

Features & Specifications

2019 Burgman 400



AN400AL9

YUA: Metallic Matte Stellar Blue

Key Features

- Fuel injected, DOHC, 399cc, liquid-cooled, single cylinder engine powers a seamless, CVT automatic transmission.
- Strong low-speed engine response with low emissions and excellent fuel economy.
- New, luxurious, and sporty Metallic Matte Stellar Blue color with advanced LED lighting.
- Sturdy frame and large 15-inch front wheel delivers well-planted and agile handling.
- Spacious under-seat storage and two front compartments with a DC power outlet provide a variety of cargo options.

Overview

Already renowned as a premium, feature-rich scooter, the Suzuki Burgman 400 is back for 2019 with a special matte blue finish that contains a touch of sparkle equal to its nature. Under the new finish, the Burgman 400 continues to combine exceptional chassis and engine performance with its sleek body to be a distinctively athletic luxury scooter. The 2019 Burgman 400 sets the convenience and performance standard for all mid-sized scooters while maintaining its reputation for luxury and quality. The Burgman 400 delivers Suzuki's winning combination of style, performance, practicality, convenience, and riding enjoyment.

Engine Features

- Reliable 399cc, liquid-cooled, four-stroke, DOHC, single cylinder, fuel injected engine produces great low- to mid-range torque with a powerful peak performance, even when riding with a passenger.
- DOHC four-valve arrangement allows ideal positioning of the intake and exhaust valves for superior mechanical advantages and efficient combustion. The benefits can be felt in smooth, instantly available acceleration.
- The highly efficient engine, which employs a long-life iridium spark plug, takes advantage of the scooter's low weight to improve fuel economy and extend the riding range of the generous 3.6-gallon fuel tank.

Engine Features (continued)

- The refined Suzuki Fuel Injection system with O2 feedback plus the Pulsed Secondary Air Injection (PAIR) system and catalyzer-equipped exhaust boost fuel efficiency and help the Burgman easily achieve emissions compliance.
- The high-capacity five-liter air cleaner aids throttle response and boosts acceleration in stop-and-go traffic. Located under the seat, it has been designed to have an exciting intake sound.
- Automatic Idle Speed Control (ISC) system ensures proper engine idle speed at all times.
- The CVT (Continuously Variable Transmission) provides smooth, linear power delivery for comfortable riding at any speed.

Chassis Features

- The Burgman 400's underbone frame is constructed from large-diameter, thin-wall tubes that are low weight with good rigidity that result in improved handling.
- The telescopic front fork with 41mm inner-tubes have a generous 4.3 inches of wheel travel to complement the link-type mono-shock rear suspension to deliver motorcycle-like handling with exceptional maneuverability.
- A large 15-inch front wheel replaces the 14-inch wheel of the prior generation scooter to improve stability and enhance the visual appearance.
- The cast front wheel carries a pair of 260mm disc brake rotors while the 13-inch rear wheel has a 210mm hydraulic disc brake for reliable stopping control.
- The standard Anti-lock Brake System (ABS)* monitors wheel speed and matches stopping power to available traction. The compact ABS control unit weighs 1.6 pounds less than the prior-generation unit.
- An easy-to-operate, T-handle parking-brake lever is located on the dash near the ignition switch to prevent rear wheel movement when engaged.
- The upswept windscreen has a trim appearance from every angle while delivering optimum wind protection and a clear view of the road.
- The bodywork conveys the luxurious, performance nature of the Burgman 400. The slim, sporty, and agile look matches the scooter's personality.
- The scooter's nose features sharply styled dual LED headlights with integrated LED position lights and turn signals mounted beneath. The clean and bright front end is instantly recognizable as a Suzuki Burgman.
- The slim rear deck of the Burgman 400 features independent LED rear combination lamps with the turn signals at their tips. Its sharply sculpted design expresses elegance and agility.
- Abundant luggage space includes a 42-liter under-seat storage compartment, large enough for two helmets, plus two front compartments for small personal items. Convenient switchable under-seat lights illuminate the entire storage area.
 - o *Helmet sizes and shapes vary, so some helmets may not fit in the under-seat compartment.*
- The front bodywork contains two storage compartments: a 2.8-liter compartment on the left and a 3.5-liter compartment on the right that contains a convenient DC power outlet for charging electric devices on the fly.
- The stepped dual seat has thick padding for extra comfort. The seat's width and profile is slim to add comfort for the rider and passenger. The cover features double stitching and accent piping to further extend the look of luxury.
- To increase comfort, especially on longer rides, the seat incorporates a rider's backrest that is adjustable by a half inch or inch fore-and-aft at the press of a lever.
- The combination of the seat changes and floorboard position creates an upright riding position that is comfortable and sporty for the rider.
- Cut-away footboards allow the rider to comfortably move and support the scooter at stops and starts.
- Fold-down rear footrests provide comfort, letting the passenger feel planted and relaxed, even during extended rides.

Chassis Features (continued)

- A pair of ergonomically designed grab bars are mounted to the sides of the seat so the passenger can have a good, comfortable grip of the scooter.
- A security gate incorporated in the lower portion of the bodywork allows a chain lock to be passed through a body panel, then around the frame, and then around an immovable object.
- The ignition switch is fitted with a magnetic security cover that opens only with a correctly coded key.
- The comprehensive and easy-to-read instruments incorporate an analog speedometer and tachometer plus an LCD display that provides odometer, twin trip meter, clock, ambient temperature, average fuel consumption, fuel level, and coolant temperature readings. Other colored LED indicators provide turn signal, headlight, freeze, and service function alerts.
- The LCD display has a programmable oil service indicator to alert the rider when regular maintenance is required.
- The instruments also include the Suzuki Eco Drive Indicator that illuminates when the scooter is being ridden in a fuel-efficient manner. This instant feedback helps the rider learn how to maximize the Burgman 400's fuel economy.

Additional Features

- Stylized Suzuki "S" 3-D emblems on the front leg shield and the upper meter panel denotes the quality and sophistication of the brand.
- A variety of Genuine Suzuki Accessories for Burgman owners are available including a large selection of Suzuki logo apparel.
- 12-month limited warranty.
- Longer warranty coverage period and other benefits are available through the Suzuki Extended Protection Plan (SEP).
- For more details, please visit www.suzukicycles.com.

** Depending on road surface conditions, such as wet, loose, or uneven roads, braking distance for an ABS-equipped vehicle may be longer than for a vehicle not equipped with ABS. ABS cannot prevent wheel skidding caused by braking while cornering. Please drive carefully and do not overly rely on ABS.*

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Specifications AN400AL9

Dimensions and curb mass

Item	Specification	Remark
Overall length	2235 mm (88.0 in)	—
Overall width	765 mm (30.1 in)	—
Overall height	1350 mm (53.1 in)	—
Wheelbase	1580 mm (62.2 in)	—
Ground clearance	125 mm (4.9 in)	—
Seat height	755 mm (29.7 in)	—
Curb mass	215 kg (474 lbs)	—

Engine

Item	Specification	Remark
Type	Four-stroke, liquid-cooled, DOHC	—
Number of cylinders	1	—
Bore	81.0 mm (3.189 in)	—
Stroke	77.6 mm (3.055 in)	—
Displacement	400 cm ³ (24.4 cu. in)	—
Compression ratio	10.6 : 1	—
Fuel system	Fuel injection	—
Air cleaner	Paper element	—
Starter system	Electric	—
Lubrication system	Wet sump	—
Idle speed	1450 ± 100 r/min	—

Drive train

Item	Specification	Remark
Clutch	Dry shoe, automatic, centrifugal type	—
Gearshift pattern	Automatic	—
Final reduction ratio	6.484 (31/14 x 41/14)	—
Gear ratio	2.279 – 0.865 (Variable change)	—
Drive system	V-belt drive	—

Chassis

Item	Specification	Remark
Front suspension	Telescopic, coil spring, oil damped	—
Rear suspension	Link type, coil spring, oil damped	—
Front fork stroke	110 mm (4.3 in)	—
Rear wheel travel	100 mm (3.9 in)	—
Steering angle	40° (right and left)	—
Caster	25° 12'	—
Trail	102 mm (4.02 in)	—
Turning radius	2.7 m (8.9 ft)	—
Front brake	Disc brake, twin	—
Rear brake	Disc brake	—
Front tire size	120/70-15M/C 56S, tubeless	—
Rear tire size	150/70-13M/C 64S, tubeless	—

Specifications AN400AL9

Electrical

Item	Specification	Remark
Ignition type	Electronic ignition (Transistorized)	—
Spark plug	NGK CR7EIA-9	—
	DENSO IU22D	
Battery	12 V 32.4 kC (9 Ah)/10 HR	—
Generator	Three-phase A.C. generator	—
Fuse	30/10/10/15/10/15/10/15 A	—

Item	Specification	Remark
ABS fuse	30 A	—
Headlight	LED	—
Position light	LED	—
Brake light/Taillight	LED	—
Turn signal light	12 V 21 W	—
License plate light	12 V 5 W	—
Instrument panel light	LED	—
High beam indicator light	LED	—
Turn signal indicator light	LED	—
Engine coolant temperature indicator light	LED	—
MIL	LED	—
Brake lock indicator light	LED	—
Freeze indicator light	LED	—
ECO mode indicator light	LED	—
ABS indicator light	LED	—

Capacities

Item	Specification	Remark
Fuel tank	13.5 L (3.6 US gal, 3.0 Imp gal)	—
Engine oil	Oil change	1200 ml (1.3 US qt, 1.1 Imp qt)
	With filter change	1300 ml (1.4 US qt, 1.1 Imp qt)
Final gear oil	Oil change	180 ml (6.0/6.3 US/Imp oz)
Engine coolant	1950 ml (2.1 US qt, 1.7 Imp qt)	—

Service Data AN400AL9

E-03: USA, E-33: California

NOTE

Specifications and service data are subject to change without notice.

Emission Control Devices

Item	Specification	Standard	Limit
EVAP system purge control solenoid valve power supply voltage (if equipped)		Battery voltage	—
EVAP system purge control solenoid valve resistance (if equipped)	20 °C (68 °F)	30 – 34 Ω	—

Engine Electrical Devices

Item	Specification	Standard	Limit
IAP sensor power supply voltage		4.5 – 5.5 V	—
IAP sensor output voltage	Idle speed at 1 atm.	1.5 – 3.5 V	—
IAT sensor power supply voltage		4.5 – 5.5 V	—
IAT sensor resistance	40 °C (104 °F)	1041 – 1231 Ω	—
ECT sensor power supply voltage		4.5 – 5.5 V	—
ECT sensor resistance	40 °C (104 °F)	1041 – 1231 Ω	—
TP sensor power supply voltage		4.5 – 5.5 V	—
TP sensor output voltage	Closed	0.58 – 0.62 V	—
	Opened	3.68 – 3.88 V	
ISC valve resistance	20 °C (68 °F)	80 Ω	—
HO2 sensor output voltage	Idle speed	0.6 V or less	—
	5000 r/min	0.6 V or more	
HO2 sensor heater power supply voltage		Battery voltage	—
HO2 sensor heater resistance	23 °C (73.4 °F)	11.5 – 17.5 Ω	—
CKP sensor peak voltage	When cranking	2 V or more	—
CKP sensor resistance	20 °C (68 °F)	50 – 200 Ω	—
TO sensor power supply voltage		4.5 – 5.5 V	—
TO sensor output voltage	Normal	0.4 – 1.4 V	—
	Leaning 65°	3.7 – 4.4 V	
TO sensor resistance		16500 – 22300 Ω	—
ECM power supply voltage		Battery voltage	—

Engine Mechanical

Item	Specification	Standard	Limit
Throttle body I.D. No.	Without EVAP Control System	19K0	—
	With EVAP Control System	19K1	—
Throttle body bore size		36 mm (1.4 in)	—
Throttle cable play		2.0 – 4.0 mm (0.079 – 0.16 in)	—
Idle speed	When engine warmed	1450 ± 100 r/min	—
Fast idle speed		1450 – 1700 r/min	—
Compression pressure		900 – 1100 kPa (9.2 – 11.2 kgf/cm ² , 131 – 159 psi)	620 kPa (6.4 kgf/cm ² , 90 psi)
Cam height	Intake	36.28 – 36.32 mm (1.4284 – 1.4299 in)	35.98 mm (1.4166 in)
	Exhaust	35.78 – 35.82 mm (1.4087 – 1.4102 in)	35.48 mm (1.3969 in)

Item	Specification		Standard	Limit
Camshaft journal oil clearance	Intake		0.019 – 0.053 mm (0.0008 – 0.0020 in)	0.150 mm (0.0059 in)
	Exhaust		0.019 – 0.053 mm (0.0008 – 0.0020 in)	0.150 mm (0.0059 in)
Camshaft journal holder I.D.	Intake		22.012 – 22.025 mm (0.8662 – 0.8671 in)	—
	Exhaust		22.012 – 22.025 mm (0.8662 – 0.8671 in)	
Camshaft journal O.D.	Intake		21.972 – 21.993 mm (0.8651 – 0.8658 in)	—
	Exhaust		21.972 – 21.993 mm (0.8651 – 0.8658 in)	
Camshaft runout	Intake & Exhaust		—	0.10 mm (0.003 in)
Cam chain pin	At arrow "3"		15th pin	—
Valve clearance	When engine cold	Intake	0.10 – 0.20 mm (0.004 – 0.007 in)	—
		Exhaust	0.20 – 0.30 mm (0.008 – 0.011 in)	
Valve diameter	Intake		31.0 mm (1.22 in)	—
	Exhaust		27.0 mm (1.06 in)	
Valve stem runout	Intake & Exhaust		—	0.05 mm (0.0019 in)
Valve head radial runout	Intake & Exhaust		—	0.03 mm (0.0011 in)
Valve head thickness	Intake		—	0.5 mm (0.020 in)
	Exhaust		—	0.5 mm (0.020 in)
Valve stem deflection	Intake & Exhaust		—	0.35 mm (0.013 in)
Valve stem O.D.	Intake		4.475 – 4.490 mm (0.1762 – 0.1767 in)	—
	Exhaust		4.455 – 4.470 mm (0.1754 – 0.1759 in)	—
Valve seat width	Intake		0.9 – 1.1 mm (0.036 – 0.043 in)	—
	Exhaust		0.9 – 1.1 mm (0.036 – 0.043 in)	—
Valve guide I.D.	Intake		4.500 – 4.512 mm (0.1772 – 0.1776 in)	—
	Exhaust		4.500 – 4.512 mm (0.1772 – 0.1776 in)	—
Valve guide to valve stem clearance	Intake		0.010 – 0.037 mm (0.0004 – 0.0014 in)	—
	Exhaust		0.030 – 0.057 mm (0.0012 – 0.0022 in)	—
Valve spring free length	Intake		—	38.1 mm (1.50 in)
	Exhaust		—	38.1 mm (1.50 in)
Valve spring pre-load	When compressed to 33.35 mm (1.313 in)	Intake	100 – 115 N (10.2 – 11.7 kgf, 22.5 – 25.8 lbf)	—
		Exhaust	100 – 115 N (10.2 – 11.7 kgf, 22.5 – 25.8 lbf)	—
Cylinder head distortion			—	0.05 mm (0.0019 in)

Item	Specification	Standard	Limit
Cylinder distortion		—	0.05 mm (0.0019 in)
Cylinder bore		81.000 – 81.015 mm (3.1890 – 3.1895 in)	No nicks or Scratches
Piston diameter	Measure at 15 mm (0.59 in) from the skirt end.	80.970 – 80.985 mm (3.1878 – 3.1883 in)	80.880 mm (3.1843 in)
Piston to cylinder clearance		0.025 – 0.035 mm (0.0010 – 0.0013 in)	0.120 mm (0.0047 in)
Piston ring to groove clearance	1st	—	0.180 mm (0.0070 in)
	2nd	—	0.150 mm (0.0059 in)
Piston ring groove width	1st	0.83 – 0.85 mm (0.0327 – 0.0334 in)	—
		1.30 – 1.32 mm (0.0512 – 0.0519 in)	—
	2nd	1.01 – 1.03 mm (0.0398 – 0.0405 in)	—
	Oil	2.01 – 2.03 mm (0.0792 – 0.0799 in)	—
Piston ring thickness	1st	0.76 – 0.81 mm (0.0300 – 0.0318 in)	—
		1.08 – 1.10 mm (0.0426 – 0.0433 in)	—
	2nd	0.97 – 0.99 mm (0.0382 – 0.0389 in)	—
Piston ring free end gap	1st	Approx. 6.5 mm (0.256 in)	5.2 mm (0.205 in)
	2nd	Approx. 9.0 mm (0.354 in)	7.2 mm (0.284 in)
Piston ring end gap	1st	0.06 – 0.18 mm (0.0024 – 0.0070 in)	0.50 mm (0.019 in)
	2nd	0.06 – 0.18 mm (0.0024 – 0.0070 in)	0.50 mm (0.019 in)
Piston pin bore I.D.		20.002 – 20.008 mm (0.7875 – 0.7877 in)	20.030 mm (0.7885 in)
Piston pin O.D.		19.992 – 20.000 mm (0.7871 – 0.7874 in)	19.980 mm (0.7867 in)
Conrod small end I.D.		20.006 – 20.014 mm (0.7877 – 0.7879 in)	20.040 mm (0.7889 in)
Conrod deflection		—	3.0 mm (0.11 in)
Conrod big end side clearance		0.10 – 0.65 mm (0.0039 – 0.0256 in)	1.0 mm (0.039 in)
Conrod big end width		21.95 – 22.00 mm (0.8642 – 0.8661 in)	—
Crank web to web width		59.9 – 60.1 mm (2.359 – 2.366 in)	—
Crankshaft runout		—	0.080 mm (0.0031 in)
Balancer spring free length		—	21.9 mm (0.862 in)

Engine Lubrication System

Item	Specification	Standard	Limit
Oil pressure	At 60 °C (140 °F), 3000 r/min	30 – 110 kPa (0.31 – 1.12 kgf/cm ² , 4.36 – 15.9 psi)	—

Item	Specification	Standard	Limit
Necessary amount of engine oil	Oil change	1200 ml (1.3 US qt, 1.1 Imp qt)	—
	Oil and filter change	1300 ml (1.4 US qt, 1.1 Imp qt)	
	Engine overhaul	1500 ml (1.6 US qt, 1.3 Imp qt)	

Cooling System

Item	Specification	Standard	Limit
Engine coolant	Engine side	Approx. 1700 ml (1.80 US qt, 1.50 Imp qt)	—
	Reserve tank side	Approx. 250 ml (0.26 US qt, 0.22 Imp qt)	
Radiator cap valve opening pressure		93.3 – 122.7 kPa (1.0 – 1.2 kgf/cm ² , 13.6 – 17.7 psi)	—
Cooling fan relay power supply voltage		Battery voltage	—
Cooling fan operating temperature	OFF → ON	Approx. 105 °C (221 °F)	—
	ON → OFF	Approx. 100 °C (212 °F)	
Thermostat valve opening temperature		85.5 – 88.5 °C (186 – 191 °F)	—
Thermostat valve lift	95 °C (203 °F)	3.0 mm (0.12 in) or more	—

Fuel System

Item	Specification	Standard	Limit
Fuel injector power supply voltage		Battery voltage	—
Fuel injector resistance	24 °C (75 °F)	11.4 – 12.6 Ω	—
FP relay power supply voltage		Battery voltage	—
FP discharge amount	Per 10 seconds	41.6 ml (1.40 US oz, 1.46 Imp oz) or more	—
Fuel pressure		289 – 299 kPa (2.95 – 3.04 kgf/cm ² , 42.0 – 43.3 psi)	—

Ignition System

Item	Specification	Standard	Limit
Spark plug	Type	DENSO: IU22D NGK: CR7EIA-9	—
	Gap	0.8 – 0.9 mm (0.032 – 0.035 in)	
Spark performance	At 1 atm	8 mm (0.3 in) or more	—
Ignition coil primary peak voltage		150 V or more	—
Ignition coil resistance	Primary	1.87 – 2.53 Ω	—
	Secondary	18800 – 23200 Ω	

Starting System

Item	Specification	Standard	Limit
Starter motor brush length		7.0 mm (0.28 in)	3.5 mm (0.14 in)
Starter relay resistance		3 – 6 Ω	—
Side-stand switch voltage	ON (Side-stand retracted)	0.4 – 0.6 V	—
	OFF (Side-stand on the ground)	1.4 V or more	

Charging System

Item	Specification		Standard	Limit
Battery leakage current			3 mA or less	—
Regulated voltage	Charging output	At 5000 r/min	14.0 – 15.0 V	—
Generator coil resistance			0.1 – 0.5 Ω	—
Generator no-load voltage	When engine cold	At 5000 r/min	50 V (AC) or more	—
Reaching time	Standard charging		0.9 A for 5 to 10 hours	—
	Fast charging		4 A for 1 hour	
Generator Max. output	At 5000 r/min		Approx. 350 W	—
Battery	Type designation		FTZ9-BS	—
	Capacity		12 V 32.4 kC (9 Ah)/10 HR	

Front Suspension

Item	Specification	Standard	Limit
Front fork inner tube O.D.		41 mm (1.6 in)	—
Front fork oil level	Without spring, inner tube fully compressed	87 mm (3.4 in)	—
Front fork spring free length		344.6 mm (13.57 in)	337 mm (13.3 in)
Front fork oil capacity	Each leg	301 ml (10.18 US oz, 10.59 Imp oz)	—

Rear Suspension

Item	Specification	Standard	Limit
Rear shock absorber spring adjuster		3rd position from softest end	—

Wheels and Tires

Item	Specification		Standard	Limit
Wheel rim runout	Front	Axial & Radial	—	2.0 mm (0.08 in)
	Rear	Axial & Radial	—	2.0 mm (0.08 in)
Wheel axle runout	Front & Rear		—	0.25 mm (0.010 in)
Tire size	Front		120/70-15M/C 56S	—
	Rear		150/70-13M/C 64S	
Tire type	Front		DUNLOP/SCOOTSMART G	—
	Rear		DUNLOP/SCOOTSMART G	
Tire tread depth	Recommend depth	Front	—	1.6 mm (0.062 in)
		Rear	—	2.0 mm (0.078 in)
Cold inflation tire pressure	Solo riding	Front	200 kPa (2.00 kgf/cm ² , 29 psi)	—
		Rear	200 kPa (2.00 kgf/cm ² , 29 psi)	
	Dual riding	Front	200 kPa (2.00 kgf/cm ² , 29 psi)	—
		Rear	250 kPa (2.50 kgf/cm ² , 36 psi)	
Wheel rim size	Front		15 M/C × MT 3.50	—
	Rear		13 M/C × MT 4.00	

Drive Chain / Drive Train / Drive Shaft

Item	Specification	Standard	Limit
Final gear oil capacity	When oil change	180 ml (6.09 US oz, 6.34 Imp oz)	—
	When overhaul	190 ml (6.42 US oz, 6.69 Imp oz)	—

Brake Control System and Diagnosis

Item	Specification	Standard	Limit
Master cylinder bore / piston diameter	Front	Approx. 14.0 mm (0.55 in)	—
	Rear	Approx. 12.7 mm (0.50 in)	

Front Brakes

Item	Specification	Standard	Limit
Front brake disc thickness		4.5 mm (0.18 in)	4.0 mm (0.16 in)
Front brake disc runout		—	0.30 mm (0.012 in)
Front brake caliper cylinder bore / piston diameter		Approx. 25.4 mm (1.00 in)	—

Rear Brakes

Item	Specification	Standard	Limit
Rear brake disc thickness		5.0 mm (0.20 in)	4.5 mm (0.18 in)
Rear brake disc runout		—	0.30 mm (0.012 in)
Rear brake caliper cylinder bore / piston diameter		Approx. 27.0 mm (1.06 in)	—

Brake Lock

Item	Specification	Standard	Limit
Brake lock cable adjusting margin		0 – 1.25 mm (0 – 0.04 in)	—

ABS

Item	Specification	Standard	Limit
Wheel speed sensor – sensor rotor clearance	Front	0.360 – 1.620 mm (0.015 – 0.063 in)	—
	Rear	0.156 – 1.624 mm (0.007 – 0.063 in)	—

CVT

Item	Specification	Standard	Limit
Drive V-belt width		26.1 mm (1.03 in)	25.1 mm (0.99 in)
Movable driven face spring free length		145.0 mm (5.71 in)	137.8 mm (5.425 in)
Face abrasion		—	0.4 mm (0.01 in)
Clutch engagement		2200 – 2800 r/min	
Clutch lock-up		4800 – 5800 r/min	
Clutch wheel I.D.		160.0 – 160.2 mm (6.300 – 6.307 in)	160.5 mm (6.318 in)
Clutch shoe thickness		5.0 mm (0.20 in)	2.0 mm (0.07 in)

Steering / Handlebar

Item	Specification	Standard	Limit
Steering tension initial force		2 – 5 N (0.2 – 0.5 kgf, 0.5 – 1.1 lbf)	—

Wiring Systems

Item	Specification	Standard	Limit	
Fuse size	Headlight	HI	10 A	—
		LO	10 A	—
	Meter	15 A	—	
	Ignition	10 A	—	
	Signal	15 A	—	
	Power source	10 A	—	
	Fan	15 A	—	
	ABS	30 A	—	
Main	30 A	—		

Lighting Systems

Item	Specification	Standard	Limit
Headlight	High beam	LED	—
	Low beam		
Position light (if equipped)		LED	—
Brake light/Taillight		LED	—
Turn signal light		12 V 21 W × 4	—
License plate light		12 V 5 W	—

Combination Meter / Fuel Meter / Horn

Item	Specification	Standard	Limit
Tachometer light		LED	—
Speedometer light		LED	—
Instrument panel light		LED	—
Turn signal indicator light		LED	—
MIL		LED	—
Engine coolant temperature indicator light		LED	—
ABS indicator light		LED	—
High beam indicator light		LED	—
Brake lock indicator light		LED	—
Freeze indicator light		LED	—
ECO mode indicator light		LED	—

Tightening Torque List

Emission Control Devices

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
EVAP system purge control solenoid valve nut	6.7	0.68	4.95

Engine Electrical Devices

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
IAT sensor screw	1.3	0.13	0.95
ECT sensor	12	1.2	9.0
HO2 sensor	25	2.5	18.5
ISC valve screw	2.1	0.21	1.55

Engine Mechanical

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Air cleaner box mounting bolt	10	1.0	7.5
Air cleaner outlet tube clamp screw	1.5	0.15	1.10
Intake pipe No.2 clamp screw	1.5	0.15	1.10
Intake pipe No.1 bolt	10	1.0	7.5
EVAP system purge control solenoid valve bracket bolt	4.5	0.46	3.35
Cylinder head cover bolt	15	1.5	11.0
Camshaft journal holder bolt	11	1.1	8.5
Cam chain tension adjuster bolt	10	1.0	7.5
Spring holder bolt	23	2.3	17.0
Cylinder head bolt (L190)	25 N·m → 43 N·m (2.5 kgf-m → 4.4 kgf-m, 18.5 lbf-ft → 32.0 lbf-ft)		
Cylinder head bolt (L130)	26	2.7	19.5
Water inlet connector bolt	10	1.0	7.5
Cam chain guide No.1 bolt	23	2.3	17.0
Cam chain tensioner bolt	23	2.3	17.0
Oil gallery plug (cylinder head)	11	1.1	8.5
Intake pipe No.2 bolt	10	1.0	7.5
Air cleaner bracket bolt	10	1.0	7.5
Engine mounting nut	93	9.5	68.5
Cushion rod rear nut	50	5.1	37.0
Crankcase bolt (M8)	22	2.2	16.5
Crankcase bolt (M6)	11	1.1	8.5
Balancer drive gear nut	150	15.3	111.0
Oil pump drive gear nut	29	3.0	21.5
Balancer driven gear nut	50	5.1	37.0
Crankcase bracket nut	85	8.7	63.0
Rubber damper bolt	85	8.7	63.0

Engine Lubrication System

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Oil gallery plug	16	1.6	12.0
Oil drain plug	23	2.3	17.0
Oil pump mounting bolt	10	1.0	7.5

Engine Cooling System

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Air bleeding bolt	6.0	0.61	4.45
Cooling fan mounting bolt	6.5	0.66	4.80
Radiator mounting bolt	10	1.0	7.5

Fastening part	Tightening torque		
	N·m	kgf·m	lbf·ft
Radiator hose clamp	1.5	0.15	1.10
Reservoir tank bolt	6.0	0.61	4.45
Reservoir tank bracket bolt	10	1.0	7.5
Water hose clamp bolt	10	1.0	7.5
Radiator conduction bolt	6.0	0.61	4.45
Thermostat cover bolt	12	1.2	9.0
Water pump bolt	10	1.0	7.5
Water pump cover screw	5.5	0.56	4.05

Fuel System

Fastening part	Tightening torque		
	N·m	kgf·m	lbf·ft
Fuel feed hose bolt	10	1.0	7.5
Fuel cut valve bolt	3.5	0.36	2.60
Fuel pump mounting bolt	10	1.0	7.5

Ignition System

Fastening part	Tightening torque		
	N·m	kgf·m	lbf·ft
Spark plug	11	1.1	8.5
Ignition coil bolt	4.5	0.46	3.35
Seat lock cable bolt	8.0	0.82	5.90

Starting System

Fastening part	Tightening torque		
	N·m	kgf·m	lbf·ft
Starter motor mounting bolt	10	1.0	7.5
Starter motor lead wire bolt	3.0	0.31	2.25
Starter motor housing bolt	4.0	0.41	2.95
Starter clutch bolt	26	2.7	19.5

Charging System

Fastening part	Tightening torque		
	N·m	kgf·m	lbf·ft
Generator stator bolt	10	1.0	7.5
CKP sensor bolt	5.0	0.51	3.70
Generator rotor bolt	160	16.3	118.0

Exhaust System

Fastening part	Tightening torque		
	N·m	kgf·m	lbf·ft
Exhaust pipe nut	25	2.5	18.5
Muffler connector bolt	23	2.3	17.0
Muffler support bolt	23	2.3	17.0
Muffler rear cover stay No.2 bolt	10	1.0	7.5
Muffler rear cover stay No.1 bolt	10	1.0	7.5
Muffler rear cover bolt	10	1.0	7.5
Muffler cover bolt	10	1.0	7.5

Front Suspension

Fastening part	Tightening torque		
	N·m	kgf·m	lbf·ft
Front fork cap	45	4.6	33.5
Front fork clamp bolt	23	2.3	17.0
Cylinder bolt	30	3.1	22.5

Rear Suspension

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Rear shock absorber rear nut	50	5.1	37.0
Cushion rod front nut	50	5.1	37.0
Rear shock absorber front bolt	50	5.1	37.0
Cushion lever center nut	80	8.2	59.0
Cushion rod rear nut	50	5.1	37.0
Rear swingarm bolt	50	5.1	37.0
Rear axle nut	120	12.2	88.5

Wheels and Tires

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Front axle	65	6.6	48.0
Front axle pinch bolt	23	2.3	17.0

Drive Chain / Drive Train / Drive Shaft

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Oil level plug	16	1.6	12.0
Oil drain plug	12	1.2	9.0
Final gear cover bolt	22	2.2	16.5
Rear axle bearing retainer screw	8.5	0.87	6.30
Idle shaft bearing retainer screw	8.5	0.87	6.30

Brake Control System and Diagnosis

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Front brake air bleeder valve	6.0	0.61	4.45
Rear brake air bleeder valve	6.0	0.61	4.45
Front brake master cylinder holder bolt	10	1.0	7.5
Brake hose union bolt	23	2.3	17.0
Brake light switch mounting screw	1.2	0.12	0.90
Brake lever pivot bolt	5.9	0.60	4.35
Brake lever pivot bolt lock-nut	5.9	0.60	4.35
Rear brake master cylinder holder bolt	10	1.0	7.5

Front Brakes

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Front brake caliper mounting bolt	35	3.6	26.0
Front brake pad mounting pin	17	1.7	12.5
Brake hose union bolt	23	2.3	17.0
Sliding pin nut	22	2.2	16.5
Sliding pin bolt	17	1.7	12.5
Front brake air bleeder valve	6.0	0.61	4.45
Front brake disc bolt	23	2.3	17.0

Rear Brakes

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Pad mounting pin	17	1.7	12.5
Caliper mounting bolt	23	2.3	17.0
Brake hose union bolt	23	2.3	17.0
Rear brake air bleeder valve	6.0	0.61	4.45
Brake-lock housing bolt	22	2.2	16.5
Rear brake disc bolt	35	3.6	26.0

Brake Lock

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Lock-nut	9.3	0.95	6.85
Bake lock housing bolt	22	2.2	16.5

ABS

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Front wheel speed sensor rotor bolt	6.3	0.64	4.65
Rear wheel speed sensor rotor bolt	6.3	0.64	4.65
Brake hose union bolt	23	2.3	17.0

CVT

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Cooling fan duct hose clamp screw	1.5	0.15	1.10
Bearing retainer bolt	8.5	0.87	6.30
Fixed drive face nut	105	10.7	77.5
Clutch housing nut	85	8.7	63.0
Clutch shoe nut	105	10.7	77.5
Belt cooling duct hose clamp screw	1.5	0.15	1.10

Steering / Handlebar

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Handlebar clamp bolt	23	2.3	17.0
Handlebar balancer screw	5.5	0.56	4.05
Front brake master cylinder holder bolt	10	1.0	7.5
Rear brake master cylinder holder bolt	10	1.0	7.5
Steering stem lock-nut	30	3.1	22.5
Steering stem nut	30 N-m (3.1 kgf-m, 22.5 lbf-ft) → turn counterclockwise 1/4 – 1/2		
Handlebar holder set bolt	23	2.3	17.0
Handlebar holder clamp bolt	55	5.6	40.5

Lighting Systems

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Headlight screw	2.3	0.23	1.70
License light screw	2.0	0.20	1.50
Rear reflex reflector nut	1.8	0.18	1.35

Combination Meter / Fuel Meter / Horn

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Horn bolt	23	2.3	17.0

Exterior Parts

Fastening part	Tightening torque		
	N-m	kgf-m	lbf-ft
Seat hinge bracket bolt	10	1.0	7.5
Seat hinge nut	5.5	0.56	4.05
Pillion rider handle bolt	23	2.3	17.0
Rear combination light screw	2.0	0.20	1.50
Seat striker bolt	8.0	0.81	5.90
Combination meter bolt	2.0	0.20	1.50
Headlight nut	5.5	0.56	4.05

Fastening part	Tightening torque		
	N·m	kgf·m	lbf·ft
Headlight bolt	8.5	0.87	6.30
Front turn signal screw	2.3	0.23	1.70

Special Tools and Equipment

Fuel / Oil / Fluid / Coolant Recommendation

Fuel

NOTICE

Do not use leaded gasoline. If it is used, the engine and the emission control system will be damaged.

Use unleaded gasoline with an octane rating of 87 AKI or higher.

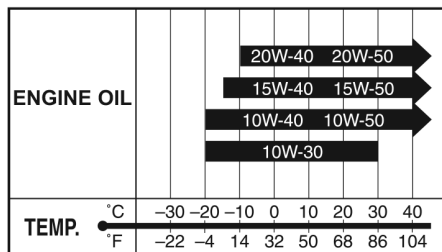
Unleaded gasoline containing up to 10% ethanol by volume may be used.

Engine Oil

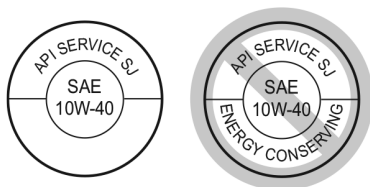
Use engine oils which meet the following requirements.

	Engine oil
API service classification	SG, SH, SJ or SL
JASO T903 standard	MA
Viscosity	SAE 10W-40

If SAE 10W-40 engine oils are not available, select oils of an appropriate viscosity grade according to the following chart.



Suzuki does not recommend the use of engine oil which have an "ENERGY CONSERVING" indication in the API service symbol for any of its motorcycles / ATVs. It can affect the engine life and the clutch performance.



Suzuki recommends the use of SUZUKI PERFORMANCE 4 MOTOR OIL.

Brake Fluid

Specification and classification: DOT 4

▲ WARNING

Since the brake system of this motorcycle is filled with a glycol-based brake fluid by the manufacturer, do not use or mix different types of fluid such as silicone-based and petroleum-based fluid for refilling the system, otherwise serious damage will result.

Do not use any brake fluid taken from old or used or unsealed containers.

Never reuse brake fluid left over from a previous servicing, which has been stored for a long period.

Engine Coolant

Suzuki recommends the use of SUZUKI LONG LIFE COOLANT or SUZUKI SUPER LONG LIFE COOLANT.

If SUZUKI COOLANT is not available, use an anti-freeze/engine coolant compatible with an aluminum radiator, mixed with distilled water only.

For SUZUKI LONG LIFE COOLANT

NOTICE

- Use a high quality ethylene glycol base anti-freeze, mixed with distilled water. Do not mix an alcohol base anti-freeze and different brands of anti-freeze.
- Do not put in more than 60% anti-freeze or less than 50%. (Refer to Fig. 1 and 2.)

The 50:50 mixture of distilled water and ethylene glycol anti-freeze will provide the optimum corrosion protection and excellent heat protection, and will protect the cooling system from freezing at temperatures above -31°C (-24°F).

If the vehicle is to be exposed to temperatures below -31°C (-24°F), this mixing ratio should be increased up to 55% or 60% according to the figure.

Anti-freeze Proportioning Chart

Anti-freeze density	Freezing point
50%	-31°C (-24°F)
55%	-40°C (-40°F)
60%	-55°C (-67°F)

Fig.1: Engine coolant density-freezing point curve

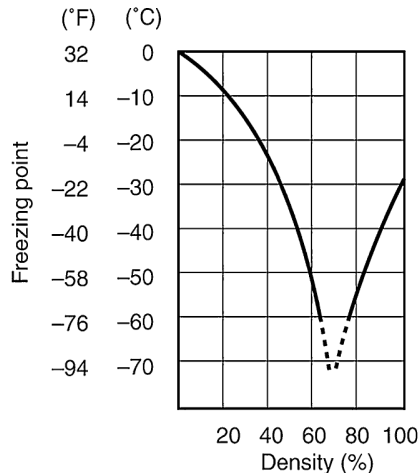
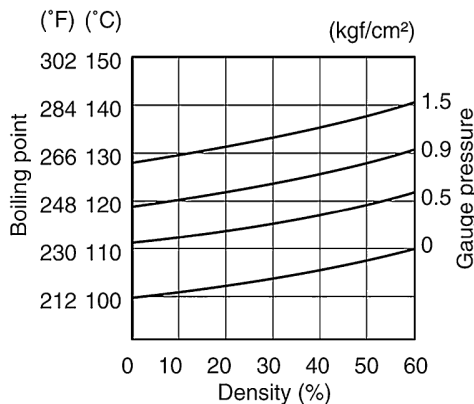


Fig.2: Engine coolant density-boiling point curve



For SUZUKI SUPER LONG LIFE COOLANT

NOTICE

- Ethanol or methanol base coolant or water alone should not be used in cooling system at any time as damage to cooling system could occur.
- Do not mix the distilled water, SUZUKI LONG LIFE COOLANT (coolant color: Green) or equivalent.

SUZUKI SUPER LONG LIFE COOLANT will provide the optimum corrosion protection and excellent heat protection, and will protect the cooling system from freezing at temperatures above $-36\text{ }^{\circ}\text{C}$ ($-33\text{ }^{\circ}\text{F}$).

Anti-freeze concentration table

Anti-freeze density	Freezing point
50%	$-36\text{ }^{\circ}\text{C}$ ($-33\text{ }^{\circ}\text{F}$)

Water for mixing

Use distilled water only. Water other than distilled water can corrode and clog the aluminum radiator. For engine coolant mixture information, refer to “Engine Coolant”.

NOTICE

Mixing of anti-freeze/engine coolant should be limited to 60%. Mixing beyond it would reduce its efficiency. If the anti-freeze/engine coolant mixing ratio is below 50%, rust inhabiting performance is greatly reduced. Be sure to mix it above 50% even though the atmospheric temperature does not go down to the freezing point.

Anti-freeze / Engine coolant

The engine coolant perform as a corrosion and rust inhibitor as well as anti-freeze. Therefore, the engine coolant should be used at all times even though the atmospheric temperature in your area does not go down to freezing point. Suzuki recommends the use of SUZUKI COOLANT anti-freeze/engine coolant. If this is not available, use an equivalent which is compatible with an aluminum radiator.

Front Fork Oil

Use SUZUKI FORK OIL G-10.

Fork oil 99000–99044–10G (SUZUKI FORK OIL G-10)

