

ROAD TEST

★ SUZUKI GSX-R600K4 92%

A LEANER, MEANER

THE 2004 GSX-R600 is more exciting to ride than Honda's CBR600RR – and it's cheaper, too

2004 GSX-R600
**WORLD
FIRST TEST**

'It has the savage bark of a 1000, the acceleration and pull of a 750, coupled with the light weight and agility of a 600'

BY MICHAEL NEEVES PICTURES HOWARD BOYLAN

600 SCREAMER!

Less weight, more power and low price make the new GSX-R600 a leap forward in Suzuki's bid for the 2004 supersport crown...

SUZUKI'S original GSX-R600 entered the cut-throat 600cc supersport category in 1997. With its screaming, powerful engine and race-ready handling it scorched its rivals. But progress in this class moves at breakneck speed. In 2003 a new generation of 600s from Honda, Yamaha and Kawasaki were released into the middleweight fray. Honda's CBR600RR took top honours in MCN's 600cc group test while the GSX-R600 was elbowed to the rear.

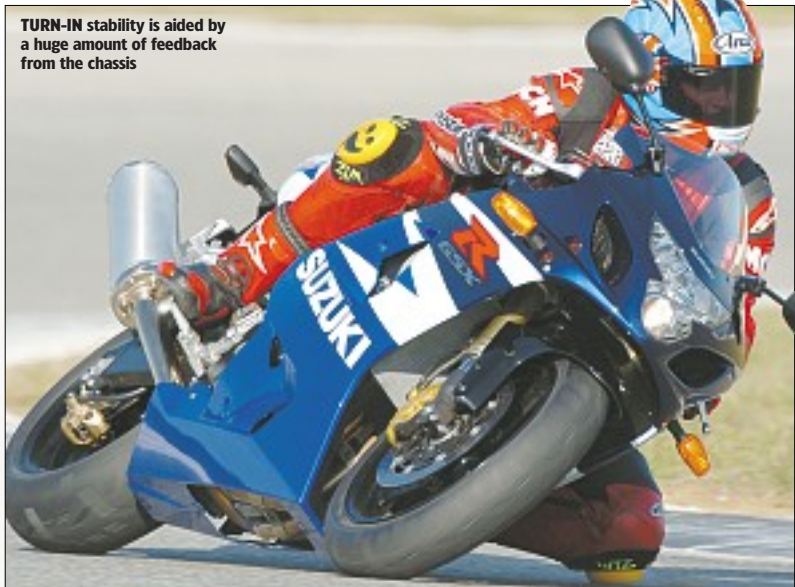
Over the next six pages we tell you just how close it is to winning back the supersports top spot, with the world's first detailed riding impression and technical lowdown on the new GSX-R600 K4.

THE new slimmed-down and beefed-up 2004 GSX-R600 comes out of its corner with fists flailing – with less fat, more muscle and a screaming 750-style top-end. Its £6849 on-the-road price beats its Japanese rivals by £500. Only Triumph's Daytona is less at £6349. From the low-slung, chiselled bottom jaw of the new top fairing, all the way through to the "jacked up", tapered tail unit, you know it means business. A set of upside-down forks and Tokico four-piston radial calipers also grace the front end.

Not only does the GSX-R600 look the real deal, but riding it round the sunny, but cold, Misano circuit in Italy shows it also has the performance to seriously embarrass bigger bikes.

With this GSX-R600, Suzuki has somehow managed to put its three GSX-Rs into one tidy and exhilarating package. The new, shorter-stroke motor has the savage bark of the 1000. And thanks to paper-light engine internals it's incredibly free-revving. It has the acceleration and top-end pull of the 750, but is light and agile, giving it the grab-it-by-the-

TURN-IN stability is aided by a huge amount of feedback from the chassis



HANDLING inspires you to push harder every lap

scruff-of-the-neck sensation expected of a great supersport 600.

Part of its boost in performance is down to its lower weight. The old model was hardly a porker at just 163kg (six bags of sugar less than the CBR600RR) but the new bike is a further 2kg lighter – most of this weight being lost from the engine.

Because the motor's internals weigh less it can be revved higher. The engine is pushing less weight along, too, making the new bike quicker and easier to hustle through the twists.

Tackling Misano's corners it is immediately clear that the new 600's higher peak power (up to a claimed 118bhp) together with the head-banging, screaming 15,500rpm redline equates to a serious shove in the back when getting on the gas.

The best way to make progress on a 600 around a track is to keep the revs in five figures. But on the new GSX-R, exiting a corner in too high a gear doesn't bog you down; the engine pulls cleanly from as low as 3000rpm. With the wick wound up, the engine

note deepens as the red rev-counter needle swings effortlessly through to 6000rpm. A split second later the raucous engine note battering your eardrums is a signal that 10,000rpm has been breached. And just when the acceleration is pulling hard at your arms... pow! The rev needle has scabbled to 15,500rpm and the limiter has cut in. Awesome! It feels as fast as a 750.

There's a fair dollop of midrange, too. The engine has more urgency than the CBR600RR from around 8000rpm, and spins faster to the redline. But, like all GSX-Rs, the motor has got a rough-edged feel about it. The CBR600RR is so smooth it feels like you're crawling along even when clocking 160mph. But the Suzuki is definitely more fun to ride.

It's the same in the handling department, too. The feel through the chassis lets you know exactly what's going on at all times, giving you extra confidence to keep pushing the bike that little harder with every lap. But, unlike the CBR600RR, which

feels utterly planted, the GSX-R dances, wiggles and shimmies underneath you. It feels alive and talkative. It can wag its head over the bumps one minute, while the next it sends a brain-load of feedback through the bars as you stuff it into an apex, still hard on the brakes.

There's only one really hard braking point at Misano, at the end of the 150mph sixth gear back straight into a 50mph left-hander. The new radial-mounted brakes do the business here. They're powerful enough to slow with just two fingers, and refuse to fade.

So, fresh out of the crate, the new GSX-R600 is going to give the opposition a hard time on the track. The chassis components are more refined, and, coupled with the stronger midrange and mint handling, it should be a gem to ride on the road. But to know for sure whether these changes are enough to wrestle the crown from the CBR600RR we'll have to wait until next week's 600cc group test, only in MCN, February 4. It's going to be one hell of a close battle...

THE TEST VENUE: MISANO, ITALY



MISANO: tight, technical and often slippery

THE historic circuit of Misano has seen the likes of Fogarty, Edwards, Bayliss and Hodgson banging fairings in WSB races. It also has a fearsome reputation for being slippery – even in the dry – thanks to dust blown in from the nearby Adriatic coastline.

So a healthy dose of respect for the track is required. But with that in mind it's still enormous fun, especially when tackled by a fast, sweet-handling new-generation 600 like Suzuki's latest GSX-R.

Most of the circuit is tight and technical with loads of flat, second gear corners that are ready to send

you skyward if you're too liberal with the throttle on the exit. There are also two flip-flop chicanes, ideal for weeding out slower-steering bikes from the fast ones.

The circuit's highlight is a set of left-handers that lead on to the back straight. There are four lefts, starting with a slow second gear turn all the way to a knicker-wetting 140mph flick that takes you on to the long back straight. A good run through these turns is essential for a fast lap. This is easy on the GSX-R thanks to the amount of rear-end feedback it gives. And for that reason it will be



GSX-R devours sweepers and twists

as quick as some bigger bikes through long sweepers and not just through tight turns, where the agility of a 600 will usually pay dividends.

ROAD TEST

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GSX-R tears up the track with

RIDING POSITION

CLASSIC GSX-R: low set clip-ons force you into a racing tuck perfect for hooning around tracks, but perhaps not too comfortable for Margate High Street. The pegs are set back and high enough so that ground clearance is not a problem. The pegs never touched down during our test, but boot sliders did – a good indication that on a scorching day, with track-biased tyres fitted and the bit between your teeth, rearsets might only be a cosmetic option.

The new bike is narrower than the old model. That means your legs aren't so splayed, making it more comfortable to ride everyday, as well as easier to climb over when shifting bodyweight on the track.

The tank is shorter too, so you're able to get more weight over the front through corners. The bars aren't such a stretch for those with shorter arms either.



THE riding position forces you into a racing tuck

SUSPENSION

ONE of the GSX-R600's ace cards. You can feel exactly what the bike is doing as you thread your way through a set of corners.

The new Showa 43mm upside forks and single rear shock do their jobs superbly. Standard road settings were too soft to deal with the high corner speeds, hard braking and searing acceleration dealt out at the track launch. But small adjustments to the rebound and compression damping rates

(see Five Minute Fiddle, right) made a big difference. Just a half a turn here, or a quarter of a turn there transformed the performance – a far cry from road bike suspension of old where it made hardly any difference to the suspension whether it was set fully hard or fully soft.

Additional frame bracing, running along the length of the side rails, is also designed to give even more feeling when braking and cornering.

BRAKES



THE new radial front brake master cylinder is designed to improve feel at the lever. It works too, because, despite having brakes that have the power to stop a juggernaut, our test revealed that it is as easy to brush off just a few mph as it is to nail the brakes hard, such as when braking from 150mph to 50mph at the end of Misano's fast back straight.

The radially-mounted four-piston calipers (left) showed no signs of fade throughout the hard 30-minute riding sessions.

TYRES

THE new Bridgestone BT014 tyres did a good job – despite track temperatures down to 4 degrees.

The rubber gets up to working temperature very quickly and grips well. Despite serious abuse they stood up impressively and even kept the bike upright when braking too hard while leaning a bit too far over during the initial track learning sessions!

Due to the cold, the Bridgestone technicians dropped the pressures, allowing the tyres to move around a bit more and generate extra heat to keep them near working temperature. The rear was dropped from 36psi to 32psi, the front 36psi to 28psi.



GSX-R600K4 IN DETAIL

THE NEW GSX-R600K4 may be an all-new machine, but Suzuki has tried very hard to retain the bike's distinctive character while improving its performance across the board: Paintschemes, styling and even engine performance are all vaguely familiar, but with much, much more bite.



THREE colourscheme choices are available in the UK: black, yellow or classic blue and white



NEW headlight is as racy as they come



THE injection is a big improvement

poise

2004 GSX-R600
**WORLD
FIRST TEST**



SUPERB chassis
makes ridiculous lean
angles seem easy

HANDLING

AS well as being able to lap a race track with impressive results, the new GSX-R will tear up your favourite country road with the same poise and precision. It is also very easy to ride and will flatter any rider.

It's very manageable, too – all you have to do is pick your line, with minimal steering effort through the bars, and you've flip-

flopped your way through. Plus the new Suzuki is a doddle to steer on the brakes. At the end of Misano's fast back straight, the front brake lever could be held on, scrubbing off speed all the way to apex, without any hint of wanting to stand up or running straight on.

Stability is excellent and begs the question why fit a steering damper?



IT'S still the best track 600. Probably

FIVE-MINUTE FIDDLE

STOCK settings were too soft for track use. This is how we adjusted it.

FRONT

- Pre-load: One extra ring to stop bottoming out.
- Rebound: 1.25 turns from fully in to keep it stable through fast corners.

- Compression: 0.25 turns from fully in to stop front end dive on the brakes.

REAR

- Pre-load: Standard
- Rebound damping: One turn from fully in.
- Compression: One turn from fully in for stability.

ENGINE

THE raspy engine note raises neck hairs even before you jump aboard. The high pitch scream as it approaches its heady 15,500rpm redline while hammering past pit lane is even more intense – I could so easily have been at a race meeting.

Throttle response is very smooth and there are no glitches in the power delivery at any point through the rev range.

For a screaming 600, there is a fair whack of midrange. From just 6000rpm a big dose of throttle equals an equally big dose of forward momentum.

But a supersports 600 is all about revs and delivering big rushes of power at the top end, and that's just what the GSX-R does. It has loads more drive than the old version, and winding the throttle back to the stop in first or second will have the



REVISED motor has 15,500rpm redline

front wheel up with no provocation.

But it terms of engine smoothness, the R6 and CBR600RR win hands down. Like the ZX-6R the Suzuki has a raw edge to its motor. It sounds gruff and tingles slightly through the bars and footrests. Never intrusively, just enough to let you know that it's got a seriously wild side.

2001 SUZUKI GSX-R600 K1

Second generation re-wrote rules



FIRST K-series machine redefined the supersports class – and is now a bargain

IN the same way that the original GSX-R600 showed the world how a supersports bike should be in 1997 – full-on superbike looks, rev hungry engine and sharp handling – the revamped K1-model again took the class to another level when it hit showrooms in 2001.

It was a staggering 11kg lighter, was treated to a facelift to mimic its bigger 750 brother, and gained a claimed 18bhp. But the best bit was always the handling. So good in fact that despite being caught up in recent years by the latest generation CBR600RR, ZX-6R and R6, with their more refined engines, brakes and suspension, it was still able to kick their butts on the track – and that's despite it being unchanged until this year.

The K1 GSX-R600 (tested here) feels slightly agricultural in the company of the latest bike. Ridden slowly it feels average, lacking the new bike's refinement. The engine note has the usual GSX-R-type harsh edge to it, transmitting some vibes through the bars and pegs. The brakes are fine but need a good pull before they really start working with any urgency and the ride quality isn't quite up there with the best.

But wring its neck and you will suddenly realise why its spiritual home is the track. The harder you ride, the better the K1 feels – the chassis is so responsive that you find yourself taking unbelievable liberties in turns.

Masses of ground clearance mean that serious lean angles are a piece of cake. And although the ride isn't as crisp because its suspension is starting to age, confidence still builds to encourage you to do things you'd never thought you could. Things like mini-power slides on that last bit of the corner that runs out towards the edge of the circuit. Not the kind of slide that's visible to the naked eye from the trackside, but the kind you feel through the seat of your pants. The ones that make you break out into a big cheesy grin.

Even better, look through the pages of MCN BikeMart and you'll still find new examples available for around £5000, as dealers try to clear stock to make way for the new model.

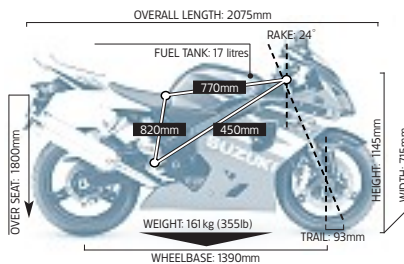
Of course the new GSX-R600 is all of the above and a lot, lot more. But if you are thinking about buying a used K1, K2, or even new 3, don't worry, you'll be buying one of the finest 600 supersport bikes Suzuki ever made.

MOST immediate difference with K4 are conventional forks



SUZUKI GSX-R600

£6849
Available: Mid to late February.
With 24 months unlimited mileage warranty, 12 months AA recovery
Colours: Blue/white, yellow, black.
New for 2004: New model
Insurance group: 15 (of 17)
Info: Suzuki UK
01892-707-001



SPECIFICATION:

Engine: Liquid-cooled, 599cc (67 x 42.5mm), 16v dohc, in-line four-cylinder four stroke. Fuel injection. Six gears
Chassis: Aluminium twin spar
Front suspension: 43mm upside-down forks, adjustable for pre-load, rebound and compression damping
Rear suspension: Single shock, adjustable for pre-load, rebound and compression damping
Tyres: Bridgestone B1014; 120/70 x 17 front; 180/55 x 17 rear
Brakes: 2 x 300mm front discs with radial four-piston calipers, 220mm rear disc with twin-piston caliper

PROS ● Good midrange and top-end drive ● Responsive chassis ● Best Suzuki brakes so far ● Spacious riding position
CONS ● May be too track-focused to compete with CBR600RR as the best all-rounder

92%

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ROAD TEST

COMING SOON IN MCN

GSX-R 600

ALL-NEW
SUZUKI TAKES
ON THE REST
OF THE PACK

DUCATI 749S

HONDA CBR600RR

YAMAHA R6

KAWASAKI ZX-6R

TRIUMPH

DAYTONA 600



CONTINUED FROM PREVIOUS PAGE

Technical highlights of the

SUZUKI is deadly serious about stealing the supersports crown back from the CBR600RR – both on the road and track. The company has left no stone unturned in its quest to make the new GSX-R600K4 lighter, more compact and, most importantly, more powerful than last year's K3 model. Here's how it did it:

STYLING

THE GSX-R600 is virtually identical to the new GSX-R750 (the 750 has a longer tailpipe and slightly different graphics to set it apart, see above left). The bodywork is all-new, giving it an aggressive stance like the similarly styled GSX-R1000. But different headlights and ram-air scoops, which are closer together than the bigger bike's, give the 600 snout a more angular look which moves it away from the softer Hayabusa-like front end of the 1000cc version.

At the rear are newly designed rear LED lights and smaller, lighter indicators.

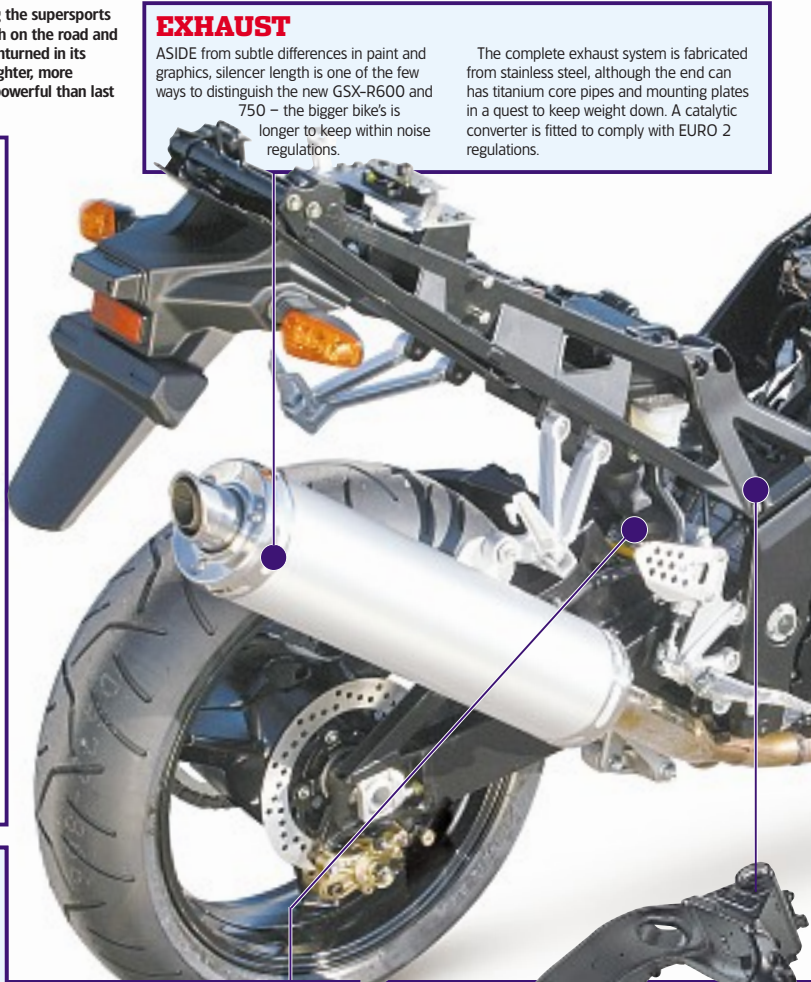


NEW bike's angular snout adds to its more aggressive appearance

SUSPENSION



600 and 750 will use same forks



EXHAUST

ASIDE from subtle differences in paint and graphics, silencer length is one of the few ways to distinguish the new GSX-R600 and 750 – the bigger bike's is longer to keep within noise regulations.

The complete exhaust system is fabricated from stainless steel, although the end can has titanium core pipes and mounting plates in a quest to keep weight down. A catalytic converter is fitted to comply with EURO 2 regulations.

FOR the first time, the GSX-R600 has inverted forks just like its bigger 750cc and 1000cc brothers. The 43mm Showa units are adjustable for pre-load, rebound and compression damping.

These forks will also feature on the new GSX-R750. The rear Showa shock, which carries a piggyback reservoir, is also fully adjustable.

A non-adjustable steering damper lives down near the bottom yoke.



WHEN YOU FEEL THE NEED FOR SPEED SELL YOUR BIKE AT

new GSX-R6



ENGINE



600 gets all-new fuel injection

THE powerplant has been totally reworked. Although still 599cc, it has slightly bigger-bore pistons travelling through a 2mm shorter stroke. This more oversquare layout allows the engine to rev 1350rpm higher, increasing top end power.

The forged pistons have shorter skirts and thinner walls, which make each 18 grams lighter and so reduces internal inertia. Even the rings have been modified with a chrome-nitride plating to cut friction.

Inside the all-new cylinder head are thin-walled, hollow section camshafts and lightweight titanium valves, springs and buckets, which replace the old steel ones. The new valves are also set more steeply, reducing combustion chamber volume, which in conjunction with new flat-topped pistons, increases compression from 12.2:1 to 12.5:1. It has also allowed the width of the cylinder head to be reduced by 8mm.

Digital fuel injection is all-new, with dual double-barrel throttle bodies replacing the old bank of single-barrels. The SDTV (Suzuki Dual Throttle Valve) sees each throttle barrel throat carry twin butterfly valves designed to give a smooth response throughout the rev range.

The injectors have multi-hole nozzles to administer a fine spray of fuel that can atomise more rapidly, allowing more efficient combustion.

Engine management is by a 32-bit processor, which is both more powerful and physically smaller than the old model's 16-bit unit.

BRAKES

FOLLOWING the Kawasaki ZX-6R and all current superbikes, the GSX-R's four-piston Tokico brakes are radially mounted. This makes them more rigid and less prone to flex under hard use. A new radial piston master cylinder improves feel through the lever.

Due to the front brake's increased efficiency, smaller and lighter 300mm discs are used, reducing unsprung weight and gyroscopic effect on the wheel, making the bike easier to turn.

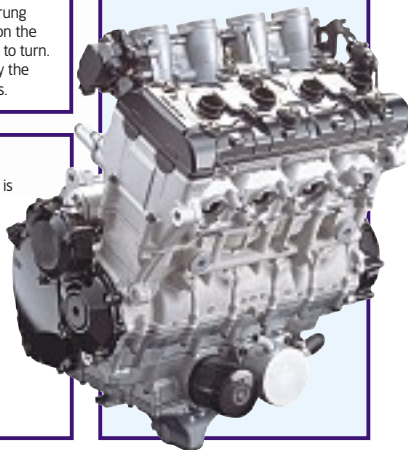
Cast aluminium wheels carry the latest Bridgestone BT014 tyres.

CHASSIS/SWINGARM

THE all-new twin-spar aluminium alloy frame has a similar layout to before but is slightly more compact. It is 15mm narrower at its widest point and 5mm narrower at the swingarm pivot. The spars are now extruded aluminium instead of welded plates – making it far easier to construct – with cast sections forming the headstock and swingarm pivot. Like the previous GSX-R600, the subframe is removable, so it can be replaced either after a crash or for a lighter version for racing.

Like the frame, the swingarm is constructed using extruded and cast sections of aluminium alloy. There's an external strengthening brace now, like the CBR600RR and R6, to give extra rigidity.

As per Suzuki's new GSX-R750, both the frame and swingarm are painted black in the same style as the 1000 giving it a GSX-R family appearance.



1997 SUZUKI GSX-R600

How far has the model come in seven years?



ORIGINAL version seems bulbous, but still looks and rides like true race replica

THE new GSX-R600 is a far cry from the 1997 original. It's more powerful, significantly lighter and will be much quicker on a racetrack.

But when the GSX-R600 first arrived seven years ago it heralded the creation of the supersport bike as we know it today. While sports 600s of the day handled well and were undoubtedly fast, the GSX-R600 looked every inch the racetrack refugee.

It made the Yamaha Thundercat, Kawasaki ZX-6R and Honda CBR600 seem like sports-tourers overnight.

Since then supersport 600s have become technically more advanced and features like radial brakes and upside down forks are now *de rigueur*. But despite appearing basic compared to the latest model, the 1997 bike still looks good and is every inch the racer with its massive exposed aluminium beam frame, fat rear tyre and low-set clip on handlebars.

The most impressive feature of the new bike is its lack of weight. It's a massive 13kg lighter, thanks to the use of exotic materials like titanium and magnesium and meticulous attention to detail. This allows it to accelerate quicker, stop sooner and steer easier.

Higher quality suspension and brakes further improve the new bike.

Seven years has also seen power rise from the original's claimed 97bhp @ 12,100rpm to 118bhp @ 13,000rpm.

It's amazing how far the GSX-R600 has come in just seven years. Can you imagine what the 2011-model will be like? We can hardly wait.

● Although now outdated on the road, Suzuki's original GSX-R600 remains very popular with track day fans thanks to its race-orientated handling, good variety of performance accessories, excellent spares availability and price – good race-kitted versions can be found in MCN BikeMart for as little as £2500.



UNDER the skin the original 1997 GSX-R600 was a real racetrack refugee

THANKS TO:

Rockingham – Official Test Circuit for MCN. Contact 01536 500500, www.rockingham.co.uk
Crescent Performance Centre 01202 820170 – for the loan of the immaculate '97 and '01 GSX-R600s, which are also for sale.

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