

| General Specifications    |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| <b>Engine</b>             |                                                                             |
| Engine Type               | 4-stroke, Inline, 2-cylinder, DOHC, Liquid cooled, 8-Valve, Counterbalancer |
| Displacement              | 498 cc                                                                      |
| Bore x Stroke             | 74.0 x 58.0 mm                                                              |
| Compression Ratio         | 10.2:1                                                                      |
| Carburetor                | Keihin CVK32(2) Constant velocity, Diaphragm-type                           |
| Ignition System           | 12 V Battery & Coil, Transistorized Breakerless                             |
| Ignition Advance          | Electronic                                                                  |
| Crankshaft Rotation       | Clockwise from RH 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                 | 1.3 L                                                                       |
| —Level                    | Level with radiator filler neck.                                            |
| <b>Transmission</b>       |                                                                             |
| 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                      | 1.72 (31/18)                                                                |
| —2nd                      | 1.33 (28/21)                                                                |
| —3rd                      | 1.25 (27/24)                                                                |
| —4th                      | 0.96 (25/26)                                                                |
| —5th                      | 0.85 (23/27)                                                                |
| —6th                      | 2.65 (61/23)                                                                |
| Primary Ratio             | 2.63 (42/16)                                                                |
| Final Ratio               | 5.93                                                                        |
| Overall Ratio (Top Gear)  |                                                                             |
| <b>Chassis</b>            |                                                                             |
| Wheelbase                 | 1595 mm                                                                     |
| Seat Height               | 715 mm                                                                      |
| Ground Clearance          | 120 mm                                                                      |
| Dry Weight                | 199 kg (US,CN) 199.5 kg (CA)                                                |
| Curb Weight               | 214 kg (US,CN) 214.5 kg (CA)                                                |
| Max Recom Load            | 399 lb.                                                                     |
| Fuel Tank Capacity        | 15.0 L                                                                      |
| Tire Size                 | 100/90-19 Tubeless                                                          |
| —Front                    | 140/90-15 Tubeless                                                          |
| —Rear                     |                                                                             |
| Brake Type                | Single Hydraulic Disc                                                       |
| —Front                    | Mechanical Drum (Leading/Trailing)                                          |
| —Rear                     |                                                                             |
| Wheel Travel              | 150 mm                                                                      |
| —Front                    | 100 mm                                                                      |
| —Rear                     |                                                                             |
| Suspension Type           | Telescopic Fork                                                             |
| —Front                    | Swingarm Oil Shock                                                          |
| —Rear                     |                                                                             |

| Model Identification         |                                                                                            |
|------------------------------|--------------------------------------------------------------------------------------------|
| Year & Model                 | '05 EN500-C10:VULCAN 500 LTD                                                               |
| Colors                       | ① Metallic Sonic Blue (GW)                                                                 |
| VIN Range                    | JKAENVC1✓5A189001-                                                                         |
| Engine No. Range             | EX500AE018001 —                                                                            |
| Engine No. Location          | RH top crankcase, below carburetor                                                         |
| <b>Tuning Specifications</b> |                                                                                            |
| <b>Engine</b>                |                                                                                            |
| Valve Clearance (cold)       | Intake: 0.13-0.18 mm<br>Exhaust: 0.18-0.23 mm                                              |
| — Adjustment Method          | Rocker arm screw                                                                           |
| Compression Pressure         | 199 psi                                                                                    |
| Spark Plug                   | NGK DR9EA or ND X27ESR-U (USA)<br>NGK DR8EA or ND X24ES-U (Canada)                         |
| — Gap                        | 0.6-0.7 mm                                                                                 |
| Ignition Timing              | 10° @ 1,300 rpm<br>35° @ 8,000 rpm                                                         |
| — Idle                       |                                                                                            |
| — Full                       |                                                                                            |
| Pilot Screw                  | Sealed — not adjustable                                                                    |
| Idle Speed                   | 1,200 ±100 rpm                                                                             |
| Engine Oil                   | SE Class SAE 10W40, 10W50, 20W40, 20W50                                                    |
| — w/Filter Change            | 3.0 L                                                                                      |
| — No Filter Change           | 2.8 L                                                                                      |
| — Level                      | On center stand, wait 5 min, middle of window                                              |
| <b>Chassis</b>               |                                                                                            |
| Fork Oil                     | SAE 10W20                                                                                  |
| — Capacity                   | 507 ± 2mm                                                                                  |
| Fork Air Pressure (cold)     | 0.0 kg/cm <sup>2</sup> , max 2.5 kg/cm <sup>2</sup>                                        |
| Tire Pressure (cold)         |                                                                                            |
| — Front                      | 2.0 kg/cm <sup>2</sup> (28 psi)                                                            |
| — Rear (Normal)              | 2.0 kg/cm <sup>2</sup> (28 psi) - 2.25 kg/cm <sup>2</sup> (32 psi)                         |
| Drive Belt Tension           | 7.5 — 16.5 mm deflection (on center stand, apply 4.5 kg of force midway between sprockets) |