N/mm}$ (0.34 kg/mm, 19.0 lb/in) 0 ~ 140 mm (0 ~ 5.51 in) 253 cm ³ (8.92 Imp oz, 8.55 US oz) 120 mm (4.72 in) SAE 10W30 SE motor oil 39 kPa (0.4 kg/cm ² , 5.7 psi) 0 ~ 118 kPa (0 ~ 1.2 kg/cm ² , 0 ~ 17 psi)		← ← ← ← ← ← ← ←	
Front fork travel				
Front fork spring				
— Free length				
— Spring rate				
Oil capacity				
Oil level				
Oil grade				
Air pressure (STD)				
(Min — Max)				
Rear suspension:				
Shock absorber travel				
Rear wheel travel				
Rear absorber spring				
— Free length				
— Spring rate				
Gas properties	Nitrogen gas		←	
Gas pressure	1,177 kPa (12 kg/cm ² , 171 psi)		←	

Model	RD250LC	RZ250	RD350LC	RZ350
Rear arm: Swing arm free play End Side	1 mm (0.04 in) 0.1 ~ 0.3 mm (0.004 ~ 0.012 in)		← ←	
Wheel: Type Rim size (Front)/ Material Rim size (Rear)/ Material Rim run out limit Vertical Lateral	Cast wheel MT2.15 × 18/ Aluminum MT2.50 × 18/ Aluminum 1 mm (0.04 in) 0.5 mm (0.02 in)		← ← ← ← ←	
Drive chain: Type/ Manufacturer Number of links Chain free play	520V-S/ DAIDO 106 30 ~ 40 mm (1.18 ~ 1.57 in)		520V-SR/ DAIDO ← ←	
Disc brake: Type Front Rear Disc size-outside dia × Thickness Disc wear limit Pad thickness Pad wear limit Master cylinder inside diameter Front Rear Caliper cylinder inside diameter Front Rear Brake fluid type	Dual Single 267 × 5 mm (10.5 × 0.19 in) 4.5 mm (0.18 in) 6.8 mm (0.27 in) 0.8 mm (0.03 in) 15.87 mm (0.62 in) 12.70 mm (0.51 in) 38.18 mm (1.5 in) 38.18 mm (1.5 in) DOT #3		← ← ← ← ← ← ← ← ← ←	

Electrical

Model	RD250LC	RZ250	RD350LC	RZ350
Ignition system: Model/ Manufacturer Pickup coil resistance Charge coil resistance Ignition timing: (B.T.D.C.) Advanced timing: (B.T.D.C.)	AVCC58/ NIPPONDENSO W/R-W/G: $115\Omega \pm 20\%$ Br-G: $225\Omega \pm 20\%$ Br-R: $5.3\Omega \pm 20\%$ 17° at 1,200 r/min 27° at 3,500 r/min			
 Ignition Timing (B.T.D.C.) Engine Speed ($\times 10^3$ r/min)				
Ignition coil: Model/ Manufacturer Minimum spark gap Primary winding resistance Secondary winding resistance	12900-027/ NIPPONDENSO 6 mm (0.24 in) $0.33\Omega \pm 10\%$ at 20°C (68°F) $3.5k\Omega \pm 20\%$ at 20°C (68°F)			
Spark plug: Type/ Manufacturer	BR8ES/ N.G.K.			
C.D.I. Unit: Type/ Manufacturer	AQAB02/ NIPPONDENSO		AQAB06/ NIPPONDENSO	
A.C. Generator: Model/ Manufacturer Charging output Charging coil resistance (W-W)	AVCC58/ NIPPONDENSO 14V14A/5,000 r/min $0.4\Omega \pm 20\%$ at 20°C (68°F)			

Model	RD250LC	RZ250	RD350LC	RZ350
Voltage regulator: Model/ Manufacturer Regulating voltage	Short circuit type SH235-12C/SHINDEN- GEN KOUGYOU 14.5 ± 0.5V		←	←
Rectifier: Model/ Manufacturer Capacity Withstand voltage	Three phase, Full wave SH235-12C/SHINDEN- GEN KOUGYOU 15A 200V		←	←
Battery: Model/ Manufacturer Charging rate Specific gravity	12N5.5-3B/ NIPPONDENSO 0.55A × 10 hour 1.260		←	←
Horn: Model/ Manufacturer Maximum amperage	SF12/NIKKO 2.5A or less		←	←
Flasher relay: Type Model/ Manufacturer Flasher frequency Capacity	Semi transistor type FU257CD/ NIPPONDENSO 85 cycle/min 12V, 27W × 2 + 3.4W		←	←
Circuit breaker: Type Amperage for individual circuit/ quantity Main Headlight Signal Ignition Reserve	Fuse 20A × 1 15A × 1 15A × 1 5A × 1 10A × 2		←	←
Thermo-unit: Model/ Manufacturer	YA55901NO/ NISSEI		←	