

Features & Specifications

2016 KingQuad 500AXi



LT-A500XL6

YT9: Flame Red

Introduction

- In 1983, Suzuki introduced the world's first 4-wheel ATV. Today, Suzuki ATVs are everywhere. From the most remote areas to the most everyday tasks, you'll find the KingQuad powering a rider onward. And every year, we continue to evolve our machines to meet the demands of our riders. Quicker response. Smoother power. Better fuel consumption. Across the board, our KingQuad lineup is a dominating group of ATVs.
- With a long list of technologically advanced features, the Suzuki KingQuad 500AXi is equally at home on tough trails or helping you take on tough jobs. Its fuel-injected engine provides exceptional performance and features a twin-spark-plug cylinder head, multi-hole fuel injector and more, resulting in smooth performance throughout the powerband along with strong mid- to high-end performance.

Engine Features

- The powerful 493cc, SOHC, single-cylinder, liquid-cooled, four-stroke engine produces a wide powerband with strong top-end power.
- Its cylinder is canted forward for a low center of gravity resulting in reduced engine height and lower seat height. The engine also features a balancer shaft for smooth operation.
- The compact 4-valve cylinder head has large intake valves and straight intake ports for superb cylinder charging efficiency.
- A lightweight aluminum cylinder uses SCEM (Suzuki Composite Electrochemical Material) coating for excellent heat transfer and ring sealing resulting in superb combustion chamber efficiency.
- High capacity aluminum radiator with large diameter, thermostatically controlled cooling fan provides stable engine operating temperature.

Transmission Features

- The Quadmatic™ CVT-type automatic transmission provides versatility and convenience with a fender-mounted gate-type shifter for high/low range selection. Its advanced engine-braking system minimizes free-wheeling with the throttle off and helps control the vehicle during steep descents.

- A compact torque-sensing limited-slip front differential offers potent traction plus light steering. A differential-lock system provides serious four-wheel-drive traction.
- Handlebar-mounted push-button controls permit easy selection between 2WD, 4WD and differential-lock 4WD. An override button on the left handlebar can be used to override the normal speed limiter when stuck in the mud.



LT-A500XL6

YLG: Terra Green

Chassis Features

- Independent double A-arm front suspension (7.1 inches of wheel travel) includes large diameter shock absorbers with 5-way spring preload adjustment.
- Fully independent, A-arm/I-beam rear suspension with 7.9 inches of wheel travel includes large diameter shock absorbers with 5-way spring preload adjustment and large diameter rear sway-bar.
- Dual hydraulic front disc brakes plus a sealed, multi-plate rear brake system. The rear brake's clutch-type design provides high durability, reduced unsprung weight and low-maintenance.
- High traction 25-inch CARLISLE tires are mounted on heavy-duty steel wheels.
- Suzuki's plush T-shaped seat delivers rider mobility during spirited or difficult terrain riding.
- Polyethylene skid plates provide protection with minimal resistance over rocks and rough terrain. Durable plastic guards protect the front and rear half shafts.

Utility/Convenience Features

- Winch-ready mounts and wire conduit makes winch installation simple.
- Instrumentation includes LCD readouts for speedometer, odometer, twin tripmeter, hour meter, clock, fuel level, driving range and drive mode. LED indicators for high, low, neutral, reverse and 2WD/4WD and differential-locked 4WD. LED cautions for fuel injection and engine temperature.
- Distinctively-styled twin 30W halogen headlights plus a compact 5/21W tail light and brake light.
- High-output, three-phase charging system feeds an 18-amp maintenance-free battery for abundant power for easy starting and accessory use.
- The large 4.6 gallon (17.5 L) fuel tank is positioned for a low center-of-gravity. It includes a vacuum-operated petcock and a ratchet-style filler cap.
- A large 2.8 liter water resistant front storage compartment includes an easy access screw-on cap.
- The rugged steel-tube cargo racks have wrinkle paint finish for durability and scratch resistance.
- Full floorboards with integrated raised footpegs provide protection.

Additional Features

- A variety of Suzuki Genuine Accessories are available, including winches, windshield, front and rear bumpers, snow plow, aluminum skid pans, rack extensions, utility box and more.
- 12-month limited warranty
- For more details, please visit www.suzukicycles.com.

Specifications LT-A500XL6

E-03: USA, E-33: California

Dimensions and curb mass

| Item | Specification | Remark |
|------------------|--------------------|--------|
| Overall length | 2 135 mm (84.1 in) | |
| Overall width | 1 210 mm (47.6 in) | |
| Overall height | 1 245 mm (49.0 in) | |
| Wheelbase | 1 285 mm (50.6 in) | |
| Front track | 940 mm (37.0 in) | |
| Rear track | 920 mm (36.2 in) | |
| Ground clearance | 260 mm (10.2 in) | |
| Seat height | 920 mm (36.2 in) | |
| Curb mass | 305 kg (672 lbs) | |

Engine

| Item | Specification | Remark |
|---------------------|---|--------|
| Type | Four-stroke, liquid-cooled, OHC | |
| Number of cylinders | 1 | |
| Bore | 87.5 mm (3.445 in) | |
| Stroke | 82.0 mm (3.228 in) | |
| Displacement | 493 cm ³ (30.1 cu.in) | |
| Compression ratio | 9.9 : 1 | |
| Fuel system | Fuel injection | |
| Air cleaner | Paper element and Polyurethane form element | |
| Starter system | Electric | |
| Lubrication system | Wet sump | |
| Idle speed | 1 500 ± 100 r/min | |

Drive train

| Item | Specification | Remark |
|--|---------------------------------------|-------------------------|
| Clutch | Wet shoe, automatic, centrifugal type | |
| Transmission | CVT (V-belt) | |
| Transfer | 2 speed forward with reverse | |
| Gearshift pattern | Transmission | Automatic |
| | Transfer | L-H-N-R (Hand operated) |
| Automatic transmission ratio | Variable change (2.902 – 0.779) | |
| Secondary reduction ratio | 2.603 (37/18 x 19/15) | |
| Final reduction ratio (Front and Rear) | 3.600 (36/10) | |
| Transfer gear ratio | Low | 2.562 (41/16) |
| | High | 1.240 (31/25) |
| | Reverse | 2.000 (32/16) |
| Drive system | Shaft drive | |

Specifications LT-A500XL6

E-03: USA, E-33: California

Chassis

| Item | Specification | Remark |
|--------------------|---|--------|
| Front suspension | Independent, double wishbone, coil spring, oil damped | |
| Rear suspension | Independent, double wishbone, coil spring, oil damped | |
| Front wheel travel | 180 mm (7.1 in) | |
| Rear wheel travel | 200 mm (7.9 in) | |
| Caster | 1.6° | |
| Trail | 3.4 mm (0.13 in) | |
| Toe-out | 10 mm (0.39 in) | |
| Camber | 0.64° | |
| Steering angle | 46° (right and left) | |
| Turning radius | 3.1 m (10.2 ft) | |
| Front brake | Disc brake, twin | |
| Rear brake | Sealed oil-bathed multi-disc | |
| Front tire size | AT25 x 8-12 ☆ ☆ , tubeless | |
| Rear tire size | AT25 x 10-12 ☆ ☆ , tubeless | |

Electrical

| Item | Specification | Remark |
|--|--------------------------------------|--------|
| Ignition type | Electronic ignition (Transistorized) | |
| Ignition timing | 6° B.T.D.C. at 1 500 r/min | |
| Spark plug | NGK LMAR6A-9 | |
| Battery | 12 V 64.8 kC (18 Ah)/10 HR | |
| Generator | Three-phase A.C. generator | |
| Fuse | 30/10/10/10/15/15/10 A | |
| Headlight | 12 V 35/35 W (HS1) x 2 | |
| Brake light/Tail light | 12 V 21/5 W | |
| Speedometer light | LED | |
| Coolant temperature/FI indicator light | LED | |
| Neutral indicator light | LED | |
| High beam indicator light | LED | |
| Reverse indicator light | LED | |
| Diff-lock indicator light | LED | |

Capacities

| Item | Specification | Remark |
|-----------------------|------------------------------|------------------------------|
| Fuel tank | 17.5 L (4.6/3.8 US/Imp gal) | |
| Engine oil | Oil change | 2 500 ml (2.6/2.2 US/Imp qt) |
| | With filter change | 2 700 ml (2.9/2.4 US/Imp qt) |
| | Overhaul | 3 200 ml (3.4/2.8 US/Imp qt) |
| Differential gear oil | 460 ml (15.6/16.2 US/Imp oz) | |
| Final gear oil | 770 ml (26.0/27.1 US/Imp oz) | |
| Coolant | 2.5 L (2.6/2.2 US/Imp qt) | |

Service Data LT-A500XL6

E-03: USA, E-33: California

Valve + Valve Guide

Unit: mm (in)

| Item | Standard | | Limit |
|-------------------------------------|-----------|---|--------------|
| | | | |
| Valve diam. | IN. | 30.6 (1.20) | — |
| | EX. | 27.0 (1.06) | — |
| Valve clearance (When cold) | IN. | 0.05 – 0.10 (0.002 – 0.004) | — |
| | EX. | 0.17 – 0.22 (0.007 – 0.009) | — |
| Valve guide to valve stem clearance | IN. | 0.010 – 0.037 (0.0004 – 0.0015) | — |
| | EX. | 0.030 – 0.057 (0.0012 – 0.0022) | — |
| Valve guide I.D. | IN. & EX. | 5.000 – 5.012 (0.1969 – 0.1973) | — |
| Valve stem O.D. | IN. | 4.975 – 4.990 (0.1959 – 0.1965) | — |
| | EX. | 4.955 – 4.970 (0.1951 – 0.1957) | — |
| Valve stem deflection | IN. & EX. | — | 0.35 (0.014) |
| Valve stem runout | IN. & EX. | — | 0.05 (0.002) |
| Valve head thickness | IN. & EX. | — | 0.5 (0.02) |
| Valve stem end length | IN. & EX. | — | 2.3 (0.09) |
| Valve seat width | IN. & EX. | 0.9 – 1.1 (0.035 – 0.043) | — |
| Valve head radial runout | IN. & EX. | — | 0.03 (0.001) |
| Valve spring free length | IN. & EX. | — | 38.8 (1.53) |
| Valve spring tension | IN. & EX. | 182 – 210 N (18.6 – 21.4 kgf, 41.0 – 47.2 lbs) at length 31.5 mm (1.24 in) | — |

Camshaft + Cylinder Head

Unit: mm (in)

| Item | Standard | | Limit |
|--------------------------------|-------------------|-----------------------------------|----------------|
| | | | |
| Cam height | IN. | 33.45 – 33.50 (1.317 – 1.319) | 33.15 (1.305) |
| | EX. | 33.47 – 33.52 (1.318 – 1.320) | 33.17 (1.306) |
| Camshaft journal oil clearance | Camshaft end side | 0.028 – 0.059 (0.0011 – 0.0023) | 0.150 (0.0059) |
| | Other side | 0.032 – 0.066 (0.0013 – 0.0026) | |
| Camshaft journal holder I.D. | Camshaft end side | 17.512 – 17.525 (0.6894 – 0.6900) | — |
| | Other side | 22.012 – 22.025 (0.8666 – 0.8671) | |
| Camshaft journal O.D. | Camshaft end side | 17.466 – 17.484 (0.6876 – 0.6883) | — |
| | Other side | 21.959 – 21.980 (0.8645 – 0.8654) | |
| Camshaft runout | | — | 0.10 (0.004) |
| Rocket arm I.D. | IN. & EX. | 12.000 – 12.018 (0.4724 – 0.4731) | |
| Rocket arm shaft O.D. | IN. & EX. | 11.973 – 11.984 (0.4714 – 0.4718) | |
| Cylinder head distortion | | — | 0.05 (0.002) |
| Cylinder head cover distortion | | — | 0.05 (0.002) |

Cylinder + Piston + Piston Ring

Unit: mm (in)

| Item | Standard | | | Limit |
|--|--|-------------------------------|-----------------------------|-----------------------|
| Compression pressure (Automatic-decomp. actuated) | Approx. 1 000 kPa (10.0 kgf/cm ² , 142 psi) | | | — |
| Piston-to-cylinder clearance | 0.030 – 0.040 (0.0012 – 0.0016) | | | 0.120 (0.0047) |
| Cylinder bore | 87.500 – 87.515 (3.4449 – 3.4455) | | | Nicks or Scratches |
| Piston diam. | 87.465 – 87.480 (3.4435 – 3.4441) Measure at 15 mm (0.6 in) from the skirt end. | | | 87.380 (3.4402) |
| Cylinder distortion | — | | | 0.05 (0.002) |
| Piston ring free end gap | 1st | Approx. 6.2 (0.24) | | 4.9 (0.19) |
| | 2nd | 2R | Approx. 12.0 (0.47) | 9.6 (0.38) |
| Piston ring end gap | 1st | 0.08 – 0.20 (0.003 – 0.008) | | 0.50 (0.020) |
| | 2nd | 2R | 0.10 – 0.25 (0.004 – 0.010) | 0.50 (0.020) |
| Piston ring-to-groove clearance | 1st | — | | 0.180 (0.0071) |
| | 2nd | — | | 0.150 (0.0059) |
| Piston ring groove width | 1st | 0.78 – 0.80 (0.0307 – 0.0315) | | — |
| | | 1.30 – 1.32 (0.051 – 0.052) | | — |
| | 2nd | 1.01 – 1.03 (0.040 – 0.041) | | — |
| | | Oil | 2.51 – 2.53 (0.099 – 0.100) | |
| Piston ring thickness | 1st | 0.71 – 0.76 (0.028 – 0.030) | | — |
| | | 1.08 – 1.10 (0.0425 – 0.0433) | | — |
| | 2nd | 2R | 0.97 – 0.99 (0.038 – 0.039) | — |
| Piston pin bore I.D. | 20.002 – 20.008 (0.7875 – 0.7877) | | | 20.030 (0.7886) |
| Piston pin O.D. | 19.992 – 20.000 (0.7871 – 0.7874) | | | 19.980 (0.7866) |

Conrod + Crankshaft

Unit: mm (in)

| Item | Standard | | | Limit |
|-------------------------------|-----------------------------------|--|--|-----------------|
| Conrod small end I.D. | 20.006 – 20.014 (0.7876 – 0.7880) | | | 20.040 (0.7890) |
| Conrod deflection | — | | | 3.0 (0.12) |
| Conrod big end side clearance | 0.10 – 0.65 (0.004 – 0.026) | | | 1.0 (0.04) |
| Conrod big end width | 24.95 – 25.00 (0.982 – 0.984) | | | — |
| Crank web to web width | 70.9 – 71.1 (2.79 – 2.80) | | | — |
| Crankshaft runout | — | | | 0.08 (0.003) |

Oil Pump

| Item | Standard | | | Limit |
|---------------------------------|---|--|--|-------|
| Oil pressure (at 60 °C, 140 °F) | 80 – 120 kPa (0.8 – 1.2 kgf/cm ² , 11 – 17 psi) at 3 000 r/min | | | — |

Clutch

Unit: mm (in)

| Item | Standard | | | Limit |
|--------------------------|-------------------------------|--|--|--------------------------|
| Clutch wheel I.D. | 140.0 – 140.2 (5.512 – 5.520) | | | 140.5 (5.53) |
| Clutch shoe | — | | | No groove at any part |
| Clutch engagement r/min. | 1 700 – 2 200 r/min | | | — |
| Clutch lock-up r/min. | 3 700 – 4 300 r/min | | | — |

Drive Train

Unit: mm (in) Except ratio

| Item | | Standard | Limit |
|--|------------------------------------|---|--------------|
| Automatic transmission ratio | | Variable change (2.902 – 0.779) | — |
| Secondary reduction ratio | | 2.603 (37/18 x 19/15) | — |
| Final reduction ratio | Front | 3.600 (36/10) | — |
| | Rear | 3.600 (36/10) | — |
| Transfer gear ratio | Low | 2.562 (41/16) | — |
| | High | 1.240 (31/25) | — |
| | Reverse | 2.000 (32/16) | — |
| Drive V-belt width | | 31.1 (1.22) | 30.1 (1.18) |
| Movable driven face spring free length | | 200 (7.87) | 190 (7.48) |
| Shift fork to groove clearance | | 0.10 – 0.30 (0.0040 – 0.0120) | 0.50 (0.020) |
| Shift fork groove width | Reverse | 5.50 – 5.60 (0.217 – 0.220) | — |
| | High | 5.50 – 5.60 (0.217 – 0.220) | — |
| Shift fork thickness | Reverse | 5.30 – 5.40 (0.209 – 0.213) | — |
| | High | 5.30 – 5.40 (0.209 – 0.213) | — |
| Rear output shaft bevel gear backlash | | 0.03 – 0.15 (0.001 – 0.006) | — |
| Front drive (differential) gear backlash | | 0.05 – 0.20 (0.002 – 0.008) | — |
| Final gear backlash | Without gear cover specification | 0.02 – 0.06 (0.0008 – 0.0024) | — |
| | Gear cover assembled specification | 0.08 – 0.15 (0.0031 – 0.0059) | — |
| Front differential gear oil type | | Hypoid gear oil SAE 90, API grade GL-5 or SAE 75 W-90 | — |
| Final gear oil type | | Mobil fluid 424 (or equivalent gear oil) | — |
| Front differential gear oil capacity | | 460 ml (15.6/16.2 US/Imp oz) | — |
| Final gear oil capacity | | 770 ml (26.0/27.1 US/Imp oz) | — |

Thermostat + Radiator + Fan + Coolant

| Item | Standard/Specification | | Note |
|--------------------------------------|---|--------------------------------|------|
| Thermostat valve opening temperature | 80.5 – 83.5 °C (177 – 182 °F) | | — |
| Thermostat valve lift | 8 mm (0.31 in) and over at 95 °C (203 °F) | | — |
| Radiator cap valve opening pressure | 110 – 140 kPa (1.1 – 1.4 kgf/cm ² , 15.6 – 19.9 psi) | | — |
| Cooling fan operating temperature | OFF → ON | Approx. 93 °C (199 °F) | — |
| | ON → OFF | Approx. 87 °C (189 °F) | |
| Engine coolant type | Use an antifreeze/coolant compatible with aluminum radiator, mixed with distilled water only. | | — |
| Engine coolant capacity | Reservoir | 250 ml (0.26/0.22 US/Imp qt) | — |
| | Engine | 2 200 ml (2.32/1.94 US/Imp qt) | — |

Injector + Fuel Pump + Fuel Pressure Regulator

| Item | Specification | Note |
|--|--|------|
| Injector resistance | 11 – 13 Ω at 20 °C (68 °F) | |
| Fuel pump discharge amount | 55.5 ml (1.88/1.95 US/Imp qt) and more/10 sec. | |
| Fuel pressure regulator operating set pressure | Approx. 294 kPa (2.9 kgf/cm ² , 41 psi) | |

FI Sensors

| Item | Specification | | Note |
|--|--------------------------------------|-----------------|------------------|
| CKP sensor resistance | 170 – 250 Ω | | |
| CKP sensor peak voltage | 5.0 V and more | | When cranking |
| IAP sensor input voltage | 4.5 – 5.5 V | | |
| IAP sensor output voltage | 0.78 – 3.35 V at idle speed | | |
| TP sensor input voltage | 4.5 – 5.5 V | | |
| TP sensor output voltage | Closed | 0.93 – 1.31 V | |
| | Opened | 3.64 – 4.82 V | |
| IAT sensor input voltage | 4.5 – 5.5 V | | |
| IAT sensor output voltage | 1.88 – 3.06 V at 20 °C (68 °F) | | |
| IAT sensor resistance | 20 °C (68 °F) | 2.22 – 3.22 kΩ | |
| ECT sensor input voltage | 4.5 – 5.5 V | | |
| ECT sensor output voltage | 0.15 – 4.85 V | | |
| ECT sensor resistance | 20 °C (68 °F) | Approx. 2.45 kΩ | |
| TO sensor resistance | 19 – 20 kΩ | | |
| TO sensor voltage | Normal | 0.4 – 1.4 V | |
| | Leaning | 3.7 – 4.4 V | When leaning 65° |
| ISC valve resistance | Approx. 31 Ω at 20 °C (68 °F) | | |
| Injector voltage | Battery voltage | | |
| Ignition coil primary peak voltage | 150 V and more | | When cranking |
| PAIR control solenoid valve resistance | 20 – 24 Ω at 20 – 30 °C (68 – 86 °F) | | |
| Vehicle speed sensor input voltage | Battery voltage | | |

Throttle Body

| Item | Standard/Specification | Note |
|---------------------|-------------------------|------|
| Bore size | 37 mm | |
| I.D. No. | 31H1 | |
| Idle r/min | 1 500 ± 100 r/min | |
| Throttle cable play | 3 – 5 mm (0.1 – 0.2 in) | |

Electrical

Unit: mm (in)

| Item | | Standard/Specification | | Note |
|--|---------------------|-----------------------------------|------|------------------------|
| Spark plug | Type Gap | NGK: LMAR6A-9 | | |
| | | 0.8 – 0.9 (0.031 – 0.035) | | |
| Spark performance | | Over 8 (0.3) at 1 atm. | | |
| Ignition coil resistance | Primary | 1 – 5 Ω | | Terminal – Terminal |
| | Secondary | 25 – 40 k Ω | | Plug cap – Plug cap |
| Ignition coil primary peak voltage | | 150 V and more | | When cranking |
| Generator coil resistance | | 0.1 – 1.0 Ω | | |
| Generator Max. output | | Approx. 400 W at 5 000 r/min | | |
| Generator no-load voltage (When engine is cold) | | 70 V (AC) and more at 5 000 r/min | | |
| Regulated voltage | | 13.5 – 15.5 V at 5 000 r/min | | |
| Starter motor brush length | Standard | 10 (0.39) | | |
| | Limit | 6.5 (0.26) | | |
| Starter relay resistance | | 3 – 5 Ω | | |
| Battery | Type designation | YTX20CH-BS | | |
| | Capacity | 12 V 64.8 kC (18 Ah)/10 HR | | |
| Fuse size | Headlight | HI | 10 A | |
| | | LO | 10 A | |
| | Power source | | 10 A | |
| | Ignition | | 15 A | |
| | Fuel | | 10 A | |
| | Fan | | 15 A | |
| Main | | 30 A | | |

Wattage

Unit: W

| Item | Standard/Specification |
|---|------------------------|
| Headlight | 12 V 35/35 (HS1) x 2 |
| Brake light/Tail light | 12 V 21/5 |
| Reversing light | — |
| Speedometer light | LED |
| High beam indicator light | — |
| Neutral indicator light | LED |
| Coolant temperature/FI indicator light | LED |
| Reverse indicator light | LED |
| Diff-lock indicator light | LED |

Brake + Wheel

Unit: mm (in)

| Item | Standard/Specification | Limit |
|---|---------------------------|--------------|
| Rear brake pedal height | 12.5 – 22.5 (0.5 – 0.9) | — |
| Rear brake pedal free travel | 20 – 30 (0.8 – 1.2) | — |
| Front brake disc thickness | 3.3 – 3.7 (0.13 – 0.15) | 3.0 (0.12) |
| Front brake disc runout | — | 0.30 (0.012) |
| Front master cylinder bore/Piston diameter | Approx. 14.0 (0.55) | — |
| Front brake caliper cylinder bore/Piston diameter | Approx. 33.96 (1.337) | — |
| Rear brake lever play | 6 – 8 (0.2 – 0.3) | — |
| Rear brake outer distance | 26.0 – 27.0 (1.02 – 1.06) | — |
| Brake side plate spring free length | 21.3 (0.84) | 20.2 (0.80) |
| Brake fluid type | DOT 4 | — |
| Steering angle | 46 ° (right & left) | — |
| Turning radius | 3.1 m (10.2 ft) | — |
| Toe-out (With 75 kg, 165 lbs) | 10 ± 4 (0.39 ± 0.16) | — |
| Camber | 0.64° | — |
| Caster | 1.6° | — |

Tire

Unit: mm (in)

| Item | Standard | | Limit |
|--|----------|---|------------|
| Cold inflation tire pressure (Solo riding) | Front | 35 kPa (0.35 kgf/cm ² , 5.1 psi) | — |
| | Rear | 30 kPa (0.30 kgf/cm ² , 4.4 psi) | — |
| Tire size | Front | AT 25 x 8-12 ☆ ☆ , tubeless | — |
| | Rear | AT 25 x 10-12 ☆ ☆ , tubeless | — |
| Tire tread depth | Front | — | 4.0 (0.16) |
| | Rear | — | 4.0 (0.16) |

Suspension

| Item | Standard | Limit |
|--------------------------------------|--------------|-------|
| Front shock absorber spring adjuster | 2/5 position | — |
| Rear shock absorber spring adjuster | 2/5 position | — |

Fuel + Oil

| Item | Specification | Note |
|---------------------|--|------------------------------|
| Fuel type | Use only unleaded gasoline of at least 87 pump octane (R/2 + M/2) or 91 octane or higher rated by the Research Method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible. | |
| Fuel tank capacity | 17.5 L (4.6/3.8 US/Imp gal) | |
| Engine oil type | SAE 10 W-40, API SF/SG or SH/SJ with JASO MA | |
| Engine oil capacity | Change | 2 500 ml (2.6/2.2 US/Imp qt) |
| | Filter change | 2 700 ml (2.9/2.4 US/Imp qt) |
| | Overhaul | 3 200 ml (3.4/2.8 US/Imp qt) |

Tightening Torque List

Engine

| Item | N·m | kgf-m | lbf-ft |
|--|---------|-------|--------|
| Spark plug | 11 | 1.1 | 8.0 |
| Air cleaner box mounting bolt | 4.5 | 0.45 | 3.0 |
| Cylinder head cover bolt | 10 | 1.0 | 7.0 |
| Rocket arm shaft bolt | 28 | 2.8 | 20.0 |
| Intake pipe bolt | 9 | 0.9 | 6.5 |
| Cylinder head bolt (M8) | 25 | 2.5 | 18.0 |
| Cylinder head bolt (M10) | Initial | 25 | 18.0 |
| | Final | 37 | 27.0 |
| Cylinder head base nut | 25 | 2.5 | 18.0 |
| Camshaft sprocket bolt | 15 | 1.5 | 11.0 |
| Cam chain tensioner bolt | 13 | 1.3 | 9.5 |
| Cam chain tension adjuster mounting bolt | 10 | 1.0 | 7.0 |
| Cam chain tension adjuster cap bolt | 8 | 0.8 | 6.0 |
| Crankcase bolt (M6) | 10 | 1.0 | 7.0 |
| Crankcase bolt (M8) | 26 | 2.6 | 19.0 |
| TDC plug | 23 | 2.3 | 16.5 |
| Valve clearance adjuster lock-nut | 10 | 1.0 | 7.0 |
| Valve clearance inspection cap bolt | 10 | 1.0 | 7.0 |
| Clutch shoe nut | 150 | 15.0 | 108.5 |
| Movable drive face bolt | 110 | 11.0 | 79.5 |
| Movable driven face bolt | 110 | 11.0 | 79.5 |
| Movable driven face ring nut | 110 | 11.0 | 79.5 |
| Clutch outer cover bolt | 8 | 0.8 | 6.0 |
| Clutch inner cover bolt | 9 | 0.9 | 6.5 |
| Generator rotor nut | 140 | 14.0 | 101.5 |
| Generator stator set bolt | 11 | 1.1 | 8.0 |
| Speed sensor bolt | 10 | 1.0 | 7.0 |
| Starter clutch bolt | 26 | 2.6 | 19.0 |
| Left crankshaft spacer nut | 38 | 3.8 | 27.5 |
| Exhaust pipe nut | 25 | 2.5 | 18.0 |
| Muffler connecting bolt | 25 | 2.5 | 18.0 |
| Muffler mounting bolt | 25 | 2.5 | 18.0 |
| Muffler end cover nut | 11 | 1.1 | 8.0 |
| Muffler cover bolt | 10 | 1.0 | 7.0 |
| Engine oil drain plug | 21 | 2.1 | 15.0 |
| Engine coolant drain plug | 12.5 | 1.25 | 9.0 |
| Drive bevel gear nut | 100 | 10.0 | 72.5 |
| Engine mounting nut | 60 | 6.0 | 43.5 |
| Engine mounting damper stopper bolt | 23 | 2.3 | 16.5 |
| Rear output shaft nut | 100 | 10.0 | 72.5 |
| Crank balancer drive gear nut | 150 | 15.0 | 108.5 |
| Crank balancer driven gear bolt | 50 | 5.0 | 36.0 |
| Starter motor mounting bolt | 10 | 1.0 | 7.0 |
| Starter motor lead wire connecting nut | 6 | 0.6 | 4.5 |
| Starter motor housing bolt | 3.5 | 0.35 | 2.0 |
| Oil gallery plug (M8) | 18 | 1.8 | 13.0 |
| Oil gallery plug (M12) | 21 | 2.1 | 15.0 |
| PAIR reed valve cover bolt (If equipped) | 10 | 1.0 | 7.0 |

Drive Train

| Item | N·m | kgf-m | lbf-ft |
|---|-----|-------|--------|
| 2WD/4WD/diff-lock actuator mounting bolt | 10 | 1.0 | 7.0 |
| Front drive (differential) gear case cover bolt | 12 | 1.2 | 8.5 |
| Front drive (differential) gear case mounting nut | 50 | 5.0 | 36.0 |
| Front differential gear oil level plug | 8 | 0.8 | 6.0 |
| Front differential gear oil filler plug | 35 | 3.5 | 25.5 |
| Front differential gear oil drain plug | 32 | 3.2 | 23.0 |
| Front propeller shaft boot clamp screw | 1.3 | 0.13 | 0.94 |
| Final drive gear nut | 100 | 10.0 | 72.5 |
| Rear drive bearing stopper | 100 | 10.0 | 72.5 |
| Final gear case bolt (M8) | 26 | 2.6 | 19.0 |
| Final gear case bolt (M10) | 55 | 5.5 | 40.0 |
| Final gear case mounting nut | 75 | 7.5 | 54.0 |
| Final gear case mounting bolt | 75 | 7.5 | 54.0 |
| Rear propeller shaft boot clamp screw | 2 | 0.2 | 1.5 |
| Final gear oil drain plug | 23 | 2.3 | 16.5 |
| Rear propeller shaft coupling nut | 100 | 10.0 | 72.5 |
| Rear output shaft nut | 100 | 10.0 | 72.5 |
| Rear output shaft driven gear nut | 100 | 10.0 | 72.5 |

FI System, Intake System and Fuel System

| Item | N·m | kgf-m | lbf-ft |
|--|-----|-------|--------|
| CKP sensor mounting bolt | 6 | 0.6 | 4.5 |
| Generator lead wire clamp bolt | 6 | 0.6 | 4.5 |
| Fuel delivery pipe mounting screw | 3.5 | 0.35 | 2.5 |
| ECT sensor | 18 | 1.8 | 13.0 |
| ISC valve mounting screw | 2 | 0.2 | 1.5 |
| Air cleaner outlet tube clamp screw | 1.5 | 0.15 | 1.0 |
| Intake pipe clamp screw | 1.5 | 0.15 | 1.0 |
| PAIR control solenoid valve bracket bolt (If equipped) | 10 | 1.0 | 7.0 |

Cooling System

| Item | N·m | kgf-m | lbf-ft |
|--------------------------------------|-----|-------|--------|
| Water pump cover screw | 5.5 | 0.55 | 4.0 |
| Water pump mounting bolt | 10 | 1.0 | 7.0 |
| Cooling fan thermo-switch (P-17, 24) | 18 | 1.8 | 13.0 |
| Thermostat case bolt | 23 | 2.3 | 16.5 |
| Cooling fan mounting bolt | 8.4 | 0.84 | 6.0 |
| Water hose clamp screw | 1.5 | 0.15 | 1.0 |
| Water bypass union | 12 | 1.2 | 8.5 |
| Water pump drain bolt | 13 | 1.3 | 9.5 |

Chassis

| Item | N-m | kgf-m | lbf-ft |
|--|-----|-------|--------|
| Handlebar upper clamp bolt | 26 | 2.6 | 19.0 |
| Handlebar holder nut | 60 | 6.0 | 43.5 |
| Rear brake lever holder clamp bolt | 10 | 1.0 | 7.5 |
| Throttle lever case clamp bolt | 4 | 0.4 | 3.0 |
| Throttle lever case screw | 2 | 0.2 | 1.5 |
| EPS body assembly mounting bolt (LT-A500XP/PZ) | 26 | 2.6 | 19.0 |
| EPS body assembly mounting nut (LT-A500XP/PZ) | 28 | 2.8 | 20.0 |
| Steering shaft upper nut (LT-A500XP/PZ) | 120 | 12.0 | 87.0 |
| Steering shaft bolt (LT-A500XP/PZ) | 26 | 2.6 | 19.0 |
| Steering shaft holder bolt (LT-A500X/Z) | 23 | 2.3 | 16.5 |
| Steering shaft lower nut | 162 | 16.2 | 117.0 |
| EPS control unit mounting nut (LT-A500XP/PZ) | 12 | 1.2 | 8.5 |
| Front suspension arm pivot nut (Upper) | 60 | 6.0 | 43.5 |
| Front suspension arm pivot nut (Lower) | 65 | 6.5 | 47.0 |
| Steering knuckle end nut (Upper and Lower) | 29 | 2.9 | 21.0 |
| Tie-rod end nut | 29 | 2.9 | 21.0 |
| Tie-rod lock-nut (LT-A500XP/PZ) | 29 | 2.9 | 21.0 |
| Tie-rod lock-nut (LT-A500X/Z) | 45 | 4.5 | 32.5 |
| Front shock absorber mounting bolt (Upper) | 55 | 5.5 | 40.0 |
| Front shock absorber mounting nut (Lower) | 60 | 6.0 | 43.5 |
| Front hub nut | 110 | 11.0 | 79.5 |
| Rear hub nut | 121 | 12.1 | 87.5 |
| Wheel set nut (Front and Rear) | 60 | 6.0 | 43.5 |
| Front brake hose union bolt | 23 | 2.3 | 16.5 |
| Front brake air bleeder valve | 6.0 | 0.6 | 4.3 |
| Front brake caliper mounting bolt | 26 | 2.6 | 19.0 |
| Caliper holder pin | 18 | 1.8 | 13.0 |
| Caliper holder slide pin | 23 | 2.3 | 16.5 |
| Front brake pad mounting pin | 18 | 1.8 | 13.0 |
| Brake pipe flare nut | 16 | 1.6 | 11.5 |
| Front brake disc bolt | 23 | 2.3 | 16.5 |
| Brake master cylinder clamp bolt | 10 | 1.0 | 7.0 |
| Footrest mounting bolt (M8) | 26 | 2.6 | 19.0 |
| Footrest mounting bolt (M10) | 55 | 5.5 | 40.0 |
| Rear stabilizer joint nut | 60 | 6.0 | 43.5 |
| Rear shock absorber mounting nut (Upper and Lower) | 60 | 6.0 | 43.5 |
| Rear suspension arm pivot nut (Upper and Lower) | 60 | 6.0 | 43.5 |
| Rear knuckle end nut (Upper and Lower) | 60 | 6.0 | 43.5 |
| Rear brake cam lever nut | 11 | 1.1 | 8.0 |
| Rear brake case bolt | 26 | 2.6 | 19.0 |
| Brake lever pivot bolt (Front and Rear) | 6 | 0.6 | 4.5 |
| Brake lever pivot bolt lock-nut | 6 | 0.6 | 4.5 |
| Rear brake pedal pivot bolt | 11 | 1.1 | 8.0 |
| Trailer towing bolt | 60 | 6.0 | 43.5 |
| Gearshift gate cover mounting bolt | 10 | 1.0 | 7.0 |