Features & Specifications 2017 RM-Z250



New Features

- New, competition inspired body panel colors, graphics and seat color.
- Front upper and lower fork clamps are anodized black, complementing the gold fork leg finish.
- New, black anodized Excel aluminum rims are made specifically to withstand rugged racing environments, including Supercross, Motocross and off-road conditions.

Engine Features

- 249cc 4-stroke liquid-cooled DOHC 4-valve fuel-injected engine delivers remarkably smooth and controlled idle-to-redline performance
- The RM-Z250's engine has heightened mid-range power and torque while maximum power is maintained. Power delivery is smoother and linear for easier control thanks to the following:
 - o Specially designed piston, piston pin & rings improve durability and ring-sealing.
 - o Crankshaft and magneto mass are balanced to reduce engine braking losses.
 - o EFI throttle valve angle also reduces engine braking losses.
 - o Camshafts and intake valves design widens engine performance.
 - o Effective decompression system improves starting.
 - o Kick drive gear, breather gear & kick idle gear ratios also aid starting.
 - o Unlike some competitor's motorcycles, a hot-start lever system is not required.
 - Slippery cam chain tensioner and precise adjuster reduce valve train friction.
 - o Crankcase passages are designed for increased lubrication.
 - o Clutch cover with oil level window eases maintenance checks.
 - o Long head pipe enhances low-to-mid range power.
 - o Lightweight muffler meets AMA sound standards.
- The compact aluminum cylinder is finished with Suzuki Composite Electrochemical Material (SCEM) coating for durability, light weight and efficient heat transfer.
- · Designed for motocross-use, the lightweight, battery-less, electronic fuel injection system with progressive throttle linkage delivers efficient power. A 12-hole fuel injector sprays a fine fuel/air mist for efficient combustion.
- · For quick fuel adjustments to suit riding conditions, two couplers are provided. One is for rich and another for lean fuel setting compared to stock setting. Riders can change fuel settings in seconds by simply connecting either coupler to the wire harness.
- · Cooling performance is efficient with balanced flow between the left and right radiators, and a high CHIVAUIS capacity coolant pump.

Holeshot Assist Control Features

• Suzuki Holeshot Assist Control (S-HAC) is a selectable launch mode system derived straight from factory race bike. S-HAC helps the rider's takeoff from the starting gate for an early lead. There are three modes riders can choose for the best option per their skill level and starting conditions.

A-Mode: For hard surfaces or slippery conditions at the starting gate. In this mode, S-HAC alters ignition timing at the moment of launch and the ride over the gate to reduce wheel slip to deliver a smooth take off. It also advances ignition timing during this sequence for stronger acceleration.

B-Mode: When conditions at the starting gate have better traction, and a more aggressive launch is desired, use B-Mode.

Base Mode: Standard power launch controlled solely by rider, no action required on the S-HAC switch.

There are three stages to A-Mode and B-Mode of the S-HAC system. This helps riders at the moment of launch, when crossing the gate, and through acceleration to the full-speed.

Transmission Features

Well-designed 5-speed transmission enables precise gear shift operation. The gear selection feel
and accuracy is the result of a refined shift cam and shift lever. Specialized machining processes
ensure the precision of the matching gears.

Chassis Features

- Compared to the prior generation RM-Z250, the main frame is reduced in weight 2.5% while chassis rigidity has been optimized for improved cornering performance.
- Advanced design KYB PSF2 Pneumatic Spring front fork uses air chambers in place of steel springs for light weight, easy adjustment, improved damper performance and smooth action from low friction. Riders can adjust both air forks with one balanced air pressure setting from a hand-pump. Compression damping is adjustable while rebound damping force is both high- and low-speed adjustable.
- Innovative KYB rear shock absorber is connected link style to the swingarm via re-shaped cushion rods and spacers. The nitrogen-charged, piggyback style shock features a new top-mounted integral adjuster system for easy adjustment of the high- and low-speed rebound, and high- and low-speed compression damping force adjusters. Spring preload can be precisely tuned via a threaded collar on the main shock body.
- Light weight front brake caliper has low mass while still providing outstanding stopping force.
- Dunlop MX52 series tires are used featuring CTCS (Carcass Tension Control System) technology for superb rigidity and high level of grip.
- Slim chassis design creates a trim riding position, allowing the rider to actively take control of the machine.
- Aluminum fuel tank provides sound foundation and cooling for the internal EFI fuel pump. Fuel capacity is 6.5L (1.7 US gal.).
- Race-inspired waved disc rotors are mounted to black-anodized EXCEL aluminum rims with stainless steel spokes.
- The standard Renthal Fatbar is stronger and reduces vibration more than conventional handlebars.
- Champion Yellow bodywork (including new yellow rear fender) with race team-inspired graphics package.
- New color gripper seat, with cross-shaped patterns on the yellow top surface, aids rider control.

Additional Features

- A variety of Genuine Suzuki Accessories for RM-Z250 owners are available including a large selection of Suzuki logo apparel.
- Learn more about Suzuki's industry leading contingency and Amateur Support programs at www.SuzukiCycles.com/Racing.
- · For more details, please visit www.suzukicycles.com.



Specifications RM-Z250L7 E-03: USA, E-33: California

| DIMENSIONS AND CURB MASS | |
|--------------------------|---|
| Overall length | 2170 mm (85.4 in) |
| Overall width | 830 mm (32.7 in) |
| Overall height | 1270 mm (50.0 in) |
| Wheelbase | |
| Ground clearance | (, |
| Seat height | |
| Curb mass | . 106 kg (234 lbs) |
| ENGINE | |
| ENGINE Type | Four strake liquid cooled DOHC |
| Number of cylinders | · · · · · · · · · · · · · · · · · · · |
| Bore | |
| Stroke | |
| Displacement | |
| Compression ratio | |
| Fuel system | |
| Air cleaner | |
| Starter system | |
| Lubrication system | |
| Idle speed | |
| ' | |
| DRIVE TRAIN | |
| Clutch | |
| Transmission | |
| Gearshift pattern | |
| Primary reduction ratio | |
| Gear ratios, Low | |
| 2nd | |
| 3rd | |
| | , |
| Top | |
| Final reduction ratio | ` , |
| Drive chain | DID 520DIVIA4, 114 IIIIKS |
| CHASSIS | |
| Front suspension | Inverted telescopic, air spring, oil damped |
| Rear suspension | Link type, coil spring, oil damped |
| Front suspension stroke | |
| Rear wheel travel | |
| Caster | |
| Trail | 130 mm (5.1 in) |
| Steering angle | |
| Front brake | |
| Rear brake | |
| Front tire size | |
| Rear tire size | 100/90-19 57M, tube type |
| ELECTRICAL | |
| Ignition type | Electronic ignition (CDI) |
| Ignition type | |
| Spark plug | |
| Οραικ ριαθ | NGR ORIGID-10 |
| CAPACITIES | |
| Fuel tank | 6.5 L (1.7/1.4 US/Imp gal) |
| Engine oil, oil change | 850 ml (0.9/0.7 US/Imp qt) |



900 ml (1.0/0.8 US/Imp qt)

with filter change

Service Data RM-Z250L7

E-03: USA, E-33: California

VALVE + GUIDE

| ITEM | | STANDARD | LIMIT |
|-------------------------------------|-----------|--|-----------------|
| Valve diam. | IN. | 31 (1.22) | _ |
| | EX. | 25 (0.98) | _ |
| Tappet clearance (when cold) | IN. | 0.09 - 0.16 (0.004 - 0.006) | _ |
| | EX. | 0.17 - 0.24 (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 stem deflection | IN. & EX. | _ | 0.25 (0.010) |
| Valve guide I.D. | IN. & EX. | 4.500 – 4.512 (0.1772 – 0.1176) | _ |
| Valve stem O.D. | IN. | 4.475 – 4.490 (0.1762 – 0.1768) | _ |
| | EX. | 4.455 - 4.470 (0.1754 - 0.1760) | _ |
| Valve stem runout | IN. & EX. | _ | 0.05 (0.002) |
| 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. | _ | 37.1 (1.46) |
| | EX. | _ | 37.5 (1.48) |
| Valve spring tension | IN. | 142 – 157 N (14.5 – 16.0 kgf, 31.9 – 35.3 lbs) at length 33.55 mm (1.321 in) | _ |
| | EX. | 137 – 157 N (14.0 – 16.0 kgf, 30.8 – 35.3 lbs) at length 33.55 mm (1.321 in) | |

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

| ITEM | | STANDARD | LIMIT |
|--------------------------------|-----------|--------------------------------------|-------------------|
| Cam height | IN. | 35.18 - 35.23 (1.385 - 1.387) | 34.88 (1.373) |
| | EX. | 34.08 - 34.13 (1.342 - 1.344) | 33.78 (1.330) |
| Camshaft journal oil clearance | IN. & EX. | 0.023 - 0.066 (0.0013 - 0.0026) | 0.150 (0.0059) |
| Camshaft journal holder I.D. | IN. & EX. | 22.003 – 22.025 (0.8663 – 0.8671) | _ |
| Camshaft journal O.D. | IN. & EX. | 21.959 – 21.980 (0.8645 – 0.8654) | _ |
| Camshaft runout | _ | | 0.10 (0.004) |
| Cam chain pin | 13th pin | | _ |
| Cylinder head distortion | | _ | 0.05 (0.002) |

CYLINDER + PISTON + PISTON RING

| ITEM | | STANDARD | LIMIT |
|---|--------------------------------------|---|--------------------|
| Compression pressure (Automatic decomp. actuated) | (4 | 400 – 800 kPa (4.0 – 8.0 kgf/cm², 57 – 114 psi) | |
| Piston to cylinder clearance | | 0.030 - 0.040 (0.0012 - 0.0016) | |
| Cylinder bore | | 77.000 – 77.015 (3.0315 – 3.0321) | Nicks or scratches |
| Piston diam. | Measure | 76.965 – 76.980 (3.0301 – 3.0307) at 8.0 mm (0.31 in) from the skirt end. | 76.880 (3.0268) |
| Cylinder distortion | | _ | 0.05 (0.002) |
| Piston ring free end gap | 1st | Approx. 5.9 (0.23) | 4.7 (0.19) |
| Piston ring end gap | 1st | 0.08 - 0.20 (0.003 - 0.008) | 0.50 (0.020) |
| Piston ring to groove clearance | 1st | _ | 0.180 (0.0071) |
| Piston ring groove width | 1st | 0.83 - 0.85 (0.0327 - 0.0335) | _ |
| | | 1.30 – 1.32 (0.051 – 0.052) | _ |
| | Oil | 1.51 - 1.53 (0.0594 - 0.0602) | _ |
| Piston ring thickness | 1st | 0.76 - 0.81 (0.030 - 0.032) | _ |
| | ISI | 1.08 - 1.10 (0.0425 - 0.0433) | _ |
| Piston pin bore | 16.002 – 16.008 (0.6300 – 0.6302) | | 16.030 (0.6311) |
| Piston pin O.D. | 15.993 – 16.000 (0.6296 – 0.6299) | | 15.980 (0.6291) |

CONROD + CRANKSHAFT

| CONROD + CRANKSHAFT | Unit: mm (in) | |
|-------------------------------|--------------------------------------|--------------------|
| ITEM | STANDARD | LIMIT |
| Conrod small end I.D. | 16.008 - 16.027 (0.6302 - 0.6310) | 16.040 (0.6315) |
| Conrod deflection | _ | 3.0 (0.12) |
| Conrod big end side clearance | 0.20 - 0.65 (0.008 - 0.026) | 1.0 (0.04) |
| Conrod big end width | 17.75 – 17.80 (0.699 – 0.701) | _ |
| Crank web to web width | 55.9 – 56.1 (2.20 – 2.21) | _ |
| Crankshaft runout | - | 0.08 (0.003) |

OIL PUMP

| ITEM | STANDARD | LIMIT |
|---------------------------------|--|-------|
| Oil pressure (at 50 °C, 122 °F) | 90 kPa (0.9 kgf/cm², 12.8 psi) at 6 000 r/min | _ |

CLUTCH Unit: mm (in)

| ITEM | STANDARD | LIMIT |
|---------------------------|----------------------------------|------------------|
| Clutch cable play | 2 – 3 (0.08 – 0.16) | _ |
| Drive plate thickness | 2.72 - 2.88 (0.107 - 0.113) | 2.42 (0.095) |
| Drive plate claw width | 13.85 - 13.96 (0.545 - 0.550) | 13.05 (0.514) |
| Driven plate distortion | _ | 0.10 (0.004) |
| Clutch spring free length | 50.74 (1.998) | 48.2 (1.90) |

RADIATOR + ENGINE COOLANT

| ITEM | STANDARD/SPECIFICATION | LIMIT |
|-------------------------------------|---|-------|
| Radiator cap valve opening pressure | 95 – 125 kPa (0.95 – 1.25 kgf/cm², 14 – 18 psi) | _ |
| Engine coolant type | Use an anti-freeze/coolant compatible with aluminum radiator. | _ |
| Engine coolant capacity | 950 ml (1.0/0.8 US/Imp qt) | _ |



TRANSMISSION + DRIVE CHAIN

Unit: mm (in) Except ratio

| ITEM | | | STANDARD | LIMIT |
|---------------------------|--------|---|---------------|------------------|
| Primary reduction ratio |) | 3.315 (63/19) | | _ |
| Final reduction ratio | | | 3.769 (49/13) | _ |
| Gear ratios | Low | | 2.153 (28/13) | _ |
| | 2nd | | 1.764 (30/17) | _ |
| | 3rd | | 1.470 (25/17) | _ |
| | 4th | | 1.238 (26/21) | _ |
| | Тор | | 1.090 (24/22) | _ |
| Shift fork to groove clea | arance | No.1, 2 & 3 0.10 - 0.30 (0.004 - 0.012) | | 0.50 (0.020) |
| Shift fork groove width | | No.1, 2 & 3 5.00 – 5.10 (0.197 – 0.201) | | _ |
| Shift fork thickness | | No.1, 2 & 3 4.80 - 4.90 (0.189 - 0.193) | | _ |
| Drive chain | | Туре | DID 520 DMA4 | _ |
| | | Links | 114 links | _ |
| | | 20-pitch length | | 323.8 (12.75) |
| Drive chain slack | | 35 – 45 (1.4 – 1.8) | | _ |
| Gearshift lever height | | 10-15 (0.4 - 0.6) (Above the top face of the foot rest) | | _ |

INJECTOR + FUEL PUMP + FUEL PRESSURE REGULATOR

| ITEM | SPECIFICATION | NOTE |
|--|---|------|
| Injector resistance | 10 – 11 Ω at 24 °C (75 °F) | |
| Fuel pump discharge amount | 89 ml (3.0/3.1 US/Imp oz) or more /10 sec. | |
| Fuel pressure regulator operating set pressure | Approx. 294 kPa (2.94 kgf/cm², 41.81 psi) | |

FI SENSORS

| ITEM | STANDARD/SPECIFICATION | | NOTE |
|---------------------------|----------------------------------|-------------------|------|
| CKP sensor resistance | | $80 - 120 \Omega$ | |
| CKP sensor peak voltage | | 2.8 V or more | |
| IAP sensor input voltage | | 4.5 – 5.5 V | |
| IAP sensor output voltage | 0.30 - 4.03 V at idle speed | | |
| TP sensor input voltage | 4.5 – 5.5 V | | |
| TP sensor output voltage | Closed 0.60 – 0.64 V | | |
| | Opened 3.60 – 4.00 V | | |
| ECT sensor input voltage | 4.5 – 5.5 V | | |
| ECT sensor resistance | Approx. 2.58 kΩ at 20 °C (68 °F) | | |
| IAT sensor input voltage | | 4.5 – 5.5 V | |



| ITEM | ST | STANDARD/SPECIFICATION | | |
|-----------------------|---------|----------------------------------|---------------------|--|
| IAT sensor resistance | App | Approx. 2.58 kΩ at 20 °C (68 °F) | | |
| TO sensor resistance | | 16.5 – 22.3 kΩ | | |
| TO sensor voltage | Normal | 0.4 – 1.4 V | | |
| | Leaning | 3.7 – 4.4 V | When leaning 65° | |
| GP switch voltage | | 0.88 V or more | | |
| Injector voltage | | Battery voltage | | |

THROTTLE BODY

| ITEM | SPECIFICATION |
|---------------------|------------------------------|
| Bore size | 44 mm (1.73 in) |
| I.D. No. | 49H2 |
| Idle r/min | 2 200 ± 50 r/min |
| Idle screw | 5 – 6 turns counterclockwise |
| Throttle cable play | 2 – 4 mm (0.08 – 0.16 in) |

ELECTRICAL Unit: mm (in)

| ITEM | S | NOTE | | |
|---|-----------------------------------|-----------------------------|----------------|--|
| Ignition timing | | 6° B.T.D.C. at 2 200 r/min. | | |
| Spark plug | Туре | NGK: CR8EIB10 | | |
| | Gap | 0.9 – 1.0 (0.035 – 0.039) | | |
| Spark performance | | Over 8 (0.3) at 1 atm. | | |
| CKP sensor resistance | | 80 – 120 Ω | R-G | |
| Charge coil resistance | | 1.2 – 2.5 Ω | Y – Y | |
| CKP sensor peak voltage | | 2.8 V or more | ⊕ R – ⊝ G | |
| Ignition coil resistance | Primary | 0.17 – 0.70 Ω | W/BI – B/W | |
| | Secondary | 9 – 14 kΩ | Plug cap – B/W | |
| Ignition coil primary peak voltage | | 170 V or more | | |
| Magneto no-load voltage (When engine is cold) | 100 V (AC) or more at 5 000 r/min | | | |
| Regulated voltage | | | | |
| Engine stop switch resistance | | B/Y – B/W | | |
| S-HAC switch resistance | | Under 1 Ω | R/Y – B/W | |



BRAKE + WHEEL

| ITEM | | STANDARD | LIMIT |
|------------------------------|-----------------|---|-----------------|
| Brake lever adjuster length | | 11 – 15 (0.4 – 0.6) | |
| Rear brake pedal height | (Beld | 0 - 10 (0 - 0.4) by the top face of the foot rest) | _ |
| Brake disc thickness | Front | 2.8 - 3.2 (0.11 - 0.13) | 2.5 (0.10) |
| | Rear | 3.85 - 4.15 (0.152 - 0.163) | 3.5 (0.14) |
| Brake disc distortion | Front & Rear | _ | 0.3 (0.012) |
| Master cylinder bore | Front | 11.000 - 11.043 (0.4331 - 0.4348) | _ |
| | Rear | 11.000 - 11.043 (0.4331 - 0.4348) | _ |
| Master cylinder piston diam. | Front | 10.957 — 10.984 (0.4314 — 0.4324) | _ |
| | Rear | 10.957 — 10.984 (0.4314 — 0.4324) | _ |
| Brake caliper cylinder bore | Front | 27.000 - 27.050 (1.0630 - 1.0650) | _ |
| | Rear | 25.400 - 25.450 (1.0000 - 1.0020) | _ |
| Brake caliper piston diam. | Front | 26.900 - 26.950 (1.0591 - 1.0610) | _ |
| | Rear | 25.335 – 25.368 (0.9974 – 0.9987) | _ |
| Brake fluid type | | DOT 4 | _ |
| Wheel rim runout | Axial | _ | 2.0 (0.08) |
| | Radial | _ | 2.0 (0.08) |
| Wheel rim size | Front | 1.60 × 21 | |
| | Rear | 1.85 × 19 | _ |
| Wheel axle runout | Front | _ | 0.25 (0.010) |
| | Rear | _ | 0.25 (0.010) |

TIRE

| ITEM | | STD/SPEC. | LIMIT |
|------------------------------------|-----------------|--|---------------------|
| Cold inflation tire pressure | Front & Rear | 70 – 110 kPa (0.7 – 1.1 kgf/cm², 10 – 16 psi) | _ |
| Tire size | Front | 80/100-21 51M | _ |
| | Rear | 100/90-19 57M | _ |
| Tire type | Front | MX52F | _ |
| | Rear | MX52 | _ |
| Tire tread depth (Recommend depth) | Front & Rear | _ | 4.0 mm (0.16 in) |

SUSPENSION

| ITEM | | STANDARD | LIMIT | NOTE |
|---|--------------------------|--|---------------|---|
| Front fork stroke | | 310 (12.2) | _ | |
| Front fork inner tube O.D. | | 48 (1.9) | _ | |
| Front fork oil level (Outer tube fully compre | essed) | 115 (4.5) | _ | |
| Front fork damping force adjuster | Rebound (High speed) | MAX – 16 clicks turn counterclockwise | _ | |
| | Rebound (Low speed) | MAX – 15 clicks turn counterclockwise | _ | |
| | Compression | MAX – 7 clicks turn counterclockwise | _ | |
| Front fork air pressure | | 240 kPa (2.4 kgf/cm², 34.1 psi) | - | |
| Rear shock absorber ga | as pressure | 1 000 kPa (10.0 kgf/cm², 142.2 psi) | _ | |
| Rear shock absorber splength | oring set | 6.0 (0.24) | _ | 6.0 mm (0.24 in) compressed from spring free length |
| Rear shock absorber sp | oring rate | 54 N/mm (5.5 kgf/mm) | _ | |
| Rear shock absorber damping force adjuster | Rebound (High speed) | MAX – 17 clicks turn counterclockwise | _ | |
| | Rebound (Low speed) | MAX – 11 clicks turn counterclockwise | - | |
| | Compression (High speed) | MAX – 9 clicks turn counterclockwise | _ | |
| Compression (Low speed) | | MAX – 10 clicks turn counterclockwise | _ | |
| Rear wheel travel | | 310 (12.2) | _ | |
| Swingarm pivot shaft ru | nout | _ | 0.3 (0.01) | |

TIGHTENING TORQUE

ENGINE

| ITEM | | N⋅m | kgf-m | lbf-ft |
|--|-----------|-----|-------|--------|
| Cylinder head cover bolt | | 14 | 1.4 | 10.0 |
| Spark plug | | 11 | 1.1 | 8.0 |
| Spark plug cap retainer bolt | | 11 | 1.1 | 8.0 |
| Outing down to and the life | (Initial) | 25 | 2.5 | 18.0 |
| Cylinder head bolt | (Final) | 51 | 5.1 | 37.0 |
| Cylinder head base bolt | | 10 | 1.0 | 7.0 |
| Cylinder base bolt | | 10 | 1.0 | 7.0 |
| Camshaft journal holder bolt | | 10 | 1.0 | 7.0 |
| Primary drive gear nut | | 110 | 11.0 | 79.5 |
| Magneto rotor nut | | 80 | 8.0 | 58.0 |
| Clutch sleeve hub nut | | 90 | 9.0 | 65.0 |
| Clutch spring set bolt | | 10 | 1.0 | 7.0 |
| Gearshift arm stopper bolt | | 23 | 2.3 | 16.5 |
| Gearshift cam driven gear pin | | 24 | 2.4 | 17.5 |
| Gearshift cam stopper bolt | | 10 | 1.0 | 7.0 |
| Pawl lifter screw | | 8.5 | 0.85 | 6.0 |
| Kick starter guide bolt | | 10 | 1.0 | 7.0 |
| Cam chain tension adjuster mounting bolt | | 10 | 1.0 | 7.0 |
| Cam chain tension adjuster cap bolt | | 5.5 | 0.55 | 4.0 |
| Cam chain tensioner bolt | | 10 | 1.0 | 7.0 |
| Cam chain guide retainer bolt | | 10 | 1.0 | 7.0 |
| Right crankcase cover bolt | | 11 | 1.1 | 8.0 |
| Bearing retainer screw | | 8.5 | 0.85 | 6.0 |
| Reed valve guide bolt | | 4.5 | 0.45 | 3.25 |
| Engine oil drain plug | | 21 | 2.1 | 15.0 |
| Engine oil drain No.2 plug | | 12 | 1.2 | 8.5 |
| Engine oil strainer cap | | 21 | 2.1 | 15.0 |
| Oil filter cap bolt | | 11 | 1.1 | 8.0 |
| Oil gallery plug | | 10 | 1.0 | 7.0 |
| Oil pump idle gear shaft | | 23 | 2.3 | 16.5 |
| Oil pump No.1 bolt | | 5.5 | 0.55 | 4.0 |
| Oil pump No.2 bolt | | 11 | 1.1 | 8.0 |
| Oil strainer No.2 bolt | | 5.5 | 0.55 | 4.0 |
| Crankcase bolt | | 11 | 1.1 | 8.0 |
| Clutch cover bolt | | 11 | 1.1 | 8.0 |
| TDC plug | | 14 | 1.4 | 10.0 |
| Magneto cover bolt | | 11 | 1.1 | 8.0 |
| Magneto stator bolt | | 5.5 | 0.55 | 4.0 |
| Crankshaft hole plug | | 11 | 1.1 | 8.0 |
| Ignition coil mounting bolt | | 10 | 1.0 | 7.0 |
| Condenser bracket bolt | | 10 | 1.0 | 7.0 |

| ITEM | N⋅m | kgf-m | lbf-ft |
|-----------------------------------|-----|-------|--------|
| Engine mounting upper bolt | 45 | 4.5 | 32.5 |
| Engine mounting lower nut | 66 | 6.6 | 47.5 |
| Engine mounting front nut | 66 | 6.6 | 47.5 |
| Engine mounting upper bracket nut | 40 | 4.0 | 29.0 |
| Engine mounting front bracket nut | 40 | 4.0 | 29.0 |
| Engine sprocket bolt | 32 | 3.2 | 23.0 |
| Engine sprocket cover bolt | 11 | 1.1 | 8.0 |
| Kick starter lever bolt | 29 | 2.9 | 21.0 |
| Kick starter lever screw | 10 | 1.0 | 7.0 |
| Intake pipe bolt | 10 | 1.0 | 7.0 |
| Exhaust pipe nut | 23 | 2.3 | 16.5 |
| Muffler connector clamp bolt | 17 | 1.7 | 12.5 |
| Muffler mounting front bolt | 21 | 2.1 | 15.0 |
| Muffler mounting rear bolt | 23 | 2.3 | 16.5 |
| Exhaust pipe cover bolt | 11 | 1.1 | 8.0 |
| Rear muffler body mounting bolt | 10 | 1.0 | 7.0 |

FI SYSTEM AND INTAKE AIR SYSTEM

| ITEM | N⋅m | kgf-m | lbf-ft |
|-----------------------------------|-----|-------|--------|
| CKP sensor bolt | 5.5 | 0.55 | 4.0 |
| IAT sensor mounting screw | 1.3 | 0.13 | 0.95 |
| GP switch mounting bolt | 6.5 | 0.65 | 4.7 |
| Fuel delivery pipe mounting screw | 3.5 | 0.35 | 2.5 |
| Fuel pipe mounting screw | 3.5 | 0.35 | 2.5 |
| Fuel pump mounting bolt | 10 | 1.0 | 7.0 |
| TP sensor mounting screw | 3.5 | 0.35 | 2.5 |
| ECT sensor | 12 | 1.2 | 8.5 |
| TO sensor bracket bolt | 8.5 | 0.85 | 6.0 |
| Air cleaner mounting bolt | 5 | 0.5 | 3.5 |

COOLING SYSTEM

| ITEM | N⋅m | kgf-m | lbf-ft |
|---------------------------|-----|-------|--------|
| Water pump impeller | 8 | 0.8 | 6.0 |
| Water pump case bolt | 11 | 1.1 | 8.0 |
| Water pump joint bolt | 10 | 1.0 | 7.0 |
| Engine coolant drain bolt | 11 | 1.1 | 8.0 |
| Water hose clamp screw | 1.5 | 0.15 | 1.0 |



CHASSIS

| ITEM | N⋅m | kgf-m | lbf-ft |
|--|---------------------|--|--------------------------|
| Handlebar clamp bolt | 25 | 2.5 | 18.0 |
| Handlebar holder set nut | 44 | 4.4 | 32.0 |
| Front fork upper clamp bolt (right and left) | 23 | 2.3 | 16.5 |
| Front fork lower clamp bolt (right and left) | 23 | 2.3 | 16.5 |
| Steering stem head nut | 120 | 12.0 | 87.0 |
| Steering stem nut | 45 N·n then turn | n (4.5 kgf-m, 32.5 counterclockwise | 5 lbf-ft) e 1/4 – 1/2 |
| Fork cap | 45 | 4.5 | 32.5 |
| Lock-nut/fork cap | 29 | 2.9 | 21.0 |
| Center bolt | 75 | 7.5 | 54.0 |
| Air valve (front fork) | 5.5 | 0.55 | 4.0 |
| Fork protector bolt | 4.9 | 0.49 | 3.5 |
| Front brake master cylinder holder bolt | 10 | 1.0 | 7.0 |
| Rear brake master cylinder mounting bolt | 10 | 1.0 | 7.0 |
| Rear brake master cylinder rod lock-nut | 6 | 0.6 | 4.5 |
| Brake lever pivot bolt | 6 | 0.6 | 4.5 |
| Brake lever pivot bolt lock-nut | 6 | 0.6 | 4.5 |
| Brake pedal pivot bolt | 29 | 2.9 | 21.0 |
| Brake hose union bolt (front and rear) | 23 | 2.3 | 16.5 |
| Front brake hose guide bolt | 3 | 0.3 | 2.0 |
| Front brake caliper mounting bolt | 26 | 2.6 | 19.0 |
| Brake pad mounting pin (front and rear) | 18 | 1.8 | 13.0 |
| Front brake caliper axle bolt (caliper) | 25 | 2.5 | 18.0 |
| Front brake caliper axle bolt (bracket) | 28 | 2.8 | 20.0 |
| Rear brake caliper axle bolt (caliper) | 43 | 4.3 | 31.0 |
| Rear brake caliper axle bolt (bracket) | 13 | 1.3 | 9.5 |
| Brake air bleeder valve (front and rear) | 6 | 0.6 | 4.5 |
| Disc plate bolt (front) | 11 | 1.1 | 8.0 |
| Disc plate bolt (rear) | 26 | 2.6 | 19.0 |
| Front axle nut | 35 | 3.5 | 25.5 |
| Front axle holder bolt | 21 | 2.1 | 15.0 |
| Rear axle nut | 100 | 10.0 | 72.5 |
| Rear sprocket nut | 30 | 3.0 | 21.5 |
| Drive chain roller bolt/nut | 23 | 2.3 | 16.5 |
| Spoke nipple | 6 | 0.6 | 4.5 |
| Front wheel rim lock | 14 | 1.4 | 10.0 |
| Rear wheel rim lock | 17 | 1.7 | 12.5 |
| Swingarm pivot nut (engine mounting) | 70 | 7.0 | 50.5 |
| Swingarm rear axle plate screw | 3 | 0.3 | 2.0 |
| Rear shock absorber mounting nut (upper and lower) | 50 | 5.0 | 36.0 |
| Adjuster assembly | 23 | 2.3 | 16.5 |
| Cushion lever nut | 80 | 8.0 | 58.0 |

| ITEM | N⋅m | kgf-m | lbf-ft |
|---|-----|-------|--------|
| Cushion rod nut (front and rear) | 80 | 8.0 | 58.0 |
| Spring adjuster lock-nut | 30 | 3.0 | 21.5 |
| Seat rail bolt and nut (upper and lower) | 23 | 2.3 | 16.5 |
| Footrest bolt | 35 | 3.5 | 25.5 |
| Cable adjuster lock-nut (throttle and clutch) | 4.5 | 0.45 | 3.25 |
| Clutch cable bracket bolt | 10 | 1.0 | 7.0 |
| Throttle case screw | 3.8 | 0.38 | 2.75 |
| Clutch lever holder bolt | 3 | 0.3 | 2.0 |
| Clutch lever pivot bolt | 4 | 0.4 | 3.0 |
| Clutch lever pivot bolt lock-nut | 4 | 0.4 | 3.0 |
| Radiator cover upper bolt | 10 | 1.0 | 7.0 |
| Radiator cover bolt | 10 | 1.0 | 7.0 |

FUEL + OIL

| ITEM | | SPECIFICATION | NOTE | |
|----------------------------------|--|---|------|--|
| Fuel type | Use only ur | Use only unleaded gasoline of at least 90 pump | | |
| | octane (R/2 | 2 + M/2 method). | | |
| Fuel tank capacity | | 6.5 L (1.7/1.4 US/Imp gal) | | |
| Engine oil type | SAE | 10W-40, API SG/SH/SJ/SL with JASO MA/MA1/MA2 | | |
| Engine oil capacity | Change | 850 ml (0.9/0.7 US/Imp qt) | | |
| | Filter change | 900 ml (1.0/0.8 US/Imp qt) | | |
| | Overhaul | 1 000 ml (1.1/0.9 US/Imp qt) | | |
| Air cleaner element oil type | MOTUL AIR FILTER OIL or equivalent | | | |
| Front fork oil type | KYB SUSPENSION OIL KHL15-11 or equivalent | | | |
| Front fork oil capacity | Each leg | 632 ml (21.4/22.3 US/Imp oz) | | |
| Rear shock absorber oil type | REAR SUSPENSION OIL KHV10-K2C or equivalent | | | |
| Rear shock absorber oil capacity | | 422 ml (14.3/14.9 US/Imp oz) | | |