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### The look of freedom

The V-Strom 650XT's styling reflects world-beating adventure-tourer performance. Its compact form consists of expressive painted sections and functional black plastic components — a combination that creates a sporty, purposeful profile. Rider comfort is enhanced by the windscreen, by heat- and wind-diverting designs, and by slim bodywork.

### Dynamic front styling

A beak-like front cowl reflects Suzuki's spirit of adventure by evoking the DR-Z ridden in the 1988 Paris-Dakar rally. A painted upper section contains dual multi-reflector headlights with 60/55W halogen bulbs that give great light distribution. Contrasting black plastic lower/side sections have a rugged surface texture. A front fender shaped for smooth radiator airflow is combined with the fork chip guard.

### **Great wind protection**

The windscreen and compactly shaped bodywork reflect the results of extensive wind-tunnel testing in shapes that give great wind protection for low noise and low rider fatigue. The windscreen is three-way adjustable to suit the rider's stature, the riding position, and the road situation. Adjustment is easy: Simply remove the bolts then insert them in different holes. Air intakes below the headlights enhance rider comfort by reducing the pressure difference behind the windscreen. The base of the windscreen is textured (rather than blacked out) for an attractive see-through impression.



### A trim side view

A fuel tank with a class-leading 20-litre capacity combines with the surrounding bodywork to create a trim and purposeful look. A combination of painted surfaces and unpainted black sections makes the tank appear small despite its generous capacity. The tank is slim toward the rear to facilitate knee grip. The distinctive side air outlets heighten cooling performance. The seat allows the rider to find the most comfortable position. The seat and the frame covers are slim for an easy reach to the ground. The pillion section is shaped to help prevent the passenger from slipping forward. The seat also heightens pride of ownership thanks to an embossed V-Strom logo and a combination of red-stitched leather-look sections and suede-look, slip-resistant surfaces. The seat keyhole is positioned to the left of the rear fender to free up space in the underseat compartment.



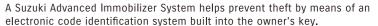




# All lights and indicators are illuminated in the photo for illustrative purposes.

### **Instruments and immobilizer**

A compact, easy-to-read instrument cluster combines an analogue tachometer with a big, brightness-adjustable LCD that shows the gear position, ambient temperature, average fuel consumption, speedometer, odometer, dual tripmeters, coolant temperature, clock, and fuel gauge. The rider can select LCD indications using the left handlebar switch. A short push toggles the odometer section to tripmeter, fuel consumption, and brightness. A long push changes the clock section to the ambient temperature. LED indicators include a road freeze indicator\* that, together with the ambient temperature display, helps the rider monitor road conditions.



\*The freeze indicator starts blinking when the ambient temperature falls below 3°C. It continues to blink for 30 seconds then remains lit until the ambient temperature rises above 5°C.



### Rear style and practicality

An upswept muffler is neatly aligned with the seat rail and topped with a silver cover and a buffed-finish end cap. A lightweight plastic luggage carrier with a slip-resistant rubber mat allows easy, bolt-on installation of a top-case adapter plate (an optional part) and is integrated with easy-to-grasp grab bars. The rear fender has a unique waisted shape and a neat textured surface.









## The power for freedom

The V-Strom 650XT's four-stroke, DOHC, 645cm<sup>3</sup> 90-degree V-twin engine is ready for full-range riding enjoyment. It offers the distinctive beat feel of a V-twin, ample torque for easy handling at low and mid-range revs, and powerful performance at the high end of the rev range. A broad powerband makes for smooth going on steep mountain passes, open highways, and crowded city streets. Plus, great fuel economy ensures a class\*-leading riding range. \*650cm<sup>3</sup>~800cm<sup>3</sup> adventure touring models

### **Low emissions**

The exhaust system includes a three-way catalyzer and an O<sub>2</sub> sensor to limit emissions of hydrocarbons, carbon monoxide, and nitrogen oxides. For optimal performance, the O<sub>2</sub> sensor is located in the straight section after all the exhaust pipes join and where the exhaust flow is equalized. The V-Strom 650XT meets the strict Euro 3 emission standards.

### Rider-focused engine design

The engine has compact combustion chambers with large-diameter valves (31mm for the intake and 25.5mm for the exhaust) set at a narrow angle (14° for the intake and 16° for the exhaust) and shot-peened connecting rods. This configuration combines with technologies such as the Suzuki Dual Throttle Valve (SDTV) fuel-injection system, twin iridium spark plugs per cylinder, and Suzuki Composite Electrochemical Material (SCEM)-plated cylinders to produce strong torque at low revs, smooth revving up to the middle of the rev range, and powerful output at high revs.

### **Sporty, refined transmission**

Tight first-to-fifth gear ratios are tailored for sporty riding, and a tall top gear assures comfortable cruising on highways. The final drive ratio ensures a smooth ride on steep hills and crowded streets. A scissors-type primary driven gear helps limit mechanical noise. It also contributes to a quality idle feel that is enhanced by a double-layer clutch cover. Smooth, satisfying gearshifting is assured by a cam-type clutch release that gives a direct, positive operating feel at the clutch lever.

### **Advanced digital engine management**

A 32-bit engine control unit (ECU) manages the SDTV fuel-injection system and the ignition and emission-control systems and helps translate the engine's hefty output into a refined, rider-friendly power character. The ECU also helps to realize smooth throttle response, low exhaust emissions, and high fuel efficiency.

### **Fuel injection for real-world riding**

The SDTV fuel-injection system promotes combustion efficiency and throttle response and helps to ensure smooth power delivery. Each of the two 39mm throttle bodies contains two butterfly valves. The primary butterfly valve is controlled by the rider via the throttle twist grip. It is positioned closer to the intake valves. The secondary butterfly valve is opened and closed by a stepping motor controlled by the ECU. The ECU opens and closes the secondary throttle valve in accordance with the engine speed, the gear position, and the position of the primary throttle valve. The SDTV system optimizes the intake-charge velocity at all engine speeds, so an intake mixture with the optimal air-fuel ratio is always supplied to the combustion chambers. The benefits include abundant torque at low and mid-range revs, linear throttle response, and low emissions.

### **Fine-atomization 10-hole fuel injectors**

The ECU calculates the optimal fuel-injection volume for engine and riding conditions in accordance with the engine speed, intake pressure, and throttle position, and it fine-tunes its calculation using data from the exhaust-mounted O<sub>2</sub> sensor. Ten-hole injectors finely atomize the fuel for high combustion efficiency.

### Twin iridium spark plugs

Two iridium spark plugs for each cylinder produce quick, hot sparks for superior combustion efficiency. The benefits include high power, linear throttle response, easy engine startup, stable idling, high fuel efficiency, and low exhaust emissions.

# wind-directing plates that enhance cooling performance and incorporate holes that allow hot radiator air to flow to the side air outlets and away from the rider's legs. A liquid-cooled oil cooler keeps the oil

# **Throttle-body integrated idle speed**

A Suzuki-patented system for controlling the idle speed is integrated into each throttle body. A notch is machined into the extended secondary throttle valve shaft, and an air circuit and valve mechanism are added to the throttle bodies. A secondary throttle valve actuator rotates the notch to control the idling airflow. This system promotes cold-startability, helps to ensure a stable idle, and suppresses emissions immediately after startup. It combines with the fine-atomization fuel injectors, twin iridium spark plugs, and big catalyzer to allow the V-Strom 650XT to meet tough emission standards without the weight of a secondary air-injection system.

Throttle body

### **Superior fuel economy**

Minimized mechanical and frictional losses and optimized combustion efficiency help to keep fuel economy high, so a light, compact 20-litre fuel tank is ample for a class\*-leading riding range

\*650cm3~800cm3 adventure touring models

### Efficient radiator and oil cooler The radiator has a compact core. It is flanked by

control (TI-ISC) system

between refuelling stops. An accordingly slim chassis helps riders enjoy adventure touring in comfort.

temperature stable.

# A chassis tailored for comfortable performance

The V-Strom 650XT is built on a light, rigid aluminum twin-spar frame and swingarm with proven designs that ensure steady handling and great manoeuvrability. An upright riding position, long-stroke front and rear suspension, and lightweight wire-spoked aluminum rims also help to ensure comfort for adventure touring.

### **Relaxing riding position**

The seat's height relative to the handlebars gives an upright riding position that reduces fatigue on long-distance tours. The upright position also gives great freedom of movement, so the rider can feel at one with the bike. A slim seat allows an easy reach to the ground.



### **Adjustable suspension**

Front forks with 43mm stanchion tubes are tuned for a firm feel and smooth operation. Spring preload is five-steps adjustable to suit road conditions, rider tastes, and the carrying of a passenger or luggage. Link-type rear suspension is designed for progressive response. It has a stepless rebound-damping adjuster and a dial-type spring preload adjuster that requires no tools and is conveniently located below the right sidecover. The front suspension stroke is a generous 150mm. The rear wheel travel is long at 159mm

### Twin-spar aluminum-alloy frame and swingarm

The twin-spar aluminum-alloy frame is built from cast and extruded pieces. The swingarm has extruded arms, an extruded pivot, and a cast joint section. The frame is exceptionally light because it is the only one in the class to be made of aluminum alloy. It complements the smooth, powerful engine to ensure poised running in all conditions.

### **Wire-spoked aluminum rims**

Wire-spoked aluminum-alloy rims absorb shock effectively at low speeds to promote friendly handling character. Tubeless radial tyres (110/80R19 at the front; 150/70R17 at the rear) offer a great combination of life and road grip.





### Disc brakes and antilock braking system

Dual 310mm front disc brakes with dual-piston calipers and a 260mm rear disc brake with a single-piston caliper give smooth, controllable stopping power. They are complemented by an antilock braking system (ABS) that increases the rider's control by helping to prevent wheel lockup during brake application in diverse road-surface conditions.

Note1: 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.



# Accessories that stretch your riding horizons



















Suzuki Genuine Accessories developed specifically for the V-Strom 650XT boost convenience and comfort. They are easy to fit and are shaped to accentuate the bike's purposeful adventure-tourer profile. Top and side cases\* are available in plastic and in aluminum. The side cases fit close to the bike's centre of gravity for rider-friendly handling. The plastic top and left side cases are each big enough for a full-face helmet. The side-case carriers can be detached using quick-release screws to keep the bike slim. An accessory bar, an aluminum under guard, a chain guard, and LED fog lamps make the bike even readier for adventure. A touring windscreen, knuckle covers, low and high seats, and handlebar grip heaters heighten comfort. Other accessories include a centre stand, a 12-volt accessory socket, an alarm kit, and a handlebar satnav bracket.

\*The maximum loading capacity of each case is 3kg.

### **V-Strom 650XT ABS SPECIFICATIONS**













verall length		2,290 mm (90.2 in)
verall width		835 mm (32.9 in)
verall height		1,405 mm (55.3 in)
Vheelbase		1,560 mm (61.4 in)
round clearance		175 mm (6.9 in)
eat height		835 mm (32.9 in)
urb mass		215kg (474 lbs)
ngine type		4-stroke, liquid-cooled, DOHC, 90° V-twin
ore x stroke		81.0 mm x 62.6 mm (3.2 in x 2.5 in)
isplacement		645 cm³ (40.2 cu.in)
ompression ratio		11.2:1
uel system		Fuel injection
tarter system		Electric
ubrication system		Wet sump
ransmission		6-speed constant mesh
rimary reduction ratio		2.088 (71 / 34)
inal reduction ratio		3.133 (47 / 15)
uspension	Front	Telescopic, coil spring, oil damped
	Rear	Link type, coil spring, oil damped
ake / trail		26° / 110 mm (4.3 in)
rakes	Front	Disc, twin
	Rear	Disc
yres	Front	110/80R19M/C (59H), tubeless
	Rear	150/70R17M/C (69H), tubeless
gnition system		Electronic ignition (transistorized)
uel tank capacity		20.0 L (5.3 / 4.4 US / Imp gal)
il capacity (overhaul)		3.0 L (3.2 / 2.6 US / Imp qt)

\*SUZUKI MOTOR CORPORATION reserves the right to add any improvement, to change the design, or to discontinue any Suzuki Genuine Accessory at any time without notice. Some Suzuki Genuine Accessories might not be compatible with local standards or statutory requirements. Please check with your local Authorized Suzuki Dealer for details at the time of ordering. Actual colours might differ from those in this catalogue.