

Model	RZ350N	RZ350NC
Model Code Number	48H	1EL
Federal V.I.N. Number	JYA48H00*FA010101	JYA1EL00*FA000101
Engine Starting Number	48H-010101	1EL-000101
Dimensions:		
Overall Length	2,120 mm (83.5 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 ( 6.9 in)	
Weight:		
With Oil and Full Fuel Tank	168 kg (370.6 lb)	
Minimum Turning Radius	2,400 mm (94.5 in)	
Engine:		
Type	Liquid cooled 2-stroke, gasoline, torque induction with catalytic converters	
Cylinder Arrangement	Twin, forward inclined	
Displacement	347 cm <sup>3</sup>	
Bore × Stroke	64.0 × 54.0 mm (2.52 × 2.13 in)	
Compression Ratio	6.0 : 1	
Starting System	Primary kick starter	
Lubrication System	Separate lubrication (Yamaha Autolube)	
Engine Oil:		
Type	Yamalube 2-cycle oil or 2-stroke engine oil with "BIA certified for service TC-W"	
Tank Capacity	1.6 L (1.41 Imp qt, 1.69 US qt)	
Transmission Oil:		
Type	Yamalube 4-cycle oil or SAE 10W/30 type SE motor oil or "GL" gear oil	
Oil Capacity Total	1.7 L (1.5 Imp qt, 1.8 US qt)	
Exchange	1.5 L (1.3 Imp qt, 1.6 US qt)	
Radiator Capacity (Including All Routes)	1.5 L (1.32 Imp qt, 1.59 US qt)	
Spark Plug:		
Type	Standard: BR8ES (NGK), For high speed riding: BR9ES (NGK)	
Gap	0.7 ~ 0.8 mm (0.02 ~ 0.03 in)	

Model	RZ350N/NC
Carburetor × Quantity	VM26SS × 2
Air Cleaner	Wet type element
Clutch Type	Wet, multiple-disc
Transmission: Primary Reduction System Primary Reduction Ratio Secondary Reduction System Secondary Reduction Ratio Transmission Type Operation System Gear Ratio 1st 2nd 3rd 4th 5th 6th	Helical gear 66/23 (2.869) Chain 40/17 (2.352) Constant mesh 6-speed Left foot operation 36/14 (2.571) 32/18 (1.778) 29/22 (1.318) 26/24 (1.083) 25/26 (0.962) 24/27 (0.888)
Chassis: Frame Type Caster Trail	Tubular, double-cradle 26° 96 mm (3.8 in)
Fuel: Type Tank Capacity, Total Reserve	Regular gasoline (Unleaded fuel only) RZ350N: 20.0 L (4.3 Imp gal, 5.3 US gal) RZ350NC: 18L (4.0 Imp gal, 4.8 US gal) 2.0 L (0.4 Imp gal, 0.5 US gal)
Tire size: Front Rear	90/90-18 51H 110/80-18 58H
Brake: System/Operation Front Rear	Double disc brake/ Right hand operation Single disk brake/ Right foot operation
Suspension: Front Rear	Telescopic fork Swingarm (New monocross suspension)
Shock Absorber: Front Rear	Coil spring/air, oil damper Coil spring, gas, oil damper
Wheel Travel: Front Rear	140 mm (5.51 in) 100 mm (3.94 in)

Model	RZ350N/NC
<b>Electrical:</b> Ignition System Generator System	C.D.I. A.C. magneto
<b>Battery:</b> Type/ Capacity	12N5.5-3B/ 12V, 5.5AH
<b>Bulb Wattage × Quantity:</b> Headlight Tail/ Brake Light Flasher Light Meter Light	60W/55W (Quartz bulb) 12V, 8W/27W × 2 12V, 27W × 4 3.4W × 3
<b>Indicator Light:</b> NEUTRAL HIGH BEAM OIL CATALIZER TURN	3.4W × 1 3.4W × 1 3.4W × 1 3.4W × 1 3.4W × 2

## Cylinder Head:

Combustion Chamber Volume  
Warp Limit

21.3 ~ 21.9 cm<sup>3</sup>  
0.03 mm (0.0012 in)

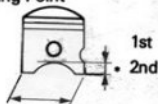
## Cylinder:

Material  
Bore Size / Limit  
Taper Limit  
Warp Limit  
Out of Round Limit

Aluminum alloy with cast iron sleeve (Cast in)  
64<sup>+0.02</sup><sub>-0</sub> mm (2.52<sup>+0.0008</sup> in)/64.1 mm (2.524 in)  
0.05 mm (0.0020 in)  
0.03 mm (0.0012 in)  
0.01 mm (0.0004 in)

## Piston:

Piston Size/ Measuring Point\*  
Piston Clearance  
Piston Oversize  
Piston Offset



64.0 mm (2.520 in)/ 10 mm (0.39 in)  
0.060 ~ 0.065 mm (0.0024 ~ 0.0026 in)  
64.25 mm (2.53 in)  
64.50 mm (2.54 in)  
0 mm (0 in)

## Piston Ring:

Piston Ring Design/ B × T  
(Top)  
(2nd)



Keystone/ 1.2 × 2.6 mm (0.047 × 0.102 in)  
Plain (With expander)/  
1.5 × 2.15 mm (0.059 × 0.085 in)

Ring End Gap (Installed)  
(Top)  
(2nd)



0.30 ~ 0.45 mm (0.012 ~ 0.018 in)  
0.35 ~ 0.50 mm (0.014 ~ 0.020 in)

Ring Groove Side Clearance  
(Top)  
(2nd)

0.02 ~ 0.06 mm (0.0008 ~ 0.0024 in)  
0.03 ~ 0.07 mm (0.0012 ~ 0.0028 in)

## Crankshaft:

Crankshaft Assembly Width  
(F)  
(A)

54.00 <sup>-0.06</sup><sub>-0.05</sub> mm (2.13 <sup>-0.002</sup><sub>-0.002</sub> in)  
156 <sup>-0.05</sup><sub>-0.05</sub> mm (6.14 <sup>-0.002</sup><sub>-0.002</sub> in)

Crankshaft Runout Limit (S)

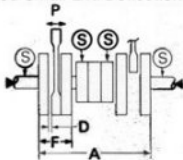
0.05 mm (0.002 in)

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 (0.014 ~ 0.039 in)



## Clutch:

## Friction Plate

Thickness/ Quantity

Wear Limit

3.0 mm (0.12 in) × 7

2.7 mm (0.106 in)

## Clutch Plate

Thickness/ Quantity

Warp Limit

1.2 mm (0.047 in) × 6

0.05 mm (0.002 in)

## Clutch Spring

Free Length/ Quantity

&lt;Limit&gt;

36.4 mm (1.43 in) × 6

&lt;34.4 mm (1.35 in)&gt;

## Clutch Housing

Thrust Clearance

Radial Clearance

0.07 ~ 0.12 mm (0.003 ~ 0.005 in)

0.011 ~ 0.048 mm (0.0004 ~ 0.0019 in)

## Clutch Release Method

## Push Rod Bending Limit

## Primary Reduction Gear Back Lash

Tolerance

## Primary Drive Gear Back Lash Number

## Primary Driven Gear Back Lash Number

Inner push, Cam push

0.2 mm (0.008 in)

154 ~ 156

90 ~ 98

57 ~ 65

## 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 ~ 1.3 kg (1.76 ~ 2.90 lb)



## Air Filter — Oil Grade

Yamaha 2-stroke engine oil or equivalent

## Reed Valve: (Engine)

## Bending Limit

## Valve Lift

## Reed Valve: (Catalyzer)

Bending Limit

Valve Lift


0.5 mm (0.02 in)

10.3 ± 0.2 mm (0.41 ± 0.008 in)

0.5 mm (0.02 in)

1.2 mm (0.05 in)



Model	RZ350N/NC
<b>Carburetor:</b> Type/Manufacturer/Quantity I.D. Mark Main Jet (M.J.) Main Air Jet (M.A.J.) Jet Needle - Clip Position (J.N.) Needle Jet (N.J.) Cutaway (C.A.) Left And Right Pilot Jet (P.J.) Air Screw (Turns Out)(A.S.) Starter Jet (G.S.) Left And Right Valve Seat (V.S.) Float Height (F.H.) Fuel Level Engine Idling Speed Vacuum Pressure	VM26SS/MIKUNI/2 48H00 (RZ350N)                      1EL00 (RZ350NC) #230 #85 5CK1-1 0-8 2.0 #20 Preset #80 ø2.8 21 ± 0.5 mm (0.83 ± 0.02 in) 2 ± 1 mm (0.08 ± 0.04 in) 1,200 ± 50 r/min 12 kPa (90 mmHg, 3.5 inHg)
<b>Lubrication:</b> Autolube Pump Color Code Minimum Stroke Maximum Stroke Minimum Output/200 Stroke  Maximum Output  Pulley Adjusting Position (Adjusting Mark)  	Yellow 0.10 ~ 0.15 mm (0.004 ~ 0.006 in) 2.05 ~ 2.27 mm (0.08 ~ 0.09 in) 0.12 ~ 0.19 cm <sup>3</sup> (0.004 ~ 0.007 imp oz, 0.004 ~ 0.006 US oz) 2.58 ~ 2.85 cm <sup>3</sup> (0.091 ~ 0.101 imp oz, 0.087 ~ 0.096 US oz)  (At idle)
<b>Cooling:</b> Radiator Core Size Width Height Thickness Radiator Cap Opening Pressure Coolant Capacity (Total) Water Pump Type Reduction Ratio	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 <sup>2</sup> , 12.8 ± 2.13 psi) 1.5 L (1.32 imp qt, 1.59 US qt)  Single-suction centrifugal pump 32/20 (1.60)

Model	RZ350N/ NC
<b>Steering System:</b> Steering Bearing Type No. / Size of Balls Upper Lower Lock to Lock Angle	Ball bearing  19 pcs. 1/4 in 19 pcs. 1/4 in 80°
<b>Front Suspension:</b> Front Fork Travel Front Fork Spring Free Length <Limit> Spring Rate  Oil Capacity Oil Level Oil Grade Air Pressure (STD) (Min. – Max.)	140 mm (5.51 in)  506.2 mm (19.9 in) <501.2 mm (19.73 in)> $K_s = 3.33 \text{ N/mm}$ (0.34 kg/mm, 19.0 lb/in) 0 – 140 mm (0 – 5.51 in) 253 cm <sup>3</sup> (8.91 imp oz, 8.55 US oz) 120 mm (4.72 in) SAE 10W30 SE motor oil 39 kPa (0.4 kg/cm <sup>2</sup> , 5.7 psi) 0 – 118 kPa (0 – 1.2 kg/cm <sup>2</sup> , 0 – 17 psi)
<b>Rear Suspension:</b> Shock Absorber Travel Rear Wheel Travel Rear Absorber Spring Free Length Spring Rate  Gas Properties Gas Pressure	40 mm (1.57 in) 100 mm (3.94 in)  184 mm (7.24 in) $K_s = 103.0 \text{ N/mm}$ (10.5 kg/mm, 588 lb/in) 0 – 40 mm (0 – 1.57 in) Nitrogen gas 1,177 kPa (12 kg/cm <sup>2</sup> , 171 psi)
<b>Rear Arm:</b> Swing Arm Free Play End Side	1 mm (0.04 in) 0.2 – 0.4 mm (0.008 – 0.016 in)
<b>Wheel:</b> 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  2 mm (0.08 in) 2 mm (0.08 in)
<b>Drive Chain:</b> Type/ Manufacturer Number of Links Chain Free Play	520V-SR/ DAIDO 108 30 – 40 mm (1.2 – 1.6 in)

**Model****RZ350N/NC****Disc Brake:****Type**

Front

Dual

Rear

Single

**Disc Size-Outside Dia × Thickness****267 × 5 mm (10.5 × 0.19 in)****Disc Wear Limit****4.5 mm (0.18 in)****Pad Thickness****6.8 mm (0.27 in)****Pad Wear Limit****0.8 mm (0.03 in)****Master Cylinder Inside Diameter** Front**15.87 mm (0.62 in)**

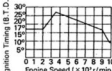
Rear

**12.70 mm (0.51 in)****Caliper Cylinder Inside Diameter** Front**38.18 mm (1.5 in)**

Rear

**38.18 mm (1.5 in)****Brake Fluid Type****DOT #3**



Model	RZ350N/NC
<p>Ignition System: Model/ Manufacturer</p> <p>Ignition Timing: (B.T.D.C.) Advanced Timing: (B.T.D.C.)</p>  <p>30° 25° 20° 17° 15° 10° 5°</p> <p>0 1 2 3 4 5 6 7 8 9 10</p> <p>Engine Speed ( × 10<sup>3</sup> r/min)</p>	<p>AVCC58/NIPPONDENSO W/ R-W/ G: RZ350N: 115Ω ± 20% RZ350NC: 117Ω ± 20%</p> <p>Br- G: RZ350N: 225Ω ± 20% (Low speed) RZ350NC: 133Ω ± 20%</p> <p>Br- R: 5.3Ω ± 20% (High speed) 17° at 1,200 r/min 27° at 3,500 r/min</p>
<p>Ignition Coil: Model/ Manufacturer Minimum Spark Gap Primary Winding Resistance Secondary Winding Resistance</p>	<p>12900-027/NIPPONDENSO 6 mm (0.24 in) 0.33Ω ± 10% at 20°C (68°F) 3.5kΩ ± 20% at 20°C (68°F)</p>
<p>Spark Plug: Type/ Manufacturer</p>	<p>Standard: BR8ES/(NGK), For high speed riding: BR9ES/(NGK)</p>
<p>C.D.I. Unit: Type/ Manufacturer</p>	<p>RZ350N: AQAB06/ ND RZ350NC: 52Y-50/ ND</p>
<p>A.C. Generator: Model/ Manufacturer Charging Output Charging Coil Resistance</p>	<p>RZ350N: AVCC58/ ND RZ350NC: 51L-50/ ND 14V14A/5,000 r/min RZ350N: (W-W) 0.4Ω ± 20% at 20°C (68°F) RZ350NC: (W-W) 0.5Ω ± 20% at 20°C (68°F)</p>
<p>Voltage Regulator: Model/ Manufacturer Regulating Voltage</p>	<p>Short circuit type SH235-12C/SHINDENGEN KOUGYOU 14.5 ± 0.5V</p>

Model	RZ350N/ NC
<b>Rectifier:</b> Model/ Manufacturer Capacity Withstand Voltage	Three phase, Full wave SH235-12C/ SHINDENGEN KOUGYOU 15A 200V
<b>Battery:</b> Model/ Manufacturer Charging Rate Specific Gravity	12N5.5-3B/ NIPPONDENSO 0.55A × 10 hours 1.260
<b>Horn:</b> Model Maximum Amperage	SF12/ NIKKO 2.5A or less
<b>Flasher Relay:</b> Type Model/ Manufacturer Flasher Frequency Capacity	Semi transistor type FU257CD/ NIPPONDENSO 85 cycle/min 12V, 27W × 2 + 3.4W
<b>Catalyzer Thermo Sensor:</b> Model/ Manufacturer Sensor Resistance	48H/ NTK 4Ω ± 20% at 20°C (68°F)
<b>Catalyzer Warning Buzzer:</b> Model/ Manufacturer	48H/ YAMAHA
<b>Circuit Breaker:</b> Type Amperage For Individual Circuit/ Quantity Main Headlight Signal Ignition Reserve	Fuse  20A × 1 10A × 1 15A × 1 5A × 1 10A × 1 15A × 1 20A × 1
<b>Thermo-Unit:</b> Model/ Manufacturer	YH55901NO/ NISSEI