PRESS INFORMATION

November 2023

GSX-8R

Professional rider in closed conditions.

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Setting the Trend for a New Era of Sportbikes

The Suzuki GSX-8R introduces an exciting new expression of sportbike appeal, performance and riding pleasure. Controllable, agile, and designed to satisfy, whether riding around town or heading out for a sporty run through winding mountain roads on the weekend, the GSX-8R is destined to appeal strongly to customers across a wide range of ages and levels of experience.

The GSX-8R joins the GSX-S series, featuring superbike looks that evoke anticipation of riding pleasure combined with satisfying sports performance, reassuring controllability and optimized comfort.

The GSX-8R builds on the solid engineering advances. At the core is Suzuki's new-generation parallel twin 776cm^3 DOHC engine with the frame built around it to form a perfect package. Every aspect of the design is geared to delivering a satisfying experience to riders who desire more power than the 650cm^3 class can deliver, who aspire to riding a bike with the sharp styling of a thoroughbred sportbike, and who desire a satisfying ride that is reassuring and reliable.
The chassis and free-revving engine respond faithfully 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 an exhilarating ride they will continue to enjoy for many years.

Wrapped in the unique styling of a thoroughly modern interpretation of Suzuki's sportbike heritage, the GSX-8R features an aggressive, mass-forward look that is slim, compact, well balanced, and ready for action.

The New Standard of Sport

The product concept “The New Standard of Sport” is intended to convey how the GSX-8R combines practical real-world performance, rider-friendly controllability and advanced equipment features with cutting-edge sportbike styling. Designed to appeal to riders of all ages and skill levels, the GSX-8R brings the fun of riding a sportbike to every outing, whether commuting to work or school, taking a quick trip to the local shops, or heading out for an exhilarating run through winding mountain roads. The harmonious pairing of Suzuki’s parallel twin engine with an optimized chassis layout offers riders power, handling, and comfort that faithfully follows their will and puts them in full control.

The GSX-8R introduces a thoroughly modern design expression that celebrates functional beauty backed by exciting yet forgiving performance. The sharp lines of its advanced styling is about to set the trend for an exciting new generation of Suzuki sportbikes.

With progressive features ranging from its parallel twin engine, robust frame, separate forged aluminum handlebars, uniquely shaped aluminum swingarm, inverted front forks, dual front disc brakes with four-piston radial-mount calipers, LED lighting and color TFT LCD multifunction instrument panel, to advanced electronic control systems that include Suzuki Drive Mode Selector, Suzuki Traction Control System, the Bi-Directional Quick Shift system and the Ride-by-Wire Electronic Throttle System, the GSX-8R is a sportbike destined to lead the way toward an exciting new era of riding pleasure.

KEY PRODUCT FEATURES

Engine Features:

- 776cm^3 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 provides power delivery characteristics and a pleasing sound similar to that of the model's V-twin brethren.
- The Suzuki Cross Balancer is a patented biaxial primary balancer that contributes to smooth operation and a compact, lightweight engine design.
- Long-reach iridium spark plugs help enhance combustion efficiency.
- 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 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 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:

- Rugged steel frame contributes to comfort, straight-line stability and nimble handling.
- Forged aluminum separate handlebars contribute to positive control and a sporty riding position.
- The windscreen was purposefully developed to help reduce fatigue on long rides.
- Dual four-piston radial mount front disc brake calipers act on ø310mm discs to provide sure stopping power and controllability.
- Cast aluminum wheels featuring a unique design contribute to nimble handling and a sporty appearance.
- Dunlop SPORTMAX Roadsport2 tires contribute to nimble, predictable handling and sporty performance.
- Hitachi Astemo (SHOWA) SFF-BP* (Separate Function Fork – Big Piston) inverted front forks deliver a smooth, controllable ride.
  *SFF-BP is a registered trademark of Hitachi Astemo, Ltd.
- Hitachi Astemo (SHOWA) link-type rear suspension contributes to agility and stability.
- Features a uniquely shaped lightweight aluminum swingarm with enhanced torsional rigidity that contributes to nimble handling and straight-line stability.
- The 14L fuel tank features a stunning slim design.
- Cowl (frame) mounted headlight assembly contributes to agility and neutral steering feel.
- The rider's seat is designed for comfortable sport riding, delivering solid support and shaped to offer freedom of movement.
- New cowl-mounted mirrors enhance aerodynamic performance and wind protection.

Electric Equipment Features:

- Custom 5-inch color TFT LCD multi-function instrument panel displays a wealth of information in clearly legible fashion.
- Vertically stacked hexagonal LED headlights topped by an LED position light provide a clear view of the road ahead and enhance the sharp looks and bold presence of the front cowl.
- The LED rear combination light features a distinctive design.
- The turn signals adopt LEDs, which are highly visible and feature long life.

Styling Features:

- Advanced styling pays tribute to Suzuki's sportbike heritage while aiming to create a new look that symbolizes the future of Suzuki sportbike design.
- The cowling is wind tunnel tested to lower the drag coefficient, improve high-speed stability and make touring more comfortable by providing the rider with better wind protection.
- The bodywork features flat surfaces and sharp lines that emphasize the GSX-8R's compact, slim and well-balanced proportions.
- Exposed parts such as the engine and seat rails are painted to highlight the mechanical appeal of functional beauty.
- The characteristic short muffler pipe accentuates the slim, compact design.
- The compact LED rear combination light and LED license plate light mounted on the slim rear fender make the GSX-8R rear end look even shorter and slimmer.
- Bold graphics that employ iconic typography create a presence that is instantly recognizable and equally appealing.
- Body colors paired with colored wheels bring fresh appeal that will resonate with a wide audience.

3. KEY COMPARISON

<Key Comparison of GSX-8R and GSX-8S.>

GSX-8R

GSX-8S

Note: North American spec GSX-8R and European spec GSX-8S shown

No.	Features	GSX-8R	Benefit	GSX-8S	Benefit
1	Windscreen	Aerodynamic design	Reduced fatigue on long rides	–	–
2	Fairing	Full fairing	Reduces fatigue on long rides and enhances sporty appearance	–	–
		GSX-R inspired front fairing design	Smooth air flow contributes to a more stable ride		
3	Handlebars	Forged aluminum separate handlebars	Provides a sporty riding position	Tapered aluminum handlebars	Provides an upright riding position
4	Headlights	Cowl (frame) mounted	Contributes to agility and neutral steering feel	Fork mounted	Light beam follows handlebar angle
5	Position light(s)	Stacked atop the LED headlights	Sharp look with unique character	Flank the headlights	Add to the unique front “mask”
6	Mirror	Cowl mounted	Aerodynamic performance and wind protection	Handlebar mounted	Tall position allows for clear viewing
7	Front suspension	Hitachi Astemo (SHOWA) SFF-BP* inverted front forks	Deliver a plush, controllable ride suitable for both sporty runs and touring	KYB inverted front forks	Deliver a plush, controllable ride suitable for both sporty runs and touring
8	Rear suspension	Hitachi Astemo (SHOWA) link-type mono-shock with preload adjuster	Contributes to straight-line stability and a smooth, controllable ride	KYB link-type mono-shock with preload adjuster	Contributes to straight-line stability and a smooth, controllable ride

* SFF-BP is a registered trademark of Hitachi Astemo, Ltd.

An Engine Engineered for a New Era of Sportbike Fun

Creating the perfect sportbike for the next era began with the engine design. Suzuki's engineers first 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. They also sought to deliver dynamic performance that would excel whether enjoying a solo run on a winding mountain road or riding around town in daily use. The 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.

With these objectives in mind, Suzuki designed a parallel twin 776cm^3 DOHC, 4-valve-per-cylinder engine. The 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.

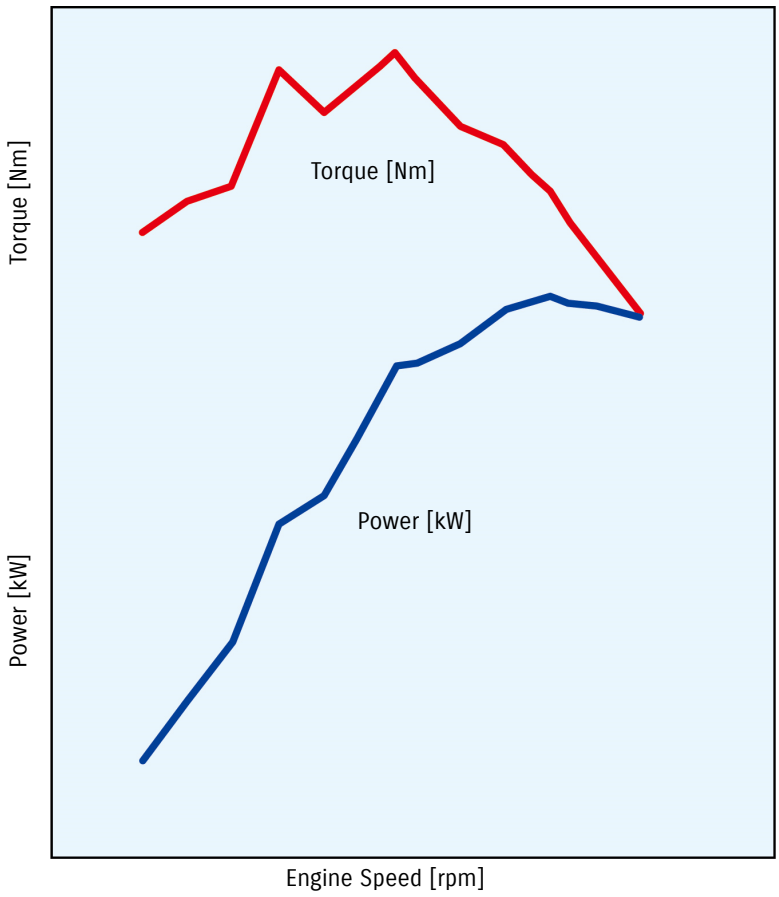
The engine features a 270-degree crankshaft design, which delivers a smooth ride with plenty of torque, positive traction and a pleasing rumble. It also adopts the Suzuki Cross Balancer, an innovative primary balancer design that contributes to smooth operation and helps achieve a compact and lightweight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

776cm^3, 4-stroke, 2-cylinder, Liquid-cooled, DOHC, Parallel Twin Engine

776cm^3, 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

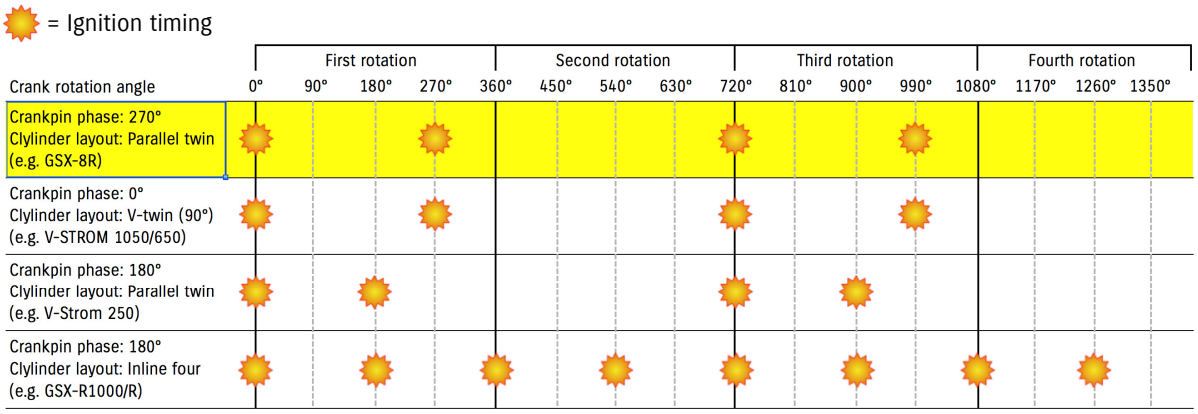
Note: Actual fuel consumption may differ owing to conditions such as the weather, road, rider behavior and maintenance.



Engine Performance Curve

270-degree Crankshaft

The ignition timing of the engine's 270-degree crankshaft layout is the same as that on the (90°) V-twin engines Suzuki has been developing and evolving for many years. 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.

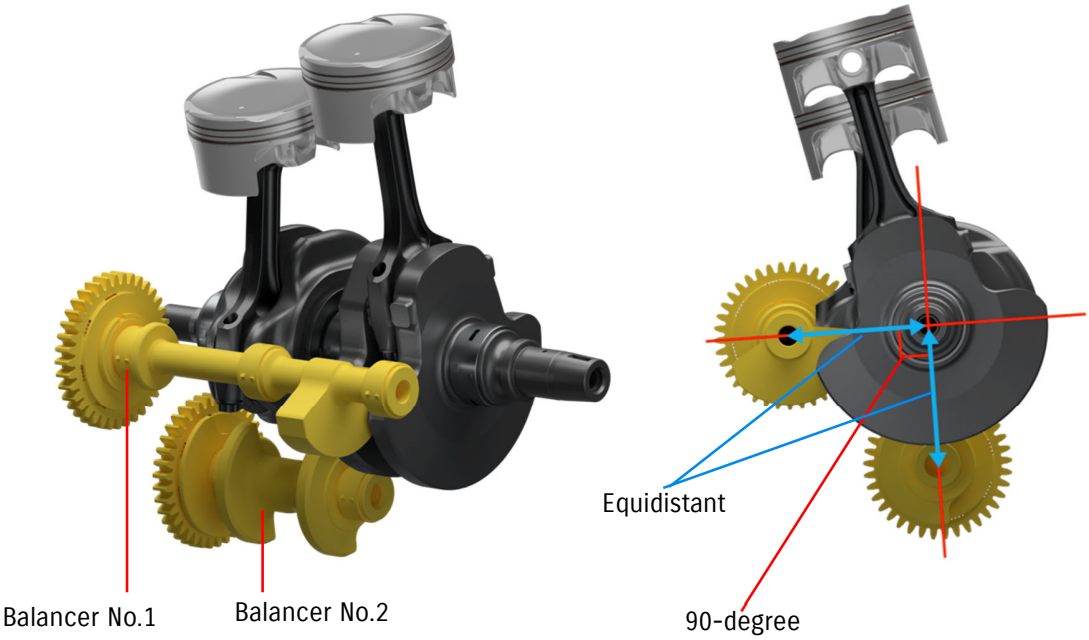


Suzuki Cross Balancer

The engine introduces Suzuki Cross Balancer. This patented biaxial primary balancer positions its two balancers at 90° to the crankshaft*1. 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.

Suzuki Cross Balancer



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.

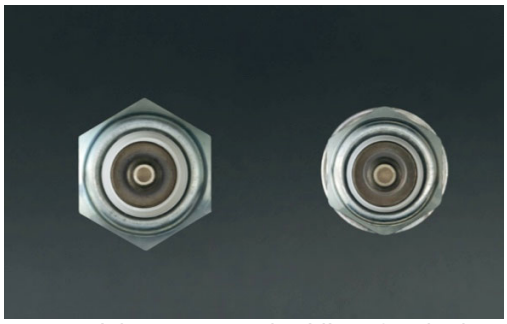
Suzuki Composite Electrochemical Material (SCEM)

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.

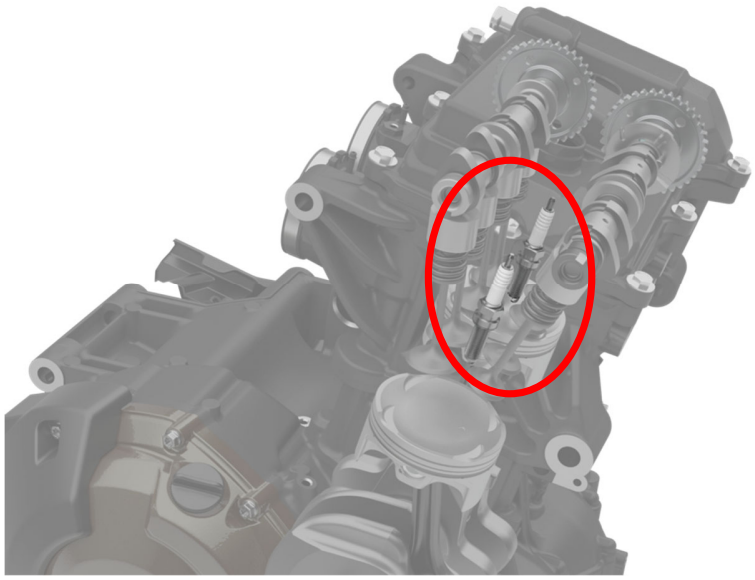
Long-reach iridium spark plugs

Long-reach iridium spark plugs bring a number of benefits. Firstly, their extended length makes it easier to secure a cooling channel around the plug, leading to improved cooling performance. Secondly, they are thin enough that they contribute to optimizing the combustion chamber layout. And thirdly, they leverage the strong spark characteristics of iridium plugs to aid combustion efficiency, while also contributing to greater fuel economy.

Right: Long-reach Iridium Spark Plug
Left: Conventional Iridium Spark Plug



Right: Long-reach Iridium Spark Plug
Left: Conventional Iridium Spark Plug



Position of Long-reach Iridium Spark Plugs

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

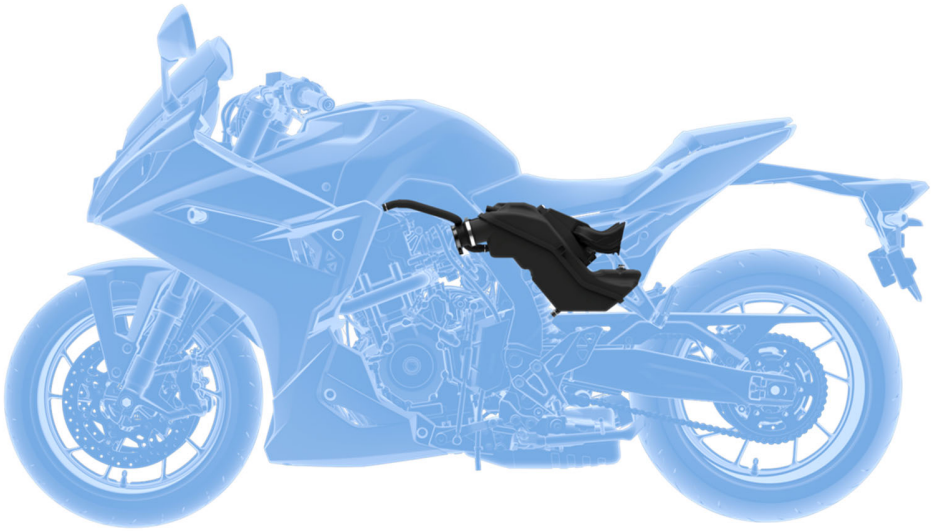
The GSX-8R employs 10-hole, long-nosed, 343kpa high-pressure-feed fuel injectors that maximize fuel atomization for better combustion efficiency and lower fuel consumption.

Transmission

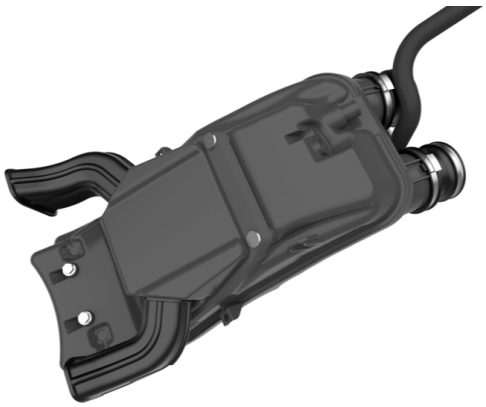
The six-speed transmission adopts gear ratios that deliver smooth shifting and exciting acceleration, whether shifting normally or using the standard-equipment Bi-directional Quick Shift system to shift without clutch operation.

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 achieve maximum power output.



Position of Air Cleaner Box



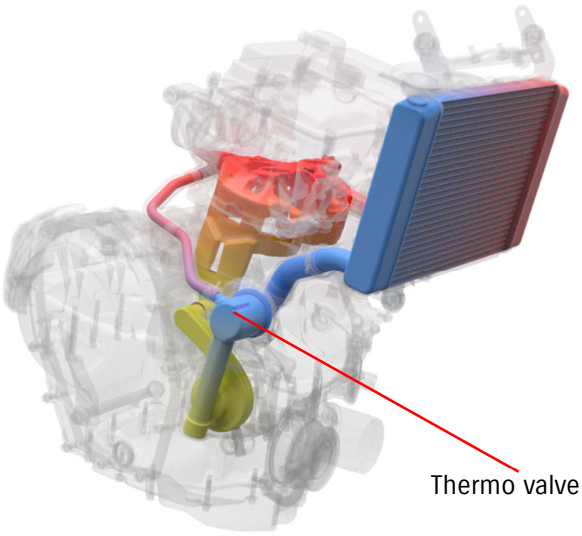
Air Cleaner Box (outside)

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.

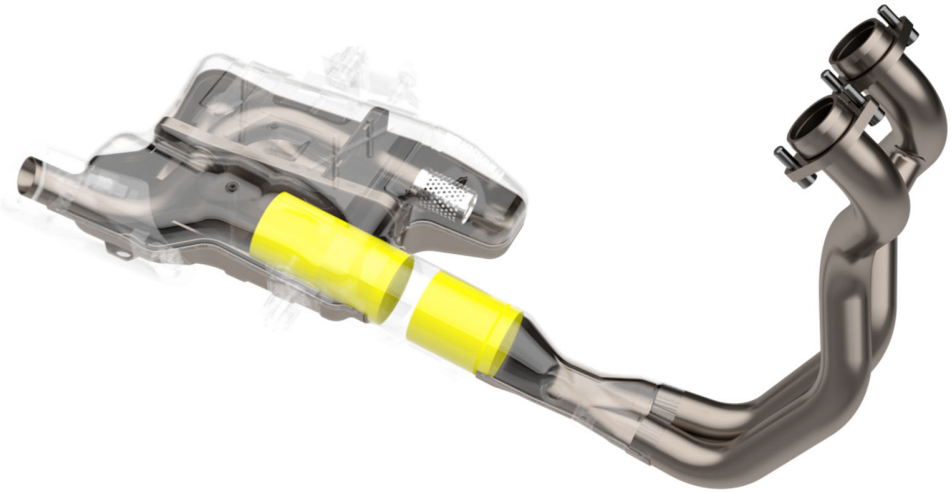


Cooling System Inlet Control

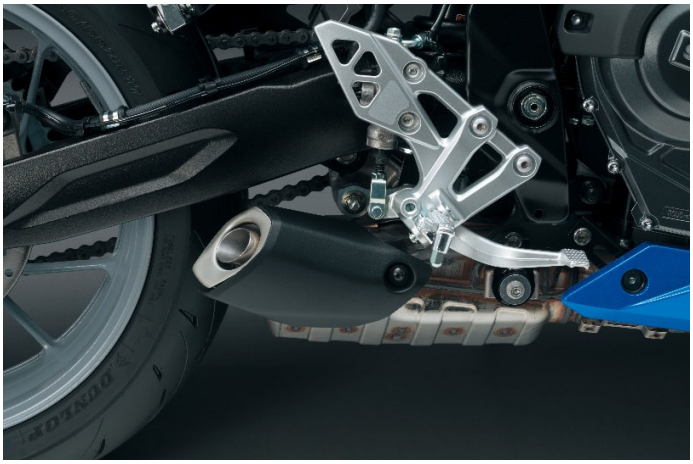
The GSX-8R is also equipped with a lightweight, compact liquid-cooled oil cooler that helps keep lubrication temperatures cooler for even smoother and reliable engine operation.

Distinctive Short Muffler Design

The 2-into-1 exhaust system for the GSX-8R is designed to produce a pleasing note that befits the 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 muffler design that barely rises up and out from the right side of the engine.



Exhaust System



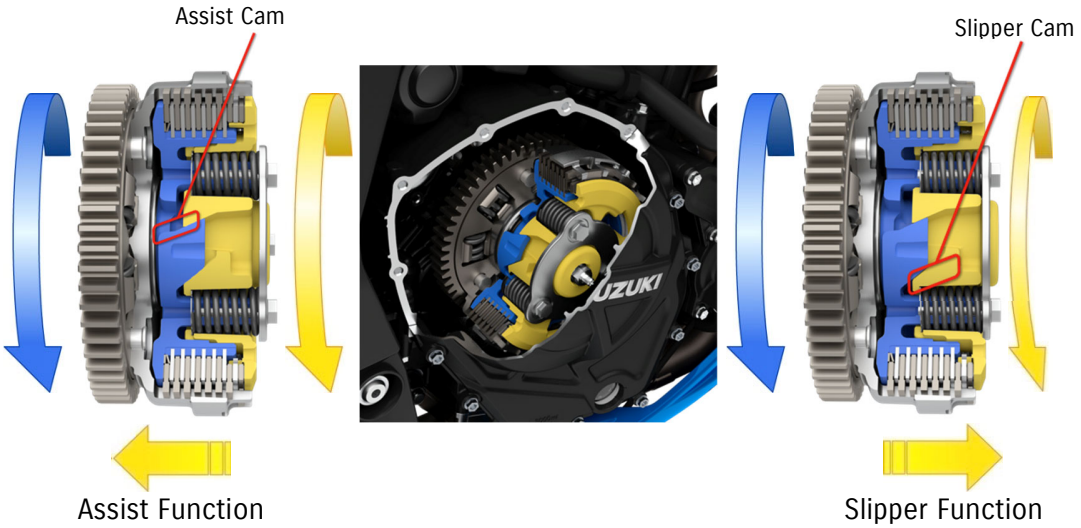
Short Muffler Design

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

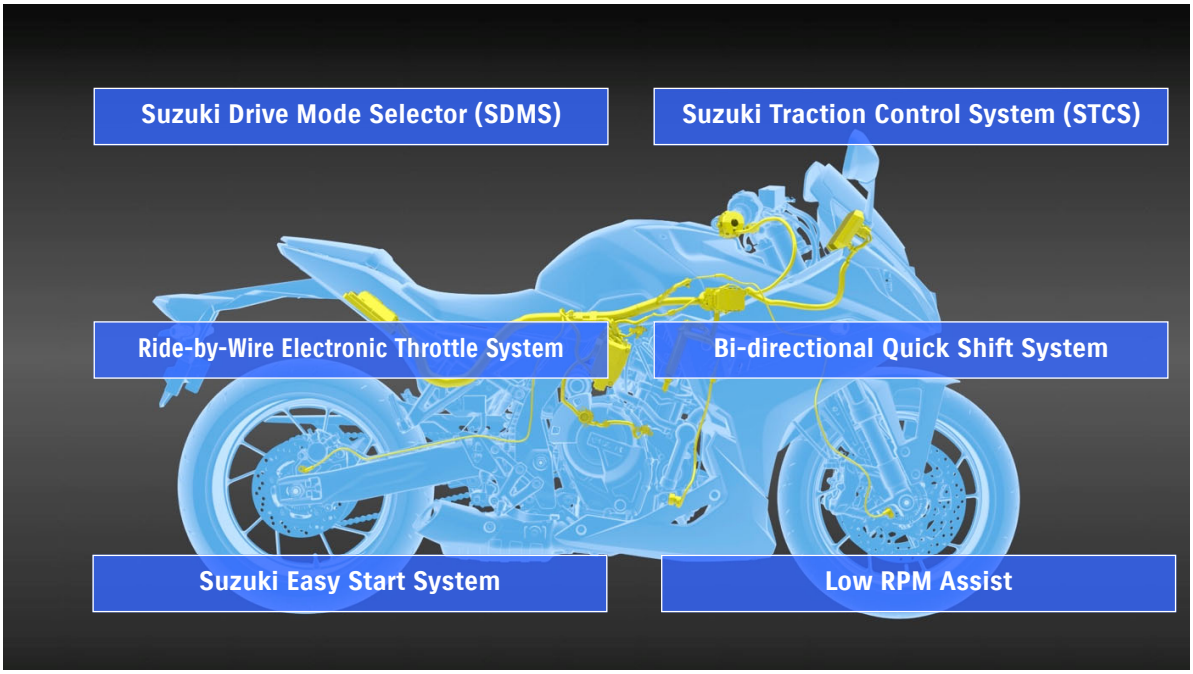


Introduction

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-8R 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-8R include the Suzuki Drive Mode Selector (SDMS), Suzuki Traction Control System (STCS), Ride-by-Wire Electronic Throttle System, Bi-directional Quick Shift System, Suzuki Easy Start System, and Low RPM Assist.

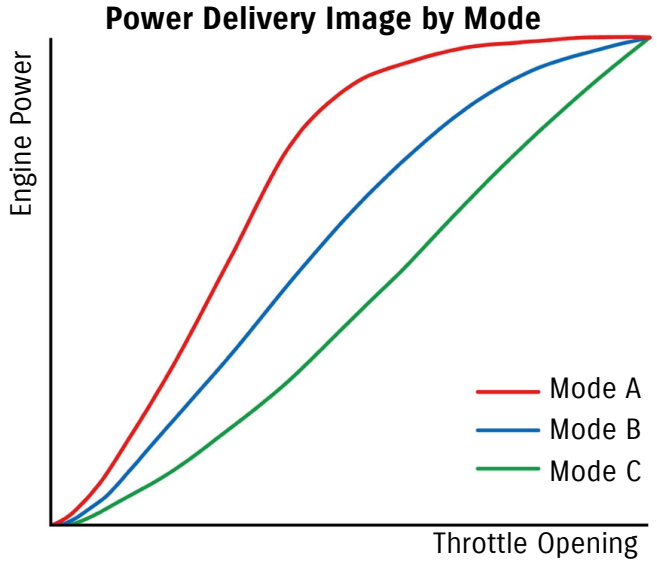
Suzuki Intelligent Ride System (S.I.R.S.)



(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-8R's capabilities as a top-performing sportbike, to build in the flexibility to adapt well to changing weather, road, and riding conditions, and to make the overall riding experience more enjoyable.



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-8R 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.

Note: SDMS is not available for under power model/A2 model.

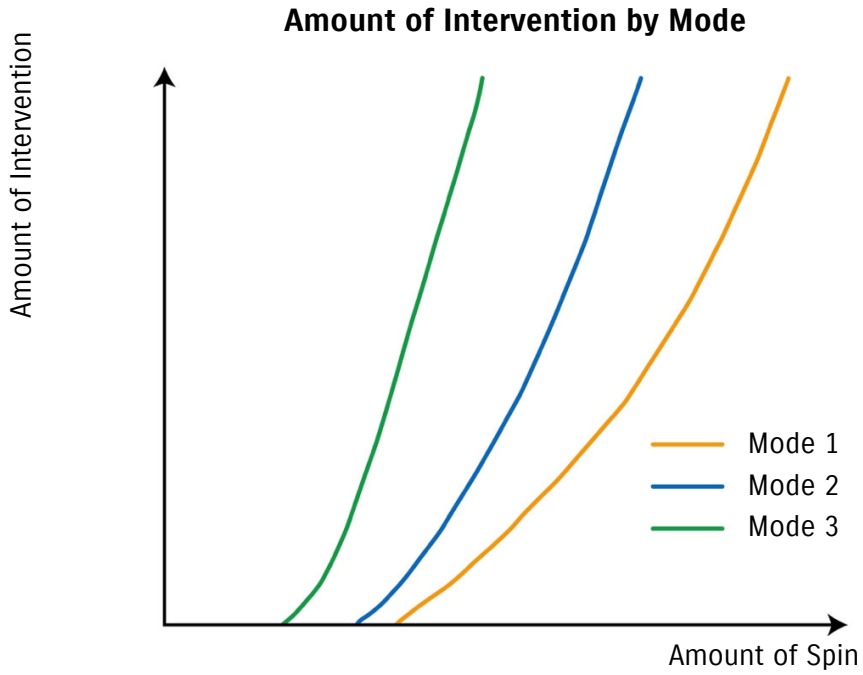
(2) Control over Engine Acceleration Characteristics

Suzuki Traction Control System (STCS)

STCS for the GSX-8R 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.

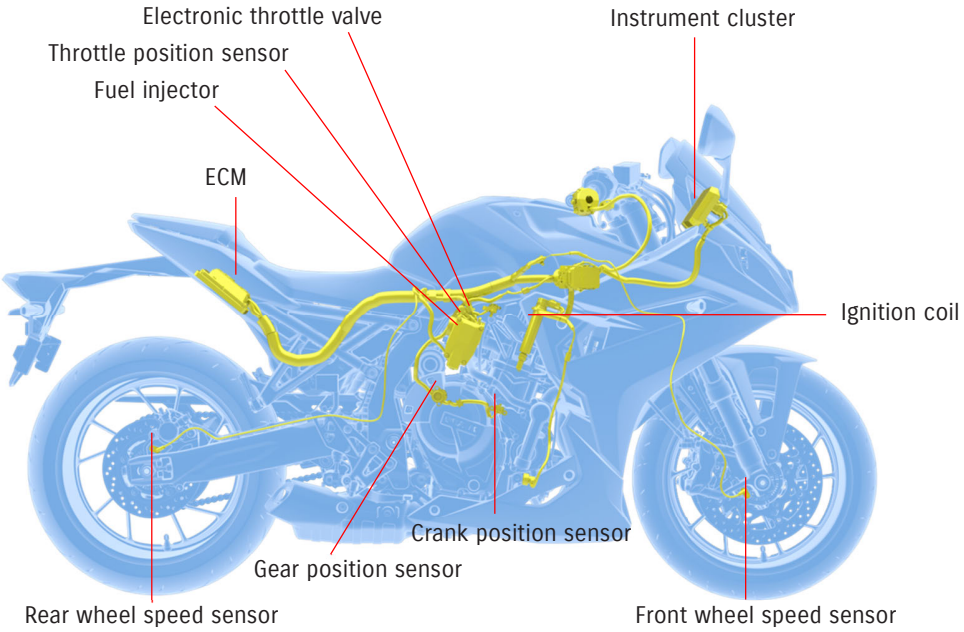
The rider can select from 3 modes or turn the system off. The higher number the mode, the faster the control takes effect and the more proactive the system is in limiting wheel spin. As such, Mode 1 is for sport riding with minimal intervention from the system. Mode 2 offers a balance that is ideal for 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: Traction Control System is not a substitute for the rider's throttle control. It cannot prevent loss of traction due to excessive speed when entering turns, or while braking. Nor can it prevent the front wheel from losing traction.

Suzuki Traction Control System Overview Diagram



(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 precision control over throttle body action to optimize operation of each mode setting for the Suzuki Traction Control System and SDMS to produce a riding feel best matched to the specifications and performance characteristics of the GSX-8R.

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 handlebar.

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-8R, 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 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. ABS cannot prevent wheel skidding caused by braking while cornering. Please drive carefully and do not overly rely on ABS.

Supporting Technologies

Controller Area Network (CAN bus)

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

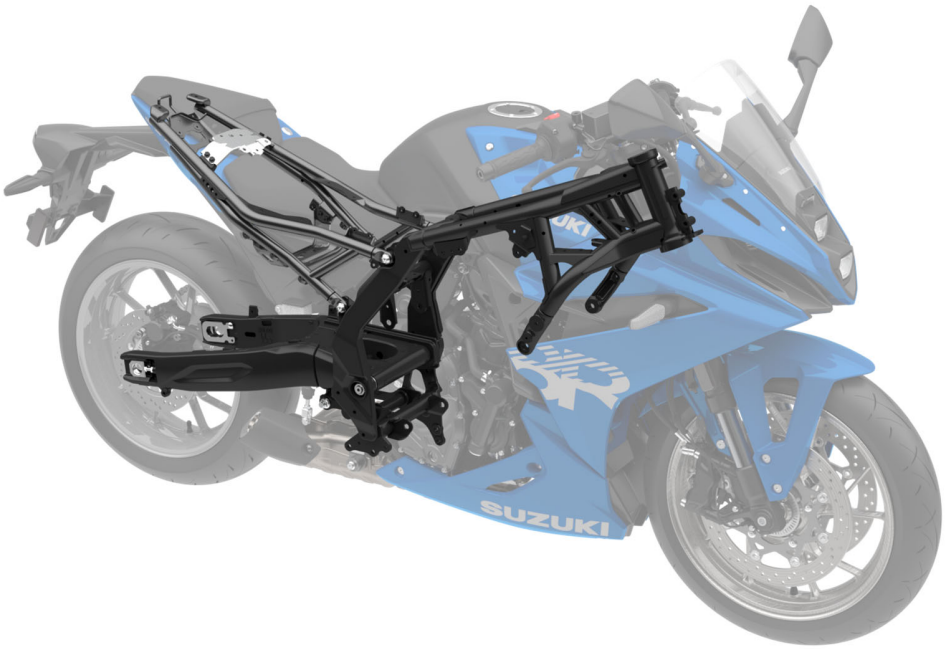
Engine Control Module (ECM)

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 Support Satisfying Sportbike Performance

Development efforts aimed to maximize agility, comfort, utility and reassuring riding pleasure. The end goal was to deliver great handling and control whether riding through town or enjoying a sporty run on a twisty mountain road, and even when riding with the optional soft side cases attached, on fully leveraging the potential of the high-performance parallel twin engine and on minimizing fatigue, even on long rides. The frame and swingarm were designed around the parallel twin engine to create a core structure that is strong and highly rigid, to contribute to a chassis layout that is both compact and light, and to perform optimally on the street.

The chassis layout considerations covered every detail, 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, engine and advanced controls of the Suzuki Intelligent Ride System (S.I.R.S.).

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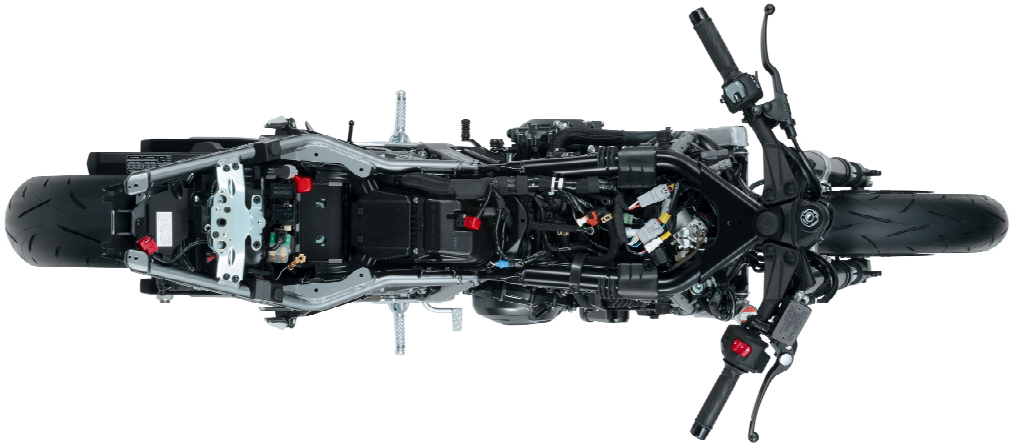


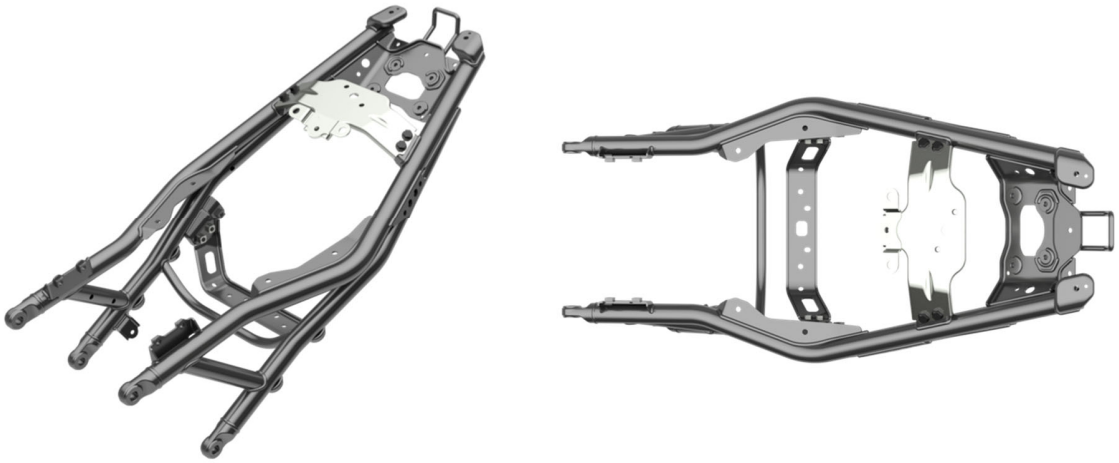
The Perfect Frame for Sporty Street Performance

Designed as a perfect pairing with the parallel twin engine platform and made from rugged steel pipe with just the right amount of flex to minimize fatigue on long rides, the frame was engineered to contribute to nimble handling, to provide excellent straight-line stability, and to perform equally well in the city, on the highway, or when negotiating winding mountain roads.

The headlight assembly is mounted directly to the frame, reducing the amount of weight carried by the handlebars to make the GSX-8R even more controllable and realize a more neutral feel to steering.

In addition, the exposed seat rails are engineered to support the rider well, and also to contribute to the GSX-8R's slim appearance and sporty, functional appeal.

Frame and seat rails



Seat Rails

Forged Aluminum Separate Handlebars

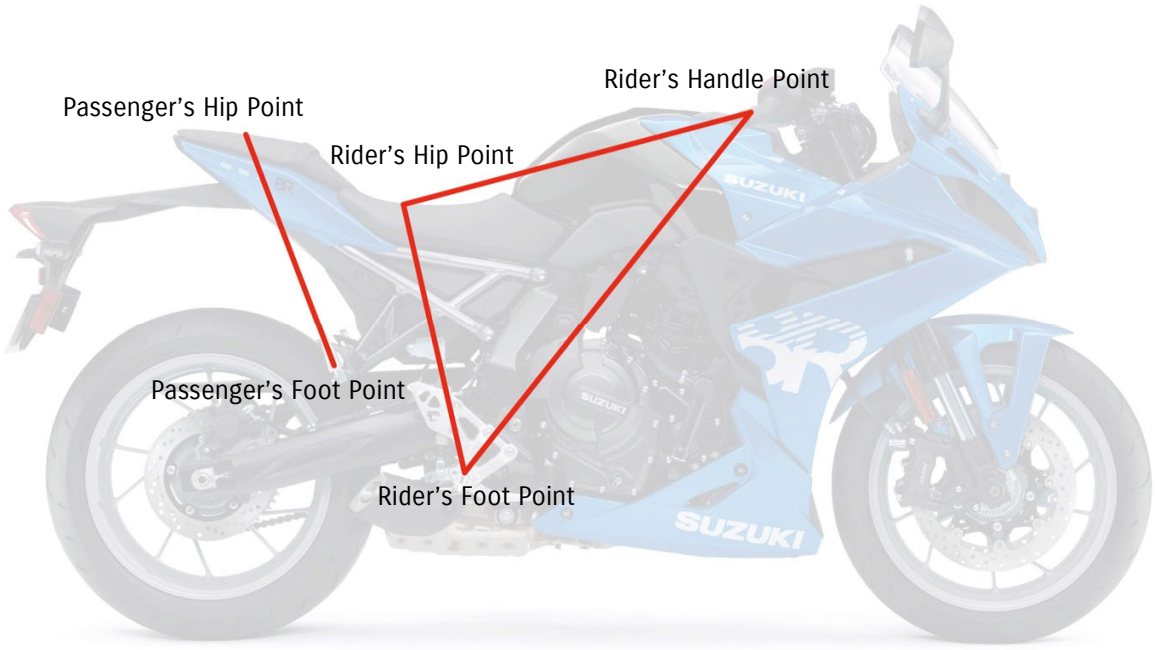
The GSX-8R adopts forged aluminum separate handlebars. The use of aluminum not only minimizes weight, but the pressure applied in the forging process also contributes to creating highly rigid components.
The lower, more forward placement of the separate handlebars helps the rider lean over the bars in a sporty riding position that makes aggressive runs all the more enjoyable.

Forged Aluminum Separate Handlebars

Chassis Geometry and Riding Position

The GSX-8R features a wheelbase long enough to enhance 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.

One priority was to provide a sporty riding position that effectively distributes weight to the front and rear while offering the rider comfort, particularly on long rides. Aluminum separate handlebars help achieve this by offering the rider a forward-leaning posture that makes sport riding all the more enjoyable. In addition, Suzuki's 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 forward and more easily control the GSX-8R when negotiating tight corners.



Riding Position

Windscreen

The windscreen for the GSX-8R was developed through extensive wind tunnel testing to help reduce fatigue on long rides by cutting wind noise and preventing buffeting.

Windscreen

Disc Brakes Provide Sure Stopping Power

Dual four-piston 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.

Dual Front Disc Brakes

Cast Aluminum Wheels and High-Performance Tires

The unique lightweight design of the cast aluminum wheels feature contribute to nimble handling and sporty performance, while also enhancing the sporty looks of the GSX-8R. Dunlop RoadSport 2 radial tires (120/70ZR17 at the front; 180/55ZR17 at the rear) designed to perform optimally and provide sure grip. The 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-8R, and to deliver the right combination of agility and stability. Dunlop's proven tread pattern employs a 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

Optimized Front and Rear Suspension

Hitachi Astemo (SHOWA) SFF-BP (Separate Function Fork – Big Piston) inverted front forks allows for the elimination of the cartridge on one side and made it possible to increase the size of the piston. The structure not only reduces weight, but also features stable damping characteristics that make the forks suitable for both sports riding and long-distance runs. The dedicated link-type mono-shock rear suspension with preload adjuster is set up to contribute to straight-line stability and a smooth, controllable ride.

*SFF-BP is a registered trademark of Hitachi Astemo, Ltd.

Front Suspension

Rear Suspension

Uniquely Shaped Lightweight Aluminum Swingarm

The highly attractive aluminum swingarm employs a unique shape engineered to perform optimally under all street riding conditions and provide sure handling stability. Its lightweight aluminum construction enhances trackability and improves rear suspension response while at the same time contributing to a smoother, more comfortable ride.

Uniquely Shaped Lightweight Aluminum Swingarm

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-8R's sportbike styling.

Seating that Supports Sport Riding

The rider's seat is designed for comfortable sport riding. Delivering solid support 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, its smoothly rounded edges also help the rider more easily to plant their feet on the ground when stopped. The separate pillion seat includes a hand strap for the passenger.

Seat

Cowl-Mounted Mirrors

The new cowl-mounted mirrors are designed and tested to enhance aerodynamic performance and wind protection. Their sharp design adds sophisticated flair to the GSX-8R's modern expression of sporty styling. Being cowl-mounted, they also reduce the amount of eye movement required for viewing, so help make long-distance rides even more relaxing and less tiring.

Cowl-Mounted Mirrors

Sporty 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.

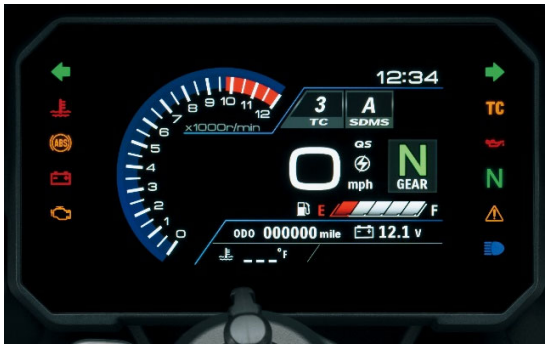
Front Fender

5-inch Color TFT LCD Multi-Information Display

The custom 5-inch color TFT LCD multi-function instrument panel for the GSX-8R features a clearly legible display that conveys 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 turn signal indicators, MIL (Malfunction Indication Light), neutral indicator, master warning indicator, high-beam 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 clear display of information using attractive graphics, including blue highlight lines on the tachometer that add extra flavor and convey the appeal and spirit of the Suzuki brand identity. It also offers manual or automatic switching between day (white) and night (black) display modes to help maximize visibility at any hour and in any riding situation.

Striking LED Headlight Design

The vertically stacked pair of hexagonal LED headlights employ a bright mono-focus 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 topped by an LED position light 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 Rear Combination Light and turn signals

The LED rear combination light and LED license plate light mounted on the slim rear fender contributes to a sporty design that makes the GSX-8R look even shorter, slimmer and lighter in the rear.

LED Rear Combination Light

Handlebar Switches Designed for Intuitive Operation

The ergonomic switch layout maximizes operating ease and efficiency, allowing the rer 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 recognize long and short presses), on the left handlebar.

Left Handlebar Switch

Right Handlebar Switch

The GSX-8R Design Concept is;

“Next-Generation Suzuki Sportbike Styling”

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

“New Era” reflects a further evolution of the futuristic design language introduced on the GSX-8S. The goal was to create a thoroughly modern interpretation of sportbike styling compelling enough to set a trend for an exciting new generation of motorcycles ready to carry the Suzuki brand into the future.

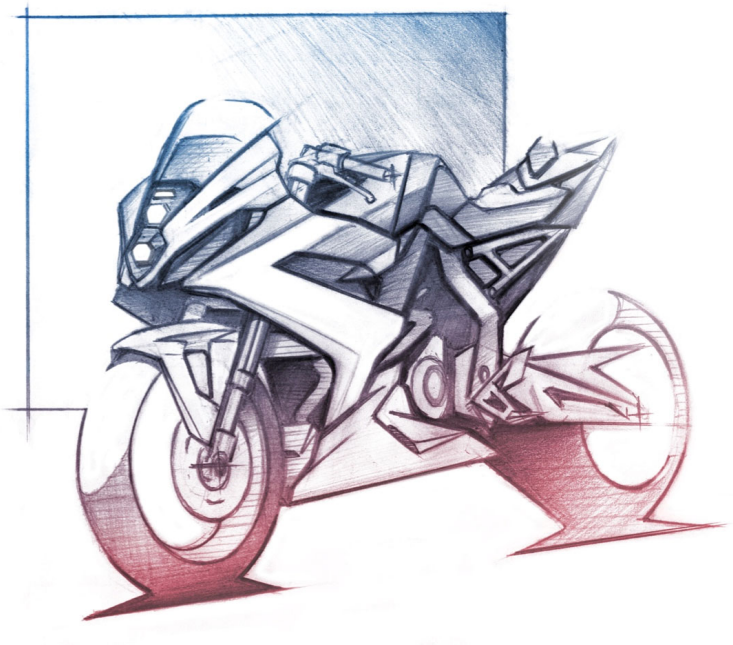


Image Sketch

“Visual Structure” reflects the goal of exposing the bike’s functional parts and painting them to put a spotlight on the visceral appeal of the GSX-8R’s structural elements and highlight the mechanical appeal of functional beauty. Highlights include details such as the separate handlebars, the painted seat rails and aluminum wheels, the short muffler design and the slim rear fender.

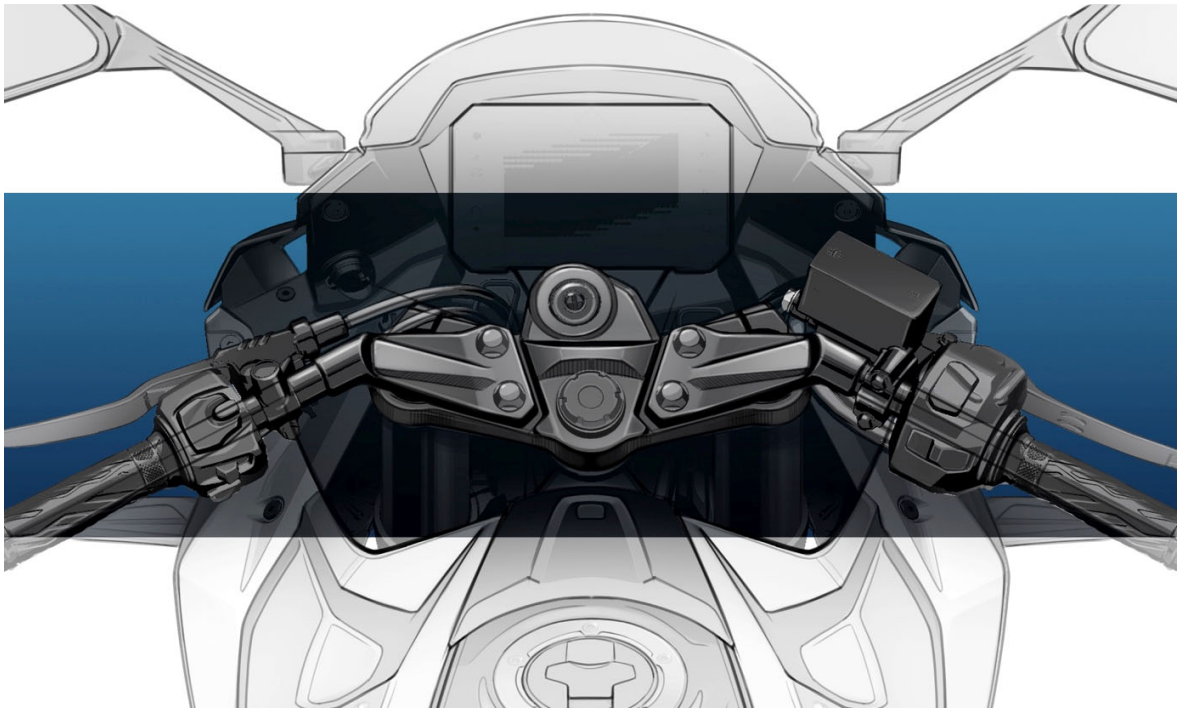


Image Sketch

“Icon” symbolizes the respect Suzuki’s designers paid to the iconic GSX-R series design and over 35-year heritage of the series, even while working to create a thoroughly modern interpretation. One example of the tribute to GSX-R styling is the front fairing design.
Though not required for the same purpose as on the GSX-R, the front fairing is a functional element employed to streamline the flow of air from the cowling out the sides. This in turn reduces turbulence and contributes to a more stable ride.
Though related to the GSX-R series in terms of DNA, the GSX-8R presents a fresh new face that symbolizes the future of Suzuki sportbike design.

Image Sketch

Front fairing

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-8R is set to become the mid-size sportbike of choice for riders of all experience levels.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Street-Cool Body Colors

The GSX-8R color concept “Brave Fighter” is intended to convey the appeal of energetic and powerful colors carefully selected to excite riders and inspire them to head out, explore their surroundings and make new discoveries along the way.

Metallic Triton Blue (YSF) not only represents Suzuki’s sportbike brand identity, but it also features a sporty look that symbolizes performance, speed and agility. In adopting this color, the GSX-8R conveys that it is a fully cowled sport machine and that it is built to appeal to a wide range of riders.

Pearl Ignite Yellow (QZY) is an exciting color that represents a new direction for Suzuki sportbike design and reflects the anticipation of an exciting ride the color evokes in the rider. As such, it fully embodies the “Brave Fighter” color concept.

Metallic Triton Blue

Pearl Ignite Yellow

“Iconic” Body Graphics

The large “8R” graphic on the sides of the cowling is layered upon a pattern that conjures up images of racetrack curb stripes or caution flags. The result is a sporty new design that also embodies the “New Era” styling concept keyword. “GSX-8R” decals applied on the front cowl and rear sides help raise recognition for this new model, creating 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-8R, while the SUZUKI name on the clutch cover is finished in a contrasting color to create an effective accent.

Clutch Cover


Magneto Cover

Metallic Triton Blue (YSF)

Pearl Ignite Yellow (QZY)

Metallic Mat Sword Silver (QKA)

Metallic Mat Black No.2 (YKV)

11. SPECIFICATIONS

GSX-8R

Overall length		2,155 mm (84.8 in.)
Overall width		770 mm (30.3 in.)
Overall height		1,135 mm (44.7 in.)
Wheelbase		1,465 mm (57.7 in.)
Ground clearance		145 mm (5.7 in.)
Seat height		810 mm (31.9 in.)
Curb mass		205 kg (452 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 in WMTC

North American Spec. shown.

Actual fuel consumption and CO_2 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 document are subject to change by Suzuki at any time without notice and they may vary depending on local conditions or requirements.