

## General Specifications

### Engine

Engine Type	4-stroke, In-line, 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

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

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
—Rear	130 mm

## Model Identification

Year & Model	'05 EX250-F19:NINJA 250R
Color	① KMT. Ebony (IG) ② KMT. Galaxy Silver (X1) ③ KMT. Metallic Nocturne Blue (KQ)
VIN Range	JKAEXMF1 ✓5DA07709 —
Engine No. Range	EX250EEA00001 —
Engine No. Location	RH top crankcase, below carburetor

## Tuning Specifications

### Engine

Cylinder Head Torque	In sequence: ① 8 $\phi$ 2.5 kg/m	② 6 $\phi$ 1.2 kg-m
O= Step —Nuts	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	NGK C8HSA or ND U24FS-L (USA)	
Spark Plug	NGK CR8HS (Canada)	
—Gap	.6-.7 mm	
Ignition Timing	—Idle	10° BTDC ("F" mark) at 1,300 rpm (US, CN)
—Full		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)
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	
—No Filter Change	1.5 liter	
—Level	On center stand, wait 5 min, middle of window	

### Chassis

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