



PRESS INFORMATION

November 2022

GSX-8S



This photo includes an optional accessory.

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Form and Function for a New Era

The GSX-8S is a brand-new model engineered from the ground up to shine as a fresh realization of naked street fighter performance for a new era of riding pleasure. Controllable, agile, and ready to go, it offers the strong appeal to a wide range of customers, regardless of their age or level of experience.

The GSX-8S joins the GSX-S series as the latest member of a new family of street fighters featuring trendsetting naked sportbike looks combines with winning performance, confidence-inspiring controllability, and optimized comfort.

For development of the new GSX-8S, Suzuki followed a series of basic steps using a process aimed at creating superior value that is focused on our customers. In response to the demands from riders of varying experience levels in the mid-size naked street bike category, ranging from novice to veteran, Suzuki engineers figured out the ideal package, with engine/body size plus features and specifications suitable for the model. To realize such needs in one model, countless optimization tests were performed and adjustments implemented across all related departments to achieve a balance between highly challenging and seemingly contradicting factors at various development stages. The new GSX-8S was hammered out through such tough but constructive processes, and this results in in one ideal package for Suzuki customers.

The result represents just as big a step forward. The new GSX-8S features Suzuki's brand-new parallel twin 776cm³ DOHC engine with a new frame built around it as a perfect match. Every aspect of the design is geared to deliver a satisfying experience to riders who desire more power than 650cm³ class can deliver, and who desire a satisfying ride that is reassuring and reliable.

The chassis and free-revving engine respond faithfully to the rider's will in a nonassertive fashion that makes the rider's style and preferences the focus of riding pleasure on every outing. Riders can easily tap its full potential and enjoy a pure riding experience they will continue to enjoy for many years. The new GSX-8S is ready to enrich the lives of its owners and serve as a dependable partner, wherever its rider wishes to go.

Wrapped in the unique styling of this new package, the GSX-8S features an aggressive, mass-forward look that is slim, compact, well balanced, and ready for action. The new GSX-8S is set to become the best choice for street riders of all experience levels.

Infinite Potential. Limitless Fun.

The product concept “Infinite Potential. Limitless Fun.” intends to convey a sense that the GSX-8S offers riders of all ages and skill levels endless possibilities to enjoy the fun of every outing, whether that ride is a simple commute to work or school, a shopping trip, or an exciting day out to enjoy touring or a sporty run through some winding roads. It also suggests how its new engine and chassis layout blend harmoniously to deliver power, handling, and comfort that faithfully follow the will of the rider and offer a quirk-free riding experience that puts the rider in full control.

The GSX-8S features a thoroughly modern design that sings of functional beauty and is backed by the exciting yet forgiving performance desired by a wide range of riders. The GSX-8S is ready to set the trend for an exciting new generation of street motorcycles ready to carry the Suzuki brand into the future.

With progressive features ranging from its brand-new parallel twin engine, robust frame, uniquely shaped aluminum swingarm, inverted front forks, and color TFT LCD multifunction instrument panel, to advanced electronic control systems that include Suzuki Drive Mode Selector, the Suzuki Traction Control System, and Suzuki’s Bi-Directional Quick Shift system, the GSX-8S instantly sends the message that it is a new street fighter set to usher in an exciting new era of riding pleasure.

KEY PRODUCT FEATURES

Engine Features:

- Newly developed 776cm³ parallel twin DOHC engine delivers a fine balance of smooth, controllable power from low rpm and the pleasant feeling of free-revving performance through to the high end.
- The 270-degree crankshaft configuration helps maintain a pleasant feeling in common with Suzuki's V-twin models, such as the SV650.
- Suzuki Cross Balancer, the first primary balancer of its type on a production motorcycle, contributes to smooth operation and a compact, lightweight engine design.
- Cooling system inlet control helps maintain consistent engine temperature and eliminate rough idle while warming the engine in cold weather.
- The electronic throttle bodies help achieve faithful response and a linear feeling to throttle action.
- The 2-into-1 exhaust system features a dual-stage catalytic converter inside the collector that helps satisfy Euro 5 emissions standards and a striking new short design.
- The six-speed transmission realizes smooth shifting and improved controllability.
- Suzuki Clutch Assist System (SCAS) helps reduce fatigue on long rides and contributes to smoother shifting.

SUZUKI Intelligent Ride System (S.I.R.S.) Features:

- Suzuki Drive Mode Selector (SDMS) better supports the rider in matching performance to the conditions of the riding scene, road conditions, or preferred riding style.
- Suzuki Traction Control System (STCS) with 3 mode settings (+ OFF) enables greater control over the bike's behavior under diverse riding conditions.
- Suzuki's ride-by-wire electronic throttle control system realizes throttle action that responds faithfully to the rider's every intention.
- Suzuki's Bi-directional Quick Shift System (with ON/OFF settings) provides quicker, smoother, more assured shifting without operating the clutch lever while in motion.
- The ABS system contributes to more stable braking by helping prevent the wheels from locking up, even under hard braking.
- The Suzuki Easy Start System starts the engine with one quick press of the starter button.
- Suzuki's Low RPM Assist function helps maintain engine idle speed for smoother and easier starts.

Chassis Features:

- A new steel frame developed for the GSX-8S contributes to comfort, straight-line stability, and nimble handling.
- Dual radial mount front disc brake calipers act on ø310mm discs to provide sure stopping power and controllability.
- KYB inverted front forks deliver a smooth, controllable ride.
- Adjustable KYB link-type rear suspension contributes to agility and stability.
- Cast aluminum wheels featuring a unique new design contribute to nimble handling and a futuristic sporty appearance.
- New Dunlop SPORTMAX Roadsport2 tires contribute to nimble, predictable handling and sporty performance.
- Features a uniquely shaped lightweight aluminum swingarm with enhanced torsional rigidity that contributes to nimble handling and straight-line stability.
- Tapered aluminum handlebars contribute to positive control and an upright riding position that offers comfort combined with a sporty riding experience.
- The 14L fuel tank features a stunning slim design unique to the GSX-8S.
- The rider's seat is designed for comfortable sport riding, delivering solid support and shaped to offer freedom of movement.

Electric Equipment Features:

- A custom 5-inch color TFT LCD multi-function instrument panel features a clearly legible display of a rich variety of information.
- Vertically stacked LED headlights in hexagonal housings provide a clear view of the road ahead and create a sharp look with bold presence.
- Unique compact LED position lights flank the headlights as they trace forward and down along the front cowl.
- The LED rear combination light features a compact new design introduced for the first time on a Suzuki motorcycle.
- The North American specification GSX-8S is equipped with LED turn signals.*
*Note: Turn signals on the other specifications use conventional bulbs. LED turn signals are available as a genuine accessory.

Styling Features:

- The advanced styling for the GSX-8S aims to set a new trend and usher in a new era of functional beauty that symbolizes the future of Suzuki design.
- The bodywork features flat surfaces and sharp lines that emphasize its compact, slim and well-balanced look.
- The bodywork is minimized to expose parts such as the engine and seat rails painted in the body color, thereby highlighting the mechanical appeal of functional beauty.
- The front cowl stacked hexagonal headlights and characteristic LED position lights create a mechanical look of toughness that is also compact and sharp.
- The shortest muffler ever mounted on a Suzuki motorcycle accentuates the slim, compact design.
- A compact new LED rear combination light is mounted on the slim new rear fender.
- Dynamic decals create an iconic presence that is instantly recognizable and equally appealing.
- Newly developed body colors bring fresh appeal that will resonate with a wide audience.

A New Engine for a New Era

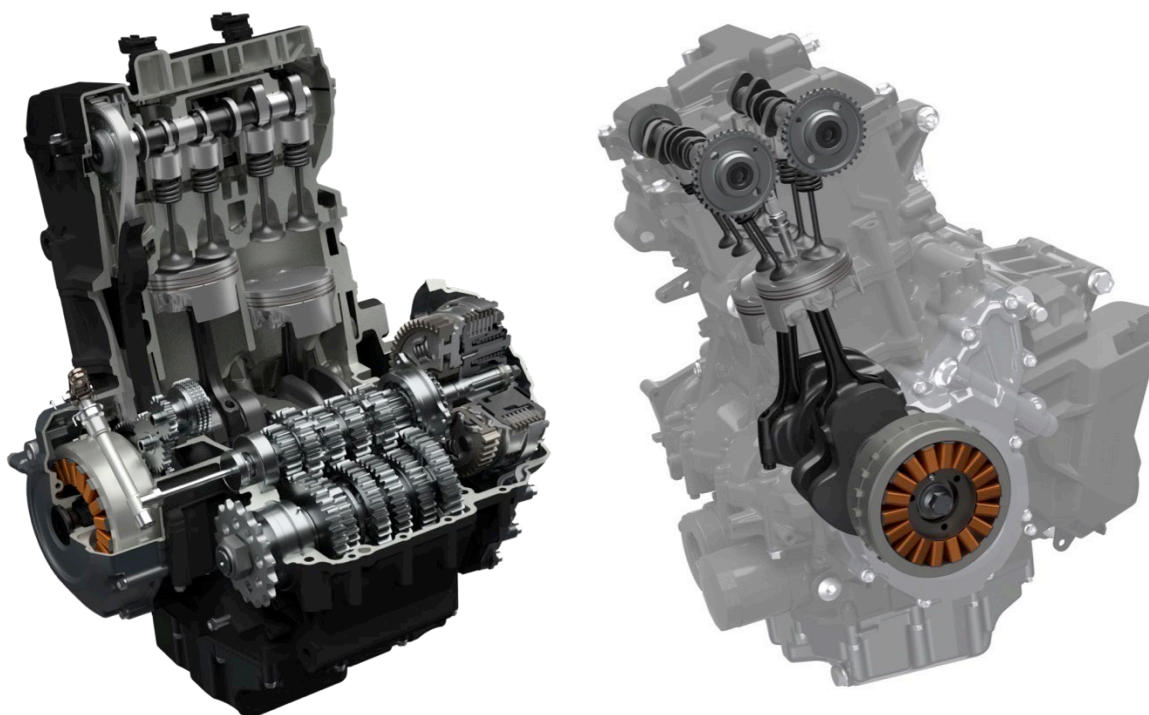
Creating the naked street fighter for a new era began with designing a brand-new engine. Firstly, Suzuki's engineers sought to design a slim, compact powerplant that would expand the possibilities for overall design flexibility and help realize the most effective chassis geometry for performance gains, including the optimum riding position. Secondly, Suzuki sought to deliver dynamic performance that would excel whether enjoying a solo run or carrying a passenger. The new engine must provide plenty of torque and power, but must also be easy for even less experienced riders to control, with smooth throttle response. Overall, it must fill the rider's personal adventuring experience with fun and pleasure, even when carrying a passenger and luggage.

With these objectives in mind, Suzuki designed a brand-new parallel twin 776cm³ DOHC, 4-valve-per-cylinder engine. It features a long-stroke configuration that delivers a fine balance of smooth, controllable power from low rpm and the pleasant feeling of free-revving performance through to the high end.

The engine also features a 270-degree crankshaft design, which delivers a smooth ride with plenty of torque, positive traction, and a pleasing rumble. It also introduces the Suzuki Cross Balancer, an innovative new primary balancer design that contributes to smooth operation and helps achieve a compact and lightweight package that enhances the GSX-8S's nimble handling. The GSX-8S also adopts an exclusive new short muffler design that barely rises up and out from the engine's right side.



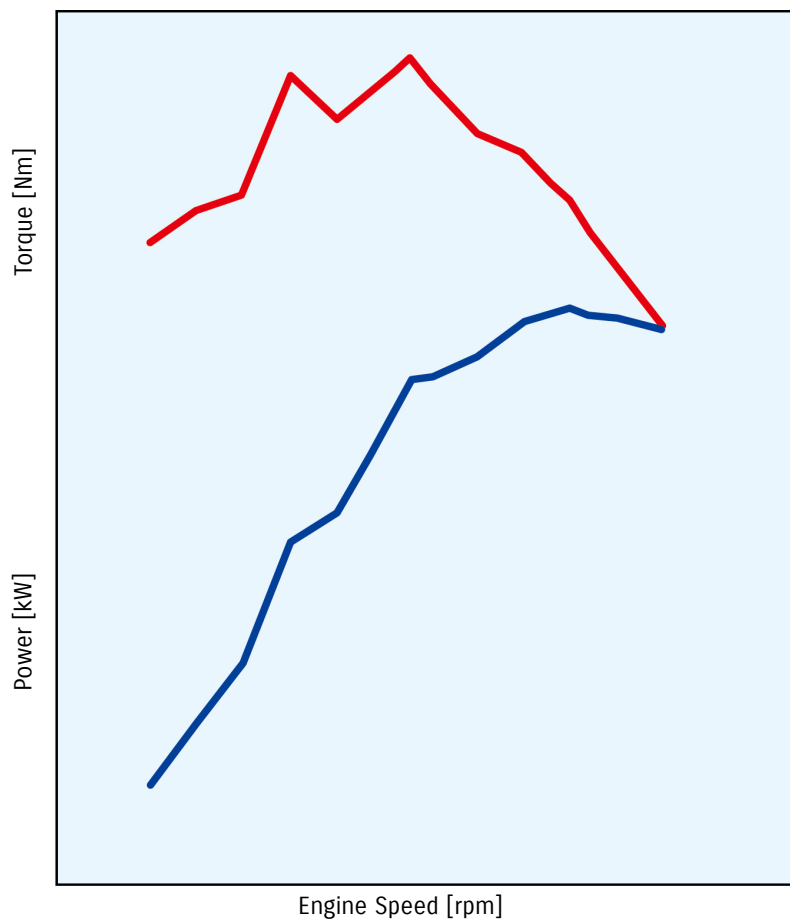
776cm³, 4-stroke, 2-cylinder, Liquid-cooled, DOHC, Parallel Twin Engine



776cm³, 4-stroke, 2-cylinder, Liquid-cooled, DOHC, Parallel Twin Engine

Engine type	4-stroke DOHC parallel twin
Cooling system	Liquid-cooled
Displacement	776cm ³
Bore x Stroke	84.0mm x 70.0mm
Maximum output	61kW / 8500rpm
Maximum torque	78Nm/6800rpm
Emissions level	Euro 5
Fuel consumption	23.8km/L (4.2L/100km) in WMTC

Note: Actual fuel economy may differ owing to conditions such as the weather, road, rider behavior and maintenance.























Engine Performance Curve

270-degree Crankshaft

The ignition timing of the engine's 270-degree crankshaft layout is the same as that on Suzuki's (90°) V-twin engines. That means it produces the same pleasing rumble and sound for which V-twins are favored. In addition, the 450 degrees of crank revolution between cylinder firings, (between 270° and 720° in the chart below), extends the time between power pulses and gives the rear wheel the time it needs to regain traction before the next pulse. The positive traction that results is particularly beneficial when powering out of corners or riding on roads with less grip.

 = Ignition timing

Crank rotation angle	0°	90°	180°	270°	360°	450°	540°	630°	720°	810°	900°	990°	1080°	1170°	1260°	1350°
Crankpin phase: 270° Cylinder layout: Parallel twin (e.g. GSX-8S)																
Crankpin phase: 0° Cylinder layout: V-twin (90°) (e.g. V-STROM 1050/650)																
Crankpin phase: 180° Cylinder layout: Parallel twin (e.g. V-Strom 250)																
Crankpin phase: 180° Cylinder layout: Inline four (e.g. GSX-R1000/R)																

Suzuki Cross Balancer

The new engine introduces Suzuki Cross Balancer. This patented biaxial primary balancer positions its two balancers at 90° to the crankshaft^{*1}, marking a first among production motorcycles^{*2} to position its two balancers at 90° to the crankshaft. This patented mechanism suppresses vibration to contribute to smooth operation, and it also helps realize a lightweight powerplant that is more compact from front to rear.

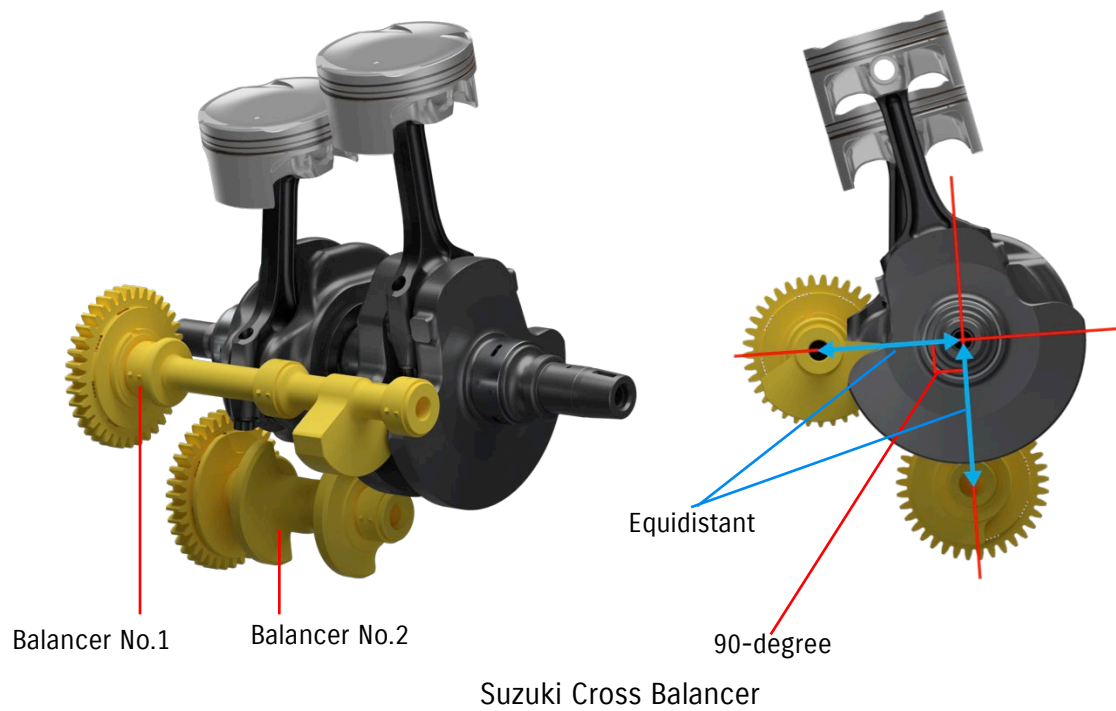
Balancer No.1 cancels the primary vibration generated by the piston (reciprocating weight) of the first cylinder, while balancer No.2 cancels the primary vibration of the second cylinder. Adopting a 270-degree crankshaft angle cancels secondary vibration, contributing to even smoother engine operation. Furthermore, placing the two balancers at 90° to the crankshaft with each positioned equidistant from the crankshaft cancels primary couple vibration.

*1: Patent granted for biaxial primary balancer that positions its two balancers at 90° to the crankshaft.

*2: Based on Suzuki research as of November 2022.



Suzuki Cross Balancer



Pistons and Connecting Rods

The engine employs forged pistons engineered using FEM (Finite Element Method) analysis to maximize strength and minimize weight, despite the engine's 84mm bore. Conical machining inside the wrist pin holes transfers load and mitigates stress transferred to the crowns, so contributes to enhanced durability.

The connecting rods also feature the reliability and high level of technical prowess for which Suzuki is known. This is backed up by thorough analysis conducted to ensure a balance of weight and rigidity, and to stabilize the rods' behavior during stroke action.

Suzuki Composite Electrochemical Material (SCEM)

The cylinder bores inside the aluminum die-cast cylinders are plated using Suzuki's SCEM process. Originally developed for racing and proven on the track, the SCEM cylinder coating promotes better heat dissipation, reduces friction and achieves a consistent wear resistant seal on the piston rings for greater durability.

Ride-by-Wire Electronic Throttle Bodies

Each of the two cylinders are fed by a pair of linked 42mm bore electronic-controlled throttle bodies. APS (Accelerator Position Sensor) play is optimized to deliver the best balance of performance for both everyday use and the demands of sporty runs.

High-Pressure Fuel Injectors

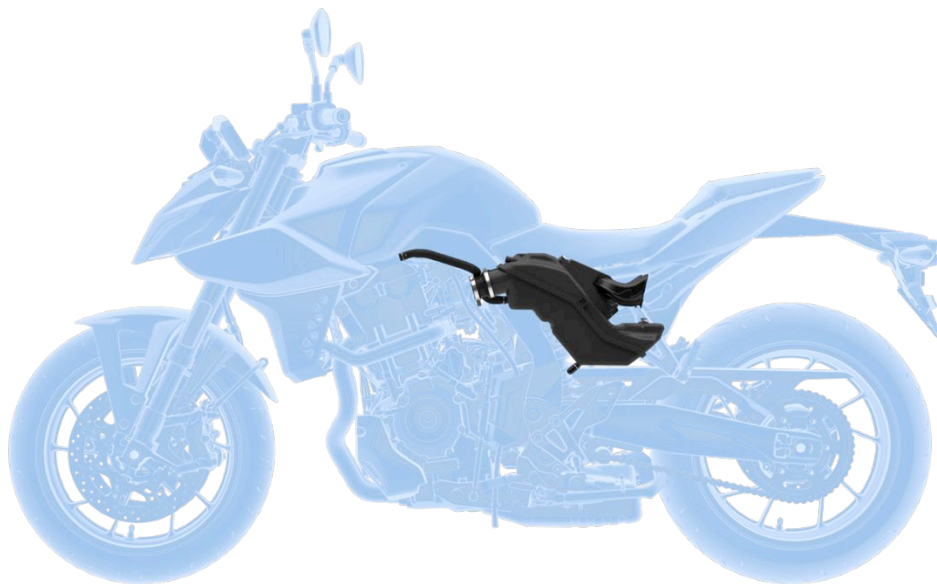
The GSX-8S employs 10-hole, long-nosed, 343kpa high-pressure-feed fuel injectors that maximize fuel atomization for better combustion efficiency and lower fuel consumption.

Transmission

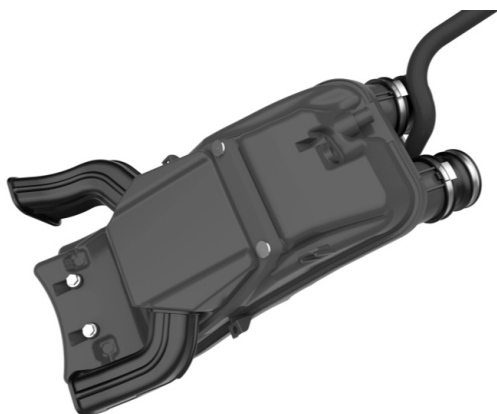
The six-speed transmission adopts gear ratios that deliver smooth shifting and exciting acceleration, whether shifting normally or using the standard-equipment Bi-directional Quick Shift system to shift without clutch operation.

Air Cleaner Box

The air cleaner box and intake pipe designs are optimized using CAE analysis to maximize power output characteristics and torque production at low rpm. To contribute to the realization of a slim and compact chassis design and enhance the freedom of rider movement, the box adopts a compact design and is positioned under the seat. Even so, the intake is optimized, using different lengths for the left and right pipes, which helps secure adequate flow to derive maximum power output.



Position of Air Cleaner Box



Air Cleaner Box (outside)

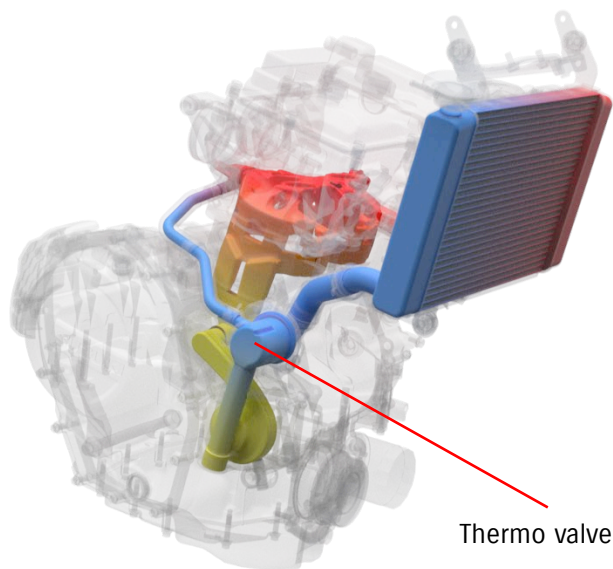


Air Cleaner Box (inside)

Highly Efficient Cooling

The radiator boasts high cooling capacity to support the parallel twin engine's powerful output. A cooling fan helps stabilize the coolant temperature.

Cooling water inlet control contributes to early stabilization of water temperature during engine warm-up. Since a thermo valve located at the inlet of engine cooling circuit, adjusts the temperature, before the coolant enters the engine, there is less temperature fluctuation during warm-up. This helps stabilize combustion and contributes to cleaner exhaust gas.

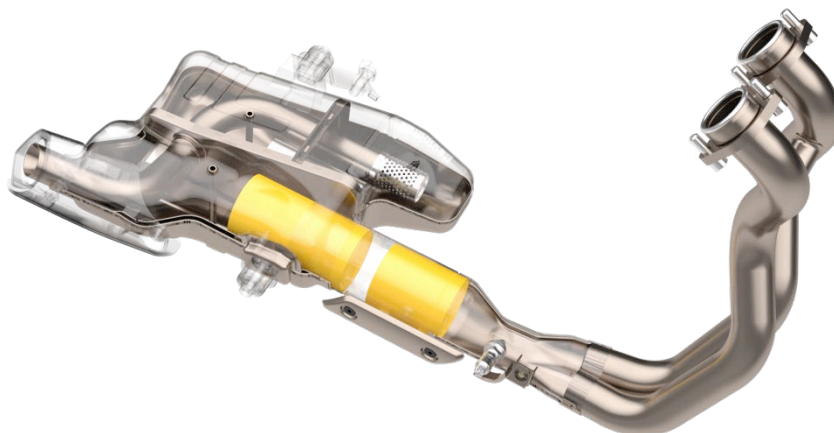


Cooling System Inlet Control

The GSX-8S is also equipped with a lightweight, compact liquid-cooled oil cooler that helps keep lubrication temperatures cooler for even smoother and reliable engine operation.

Distinctive Short Muffler Design

The 2-into-1 exhaust system for the GSX-8S is designed to produce a pleasing note that befits the new parallel twin engine. Better yet, the two-stage catalytic converter inside the collector helps limit emissions to a level that satisfies Euro 5 standards, while at the same time maximizing power output and overall performance. The exhaust system features a short new muffler design that barely rises up and out from the right side of the engine.



Exhaust System



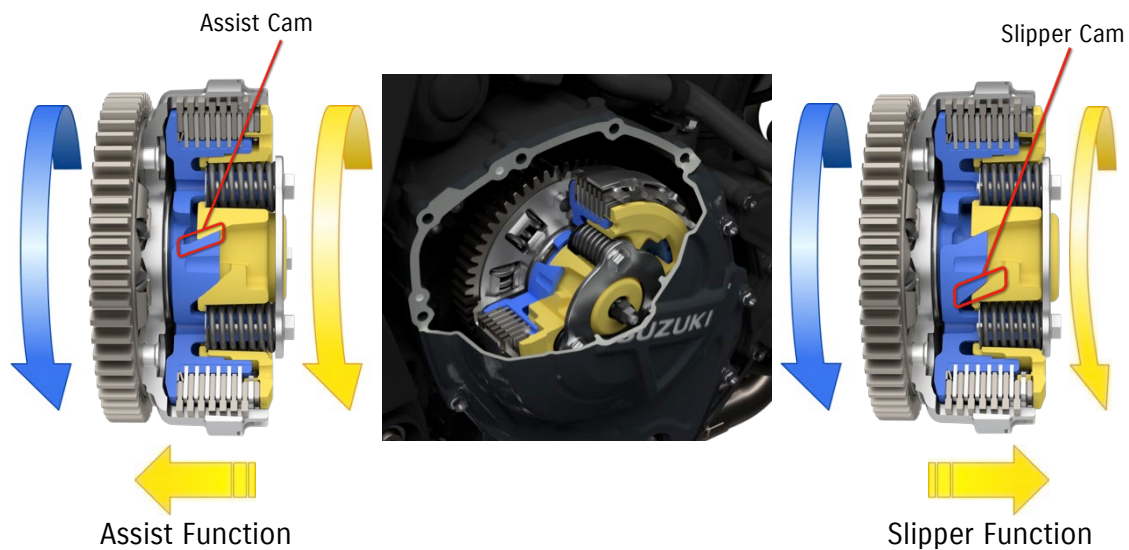
Short Muffler Design

Suzuki Clutch Assist System (SCAS)

The assist function leverages precision-engineered ramps to force the clutch boss and pressure plate together and efficiently transfer torque to the rear wheel under acceleration, all while using softer clutch springs.

The slipper clutch partially disengages when downshifting to decelerate to mitigate the effect of engine braking. By helping to prevent the rear tire from hopping and providing smoother deceleration, this function enables the rider to shift down with greater confidence and maintain better control.

Suzuki Clutch Assist System Cam Operation Diagram

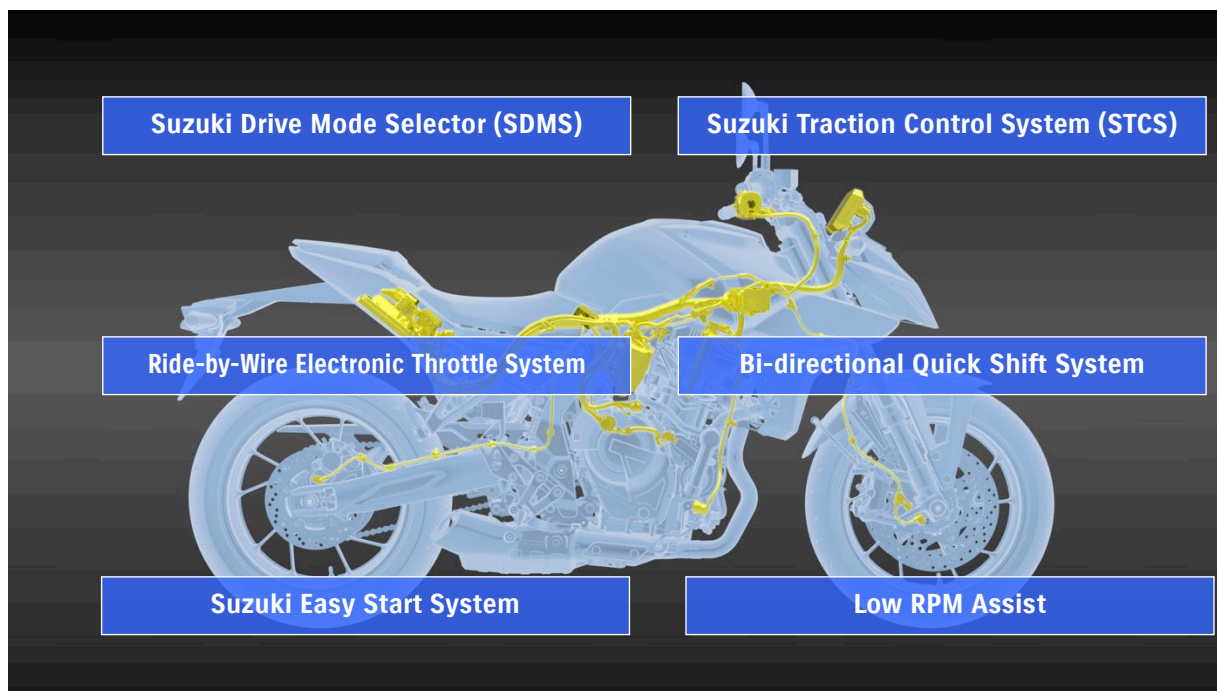


Introduction

The Suzuki Intelligent Ride System (S.I.R.S.) features a collection of advanced electronic rider assist systems. The rider can freely choose the settings for each system to best suit their level of skill and experience, and to optimize performance characteristics for the riding conditions and road surface at any given moment. These settings in turn help make the GSX-8S more controllable, predictable, and less tiring to operate. With each system designed and thoroughly tested to operate the way the rider expects, S.I.R.S. helps realize a more exciting riding experience that inspires confidence and frees riders to concentrate on enjoying the experience.

The robust collection of advanced S.I.R.S. electronic systems employed by the GSX-8S include the Suzuki Drive Mode Selector (SDMS), Suzuki Traction Control System (STSC), Ride-by-Wire Electronic Throttle System, Bi-directional Quick Shift System, Suzuki Easy Start System, and Low RPM Assist.

Suzuki Intelligent Ride System (S.I.R.S.)

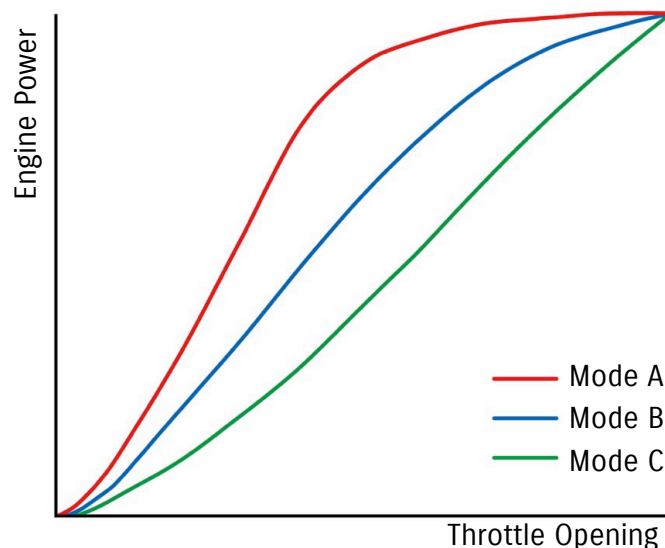


(1) Control over Engine Output Characteristics

Suzuki Drive Mode Selector (SDMS)

SDMS fully leverages the electronic throttle control system to offer a choice between three modes that deliver different power characteristics – especially when turning the throttle grip between a slightly open position to when it reaches the top of the mid-speed range under acceleration – to match the conditions of the riding scene, surface conditions, or preferred riding style for any given outing. The settings for each mode were custom-tuned and thoroughly tested to maximize the GSX-8S's capabilities as a top-performing street fighter, to build in the flexibility to adapt well to changing weather, road, and riding conditions, and to make the overall riding experience more enjoyable.

Power Delivery Image by Mode



Mode A (Active) provides the sharpest throttle response as the throttle is opened. Settings for torque characteristics are tuned to deliver exciting acceleration and fully leverage the engine's power. It is well suited for enjoying aggressive runs on winding road surfaces in good weather.

Mode B (Basic) reaches the same level of maximum output, but features a more linear curve with softer throttle response. Planned as an ideal setting for touring, this mode aims to make the bike more controllable and instill confidence in the rider when accelerating, and to make a good fit for a wide range of riding styles and road conditions.

Mode C (Comfort) provides the softest throttle response and more gentle torque characteristics, which makes the GSX-8S more obedient and controllable as the throttle is opened. This is particularly beneficial when touring for long distances, when riding with a passenger, when riding on wet or otherwise slippery surfaces, when road conditions are bad, or even when the rider wants to relax and enjoy a ride home after a long outing.

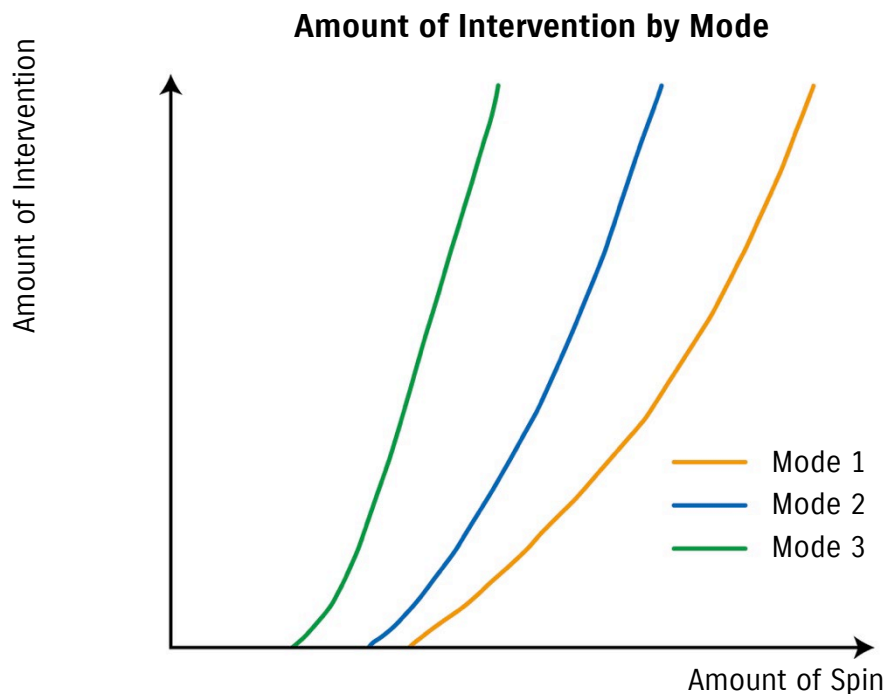
(2) Control over Engine Acceleration Characteristics

Suzuki Traction Control System (STCS)

STCS for the GSX-8S enables the rider to better control the bike in diverse and varying conditions, whether riding alone or with a passenger, or riding in inclement weather. STCS not only reduces stress and fatigue but, by giving the rider greater control over the bike's behavior, it instils greater confidence regardless of their level of experience.

The rider can select from 3 modes or turn the system off. The higher number the mode, the faster the control takes effect and the more proactive the system is in limiting wheel spin. As such, Mode 1 is for sport riding with minimal intervention from the system. Mode 2 offers a balance that is ideal for city riding and regular road conditions. And Mode 3 is well suited to wet or otherwise slippery road conditions.

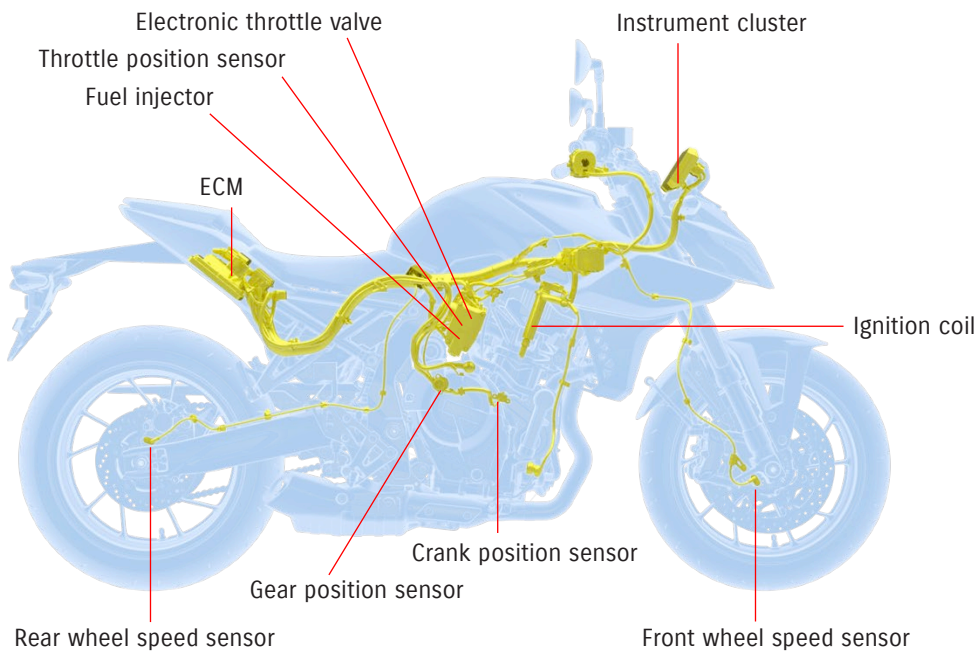
The system is programmed to continuously monitor front and rear wheel speed, engine RPM (as calculated using data from the crank position sensor), throttle position and gear position. It is designed to immediately limit power and help prevent slipping when an imminent loss of traction is detected by retarding the ignition timing and limiting the throttle opening.



Note: 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.

4. Suzuki Intelligent Ride System (S.I.R.S.)

GSX-8S



(3) Control over Engine Operations

Ride-by-Wire Electronic Throttle System

Suzuki's electronic throttle control system takes advantage of the ECM to control the action of the throttle valves and make it possible for settings to more finely control the relationship between throttle action and engine output characteristics. One benefit is that individual settings can be tuned and thoroughly tested to match each of the SDMS modes and realize throttle action that responds faithfully to the rider's intention across the range of mode settings.

Throttle grip action is set to maximize controllability, with the faithful response of linear control. This setting also makes throttle action feel more natural to riders not yet accustomed to systems that do not employ a mechanical cable. Adding to the benefits, the system is simpler and more compact than conventional mechanical systems and eliminates cables that would otherwise add clutter to the right side of the handlebars.

Bi-Directional Quick Shift System

The Bi-directional Quick Shift System enables the rider to shift up or down without operating the clutch lever while in motion. As standard equipment on the GSX-8S, this distinctive feature is one the rider will find enhances the riding experience the minute they try it. And they will immediately feel the benefits of reduced fatigue and not missing shifts.

When activated, the system automatically interrupts power delivery when accelerating and maintaining steady speed just long enough to unload the transmission gear dogs, thereby producing a smoother ride and almost uninterrupted acceleration when the rider shifts up. When decelerating the system automatically opens the throttle valves just enough to increase rpm and match engine speed to the next-lower gear ratio without manually blipping the throttle or using the clutch. This hands-free automatic blipping function combines seamlessly with engine braking to create a highly satisfying experience. While the ECM is programmed to control the electronic throttle valves and ignition timing to match the engine's operating speed and enable smooth shifting at any RPM, the gear shifting mechanism is optimized to provide a solid click with each shift that assures the rider a satisfying feeling that the gearbox has responded immediately to their action.

Suzuki Easy Start System

This system lets the rider start the motorcycle with one quick press of the starter button. There is no need to pull in the clutch lever when the transmission is in neutral, and the starter motor automatically disengages the instant the engine fires up. As a function used every time the engine is started, removing the bother of the above operations makes the riding experience more pleasurable and convenient.

Low RPM Assist

Suzuki's Low RPM Assist function monitors engine rpm, gear position, throttle position, and clutch switch data as the rider releases the clutch lever to pull away from a standing start, or when riding at low speeds. It is programmed to help prevent engine speed from dropping excessively as the rider launches the bike to ensure smoother starts. It also promotes more confident riding by helping counteract drops in engine speed when riding in stop-and-go traffic, or when doing U-turns.

(4) Control over Braking

Antilock Braking System (ABS)

The antilock braking system (ABS) contributes to more stable braking by helping prevent the wheels from locking up, even under hard braking. The system is programmed to monitor wheel speed and match stopping power to the available traction. The ABS control unit features a compact, lightweight design that contributes to making the bike nimbler.

Note: ABS is not designed to shorten the braking distance. Please always ride at a safe speed for road and weather conditions, including while cornering.

Supporting Technologies

Controller Area Network (CAN bus)

The GSX-8S's robust CAN bus reduces the number of wires required by the harness, so contributes to reducing weight.

Engine Control Module (ECM)

A dual-core processor ECM provides optimal engine management that contributes to the operation and optimization of critical systems, including those to comply with Euro 5 emissions standards.

Engineered to Perform and to Please

In engineering a brand-new model from the ground up, the goal was to design a compact, lightweight chassis engineered to maximize agility, comfort, utility, and reassuring riding pleasure. Every aspect was planned to reflect a focus on great handling and control, even when riding with the optional soft side cases attached, on supporting the high-performance parallel twin engine, and on minimizing fatigue, whether riding solo or carrying a passenger.



Development of the chassis layout began with devising the core structure of the new frame and swing arm. The resulting frame is strong and highly rigid. The swingarm, designed exclusively for the GSX-8S, was optimized to perform ideally on the street. Other layout considerations covered everything from achieving the right riding position to the selection of the wheels, tires, and suspension settings. And it extended to striking a harmonious relationship between the chassis, the new engine, and the advanced controls of the Suzuki Intelligent Ride System (S.I.R.S.).





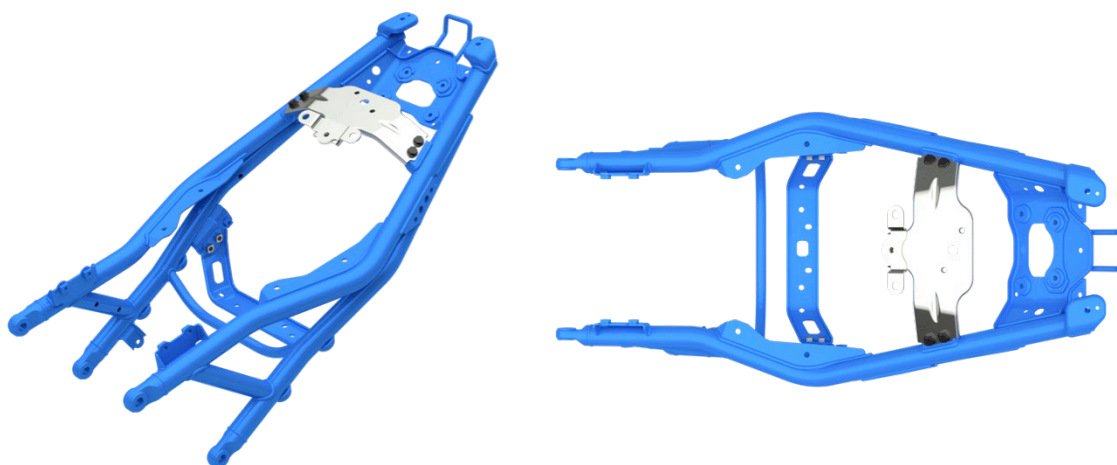
A Reliable New Frame

Designed around the new engine platform and made from rugged steel pipe, the frame was engineered to provide excellent straight-line stability, to contribute to nimble handling, and to perform well in the city and at highway speeds. This includes providing solid handling stability when the genuine accessory soft side case set is mounted.

The new exposed seat rails are engineered to support the rider well, and also to contribute to the GSX-8S' slim appearance and stripped-down look of functional beauty.



Frame and seat rails



Seat Rails

Sure Stopping Power

Radial mount front brake calipers mated with 310mm outer diameter dual discs provide sure stopping power and controllable braking performance.

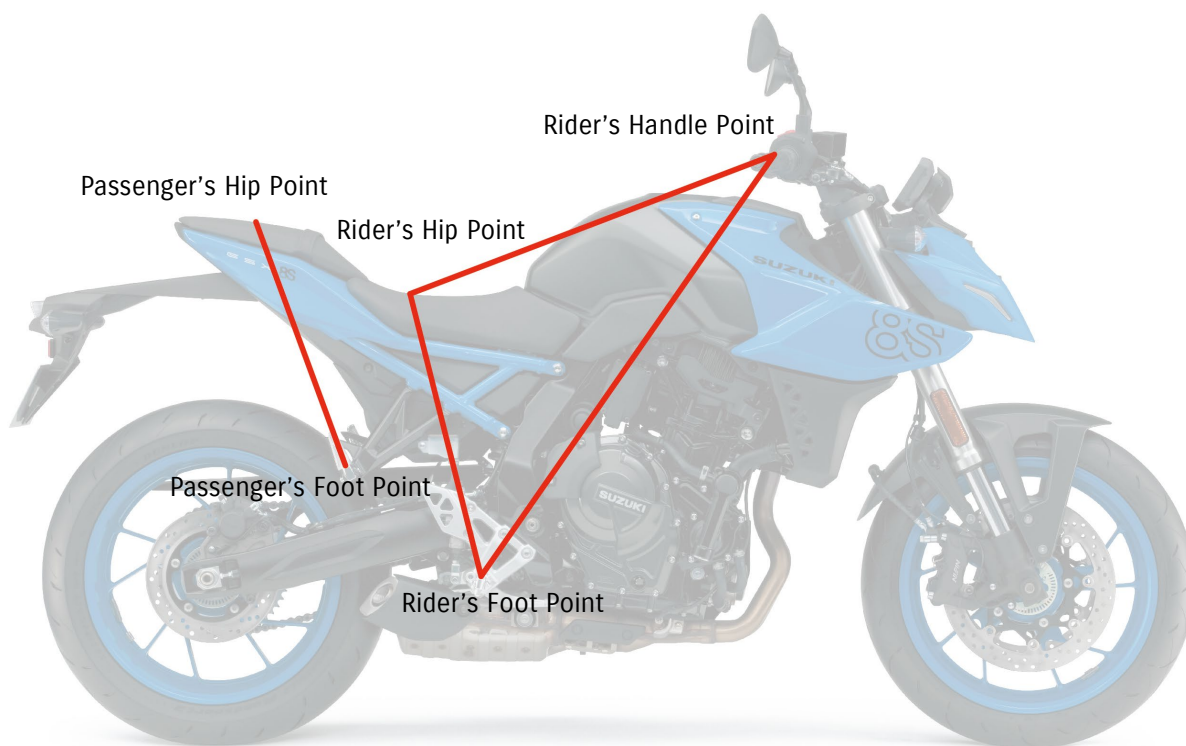
The rear brake has a 240mm outer diameter disc and uses a single-piston pin-slide caliper.

Chassis Geometry and Riding Position

The GSX-8S features a wheelbase that is longer than on typical naked street fighter, and this contributes to straight-line stability. Even so, the overall chassis geometry also helps ensure nimble handling and cornering ability, and the design still makes the bike appear compact. The geometry achieved also enhances handling stability when carrying a passenger and with the genuine accessory soft side cases mounted.

One priority of the chassis geometry was to provide a comfortable riding position that effectively distributes weight to the front and rear. Passenger comfort is also addressed through a design that lets the passenger sit without bending their knees too much.

The adoption of Suzuki's new parallel twin engine benefits the geometry because its compact front-rear dimensions allowed us to position the rider's hip point well forward. This in turn enables the rider to shift their weight toward the front and more easily control the GSX-8S when negotiating tight corners.



Riding Position

Optimized Front and Rear Suspension

KYB inverted front forks with a 130mm stroke deliver a plush, controllable ride and feature stable damping characteristics that makes them suitable for both sports riding and long-distance runs. The dedicated link-type mono-shock KYB rear suspension is set up to contribute to straight-line stability and agility, even when carrying a passenger. The mechanical preload adjuster is particularly useful when heading out to ride tandem.



Front Suspension



Rear Suspension

Wheels and Tires

The cast-aluminum wheels feature a unique new lightweight design that looks great and contributes to nimble handling and sporty performance. They are shod with a new generation of Dunlop RoadSport 2 radial tires (120/70ZR17 at the front; 180/55ZR17 at the rear) designed to perform optimally and provide sure grip on the GSX-8S. The custom-engineered internal construction features a carcass and belt layer tuned to achieve the right level of rigidity to match the weight and performance characteristics of the GSX-8S, and to deliver the right combination of nimble handling and stability. Dunlop's proven tread pattern introduces a new silica compound that enhances positive grip in wet conditions and features durable wear resistance. These wheels and tires work in harmony with the front and rear suspension settings to help realize great grip, stability, and nimble handling, while also contributing to a comfortable ride.



Front Wheel and Tire



Rear Wheel and Tire

Uniquely Shaped Lightweight Aluminum Swingarm

The GSX-8S adopts a highly attractive new aluminum swingarm with a unique shape that is engineered to perform optimally. It achieves the right amount of vertical, lateral, and torsional rigidity to provide sure handling stability and contribute to greater ride comfort.



Uniquely Shaped Lightweight Aluminum Swingarm

Tapered Aluminum Handlebars

The tapered aluminum handlebars are designed to provide a sporty yet comfortable upright riding position, and feature a wide enough grip to contribute to positive control when steering the GSX-8S.



Tapered Aluminum Handlebars

Fuel Tank

The 14L fuel tank is designed to deliver the right balance between riding range and slim, compact looks that heighten the appeal of the GSX-8S' sporty styling.



Comfortable, Practical Seating

The rider's seat is designed for comfortable sport riding. Delivering solid support for the rider toward its rear edge, the seat is shaped to offer freedom of movement and is covered in a skin that provides positive grip. Featuring a slim design, the smoothly rounded edges of the seat also make it relatively easy for the rider to plant their feet on the ground when stopped. The separate pillion seat includes a hand strap for the passenger.



Seat

Front Fender

The front fender features a bold upright strut that extends upward toward its leading edge. This helps create the visual impression of weight distribution being brought toward the front and contributes to an overall look of balance and sporty performance.



Front Fender

5-inch Color TFT LCD Multi-Information Display

The GSX-8S's custom 5-inch color TFT LCD multi-function instrument panel features a clearly legible display of a rich variety of information.

Not only does it keep the rider fully aware of all the bike's systems and settings, it also supplies critical real-time operating status information. The look is one of high quality that helps instill pride of ownership.



Day Mode

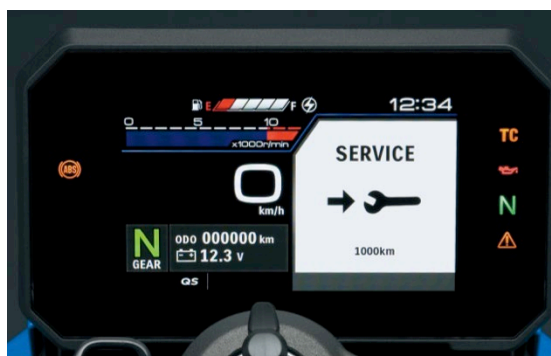


Night Mode

LCD readouts include:

- Speedometer
- Tachometer
- Riding range
- Odometer
- Dual trip meter
- Gear position
- Water temperature
- Engine rpm indicator
- Average fuel consumption (1&2)
- Instant fuel consumption
- SDMS mode
- Traction control mode
- Quick Shift (ON/OFF)
- Fuel gauge
- 12-hour clock
- Voltmeter
- Service reminder

The LCD offers the ability to display large pop-up alerts and warnings.



Pop-up Display

The tachometer also serves as programmable engine rpm indicator. It blinks when the engine speed reaches the preset rpm entered by the rider. (It can be set in 250rpm increments within a range from 4000rpm to 9750rpm.)

LED indicators flanking the display include the left turn signal indicator, MIL (Malfunction Indication Light), neutral indicator, master warning indicator, high-beam indicator, right turn signal indicator, TC (Traction Control) indicator, low oil pressure warning indicator, ABS indicator, low voltage warning indicator, and coolant temperature warning indicator. All are designed for easy recognition.

The screen features a custom display with exclusive graphics, including blue background lines that add extra flavor and convey the appeal and spirit of the Suzuki brand identity. It also offers manual or automatic switching settings for the day (white) and night (black) display modes that maximize visibility at any hour and in any riding situation.

LED Headlights

The vertically stacked pair of hexagonal LED headlights employ a bright mono-focus LED light source that provides the rider with a clear view of the road ahead. In terms of design, the vertical orientation of the thin, compact headlight assembly creates a sharp look with unique character that makes the front end look light and ready for action.



Headlights OFF



Low Beam



High Beam

LED Position Lights

Compact LED position lights flank the headlights as they trace forward and down along the front cowl. The angled design of these narrow slits add to the unique “mask” of the front face.



Position Lights

LED Rear Combination Light

The LED rear combination light with integrated LED license plate light features a new design introduced for the first time on a Suzuki motorcycle. Mounted on the slim rear fender, this new light contributes to a sporty new design that makes the GSX-8S look even shorter and slimmer in the rear.

*Note: The taillight and turn signals for the American specification GSX-8S differ from those of other regions.



LED Rear Combination Light

Handlebar Switches Designed for Intuitive Operation

The ergonomic switch layout maximizes operating ease and efficiency, allowing the rider to access controls while remaining focused on the road ahead. Selecting modes and making settings and adjustments for each of the advanced electronic control systems simply involves operating the MODE and UP/DOWN switches, (which recognizes long and short presses), on the left handlebar.



Left Handlebar Switch



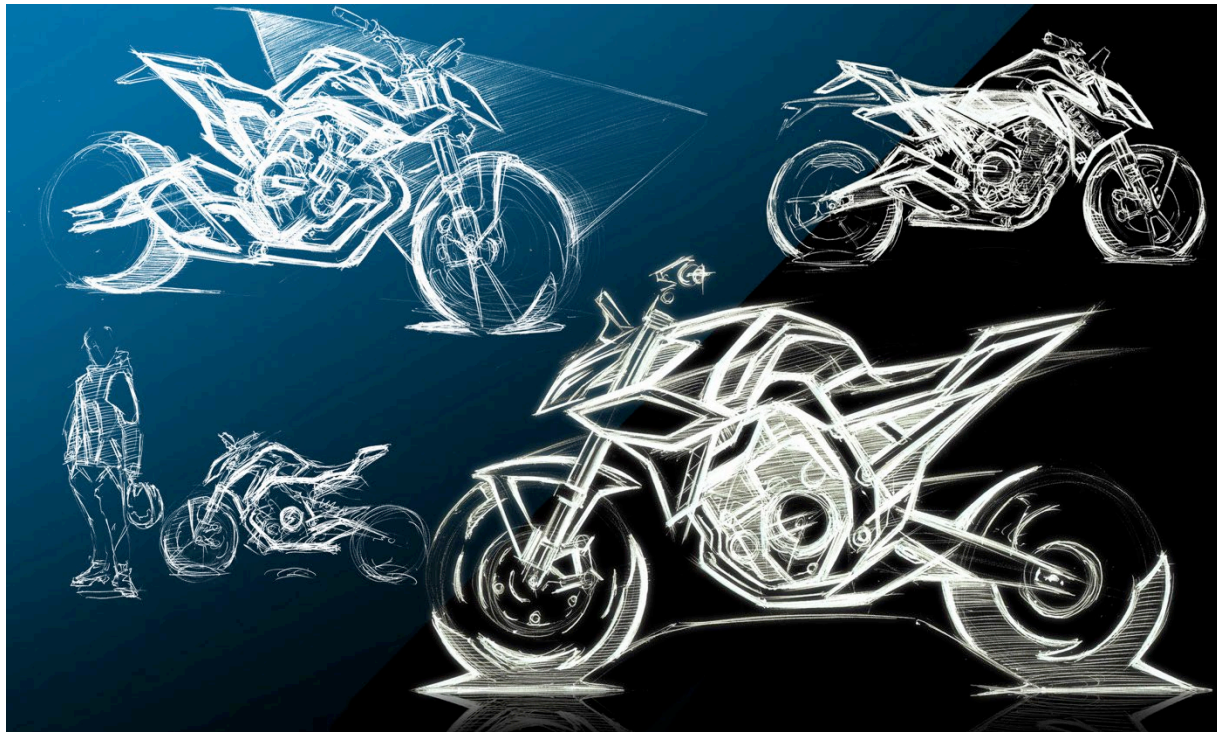
Right Handlebar Switch

The GSX-8S Design Concept is;

“An Icon for a New era of Functional Beauty”

In developing the styling for the new GSX-8S, Suzuki’s design team set a goal based on the three keywords, “New Era”, “Visual Structure”, and “Icon”.

“New Era” reflects the goal of creating a thoroughly modern design that sets a trend for an exciting new generation of motorcycles ready to carry the brand into the future. The 2022 model GSX-S1000 established the beginnings of a new design language featuring sharp lines and an edgy futuristic look. And now the GSX-8S is ready to take the ball and carry it a step further down the road. The design also takes clues from close observation of the latest trends that European riders find most appealing.



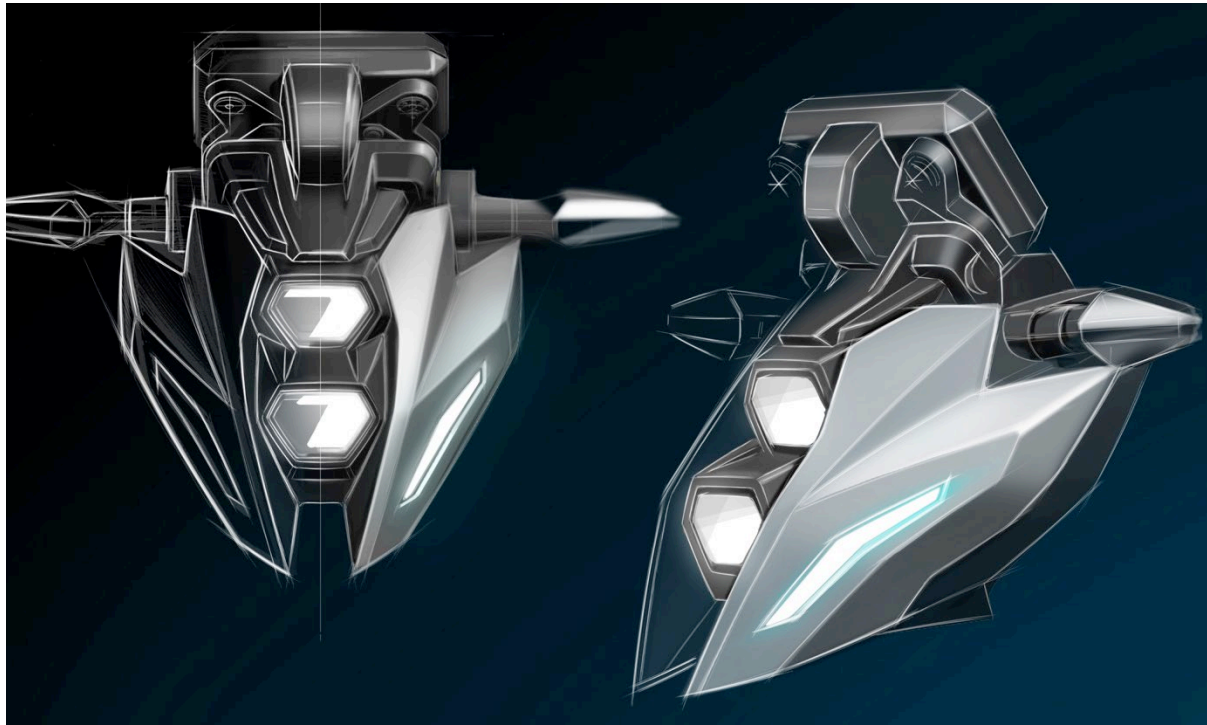




Image Sketch

“Visual Structure” reflects the goal of exposing the bike’s functional parts, painting them in the new body colors, and simplifying the bodywork and graphics to put a spotlight on the visceral appeal of its structural elements.

One key element involves minimizing the size of cosmetic panels to expose parts such as the engine and seat rails, thereby highlighting the mechanical appeal of functional beauty. It then extends to making the lines of the bodywork sharper with flatter surfaces to create a tough yet sophisticated look.

Highlights include details such as painting exposed parts such as the seat rails and aluminum wheels. They also include newly developed components such as the shortest muffler ever mounted on a Suzuki motorcycle and the compact new rear combination light mounted on the slim new rear fender.



Rear Fender

“Icon” reflects our goal to create a unique silhouette with iconic presence that is instantly recognizable from a distance and symbolizes the future of Suzuki design.

All combined, the styling creates an appealing new mass-forward, aggressive look that is slim, compact, well balanced, and ready for action. The new GSX-8S is set to become the naked street fighter of choice for riders of all experience levels.







Stunning New Body Colors

The GSX-8S introduces two new body colors created to coordinate well with the styling concept.

Suzuki set the color concept as “New Impact of Blue”. In keeping with the styling concept, it reflects the keyword “New Era” in presenting a new presentation of color combinations that embody the spirit of the next generation of street sport bikes. In highlighting the “Visual Structure, the exposed seat rails and wheels are painted blue (for the QU1 and QU2 body colors) to express the appeal of Suzuki’s industrial design. And the body graphics capture the essence of the third keyword, “Icon”. “New Impact of Blue” is intended as an evolution of the theme color long used on Suzuki’s street sport bikes, and therefore to become the symbol of the next generation.

Pearl Cosmic Blue (QU1) is a brand new color created exclusively for the GSX-8S. Its bright, solid pearl finish creates an expression that changes depending on how the light strikes it, even tricking the eyes almost into seeing it as illuminated when viewed in darker settings. This gives the color a unique new “spiritual” appeal that will resonate with a wide range of customers.

Pearl Tech White (QU2) features an appealing pearl finish with an inorganic “mechanical” look of high quality that conjures up images of exciting vehicles that might appear in a near-future science-fiction scene. It was also newly developed for introduction on the GSX-8S.



Pearl Cosmic Blue (QU1)



Pearl Tech White (QU2)

“Iconic” Body Graphics

The body decals adopt the fresh new font that first appeared on the GSX-S1000. This not only reflects the new model’s relation to the S1000, but also highlights the “8S” nickname logo, which somewhat resembles the endless loop of the infinity symbol, as a monogram inspired by iconography. They create a fresh look that will appeal to a wide range of customers of all ages.

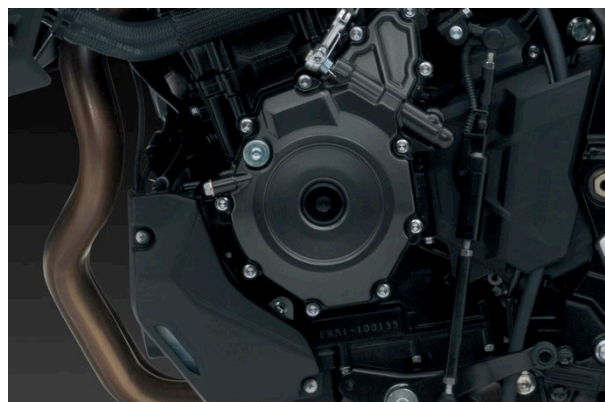


Body Graphics

The clutch cover and magneto cover are finished in a color selected to match the GSX-8S’s body color, while the SUZUKI name on the clutch cover is finished in a contrasting color to create an effective accent.



Clutch Cover



Magneto Cover

9. COLOR LINEUP

GSX-8S



Pearl Cosmic Blue (QU1)



Pearl Tech White (QU2)



Metallic Mat Black No.2 / Glass Sparkle Black (KGL)

10. SPECIFICATIONS

GSX-8S

Overall length		2,115 mm (83.3 in.)
Overall width		775 mm (30.5 in.)
Overall height		1,105 mm (43.5 in.)
Wheelbase		1,465 mm (57.7 in.)
Ground clearance		145 mm (5.7 in.)
Seat height		810 mm (31.9 in.)
Curb mass		202 kg (445 lbs.)
Engine type		4-stroke, 2-cylinder, liquid-cooled, DOHC
Bore x stroke		84.0 mm x 70.0 mm (3.3 in. x 2.8 in.)
Engine displacement		776 cm ³ (47.4 cu. in.)
Compression ratio		12.8 : 1
Fuel system		Fuel injection
Starter system		Electric
Lubrication system		Forced feed circulation, Wet sump
Transmission		6-speed constant mesh
Suspension	Front	Inverted telescopic, coil spring, oil damped
	Rear	Link type, coil spring, oil damped
Rake / trail		25° / 104 mm (4.1 in.)
Brake	Front	Disc, twin
	Rear	Disc
Tires	Front	120/70ZR17M/C (58W) tubeless
	Rear	180/55ZR17M/C (73W) tubeless
Ignition system		Electronic ignition (transistorized)
Fuel tank capacity		14 L (3.7/3.1 US/Imp gal)
Oil capacity (overhaul)		3.9 L (1.0/4.1 US/Imp qt)
Fuel consumption		23.8 km/L (4.2 L/100km) in WMTC
CO ₂ emissions		99 g/km

European Spec. shown.

Actual fuel consumption and CO₂ emissions may differ owing to conditions such as the weather, road, rider behavior and maintenance.

Specifications, appearances, color (including body color), equipment, materials and other aspects of the SUZUKI products shown in this catalog are subject to change by Suzuki at any time without notice and they may vary depending on local conditions or requirements.