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SUZUKI

GSX-R1000R

Press information

July 2025

Contents

1. Introduction

With no fewer than 15 FIM Endurance World Championship titles since its release in 2001, the GSX-R1000 name is synonymous with performance, reliability, and pure riding enjoyment. In 2025 the GSX-R family celebrates its 40th anniversary, and it has been close to a quarter of a century since the GSX-R1000 first appeared and moved the game on in the superbike class.

Now, the GSX-R1000R returns to the UK and European markets with updates that help it comply with the latest emissions regulations, while other updates enhance the GSX-R1000's performance potential, from engine modifications to electronics updates.

As a result, the new GSX-R1000R maintains its position as the sportsbike of choice for the rider on the road, but, underneath, race-winning DNA flows ensuring it can continue to contest for victories and championships.

The GSX-R1000R is designed to perform, built to thrill.

2. Product concept

Designed to perform, built to thrill

The latest GSX-R1000R has undergone further development to its engine internals, raising its performance ceiling and making it capable of withstanding the tuning required to compete successfully in premier class endurance and superbike and superstock racing competitions.

The product concept of ‘designed to perform, built to thrill’ conveys how the latest GSX-R model remains committed to delivering the staple elements of a performance motorcycle; from acceleration to cornering and braking, elements that have defined GSX-Rs over the last 40 years.

While there were challenges that arose during development, centred mostly around meeting the latest emissions and noise regulations, the key aim was to bring the GSX-R1000R model back to the streets and race tracks of Europe and other markets around the world.

The result is a GSX-R1000R that delivers high levels of performance while hitting its regulation targets, with an updated electronics suite that helps riders be the best they can be.

In addition, the latest GSX-R1000R comes in a trio of colour schemes that will tug on the heart strings of GSX-R fans around the world, by capturing the spirit of famous GSX-R liveries of the past. Each colour scheme sports an accompanying ‘40th anniversary’ logo and a retro-inspired ‘R’ on the bellypan, plus an engraved logo on the exhaust silencer.

2. Product concept

Key product features

Engine features:

- High-performance 1000cc, four-stroke, liquid-cooled, DOHC, inline-four cylinder engine.
- New crankshaft adopts thicker journals designed to accommodate higher loads.
- New crankcases accommodate new crankshaft design.
- Increased compression ratio from 13.2:1 to 13.8:1, with reshaped piston heads that also accommodate the increased valve diameter.
- Simple, compact, and light, the centrifugally operated Suzuki Racing Variable Valve Timing (SR-VVT) system is built into the intake cam sprocket and an adjacent guide plate, adding significantly to power at the high end.
- The Suzuki Racing finger follower valve train system improves valve control and allows higher rpm.
- In addition to the primary injectors that operate full-time in each throttle body, a secondary set of four Suzuki Top Feed Injectors (S-TFI) spray fuel from the top of the air box directly into the intake funnels at higher rpm. This results in enhanced combustion efficiency, throttle response and top-end power.
- The number of holes for the primary fuel injectors was changed from ten to eight holes.
- The cylinder head and both intake and exhaust ports have been modified to achieve higher efficiency.
- The head gasket shape was revised to improve durability.
- Each forged aluminium piston has short skirts, cutaway sides and a short, DLC coated wrist pin to reduce friction.
- A change to the rib shape on the underside of the piston heads reduces weight and contributes to durability.
- The piston circlips are new and improve durability.
- The introduction of a wider new cam chain helps reduce friction loss.
- A new single-stage funnel #1 and #4 design features a shape that contributes to improved output at high rpm.
- Camshaft lubrication now uses an intermittent lubrication scheme.
- The new exhaust system includes a slimmer new silencer design.
- The Suzuki Clutch Assist System (SCAS) contributes to smooth shifting and enables a light touch to clutch lever operation.

2. Product concept

Chassis features:

- The compact, lightweight chassis provides quick response and agility. It is designed to increase the rider's confidence.
- Compact, light, and rigid, the twin-spar aluminium frame is built to deliver agile handling and great road holding ability.
- The race-inspired aluminium swingarm is braced on both sides and rigidity is optimised to help improve racetrack handling.
- The bolt-on rear subframe is made of strong, light square aluminium tubing.
- New winglets on the front cowling generate downforce at high speeds to enhance stability.
- Lightweight, six-spoke, cast aluminium wheels contribute to agile handling.
- Bridgestone BATTLAX RACING STREET RS11 radial tyres provide high cornering performance, positive grip, and durability in a wide range of conditions.
- Dual four-piston, radially-mounted, monoblock Brembo front brake calipers paired with 320mm discs and a single-caliper rear brake with a 220mm disc provide sure braking power.
- The end of the front brake lever is slotted to reduce the chance of wind pressure causing brake drag at high speed.

Suzuki Intelligent Ride System (SIRS) features:

- Suzuki Drive Mode Selector (SDMS) allows the rider to pick from three available engine map settings that help better match power delivery characteristics to the riding conditions.
- Smart TLR Control integrates the Suzuki Traction Control System (STCS) with Lift Limiter and Roll Torque Control.
- Ride-by-wire Electronic Throttle System gives greater control over the engine output.
- The bi-directional quick shifter allows the rider to shift up and down smoothly and efficiently without using the clutch or blipping the throttle.
- By intervening to control brake pressure while braking through corners, the lean-angle sensitive ABS system - Motion Track Brake System - helps the rider better trace their intended line through the corner.
- Slope Dependent Control provides more stable braking by monitoring the bike's posture and optimising ABS to match the grade and prevent rear wheel lift when travelling downhill.
- Suzuki Easy Start System starts the engine with just one quick press of the starter button, even without pulling in the clutch lever when the transmission is in neutral.
- Low RPM Assist helps ensure smoother starts when pulling away from a standing start or riding at low speeds.

2. Product concept

Electric equipment features:

- The new Li-ion battery is lighter, more compact and provides more stable voltage under load.
- The simple multifunction instrument panel is laid out so the rider can quickly confirm the tachometer and speedometer readouts.
- The narrow and compact high-illumination LED headlight contributes to the sharp face design.
- The LED combination tail and brake light features a vertical layout that contributes to the tail's sharp, slim design.
- It features sharp, clean, light and bright, LED turn signals.

Styling features:

- Sleek, narrow and compact bodywork with a small frontal projected area helps maximise aerodynamic efficiency.
- The top of the fuel tank is designed to allow the rider to tuck in easily on straights.
- Large Suzuki Ram Air Direct (SRAD) intake ducts are positioned close to the center of the fairing nose, where air pressure is highest.
- The shot-blasted titanium silencer enhances the new exhaust system's appearance.
- The lineup of three available body colour schemes were carefully selected to maximise appeal and, in celebration of the GSX-R family's 40th anniversary, pay homage to famous GSX-R liveries from previous generations.
- 40th anniversary logos combine with new graphics that hark back to the original GSX-R and stripes that add aggressive, sporty flair.

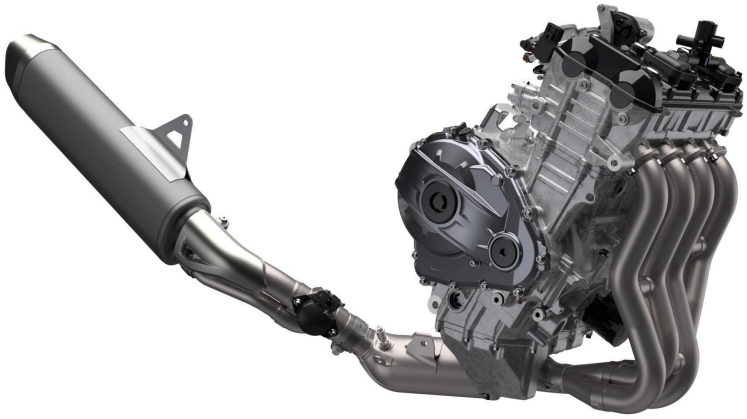
3. Engine design

Introduction

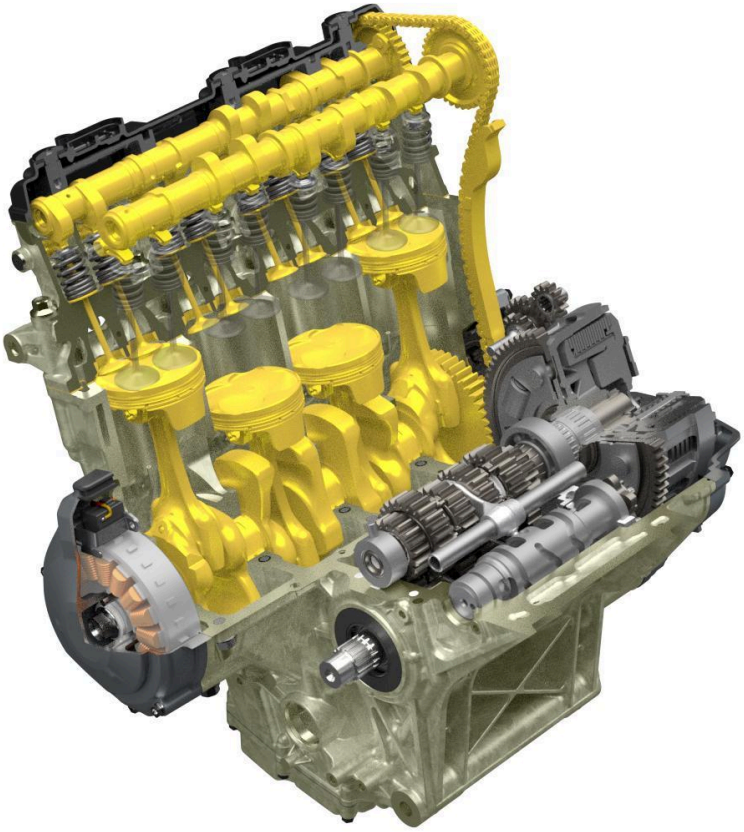
The high-performance 1000cc, four-stroke, liquid-cooled, DOHC inline-four cylinder engine that powers the GSX-R1000R is built to perform optimally under all kinds of riding conditions, both on the road or the track, and to deliver the reliability and winning potential that have earned the model its revered reputation in the world of endurance racing.

Updated for 2025, the engine delivers high levels of performance and reliability, while producing torque in an even more linear fashion through the operating range, and complying with the latest emissions and noise regulations.

To improve combustion efficiency, all components that comprise the intake and exhaust path - from the intake funnels through to the silencer - were thoroughly reviewed as part of the development process for the 2025 model.



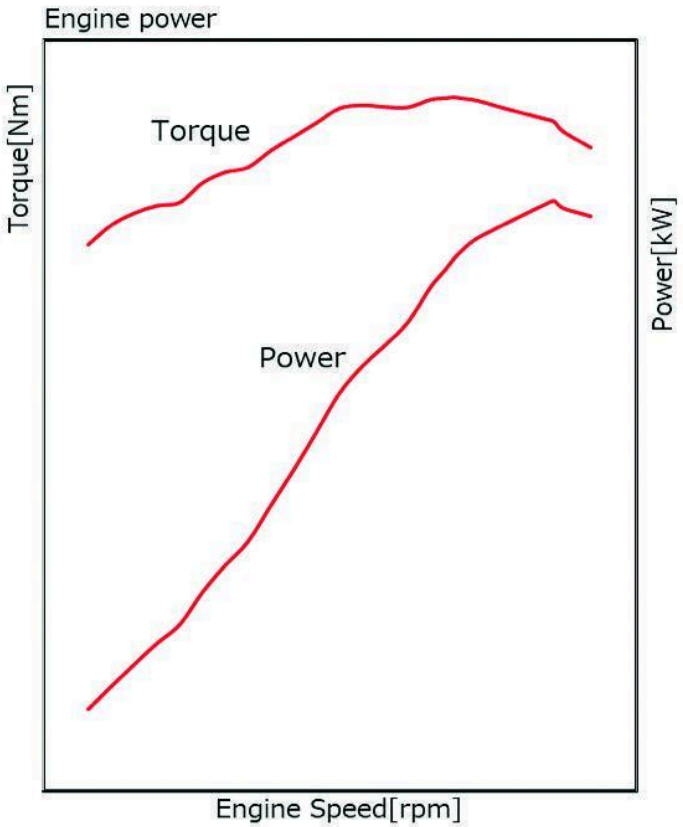
3. Engine design



New components shown in yellow

3. Engine design

Displacement	999.8cc
Engine type	Four-stroke, four-cylinder, liquid-cooled, DOHC
Bore x Stroke	76.0mm x 55.1mm
Compression ratio	13.8:1
Maximum power	143.5kW (195PS)/13,200rpm
Maximum torque	110.0Nm/11,000rpm
Fuel consumption (WMTC)*	41.54mpg (6.8 L/100km)
CO_2 emissions (WMTC)*	158 g/km
Emissions level	Euro 5+



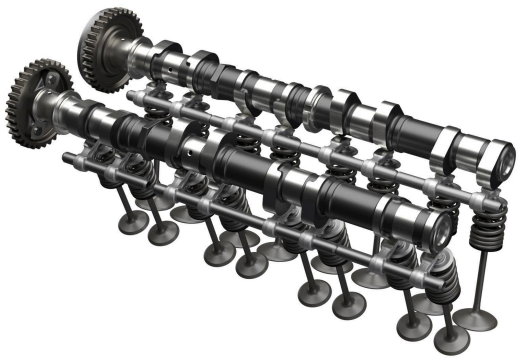
3. Engine design

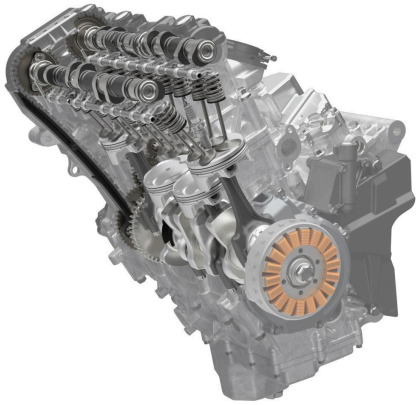
Suzuki Racing Variable Valve Timing (SR-VVT)

Simple, compact, and light, the centrifugally operated SR-VVT system is built into the intake cam sprocket and an adjacent guide plate. It uses 12 steel balls and slanted grooves to rotate the sprocket and retard the intake valve timing at a pre-set rpm, adding significantly to high-rpm power without sacrificing mid-range and lower-rpm power. The SR-VVT system is compact, simple, lightweight, and reliable with seamless operation. Moreover, the system is built into existing components, taking up no extra room in the engine. In addition, the VVT sprocket shape was changed on the latest GSX-R1000R model, in conjunction with the adoption of a new, wider cam chain.

Suzuki Racing finger follower valve train system

The GSX-R1000R uses thin-wall, hollow camshafts operating light, F1-style pivoting finger followers. The lighter moving mass of these fingers allows maximum engine rpm and valve lift to be increased while improving valve response and maintaining accurate valve control. Each finger follower in the GSX-R1000R has a DLC coating to increase durability. The shape of the fingers on both the intake and exhaust sides was changed and optimised to match the new cam profile. In addition, the exhaust valve diameter was changed from 24mm to 25mm, increasing exhaust efficiency and thereby contributing to increased intake air efficiency.

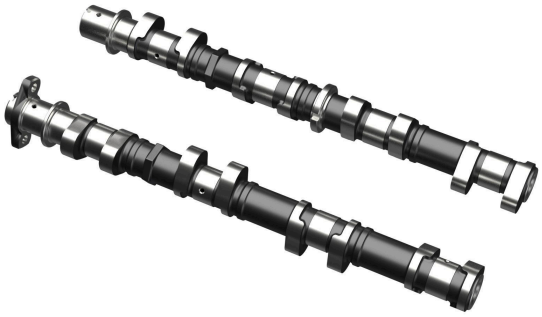


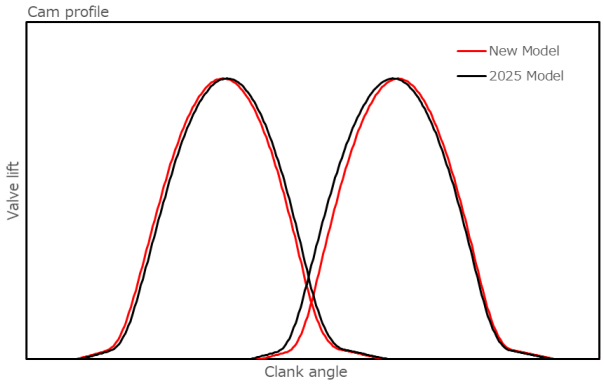


3. Engine design

Camshaft profiles and cam chain

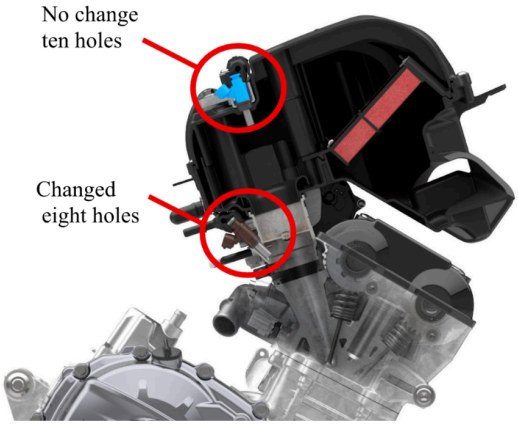
The camshaft intake and exhaust lift curves were optimised to achieve both the development goal for engine output and compliance with Euro 5+ emissions regulations. The maximum lift has not been changed, but the overlap has been reduced. In addition, the new, wider cam chain helps reduce friction loss, and the cam sprockets have been reshaped accordingly.

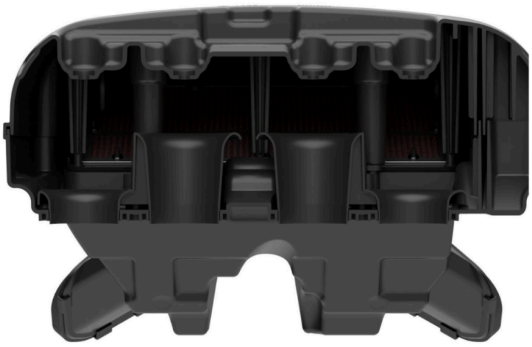




Suzuki Top Feed Injectors (S-TFI)

One primary injector mounted at a steep angle in each throttle body operates full-time when the engine is running. A second injector that operates at higher rpm - also known as a top feed injector (TFI) - is mounted in the top of the air box, directly over each throttle body's intake funnel. The TFI delivers additional fuel in an improved spray pattern designed to enhance combustion efficiency, throttle response, and top-end power. The new injector positioned in each throttle body replaces the previous ten-hole design with an eight-hole design. The new injectors help achieve compliance with Euro 5+ emissions standards. Additionally, the fuel pump was changed to increase fuel pressure.





3. Engine design

Electronic throttle bodies

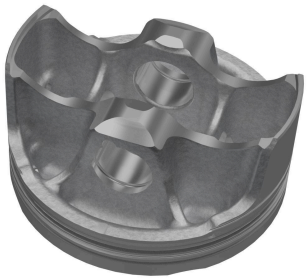
Electronic throttle bodies help achieve the right balance between idling speed control and power output characteristics, while their design also contributes to complying with Euro 5+ emissions standards. The new throttle bodies are light and compact, with a larger bore (48mm versus 46mm) that helps enhance engine output. Each one has a single butterfly valve controlled by an advanced electronic engine management system, and each cylinder is fed by two ultra-fine-atomisation eight-hole injectors. Air is delivered to the throttle bodies via new single-stage funnels (velocity stacks). The funnels' shape was changed to contribute to improved output at high rpm.

3. Engine design

Forged aluminium pistons

Each forged aluminium piston has short skirts, cutaway sides and a short, DLC-coated wrist pin to reduce friction. The compression ratio is changed to 13.8:1. The piston heads were reshaped to increase the compression ratio and accommodate the size of the increased exhaust valve diameter. The rib shape on the underside of the piston heads is also new. This reduces weight by 3g and, as high-rotation parts, delivers benefits in output, vibration, and durability. In addition, the piston circlips are also new and improve durability.

An L-shaped upper compression ring is pushed out against the cylinder wall by combustion pressure, limiting blow-by and maximising cylinder sealing. The oil ring features a chrome-nitride coating. Harder and smoother than chrome plating, this chrome-nitride coating helps reduce friction, increase durability, and further enhances cylinder sealing. Connecting rods are chrome-molybdenum steel with a carburised surface treatment to increase strength. The connecting rods are manufactured to design standards with rigorous tolerances to enhance reliability when under higher levels of tune for racing.



New piston head

Previous model

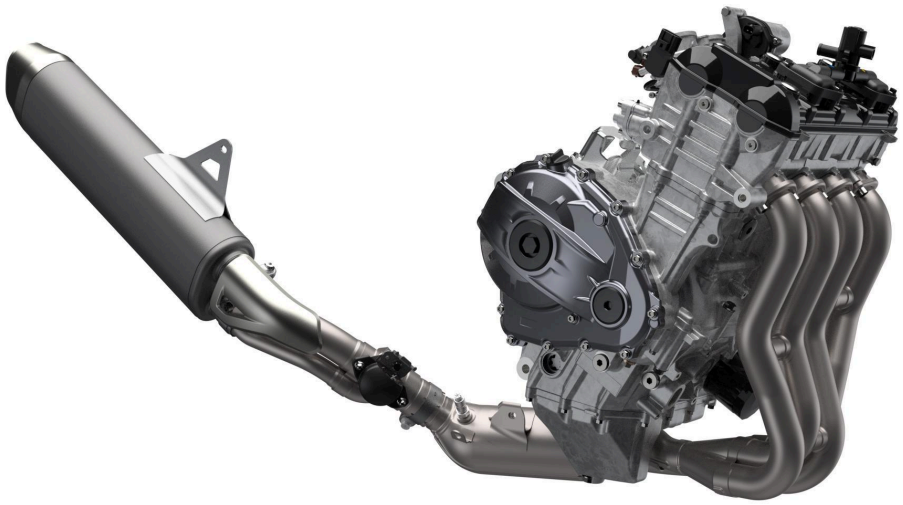
3. Engine design

Optimised cooling

The GSX-R1000R's cylinder head water jacket was designed to optimise coolant flow and heat-transfer efficiency. The smooth internal shape makes the coolant flow faster and eliminates areas where the coolant could otherwise stagnate. It is so efficient that the engine requires less coolant, which in turn contributes to weight savings. The high-efficiency curved radiator with dual electric fans also aids excellent cooling performance, and the radiator itself adopts a more compact form.

Exhaust system

A number of updates were applied to the 4-2-1 exhaust system. Enlarging the diameter of the exhaust pipe contributes to maintaining output while complying with Euro 5+ emissions regulations. In conjunction, a larger capacity elliptical catalytic converter in the collector is positioned closer to the engine to facilitate quicker warming, which helps improve its performance. A pair of O_2 sensors positioned in front and behind the catalytic converter help comply with Euro 5+ emissions regulations. Another benefit of the new layout is that it created the design freedom to make the silencer body more compact, reducing its capacity from 8.3 to 5.5 liters while still retaining performance on par with the previous design. The shot-blasted titanium silencer features a slim and stylish design.



3. 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. This also enables a light clutch lever. The slipper clutch partially disengages when downshifting to decelerate to mitigate the effect of engine braking. By helping to prevent the rear wheel from hopping and providing smoother deceleration, this function enables the rider to shift down with greater confidence and maintain better control. SCAS works harmoniously with the bi-directional quickshifter to deliver an additional benefit to the system's clutch-free shifting.

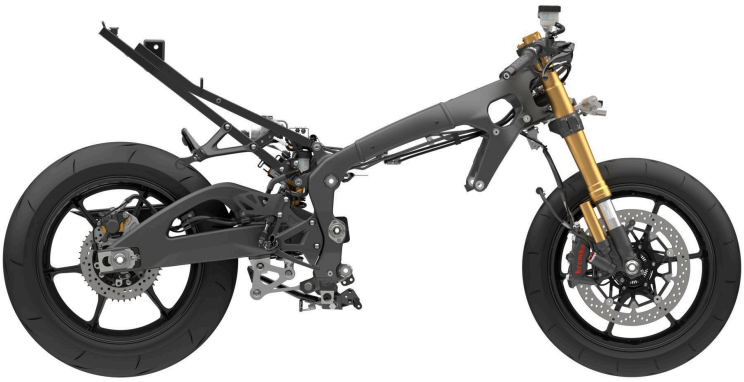
Other features

- The crankshaft adopts a new design with thicker journals, increased from 35mm to 37mm, designed to accommodate higher loads.
- The crankcase was also redesigned in conjunction with the new crankshaft.
- Cutouts in the sides of the cylinder bores (below the piston stroke) allow air trapped underneath each descending piston to quickly escape to adjacent cylinders where pistons are rising. This minimises air-pressure resistance to downward piston movement, reducing mechanical power loss and contributing to a better ring seal.
- Suzuki Composite Electrochemical Material (SCEM)-plated cylinders reduce friction, promote better heat transfer and increase durability.

4. Chassis design

Introduction

The compact, lightweight chassis provides quick steering response and agility and enables the rider to push with confidence on the racetrack.



Twin-spar aluminium frame

Compact, light, and rigid, the twin-spar aluminium frame is built to deliver agile handling and great road-holding ability.

Braced aluminium swingarm

Braced on both sides, the aluminium swingarm provides great road-holding and performance.

4. Chassis design

Suspension

Race-developed Showa Balance Free Front (BFF) forks provide more consistent damping and enhanced performance, increasing cornering traction and deliver smooth, controlled travel.

The BFF system balances oil pressure above and below the solid internal piston as it moves up and down, pushing oil out of the fork leg and through external damping circuits that run to the other side of the piston, where it is drawn back into the fork leg.

The external compression and rebound damping circuits that the oil runs through are more precise than the valve stacks fitted above and below the piston in other types of forks, and damping control is isolated from the influence of unequal pressure.

Rebound damping, compression damping, and spring preload can be easily adjusted externally.

At the rear a Balance Free Rear Cushion (BFRC) shock absorber balances oil pressure above and below the solid internal piston as it moves. As the shock compresses, oil is pushed through the external damping circuit built into the upper shock body, through the compression valve stack and back into the shock body, on the other side of the piston. As the shock extends, oil is pushed through the external rebound damping circuit, through the rebound valve stack and back into the shock body, on the other side of the piston.

4. Chassis design

Wheels and tyres

The lightweight, six-spoke, cast aluminium wheels give positive handling and performance. They are shod with the latest generation of Bridgestone BATTLAX RACING STREET RS11 radial tyres (120/70ZR17M/C (58W) at the front; 190/55ZR17M/C (75W) at the rear), which deliver consistent performance and durability across a wide range of conditions.

Rear wheel and tyre

Front wheel and tyre

BATTLAX RACING STREET RS11

4. Chassis design

Winglets

New winglets added to the front cowling direct airflow and generate downforce at high speeds to enhance stability. They adopt the same design as those used by Team Suzuki CN Challenge when competing in the Suzuka 8 Hours Endurance Race in 2024. Made of dry carbon with a hollow structure and produced in Japan, the size and shape of the winglets was developed through a long process of experimental builds and thorough test runs to achieve the optimum effect without making handling feel heavy.

Electronic steering damper

The electronically-controlled steering damper automatically increases damping at higher speeds, and reduces it at slower speeds. The result is a fine balance of precision and agility on faster and slower sections of the racetrack.

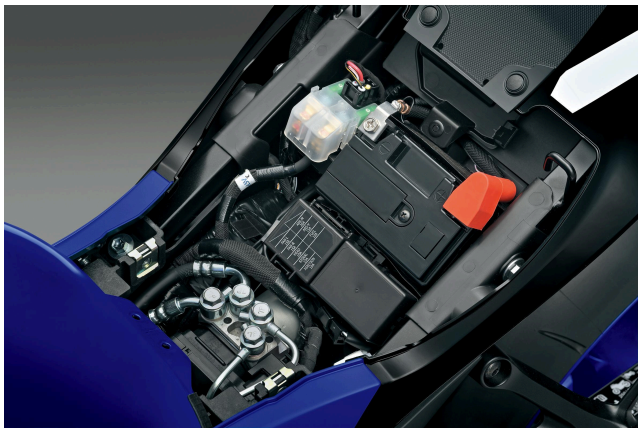
Brakes

The GSX-R1000R uses radially-mounted Brembo monoblock front brake calipers. Each caliper has four opposed 32mm pistons acting on a 320mm floating-mount disc. A single hydraulic disc provides stopping power to the rear wheel. Each disc features a hybrid mounting system using a 50/50 combination of five spring-loaded floating pin mounts and five Brembo T-drive floating mounts. The T-drive mounts are lighter than spring-loaded floating pin, but can produce more noise. Spring-loaded pin mounts are slightly heavier and produce a smaller contact area, but are quieter. Using a combination of T-drive and pin mounts reduces noise and requires fewer mounting points.

4. Chassis design

Additional features

- The ABS unit has been changed to Astemo's latest product, which is more compact and lighter, reducing weight by 51g over the unit on the previous model.
- The fairing's under cowl was reshaped on both the left and right sides to match the new silencer layout. The changes include enlarging the notch on the right side and eliminating the hole on the left side.
- The fuel tank cap was changed to black and the O-ring was changed.
- The shape of the license plate lamp housing and rear fender behind the license plate has been changed from a square shape to a round one that makes the appearance of the tail cleaner and more appealing.
- The rear side reflectors have been changed from round to square for a cleaner look
- The projection profile of the pillion footrest was changed.



ABS control unit

5. Suzuki Intelligent Ride System (SIRS)

Introduction

The Suzuki Intelligent Ride System (SIRS) is a collection of advanced electronic rider aid systems. Each provides settings the rider can choose from freely to best suit their level of skill and experience, or the riding conditions.

The latest SIRS is developed and optimised specifically to bring out the winning potential of the updated GSX-R model. Revisions to the various systems benefit from incorporating feedback from new systems on models released since the previous generation of the GSX-R1000R. The development concept focused on not interfering with the rider's intuitive operation and natural feeling, with an aim on instilling confidence and helping each rider get the most out of riding the latest GSX-R1000R.

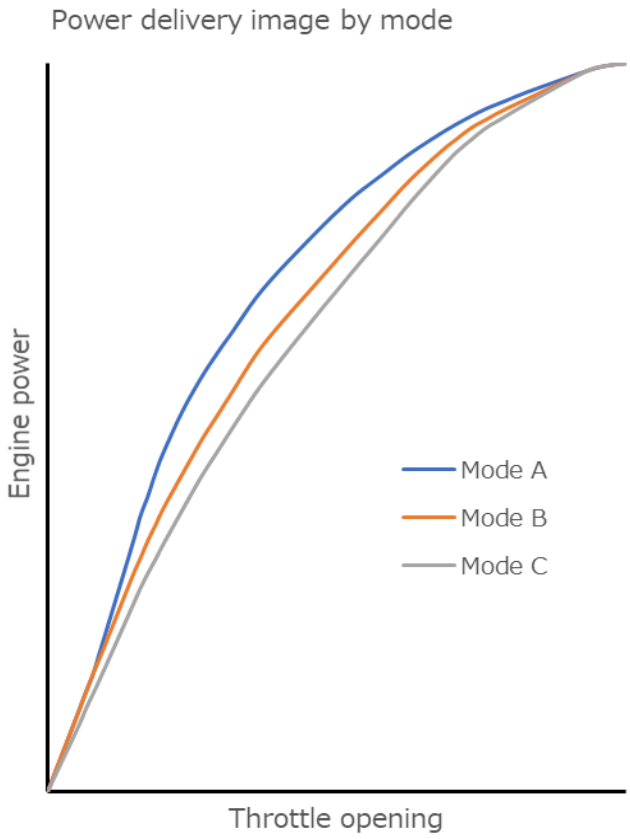
The collection of systems custom-engineered for the GSX-R1000R aim not only to put the latest high-spec technologies in the hands of all riders, but also to make the GSX-R1000R more controllable, predictable, comfortable and competitive.

5. Suzuki Intelligent Ride System (SIRS)
Suzuki Drive Mode Selector (SDMS)
The rider can select between three modes that deliver different power characteristics to match their preferences or the riding conditions. The settings for each mode have been updated over the previous generation GSX-R1000R.

A (Active) mode provides the sharpest response as the throttle is opened. Tuned to deliver exciting acceleration and fully leverage the engine's power, it is well suited for enjoying aggressive runs and circuit use.

B (Basic) mode reaches the same level of maximum output, but features a more linear curve with softer initial throttle response. The aim is to deliver a satisfying balance of settings that make a good fit for a broad range of riding styles and road conditions.

C (Comfort) mode aims to prioritise comfort and controllability by offering the softest throttle response and more gentle torque characteristics. This setting is a good choice in inclement weather or when riding with a pillion.

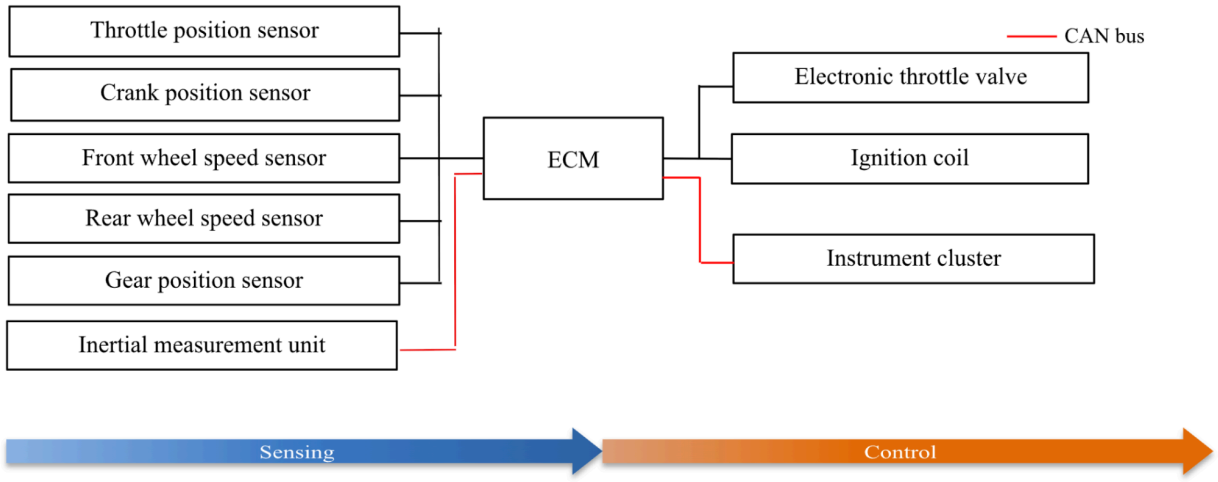


5. Suzuki Intelligent Ride System (SIRS)
Smart TLR Control - Suzuki Traction Control System
Designed to provide greater stability and enable the rider to control the GSX-R1000R with confidence in varying riding conditions, this system features smooth control that does not interfere when enjoying a more sporty ride. It offers 10 settings and can also be turned off. The higher the number of the mode, the faster the control takes effect and the more proactive the system is in limiting wheel spin.

In addition to monitoring front and rear wheel speed, engine RPM, throttle position, and gear position, the system uses data from the inertial measurement unit (IMU) to constantly monitor the amount of lean angle as well. When the system determines an imminent loss of traction, the ECU controls output to the electronic throttle valve, ignition coil, and spark plugs to limit power and prevent slipping. This technology is adopted directly from the traction control system Suzuki developed for racing.

Smart_TLR image

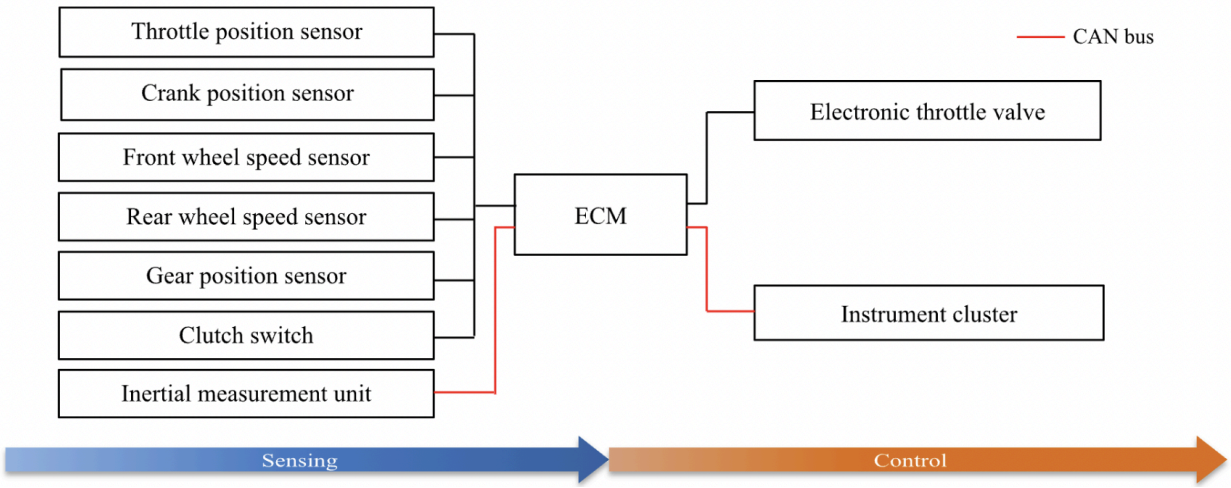
stage	mode	TC	RT	LIFT	control level
Race track	OFF				Minimum
	1				
	2				
	3				
	4				
Twisty roads or City Street	5				
	6				
	7				
	8				
	9				
Wet	10				Maximum



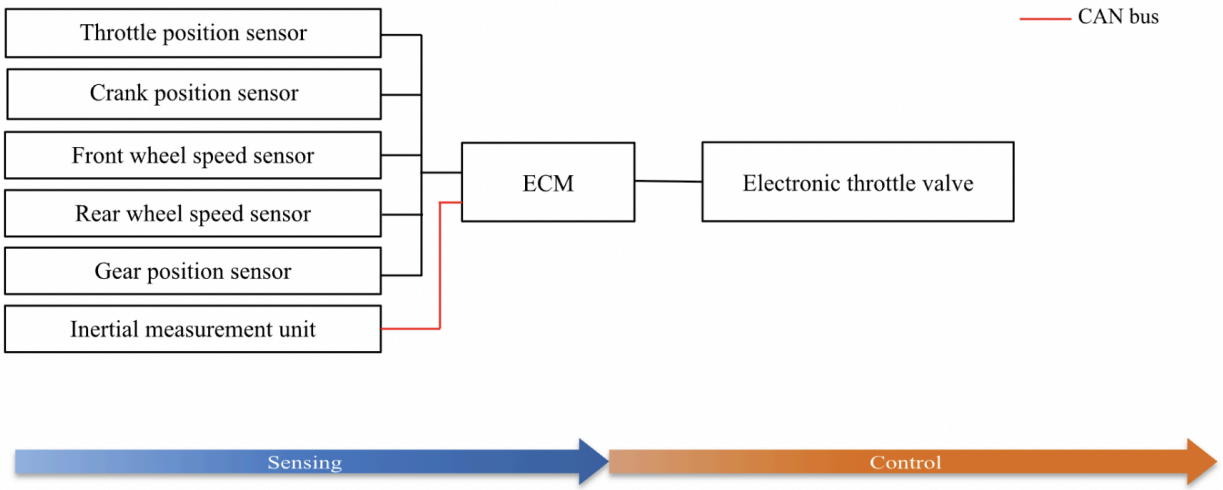
5. Suzuki Intelligent Ride System (SIRS)

Smart TLR Control - Lift limiter

The GSX-R1000R adopts a new lift limiter, which helps prevent the front wheel from lifting when accelerating hard. Lift limiter works silently in the background, with its settings being determined by the STCS level setting. In addition to monitoring engine RPM, the GSX-R1000R's ECU monitors throttle position, gear position, and clutch switch status, and processes that data along with input from the front and rear wheel speed sensors and the IMU to determine the appropriate amount of output to developer in response to operation of the electronic throttle control.



5. Suzuki Intelligent Ride System (SIRS)
Smart TLR Control - Roll Torque Control
Roll Torque Control uses data received from the IMU and wheel speed sensors to calculate the bike's lean angle and speed to predetermine what level of power output is optimal for a given corner. It works in conjunction with traction control to help deliver a sense of stability through the corner. Its benefit is that it works to prevent wheel spin, rather than activate when slip is detected, making for more seamless acceleration and reduced 'pumping'.



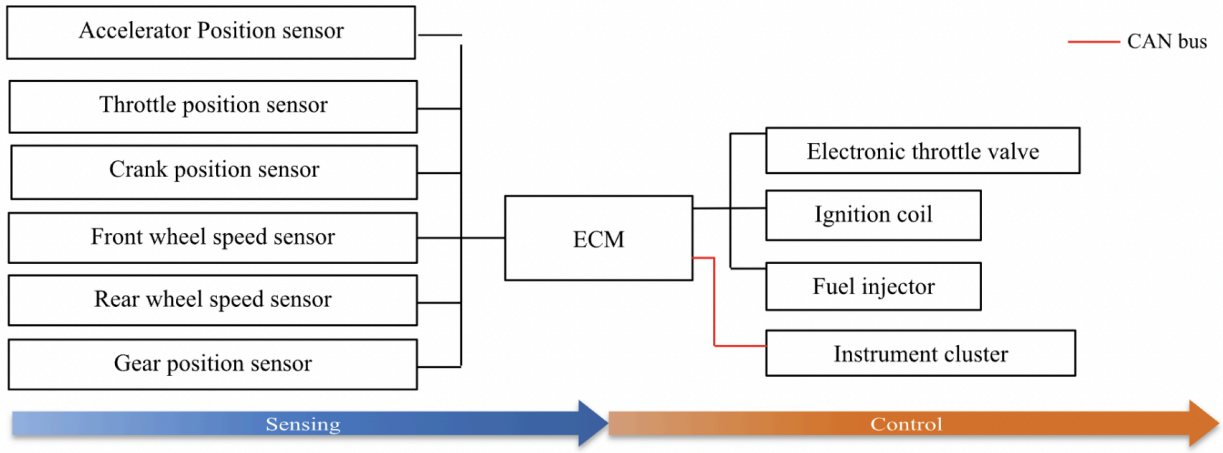
5. Suzuki Intelligent Ride System (SIRS)

Launch control

The GSX-R1000R's launch control system has also been updated. This system makes it easier for a racer to get a good start in closed-course competition by automatically limiting engine rpm and optimising torque delivery while the rider holds the throttle wide open and concentrates on feeding in the clutch lever.

Launch control is activated using a switch on the right handlebar. The system then monitors throttle twist grip position, throttle valve position, engine rpm, gear position, and front wheel speed and rear wheel speed. At the moment of launch, the system is set to hold the engine at the ideal rpm for an effective launch. Once the clutch lever is released and the clutch engaged, rpm is no longer limited but throttle opening is controlled to keep the engine at the ideal torque for strong acceleration.

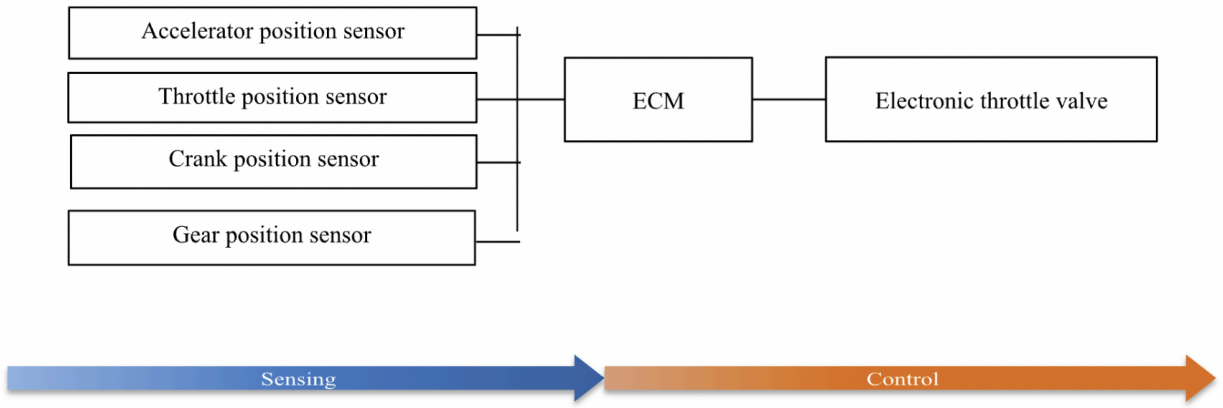
The launch control system not only helps the rider get a good initial launch, but also helps reduce the chance that a wheelie off the starting grid will require the rider to close the throttle. It does so by working with the lift limiter function and controlling engine torque while monitoring input from several sensors. The launch control system automatically disengages when the rider upshifts into third gear or closes the throttle grip.



5. Suzuki Intelligent Ride System (SIRS)

Ride-by-wire electronic throttle system

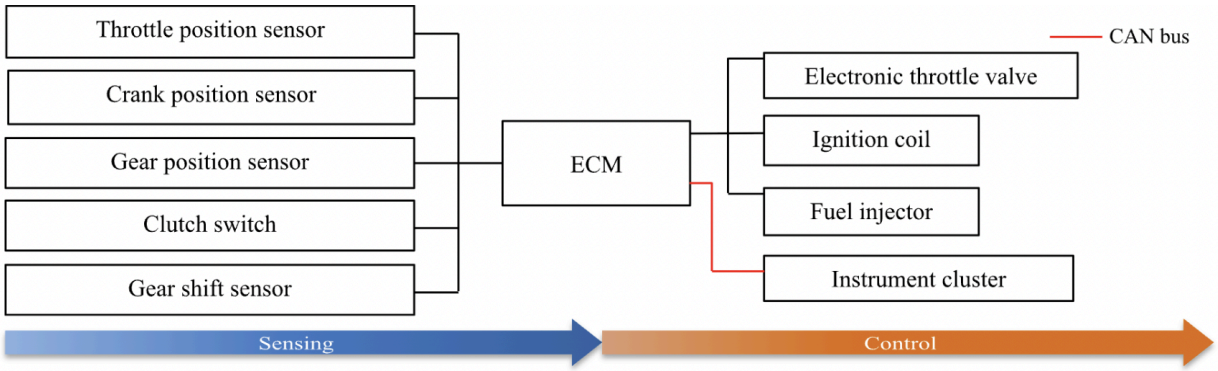
Suzuki's ride-by-wire electronic throttle system uses the ECU to control the action of the throttle valves and better control the relationship between throttle action and engine output. The benefit of this is that individual settings can be tuned and thoroughly tested to match each of the SDMS mode settings. As a result, throttle action responds faithfully to the rider's intention across the range of mode settings and it offers the feeling, response, and linear control similar to that of conventional throttle operation. The system also brings its advantages to other systems, such as the bi-directional quickshifter.



5. Suzuki Intelligent Ride System (SIRS)

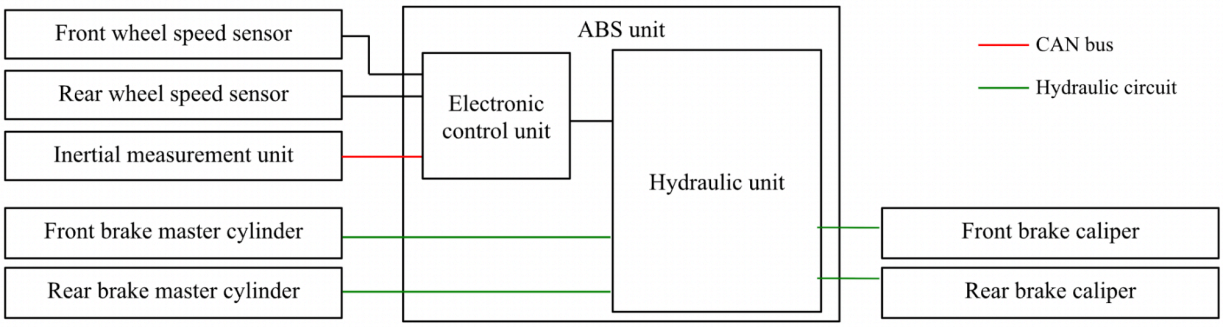
Bi-directional quickshifter

The bi-directional quickshifter allows the rider to shift up or down without operating the clutch lever or blipping the throttle on downshifts. The system automatically interrupts power delivery for between 50 and 75 milliseconds - depending upon the sensitivity adjustment - to unload the transmission gear dogs and allow a clean upshift, producing smoother, uninterrupted acceleration. For quicker and smoother downshifts, 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. The ECU 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, and the gear shifting mechanism is optimised to provide a solid click with each shift that assures the rider that the gearbox has responded immediately to their action.



5. Suzuki Intelligent Ride System (SIRS)
Motion Track Brake System

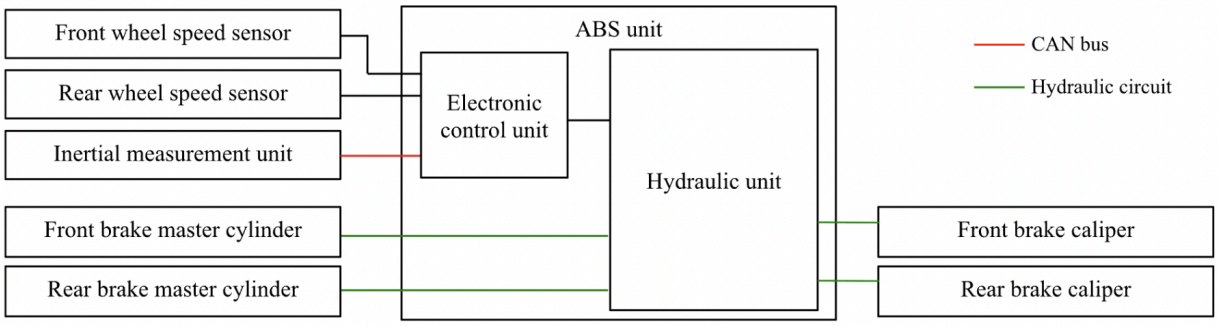
This system enhances control by allowing ABS activation not only when travelling in a straight line, but also when leaning into a corner. The ABS system determines when intervention is called for by monitoring input from the front and rear wheel speed sensors along with vehicle posture data from the IMU. When it is, the ABS unit's hydraulic unit controls brake pressure to reduce the impact of sudden braking force, making the bike less likely to try to push itself upright or lose traction. As a result, the bike maintains its radius and lean angle, helping to support the rider in tracing their intended line through the corner. Even if the rider panics and brakes heavily in a corner, the system assists in maintaining stability while slowing the machine. The Motion Track Brake System supports sure and confident braking in various riding situations, both when riding straight and when cornering.



5. Suzuki Intelligent Ride System (SIRS)

Slope Dependent Control System

This system helps prevent rear wheel lift when braking while riding downhill, resulting in a more stable ride. The ABS unit uses input from the IMU to monitor the bike's posture and, when the rider applies the brakes, its hydraulic unit controls brake pressure to deliver the optimum setting to match the angle of inclination. The amount of rear lift control is continuously adjusted to match the current slope angle, and this results in supporting more stable braking.



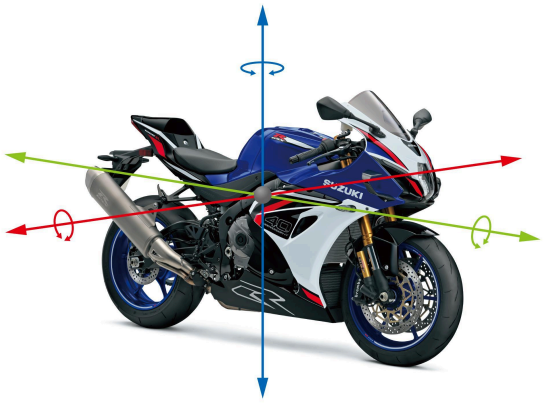
Suzuki Easy Start System

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.

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.

5. Suzuki Intelligent Ride System (SIRS)
Supporting technologies
Inertial Measurement Unit (IMU)
The GSX-R1000R adopts the latest version of Bosch's IMU to track pitch, roll, and yaw movement in six directions along three axes, and constantly monitor the bike's angular rate and acceleration. This real-time data is used to control features such as the lift limiter, Roll Torque Control, the Motion Track Brake System, and Slope Dependent Control. The new IMU reduces weight by approximately 10 grams over the previous generation.



Three-axis, six-direction IMU

IMU

Controller Area Network (CAN bus)
The GSX-R1000R employs a robust CAN bus that reduces the number of wires required by the harness, so contributes to reducing weight and aids the inclusion of advanced control systems. For example, while conventional ABS is controlled using only information from the front and rear wheel speed sensors, ABS on the GSX-R1000R also receives data from the IMU via the CAN bus.

Engine Control Unit (ECU)
The ECU provides state-of-the-art engine management that contributes to the operation and optimisation of several critical systems.

6. Electric equipment

HY battEliiy P-series starter battery

The HY battEliiy P-series starter battery represents a major innovation in motorcycle starter battery technology, offering numerous advantages over conventional lead-acid batteries.

Developed by Eliiy Power using cutting-edge energy storage technology, the new P-series is not only more compact and lightweight but is designed with a focus on exceptional reliability, impressive durability, enhanced startability, and an extended lifespan with minimal self-discharge requirements.

Safety is central to the design of the HY P-series batteries. Extensive testing has shown that these batteries excel in security and reliability, outperforming conventional lithium-ion batteries. They remain safe even under conditions such as internal short circuits, abnormal charging, tipping incidents, or other physical impacts. The electrolyte uses a unique component that acts as a chemical balancer to automatically even out the state of charge across each cell, promoting optimal battery performance and safety. Furthermore, the battery is equipped with an easily replaceable fuse, allowing continued functionality despite high current flows resulting from miswiring or external short circuits.

Designed to operate across a wide thermal range, the HY P-series reliably starts engines in temperatures from -10˚C to 65˚C and maintains smooth operation under persistent -10˚C conditions. With an expected lifespan of up-to 10 years, these batteries deliver consistent output and high-rate performance throughout their service life.

Given their high reliability in safety, durability and long life, HY battEliiy P-series is a perfect fit for modern motorcycle starter batteries.

7. Styling design

LED headlight

The high-illumination LED headlight features low-beam and high-beam elements that are stacked, with the low beam positioned above the high beam. The narrow and compact design contributes to both aerodynamic performance and the sharp lines of the GSX-R1000R’s face.

LED position lights

Sharp LED position lights are located above the SRAD intakes on each side of the GSX-R1000R’s headlight, enhancing the distinctive look of the bike’s face.

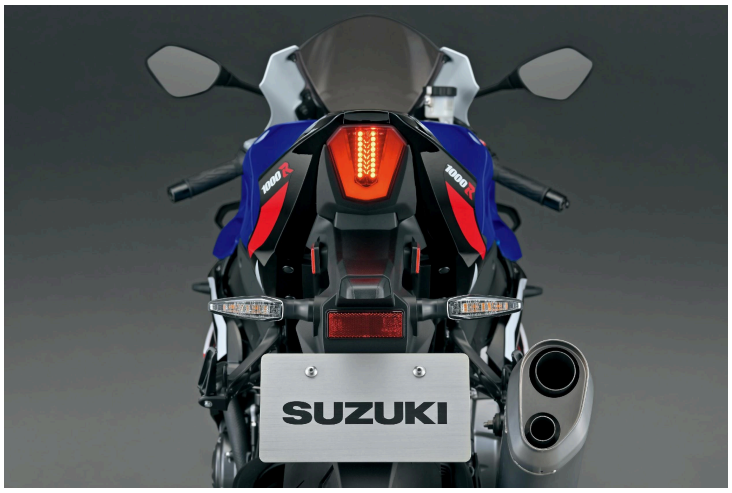
7. Styling design

LED front indicators

The LED front turn signals are mounted in thin bar-shaped housings that extend from the sides of the cowling.

LED rear combination lamp

The LED combination tail and brake light features a vertical layout that contributes to the tail's sharp, slim design.



7. Styling design

Shaped for performance

The GSX-R1000R’s styling is based on aerodynamic performance, as determined in wind tunnel and racetrack testing, with feedback from experienced test riders and racers. Styling designers worked alongside the engineering team to create a functional shape that still expresses the beauty of high performance in a purpose-built super sportbike.

7. Styling design

Body colours matched to the prestigious history of the GSX-R

In keeping with the 40th anniversary theme, a lineup of body colours was chosen that feature schemes used on famous racing liveries of memorable winning GSX-R race machines from the past:

- C6F (Pearl Vigor Blue / Pearl Tech White)
- C7Q (Candy Daring Red / Pearl Tech White)
- C7P (Pearl Ignite Yellow / Metallic Matt Stellar Blue)

40th anniversary graphics

Striking graphics and parts finishes aim to commemorate the 40th anniversary of the GSX-R family, which foster a sense of connection with the history of the GSX-R and instill great pride of ownership.

Decals

40th anniversary decals add a special highlight to the sides of the fairing, while bold R decals adorn the bellypan.

Emblem

A 40th anniversary emblem adorns the top of the fuel tank.

7. Styling design

Embossed seat logo

The GSX-R logo is embossed on the seat.

Silencer logo

The GSX-R graphic is featured on the silencer body.

Magneto and clutch cover

The magneto and clutch cover are changed from black to grey.

7. Styling design

Front disc brake

The front disc brake housings feature a gold anodised finish.

Key

The ignition key features the GSX-R 40th anniversary logo presented on a black background.

Fuel tank cap

The blacked-out fuel tank cap adds extra style.

8. Colour lineup

C6F (Pearl Vigor Blue / Pearl Tech White)

C7Q (Candy Daring Red / Pearl Tech White)

C7P (Pearl Ignite Yellow / Metallic Matt Stellar Blue)

9. Specifications

Overall length		2,075 mm (81.7 in.)
Overall width		705 mm (27.8 in.)
Overall height		1,145 mm (45.1 in.)
Wheelbase		1,420 mm (55.9 in.)
Ground clearance		130 mm (5.1 in.)
Seat height		825 mm (32.5 in.)
Kerb weight		203kg (448 lbs.)
Engine type		Four-stroke, four-cylinder, liquid-cooled, DOHC
Bore x Stroke		76.0 mm x 55.1 mm (3.0 in. x 2.2 in.)
Engine displacement		1000cc (61.0 cu. in.)
Compression ratio		13.8:1
Maximum power		143.5kW (195PS)/13,200rpm
Maximum torque		110.0Nm/11,000rpm
Fuel system		Fuel injection
Starter system		Electric
Lubrication system		Wet sump
Transmission		Six-speed constant mesh
Suspension	**Front**	Inverted telescopic, coil spring, oil damped
	Rear	Link type, coil spring, oil damped
Rake / Trail		23°20’ / 95mm (3.7in)
Brakes	**Front**	Disc, twin
	Rear	Disc
Tyres	**Front**	120/70ZR17M/C (58W), tubeless
	Rear	190/55ZR17M/C (75W), tubeless
Ignition system		Electronic ignition (transistorised)

Fuel tank capacity	16.0 L
Oil capacity (overhaul)	4.0 L
Fuel consumption*	41.54mpg (6.8 L/100km) in WMTC
CO_2 emissions*	158g/km in WMTC

*Actual fuel consumption and CO_2 emissions may differ owing to conditions such as the weather, road, rider behavior and maintenance.

Ends