# Features & Specifications 2017 RM-Z450



#### **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**

- 449cc 4-stroke liquid-cooled DOHC 4-valve fuel-injected engine delivers phenomenal idle-to-redline performance
- The compact aluminum cylinder is finished with Suzuki Composite Electrochemical Material (SCEM) coating for durability, light weight and efficient heat transfer.
- The piston pin has Diamond-Like Carbon (DLC) surface treatment, for less friction and increased durability.
- 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.
- Engine starting is easy due to a long kick starter lever, refined internal gears, and decompression system that works precisely and efficiently.
- Cooling performance is efficient with hose routing that is balanced between the left and right radiators, and a high capacity coolant pump.

#### **Transmission Features**

• Refined 5-speed transmission enables precise gear shift operation. The transmission feel has been improved with a precisely machined shift cam for accurate gear selection. Specialized machining processes also increase the precision of the matching gears.

## Suzuki Holeshot Assist Control Features

• The Suzuki Holeshot Assist Control (S-HAC) is a selectable launch system derived from the factory race bike to help riders' 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. **Benefit of A-Mode:** For novice riders, and/or hard and slippery traction conditions, use A-Mode for a more controlled launch.

**B Mode:** When conditions at the starting gate have better traction, and a more aggressive launch is desired. **Benefit of B-Mode:** For skilled riders, and/or good starting conditions, use Mode B for a more aggressive launch. **Base Mode:** Standard power launch controlled by rider only, 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.

#### **Chassis Features**

- The frame has increased rigidity and reduced weight from previous generation RM-Z450.
- Slim chassis design creates a trim riding position, allowing the rider to actively take control of the machine.
- The SFF-Air suspension evolved from the SFF system but without a conventional coil spring
  resulting in reduced weight, increased inner tube diameter and damper rod/piston size. SFF-Air
  utilizes three tunable chambers so riders can easily adjust the spring rate with an air pump instead
  of changing out steel springs.
- The SHOWA rear shock, with rising-rate linkage system, provides 12.2 inches of wheel travel and complements the SFF-Air fork.
- Lightweight front brake caliper has reduced mass while still providing outstanding stopping force.
- Race-inspired waved disc rotors are mounted to black EXCEL aluminum rims with stainless steel spokes.
- The standard Renthal Fatbar is stronger and reduces vibration more than conventional aluminum handlebars.
- Champion Yellow bodywork (including new yellow rear fender) with race team-inspired graphics package.
- New color gripper seat, with projected cross-shaped patterns on its yellow top surface, aids rider control



## **Additional Features**

- A variety of Genuine Suzuki Accessories for RM-Z450 owners are available including a large selection of Suzuki logo apparel.
- Learn more about Suzuki's industry leading contingency and Amateur Support programs at <u>www.SuzukiCycles.com/Racing</u>.

• For more details, please visit <u>www.suzukicycles.com</u>.

# **Specifications RM-Z450L7** E-03: USA, E-33: California

DIMENSIONS AND CURB MASS Overall length	2190 mm (86.2 in)
Overall width	
Overall height	
Wheelbase	
Ground clearance	
Seat height	
Curb mass	
	112 kg (247 lbs)
	Four strake liquid cooled DOHC
Type Number of cylinders	
Bore	
Stroke	
Displacement	
Compression ratio	
Fuel system	
Air cleaner	
Starter system	
Lubrication system	•
Idle speed	
DRIVE TRAIN	
Clutch	Wet multi-plate type
Transmission	
Gearshift pattern	
Primary reduction ratio	
Gear ratios, Low	
2nd	
3rd	
4th	
Тор	
Final reduction ratio	3.846 (50/13)
Drive chain	DID520MXV4, 114 links
CHASSIS	
Front suspension	Inverted telescopic, air spring, oil damped
Rear suspension	
Front suspension stroke	
Rear wheel travel	
Caster	
Trail	
Steering angle	45° (right & left)
Turning radius	1.95 m (6.4 ft)
Front brake	Disc brake
Rear brake	Disc brake
Front tire size	
Rear tire size	110/90-19 62M, tube type
ELECTRICAL	
Ignition type	Electronic ignition (CDI)
Ignition timing	
Spark plug	
CAPACITIES	
Fuel tank	6.2 L (1.6/1.4 US/Imp gal)
Engine oil, change	
with filter change	
overhaul	
Coolant	
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ner information may change without notice.	

# Service Data RM-Z450L7 E-03: USA, E-33: California

# VALVE + GUIDE

Unit: mm (in)

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ITEM STAND		STANDARD	LIMIT	
Valve diam.	IN.	36 (1.4)	_	
	EX.	31 (1.2)	_	
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.	5.500 – 5.512 (0.2165 – 0.2170)	_	
Valve stem O.D.	IN.	5.475 – 5.490 (0.2156 – 0.2161)		
	EX.	5.455 – 5.470 (0.2148 – 0.2154)	_	
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. & EX.	—	35.8 (1.41)	
Valve spring tension	IN. & EX.	146 – 168 N (14.9 – 17.1 kgf, 32.8 – 37.7 lbs) at length 30.9 mm (1.22 in)		

# **CAMSHAFT + CYLINDER HEAD**

Unit:	mm	(in)
01110		<b>\'''</b>

ITEM		STANDARD	LIMIT
Cam height	IN.	35.58 – 35.63 (1.401 – 1.403)	35.28 (1.389)
	EX.	34.53 – 34.58 (1.359 – 1.361)	34.23 (1.348)
Camshaft journal oil clearance	IN. & EX.	0.032 - 0.066 (0.001 - 0.002)	0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.	22.012 - 22.025 (0.8667 - 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	14th pin		—
Cylinder head distortion			0.05 (0.002)

# **CYLINDER + PISTON + PISTON RING**

Unit: mm (in)

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ITEM		STANDARD		
Compression pressure (Automatic decomp. actuated)	300	300 kPa (3.0 kgf/cm², 43 psi) or more		
Piston to cylinder clearance		0.035 - 0.045 (0.0014 - 0.0018)		
Cylinder bore		96.000 – 96.015 (3.7795 – 3.7801)	Nicks or scratches	
Piston diam.	Measure	95.960 – 95.975 (3.7779 – 3.7785) at 16 mm (0.6 in) from the skirt end.	95.880 (3.7748)	
Cylinder distortion		—	0.05 (0.002)	
Piston ring free end gap	1st	Approx. 8.7 (0.34)	7.0 (0.28)	
Piston ring end gap	1st	0.20 - 0.30 (0.008 - 0.012)	0.50 (0.020)	
Piston ring to groove clearance	1st	_	0.180 (0.007)	
Piston ring groove width	1st	0.78 – 0.80 (0.0307 – 0.0315)	_	
	151	1.30 – 1.32 (0.0512 – 0.0520)	_	
	Oil	2.01 – 2.03 (0.0791 – 0.0799)	_	
Piston ring thickness	1st	0.71 – 0.76 (0.0279 – 0.0299)	_	
	151	1.08 – 1.10 (0.0425 – 0.0433)	—	
Piston pin bore		19.002 – 19.008 (0.7425 – 0.7433)		
Piston pin O.D.	18.992 – 19.000 (0.7477 – 0.7480)		18.980 (0.7472)	

# **CONROD + CRANKSHAFT**

Unit: mm (in)

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ITEM	STANDARD	LIMIT
Conrod small end I.D.	19.018 – 19.038 (0.7487 – 0.7495)	19.050 (0.7500)
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	19.75 – 19.80 (0.778 – 0.780)	_
Crank web to web width	61.9 – 62.1 (2.437 – 2.445)	_
Crankshaft runout	_	0.08 (0.003)

# **OIL PUMP**

ITEM	STANDARD	LIMIT
Oil pressure (at 50 °C, 122 °F)	50 kPa (0.5 kgf/cm², 7.1 psi) at 4 000 r/min	—

CLUTCH		Unit: mm (in)
ITEM	STANDARD	LIMIT
Clutch lever clearance	2 - 3 (0.08 - 0.12)	—
Drive plate thickness (No.1 & No.2)	3.07 – 3.23 (0.121 – 0.127)	2.77 (0.109)
Drive plate claw width (No.1 & No.2)	13.85 – 13.95 (0.545 – 0.549)	13.05 (0.514)
Driven plate distortion	_	0.10 (0.004)
Clutch spring free length	51.94 (2.045)	49.4 (1.94)

# **RADIATOR + ENGINE COOLANT**

ITEM	S	STANDARD/SPECIFICATION		
ECT sensor resistance	20 °C (68 °F)	Approx. 2.58 kΩ	—	
	50 °C (122 °F)	Approx. 0.77 kΩ	_	
	80 °C (176 °F)	Approx. 0.28 kΩ	—	
Radiator cap valve opening pressure	(0.	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		1 150 ml (1.2/1.0 US/Imp qt)		

TRANSMISSION + DRIVE CHAIN Uni				Unit: mm (in) Except ratio
ITEM		STANDARD		LIMIT
Primary reduction ratio			2.625 (63/24)	
Final reduction ratio			3.846 (50/13)	_
Gear ratios	Low		1.800 (27/15)	—
	2nd		1.470 (25/17)	—
	3rd		1.235 (21/17)	—
	4rh		1.050 (21/20)	—
	Тор		0.909 (20/22)	—
Shift fork to groove clearance		No.1, 2, 3	0.1 – 0.3 (0.004 – 0.012)	0.5 (0.02)
Shift fork groove width		No.1, 2, 3	5.0 – 5.1 (0.197 – 0.201)	_
Shift fork thickness		No.1, 2, 3	4.8 – 4.9 (0.189 – 0.193)	_
Drive chain		Туре	DID520MXV4	—
		Links	114	—
Drive chain plate height		Inner	15.0 (0.59)	12.75 (0.502)
		Outer	12.8 (0.50)	11.20 (0.441)
Drive chain slack			35 – 45 (1.4 – 1.8)	_

## **INJECTOR + FUEL PUMP + FUEL PRESSURE REGULATOR**

ITEM	SPECIFICATION	NOTE
Injector resistance	9.5 – 11.5 Ω at 20 °C (68 °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)	

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# **FI SENSORS**

ITEM	S	TANDARD/SPECIFICATION	NOTE	
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		0.98 – 2.86 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	Ap	prox. 2.58 kΩ at 20 °C (68 °F)		
IAT sensor input voltage		4.5 – 5.5 V		
IAT sensor resistance	Ap	prox. 2.58 kΩ at 20 °C (68 °F)		
TO sensor resistance	Ap	prox. 19.4 kΩ at 20 °C (68 °F)		
TO sensor voltage	Normal	0.4 – 1.4 V		
	Leaning	3.7 – 4.4 V	When leaning 65°	
GP switch voltage		0.6 V or more		
Injector voltage		Battery voltage		

# **THROTTLE BODY**

ITEM	SPECIFICATION
Bore size	43 mm
I.D. No.	28H5
Idle r/min	2 100 ± 50 r/min
Idle screw	5 – 6 turns back
Throttle cable play	2 – 4 mm (0.08 – 0.16 in)

# **ELECTRICAL**

Unit: mm (in)

ITEM	S	TANDARD/SPECIFICATION	NOTE
Ignition timing		12° B.T.D.C. at 2 100 r/min.	
Spark plug	Туре	NGK: DIMR8A10	
	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	
/lagneto no-load voltage When engine is cold)	100	100 V (AC) or more at 5 000 r/min	
egulated voltage		13.5 – 15.0 V at 5 000 r/min	
ngine stop switch resistance		Under 1 $\Omega$	B/Y – B/W
S-HAC switch resistance		Under 1 Ω	R/Y – B/W

BRAKE + WHEEL			Unit: mm (in)	
ITEM		STANDARD		
Brake lever adjuster length		11 – 15 (0.4 – 0.6)		
Rear brake pedal height		0 - 10 (0 - 0.4)	_	
Brake disc thickness	Front	$3.0 \pm 0.2$ (0.118 ± 0.008)	2.5 (0.10)	
	Rear	4.0 ± 0.15 (0.157 ± 0.006)	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	2.15 × 19	—	
Wheel axle runout	Front	—	0.25 (0.010)	
	Rear	—	0.25 (0.010)	

# TIRE

ITEM	ST	ANDARD/SPECIFICATION	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	110/90-19 62M	—
Tire type	Front	BRIDGESTONE: M403	
	Rear	BRIDGESTONE: M404	—
Tire tread depth (Recommend depth)	Front & Rear	_	4.0 mm (0.16 in)
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# **SUSPENSION**

Unit: mm (in)

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ITEM		STANDARD	LIMIT	NOTE
Front fork stroke	ont fork stroke		_	
Front fork inner tube O.	D.	49 (1.9)	_	
Left front fork damping force adjuster	Rebound	MAX – 13 clicks turn counterclockwise	_	
	Compres- sion	MAX – 8 clicks turn counterclockwise	_	
Left front fork air pressu	re	0 kPa (0 kgf/cm², 0 psi)		
Right front fork air pressure	Inner chamber	1 200 kPa (12 kgf/cm², 171 psi)	_	
	Outer chamber	0 kPa (0 kgf/cm², 0 psi)	—	
	Balance chamber	1 200 kPa (12 kgf/cm², 171 psi)	—	
Rear shock absorber ga	as pressure	784 – 980 kPa (7.8 kgf/cm², 111.5 psi – 9.8 kgf/cm², 139.4 psi)	—	
Rear shock absorber sp length	pring set	5 (0.2)	—	5 mm (0.2 in) com- pressed from spring free length
Rear shock absorber sp	oring rate	55.9 N/mm (5.70 kgf/mm)	—	
Rear shock absorber damping force adjuster	Rebound	MAX – 12 clicks turn counterclockwise	_	
	Compres- sion (High speed)	MAX – 2 turns coun- terclockwise	_	
	Compres- sion (Low speed)	MAX – 12 clicks turn counterclockwise	—	
Rear wheel travel		310 (12.2)	_	
Swingarm pivot shaft ru	nout	_	0.3 (0.01)	

# FUEL + OIL

ITEM		SPECIFICATION	NOTE		
Fuel type	Use only ur	Use only unleaded gasoline of at least 90 pump			
	octane (R/2	octane (R/2 + M/2 method).			
Fuel tank capacity		6.2 L (1.6/1.4 US/Imp gal)			
Engine oil type	SAE	10W-40, API SG/SH/SJ/SL with			
		JASO MA/MA1/MA2			
Engine oil capacity	Change	1 050 ml (1.1/0.9 US/Imp qt)			
	Filter change	1 100 ml (1.2/1.0 US/Imp qt)			
	Overhaul	1 200 ml (1.3/1.1 US/Imp qt)			
Air cleaner element oil type	MOT	MOTUL AIR FILTER OIL or equivalent			
Front fork oil type	SHO	SHOWA SUSPENSION FLUID SS-19 or equivalent			
Left front fork oil capacity	320 ml (10.8/11.3 US/Imp oz)				Outer tube oil quantity
	314 ml (10.6/11.1 US/Imp oz)		Fork cylinder unit oil quantity		
Right front fork oil capacity	100 ml (3.4/3.5 US/Imp oz)				Inner chamber oil quantity
	250 ml (8.5/8.8 US/Imp oz)				Outer chamber oil quantity
	10 ml (0.3/0.4 US/Imp oz)				Balance cham- ber oil quantity
Rear shock absorber oil type	SHO	SHOWA SUSPENSION FLUID SS-25 or equivalent			
Rear shock absorber oil capacity		383 ml (13.0 /13.5 US/Imp oz)			

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# **TIGHTENING TORQUE** ENGINE

Initial) Final)	14         11         25         51         10         10         10         10         10         10         10         10         10         10         10         10         10         10         23         24         8.5	1.4         1.1         2.5         5.1         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         2.3         2.4	10.0         8.0         18.0         37.0         16.5
,	25 51 10 10 10 10 10 110 80 90 10 10 10 23 24	2.5 5.1 1.0 1.0 1.0 1.0 1.0 8.0 9.0 1.0 1.0 2.3	18.0         37.0         7.0
,	51 10 10 10 10 10 110 80 90 10 10 10 23 24	5.1 1.0 1.0 1.0 1.0 11.0 8.0 9.0 1.0 1.0 2.3	37.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0         7.0
Final)	10 10 10 10 110 80 90 10 10 10 23 24	1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         2.3	7.0 7.0 7.0 7.0 79.5 58.0 65.0 7.0 7.0
	10 10 10 110 80 90 10 10 10 23 24	1.0         1.0         1.0         1.0         1.0         11.0         8.0         9.0         1.0         2.3	7.0 7.0 79.5 58.0 65.0 7.0 7.0
	10 10 110 80 90 10 10 23 24	1.0         1.0         11.0         8.0         9.0         1.0         2.3	7.0 7.0 79.5 58.0 65.0 7.0 7.0
	10 110 80 90 10 10 23 24	1.0         11.0         8.0         9.0         1.0         2.3	7.0 79.5 58.0 65.0 7.0 7.0
	110 80 90 10 10 23 24	11.0 8.0 9.0 1.0 1.0 2.3	79.5 58.0 65.0 7.0 7.0
	80 90 10 10 23 24	8.0 9.0 1.0 1.0 2.3	58.0 65.0 7.0 7.0
	90 10 10 23 24	9.0 1.0 1.0 2.3	65.0 7.0 7.0
	10 10 23 24	1.0 1.0 2.3	7.0 7.0
	10 23 24	1.0 2.3	7.0
	10 23 24	1.0 2.3	7.0
	23 24	2.3	
	24		10.0
			17.5
	-	0.85	6.0
	8.5	0.85	6.0
	10	1.0	7.0
	10	1.0	7.0
	23	2.3	16.5
			7.0
			7.0
			8.0
			8.5
			4.0
			8.0
			7.0
			4.0
			8.0
			15.0
			8.0
			8.0
			10.0
			8.0
			8.0
			4.0
			7.0
			7.0
			7.0
			3.5
		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

PART		N∙m	kgf-m	lbf-ft
Engine mounting bolt		55	5.5	40.0
Engine mounting nut (front)		66	6.6	47.5
Engine mounting nut (lower)		66	6.6	47.5
Engine mounting bracket nut (front)		66	6.6	47.5
Engine mounting bracket bolt (upper)		40	4.0	29.0
Intake pipe bolt	(Initial)	1	0.1	0.7
	(Final)	10	1.0	7.0
Engine sprocket bolt		36	3.6	26.0
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
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
Front protector bolt		12	1.2	8.5

# 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 joint 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
ECM bracket mounting bolt	10	1.0	7.0
TO sensor bracket bolt	8.5	0.85	6.0

# **COOLING SYSTEM**

ITEM	N⋅m	kgf-m	lbf-ft
Impeller	8	0.8	6.0
Water pump case bolt	11	1.1	8.0
Engine coolant drain bolt	11	1.1	8.0
Radiator air bleeder bolt	6	0.6	4.5
Water hose clamp screw	1.5	0.15	1.0

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# **CHASSIS**

Handlebar clamp bolt	N⋅m	kgf-m	lbf-ft
	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		m (4.5 kgf-m, 32 en turn back 1/4 -	
Fork cylinder unit	34	3.4	24.5
Air cylinder unit	34	3.4	24.5
Lock-nut/center bolt	28	2.8	20.0
Lock-nut/sealing bolt	28	2.8	20.0
Front fork center bolt	69	6.9	50.0
Front fork sealing bolt	69	6.9	50.0
Front fork compression damper unit	30	3.0	21.5
Front fork air bleeder valve	1.3	0.13	1.0
Front fork air valve	5.5	0.55	4.0
Front fork valve core	3	0.3	2.0
Front 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
Rear brake master cylinder reservoir cap screw	1.5	0.15	1.0
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
Brake hose guide bolt (front)	3	0.3	2.0
Brake caliper mounting bolt (front)	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 and nut	23	2.3	16.5
Spoke nipple	6	0.6	4.5
	14	1.4	10.0
Front wheel rim lock	47	47	12.5
Front wheel rim lock Rear wheel rim lock			

PART	N⋅m	kgf-m	lbf-ft
Throttle cable adjuster lock-nut	4.5	0.45	3.25
Clutch cable adjuster lock-nut	2.2	0.22	1.60
Clutch cable bracket bolt	7	0.7	5.0
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
Swingarm pivot nut (engine mounting)	70	7.0	50.5
Swingarm rear axle plate screw	3	0.3	2.0
Rear shock absorber upper mounting nut	50	5.0	36.0
Rear shock absorber lower mounting nut	50	5.0	36.0
Rear shock absorber compression adjuster assembly	30	3.0	21.5
Rear cushion lever nut (upper and lower)	80	8.0	58.0
Rear cushion rod nut	80	8.0	58.0
Rear shock absorber spring adjuster lock-nut	70	7.0	50.5
Seat rail bolt (upper and lower)	23	2.3	16.5
Footrest bolt	35	3.5	25.5

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