Features & Specifications 2019 V-Strom 650XT Touring



Overview

Renowned for its versatility, reliability, and value, the V-Strom 650 has attracted many riders who use it for touring, commuting, or a fun ride when the spirit moves them. It is a touchstone motorcycle balanced with a natural riding position, comfortable seat, and a flexible engine character that produces stress-free riding during brief daily use or a high-mile adventure. The 2019 V-Strom 650XT Touring is the newest member of the V-Strom family by marrying the looks of the V-Strom 1000, the tubeless-spoke wheels of the V-Strom 650XT, plus a set of Suzuki side cases, a rugged accessory bar, and a centerstand. Even loaded and ready to travel, this V-Strom boasts strong engine performance and great fuel economy while achieving worldwide emission standards. A number of engineering accomplishments result in low weight and a thin chassis, producing a V-Strom that is more versatile, more controllable, and more accessible to elevate its total performance so it's simply "more V-Strom." And that's what a rider wants: more of a good ride.

Key Features

- Liquid-cooled, 645cc, 90-degree, V-twin engine delivers strong torque in the low- to mid-rpm range, yet provides a strong rush of high-rpm power that's ideal for any riding mission.
- Suzuki's Advanced Traction Control System*, Easy Start System, Low RPM Assist feature, plus ABS** technology make a great motorcycle really incredible.
- ADV fairing, with vertically stacked headlights and adjustable windshield, houses a multi-function, illumination-adjustable instrument panel that delivers a wealth of information.
- The strong and light chassis with Suzuki V-Strom side cases that are easy to clip on and off and keeps the motorcycle trim when ready for touring.
- Ready for real adventure, the V-Strom 650XT Touring has aluminum, spoke-style wheels with tubeless radial dual-sport tires, hand guards, and a protective lower engine cowl.

Engine Features

- Using SV650 engineering, the V-Strom's DOHC, liquid-cooled engine has been tuned to deliver clean, strong power at any rpm.
- Low-friction resin-coated pistons and SCEM-coated cylinders help deliver high mileage for class-leading touring range.
- Engine cover hardware and select other fasteners are of a new design that permits the use of Torx or conventional hex-style tools.



Engine Features (continued)

- The sleek 2-into-1 exhaust system routes below the chassis to reduce weight, centralize mass, and provide space for a narrow tail section (and optional luggage).
- The exhaust system has twin catalyzers and employs O2 feedback to the EFI system to produce optimum combustion efficiency and reduce emissions to an incredibly low level.
- The fuel injection system employs Suzuki's innovative SDTV (Suzuki Dual Throttle Valve) on 39mm throttle bodies. The secondary throttle valves are controlled by a servo motor for smooth power delivery.
- Ten-hole, long-nose-type fuel injectors on each throttle body improve fuel atomization for better combustion efficiency while reducing fuel consumption.
- Suzuki's patented Throttle-body Integrated Idle Speed Control (TI-ISC) stabilizes the engine idle speed and helps lower emissions. The system is compact and lightweight.
- The TI-ISC on the V-Strom 650XT has Suzuki's Low RPM Assist feature that seamlessly adjusts engine speed during takeoff and low-speed riding to smooth the power delivery. It also helps reduce the possibility of the rider stalling the motorcycle.
- The Engine Control Module (ECM) provides state-of-the-art engine management and has enhanced settings to suit the updated intake and exhaust systems, resulting in better fuel economy and linear throttle response.
- The engine has dual spark technology heads with two high-energy, slim electrode spark plugs per cylinder, which aid in combustion efficiency and power production.
- The V-Strom 650XT Touring is equipped with Suzuki's Advanced Traction Control System*, which lets the rider control the throttle with more confidence in various riding conditions. It continuously monitors front and rear wheel speeds, throttle opening, engine speed, and the selected transmission gear to adjust engine output if wheel spin is detected.
- There are three traction control modes (1, 2, and OFF), and the difference between the modes is their sensitivity to road conditions. Mode 1 is lowest sensitivity level, most suitable for skilled riders or in conditions that have good road surface grip (riding on good, smooth roads). Mode 2 is highest sensitivity level, suitable for road conditions where the grip may be limited (wet or cold surfaces). OFF disengages all traction control features.
- This V-Strom as the Suzuki Easy Start System, which lets the rider start the motorcycle with a momentary press of the start button without pulling in the clutch lever (when in neutral).
- The compact radiator is flanked by wind-directing plates that enhance cooling efficiency and direct heat out of the side vents away from the rider's legs.
- The six-speed transmission suits sporty rides with tight 1st through 5th gear ratios and a tall top gear (6th gear) for highway cruising.
- Low-maintenance, long-life sealed O-ring drive chain is standard.

Chassis Features

- The beak-style fairing, with vertically stacked headlights and new mounting structure, helps the V-Strom 650XT Touring cut through the wind, protecting the rider in style.
- · The three-way height-adjustable windscreen was wind-tunnel tested to reduce wind sounds, buffeting, and rider fatigue.
- The fuel tank has a generous 5.3-gallon capacity but is shaped to be thin at the rear to flow into the slimmer seat, which aids the rider in touching the ground at stops.
- The internal construction and cap of the fuel tank is updated so the gasoline capacity is the same for both the 49-state and California versions.
- The spacious two-up seat combines smooth and slip-resistant surfaces, plus an V-Strom logo.
- Lightweight, rigid twin-spar aluminum frame and swingarm contribute to smooth handling performance and excellent stability.
- Spring-preload-adjustable 43mm front forks and link-type rear suspension with rebound damping adjustment and hand-operated spring preload adjuster. CHIMANIS



Chassis Features (continued)

- Spoke-style wheels, with black anodized aluminum rims laced with stainless steel spokes, absorb shock from irregular road surfaces well and accept tubeless tires.
- Adventure-spec Bridgestone BATTLAX 19-inch front and 17-inch rear tubeless radial tires are mounted to the spoke-style wheels for all-around good performance.
- Front dual 310mm disc brakes and a rear 260mm disc brake deliver controlled stopping power.
- Compact Anti-lock Brake System (ABS)** monitors wheel speed to match braking to available traction.
- The lightweight resin luggage rack incorporates easy-to-grasp grab bars and aligns with the passenger section of the seat, offering a larger surface for carrying cargo or luggage.
- The V-Strom 650XT Touring is ready to carry the gear you need with its Suzuki side cases that are keyed to match the motorcycle's ignition key and can be removed and installed in seconds.
- The V-Strom 650XT Touring also comes with a rugged accessory bar, hand guards, a protective lower engine cowl, and a center stand that makes chain service easy.



- The multi-function instrument panel is similar in appearance to the V-Strom 1000 panel but has functions unique to the V-Strom 650XT Touring.
- The instrument set includes an analog tachometer and brightness-adjustable LCD speedometer and control panel.
- LCD readouts include odometer, dual trip meter, traction control modes, gear position, coolant and ambient temperature, fuel consumption, fuel gauge, and clock. Switching between readings can be done with the left handlebar switch.
- LED indicators include an ABS alert and a freeze warning icon, which together with the air temperature display warn of possible icy road conditions.
- Strong three-phase charging system supplies the 10Ah maintenance-free battery for easy starting and additional accessory power. A dedicated accessory fuse is located under the seat.
- The stacked, 65/55-watt halogen headlamps illuminate the road when your ride stretches into night.
- The LED tail and brake light is bright and vibration resistant. The turn signals use bright amber incandescent bulbs with clear lenses.
- A handy 12-volt DC accessory outlet is mounted on the inner dash.

Additional Features

- Genuine Suzuki Accessories includes side and top cases, engine guards, low and high profile seats, heated grips, hand guards and more.
- 12-month limited warranty
- Coverage period and additional benefits available through Suzuki Extended Protection.
- · For more details, please visit www.suzukicycles.com.
 - * The Traction Control System is not a substitute for the rider's throttle control. It cannot prevent loss of traction due to excessive speed when the rider enters a turn and/or applies the brakes. Neither can it prevent the front wheel from losing grip.





^{**} 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.

Specifications DL650XAAL9 E-03: USA, E-33: California

Dimensions and curb mass

Item	Specification	Remark
Overall length	2275 mm (89.57 in)	
Overall width	910 mm (35.8 in)	_
Overall height	1405 mm (55.31 in)	_
Wheelbase	1560 mm (61.42 in)	_
Ground clearance	170 mm (6.69 in)	_
Seat height	835 mm (32.9 in)	_
Curb mass	216 kg (476 lbs)	No accessories installed
	233 kg (514 lbs)	Touring accessories installed

Engine

Item	Specification	Remark
Туре	Four-stroke, liquid-cooled, DOHC, 90° V-twin	_
Number of cylinders	2	_
Bore	81.0 mm (3.189 in)	_
Stroke	62.6 mm (2.465 in)	_
Displacement	645 cm³ (39.4 cu. in)	_
Compression ratio	11.2 : 1	_
Fuel system	Fuel injection	_
Air cleaner	Non-woven fabric element	_
Starter system	Electric	_
Lubrication system	Wet sump	_
Idle speed	1300 ± 100 r/min	_

Drive train

Item Specification		Specification	Remark
Clutch	h Wet multi-plate type		_
Transmission		6-speed constant mesh	_
Gearshift patte		1-down, 5-up	_
Primary reduc	tion ratio	2.088 (71/34)	_
Low		2.461 (32/13)	
	2nd	1.777 (32/18)	
Gear ratios 3rd	1.380 (29/21)	_	
Gear ratios	4th	1.125 (27/24)	_
	5th	0.961 (25/26)	_
	Тор	0.851 (23/27)	_
Final reduction	n ratio	3.133 (47/15)	_
Drive chain		RK/525SMOZ8, 118 links	_

Chassis

Item	Specification	Remark
Front suspension	Telescopic, coil spring, oil damped	_
Rear suspension	Link type, coil spring, oil damped	_
Front fork stroke	150 mm (5.91 in)	_
Rear wheel travel	159 mm (6.26 in)	_
Steering angle	40° (right and left)	_
Caster	25° 40'	_
Trail	107 mm (4.21 in)	_
Turning radius	2.7 m (8.9 ft)	_
Front brake	Disc brake, twin	_
Rear brake	Disc brake	_
Front tire size	110/80R19M/C 59V, tubeless	_
Rear tire size	150/70R17M/C 69V, tubeless	_



Specifications DL650XAAL9 E-03: USA, E-33: California

Electrical

Item		Specification	Remark
Ignition type		Electronic ignition (transistorized)	_
Spark plug		NGK MR8E-9	_
Battery		12 V 36.0 kC (10 Ah)/10 HR	_
Generator		Three-phase A.C. generator	_
Main fuse		30 A	_
Fuse		15/15/10/15/15/10/3 A	_
ABS fuse		25/15 A	_
Headlight	High beam	12 V 65 W H9	_
neadiigiit	Low beam	12 V 55 W H7	_
Position light	•	12 V 5 W	_
Brake light/Taillig	ght	LED	_
Turn signal light		12 V 21 W	_
License plate lig	ht	12 V 5 W	_
Instrument panel		LED	_
Neutral indicator	light	LED	_
Hi beam indicato	r light	LED	_
Turn signal indic		LED	_
Engine coolant to	emperature		
indicator light/Oil pressure		LED	_
indicator light			
MIL		LED	_
ABS indicator light		LED	_
Freeze indicator	light	LED	
TC indicator ligh	t	LED	_

Capacities

Item		em Specification	
Fuel tank		20.0 L (5.3 US gal, 4.4 Imp gal)	_
Engine oil	Oil change	2400 ml (2.5 US qt, 2.1 lmp qt)	_
Engine on	With filter change	2600 ml (2.7 US qt, 2.3 lmp qt)	_
Engine cool	lant	Approx. 1700 ml (1.80 US qt, 1.50 lmp qt)	_

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Service Data DL650XAAL9 E-03: USA, E-33: California

NOTE:

The specification of fuel and oil are not listed below. However, their details are described after the tables.

Emission Control Devices

Item	Specification	Standard	Limit
EVAP system purge control solenoid			
valve power supply voltage (if		Battery voltage	_
equipped)			
EVAP system purge control solenoid	20 °C (68 °F)	30 – 34 O	
valve resistance (if equipped)	20 C (08 F)	30 – 34 12	_
PAIR control solenoid valve power		Pottory voltago	
supply voltage (if equipped)		Battery voltage	_
PAIR control solenoid valve	20 – 30 °C (68 – 86 °F)	20 – 24 O	
resistance (if equipped)	20 - 30 C (00 - 80 F)	20 – 24 Ω	_

Engine Electrical Devices

Item	Specification	Standard	Limit
IAP sensor #1 power supply voltage		4.75 – 5.25 V	_
IAP sensor #1 output voltage	Idle speed at 1 atm.	Approx. 2.5 V	_
IAP sensor #2 power supply voltage		4.75 – 5.25 V	_
IAP sensor #2 output voltage	Idle speed at 1 atm.	Approx. 2.5 V	_
IAT sensor power supply voltage		4.5 – 5.5 V	_
IAT sensor resistance	0 °C (32 °F)	5400 – 6600 Ω	_
TAT Sensor resistance	80 °C (176 °F)	290 – 390 Ω	_
ECT sensor power supply voltage		4.5 – 5.5 V	_
ECT sensor resistance	20 °C (68 °F)	2320 – 2590 Ω	
LCT sensor resistance	80 °C (176 °F)	310 – 326 Ω	_
TP sensor power supply voltage		4.5 – 5.5 V	_
TP sensor output voltage	Closed	1.10 – 1.14 V	
Tr sensor output voltage	Opened	4.34 – 4.54 V	_
STP sensor power supply voltage		4.5 – 5.5 V	_
STP sensor output voltage	Closed	0.57 – 0.67 V	
STI Sellsoi output voltage	Opened	4.4 – 4.6 V	
STVA resistance		Approx. 7 Ω	_
HO2 sensor output voltage	ldle speed	0.90 V or less	
1102 serisor output voltage	5000 r/min	0.90 V or less	_
HO2 sensor heater power supply		Battery voltage	
voltage		, ,	_
HO2 sensor heater resistance	23 °C (73.4 °F)	11.5 – 17.5 Ω	_
CKP sensor peak voltage	When cranking	1 V or more	_
CKP sensor resistance	25 °C (77 °F)	156 – 234 Ω	_
TO sensor power supply voltage		4.5 – 5.5 V	_
TO sensor output voltage	Normal	0.4 – 1.4 V	
TO sensor output voltage	Leaning 65°	3.7 – 4.4 V	_
TO sensor resistance		16500 – 22300 Ω	_
ECM power supply voltage		Battery voltage	_

Engine Mechanical

Item	Specifica		Standard	Limit
	Without EVA		28K0	
	system and PA			
Throttle body I.D. No.	With EVAP con		28K1	_
	With EVAP contained and PAIR s	•	28K2	_
Throttle body bore size	dd	<i>y</i> = 10	39 mm (1.5 in)	_
Throttle cable play			2.0 – 4.0 mm (0.079 – 0.157 in)	_
Idle speed	When engine	warmed	1300 ± 100 r/min	_
Fast idle speed			1500 – 2000 r/min	_
·			1300 – 1700 kPa	1100 kPa
Compression pressure			(13.3 - 17.3 kgf/cm², 188 - 246	(11.2 kgf/cm ²
			psi)	159 psi)
				200 kPa
Compression pressure difference			_	(2.0 kgf/cm ² ,
				29.0 psi)
	Intake	2	35.48 – 35.53 mm	35.18 mm
Cam height	Intakt	,	(1.397 – 1.398 in)	(1.385 in)
Carri ricigiti	Exhau	st	35.68 – 35.73 mm	35.38 mm
	LXIIau	31	(1.405 – 1.406 in)	(1.393 in)
	Intake	a	0.027 – 0.069 mm	0.150 mm
Camshaft journal oil clearance	Intak		(0.0011 – 0.0027 in)	(0.0059 in)
	Exhau	st	0.027 – 0.069 mm	0.150 mm
	ZXIIGG		(0.0011 – 0.0027 in)	(0.0059 in)
	Intake		22.007 – 22.028 mm	
Camshaft journal holder I.D.			(0.8665 – 0.8672 in)	_
	Exhau	st	22.007 – 22.028 mm	
			(0.8665 – 0.8672 in)	
	Intake		21.959 – 21.980 mm	
Camshaft journal O.D.			(0.8646 – 0.8653 in)	_
	Exhau	st	21.959 – 21.980 mm (0.8646 – 0.8653 in)	
Camshaft runout	Intake & Ex	chaust	<u> </u>	0.10 mm
Com choin nin	At arrow	. "?"	16th pin	(0.004 in)
Cam chain pin	At allow	<u> </u>	0.10 – 0.20 mm	_
	When engine	Intake	(0.0040 – 0.0078 in)	
Valve clearance	cold		0.20 – 0.30 mm	<u> </u>
	Cold	Exhaust	(0.0079 – 0.0118 in)	
	Intake	j 	31 mm (1.2 in)	
Valve diameter	Exhau		25.5 mm (1.00 in)	-
			2010 11111 (1100 111)	0.05 mm
Valve stem runout	Intake & Ex	chaust	_	(0.0019 in)
Value le cad vedial vuosut	leteles O. F.			0.03 mm
Valve head radial runout	Intake & Ex	maust	-	(0.0011 in)
	Intake	`		0.5 mm
Valve head thickness	IIIIak	,	_	(0.02 in)
valve nead unckness	Exhau	ct	<u></u>	0.5 mm
	LATIAU	٠. 		(0.02 in)
Valve stem deflection	Intake & Ex	chaust	<u> </u>	0.35 mm
tarra atom demotion	make & E/	aaot		(0.013 in)
	Intake	9	4.475 – 4.490 mm	_
Valve stem O.D.	arc	-	(0.1762 – 0.1767 in)	
	Exhau	st	4.455 – 4.470 mm	_
	Extradot		(0.1754 – 0.1759 in)	



Item	Specifica	ition	Standard	Limit
	Intake		0.9 – 1.1 mm	_
Valve seat width	Exhaust		(0.036 – 0.043 in) 0.9 – 1.1 mm	
			(0.036 – 0.043 in)	_
			4.500 – 4.512 mm	
Value suide LD	Intake	9	(0.1772 – 0.1776 in)	_
Valve guide I.D.	Exhau	ct	4.500 – 4.512 mm	
	Exilau	SI.	(0.1772 – 0.1776 in)	_
	Intake	ż	0.010 – 0.037 mm	_
Valve guide to valve stem clearance	Intak		(0.0004 – 0.0014 in)	
3	Exhau	st	0.030 – 0.057 mm	_
			(0.0012 – 0.0022 in)	37.1 mm
	Intake	9	_	(1.46 in)
Valve spring free length				37.1 mm
	Exhau	st	_	(1.46 in)
	When	latalia	127 – 147 N	,
Valve spring pre-load	compressed to	Intake	(13.0 – 15.0 kgf, 28.6 – 33.0 lbf)	_
valve spring pre-load	33.40 mm	Exhaust	127 – 147 N	
	(1.315 in)	LAHaust	(13.0 – 15.0 kgf, 28.6 – 33.0 lbf)	
Cylinder head distortion			_	0.05 mm
				(0.0019 in)
Cylinder distortion			_	0.05 mm
			81.000 – 81.015 mm	(0.0019 in) No nicks or
Cylinder bore			(3.1890 – 3.1895 in)	scratches
	Measure at 20	mm (0.79	80.976 – 81.011 mm	80.880 mm
Piston diameter	in) from the s	,	(3.1880 – 3.1894 in)	(3.1843 in)
D. ()	,	Tant Origin	0.025 – 0.035 mm	0.120 mm
Piston to cylinder clearance			(0.0010 – 0.0013 in)	(0.0047 in)
	1st			0.180 mm
Piston ring to groove clearance	151		_	(0.0070 in)
Islanding to groove dearance	2nd		_	0.150 mm
			0.00 0.05	(0.0059 in)
	1st		0.83 – 0.85 mm (0.0327 – 0.0334 in)	_
			1.30 – 1.32 mm	
			(0.0512 – 0.0519 in)	_
Piston ring groove width			1.01 – 1.03 mm	
	2nd		(0.0398 – 0.0405 in)	_
	Oil		2.01 – 2.03 mm	
	Oii		(0.0792 – 0.0799 in)	_
			0.76 – 0.81 mm	
	1st		(0.030 – 0.031 in)	
Piston ring thickness			1.08 – 1.10 mm	_
			(0.0426 – 0.0433 in) 0.97 – 0.99 mm	
	2nd		(0.0382 – 0.0389 in)	_
			,	5.2 mm
Piston ring free end gap	1st		Approx. 6.5 mm (0.26 in)	(0.21 in)
	2:		Approx 0 mm (0.4 in)	7.2 mm
	2nd		Approx. 9 mm (0.4 in)	(0.29 in)
	1st		0.06 – 0.18 mm	0.50 mm
Piston ring end gap	131		(0.0024 – 0.0070 in)	(0.019 in)
	2nd		0.06 – 0.18 mm	0.50 mm
	ZIIU		(0.0024 – 0.0070 in)	(0.019 in)

Item	Specification	Standard	Limit
Piston pin bore I.D.		20.002 – 20.008 mm	20.030 mm
Fistori piri bore i.b.		(0.7875 – 0.7877 in)	(0.7885 in)
Piston pin O.D.		19.995 – 20.000 mm	19.980 mm
Pistori piri O.D.		(0.7872 – 0.7874 in)	(0.7867 in)
Conrod small end I.D.		20.015 – 20.023 mm	20.040 mm
Confod Small end I.D.		(0.7880 – 0.7883 in)	(0.7889 in)
Conrod big end side clearance		0.170 – 0.320 mm	0.5 mm
Controd big end side clearance		(0.0067 – 0.0125 in)	(0.019 in)
Conrod big end width		20.95 – 21.00 mm	
Controd big end width		(0.8248 – 0.8267 in)	_
Conrad hig and LD		41.000 – 41.016 mm	
Conrod big end I.D.		(1.6142 – 1.6148 in)	_
Canrad his and all alcaronse		0.032 – 0.056 mm	0.080 mm
Conrod big end oil clearance		(0.0013 – 0.0022 in)	(0.0031 in)
Cronk nin width		42.17 – 42.22 mm	
Crank pin width		(1.661 – 1.662 in)	_
Crank sin O.D.		37.976 – 38.000 mm	
Crank pin O.D.		(1.4952 – 1.4960 in)	_
Crank nin haaring thickness		1.480 – 1.496 mm	
Crank pin bearing thickness		(0.0583 – 0.0588 in)	_
Crankah aft iaumaal O.D.		41.985 – 42.000 mm	
Crankshaft journal O.D.		(1.6530 – 1.6535 in)	_
Crankabaft inurnal ail alaaranaa		0.004 – 0.023 mm	0.080 mm
Crankshaft journal oil clearance		(0.0002 – 0.0009 in)	(0.0031 in)
Crankcase journal I.D.		46.000 – 46.018 mm	
Crankcase journal I.D.		(1.8111 – 1.8117 in)	_
Crapkagas isurnal basring thickness		1.999 – 2.008 mm	
Crankcase journal bearing thickness		(0.0787 – 0.0790 in)	_
Crankahaft jaurnal halder width	Dight side	19.8 – 19.9 mm	
Crankshaft journal holder width	Right side	(0.780 – 0.783 in)	-
Crankshoft journal width	Dight side	20.00 – 20.05 mm	
Crankshaft journal width	Right side	(0.7874 – 0.7893 in)	_
Crankshaft runout			0.05 mm
Crankshalt fullout		_	(0.0019 in)

Engine Lubrication System

Item	Item Specification		Limit
Oil pressure	At 60 °C (140 °F),	200 – 600 kPa	
	3000 r/min	(2.0 – 6.1 kgf/cm², 29.0 – 87.0 psi)	_
Necessary amount of engine oil	Oil change	2400 ml (2.5 US qt, 2.1 lmp qt)	
	Oil and filter change	2600 ml (2.7 US qt, 2.3 lmp qt)	_
	Engine overhaul	3000 ml (3.2 US qt, 2.6 Imp qt)	

Cooling System

Item	Specification	Standard	Limit
	Engine side	Approx. 1700 ml	
Engine coolant	Liigiile side	(1.80 US qt, 1.50 Imp qt)	
Engine coolant	Reserve tank side	Approx. 250 ml	_
	Reserve talk side	(0.26 US qt, 0.22 Imp qt)	
Padiator can valve aponing prossure		93.3 – 122.7 kPa	
Radiator cap valve opening pressure		(1.0 – 1.3 kgf/cm², 13.5 – 17.8 psi)	
Cooling fan relay power supply		Battery voltage	_
voltage		Battery voltage	
	$OFF \to ON$	Approx. 105 °C	
Cooling fan operating temperature	011 → 011	(221 °F)	_
Cooling lan operating temperature	$ON \to OFF$	Approx. 99 °C	_
	ON → OF I	(210 °F)	
Thermostat valve opening		80.5 – 83.5 °C	
temperature		(176.9 – 182.3 °F)	
Thermostat valve lift	At 95 °C (203 °F)	8.0 mm (0.3 in) or more	_

Fuel System

Item	Specification	Standard	Limit
Fuel injector power supply voltage		Battery voltage	_
Fuel injector resistance	20 °C (68 °F)	11.5 – 12.5 Ω	_
FP relay power supply voltage		Battery voltage	_
FP discharge amount	Per 10 seconds	166 ml	
TP discharge amount	Per 10 seconds	(5.61 US oz, 5.84 Imp oz) or more	_
Fuel pressure		289 – 299 kPa	
Fuel pressure		(2.9 – 3.0 kgf/cm², 41.9 – 43.3 psi)	_

Ignition System

ltem	Specification	Standard	Limit
Firing order		1.2	
Spork plug	Туре	NGK MR8E-9	
Spark plug	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	1.45 – 1.96 Ω	
grillion con resistance	Secondary	31730 – 35870 Ω	_
Immobilizer antenna power supply voltage (if equipped)		Battery voltage	_

Starting System

ltem	Specification	Standard	Limit
Starter motor brush length		12 mm (0.47 in)	6.5 mm (0.26 in)
Starter relay resistance		3 – 6 Ω	_
	ON (side-stand retracted)	0.4 – 0.6 V	
Side-stand switch voltage	OFF (side-stand on the ground)	1.4 V or more	<u> </u>



Charging System

ltem	Specifi	cation	Standard	Limit
Battery leakage current	·		2 mA or less	_
Regulated voltage	Charging output	At 5000 r/ min	14 – 15 V	_
Generator coil resistance			0.19 – 0.23 Ω	_
Generator no-load voltage	When engine cold	At 5000 r/ min	60 V (AC) or more	_
December of the c	Standard	charging	1.2 A for 5 to 10 hours	
Reaching time	Fast ch	arging	5 A for 1 hour	T
Generator Max. output	At 5000	0 r/min	Approx. 390 W	_
	Type des	signation	FTX12-BS	
Battery	Capacity		12 V 36.0 kC (10 Ah)/10 HR	_

Front Suspension

Item	Specification	Standard	Limit
Front fork inner tube O.D.		43 mm (1.7 in)	_
Front fork oil level	Without spring, inner tube fully compressed	105 mm (4.13 in)	_
Front fork spring free length		466.2 mm (18.35 in)	456 mm (18.0 in)
Front fork oil capacity	Each leg	568 ml (19.21 US oz, 19.99 Imp oz)	_

Rear Suspension

Item	Specification	Standard	Limit
Rear shock absorber spring adjuster		2nd position from softest end	
Rear shock absorber damping force adjuster	Rebound side	2 turns counterclockwise from stiffest position	_
Swingarm pivot shaft runout		_	0.3 mm (0.011 in)



Wheels and Tires

Item	Specif	ication	Standard	Limit
	Front	Axial & Radial	_	0.5 mm (0.019 in)
Wheel rim runout	Door	Axial	_	0.5 mm (0.019 in)
	Rear	Radial	_	1.0 mm (0.039 in)
Front wheel hub left end surface to rim distance			21.95 – 22.95 mm (0.8642 – 0.9035 in)	_
Rear wheel hub right end surface to rim distance			23.9 – 24.9 mm (0.941 – 0.980 in)	_
Wheel axle runout	Front 8	& Rear	_	0.25 mm (0.010 in)
Tire size	Fro Re		110/80R19M/C 59V 150/70R17M/C 69V	_
Tire type	Fro	ont	BRIDGESTONE/BATTLAX ADVENTURE A40F F	
The type	Rear		BRIDGESTONE/BATTLAX ADVENTURE A40R F	_
Tire tread depth	Recommend	Front	_	1.6 mm (0.063 in)
тпе пеас серит	depth	Rear	_	2.0 mm (0.079 in)
	Solo riding	Front	225 kPa (2.25 kgf/cm², 33 psi)	
Cold inflation tire pressure	- Colo Hallig	Rear	250 kPa (2.50 kgf/cm², 36 psi)	
osa ililation tilo procedio	Dual riding	Front Rear	225 kPa (2.25 kgf/cm², 33 psi) 290 kPa (2.90 kgf/cm², 42 psi)	_
Wheel rim size		ont ear	19 M/C × MT 2.50 17 M/C × MT 4.00	_

Drive Chain / Drive Train / Drive Shaft

Item	Specification	Standard	Limit
Drive chain	Туре	RK/525SMOZ8	_
Drive chain	Links	118 Links	_
Drive chain 20-pitch length		_	319.4 mm (12.57 in)
Drive chain slack	On side-stand	20 – 30 mm (0.79 – 1.18 in)	_
Joint plate distance specification		18.6 – 18.9 mm (0.733 – 0.744 in)	_
Pin end diameter specification		5.45 – 5.85 mm (0.215 – 0.230 in)	



Brake Control System and Diagnosis

ltem	Specification	Standard	Limit
Rear brake pedal height		19.5 – 20.5 mm (0.768 – 0.807 in)	_
Master cylinder hore / piston diameter	Front	Approx. 14 mm (0.55 in)	
Master cylinder bore / piston diameter	Rear	Approx. 14 mm (0.55 in)	_

Front Brakes

Item	Specification	Standard	Limit
Front brake disc thickness		5.0 mm (0.20 in)	4.5 mm (0.18 in)
Front brake disc runout		_	0.30 mm (0.012 in)
Front brake caliper cylinder bore / piston diameter		Approx. 27 mm (1.1 in)	_

Rear Brakes

Item	Specification	Standard	Limit
Rear brake disc thickness		5.0 mm (0.20 in)	4.5 mm
Treat brake disc thekness			(0.18 in)
Rear brake disc runout			0.30 mm
Treal brake discration		_	(0.012 in)
Rear brake caliper cylinder bore /		Approx. 38.2 mm (1.50 in)	
piston diameter		Αρρίολ. 30.2 ΠΠΤ (1.30 ΠΤ)	

ABS

Item	Specification	Standard	Limit
Wheel speed sensor – sensor rotor	Front	0.28 – 1.65 mm (0.0111 – 0.0649 in)	_
clearance	Rear	0.28 – 1.45 mm (0.0111 – 0.0570 in)	_

Manual Transmission

Item	Specification	Standard	Limit
	No. 1	0.1 – 0.3 mm (0.004 – 0.011 in)	0.5 mm (0.019 in)
Gearshift fork to groove clearance	No. 2	0.1 – 0.3 mm (0.004 – 0.011 in)	0.5 mm (0.019 in)
	No. 3	0.1 – 0.3 mm (0.004 – 0.011 in)	0.5 mm (0.019 in)
	No. 1	5.5 – 5.6 mm (0.217 – 0.220 in)	
Gearshift fork groove width	No. 2	5.5 – 5.6 mm (0.217 – 0.220 in)	_
	No. 3	5.5 – 5.6 mm (0.217 – 0.220 in)	
	No. 1	5.3 – 5.4 mm (0.209 – 0.212 in)	
Gearshift fork thickness	No. 2	5.3 – 5.4 mm (0.209 – 0.212 in)	_
	No. 3	5.3 – 5.4 mm (0.209 – 0.212 in)	
Gearshift lever height		20 – 30 mm (0.79 – 1.18 in)	_
GP switch power supply voltage		4.5 – 5.5 V	_
	1st	Approx. 1.3 V	
	Neutral	Approx. 5.0 V	
	2nd	Approx. 1.8 V	
GP switch voltage	3rd	Approx. 2.5 V	_
	4th	Approx. 3.2 V	
	5th	Approx. 4.1 V	
	6th	Approx. 4.6 V	



Clutch

Item	Specification	Standard	Limit	
Clutch cable play		10 – 15 mm (0.39 – 0.59 in)	_	
Clutch release screw		1 turn counterclockwise —		
	No. 1	2.92 – 3.08 mm	2.62 mm	
Drive plate thickness	110. 1	(0.115 – 0.121 in)	(0.104 in)	
Drive plate trickness	No. 2	2.92 – 3.08 mm	2.62 mm	
	NO. 2	(0.115 – 0.121 in)	(0.104 in)	
	No. 1	13.7 – 13.8 mm	13.2 mm	
Drive plate claw width	NO. 1	(0.540 – 0.543 in)	(0.520 in)	
Drive plate claw width	No. 2	13.7 – 13.8 mm	13.2 mm	
	NO. 2	(0.540 – 0.543 in)	(0.520 in)	
Driven plate distortion			0.10 mm	
Driven plate distortion		_	(0.0039 in)	
Clutch spring free length		60.6 mm (2.39 in)	57.6 mm	
Cidicit spring free length		00.0 11111 (2.39 111)	(2.27 in)	

Steering / Handlebar

Item	Specification	Standard	Limit
Steering tension initial force		2 – 5 N	
		(0.20 – 0.51 kgf, 0.45 – 1.12 lbf)	_

Wiring Systems

ltem	Specifi	cation	Standard	Limit
	Hoodlight	HI	15 A	_
	Headlight -	LO	15 A	_
	Ignit	ion	10 A	_
Even eine	Sig	nal	15 A	_
	Fa	n	15 A	_
use size	Fu	el	10 A	_
	Ma	in	30 A	_
	P-so	urce	3 A	_
	ABS r	notor	25 A	_
	ABS	/alve	15 A	_

Lighting Systems

Item	Specification	Standard	Limit
Hoodlight	HI	65 W	_
Headlight	LO	55 W	_
Position light		12 V 5 W	_
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
	–20 °C (–4 °F)	13779 – 19083 Ω	_
	–10 °C (14 °F)	8100 – 10609 Ω	_
	0 °C (32 °F)	4928 – 6125 Ω	_
Ambient air temperature sensor	10 °C (50 °F)	3089 – 3656 Ω	_
resistance	20 °C (68 °F)	1992 – 2251 Ω	_
	25 °C (77 °F)	1615 – 1785 Ω	_
	30 °C (86 °F)	1290 – 1456 Ω	_
	40 °C (104 °F)	838 – 986 Ω	_
nstrument panel light		LED	_
Turn signal indicator light		LED	_
Hi beam indicator light		LED	_
Neutral indicator light		LED	_
Engine coolant temperature indicator		LED	
ight/Oil pressure indicator light			_
MIL		LED	_
ABS indicator light		LED	_
reeze indicator light		LED	_
ΓC indicator light		LED	_



Tightening Torque List

Emission Control Devices

Eastoning part	Tightening torque		
Fastening part	N·m	kgf-m	lbf-ft
PAIR reed valve cover bolt	10	1.0	7.5
EVAP system purge control solenoid valve nut	7.0	0.71	5.20

Engine Electrical Devices

Fastening part		Tightening torque		
rastering part	N⋅m	kgf-m	lbf-ft	
IAT sensor screw	1.3	0.13	0.95	
ECT sensor	18	1.8	13.5	
TP sensor mounting screw	3.5	0.36	2.60	
HO2 sensor	25	2.5	18.5	
STP sensor mounting screw	3.5	0.36	2.60	

Engine Mechanical

Footoning novt	Tightening torque		
Fastening part	N⋅m	kgf-m	lbf-ft
Air cleaner outlet tube clamp screw	1.5	0.15	1.10
Throttle cable lock-nut	4.5	0.46	3.35
EVAP system purge control solenoid valve bracket screw	5.0	0.51	3.70
EVAP system purge control solenoid valve nut	7.0	0.71	5.20
Intake pipe screw	8.4	0.86	6.20
Cylinder head cover bolt	14	1.4	10.5
Cylinder head bolt (M10)	25 → 42 N·m (2.5	→ 4.3 kgf-m, 18.5	→ 31.0 lbf-ft)
Cylinder head bolt (M6) (L70)	10	1.0	7.5
Cylinder head bolt (M6) (L40)	10	1.0	7.5
Cylinder nut	10	1.0	7.5
Camshaft journal holder bolt	10	1.0	7.5
Cam chain tension adjuster bolt	10	1.0	7.5
Cam chain tension adjuster plug	23	2.3	17.0
Crankshaft hole plug	11	1.1	8.5
TDC plug	23	2.3	17.0
Engine mounting bracket bolt	35	3.6	26.0
Engine mounting thrust adjuster	12	1.2	9.0
Engine mounting thrust adjuster lock-nut	45	4.6	33.5
Engine mounting bolt	55	5.6	40.5
Engine mounting bolt	25	2.5	18.5
Engine mounting nut	93	9.5	69.0
Engine mounting nut	55	5.6	40.5
Connector hose union bolt	10	1.0	7.5
Oil gallery plug (M6)	10	1.0	7.5
Cam chain tensioner bolt	10	1.0	7.5
Crankcase bolt (M8) (L80)	26	2.7	19.5
Crankcase bolt (M8) (L55)	26	2.7	19.5
Crankcase bolt (M6)	11	1.1	8.5
Primary drive gear bolt	70	7.1	52.0
Special tool bolt	23	2.3	17.0
Oil gallery plug (M8)	18	1.8	13.5
Oil gallery plug (M12)	21	2.1	15.5
Drain plug	21	2.1	15.5
Oil gallery plug (M16)	35	3.6	26.0
Conrod cap bolt	21 N·m (2.1 kgf-m	, 15.5 lbf-ft) $ ightarrow$ turn	clockwise 90°



Engine Lubrication System

Fastening part		Tightening torqu	е
	N⋅m	kgf-m	lbf-ft
Oil gallery plug (M12)	21	2.1	15.5
Oil drain plug	21	2.1	15.5
Oil filter	20	2.0	15.0
Oil pressure regulator	28	2.9	21.0
Oil cooler union bolt	70	7.1	52.0
Oil pressure switch	13	1.3	9.5
Oil gallery plug (M8)	18	1.8	13.5
Oil gallery plug (M6)	10	1.0	7.5
Driveshaft oil seal retainer bolt	10	1.0	7.5
Piston cooling jet bolt	10	1.0	7.5
Oil pump mounting bolt	10	1.0	7.5
Oil separator screw	10	1.0	7.5
Transmission oil guide retainer screw	8.4	0.86	6.20

Engine Cooling System

Fastening part		Tightening torque		
	N⋅m	kgf-m	lbf-ft	
Water drain bolt	13	1.3	9.5	
Radiator under rubber bracket bolt	10	1.0	7.5	
Cooling fan assembly mounting bolt	4.9	0.50	3.65	
Radiator mounting bolt	10	1.0	7.5	
Radiator reservoir tank mounting bolt	10	1.0	7.5	
Radiator reservoir tank mounting bracket bolt	5.5	0.56	3.70	
Thermostat connector cap bolt	10	1.0	7.5	
Water pump case screw	4.5	0.46	3.35	

Fuel System

Fastening part	Tightening torque		
	N·m	kgf-m	lbf-ft
Fuel tank cap bolt	3.0	0.31	2.25
Fuel tank cover bracket bolt	10	1.0	7.5
Fuel tank front mounting bolt	10	1.0	7.5
Fuel tank rear mounting bolt	23	2.3	17.0
Fuel pump mounting bolt	10	1.0	7.5
Fuel delivery pipe mounting screw	3.5	0.36	2.60

Ignition System

Eastoning part	Tightening torque		
Fastening part	N·m kgf-m lbf-f	lbf-ft	
Spark plug	11	1.1	8.5

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 mounting nut	6.0	0.61	4.45
Starter motor set bolt	5.0	0.51	3.70
Starter motor lead wire and battery (+) lead wire mounting bolt	4.4	0.45	3.25
Starter clutch bolt	25	2.5	18.5



Charging System

Fastening part	Tightening torque		
	N⋅m	kgf-m	lbf-ft
Generator rotor bolt	140	14.3	103.5
Generator cover bolt	10	1.0	7.5
Clutch release arm bolt	9.0	0.92	6.65

Exhaust System

Fastening part		Tightening torque	
	N⋅m	kgf-m	lbf-ft
Exhaust pipe bolt #1 and #2	23	2.3	17.0
Muffler connector bolt	18	1.9	14.0
Muffler support bolt	30	3.1	22.5
Exhaust pipe connector bolt	18	1.9	14.0
Exhaust support bolt	23	2.3	17.0
Exhaust pipe bolt #2	23	2.3	17.0
HO2 sensor bolt	25	2.5	18.5
Exhaust pipe bolt	5.5	0.56	4.05
Exhaust pipe bolt #1	23	2.3	17.0
Muffler sport bolt	30	3.1	22.5

Front Suspension

Fastening part	Tightening torque		
	N⋅m	kgf-m	lbf-ft
Front fork cap bolt	23	2.3	17.0
Front fork lower clamp bolt	21	2.1	15.5
Front fork upper clamp bolt	23	2.3	17.0
Cylinder bolt	20	2.0	15.0

Rear Suspension

Fastening part		Tightening torque		
	N⋅m	kgf-m	lbf-ft	
Rear shock absorber lower mounting nut	50	5.1	37.0	
Cushion rod mounting nut	78	8.0	57.5	
Rear shock absorber upper mounting nut	50	5.1	37.0	
Pre-load adjuster bolt	23	2.3	17.0	
Cushion lever (front) mounting nut	78	8.0	57.5	
Cushion lever (center) mounting nut	78	8.0	57.5	
Swingarm pivot shaft	15	1.5	11.0	
Swingarm pivot nut	100	10.2	74.0	
Swingarm pivot shaft lock-nut	90	9.2	66.5	

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
Spoke nipple (front wheel)	7.5	0.76	5.55
Spoke nipple (rear wheel)	7.0	0.71	5.20



Drive Chain / Drive Train / Drive Shaft

Fastening part	Tightening torque		
	N·m	kgf-m	lbf-ft
Rear axle nut	100	10.2	74.0
Engine sprocket nut	145	14.8	107.0
Engine sprocket cover bolt	5.5	0.56	4.05
Rear sprocket nut	60	6.1	44.5

Brake Control System and Diagnosis

Fastening part		Tightening torque		
	N⋅m	kgf-m	lbf-ft	
Rear brake master cylinder rod lock-nut	18	1.8	13.5	
Front brake air bleeder valve	7.5	0.76	5.55	
Front reservoir cap screw	1.5	0.15	1.10	
Rear brake air bleeder valve	6.0	0.61	4.45	
Rear reservoir cap screw	1.2	0.12	0.90	
Front brake master cylinder holder bolt	10	1.0	7.5	
Brake hose union bolt	23	2.3	17.0	
Brake light switch 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 mounting bolt	10	1.0	7.5	
Front footrest bracket bolt	26	2.7	19.5	

Front Brakes

Fastening part		Tightening torque		
	N⋅m	kgf-m	lbf-ft	
Front brake caliper mounting bolt	39	4.0	29.0	
Brake hose union bolt	23	2.3	17.0	
Front brake air bleeder valve	7.5	0.76	5.55	
Front brake disc bolt	23	2.3	17.0	

Rear Brakes

Fastening part		Tightening torque		
	N⋅m	kgf-m	lbf-ft	
Rear brake caliper mounting bolt	22	2.2	16.5	
Rear brake pad mounting pin	17	1.7	12.5	
Rear brake pad pin plug	2.5	0.25	1.85	
Brake hose union bolt	23	2.3	17.0	
Rear brake air bleeder valve	6.0	0.61	4.45	
Rear brake caliper sliding pin	27	2.8	20.0	
Rear brake disc bolt	23	2.3	17.0	

ABS

Factoring part		Tightening torque		
Fastening part	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 pipe flare nut	16	1.6	12.0	



Manual Transmission

Fastening part	Tightening torque		
	N·m	kgf-m	lbf-ft
Driveshaft oil seal retainer bolt	10	1.0	7.5
GP switch mounting bolt	6.0	0.61	4.45
Gearshift arm stopper	19	1.9	14.0
Gearshift cam stopper bolt	10	1.0	7.5
Gearshift cam plate bolt	13	1.3	9.5

Clutch

Fastening part	Tightening torque		
	N⋅m	kgf-m	lbf-ft
Clutch release adjuster nut	5.0	0.51	3.70
Clutch lever pivot bolt	6.5	0.66	4.80
Clutch lever pivot nut	6.5	0.66	4.80
Clutch switch screw	0.6	0.06	0.45
Clutch lever holder bolt	10	1.0	7.5
Clutch sleeve hub nut	50	5.1	37.0
Clutch spring bolt	10	1.0	7.5
Clutch cover bolt	10	1.0	7.5
Primary drive gear bolt	70	7.1	52.0

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	
Steering stem lock-nut	80	8.2	59.0	
Steering stem head nut	90	9.2	66.5	
Front fork upper clamp bolt	23	2.3	17.0	
Steering stem nut	45 N·m (4.6 kgf-m	, 33.5 lbf-ft) → turn	counterclockwise	
	1/4 – 1/2			

Lighting Systems

Factoring part	Tightening torque		
Fastening part	N⋅m	kgf-m	lbf-ft
Headlight screw	2.0	0.20	1.50
Rear combination light screw	2.5	0.25	1.85
License plate light nut	4.8	0.49	3.55
Front side reflex reflector bolt	10	1.0	7.5
Front side reflex reflector	1.8	0.18	1.35
Rear side reflex reflector nut	1.8	0.18	1.35
License plate bracket nut	5.0	0.51	3.70
Front turn signal light nut	1.3	0.13	0.95
Rear turn signal light nut	1.8	0.18	1.35

Exterior Parts

Eactoning part		Tightening torque		
Fastening part	N⋅m	kgf-m	lbf-ft	
Striker support bracket nut	8.8	0.90	6.50	
Front fender bolt	10	1.0	7.5	
Knuckle cover upper nut	5.9	0.60	4.35	
Knuckle cover lower nut	1.7	0.17	1.25	
Knuckle cover upper screw	5.5	0.56	4.05	
Knuckle cover lower nut	5.9	0.60	4.35	
Under cowling front bracket bolt	10	1.0	7.5	
Side under cowling bolt	7.0	0.71	5.20	



Special Tools and Equipment

Fuel / Oil / Fluid / Coolant Recommendation

NOTICE

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

For U.S.A.

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

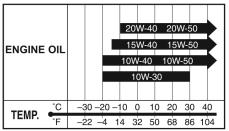
Unleaded gasoline containing up to 10% ethanol by volume may be used.

Engine Oil / Final Gear Box Oil

Use engine oils which meet the following requirements.

	Engine oil
API service	SG. SH. SJ or SL
classification	3G, 3H, 3J 0l 3L
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.



IF04K1030001-01

For U.S.A.

Suzuki recommends the use of ECSTAR motorcycle engine oil or SUZUKI PERFORMANCE 4 MOTOR OIL.

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.





IF04K1030002-02

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.

Coolant 99000-99032-12X (SUZUKI LONG LIFE COOLANT (GREEN))

Coolant 99000-99032-20X (SUZUKI SUPER LONG LIFE COOLANT (BLUE))



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

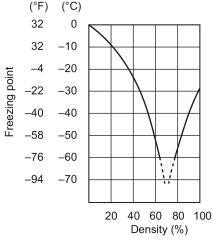
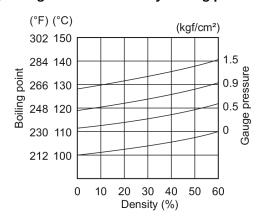


Fig.2: Engine coolant density-boiling point curve



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 °C (–33 °F).

Anti-freeze concentration table

Anti-freeze density	Freezing point
50%	–36 °C (–33 °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" (Page 0C-14).

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 antifreeze/engine coolant. If this is not available, use an equivalent which is compatible with an aluminum radiator.

Front Fork Oil

Use SUZUKI FORK OIL SS-8.

Fork oil 99000-99001-SA8 (SUZUKI FORK OIL SS-8)

