

Features & Specifications

2019 GSX-R750



GSX-R750L9

AGT: Pearl Glacier White/Glass Sparkle Black

Overview

Three decades ago Suzuki revolutionized sportbikes with the introduction of the GSX-R750. Ever since then, the GSX-R750 has remained true to its original concept and championship-winning heritage. On the road or on the track, the GSX-R750 delivers a breathtaking combination of outstanding engine performance, crisp handling, compact size, and light weight. Its secret is an unequaled pairing of 750cc performance with the lightweight, compact chassis of a 600cc Supersport, complemented by technologically advanced suspension front and rear. Try a GSX-R750 and you'll quickly realize this motorcycle defines performance riding from the center of the sportbike class.

Key Features

- The GSX-R750's look was born and raised on the racetrack, and for 2019 that styling has two new, dual-color paint schemes. Riders can choose the Glass Sparkle Black/Pearl Glacier White scheme that includes red bodywork graphics and striping on the black cast aluminum wheels. Also available is a scheme that blends a shiny and flat finish via Metallic Matter Black/Glass Sparkle Black bodywork that also includes red graphics and accents on black wheels.
- The GSX-R750's fuel injected, 750cc, four-cylinder engine powers a balanced sportbike experience. This engine pulls strong off the bottom like a larger-displacement powerplant while it builds revs like a smaller mill – it's the best of both worlds.
- The Suzuki Drive Mode Selector (S-DMS) lets the rider adjust the engine's power delivery to suit the riding conditions.
- The twin-spar aluminum frame effectively connects the steering head with the swingarm pivot portion of the chassis in a way that balances light weight and strength. The engine is suspended below the frame to keep mass low and the wheelbase short to promote nimble handling.
- The Showa Big Piston front Fork (BPF) and remote reservoir rear shock absorber are fully adjustable to deliver exceptional handling.
- Twin Brembo Monobloc, radially mounted front brake calipers grasp fully floating stainless steel brake rotors to deliver strong stopping power.



GSX-R750L9

KGL: Metallic Mat Black No. 2 / Glass Sparkle Black

Engine Features

- Compact 750cc, four-cylinder engine with a race-proven over-square bore/stroke ratio produces remarkably strong high rpm power delivery.
- The energy-efficient engine employs forged pistons, shot-peened connecting rods, chrome-nitride-coated upper compression and oil control rings, and pentagonal ventilation holes to reduce frictional and mechanical losses.
- Lightweight titanium alloy valves are controlled by single-coil valve springs to reduce valve-train mass, reducing mechanical losses at high rpm.
- Suzuki Dual Throttle Valve (SDTV) fuel injection uses eight fine-spray eight-hole injectors for improved fuel atomization, which contributes to more complete combustion.
- An Engine Control Module (ECM) provides state-of-the-art engine management and has enhanced settings to suit the intake and exhaust systems, resulting in better fuel economy and linear throttle response.
- Advanced MotoGP-developed transistorized ignition control programming helps maintain more precise spark timing across the range of engine speed and temperature.
- Suzuki Drive Mode Selector (S-DMS) offers push-button selection of two racing-developed engine control maps to suit road or track conditions and personal tastes.
- Four-into-one stainless steel exhaust system with a titanium muffler is fitted with a Suzuki Exhaust Tuning (SET) valve that maximizes torque and improves throttle response, especially in the low- to mid-rpm range.
- The close-ratio six-speed transmission features a taller first-gear ratio and shorter ratios for 2nd, 3rd, 4th, and 6th gear, making it easier for a racer to get a good start while improving straight-line acceleration and drive out of corners.
- Race-proven back-torque-limiting clutch contributes to smoother downshifting and corner entry.

Chassis Features

- Lightweight and compact twin-spar aluminum alloy frame is constructed of five cast sections to produce a balance of light weight and strength.
- The frame is mated with a cast aluminum swingarm and multi-piece rear sub-frame that's ready for racetrack use.
- Race-developed, lightweight Showa Big Piston front Fork (BPF) delivers superb feedback and consistent performance.

Chassis Features (continued)

- Single Showa rear shock features externally adjustable rebound and compression damping, along with adjustable ride height.
- Electronically controlled steering damper provides lighter steering at slower speeds and more damping force at racetrack and highway speeds.
- Front brakes with fully floating 310mm discs are grasped by radial-mount, four-piston Brembo Monobloc calipers.
- Three-spoke cast aluminum alloy wheels are shod with lightweight, high-grip front and rear tires for sharp handling.
- Three-way adjustable foot pegs, adjustable shift lever, and short fuel tank help compose a comfortable riding position that permits the rider movement required for performance riding.
- Compact, lightweight instrument cluster with a built-in lap timer/stopwatch and programmable engine rpm indicators to alert the rider to certain shift points.
- Trim, simple, and lightweight bodywork creates an exciting, aerodynamic style that truly works well at speed.
- Distinctive multi-reflector headlight with vertically stacked high- and low-beam halogen bulbs is centered between position lights on each side.
- Bright, durable LED tail light, with clear lens.
- The front turn signals are integrated into the rearview mirrors while the rear tail section houses the rear signals.
- The lightweight instruments also include an analog tachometer and LCD readouts that show speed, odometer, dual trip meter, reserve trip meter, clock, coolant temperature/oil pressure indicator, S-DMS, and gear position indicators.
- Attention to rider comfort and confidence includes a carefully shaped seat with a high-grip cover.
- The wheel rims have pinstripes punctuated by “R” logos that highlight the bike’s identity.

Additional Features

- Stylized Suzuki “S” 3-D emblems on the fuel tank and the fork upper bracket denotes the quality, sophistication and performance legacy of the brand.
- Optional single seat cowl can replace the passenger seat for an even more aggressive look or for use on solo rides, or track days.
- A variety of Genuine Suzuki Accessories for GSX-R owners are available including a large selection of Suzuki logo apparel.
- 12-month limited warranty
- For more details, please visit www.suzukicycles.com.

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Specifications GSX-R750L9

E-03: USA, E-33: California

DIMENSIONS AND CURB MASS

Overall length	2030 mm (79.9 in)
Overall width	710 mm (28.0 in)
Overall height	1135 mm (44.7 in)
Wheelbase	1390 mm (54.7 in)
Ground clearance	130 mm (5.1 in)
Seat height	810 mm (31.9 in)
Curb mass	190 kg (419 lbs)

ENGINE

Type	4-stroke, liquid-cooled, DOHC
Number of cylinders	4
Bore	70.0 mm (2.756 in)
Stroke	48.7 mm (1.917 in)
Displacement	750 cm ³ (45.8 cu. in)
Compression ratio	12.5 : 1
Fuel system	Fuel injection
Air cleaner	Paper element
Starter system	Electric
Lubrication system	Wet sump
Idle speed	1200 ± 100 r/min

DRIVE TRAIN

Clutch	Wet multi-plate type
Transmission	6-speed constant mesh
Gearshift pattern	1-down, 5-up
Primary reduction ratio	1.761 (74/42)
Gear ratios, Low	2.785 (39/14)
2nd	2.052 (39/19)
3rd	1.714 (36/21)
4th	1.500 (36/24)
5th	1.347 (31/23)
Top	1.208 (29/24)
Final reduction ratio	2.647 (45/17)
Drive chain	RK525ROZ5Y, 116 links

CHASSIS

Front suspension	Inverted telescopic, coil spring, oil damped
Rear suspension	Link type, coil spring, oil damped
Front fork stroke	120 mm (4.7 in)
Rear wheel travel	130 mm (5.1 in)
Caster	23° 45'
Trail	97 mm (3.82 in)
Steering angle	27° (right & left)
Turning radius	3.4 m (11.2 ft)
Front brake	Disc brake, twin
Rear brake	Disc brake
Front tire	120/70ZR17M/C (58W), tubeless
Rear tire	180/55ZR17M/C (73W), tubeless

Specifications GSX-R750L9

E-03: USA, E-33: California

ELECTRICAL

Ignition type	Electronic ignition (Transistorized)
Ignition timing	3° B.T.D.C. at 1200 r/min
Spark plug	NGK CR9EIA-9 or DENSO IU27D
Battery	12V 36.0 kC (10 Ah)/10 HR
Generator	Three-phase A.C. generator
Main fuse	30A
Fuse	10/10/10/10/10/15A
Headlight	12V 65W (H9) + 12V 55W (H7)
Position light	12V 5W × 2
Brake/Tail light	LED
Turn signal light	12V 21W
License plate light	12V 5W
Combination meter light	LED
Neutral indicator light	LED
High beam indicator light	LED
Turn signal indicator light	LED
Fuel level indicator light	LED
Oil pressure/Coolant temperature indicator light	LED
F1/SD indicator light	LED
Engine RPM indicator light	LED

CAPACITIES

Fuel tank	16.0 L (4.2/3.5 US/Imp gal) ...E-33
	17.0 L (4.5/3.7 US/Imp gal) ...E-03
Engine oil, oil change	2200 ml (2.3/1.9 US/Imp qt)
with filter change	2500 ml (2.6/2.2 US/Imp qt)
overhaul	2900 ml (3.1/2.6 US/Imp qt)
Coolant	2.7 L (2.9/2.4 US/Imp qt)

Service Data GSX-R750L9

E-03: USA, E-33: California

Valve + Guide

Unit: mm (in)

Item	Standard		Limit
Valve diam.	IN.	29.0 (1.14)	—
	EX.	23.0 (0.91)	—
Valve clearance (when cold)	IN.	0.08 – 0.18 (0.003 – 0.007)	—
	EX.	0.18 – 0.28 (0.007 – 0.011)	—
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.	4.500 – 4.512 (0.1772 – 0.1776)	—
Valve stem O.D.	IN.	4.475 – 4.490 (0.1762 – 0.1768)	—
	EX.	4.455 – 4.470 (0.1754 – 0.1760)	—
Valve stem deflection	IN. & EX.	—	0.25 (0.010)
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.	—	37.1 (1.46)
Valve spring tension	IN. & EX.	142 – 157 N (14.5 – 16.0 kgf, 31.9 – 35.3 lbs) at length 33.55 mm (1.321 in)	—

Camshaft + Cylinder Head

Unit: mm (in)

Item	Standard		Limit
Cam height	IN.	36.58 – 36.63 (1.440 – 1.442)	36.28 (1.428)
	EX.	35.78 – 35.83 (1.409 – 1.411)	35.48 (1.397)
Camshaft journal oil clearance	IN. & EX.	0.032 – 0.066 (0.0013 – 0.0026)	0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.	24.012 – 24.025 (0.9454 – 0.9459)	—
Camshaft journal O.D.	IN. & EX.	23.959 – 23.980 (0.9433 – 0.9441)	—
Camshaft runout	—		0.10 (0.004)
Cam chain pin (at arrow "3")	12th pin		—
Cylinder head distortion	—		0.20 (0.008)

Balancer

Unit: mm (in)

Item	Standard	Limit
Balancer shaft journal oil clearance	0.028 – 0.052 (0.0011 – 0.0020)	0.080 (0.0031)
Balancer shaft journal O.D.	22.976 – 22.992 (0.9046 – 0.9052)	—

Cylinder + Piston + Piston Ring

Unit: mm (in)

Item	Standard			Limit
Compression pressure	1 300 – 1 700 kPa (13 – 17 kgf/cm ² , 185 – 242 psi)			1 000 kPa (10 kgf/cm ² , 142 psi)
Compression pressure difference	—			200 kPa (2 kgf/cm ² , 28 psi)
Piston-to-cylinder clearance	0.030 – 0.040 (0.0012 – 0.0016)			0.120 (0.0047)
Cylinder bore	70.000 – 70.015 (2.7599 – 2.7565)			No nicks or Scratches
Piston diam.	69.965 – 69.980 (2.7545 – 2.7551) Measure 15 mm (0.6 in) from the skirt end.			69.880 (2.7512)
Cylinder distortion	—			0.20 (0.008)
Piston ring free end gap	1st	IR	Approx. 9.2 (0.36)	7.3 (0.29)
	2nd	R	Approx. 7.3 (0.29)	5.8 (0.23)
Piston ring end gap	1st	IR	0.06 – 0.21 (0.002 – 0.008)	0.50 (0.020)
	2nd	R	0.06 – 0.18 (0.002 – 0.007)	0.50 (0.020)
Piston ring-to-groove clearance	1st		—	0.180 (0.0071)
	2nd		—	0.150 (0.0059)
Piston ring groove width	1st		1.01 – 1.03 (0.0398 – 0.0406)	—
	2nd		0.81 – 0.83 (0.0319 – 0.0327)	—
	Oil		1.51 – 1.53 (0.0594 – 0.0602)	—
Piston ring thickness	1st		0.97 – 0.99 (0.0382 – 0.0390)	—
	2nd		0.77 – 0.79 (0.0303 – 0.0311)	—
Piston pin bore	15.002 – 15.008 (0.5906 – 0.5909)			15.030 (0.5917)
Piston pin O.D.	14.995 – 15.000 (0.5903 – 0.5906)			14.980 (0.5898)

Conrod + Crankshaft

Unit: mm (in)

Item	Standard		Limit
Conrod small end I.D.	15.010 – 15.018 (0.5909 – 0.5913)		15.040 (0.5921)
Conrod big end side clearance	0.10 – 0.20 (0.004 – 0.008)		0.30 (0.012)
Conrod big end width	19.95 – 20.00 (0.7854 – 0.7874)		—
Crank pin width	20.10 – 20.15 (0.7913 – 0.7933)		—
Conrod big end oil clearance	0.032 – 0.056 (0.0013 – 0.0022)		0.080 (0.0031)
Crank pin O.D.	32.976 – 33.000 (1.2983 – 1.2992)		—
Crankshaft journal oil clearance	0.010 – 0.028 (0.0004 – 0.0011)		0.080 (0.0031)
Crankshaft journal O.D.	31.982 – 32.000 (1.2591 – 1.2598)		—
Crankshaft thrust bearing thickness	Right side	2.425 – 2.450 (0.0955 – 0.0965)	—
	Left side	2.350 – 2.500 (0.0925 – 0.0984)	—
Crankshaft thrust clearance	0.055 – 0.110 (0.0022 – 0.0043)		—
Crankshaft runout	—		0.05 (0.002)

Oil Pump

Item	Standard	Limit
Oil pressure (at 60 °C, 140 °F)	100 – 400 kPa (1.0 – 4.0 kgf/cm ² , 14 – 57 psi) at 3 000 r/min	—

Clutch

Unit: mm (in)

Item	Standard	Limit
Clutch drive plate thickness	No. 1, 2 & 3 2.72 – 2.88 (0.107 – 0.113)	2.42 (0.095)
Clutch drive plate claw width	No. 1, 2 & 3 13.85 – 13.96 (0.545 – 0.550)	13.05 (0.514)
Clutch driven plate distortion	—	0.10 (0.004)
Clutch spring free length	66.47 (2.617)	63.2 (2.49)
Clutch lifter pin height	0.2 – 0.4 (0.008 – 0.016)	—
Wave spring washer height	—	4.30 (0.169)
Clutch lever play	10 – 15 (0.4 – 0.6)	—
Clutch release screw	1 turn back	—

Drive Train

Unit: mm (in) Except ratio

Item	Standard	Limit
Primary reduction ratio	1.761 (74/42)	—
Final reduction ratio	2.647 (45/17)	—
Gear ratios	Low	2.785 (39/14)
	2nd	2.052 (39/19)
	3rd	1.714 (36/21)
	4th	1.500 (36/24)
	5th	1.347 (31/23)
	Top	1.208 (29/24)
Gearshift fork to groove clearance	0.1 – 0.3 (0.004 – 0.012)	0.5 (0.02)
Gearshift fork groove width	5.0 – 5.1 (0.197 – 0.201)	—
Gearshift fork thickness	4.8 – 4.9 (0.189 – 0.193)	—
Drive chain	Type	RK 525ROZ5Y
	Links	116 links
	20-pitch length	—
Drive chain slack (on side-stand)	20 – 30 (0.8 – 1.2)	—
Gearshift lever height	65 – 75 (2.6 – 3.0)	—

Thermostat + Radiator + Fan + Coolant

Item	Standard/Specification	Note
Thermostat valve opening temperature	Approx. 82 °C (180 °F)	—
Thermostat valve lift	Over 8 mm (0.31 in) and at 95 °C (203 °F)	—
ECT sensor resistance	20 °C (68 °F)	Approx. 2.45 kΩ
	50 °C (122 °F)	Approx. 0.811 kΩ
	80 °C (176 °F)	Approx. 0.318 kΩ
	110 °C (230 °F)	Approx. 0.142 kΩ
Radiator cap valve opening pressure	108 – 137 kPa (1.1 – 1.4 kgf/cm ² , 15.4 – 19.5 psi)	—
Cooling fan operating temperature	OFF → ON	Approx. 105 °C (221 °F)
	ON → OFF	Approx. 100 °C (212 °F)
	OFF → ON	Approx. 100 °C (212 °F)
	ON → OFF	Approx. 95 °C (203 °F)
Engine coolant type	Use an anti-freeze/coolant compatible with aluminum radiator.	—
Engine coolant including reserve	Reserve tank side	Approx. 250 ml (0.3/0.2 US/Imp qt)
	Engine side	Approx. 2 400 ml (2.5/2.1 US/Imp qt)

Injector + Fuel Pump + Fuel Pressure Regulator

Item	Specification	Note
Injector resistance	Approx. 12 Ω at 20 °C (68 °F)	Primary and secondary
Fuel pump discharge amount	167 ml (5.6/5.9 US/Imp oz) and more/10 sec.	
Fuel pressure regulator operating set pressure	Approx. 300 kPa (3.0 kgf/cm ² , 43 psi)	

FI Sensors

Item	Standard/Specification	Note
CKP sensor resistance	Approx. 168 Ω at 20 °C (68 °F)	
CKP sensor peak voltage	0.28 V and more	When cranking
IAP sensor input voltage	4.5 – 5.5 V	
IAP sensor output voltage	Approx. 2.7 V at idle speed	
TP sensor input voltage	4.5 – 5.5 V	
TP sensor output voltage	Closed	1.02 – 1.22 V
	Opened	4.34 – 4.54 V
ECT sensor input voltage	4.5 – 5.5 V	
ECT sensor output voltage	0.15 – 4.85 V	
ECT sensor resistance	Approx. 2.45 k Ω at 20 °C (68 °F)	
IAT sensor input voltage	4.5 – 5.5 V	
IAT sensor output voltage	0.15 – 4.85 V	
IAT sensor resistance	Approx. 2.58 k Ω at 20 °C (68 °F)	
AP sensor input voltage	4.5 – 5.5 V	
AP sensor output voltage	Approx. 3.6 V at 100 kPa (760 mmHg)	
TO sensor resistance	Approx. 19.4 k Ω at 20 °C (68 °F)	
TO sensor voltage	Normal	0.4 – 1.4 V
	Leaning	3.7 – 4.4 V
GP switch voltage	0.6 V and more	When leaning 65° From 1st to Top
Injector voltage	Battery voltage	Primary and secondary
Ignition coil primary peak voltage	80 V and more	When cranking
HO2 sensor output voltage	0.4 V and less at idle speed	
	0.6 V and more at 5 000 r/min	
HO2 sensor heater resistance	6.7 – 9.5 Ω at 23 °C (73 °F)	
PAIR control solenoid valve resistance	20 – 24 Ω at 20 – 30 °C (68 – 86 °F)	
STP sensor input voltage	4.5 – 5.5 V	
STP sensor output voltage	Closed	0.52 – 0.72 V
	Opened	4.12 – 4.32 V
STVA resistance	Approx. 6.5 Ω	
EXCVA position sensor input voltage	4.5 – 5.5 V	
EXCVA position sensor output voltage	Closed	0.45 – 1.4 V
	Opened	3.6 – 4.55 V
EXCVA position sensor resistance	Approx. 3.1 k Ω	At adjustment position
EVAP system purge control solenoid valve resistance	Approx. 32 Ω at 20 °C (68 °F)	If equipped
ISC valve resistance	Approx. 20 Ω at 20 °C (68 °F)	
Steering damper solenoid valve resistance	Approx. 12.5 Ω at 20 °C (68 °F)	
Steering damper solenoid valve voltage	Approx. 10 V	When battery fully charged

Throttle Body

Item	Specification
Bore size	42 mm (1.65 in)
I.D. No.	15J1 (For E-33), 15J0 (For E-03)
Idle r/min	1 200 ± 100 r/min
Throttle cable play	2.0 – 4.0 mm (0.08 – 0.16 in)

Electrical

Unit: mm (in)

Item	Specification	Note	
Firing order	1 · 2 · 4 · 3		
Spark plug	Type	NGK: CR9EIA-9 DENSO: IU27D	
	Gap	0.8 – 0.9 (0.031 – 0.035)	
Spark performance	Over 8 (0.3) at 1 atm.		
CKP sensor resistance	Approx. 168 Ω at 20 °C (68 °F)		
CKP sensor peak voltage	0.28 V and more	When cranking	
Ignition coil resistance	Primary	1.1 – 1.5 Ω at 20 °C (68 °F)	Terminal – Terminal
	Secondary	6.4 – 9.6 kΩ at 20 °C (68 °F)	Plug cap – Terminal
Ignition coil primary peak voltage	80 V and more	When cranking	
Generator coil resistance	0.2 – 1.0 Ω		
Generator maximum output	Approx. 400 W at 5 000 r/min		
Generator no-load voltage (When engine is cold)	65 V (AC) and more at 5 000 r/min		
Regulated voltage	14.0 – 15.5 V at 5 000 r/min		
Starter motor brush length	Standard	12.0 (0.47)	
	Limit	6.5 (0.26)	
Starter relay resistance	3 – 6 Ω		
Battery	Type designation	FT12A-BS	
	Capacity	12 V 36.0 kC (10 Ah)/10 HR	
	Standard electrolyte S.G.	1.320 at 20 °C (68 °F)	
Fuse size	Headlight	HI	10 A
		LO	10 A
	Ignition	10 A	
	Signal	10 A	
	Fuel	10 A	
	Fan	15 A	
	Main	30 A	

Wattage

Unit: W

Item		Specification
Headlight	HI	65
	LO	55
Position light		5 x 2
Brake/Tail light		LED
Turn signal light		21 x 4
License plate light		5
Combination meter light		LED
Turn signal indicator light		LED
High beam indicator light		LED
Neutral position indicator light		LED
Oil pressure indicator light/Engine coolant temp. indicator light		LED
FI indicator light/Sd indicator light		LED
Fuel level indicator light		LED
Engine RPM indicator light		LED

Brake + Wheel

Unit: mm (in)

Item	Standard		Limit
Rear brake pedal height	65 – 75 (2.6 – 3.0)		—
Brake disc thickness	Front	4.8 – 5.2 (0.19 – 0.20)	4.5 (0.18)
	Rear		
Brake disc runout	—		0.30 (0.012)
Master cylinder bore & piston diam.	Front	Approx. 17.5 (0.69)	—
	Rear	Approx. 14.0 (0.55)	—
Brake caliper cylinder bore & piston diam.	Front	Leading	Approx. 32.0 (1.26)
		Trailing	
	Rear	Approx. 30.2 (1.19)	
Brake fluid type	DOT 4		—
Wheel rim runout	Axial	—	2.0 (0.08)
	Radial		
Wheel rim size	Front	17 M/C x MT 3.50	—
	Rear	17 M/C x MT 5.50	—
Wheel axle runout	Front	—	0.25 (0.010)
	Rear		

Tire

Item	Standard		Limit
Cold inflation tire pressure (Solo riding)	Front	250 kPa (2.50 kgf/cm ² , 36 psi)	—
	Rear	290 kPa (2.90 kgf/cm ² , 42 psi)	—
Cold inflation tire pressure (Dual riding)	Front	250 kPa (2.50 kgf/cm ² , 36 psi)	—
	Rear	290 kPa (2.90 kgf/cm ² , 42 psi)	—
Tire size	Front	120/70 ZR17M/C (58 W)	—
	Rear	180/55 ZR17M/C (73 W)	—
Tire type	Front	BRIDGESTONE BATTLEAX BT016F G	—
	Rear	BRIDGESTONE BATTLEAX BT016R G	—
Tire tread depth (Recommended depth)	Front	—	1.6 mm (0.06 in)
	Rear	—	2.0 mm (0.08 in)

Suspension

Unit: mm (in)

Item	Standard		Limit
Front fork stroke	120 (4.7)		—
Front fork spring free length	238.4 (9.39)		233 (9.2)
Front fork oil level	90 (3.5) 80 (3.1) 10 min. after adjustment		—
Front fork oil type	FORK OIL SS-47 or an equivalent fork oil		—
Front fork oil capacity (Each leg)	487 ml (16.5/17.1 US/Imp oz)		—
Front fork inner tube O.D	41 (1.6)		—
Front fork spring adjuster	4 turns in from full soft position		—
Front fork damping force adjuster	Rebound	4 turns out from full hard position	—
	Compression	5 turns out from full hard position	—
Rear shock absorber spring pre-set length	181 (7.1)		—
Rear shock absorber damping force adjuster	Rebound	2 turns out from full hard position	—
	Compression	Lo: 2-1/4 turns out from full hard position Hi: 3 turns out from full hard position	—
Rear wheel travel	130 (5.1)		—
Swingarm pivot shaft runout	—		0.3 (0.01)

Fuel + Oil

Item	Specification		Note
Fuel type	Use only unleaded gasoline of at least 90 pump octane (R/2 + M/2). 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	Including reserve	16 L (4.2/3.5 US/Imp gal)	E-33
		17 L (4.5/3.7 US/Imp gal)	E-03
	Fuel level indicator light lighting	blink lighting	Approx. 3.9 L (1.0/0.9 US/Imp gal) Approx. 1.5 L (0.4/0.3 US/Imp gal)
Engine oil type	SAE 10W-40, API SF/SG or SH/SJ with JASO MA		
Engine oil capacity	Change	2 200 ml (2.3/1.9 US/Imp qt)	
	Filter change	2 500 ml (2.6/2.2 US/Imp qt)	
	Overhaul	2 900 ml (3.1/2.6 US/Imp qt)	

Tightening Torque List

BEN15J10307002

Engine

Item		N·m	kgf·m	lbf·ft	
Exhaust pipe bolt		23	2.3	16.5	
Exhaust chamber support bolt		23	2.3	16.5	
Exhaust chamber support bracket bolt		26	2.6	19.0	
Muffler connecting bolt		23	2.3	16.5	
Muffler cover bolt		11	1.1	8.0	
Muffler support bolt		26	2.6	19.0	
Speed sensor rotor bolt		28	2.8	20.0	
Speed sensor bolt		4.5	0.45	3.0	
Engine sprocket nut		115	11.5	83.0	
Engine mounting bolt (Cylinder)		55	5.5	39.8	
Engine mounting nut (Crankcase)		75	7.5	54.0	
Engine mounting thrust adjuster		23	2.3	16.5	
Engine mounting thrust adjuster lock-nut		45	4.5	32.5	
Engine mounting pinch bolt		23	2.3	16.5	
Cylinder head cover bolt		14	1.4	10.0	
Spark plug		11	1.1	8.0	
Cam chain guide No. 1 bolt		23	2.3	16.5	
Camshaft journal holder bolt		10	1.0	7.0	
Cam chain tension adjuster service cap		23	2.3	16.5	
Cam chain tension adjuster mounting bolt		10	1.0	7.0	
Cam chain tensioner bolt		23	2.3	16.5	
CKP sensor rotor/cam chain drive sprocket bolt		54	5.4	39.0	
Cylinder head bolt	[M10]	31 N·m (3.1 kgf·m, 22.5 lbf·ft) then turn in 1/6 (60°) turn			
	[M6]	10	1.0	7.0	
Clutch sleeve hub nut		95	9.5	68.5	
Clutch spring set bolt		10	1.0	7.0	
Clutch release adjuster cap		11	1.1	8.0	
Clutch push rod adjusting screw lock-nut		5.5	0.55	4.0	
Clutch lifter pin lock-nut		23	2.3	16.5	
Clutch cable lock-nut		4.5	0.45	3.0	
Crankshaft hole plug		11	1.1	8.0	
Starter clutch bolt		15	1.5	11.0	
Generator rotor bolt		120	12.0	87.0	
Generator stator set bolt		11	1.1	8.0	
Generator lead wire clamp bolt		5.5	0.55	4.0	
Oil pressure switch		14	1.4	10.0	
Oil pressure switch lead wire screw		1.5	0.15	1.0	
Oil filter		20	2.0	14.5	
Crankshaft journal bolt	[M9]	18 N·m (1.8 kgf·m, 13.0 lbf·ft) then turn in 50°			
Crankcase bolt	[M6]	Initial	6	0.6	4.5
		Final	11	1.1	8.0
	[M8]	Initial	15	1.5	11.0
		Final	26	2.6	19.0
Oil gallery plug		7	0.7	5.0	
Oil gallery plug	[M6]	10	1.0	7.0	
	[M12]	15	1.5	11.0	
	[M16]	35	3.5	25.5	
Oil drain plug		23	2.3	16.5	
Oil gallery jet		27	2.7	19.5	
Piston cooling oil jet bolt		10	1.0	7.0	
Conrod cap bolt		15 N·m (1.5 kgf·m, 11.0 lbf·ft) then turn in 1/4 (90°) turn			
Oil cooler mounting bolt		10	1.0	7.0	

Item		N-m	kgf-m	lbf-ft
Driveshaft bearing cover bolt	Initial	6	0.6	4.5
	Final	12	1.2	8.5
Driveshaft bearing case bolt (LH and RH)		12	1.2	8.5
Driveshaft retainer bolt		12	1.2	8.5
Gearshift arm stopper		19	1.9	13.5
Gearshift cam stopper bolt		10	1.0	7.0
Gearshift cam plate bolt		13	1.3	9.5
Gearshift cam bearing retainer screw		10	1.0	7.0
Gearshift shaft end screw		8.5	0.85	6.1
Gearshift lever shaft		40	4.0	29.0
Gearshift lever bracket bolt		28	2.8	20.0
Push rod oil seal retainer bolt		10	1.0	7.0
Starter motor mounting bolt		10	1.0	7.0
Starter motor lead wire mounting nut		6	0.6	4.5
Starter motor housing bolt		5	0.5	3.5
Starter motor brush holder nut		11	1.1	8.0
PAIR solenoid valve bracket mounting bolt		11	1.1	8.0
Throttle cable nut		4.5	0.45	3.0

FI System + Intake Air System

Item		N-m	kgf-m	lbf-ft
CMP sensor bolt		10	1.0	7.0
TP sensor mounting screw		3.5	0.35	2.5
STP sensor mounting screw		3.5	0.35	2.5
ISC valve mounting screw		2	0.2	1.5
CKP sensor mounting screw		5.5	0.55	4.0
CKP sensor clamp screw		5.5	0.55	4.0
HO2 sensor		25	2.5	18.0
Fuel delivery pipe mounting screw		3.5	0.35	2.5
Fuel pump mounting bolt		10	1.0	7.0
EXCVA pulley mounting bolt		5	0.5	3.5
EXCV cable bracket mounting nut		11	1.1	8.0
IAP sensor mounting screw		3.5	0.35	2.5
IAT sensor mounting bolt		1.5	0.15	1.0
GP switch mounting bolt		6.5	0.65	4.5
Intake pipe bolt		10	1.0	7.0
Intake pipe clamp screw		1.5	0.15	1.0
Air cleaner box cover screw		1.5	0.15	1.0
Air cleaner holder bolt		10	1.0	7.0
Funnel bolt		4.3	0.43	3.0
EVAP pipe mounting bolt (if equipped)		10	1.0	7.0
EVAP system purge control solenoid valve mounting nut (if equipped)		10	1.0	7.0
EVAP system purge control solenoid valve bracket bolt (if equipped)		10	1.0	7.0

Cooling System

Item		N-m	kgf-m	lbf-ft
Impeller securing bolt		8	0.8	6.0
Water pump case screw		5.5	0.55	4.0
Water pump air bleeder bolt		13	1.3	9.5
Water pump mounting bolt		10	1.0	7.0
ECT sensor		18	1.8	13.0
Radiator reservoir tank bolt		6	0.6	4.5
Water hose clamp screw		1.5	0.15	1.0

Chassis

Item	N-m	kgf-m	lbf-ft
Steering stem head nut	90	9.0	65.0
Steering stem lock-nut	80	8.0	58.0
Steering damper bolt	23	2.3	16.5
Steering damper nut	23	2.3	16.5
Front fork upper clamp bolt	23	2.3	16.5
Front fork lower clamp bolt	23	2.3	16.5
Front fork cap bolt	35	3.5	25.5
Front fork piston rod nut	28	2.8	20.0
Front fork rod guide case	90	9.0	65.0
Front axle nut	100	10.0	72.5
Front axle pinch bolt	23	2.3	16.5
Handlebar clamp bolt	23	2.3	16.5
Handlebar balancer screw	5.5	0.55	4.0
Master cylinder holder bolt (Upper and Lower)	10	1.0	7.0
Front brake caliper mounting bolt	39	3.9	28.0
Brake hose union bolt	23	2.3	16.5
Air bleeder valve (Front caliper)	7.5	0.75	5.5
Air bleeder valve (Rear caliper)	6.0	0.6	4.5
Air bleeder valve (Front master cylinder)	6.0	0.6	4.5
Brake disc bolt (Front)	18	1.8	13.0
Brake disc bolt (Rear)	35	3.5	25.5
Rear brake pad mounting pin	18	1.8	13.0
Rear brake pad mounting pin plug	2.5	0.25	2.0
Rear brake caliper sliding pin A	27	2.7	19.5
Rear brake caliper sliding pin B	13	1.3	9.5
Rear brake master cylinder mounting bolt	10	1.0	7.0
Rear brake master cylinder rod lock-nut	18	1.8	13.0
Brake lever pivot bolt	1	0.1	0.7
Brake lever pivot bolt lock-nut	6	0.6	4.5
Clutch lever pivot nut	6.5	0.65	4.7
Clutch lever holder bolt	10	1.0	7.0
Swingarm pivot shaft	15	1.5	11.0
Swingarm pivot nut	100	10.0	72.5
Swingarm pivot lock-nut	90	9.0	65.0
Cushion lever mounting nut	98	9.8	71.0
Cushion rod mounting nut	98	9.8	71.0
Rear shock absorber bracket nut	100	10.0	72.5
Rear shock absorber mounting nut (Upper and Lower)	50	5.0	36.0
Spring adjuster lock-nut	35	3.5	25.5
Rear axle nut	100	10.0	72.5
Rear sprocket nut	60	6.0	43.0
Rear combination light mounting bolt	5	0.5	3.5
License plate light mounting nut	5	0.5	3.5
Side-stand nut	40	4.0	29.0
Side-stand bolt	50	5.0	36.0
Side-stand bracket mounting bolt	50	5.0	36.0
Bank sensor bolt	18	1.8	13.0
Footrest bracket bolt	23	2.3	16.5
Footrest guard screw (Left side)	4.5	0.45	3.0
Footrest holder bolt	35	3.5	25.5
Pillion footrest bracket bolt	23	2.3	16.5
Seat rail mounting bolt	50	5.0	36.0
Cowling brace mounting nut	38	3.8	27.5
Rear fender (Lower) mounting bolt	10	1.0	7.0
Rear view mirror mounting nut	10	1.0	7.0

Item	N·m	kgf-m	lbf-ft
Front reflector bolt (if equipped)	10	1.0	7.0
Front reflex reflector (if equipped)	1.8	0.18	1.3
Rear reflex reflector nut (if equipped)	1.8	0.18	1.3
Under cowling mounting screw (right side)	6.5	0.65	4.7