> Suzuki GSX-R1100

Not so much a motorcycle as a statement of intent. Early oil-cooled GSX-R1100s are for hard men only

■ Top speed 160mph (average) ■ Insurance group NU16 ■ Engine 1127cc, 16v, in-line four ■ Dry weight 210kg ■ Typical mpg 36

What it is

The Daddy. Mr Muscle. The Man's bike. Okay, so the GSX-R11 had its problems, but it was the first Japanese litre-plus bike that could truly be called a super-sports machine.

You think the FireBlade was the first Jap bike to play the power-to-weight card? It wasn't. The GSX-R's claimed 130bhp was nothing new, but that much power in a bike weighing under 200kg certainly was. That was 30kg lighter than the Kawasaki GPZ900R, which was itself a model of compactness for the era.

The GSX-R was styled like an endurance-racer. Tucked in behind the wide fairing, big screen and those twin headlights (for added pose value, you had one pointing slightly skyward, true endurance-style) you really could play the Bol d'Or hero.

In 1986 the chassis was state-of-theart - alloy frame, electric anti-dive forks and fully-floating front discs. Time hasn't served it so well. A true musclebike, the engine had muscle, and you needed all of yours to keep the thing under control.

Thanks to Colchester

Motorcycles for the loan

of the bike. If you're

dynamic abilities. If that's what you like, you'll love the Big Eleven.

Riding

"Nail the throttle and the Suzuki surges forward, although the tacho needle is barely off its 3000rpm peg. The acceleration is awesome - like being charged in the back by a rugby scrum," said Roland Brown in May 1986. "This bike's racing potential is mindblowing."

Many were raced. What impressed people about the first 1100 was its responsiveness - the 750 had to be wound up to deliver its (impressive) best, but the 1100 just charged, in any gear, from any revs. Five gears were enough for the GSX-R1100.

Next to the 750 it was stable too, thanks to its longer wheelbase and factory-fitted steering damper.

It all went wrong with the 1989 K model. The new chassis had exactly the same rake and trail figures as the 750, and it turned from a super-stable rocket into a near-unmanageable animal. "The front end is inclined to chatter under hard braking, the rear to squat and wallow under hard power, with a tendency to shake its head slightly over ripples," said Mac McDiarmid in

February 1989. And that was on a supersmooth Japanese test track

It wasn't just Bike - most magazines of the day were united in their criticism of the K model's wayward nature.

The L model had new suspension including, for the first time on a superbike, upside-down forks. It didn't really cure the problem. "Every year Suzuki change something about the GSX-R1100. Trouble is, they never change just one thing. And for every one thing they improve, they worsen something else," moaned Phil West in June 1991. "That sophisticated suspension set-up, although fine for the track, still isn't right for the road."

With the M model, Suzuki messed up the engine, shoving all the real power above 8000rpm.

"If you get your kicks riding 160mph 1100s like 350 Powervalves you'll love it. If, with that sort of performance on hand, you prefer to trouble yourself less with the gear lever and more with picking lines, braking points, etc, you won't," concluded Phil West, again in June 1991.

It was clear that the big GSX-R had had its day. "Showing its age," we concluded. The water-cooled engine





Price guide

As you'll have gathered, there aren't many showroom condition oil-cooled GSX-R1100s around.

"It was that long ago we last had one in that I'can't remember!" said Sturdeys of Tonbridge.

"I think we've had two in the last five years," opined someone else.

"We just sold an early blue and white E-reg slabsider," says salesman lan Fraser of Rex Judd. "It went for £2500. We don't see many because they've all usually been streetfightered by now. Or crashed."

According to Peter Hendry of the same dealer, docent 1100s fetch anything between £1500 and £2200, "And that's not a lot of money for a lot of motorcycle."

Privately, you're looking at similar money. When late-1990s water-cooled 1100Rs are under three grand, nobody wants to pay more than £2500 for an oil-pumper. But I wouldn't be surprised to see utterly mint and original 1986 and 1987 bikes priced at £3000 and upwards from a dealer – but you'd have to look hard.

was on the horizon, and the GSX-R moved on again, but by then it had the FireBlade to contend with, and that's another story.

Reliability

This is a seriously strong engine. The word 'bullet-proof' crops up again and again from dealers who see them. "They were tough when they were new and they're still tough," says Peter Hendry of London dealer Rex Judd.

"Mechanically, they're pretty good," echoes Mick Tombleson of Straightline Racing, which flogs new and used spares and tuning kit for the 1100R. "There's a lot of demand for bits, but it's not engine parts or bodywork. Even the shocks are tough on them: they last longer than nower stuff."

The known weakish spot is cam wear on 1127cc engines with the shimadjusted valves and the single 'finger' cam follower. With the old engines, you can get the cams re-profiled and just take up the small amount of slack on the screw adjusters. Try that with a shim engine and it'll spit out the shim, causing major damage. So you need to replace the cams, which is expensive.

Camchain rattle on oil-cooled 1100s is due to the tensioner sticking. Not a big job if you know what you're doing.

The electrics are sound barring the odd case of coil failure, but you can expect items like discs and suspension to wear with age. Watch out for leaks from the oil cooler.

Most problems are owner-induced.

Messing with the carburation is a common problem. Owner A sets the carbs up for a certain type of pipe, and Owner B replaces the pipe and doesn't reset the carbs, so it never runs properly.

Running costs

Not as bad as you'd think. The relatively light weight gives the brakes an easier time of it, and the old-fashioned tyre sizes are usefully cheaper than the huge gumballs on modern sportsbikes. Insurance is less of a problem as well. Even the youngest oil-cooled 1100 is now a decade old, meaning cheaper cover, and the earliest models are actually eligible for classic insurance –£100 or so fully comp? Sounds good.

The 1052cc oil-cooled engine is simpler to fettle than the later 1127cc lumps because the valves are adjusted by screw and locknut, whereas on the later ones it's shims, and under the buckets at that, so it's cams-out time.

Service intervals are relatively short, which means frequent visits to the dealer unless you DIY. It's heavy on chains and sprockets, and skimping on either, with a bike of this power and weight, is asking for trouble.

To sum up, if you have one valued at, >>

Know your GSX-Rs

1996 G Blue/white, twin headlight, fourinto-one exhaust, white-faced clocks. 1052cc, 130bhp, 197kg, 155mph, mpg/range to reserve 31mpg/115 miles.

1987 H Minor changes – bigger diameter front wheel spindle, slightly less suspension travel. Blue/white, black/gold or red/white/black.

1988 J Engine unchanged, larger rear tyre (160/60 from 150/70), three-spoke wheels, revised suspension, slightly different fuel tank. The one to buy.

1989 K First major revision. Bigger carbs, frame based on GSX-R750J, 17in wheels, 4-into-2 exhaust, curved oil cooler, air ducting over cylinder head to carbs, new fairing, 1127cc, 141bhp, 210kg,160mph, mpg/range to reserve 31mpg/115 miles. Black/silver, black/red, blue/white.

1990 L USD forks and new shock, both fully adjustable, longer wheelbase, new graphics, engine as K, stainless steel exhaust cans. If you want a 1127cc version, this is the one.

1991 M Larger 40mm carbs, modded cylinder head with shim-adjusted valves, twin headlights behind plastic cover in new fairing, 1127cc, 125bhp, 210kg, 164mph, mpg/range to reserve 39mpg/145 miles. Blue/white or redfblack gray.

1992 N As M, but new graphics. Silver/black, blue/white or red/black.











(clockwise from above left): look at all those numbers - clocks look classy but are tricky to read; standard exhaust is a four-into-two system - most bikes have aftermarket four-into-ones - and swingarm looks feeble for a 141bhp engine; tiny grab rail doesn't inspire pillion confidence; still one of the meanest stares in biking - shame they're crap at night; brakes are still pretty impressive if in good nick, but multi-adjustable suspension is the curse of the GSX-R but every shock was calibrated at the factory and the standard settings are stamped on the shock body



Tip: keep the declared value below £2000.

- 25-year-old, held licence for two years only, inner city, not garaged, clean licence. one year's NCB, fully comp with a £500 excess. Not bad!
- 33-year-old, three points on licence held for 12 years, two years' NCB, garaged, lowish risk area, £1.40 TPF&T or 0 fully comp.
- 40-year-old, three years' NCB, clean licence, rural area, bike garaged, 190 TPF&T. Yes, just ninety quid. (Quotes from Rampdale Brokers, 020 8442 0767)

Websites

www.goxer.com/ Good American site News, tips, racing. classifieds, bulletin board. http://user.trunet.se/~lvn9 30t/gsxrenglish.htm Swedish enthusiast's home page, in English www.geocities.com/ MotorCity/Downs/1747/ gsxr.html Good place if you're tuning a 1050cc engine.

say, £2000 or less for cheapish insurance, and you do your own work, then it should cost you a lot less than a modern sports 600.

Improve it

The one-piece exhaust on early bikes means you can't just fit an end can, but the right pipe and carb kit can add 10bhp. For more serious tuning, replace the 34mm carbs on early bikes with the carbs from later models, or flat-slides. How much power you get is governed by your wallet rather than the engine's strength. We've seen GSX-R road bikes making close on 200bhp.

Handling? All the front ends are interchangeable, up to and including the water-cooled bikes and all the 750s too. Rob the master cylinders and spanadjustable lever from the later watercooled GSX-R750s for improved brakes.

Check this

Head race adjustment on the 1100 is critical and to check it properly the steering damper needs to be disconnected. The early Ls were restricted with washers in the tops of the header pipes and silencers. They've almost certainly been removed by now, but it's worth checking. On models with fully adjustable suspension, it's possible to sod things up. They handle better if set three or four clicks off minimum.

The competition

The GSX-R was unchallenged in 1986. Yamaha's FZR1000 arrived in 1987 with a revvier engine and better chassis. When the FZR got a mid-range-boosting EXUP valve in 1989, it was good night GSX-R on every front bar attitude.

FZRs are less likely to have been street-fightered but don't quite share the Suzuki's reliability record.

Kawasaki's ZZ-R1100 is a lot of bike for not much money and a more practical proposition than a GSX-R.

Five things you should know about the GSX-R

- 1. The older ones are lighter and more flexible, while the later ones are heavier and more powerful.
- 2. The K model (pictured) is an absolute lemon - the one to avoid.
- 3. You will be very lucky to find a pre-1990 model in stock condition.
- 4. It's a big brutal bastard.
- 5. The engine is still with us, albeit bored out, in the 1200 Bandit.

Owners guizzed

Andrew Cockburn, 1986 G model The fairing is easy to remove and plugs, sump plug, oil filter and air filter all easy to get at. The petrol tap lever needs to come off before removing the tank. The side stand flips up and bike is fairly upright on the stand so fairing damage is a possibility. Insurance is now incredibly cheap (we knowl]. The original exhaust is very heavy: mine had a Laser 4/1 that weighed about half. Mid 30s mpg in town and up to 44mpg on a run.

John Male, 1992 M model It uses two sets of sprockets to one chain and one front tyre to two rear. EBC HH brake pads last 6000 miles. This year the IC igniter black box failed. I went out and bought a complete Dyna ignition system and coils with 8mm leads. Problems with fuel delivery were cured with a high-flow fuel tap (remember to enlarge the hole under the fuel tank, not mentioned in instructions). Its quicker, has better handling and in my opinion is better looking than a Bandit.

Roger Collier, 1990 L model It has always been completely reliable. You can remove the oil filter and change the oil without removing the fairing, but the carbs and airbox are a nightmare to get to. Servicing is much easier if you junk the airbox and fit double K&N filters.