



Way of Life!

PRESS INFORMATION  
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**GSX-S 750 ABS**



### Introduction

Suzuki had a clear vision in designing the GSX-S750 to take its place as the second model in Suzuki's new lineup of performance street machines. The GSX-S750 features aggressive styling and a look of quality worthy of the series. Handily responding to the needs of today's market, it looks better and outperforms both the GSR750 – its popular predecessor – and other entries in the class. It is nimble, comfortable and rider friendly.

As with the GSX-S1000, which was released last year, the GSX-S750 inherits its heart and soul from Suzuki's MotoGP race experience and a 36-year heritage dating back to the launch of the original GSX model in 1980. The GSX-S750 is now ready to capture hearts and turn heads as the new leader in its class.



## Product Concept

-The product concept for the GSX-S750 is;

**“The aggressive looking Street bike with friendly character”**

Major features of the GSX-S750/ABS;

### Performance:

- Increased maximum output 78kw⇒84kw \*1
- Ventilation holes in crankcase - reduce pumping loss
- Long nose 10-hole fuel injectors
- Shorter final gear ratio - improved acceleration
- The transmission's 6<sup>th</sup> gear maintains the same top-speed
- New air box inlet produce a more exciting intake sound
- Bridgestone BATTLAX HYPERSPORT S21 tires
- 4-piston radial mount front brake calipers
- Complies with new regulation EURO 4 regulations
- Class-leading level of fuel efficiency (20.4km/L \*2)

### Features:

- Traction control system (3 modes + OFF)
- Easy Start System
- Low RPM Assist
- Gauge displays can now be controlled using new handlebar switch box.

### Styling:

- New full-LCD instrumentation inherited from GSX-S1000
- New aggressive-looking headlight design
- New LED tail/stop lights
- Turn signals adopt clear lenses (except North American Spec)
- Sporty /Lightweight aluminum foot pegs
- Petal-type brake discs
- Adopts a more appealing swingarm design
- Newly designed 10-spoke wheels
- Added cover to hide the “hole” behind the engine
- Lighter/simpler rear fender



## Engine Performance and Utility

-Engine design – outline

The four-stroke, liquid-cooled, DOHC, 749 cm<sup>3</sup> inline-four engine, is a street-tuned version of the legendary 2005 GSX-R750 engine designed to maximize smooth throttle response and deliver immediate, controlled acceleration. Newly added crankcase ventilation holes reduce pumping loss, enabling the increase in maximum power while conforming to Euro 4 emissions regulations. Maximum output is increased from 78kW to 84kW <sup>\*1</sup>, while the engine still maintains a class-leading level of fuel efficiency (20.4km/L <sup>\*2</sup>). The final gear ratio is shortened over that of the GSR750 for improved acceleration but the transmission retains its 6<sup>th</sup> gear to continue delivering the same top speed.



We chose to use the 2005 GSX-R engine as a base rather than the unit from the current GSX-R750 because its engine mounting angle is close to vertical. This helps realise the short wheelbase wanted on a naked model.

The GSX-S750 is the only model in the class powered by a super sport power unit.

	GSX-S750	GSR750
Displacement	749 cm <sup>3</sup>	←
Bore x Stroke	72.0mm x 46.0mm	←
Compression	12.3 : 1	←
Maximum power	84kW/10,500rpm <sup>*1</sup>	78kW/10,000rpm
Maximum torque	81Nm/9,000rpm <sup>*1</sup>	80Nm/9,000rpm
Emission level	Euro 4	Euro 3

<sup>\*1</sup>: For European spec.

<sup>\*2</sup>: Measured by Suzuki in the Worldwide Motorcycle Test Cycle (WMTC mode) exhaust emissions measuring conditions. Actual fuel economy may differ owing to differences in conditions such as the weather, road, rider behaviour and maintenance.

### -Crankcase



Ventilation holes are added to the bottom side of each cylinder located on the “cylinder integrated 3-piece crankcase”. These ventilation holes reduce pumping loss.

### -Fuel injection



New type

Previous type

A change to 10-hole long-nosed fuel injectors (from the 8-hole injectors used on GSR750) realised finer atomisation, increased fuel volume and improved combustion efficiency.

-Air Cleaner Box



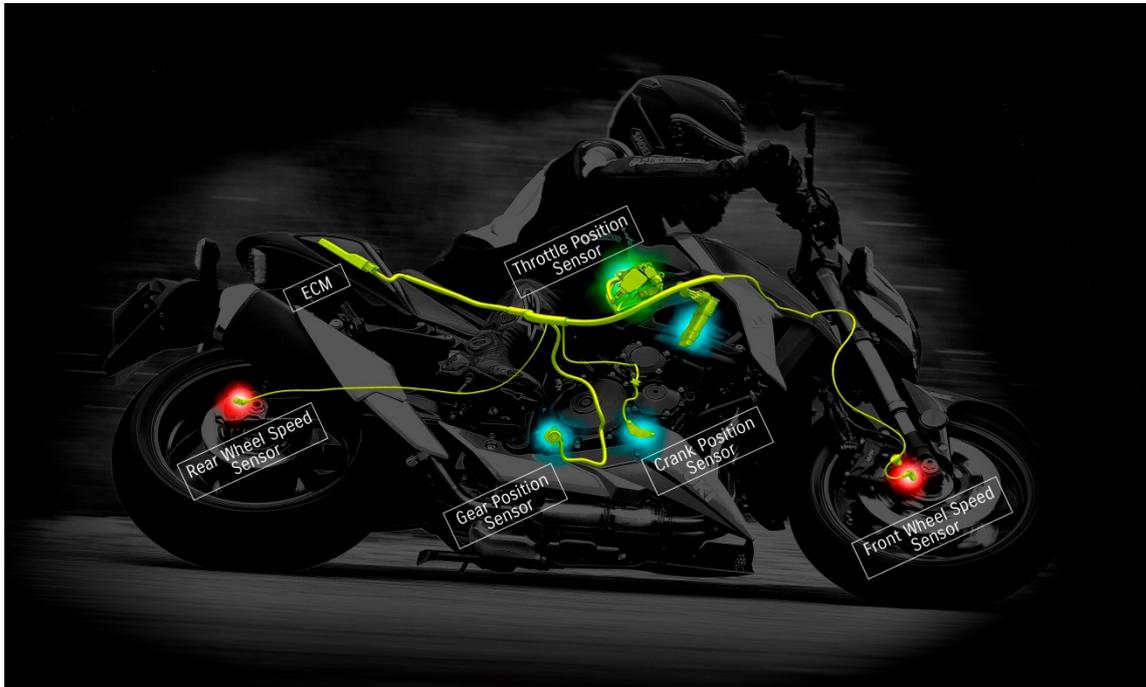
The GSX-S750 adopts a new air box that draws air in from three optimized inlets. The resulting intake sound is music to the ears when accelerating.

## -Exhaust system



- The exhaust system is updated from the GSR750 for weight reduction, cleaner emissions and better looks.
- The exhaust system uses a 4-into-2into-1 design with equaliser pipes between the 1 and 4, and 2 and 3 header pipes. This design contributes to stronger low-to-mid range output by fine-tuning the exhaust pressure waves.
- The exhaust system uses the same catalytic converter as the GSX-S1000 for clean emission. It conforms to the strict Euro4 emissions regulations.
- The "Exhaust Control Valve" and "Exhaust Control Valve Actuator" are eliminated on the new GSX-S750 contributing to weight reduction while maintaining performance.
- The muffler cover is newly designed to integrate with the overall styling of the new design.

### 3-mode Traction control system



The 2017 GSX-S750 features Suzuki's advanced traction control system, which enables the rider to control the throttle with greater confidence in various riding conditions. The result is more enjoyable, more confident sport riding coupled with less stress and fatigue.

\* The traction control system is not a substitute for the rider's throttle control under the various conditions. It cannot prevent loss of traction due to excessive speed when entering turns, or while braking, and it does not control front wheel traction.

- Suzuki's traction control system continuously monitors front and rear wheel speeds, the throttle position sensor, crank position sensor and gear position sensor, and quickly reduces engine output when wheel spin is detected. Engine output is controlled by managing ignition timing and air delivery to ensure smoother traction control operation.
- Suzuki's traction control system confirms conditions every 4 milliseconds, and governs ignition to allow extremely quick reaction.
- The system precisely controls output by optimising ignition timing and air delivery depending on the conditions. That results in smooth, natural control of power, which does not interfere with sport riding when the system is operating.

## Traction control switch



- Riders can select between 3 different modes or turn the system off, depending on conditions or their riding preferences. The difference between modes 1, 2 and 3 is the sensitivity level.
- Mode 1 is the lowest sensitivity level, allowing a certain level of rear wheel spin. It is suitable for sport riding in road conditions offering a good grip.
- Mode 2 is the medium sensitivity level. Activating the system slightly earlier than Mode 1 makes it suitable for most riders and road conditions.
- Mode 3 is the highest sensitivity level, activating the system even earlier than the other 2 modes. It is suitable for riding when road conditions are bad.

Mode	Sensitivity level	Suitable conditions
OFF	-	-
1	Low	Sport riding, good road conditions
2	Middle	City riding, regular road conditions
3	High	Wet or cold conditions

## Multi-function instrument panel



\*All lights and indicators are illuminated in the photo for illustrative purposes. Photo: GSX-S750 ABS.

- The Full LCD instrument cluster is designed to be lightweight and compact. With its full-LCD design eliminating motor and needle mechanics, the cluster weighs only 275g (as opposed to the 320g weight of the GSR750 instrument.)
- The LCD instruments are brightness-adjustable with readouts that include;
  - Speedometer
  - Tachometer
  - Odometer
  - Dual trip meters
  - Gear position
  - Coolant temperature
  - Driving range
  - Average fuel consumption
  - Instant fuel consumption
  - Traction control mode
  - Fuel gauge
  - Clock
- White back lighting for good visibility at night.
- LED indicators include those for the turn signals, high beam, neutral, malfunction, ABS, traction control system and coolant temperature/oil pressure. The indicators are designed to be easy to recognise.
- A bar-type tachometer features “peak-hold” function. It shows the peak rpm after the engine speed drops, enabling the rider to easily recognise the peak rpm of the last moment when downshifting.



## Suzuki Easy Start system

- The GSX-S750 features the Suzuki Easy Start system. When starting the engine on a typical motorcycle, the rider must press and hold the starter switch until the engine fires up. On the GSX-S750, you need only push the starter switch once, just like using the engine start systems on recent automobiles. The 32-bit ECM recognises the signals and keeps the starter motor working for the time needed to fire the engine.
- The rider doesn't have to pull the clutch lever when starting the engine. (when in neutral gear.)

## -Low RPM Assist



Close

Open

- The ISC (Idle Speed Control) system on the new GSX-S750 features Suzuki's Low RPM Assist control function.
- When launching from a standing start or running at low rpm, the engine rpm sensor sends a signal to the ECM that activates the ISC system. Engine rpm rises slightly when the ISC circuits open.
- Normally in launching the motorcycle, engine rpm drops when the clutch is engaged. This general behaviour is one cause of engine stall. Suzuki's Low RPM Assist function helps the rider execute smoother launching operation in the low rpm range.
- It also makes it easier to ride at low speeds in stop and go traffic.

## Chassis Performance

### -Chassis design

- The unique chassis design integrates the best qualities of a compact tubular girder streetbike frame and a twin-spar sportbike frame. It is built using a combination of D-section and round-section steel tubes for an especially sporty, smooth ride.

### -Dimensions and ergonomics

- Designed for sporting comfort, the upright riding position also reduces rider fatigue and increases visibility.

Dimension	GSX-S750
Wheelbase	1,455 mm
Rake/Trail	25° 20' / 104mm (4.1 in)
Seat height	820 mm



GSX-S750



GSX-R750

### -Inverted front forks

- Gold-anodised, 41mm KYB inverted front fork provides tough looks and 120mm stroke.
- The brake caliper carriers are redesigned to mount radial mount calipers.
- Spring pre-load is adjustable.



### -Rear suspension



- The link-type shock and its 138mm wheel travel were refined for the GSX-S750.
- The shock features 7-way adjustable preload.

### -Brake components



- Nissin 2-piece radial mount front brake calipers are mated with 310mm floating-mount petal type dual discs that provide strong braking performance.
- The front brake calipers are 4-pot opposed piston type. (33.9mm & 30.2mm)
- The 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, is a compact and lightweight design.

\* Please note that ABS is a supplemental device for brake operation, not a device for shortening stopping distance. Always remember to reduce speed sufficiently before approaching curves and corners.

### -Swingarm



- The swingarm is newly designed and changed from the square-shape used on the GSR750 to a new tapered type. With tapered lines that speak of performance and sporty good looks, this new swing arm design is a perfect fit for the GSX-S750.
- It also features a clean and stylish new chain adjuster.

## -Wheels and tires



### **BATTLAX HYPERSPORT S21**

\*Rear tire image shown above is 190/55ZR17 M/C(75W).

- Newly designed 10-spoke cast aluminum wheels, manufactured by TPR enhance the GSX-S750's sporty appearance.
- Bridgestone's new BATTLAX HYPERSPORT S21 radial tires provide great grip in sport riding on the public roads.
- The BATTLAX HYPERSPORT S21 tyres are designed using technologies Bridgestone gained from extensive racing experience. Dry grip and cornering stability are increased over its predecessor. (The Bridgestone BATTLAX HYPERSPORT S20 EVO)
- The S21 tyres for the GSX-S750 are co-developed by Suzuki/Bridgestone engineers, with compound and profiles specially developed for the GSX-S750.

	Size	Brand
Front tyre	120/70ZR17 M/C(58W)	BATTLAX HYPERSPORT S21
Rear tyre	180/55ZR17 M/C(73W)	BATTLAX HYPERSPORT S21

### -Handlebar



- Tapered handlebars deliver a look of toughness that well the aggressive overall styling design.
- The matte black finished handlebars combine with black levers and a new switch design to enhance the looks of an area that often falls within the rider's field of vision.

## Styling Design

-Styling design concept

### “Evolution for Assault”

Suzuki’s styling designers intended to build a younger but equally wild brother of the GSX-S1000. Wild, fierce looks and forward leaning style express its aggressive character. Position lights express the fangs of a wild beast. Dynamic lines run across the fuel tank to the shroud, and from the new belly pan to the tail section. These lines create a dynamic form that resembles a hunting beast crouching as it stalks its prey.



Image sketch



-Headlight and turn signals



- The distinctively shaped headlight is a multi-reflector type with a 12V60/55W bulb.
- The shape of the position lights flanking the lower side of the headlight, share the same look of a beast's as found on the GSX-S1000.
- The color of the turn signal lenses was changed from amber to clear (North American Spec excepted).



### **Overall Styling**

The styling design is brushed up based on feedback received from customers. The routing of wiring and hoses is also revised to realize a better, cleaner look.

### **Belly pan**

The belly pan is designed to feature sharp lines and surfaces that connect dynamically from the radiator shroud through to the tail section. The belly pan is standard equipment on the GSX-S750.

### **Newly designed cover**

New covers added behind the engine hide the hole connecting right and left sides that made the GSR750 appear “unfinished”.

### **Foot pegs**

The GSX-S750 adopts new black aluminum footpegs that are lightweight and feature sporty style.

### **Brake and clutch lever**

The color of brake and clutch levers is changed to black, giving the levers a sportier look.

-Rear combination lights and rear fender



- The thin, flatly shaped rear combination lights use LEDs for high visibility and long life. It is a double lens design that emphasises the classy look of the tail section.
- The license plate light uses a 12V5W bulb.
- Material for the rear fender brace is changed from the steel used on the GSR750 to plastic to reduce weight.

## Color Variations



Metallic Triton Blue /  
Glass Sparkle Black (KEL)



PRL. MIRA RED (YVZ)



MET.MAT BLACK NO.2 (YKV)

## Specifications

Overall Length		2,125 mm
Overall width		785 mm
Overall height		1,055 mm
Wheelbase		1,455 mm
Ground clearance		135 mm
Seat height		820 mm
Curb mass		213 kg [ABS Model]    211 kg [Non ABS Model]
Engine type		Four-stroke, liquid-cooled, DOHC, in-line four
Bore x stroke		72.0 mm x 46.0 mm
Engine displacement		749 cc
Compression ratio		12.3 : 1
Fuel system		Fuel injection
Starter system		Electric
Lubrication system		Wet-sump
Transmission		6-speed constant mesh
Primary drive ratio		1.857
Final drive ratio		2.529
Suspension	Front	Inverted telescopic, coil spring oil damped
	Rear	Link type, coil spring, oil damped
Rake (Caster angle) / Trail		25° 20' / 104mm (4.1 in)
Brakes	Front	Disc brake, twin
	Rear	Disc brake
Tires	Front	120/70ZR17M/C (58W) tubeless
	Rear	180/55ZR17M/C (73W) tubeless
Ignition system		Electronic ignition
Fuel tank capacity		16 L
Oil capacity (Overhaul)		3.9 L