

General Specifications	
Engine	
Engine Type	4-stroke, Inline, 2-cylinder, DOHC, Liquid cooled,
Displacement	8-Valve
Bore x Stroke	498 cc
Compression Ratio	74.0 x 58.0 mm
Maximum Torque	10.8:1
Carburetor	4.7 kg-m at 8,500 rpm
Ignition System	Keihin CVK34 (2) Constant velocity, Diaphragm-type
Ignition Advance	12 V Battery & Coil, Transistorized Breakerless
Crankshaft Rotation	Electronic
Cylinder Number Method	Clockwise from ignition (RH side)
Firing Interval/Order	Left to Right: 1-2
Cylinder Material	188°
Fuel	Aluminum alloy with ferrous sleeves
Coolant	Min 91 Research/87 Avg. Oct. Unleaded OK
—Capacity	50% distilled water /50% ethylene glycol base antifreeze.
—Level	1.8 L
	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	2.57 (36/14)
—1st	1.78 (32/18)
—2nd	1.38 (29/21)
—3rd	1.13 (27/24)
—4th	0.96 (25/26)
—5th	0.85 (23/27)
—6th	2.65 (27/23 x 63/28)
Primary Ratio	2.63 (39/15)
Final Ratio	5.93
Overall Ratio (Top Gear)	
Chassis	
Wheelbase	1435 mm
Seat Height	775 mm
Ground Clearance	120 mm
Dry Weight	176 kg (US) 176.5 kg (CA)
Curb Weight	197 kg (US) 197.5 kg (CA)
Max Recom Load	186 kg
Fuel Tank Capacity	4.8 U.S. gal.
Tire Size	—Front 110/70 17
—Rear	130/70 17
Brake Type	—Front Single Disc
—Rear	Single Disc
Brake Size	—Front 252 mm Effective Diameter
—Rear	203 mm Effective Diameter
Wheel Travel	—Front 130 mm
—Rear	100 mm

Model Identification	
Year & Model	'05 EX500-D12:Ninja 500
Colors	1. Candy Thunder Blue (235)
	2. Ebony (H9)
VIN Range	JKAEXVD1✓5A090001 -
Engine No. Range	EX500AE018001 -
Tuning Specifications	
Engine	
Cylinder Head Torque	In sequence: ① 2.3 kg-m
0 = Step — Nuts	② 1.0 kg-m ③ Warm up ④ Retorque cold
Valve Clearance (Cold)	Intake: 0.13-0.18 mm
— Adjustment Method	Exhaust: 0.18-0.23 mm
Compression Pressure	Rocker arm screw
Spark Plug	182 psi
	NGK DR9EA or ND X27ESR-U (USA)
	NGK DR8ES or NDX24ESR-U (Canada)
	0.6-0.7 mm
Ignition Timing	—Gap 10° BTDC at 1,200 rpm (US)
	—Idle 10° BTDC at 1,300 rpm (CA)
	—Full 37.5° BTDC at 10,000 rpm (US)
	37.5° BTDC at 10,000 rpm (CA)
Air Screw	Sealed—not adjustable
Idle Speed	1,050 ±50 rpm (US,CN)
	1,250 ±50 rpm (CA)
Engine Oil	SE Class SAE 10W40, 10W50, 20W40, 20W50
—w/Filter Change	3.4 L
—No Filter Change	2.4 L
—Level	On center stand, wait 5 min, middle of window
Chassis	
Fork Oil	SAE 10W20
—Capacity	352 cc
Tire Pressure (Cold)	
—Front	33 psi
—Rear	36 psi
Drive Chain Slack	34-45 mm (STD)