
General Specifications

Engine

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| Engine Type | 4-stroke, Inline, 2-cylinder, DOHC, Liquid cooled, 8-Valve, counterbalancer |
| Displacement | 248 cc |
| Bore x Stroke | 62.0 x 41.2 mm |
| Compression Ratio | 12.4:1 |
| Carburetor | Keihin CVK30 (2) Constant velocity, Diaphragm-type |
| Ignition System | 12 V Battery & Coil, Transistorized Breakerless |
| Ignition Advance | Electronic |
| Crankshaft Rotation | Counterclockwise from LH side |
| Firing Interval/Order | 180° |
| Cylinder Material | Aluminum alloy with ferrous sleeves |
| Fuel | Min 91 Research/87 Avg. Oct. Unleaded OK |
| Coolant | 50% distilled water /50% ethylene glycol base antifreeze. |
| —Capacity | 1.0 liter |
| —Level | Level with radiator filler neck. |

Transmission

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| Clutch Type | Wet, Multi-disc, Manual |
| Transmission | 6-speed, Constant mesh, Return shift |
| Shift Pattern (Bottom up) | 1-N-2-3-4-5-6 (w/Neutral Finder) |
| Gear Ratios —1st | 2.60 (39/15) |
| —2nd | 1.79 (34/19) |
| —3rd | 1.41 (31/22) |
| —4th | 1.16 (29/25) |
| —5th | 1.00 (27/27) |
| —6th | 0.89 (25/28) |
| Primary Ratio | 3.09 (71/23) |
| Final Ratio | 3.21 (45/14) |
| Overall Ratio (Top Gear) | 8.86 |

Chassis

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|---------------------|------------------------------|
| Wheelbase | 1400 mm (55.1 in.) |
| Seat Height | 745 mm (29.3 in.) |
| Ground Clearance | 155 mm (6.1 in.) |
| Dry Weight | 138 kg (US,CN) 138.5 kg (CA) |
| Curb Weight | 161 kg (US,CN) 161.5 kg (CA) |
| Max Recom Load | 155 kg (342 lb.) |
| Fuel Tank Capacity | 18.0 liter (4.8 gal.) |
| Tire Size —Front | 100/80-16 50S Tubeless |
| —Rear | 130/80-16 64S Tubeless |
| Brake Type —Front | Single Hydraulic Disc |
| —Rear | Single Hydraulic Disc |
| Brake Size —Front | 232 mm |
| —Rear | 207 mm |
| Wheel Travel —Front | 140 mm (5.5 in.) |
| —Rear | 130 mm (5.1 in.) |

Model Identification

| | |
|---------------------|---|
| Year & Model | '06 EX250F6F:NINJA 250R |
| Color | 1. KMT. Bright Yellow (187) 2. KMT. Candy Persimmon Red (G2) 3. KMT. Candy Thunder Blue (620) 4. KMT. Ebony (IG) |
| VIN Range | JKAEXMF1✓6DA16601 — |
| Engine No. Range | EX250EEA00001 — |
| Engine No. Location | RH top crankcase, below carburetor |

Tuning Specifications

Engine

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| Cylinder Head Torque | In sequence: | 1. 8 ϕ | 2. 6 ϕ |
| o= Step —Nuts | | 2.5 kg/m | 1.2 kg-m |
| | | 3. Warm up | 4. Retorque cold |
| Valve Clearance (Cold) | Intake: 0.08-0.13 mm | | |
| | Exhaust: 0.11-0.16 mm | | |
| —Adjustment Method | Rocker arm screw | | |
| Compression Pressure | | | |
| Spark Plug | NGK C8HSA or ND U24FS-L (USA) | | |
| | NGK CR8HS (Canada) | | |
| —Gap | .6-7 mm | | |
| Ignition Timing—Idle | 10° BTDC ("F" mark) at 1,300 rpm (US, CN) | | |
| | 5° BTDC ("F" mark) at 1,500 rpm (CA) | | |
| | 42° BTDC ("F" mark) at 4,500 rpm (US, CN) | | |
| | 42° BTDC ("F" mark) at 4,500 rpm (CA) | | |
| —Full | | | |
| Air Screw | Sealed—not adjustable | | |
| Idle Speed | 1300 \pm 100 rpm (US,CN) | | |
| | 1500 \pm 100 rpm (CA) | | |
| Engine Oil | API SE, SF or SG, API SH or SJ of JASO MA Class | | |
| | SAE 10W40 | | |
| —w/Filter Change | 1.9 liter (2.0 qt.) | | |
| —No Filter Change | 1.5 liter (1.6 qt.) | | |
| —Level | On center stand, wait 5 min, middle of window | | |

Chassis

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|----------------------|---|
| Fork Oil | SAE 10W20 |
| —Capacity | 202.5-210.5 cc, each |
| —Level | 226 \pm 2 mm |
| Tire Pressure (Cold) | |
| —Front | 2.00 kg/cm ² |
| —Rear | 2.25 kg/cm ² |
| Drive Chain Slack | 20-30 mm (on center stand, tightest point, STD) |