



SV650/A

SV650 ABS



OVERVIEW

Suzuki riders struck motorcycling gold when the first SV650 debuted in 1999. Since then, this iconic motorcycle has seen continual improvements while still embodying the sporty personality that only a lively, mid-sized V-twin roadster can deliver. The 2025 SV650 ABS has a polished, dependable powerplant that provides surprising performance with low emissions and outstanding fuel economy, mounted in a trim and lightweight chassis that delivers a sporty, exciting ride.

The SV650 ABS's nimble chassis achieves exciting lean angles when cornering, with a pair of four-piston, ABS-equipped** Tokico brake calipers that grasp 290mm stainless-steel rotors up front. The 2025 SV650 ABS's Pearl Matte Shadow Green / Metallic Matte Black No.2 bodywork is draped upon a dark gold trellis frame that rolls upon matching dark gold, cast-aluminum wheels. This stunning look and style, combined with sparkling performance, delivers sportbike value that a broad range of riders will embrace.



Pearl Matte Shadow Green /
Metallic Matte Black No.2

2025

2025

KEY FEATURES

- The 2025 SV650 ABS's trim and aesthetically pleasing Pearl Matte Shadow Green / Metallic Matte Black No.2 bodywork is mounted to a visually stunning, dark gold trellis-style frame.
- The SV650 ABS's liquid-cooled, 645cc, four-stroke, DOHC, 90-degree, V-twin engine has perfect primary balance, so it smoothly pulls with authority from idle up to the 10,000 rpm redline. This narrow engine is a primary contributor to the motorcycle's low weight and nimble chassis.
- An advanced EFI system includes Suzuki's Low RPM Assist feature that seamlessly adjusts engine speed during takeoff and low speed running to smooth the power delivery and to help reduce the possibility of the rider stalling the motorcycle. The muffler and its brushed stainless-steel cover are positioned to permit ample lean angles when cornering.
- Assembled around a tubular steel trellis-style frame, the SV650's characteristically slim V-twin body and streamlined seat design make it easy for riders to put their feet on the ground while stopped, and aids maneuvering while riding.
- Dual four-piston Tokico brake calipers up front grasp a pair of 290mm fully floating stainless-steel rotors. The compact Anti-lock Brake System (ABS)** matches the hydraulic brake force to the available traction.
- Suzuki's Easy Start System enables the rider to start the motorcycle with just a push of a button. A momentary press of the starter button signals the 32-bit ECM to operate the starter motor for a few seconds and then disengage when the engine starts. There is no need to pull in the clutch lever when the transmission is in neutral.
- Another Suzuki rider's aid is the Low RPM Assist feature that slightly opens the throttle automatically as the clutch is released to improve slow speed riding control that also reduces the chance of stalling the engine when pulling away from a stop.
- Styled well to match the SV's appearance, the full LCD instrument panel displays gear position, speedometer, tachometer, odometer, trip meter, clock, water temperature and fuel. The panel's backlight illumination is adjustable and can be set to the rider's preference.

ENGINE

- Class exclusive*, 645cc, DOHC, V-twin engine produces strong, torque-rich horsepower while conforming to the latest emission requirements.
- The engine's 90-degree L-twin configuration has perfect primary balance, so a heavy, power-robbing counter balancer is not needed.
- The energy-efficient engine has unique pistons that were engineered with the use of Finite Element Method (FEM) analysis to achieve optimal rigidity and weight.
- Each piston skirt has a special resin coating, and the other sliding parts are tinned for less friction and greater durability – a first for a Suzuki motorcycle.
- Suzuki's innovative L-shaped piston rings contribute to reduced blow-by gas, resulting in fewer emissions and greater combustion efficiency.
- Suzuki Composite Electrochemical Material (SCEM)-plated cylinders reduce friction and improve heat transfer and durability.
- Both cylinder heads feature Suzuki's original Dual Spark Technology for greater combustion efficiency, better fuel economy, and cleaner emissions.
- The fuel-injection system employs Suzuki's innovative Suzuki Dual Throttle Valve (SDTV) with 39mm throttle bodies. The secondary throttle valves are controlled by a servo motor for smooth power delivery and optimum combustion efficiency.
- Ten-hole, long-nose-type fuel injectors on each throttle body improve fuel atomization for better combustion efficiency while reducing fuel consumption.
- The EFI system employs O2 feedback and a precise intake pressure sensor for optimum combustion efficiency in various conditions and reduced emissions.
- Suzuki's patented Throttle-body Integrated Idle Speed Control (TI-ISC) eases starting, stabilizes the engine idle speed, and helps lower emissions. The system is compact and lightweight.
- The TI-ISC on the SV650 ABS incorporates Suzuki's Low RPM Assist feature that seamlessly adjusts engine speed during takeoff and low-speed running to smooth the power delivery and to help 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 intake and exhaust systems, resulting in better fuel economy and linear throttle response.
- Advanced, transistorized ignition control programming helps maintain more precise spark timing to the four iridium, long-life spark plugs.
- The SV650 ABS also features Suzuki's Easy Start System that lets the rider start the motorcycle with a momentary press of the start switch without pulling in the clutch lever when the transmission is in neutral.
- The air cleaner case design has high capacity and routes crankcase breather gas from the engine cover to help increase engine power. The air intake funnels have staggered lengths to heighten mid-range torque.
- The exhaust system has a clean, functional appearance and lower weight. The 2-into-1 system has a catalyzer to further reduce emissions.
- The location of the muffler and its brushed stainless-steel cover allow ample lean angles when cornering.
- The high-efficiency radiator employs a large cooling fan for exceptional cooling capacity. To further control temperature, the engine is also fitted with a coolant-cooled oil cooler that is compact and lightweight.
- The close-ratio, six-speed transmission features carefully selected ratios that are equally well suited for commuting or spirited riding.
- The multi-plate clutch has precise push rod actuation of the pressure plate for a light pull and consistent release point.

CHASSIS

- The compact, lightweight chassis is covered with slim bodywork to create a bike that is agile and fun to ride on a variety of streets – such as city traffic, highway, rural roads, and winding roads.
- The ready-to-ride weight of the SV650 ABS is a low 437 pounds.
- The high-strength steel, trellis-style frame is key to the motorcycle's trim and intelligent dimensions. The seat height is just 785mm (30.9 inches) and is the lowest in the 600-800cc street bike class.
- The SV650 ABS's fuel tank is short and narrow but holds 3.8-gallon (14.5-liter) of gasoline.
- The slim fuel tank and seat joint aid the rider in touching the ground better at stops.
- The frame is mated to a steel, beam-type swingarm with a straightforward chain tension adjuster system.
- The 41mm conventional-style front fork has a generous 125 mm (4.9 inches) of wheel travel to provide a sporty but plush ride.
- Link-type rear shock unit has a 63mm (2.48-inch) stroke and is tuned for a superb progressive feel and to react efficiently to varied road conditions while still delivering an agile and stable feel.
- The rear shock's spring preload is seven-way adjustable so you can easily adjust for a passenger or cargo.
- The front brakes feature a pair of fully floating 290mm discs that are grasped by four-piston Tokico calipers. The compact Anti-lock Braking System (ABS)** ensures hydraulic brake pressure matches available traction.
- Five-spoke, cast aluminum alloy wheels are shod with lightweight, front, and rear Dunlop radial tires for sharp handling and good mileage.
- The Dunlop Road Smart III tires fitted to the SV650 ABS have great grip and all-around good tire performance.
- The compact and lightweight instrument panel is a full LCD display, eliminating motor and needle mechanics.
- The instrument panel has several features, including a tachometer, speedometer, odometer, dual trip meter, reserve trip meter, clock, coolant temperature/oil pressure indicator, ABS** alert, and gear position, plus fuel consumption and driving range data.
- Well-proportioned, tubular handlebars and mid-set foot controls create a sporting, yet ergonomically relaxed riding position.
- The tastefully designed, round-shaped headlight is a multi-reflector type with a 12V 60/55-watt halogen bulb.
- A bright, durable LED combination tail and brake light, plus front and rear amber-tinted turn signals, illuminate the riding route.
- Attention to rider comfort and confidence includes a carefully shaped seat with a high-grip cover and integrated cargo retention loops that can pull out from under the seat.
- The styling was conceived to express slim, lightweight design and to highlight the strength of the V-twin engine. The clean, neatly shaped body lines are aimed to be appealing to a wide range of riders.



ADDITIONAL

- Stylized Suzuki "S" 3D emblems on the fuel tank and the fork upper bracket denote the quality, sophistication, and performance legacy of the brand.
- A variety of Genuine Suzuki Accessories for SV owners are available, including a wide selection of Suzuki logo apparel.
- 12-month limited warranty. Longer coverage periods with other benefits are available through Suzuki Extended Protection (SEP).
- For more details, please visit www.suzukicycles.com.

* 600-800cc, street bike class.

** 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

ENGINE

Engine:	645cc, 4-stroke, liquid-cooled, DOHC, 90° V-twin
Bore x Stroke:	81.0 mm x 62.6 mm (3.2 in. x 2.5 in.)
Compression Ratio:	11.2:1
Fuel System:	Fuel injection with SDTV
Starter:	Electric
Lubrication:	Wet sump

DRIVETRAIN

Clutch:	Wet, multi-plate type
Transmission:	6-speed constant mesh
Final Drive:	Chain, DID 520V0, 112 links

CHASSIS

Suspension, Front:	Telescopic, coil spring, oil damped
Suspension, Rear:	Link type, single shock, coil spring, oil damped
Brake, Front:	Dual, 4-piston calipers, twin disc, ABS-equipped
Brake, Rear:	Single, 1-piston caliper, single disc, ABS-equipped
Tire, Front:	120/70ZR17M/C (58W), tubeless
Tire, Rear:	160/60ZR17M/C (69W), tubeless
Fuel Tank Capacity:	14.5 L (3.8 US gal.)

ELECTRICAL

Ignition:	Electronic ignition (transistorized)
Headlight:	12V, 60/55W (H4)
Tail Light:	LED

DIMENSIONS

Overall Length:	2140 mm (84.3 in.)
Overall Width:	760 mm (29.9 in.)
Overall Height:	1090 mm (42.9 in.)
Wheelbase:	1445 mm (56.9 in.)
Ground Clearance:	135 mm (5.3 in.)
Seat Height:	785 mm (30.9 in.)
Curb Weight:	198 kg (437.0 lb.)

WARRANTY

Warranty:	12-month unlimited mileage limited warranty Longer coverage periods with other benefits are available through Suzuki Extended Protection (SEP).
------------------	--

Suzuki Motor USA, LLC makes every effort to present the most current specifications and product features at the time of publication. Because of our policy of continual improvement, changes may be made in equipment, availability, and specifications without notice or obligation. At Suzuki, we want every ride to be safe and enjoyable. Always wear a helmet, eye protection, and protective clothing. Never ride under the influence of alcohol or other drugs. Study your owner's manual and always inspect your Suzuki before riding. Always supervise young riders. Take an MSF skills course. For the street course nearest you, call 1-800-446-9227. Preserve your future riding opportunities by showing respect for the environment, local laws, and the rights of others when you ride. Limited Warranty: The 2025 SV650 ABS limited warranty covers a period of 12 months. See your dealer for details. Ask your participating dealer about Genuine Suzuki Accessories, the Suzuki Retail Finance Plan, and the Suzuki Extended Protection Plan. With the Suzuki Retail Finance Plan, it is easy to afford and equip the machine that is perfect for you. Visit Suzukicycles.com for more information. Suzuki Motor USA, LLC, 3251 East Imperial Highway, P.O. Box 1100, Brea, CA 92822-1100. Suzuki, the "S" logo, and Suzuki model names are Suzuki trademarks or registered trademarks.