

Features & Specifications

2016 Boulevard C50



VL800L6

YVB: Glass Sparkle Black

Key Features

- 805cc, fuel-injected, 45-degree V-Twin
- Low seat height at 27.6 in.
- Wide tires on sparkling spoke wheels
- Styling incorporates timeless cruiser heritage

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.
- Cutting-edge 3D-mapped digital ignition system using a throttle-position sensor helps boost the hallmark big V-Twin low-down torque.
- Chromed and staggered dual-exhaust system mounted on the right side of the engine are 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.

Chassis Features

- Strong, double-cradle steel frame supports a chassis ready for cruising or a full-on tour.
- The styling incorporates timeless visual statements in the 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 swing arm and a single shock absorber with 7-way spring preload adjustability providing 4.1 inches of smooth and response suspension travel.
- A kicked-out, 33-degree rake and long 65.2-inch wheelbase provides 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" rear tire and matching 16" 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 inches seat height that's ideal for comfortable cruising and confident stops.
- Wide passenger seat makes for comfortable two-up rides. It's 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 that's always on display.
- Bright multi-reflector headlight. Durable, efficient and compact LED taillight.
- Rear turn signals are mounted at the base of the rear fender to allow room for adding saddlebags.

VL800L6

AJX: Pearl Glacier White



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 VL800L6

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 VL800L6

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-UE-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) |

Service Data VL800L6

E-03: USA, E-33: California

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/cm ² , 185 – 242 psi) | | 1 100 kPa (11 kgf/cm ² 156 psi) |
| Compression pressure difference | — | | 200 kPa (2 kgf/cm ² 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/cm ² , 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/cm ² , 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/lmp 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/lmp oz) and more/10 sec. | |
| Fuel pressure regulator operating set pressure | Approx. 300 kPa (3.0 kgf/cm ² , 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/BI (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/BI ⊖ 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/cm ² , 29 psi) | — |
| | Rear | 250 kPa (2.50 kgf/cm ² , 36 psi) | — |
| Cold inflation tire pressure (Dual riding) | Front | 200 kPa (2.00 kgf/cm ² , 29 psi) | — |
| | Rear | 250 kPa (2.50 kgf/cm ² , 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 |
| | 10 mm | 50 | 5.0 |
| 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 mounting 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 |