Features & Specifications
2019 Boulevard C50

VL800L9

YVB: Glass Sparkle Black

Overview

The Suzuki Boulevard C50 stamps a bold impression on traditional cruiser styling that includes kicked-out forks and a staggered, chromed, dual exhaust system; the Boulevard C50 turns heads wherever you ride. Its fuel injected, 50 cubic inch, V-twin engine delivers abundant torque and is engineered for comfort. On the boulevard or the open highway, its spacious riding position and smooth suspension let you cruise comfortably all day long, while its rear suspension delivers the appearance of a classic hardtail.

Key Features

- **New, deep Metallic Mystic Silver or Glass Sparkle Black paint with distinguished graphics magnify the Boulevard's classic posture.**
- **Fifty cubic inch (805cc), 45-degree V-twin engine rumbles through dual pipes as it smoothly puts down power that's at home in town or out on the highway.**
- **With a light pull the clutch feeds engine power to the smooth-shifting five-speed transmission and out to the clean shaft drive.**
- **Riders settle in behind wide, buckhorn-style handlebars, with feet comfortably on forward-mount floorboards, while sitting on a plush seat that's a short 27.6 inches above the ground.**
- **The classically styled 4.1-gallon fuel tank complements the large, valance fenders that hover over the wide 15-inch rear and 16-inch front tires mounted on spoke-style chrome wheels.**
- **Brushed, stainless steel covers shield the stout front fork, whereas a hidden, link-style rear shock smooths the ride while giving the bike an old-school, hard-tail look.**

Engine Features

- **Narrow 805cc, fuel injected, liquid-cooled, SOHC, four-valve-per-cylinder, 45-degree, V-twin engine is tuned for exceptional low rpm torque.**
- **Sculpted engine features polished aluminum and chrome covers that complement the visually striking cylinders with symmetrical cooling fins.**
- **Offset crankpins bring optimally balanced firing intervals and create a signature V-twin rumble.**
- **Suzuki Dual Throttle Valve (SDTV) electronic fuel injection system maintains optimum air velocity in the intake tract for smooth low- to mid-rpm throttle response.**
- **Auto Fast Idle System (AFIS) automatically sets the throttle-valve opening during cold engine starts by monitoring coolant temperature.**

Engine Features (continued)

- Cutting-edge 3D-mapped digital ignition system using a throttle-position sensor helps boost the hallmark big V-twin down-low torque.
- Chromed and staggered dual exhaust system mounted on the right side of the engine is tuned for responsive torque delivery, providing a deep, rumbling exhaust note.
- A wide-ratio five-speed transmission features a high fifth-gear ratio for relaxed highway cruising.
- Low-maintenance shaft drive is clean-running and has minimal torque reaction as it efficiently transmits power to the wide 15-inch rear tire.

VL800L9

YMD: Metallic Mystic Silver

Chassis Features

- Strong, double-cradle steel frame supports a chassis ready for cruising or a full-on tour.
- New-generation styling incorporates visual cues from American cruiser heritage: rich paintwork, glittering chrome, and deep front and rear fenders with rounded ends.
- Link-type rear suspension is shaped to mimic the hard-tail lines of a traditional cruiser, connecting a truss-style swingarm and a single shock absorber with seven-way spring preload adjustability, providing 4.1 inches of smooth and responsive suspension travel.
- A kicked-out, 33-degree rake and long 65.2-inch wheelbase provide a smooth, comfortable ride.
- Stout telescopic front forks deliver generous 5.5 inches of smooth wheel travel.
- Wide handlebars, forward-mounted floorboards, and leather-textured seat provide a comfortable ride around town and on the highway.
- A wide 15-inch rear tire and matching 16-inch front tire are mounted to bright, spoke-style wheels for a classic cruiser look.
- Hydraulic front disc and drum-type rear brakes provide strong, reliable braking performance.
- The wide, deeply cushioned seat has a low 27.6-inch seat height that's ideal for comfortable cruising and confident stops.
- Wide passenger seat makes for comfortable two-up rides. Its stepped location on the rear fender allows passengers to see over the rider's shoulder.
- The instrument cluster includes a convenient gear-position indicator, a large fuel meter, and a clock.
- Bright multi-reflector headlight. Durable, efficient, and compact LED tail light.
- Rear turn signals are mounted at the base of the rear fender to allow room for adding saddlebags

Additional Features

- A variety of Genuine Suzuki Accessories for Boulevard owners are available including a large selection of Suzuki logo apparel.
- 12-month limited warranty
- For more details, please visit www.suzukicycles.com.

Specifications VL800L9
E-03: USA, E-33: California

DIMENSIONS AND CURB MASS

Overall length	2500 mm (98.4 in)
Overall width	955 mm (37.6 in)
Overall height	1110 mm (43.7 in)
Wheelbase	1655 mm (65.2 in)
Ground clearance	140 mm (5.5 in)
Seat height	700 mm (27.6 in)
Curb mass	277 kg (611 lbs)

ENGINE

Type	4-stroke, Liquid-cooled, OHC, 45° V-twin
Number of cylinders	2
Bore	83.0 mm (3.268 in)
Stroke	74.4 mm (2.929 in)
Displacement	805 cm^3 (49.1 cu. in)
Compression ratio	9.4 : 1
Fuel system	Fuel injection
Air cleaner	Non-woven fabric element
Starter system	Electric
Lubrication system	Wet sump
Idle speed	1100 ± 100 r/min

DRIVE TRAIN

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	1.690 (71/42)
Secondary reduction ratio	1.000 (30/30)
Gear ratios, Low	2.461 (32/13)
2nd	1.631 (31/19)
3rd	1.227 (27/22)
4th	1.000 (25/25)
Top	0.814 (22/27)
Final reduction ratio	3.503 (17/15 × 34/11)
Drive system	Shaft drive

CHASSIS

Front suspension	Telescopic, coil spring, oil damped
Rear suspension	Link type, coil spring, oil damped
Front suspension stroke	140 mm (5.5 in)
Rear wheel travel	105 mm (4.1 in)
Caster	33° 20’
Trail	138 mm (5.43 in)
Steering angle	38° (right & left)
Turning radius	3.0 m (9.8 ft)
Front brake	Disc brake
Rear brake	Drum brake
Front tire	130/90-16M/C 67H, tubeless
Rear tire	170/80-15M/C 77H, tubeless

Specifications VL800L9
E-03: USA, E-33: California

ELECTRICAL

Ignition type	Electronic ignition (Transistorized)
Ignition timing	7° B.T.D.C. at 1100 r/min
Spark plug	NGK DR7EA or DENSO X22ESR-U .....E-33 NGK DPR7EA-9 or DENSO X22EPR-U9.....E-03
Battery	12V 36.0 kC (10 Ah)/10 HR
Generator	Three-phase A.C. generator
Main fuse	30A
Fuse	20/10/10/10/10/10A
Headlight	12V 60/55W (H4)
Brake/Tail light	LED
License light	12V 5W
Front turn signal/Position light	12V 21/5W
Rear turn signal light	12V 21W
Speedometer light	LED
Neutral indicator light	LED
High beam indicator light	LED
Turn signal indicator light	LED
Oil pressure/Coolant temperature indicator light	LED
Fuel injection indicator light	LED

CAPACITIES

Fuel tank	15.5 L (4.1/3.4 US/Imp gal)
Engine oil, oil change	3000 ml (3.2/2.6 US/Imp qt)
with filter change	3400 ml (3.6/3.0 US/Imp qt)
overhaul	3700 ml (3.9/3.3 US/Imp qt)
Final gear oil	200 – 220 ml (6.8/7.0 – 7.4/7.7 US/Imp oz)
Coolant	1.5 L (1.6/1.3 US/Imp qt)

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VALVE + GUIDE

Unit: mm (in)

ITEM	STANDARD		LIMIT
Valve diam.	IN.	30 (1.18)	—
	EX.	26 (1.02)	—
Valve clearance (when cold)	IN.	0.08 – 0.13 (0.003 – 0.005)	—
	EX.	0.17 – 0.22 (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 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 deflection	IN. & EX.	—	0.35 (0.014)
Valve stem runout	IN. & EX.	—	0.05 (0.002)
Valve head thickness	IN. & EX.	—	0.5 (0.02)
Valve stem end length	IN. & EX.	—	3.1 (0.12)
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	INNER	—	38.3 (1.51)
	OUTER	—	40.1 (1.58)
Valve spring tension	INNER	64 – 73 N (6.51 – 7.49 kgf, 14.35 – 16.51 lbs) at length 32.5 mm (1.28 in)	—
	OUTER	119 – 136 N (12.09 – 13.91 kgf, 26.65 – 30.67 lbs) at length 36.0 mm (1.42 in)	—

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

ITEM	STANDARD		LIMIT
Cam height	IN.	35.50 – 35.54 (1.398 – 1.399)	35.20 (1.386)
	EX.	36.58 – 36.62 (1.440 – 1.442)	36.28 (1.428)
Camshaft journal oil clearance	0.032 – 0.066 (0.0013 – 0.0026)		0.150 (0.0059)
Camshaft journal holder I.D.	Rear left side Front right side	20.012 – 20.025 (0.7879 – 0.7884)	—
	Rear right side Front left side	25.012 – 25.025 (0.9847 – 0.9852)	—
Camshaft journal O.D.	Rear left side Front right side	19.959 – 19.980 (0.7858 – 0.7866)	—
	Rear right side Front left side	24.959 – 24.980 (0.9826 – 0.9835)	—
Camshaft runout	—		0.10 (0.004)
Rocker arm I. D.	IN. & EX.	12.000 – 12.018 (0.4724 – 0.4731)	—
Rocker arm shaft O. D.	IN. & EX.	11.977 – 11.995 (0.4715 – 0.4722)	—
Cylinder head distortion	—		0.05 (0.002)
Cylinder head cover distortion	—		0.05 (0.002)

CYLINDER + PISTON + PISTON RING

Unit: mm (in)

ITEM	STANDARD		LIMIT
Compression pressure	1 300 – 1 700 kPa (13 – 17 kgf/cm², 185 – 242 psi)		1 100 kPa (11 kgf/cm² 156 psi)
Compression pressure difference	—		200 kPa (2 kgf/cm² 28 psi)
Piston to cylinder clearance	0.045 – 0.055 (0.0018 – 0.0022)		0.120 (0.0047)
Cylinder bore	83.000 – 83.015 (3.2677 – 3.2683)		83.085 (3.2711)
Piston diam.	82.950 – 82.965 (3.2657 – 3.2663) Measure at 15 mm (0.6 in) from the skirt end.		82.880 (3.2630)
Cylinder distortion	—		0.05 (0.002)
Piston ring free end gap	1st	Approx. 9.6 (0.38)	7.7 (0.30)
	2nd R	Approx. 11.8 (0.46)	9.4 (0.37)
Piston ring end gap	1st	0.20 – 0.35 (0.008 – 0.014)	0.70 (0.028)
	2nd	0.20 – 0.35 (0.008 – 0.014)	0.70 (0.028)
Piston ring to groove clearance	1st	—	0.180 (0.007)
	2nd	—	0.150 (0.006)

ITEM	STANDARD		LIMIT
Piston ring groove width	1st	1.01 – 1.03 (0.0398 – 0.0406)	—
	2nd	1.21 – 1.23 (0.0476 – 0.0484)	—
	Oil	2.51 – 2.53 (0.0988 – 0.0996)	—
Piston ring thickness	1st	0.970 – 0.990 (0.0382 – 0.0390)	—
	2nd	1.170 – 1.190 (0.0461 – 0.0469)	—
Piston pin bore	20.002 – 20.008 (0.7875 – 0.7877)		20.030 (0.7886)
Piston pin O.D.	19.992 – 20.000 (0.7871 – 0.7874)		19.980 (0.7866)

CONROD + CRANKSHAFT

Unit: mm (in)

ITEM	STANDARD	LIMIT
Conrod small end I.D.	20.010 – 20.018 (0.7878 – 0.7881)	20.040 (0.7890)
Conrod big end side clearance	0.10 – 0.20 (0.004 – 0.008)	0.30 (0.012)
Conrod big end width	21.95 – 22.00 (0.864 – 0.866)	—
Crank pin width	22.10 – 22.15 (0.870 – 0.872)	—
Conrod big end oil clearance	0.024 – 0.042 (0.0009 – 0.0017)	0.080 (0.0031)
Crank pin O.D.	40.982 – 41.000 (1.6135 – 1.6142)	—
Crankshaft journal oil clearance	0.002 – 0.029 (0.00008 – 0.0011)	0.080 (0.0031)
Crankshaft journal O.D.	47.965 – 47.980 (1.8884 – 1.8890)	—
Crankshaft thrust bearing thickness	1.925 – 2.175 (0.0758 – 0.0856)	—
Crankshaft thrust clearance	0.05 – 0.10 (0.002 – 0.004)	—
Crankshaft runout	—	0.05 (0.002)

OIL PUMP

ITEM	STANDARD	LIMIT
Oil pressure (at 60 °C, 140 °F)	350 – 650 kPa (3.5 – 6.5 kgf/cm², 50 – 92 psi) at 3 000 r/min	—

CLUTCH

Unit: mm (in)

ITEM	STANDARD		LIMIT
Clutch lever play	10 – 15 (0.4 – 0.6)		—
Clutch release screw	1/4 turn back		—
Drive plate thickness	No. 1	2.92 – 3.08 (0.115 – 0.121)	2.62 (0.103)
	No. 2	3.42 – 3.58 (0.135 – 0.141)	3.12 (0.123)
Drive plate claw width	15.9 – 16.0 (0.626 – 0.630)		15.1 (0.594)
Driven plate distortion	—		0.10 (0.004)
Clutch spring free length	49.2 (1.94)		46.8 (1.84)

TRANSMISSION

Unit: mm (in) Except ratio

ITEM		STANDARD		LIMIT
Primary reduction ratio		1.690 (71/42)		—
Secondary reduction ratio		1.000 (30/30)		—
Final reduction ratio		3.503 (17/15 × 34/11)		—
Gear ratios	Low	2.461 (32/13)		—
	2nd	1.631 (31/19)		—
	3rd	1.227 (27/22)		—
	4th	1.000 (25/25)		—
	Top	0.814 (22/27)		—
Shift fork to groove clearance		No. 1	0.10 – 0.30 (0.004 – 0.012)	0.50 (0.020)
		No. 2	0.10 – 0.30 (0.004 – 0.012)	0.50 (0.020)
Shift fork groove width		No. 1	5.50 – 5.60 (0.217 – 0.220)	—
		No. 2	4.50 – 4.60 (0.177 – 0.181)	—
Shift fork thickness		No. 1	5.30 – 5.40 (0.209 – 0.213)	—
		No. 2	4.30 – 4.40 (0.169 – 0.173)	—

SHAFT DRIVE

Unit: mm (in)

ITEM	STANDARD		LIMIT
Secondary bevel gear backlash	0.05 – 0.32 (0.002 – 0.013)		—
Final bevel gear backlash	Drive side	0.03 – 0.064 (0.001 – 0.025)	—
Damper spring free length	—		58.5 (2.30)

THERMOSTAT + RADIATOR + FAN + ENGINE COOLANT

ITEM	STANDARD/SPECIFICATION		NOTE
Thermostat valve opening temperature	Approx. 75 °C (167 °F)		—
Thermostat valve lift	Over 6 mm (0.24 in) at 90 °C (194 °F)		—
ECT sensor resistance	20 °C (68 °F)	Approx. 2.45 kΩ	—
	40 °C (104 °F)	Approx. 1.148 kΩ	—
	60 °C (140 °F)	Approx. 0.587 kΩ	—
	80 °C (176 °F)	Approx. 0.322 kΩ	—
Radiator cap valve opening pressure	95 – 125 kPa (0.95 – 1.25 kgf/cm², 13.5 – 17.8 psi)		—
Cooling fan thermo-switch operating temperature	OFF → ON	Approx. 105 °C (221 °F)	—
	ON → OFF	Approx. 100 °C (212 °F)	—
Engine coolant type	Use an antifreeze/coolant compatible with aluminum radiator.		—
Engine coolant capacity	1 500 ml (1.6/1.3 US/Imp qt)		—

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	Approx. 168 ml (5.7/5.9 US/Imp oz) and more/10 sec.	
Fuel pressure regulator operating set pressure	Approx. 300 kPa (3.0 kgf/cm², 43 psi)	

THROTTLE BODY

ITEM	SPECIFICATION
Bore size	34 mm
I.D. No.	41F3 (For E-33), 41F2 (For E-03)
Idle r/min	1 100 ± 100 r/min
Fast idle r/min	1 800 r/min (When cold engine)
Throttle cable play	2.0 – 4.0 mm (0.08 – 0.16 in)

FI SENSORS + SECONDARY THROTTLE VALVE ACTUATOR

ITEM	SPECIFICATION		NOTE
CKP sensor resistance	184 – 276 Ω		
CKP sensor peak voltage	1.5 V and more		When cranking
IAP sensor input voltage	4.5 – 5.5 V		
IAP sensor output voltage	Approx. 2.6 V at idle speed		
TP sensor input voltage	4.5 – 5.5 V		
TP sensor resistance	Closed	Approx. 1.1 kΩ	
	Opened	Approx. 4.4 kΩ	
TP sensor output voltage	Closed	Approx. 1.1 V	
	Opened	Approx. 4.4 V	
ECT sensor input voltage	4.5 – 5.5 V		
ECT sensor resistance	Approx. 2.45 kΩ at 20 °C (68 °F)		
IAT sensor input voltage	4.5 – 5.5 V		
IAT sensor resistance	Approx. 2.6 kΩ at 20 °C (68 °F)		
TO sensor resistance	19.1 – 19.7 kΩ		
TO sensor voltage	Normal	0.4 – 1.4 V	
	Leaning	3.7 – 4.4 V	When leaning 65°
GP switch voltage	0.2 V and more		From 1st to Top
Injector voltage	Battery voltage		
STP sensor input voltage	4.5 – 5.5 V		
STP sensor resistance	Closed	Approx. 0.5 kΩ	
	Opened	Approx. 3.9 kΩ	
STP sensor output voltage	Closed	Approx. 0.5 V	
	Opened	Approx. 3.9 V	
STV actuator resistance	Approx. 6.5 Ω		
Heated oxygen sensor output voltage	0.3 V and less at idle speed		For E- 33
	0.6 V and more at 5 000 r/min		
Heated oxygen sensor resistance	6.7 – 9.5 Ω at 23 °C (73.4 °F)		
PAIR solenoid valve resistance	20 – 24 Ω at 20 – 30 °C (68 – 86 °F)		

ELECTRICAL

Unit: mm (in)

ITEM			SPECIFICATION		NOTE	
Firing order			1-2			
Spark plug		Type	NGK: DR7EA DENSO: X22ESR-U		For E-33	
			NGK: DPR7EA-9 DENSO: X22EPR-U9		For E-03	
		Gap	0.6 – 0.7 (0.024 – 0.028)		For E-33	
			0.8 – 0.9 (0.031 – 0.035)		For E-03	
Spark performance			Over 8 (0.3) at 1 atm.			
CKP sensor resistance			184 – 276 Ω			
CKP sensor peak voltage			4.0 V and more			
Ignition coil resistance		Primary	2.8 – 4.7 Ω		Terminal – Terminal	
		Secondary	24 – 36 kΩ		Plug cap – Terminal	
Ignition coil primary peak voltage (For E-33)			200 V and more		#1	⊕ B/Bl (main) ⊕ B/R (sub) ⊖ Ground
					#2	⊕ B/Y (main) ⊕ W (sub) ⊖ Ground
Ignition coil primary peak voltage (For E-03)			200 V and more		#1	⊕ B/Bl ⊖ Ground
					#2	⊕ B/R ⊖ Ground
Generator coil resistance			0.2 – 1.5 Ω			
Generator no-load voltage (when engine is cold)			70 V (AC) and more at 5 000 r/min		Y – Y	
Regulated voltage			13.5 – 15.0 V at 5 000 r/min		Y – Y	
Generator maximum output			350 W at 5 000 r/min			
Starter relay resistance			3 – 7 Ω			
GP switch voltage			0.6 V and more (From 1st to top without neutral)			
Battery	Type designation		FTX12-BS			
	Capacity		12 V 36 kC (10 Ah)/10 HR			
Fuse size	Headlight	HI	10 A			
		LO	10 A			
	Signal		10 A			
	Ignition		20 A			
	Fuel		10 A			
	Main		30 A			
	Power source		10 A			

WATTAGE

Unit: W

ITEM		SPECIFICATION
Headlight	HI	60
	LO	55
Brake light/Taillight		LED
Turn signal light		21/5 (Front), 21 (Rear)
Licence plate light		5
Speedometer light		LED
Engine coolant temp. warning light		LED
Turn signal indicator light		LED
High beam indicator light		LED
Neutral indicator light		LED
Oil pressure indicator light		LED
FI indicator light		LED

BRAKE + WHEEL

Unit: mm (in)

ITEM	STANDARD		LIMIT
Rear brake pedal free travel	20 – 30 (0.8 – 1.2)		—
Rear brake pedal height	95 – 105 (3.7 – 4.1)		—
Brake drum I.D.	Rear	—	180.7 (7.11)
Brake disc thickness	Front	4.8 – 5.2 (0.19 – 0.21)	4.5 (0.18)
Brake disc runout	—		0.30 (0.012)
Master cylinder bore	Front	12.700 – 12.743 (0.5000 – 0.5017)	—
Master cylinder piston diam.	Front	12.657 – 12.684 (0.4983 – 0.4993)	—
Brake caliper cylinder bore	Front	30.230 – 30.306 (1.1901 – 1.1931)	—
Brake caliper piston diam.	Front	30.150 – 30.200 (1.1870 – 1.1889)	—
Wheel rim runout	Axial	—	2.0 (0.08)
	Radial	—	2.0 (0.08)
Wheel axle runout	Front	—	0.25 (0.010)
	Rear	—	0.25 (0.010)
Wheel rim size	Front	J16 M/C × MT 3.00	—
	Rear	J15 M/C × MT 4.00	—

TIRE

ITEM	STANDARD		LIMIT
Cold inflation tire pressure (Solo riding)	Front	200 kPa (2.00 kgf/cm², 29 psi)	—
	Rear	250 kPa (2.50 kgf/cm², 36 psi)	—
Cold inflation tire pressure (Dual riding)	Front	200 kPa (2.00 kgf/cm², 29 psi)	—
	Rear	250 kPa (2.50 kgf/cm², 36 psi)	—
Tire size	Front	130/90-16 M/C 67H	—
	Rear	170/80-15 M/C 77H	—
Tire type	Front	IRC GS-23F	—
	Rear	IRC GS-23R	—
Tire tread depth	Front	—	1.6 (0.06)
	Rear	—	2.0 (0.08)

SUSPENSION

Unit: mm (in)

ITEM	STANDARD	LIMIT
Front fork stroke	140 (5.5)	—
Front fork spring free length	575.4 (22.65)	563 (22.2)
Front fork oil level (without spring)	158 (6.22)	—
Front fork oil type	SUZUKI FORK OIL SS-08 or an equivalent fork oil	—
Front fork oil capacity (each leg)	441 ml (24.0/25.0 US/Imp oz)	—
Front fork inner tube outside diam.	41 (1.61)	—
Rear shock absorber spring adjuster	4th	—
Rear wheel travel	105 (4.13)	—
Swingarm pivot shaft runout	—	0.3 (0.01)

FUEL + OIL

ITEM	SPECIFICATION		NOTE
Fuel type	Use only unleaded gasoline of at least 87 pump octane (R/2 + M/2) or 91 octane or higher rated by the research method. 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	15.5 L (4.1/3.4 US/Imp gal)	
	Fuel level indicator light lighting	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	3 000 ml (3.2/2.6 US/Imp qt)	
	Filter change	3 400 ml (3.6/3.0 US/Imp qt)	
	Overhaul	3 700 ml (3.9/3.3 US/Imp qt)	
Final bevel gear oil type	SAE 90 hypoid gear oil with GL-5 under API classification		
Final bevel gear oil capacity	200 – 220 ml (6.8/7.0 – 7.4/7.7 US/Imp oz)		
Brake fluid type	DOT 4		

TIGHTENING TORQUE
ENGINE

ITEM			N·m	kgf-m	lbf-ft
Rocker arm shaft			27	2.7	19.5
Cylinder head cover bolt		6 mm	10	1.0	7.0
		8 mm	25	2.5	18.0
Cylinder head bolt and nut	8 mm	Initial	10	1.0	7.0
		Final	25	2.5	18.0
	10 mm	Initial	25	2.5	18.0
		Final	38	3.8	27.5
Cam sprocket bolt			15	1.5	11.0
Cam chain tension adjuster mounting bolt			10	1.0	7.0
Cam chain tensioner bolt			10	1.0	7.0
Primary drive gear bolt			95	9.5	68.5
Clutch spring set bolt			10	1.0	7.0
Clutch sleeve hub nut			60	6.0	47.0
Driveshaft bolt			55	5.5	40.0
Ignition coil bolt			4.5	0.45	3.5
Secondary drive gear shaft nut			105	10.5	76.0
Secondary gear case bolt		Initial	15	1.5	11.0
		Final	22	2.2	16.0
Generator rotor bolt			160	16.0	115.5
Starter clutch allen bolt			26	2.6	19.0
Starter motor mounting bolt			10	1.0	7.0
Crankcase bolt	6 mm		11	1.1	8.0
	8 mm	Initial	15	1.5	11.0
		Final	22	2.2	16.0
Conrod cap nut		Initial	25	2.5	18.0
		Final	51	5.1	37.0
Oil pressure regulator			28	2.8	20.0
Oil pump mounting bolt			11	1.1	8.0
Oil pressure switch			14	1.4	10.0
Oil drain plug			21	2.1	15.0
Oil plug		6 mm	6	0.6	4.3
		8 mm	18	1.8	13.0
		10 mm	15	1.5	11.0
		14 mm	23	2.3	16.5
		16 mm	35	3.5	25.5
Engine mounting bolt			79	7.9	57.0
Engine mounting bracket bolt			23	2.3	16.5
Frame mounting bolt/nut		8 mm	23	2.3	16.5
		10 mm	50	5.0	36.0
Exhaust pipe bolt			23	2.3	16.5
Exhaust pipe clamp bolt			23	2.3	16.5

ITEM	N·m	kgf-m	lbf-ft
Muffler mounting bolt	23	2.3	16.5
Muffler support bolt	23	2.3	16.5
Speed sensor rotor bolt	100	10.0	72.5
Rear turn signal bolt	11	1.1	8.0
License plate bracket nut	11	1.1	8.0
Rear turn signal bracket nut	11	1.1	8.0
Rear reflector mounting nut	1.8	0.18	1.3

SECONDARY AND FINAL

ITEM		N·m	kgf-m	lbf-ft
Secondary drive bevel gear bearing retainer bolt		23	2.3	16.5
Secondary driven bevel gear bolt		23	2.3	16.5
Secondary driven bevel gear bearing stopper		105	10.5	76.0
Final gear case mounting nut		40	4.0	29.0
Final drive bevel gear coupling nut		100	10.0	72.5
Final drive bevel gear bearing stopper		110	11.0	79.5
Final gear case oil drain plug		23	2.3	16.5
Final gear case bolt	8 mm	23	2.3	16.5
	10 mm	50	5.0	36.0
Final driven bevel gear bearing retainer screw		9	0.9	6.5

FI SYSTEM AND INTAKE AIR SYSTEM

ITEM	N·m	kgf-m	lbf-ft
ISC valve mounting screw	2.1	0.21	1.5
Straight plug mounting screw	5	0.5	3.5
STP sensor mounting bolt	3.5	0.35	2.5
TP sensor mounting bolt	3.5	0.35	2.5
ISC valve mounting bolt	2.1	0.21	1.5
Delivery pipe mounting screw	3.5	0.35	2.5
ECT sensor	18	1.8	13.0
HO2 sensor	25	2.5	18.0

CHASSIS

ITEM	N·m	kgf-m	lbf-ft
Front axle	65	6.5	47.0
Front axle pinch bolt	33	3.3	24.0
Brake disc bolt	23	2.3	16.5
Front fork cap bolt	45	4.5	33.1
Front fork spring stopper nut	35	3.5	25.5
Front fork damper rod bolt	20	2.0	14.5
Front fork upper clamp bolt	23	2.3	16.5
Front fork lower clamp bolt	33	3.3	24.0
Steering stem head nut	90	9.0	65.0
Front master cylinder mounting bolt	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	7.5	0.75	5.5
Handlebar set bolt	23	2.3	16.5
Handlebar holder nut	70	7.0	50.5
Front footrest bolt	55	5.5	40.0
Frame down tube mounting bolt (M8)	23	2.3	16.5
Frame down tube mounting bolt (M10)	50	5.0	36.0
Rear brake pedal bolt	11	1.1	8.0
Rear swingarm pivot bolt (Left)	100	10.0	72.5
Rear swingarm pivot bolt (Right)	9.5	0.95	7.0
Rear swingarm pivot bolt lock nut	100	10.0	72.5
Rear shock absorber monting nut (Upper and Lower)	50	5.0	36.0
Rear cushion lever/rod mounting nut	78	7.8	57.5
Rear axle nut	65	6.5	47.0
Rear torque link nut (front)	35	3.5	25.5
Rear torque link nut (rear)	25	2.5	18.0
Rear brake cam lever bolt	10	1.0	7.3
Driven joint stopper bolt	10	1.0	7.0
Frame handle grip mounting bolt (M10)	50	5.0	36.0
Fuel level gauge mounting bolt	10	1.0	7.0