



## MISSION IMPOSSIBLE?

Is it possible for Porsche to improve on the meteoric abilities of the original 997 GT3? After a first drive in the generation-two 911 GT3 Andrew Frankel certainly thinks so.

Photography: Antony Fraser and Kenny P





The interior remains largely unchanged from the outgoing GT3 save for the latest PCM3. The GT2 carbon-backed bucket seats are an optional extra

ong before I slipped behind the wheel of this new 911 GT3, I had tried to put my finger on exactly why it was that, of all cars on sale – including Ferraris, Bugattis, Atoms and Caterhams, the last GT3 was the one I coveted the most. It came down to this: performance cars need to be considered in two ways – what they are like to drive and what they are like to live with – and nothing, not even a GT3 RS, offers a better blend of the two. When I think of a Ferrari Scuderia, I think how wonderful it would be to drive one again; when I think of the GT3 I think how sad it is I'll almost certainly never own one.

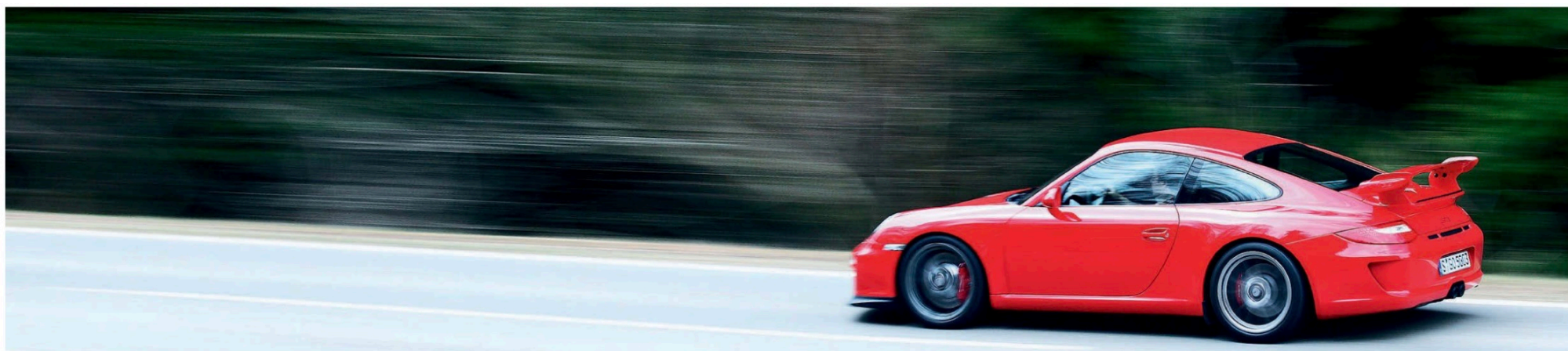
How the GT3 came to be this way is simple to explain. Although it is a road car, the GT3 is a product of Porsche's motorsports department and this is a world dominated not by market research and customer clinics, but the gut feeling of a small band of ultra-dedicated, super-skilled arch-enthusiasts. It may seem a strange thing to say about a company that now controls the largest car maker in Europe, but when it comes to cars like the GT3, what these guys tell Porsche they want to build is pretty much what gets built.

It's also why, when you drive the GT3, it leaves

you with the indelible impression that when they were designing it, they were thinking of you. Which, of course, they were: you and those happy few thousand of ever so slightly unhinged petrolheads around the world with both the means and the desire to put a GT3 in their lives. In an hour around a table and during a day in and out of the car with Andreas Preuninger, whose project the GT3 is, not once did he refer to a single thing that had been changed on the car for aesthetic reasons. In short, if it didn't make the car better to drive, it didn't get done.

But that still left an extraordinarily long to-do list. Being a GT3, Porsche could probably have just bunged a bigger rear wing on the back and sold another 5000 of them, but being Porsche, it chose a total engineering solution.

We'll start in the engine room, though you'll not need to look further than the side of the re-profiled rear wing to know the secret it contains. Here you'll find once more the famous '3.8' legend, denoting for the first time in the 12 years since the demise of the 993 RS that an engine this big has been fitted in the back of a road-going Porsche. But this is not the all new engine fitted to the current generation of 997s, but a







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bored-out version of the engine used in the old GT3. Why eschew the more modern design with its more efficient direct fuel injection? Simply because the old engine is derived from that of the GT1 racer and is, as such, a proper motorsports powerplant, and the power source for Porsche's GT3 race cars, with this road car providing the required homologation.

Even so, its bores are now so wide and the spaces between the cylinders so small, steel rather than aluminium liners had to be used, raising weight by 3kg (although these lines are identical to those used in the RSR race car). This displeased Porsche, so the entire engine went on a diet with everything from the pistons to the tappets being lightened until the whole motor ended up 1.8kg lighter. The only way to enlarge the motor further would be to fit a long throw

crankshaft to lengthen the stroke and take its capacity up to the 4.0-litre limit of the RSR racers.

But even in road-going form, the new engine now gives 435hp – a rise of 20hp – and is safe to an even more stratospheric 8500rpm. It runs through the same six-speed manual gearbox as before (happily, the PDK gearbox won't fit this engine and, even if it did, would not be allowed on the grounds that it would increase weight by 30kg), but the gears are lighter and, if you want, you can choose your own ratios.

The suspension retains its old architecture but myriad detail changes have been wrought here: the front roll centre has been lowered 5cm to reduce understeer and while the rear springs are carried over, those at the front are slightly stiffer (by 5Nm) but offset by fitting the marginally softer front and rear anti-roll bars (measuring







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The work required by Porsche's engineers to improve on the 997 GT3 was not that of a moment. The aerodynamic work provides the visual muscle of the new car, the 3.8-litre flat-six the immense power. Details such as the centre lock wheels and interchangeable gear ratios show how deep the pedigree runs. Walter Rohrl (bottom left, opposite page) has lapped the Nürburgring in under 7min 40sec

25mm and 23mm in diameter respectively) from the now discontinued GT2. Braking efficiency – never exactly a weak point with its predecessor – has been improved further by the fitment of 30mm wider discs, while the wheels are now secured to the hubs by very cool centre lock nuts. On the electronics front, the PSM system has been adopted from the GT2 and, according to Preuninger is 'the best in the world', so good in fact that even professional drivers lap more quickly with it on than off. Significantly, the traction and stability control elements now operate entirely independently and can be individually deactivated. Later in the year you'll even be able to opt for electronic engine mounts that allow the motor to move by up to 2cm when that helps increase

traction in slow corners and reduces vibration on the autobahn, but can restrict it to less than 2mm when you want the car's masses to be as stable as possible in really fast corners. But perhaps the biggest changes are the most subtle, and concern the multitudinous modifications to the wings, spoilers, scoops and slats that bedeck the GT3's pumped up bodywork. As you might expect, not one is there for show. In fact their combined effect is to increase the amount of downforce the body can generate not by a few meaningless per cent, but a factor of five. Despite this raft of modifications, I can't say I really noticed any of them at first. The car looks a little different – a touch more pugnacious perhaps – but the feel of the suede-lined wheel,



## 2009 911 GT3

**ENGINE**

Six horizontally-opposed cylinders, water-cooled

**Bore x stroke:** 102.7mm x 76.4mm**Capacity:** 3797cc**Cylinder head:** Four overhead camshafts, four valves per cylinder, VarioCam**Compression ratio:** 12.0:1**Max power:** 435hp @ 7600rpm**Max torque:** 317lb ft @ 6250rpm**Max engine speed:** 8500rpm**power to weight:** 311hp per tonne**Ignition & injection:** DME engine management**TRANSMISSION**

Six-speed manual, rear-wheel drive, limited-slip differential, TC+SC

**SUSPENSION**

Front: MacPherson strut, coil springs, PASM

Rear: MacPherson strut, coil springs PASM

**BRAKES**

Front: Six-piston callipers, 380mm cross-drilled and ventilated disc, ABS, PSM

Rear: Four-piston callipers, 350mm cross-drilled and inner ventilated, ABS, PSM

**MEASUREMENTS****Weight:** 1395kg**Length:** 4460mm**Width:** 1808mm**Height:** 1280mm**Track (front & rear):** 1497/1524mm**PERFORMANCE****Max speed:** 194mph (claimed)**0-62mph:** 4.1 seconds (claimed)**HOW MUCH?****List price:** £81,914**On sale:** September 2009

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the action of the gearbox and sound of the engine are much as I remember. Stogging through Stuttgart's suburbs I was struck by the quality of the ride and the perfectly passable refinement, but I recall having the same thoughts in the last GT3. Then as now and so long as you don't need the non-existent rear seats, this is wonderfully usable car, a practical every day proposition.

But accelerate out on to the autobahn and you'll not miss the extra punch or the engine's sharper edge. Despite all the work, this GT3 weighs not one gram more than the last but with a slug more mid-range torque and a useful

increase in top end power, it feels faster even than raw statistics suggest. And when those stats say it will hit 62mph from rest in 4.1sec and double that speed in eight seconds more, you'll have an idea of just how rapid this machine is.

The autobahn was kind to me that day: it's rare even in a car this quick to see 300km/h appear on the dial, but the GT3 took me there two or three times on my route to the Alps. Yet it is the memory of the car's stability that will remain long after that of its raw speed has faded. Most cars capable of such velocities become hundreds of kilos lighter as the air underneath

tries to rip them from the road, and if you've driven at high speeds you'll likely know that slightly queasy lightness at the helm this phenomenon brings. And when car manufacturers talk about downforce, often what they mean is merely a reduction in this lift. In the GT3, downforce means exactly that: at 300km/h it is precisely 110kg heavier than it is at rest. Not that you would ever choose to, but if you had to change lanes very rapidly at 150mph, it will do it without a single degree of unwanted deflection. What's more and for most buyers, the standard discs are now strong enough to make

the expense of PCCB carbon ceramic options look more like a vanity than a necessity.

But good though the GT3 is at tackling these straight-line tasks, that is not what it was born for. We didn't go past a race track in the few short hours spent with the GT3, but the Alpine roads Porsche uses to sign off cars such as these proved as good a substitute as you're likely to find.

'My' GT3 came with Michelin Cup tyres. A Pirelli Corsa with a deeper tread pattern and better wet weather behaviour will be available later in the year, but if it's ultimate lateral adhesion you want, the Michelin is the one for you.

These are not like normal tyres and while they work perfectly well from cold in normal circumstances, if you push them you'll wonder if the GT3 is not just a bit too hardcore for road use. And because the front tyres are always colder than the rears (which have the weight and heat of the engine on top of them and provide all the traction), the initial understeer can be a little surprising. But once up to temperature grip levels are so strong it feels that nothing short of a wrecking ball through the door would unstick it.

The roads we used were as tough as you'd expect of those chosen by Porsche to fine tune a

car such as this, and here it's simply not good enough just to have a car with a lot of power, grip and braking ability. What really matters is how these facilities interact, how the car behaves in the transitions between one state and another. Can you stay on the brakes while turning into a quick curve? Can you squeeze the throttle while the car is pulling well over 1G of lateral acceleration? What happens when you've hammering out of a corner, tyres straining for grip and you hit a bump? Will the dampers still cushion the blow, steady the body and send you on your way? In the GT3 the answers are yes, yes and yes.



## The famous '3.8' legend, denoting for the first time in 12 years that an engine this big has been fitted in the back of a road-going Porsche

Better than that, it will do all of this and, at the same time, bring you closer to the action than any other Porsche on sale and in that I include the only recently discontinued GT2.

In fact the only problem with the GT3 is finding somewhere safe to exercise it. Not many of us are lucky enough to have an Alp on our doorstep and on most UK roads most of the time, I fear a GT3 would feel hideously constrained. It really needs a race track to show what it can do but there are few weekends I remember with greater warmth than those when I used to grumble my way from home to the Nürburgring in my old 993 RS, spend a couple of days hammering around the greatest track in the world and then take in Spa on the way home and I am sure the GT3 would be more

memorable even than that. It's not a cheap way of passing the time, but if you're capable of raising the £81,914 Porsche asks for the car, you're probably okay for a few track days a year.

I thought Porsche would struggle to make a material improvement to the last GT3 but, in fact, it's made a substantial step, which is why I now want to own one more than ever and, indeed, more than anything else on the new car market. So I shall try to ignore the gnawing knowledge that it is beyond my means and try to accentuate the positive. Lucky lad that I am, it is at least possible and fairly likely that I'm going to have one or two more GT3-shaped encounters in the months and years to come. I don't know where and I don't know when, but even the thought of it is simply thrilling ◊

The aerodynamic work carried out by Porsche on the new GT3 has resulted in an additional 110kg of downforce at 186mph. 70kg is produced from the rear wing alone

