# Features & Specifications 2018 RM-Z250



**RM-Z250L8** 

YU1: Champion Yellow No.2

#### New Features

• New, competition inspired body panel colors, graphics and seat color match the 2018 RM-Z450.

#### **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.
  - o 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 guick 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 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.
- Front upper and lower fork clamps are anodized black, complementing the gold fork leg finish.
- 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 with MX-GP race team-inspired graphics package.
- New color gripper seat, with cross-shaped patterns on the blue 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, plus the RM ARMY and Amateur Support programs at <u>www.SuzukiCycles.com/Racing</u>.
- For more details, please visit <u>www.suzukicycles.com</u>.



### **Specifications RM-Z250L8** 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	
Wheelbase	1475 mm (58.1 in)
Ground clearance	
Seat height	955 mm (37.6 in)
Curb mass	. 106 kg (234 lbs)

#### ENGINE

ENGINE	
Туре	Four-stroke, liquid-cooled, DOHC
Number of cylinders	
Bore	
Stroke	
Displacement	
Compression ratio	
Fuel system	
Air cleaner	
Starter system	5
Lubrication system	
Idle speed	

#### DRIVE TRAIN

#### CHASSIS

Front suspension	
Rear suspension	Link type, coil spring, oil damped
Front suspension stroke	310mm (12.2 in)
Rear wheel travel	310mm (12.2 in)
Caster	29°20'
Trail	130 mm (5.1 in)
Steering angle	45° (right & left)
Front brake	
Rear brake	Disc brake
Front tire size	80/100-21 51M, tube type
Rear tire size	100/90-19 57M, tube type
Rear brake Front tire size	Disc brake 80/100-21 51M, tube type

#### ELECTRICAL

Ignition type	Electronic ignition (CDI)
Ignition timing	6° B.T.D.C. at 2200 r/min
Špark plug	

#### 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)
with filter change	
overhaul	
Coolant	950 ml (1.0/0.8 US/Imp qt)



#### Service Data RM-Z250L8 E-03: USA, E-33: California

#### **VALVE + GUIDE**

ITEM	STANDARD		
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)	0.120 (0.0047)
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)	_
	151	1.30 – 1.32 (0.051 – 0.052)	_
	Oil	1.51 – 1.53 (0.0594 – 0.0602)	—
Piston ring thickness	1 ot	0.76 – 0.81 (0.030 – 0.032)	—
	1st	1.08 – 1.10 (0.0425 – 0.0433)	_
Piston pin bore		16.002 – 16.008 (0.6300 – 0.6302)	
Piston pin O.D.	15.993 – 16.000 (0.6296 – 0.6299)		15.980 (0.6291)



### **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 alumi- num 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	C	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 cle	rk to groove clearance No.1, 2 & 3		0.10 – 0.30 (0.004 – 0.012)	0.50 (0.020)
Shift fork groove width	l	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/cm <sup>2</sup> , 41.81 psi)	

#### **FI SENSORS**

ITEM	S	STANDARD/SPECIFICATION		
CKP sensor resistance		80 – 120 Ω		
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	Closed 0.60 – 0.64 V		
	Opened	Opened 3.60 – 4.00 V		
ECT sensor input voltage		4.5 – 5.5 V		
ECT sensor resistance	Ap	Approx. 2.58 kΩ at 20 °C (68 °F)		
IAT sensor input voltage		4.5 – 5.5 V		



ITEM	S	STANDARD/SPECIFICATION		
IAT sensor resistance	Ар	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

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		
CKP sensor peak voltage		2.8 V or more		
Ignition coil resistance	Primary	Primary 0.17 – 0.70 Ω		
	Secondary	9 – 14 kΩ	Plug cap – B/W	
Ignition coil primary peak voltage		170 V or more	+ B/W − - W/BI	
Magneto no-load voltage (When engine is cold)	100	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		



#### **BRAKE + WHEEL**

ITEM		STANDARD	LIMIT	
Brake lever adjuster length		11 – 15 (0.4 – 0.6)		
Rear brake pedal height	(Belo	0 - 10 (0 - 0.4) (Below 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)	



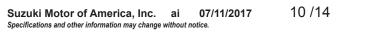
#### TIRE

ITEM		STD/SPEC.		
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**

Unit: mm (in)

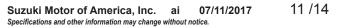
ITEM		STANDARD	LIMIT	NOTE
Front fork stroke		310 (12.2)	_	
Front fork inner tube O.D.		48 (1.9)	—	
Front fork oil level (Outer tube fully compre	essed)	115 (4.5)		
Front fork damping force adjuster	Rebound (High speed)	MAX – 16 clicks turn counterclockwise	_	
	Rebound (Low speed)	MAX – 15 clicks turn 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 sp length	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
	(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

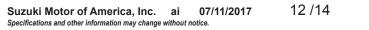
### FI SYSTEM AND INTAKE AIR SYSTEM

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

GULAUK



### **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. 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 unleaded gasoline of at least 90 pump		
	octane (R/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)		

