

GSXR1100



Massive Torque and Response

The phenomenal GSX-R1100 engine has defined race-winning torque since its introduction. Revolutionary for its combination of high torque output, design simplicity and light weight, Suzuki's unique GSX-R1100 engine has been continually refined. This air-cooled with SACS (Suzuki Advanced Cooling System) 1127 cc powerhouse has a bore and stroke of 78 x 59mm, four valves per cylinder, double overhead camshafts and Suzuki's TSCC (Twin Swirl Combustion Chamber) design.

Cylinder head designs are directly from the factory team's race shop. Blending the valve seats smoothly into oblong intake ports increases gas flow velocity, improving cylinder charging and scavenging and torque output. Opening each valve with a lightweight, single rocker arm (operated by an individual cam lobe) and using a small shim (held on top of each valve spring retainer) to adjust valve lash reduces inertial mass and—especially at high rpm—mechanical losses as well.

The transmission output shaft is equipped with a double-row ball bearing to match the massive engine torque. The crankcase system sprays a constant stream of oil on the third, fourth and fifth gears, improving gear lubrication and cooling.

It all adds up to massive torque, unheard-of response and outstanding efficiency.

Suzuki Advanced Cooling System (SACS)

The Suzuki Advanced Cooling System (SACS) combines with air-cooling to efficiently keep the GSX-R1100 engine at optimum operating temperatures. SACS is a separate, high-volume oil flow system that carries engine heat to an efficient, high-capacity, curved Radial Flow cooler. SACS results in engine temperatures much lower than

those achieved with air-cooling alone, and SACS is simpler and lighter than competing water cooling systems.

Slingshot Carburetors

The Suzuki GSX-R1100 breathes through large 40mm Slingshot smoothbore carbs. The innovative Slingshot carburetors deliver excellent response at low and mid-rpm along with high-rpm power. The Slingshot carburetor's unique slide is flat on the side facing the airbox and round on the side facing the engine. This design provides faster flow at the main nozzle and increased negative pressure, thereby atomizing the fuel more efficiently. The slide is made of lightweight plastic for responsive, instantaneous response to the rider's hand on the throttle. A smooth-radius air intake bell, without ridges, increases intake efficiency. A vent circuit built into each carburetor reduces negative pressure underneath the slide diaphragm, allowing the slide to rise more rapidly and improving throttle response. Slingshot design carburetors are lighter than conventional carburetors and are also easier to work on.

Convenient Choke Control

The remote choke control lever is conveniently positioned on the left handlebar. The lever system helps the rider accurately control cold-idle rpm by making fine adjustments to the choke setting.

Cool Air Induction System

Cool air is dense air, and dense air means more torque output. But the air reaching the carburetors of most motorcycles has been heated and thinned by passing the engine or the radiator. The GSX-R1100's racing

induction system carries relatively cool, dense air to the carburetors. The system routes air from a fairing intake scoop into the right-side frame rail; the air travels through the rear frame cross tube and is fed into the airbox intake.

Four-into-two Exhaust System

The GSX-R1100's efficient four-into-two exhaust system is made of rust-resistant stainless steel. The system is designed to help maximize cornering clearance.

Computerized Ignition

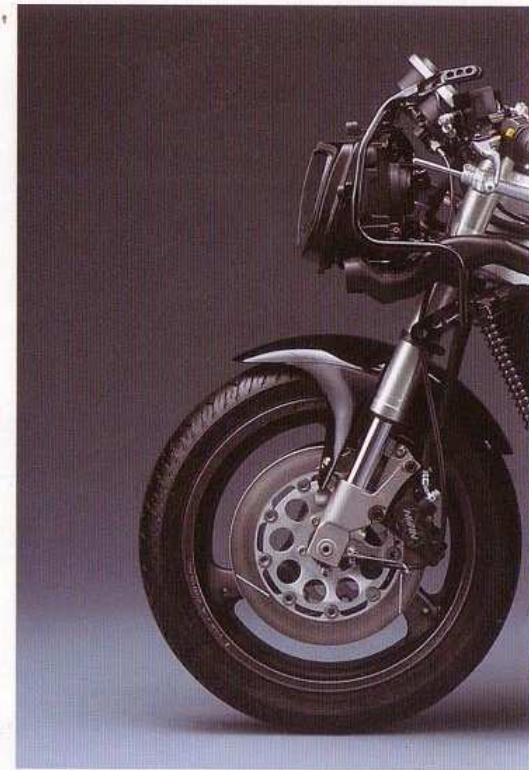
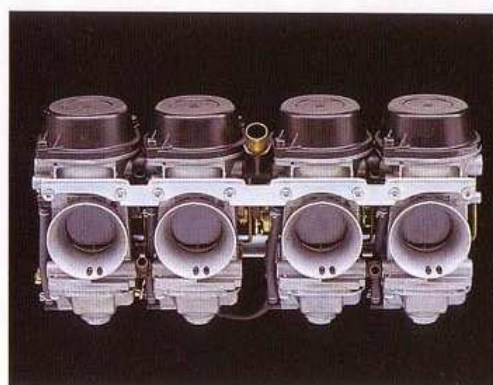
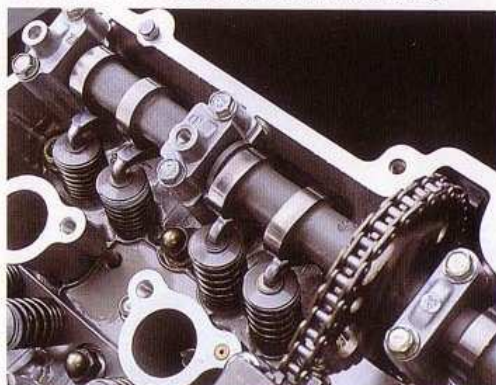
Suzuki's microcomputer-controlled digital ignition system provides ideal ignition timing at every engine rpm. Timing is not affected by heat or humidity.

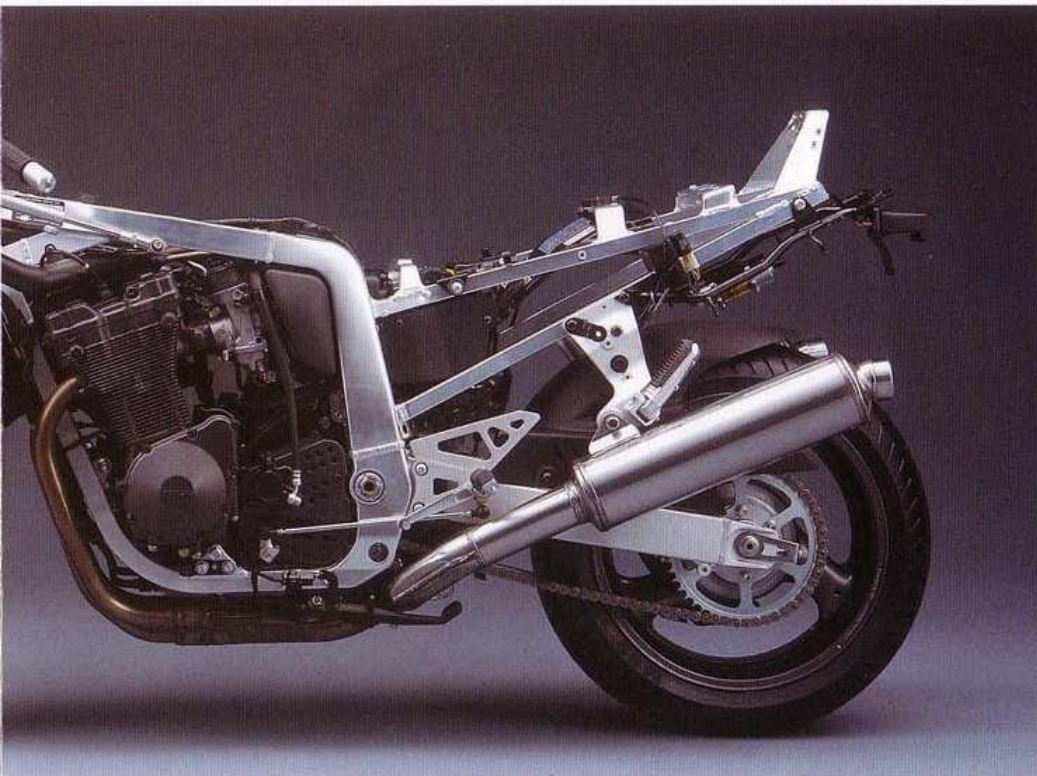
Hydraulic Clutch With Diaphragm Spring

Hydraulic actuation and diaphragm springs help give the GSX-R1100 positive clutch action with a relatively light lever feel.

Compact, Strong Racing Frame and Swingarm

The GSX-R1100's aluminum-alloy frame and swingarm are an exceptionally light and rigid combination of state-of-the-art castings and extruded straight-wall tubing. The double-cradle frame and rectangular-section swingarm designs have performed well with heavily modified racing engines. Swingarm reinforcing includes gussets behind the cross brace tube.





Inverted Front Forks

Any racer who has made back-to-back comparisons will tell you that the fastest way to improve handling is to replace conventional front forks with a set of inverted forks. Race-proven inverted forks simply work better, and that's why they're standard on the GSX-R1100.

Unlike conventional forks, the GSX-R1100's inverted forks have the stanchion tubes on the bottom, carrying the axle. The stanchion tubes slide inside larger diameter upper tubes grabbed by forged aluminum alloy triple clamps; because there's more surface area gripped by the triple clamps, the entire assembly is more rigid, which in turn reduces side-loading of fork bushings and improves fork response.

Rebound and compression damping can be adjusted independently, with 10 rebound damping settings and 8 compression damping settings. Spring preload can be adjusted across a wide range. Front wheel travel is 120mm (4.72 inches).

Progressive Link Rear Suspension System

Suzuki's unique progressive link rear suspension system becomes progressively firmer throughout the GSX-R1100's 158mm (6.22-inches) of wheel travel, improving response to road irregularities around town and at highway speeds. Needle roller bearings reduce friction in linkage pivot points. The externally-adjustable, remote-reservoir rear shock absorber has 19 rebound damping settings and 17 compression damping settings, along with 7 spring preload settings.

Wide Cast Wheels, Radial Tires

The GSX-R1100's wide, cast aluminum-alloy wheels carry 17-inch high-performance radial tires. Each wheel has

three hollow spokes to reduce weight, with uniform casting wall thickness for maximum strength and a sealed design to reduce stress concentration where the spoke meets the rim. The front wheel measures 3.50×17-inches and the rear wheel measures 5.50×17-inches.

Four-piston Calipers, Floating Front Brake Discs

Race-proven stainless steel alloy, 310mm (12.2-inch) front brake discs feature surface slotting and floating carrier mounts to help resist heat-related distortion. Four-piston calipers have staggered (30mm leading and 34mm trailing) piston sizes for more even pad wear. The front master cylinder features a remote fluid reservoir.

Racebike Aerodynamics

The wind-tunnel refined, factory racer-derived fairing is of narrow design and features a slanted nose, flush-mounted headlight assembly and raked windscreen for less lift, smaller frontal area and reduced drag. The side-covers and tailsection reduce turbulence and smooth the airflow behind the rider's legs.

Wide Seat and Optional Solo Cover

The GSX-R1100 has a wide seat for rider and passenger comfort. An optional cover is available to replace the rear seat section, for solo riding.

Dual Lighting, Complete Instrumentation

The GSX-R1100's dual-halogen-bulb headlight assembly is complemented by a front running light and a dual-bulb taillight integrated into the tailsection. Instruments include a large tachometer, speedometer and a full array of indicator lights set in a diecast aluminum panel.



White/Blue



Black/Red



Silver/Black



GSX-R1100 SPECIFICATIONS

Engine type	4-stroke, 4-cylinder, air-cooled with SACS, DOHC, TSCC
Piston displacement	1,127 cc
Bore x stroke	78 x 59 mm
Compression ratio	10:1
Maximum power	145 ps/10,000 rpm
Maximum torque	11.6 kg·m/7,500 rpm
Carburetor	BST40SS, four
Starter system	Electric starter
Lubrication system	Wet sump
Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Drive chain	TAKASAGO RK532GSV2, 118 links

Overall length	2,085 mm (82.1 in.)				
Overall width	755 mm (29.7 in.)				
Overall height	1,150 mm (45.3 in.)				
Wheelbase	1,465 mm (57.7 in.)				
Ground clearance	115 mm (4.5 in.)				
Seat height	815 mm (32.1 in.)				
Dry mass	226 kg (498 lbs.)				
Suspension	<table border="1"> <tbody> <tr> <td>Front</td> <td>Inverted telescopic, coil spring, spring preload fully adjustable, damping force compression 8-way and extension 10-way adjustable</td> </tr> <tr> <td>Rear</td> <td>Link-type, coil spring, gas/oil damped, spring preload 7-way adjustable, damping force compression 17-way and rebound 19-way adjustable.</td> </tr> </tbody> </table>	Front	Inverted telescopic, coil spring, spring preload fully adjustable, damping force compression 8-way and extension 10-way adjustable	Rear	Link-type, coil spring, gas/oil damped, spring preload 7-way adjustable, damping force compression 17-way and rebound 19-way adjustable.
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Rear	Disc				
Tires	<table border="1"> <tbody> <tr> <td>Front</td> <td>120/70 ZR17</td> </tr> <tr> <td>Rear</td> <td>180/55 ZR17</td> </tr> </tbody> </table>	Front	120/70 ZR17	Rear	180/55 ZR17
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Ignition type	Fully transistorized				
Spark plug	NGK JR9B				
Headlight	12V 60/55W x 2				
Fuel tank	<table border="1"> <tbody> <tr> <td>Full</td> <td>22L (5.8 gal)</td> </tr> <tr> <td>Reserve</td> <td>4L (1.1 gal)</td> </tr> </tbody> </table>	Full	22L (5.8 gal)	Reserve	4L (1.1 gal)
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Engine oil with filter change	4,200 ml (4.4 qt)				
Body colors	White/Blue, Black/Red, Silver/Black				

● All action photography shows professional rider on designated closed circuit.

SUZUKI MOTOR CORPORATION reserves the right to change, without notice, equipment, specifications, colors, materials and other items to apply to local conditions. Each model might be discontinued without notice. Please inquire at your local dealer for details of any such changes. Actual body colors might differ slightly from the colors in this brochure.

● Always wear a helmet, eye protection, and protective clothing ● Read your owner's manual carefully ● Enjoy riding safely

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