# GSX-8R

# Press information

**November 2023**

## Contents

# 1. Introduction

**Advancing a new era of sportsbikes**

The new GSX-8R advances a new era of sportsbikes, bringing real world performance and appeal to a new generation of sportsbike riders. Easy to ride, agile, and comfortable, it'll satisfy riders enjoying spirited rides on their favourite country roads or those wanting to show their sporting credentials when in town, and appeal to a range of ages and experience levels.

It becomes the latest new model from Suzuki to utilise the new 776cc, parallel twin cylinder engine with its 270° crankshaft configuration, with common features shared with the new-for-2023 GSX-8S, including a steel frame designed to contribute straight line stability and agile handling and separate aluminium subframe, cast aluminium wheels, and dual, radially mounted front calipers.

However, key component changes - such as lower handlebars and a full fairing, plus suspension from Showa - give the GSX-8R a sportier poise, while the chassis and flexible, free-revving engine characteristics mean riders can tap into its full potential for maximum enjoyment.

Its sporting prowess is further emphasised by GSX-R-inspired bodywork that give it an aggressive, purposeful look.

## 2. Product concept

**The new standard of sport**

Designed using the product concept of: *the new standard of sport*, the GSX-8R was created to combine practical, usable, real world performance with rider-friendly controllability and ease of use. It has the ability to excite riders of greater experience and skill levels, while newer riders can step up to a larger machine with confidence. This is achieved thanks its parallel twin engine layout and power delivery characteristics, its supporting electronics package, and chassis design.

The GSX-8R uses 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 sportsbikes.

With features including separate forged aluminium handlebars, uniquely shaped aluminium swingarm, inverted Showa front forks, dual front disc brakes with four-piston, radial-mounted calipers, LED lighting and colour TFT instrument panel, and an advanced electronic control system that includes Suzuki Drive Mode Selector, Suzuki Traction Control System, a bi-directional quickshifter and a ride-by-wire electronic throttle, the GSX- 8R is a sportsbike set to lead the way toward an exciting new era.

**2. Product concept**

**Key product features**

Engine features:

- The 776cc parallel twin, DOHC engine delivers a balance of smooth, controllable power from low rpm through to free-revving performance at the top end.
- The 270° crankshaft configuration provides power delivery characteristics and a rumble reminiscent of the V-twin range.
- 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 eliminates 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 two-into-one exhaust system features a dual-stage catalytic converter inside the collector that helps meet Euro 5 emissions standards and a striking, short design.
- The six-speed transmission enables 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 (SIRS) features:

- Suzuki Drive Mode Selector (SDMS) allows the rider to select an engine map that is best suited to riding conditions or personal riding style.
- Suzuki Traction Control System (STCS) with three modes, plus the ability to switch off.
- Ride-by-wire electronic throttle control system makes for a throttle action that feels natural and responds faithfully to the rider’s input.
- Suzuki’s Bi-directional Quick Shift System (with on/off settings) provides quicker, smoother, more assured shifting without operating the clutch lever, and without closing the throttle on upshifts or blipping it on downshifts.
- Suzuki Easy Start System starts the engine with one press of the starter button.
- Low RPM Assist function helps maintain engine idle speed for smoother and easier starts.

**2. Product concept**

Chassis features:

- Steel frame contributes to straight line stability and agile handling.
- Forged aluminium separate handlebars contribute to positive control and a sporty riding position.
- The windscreen helps airflow and helps the GSX-8R slip through the air with more efficiency and stability, while also reducing fatigue on long rides.
- Dual four-piston radially-mounted front brake calipers act on 310mm discs to provide sure stopping power and controllability.
- Cast aluminium wheels featuring a unique design and contribute to agile handling and a sporty appearance.
- Dunlop SPORTMAX Roadsport2 tyres aid in predictable handling and sporty performance.
- Showa SFF-BP* (Separate Function Fork – Big Piston) inverted front forks provide support and sporty performance as well as delivering a smooth, controllable ride.
- Showa link-type rear suspension contributes to agility and stability.
- A uniquely shaped lightweight aluminium swingarm with enhanced torsional rigidity that contributes to nimble handling and straight-line stability.
- The 14-litre fuel tank features a slim design.
- Cowl and frame-mounted headlight assembly contributes to agility and neutral steering feel.
- The rider’s seat is designed for comfort, delivering solid support and shaped to offer freedom of movement.
- New cowl-mounted mirrors enhance aerodynamic performance and wind protection.

**2. Product concept**

Electric equipment features:

- A five-inch colour TFT multi-function instrument panel features a clearly legible display of a variety of information.
- Vertically-stacked LED headlights topped by LED position light provide a clear view of the road ahead and create a sharp look with bold presence.
- The LED rear combination light features a distinctive design.
- LED turn signals are highly visible and long-lasting.

Styling features:

- Styling pays tribute to Suzuki's sportsbike heritage while creating a new design that symbolises the future of Suzuki's sportsbike design.
- Wind tunnel-developed fairing lowers the drag coefficient, improves high-speed stability and makes touring more comfortable by providing the rider with better wind protection.
- The bodywork features flat surfaces and sharp lines that emphasise 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.
- A short exhaust design accentuates the slim, compact design.
- The compact LED rear combination light and LED licence plate light mounted on the slim rear fender make the GSX-8R rear end look short and slim.
- Bold graphics use new typography to create a presence that will be instantly recognisable.
- Body colours paired with coloured wheels make for a striking look.

## 3. Key comparison

| Features | GSX-8R | Benefit | GSX-8S | Benefit |
|---|---|---|---|---|
| Windscreen | Aerodynamic design | Aids aerodynamics and stability, and reduces rider fatigue. | - | - |
| Fairing | Full fairing | Provides sporty appearance, and reduces rider fatigue | - | - |
| | GSX-R-inspired design | Smooth airflow contributes to stable ride | | |
| Handlebars | Forged aluminium separate handlebars | Provides a sporty riding position | Tapered aluminium handlebars | Provides upright riding position |
| Headlights | Cowl/frame mounted | Contributes to agility, neutral steering | Fork-mounted | Light beam follows handlebar angle |
| Position lights | Stacked atop LED headlights | Sharp look | Flank the headlights | Add to the unique look |
| Mirrors | Cowl-mounted | Aerodynamic performance and wind protection | Handlebar-mounted | Tall position for clear rear view |
| Front suspension | Showa SFF-BP inverted front forks | Improves sporty performance and provides more support for more front-focussed weight bias | KYB inverted front forks | Plush, controlled, sporty ride |
| Rear suspension | Showa link-type mono-shock with preload adjuster | Improves sporty performance | KYB link-type mono-shock with preload adjuster | Contributes to straight line stability and agility |

## 4. Engine

**Engineered for a new era of sportsbike performance**

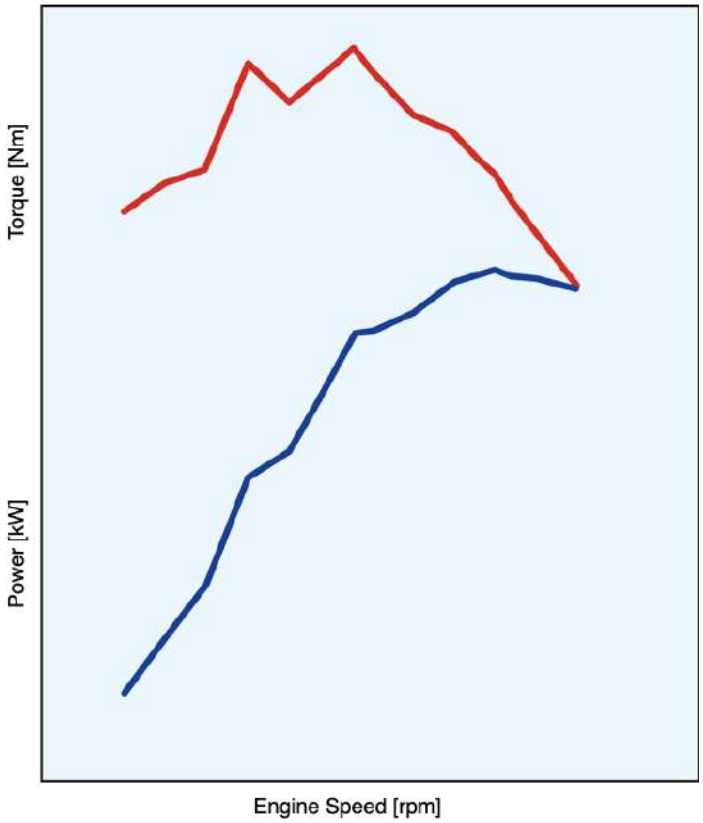
A new engine for a new era of sportsbikes, the new GSX-8R uses Suzuki's new parallel twin engine, which delivers torque in abundance across the rev range, provides an exciting character and feeling thanks to its 270-degree crankshaft design, and enables a slim chassis design thanks to its compact layout.

The parallel twin design expands the possibilities for overall design flexibility and helps realise the most effective chassis geometry for performance gains, including the optimum riding position. Suzuki also aimed to deliver dynamic performance, with a new engine focussed primarily on delivering plenty of torque to allow the GSX-8R to punch out of corners and for flexibility suited to a range of riders, all controlled by a smooth throttle response. As a result the new 776cc, DOHC, parallel twin engine with four valves per cylinder 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 top end.

The engine's 270-degree crankshaft design delivers a smooth ride with plenty of torque, positive traction, and a pleasing sound. It also features 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-8R's agile handling. The GSX-8R also adopts a short silencer design that barely rises up and out from the engine's right side, enhancing the compact look.


### 3. Engine design

| | |
|---|---|
| **Engine type** | Four-stroke, DOHC parallel twin |
| **Cooling system** | Liquid-cooled |
| **Displacement** | 776cc |
| **Bore x stroke** | 84.0mm x 70.0mm |
| **Maximum power** | 82.9PS (61kW) / 8,500rpm |
| **Maximum torque** | 78Nm / 6,800rpm |
| **Emissions level** | Euro 5 |
| **Fuel consumption (WMTC)** | 67.23mpg |

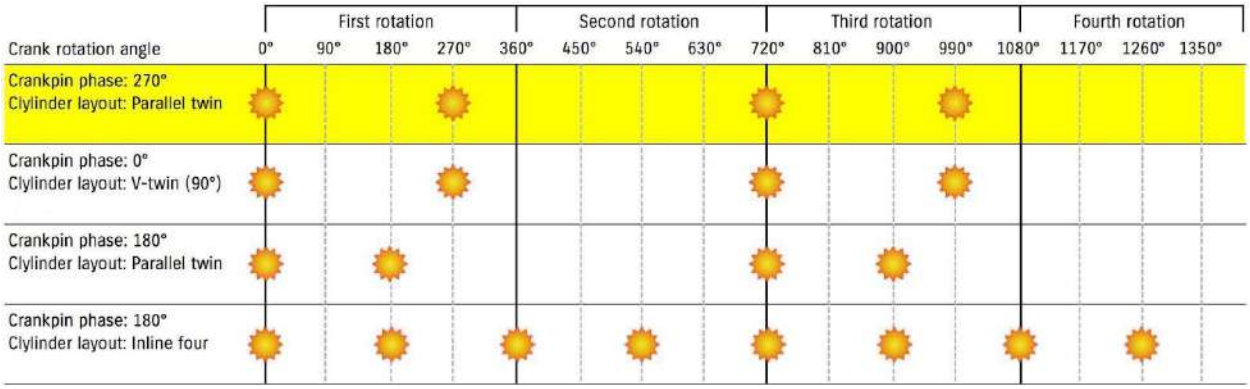


## 3. Engine design

### 270° crankshaft

The ignition timing of the engine's 270° crankshaft layout is the same as that on Suzuki's (90°) V-twin. That means it produces a similar pleasing rumble and character for those engines are known. 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.

= ignition timing



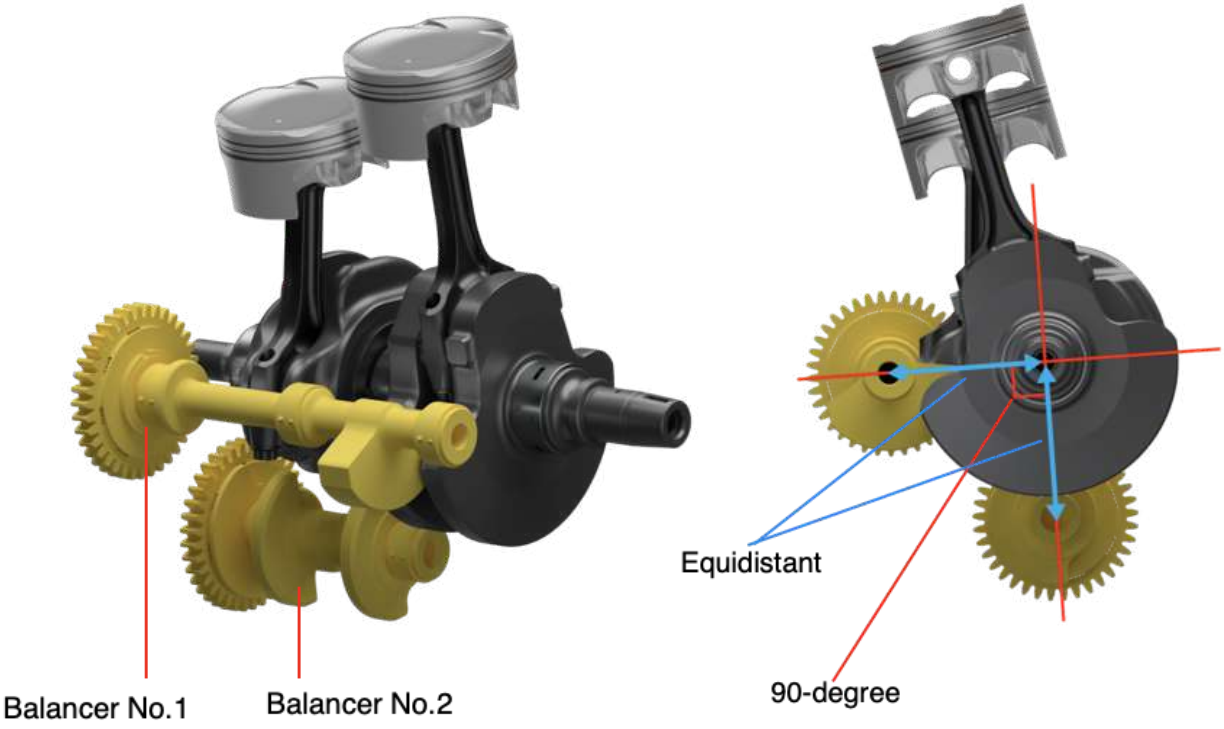

### Suzuki Cross Balancer

The engine uses the 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 achieve 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° 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.

### 3. Engine design



## 3. Engine design

### Pistons and connecting rods

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

The connecting rods also boast the reliability for which Suzuki is known. This is backed up by thorough analysis and testing conducted to ensure a balance of weight and rigidity, and to stabilise the rods' performance during stroke action.

### Suzuki Composite Electrochemical Material (SCEM)

The cylinder bores inside the aluminium, 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 optimised to deliver the best balance of performance for both everyday use and the demands of adventure touring.

### High-pressure fuel injectors

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

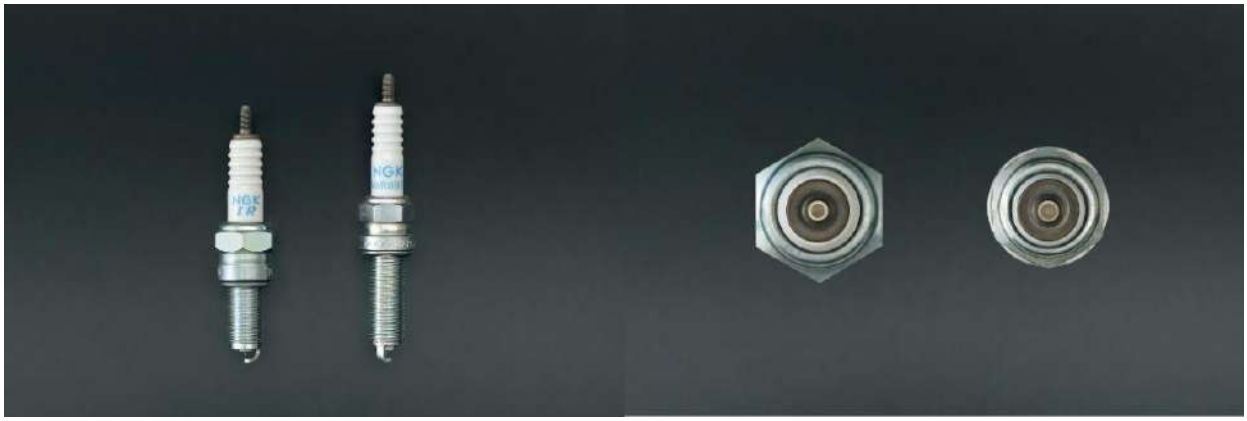
### Transmission

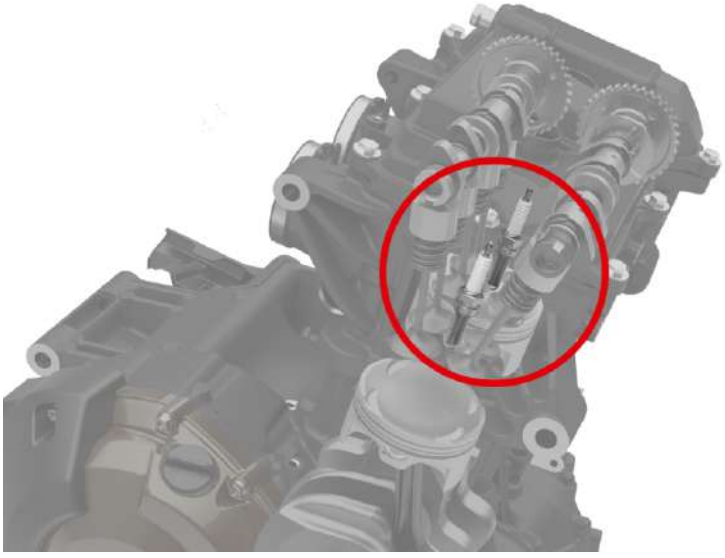
The six-speed transmission adopts gear ratios that deliver smooth shifting and exciting acceleration performance.

**4. Engine design**

**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, their diameter is thin enough that they contribute to optimising 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.





Position of long-reach spark plug

**4. Engine design**

**Airbox**

The six-litre airbox and intake pipe designs are optimised using CAE analysis to maximise torque production at low rpm and enable high peak performance. To contribute to the slim and compact chassis design and enhance the freedom of rider movement, the airbox is compact and positioned under the seat. Different lengths for the left and right pipes intakes help secure adequate flow to derive maximum power output.

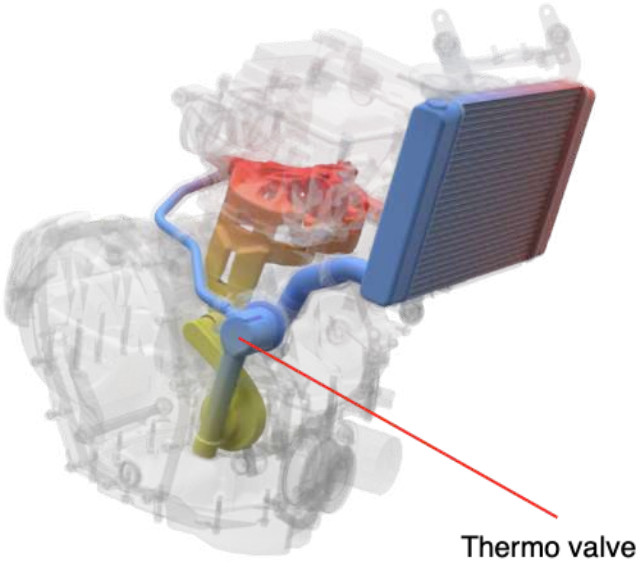
**4. Engine design**

**Efficient cooling**

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

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

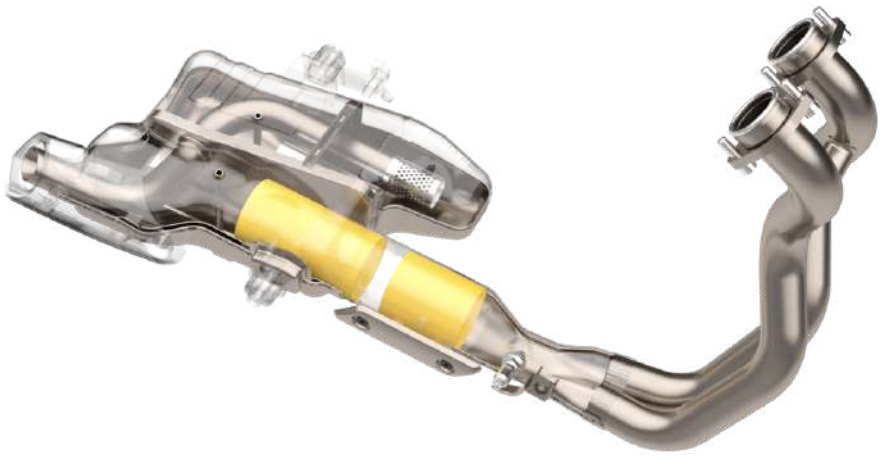
The GSX-8R is also equipped with a lightweight, compact liquid-cooled oil cooler that helps keep lubrication temperatures cooler for even smoother and reliable engine operation.



**4. Engine design**

**Distinctive short muffler design**

The two-into-one exhaust system is designed to produce a pleasing note and enticing rumble. The two-stage catalytic converter inside the collector helps limit emissions to a level that satisfies Euro 5 standards, while at the same time maximising torque and 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 enhancing the compact look and feel.

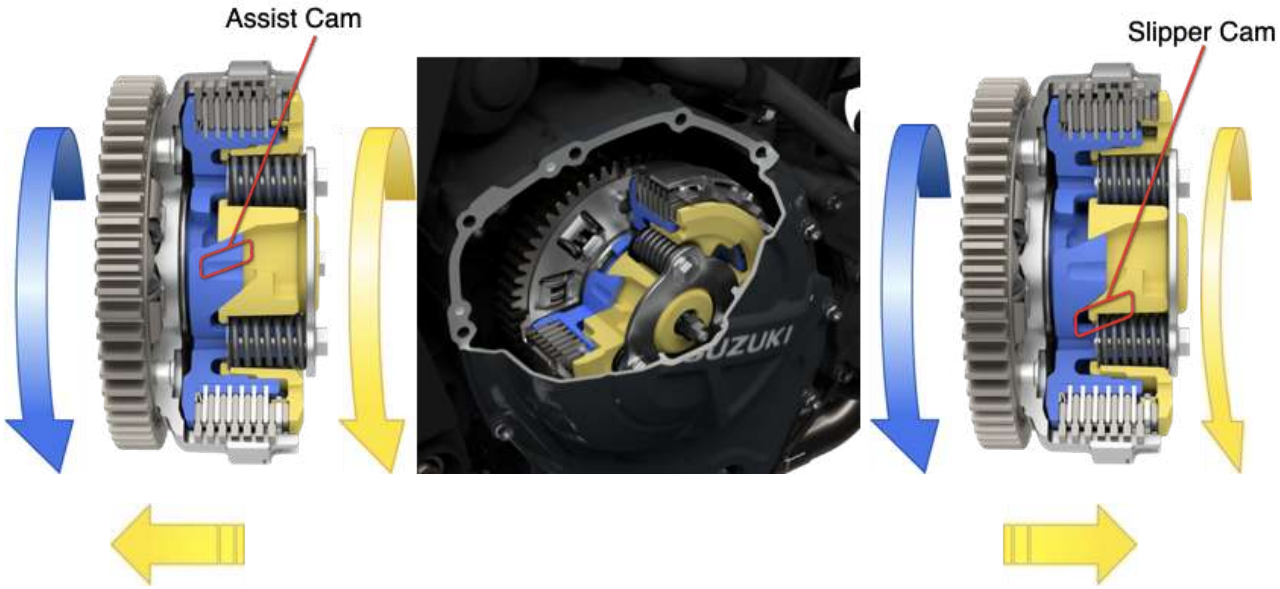


Exhaust system

**4. Engine 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 and decelerating to mitigate the effect of engine braking and provides smoother deceleration, which enables the rider to shift down with greater confidence and maintain better control.

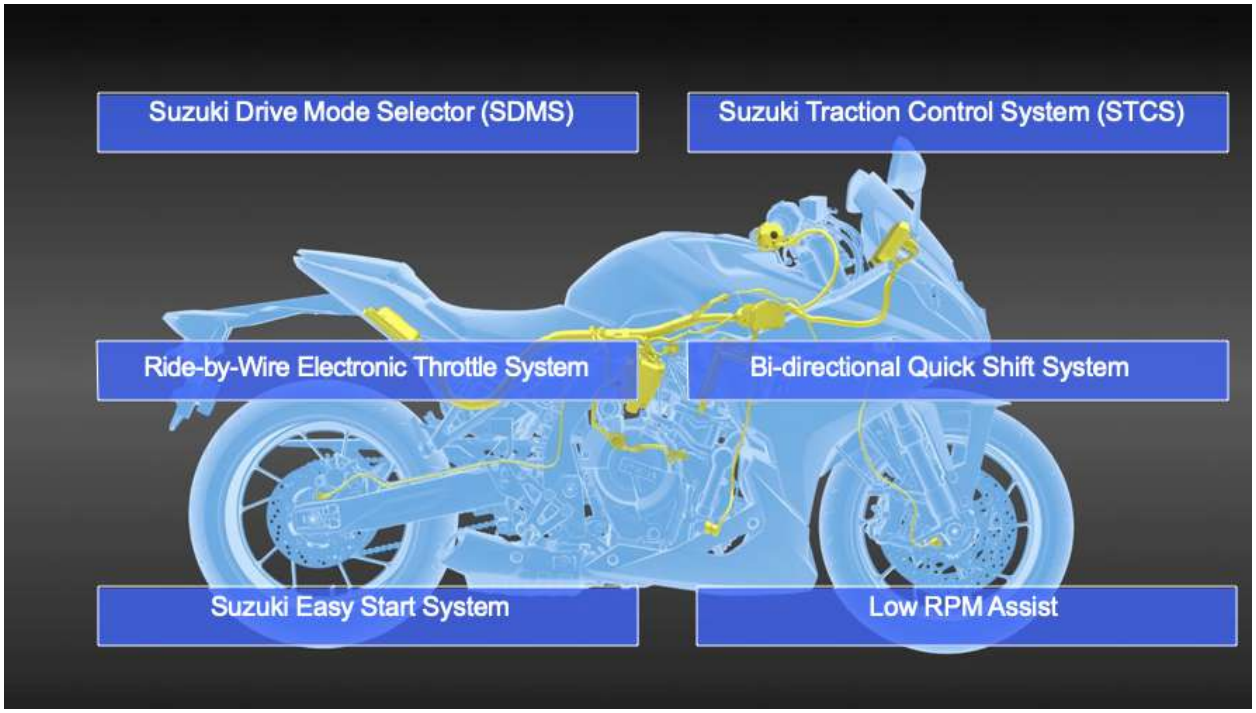


## 5. Suzuki Intelligent Ride System (SIRS)

### Introduction

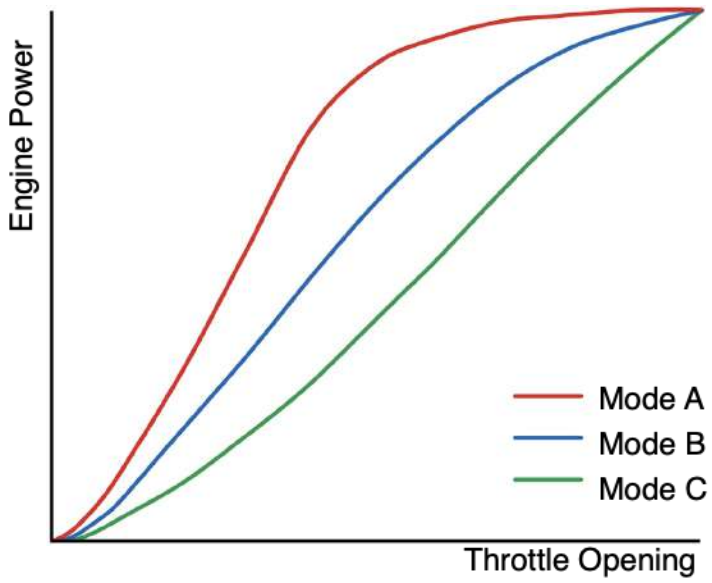
The Suzuki Intelligent Ride System (SIRS) is a collection of advanced electronic rider assist systems, which allow the rider to choose the settings for each system to best suit their preference or to suit the conditions. SIRS helps enhance an already exciting riding experience that inspires confidence and frees riders to concentrate on enjoying the ride.

The systems employed by the GSX-8R include the Suzuki Drive Mode Selector (SDMS), Suzuki Traction Control System (STSC), a ride-by-wire electronic throttle system, a bi-directional quickshifter, Suzuki Easy Start System, and Low RPM Assist.



**5. Suzuki Intelligent Ride System (SIRS)**
**Suzuki Drive Mode Selector (SDMS)**
SDMS leverages the electronic throttle control system to offer a choice between three modes that deliver different power characteristics to match the riding conditions or preferred riding style. The settings for each mode were thoroughly tested to maximise the GSX-8R's performance in various scenarios.

Power delivery 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 sporty rides in good weather.

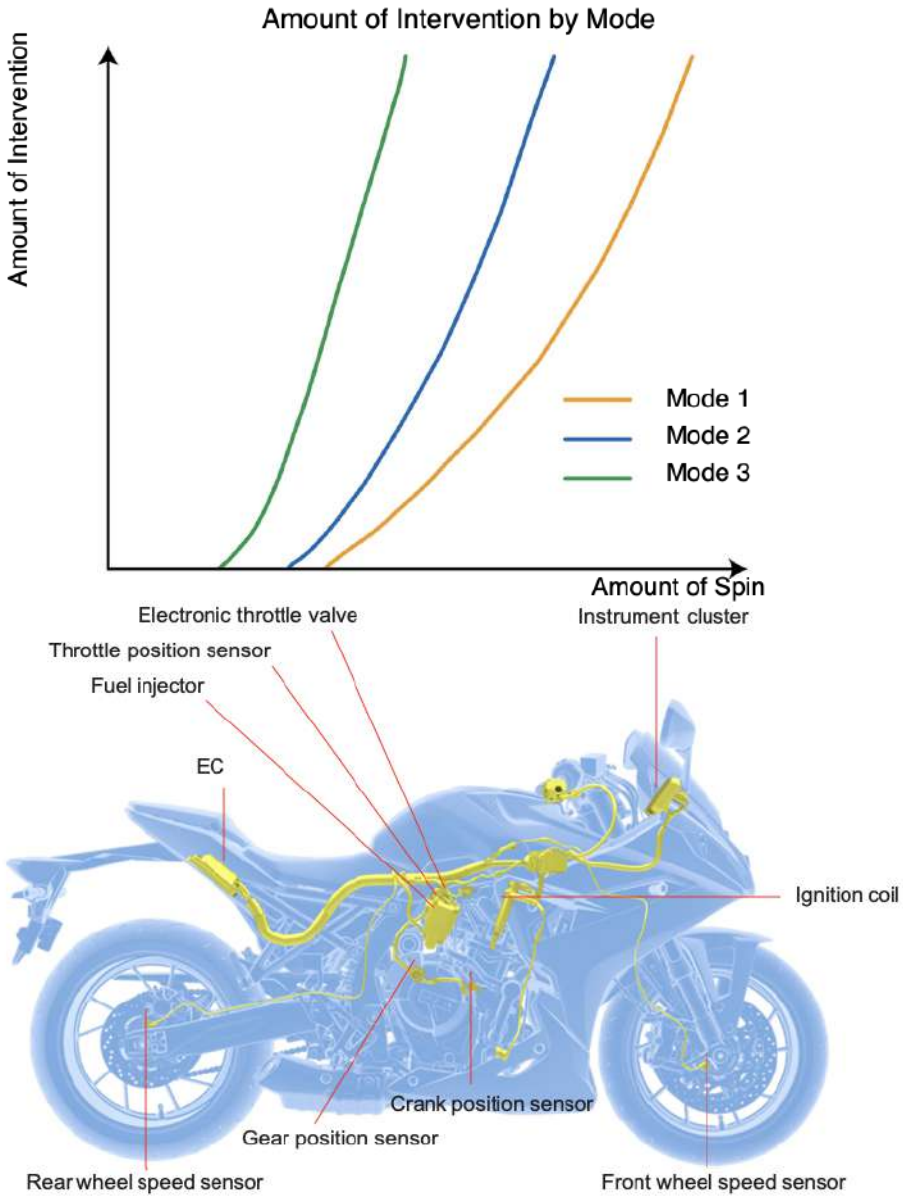
**Mode B (Basic)** reaches the same level of maximum output, but features a more linear curve with softer throttle response. Planned as an ideal setting for touring or commuting, this mode is a good fit for a wide range of riding styles and road conditions.

**Mode C (Comfort)** provides the softest throttle response and more gentle torque characteristics. 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.

**5. Suzuki Intelligent Ride System (SIRS)**
**Suzuki Traction Control System (STCS)**
STCS for the GSX-8R enables the rider to better control the bike in diverse and varying conditions, such as riding in inclement weather, and instils greater confidence regardless of the rider's level of experience.

The rider can select from three modes or turn the system off. The higher the number of the mode selected, the faster the control takes effect and the more proactive the system is in limiting wheel spin.

The system continuously monitors front and rear wheel speed, engine RPM (as calculated using data from the crank position sensor), throttle position and gear position.



**5. Suzuki Intelligent Ride System (SIRS)**
**Ride-by-wire electronic throttle system**
An electronic throttle control system uses the ECM to control the action of the throttle valves and more finely control the relationship between throttle action and engine output characteristics.

Throttle grip action is set to provide faithful response and linear control. This makes the throttle action feel more natural. 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 quickshifter**
The bi-directional quickshifter allows riders to shift up without closing the throttle or downshift without blipping it, and eradicates the need to operate the clutch lever, also.

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 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.

**Suzuki Easy Start System**
The Suzuki Easy Start System lets the rider start the motorcycle with one quick press of the starter button with no need to pull in the clutch lever when the transmission is in neutral.

**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.

**Anti Lock Braking System (ABS)**
The antilock braking system (ABS) provides stable braking performance 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.

**5. Suzuki Intelligent Ride System (SIRS)**
**Supporting technologies**
**Controller Area Network (CAN bus)**
The GSX-8R's 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 of critical systems, including those to comply with Euro 5 emissions standards.

# 6. Chassis

### Introduction

Development of the chassis aimed to maximise comfort and performance. The end goal was to deliver great handling and control whether riding through town or enjoying a sporty run on twisty roads, fully leveraging the potential of the punchy, torque-laden parallel twin engine and on minimising fatigue, even on long rides. The frame and swingarm were designed around the engine to create a core structure that is strong and highly rigid, to contribute to a chassis layout that is both compact and light.

The chassis layout considerations covered every detail, from achieving the right riding position to the selection of the wheels, tyres, and suspension settings. And it extended to striking a harmonious relationship between the chassis, engine, and advanced controls of the Suzuki Intelligent Ride System (SIRS).

## 6. Chass


**6. Chassis**

**6. Chassis**

Designed as to pair perfectly with the parallel twin engine platform and made from steel tube sections with optimised rigidity, the frame is engineered to contribute to agile handling, to provide excellent straight-line stability, and to perform equally in urban environments or on more sporty rides on twistier 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 controllab le and provide a more neutral feel to the steering.

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

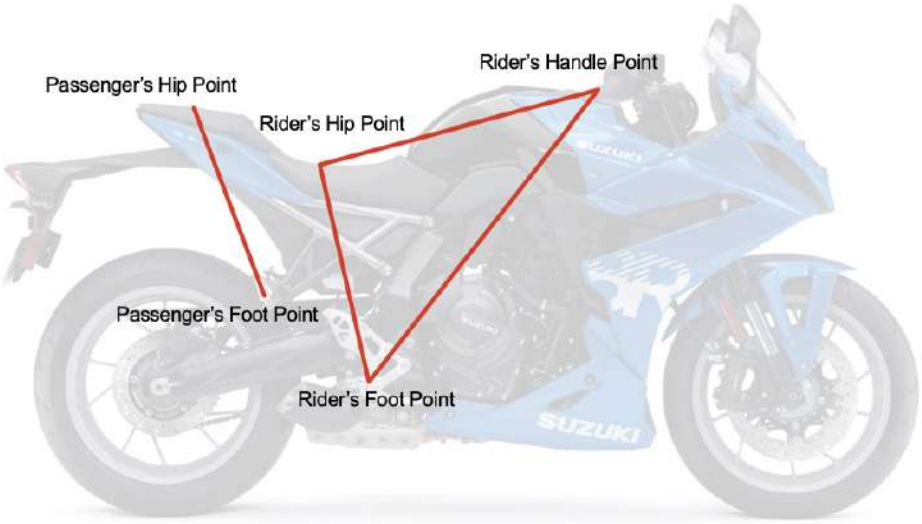
## 6. Chassis

### Forged aluminium separate handlebars

The GSX-8R uses forged aluminium, separate handlebars. The use of aluminium not only minimises weight, but the pressure applied in the forging process also contributes to creating highly rigid components. The lower, more forward placement of the handlebars provides a sportier riding position, placing more of the rider's weight over the front wheel.

### Chassis geometry and riding position

The GSX-8R features a long wheelbase to enhance straight line stability, with other chassis design elements ensuring agile handling and cornering ability, with a slim, compact design. A key priority was to provide a sporty riding position that effectively distributes weight to the front and rear, providing a plugged-in riding experience, while also offering comfort. Aluminium handlebars help achieve this by providing a forward-leaning riding position. In addition, the parallel twin engine benefits the geometry because its compact front-rear dimensions allow it to position the rider's hip point further forward. This, in turn, enables the rider to shift their weight forward and more easily control the GSX-8R when negotiating tight corners.



## 6. Chassis

### Windscreen

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


### Sure stopping power

Radially-mounted front brake calipers biting 310mm discs provide sure stopping power and predictable braking performance. The rear brake uses a 240mm disc and a single-piston pin-slide caliper.

## 6. Chassis

### Cast aluminium wheels and Dunlop tyres

Cast aluminium wheels contribute to agile handling and visually enhance the sporty poise of the GSX-8R. Dunlop RoadSport 2 radial tyres - 120/70ZR17 at the front, 180/55ZR17 at the rear - are designed to perform optimally in all conditions 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 tyres work in harmony with the front and rear suspension settings to provide positive feedback, agile handling and neutral steering, and a plush ride.


### Front and rear suspension

Showa SFF-BP (Separate Function Fork - Big Piston) inverted front forks allows for the elimination of the cartridge on one side and makes it possible to increase the size of the piston. The structure not only reduces weight, but also features stable damping characteristics. The link-type mono-shock at the rear, with preload adjuster, is set up to contribute to straight-line stability and a smooth, controllable ride.

**6. Chassis**

**Uniquely-shaped and lightweight aluminium swingarm**

The GSX-8R uses a highly attractive aluminium swingarm with a unique shape that is engineered to perform with the right amount of vertical, lateral, and torsional rigidity providing sure handling stability and greater ride comfort.

**Fuel tank**

The 14 litre fuel tank is designed to deliver the right balance between riding range and slim, compact looks that add to the sporty styling of the GSX-8R.

## 6. Chassis

### Seat designed for sports riding

The rider's seat is designed for sporty riding. Delivering support for the rider toward its rear edge, the seat is shaped to offer freedom of movement and is covered in a material that provides positive grip. Featuring a slim design, the smoothly rounded edges of the seat also make it easier for the rider to plant their feet on the ground when stopped.

### Cowl-mounted mirrors

The cowl-mounted mirrors are designed and tested to enhance aerodynamic performance and wind protection. With a sharp design they compliment sporty styling.

**6. Chassis**

**Sporty front mudguard**

The front mudguard 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.

# 7. Electric equipment

**5-inch colour TFT multi-information display**

The GSX-8R's 5-inch, colour TFT multi-function instrument panel features a clearly legible display of a variety of information, while also providing a high quality finish and pleasing view from the rider’s perspective.


Day mode


Night mode

The display offers the ability to display large pop-up alerts and warnings while readouts include:

| | |
|---|---|
| Speedometer | Tachometer |
| Riding range | Odometer |
| Dual trip meter | Gear position |
| Water temperature | Engine rpm indicator |
| Average fuel consumption | Instant fuel consumption |
| SDMS mode | Traction control mode |
| Quickshifter (on/off) | Fuel gauge |
| 12 hour clock | Voltmeter |
| Service reminder | |

**7. Electric equipment**

The tachometer also serves as a 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 4,000rpm to 9,750rpm.

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. It also offers manual or automatic switching settings for the day (white) and night (black) display modes that maximise visibility at any hour and in any riding situation.

**Striking LED headlight design**

The vertically stacked pair of hexagonal LED headlights use 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.

**LED rear combination light and turn signals**

The LED rear combination light and LED licence plate light are mounted on the slim rear mudguard and make for a sporty design that results in the GSX-8R looking short, slim, and light at the rear.

**7. Electric equipment**

**Handlebar switches designed for intuitive operation**

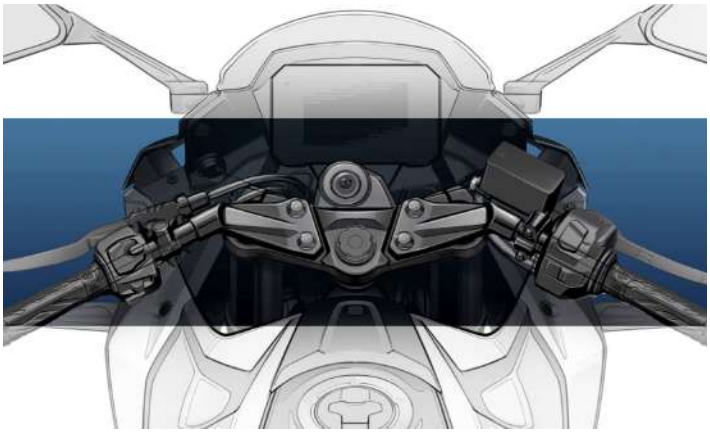
The ergonomic switch layout makes for ease of operation, allowing the rider to access controls while remaining focused on the road ahead. Selecting modes and making adjustments for each of the advanced electronic control systems simply involves operating the MODE and UP/DOWN switches, which recognise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


## 8. Styling design

The GSX-8R design concept is: *next generation Suzuki sportsbike styling.* In developing the styling for the new GSX-8R, the design team set its goals based on three keywords and phrases: *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.

*Visual structure* reflects the ideology of exposing the bike's functional parts and painting them to put a spotlight on the visceral appeal of the structural elements, and highlight the mechanical appeal of functional beauty. Highlights include details such as the separate handlebars, the painted seat rails, aluminium wheels, the short muffler design and the slim rear mudguard.



**8. Styling design**

Icon symbolises the respect Suzuki's designers paid to the iconic GSX-R series design and over the 35-year-plus heritage of the GSX-R range, even while working to create a thoroughly modern interpretation. One example of the tribute to GSX-R styling is the front fairing design. Though related to the GSX-R series in terms of DNA, the GSX-8R presents a fresh new face that symbolises the future of Suzuki sportbike design.

All combined, the styling creates an appealing, new, mass-forward, aggressive look that is slim, compact, well-balanced, and ready for action.


**8. Styling design**


**8. Styling design**


## 8. Styling design


# 9. Colour and graphics

**A trio of body colours**

A trio of body colours will give customers choice when it comes to purchasing their new GSX-8R.

Metallic Triton Blue (YSF) represents Suzuki's sportsbike brand identity. In adopting this colour, the GSX-8R demonstrates that it is a fully-faired sports machine and that it is built to appeal to a wide range of riders.

Metallic Matt Sword Silver (QKA) and Metallic Matt Black No. 2 (YKV) provide classy alternatives for those looking for something different in their sportsbike design or an understated look.

**Iconic graphics**

The large 8R graphic on the fairings 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.

The clutch cover and magneto cover are finished in a colour selected to match the GSX-8R, while the Suzuki branding on the clutch cover is finished in a contrasting colour to create an effective accent.




## 10. Colour lineup


Metallic Triton Blue (YSF)


Metallic Matt Sword Silver (QKA)


Metallic Matt Black No.2 (YKV)

## 11. Specification

| | | | |
|---|---|---|---|
| **Overall length** | | | 2,155mm (84.8in.) |
| **Overall width** | | | 770mm (30.3in.) |
| **Overall height** | | | 1,135mm (44.7in.) |
| **Wheelbase** | | | 1,465mm (57.7in.) |
| **Ground clearance** | | | 145mm (5.7in.) |
| **Seat height** | | | 810mm (31.9in.) |
| **Kerb mass** | | | 205kg (452lbs.) |
| **Engine type** | | | Four-stroke, two-cylinder, liquid-cooled, DOHC |
| **Bore x stroke** | | | 84.0mm x 70.0mm (3.3in. x 2.8in.) |
| **Engine displacement** | | | 776cc (47.4 cu. in.) |
| **Compression ratio** | | | 12.8 : 1 |
| **Fuel system** | | | Fuel injection |
| **Starter system** | | | Electric |
| **Lubrication system** | | | Forced feed circulation, Wet sump |
| **Transmission** | | | Six-speed constant mesh |
| **Suspension** | **Front** | | Inverted telescopic, coil spring, oil damped |
| | **Rear** | | Link type, coil spring, oil damped |
| **Rake / trail** | | | 25° / 104mm (4.1in.) |
| **Brake** | | **Front** | Disc, twin |
| | | **Rear** | Disc |
| **Tyres** | | **Front** | 120/70ZR17M/C (58W) tubeless |
| | | **Rear** | 180/55ZR17M/C (73W) tubeless |
| **Ignition system** | | | Electronic ignition (transistorised) |
| **Fuel tank capacity** | | | 14L |
| **Oil capacity (overhaul)** | | | 3.9L |
| **Fuel consumption** | | | 67.23mpg in WMTC |
| **$CO_2$ emissions** | | | 99 g/km |

**Ends**