

#### **PRESS INFORMATION**

Nov 2017





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# SV650X ABS

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\* Images shown with optional fog lamps

### Introduction

### - Acclaimed Suzuki V-Twin Sport Now In Custom Guise

In 2016, Suzuki introduced the SV650 with a clearer focus on the characteristics of its V-Twin motor mentioned below. The SV650 had greater engine performance, class-leading fuel economy, lighter weight and a sportier package—all within an affordable price range. The model gained an excellent reputation in the market.

- Linear power delivery throughout the rev range
- Slim and lightweight chassis
- V-Twin's unique beat and rumble
- A great package any rider can enjoy.

This model inherits the SV650's engine and almost the entire bodywork of the base model. But the SV650X ABS immediately grabs attention with its appeal. Its eye-catching slotted headlight cowling, clip-on handlebars, tuck-and-roll seat and blacked-out rider and pillion footrests all accentuate the SV650X ABS's café racer style custom bike looks.



### The product concept of SV650X ABS is; "The Timeless V-Twin Roadsport"

Keeping the cool in class, Suzuki's SV650 Rally concept stirred keen interest at its unveiling in Japan in the spring of 2016. A custom styling concept with the flavor of 1970's tarmac rally car design, the commercial version SV650X ABS has brought together the sporty fun of the V-Twin and the fashion flair of the cafe rider spirit.

Suzuki's proven 645cm<sup>3</sup> DOHC V-Twin engine pumps out substantial low-end torque and a power surge at higher revs. Power delivery is also smooth and controllable, which makes for a fun-to-ride machine for a whole range of riders. Its slim, lightweight package and specially tuned suspension guarantee an agile and sporty ride.

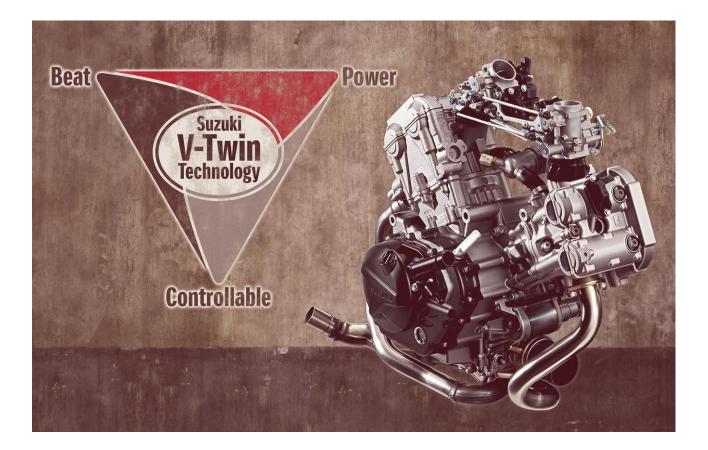
Café racer looks are key to the styling. The distinctive headlight cowling and clip-on handlebars assert a sportier appearance and stance that hark back to the original heritage racers. A tuck-and-roll seat and SUZUKI logo on the tank definitely add punch to this classy-appeal. The SV650X ABS even has bright LED fog lamps available as an option, lending a unique touch to the stylish looks.

Whether you are a novice or experienced rider, the SV650X ABS is a sporty all-rounder that delivers the goods—a ride that's fit for all riders, however you want to ride.

#### Engine design overview

The liquid-cooled, DOHC, 645cm<sup>3</sup> 90° V-Twin engine delivers strong torque in the low-to-mid rpm range and higher maximum power with fuel economy.

The engine runs smoothly up to high rpm and features powerful yet controllable characteristics. These ensure the SV650X ABS performs well in a wide range of riding situations, from winding roads to highway cruising to congested stop-and-go traffic.



	SV650X ABS
Displacement	645cm <sup>3</sup>
Bore x Stroke	81.0 mm x 62.6 mm
Compression ratio	11.2 : 1
Max power	56.0kW / 8500rpm
Max torque	64Nm / 8100rpm
Fuel economy in WMTC mode	26km/L (3.9L/100km)
Emission level	Euro 4

#### **Pistons and piston rings**



- The pistons were designed with aid of FEM (Finite Element Method) analysis to help achieve optimal rigidity and weight.
- Each piston skirt is resin-coated, while other sliding parts are tin-plated for low friction and great durability.
- Suzuki's original L-shaped piston rings contribute to reduced blow-by gas, resulting in low emissions and high combustion efficiency.

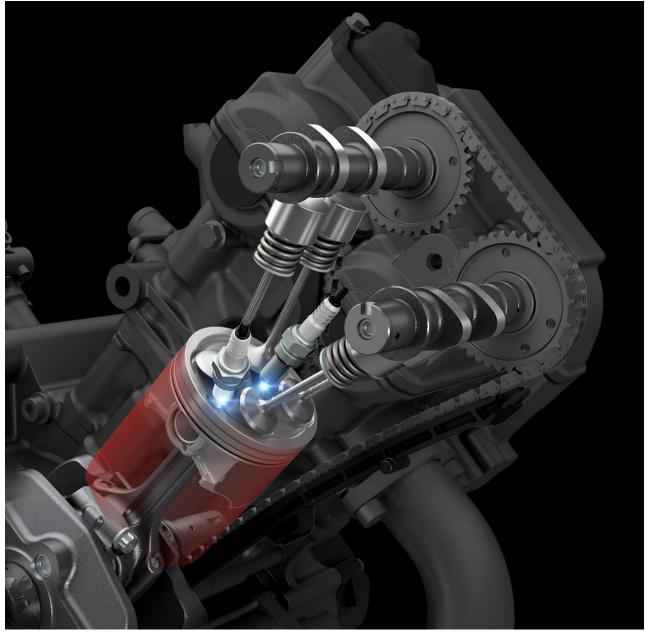
#### **SCEM plated cylinders**



SCEM (Suzuki Composite Electrochemical Material)-plated cylinders achieve low friction and high heat transfer and durability.

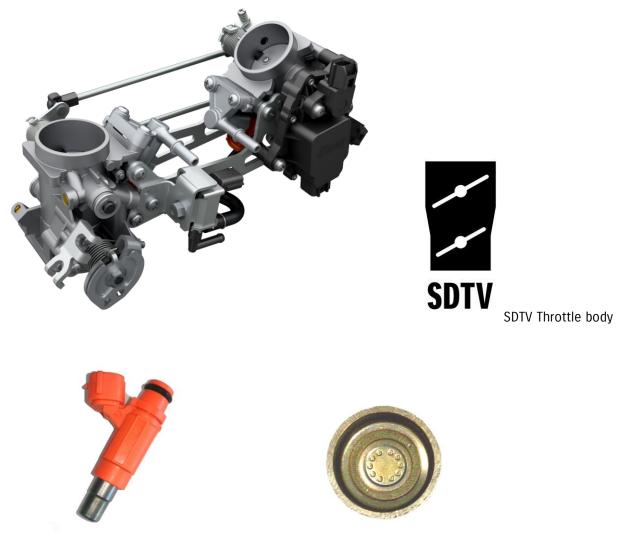
#### **Dual Spark Cylinder head**

#### Cylinder head



The cylinder heads feature Suzuki's original Dual Spark Technology for high combustion efficiency, fuel economy and clean emissions.

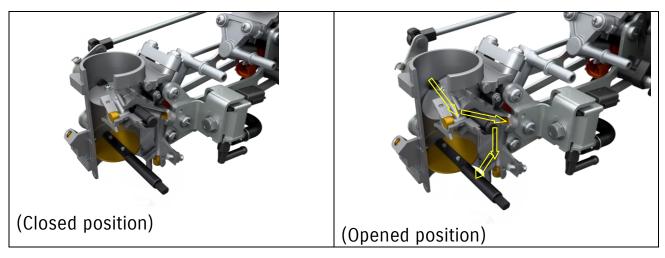
#### **SDTV Fuel injection**



10-hole injector

- The fuel injection system employs Suzuki's original, SDTV (Suzuki Dual Throttle Valve) 39mm throttle bodies, and the secondary throttle valves are controlled by servo motor for smooth power delivery and optimum combustion efficiency.
- 10-hole, long-nosed type fuel injectors used on each throttle body improve fuel atomization for better combustion efficiency while reducing fuel consumption.
- Fuel injection works with an O<sub>2</sub> feedback system and intake pressure sensor for optimum combustion efficiency under various conditions, reducing emissions to meet the Euro 4 requirement.

#### **TI-ISC (Throttle body Integrated Idle Speed Control)**



- Suzuki's patented, Throttle-body Integrated Idle Speed Control (TI-ISC) contributes to better starting ability and stability as well as low emissions after starting the engine. It is also compact and lightweight.
- Idling air-flow is regulated by the shaft notch section through rotating secondary butterfly valve.

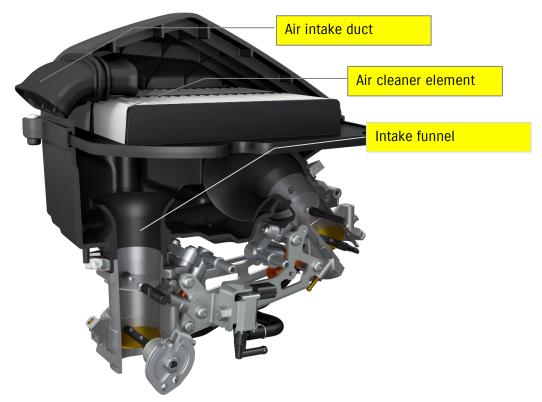


Low RPM Assist

#### 3000 Engine rpm at the moment of launch 2500 RPM 2000 speed 1500 Engine 1000 500 Without LRA With LRA 0 ٥ 8 10 Time (Sec) 12 14 16 18

- > TI-ISC has the Low RPM Assist control function.
- During a launching operation or when running at low rpm, the engine rpm sensor sends a signal to the ECM to activate the ISC system. By opening the ISC circuits, engine rpm rises slightly.
- Normally, when pulling away from stops, engine rpm drops as the clutch is engaged. Low RPM Assist helps the rider launch the bike more smoothly in the low rpm range.
- It also makes it easy to ride at low speed in stop-and-go traffic.

### Air Cleaner



- > The air cleaner is designed to match the required intake capacity.
- The funnels in the air box are of staggered lengths to heighten mid-range torque.

#### **Clutch cover**



SV650X ABS clutch cover

> Clutch cover is designed to reduce weight.

#### Exhaust system



SV650X ABS exhaust system

- The exhaust system is designed to achieve lightweight, clean-cut looks and brisk acceleration performance.
- The exhaust system is a 2-into-1 system. This design contributes to lighter weight and plentiful low-to-mid range power output.
- The triangular shaped muffler body enhances the bike's sporty character and produces the distinctive V-Twin rumble.
- The exhaust system contains a catalyzer for clean emissions. It conforms to the strict Euro 4 emissions standard. (European spec).

#### **Cooling system**

#### Radiator



The high-efficiency radiator with large cooling fan has powerful cooling performance.

Liquid-cooled Oil cooler



- Liquid-to-liquid oil cooler is used.
- Benefit of liquid-cooled oil cooler is lightweight, compact and clean look.

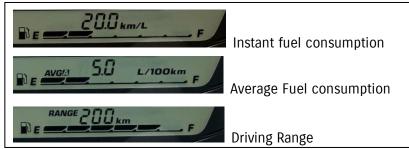
### **ELECTRIC DESIGN**

#### Multi-function Instrument Panel



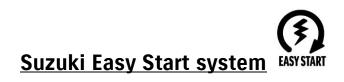
\* Please note that all lights and indicators are illuminated in the photo for illustrative purposes.

- The full LCD instrument cluster is lightweight and compact. Thanks to its full-LCD design, it eliminates motor and needle mechanics and weighs only 275g.
- > Instruments are brightness-adjustable full LCD. The LCD readouts include:
  - Speedometer
  - Tachometer
  - Odometer
  - Dual trip meter
  - Gear position
  - Water temperature
  - Driving range
  - Average fuel consumption
  - Instant fuel consumption
  - Fuel gauge
  - Clock
- > White backlight for visibility during nighttime riding.
- LED indicators, including turn signal, high-beam, Neutral, Malfunction indicator, ABS and coolant temperature /oil pressure indicator lights are designed for easy readability.
- The bar-type tachometer features a "peak-hold" function, which shows peak rpm when rpm drops. So the rider can recognize the peak rpm of the last moment when downshifting.



### SV650X ABS

### **ELECTRIC DESIGN**





Starter switch

- > The SV650X ABS features the Suzuki Easy Start system.
- During normal motorcycle engine starting, the rider needs to press-hold the starter switch until the engine fires up. On the SV650X ABS, all that's required is one push of the starter switch, as with the engine start system of recent automobiles. The ECM recognizes the signals and keeps the starter motor operating for a preset length of time.

#### Chassis design

The chassis design is for a compact, lightweight package that helps make the bike agile and fun-to-ride for variety of riders. The design is also aimed at achieving the best performance under real-world riding conditions: i.e., all roads motorcycle riders use, including regular public roads, city streets, highways, country roads and winding roads.



Photo: SV650 ABS

Model	Curb weight
SV650X ABS	198kg (437lbs)
SV650/ABS	196kg (432lbs) / 198kg/(437lbs)

## SV650X ABS

#### Slim bodywork



Thanks to its V-Twin engine, the area where the seat and fuel tank meet is slim, contribute to make it easy for the rider's feet to reach the ground.

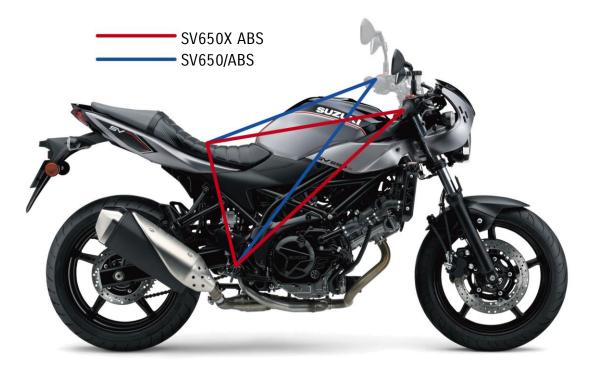
#### Seat height and riding position



\* Images shown with optional fog lamps

170cm (5'7")

- The seat height is 790mm.
- The position of the side covers which are located close together contributes for the rider to put his/her feet on the ground comfortably. The seat-to-fuel tank interface has a slim design, too.



> The riding position is designed for sporting comfort. The sporty yet upright riding position helps reduce rider fatigue and achieves visibility.

Clip-on Handlebars NEW



Clip-on Handlebars encourage a sporty riding position, and hark back to the days of the original café racers.

#### **Front forks**



41mm front fork has a 125mm stroke, providing a sporty yet plush ride.

### SV650X ABS

#### Front Preload Adjuster NEW



Front forks are equipped with a new Preload Adjuster, allowing you to set suspension firmness for exactly the way you want to ride.

#### **Rear suspension**



- Link-type shock unit has a 63 mm stroke and is tuned for a superb progressive feel, reacting efficiently to road conditions and delivering an agile yet stable feel.
- > Spring pre-load is 7-way adjustable.

#### Brakes and ABS





ABS control unit

Dual disc front brakes

- Two piston front brake calipers are mated with 290mm floatingmount dual discs, providing powerful braking performance.
- Antilock Brake System (ABS)\* monitors wheel speed 50 times per wheel rotation, and matches stopping power to available traction.
- The ABS control unit, produced by NISSIN, has a compact and lightweight design.
- \* Please note that ABS is not designed to shorten the braking distance. ABS cannot prevent wheel skidding caused by braking while cornering. Please drive carefully and do not overly rely on ABS.

#### Wheels and tyres



- 5-spoke cast aluminum wheels, manufactured by TPR, are made lightweight, helping to enable nimble handling while presenting a sporty appearance.
- The SV650X ABS adopts Dunlop Roadsmart III tyres. Well-grounded with exceptional performance in the wet, the Roadsmart III's assure confident handling.

	Rim Size	Tyre size	Tyre Brand
Front	17M/C x MT3.50	120/70ZR17M/C (58W)	DUNLOP
Rear	17M/C x MT5.00	160/60ZR17M/C (69W)	DUNLOP

Styling design concept:

### "Suzuki's café racer style: The essence of sportiness"

The SV650X ABS is a commercial version of the SV650 custom styling prototype Suzuki announced as the SV650 Rally Concept in the spring of 2016.

The motif takes the 1970's tarmac rally car as its source of imagery, linking that styling essence with the sports image of Suzuki in an expression of Suzuki's own inimitable style.

A compact handlebar mounted fairing is adopted so as not to impair regular functionality, while the silhouette as a whole coalesces into the café racer look.

Also, the clip-on handlebars and tuck-and-roll seat highlight sportiness and the iconic custom bike look.

Other functional parts that are different from the original SV650, and specified to accentuate sportiness, include the blacked-out footrests for both rider and pillion.

- The round multi-reflector headlight is equipped with a stylish headlight cowling. Slots in the headlight sides are reminiscent of heritage racers, accentuating the SV650X ABS's personality.
- Overall shape is designed to express a slim, lightweight design and to highlight the powerful looking V-Twin engine.
- Clean, neatly shaped body lines are intended to appeal to a wide range of riders.
- A combination of black parts and painted parts emphasize the bike's slim, sporty and lightweight looks.
- The curved line of the rounded headlight cowling connects to the side panel, giving an integrated appearance, like the body-mounted cowling of a cafe racer. In addition, the line connects to the rider's seat and continues through to the tail cowl.

# SV650X ABS



Osaka/Tokyo Motorcycle Show exhibition model



Image sketch



\* Images shown with optional fog lamps

### SV650X ABS

#### Stylish Slotted Headlight Cowling NEW



The round multi-reflector headlight is equipped with a stylish headlight cowling. Slots in the headlight sides are reminiscent of heritage racers, accentuating the SV650X ABS's personality.

#### Optional Fog Lamps NEW



The LED fog lamps match the stylish headlight cowling, highlighting the SV650X ABS's intense character. The lamps feature high brightness LED and superior light distribution characteristics.

### SV650X ABS

#### LED rear combination lights



- > Thin, flat-shaped rear combination lights use LED.
- > LED lights have high visibility and long life.

### Fuel tank



- > The fuel tank is narrowly shaped while maintaining the 14.5L fuel capacity.
- The tank's emblem has been changed from the signature "S" mark to the SUZUKI logo. The design has a definite classy look.

#### **Cockpit**



- The top bridge has been redesigned due to the adoption of clip-on handlebars.
- A sporty, round shape has been adopted for the design of the front brake fluid reservoir.
- Black is adopted for the color of the brake lever and clutch lever, conveying a sportier appearance.

Tuck-and-Roll Seat NEW



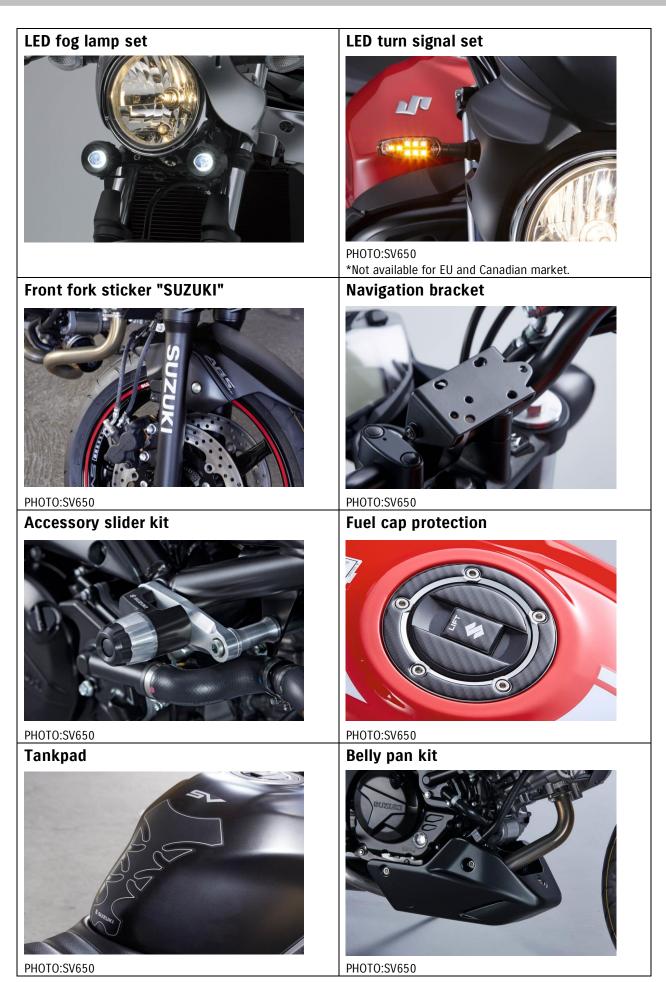
- The narrow, streamlined seat exudes café racer looks and feel. The seat has soft cushioning, helping reduce rider fatigue, even in a sporty riding position.
- Underneath the pillion seat, two luggage loops are installed, which help the rider to carry items on the pillion seat.

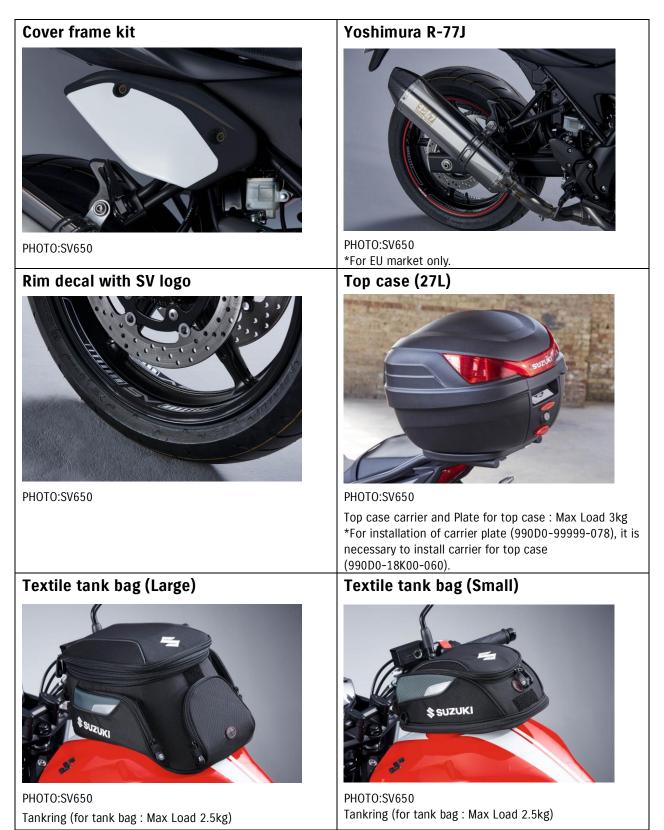


Photos: 2017 SV650 ABS

### ACCESSORIES

## SV650X ABS





Shape, color and appearance etc. are subject to change. They may vary depending on local conditions and requirements.



Glass Sparkle Black/Metallic Oort Gray No.3 (BD7)

#### **Specifications**

Specificatio			
<b>Overall Lengt</b>	h	2140 mn	
Overall width		730 mm	
Overall height		1090 mm	
Wheelbase		1445 mm	
Ground cleara	ance	135 mm	
Seat height		790 mm	
Curb mass		198kg	
Engine type		4-stroke, 2-cylinder, liquid-cooled, DOHC	
Bore x stroke	<b>x stroke</b> 81.0 mm x 62.6		
Displacement	Displacement		
Compression	ratio	11.2:1	
Fuel system		Fuel injection	
Starter system		Electric	
Lubrication system		Wet sump	
Transmission		6-speed constant mesh	
Primary drive ratio		2.088 (71/34)	
Final drive ratio		3.066 (46/15)	
Suspension	Front	Telescopic, coil spring, oil damped, spring preload adjustable	
	Rear	Link type, coil spring, oil damped, spring preload adjustable	
Rake / trail	xe / trail 25° /106 mi		
Brakes	Front	Disc, twin	
	Rear	Disc	
Tyres	Front	120/70ZR17M/C (58W), tubeless	
	Rear	160/60ZR17M/C (69W), tubeless	
Ignition syste	tion system Electronic ignition (Transistoria		
Fuel tank cap	Fuel tank capacity		
Oil capacity	il capacity 3		

Specifications, appearances, color (including body color), equipment, materials and other aspects of the SUZUKI products shown in this press information are subject to change by Suzuki at any time without notice and they may vary depending on local conditions or requirements. Some models are not available in some territories. Each model may be discontinued without notice. Please inquire at your local dealer for details of any such changes.