



Motorcycle
2012 Model: GSX1300R/ZL2
Date: June 2011

MSRP \$13,999



Glass Sparkle Black (YVB)

Key Features

1. 1340cm³ in-line 4-cylinder fuel-injected, liquid-cooled DOHC engine built to deliver a broad wave of torque for effortless acceleration.
2. Hard, smooth chrome-nitride Physical Vapor Deposition (PVD) coating on the upper compression and oil control rings on each piston reduces friction while improving cylinder sealing.
3. Suzuki Composite Electrochemical Material (SCEM) cylinder plating improves heat transfer, durability and ring seal.
4. U-shaped cutouts in the cylinder-bore sides allow air below descending pistons to escape to adjacent cylinders to reduce internal pumping pressure and mechanical power losses.
5. Lightweight titanium valves allow use of light valve springs and high lift while maintaining accurate valve control. Iridium spark plugs produce more complete combustion.

6. Curved radiator with a compact, dense-core design and engine-management-computer-controlled two ring-type electric fans mounted on the rear of the radiator, increasing the control accuracy and keeping engine temperature stable.
7. Suzuki Clutch Assist System (SCAS) serves as back-torque-limiting system for smooth downshifts and also contributes to a light clutch pull.
8. Advanced aerodynamics offering superb wind protection both for normal and completely tucked-in seating positions.
9. Optimized 6-speed transmission; oil spray to the 4th, 5th and 6th gears reduce wear and mechanical noise during highway cruising.
10. Suzuki Dual Throttle Valve (SDTV) fuel injection results in improved power delivery and a more linear response. This system uses engine-computer-operated secondary valves to maintain optimum intake-air velocity for maximum combustion efficiency.
11. Two 12-hole fine-spray injectors on each throttle body improve fuel atomization for better combustion efficiency and while reducing fuel consumption.
12. Idle Speed Control (ISC) system improves cold starting and helps maintain stable engine idle under various conditions.
13. Suzuki Pulsed-secondary AIR-injection (PAIR) system ignites unburned hydrocarbons (HC) and reduces carbon monoxide (CO) emissions.
14. Suzuki Drive Mode Selector (S-DMS) enables the rider to choose from three different engine power characteristics according to personal preference.
15. Advanced aerodynamics offering superb wind protection both for normal and completely tucked-in seating positions.
16. Twin-spar aluminum-alloy frame built with castings and extrusions.
17. Rear subframe made of rectangular steel tubing for sufficient weight carrying capacity.
18. Inverted cartridge front forks featuring Diamond-Like Coating (DLC) surface treatment to reduce stiction and improve reaction to small surface irregularities.
19. The front forks and the single rear shock absorber both have fully adjustable spring preload, compression and rebound damping.
20. 3-spoke cast-aluminum-alloy wheels with 120/70ZR17M/C (58W) front and 190/50ZR17M/C (73W) rear radial tires.

21. 310mm (12.2 inch) dual-floating-disc front brakes with efficient, race-proven aluminum-piston, radial-mount brake calipers, and 260mm (10.2 inch) single-disc rear brake with single-piston brake caliper.
22. Quality detail finish – passenger footpeg brackets, muffler hangers, footpeg/control brackets – evoking the fine art of feudal Japanese armor, Yoroi-Kabuto.
23. Standard-equipment steering damper.
24. Integrated front turn signals form the outer edges of the ram-air-intake scoop.
25. Vertically stacked headlight featuring a projector high beam and a halogen-bulb multi-reflector low beam.
26. Unique tailsection featuring streamlined bulges carrying integrated rear turn signals and shaped with jet-engine motif.
27. Bright, durable LED taillight, with clear inner lens and red outer lens.
28. Analog gauges including step-motor-driven tachometer and speedometer.
29. Round LCD panel includes clock, gear position indicator, S-DMS map indicator, odometer and dual trip meters. Engine-rpm indicator, programmable to blink or stay on between 4,000 and 11,500 rpm.
30. Silver metallic trim around the analog gauges and LCD panel evoking American GT muscle-car image.

Limited Edition

MSRP \$14,299



Candy Sonoma Red (YHL)

SPECIFICATIONS**MODEL: GSX1300R/ZL2****DIMENSIONS AND CURB MASS**

Overall length.....	2190 mm (86.2 in)
Overall width.....	735 mm (28.9 in)
Overall height.....	1165 mm (45.9 in)
Wheelbase.....	1480 mm (58.3 in)
Ground clearance.....	120 mm (4.7 in)
Seat height.....	805 mm (31.7 in)
Curb mass.....	260 kg (573 lbs)

ENGINE

Type.....	4-stroke, Liquid-cooled, DOHC
Number of cylinders.....	4
Bore.....	81.0 mm (3.189 in)
Stroke.....	65.0 mm (2.559 in)
Displacement.....	1340 cm ³ (81.8 cu. in)
Compression ratio.....	12.5 : 1
Fuel system.....	Fuel injection
Air cleaner.....	Paper element
Starter system.....	Electric
Lubrication system.....	Wet sump
Idle speed.....	1150 ± 100 r/min

DRIVE TRAIN

Clutch.....	Wet multi-plate type
Transmission.....	6-speed constant mesh
Gearshift pattern	1-down, 5-up
Primary reduction ratio.....	1.596 (83/52)
Gear ratios, Low.....	2.615 (34/13)
2nd.....	1.937 (31/16)
3rd.....	1.526 (29/19)
4th.....	1.285 (27/21)
5th.....	1.136 (25/22)
Top.....	1.043 (24/23)
Final reduction ratio.....	2.388 (43/18)
Drive chain.....	RK GB50GSV Z4, 114 links

CHASSIS

Front suspension.....	Inverted telescopic, coil spring, oil damped
Rear suspension.....	Link type, coil spring, oil damped
Front suspension stroke.....	120 mm (4.7 in)
Rear wheel travel.....	140 mm (5.5 in)
Caster.....	23° 25'
Trail.....	93 mm (3.66 in)
Steering angle.....	30° (right & left)
Turning radius.....	3.3 m (10.8 ft)
Front brake.....	Disc brake, twin
Rear brake.....	Disc brake
Front tire.....	120/70ZR17M/C (58W), tubeless
Rear tire.....	190/50ZR17M/C (73W), tubeless

ELECTRICAL

Ignition type.....	Electronic ignition (Transistorized)
Ignition timing.....	5° B.T.D.C. at 1150 r/min
Spark plug.....	NGK CR9EIA-9 or DENSO IU27D
Battery.....	12V 36.0 kC (10Ah)/10 HR
Generator.....	Three-phase A.C. generator
Main fuse.....	30A
Fuse.....	15/15/15/10/10/10/10A
Headlight.....	12V 65W (H9).....High beam 12V 55W (H7).....Low beam
Position light.....	12V 5W × 2
Brake/Tail light.....	LED
Turn signal light.....	12V 21W
License plate light.....	12V 5W
Speedometer light.....	LED
Tachometer light.....	LED
Neutral indicator light.....	LED
High beam indicator light.....	LED
Turn signal indicator light.....	LED
Coolant temperature indicator light.....	LED
Oil pressure indicator light.....	LED
Fuel level indicator light.....	LED
FI indicator light.....	LED
Engine RPM indicator light.....	LED

CAPACITIES

Fuel tank.....	20.0 L (5.3/4.4 US/Imp gal)...E33 21.0 L (5.5/4.6 US/Imp gal)...Others
Engine oil, oil change.....	3100 ml (3.3/2.7 US/Imp qt)
with filter change.....	3300 ml (3.5/2.9 US/Imp qt)
overhaul.....	4000 ml (4.2/3.5 US/Imp qt)
Coolant.....	3.0 L (3.1/2.6 US/Imp qt)

**Model: GSX1300RL2
GSX1300RUFL2**

**E-02, 03, 14, 19, 24, 28, 33, 50, 51
E-19**

Date: September 13, 2011

SERVICE DATA

Valve + Guide

Unit: mm (in)

Item	Standard		Limit
Valve diam.	IN.	33 (1.30)	—
	EX.	27.5 (1.08)	—
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.	5.000 – 5.012 (0.1969 – 0.1973)	—
Valve stem O.D.	IN.	4.975 – 4.990 (0.1959 – 0.1965)	—
	EX.	4.955 – 4.970 (0.1951 – 0.1957)	—
Valve stem deflection	IN. & EX.	—	0.25 (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.	—	42.3 (1.67)
Valve spring tension	IN. & EX.	Approx. 137 N (14.0 kgf, 30.8 lbs) at length 36.6 mm (1.44 in)	—

Camshaft + Cylinder Head

Unit: mm (in)

Item	Standard		Limit
Cam height	IN.	36.98 – 37.02 (1.456 – 1.457)	36.68 (1.444)
	EX.	36.58 – 36.62 (1.440 – 1.442)	36.28 (1.428)
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”)	15th pin		—
Cylinder head distortion	—		0.20 (0.008)

Cylinder + Piston + Piston Ring

Unit: mm (in)

Item	Standard			Limit
Compression pressure	1 400 – 1 800 kPa (14 – 18 kgf/cm², 199 – 256 psi)			1 000 kPa (10 kgf/cm², 142 psi)
Compression pressure difference	—			200 kPa (2 kgf/cm², 28 psi)
Piston-to-cylinder clearance	0.035 – 0.045 (0.0014 – 0.0018)			0.120 (0.0047)
Cylinder bore	81.000 – 81.015 (3.1890 – 3.1896)			No nicks or Scratches
Piston diam.	80.960 – 80.975 (3.1874 – 3.1880) Measure 15 mm (0.6 in) from the skirt end.			80.880 (3.1842)
Cylinder distortion	—			0.20 (0.008)
Piston ring free end gap	1st	—	Approx. 6.5 (0.26)	5.2 (0.20)
	2nd	2T	Approx. 9.0 (0.35)	7.2 (0.28)
Piston ring end gap	1st	—	0.06 – 0.18 (0.002 – 0.007)	0.50 (0.020)
	2nd	2T		
Piston ring-to-groove clearance	1st	—		0.180 (0.0071)
	2nd	—		0.150 (0.0059)
Piston ring groove width	1st	0.83 – 0.85 (0.0327 – 0.0335) 1.30 – 1.32 (0.0512 – 0.0520)		—
		2nd	1.01 – 1.03 (0.0398 – 0.0406)	
	Oil	2.01 – 2.03 (0.0791 – 0.0799)		—
Piston ring thickness	1st	0.76 – 0.81 (0.0299 – 0.0319) 1.08 – 1.10 (0.0425 – 0.0433)		—
		2nd	0.97 – 0.99 (0.0382 – 0.0390)	
Piston pin bore	18.002 – 18.008 (0.7087 – 0.7090)			18.030 (0.7098)
Piston pin O.D.	17.996 – 18.000 (0.7085 – 0.7087)			17.980 (0.7079)

Conrod + Crankshaft

Unit: mm (in)

Item	Standard		Limit
Conrod small end I.D.	18.010 – 18.018 (0.7091 – 0.7094)		18.040 (0.7102)
Conrod big end side clearance	0.10 – 0.20 (0.004 – 0.008)		0.3 (0.012)
Conrod big end width	20.95 – 21.00 (0.825 – 0.827)		—
Crank pin width	21.10 – 21.15 (0.831 – 0.833)		—
Conrod big end oil clearance	0.032 – 0.056 (0.0013 – 0.0022)		0.080 (0.0031)
Crank pin O.D.	37.976 – 38.000 (1.4951 – 1.4960)		—
Crankshaft journal oil clearance	0.010 – 0.028 (0.0004 – 0.0011)		0.080 (0.0031)
Crankshaft journal O.D.	39.982 – 40.000 (1.5741 – 1.5748)		—
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)	200 – 500 kPa (2.0 – 5.0 kgf/cm ² , 28.4 – 71.1 psi) at 3 000 r/min	—

Clutch

Unit: mm (in)

Item	Standard		Limit
Clutch drive plate thickness	No. 1	2.92 – 3.08 (0.115 – 0.121)	2.62 (0.103)
	No. 2 & 3	3.72 – 3.88 (0.146 – 0.153)	3.42 (0.135)
Clutch drive plate claw width	No. 1	13.85 – 13.96 (0.542 – 0.550)	13.05 (0.514)
	No. 2 & 3	13.90 – 14.00 (0.547 – 0.551)	13.10 (0.516)
Clutch driven plate distortion	—		0.10 (0.004)
Clutch spring free length	37.13 (1.462)		35.3 (1.39)
Clutch master cylinder bore	14.000 – 14.043 (0.5512 – 0.5529)		—
Clutch master cylinder piston diam.	13.957 – 13.984 (0.5495 – 0.5506)		—
Clutch release cylinder bore	33.600 – 33.662 (1.3228 – 1.3253)		—
Clutch release cylinder piston diam.	33.550 – 33.575 (1.3209 – 1.3218)		—
Clutch fluid type	Brake fluid DOT 4		—

Drive Train

Unit: mm (in) Except ratio

Item		Standard	Limit
Primary reduction ratio		1.596 (83/52)	—
Final reduction ratio		2.388 (43/18)	—
Gear ratios	Low	2.615 (34/13)	—
	2nd	1.937 (31/16)	—
	3rd	1.526 (29/19)	—
	4th	1.285 (27/21)	—
	5th	1.136 (25/22)	—
	Top	1.043 (24/23)	—
Shift fork to groove clearance		0.1 – 0.3 (0.004 – 0.012)	0.5 (0.02)
Shift fork groove width		5.0 – 5.1 (0.197 – 0.201)	—
Shift fork thickness		4.8 – 4.9 (0.189 – 0.193)	—
Drive chain	Type	RK GB50GSVZ4	—
	Links	114 links	—
	20-pitch length	—	319.4 (12.57)
Drive chain slack (on side-stand)		20 – 30 (0.8 – 1.2)	—
Gearshift lever height		50 – 60 (2.0 – 2.4)	—

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	93 – 123 kPa (0.93 – 1.23 kgf/cm ² , 13.2 – 17.5 psi)		—
Cooling fan operating temperature	OFF → ON	Approx. 105 °C (221 °F)	—
	ON → OFF	Approx. 100 °C (212 °F)	—
Engine coolant type	Use an anti-freeze/coolant compatible with aluminum radiator, mixed with distilled water only, at the ratio of 50:50.		—
Engine coolant including reserve	Reserve tank side	Approx. 250 ml (0.3/0.2 US/Imp qt)	—
	Engine side	Approx. 2 700 ml (2.9/2.4 US/Imp qt)	—

Injector + Fuel Pump + Fuel Pressure Regulator

Item	Specification	Note
Injector resistance	11 – 13 Ω at 20 °C (68 °F)	
Fuel pump discharge amount	220 ml (7.4/7.7 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	180 – 280 Ω		
CKP sensor peak voltage	3.0 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	Approx. 1.1 V	
	Opened	Approx. 4.3 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	16.5 – 22.3 k Ω		
TO sensor voltage	Normal	0.4 – 1.4 V	
	Leaning	3.7 – 4.4 V	When leaning 65°
GP switch voltage	0.6 V and more		From 1st to Top
Injector voltage	Battery voltage		
Ignition coil primary peak voltage	80 V and more		When cranking
HO2 sensor output voltage	0.3 V and less at idle speed		
	0.6 V and more at 3 000 r/min		
HO2 sensor heater resistance	Approx. 8 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	Approx. 0.5 V	
	Opened	Approx. 3.9 V	
STVA resistance	Approx. 6.5 Ω		
EVAP system purge control solenoid valve resistance	Approx. 32 Ω at 20 °C (68 °F)		E-14, 33
ISC valve resistance	Approx. 80 Ω at 20 °C (68 °F)		

Throttle Body

Item	Specification
Bore size	44 mm (1.73 in)
I.D. No.	15H1 (For E-33, 50), 15H0 (For the others)
Idle r/min	1 150 ± 100 r/min
Throttle cable play	2.0 – 4.0 mm (0.08 – 0.16 in)

Electrical

Unit: mm

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			180 – 280 Ω		
CKP sensor peak voltage			3.0 V and more	When cranking	
Ignition coil resistance			Primary	1.0 – 1.9 Ω	Terminal – Terminal
			Secondary	10.0 – 16.2 kΩ	Plug cap – Terminal
Ignition coil primary peak voltage			80 V and more	When cranking	
Generator coil resistance			0.2 – 0.7 Ω		
Generator maximum output			Approx. 400 W at 5 000 r/min		
Generator no-load voltage (When engine is cold)			70 V (AC) and more at 5 000 r/min		
Regulated voltage			13.5 – 15.5 V at 5 000 r/min		
Starter motor brush length			Standard	12.0 (0.47)	
			Limit	8.5 (0.33)	
Starter torque limiter slip torque			33.3 – 52.0 N·m (3.3 – 5.2 kgf-m, 24.0 – 37.5 lbf-ft)		
Starter relay resistance			3 – 5 Ω		
Battery	Type designation		YTX12-BS		
	Capacity		12 V 36 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		
	Signal		10 A		
	Ignition		15 A		
	Fuel		10 A		
	Fan (LH)		15 A		
	Fan (RH)				
	Main		30 A		

Wattage

Unit: W

Item		Specification	
		E-02, 19, 24, 50	The other countries
Headlight	HI	65	←
	LO	55	←
Position/Parking light		5 x 2	←
Brake/Tail light		LED	←
Turn signal light		21 x 4	←
License plate light		5	←
Tachometer light		LED	←
Speedometer light		LED	←
Turn signal indicator light		LED	←
High beam indicator light		LED	←
Neutral position indicator light		LED	←
Oil pressure indicator light		LED	←
FI indicator light		LED	←
Engine coolant temp. indicator light		LED	←
Fuel level indicator light		LED	←
Engine R.P.M. indicator light		LED	←
Immobilizer indicator light		LED	—

Brake + Wheel

Unit: mm (in)

Item	Standard			Limit
Rear brake pedal height	50 – 60 (2.0 – 2.4)			—
Brake disc thickness	Front	5.3 – 5.7 (0.21 – 0.22)		5.0 (0.20)
	Rear			
Brake disc runout	—			0.30 (0.012)
Master cylinder bore	Front	14.000 – 14.043 (0.5512 – 0.5529)		—
	Rear	12.700 – 12.743 (0.5000 – 0.5017)		—
Master cylinder piston diam.	Front	13.957 – 13.984 (0.5495 – 0.5506)		—
	Rear	12.657 – 12.684 (0.4983 – 0.4994)		—
Brake caliper cylinder bore	Front	Leading	30.280 – 30.330 (1.1921 – 1.1941)	—
		Trailing	32.080 – 32.130 (1.2630 – 1.2650)	—
	Rear	38.180 – 38.256 (1.5031 – 1.5061)		—
				—
Brake caliper piston diam.	Front	Leading	30.167 – 30.200 (1.1877 – 1.1890)	—
		Trailing	31.967 – 32.000 (1.2585 – 1.2598)	—
	Rear	38.098 – 38.148 (1.4999 – 1.5019)		—
				—
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 6.00		—
Wheel axle runout	Front	—		0.25 (0.010)
	Rear			

Tire

Item	Standard			Limit
Cold inflation tire pressure (Solo/Dual riding)	Front	290 kPa (2.90 kgf/cm ² , 42 psi)		—
	Rear			
Tire size	Front	120/70 ZR17M/C (58 W)		—
	Rear	190/50 ZR17M/C (73 W)		—
Tire type	Front	BRIDGESTONE BT015F RADIAL M		—
	Rear	BRIDGESTONE BT015R RADIAL M		—
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	263 (10.4)		257 (10.1)
Front fork oil level (Without spring, outer tube fully compressed)	95 (3.7)		—
Front fork oil type	SUZUKI FORK OIL L01 or an equivalent fork oil		—
Front fork oil capacity (Each leg)	532 ml (18.0/18.7 US/lmp oz)		—
Front fork inner tube O.D	43 (1.7)		—
Front fork spring adjuster	3-1/2 grooves from top		—
Front fork damping force adjuster	Rebound	8 clicks out from stiffest position	—
	Compression		—
Rear shock absorber spring pre-set length	195 (7.7)		—
Rear shock absorber damping force adjuster	Rebound	12 clicks out from stiffed postion	—
	Compression	8 clicks out from stiffed postion	—
Rear wheel travel	140 (5.5)		—
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.		E-03, 28, 33
	Gasoline used should be graded 95 octane or higher. An unleaded gasoline type is recommended.		Others
Fuel tank capacity	Including reserve	20 L (5.3/4.4 US/Imp gal)	E-14, 33, 50
		21 L (5.5/4.6 US/Imp gal)	Others
Engine oil type	SAE 10W-40, API SF/SG or SH/SJ with JASO MA		
Engine oil capacity	Change	3 100 ml (3.3/2.7 US/Imp qt)	
	Filter change	3 300 ml (3.5/2.9 US/Imp qt)	
	Overhaul	4 000 ml (4.2/3.5 US/Imp qt)	

Tightening Torque List

Engine

Item			N-m	kgf-m	lbf-ft
Exhaust pipe bolt			23	2.3	16.5
Exhaust pipe mounting bolt			23	2.3	16.5
Muffler mounting bolt			25	2.5	18.0
Muffler connecting bolt			23	2.3	16.5
Muffler joint nut			25	2.5	18.0
Speed sensor rotor bolt			28	2.8	20.0
Engine sprocket nut			145	14.5	105.0
Speed sensor bolt			6.5	0.65	4.7
Engine mounting bolt			55	5.5	40.0
Engine mounting nut			75	7.5	54.0
Engine mounting thrust adjuster			10	1.0	7.0
Engine mounting thrust adjuster lock-nut			45	4.5	32.5
Engine mounting pinch bolt			35	3.5	25.5
Cylinder head cover bolt			14	1.4	10.0
Spark plug			11	1.1	8.0
Cam chain guide No. 2 bolt			10	1.0	7.0
Camshaft journal holder bolt			10	1.0	7.0
Cam chain tension adjuster mounting bolt			10	1.0	7.0
Cylinder head side bolt			14	1.4	10.0
Cam chain tensioner bolt			23	2.3	16.5
Cylinder head bolt	[M6]		10	1.0	7.0
	[M10]	Initial	25	2.5	18.0
		Final	52	5.2	37.5
Cylinder nut	[M6]		10	1.0	7.0
Water inlet connector bolt			10	1.0	7.0
Oil hose union bolt			18	1.8	13.0
Clutch cover bolt			10	1.0	7.0
Clutch sleeve hub nut			150	15.0	108.5
Clutch spring set bolt			10	1.0	7.0
Clutch spring support bolt			23	2.3	16.5
Starter clutch cover bolt			10	1.0	7.0
Starter torque limiter cover bolt			10	1.0	7.0
Starter clutch cover cap			10	1.0	7.0
Valve timing inspection cap			23	2.3	16.5
Starter clutch bolt			55	5.5	40.0
Generator cover bolt			10	1.0	7.0
Generator rotor bolt			120	12.0	87.0
Generator stator set bolt			11	1.1	8.0
Gearshift cover bolt			10	1.0	7.0
Gearshift cam stopper bolt			10	1.0	7.0
Gearshift cam stopper plate bolt			13	1.3	9.5
Gearshift arm stopper bolt			19	1.9	13.5
Oil pressure switch			14	1.4	10.0
Crankcase bolt	[M6]		11	1.1	8.0
	[M8]		26	2.6	19.0
	[M10]		50	5.0	36.0
Oil gallery plug	[M6] and [M8]		10	1.0	7.0
	[M10]		18	1.8	13.0
	[M14]		23	2.3	16.5
	[M16]		35	3.5	25.5
Oil drain plug			23	2.3	16.5
Piston cooling oil jet bolt			10	1.0	7.0
Oil jet (For generator)			5	0.5	3.5

Item			N-m	kgf-m	lbf-ft
Oil pump mounting bolt			10	1.0	7.0
Conrod bearing cap bolt	Initial		21	2.1	15.0
	Final		90°		
Bearing retainer screw			8	0.8	6.0
Cam chain guide retainer screw			8	0.8	6.0
Balancer shaft arm bolt			10	1.0	7.0
Balancer cover bolt			10	1.0	7.0
Balancer pipe bolt			10	1.0	7.0
Oil strainer bolt			10	1.0	7.0
Oil pan bolt			10	1.0	7.0
Oil pipe bolt (Camshaft housing)			10	1.0	7.0
Oil pipe bolt	[M6]		10	1.0	7.0
Oil pipe union bolt	[M14]		24	2.4	17.5
Oil filter			20	2.0	14.5
PAIR reed valve cover bolt			11	1.1	8.0
Cam chain tension adjuster service cap			23	2.3	16.5
Water jacket plug			11	1.1	8.0
Crankshaft journal bolt	[M9]	Initial	18	1.8	13.0
Crankshaft journal bolt		Final	32	3.2	23.0
Balancer shaft mounting bolt			10	1.0	7.0
PCV cover bolt			10	1.0	7.0
PCV reed valve cover bolt			10	1.0	7.0
Main oil gallery plug	[M6]		35	3.5	25.5
Oil pressure switch lead wire bolt			1.5	0.15	1.1
Speed sensor mounting bolt			6.5	0.65	4.7

FI System

Item			N-m	kgf-m	lbf-ft
CKP sensor mounting bolt			6.5	0.65	4.7
HO2 sensor			25	2.5	18.0
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
Fuel delivery pipe mounting screw			3.5	0.35	2.5
GP switch mounting bolt			6.5	0.65	4.7
Fuel pump mounting bolt			10	1.0	7.0
IAT sensor mounting screw			5.5	0.55	4.0

Cooling System

Item			N-m	kgf-m	lbf-ft
Impeller securing bolt			8	0.8	6.0
Water pump case screw			6	0.6	4.5
Water pump mounting bolt			10	1.0	7.0
Thermostat cover bolt			10	1.0	7.0
Oil cooler hose bolt			10	1.0	7.0
ECT sensor			18	1.8	13.0

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	23	2.3	16.5
Front fork inner rod lock-nut	15	1.5	11.0
Front fork damper rod bolt	23	2.3	16.5
Front axle bolt	100	10.0	72.5
Front axle pinch bolt	23	2.3	16.5
Handlebar holder mounting nut	35	3.5	25.5
Handlebar clamp bolt	10	1.0	7.0
Master cylinder holder bolt (Upper and Lower)	10	1.0	7.0
Front brake caliper mounting bolt	39	3.9	28.0
Front brake caliper housing bolt	22	2.2	16.0
Front brake pad mounting pin	15	1.5	11.0
Brake hose union bolt	23	2.3	16.5
Clutch master cylinder mounting bolt	10	1.0	7.0
Clutch hose union bolt	23	2.3	16.5
Air bleeder valve (Front)	7.5	0.75	5.5
Air bleeder valve (Rear)	7.5	0.75	5.5
Brake disc bolt (Front)	23	2.3	16.5
Brake disc bolt (Rear)	35	3.5	25.5
Rear brake caliper mounting bolt	17	1.7	12.5
Rear brake pad mounting pin	15	1.5	11.0
Rear brake master cylinder mounting bolt	10	1.0	7.0
Rear brake master cylinder rod lock-nut	18	1.8	13.0
Rear brake caliper sliding pin	33	3.3	24.0
Brake lever pivot bolt	6	0.6	4.5
Brake lever pivot bolt lock-nut	6	0.6	4.5
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	78	7.8	56.5
Cushion rod mounting nut	78	7.8	56.5
Rear shock absorber mounting nut	50	5.0	36.0
Rear axle nut	100	10.0	72.5
Rear sprocket nut	60	6.0	43.5
Rear master cylinder rod lock-nut	18	1.8	13.0
Air bleeder valve (Clutch)	6	0.6	4.5
Clutch master cylinder holder bolt	10	1.0	7.0
Clutch lever pivot bolt	1.0	0.1	0.7
Clutch lever pivot bolt lock-nut	6.0	0.6	4.5
Clutch release mounting bolt	10	1.0	7.0