



50 YEARS OLD

AND STILL R

It's been with us for half a century, but the Porsche

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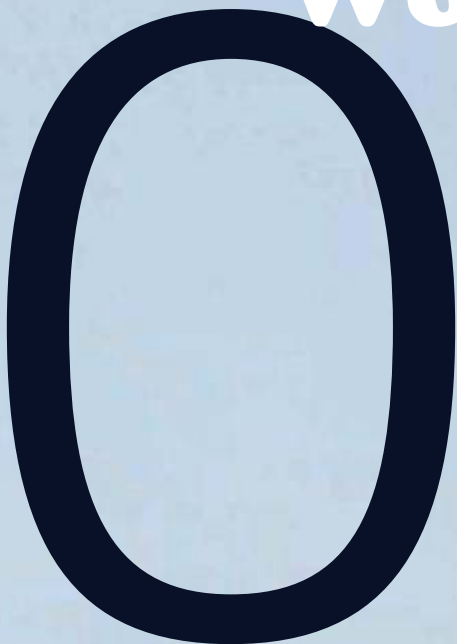


RAISING HELL

911 isn't slowing down just yet, especially not the new, hardcore GT3

WORDS GEORG KACHER // PHOTOGRAPHY GREG PAJO

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ON THE LAST WEEK, aluminium door, squash your body into the slim-fit bucket seat, run your fingers over the Alcantara-trimmed steering wheel. So far, so 911 GT3 – hardcore, focused, minimalist. Trackday fans will feel right at home. But just watch the expression on their faces when they push their left foot into the dark hole where a clutch pedal once lived.

For the first time in the 911's 50-year-history, the GT3 marks a radical departure, a race-bred model from the GT/RS gene pool that's somehow escaped the factory with just two pedals. This is no dip-your-toe-in-the-water exercise from Stuttgart, it's all or nothing, the PDK dual-clutch

gearbox is your only option. **YOU CANNOT HAVE A MANUAL GEARBOX.** Part of what the purists say makes the GT3 great has simply been junked. And it doesn't end there: the Mezger engine – stalwart of everything from the first GT2 to Porsche's last Le Mans-winning prototype – is also gone, plus there's new rear-wheel steering and, yes, the GT3 finally succumbs to electric power steering. You can almost hear the internet exploding.

Porsche will counter that the new 3.8-litre flat-six makes 350kW and 440Nm – up 30kW and 10Nm over the outgoing car – and that the aluminium-intensive body structure tips the scales at 1430kg, barely 35kg more than the less powerful, less technically advanced model it replaces. But the diehards are going to take quite some convincing of

And of all those changes, it's the PDK 'box and the two paddles fixed to the steering wheel that are most obvious and controversial. Mastering the old six-speed transmission was a manly achievement, what with the potato-bag weight of the clutch and the antler-like shift motion of the lever, but the GT3 project engineers will say that the three-pedal layout was simply a less efficient means of progress and that, anyway, the development of PDK is now so advanced and its shifts so sharp that the purists will come round to their way of thinking. They just need to go for a test drive.

To put the new technology to the test, we headed to the Swabian Alps, criss-crossed through the rolling hills of no man's land and steered the aggressively bespoilered 911 around a variety of twists and turns of varying intensity.

The very first thing you notice when pulling the GT3's solid aluminium upshift paddle is that the travel towards the steering wheel has been cut in half from *cliiick* to *click*, a small touch that cleverly conveys a sense of mechanical precision and immediacy. Still long for the old days? You can change gears by moving the gearlever into the manual position: pull back to shift up, push forward to shift down, the racer's logic. And if that's not quick enough, hit the Race Track button and brace yourself for 100ms upshifts – they're every bit as fast, hard and spine-tingling as those in the 911 Cup racecar. To speed up the transition from one cog to the next in this mode, the black box will simultaneously boost torque and adjust engine revs, resulting in a mighty, momentary kick in the butt. The PDK algorithm also induces late upshifts and early downshifts, holds the 'box in gear through fast corners, and retains these characteristics even when your pace drops from ten to six-tenths.



With so much new tech, lots could have gone wrong with this GT3. But no, they've got it just right

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Steering & 'box

Electric steering and twin-clutch gearbox are both big controversies for the 991 – to give it its codename – GT3. Project boss Andreas Preuninger claims the steering is indistinguishable from the hydraulically assisted 997 RS 4.0, while PDK (with completely new software and hardware versus the 991 Carrera) can shift gears in just 100ms

Wheels & tyres

New 20-inch wheels are forged aluminium, and shod with Michelin Cup or Dunlop Sport Maxx Race tyres. Standard brakes measure 380mm at all corners; optional PCCB ceramic-composites increase front discs to a monster 410mm

Bodyshell

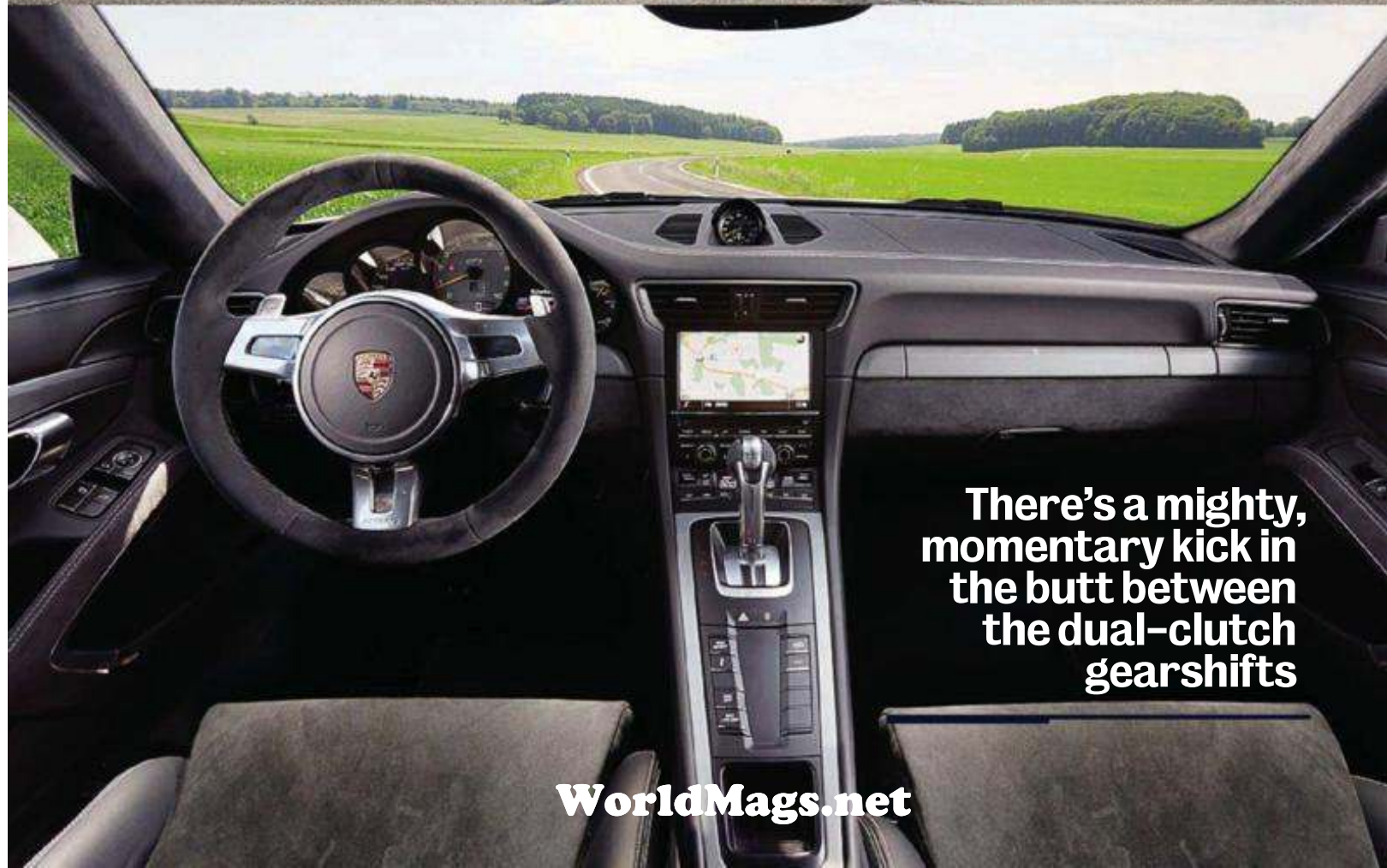
991 GT3 is the first to use the wider Carrera 4 body (it's previously been the reserve of the GT3 RS) and sits 30mm lower than a standard 911, on unique all-aluminium suspension. Aluminium is also used for the bonnet, doors and roof to cut weight, but it's still 35kg heavier than last GT3

E-differential

New electronically controlled limited-slip diff can send 100% of the torque to an individual rear wheel – but will only work with the PDK 'box. Rear steering varies the angle of the back wheels by up to 1.5 degrees. It adds an extra 5kg, but agility, stability and turn-in capability are much improved. Features on new 911 Turbo too

Engine

Legendary Le Mans-derived 'Mezger' engine is dead, replaced by a new direct-injection 3.8-litre flat-six. Only the casting of the crankcase and the bolts from the cylinder head are shared with the 911 Carrera, and it weighs 25kg less than the Mezger engine, revs 500rpm higher and has the same 92kW-per-litre output as the old RS 4.0



There's a mighty, momentary kick in the butt between the dual-clutch gearshifts

Only Italian exotics can match the GT3's enthusiasm to rev to an astonishing 9000rpm



Although the dynamic forward thrust sates the petrolhead thirst, sheer power alone may not be enough to convert those with a now unemployed left hoof. Which is why Porsche has introduced Paddle Neutral, a manually activated de-clutch mode that the driver triggers by pulling both shift paddles at the same time. The instant you release the paddles again, power and torque are back in business. With stability control active, the transition between neutral and power-on is crisp and positive but still relatively refined; with all the systems off, the fusion is positively explosive. According to Porsche, Paddle Neutral has two advantages. Firstly, it reduces understeer through tight corners and on low-friction pavement by markedly improving front-wheel grip. Secondly, it enables the driver to actively destabilise the vehicle prior to turning in, thereby making it more amenable to the power oversteer antics that are likely to follow. Paddle Neutral can also act as throttle-induced launch assist: rev the engine to 4500rpm, release the paddles and the car will take off with exactly the right amount of wheelspin. Beats launch control any day.

We spent an hour playing with the new functions, but that was not nearly enough to get the timing right for Paddle Neutral or to fully fall for the charms of Race Track, the latter an acquired taste for road driving because it keeps pushing you into lose-your-licence territory. Sport mode is just fine for everyday use, and its appeal is further enhanced by the fact that the GT3 leaves the factory with a shorter final-drive ratio and with a more progressively staggered gearbox. So, unlike every other PDK-equipped 911, this one reaches its top speed in seventh gear, so it does pay off to push to the redline in all available forward ratios – though strictly on the autobahn, of course.

Is the new transmission really an improvement over the manual six-speeder, both in terms of emotional appeal and functional advantage? The

answer is a cautiously worded yes and no. No, I don't miss the manual 'box one bit. But I probably would not use Paddle Neutral and Race Track that much either. Fact is, when the day was half over, I even ignored the up and down shifters attached to the steering wheel simply because the adaptive shift programme is gifted with such telepathic foresight that it executes the job to perfection. It does what your index fingers would do exactly when they would do it. It even willingly changes down into first gear through slow esses, stages a quick third-fourth-third sequence where conditions permit, and kicks down with whiplash ferocity. There is no doubt about it, this transmission is pure magic.

As is the incredible engine. The normally aspirated 3.8-litre flat-six is a vocal and voraciously determined powerplant. No, low-end torque is not its forte – it requires 6250rpm to dish up its 440Nm maximum, which is no more than the Carrera S – and it is not as smooth running and refined as the other members of the boxer family either. But the super-fast throttle response hits you right in the sweet spot of your stomach where the butterflies gather and where respect, courage and angst set the pace of life. Only Italian exotics can match the direct-injection flat-six's enthusiasm to rev to an astonishing 9000rpm, but still you keep bumping into the limiter because of the unit's yo-yo-like willingness to show off its explosive low-weight, low-inertia, low-friction energy. It is impossible not to be smitten by the soundtrack. How type-approval for this decibel feast was obtained amazes me.

In more ways than one, the new GT3 feels even faster than the new Turbo S (see opposite page). But against the stopwatch it isn't, not even on the Nordschleife where less than two seconds separate the two models. And yet the GT3 is more involving, more challenging and perhaps even more rewarding to drive. Having said that, the 2014 model has mellowed somewhat, and this is a good thing. The ▶

▲ Born for the racetrack, feels perfectly at home on the road. Nothing else this hardcore can be as versatile as the GT3



▲ Typical: tell your mates it revs to 9000rpm, then it just sits there



Flat-out in the new Turbo S

STEPPING OUT OF the hackle-raising new GT3, you could swear that it was, is, must be, will for the foreseeable future be the fastest Porsche 911, period. But then you discover that the four-wheel-drive Turbo S is a full 0.4sec quicker off the mark. How can this be, especially when it's 275kg heavier at 1605kg and has a power advantage of 'only' 62kW?

The Porsche person who took us for a ride did not say a word. But he selected Launch Control before aiming the Turbo S down a long, long straight, and then smiled a broad, knowing smile. Okay, I have accelerated in 3.1sec from 0-100kph before, but I cannot recall a smoother, quieter and more progressive sprint. Which continued in third gear, then in fourth, passing the 200kph mark after only 10.3sec. Instead of losing momentum, the Turbo S still seemed to pick up speed. What comes next? Take off, drinks and a meal?

While the GT3 engine spins all the way to meltdown gear after gear after gear,

the twin-turbo lump runs out of revs comparatively early at 7200rpm. But its torque curve is on another plane. Between 2100rpm and 4250rpm, there's a feisty 700Nm on tap. Want more? Then hit Sport Plus for an extra 50Nm across almost the entire rev range.

The 911 Turbo S is more elegant and more restrained than the GT3 inside and out, feeling more like a downsized Panamera than a grown-up Cayman. And that follows through to its on-road manners. Its PDK dual-clutch gearbox operates at a less hectic pace, its working noises are wrapped in acoustic cotton wool, its suspension settings range from almost cushy to just about right and on to really rather firm.

The transmission is a blend of two relatively breathless bottom gears and a pair of laissez-faire upper ratios, which is exactly what you need for screaming standing-start acceleration and for focused high-speed autobahn cruising.

The prime strength of the new Turbo is amazing effortlessness. It may be less

If speed's a cat, it's just been skinned in two different ways



PORSCHE 911 TURBO S 991

PRICE R2596000
ENGINE 3800cc 24v flat-six, 412kW @ 6500-6750rpm, 700Nm @ 2100-4250rpm (750Nm @ 2200-4000rpm with overboost)
TRANSMISSION Seven-speed dual-clutch PDK, four-wheel drive
SUSPENSION MacPherson struts front, multi-link rear
LENGTH/WIDTH/HEIGHT 4506/1880/1296mm
WEIGHT 1605kg
PERFORMANCE 3.1sec 0-100kph, 318kph, 9.7ℓ/100km, 227g/km CO2
ON SALE Now

involving than a GT3, but it is even faster than previous high-end 911s, and it seems to have neutralised all those dynamic idiosyncrasies for good. Stability no longer seems an issue, lift-off oversteer is apparently a vice of the past, even fuel economy has improved beyond belief.

It's an impressive car, the Turbo S. Is it better overall than the GT3? Very probably, yes. Is it more desirable than the GT3? Perhaps not. Because the new GT3 has matured, too. It is more powerful and more accessible now, and at the same time has lost none of its appeal.





adaptive, two-stage suspension is now even more compliant. Torque vectoring sedates the bumblebees in the car's rear end by supporting the electronically controlled limited-slip differential with intermittent brake actuation. Add to this the dynamic engine mounts that make the drivetrain freeze in its cradle at the limit, and you begin to appreciate this multi-talented sports car that's compliant and benign when driven at a leisurely pace while being precise, fast-responding and sure-footed when pushed hard.

Also key is the GT3's new, state-of-the-art rear-wheel steering, a feature it shares with the new Turbo. It works like this: below 50kph, rear countersteer makes the GT3 feel like a short-wheelbase microcar. Above 80kph, the rear wheels move in sync with the fronts, generating a reassuring long-wheelbase effect. Even without last year's car available for reference it's obvious that the new

PORSCHE 911 GT3 (991)

PRICE R2323000
ENGINE 3799cc 24v flat-six, 350kW @ 8250rpm, 440Nm @ 6250rpm
TRANSMISSION Seven-speed dual-clutch PDK, rear-wheel drive
SUSPENSION MacPherson struts front, multi-link rear
LENGTH/WIDTH/HEIGHT 4545/1852/1269mm
WEIGHT 1430kg
PERFORMANCE 3.5sec 0-100kph, 315kph, 12.4ℓ/100km, 289g/km CO2
ON SALE Now

model feels notably more agile as well as more laid back. The times of fighting the front end, the rear end, the road, the conditions and the flame of anxiety inside are definitely over. The new model is not only quicker through corners and faster in a straight line, it is also twice as confidence-inspiring, this GT3 preferring to garnish its more neutral prevailing stance with only a dash of nose-heaviness or tail-happiness compared with the older car's more lurid antics. And no, this does not make it the preferred choice for pantywaists and toe-dippers. What you relish in the shape of the new GT3 is more fluidity, more feedback and more flexibility in response to changing conditions. At all velocities, the handling is now less nervous, less twitchy, less dependent on keeping up the torque flow.

Of course, this isn't all down to the rear steering, the new electric steering plays its part too, something we've previously criticised for its lack of feel in the Carreras. But the GT3's quicker and stiffer rack rests more self-assuredly in your palms, even if it doesn't communicate any more clearly than the Carrera. Turn-in is now ludicrously quick, but it is no longer followed by fluttering coattails – this newly discovered run-on-rails cornering style must be due to the stabilising effect of the rear-wheel steering, along with the shaved and sticky 20-inch Dunlop Sport Maxx tyres.

While the winged wonder from Weissach may have lost some of its rough edges, it has at the same time acquired important new qualities. Like a supreme sense of balance, a higher level of tactility, more potent and more progressive action, a creamier behaviour at the limit of adhesion as well as amazingly articulated feedback.

The message to hardliners is don't worry, all the trademark GT3 entertainment values are still there, standing proud and tall. Some buyers will never be convinced, however, and for them there's still hope: the upcoming 911 GT3 RS is rumoured to be as blunt a weapon as the diehards could ever wish for, and the engineers haven't yet ruled out an optional manual gearshift... **TC**



Ironic, but auto 'box makes GT3 even more like the racer

20in rims standard, but it's costly to fill them with carbon brakes