

# SUZUKI

## GSXR 1000 ABS

# 2017

## NEW FOR 2017

All new 999.8cc liquid-cooled DOHC inline-four cylinder engine produces exceptionally high top-end power without sacrificing low to mid-range power thanks to a Variable Valve Timing (VVT) system, Ride-by-Wire Throttle Bodies and more

Advanced electronics such as an Inertia Measurement Unit (IMU), S-DMS adjustable power output, and Suzuki traction control, plus other performance features, increase racetrack and street performance

New design, twin-spar type aluminum frame is 10% lighter and more compact, with optimized rigidity for nimble handling and a high level of grip when cornering

Advanced suspension uses a SHOWA BPF fork and rear shock that combine with new ABS-equipped BREMBO T-drive 320mm dual front brake rotors and Monobloc 4-piston calipers for extraordinary handling and stopping performance

Aerodynamic bodywork is sleek and stylish while housing a new, bright LED headlight and Suzuki Ram Air Direct (SRAD) ducts that feed a high volume of intake air for astonishing top speed muscle



### GSX-R1000 ABS COLORS



Pearl Mira Red



Metallic Matte Black No. 2 /  
Glass Sparkle Black

It has been three decades, with more than a million editions sold, since the GSX-R line was born. And a decade and a half has elapsed since the first GSX-R1000 transformed the open sportbike class forever. Now, the 2017 GSX-R1000 ABS is redefining what it means to be The King of Sportbikes.

This motorcycle's chassis forms the lightest, the most compact, the most aerodynamic and the best-handling GSX-R1000 ever. Cradled in the new aluminum frame is an all-new engine that uses an exclusive Variable Valve Timing system and Ride-by-Wire throttle bodies for a wide spread of power while delivering smooth and precise throttle response

Using an Inertial Measuring Unit (IMU) the GSX-R1000 ABS's advanced electronics package includes selectable performance modes so the motorcycle enhances and fine tunes rider inputs. The six-axis IMU lets the GSX-R1000 ABS recognize its position on the street or race track to help the rider achieve an extraordinary level of riding performance.

Up front, new style BREMO T-drive brake rotors grasped by Monobloc calipers connected to the exclusive Suzuki Motion Track Anti-lock Brake system provides strong, controlled braking. The precise and smooth SHOWA suspension keeps the sticky Bridgestone RS10 tires in touch with the road. All of this forward-looking motorcycle technology is covered in all-new, wind tunnel-developed bodywork that's uniquely GSX-R.

The King of Sportbikes is back, bow to the King.

## GSX-R1000 ABS FEATURES

- New 32-bit Dual Processor Engine Control Module (ECM) blends Suzuki's vast street-going EFI knowledge with the intelligence from Suzuki's race-winning MotoGP program. GSX-R1000 ABS riders will get sportbike performance without peer while simultaneously receiving polished street manners.
- Using MotoGP knowledge, Suzuki has fitted an Inertial Measurement Unit (IMU) on the new GSX-R1000 ABS. The IMU provides six direction, three axis motion and position information to the ECM so instantaneous adjustments can be made electronically to the engine and chassis components that influence performance.
- The new LCD Multi-function Instrument Panel was inspired by the GSX-RR MotoGP dash, and is laid out so the rider can quickly acquire the tachometer bar, speedometer digits, and other operational information that's essential - especially at racetrack speeds. The panel is a critical interface as it provides setting information for the GSX-R1000 ABS's advanced electronic rider aids.
- New Ride-by-Wire electronic throttle bodies are precisely opened by the ECM to match the throttle grip rotation of the rider's hand and the refinement from the IMU-influenced electronics. The result is a strong, seamless engine power delivery from idle to redline.
- A new version of the three mode, Suzuki Drive Mode Selector (S-DMS) system lets the rider select the power output levels of the engine to match riding ability and conditions.
- The new and exclusive ten-mode, Motion Track Traction Control System (MT-TCS), with IMU influence, increases rider confidence by allowing adjustments to amount of intervention to match riding ability and surface conditions.
- Exclusive to Suzuki, the new Motion Track Anti-lock Brake System brings additional control to anti-lock braking (ABS). Like a conventional ABS system, the Motion Track Brake System provides the appropriate amount of braking force for the available traction. When the IMU detects the rear wheel lifting up from extreme braking forces, the ABS control module will adjust the front brake pressure to reduce the rear wheel lift.
- The Suzuki Easy Start System simplifies start up for the GSX-R1000 ABS rider as the ECM automatically cranks the engine for 1.5 seconds (or until it starts) with a momentary press of the starter button. There is no need to pull in the clutch lever if the transmission is in neutral. Once started, the ECM will control the electronic throttle bodies to maintain a consistent engine idle speed, whether the engine is cold or warm.
- The innovative Suzuki Low RPM Assist System smooths take-offs and reduces the chance of the rider stalling the motorcycle. If necessary, the ECM raises engine RPM slightly for a smoother start when the clutch is released so it's easier to ride away from a stop or navigate at very low speeds in traffic.
- The all-new, four-stroke, liquid-cooled, DOHC, 999.8cc inline-four cylinder engine is designed with a high level of top end performance plus strong low to mid-range power.
- The crankshaft retains Suzuki's Even Firing Order Engine legacy. Un-even firing order engines used in other motorcycles vibrate more while the GSX-R1000 ABS makes good power at all engine speeds, runs smoother and reliably while emitting a screamer exhaust note.
- The short stroke engine has a 76.0 mm bore versus a 55.1mm stroke, yet is narrower than the prior generation GSX-R1000 thanks to effective design.
- The fresh-design engine has been rotated back and positioned in the frame to create optimal chassis dimensions for precise handling and to balance the motorcycle's weight.
- The new and exclusive Suzuki Racing Variable Valve Timing System (SR-VVT) uses a centrifugal actuated mechanism on the intake camshaft sprocket to increase high engine RPM power without losing low-to mid-range power.
- The new design Suzuki Racing Finger Follower valve train weights less than a tappet-style valve train for reduced friction and increased valve response at higher engine speeds.
- Titanium valves, two 31.5mm intake and two 24mm exhaust valves, are used for each cylinder. The lighter valves respond well to the finger follower's arms and permit a 14,500 RPM redline that helps produce very high peak horsepower.
- Aluminum pistons, 76.0 mm in diameter, were engineered with use of FEM (Finite Element Method) analysis, and are cast for optimal rigidity and weight.
- Suzuki Composite Electrochemical Material (SCEM) coated cylinders are integrated into the upper crankcase to reduce friction and improve heat transfer and durability.
- The high, 13.2:1 compression ratio helps produce high horsepower while the shallow combustion chamber, and carefully designed cooling passages, route heat effectively away from the combustion chambers.
- The EFI system uses Suzuki's new Ride-by-Wire Electronic Throttle Bodies where the throttle valves are controlled by a servo motor for fast response to rider throttle grip input while delivering precise and smooth power delivery.
- The automatic Idle Speed Control (ISC) improves cold starting and stabilizes the engine idle regardless of engine temperature.
- Complementing the four, primary fuel injectors mounted in the throttle bodies are four Suzuki Top Feed Injectors (S-TFI) that spray fuel from the top of the air box directly into the intake funnels for higher peak power, more efficient combustion, and a higher level of fueling control.

## GSX-R1000 ABS FEATURES CONT.

- To increase top end power without losing lower RPM performance, the air box is equipped with Staked Air Intake Funnels for the #1 and #4 cylinders. This simple design allows good air flow at all intake speeds without requiring a mechanism that adds weight or complexity.
- New design Suzuki Ram Air Direct (SRAD) intake ducts are used to exponentially increase the volumetric flow of air amount coming in the air box as road speed increases.
- The digital ignition fires iridium type spark plugs that increase spark strength and combustion efficiency. These quality components also last longer than conventional spark plugs.
- The 4-2-1 exhaust system with titanium muffler is designed helps the engine deliver a wide range of performance with an exciting rush up to redline.
- The Suzuki Exhaust Tuning (SET) system valve in the mid-pipe helps control back-pressure and flow to the muffler to widen power delivery and reduce exhaust sounds without needing a larger silencer.
- New design SET-Alpha exhaust valves are in the balance tubes between the #1 and #4, and the #2 and #3 head pipes. Actuated by a cable from the main SET-valve, the Alpha valves open at higher engine speeds and close at lower RPM to help the engine create high peak power without losing low and mid-range horsepower.
- The titanium muffler has a pleasing appearance while creating an exciting, distinctive sound.
- The cooling system was designed using advanced analysis design so the coolant flows through the engine and radiator more efficiently. This design uses 400cc less coolant than the prior GSX-R1000, but the new system has better cooling efficiency while being more compact and lighter.
- The fairing lowers efficiently guide cooling air to the high-capacity curved radiator. Twin cooling fans ensure good cooling at lower road speeds.
- Additional heat is removed from the engine via the use of an air-cooled, radiator-style oil cooler mounted directly below the main radiator.
- Based on Suzuki's race-proven six-speed close-ratio transmission, the new GSX-R1000 ABS features vertically staggered shafts to reduce overall engine length.
- The primary gear ratio is lower compared to the prior GSX-R1000 for stronger acceleration.
- A programmable shift light is on the main panel to provide a visual alert to the rider to shift when a certain engine RPM is reached.
- A new version of the Suzuki Clutch Assist System (SCAS) multi-plate, wet clutch is used. SCAS works like a slipper clutch during downshifts, while increasing pressure on the plates during acceleration. This smooths engine braking and lightens the clutch lever pull.
- To reduce weight, a new 525-size drive chain is used with a 45/17 final sprocket ratio that complement the larger, rear tire dimensions.
- Using lessons learning from Suzuki MotoGP chassis development, the engine angle of the GSX-R1000 ABS was rotated backwards 6-degrees. This had the joint effect of reducing the distance of the fork to the center of the chassis by 20mm and increase the swingarm length by 40mm. This increased chassis stability and improves aerodynamics.
- The new, aluminum twin-spar style frame was designed using FEM analysis technology to place strength in the proper places, the new frame is also 10% lighter than the prior generation GSX-R1000. The spars of the frame are set 20mm closer to help improve aerodynamics, looks and to bring more comfort to the rider.
- All-new Aluminum Superbike-braced Swingarm has equalized bracing to the main beams to provide balanced support and movement to the shock absorber to improves racetrack handling while conveying a consistent suspension feel to the rider,
- Racetrack-developed links connect the single SHOWA Remote Reservoir Shock Absorber to the braced swingarm. With spring preload, rebound damping, plus high and low-speed compression damping force adjustment the rider can tune the motorcycle to respond to riding style and weight.
- Superb suspension action is delivered by the fully adjustable SHOWA Big Piston Fork (BPF) which is renowned for damping force control that maintains front tire contact with the surface so the rider gets good sensory feedback while riding at a variety of speeds.
- BREMBO Radial Mount Brake Calipers provide the rider with strong braking performance combined with superb feel. The GSX-R1000 ABS rider will be able to sense the braking force as the lever is squeezed.
- The new BREMBO T-drive Brake Rotors feature two methods of attaching the 320mm floating disc to the carrier. There are five conventional floating rotor spools that maintain the rotor's relationship to the caliper, and there are five new-design T-drive fasteners that enable the rotor to absorb more braking energy than a disc with conventional spools alone. As a result of the larger diameter discs, and the energy they can absorb, the new GSX-R1000 ABS has more braking force available to the rider than ever before.
- The front brakes are complemented by a 240mm rear disc brake with a NISSIN single-piston caliper to help make sure you can have controlled stops.
- Like conventional ABS, the new Motion Track Brake System provides the appropriate amount of braking force for the available traction, with additional chassis pitch input from the IMU. When the IMU detects the rear wheel lifting up from extreme braking forces, the ABS control module will adjust the front brake pressure to reduce the rear wheel lift.
- Unique to Suzuki, new lightweight six-spoke wheels reduce unsprung mass and have been designed to handle the braking and drive forces that a GSX-R1000 ABS can create.
- The track-day ready Bridgestone RS10 low mass tires, with a new higher 55% profile in the back, are premium high-grip radials that achieve excellent handling and stability.
- NEW Aerodynamic Bodywork was created by Suzuki styling designers and engineers using numerous wind tunnel tests to achieve a slippery shape and compelling appearance. Narrower than ever before, the GSX-R1000 ABS's shape directly aids performance by improved handling and top speed on the racetrack.
- The new SRAD intake ducts are positioned closer to the center of the fairing nose, where air pressure is highest. The intake ducts are also larger, thanks to the compact LED headlight.
- The reasonable sport riding position is created by a carefully crafted relationship between the clip-on's, footrests and seat. The top of the fuel tank is lowered 21mm to make it easier for the rider to tuck in on a racetrack straightaway.
- The seat height is an appropriate 825 mm (32.48 in.) and contributes the good rider interface that aids in guiding the motorcycle on the road or race track.
- The passenger seat can be removed and exchanged with an optional, color-matched solo tail cowl.

## GSX-R1000 ABS FEATURES CONT.

- The shifter and rear brake pedal are adjustable in relationship to the footrests, and the hand controls are adjustable in relation to the grips. The front brake lever has a slot machined in the end to prevent wind pressure from applying the front brake.
- The new LCD Multi-function Instrument Panel has an adjustable intensity, white-color backlight for great nighttime visibility and is flanked by LED indicators that include the turn signals, high beam, traction control, shift light, plus coolant temperature and oil pressure alerts.
- The new LED headlight is lightweight, bright and distinctive. This low-electric draw light has a narrow, stacked shape to allow the SRAD ducts at the nose of the fair access to the high pressure air created at higher speeds.
- LED Combination Tail & Brake Light has a very low electrical draw and the vertically stacked shape permits the tail section to be narrow for better air flow at the back of the motorcycle.
- The Turn Signals are lightweight and use incandescent bulbs with amber lenses so the motorcycle's turn indication is highly visible to other traffic.
- New poly-function Start/Stop Switch combines the engine stop and start functions. The switch is a fine complement to the Suzuki Easy Start system fitted to the GSX-R1000 ABS.
- A variety of Genuine Suzuki Accessories are available, plus a large selection of GSX-R logo apparel.
- 12-month unlimited mileage, limited warranty.
- Coverage period and additional benefits available through Suzuki Extended Protection.
- For more details, please visit [www.suzukicycles.com](http://www.suzukicycles.com).

*\*The Traction Control System is not a substitute for the rider's throttle control. It cannot prevent loss of traction due to excessive speed when the rider enters a turn and/or applies the brakes. Neither can it prevent the front wheel from losing grip.*

*\*\*Depending on road surface conditions, such as wet, loose, or uneven roads, braking distance for an ABS-equipped vehicle may be longer than for a vehicle not equipped with ABS. ABS cannot prevent wheel skidding caused by braking while cornering. Please drive carefully and do not overly rely on ABS.*

## GSX-R1000 ABS SPECIFICATIONS

<b>Engine</b>	999.8cc, 4-stroke, liquid-cooled, DOHC
<b>Fuel System</b>	Suzuki fuel injection
<b>Ignition</b>	Electronic ignition (transistorized)
<b>Starter</b>	Electric
<b>Transmission</b>	6-speed constant mesh
<b>Final Drive</b>	Chain, RK525R0Z5Y, 116 links
<b>Suspension Front</b>	Inverted telescopic, coil spring, oil damped
<b>Suspension Rear</b>	Link type, coil spring, oil damped
<b>Brakes Front</b>	Disc brake, twin
<b>Brakes Rear</b>	Disc brake

<b>Tires Front</b>	120/70ZR17 M/C (58W), tubeless
<b>Tires Rear</b>	190/55ZR17 M/C (73W), tubeless
<b>Overall Length</b>	2075 mm (81.69 in)
<b>Overall Width</b>	705 mm (27.8 in)
<b>Wheelbase</b>	1420 mm (55.9 in)
<b>Ground Clearance</b>	130 mm (5.11 in)
<b>Seat Height</b>	825 mm (32.48 in)
<b>Curb Weight</b>	202 kg (445.33 lbs)
<b>Fuel Tank Capacity</b>	16.0 L (4.22 US gal)