

NEW



TOTAL 911

PORSCHE 911 RS BOOK

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NINTH
EDITION

THE ULTIMATE GUIDE TO THE
GREATEST PORSCHE 911s OF ALL TIME

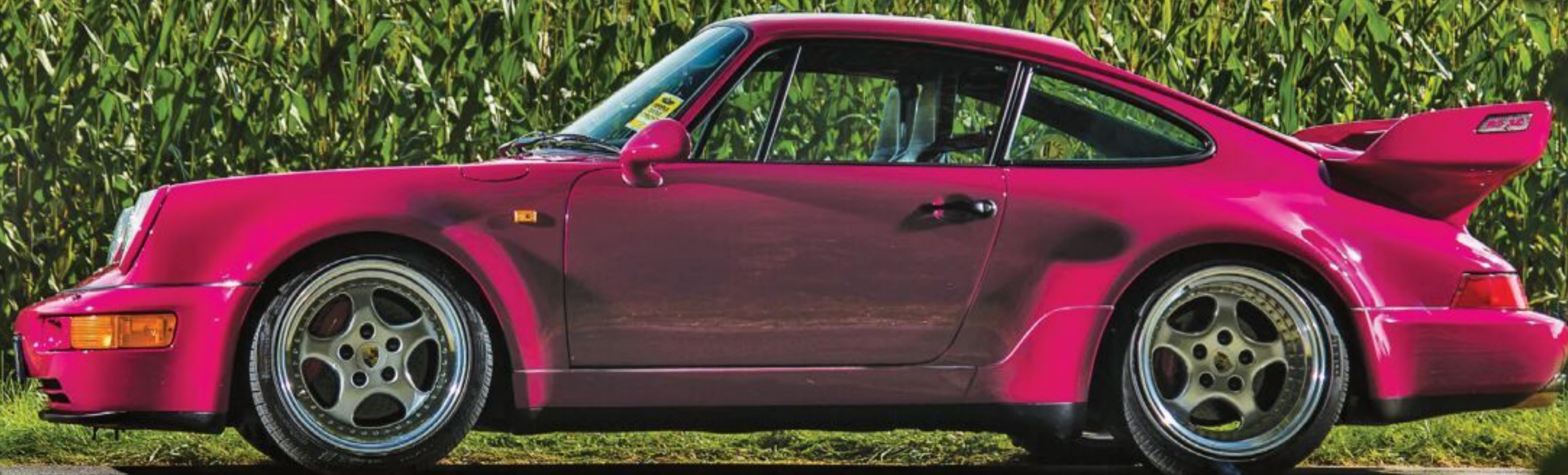
Welcome to...

THE PORSCHE 911 RS BOOK

There are few motoring legacies as rich as the Porsche 911 Rennsport. For most people, think 'race car for the road' and a Porsche 911 will be one of the first super sports cars that comes to mind.

Various iterations of Porsche 911 race cars throughout the model's existence are responsible for an unprecedented 30,000 race victories on circuits all around the world, providing the perfect platform for the company to market its coveted road cars. When it comes to the 911 Rennsport, the cars are as close to their motor-racing counterparts as is feasibly possible. They are extremely lightweight, with reduced equipment, boasting the very best performance engines, gearboxes and chassis technology to make them as competitive as possible, be it on a circuit or even for fast road driving on the public road.

Your revised edition of the Porsche 911 RS Book looks at the most decorated cars ever to wear the Rennsport badge, from early classics such as the 1973 2.7 Carrera RS all the way up to the latest modern day supercar in the form of the 991 GT2 RS. We've in-depth road tests, thrilling group tests and a look at some crazy race cars and modified monsters all celebrating the purest and most breathtaking form of the 911 sports car in all its glory. There is, after all, nothing quite like a Porsche 911 RS.



TOTAL 911

PORSCHE 911 RS BOOK

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Printed in the UK

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU
www.marketforce.co.uk Tel: 0203 787 9001

Porsche 911 RS Book Ninth Edition (TNB4518)

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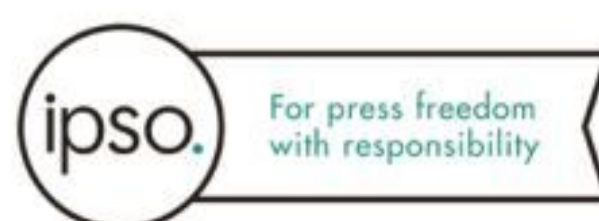
Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR) www.futureplc.com

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Part of the

**Total
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THE PORSCHE MAGAZINE
bookazine series





“ This Rennsport
is like something
out of space ”

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“The RS N/GT
was a competition-ready
fire breather permitted
on the public road”



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Relive the magic of the first generation of Porsche's now famous 911 Rennsport

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This rare RS is just one of 20 specially built cars worldwide

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044 991 .1 GT3 RS

With de-restricted roads, the Isle of Man makes for the perfect stomping ground for Porsche's first-generation 991 Rennsport

052 991 GT2 RS

We've taken the breathtaking 991 GT2 RS on a roadtrip through France to the Michelin test track





RENNSPORT

CARRERA 2.7 RS

FOR THE ROAD

Though many exist as garage queens, the 2.7 Carrera RS was built to run – and that’s just what this car has done for 43 years and counting...

Written by **Glen Smale**

Photography by **Ali Cusick**

The history of the iconic Porsche 911 Carrera RS of 1973 is as lengthy as it is fascinating. Introduced to the public at the Paris Motor Show in October 1972, it was a typical example of early 1970s motor trends, ushering in a brave new outlook on life, characterised by loud and colourful products. The RS was a motoring pioneer from launch, its illustrious reputation carried forward with distinction right to the present day, where it is regarded as one of Porsche's most iconic 911s.

It is remarkable, then, to think that initially Porsche was worried about selling even the first batch of 500 cars: in their calculation of expected market demand, the rather conservative marketing department estimated that they should make only the required 500 homologation units of the new Carrera RS. Concerned that they would otherwise sit with large quantities of unsold vehicles, the RS was priced at just DM 34,000 (about £5,230) compared to the DM 31,180 (about £4,800) for the 2.4-litre 911 S. Although the Carrera RS was aimed at the sporting fraternity, the marketing department hoped that many of them would find homes as road-going cars, thus boosting sales. When most of the first batch of 500 cars sold out soon after the Paris launch, a second batch of 500 was authorised by Ferry Porsche. When they too cleared the order books, a third batch was commissioned, resulting in 1,590 units being produced in just ten months.

With the benefit of hindsight, we might wonder why Porsche didn't commit to a much bigger production run but, at the time, this model represented a big step for the company. The Carrera RS was the first 911 to wear the 'Carrera' badge, a name which drew on the brand's early days competing in the Carrera Panamericana race in the 1950s. This model was also the first road-going car to feature the 'RS' moniker (this stood for Rennsport or Racing Sport), a powerful indicator of the car's sporting potential and ability to go racing. Although the Carrera 2.7 RS was only around 12mph faster than the 2.4-litre 911S, the bigger-engined car was 42mm wider in an effort to cope with much higher cornering speeds. The Carrera RS was also the first production car to feature a fixed rear wing, which was nicknamed 'ducktail' by the press. This rear wing, together with a front air dam, helped the RS to attain a higher top speeds well as, significantly, improved stability at those higher speeds.

The value of the Carrera RS rose modestly through the 1980s as many were still used for endurance and, later, club racing competitions, and by the 1990s it was shadowing the Ferrari Dino at around the £30,000 mark. In the early 2000s, this figure had trebled, but in recent years £600,000 to £700,000 (and more) seems to be the average value of a 2.7 RS Touring. This figure has slipped back this year, more reflecting a market correction rather than a fall in value, but the first Carrera RS is nevertheless one of the most sought-after Porsche



Model Carrera 2.7 RS**Year 1973****Engine****Capacity** 2,687cc**Compression ratio** 8.5:1**Maximum power** 210bhp @ 6,300rpm**Maximum torque** 255Nm @ 5,100rpm**Transmission** Five-speed manual**Engine modifications** Fuel metering modification, which has lifted maximum power to 229bhp**Suspension****Front** Independent suspension with wishbones and MacPherson struts; one round, longitudinal torsion bar per wheel; hydraulic double-action shock absorbers; anti-roll bar**Rear** Independent suspension with semi-trailing arms; one round, transverse torsion bar per wheel; hydraulic double-action shock absorbers; anti-roll bar**Wheels & tyres****Front** 7x15-inch Fuchs, Avon Radical CR6ZZ 185/70/R15 tyres**Rear** 8x15-inch Fuchs, Avon Radical CR6ZZ 215/60/R15 tyres**Dimensions****Length** 4,147mm**Width** 1,652mm**Weight** 1,075kg**Performance****0-62mph** 6.3 secs**Top speed** 149mph

“Many 2.7 Rennsports are consigned to the garages of exotic car collections, with few being driven in anger today”

911s to ever leave the factory. This means that many examples of this icon are consigned to the garages of exotic car collections, with few being driven in anger today. However, this isn't the fate befalling UEN 911L.

Our feature car – chassis #9113600348 – is a Touring model (option M472) imported into the UK by Porsche agents, AFN Motors, which found its way into the hands of its first owner in February 1973. This is one of the most sought after Carrera RS models, being from the first batch of 500, and is finished in Grand Prix white with green scripting and wheel centres. Factory options specified by its first customer included Sport seats, driver's door mirror, electric sliding roof, electric windows, heated rear window and a Blaupunkt radio with Hirschmann retractable antenna. Oddly enough, the first four owners only kept the car for between eight to 18 months, while the fifth owner retained it for three years.

In November 1980, Porsche Club member David Gilhooley acquired chassis #348, and so began a 28-year relationship that would see the car become one of the best-known Carrera RSs in the UK. Factory extras fitted by Gilhooley included 'Dynamic' limited-slip differential (10-100 per cent); 7-inch front and 8-inch rear Fuchs wheels; 85-litre plastic fuel tank with Goodrich space-saver tyre; sill-mounted Aley roll-over bar; fire extinguisher; a rear fog lamp; and a pair of Cibie driving lamps fitted to the luggage compartment lid. Between 1980 and 2008, Gilhooley racked up some 148,600 miles,

competing in events at all of the major race circuits in the UK. Gilhooley would typically drive UEN 911L to the race meeting, compete, and then drive the car back home again each time.

In 1983 Gilhooley formed part of the PCGB 73 Carrera RS team to compete in the 1983 Birkett 6-Hour, a relay race run by the 750 Club at Silverstone. In the same year, UEN 911L was awarded third place in class in the PCGB Concours d'elegance at Chateau Impney in July, showing how hard the car was raced, but also how well it was maintained. The European trips and race meetings in which the car competed are far too many to list here, but Gilhooley visited Stuttgart, toured to the French Pyrenees and Spain in 1982, Nürburgring, Le Mans, and competed in the six-day Paris-to-Riviera France Tour Classic Rally in 2005. In all of these activities, the only damage to the car in 28 years was a right front wing that required repair. All other panels, and all the glass, are still the original items as fitted to the car when it left the factory in 1973.

In early 2008, the engine was comprehensively overhauled but soon after, Gilhooley sadly passed away. Rob Gooding acquired UEN 911L in July 2009. “David was the RS Register Secretary for 25 years and everyone knows that it was David's car. I am just the car's custodian really and I am lucky enough to have it. When I acquired the car, his wife kindly gave me all of the CDs and box files with the car's history,” Gooding, the current owner, tells us. With such an illustrious past, you might expect a car like this to be







Above top A rare sight on the road today, what's more remarkable is this 2.7 RS is a first-500 homologation model

Right The 2.7-litre flat-six engine of the RS produced 20hp more than the 2.4-litre 911 S and featured a top speed of 152mph

treated tenderly, becoming a 'garage queen' in its old age like so many of its peers. Not likely, as Gooding explains: "I have tracked it and completed numerous Porsche days, but I tend to run it through the mountains with a group of other 911 aficionados. I prefer doing that and going to the Groes Inn in North Wales rather than thrashing it around a track. We do these runs three times a year, covering about 500 to 600 miles each time, so in total I do about 2,500 miles a year with it. I drove it to the Classic Le Mans in 2014 and did the parade laps, and it didn't miss a beat."

The car's geometry was originally set up for Gilhooley, who did more track events with the car, but Gooding has since had some changes, as he explains: "I have done some trackdays in it set like that but while the rear was very stable, the front understeered and there was little progressive slip. Chris Franklin from Centre Gravity balanced the car for me by altering the geometry, raising the back and front slightly, and setting the correct corner weights. Now I can take it around Castle Combe and I'm actually quicker and more confident through the corners because the car is far more balanced. The front and back are far more predictable, as it now has progressive slip so you can actually drive it because you now have the confidence to push on."

Rob Gooding also has a 997 GT3 RS in his garage, but for the hills of Wales, the Carrera RS is his first choice. "For the narrow and tight roads that we are using it on, the RS is just sublime because it is small enough to whip through the corners and light and nimble enough for you to really feel every movement of the car. And that is the difference between the RS and a more grunty, heavier, larger 997. That is really what the RS is all about; it's got enough power to make it just a phenomenal drive."

Experiencing Rob Gooding's Rennsport, it is incomprehensible that this car has today covered 156,000 hard miles on road and race track. It is difficult to ignore the car's compact dimensions, as both the interior space and its exterior footprint are noticeably smaller than modern cars. The RS's accelerative power is still mightily impressive, with the engine noise washing straight into the cabin for all to enjoy. Adhesion in the corners is beyond what a 43-year-old car should be capable of, but this is what Porsche became famous for, with tremendous performance from a smaller car with a powerful engine. Such a potent package is what earned Porsche its reputation for being giant killers in the racing world, which, of course, has added to the vast allure of its road cars.

Does the 'used and abused' pedigree of the car affect its significant value, though? "Well they have boomed in recent years, but the mileage doesn't seem to matter on the early cars. As long as it has a strong history, that is what matters," Gooding explains. In an age where the mere sight of a Carrera 2.7 RS gracing the public road is exceedingly rare indeed, we implore Rob and his contemporaries to keep on driving. **911**

ONE OF 20 RS N/GT 'RACING PACKAGE'
**PEAK 964 RS
PERFORMANCE**

A firecracker road car with race-ready pedigree, an N/GT is a scintillating 964 Rennsport. Total 911 uncovers the story of a unique example with a mysterious yet fascinating history

Written by Lee Sibley Photography by Ali Cusick



When the email and accompanying pictures came through, I had to double take. At first the car on screen appeared to be a 964 RS N/GT: with only 290 units ever produced, the car is a fairly rare find by Porsche standards, accounting for around 12 per cent of total 964 Rennsport production. However, I'd soon realise this isn't an ordinary N/GT. An extra special and substantially rare sub-production model straight from Weissach, just 20 examples of this car were made, each finished in a different colour. Its story is both enthralling and peculiar (though positively credible), the sort of Porsche legend that perpetually excites both writers and readers of this fine publication, and the perfect start to our 'rare 964s' double bill for issue 139. First though, a little history.

Originally a lightweight homologation special of the 964 Cup cars, the N/GT was a competition-ready fire breather permitted on the public road. A true performance thoroughbred, the suffix attached to that famous 'Rennsport' moniker simply denoted the competitions it was applicable for, this being FIA group 'N' (ostensibly production vehicles in competition), and GT racing.

Denoted from the factory as a 964 RS with option code M003 (M001 being a Cup car and M002 being the Touring model), the specification of an N/GT was Rennsport in its purest form. On top of the usual RS liturgy of a strengthened, seam-welded shell, an alloy front boot lid, no rear seats, front bucket seats with no electrical adjustment, thinner glass for side and rear windows, magnesium wheels and a lightweight rear bumper, M003 stipulated a complete removal of sound deadening (which, as well →

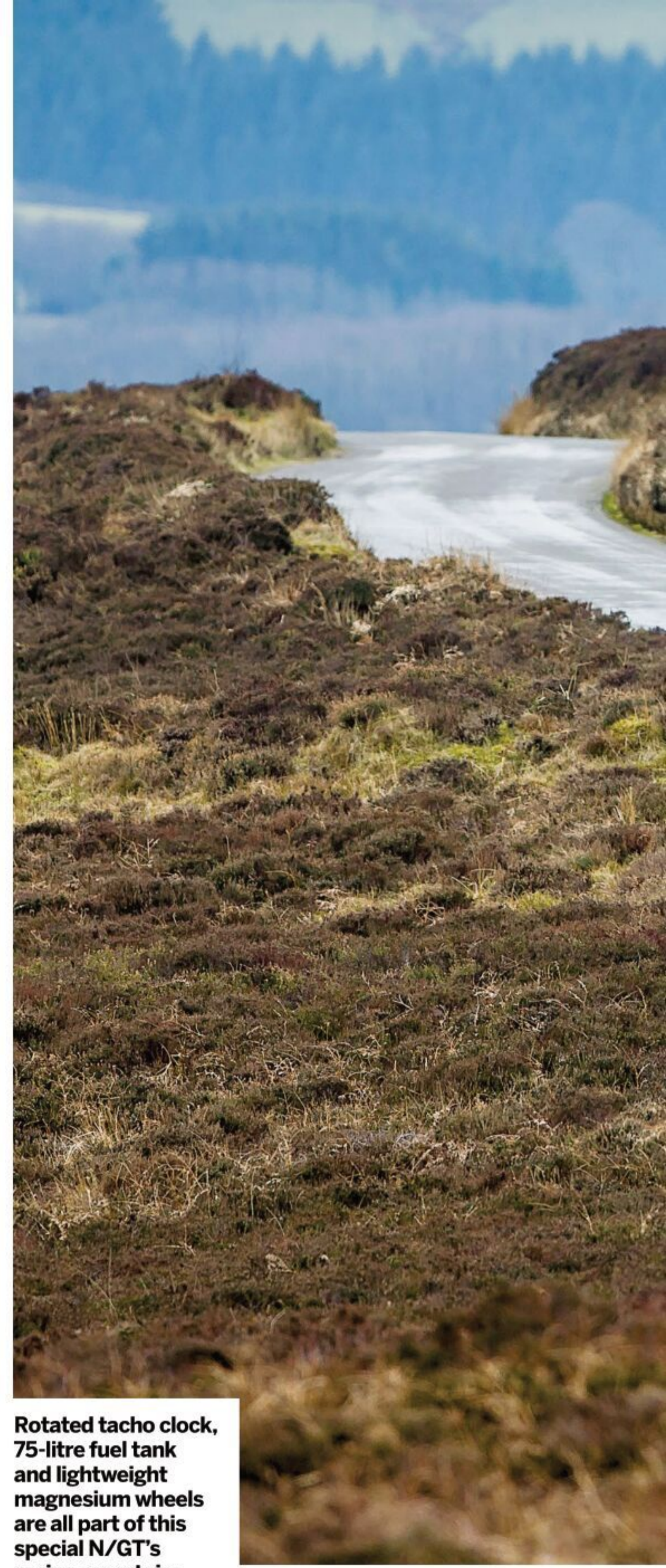


as the engine compartment cladding, meant the removal of all interior carpets and headlining, as well as carpeting in the front boot). A sun visor was only present on the driver's side, and a welded Matter roll cage was installed as standard equipment. Carpets in the front of the N/GT's cabin were replaced with plywood footboards, and the bucket seats, colour-coded and covered in leather in the RS Touring, were covered by flame-retardant Nomex material. Schroth harnesses held the driver in place and a bigger-capacity fuel tank was installed, along with an onboard fire extinguisher and cut-off switch. Like the 964 RS Touring and Lightweight, power was boosted for the N/GT by 10bhp, the result of modified pistons and cylinders as well as the deletion of catalytic converters, though the DME was relocated on N/GTs. The result is an aggressive Rennsport that's an uncompromising if not brilliantly exhilarating race car that, somehow, was deemed fit for the public road.

And that's where the subject of that aforementioned email enters the frame. Originally destined for a one-make racing series in Macau in the early 1990s, 26 cars had been ordered from Porsche with the intention of making the grid for the first race. However, the championship was canned before the first green flag was waved, leaving Weissach in possession of 26 unwanted 1992-spec N/GTs (GT Racing was already moving on to the mighty GT2, of course). One-time Porsche importer for Japan, Mitsuwa, originally offered to buy 20 of the cars from Weissach in 1995 providing they were refitted with interiors more befitting a road car. Porsche obliged with the cabin accoutrements, though later that year (and again before the cars could be delivered) Mitsuwa were issued with a cease and desist order to use the Porsche name, culling the deal. Instead, the 20 cars were sold to Art Sports in Osaka, who marketed the cars as the 964 RS 'Racing Package'.

These 20 cars, each painted in a different colour, went on sale for 8.8 million Yen, which was substantially cheaper than the 13.5 million Yen a 964 RS Lightweight cost at the time. All were sold in Japan and most are believed to still be in the Land of the Rising Sun, though Total 911 is aware of an example recently sold at Pannhorst Classics in Germany. The Polar silver car in our pictures is the sole example residing in the UK, sold to current owner Richard Cook in 2015 by independent specialists JZM.

Sure, elements of the story surrounding those early years of this unique mini-run of Japanese Rennsport N/GTs may be shrouded in relative mystery but what is clear is the interior retrofit was done at the Porsche factory. These options recognised by Porsche include a leather covered cage, triple leather covered RS Touring bucket seats and a full RS carpet fitted, thereby serving up a race-ready N/GT with some choice upgrades that make it more palatable for cross-country blasts. Of course, we had to drive it. ➡



Rotated tacho clock, 75-litre fuel tank and lightweight magnesium wheels are all part of this special N/GT's racing repertoire



“With only thin carpet for sound deadening, you’re constantly treated to an orchestral-like symphony of sounds as the 964 shoots along the asphalt”



Other super-rare 964s

The 964-generation of Porsche 911 boasted a mouth-watering array of special models within its repertoire:



964 RS 3.8
Production run: 55

Again a homologation special, the 3.8-litre 964 Rennsport was built on the virtues of its earlier 3.6-litre stablemate, though an additional 40bhp was garnered from the M64/04 engine while, impressively, the 3.8-litre RS was 20kg lighter than the 3.6 in Touring guise. A uniquely special road-going Rennsport guaranteed by its rarity – only two were produced in right-hand drive – the 3.8-litre car’s exotic looks of a Turbo body and Speedline split-piece alloys also give it clear substance over narrow-bodied forebears. It’s perhaps the 964 to have, if you can ever find one.



964 Turbo S Flatnose
Production run: 76

The Turbo S was already a special 964 while retaining its customary silhouette: effectively a turbocharged Rennsport in all but name, an extra 61bhp was eked from the 3.3-litre blown flat six, while a huge 180kg was shaved off the original Turbo’s weight. With an RS-specification suspension, and intakes in the rear quarters feeding cool air to the brakes (a style format later used on the 3.6-litre Turbo), the 964 Turbo S is both a performance icon and a collector’s dream. Total production of the 964 Turbo S reached just 93, with only 76 of those in the rarer flatnosed aesthetic (just 27 RoW).



964 Speedster wide-body
Production run: 15

Feeding off the back of the 3.2, which first brought the ‘Speedster’ look to the 911, the 964 was perhaps most true to the heritage of Porsche’s famous drop top due to its minimalist interior, including plain door cards, lightweight bucket seats (taken from the RS production line), and a Clubsport steering wheel. Melding a 964 body to the hood and windscreen of the earlier 3.2 Speedster, demand fell for the 964 version and only 936 were produced. However, those were narrow-body examples: just 15 wide-bodies were created by Porsche Exclusive, which came with Speedline wheels.



964 C4 Lightweight
Production run: 22

The C4 Lightweight has long been a **Total 911** favourite. Created by Jurgen Barth himself, the car showcases the very best of the 964’s mechanical capabilities: four-wheel drive was carried over from the 959 supercar, with a four-way adjustable differential allowing the driver to constantly alter levels of mechanical grip available thanks to two dials on the dashboard of the sparse, carpet-free interior. A short ratio gearbox and a featherweight mass of just 1,100kg ensured lightning-quick acceleration. This was a true competition thoroughbred, illegible for the public road.

Model	964 RS N/GT
Year	1992
Engine	
Capacity	3,600cc
Compression ratio	11.3:1
Maximum power	260bhp @ 6,100rpm
Maximum torque	325Nm @ 4,800rpm
Transmission	Five-speed G50
Suspension	
Front	Independent; MacPherson struts; coil springs; gas-filled double action shock absorbers; anti-roll bar
Rear	Independent; semi-trailing arms with telescopic dampers; coil springs; anti-roll bar
Wheels & tyres	
Front	7.5x17-inch magnesium Cup wheels; 205/55/ZR17 tyres
Rear	9x17-inch magnesium Cup wheels; 255/40/ZR17 tyres
Dimensions	
Length	4,250mm
Width	1,650mm
Weight	1,230kg
Performance	
0-62mph	Not tested
Top speed	Not tested



Top left: M64 engine in Rennsport guise gains an extra 10bhp over Carrera 2 variants

Top right: Unique N/GT interior features carpeting, headliner and leather seats. Cage is leather-clad, too

Three weeks later, I'm stood in front of the N/GT in a garage just outside Exmoor as Richard, the car's owner, recites his reasons for buying this truly unique, 'hot' 964. Originally entering the market in search of a good 964 Rennsport, Cook explains how he found far more than he was bargaining for: "I was attracted by the pretty unusual colour of this particular RS, then Russ [Rosenthal] from JZM filled me in on what he knew of the car's documented history, and the more I learned the more intrigued I became," he says.

Inviting me to take a closer look at the car, I conclude that, as with those original pictures sent to me electronically, from the outside this looks like any other RS. Sitting squat over those magnesium 'Cup' alloys thanks to the M030 sports suspension, there's brake cooling ducts in the front bumper,



'Cup' mirrors affixed to either door, and the lightweight rear bumper is present, too. Opening the front boot, the lid is clearly alloy and very light by comparison to a Carrera 2 or 4, and a few N/GT traits begin to appear. The large, 100-litre fuel tank sits either side of the suspension top mounts in the uncarpeted boot compartment, while a battery cut-off switch resides down in front of the ABS servo (interestingly, all left-hand-drive 964 Rennsports came with ABS as standard, while right-hand-drive examples did not). Venturing round to the driver's door, I click it open and take my first look inside.

For the discerning Porsche enthusiast, the sight here is nothing short of fascinating. The presence of carpets, headlining and leather seats with tricoloured inserts would have you assume it's an RS Touring after all, but look closer and Schroth harnesses, a Clubsport wheel, and a DME relocated behind the seats are obvious traits of N/GT, while the tacho, rotated so peak power at 6,100rpm stands at 12 o'clock, makes for a covert nod to this 911's competitive intentions. Further proof is needed, so I peel the scant carpet away from the footwell and, sure enough, underneath the plywood footboards the car's floorpan is painted Polar silver, matching the exterior hue. Exactly as you'd find in an N/GT.

Next to grab my attention is the leather-clad roll cage. Comprising of door bars at either side, with 'A' pillar supports stretching forward from the roofline

and falling down to the base of the dashboard where it's bolted to the floor at the front, it's certainly extensive, with a huge x-brace and bolting points in the rear of the cabin, too. That's nothing though, compared to the cow-hide perfectly wrapped around every bar: akin to that of a show car (or perhaps a Singer?), the immaculate stitching is nothing short of exquisite. It's so perfect it could only have been administered at Porsche.

But don't get this confused with your dearest Concours winner. As with the carpet on the floor, the headlining is thin and I can feel the contours of the roof's bracing through the fabric. Meanwhile, the seats – covered in yet more leather – work splendidly with the Schroth five-point straps in anchoring me firmly into position behind the feelsome Clubsport wheel. Motorsport is the clear objective from inside the cockpit and I'm ready to sample the capabilities of this unique N/GT.

I turn the thin key in the ignition barrel as the engine catches immediately, emitting a loud, gruff growl as the flat six settles quickly to idle. The shrill bark of that M64 power plant reverberates throughout the cabin, punctuated by the familiar transmission chatter of a single mass flywheel. Depressing the clutch pedal, I'm surprised to find there's a rather light weighting to it (owing to the factory fitted moulded facing for street use) but the biting point is gloriously low and after a quick



counter-flick of my right and left feet, the 964 is away and running.

Hours pass in quick succession as the N/GT devours the sweeping roads around Exmoor's expansive national parkland, its hardy character willing me to commit through each and every apex with aplomb. Typical 964 RS traits are displayed here, namely a tendency for the front end to go light very early into a corner, requiring a sure-footed synergy in both steering wheel and throttle inputs from a committed driver. Steering itself is a wonderful experience here, with left-hand-drive examples such as this benefitting from the heavy, unassisted steering system. As a result, the small-circumference Clubsport wheel perfectly illustrates the front two tyres' relationship with the road through my palms with little fuss, aiding my confidence to kick down further as the RS N/GT hunts for the horizon. That M64 engine is quick to react to any prod of the accelerator, swinging the rpm needle enthusiastically around the tachometer to 4,000rpm when another shove of thrust is unleashed, pushing me further back into my seat as the 964 screams all the way to the redline.

The chassis is wonderfully taut, too, a hallmark of the M030 suspension featuring a lowered ride height and uprated dampers and springs. Impressively nimble, the N/GT displays an envious turn of pace that belies the performance

capabilities of a car soon to be turning a quarter of a century old. Perhaps most satisfying, though, is the sensory appeal of the N/GT. With very little in the way of sound deadening, as a driver you're constantly treated to an orchestral-like symphony of sounds as the 964 shoots along the asphalt. Primed by that unfiltered mechanical wail of the flat six, its kamikaze tones imitating that of rapid machine gunfire as the crank spins ever faster, on the road you'll also hear the pinging of catseyes right through the car as the front tyres hunt to use all of the road for a fast corner. Complementing the aforementioned steering, the gearbox feel is wonderfully positive. Short but precise in its throw, the five-speed G50 rewards a driver for holding on to each cog to really wring out the revolutions before a quick change up to a new gear. The entire setup makes for a sensational drive.

Pleasingly, too, there's a civility to this N/GT that ensures longevity to the fun to be had from continuous driving. A 'normal' N/GT would not make for the ideal tourer; its unapologetically raw nature would in fact be overawing after long stints at the wheel. Here, however, I'm inclined to drive the car all day long, the virtues of performance not ever undone by the vices of discomfort. That's not to say this 'Racing Package' has blunted that all-out appeal of the N/GT, more just refined it ever so slightly for a more palatable experience

for both road and race use. Its very being may well be the stuff of a proper Porsche legend, another scintillating tale from inside Stuttgart, but this special RS N/GT offers a drive that's as unique as its own story of existence. Perhaps showcasing the 964 era in its very best light from a performance perspective, its rarity and desirability only adds to the appeal of this petite Polar silver predator. Want in on the exclusive fun? There's another 19 cars out there somewhere... **911**

RARITY OF THE RS N/GT





STORY OF THE 993 RSR

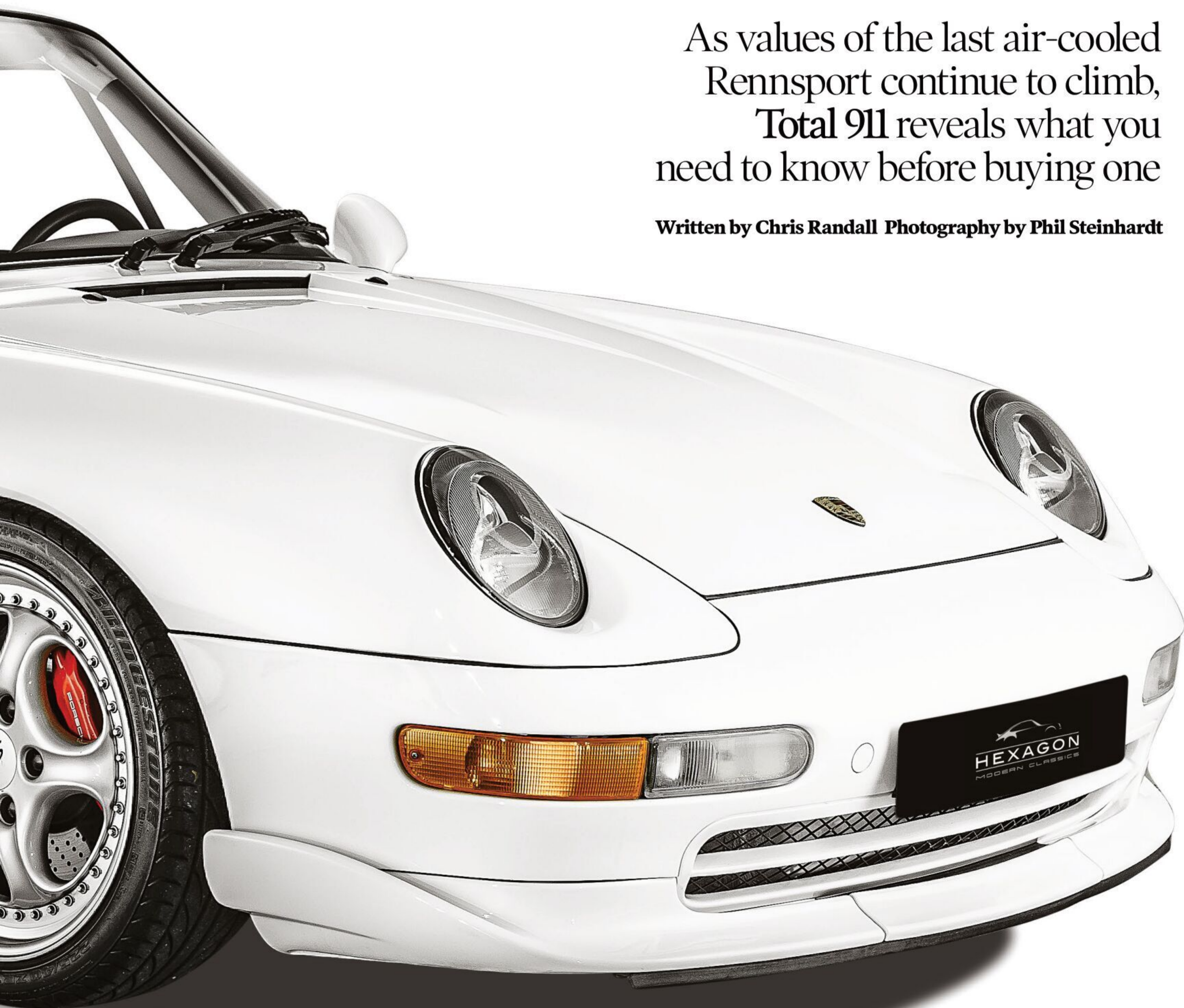
We already know the Clubsport version of the 993 RS was more hardcore, but for those buyers that ticked the option box marked M003, this was the ultimate incarnation of this special 993. Representing around 20 per cent of total production, the variant, also referred to as the RSR in some markets, wasn't really intended for road driving, although some of the more committed owners did indeed use them that way. Instead, it was aimed at those that intended to wring the maximum enjoyment out of the RS on the race circuit, and here it excelled. Costing in excess of £70,000 when new, just about all unnecessary kit was cut to maximise the weight saving, so you'd struggle in vain to find the likes of air-conditioning, electric windows, or carpets. Full harnesses were fitted as standard along with a Matter roll cage that was welded in place, and the seats gained fire-resistant Nomex coverings. Meanwhile, on the outside was an improved aero package that featured a deeper front splitter and bi-plane rear wing with substantial end plates. Highly sought after today, it's the ultimate embodiment of the RS philosophy.



993 RS

As values of the last air-cooled
Rennsport continue to climb,
Total 911 reveals what you
need to know before buying one

Written by Chris Randall Photography by Phil Steinhardt



It was back in Issue 119 that we last got behind the wheel of the 993 RS and we were mightily impressed by the combination of rawness and purity on offer. That shouldn't really come as any surprise as this last of the air-cooled Rennsport cars is a special model indeed, and that makes it incredibly sought after today. Launched in 1995, just 1,104 were built – with 227 of those produced in more hardcore Clubsport trim – and only 38 examples arrived in the UK in right-hand drive form.

It's a rare beast and a bad one will be an expensive mistress, so as values climb it's vital to meticulously investigate the history before examining a potential purchase any further. Naturally, the paperwork should all stack up with no question marks over maintenance record or mileage. The market is also seeing more cars returning from abroad, especially Japan, which can make understanding the history that bit more

difficult, so it pays to be cautious. If you've any doubt whatsoever, seek the advice of an OPC or specialist. And before we get into the detail of these cars, there's also the matter of its previous usage.

Like many 911s, the 993 RS went through a stage where values were reasonably low, and where owners would have been quite happy to explore its abilities on track. Understandable, of course, given the performance and handling on offer, but it's worth trying to establish what sort of circuit work it might have seen. It shouldn't necessarily put you off, but there's clearly a difference between the occasional track day and a car that spent its early life lapping the Nordschleife – which takes us on to another important aspect, and that's accident damage. Some previous paintwork such as stone-chip repairs isn't an issue, but it's crucial to ensure that the seam-welded shell hasn't sustained anything worse after a brush

with the Armco. Proper repairs are crucial and not always easy, depending on where the damage was sustained, and once again, a specialist will be able to spot the tell-tale signs of major panel repair so you know what you're dealing with.

While we're on the subject, you can expect damage to RS-specific parts such as the front bumper/splitter or rear wing will be costly, as replacements cost £1,700 and £2,600 respectively, before VAT and fitting. It's not uncommon for these parts to suffer from bubbling in the paint on original examples too, so budget for re-painting if there's any evidence of this. As for the rest of the bodywork, the RS can suffer from the same issues that afflict other 993s, including the annoying windscreen creak that can actually be exacerbated by the stiffer suspension set up – though it can be fixed without excessive difficulty or cost. Nevertheless, it's important to check. ➔

“The galvanised shell should have kept panel rust at bay, so it's likely to be the result of poor accident repairs”

Model 993 RS

Year 1995-1996

Engine

Capacity 3,746cc

Compression ratio 11.5:1

Maximum power 300bhp @ 6,000rpm

Maximum torque 355Nm @ 5,400rpm

Transmission Six-speed manual, rear-wheel drive

Suspension

Front MacPherson struts with coil springs; anti-roll bar

Rear Multi-link with telescopic dampers; coil springs; anti-roll bar

Wheels & tyres

Front 8x18-inch; 225/40/ZR18

Rear 10x18-inch; 265/35/ZR18

Dimensions

Length 4,245mm

Width 1,735mm

Weight 1,279kg

Performance

0-62mph 5.0 secs

Top speed 172 mph





Externally, the hardcore Clubsport differed visually from the Comfort spec thanks to a larger bi-planed rear wing with air intakes, plus a front spoiler with a more extreme curvature at its sides

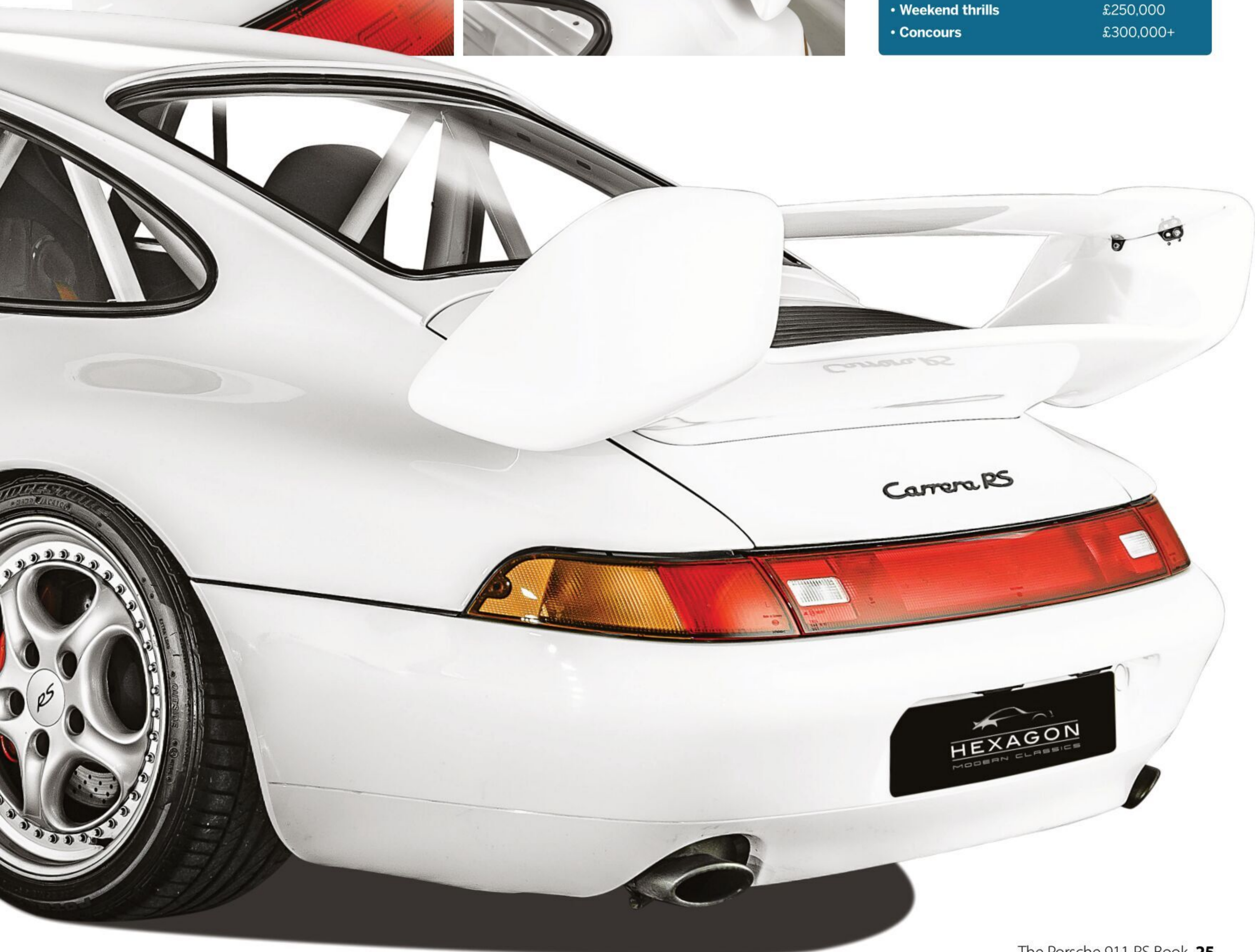
PARTS PRICES

• Front bumper	£788.45
• Rear spoiler (Comfort)	£2,687.18
• Clutch kit	£745.40
• Front damper (each)	£335.44
• Front brake disc (pair)	£433.38
• Rear brake caliper	£591.50
• Front wheel (each)	£1,127.28

VALUES

The values here represent what you can expect to pay for a left-hand drive example. Specialists say you can expect to pay substantially more for one of the rare right-hand drive UK cars.

• Project	£150,000
• Regular use	£200,000
• Weekend thrills	£250,000
• Concours	£300,000+





“Compression and cylinder leakage tests will confirm the engine condition”

It's also important to check for signs of corrosion around the front and rear screens, especially the lower edges as damage to the paintwork caused by cack-handed replacement of the bonded screen can accelerate the onset of rot. Corrosion can also affect the bumper mountings, especially at the rear, so check these are securely attached. The galvanised shell should have kept panel rust at bay, so it's likely to be the result of poor accident repairs. Make sure, too, that the door check straps are working correctly, as a clicking sound indicates a common issue. Proper repairs involve letting in a new section of A-post and you'll be looking at a bill of £500 upwards per side. The problem lies on the inside of the pillar, and previous owners may have been tempted to bodge the job by just having the outside welded. Otherwise, it's just worth checking for excessive stone-chipping

around the nose; dings in the aluminium luggage compartment lid; rear light units that have turned hazy; and for milkiness around the edge of the windscreen that signifies delamination.

As for the engine, the 300bhp, 3.8-litre unit is very strong and, if cared for, shouldn't prove any more of a high-maintenance proposition than any 911 motor. Clearly, an unimpeachable service history will provide peace of mind here, but get a specialist inspection if you have any doubts. Excessive hydraulic tappet noise needs listening for as replacing them all costs at least £2,000 including labour, and raises concerns about what else might be wrong. So carrying out compression and cylinder leakage tests will confirm the internal condition, which crucial as a re-build will set you back a five-figure sum. It could be double that, too, if it extends to more major surgery such as

replacing pistons or crankshaft, so it's clearly money well spent.

Even a fundamentally healthy engine can leak a little oil, usually from the rocker or timing chain covers, but it shouldn't be a major problem with these units, unless an item such as the crank oil seal is involved, which is where things get more expensive. And if there's more than just the smallest puff of blue exhaust smoke, be prepared to walk away. Remember, too, that the RS was the first 911 to benefit from the VarioRam intake system and acceleration should be strong throughout the rev range with no signs of hesitation or flat spots. Perished vacuum pipes can cause problems, and while repairs to the unit itself are possible, complete replacement is both costly and labour-intensive. Transmission-wise, the solid flywheel is trouble-free, and it's likely to be weak synchromesh in the lower gears that gives away a gearbox that's in need of a re-build. That said, it is a robust unit, so any problems usually point to hard use or abuse in the past. It's advisable to check for any clunks or whines from the limited-slip differential,



and to ensure there's no sign of clutch slippage, as the three-piece kit costs around £750 plus fitting, although it's not an engine-out job thankfully.

The rest of the mechanical package will need equally close inspection if big bills are to be avoided, starting with the brakes. The discs are ventilated and cross-drilled items, 322mm and 299mm diameter front and rear respectively, clamped by 'Big Red' calipers. Prolonged hard use will take its toll, so ensure the discs are in good condition with no cracking around the holes or pitting/scoring on the inner surfaces. Replacing all four corners will cost £700 in parts before VAT, so it's a hefty outlay. The calipers themselves can suffer from sticking pads, caused by corrosion between the alloy caliper and steel insert – they can be refurbished as long as things haven't gone too far, but you're looking at the best part of £600 for a new rear item. Bosch ABS was standard and shouldn't be a concern, although it's worth ensuring that the warning light illuminates and extinguishes correctly on start-up. The brakes are fronted by gorgeous split-rim Speedline wheels

Inside, the Clubsport is sparse, with only extremely necessary equipment remaining. Nomex bucket seats offer a tight hold and a comprehensive cage including door bars offers protection and rigidity



BUYING TIPS

Make no mistake, the 993 RS is a specialist proposition and one that commands increasingly high prices. It's a car that demands respect, and that goes for buying one, where researching the history and condition is crucial. It would be very unwise to take the plunge without seeking the advice of an OPC or respected specialist.

- **History:** The most important aspect of buying an RS. It's vital to ensure that numbers and mileage all tally up, and extra care is needed with imported cars. Any doubts or gaps in the history, and you should tread extremely carefully.
- **Crash damage:** Hard to believe now, but when these cars were cheaper many were subjected to circuit use with all the risks that implies. Crash repairs aren't a deal-breaker as long as you know exactly what's been done and how well.
- **Bodywork:** RS parts are eye-wateringly expensive so examine them closely and carefully for any damage. Corrosion isn't a major concern, though it can take hold around the windscreen.
- **Engine:** Strong and with few inherent problems, the 3.8-litre unit should have been fastidiously maintained. Check for flat spots in the rev range. Oil leaks are common, though rocker cover leaks are an easy fix.
- **Transmission:** Very strong if used sensibly, but hard use will take its toll. Odd noises from the gearbox will end in a big bill, so be careful – especially check for crunching synchromesh.
- **Brakes/suspension:** Refurbishing a tired set-up will cost plenty, so if an owner has skimped here what else hasn't been done? And original Speedline wheels in perfect condition are a real plus given the huge cost of their replacement.
- **Interior:** Condition here is a good indicator of previous ownership, so be wary of a scruffy cabin for Comforts. There's less equipment than other 911s, but make sure what's there works properly.

and while they can be renovated at a reasonable cost, new ones are eye-wateringly expensive, as in £1,100 each at the front and £1,200 each at the rear, so you've been warned.

The power steering can suffer from fluid leaks, so check the pipe unions and rack, while the suspension bushes should be free of any perishing or obvious wear. It was a stiffer set-up, lowered by 30mm at the front and 40mm at the rear, and with adjustable anti-roll bars, so any geometry that's gone awry or been tinkered with by track amateurs will have a dire effect on the handling. Uneven tyre wear should also ring alarm bells. Dampers themselves are another pricey item at around £700 per pair for the front, so budget accordingly if an overhaul is on the cards.

Head inside, and you'll find a cabin that's solidly constructed from good quality materials. It's also a good indicator of a car's past, so don't be hasty when it comes to checking its condition and look for scuffs caused by an uncaring owner. The Clubsport models are a sparse affair, equipment-wise, and it's worth ensuring that you could live with the track-focused roll cage and harnesses before taking the plunge.

And even if the model you're looking at appears standard, it's worth looking at the trim in the rear of the cabin for signs that such track items haven't been previously installed and then removed. Comfort versions certainly made for a more usable proposition, and although the lighter wiring loom and lower equipment levels should make things more reliable, it's no guarantee. Make sure everything works, then, focussing on items such as electric windows and air-conditioning if fitted. The latter can suffer from failure of the fan's ballast resistor, which is a cheap fix, and problems with the evaporator and condenser, which aren't. If it doesn't blow cold, the system is likely to need more than just a re-gas.

Overall, the RS is an exciting proposition and one that should last well as long as it's been cared for. And given the prices now being asked, you'd perhaps expect nothing less. An abused example in need of major work will empty your bank account with stomach-churning ease, so think long and hard before taking on any sort of project. Look instead for an original, pampered car and you'll own a very special Rennsport indeed. **911**

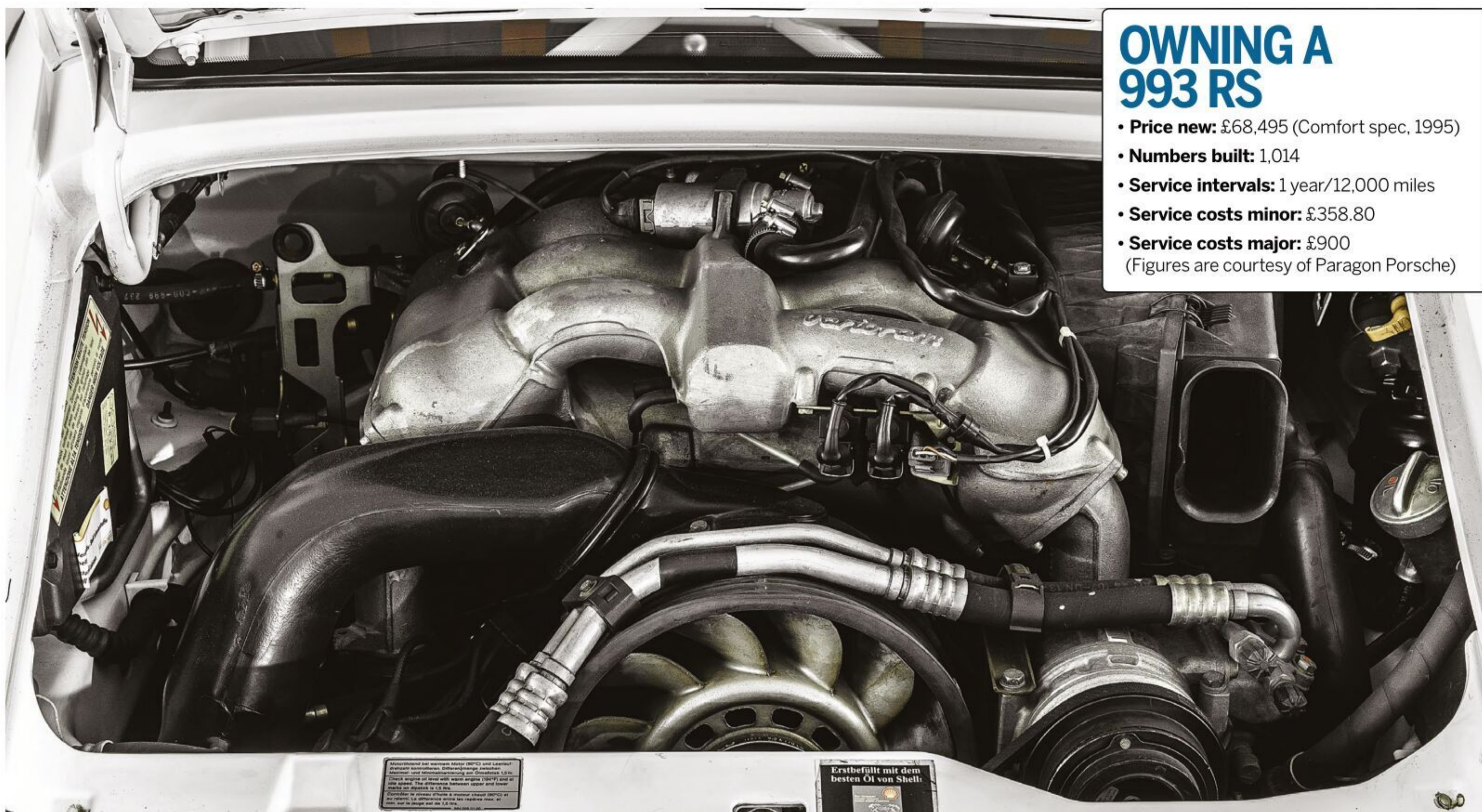
SPECIALIST VIEW

"The 993 RS is an incredibly special car indeed and has witnessed a huge leap in values since the start of last year. We're lucky enough to have had a few in stock including the immaculate Clubsport seen here in your pictures.

While a right-hand-drive car is the ultimate in terms of an investment opportunity, any 993 RS makes for a tantalising drive in Comfort spec, with the Clubsport reserved only for those who enjoy a fully hardcore driving experience."

Jonathan Franklin,
Hexagon Modern Classics





OWNING A 993 RS

- **Price new:** £68,495 (Comfort spec, 1995)
- **Numbers built:** 1,014
- **Service intervals:** 1 year/12,000 miles
- **Service costs minor:** £358.80
- **Service costs major:** £900
(Figures are courtesy of Paragon Porsche)



“With an engine rebuild in the region of £10k it’s worth getting a thorough health check”



THE SECOND-GEN 997 RENNSPORT

Given the desirability of the car you see here, it's no real surprise that the second-generation 997 range would include a GT3 RS. It was no mild refresh though, as the new model would receive some substantial changes, not least of which was a 3.8-litre motor that sat on active engine mounts. With power and torque both increased – to 450hp and 430Nm respectively – the 0-62mph time was cut by 0.2 seconds to 4.0 seconds dead, and both response and mid-range shove were boosted. VarioCam Plus and a higher 8,500rpm redline also featured. Further revisions included gorgeous new centre-lock wheels and suspension that featured stiffer spring rates and tweaks to the anti-roll bars. Externally, the new model boasted various subtle changes, including redesigned air intakes, and there was a new aero package to improve downforce. 1,500 examples were produced before the 997 disappeared in 2012.



997.1 GT3 RS

Just in case the standard GT3 wasn't quite enough, Porsche added the fabled Rennsport tag to this special 911. When it comes to buying one, Total 911 is on hand to advise

Written by Chris Randall
Photography by Phil Steinhardt



WATER-COOLED RS TIMELINE

2004

The 996 GT3 is the first water-cooled Neunelfer to get the RS treatment. The 3.6-litre engine produces 381bhp, enough to despatch the 0-62mph sprint in just 4.4 seconds. 682 produced

2006

Porsche follow up with the 997 GT3 RS, with essentially the same engine as the 996. Power is raised to 415bhp though, and a weight-saving regime saves 20kg. 1,106 produced

2009

It's the turn of the Gen 2 997, this time the RS getting a larger 3.8-litre engine with 450bhp that cuts the 0-62mph time to just 4.0 seconds. Aero tweaks and dynamic engine mounts feature. 1,500 produced

2010

A sure-fire future classic arrives in the shape of the 997 GT3 RS 4.0. Boasting a stunning 500bhp, it's the quickest RS yet. 600 produced

2010

It's the 997 GT2 that gets the RS treatment. There's 620bhp from the 3.6-litre engine, a 205mph top speed, and plenty of tasty carbon fibre bits. 500 produced

2015

Huge road presence marks out the RS in 991 GT3 form. Substantially lighter than Turbo variants, the 4.0-litre engine makes 500bhp. 42 sold in the UK last year

You have to head back a little over a decade, to 2004 in fact, to find the first GT3 to benefit from the legendary RS suffix. Then, it was attached to the rump of the 996 with around 680 lucky buyers getting to experience the delights of a 381bhp flat six allied to a useful weight reduction.

It would hardly come as a surprise, then, when Porsche announced that the 997 GT3 would also get the Rennsport treatment, although this time both models would arrive together in August 2006. 996 buyers had to wait five years or so for the same development. Even with an eye-watering £94,280 price tag, this new generation would prove immediately popular, so much so that 1,106

examples would leave the production line before the Gen2 version arrived three years later. Like the 996 incarnation, the first 997 GT3 RS was all about weight saving. The first-generation GT3 RS featured the wider rear bodyshell of the Carrera 4 and Porsche shaved a healthy 20kg off the weight of the Gen1 GT3.

The diet was assisted by using carbon fibre for the adjustable rear wing and engine cover, and plastic instead of glass for the rear screen (saving almost 3kg) and, given the cost, it's worth ensuring parts are undamaged on the example you're looking at. At a gulp-inducing £5,900 for the rear wing, the need for care is obvious. The ten year anti-corrosion warranty means that rust shouldn't be a concern, but it's worth checking whether a previous owner has added

paint protection film to the front end as the nose is susceptible to stone chips. If not, ask whether there has been any paint rectification work to the panels and bumper.

Far more important, though, is whether an RS has seen action on the track and while soaring values make it a little less likely today, that wasn't always the case. Aside from the fact that pounding over kerbs can prematurely age the bodyshell – listen out for unusual creaks – there's the risk that trips through the gravel trap has resulted in damage to the underside panelling. A specialist will check for this, of course, but otherwise it's worth a thorough examination of the undertrays and front splitter for grazing. And it goes without saying that you need to be sure of the car's history, looking for any evidence of ➔

“It certainly looked the part, but it's what was hidden beneath that composite engine cover that really captured the imagination”

Model	997.1 GT3 RS
Year	2006-2007
Engine	
Capacity	3,600cc
Compression ratio	12.0:1
Maximum power	415bhp @ 7,600rpm
Maximum torque	405Nm @ 5,500rpm
Transmission	Six-speed manual, rear-wheel drive
Suspension	
Front	MacPherson struts with coil springs and anti-roll bar
Rear	Multi-link with telescopic dampers; coil springs; anti-roll bar
Wheels & tyres	
Front	8.5x19-inch; 235/35/R19
Rear	12x19-inch; 305/30/R19
Dimensions	
Length	4,460mm
Width	1,808mm
Weight	1,375kg
Performance	
0-62mph	4.2 secs
Top speed	194mph





The 997.1 GT3 RS standard specification included 350mm steel discs clamped by six piston monoblock aluminium calipers at the front, and four piston items at the rear. Customary front bonnet vents and carbon rear wing aids downforce



PARTS PRICE CHECK

• Front bumper	£4,458.70
• Rear wing blade (carbon)	£5,921.53
• Exhaust system (exc. Cats)	£5,712.16
• Front damper	£480.60
• Brake disc set (steel)	£1,179.24
• Front wheel	£1,835.57

Prices are inclusive of VAT and come courtesy of Paragon Porsche

997.1 RS VALUES

As mentioned, prices for the RS have slowed recently, marking an end to a period of strong growth for the model. That's not to say they aren't going to rise in the future, of course (as they almost certainly will), but it's likely to be slower this time around. Left-hand-drive examples are worth a little less than the values quoted here.

• Project	£140,000
• Good	£150,000+
• Concours	£190,000





“An over-rev check is an important indicator of past use and especially vital on track-focused 911s”

major accident repair. It's also worth mentioning that the RS was available in some pretty extrovert colours, so you might want to consider whether you'd be happier with black or silver rather than the Orange or Viper green! That said, it seems buyers are happy to pay a small premium for their RS to stand out.

It certainly looked the part, then, but it's what was hidden beneath that composite engine cover that really captured the imagination. A revised version of the unit found in the 996 GT3, the 3.6-litre engine produced 415bhp at 7,600rpm and 405Nm of torque at 5,500rpm, and could safely rev to a stratospheric 8,400rpm. Featuring VarioCam

variable inlet valve timing, titanium connecting rods, and a revised dry sump lubrication system, it shoved the RS from 0-62mph in 4.2 seconds and on to 194mph. The good news for buyers is a depth of engineering that rendered it bulletproof in the eyes of most specialists, although it pays to undertake some careful checks before taking the plunge. Oil and filter changes were at 12,000 miles, and while particularly careful owners may well have shortened the interval, you certainly don't want to find any gaps in the service history. And, while regular maintenance is slightly higher than for the GT3, it's not by a great deal, so budget around £370 and £800 for a minor and major

check respectively at a good specialists such as RPM Technik.

More crucial, though, is an over-rev check, something that a reputable specialist will already have done. It's an important indicator of past use – and especially vital on track-focused 911s – as you'll want to know how often the motor has nudged that lofty redline. A cylinder leakage test will provide further reassurance that nothing serious is awry within the flat six. Otherwise, it's just a case of examining the unit for any signs of oil leaks from the cam chain covers and between the engine and transmission, the latter indicating a weeping Rear Main Seal; expect to pay around £1,100 to have this rectified at a specialist such as Parr Motorsports.

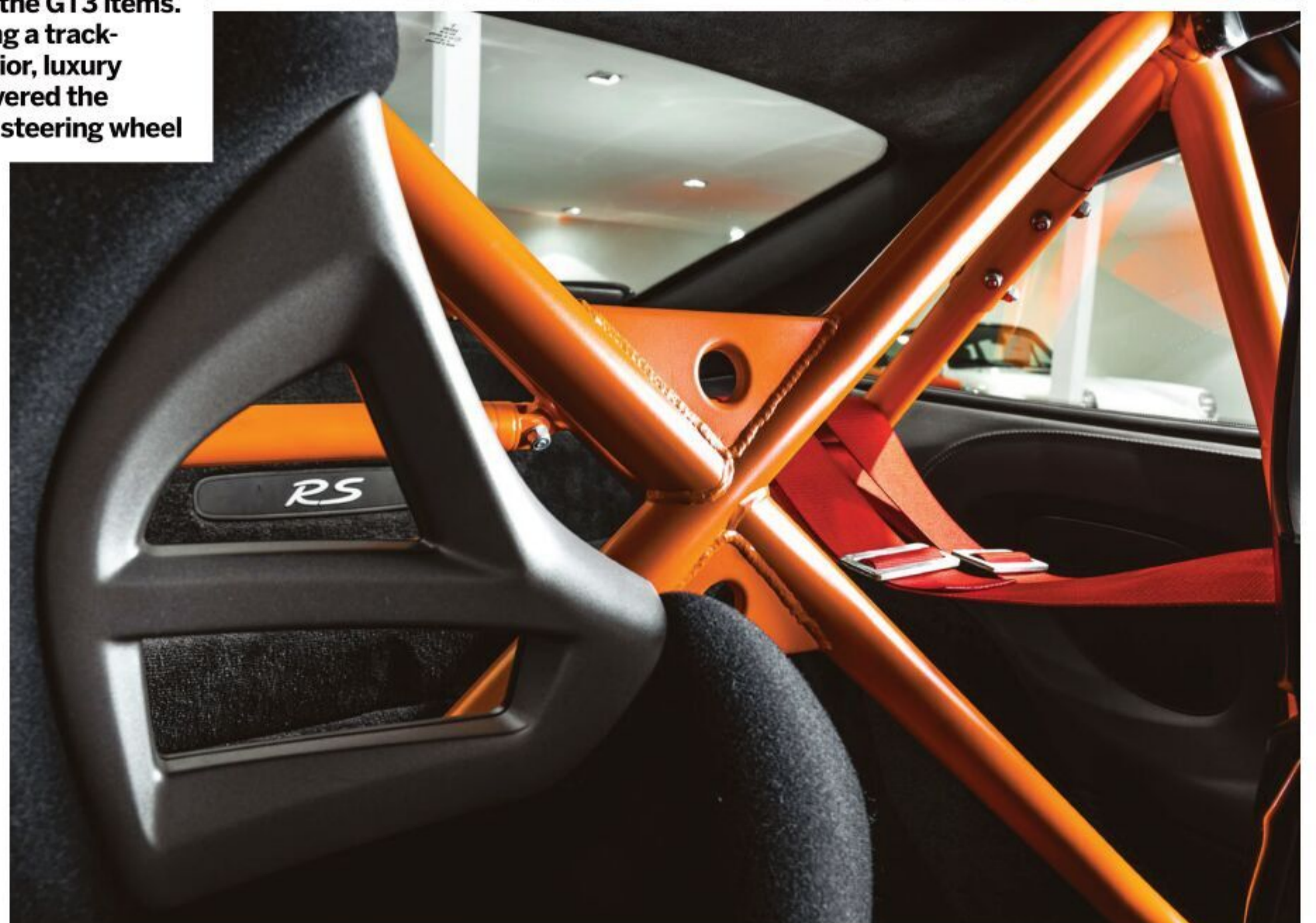
The RS used a single mass flywheel, so that's one less thing to worry about, but expect to reach around 30,000 miles before the clutch requires replacement, an engine-out job that will cost in the region of £1,300. A noticeably high biting point is a sign that renewal isn't far away, so



Lightweight carbon-shelled seats in flame retardant fabric came as standard and saved around 10kg compared to the GT3 items. Despite having a track-focused interior, luxury Alcantara covered the surfaces and steering wheel

haggle accordingly. The six-speed transmission is strong, though, benefitting from beefier internals and an additional oil cooler, and it would take particularly ham-fisted track use to cause any issues. Likewise for the limited-slip differential, although an obstructive gearshift or any odd noises from either unit would need further investigation as replacement is extremely costly.

You certainly shouldn't have any problems hauling the RS down from speed, though, thanks to the impressively powerful brakes. The standard specification was 350mm steel discs clamped by six piston monoblock aluminium calipers at the front and four piston items at the rear, and they are more than adequate for road use. Any problems are likely to be a result of overheating, so examine the discs for any sign of cracks appearing around the cross-drilling. A replacement set costs around £1,200 but a previous owner may have gone down the aftermarket route for replacements, so check what's fitted. The alternative option was the PCCB ➔



BUYING TIPS

With the earliest examples barely seven years old, it's reasonable to expect that any car you find should be in good shape, both bodily and mechanically. There are no guarantees, of course, so tread carefully, but strong build quality ensures that this is one of the easier 911s to inspect.

- **History:** A track-focused nature means that extra care is needed. Diligence is crucial to ensure you're not looking at a tired or crashed trackday warrior.
- **Bodywork:** Corrosion isn't a concern, so spend time examining the panels for any sign of previous repair or replacement. Ensure there's no damage to the RS-specific carbon fibre parts, and look for evidence of damage to the undertrays, which points to circuit-offs.
- **Engines:** If it's been religiously maintained, there's little to worry about. Check for oil leaks and make sure you see the results of a recent over-rev check.
- **Transmission:** The gearbox is tough and shouldn't be suffering from weak synchromesh unless abused. More likely is clutch wear, so check the history to see if it's already been done as it's not a cheap job.
- **Brakes/suspension:** Hard use will take its toll on the brakes, so be sure to check their condition carefully; extensive cracking around the cross-drillings indicate a hard life and imminent replacement. Adjustable suspension may have been fiddled with, so an alignment check is advisable.
- **Interiors:** Aside from being sure you can live with the Clubsport arrangement, the interior wears well. Just look for scuffed trim and overly-smooth Alcantara.

carbon items, identified by yellow calipers. While they might have saved a substantial amount in unsprung weight – they were around 50 per cent lighter according to Porsche – replacing them costs in excess of £10,000. As we've said before in these guides, think long and hard about whether you really need them.

Suspension-wise, Porsche Active Suspension Management (PASM) was standard and the RS benefitted from a five-millimetre increase in wheelbase and the fitment of split rear wishbones to allow greater camber adjustability. Owners could also make changes to the ride height, toe angle, and anti-roll bar settings, but inexpert tinkering could have resulted in a less than optimum setup. Any doubts about how the car feels on the road, or evidence of uneven tyre wear, points to the need for a specialist alignment check; RPM Technik charges £264 for this, so it's an inexpensive way of ensuring all is well. There are no issues with the hydraulically-assisted steering, but do check the condition of the 19-inch wheels. Refurbishment isn't too pricey, but replacing them is around £1,800 for a front one.

Head inside and you're left in no doubt about where this 911 was intended to spend time. The RS came with the Clubsport package as standard, which bought a roll cage in the rear, fire extinguisher prep, a six-point harness, and wiring for a battery master switch. Also standard were

a pair of lightweight, carbon-shelled seats that saved around 10kg compared to the GT3 items and they were covered in flame-retardant fabric. It's a pretty hardcore arrangement for regular use, so you'll want to be sure you can live with it before committing. Despite the track-focused specification, there was luxury on offer, too, with plenty of Alcantara covering the surfaces and steering wheel (which got a straight ahead marker at the top of the rim). Significant wear isn't very common but it's worth checking that a clumsy previous owner hasn't scuffed the seat or door cards. Porsche didn't skimp on the standard kit with the RS, and there was a lengthy options list to dip into, so make sure you establish the specification of the example you're looking at, although everything should work. Also, ensure the air-conditioning is blowing cold as corrosion could attack the nose-mounted condensers, although the system could be deleted entirely which saved a further 20kg.

Ultimately, the 997 generation is renowned for its usable, reliable nature and the GT3 RS does nothing to dispel that view. Yes, it was designed for the ultimate in thrills on road or track but the quality of its construction means there's little to worry about if you're considering buying one today. Find one that has been maintained regardless of cost and it'll prove an immensely rewarding experience. **911**

SPECIALIST VIEW

"Any 911 with an RS badge is highly sought after, and the same definitely applies to the 997.1 GT3 RS. They've got a strong following, which is to be expected given their ability and the fact that they are reliable, too. Prices have settled a bit of late, which given their meteoric rise in the past three years is no surprise. Ultimately, an RS like this one will still represent a really good purchase as a machine to get in and enjoy, as

Greig Daly,
RPM Technik





OWNING A 997.1 GT3 RS

- **Price new:** £94,280
- **Total numbers sold:** 1,106
- **Service intervals:** One-year/12,000 miles
- **Service costs minor:** £368.49
- **Service costs major:** £798.64
(Figures are courtesy of RPM Technik)



THE GREATEST RENNSPORT

Usurped on paper by its modern rivals, here's why the 997 GT3 RS 4.0 remains one of the finest 911s of all time, right where it matters: on the track

Written by **Joe Williams** Photography by **Daniel Pullen**



If we asked you to name your top three Porsche 911 Rennsports of all time, there'd be a very good chance the 997 GT3 RS 4.0 would be in the mix. Its presence in my top three is guaranteed and, as you're about to find out, would likely take the crown as the best of all time. Building on the prowess of the 997.2 GT3 RS 3.8, another car which history will be very kind to, the RS 4.0 was reserved only for those with a rich and unblemished record of buying – and keeping – Porsche GT3 and GT3 RSs because, unbelievably, the company made no money from the €178,000 it decided to sell each RS 4.0 for.

The RS 4.0 was unlike anything Porsche had made before. As the company itself declared on launch:

“The 911 GT3 RS 4.0 brings together in a road car all the attributes that have made the Porsche 911 GT3 a serial winner on the race track.” This was a proper parts-bin special, and sheds light on the reason a numbered production run of just 600 units was decided upon: it's simply all the components Porsche still had laying around.

The numbers game was always going to dictate this to be an exceedingly special car which would attract the attentions of collectors. But, regardless, it's still gone down in Porsche folklore as one of the most desirable 911s ever made, despite the fact that Andreas Preuninger and the GT Department he leads has already moved the Rennsport denomination on rather significantly. ➔





After all, by today's standards the specs and stats of the special-edition 997 GT3 RS 4.0 aren't actually that special anymore. Sure, it's the last Mezger engine in a GT car, and the inclusion of a crankshaft taken directly from the RSR race car is a cool move, but the flat six's circa 500hp output – the first for an RS – is now par for the course for a 911 GT3, while its 4.0-litre engine capacity is now seen on a host of GT-derived Neunelfers from the R, to the GT3 RS, even down to the GT3 itself.

The RS 4.0's maximum downforce was doubled by the very next Rennsport to roll out of Weissach in the 991.1 GT3 RS, and its rose-jointed rear suspension seems a little meek compared to the fully Heim-jointed, Cup-spec chassis on the 991.2 GT3 RS.

Even the 997 GT3 RS 4.0's Nürburgring lap time, ever the yardstick as to a sports car's real-world performance capabilities, has been usurped by most things since. Whisper it, but even the 991.2 Carrera GTS is faster around the Green Hell with a time of 7:23.77 compared to the RS 4.0's 7:27.

The point should by now be clear: the 997 GT3 RS 4.0 is no longer anywhere near the summit of Porsche Motorsport-derived engineering. *And that's exactly why it's so revered.*

This is because what the GT3 RS 4.0 lacks in outright performance, it more than makes up for in the way this performance is delivered, and the emotion it conjures in doing so. Equipped with a manual gearbox, a passive rear axle and mechanically assisted steering, it's the pinnacle from a golden era of the 911, the last of the 997s offering a positively analogue experience in arguably the very last iteration of a classic Neunelfer set-up.

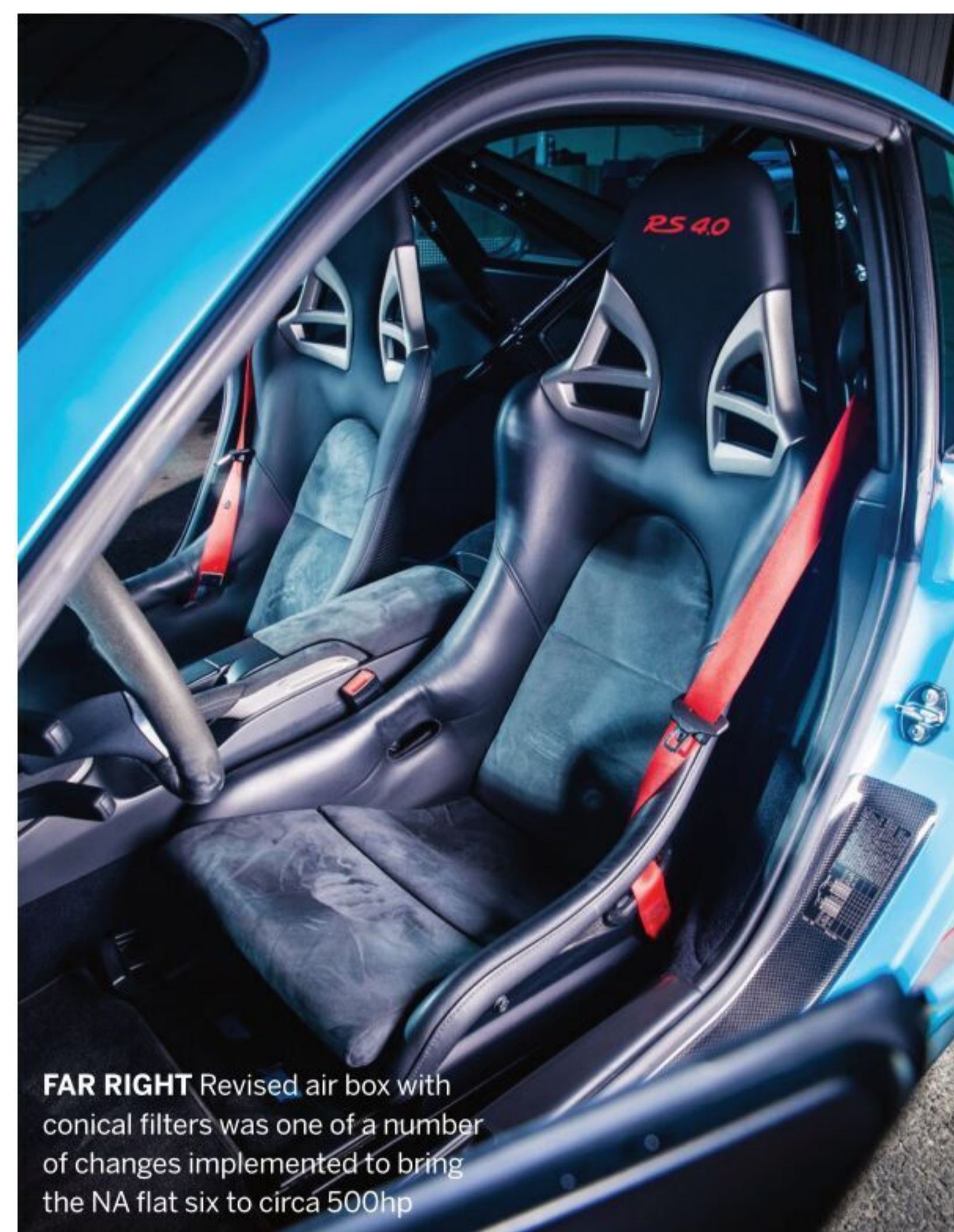
The stats, therefore, only tell one side of the story and, let's face it, as sports cars – Porsche sports cars included – migrate ever further towards digitisation, e-mobility and even autonomous driving outright, the reputation of the 997 GT3 RS 4.0 will only become more evergreen.

The opportunity to put an example to the test is a red-letter day in the book of any automotive journalist, and the example offered here is arguably more special than most. Finished in striking Mexico blue, don't be thinking its Paint To Sample hue means #429/600 doesn't often see the light of day. It's driven alright, and to its limits in the very environment it was built to excel in: the race track.

Its striking proportions are supplanted by the generation which followed it, nevertheless the 997 GT3 RS 4.0 still cuts an imposing figure in the pit lane. Its rear wing is higher than that of the 997 GT3 RS 3.8 and pitched at a more aggressive angle of attack at nine degrees too, though it's still nowhere near as outrageous as those fitted to 991-generation Rennsports. Beneath it a chunkier inlet is the result of revised airflow management into the atmospheric flat six. Around the front, dive planes at either side of the bumper remain unique to the 997 GT3 RS 4.0, these contributing to a maximum 190kg of downforce at its top speed of 193mph. A comprehensive weight-saving programme sees the use of a carbon-fibre front boot, much like the 997 GT2 RS; thinner glass plus Perspex windows in the back, which all contribute to a saving of 10kg over the 997 RS 3.8.

Inside you'll find the usual fanfare of Alcantara and leather, as you would in any 997 GT3 RS. Visual differences over the 3.8-litre GT3 RS it's based on include 'RS 4.0' inscriptions on kick plates, headrests and, most evocatively, in the centre of the rev counter. The simplistic yet high-quality Porsche Sports steering wheel, devoid of the ubiquitous feel and look of any thinly disguised VAG-group number incumbent on 991s, already feels great in my hands. Lined with Alcantara, at the other end of the steering shaft the rack-and-pinion system is mechanically assisted, the last such RS system to be so.

Back in the cockpit a short, six-speed manual shifter, ever a symbolic fortification of the RS 4.0's analogue composition, takes pride of place in front ➔



FAR RIGHT Revised air box with conical filters was one of a number of changes implemented to bring the NA flat six to circa 500hp

“Rear-axle what, again? That sort of nonsense certainly isn't missed”

997 GT3 RS 4.0

Model 997 GT3 RS 4.0

Year 2011

Engine

Capacity 3,996cc

Compression 12.6:1
ratio

Maximum power 500hp @ 8,250rpm

Maximum torque 460Nm @ 5,750rpm

Transmission Six-speed manual

Suspension

Front Independent; MacPherson strut; PASM; anti-roll bar

Rear Independent; multi-link; rose-jointed; PASM; anti-roll bar

Wheels & tyres

Front 9x19-inch centre-locks; 245/35/ZR19

Rear 12x19-inch centre-locks; 325/30/ZR19

Dimensions

Length 4,460mm

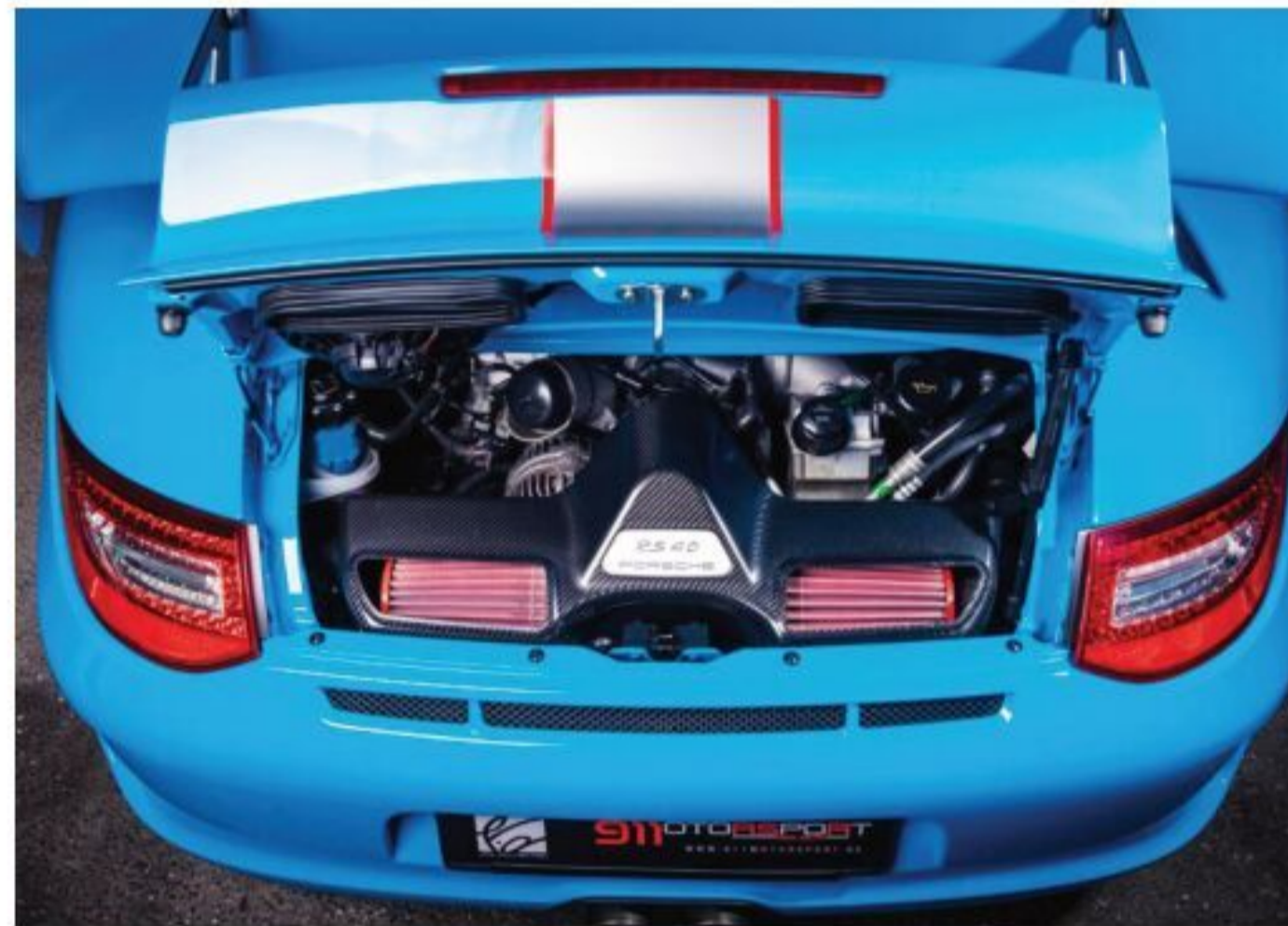
Width 1,852mm

Weight 1,360kg

Performance

0-62mph 3.9 seconds

Top speed 193mph



How does the RS 4.0 compare to a 991 R?

When it was announced in 2015, many speculated the R would tread on the toes of the GT3 RS 4.0 due to its shared ambition to deliver an altogether more analogue driving experience. Johan owns both cars, so how does he think they compare from a driver's perspective?

"The 4.0 is the better track car whereas the R is the much better street car of the two. Although dimensions are close to each other the R simply seems to be much more nimble on the road. On the track though, the R is kind of too soft. Your fantasy garage would be the R to go to the restaurant and the opera at night, whereas you would take the 4.0 to go to the track day the next morning.

"I sincerely do not think the two are in competition with each other. They are biased towards different perspectives. I think the RS 4.0 will always keep on shining at the highest level of all the Porsche stars. The R will also do that, even though a GT3 Touring does come close in specs to the R. But the R will always remain an R!"



ABOVE Mexico blue was a popular Paint To Sample choice in the period for GT cars



BELOW RS 4.0's wing sits at a nine-degree angle of attack



of – remember these – a handbrake, both of which are wrapped deliciously in Alcantara. Accompanying the manual shifter's presence is a clutch pedal down in the driver's footwell, the last such device to ever appear in a Porsche Rennsport. Equipped with a Motorsport-spec clutch, it carries a fair weight to it, requiring a firm push through your left leg to depress the pedal with the ball of your foot.

A turn of the proper Porsche key in its ignition brings the RS 4.0 to life with a gruff bark, followed thereafter by the Mezger's famously bristly mechanical note as it begins to warm through. We strap in, ready ourselves and then head out.

As we've commented on many times previously in **Total 911**, this is a car that builds brilliantly on the GT3 RS 3.8. It keeps the same gearing from that car, though somehow it's more suited to this 500hp motor, the shorter ratios over a GT3 suited to our compact track. There's an astounding amount of torque to exploit from as little as 2,000rpm, and directional changes in this thing are simply majestic. Rear-axle what, again? That sort of nonsense certainly isn't missed here.

The 997 GT3 RS 4.0 is a car that wants to involve you with every millimetre of travel, enriching you with the telepathy of its steering, the conviction of every rifle-bolt gear change and the accomplishment of its chassis, which oozes feel through every corner. The drive remains reassuringly old school: you approach this like you would any classic 911 before

it, only the speeds are much greater and the limits of grip much higher.

In context with the 991s that have followed out of Weissach since, the 997 is a high water mark for an engrossing, old school drive. There's no auto blip to help you with rev matching. No rear steering to increase stability at the back. Turn the traction control and electronic stability control systems off and it really is just you and 500hp, mitigated by three pedals and a steering wheel.

And yet it doesn't feel infallible in the slightest, unless of course you're very, very brave in the corners. For all but the elite level of driver the 997 RS 4.0 is all the performance car you could ever hope for, and it's delivered in the most absorbing package Porsche will ever likely make.

The greatest shame is that due to values many likely won't see too much track action in future, despite this being what the car was built for. Johan, this car's owner, agrees the track is its home. "It's a real monster on the track. It invites very high entry and exit speeds, so you have to know what you are doing with it. The engine is excellent, powerful... perfect. It goes into the rpms as a knife goes through warm butter. The gearbox and clutch are very well adapted to the engine – it's a hard combination to beat."

And the chassis? "For a track-biased car this chassis is perfect in my eyes. No to very little understeer when entering the corner, very stable

at the apex and twitchy on the exit because of the sheer horsepower of the car. But when it goes into oversteer it is very controllable. I tend to find that the new generation of tyres – like Michelin Sport Pilot Cup 2s – are too good to properly drift the car. Of course it can be done, but then you do need lots of speed and you have to really push the car into the drift, contrary to the 996 GT3 RS or the 991 R."

Johan promptly demonstrates his point, jumping into the 911 and dancing it round the back of Abbeville's little circuit, the car sideways on the exit of every corner. It doesn't look like he's struggling.

Johan concedes the RS 4.0 lacks a little finesse on the road, but it's a minor injustice levied at a 911 which is built almost exclusively for the track – besides, it detracts little from Johan's final assessment of the car: "It is the most amazing analogue 911 and maybe the most amazing Porsche I have ever driven." Coming from a man with nearly every Porsche Rennsport to his name that's high praise, and reason enough for us to conclude that the car you're looking at is guaranteed its status as one of the most significant, special and sought-after models in the history of the Porsche 911. **911**

Thanks

Thanks to Johan Dirickx of the JFD Collection for access to the 997 GT3 RS 4.0.



MAN'S BEST FRIEND

The Isle of Man's TT course offers one of the world's best driving roads, so what better way to tackle it than in Porsche's superlative naturally aspirated Rennsport?

Written by **Lee Sibley** Photography by **Ali Cusick**



When it was launched in 2015, Porsche's 991 GT3 RS moved the Rennsport game on substantially from its predecessors. Equipped with a 4.0-litre flat six engine producing 500hp in a body that generated more than double the downforce of the 997 GT3 RS 4.0, the 991 also boasted rear-axle steering, a seven-speed PDK gearbox and huge 21-inch rear wheels borrowed from the 918 Spyder.

The caveat, of course, was the biggest, widest and heaviest RS ever, but that didn't matter. The car was quicker, faster and more efficient than ever before, with a 'Ring lap time of seven minutes 20 seconds to endorse it as the most accomplished Porsche Rennsport of the time. Even works driver Nick Tandy has said it's the nearest thing to a Cup car you're ever likely to get. The 991 GT3 RS is a monster – and therein lies its problem. Topping out in second gear sees 73mph register on the RS's speedometer, which is enough to break the UK speed limit. Redline in third takes you past 100mph, which will guarantee the loss of your driving licence if caught – yet the RS still has another four forward ratios to go.

It may well come with licence plates affixed to its front and rear bumpers, but the reality is you won't even begin to tap into the 991 GT3 RS's capabilities on a public road. This is a race car, born and bred, and a race car needs a race track to call home. Or does it?

If I were to proffer the idea that a suitable playground for Porsche's latest RS awaits just the other side of a ferry ride from the UK, to a challenging public road that can have disastrous – perilous, even – consequences for those who get it wrong, then you may well assume I'm talking about the Nürburgring Nordschleife. And, while it's true the 'Ring is a happy hunting ground for many a GT3 RS, on this occasion our destination lies on a ferry east of the UK mainland, not west. I am, of course, talking about the Isle of Man.

Home to the famous TT motorcycle race held annually since 1907, its 37-mile course is made up entirely of public roads around the island, which is a self-governing territory with British Crown dependency. For two weeks per year in either May or June, these roads are closed to the public, respawning into a world stage for two-wheeled speed freaks to test their talent and nerve on a timed run of the circuit. For the other

50 weeks, however, the roads are just that, helping to transport some 83,000 inhabitants around the island. Much of the motor-racing paraphernalia remains though, and as for the speed limits, well, out of town there aren't any.

What's more, the course offers plenty for the driving enthusiast by way of challenges. Longer than the Nürburgring by some 24.1 miles, Isle of Man's TT has plenty in common with it: there are a number of surface changes throughout, its weather is as famously interchangeable, the track varying in altitude by some 1,400 feet, while a vast array of corner types and cambers are thrown in along the way. In short, it's a proper driver's playground, surely the best place on earth to take a 991 GT3 RS outside of a track – and that's exactly where we're headed for our latest **Total 911** adventure.

But first, we have to get there, which involves a five-hour drive from London via Birmingham to pick up photographer extraordinaire Ali Cusick. Our subsequent journey up from the Midlands largely consists of mundane motorway driving, which you'd think would trouble the GT3 RS in terms of its general practicality, though happily it does not.



Left to Right Road sign marks subtle start to the TT course; Mountain section's lumps and bumps are reminiscent of the 'Ring; Barrier-less climb from Gooseneck to Mountain Mile evokes Pikes Peak ascent



Despite the removal of most of the sound deadening occupying the 991's cabin (the R sheds an additional 4.5kg), road noise is palatable. Sure, our voices are raised to overcome tyre roar from those 325-section rear shoes, but it's not enough to detract us from spending the majority of the journey engaged in conversation. The RS, meanwhile, is impressively compliant riding on the UK's battered motorway surfaces. Where a similar drive in a 997, or particularly a 996 RS, would require more work at the wheel to keep the car from tracking down every slope or indent in the road, the 991 just points forward, completely undeterred, its engine coasting at just 2,900rpm thanks to a long seventh gear. Easy.

We follow the road signs to Heysham docks and board the boat pretty quickly, an angled approach required to get the low-slung Rennsport up the ferry's steep ramps. It's no drama, though, and we leave the RS parked while we retire to the upper deck lounges for our 66-mile journey across the Irish sea.

Four hours later, we dock in Douglas, Man's capital, situated on the east side of the island. A vast majority of its inhabitants live here, its appearance reminding us of Blackpool in the

Below Checkered kerbs add to the TT's racing mise-en-scene right around its 37-mile course



“The 991 GT3 RS clearly has a talent for lavishing its driver with unprecedented levels of power and grip to exploit”



Below The GT3 RS makes a tight turn into The Hairpin before blasting up Ramsay's hillside towards the lofty Mountain Mile



UK, minus any donkey rides along the beach. It's overcast but dry (thankfully, given the RS is shod in Michelin Pilot Sport Cup 2 rubber) and, with an hour or so of meaningful daylight remaining, we elect to head straight to the TT course as the 991's satin black wheels complete their first revolution on Manx soil.

The TT's home straight is situated in the island capital of Douglas, just a short climb up and away from its sandy beaches, which we find within minutes. It's an impressive sight: the start/finish line is punctuated by a full pits setup with a commentary box towering above a long row of garages. A concrete pit wall retains its advertising boards, a small grandstand opposite ready to accommodate a throng of spectators. It doesn't half galvanise the driver in you. If it wasn't for the steady stream of commuter traffic passing through it, this home straight wouldn't look out of place on any bona fide circuit in the UK.

We pull up at the entrance to the pit lane, which siphons off from the main road, and jump out the car for a closer look, taking in a huge map of the course imprinted on a sideboard next to a long list of TT winners in years gone by. It captures the imagination, and the minutes tick by.

As it happens, we spend so long gawping at the first 200 yards of the circuit that we forget about the remaining 36.9 miles. Ali eventually halts our inquisitive exercise by pointing at the sky. "We're losing light already, he says." Blast.

There isn't time for a full lap tonight, so we modify our plans, electing to head north up to Ramsay. This means our first taste of the TT circuit will be anti-clockwise (it's tackled in a clockwise fashion for competition), but we'll be taking in the notorious mountain section before turning around and heading back to Douglas, the location of our overnight stop.

We join what turns out to be the evening commuter rush, traffic through the mountainous A18 section (also part of the main route between the capital and Ramsay, Man's second-largest town) ensuring there's a long line of cars in front of us. What's more, as we climb in altitude, it begins to rain, reducing vision and forcing me to rein in any ambitions of long, accelerative overtakes past slower traffic. We have no choice but to sit tight in line and, by the time we get near Ramsay, it's nearly dark.

All is not lost, though: our brief sojourn onto the TT course has taught us a few things. Chiefly,

the road is, in places, as lumpy and bumpy as segments of the Nordschleife, prompting Ali and I to ponder the insanity required to fly along such a surface at 200mph on a near weightless motorbike, with only two wheels connected to the floor. It's not that the surface is crashy, but there are undulations which, when driven over at pace, must surely unsettle an overly stiff vehicle, be it car or bike. We later find out by chatting to a local that this is part of the TT's appeal for competitors, its surface giving drivers and riders plenty to do when dealing with a chassis that will be moving around a lot as a consequence.

We also realise that cats eyes in the middle of the road are notable by their absence, ever a discreet nod to the fact this is a race track in disguise. Roadside kerbs through sections of the course too are painted black and white, despite being raised. In fact, there's racing mise-en-scene quite literally everywhere and, sitting at the wheel of a 500hp super sports car equipped with roll cage and huge rear wing, it's difficult to ignore the red-blooded urge within to just think 'sod it' and engage my own full-out race mode. It doesn't happen though, and we soon head back to Douglas and our overnight digs.

Model 991.1 GT3 RS**Year 2015****Engine****Capacity** 3,996cc**Compression ratio** 12.9:1**Maximum power** 500hp @ 8,250rpm**Maximum torque** 460Nm @ 6,250rpm**Transmission** Seven-speed PDK**Suspension****Front** Independent; McPerson strut; PASM**Rear** Independent; Multi-link; Rear-axle steering; PASM**Wheels & tyres****Front** 9.5x20-inch centrelocks; 265/35/ZR20**Rear** 12.5x21-inch centrelocks; 325/30/ZR21**Dimensions****Length** 4,545mm**Width** 1,880mm**Weight** 1,420kg**Performance****0-62mph** 3.3 sec**Top speed** 193mph

Needless to say, I'm frustrated by our start on Man and elect to put that right the very next morning. We arise early and head out to the car, the RS's Sport Chrono clock telling us it's just before 5:30am as I slot the 911-silhouetted key fob into its ignition, readying the Rennsport for action. There's complete darkness and silence along Douglas' promenade, save for the gentle lapping of the Irish sea against its sandy shore. Such tranquillity is soon broken as the GT3 RS's DFI flat six jumps to life, grabbing an immediate 800rpm rhythm as the car's PDLs spectacularly illuminates the road ahead. Aware the flat six's coarse humming will very quickly wake the locals from their slumber, I make haste in heading off, leaving PDK in fully auto mode for early change-ups while the Lava orange car's engine is brought up to temperature.

Gripping the soft Alcantara wheel, I'm feeding it slowly through turns as the car and I head east out of Douglas on the A1 to tackle the TT course in its correct, clockwise flow, the road switching between 30mph and 40mph en route to St Johns. Driving the course the correct way, I now see signs deployed as milestones at the roadside, each named for upcoming corners or notable



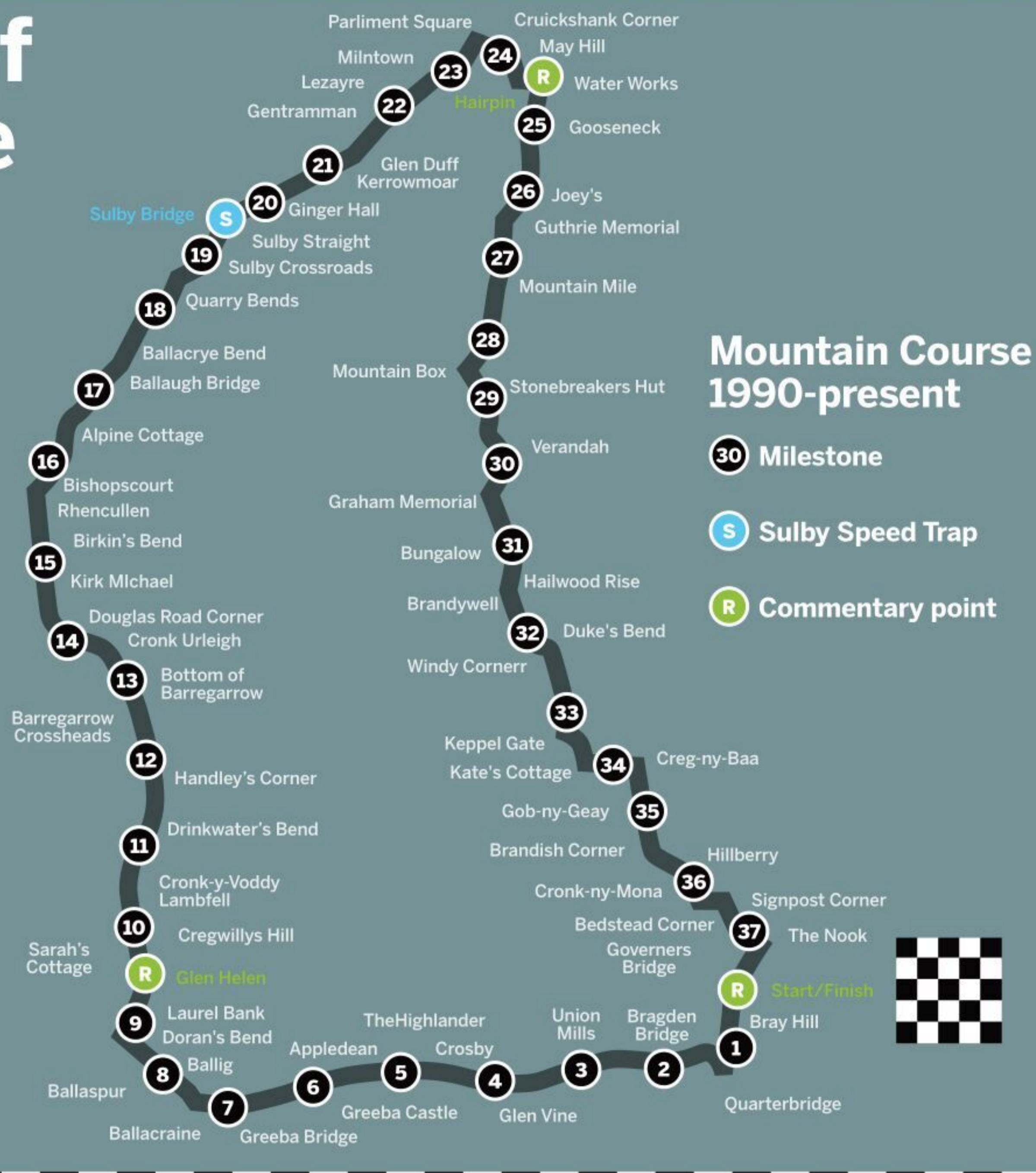
Below Fast, smooth S-bend at Hailwood's Rise takes competitors on to the TT's highest point at 1,385ft above sea level

A history of the TT race

Isle of Man's Tourist Trophy race has taken place annually since 1907, with the exception of only a few years during the war. Rather than a traditional race, the TT is a time trial event for motorcycles, both solo or with side cars, riders competing against the clock rather than directly against each other.

St John's short course was used for the first four years, riders having to complete ten laps of the 15-mile circuit before a switch to the current 37-mile Snaefell Mountain Course in 1911. Taking place over a fortnight every May or June, the event itself is split into two periods: practice week and race week.

The competition heralds incredible feats of automotive prowess. Current holder of the outright-fastest lap of the course goes to Michael Dunlop, who in 2016 rode his BMW S 1000RR round all 37 miles of the Snaefell Mountain course in just 16 minutes 53 seconds, with an average speed of 133.9mph. However, success at the TT can come at a price, and the event has a notorious reputation. There have been 146 recorded deaths since its inauguration in 1907, making it one of the world's deadliest motorsport competitions.



winners of the TT. Hunting for them keeps me entertained, as the limited section lasts for the majority of the base of the TT's loop. Turning right at St Johns up the A3, I see the first national speed limit sign illuminated by the RS's bright main beam, hovering in the darkness ahead. I ready myself for a quicker drive. Three... two... one... GO!

I pin the RS's accelerator pedal to the floor and in an instant the transmission has dropped three cogs from 5th to 2nd, the glowing red rev counter, languishing at 1,600rpm just a moment ago, now pinging up and round the tachometer to a screaming cacophony of noise behind. Ringing in my ears, the DFI Rennsport's sound is electrifying, it higher in pitch than a growling Mezger unit of old.

The TT road dinks left and then right ahead under a blanket of black, snaking north-westerly towards Man's east coast, and I'm largely holding throttle position as the RS is fed through each lightly cambered bend. A couple of tighter corners require a definitive press of the brake pedal to scrub speed off the car before turning in, PCCBs scrubbing speed from the RS with little fuss. This is such a wonderfully balanced car: there's so much natural grip at its front end that generally the RS just ghosts each turn. In

true Rennsport guise, the car comes alive when responding to sharper inputs from the driver.

The A3 opens up for its northern section, Quarry Bends faster and more sweeping as the black-and-white kerbs lining either side of the road flash by in a blur. It's point and shoot through here, the GT3 RS glued to the floor as we drift from left to right to keep some sort of a racing line. I'm careful to keep in lane on this two-way road though: it's still pretty dark and nobody else is about, but you can't be too careful.

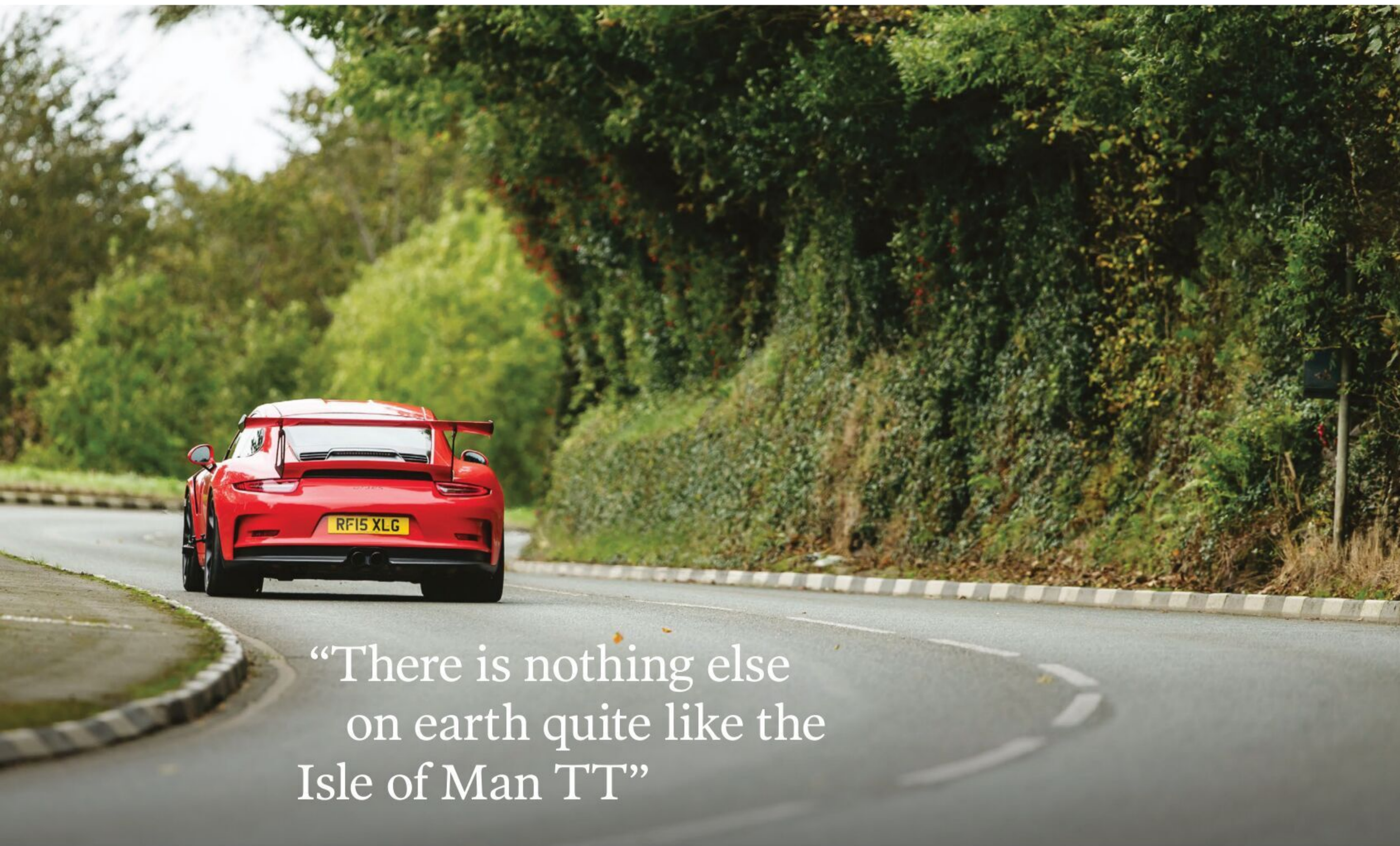
Sulby Straight, scene of 200mph+ sprints in the TT, provides the first opportunity to really reach for the GT3 RS's 8,800rpm redline. Executed in PDK Sport's auto mode, geared specifically for track use, the system won't change up until you've hit it. Unwinding the car at the start of the straight and feeding in the throttle, the Rennsport promptly demonstrates how sublime its power delivery is right through the rev range. It begins with throttle response, which has a pin-sharp immediacy that its turbocharged 991 Rennsport cousin will simply never be able to match. From there, power delivery is so wonderfully linear, with very little drop-off in inertia displayed between peak power at 8,250rpm and its max revs some 550rpm later. It's flying – what a machine this thing is!

Entering Ramsay, I bring my speed down to the required 30mph as houses and a smattering of convenience stores appear at the roadside. Streetlights illuminate the way ahead, which I still have all to myself, and before long, past Cruickshank's Corner, a national speed limit sign appears at the end of the last row of houses. Here we go again.

Content with the prowess of PDK in auto mode, I slip the drive selector left to engage fully manual mode, while again deploying PDK Sport. This time I'm in control of gear selection via the RS's steering-wheel-mounted paddles, their touch light yet sturdy, their travel minimal.

After a slight curve right, there's a short, flat straight ahead before 'The Hairpin' (you'll never guess why it's called so), which marks the beginning of a fairly steep ascent of around 500 feet in the space of just over a mile. Tearing for the hairpin, I begin leaning hard on the Rennsport's brakes to rid speed, pulling on the left paddle to drop a first cog, then a second. The rate at which the RS swaps ratios in PDK Sport is astounding: each change is instantaneous in timing, cut throat in execution, yet it doesn't unsettle the car's balance one jot.

I turn the car in and the RS darts left, its nose hunting for the apex like a predator going in for



“There is nothing else
on earth quite like the
Isle of Man TT”

the kill. The steering system is so good: why can't all 991s be like this? Any sniffles aimed at electric assistance would be banished forever. We hit the apex, and I hastily wind off lock while my right leg counters with a firm press of the accelerator. What happens next leaves me genuinely dumbstruck. Traction on corner exit has always been the ace up any 911s sleeve, yet the GT3 RS thrusts out of the corner with a turn of pace I've never experienced in a road example before. I'm being catapulted up the hillside, banging back up through the gears, eventually letting off slightly to make a sweeping right turn that tightens further round. Its trajectory catches me out a little, such is the RS's pace, but only a minor adjustment in throttle position brings the nose back, the engine held at a tantalising 5,500rpm before the road straightens and then bam! I'm back on the gas and monsterring Gooseneck between milestones 25 and 26 of the TT's Snafell mountain course. It's so quick yet so easy. The 991 GT3 RS clearly has a talent for lavishing its driver with unprecedented levels of power and grip to exploit.

Past here, I'm back on the same section of road we reached the evening before. Called the Mountain Mile, it's a long stretch of near straight asphalt cutting right through the course's most lofty section. It allows the Rennsport

to comfortably exceed triple figures, where it hunkers down into the road with impressive force. Pressed hard into the floor past 100mph, it simply feels unshakeable.

The remaining milestones fly past: Bungalow, Dukes Bends, Keppel Gate, before the checkered kerbs lead me back into Douglas. One lap done. We manage another loop before morning commuters fill the roads, at which point we stop for breakfast before heading back out for photographs. Another two laps are completed, and I feel I'm learning more about the course each time, pushing the car harder as a consequence. I know this, as by early afternoon the car is moving around beneath me a little more (though part of this is down to slight tyre degradation). I'm making fast, minor inputs at the wheel to counter this and keep the car happy, though in truth the RS never really feels like it's being shaken from the road, the stiffness of the RS ensuring there's not as much tyre roll at the shoulders as you'd get in a 991 GT3.

In fact, road-holding capabilities in the 991 GT3 RS are so good, with so much grip afforded from those Michelin Pilot Sport Cup 2s, that I soon start playing a game to see how early I can get on the throttle from corner exit. Only once does this catch me out after a bout of rain around

Gooseneck, the Rennsport's rear wandering sideways and prompting some drastic input of opposite lock.

In issue 158 of *Total 911* we said the Isle of Man's TT course was the best driving road on earth, and it's for good reason. It has it all: history, excitement, space, scenery and speed. In many ways the TT displays elements of other famous roads or tracks, from the Nürburgring's intensity, or Spa's interchangeable weather, to the barrierless climb up a mountainside reminiscent of the Pikes Peak Challenge. In reality though, there is nothing else on earth quite like the Isle of Man TT, and driving this 991 GT3 RS around it has to be one of the most intoxicating experiences I've ever had in a Porsche. By late afternoon we're boarding the ferry back, this time bound further south to Liverpool.

Sadness quickly creeps in, manifested from a realisation that, once back on the mainland, the UK's roads won't offer anything like the same chance for me to really wring the Rennsport's neck, something I'd become addicted to on that Manx playground. We knew how exhilarating the 991 GT3 RS is as a driving machine, but, the car is nothing without an equally sublime road in which to drive it on. Maybe that TT course really is Man's best friend. **911**



Written by **Ben Barry**
Photography by **Richard Pardon**

**GT2 RS TO
FRANCE'S BEST TRACK**

**SACRÉ
BLEU!**

Porsche claims the 700hp GT2 RS is as usable on the road as it is mind-blowing on track. A 1,200-mile road trip to Circuit de Charade puts that claim to the test



ABOVE Its suspension isn't as polished on the road as a GT3 RS, but the GT2 RS still makes for a sensational tourer



There are 638 miles between my home in England and Clermont-Ferrand, France, but two good reasons to cover that distance as quickly as possible: there's a 911 GT2 RS parked outside my front door and a track called Circuit de Charade near the French town. What better way to see if the GT2 RS can both retain the 911's famed usability over a long distance *and* monster a circuit?

If you've never heard of Circuit de Charade, fear not. Neither had I until I interviewed Jackie Stewart. The three-time F1 champion won there in 1969 and 1972 and described the race track as second only to the Nürburgring in the roll call of the greatest ever Formula One circuits. "It's difficult to learn... some corners are very similar, there are fast corners, slow corners, steep downhill and uphill sections," said Stewart. "You cannot make a mistake; there's no run-off." Put simply, the track is an ideal proving ground for the no-holds-barred GT2 RS.

Photographer Richard Pardon and I load up the GT2 RS early the next morning, slipping into the snug but comfy carbon-backed seats and plumbing 'Clermont-Ferrand' into the Porsche's PCM. Waking the engine is guaranteed to wake the neighbours, a bassy thud like a depth charge exploding and a growl like death-metal vocals emanating from a titanium

exhaust some 7kg lighter than a Turbo S system. We quickly scoot off, heading south on the A1, aiming to skirt round the M25 before it clogs with traffic.

There's never been a more powerful, more expensive road-going 911 than the 991 GT2 RS. It essentially takes the GT3 RS's super-wide body, two-seat interior, rear-drive/PDK drivetrain and rose-joined suspension, and throws in a hand grenade in the form of the 3.8-litre Turbo S engine. It then tunes it for an extra 108bhp to give 690bhp and 750Nm total. That represents huge gains of 177bhp and 279Nm over a GT3 RS, and with significantly different turbo characteristics too. It's enough to rocket the 1,430kg 911 from 0 to 62mph in 2.8 seconds, to 124mph in 8.3 and then on to 211mph. More relevantly, it also enabled the GT2 RS to break the then-production car record of the Nürburgring with a 6:47.03 lap back in September 2017.

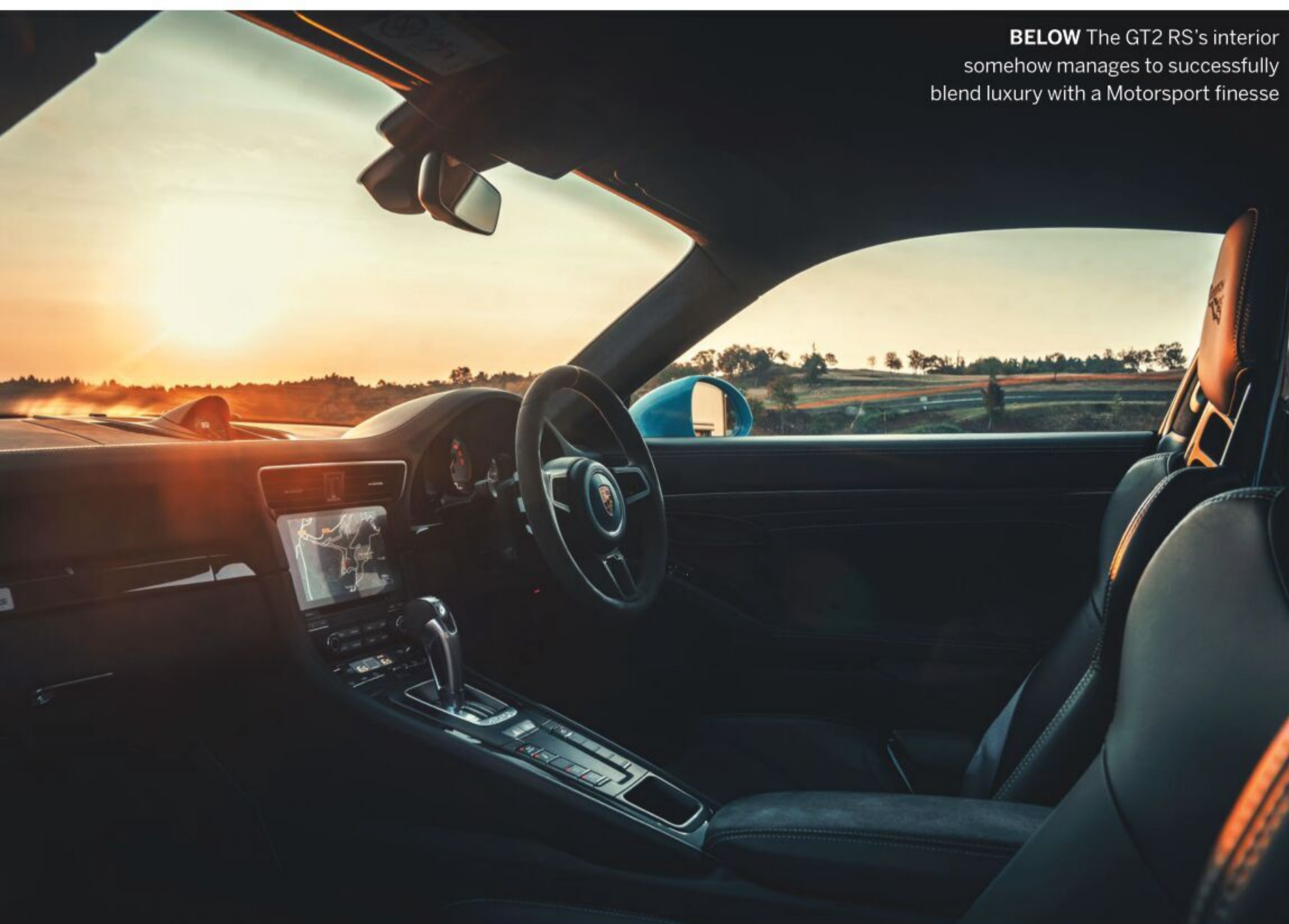
Our car gets the optional and 30kg lighter Weissach Package that also featured on the factory record-breaker, including a titanium roll cage that saves 9kg. The cage tops off a seemingly contradictory if successful combination of luxury materials and perfect fit and finish layered over a hardcore race car feel – the seats, the Alcantara rim, the cage – and yet it all gels in practice. A good proportion of GT2 RS buyers would probably accept

a significant degradation in comfort for a car that not only looks like it just drove off the Le Mans grid, but could put in a decent account of itself to boot, yet there's no scrimping here. Then again, you'd probably expect that given the £207,506 price of entry – or £228,548 with the Weissach Package.

The sun rises as we cruise down through Kent, and it's already obvious that the GT2 RS strikes a similarly sweet balance at a steady-state cruise as it does with its interior. Of course, this pseudo-racer isn't as civilised as a Carrera – it's firmer, there's more road and exhaust noise too – but we can still listen to the excellent Bose stereo and chat without shouting, and the dual-clutch transmission glides through its higher ratios where a real racer would thunk. With the adaptive dampers set in Comfort there's also compliance to the suspension, an ease to the way it deals with cambers and ruts where the spec suggests it might tug about like a divining rod locked on an oasis. It continues the trend begun with its 997 GT2 RS predecessor, which actually felt cushier than the rather jagged 997 GT2 despite ostensibly being more hardcore.

We take the Eurotunnel in the HGV carriages, the more generous width reducing risk to the RS's rims, and then power straight out over the flatlands of northern France. We pass Lens and Arras before ➔

“The steering is perfection here, it light and speedy enough to make such a serious car feel wieldy and biddable”



BELOW The GT2 RS's interior somehow manages to successfully blend luxury with a Motorsport finesse

Porsche 991 GT2 RS (Weissach Package)

Model

Year 2018

Engine

Capacity 3,800cc

Compression ratio 9.0:1

Maximum power 700hp @ 7,000rpm

Maximum torque 750Nm @ 2,500-4,500rpm

Transmission Seven-speed PDK

Suspension

Front MacPherson struts

Rear Multi-link

Wheels & tyres

Front 9.5x20-inch magnesium alloys; 265/35 ZR20; Michelin Pilot Sport Cup 2 tyres

Rear 12.5x21-inch magnesium alloys; 325/30 ZR21 Michelin Pilot Sport Cup 2 tyres

Dimensions

Length 4,549mm

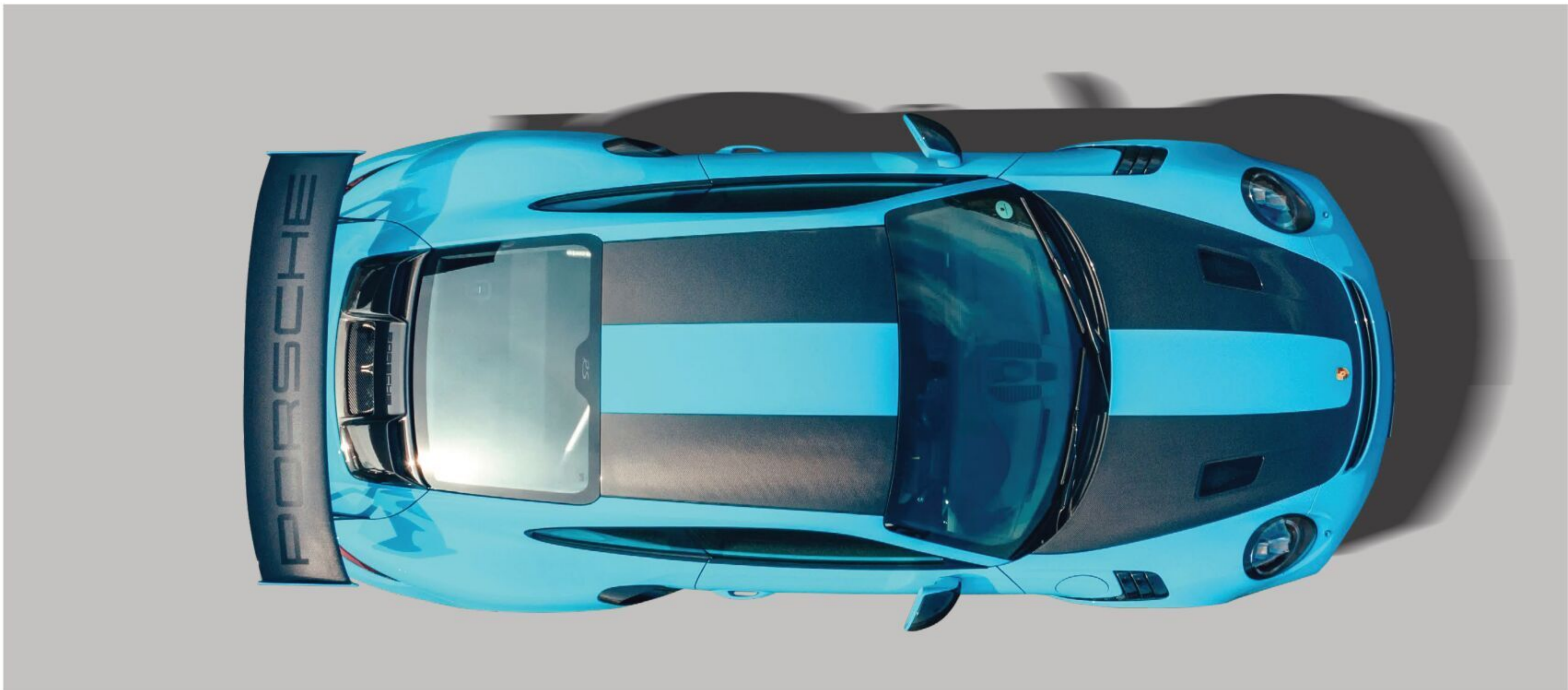
Width 1,880mm

Weight 1,430kg

Performance

0-62mph 2.8 seconds

Top speed 211mph



ABOVE Total 911's Ben Barry gets to grips with a circuit labelled by Jackie Stewart as second only to the 'Ring

struggling through heavy traffic on the Périphérique, which grumbles around Paris like the M25 with an attitude problem – you can delete the air conditioning and infotainment for ultimate weight saving, but this is a timely reminder that you shouldn't. The PDK also comes into its own with smooth manners in the stop-start traffic, this in stark contrast to a 911 R with a standard manual gearbox and single-mass flywheel I remember getting pretty tiresome through traffic.

Paris is still a frustrating grind, but finally we're through, released onto the A10 towards Orléans and the A71 past Bourges. The smooth and often deserted carriageways that roll out endlessly invite vast speed, but the occasional lurking gendarmes ensure we rarely edge past 150km/h.

When we arrive near Clermont-Ferrand in the early evening, red kites still lounge on the thermals up high as we scope out some of the nearby roads that tumble over the volcanic landscape. It's a great chance to see how the GT2 RS fares on a twisty road after hours pointed arrow-straight. The answer is mixed: there's no doubt the GT2 RS is a phenomenally exciting road car, but the steering misses some of the finesse and delicacy of the GT3 RS, and I miss the fizz and accessibility of

that car's naturally aspirated engine – I often find myself backing off soon after the turbos ignite, as if lacking the space to properly exploit and enjoy it. Driven hard, two things in particular stand out: the GT2 RS's almost benign invitation to slide through tighter corners, and its overly sensitive ABS brakes. Regarding the latter, you definitely don't want to carry ambitious speed into a tight corner with a bumpy braking zone. It's still an intoxicatingly good car, but there's no doubt that the GT3 RS is both more involving and happier as a road car than this pricier, higher performance sibling.

Next morning the sunrise glows orange over deserted grandstands, the GT2 RS's jackhammer idle amplified by concrete pit garages as we meet the easy-going circuit manager. He explains F1 hasn't raced here since 1972, that these days the circuit is owned by the region but mostly associated with Michelin, which has its headquarters in Clermont-Ferrand and developed the excellent Pilot Sport Cup 2 rubber the GT2 RS is running.

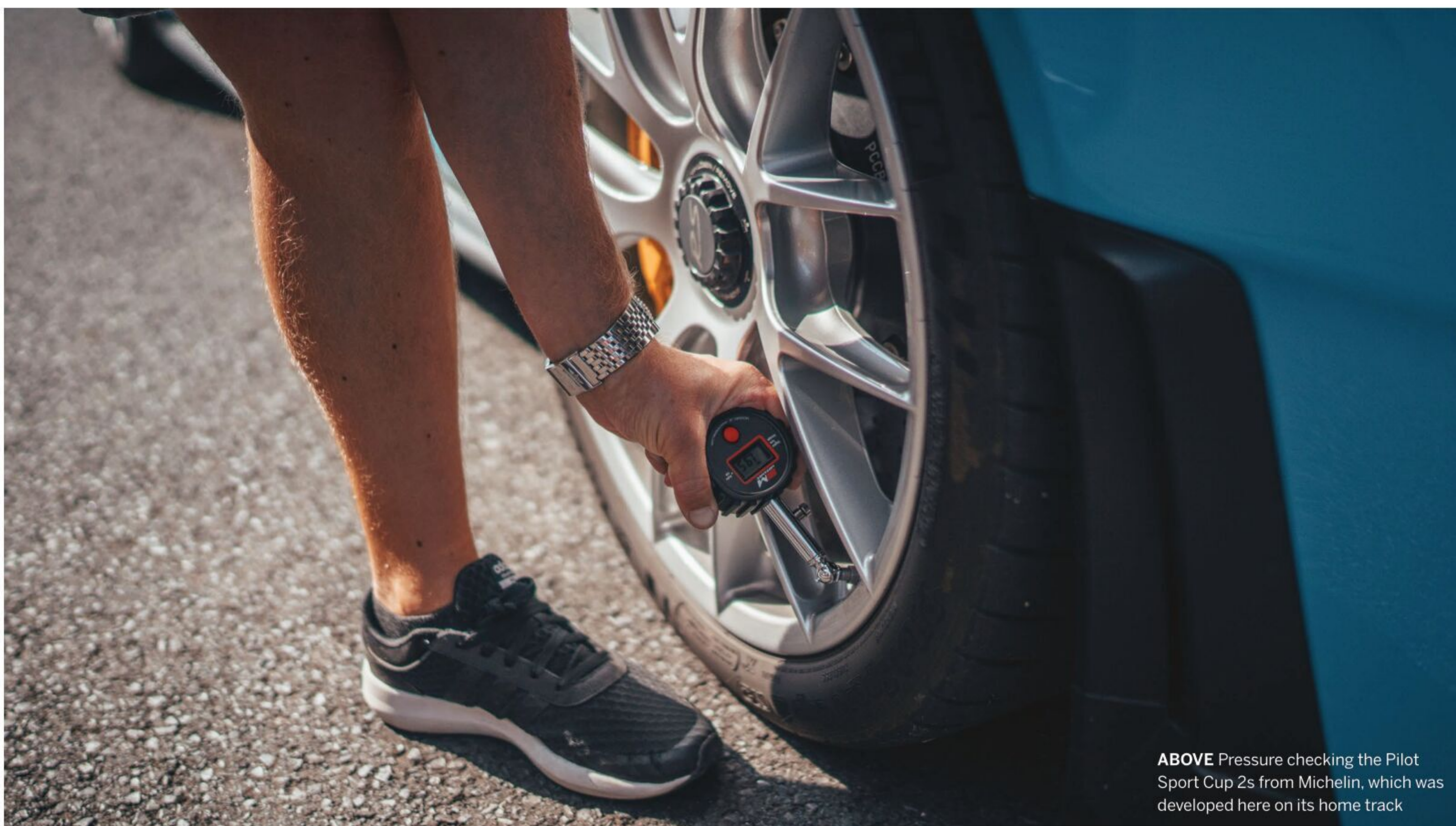
The light at the end of the pit lane switches from red to green and we ease in with a few sighting laps. The circuit is now shortened to 2.47 miles from the five miles Jackie Stewart raced half a century ago,

but it's still a fearsome place, the first turn instantly dialling up the intimidation – a super-fast, late-apex left bordered by walls, and with a tricky camber too. The rest of the circuit has a different feel: narrow at just nine metres wide, it runs up and over the topography like a party streamer, with everything from hairpins to flat-out kinks and, for the most part, a little more run-off than that first turn, though it very rarely invites you to take liberties. Round the back it climbs and funnels and intensifies again, running between the walls and doing its best to throw you into them if your lines aren't inch perfect. And the most recent race here was for trucks!

Despite butterflies the GT2 RS quickly instils confidence, the approachability that defines a Carrera still present despite such an excess of power and torque – it's a combination of the low-set driving position, excellent visibility and the controls' easy, feelsome weighting. You're a key component locked into the heart of this machine like a plug in a socket.

You need mid-threes on the rev counter for the variable-geometry turbochargers to really kick, but the flat six is still tractable and malleable down low. With full boost it just hunkers over its rear axle and spits down the track, its PDK gearbox ➔





ABOVE Pressure checking the Pilot Sport Cup 2s from Michelin, which was developed here on its home track





GT2 RS road trip in numbers

2.47 MILES
MODERN
CIRCUIT
FROM 1989

5 MILES
OLD
CIRCUIT
PRE-1973



35°C
AMBIENT
TEMPERATURE
AT TRACK



211MPH
TOP SPEED

0

GENDARMES
SPOTTED

1 SPEEDING TICKETS
ISSUED (FOR
SUPPORT CAR!)

1,478
TOTAL
MILEAGE

150km/h

OUR TYPICAL AUTOROUTE SPEED
FOR FEAR OF SPEED TRAPS

popping in changes – there’s a race car edge to the dual-clutch shifts at maximum attack that suits the explosive power delivery and never makes me pine for a manual. With turbos, this engine’s more about the mid-range wallop than grafting for the naturally aspirated GT3’s searing top end – the 690bhp peak arrives at 7,000rpm, not the GT3 RS’s 8,250rpm. More tellingly, peak torque arrives at 2,500rpm to the GT3 RS’s 6,000rpm – but there’s a thrill to feeling that kick in the back, and it’s still satisfying to wind right out.

Despite lacking some of the GT3 RS’s nuance on the road, the steering is perfection here, it light and speedy enough to make such a serious car feel wieldy and biddable. No doubt the Weissach Package helps here, much of the 30kg saving coming from unsprung mass, including carbon fibre anti-roll bars – a 5.3kg saving with the coupling rods – and magnesium wheels that shed a further 11kg. You do have to wind on some reasonable lock before the GT2 RS settles, but there’s an elastic, slightly springy feel as it bobs around in your hands, like you’re gently leading a dance partner by the fingers, feeling out its willingness to go where you point it rather than forcing it regardless.

Up to 340kg of downforce – albeit well past 200mph – gives you confidence to keep the throttle pinned as Charade winds left and right out of the dip at virage de la ferme and feeds into a fast right-hander, but it’s the way a car apparently so intimidating manages to feel so approachable, so playful in slower and mid-speed stuff that’s captivating – and, I think, surprising.

Go in hard on the brakes and the merest nudge of steering makes the heavy rear end begin to rotate, the balance centred around your spine where a mid-engined rival would pivot about your middle. This slight slide bypasses any of the 911’s inherent

understeer, and then it just settles at a mild attitude, a hunk of weight pressing over the rear wheels. A lot of cars fall into time-sapping oversteer at this point, but the GT2 RS feels solid and settled. You can flatten the throttle, oversteering gently, torque just edging the tug-o-war with the 325-section 21-inch Michelin Cup 2s and speed gathering all the time. All this with stability control on! Fabulous.

Just as on the road, the carbon-ceramic brakes are the biggest failing: their stopping power is generally extremely good, but the pedal softens after several laps at this punishing circuit and there’s excessive ABS intervention, especially on bumpier sections. However, this doesn’t detract from the fact the GT2 RS is a sensational track car, and Charade a sensational track. I don’t ever get truly comfortable with that first turn – it feels like a corner where you’d keep getting incrementally quicker and then have a cataclysmic accident the moment you slightly overstepped the mark – but this is a driving experience seared into my memory for life.

The speed the 991 GT2 RS summons on straights adds an extra layer of intensity versus a naturally aspirated GT3 RS, and there’s something especially satisfying in having so much torque to properly exploit the traction gifted by the rear-engined layout and hugely sticky tyres. Rather than feeling over the top, it just lets you place and manipulate the GT2 RS at your will.

Before we set out on this trip, I’d read reviews where road testers didn’t quite get the GT2 RS. I can relate to that, because this most powerful of 911s doesn’t translate its motorsport-derived talents to a B-road as seamlessly as you might expect. But a healthy road trip with the sat-nav aimed at a legendary race track? Now we’re talking. All we need now is a romp round Brands Hatch GP circuit on the way home. **911**



“The 964 RS
was built to go
racing”

Rennsport showdown

The best 911 racers go head to head on road and track

62 RS v Rivals

The 991.2 GT3 RS is revered as the ultimate modern driver's car, but how does it compare to its 996 and 997.1 GT3 RS predecessors?

72 2.7 v 3.0 RS

The 3.0-litre RS of 1974 is an oft-forgotten Rennsport, so how does it stack up against the halo 2.7RS from 1973?

80 9964 RS v C4 Lightweight

Only 22 964 Carrera 4 Lightweights left the Zuffenhausen factory, but is it a match for the 964 Rennsport?

86 993 RS real v replica

Can you really recreate RS levels of fun from a home-built replica? Our head to head test reveals all

92 RS 3.0 v RSR

We pit the halo Carrera RS 3.0 against its bigger race car brother in the Carrera RSR, right where it matters – on track

100 997.1 v 997.2

The 997-generation was lavished with no less than four Rennsports, so how does the naturally aspirated 3.6-litre car compare to the later 3.8?



SEVEN-MINUTE WONDER

The 991.2 GT3 RS has asserted its authority all over the Green Hell, now we pitch it against its predecessors around the de-restricted Isle of Man

Written by **Kyle Fortune** Photography by **Porsche AG**

“It won't be under seven minutes,” said GT director Andreas Preuninger when I asked him about a Nürburgring laptime at the 991.2 GT3 RS reveal in Finland earlier this year. He was wrong: it is, and comfortably so, the Lizard green RS lapping the ‘Green Hell’ in 6 minutes 56.4 seconds in the hands of Porsche works racing driver Kévin Estre. That's 24 seconds faster than the previous GT3 RS, which is little short of incredible.

It underlines the changes to the second-generation car, revisions which, on paper at least, look relatively insignificant. The engine is now that of the current GT3, albeit featuring a differing intake and exhaust. Its power creeps up – not leaps up – to 520hp, it revving to the same, glorious 9,000rpm. The increase is just 20hp over the GT3 and the Gen1 GT3 RS, Preuninger suggesting in Finland that the extra power

would only account for a second or so worth of improvement in its lap time.

Aerodynamic revisions, the immediacy and intricate control of the engine, the electronic differential, rear-wheel steering and PDK transmission and, crucially, the suspension would play their part, too. The new car borrows heavily from its GT2 RS sibling, that means 991 Cup in Nürburgring specification-derived, solid-mounted suspension, with spring rates double that of the outgoing RS, but softer dampers and anti-roll bars. It's here that Preuninger suggests the biggest gains have been made, and on the road there's no denying they're revelatory.

If the 991.1 GT3 RS felt the most distinct departure from its mere GT3 relation previously, then the 991.2 shifts the RS genre into a different area again. The changes on the road are scarcely believable. Had you told me a 991.1 GT3 RS



Rennsport showdown



could be so comprehensively out-pointed I simply would not have believed you. The most familiar element is its engine, Porsche's naturally aspirated 4.0-litre unit a masterpiece, previous experience of it in the standard GT3 underlining that. In the RS it's sharper, even more immediate and sounds absolutely incredible. The GT department has worked extensively on the systems controlling it, indeed, the entire GT3 RS project defined by adding precision and accuracy to every single element of the car's controls.

You notice that as soon as you brush the accelerator, the enthusiasm to spin up to its redline even more apparent than with the GT3. The differing intakes, the titanium exhaust and the loss of some carpet and sound deadening give it a clearer, more evocative voice, too, the mechanical sound not raw, but cultured with edge. Peak power's at 8,250rpm, but just try and avoid chasing that redline at 9,000rpm. There is no let-up as you do, the reward not just the evocative notes the flat six creates, but the continued rush of acceleration across its entire rev-range.

We've not got the Nürburgring at our disposal today to explore that, instead we'll make do with

the de-restricted country roads around the Isle of Man. The RS can stretch its legs here, though it might not be able to do so were it not for the sophistication of the suspension. It's here, specifically, that the GT3 RS takes an evolutionary leap over its predecessor. The GT2 RS-derived set-up allows incredible control and composure, despite tarmac that's about as far removed from a racing track as it could possibly be. Imperfections on the surface are the norm, smooth tarmac here evidently anomalous, which makes it even more incredible to think that the bike racers who call these roads home during the TT races carry so much speed down these same roads.

To say the RS's suspension filters those tough surfaces out would be disingenuous. Instead it's defined by its control, without any loss of communication, the suspension the greatest facilitator in the GT3 RS's increased speed. Driving down the same road in the 991.1 RS, the wheel is busy, the chassis running out of ideas before the engine's had a chance to do its thing. In the new car that's simply not the case; there are no clear limitations to the suspension's ability, it so apparent it feels like you're driving down a completely different stretch of road. The steering ➔





Above Presence of just two pedals and electrically-assisted steering makes for a whole new RS experience. Leather interior is an upgrade, with or without Lizard green contrast



Above 12 o'clock steering wheel marker, door pull straps and smattering of alcantara show 997's motorsport intentions. Deleting PCM & aircon as here saves vital kilos



Above Interior of 996 is most basic, with only six options available from new. There's no traction or stability controls to turn off here!

— WEISSACH PACK —

Pack or not? That's not a question UK buyers get, initially at least, the Weissach Pack's availability not really possible until the RHD UK-market cars are batch produced down the line. This also accounts for the lack of PTS, in case you wondered. Does the 27kg really make a difference? Undeniably, it does, it impossible to remove around 11.5kg of unsprung mass and for it not to make any difference. It's marginal though, not so significant to make it a must-have. The WP-equipped car rides with slightly more mesmerising ability on the IoM roads, but nobody's going to feel short-changed by the standard car. Indeed, for me – and I know I'm not alone here – the Weissach Pack is too overt visually speaking. The wheels I'd want, but as Herr Preuninger himself admits, they'll be available in time from Porsche...



Above 996 used narrow body from C2 counterpart, 997.2 and 991.2 switched to Turbo body for wider tyres and track width



remains crisp, richly detailed and beautifully weighted, yet uncorrupted and resolute. What's clear is that there's no need for the constant corrections of the Gen1 car as the front wheels' trajectory is kicked off-line by the difficult surface rolling beneath the tyres, the new RS is authoritative and controlled, exceptionally so.

That in turn allows – demands, even – you to explore the engine's performance that bit more. Do that and the combined efforts of Preuninger's team are clear, the GT3 RS working cohesively as a package, the engine mated not just to a chassis that's enabling in allowing its performance, but a transmission, too. You barely have to tap the paddle on the steering wheel and the PDK gearbox has selected another ratio, and the engine's searing towards its redline all over again. Downshifts too are so instantaneous that

there's no paucity in the response, it so quick in its shifting you'd swear it's predictive. It too facilitates the feeling that this RS takes the GT cars to another level, the Gen1 car's shifts feeling slovenly, relatively speaking here, in comparison.

Porsche's 911 GT3 RS models have, by definition, always been about incremental gain, a collection of small but significant improvements to create a greater result as a whole. That's obvious here, though small as the changes might sound, the overall benefit is demonstratively greater than any same-series RS revision before it. The Gen2 car feels not like a development of the car that preceded it, but something far greater than that.

“The combined efforts of Andreas Preuninger's team are clear... this RS takes Porsche's GT cars to another level”

The aero changes – those NACA ducts, with their many benefits for air flow, weight saving and brake cooling up the front – don't bring any clear advantages driving on the road, but will surely have helped Estre achieve that outrageous lap time. What is clear is that the greater wheel and body control.

are key in improving the front axle response. There's no slack in the steering either; add some lock and the nose goes exactly where you want it

to, it so faithful, uncorrupted and sharp that you can lean on it with utter conviction, certain in its response. Thank the tyre's contact patch being better used and the suspension's more sophisticated control for allowing that.

Add too the detail changes to the steering's control systems, both on the front, as well as the rear-wheel steering elements,

and the GT3 RS corners with a precision that's astonishing. There are masses of grip, mechanical as well as aero, though it's the former that's apparent at the sort of speeds that are possible even on the Isle of Man's speed-enlightened country roads. Throw moisture into the mix, our drive largely undertaken on wet roads, and the GT3 RS's cornering forces are even more impressive. Traction too is mighty, though breach both it and grip and the RS's transition is so quickly communicated and caught as to make it feel like the most natural thing in the world.

It's that control, the cohesive whole that dominates the driving experience. There's an immersive quality to how it drives that's



Rennsport showdown

Below 997.2 still genuinely engaging on the public road, 991 however needs de-restricted roads or a track to really thrill



beyond anything that comes before it. That's all down to the detail, the infinitesimal changes made to the engine, gearbox, electronic differential, steering and suspension. It adds up to an RS that moves the game on hugely. That accounts for those 24 seconds in Germany. Significantly, though, those track gains aren't made at the expense of road ability, indeed they're because of it. The RS's magic remains in its extraordinary breadth of capabilities, being arguably greater than any sports car, whether it hails from Porsche's catalogue or not, and this new RS is demonstrative of that.


Yet here I am getting excited about stepping into a 996 GT3 RS. Call it nostalgia, my first RS experience being in the first modern-era, water-cooled 996. That was back when it was launched,

borrowing the UK press car in winter and driving it virtually all night on greasy, difficult roads and enjoying enormously its purity, its dedicated take on the RS legend that went before it. That was 14 years ago, and yet the memory is still fresh.

Getting into the 996 GT3 RS today, in the company of all the cars that followed it – with the exception of its 997 4.0 RS relation – doesn't feel like such a huge step back in time. Visually it's so simple, the rear wing, considered outrageous when it was new, looks positively meek compared to the cars that followed it. The respectful nod to its legendary 2.7 RS predecessor via contrasting blue graphics on the flanks and the colour-coded wheels couldn't be more evocative. It's rare, too, with under 700 built. It's demonstrative of an era where modernity wasn't mollicoddling; there's

contemporary performance, crash structures, modern tyres and reliability, but neither is there traction or stability control.

I'm wondering today if that's wise, as the roads are somewhat damp. That it's demanding is part of its enormous appeal. I'm more tentative with the 996 RS than the new car, building up to its limits slowly, re-learning its quirks and building a trust in it. The engine, a 3.6-litre with a quoted 381hp – though Preuninger admits none left the factory with less than 400hp – allowing a 4.4-second 0-62mph time, some 1.2 seconds adrift of the new car.

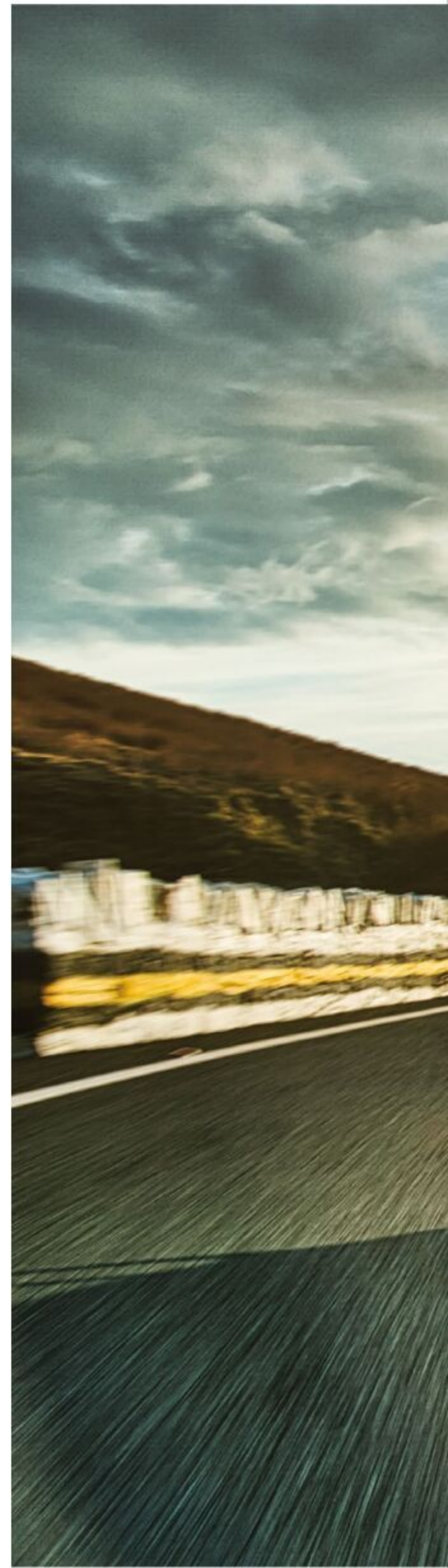
The engine, though not as trigger-sharp in its response, nor as indulgently greedy for revs, has plenty of heart, pulling strongly, the manual transmission that controls it as analogue as 



991 v 997 v 996

POWER TO WEIGHT		
363 HP/TONNE	321 HP/TONNE	280 HP/TONNE
DRAG COEFFICIENT		
0.36	0.33	0.30
FRONT & REAR TRACK		
1,588MM /1,557MM	1,510MM /1,555MM	1,485MM /1,495MM
0-62 MPH		
3.2 SECONDS	4.0 SECONDS	4.4 SECONDS
TOP SPEED		
193 MPH	192 MPH	190 MPH
'RING LAP TIME		
6.54.4	7.33	7.43
PRICE TODAY		
£250K <small>(ON OVERS MARKET)</small>	£175K	£170K

Rennsport showdown



Above Preuninger climbs behind the wheel of his latest creation for a blast around Man's TT route





the rest of the driving experience. It's the steering that's the biggest difference, though. Turn the steering wheel and there's a yawning pause before anything happens. It is initially unsettling, though you learn that it will turn in, even if it does so by feeling like the rear-axle's doing the turning. I'm still sold on it, not least because its performance remains in the league of real-world useable, while still remaining demanding of you as a driver.

I've lost count of the times I've driven the grey car here. It's something of a legend in Porsche circles, even the GT department staff referring to RO10 HBY as 'Heebee'. A Gen2 997 RS, it's been on the UK Porsche press fleet since it left the production line in Germany, and I'm smitten. If the 996 GT3 RS represents a bridging point between the analogue old school and modernity, then this car can very much be considered its zenith. Key is the way the front axle responds. No, it's not as utterly faithful as the new RS, but compared to the 996 it's a revelation. There's feel at the wheel, the nose turning in neatly, the steering weight so finely judged and the messages coming from it beautifully crisp. The engine, too, is sensational, its 3.8-litre with its 450hp output is often shadowed by the limited-series 4.0 RS that was spun off it, but in no area is it lacking. Overall it's not as sharp or as outrageously fast as the new car, but with its manual transmission and the

demands it places on you as a result I'm not sure it would be any better if it were.

"Which one?" I'm asked. The new RS is incredible, a car that's game changing, yet it achieves its extraordinary ability without detachment, it rich in feel, demanding and engaging and mind-blowingly, re-calibratingly rapid. Even so, it's a toss up between the earlier cars for me. I think, ultimately, I'd be frustrated with the new RS, simply because the opportunities to really, really enjoy it would be limited – however genuinely engaging it proves at ordinary speeds. The 996 RS comes close, more so than it perhaps should, that nostalgia and the way it looks having a lot to do with that, but it's the Gen2 997 GT3 RS that is the one I'd take home. Just why comes down to a number of reasons: it's fast enough and it's modern, yet has enough character to appeal across a broader spectrum of driving situations. Yes, the manual transmission plays its part in that, but it's demonstrably not the clincher here.

All three are incredible cars for their own different reasons, and while it's indisputable that it's a case of good, better, best when placed in time order, all represent the RS perfectly in the period they existed. Maybe except the new car, as it's so advanced the RS-genre to feel as if it's years ahead, which it is... until the next one. **911**

— VERDICT —

991.2

T911 likes: Immense clarity, sensational control, absolute purpose on road and track
T911 dislikes: Limited WP availability and having to jump through hoops to get one

997.2

T911 likes: Blend of old and new worlds, manual transmission, driver engagement
T911 dislikes: Boredom of hearing the 4.0 is better; depreciation hasn't happened

996

T911 likes: Evocative looks; rarity; it's just you and the machine
T911 dislikes: The steering requires learning; 996 cabin; depreciation has already turned into appreciation



IMPROVING THE BREED

In a battle of the famed versus the forgotten,
we return to the Rennsport genesis for
the ultimate RS showdown

Written by **Josh Barnett**

Photography by **Daniel Pullen**

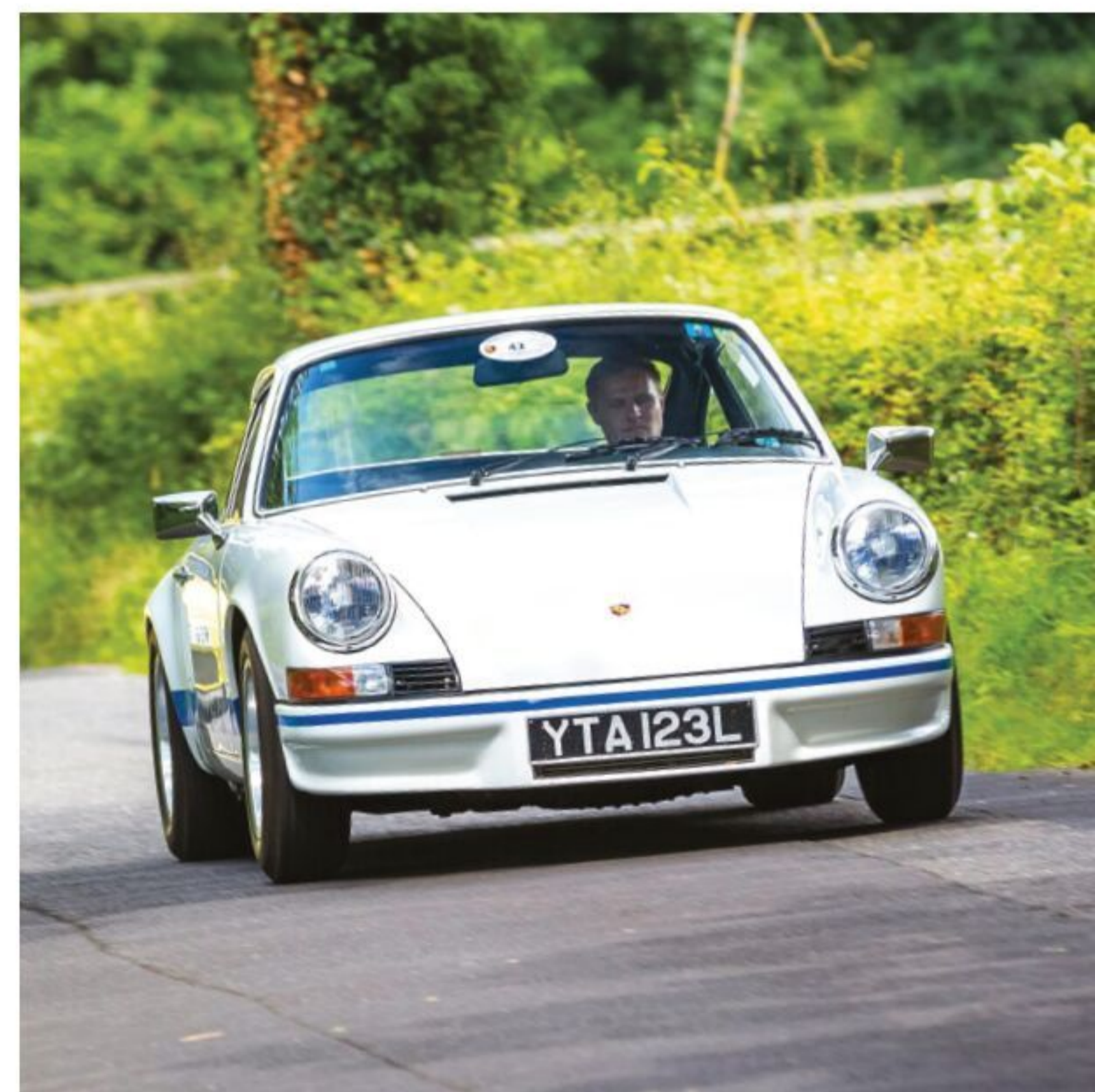
2.7 RS v 3.0 RS



Up ahead, *Total 911* Editor, Lee, is having a very good day at work. How can I tell just from looking at the back of his head? Well, he's behind the wheel of a genuine, first 500, M471 'Sport' specification 2.7 RS, and no one can have a bad day when in the driver's seat of such a legendary 911. It's even finished in Grand Prix white with the blue side script and colour-coded Fuchs. With the sun glinting off the famous *bürzel*, it looks sublime. At this particular moment, I'd wager that I'm having an even better time though, and not just thanks to the glorious view of the original Rennsport shooting up the road ahead of me. You see, Lee may be at the helm of a 2.7 RS, but in a game of very expensive Top Trumps, I have one-upped him on this occasion by precisely 307cc. The 3.0 RS that I'm currently piloting through the Essex lanes was launched just a year after Lee's car and yet, it is often forgotten in debates regarding RS royalty. However, from all objective perspectives, the 1974 Carrera RS is the better car. Maybe it is the 3.0-litre car's incredible rarity that has turned it into a forgotten hero – just 109 cars were built (51 were full racing spec RSRs) – or maybe there is something more intangible that has elevated the 2.7 RS onto its pedestal among the Porsche gods. That's what today's family reunion is all about.

Getting these two Rennsport legends on the same stretch of tarmac has not been easy; over the last half a century, Zuffenhausen has released nearly 900,000 Neunelfers into the wild, with 2.7 RS M471s and 3.0 RSs accounting for a mere 258 of these. If my maths is correct, the probability of getting these two together was one in 75 million! Those are some pretty long odds but, after nearly two years of searching, we finally did it. And, bloody hell, is it worth it. Short of chasing down Jürgen Barth in a 964 RS, my pursuit of the 2.7 RS from the cockpit of its 3.0-litre successor is the surrealist experience I've enjoyed during my three years in this job. As if to make the whole thing even more incredible, I'm strapped into the lightweight Recaro bucket seat, shifting with my left hand in one of only six right-hand-drive 1974 RSs ever made. It's not just the orientation of the steering wheel that makes this particular 3.0 RS so special either. Currently owned by ex-historic racing ace, Nigel Corner, chassis no. 099 was originally ordered by Lord Alexander Hesketh, head of the eponymous racing team that vaulted James Hunt to Formula One stardom in 1973.

With just over 38,500 miles on the odometer, the various owners of this super-rare Rennsport have not been shy ensuring it has been exercised as Porsche intended. As you may know, right-hand-drive examples of the 1974 Carrera RS are so elusive that they are often referred to by their six colours; peering beyond the three-spoke G-Series steering wheel, I'm still in disbelief at being allowed to stretch its legs for today's test. While 500 examples of the 2.7 RS were required



Left The 2.7 Carrera RS marked the genesis of the Porsche 911's rear wing with its ducktail. Just 200 2.7 RSs were produced with the M471 'Sport' specification

2.7 RS v 3.0 RS



Model Carrera 2.7 RS Sport
Year 1973

Engine

Capacity 2,687cc
Compression ratio 8.5:1
Maximum power 210 bhp @ 6,300rpm
Maximum torque 255Nm @ 5,100rpm
Transmission 915-type five-speed manual

Suspension

Front MacPherson strut; telescopic damper; torsion bar; anti-roll bar
Rear Semi-trailing arm; telescopic damper; torsion bar; anti-roll bar

Wheels & tyres

Front 6x15-inch Fuchs; 185/70/R15
Rear 7x15-inch Fuchs; 215/60/R15

Brakes

Front 282mm vented discs
Rear 290mm vented discs

Dimensions

Length 4,163mm
Width 1,610mm
Weight 975kg

Performance

0-62mph 5.8 secs
Top speed 152mph





Model Carrera 3.0 RS
Year 1974

Engine

Capacity 2,994cc
Compression ratio 9.8:1
Maximum power 230 bhp @ 6,200rpm
Maximum torque 277Nm @ 5,000rpm
Transmission 915-type five-speed manual

Suspension

Front MacPherson strut; telescopic damper; torsion bar; anti-roll bar
Rear Semi-trailing arm; telescopic damper; torsion bar; anti-roll bar

Wheels & tyres

Front 9x15-inch Fuchs; 215/55/R15
Rear 11x15-inch Fuchs; 270/45/R15

Brakes

Front 300mm internally vented discs
Rear 300mm internally vented discs

Dimensions

Length 4,135mm
Width 1,680mm
Weight 900kg

Performance

0-62mph 5.3 secs
Top speed 152mph

to homologate the 2.8 RSR for competition, the same was not needed for the next Rennsport. Finding a loophole in the regulations, Norbert Singer found that just 50 cars were required as the 3.0 RS (and the new RSR) could be classified as an “evolution” of the previous year’s model rather than an all-new design. You’d never guess it to look at the 1974 car though. As they would frequently go on to do, Singer and the Motorsport Department pushed the regulations to their very limits to develop the 3.0 RS.

Taking a regular 2.7 Carrera chassis off the production line (complete with impact bumper dampers), each 3.0 RS was put together in Weissach where it was clothed in an incredibly lightweight bodyshell. Like the first 500 2.7 RSs, the exterior of the 1974 Rennsport was sculpted from a thinner gauge steel (nominally 0.8mm thick compared to later 2.7 RSs’ 1.0mm panels) while the front and rear valances, bereft of the impact bumper bellows required on regular road-going Carreras, were moulded from glass fibre, as was the incredibly delicate bonnet skin. Even the rear quarter windows and back windscreen were thinner than normal to help reduce the 3.0 RS’s registered weight to a scant 900kg. It’s a barely believable figure, especially when you begin to truly study the 1974 car’s muscular stance. The 2.7 RS may have marked the genesis of the 911’s rear wing but that ducktail looks decidedly dainty next

to the 3.0-litre RS’s whaletail wing. And that’s the smaller, TÜV-approved version that doesn’t extend beyond the rear bumper. A much longer unit – fitted as standard to the RSR – was also supplied with every car, just in case you intended to take your RS racing in Group 3.

The motorsport influences didn’t end there. Rather than the standard pressed Turbo flares, the swollen front and rear arches were hand-finished steel items (easily identified by their asymmetric profile). The same size as those fitted to the 2.8 RSR and IROC-bound RSRs (the latter also built on the 2.7 Carrera platform during the winter of 1973/74) the Group 4 rules allowed the 3.0 RSR to use even wider arches. These housed huge 10.5- and 14-inch magnesium centre-lock front and rear wheels respectively, while the road-going RS was fitted with 9- and 11-inch Fuchs.

On the suspension front, the 1974 Carrera RS retained the tried and tested torsion bar setup but there were some detail changes. The torsion bars themselves were stiffened up, both anti-roll bars were now adjustable and the rear semi-trailing arms were shortened, a development made on the factory 2.8 RSRs and rolled out onto the very last 2.7 RSs. Both the RS and 3.0 RSR were fitted with a new brake system, too. Utilising the lessons learned on the 917 programme, the floating discs were both drilled and vented while the calipers featured vertical fins to aid cooling. Additional

air was sent to the front stoppers through the circular vents in the front bumper, which also housed a new central opening for the 3.0-litre engine’s oil cooler. Under the glass fibre decklid, the 911/77 flat six in the 3.0 RS was essentially a road-tuned version of the twin-plug motor in the 1974 RSR (itself a development of the 2.8-litre engine from the year before). Using a new, stronger aluminium crankcase and an improved head stud arrangement, each cylinder bore could be increased to 95mm yielding over 300hp in RSR spec, allowing Porsche to keep pace with its rivals. The RS featured a lower compression ratio than its motorsport counterpart, however that, along with less aggressive camshafts and a single-spark ignition system, produced a peak output of 230bhp at 6,200rpm. But how does this delectable list of Rennsport ingredients perform on the open road? Well, first let me refresh my memory behind the wheel of the 2.7 RS ‘Sport’...

Compared to ‘Touring’ spec Carrera RSs, this M471 car immediately feels much more purposeful in the cockpit. Gone are the 911S door cards, replaced by the characteristic leather pull cord and simple plastic handle. The clock, a mainstay of the fifth pod on most classic 911 dashboards, is also conspicuous by its absence, replaced by a blanking panel. The latter’s omission from the usual list of cabin comforts is, in many ways, apt; getting behind the wheel of ☺

2.7 RS v 3.0 RS





911 Rennsport: A playboy's Porsche

The story goes that Lord Hesketh regularly let James Hunt – infamous for his extravagant and eccentric lifestyle – use the 3.0 RS during the latter's early years in Formula One. The British star was reported to have even driven down to Spain for a holiday at the helm of the yellow 3.0 RS. However, a little bit of digging finds that various tales have congregated over the years, with Lord Hesketh putting the record straight in the national press when the 3.0 RS last came up for sale in 2010.

At the time of the 1974 Monaco Grand Prix, the 3rd Baron Hesketh was often found turning up to races in his Roman purple 2.7 RS 'Touring', a car driven regularly by Hunt himself too. After the conclusion of the Grand

Prix around the streets of the Mediterranean principality, the British F1 ace decided to take the 2.7-litre Rennsport owned by his team boss down to Marbella, where he was living during 1974 as a tax exile. That was the last Lord Hesketh ever saw of his original RS.

Rather than immediately firing his hotshot driver for pilfering the Porsche though, Hesketh got on the phone to AFN instead, ordering himself the very latest Rennsport as a replacement. Hunt did get to drive the bright yellow 3.0 RS – there's a picture in the coverless glovebox that proves it – though its aristocratic owner made sure not to afford the 1976 world champion quite as much freedom with his new purchase.





the original RS in its most unadulterated format is a timeless experience. Without the usual sound deadening, the 911/83 motor seems almost as vocal as the early twin plug racing motors, the crackling flat six splitting the air with increased venom. It's the 911 sound as it should be; growling through the bottom end, the snarl from the single tailpipe intensifies as the engine speed increases before there's a glorious crescendo at the redline.

Bereft of the additional 100kg found in 2.7 RS Tourings, the M471's engine seems to have been injected with some extra verve; the glorious kick at around 4,300rpm feels even more intense, the motor almost begging to have its neck wrung over and over again. And every time I oblige, I'm rewarded with that scintillating sound, piercing the blue sky like an aural dart. I can't help but smile at its organic perfection.

Despite the lack of mass, the 2.7 RS Sport's steering is surprisingly weighty (the effort no doubt increased thanks to the smaller diameter MOMO Prototipo wheel currently fitted to chassis no. 0143). Like the engine note though, it's completely unfiltered, every little imperfection in the surface telegraphed back to each of my ten digits. Like a Mezger-engined GT3, the nose sniffs around the crown of the road, pinballing around with the changes in camber, keeping my arms in an almost perpetual motion. Pointed into each corner, I can feel that idiosyncratic bobbing sensation, the nose heading skyward as I tip the 2.7 RS towards the apex and get hard on the gas to alleviate the understeer that most classic 911s exhibit at legal velocities. There's a purity to the dynamics that makes it so endearing. It doesn't suffer fools but instead rewards those who make the effort to learn its foibles and adjust.

Once I adapt to the required style, I'm stringing sequences of bends together, flowing from curve to curve with seemingly effortless style.

Parked up, the 2.7-litre car is undoubtedly the more attractive, yet the 3.0 RS almost bullies its way into your eyeline. It's bold and brash and I can't help but be smitten by its brazen charm. Restarting the 3.0-litre engine, its increased responsiveness is immediately apparent too, a gentle prod of the throttle sending the rev needle dashing insatiably around the gauge. If a car could personify confidence, the 1974 Rennsport would be it. Underway, it's clear this urgency is a trait throughout the rev range. The 911/77 flat six is seemingly always in a hurry, picking up strongly under 2,000rpm, leaving Lee an ever-shrinking figure in my mirrors as he waits for the torque to build from around 3,000rpm in the 2.7 RS. Getting into the mid range, the thrust is even more remarkable, shooting the yellow missile up the road with an audacity unmatched by any classic 911. Yet, where the 2.7-litre engine needs to kick on to reach its upper heights, the 3.0 RS keeps accelerating with a modern linearity; there isn't a single moment in the power band that feels lacking. Even in this single-plug spec, it's the perfect naturally aspirated motor.

Like every increase in capacity endowed to the 911 during its formative years, the 2,994cc flat-six sound track has a much lower frequency (even at it's 7,200rpm limit). While the timbre of the 2.7 RS spikes through your ears, the bass of the 3.0-litre Rennsport resonates through your entire chest. The sound is no less organic though, the exhaust crackling on the overrun as the air-cooled engine chatters away. The later RS's real trump card is its chassis though. I haven't driven a classic 911

that feels this connected to the tarmac yet floats over the surface with almost impossible grace. Jabbing hard at the throttle, I'm almost at pains to try and make the 3.0 RS squat over its rear axle, but try as I might, the car remains almost perfectly composed. The lack of squat is matched at the other end by an almost nonexistent level of dive under braking. Those brakes are a minor revelation too, providing a much firmer pedal and more initial punch whenever I step on the pedal.

Normally, it is the balance of weight transfers that helps a classic 911 to corner effectively, but the 1974 RS just wants to remain flat, providing it with a mesmerising amount of grip. The stiffer anti-roll control only helps to increase the car's composure, the 3.0 RS turning into the tightest radiuses with the ferocity of a 993 RS. Yet unlike the 993, Lord Hesketh's old companion never feels nervous through the mid-phase of each corner, the steering communicating with the same clarity as the 2.7 RS. I push harder and harder only for the car to leave me with wider and wider eyes. Eventually, it no longer feels like a classic 911 at all; I'm not sure if that's a criticism or not though.

There aren't many cars that can leave a 2.7 RS M471 in the shade but this is unquestionably one of them. It may have only had an extra year of development but the 3.0 RS could have been launched 20 years after the 2.7 RS and it would have still felt modern. If ever there was evidence that motorsport can improve the breed in such a short space of time, the 1974 Carrera RS is it. **911**

Thanks

Total 911 would like to thank Andy Prill for helping to organise this Rennsport head-to-head and Nigel Corner for access to his ex-Lord Hesketh 3.0 RS.



964 RS V C4 LIGHTWEIGHT

One is a hugely loved Rennsport legend, the other a little known motorsport footnote. Can the Leichtbau manage to trump the RS? We take to the track to find out...

Written by **Josh Barnett** Photography by **Ali Cusick**



As introductions to a new track go, this undoubtedly registers at the 'surreal' end of the spectrum. I'm no stranger to learning unfamiliar circuits, but I don't normally initiate myself to new surroundings quite like this.

At the wheel of a 964 Carrera RS, I'm familiarising myself with Botnaring's nine distinct turns, all the while battling 1.62 miles of damp Finnish Tarmac soaked an hour or so earlier by an unseasonably heavy rainstorm. As if that wasn't challenging enough, I'm attempting to keep up the pace with one of Weissach's racing legends, Jürgen Barth. Yes, that Jürgen Barth, the man who has stood on all three steps of the La Sarthe podium, topped off by a victory in the 1977 24 Hours of Le Mans.

Did I mention that Jürgen is driving a near-priceless 964 Carrera 4 Lightweight, a car that

he devised while heading up Porsche's customer motorsport division? No? Well he is, and the advantage of four-wheel drive traction (and his obvious surplus of talent) is making my job entertainingly difficult. I said it was surreal.

Thankfully, the 964 Carrera RS – as I found out on the Peak District's roads in issue 128 – is the friendliest Rennsport partner a 911 enthusiast could ask for, one of the key factors behind its current resurgence in the eyes of Porsche collectors.

Unlike later GT3-prefixed RSs, the 3.6-litre 964 is no high horsepower animal, meaning that I'm left to revel in the delicious chassis devised by Roland Kussmaul and co at the turn of the 1990s. More on that later though.

The Porsche 964 RS – the first Rennsport to get a large production run since the iconic Carrera 2.7 RS – was, like many of Weissach's greatest road car creations, born out of the necessity to

go racing. In 1988, after a six-year stint at BMW, Ulrich Bez returned to Weissach as technical director after Helmuth Bott's decision to retire. At the time, Porsche's Cup series in Germany and France were using the front-engined 944 Turbo but, with the 964 generation of 911 due to debut at the end of 1989, Bez believed that the one-make championships were the best shop window for the new neunelfer.

Based on the newly launched Carrera 2, research director Helmut Flegel devised the specification of the 964 Cup car before the build process was entrusted to Kussmaul, who oversaw the seam welding of the body shells and the fitment of the Matter roll cages. Contrary to popular belief, the Cup cars' engines weren't blueprinted. Instead, Kussmaul simply tested a selection of M64/03 engines on a dynamometer, before choosing those with the best power outputs. ➔

With Barth in charge of the commercial side, the 964 Cup cars proved popular, debuting in 1990 with Olaf Manthey winning the inaugural Carrera Cup Germany to feature 911s. However, in order to be homologated for international competition, the FIA required a number of road cars to be built as proof of the Cup car's production credentials. Step forward – in numerous 'flavours' – the 964 Carrera RS. Featuring the same seam-welded shell and 3.6-litre air-cooled flat six (boosted to 260bhp by a tweaked ECU as the Cup car), even the touring version of Rennsport inherited the Cup car's motorsport DNA.

Compared to the standard Carrera 2, which hit the scales at a portly 1,350 kilograms, Kussmaul's team managed to diet the Rennsport version down to a sprightlier 1,220 kilograms in Lightweight trim. An aluminium bonnet, three millimetre side and rear glass, and plastic 92-litre fuel tank all helped to reduce the RS's dry weight, as did the pretty teardrop wing mirrors borrowed from the Turbo. Perhaps the most famous mass reduction measures though were the iconic 'Cup 1' alloy wheels, forged from magnesium. An instant icon, they were later offered as an option on base Carreras (albeit in a heavier aluminium alloy guise).

While a focus on weight reduction has always been a central tenet behind the Rennsport philosophy, Weissach's engineers did not forget to upgrade a number of the 964 RS's mechanical components either. The majority of examples were fitted with a single-mass flywheel, aiding the M64/03's throttle response, while the standard Carrera 2's Getrag-built 'G50' was bestowed with different ratios and stronger synchromeshes. A limited-slip differential was a spec sheet highlight, as were the addition of the Turbo's cross-drilled and ventilated (ABS assisted) brake system.

The pièce de résistance though was undoubtedly the suspension setup. Benefitting from the 964's switch to coil springs at all four corners, the RS sat a full 40 millimetres lower than the standard

car, while a brace across the front axle helped to stiffen the MacPherson struts. Even at rest, the 964 Carrera RS looks right; it's no wonder the stance has been copied by many a Carrera 2 and 4 owner.

It was also proof that, despite the lack of engine tinkering, Porsche had given the RS the attention that its famous moniker deserved. The mainstream automotive press may have been underwhelmed by its lack of headline-making power figures (the horsepower arms race continues to blind many motoring hacks) but Weissach's attention to detail on the 964 RS truly pays off in spectacular fashion, especially on track.

Over the last 24 months, Porsche 964 Carrera RS values have shot skyward, with cars that were previously available for around £40,000 now changing hands for, in some cases, north of £200,000. The market's reappraisal has created more than its fair share of speculators though, with the end result that many Rennsports no longer see much active service. Thankfully, the maritime blue 964 Carrera RS I've strapped myself into has been entrusted to me by Jussi Itavuori, a Porsche collector who appreciates that the true beauty in a 911 is not its shape or its investment potential, but the experience it creates behind the wheel.

The RS is already warm and ready to go after the morning's trip to the track through wooded Finnish lanes, which is just as well, as Jürgen has shot out of the Botniaring's pit lane in the 964 C4 Lightweight like the proverbially scalded cat. My pride isn't the only thing that requires me to keep up either; our seasoned snapper Ali needs me to keep the two cars in frame for some of our planned photos. I better get a shift on...

On the road, many have complained that the 964 RS's springing and damping is simply too stiff to enjoy. With freshly resurfaced tarmac under the Michelin Pilot Sports though, the car actually feels remarkably soft, with a suppleness to its weight transfer that immediately and, most importantly, clearly informs you of the impending changes to

the Rennsport's cornering attitude. Coupled with a power steering system that doesn't go overly light at speed, you've got the perfect recipe for a hugely capable track car that anyone can get along with almost immediately.

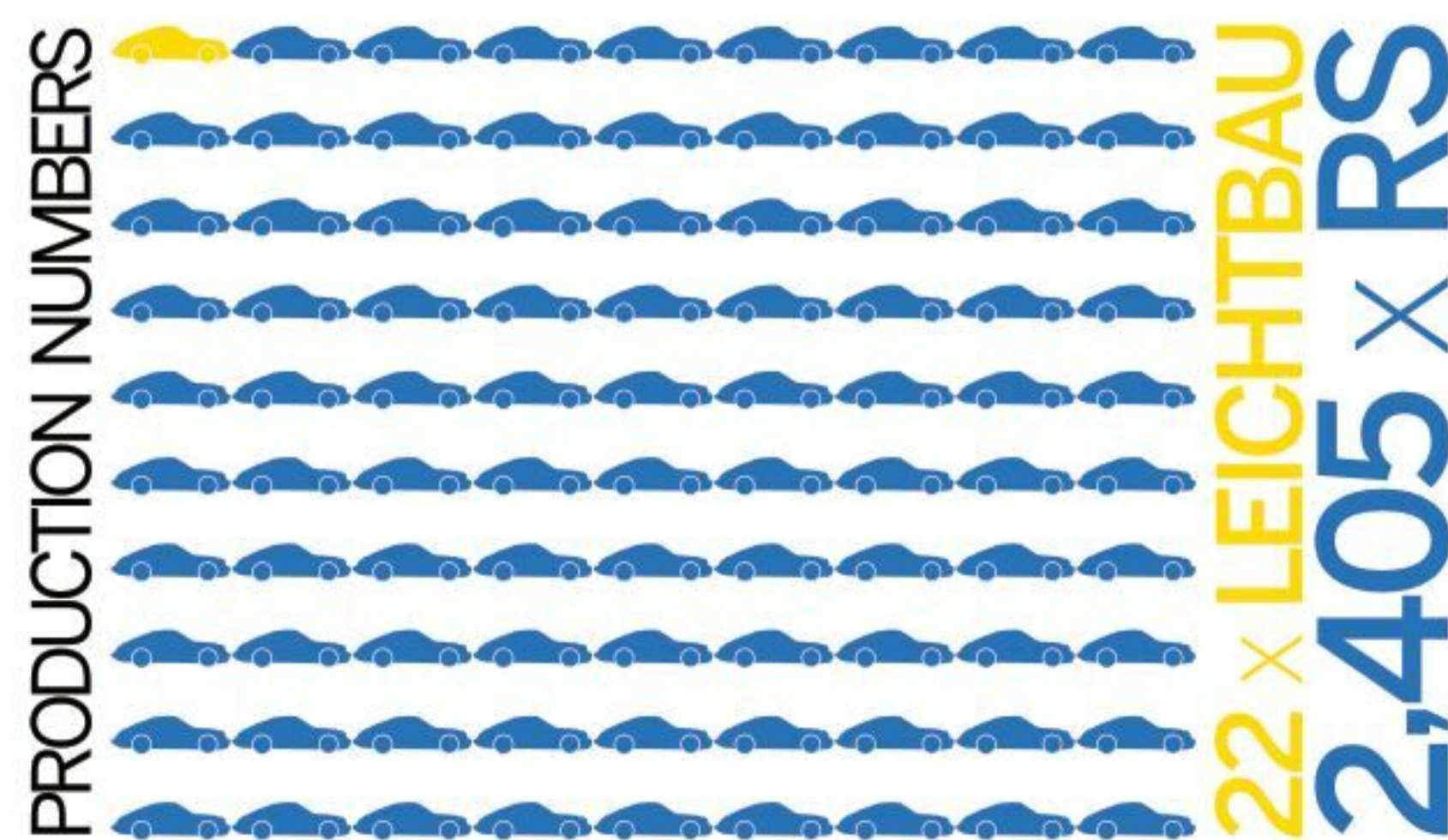
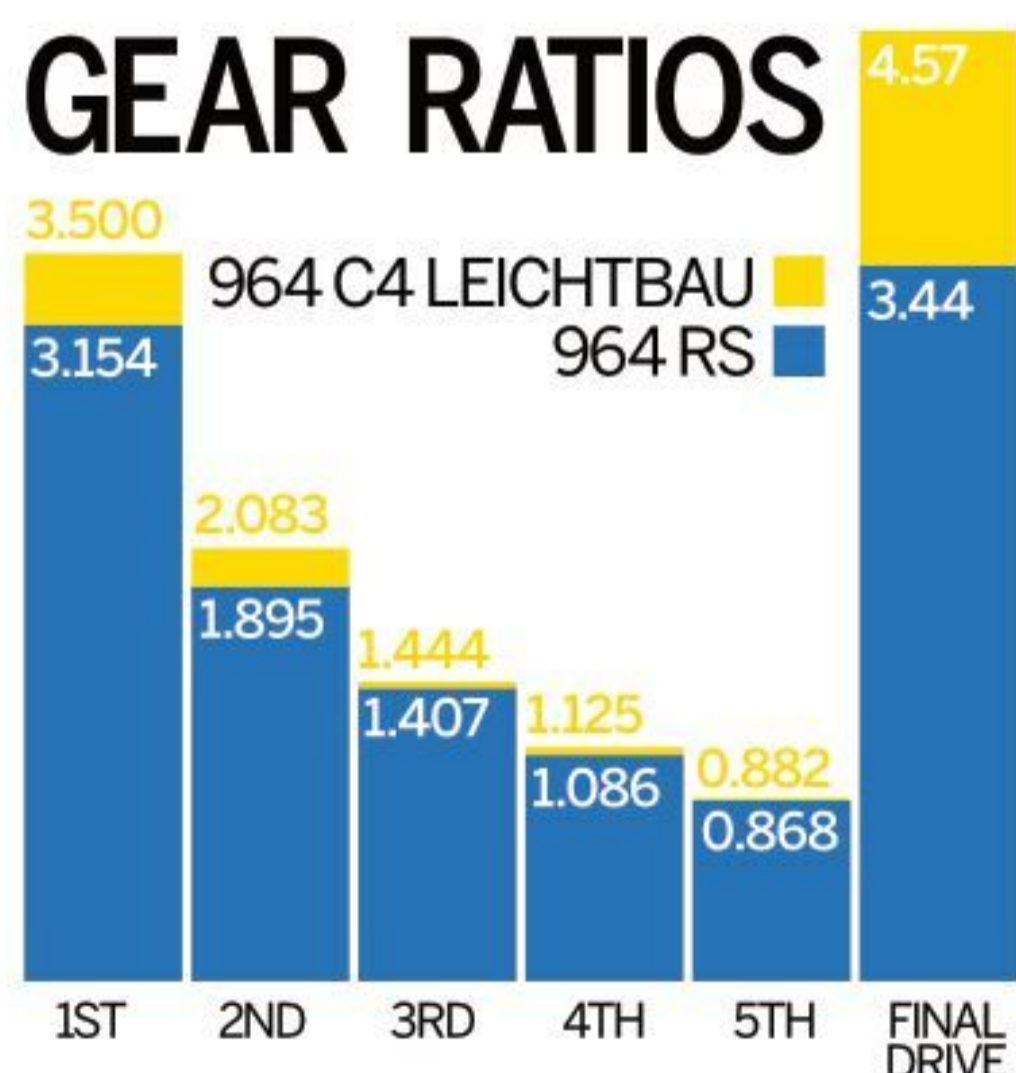
With a single lap of the circuit under my belt, I'm already confident enough to start pushing the 964 RS's limits. Barrelling into the 95-degree first corner, a mixture of a rapidly tightening exit parabola and a hidden damp patch at the apex conspire to give me a scare, as the kerbing on the outside of the circuit rushes up to greet me. Thankfully the car's behaviour is constantly telegraphed to my fingertips and backside, but my complacency has taught me a key lesson.

This is a 911 where managing your entry speed and angle is key. Every time I'm too aggressive with my turn in, the front end's trajectory quickly zeroes in on the track's edge (and the barriers beyond). Turning in too late only provokes large doses of understeer from the RS, requiring me to focus on perfecting my lines at each corner. What's more, with stereotypically sterling traction, I can't go all lead-footed on the accelerator in the hope of provoking some oversteer. Minimising my steering inputs and carving the ideal arc is the key to keeping up my momentum and carrying prodigious amounts of speed at each apex through the third-gear corners at turns two, three and nine.

Through the slower hairpins at turns five and six it's easy to provoke a little bit of tail out action, especially with a judicious lift off the loud pedal. Through the ever-tightening turn four/five sequence, the business end of the RS quickly swings around. The talents of Kussmaul's team flatter my abilities though, with a beautifully balanced relationship between anti-roll control and damping enabling me to catch the slide with relative ease. Unlike classic 911s, where the torsion bar suspension setup catches out many, the coil sprung rear end of the 964 proves much more progressive, enabling you to really get down to the business of exploiting and playing with the fantastic chassis.

Not that the handling is the only highlight to the RS's on-track experience – 260bhp may not be much on paper but, in practice, the 964 Rennsport packs plenty of punch, especially with a welcome slug of torque from about 3,000rpm. So much so that it's possibly more satisfying to shift early and enjoy another shove from the M64/03's mid-range than ride the rev counter all the way around to its Cup car soundtracked red line.

The Botniaring's almost constant succession of corners (linked predominantly by short straights) certainly accentuates the G50 gearbox's long ratios. I'm only hitting fourth gear on the chute between turns one and two, with all the corners taken in either second or third gear, utilising the flat six's torque rather than exploiting an electric top end (as you do in later GT3s). The relationship between the engine and gearbox doesn't feel perfectly suited ↻



130KG
DIFFERENCE IN WEIGHT BETWEEN THE RS & LEICHTBAU

211bhp per tonne
241bhp per tonne
POWER TO WEIGHT

THE RS HAS WINDOWS MADE OF **GLASS**
WHEREAS THE LEICHTBAU'S ARE **PERSPEX**

964 Carrera 4 Lightweight 1991-1992

Engine

Capacity
3,600cc

Compression ratio
11.3:1

Maximum power
265bhp @ 6,720rpm

Maximum torque
304Nm @ 6,720rpm

Transmission

Five-speed manual with adjustable differential lock

Suspension

Front

MacPherson struts; Bilstein dampers; coil springs; anti-roll bar

Rear

Semi-trailing arms; Bilstein dampers; coil springs; anti-roll bar

Wheels & tyres

Front

7x16-inch magnesium 'Design 90' alloys; 205/55/ZR16 tyres (17-inch Cup 1s optional)

Rear

9x16-inch magnesium 'Design 90' alloys; 245/55/ZR16 tyres (17-inch Cup 1s optional)

Brakes

Front

322mm drilled and vented discs

Rear

299mm drilled and vented discs

Dimensions

Length

4,275mm

Width

1,652mm

Weight

1,100kg

Performance

0-62mph

4.5 secs

Top speed

125mph



964 Carrera RS 1991-1992

Engine

Capacity
3,600cc

Compression ratio
11.3:1

Maximum power
260 bhp @ 6,100rpm

Maximum torque
310Nm @ 4,800rpm

Transmission

Five-speed manual

Suspension

Front

MacPherson struts; gas-filled dampers; coil springs; anti-roll bar

Rear

Semi-trailing arms; gas-filled dampers; coil springs; anti-roll bar

Wheels & tyres

Front

7.5x17-inch magnesium Speedline 'Cup 1' alloys; 205/50/ZR17 tyres

Rear

9x17-inch magnesium Speedline 'Cup 1' alloys; 255/40/ZR17 tyres

Brakes

Front

320mm drilled and vented discs

Rear

299mm drilled and vented discs

Dimensions

Length

4,250mm

Width

1,650mm

Weight

1,230kg (Sport)

Performance

0-62mph

5.4 secs

Top speed

162mph



“At the time of the RS’s genesis, Barth was dreaming up his own featherweight special”

Rennsport showdown



to the track, especially somewhere as tight and twisting as our Finnish venue. Thankfully though, with Jürgen peeling into the pit lane, I'm about to experience a more hardcore 964 that should be better suited to the rigours of circuit work.

Across the hallways at Weissach, at the same time of the 964 RS's genesis, Barth was dreaming up his own featherweight Porsche special – not as a rival to the impending Rennsport, but as a project to keep his customer motorsport department busy. After the end of Group C's turbocharged era, and the subsequent demise of the 956 and 962 programme, the engineers under Barth's guidance needed something to build; something to save them from redundancy. The result was the 964 Carrera 4 Leichtbau, a delectable concoction brewed up with the assistance of Porsche Motorsport's significant spares store.

Ever the astute businessman, Barth identified that the 964 Carrera 4 (the newly introduced four-wheel 911) could be appropriated for competition in the US rally scene, where rules were a novelty. After convincing the board, Barth's team set about giving the 964 its most extensive diet yet, putting even the Cup car to shame.

The bonnet was fashioned from aluminium, as were the lightweight doors, while the decklid and whaletail wing were made from fibreglass. The latter was actually a direct carry-over from

the SC RS, another of Barth's limited-run rally specials. Apart from the windscreen, all the glass was replaced with Perspex to reduce weight, with the 964's standard Design 90 wheels forged in magnesium specially for the C4 Lightweight. Officially listed at 1,100 kilograms, the Leichtbau truly lived up to its moniker.

Inside, the interior was also completely gutted, the cockpit featuring just a pair of nomex-clad Recaro seats, a custom roll cage and a pared-back dashboard. Of the additional race-bred switchgear, two turn dials (borrowed from 935 stock) dominated. These controlled the trick differentials, the star of the C4 Lightweight show. With no rules dictating running gear, Barth decided to use up the surplus drivetrains from the 953 Dakar-winning project. The left-hand knob controlled the front-to-rear torque distribution, with the right-hand dial adjusting the level of locking on the two differentials. Mated to these trick diffs was a short ratio five-speed 'box, while propulsion was served up by a Cup-spec 964 engine. With a motorsport exhaust manifold installed and catalytic converters removed, the Lightweight's flat six pushed out around 265bhp (and made one hell of a racket – 107 decibels at 4,500rpm).

Mechanically, the attention to detail didn't end there, with an adjustable front strut brace, stiffened and lowered Cup suspension (with adjustable

Left: It may have the same redline but, thanks to added trimmings in the cockpit, the RS feels noticeably less sprightly on track

Right: The half roll cage points to the RS's motorsport pedigree, without compromising day-to-day usability

dampers), and a dual-circuit brake system – with bias adjustment – taken, like the whaletail wing, from the SC RS. The oil tank was moved forward of the rear axle to improve weight distribution, seeing a return of the 1972-style external filler cap on the right rear wing.

This particular 'Blume Gelb' 964 Carrera 4 Lightweight (the only such lemon-hued Leichtbau) also belongs to Jussi and, even though it is one of just 22 ever built, I'm now replacing a Le Mans legend in its cockpit. The rapidly drying track is mine, after I've secured myself into the Kevlar-backed bucket seat and ensured I'm not dreaming.

Unlike the RS, which always feels like a road car from the driver's perspective, the Lightweight's motorsport lineage is obvious. The MOMO steering wheel is perfect to grasp, and the Spartan cockpit quickly puts my mind into focus. This car means business and that's before I even twist the ignition. With a flick of my wrist, spark, fuel and pistons surge into life with barely hidden fury. With only a simple metal bulkhead (rather than layers of sound deadening) between my ears and the flat six, the Lightweight is noticeably more



trebly and raucous, even if Jussi's example does feature some TÜV-approved Cargraphic exhaust components.

The clutch is proper race car stuff too. It feels like 95 per cent of the pedal's minimal travel is nothing but free play before all the engagement comes rushing in aggressively. It's not my prettiest launch but I'm away, quickly snatching second as I approach the blend line at the end of the pit lane. Here we go.

Foot to the floor, the 6,800rpm limit rushes up so much faster than in the RS. The short ratios make the M64/01 engine feel much livelier, with my right hand almost constantly on standby for the next shift through the perfectly weighted gearbox. The lever's throw feels a lot shorter and much more precise than the Rennsport too (though that may just be a virtue of this Leichtbau's incredibly low mileage). The entire package feels immediately more suited to this environment. The car is certainly in its element, but can such an extreme chassis and drivetrain inspire the same levels of confidence in me that were achieved by the RS?

I needn't have worried. With around 130 kilograms less mass than a standard RS (Jussi's C4 Lightweight hits the scales at 1,095 kilograms thanks to those originally optioned Kevlar seats and the Cup 1 wheels), this is a 964 that just wants to get its nose into each corner with such verve that

it takes me a few turns to readjust my driving style. With less weight to shift around, the Leichtbau is more accommodating to a direct turn in and, when required at the Botniaring's final corner complex, can change direction in a hurry. Darting left then right under my every input it's readily apparent that, where I was driving around the idiosyncrasies of the RS's chassis, the Lightweight accommodates my style, a sign of a thoroughbred racing weapon.

Adjusting those trick differentials is a true epiphany though. Choosing to leave the level of lock alone (I trust Jürgen's set them pretty much correctly), the left-hand dial – the front-to-rear torque spread – enables me to alter the C4's attitude turn-by-turn, without having to change my driving style. It's no wonder that similar (albeit more complex) modern systems are now found on cars such as Porsche's Le Mans-winning 919 Hybrid.

Botniaring's fast turn three sees the track transition from heavily cambered to flat on the exit, which should normally create understeer. However, the early rain coupled with the topography has left an excitement-inducing damp patch that has been unsettling the car. By winding the dial clockwise, I send more torque to the front wheels, countering the track conditions with greater understeer. This enables me to keep my foot hard to the floor when, in the RS, I would be lifting and losing time. Conversely, for the hairpins, I wind the torque

Left: Kevlar-backed bucket seats hold you firmer than the RS, which is just as well given the Lightweight's ability to stick to tarmac

Right: The Lightweight's interior makes the RS feel plush and luxurious. Door cards are especially Spartan

bias all the way to the back (a total split of 80:20), forcing the Lightweight to oversteer more when I get on the throttle. It's truly a revelation, enabling me to adjust the car's handling on the fly, without pitting for anti-roll bar changes.

As the track dries out, I find myself winding the torque more and more to the rear while, thanks the much shorter ratios, I'm a gear up in every corner compared to the RS. It's truly invigorating. The sound, the chassis, the drivetrain, all combining to produce an on-track experience unlike any other Porsche 911 out there. It doesn't take me many laps to decide that I want one. Badly.

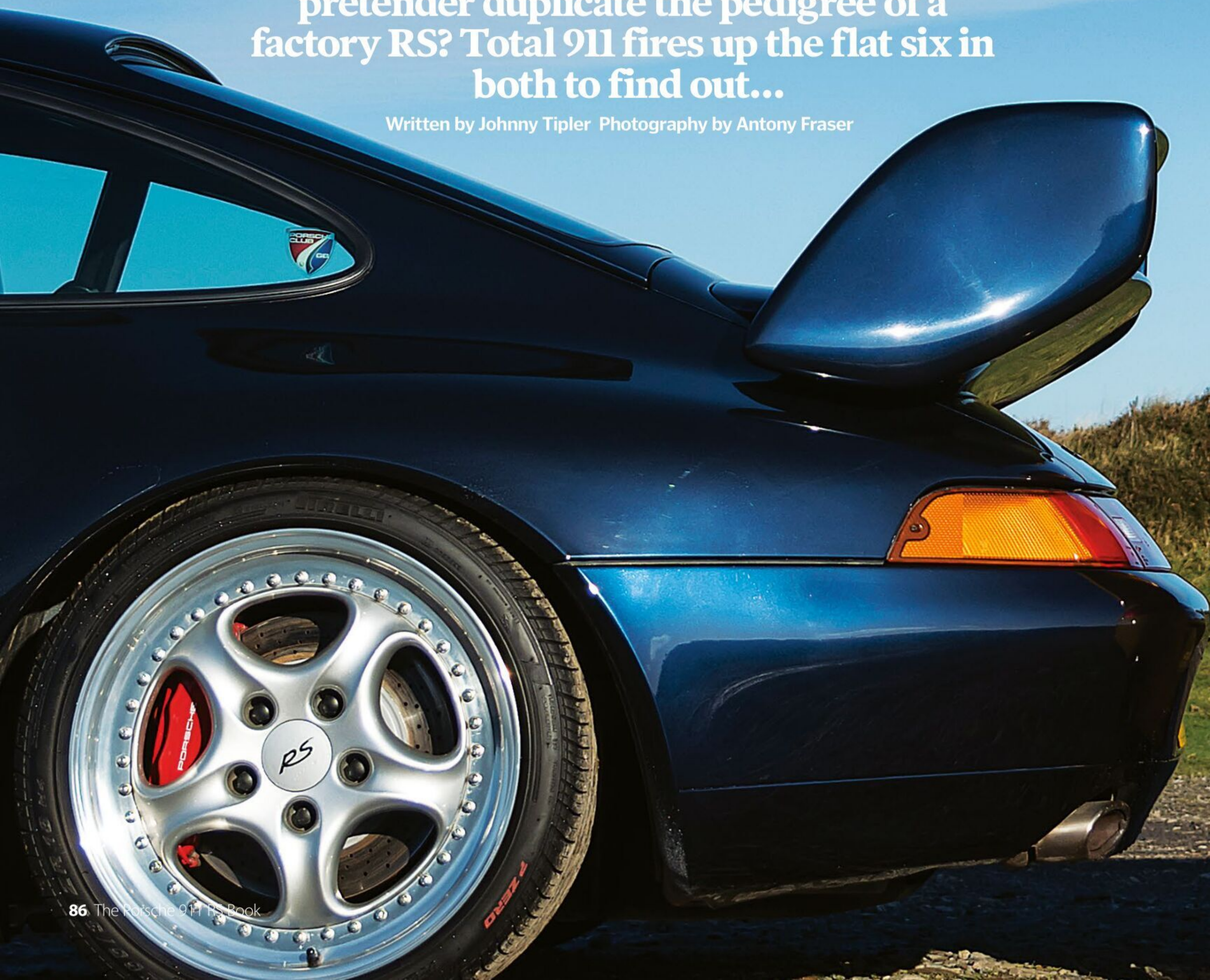
Unfortunately, prising it out of Jussi's hands may prove difficult. Considering they are around 100 times rarer than a standard 964 RS, pricing a Leichtbau is a truly dark art (one recently sold for a rumoured €800,000). To secure the keys to this one, you might as well write down a sensible figure and then add a zero to the end of it for good measure. Compared to a Rennsport though, it would be unarguably worth it, with the RS shown up as a jack of all trades and the Leichtbau being the undoubted master. **911**

Rennsport showdown

REAL VS 993 RENNSPORT REPLICA

Two 993s shaping up as Rennsports: one's a replica, one's the real deal. But can the pretender duplicate the pedigree of a factory RS? Total 911 fires up the flat six in both to find out...

Written by Johnny Tipler Photography by Antony Fraser



Putting aside issues of market value for the moment, the interesting conundrum is, which of these 993s is a genuine RS, and why is it not obvious at first glance? We've arrived at Specialist Cars of Malton in North East Yorkshire where both cars grace the showroom. Both have RS badges on their engine lids, identical BBS split-rim wheels and the same tyre specifications. The leery Speed yellow car has a roll cage and the aggressive stance of a track day pugilist. Could that one be the pretender? The other is innocuous in Midnight blue, so if it were merely a question of attitude you'd go with the yellow car. Anyway, keep an open mind for now.

The 993 Carrera RS debuted in February 1995 as the last of the air-cooled generation, endowed with a 300bhp, 3.8-litre, VarioRam engine that features a magnesium cooling fan and oil pump housing, plastic intake system, lighter pistons, connecting rods and stronger crank, plus a hot-

film mass air flow meter. It uses the same 993 six-speed gearbox but with higher ratios on the first three gears than standard Carrera models. The RS developed a lusty 355Nm of torque at 5,400rpm, went from 0-62mph in 5.0 seconds and topped out at 172mph. The bodyshell is seam-welded, and the RS has the 993's newly issued Lightweight-Stable-Agile rear suspension, featuring coil-over dampers and multi-link wishbones, aided and abetted by adjustable anti-roll bars front and rear, uniball top mounts all round, and MacPherson struts and lower wishbones up front with a cross-brace linking those front suspension turrets. Bigger 993 Turbo brakes are fitted, and ride height is 30mm lower at the front and 40mm lower at the rear. In total, Porsche made just 1,014 993 RSs, of which 227 were Clubsport versions. It is easy to see why enthusiasts have since tried to create replica versions of this exceedingly rare Rennsport.

I could keep you hanging on to the bitter end but I'll spare you that, because referring to

'the blue car' and 'the yellow car' is going to be tiresome, so I'll reveal right now that the real RS is the Midnight blue 993 and the wannabe is in Speed yellow. Now I'm going to tell you how close they are to one another. The replica is not merely a tricked-up track star; the replacement equipment is authentic and correct to a point. The cage bares the genuine factory-issue Matter label with RS serial number and, once I've hoisted my legs into the pedal box, I'm ensconced in a Recaro race seat, although I am restrained by a Sparco five point racing harness. It's kind of nice that it's gone off at a tangent, spec-wise, and hasn't tried to be an exact replica of an RS. Specialist Cars call it a 'Clubsport homage', and that's an apt enough designation for our purposes here.

It started life as a 1995 993 Carrera and has nudged just short of 88,000 miles from its 3.6-litre engine. Its last owner sought RS performance standards and, though it's still a 3.6-litre 993 engine as opposed to



a 3.8 RS, he replaced as many relevant parts with genuine ones as well as taking it down the Clubsport road. That's why the cabin lacks creature comforts like a radio and carpets in the interests of weight reduction. It has a plastic rear screen, so the rear wiper has gone, and the suspension's been switched for H&R height-adjustable springs and dampers. It's got an RS steering wheel, plus it sports the exaggerated GT2-Clubsport front splitter with side vanes and the distinctive bi-plane rear wing with its triangular GT2-style vestibule-orifices at either end. The door cards feature lightweight RS straps to pull them closed, but the electric windows are virtually impossible to operate with the doors closed because of the cross-door cage trusses. Replacing electric seats with Recaro 'Pole Position' jobs and omitting the rear ones are yet more weight saving measures in the RS repertoire.

A glance in the engine bay reveals that the air-con compressor has also been removed. And

peering in the front luggage boot, as well as the strut brace, which is apparently carbon-fibre, it's got a competition-orientated battery isolator. But it has a sprung steel bonnet lid, whereas the real RSs lid would be in aluminium and just have a basic prop. However, the engine lids with their Clubsport bi-plane wings differ in weight, the Speed yellow 993's seeming lighter than the RSs.

Our mission is to take both 993s up onto the moors between Pickering and Thirsk, and while my snapping colleague takes the Midnight blue RS, I take the Speed yellow replica. The controls fall easily to hand and, despite an absence of electric seat controls, I quickly find a comfortable driving position. It has a slick short-shift gate and gearlever, and the engine loves to rev as the car surges forward smoothly and swiftly. The brakes are very efficient but I don't get an acute feedback as I press the pedal, though I am aware of the car slowing down in short order. The view in my rear view mirror is of the crisscross architecture of the

roll cage, the yellow transoms and gaping maws either side of the rear wing, and then somewhere between those obstructions I can monitor the traffic behind. Some of the internal bars are swaddled in matching yellow foam, clipped with cable-ties, though not on the one across the windscreen header, which perhaps is the very one that ought to be protected from any head-butts. In any case, there are no sun visors on account of it, and I'm using my spare hand as a visor. I snick through the six-speed gearbox listening to the revs modulate up and down the scale, and cruise along at 2,000rpm at 60mph on the A64 to Pickering and beyond.

Released from the beaten track, I accelerate determinedly in second and go all the way through the gears. It's pulling strongly but it's also tramlining rather a lot, and all the while its nose is fidgeting, looking for the straight ahead, biting into the corners, oversteering most of the time. I hoon along the moorland roads, the car darting this way and that, and I'm holding my breath as I skitter through the streams flowing across the road. Going hard on these moorland roads up on Blakey Ridge, it becomes more like a fighting wildcat. When I get up to anything over 60, 70, 80, it's fitting all over the place, and I'm fighting it. Not that I mind the challenge – it's good fun.

I keep the power on around the turns, simply moderating pedal pressure according to sharpness and incline of camber on these moorland bends. It's very tractable in so far as you don't especially need to be in second or third gear for the tighter corners (either will do), and there's no great drama about taking off in terms of clutch control, gear selection and accelerator, all of which are perfectly agreeable, unlike some unsorted wrist-wranglers. It has very swift responses and I'm sure that, on a circuit, it would be a

Rennsport v replica: What are the costs involved?

The standard 993 is a cute car and the ultimate incarnation of the air-cooled 911 shape. It's also quick enough for most of us in a normal road-going context, too. But admit it, when have you not wondered how your 911 would look – and perform – if it was upgraded to RS specification? Here's what it takes – based on our featured 993 Rennsport homage.

Stripping out the standard 993 shell is straightforward, though here, the cabin interior along with the roll cage was painted to match the Speed yellow exterior. The full cage itself is a genuine Matter RS construction and is worth £4,000. Call it £2,500 for a half-cage. Whether you want the level of permanence implicit in a welded-in cage depends on how many track days you plan to do; a bolted-in cage makes it a lot simpler to revert to the standard 993 cabin.

A set of H&R lowering springs and dampers will cost £1,500, and a strut brace another £150. The last owner had the engine's ports polished, costing £2,700, with

a further £7,500 for the CarGraphic power kit, which includes induction and exhaust systems.

Aesthetics are crucial, and half the battle is that the 993 replica needs to look the part, and that means equipping it with appropriate Speedline split-rim wheels and tyres. Add £4,500, ballpark, depending on choice of rubber. And then the distinctive front splitter, available for £850 from PorscheShop, along with the Clubsport GT2 bi-plane rear wing for £1,500. Double those prices for getting them fitted and painted.

That tots up to a tidy £22,670 just for componentry and engine work. Fitting and refining will surely add a further £6,000-plus to that figure. So, we are looking at around £30,000 to attain a semblance of RS Clubsport looks and specification. Not so long ago we'd have laughed in the face of spending that much to chase the RS dragon. Now though, it begins to look distinctly reasonable value – assuming, that is, you're an extrovert with a track day fixation.



993 RS (Midnight blue)

1995

3,746cc

11.5:1

300bhp @ 6,000rpm

355Nm @ 5,400rpm

None

Six-speed, G50/31

Lower wishbones; MacPherson struts; dual-tube gas dampers; anti-roll bar

LSA (Lightweight-Stable-Agile) multi-link; upper and lower wishbones; dual-tube gas dampers; anti-roll bar

8x18-inch BBS;
Pirelli P-Zero 225/40/ZR18

10x18-inch BBS;
Pirelli P-Zero 265/35/ZR18

4,245mm

1,735mm

1,279kg

5.0 secs

172mph

Model

Year

Engine
Capacity

Compression ratio

Maximum power

Maximum torque

Engine
modifications

Transmission
Suspension

Front

Rear

Wheels & tyres

Front

Rear

Dimensions

Length

Width

Weight

Performance

0-62mph

Top speed

993 RS replica (Speed yellow)

1995

3,600cc

11.3:1

280bhp @ 6,100rpm

330Nm @ 5,000rpm

Polished internals, CarGraphic induction kit

Six-speed, G50/21

Lower wishbones; MacPherson struts; dual-tube gas dampers; anti-roll bar

LSA (Lightweight-Stable-Agile) multi-link; upper and lower wishbones; dual-tube gas dampers; anti-roll bar

8x18-inch BBS;

Goodyear 225/40/ZR18

10x18-inch BBS;

Bridgestone 265/35/ZR18

4,245mm

1,735mm

1,279kg

5.3 secs

170mph



“The RS dishes up instantaneous throttle response with fabulously quick acceleration”



real handful, as it's a lot of fun on these largely deserted roads. There's a much more raw feel to it. The ride is firm, as you'd expect with a car set up like this for track work, though it is a little edgy along the moorland roads and I'm constantly at the ready to apply some correction. It also has a short-shift gearbox, which means the gearlever snicks through the gate with a sharpness rarely matched by other sports cars of any such pedigree. There's no doubt these 993 RSs really look the part; they're squat and low with big wings and spoilers, and the Midnight blue car looks mean and moody as I follow along the main road. At last, it's time for a punt in the real thing so we can see what our pretender should feel like.

Unencumbered by a cage, the RS cabin environment is immediately likeable. It is an

entirely black interior with the typical RS wheel and gauges, and the Carrera RS legend embroidered into the rear carpeting of the cabin. Clearing the sodden screen, I remind myself that there's a minimal 1.2-litre capacity in the RS washer bottle instead of the normal 993's 6.5-litres, so no excess squirting! The RS steering wheel has its yellow band at the top, which shows when it's dead centre. Otherwise, it's RS austere: no back seats, thinner glass (five kilograms lighter), no de-mister, no headlamp washers or central locking, and an aluminium front lid. It doesn't have electric mirror adjusters but it does have electric windows, which is unusual.

Under the front lid, the suspension turrets of the RS are quite different to the normal 993; it's got adjustable top plates on the turrets and

completely different struts. Like the replica, in the RSs door mirrors I'm also seeing the broad haunches of those rear wheel arches and the ducting in the supports of the Clubsport-spec rear wing on either side of the car. While the Clubsport-styled replica lives up to its name, the RS at least has the reputation of being benign to drive, and though it is way harder-edged than the standard 993, it is less of an effort to control up here on the moor. Some of that will be down to the tyres, as well as the setup of the suspension. While the specs are the same, the RS uses Pirelli P-Zeros all round while the replica uses Bridgestone on the back and Goodyear up front, so it is possible that, although they are the correct sizes, they'll have different behavioural traits, which may account for the tramlining tendency.



On the other hand, the replica could have just a bit too much camber for the road; the toe-in is visible, so we assume it's set up with a track bias rather than road, which is why it acts like it does.

Immediately, the true RS feels like a very different car: the throttle response is sudden, it zings around the rev-counter more freely, it has a harsher engine note, it pulls harder and the steering and handling feel how an RS should feel, rather than a car that's been modified to emulate one. How they would work side by side on track is a different question but on the road, the true RS has it. The real 993 feels more compliant, and it's a real blaster, dishing up instantaneous throttle response with fabulously quick acceleration at the tips of my toes, and vast reserves of power available when accelerating strongly in third at

5,000rpm, rushing even harder onwards over the hills. Steering is also vastly different: on the Speed yellow replica, lock-to-lock, it's a very wide circle but the RS feels more nimble in the agility stakes. The RS's gearshift is more notchy and thus precise, and it feels more built-for-purpose than the yellow replica, which is more ambiguous.

Is the replica, so far, wide of the mark? Maybe not as far as I'd originally thought. Heading back to base in the yellow car, I'm now wondering if the reason why the genuine RS feels sharper on the road is actually because the replica is more highly tuned than the RS, and therefore it comes into its own when I'm actually going a little bit harder than I was on the moors. Now I'm starting to appreciate its attributes better. The Clubsport-styled car seems every bit as quick as the RS in

terms of its performance, and I think that's what I'm feeling here on our way back. I seem to be able to corner faster than the RS and possibly go quicker, too. The tramlining sensation is only evident when I'm driving hard and, as things calm down, I'm not aware of it.

The bottom line probably comes down to showroom sticker prices: the genuine 993 RS in Midnight blue is available for £300,000 (and likely to rise in time) while the Speed yellow replica is £100,000 and not likely to rise as much. The thing is, one of these 993 RSs is the real deal, the genuine icon, while the other never will be. It's a pretender, though it will show you just as good a time, only in a different kind of way. Many will argue the replica is now likely to see more spirited road use, so it's a winner in its own way. **911**





CARRERA 3.0 RS

V E R S U S

RSR

Developed for competition, their three-litre flat sixes would also be the basis of the 911 Turbo – but how does the road-legal RS compare to the race-only RSR?

Written by **Lee Sibley & Kieron Fennelly**
Photography by **Daniel Pullen**



The afternoon skies above are covered with a thick coating of cloud, their heavily saturated underbellies providing a dramatic setting over the Circuit d'Abbeville. The rain holds off though, skirting around the track and, in miraculous fashion, dumping itself rather spectacularly onto northern France's flat plains in the distance.

We're lucky, because a dry track is very much needed for today's test of some £3 million worth of classic Porsche 911s. Our illustrious pair in question hail from 1974, the first year of the Porsche impact bumper. Their engine capacities are 3.0 litres, the biggest of any 911 of the time and more than the rest of the range, which had only just evolved into 2.7 litres. These are no ordinary 911s though. Built for racing, the white car with gold 'Carrera' decals has the letters 'RS' emblazoned beneath a huge whaletail

on its decklid, the Henninger brewery-liveried car next to it sporting the outrageously wide and vented body of the competition-only RSR.

Symbolising the pinnacle of Porsche's road and race pedigree in 1974, these cars began a rich history in forming the basis for the 911 Turbo, and a period in which Porsche would go on to dominate competitions right around the planet. This was a pivotal moment in the Neunelfer's history – and today we're going to compare how they drive.

First, some background. The 2.7 RS turned out to be an unexpected retail success, but Porsche's intention behind the original 500 built in 1972 was to enable homologation of a Group 4 competition version. Some 55 RSs were taken from the line and converted by Werk 1 to full-blown racers. Bored out to 92mm to make 2,807cc, the RSR was the first flat six to reach 300 horsepower and won the Daytona

24 Hours in 1973 before its homologation papers had even been completed. More wins followed during that year, but the 2.8 RSR was short-lived – in September 1973 the impact-bumper 911 was launched, so it was no longer based on current production.

Once again Porsche built a road-going RS model, the 3.0 RS, for homologation. However, as the company managed to have the 3.0 RS classified as a continuation rather than a new model, the homologation minimum was only 100 units; 109 were built. The engine was comprehensively reworked: the 2,993cc capacity was achieved by taking the bore to 95mm, while the crankcase was now made of aluminium rather than the more fragile magnesium that Porsche had long favoured for competition engines. Rods and crankshafts were tested to racing standards and special pistons contributed to a 9.8:1 compression ratio. With single-plug ignition and



mechanical fuel injection, this street version delivered 230bhp at 6,200rpm and 277Nm at 5,000rpm. The specification included a lightened flywheel, an external oil radiator and a limited-slip differential, although the stock 911 exhaust system was used. Revisions to the suspension involved thicker rear trailing arms and the torsion bar anchored by solid bushing. 18mm anti-roll bars front and rear were now adjustable, as were the front struts. On 15-inch wheels were 215 section front and 235 rear tyres. Brakes were essentially those of the 917 racer.

The body, like the 2.7 RS, had thinner steel panels and lighter glass. Its plastic bumpers were shaped to replicate the impact bumpers of the production 911s, while its rear wheel arches were flared. Two rear spoilers were supplied with each RS 3.0 – the rigid ducktail and, because the German highway authority had objected to this, the rubber-edged whaletail which, because it was less likely to hurt a pedestrian, had been approved for road use. Most RS 3.0s were finished in Grand Prix white with black edging, although a wide variety of shades were available. For example, there are just six right-hand-drive RS 3.0s, and they are all finished in a different colour. The cabin was almost identical to the 'lightweight' RS 2.7, with black felt covering metal surfaces. A 10,000rpm rev counter and absence of clock were the main

changes from the standard 911 instrument panel, and provisions were made for installation of a roll bar.

At the time Porsche was thought very clever to have negotiated a minimum build of 100 when a normal homologation norm would have been 1,000 units. In 1974 the OPEC boycott slowed Western economies and pushed up petrol prices so dramatically that governments everywhere imposed draconian speed limits. Fortunately the German restrictions at least were soon lifted, but the market for fast cars suffered – 911 sales were down 30 per cent. In retrospect it is a pity, if understandable, that more RS 3.0s were not made.

That basis for racing was of course turned into the 3.0 RSR. Clients who had already shelled out DM 65,000 for the RS now paid over half as much again for Werk 1 to transform the RS into a pukka Group 4 competitor. This was the most dramatic-looking 911 yet, and sales began promisingly when Roger Penske ordered 15 cars for his International Race of Champions. A brilliant innovation which had Formula 1 stars competing against the best American racers in equal cars, the four-race series was broadcast on US television. Appropriately the winner was Mark Donohue, on whose recommendation Penske had selected Porsche rather than a home-grown make in the first place.

The essence of the RSR was its flat six: extracting massive – by the standards of the time – and above all reliable horsepower from an engine it had been developing steadily for a decade was Porsche's great strength. The three-litre was tuned to an impressive 330bhp at 8,000rpm, with torque measured at 315Nm. Much of the componentry of the RS engine was unchanged. The major differences for the RSR were twin-plug ignition and valves with polished ports; instead of the stock camshaft of the road car the old Carrera Six's four-bearing higher lift cams were used. A second oil filter was also installed.

Breathing was also different – instead of an air filter the RSR ingested air through six trumpets and exhaled through twin-pipe exhausts unencumbered by silencers, which came together under the engine. A Fichtel & Sachs sintered-metal clutch took the drive to the 915 gearbox. Magnesium wheels were 15-inch with centre-lock hubs. Behind them were 917 brakes, and the suspension was largely that of the 3.0 RS, Delrin bushing at the front providing more precise geometry.

On the track the Group 4 RSR immediately sustained Porsche's competitive record, winning the FIA GT Cup for Zuffenhausen. Third overall at Watkins Glen and fourth at Spa against much faster prototypes were impressive results. John Fitzpatrick



Carrera 3.0 RS 1974

Engine
2,994cc
9.8:1
230hp @ 6,200rpm
277Nm @ 5,000rpm

Suspension

Independent; MacPherson strut; telescopic damper; torsion bar



Independent; semi-trailing arm; telescopic damper; torsion bar

Wheels & tyres

8x15-inch; 215/60/VR15
9x15-inch; 235/60/VR15

Dimensions

4,135mm
1,680mm
930kg

Performance

5.3 seconds
152mph

Model

Year

Capacity

Compression ratio

Maximum power

Maximum torque

Front

Rear

Front

Rear

Length

Width

Weight

0-62mph

Top speed

Carrera 3.0 RSR 1974

Engine
2,994cc
10.3:1
330hp @ 8,000rpm
313Nm @ 6,500rpm

Suspension

Independent; wishbones; MacPherson struts; longitudinal torsion bars; double-action shock absorbers

Independent; semi-trailing arms; transverse torsion bars; double-action shock absorbers

Wheels & tyres

9x15-inch; 230/600-15
11x15-inch; 260/600-15

Dimensions

4,235mm
1,896mm
900kg

Performance

Not tested
Not tested





History of the Henninger RSR

Chassis number 911 560 9123 is registered as a 1975 911 Carrera IROC RSR, thought to be one of the last RSRs made by the factory – no other examples have been documented with later VINs.

According to Porsche records the car was sold in January 1975 to a New York dealer. Finished in Grand Prix Weiss (R4 code) and delivered in race trim (code M491), it was then owned and raced by Ludwig Heimrath, a Canadian racing driver with German origins. As far as the historical inquiry goes, Mr Heimrath worked at the Porsche factory before leaving the country for Canada. Heimrath raced this car in the 1975 Camel GT series with considerable success. Heimrath was supported by the German beer maker, Henninger, which is the livery the car sports today.

After a crash at the end of 1975 the original shell – minus engine and gearbox – was sent back to the factory for repair. The factory also sent a replacement chassis (006-0024), which was raced with the original engine and gearbox from 9123 until 1977. Chassis 9123 was eventually sent back to Heimrath, but as he was busy racing in the replacement RSR, the chassis was sold in 1980, going on to trade hands several times until 1988, by which time the rolling chassis was found in weeds outside a workshop and in need of restoration.

With the restoration and mechanical build completed in January 1991, the car went racing once again, winning races in the Porsche Club of America racing series. The car was raced until 1996, at which time the owner retired from driving and the car was placed in storage until restoration in 2004. Its owner at the time, Gary Quast, tracked down the original engine and gearbox and installed it into the car.

In 2004 the car came to Europe, residing in Brussels, where it stays today. Displayed for almost a year in the Porsche Museum in 2013, the car has also been raced all over Europe and is maintained by 911 Motorsport, a leading historic car maintenance concern.



ABOVE Whale tail would later find its way onto the 930 3.0, though RS 3.0's was wider



ABOVE Steering wheel is taken from the 2.7 Carrera road car, but note the omission of the clock from the far right dial behind



BELOW The 3.0 RS is a far superior Rennsport than the 2.7 RS, displaying a much better natural balance on track



drove both Loos- and Kremer-entered RSRs to win the European GT championship, and the RSR also took the European Hillclimb and several national championships. The drivers liked it; Toine Hezemans, who drove for Georg Loos, said of the RSR: "It was brilliant, so balanced. It always finished. I was fifth at Le Mans and had two wins and two seconds in the rest of that season. It was my favourite race car, even more than the BMW 3.0 CSL."

Like its 2.8 forebear, the 3.0 RSR's career was short. Having launched – and homologated – the 930 Turbo for 1976, Porsche was working hard on the blown competition 911, the fearsome and intimidating 934. The 3.0 RSR would remain the most powerful naturally aspirated 911 until the 964 RSR in 1993, its place in Porsche history assured. But what's it like to pilot, and how does it differ from the Carrera RS 3.0?

Back in Abbeville the Carrera 3.0 RS has been fired up and is warming through nicely on tickover. As a road car it has two seats inside, the rears being deleted, and so we take a pew alongside Johan Dirickx, owner of the two cars in question, who's affixing his helmet and fastening his seatbelt. Pretty soon we're ready to rock.

Heading out onto the 2.3-kilometre track, we steal an early impression of the 3.0 RS: it's pretty bare inside, though there is carpeting, door cards and

glass windows. It's fairly loud but not unbearable, that familiar, low-frequency bellow of the 911/77 flat six permeating into the cabin as Johan starts to hang on to the revs.

What's immediately evident is how much better the 3.0 RS is over a 2.7 RS. As regular readers may recall from our 2.7 v 3.0 RS test in 2016, the 3.0 RS feels like an entirely different animal to its original Rennsport predecessor. Benefitting from a greater surge in power lower down the rev range, the 3.0 RS doesn't hang around, displaying a wonderful linearity in the way it delivers its power right up to the 7,200rpm redline. However, its chassis is its crowning glory. Benefitting from a wider track, stiffer suspension and better brakes, it's quick to instil real confidence on the limit. Push all you like, the 3.0 RS remains so wonderfully composed, with little diving of the nose under braking or falling back so wildly onto its haunches under acceleration like you'd get in the 2.7 RS.

Today, from the passenger seat, those recollections have come flooding back as Johan glides the RS around the flowing corners at Abbeville. He's pushing hard but the car just sticks to the tarmac, monsterring the circuit with the conviction of a car much younger than its 44 years of age. The 3.0 RS really does excel in the way it handles. Easing off the gas for a cool-

down lap, Johan is able to impart his own verdict. He too says the three-litre is a nicer car to drive than the 2.7 RS: "It has more torque, a more solid power delivery and it was built as a basis for racing, so the chassis is so much better," he says, shouting over the bassy note of the flat six.

Returning to the pits, it's time to swap RS for RSR. Johan's team has already done a fine job of coaxing the car into life and warming it through, the process more comprehensive than the RS road car, blipping the throttle and incrementally raising the revs until the car reaches peak temperature. Its sound with each blip is wild – we can hear it over the 3.0 RS before we've even climbed out of it.

Inside the RSR, there's no mistaking its race car credentials. There are no relative luxuries like carpet or roof lining now, replaced with a more consummate cage including door bars and, well, that's about it. "It's a completely different animal," Johan says, unable to hide the wry smile spreading across his face. As we're about to find out, if the 3.0 RS is an evolution of the 2.7 RS before it, then the RSR is a quantum leap over the 3.0 RS.

Rumbling back out onto the track the RSR is a little lumpy, it not liking running at such low revs. The engine splutters a little. The ride is harsh. And never mind sound deadening: the stones flicking

up into the wheel arches from those sticky Michelin tyres as we hunt for the racing line draws audible comparisons to what I imagine it's like sheltering under a plastic bag in a hailstorm. This is going to be interesting. All of that is about to change, though... with a clear track ahead Johan buries the throttle in second gear, and all hell is let positively loose.

First, the noise: a higher timbre than the Carrera RS, the roar emitted from the RSR's exhaust pipes builds quickly to a screaming crescendo before snarling and chattering violently on the over-run. Then Johan turns in and the RSR darts across the tarmac, its conviction and willingness to do so absolutely staggering for a car of such vintage. Balancing the gas into the apex, Johan then brings in the power, quickly followed by several inputs at the wheel to control the car's tail. Despite those huge Michelin Classic Racing tyres the car's rear just wants to spit us out of each turn sideways, and Johan has to be properly 'on it' to keep it happy. As he tells me later: "To be fastest you have to drive it on the rear axle – that is, no guiding it into the apex and then getting on the power, but hustling into the turn, hitting the apex and managing the drift under full power on the way out."

Its weightlessness means this is a car determined to fight you all the way, but it's so rewarding to pedal as a result. Its twin-spark engine is nothing short of ferocious, the power delivery brutal, its durability unrelenting right through the rev range. "It's a beauty to drive," Johan says afterwards, visibly exhausted from the workout. Its chassis too is intrinsically communicative, far more so than even some modern

911 machinery. It gives a beautiful predictability to the RSR – which is needed if you're to have any chance of driving it fast and keeping it under control.

The RSR is a notable step up from the Carrera RS. It's more aggressive and uncompromising in every single way, from its footprint, to its weightlessness, to its power delivery. The differences between the two are stark, the RSR doing an unbelievable job in making the 3.0 RS look somewhat tame by comparison. You could argue that gap is still evident in Porsche's line-up today; though the 991.2 GT3 RS is now closer than ever to being a 'Cup car with licence plates', as factory driver Nick Tandy once proclaimed to us, it remains a far cry from the works RSR he campaigns in the IMSA.

Finishing up, we place the two cars side-by-side in the pit garage and retire for the day. It's been a revelation. Who knew that two cars so intrinsically linked could be so unfathomably different? With few road rivals the 3.0 RS is one of the most exquisite 911s of its time, a benchmark not really usurped in Porsche circles until the 964 RS some 18 years later.

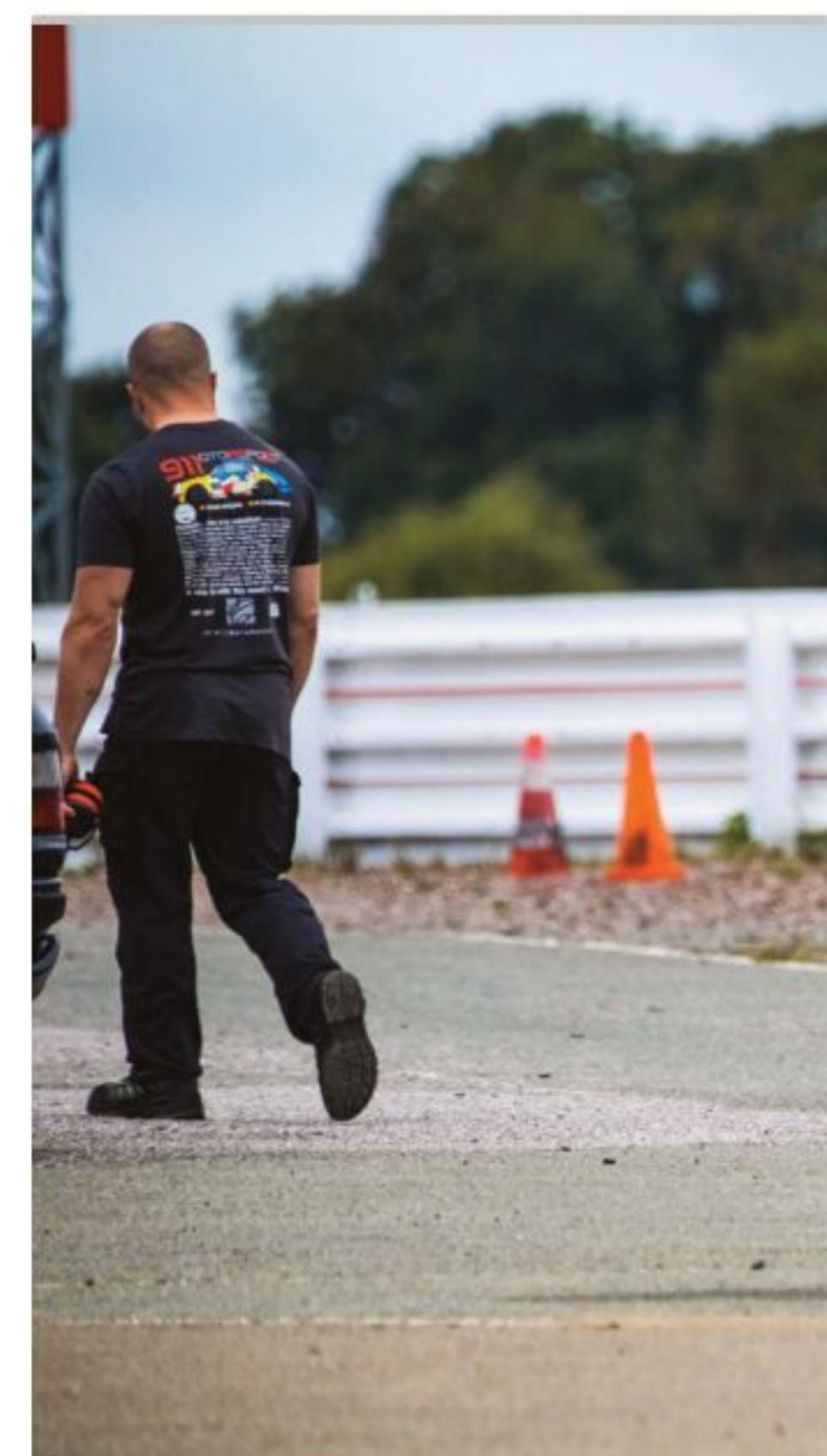
The 3.0 RSR's racing legacy was much too short-lived, it hiding in the shadow of the mighty Turbo cars which Porsche brought to the fore a year later, but its drive should not be underestimated as one of the most visceral of the 911's entire history. It might only be one letter, but that final 'R' hung onto the end of 'RS' gives rise to a whole new echelon of excellence in Porsche performance. **911**

Thanks

Thanks to Johan Dirickx of the JFD Collection for supplying the cars for our test.



ABOVE 911 Motorsport technicians complete final checks on the RSR prior to our excursion on track



“If the 3.0 RS is an evolution of the 2.7 RS before it, then the RSR is a quantum leap over the 3.0 RS”



ABOVE Gargantuan 3.0 RSR is wider than a 991-generation Turbo





RENNSPORT MASTERS

As the current epitome of Rennsport, the 997 GT3 RS offers the purest form of modern Porsche 911 exhilaration. But is the second generation a marked improvement on the first?

Written by **Tony McGuinness** Photography by **Andrew Tipping**



The heat vapour is clearly visible, rising off the black tarmac and dissipating into the air on the desolate Southern California mountain road. It is typically cool in this part of the Temecula Valley, 45 minutes north-east of San Diego, but the day is an abnormally scorching affair, with temperatures hitting 96 degrees Fahrenheit. Among the sintering heat, two of Porsche's finest 911s ever to grace the planet are on a mission and engaged in a duel: like the legendary gunslingers of the old west, Billy the Kid and Jesse James, these modern-day legends are going head to head to see which generation of the 997 GT3 RS is the most electrifying to drive.

Aided by exceptional aerodynamics, both cars have speed and power delivery in abundance, with their stripped-back and cut-throat nature making for one of the purest forms of road-legal driving, such is the moniker of a 911 RS. Where lesser models would find such an environment exhausting, here corners are attacked with aplomb. These two differing 997-generation GT3 RSs are as at home on these mountainous roads as they would be on a race track – which, of course, they were essentially designed for. Both Rennsports jockey for position and exchange leads from ➔

Rennsport showdown

the front several times as the howling of the high-revving 'Metzger sixes' resonates. If ever there was an example of heavenly driving, this was it.

The mere mention of 'GT3 RS' ensures 'pinnacle of the 911' is on the cusp of most driving enthusiasts' lips. It doesn't get any better – it's a purist car by every definition. By driving or owning one you are experiencing a piece of road-going Porsche racing heritage that is arguably not found with any other manufacturer. The GT3 RS models are exclusive machines, inspiring and leaving you in awe. They are breathtakingly beautiful and staggeringly functional in every sense of the word.

Unlike other 911s, these two naturally aspirated Rennsports are built by the Porsche Motorsport division, the same group that for many years manufactured 911 Cup cars, the RSRs, and even the RS Spyder. Racing is in their DNA.

The RS lineage dates back far with the 911, starting with the introduction of the 1973 Carrera RS. When water-cooling reached the 911 in 1999, Andreas Preuninger and Porsche soon introduced the new RS in 996 GT3 form to great acclaim. With the subsequent introduction of the 997 Gen1 GT3 RS in 2006, the change from the 996 GT3 RS was a substantial evolution of the new RS moniker. The 997.1 GT3 RS – with its wide Carrera 4 body – had purists drooling. While the Gen1 997 was well received, Porsche was struck by comments from customers that the GT3 RS did not offer considerably more performance over the standard 997.1 GT3. On paper at least, the RS only offered a quicker sprint to 62mph by 0.1 seconds over the GT3, while the official weight saving of just 20kg was noted as somewhat paltry.

The 997.1 GT3 RS is no slouch, but Porsche clearly listened to its customers and set about





ensuring vast improvements for the 3.8-litre 997.2 GT3 RS. Duly arriving in 2010, performance was markedly improved above and beyond that of its new GT3 brethren of the same generation.

Four years of manufacturing separate the two 997 GT3 RSs in our pictures (the Gen1 rolled off the production line in 2007, the Gen2 in 2011), but they are different. The changes from Gen 1 to Gen2 are, in Porsche terminology, evolutionary rather than revolutionary. However, there are stark differences. What is immediately noticeable is the magnificent larger, carbon fibre rear wing on the Gen2 supported by forged aircraft aluminium struts. Although neither are subtle, the wing of the Gen2 is certainly more pronounced than the Gen1, helping the 997.2 to create the same amount of downforce at 100mph as the 997.1 does at 190mph.

Other evolutions include the revision of the front fenders of the Gen2, which are now



“As the RS nears 8,500rpm,
the engine noise pulsates
through your body”

	997.2 GT3 RS (2011)	Model Year	997.1 GT3 RS (2007)	
	3,800cc 12.2:1 450bhp @ 7,900rpm 430Nm @ 6,750rpm Six-speed manual	Engine Capacity Compression ratio Maximum power Maximum torque Transmission	3,600cc 12.0:1 415bhp @ 7,600rpm 405Nm @ 5,500rpm Six-speed manual	
	Independent MacPherson struts; Independent multi-link	Suspension Front Rear	Independent MacPherson struts; Independent multi-link	
	9x19-inch centre-locking alloys; 245/35/ZR19 12x19-inch centre-locking alloys; 325/30/ZR19	Wheels & tyres Front Rear	8.5x19-inch five stud alloys; 235/35/ZR19 12x19-inch five stud alloys; 305/30/ZR19	
	4,460mm 1,852mm 1,370kg	Dimensions Length Width Weight	4,445mm 1,852mm 1,375kg	
	4.0 secs 192mph	Performance 0-62mph Top speed	4.2 secs 187mph	



“The GT3 RS feels
edgy and **alive**.
What more could you want?”



Unlike their European counterparts, the rear windows in both cars are real glass – not plexiglass – to satisfy US laws

26mm wider to accommodate its larger front tyres. Also redesigned in the Gen2 are larger front air intakes and outtakes: they suck in air and push it out again with the utmost efficiency, while the wire mesh covering these openings provides protection to the internal workings in the front. The front splitter on the Gen2 is also larger and more aerodynamic, again contributing to the 997.2's nous for downforce. Despite its racing pedigree, the GT3 RS retains the 911 spirit of being the everyday supercar, further exemplified by a front lift kit fitted to the Gen2, yet missing from the Gen1. The push of a button inside the cabin raises the front just enough to prevent scraping on driveways and ramps that are not drastically sloped. First available on the Gen2, this is an option that's well worth the money to protect the front of your Rennsport 911. Another interesting observation is the side mirrors of the Gen2, which were made bigger to satisfy EU safety laws.

As well as a boost in engine capacity from 3,600cc in the Gen1 to 3,800cc, the jump in power from 415bhp to 450bhp isn't the only engine-based improvement. The all-new dynamic engine mounts on the Gen2 model minimise oscillations and vibrations of the drivetrain, helping you take corners more precisely. The tailpipes are titanium and the single-mass flywheel is lighter in the later variant, as the redline is increased by 100rpm to 8,500rpm. Twinned with the boost in performance are weight-saving improvements in the Gen2, like a lightweight lithium ion battery that saves

22 pounds over the Gen1. This means the later RS is five kilograms lighter than its 997 GT3 RS counterpart.

The stats suggest vast improvements in the second instalment of the 997 GT3 RS, but how does this translate behind the wheel? After all, both cars remind you that they are primarily race cars, and in racing, even the most minute technical improvement can lead to substantial performance gains. So is the Gen2 much better than the Gen1?

I climb in the cockpit of the splendidly outfitted Gen1, with original orange wheels painted black to show off the yellow PCCB brakes nicely. A clear bar has been installed on the front bonnet to repel stones and other shrapnel. Besides this, the car is straight out of the Weissach factory. I take in the view inside. It doesn't have the cloth straps installed on the Gen2, but the orange door handles are striking nevertheless. Moreover, carbon fibre inserts throughout the interior and door sills are well placed, and provide quality craftsmanship.

The Porsche adaptive sport seats are beautiful with Alcantara inlays, which is also present on the roof of the cabin, and a rich, soft leather dashboard with deviating stitching sets off the whole car. The rear wing sits low and does not obstruct the rear window. Glance over your shoulder, and you'll see the 'RS' badge where the seats would be in a 911 Carrera. The purposeful interior means you can't help but feel excited as you fire up the engine.

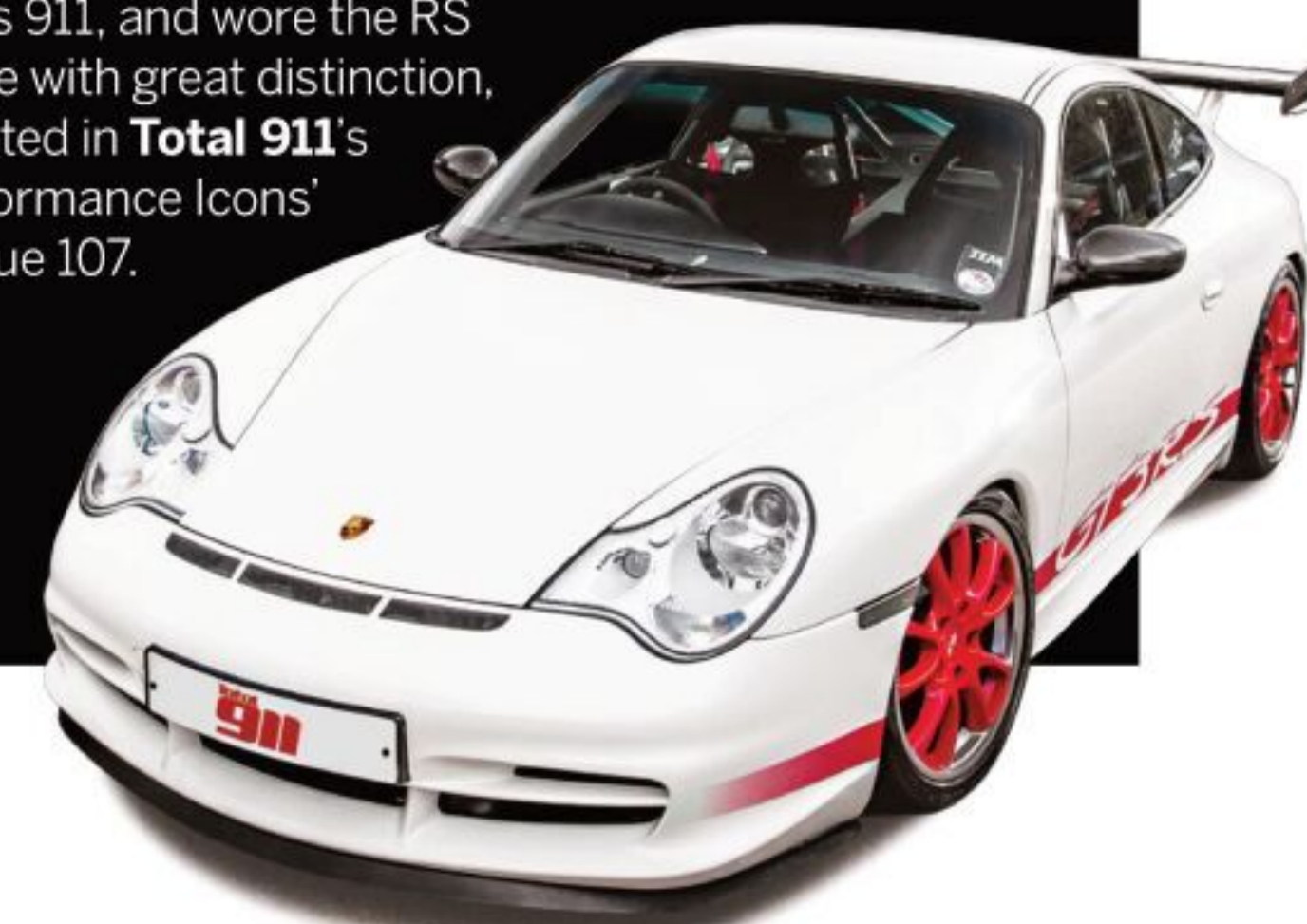
Piloting this beautiful Gen1 out in to the hills, I am struck by its raw feeling. I accelerate onto the deserted road which, unfortunately for me, ➔

996 GT3 RS: dawn of water-cooled RS

In 2003, the predecessor of the current 997 GT3 RS was introduced. The 996 GT3 RS was Porsche's first water-cooled RS, which trimmed 50kg from the 996 GT3 Clubsport models. Available in white with either blue or red decals, side stripes and matching colour-coded wheels, the 996 GT3 RS utilised a 3.6-litre M96/79 powerplant taken from the narrow-bodied 996 GT3, producing 381bhp at 7,400rpm before shooting on to a top speed of 190mph. Later, the 996's sublime engine was to be utilised in the Gen1 997 GT3 RS, albeit with some reworking.

The 996 GT3 RS featured carbon body parts, which were replicated by the 997 variant, although the carbon front bootlid on the 996 was replaced by an alloy item in the Gen1 997. In true RS weight-saving form, the Porsche crest on the front bootlid was actually a sticker, later replaced with a standard metal-oriented emblem on the 997 Gen1 and Gen2 RS variants. Crucially for track enthusiasts, the 996 GT3 RS came with PCCB as standard, reduced to an option for the 997.

Although road legal, the ride of the 996 GT3 RS was deemed incredibly harsh for anything other than a track. The lessons learned from the first water-cooled RS had a great impact on the development of the 997 GT3 RS, including increased power, comfort, aerodynamics and safety. Not sold in the US or Canada, the 996 GT3 RS was the perfect swansong for the 996 series 911, and wore the RS badge with great distinction, as noted in **Total 911's** 'Performance Icons' in issue 107.





Retailing at £94,000 when new, the first 997 GT3RS had a refined cabin, though a rollcage and cloth bucket seats were options



997.1 V 997.2 GT3 RS



Differences in the dash and doorcards mark this 997.2 out as more hardcore. Note the transmission: is this the last manual RS?



becomes quite bumpy. This isn't something you would necessarily feel in a standard 911, but the stiff chassis communicates that it would prefer to be on smooth tarmac. After a few bone-jarring hiccups, the road becomes smoother. Immediately, I am dealt a left-handed sweeper. I downshift and blip the throttle, hearing a throaty exhaust note from the flat six. The turn-in is crisp and razor sharp. Just before the halfway point, the nose starts to go a little light, and I can feel understeer, which sends adrenaline flowing through my veins. It feels edgy and alive, and wants to challenge you.

Unwinding the steering wheel and exploding out of the turn, the Gen1 regains its composure. Within seconds I shoot into a

right-handed hairpin. Just as I start to feel more confident, the rear end twitches. It wants to swing out as the huge, semi-slick rear tyres try to dance away from me. I am forced to bring it in with careful corrections. Clearly, this GT3 RS has the devil in it, and tells you so. I exit the hairpin quickly and with much more confidence.

However, as I dip into another sweeping left-handed corner, once again the nose starts to lift and understeer requires correction. As I do so, the back wants to push out. The feeling is one of exhilaration as I make slight inputs and corrections to bring her back in; she settles nicely and is once again balanced. But driving this car this hard isn't for the novice; I am required to be

totally involved, alert and focused. It needs you to listen to it and coax it. Tell it what you want it to do and deliver the right inputs, and you will be rewarded. The experience is hair-raising and exhilarating. This is exactly what you require in a car of this magnitude. On the return leg back to where the Gen2 is waiting, I feel excited and drained in equal measure. Surely that was the ultimate in road-going flat-six thrills?

Climbing into the 997.2 GT3 RS, I notice it's not too dissimilar to the 997.1. There are slight upgrades in the dashboard layout carried over from the facelifted 997 Carrera, and although the adaptive sports seats in the Gen2 are the same as the Gen1, the Gen2 seems more refined



GT3 RS running costs

Ownership of any 911 comes at a price, although these are substantially increased with a 911 of such high motorsporting calibre. Although you'll be covered by a warranty when purchasing from new (usually two years in Britain with the option of the third, or four years/50,000 miles in the US), what this warranty doesn't cover is standard maintenance including fuel, tyres, and typical wear and tear.

Because this Rennsport demands to be driven in a spirited manner, fuel replenishment is obviously required with astonishing frequency. The Gen2 comes factory-equipped with the specially designed Michelin Pilot Sport

Cup Tyres, which are incredibly sticky yet very soft, coming with only 3mm of tread. On the street with spirited driving, the tyres – costing around £250 per corner – could last for 3,000 miles (the wider rear tyres tend to wear out faster with engine load, of course). Also, due to the sticky nature of these tyres when warmed up, they can pick up metal road hazards easily, so require replacing much sooner. The Gen2 in our pictures has covered just over 18,000 miles to date. The rear tyres have been changed four times, with the tyres on the front axle being replaced three times.

Other likely expenses on the GT3 RS include the replacement of the front splitter, which can take some

punishment on the road, even with the optional lift kit fitted. The 997 GT3 RS needs a service every year or 10,000 miles with an oil change, while the Gen2 here benefitted from an additional brake service while back at the OPC.

Ceramic brakes are a well-known yet worthwhile option for a 911 with track ambitions, although their incredible performance, lack of brake dust and longevity makes them extremely desirable. Available from £5,800 as a factory option on the Gen1 GT3 RS, if your GT3 RS has ceramics then expect a hefty bill when it's time for completely new brakes. Running a GT3 RS has significant costs but, for many, the rewards of driving one are well worth the price.

inside. This Gen2 doesn't have the optional leather outfitting from the Gen1, although in the context of what these cars are, I think it is a good thing. It is simply bare bones in comparison, with reduced noise insulation materials in the plastic dashboard and door panels. The orange door handles that were in the Gen1 are now thin red straps. While some people have called them a gimmick, this gives a distinct Cup car feel. It has a stereo and PCM system as per the Gen1, while both have air conditioning – which, by the way, is one option you should never want to be without. Deleting air-conditioning for the sake of weight saving just isn't worth it unless you are hell bent on extremely serious racing competition.

The thick Alcantara steering wheel has a sensational feel to it. Looking over my shoulder to the rear of the interior, the badge no longer merely saying 'RS', instead letting you know unapologetically that it's an 'RS 3.8'. I fire up the engine and notice how the rattle at idle of this powerplant is loud and mesmerising. It's a statement of intent: that very light single mass flywheel helps to give it a unique sound.

Taking the same course as with the Gen1, I dump the clutch and accelerate down the deserted, bumpy asphalt. The heavy clutch takes some getting used to, but feels great. Likewise, the short throw shifts are fast and precise. Gathering speed over the same bumps I encountered earlier,

I'm pleasantly surprised, as the car handles them less jarringly. The upgraded PASM suspension in the 997.2 deals with the bumps with little fuss, and my bones remain intact. Again, the ride isn't as smooth as a 911 Carrera, but these are race cars that happen to have a license plate. Heading into the left-handed sweeper, I downshift and blip the throttle as I prepare for the front end to become light and the car to move into understeer. I am ready to make corrections, but none are needed! The wider front track and revised front end virtually eliminate the lift experienced in the Gen1 GT3 RS. I power out of the corner and prepare for the back end to swing out and misbehave, but it doesn't happen. The larger



Rennsport showdown

wing and wider rear wheels with sticky Michelin Pilot Sport Cup tyres (specifically designed for this Gen2 997) ensure the back end is glued to the road. No loss of grip is experienced, and I am propelled out of the bend and onto the straight. The higher-capacity 3.8-litre flat six begins to wail, and my speed increases until I am forced to brake, the large ceramic brakes bleeding off the speed and preparing the car for entry into the right-handed hairpin turn. Here, I feel the confidence I didn't experience to the same degree in the Gen1. I can push this car much harder; it begs to be driven hard. Going into this tight switchback, I feel the G forces more, but again, the wider front end with those phenomenal Michelin Pilot Sport Cup tyres, lacking on the Gen1, provide the ability to

enter the corner with more speed and grip. As such, I don't fight with the car as much. While I make slight corrections, they aren't nearly what I needed to do on the Gen1. I begin my exit out of the corner earlier than I did with the Gen1. I can feel she wants to possibly swing out, but this car – unlike the Gen1 – has stability control to go with the traction control, ideal for wet surfaces. Sure, this car also has the devil in it, but it is kept more in check by the technological upgrades and significantly revised aerodynamics. I am catapulted out of the corner at blistering speed, again reminded of the car's more serious engine growl past 5,000rpm. Meanwhile, the noise in the cabin is the perfect blend of engagement without irritation. As it nears the 8,500rpm redline, the

engine noise in the cabin pulsates through my body. I reach the next dipping, sweeping left-hander, where the ceramic brakes bite hard and shed speed, yet my entry into the corner is significantly faster than the Gen1. This time I feel a little hint of lift, and slight understeer starts to occur, but with gentle corrections and throttle inputs it is insignificant. Again, the car feels more balanced and planted when near the limit. By now, the warmed-up Sport Cup tyres are in even more love with the road, and don't want to let go. I am propelled out of the corner with only a bit of twitching in the back end. Exploding down the final straight, the RS screams at redline. As I bring the 997.2 GT3 RS back to base alongside the 997.1, I am filled with conflicting thoughts.



When you begin driving these cars, initially it isn't easy to detect differences between the two. From a standing start, the Gen1 in first gear seems quicker than the Gen2. The Gen1 wing provides a virtually unconstructive view from the driver's seat, while the rear wing on the Gen2 largely forces you to rely on your side mirrors. However, pushing the cars begins to reveal the contrasting features of these machines. Steering in both RSs feel direct and tight when turning into corners, although the Gen1 does feel lighter in the front. You have to work with it more than the Gen2, and it requires intense focus, which in itself is gratifying yet slightly unnerving. The clutch on the Gen1 is not as heavy, and is easy to adapt to. While the clutch on the second-generation car is heavy, the

shifting in both cars provides an abundance of mechanical feel. The wheels are a standout difference on the Gen2, where centre-lock wheels fitted with Michelin Pilot Sport Cup tyres provide extra sticky grip, and when warmed up won't betray you. The larger contact patch the Gen2 has over the Gen1 with its wider tyres is no small difference here. Yes, it is fun to let the back end loose, but on the track or street that extra grip is meaningful. It allows you to push the 997.2 harder, as you know it is firmly planted, and you can feel the limit is extended over the 997.1. Likewise, stability control, which brakes each individual wheel thanks to information from sensors, is helpful in the later variant, and does not take away from the performance and excitement. If anything, it gives

you the confidence to push its limits harder. The Gen1 ticks all the boxes in terms of thrills: it can be scary, and can taunt and excite you. Not having the revised technological changes of the Gen2 isn't necessarily a bad thing either, making it different and challenging in a very special way. In fact, depending on your driving habits and preferences, it is hard to criticise what, in effect, are two perfect cars in their own right. The reality, though, is that Porsche brought out a second generation of the 997 GT3 RS to improve on the previous model. They made the 997.2 lighter, faster, and more aerodynamic. It gives you the thrills, excitement and adrenaline rush of the Gen1, while communicating better. Make no mistake, the 997.1 is a great car, but the 997.2 is even better. **911**



“This is an exemplary
Rennsport
package”



Modified & Motorsport

Generations of Rennsport in its most exhilarating form

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Its looks are evocative of the revered '70s Rennsports, but can this be matched by the performance?

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Aside from the GT2 RS, this is the only turbocharged Rennsporti made – we reveal its stunning story

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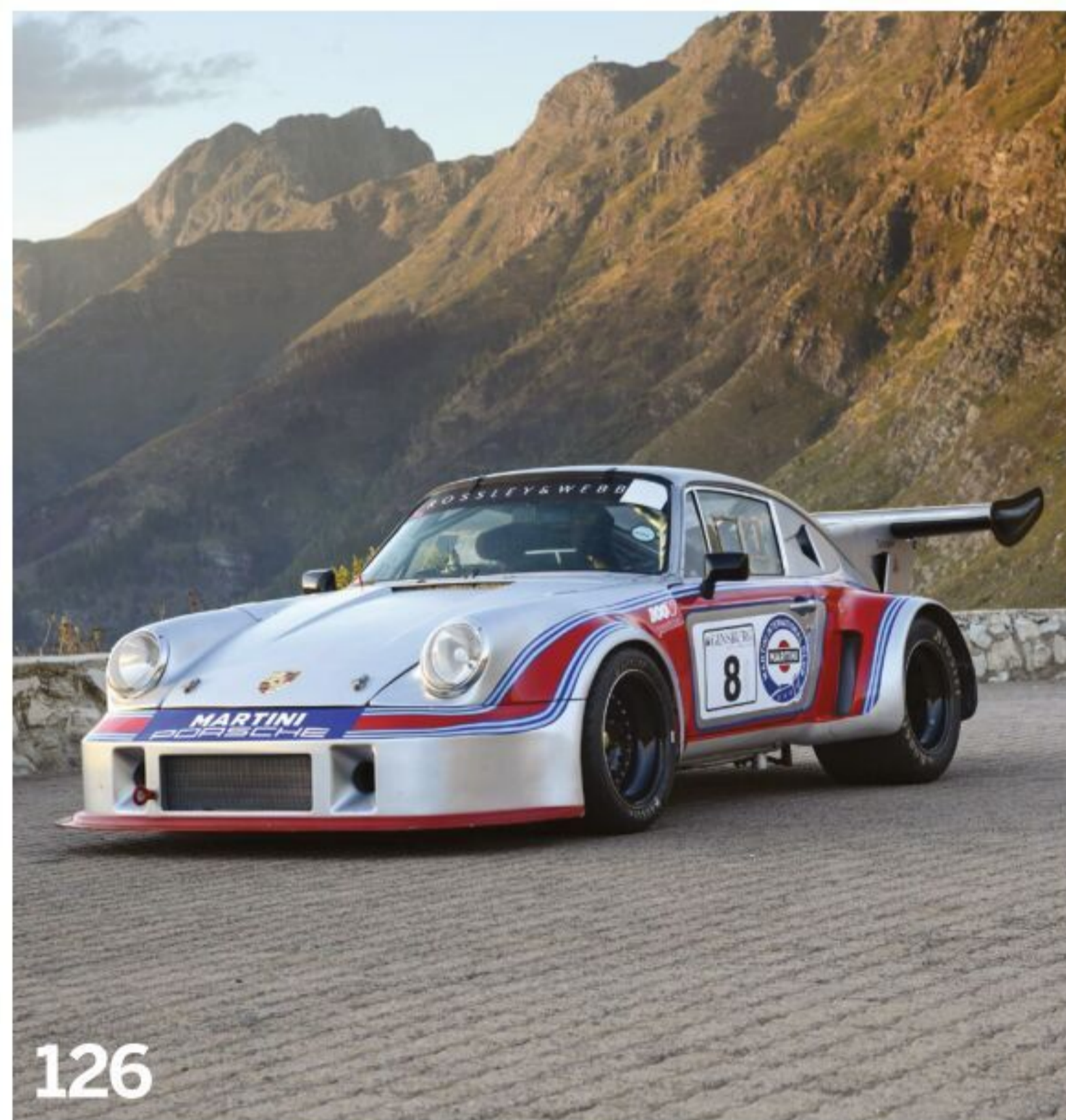
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154 993 RSR

The 1990s was a fascinating year for GT racing, as we discover with a drive in this ultimate 993





CARRERA R^{TO}SR

A GT3 RSR is the pinnacle of 997 performance, reserved exclusively for the race track – or is it?

Written by **Joe Williams** Photography by **Daniel Pullen**



Porsche's storied Rennsport programme is the stuff of automotive legend. A moniker conceived to take the company racing, it's since created a 60-year legacy of triumph on the world's most challenging stages. Victory on the race track has long bred success in the showroom too, and Porsche has no shortage of enthusiasts keen to indulge in the prowess of Weissach's race-bred engineering for their own 911, which comes courtesy of the company's acclaimed GT programme. The pinnacle for the road, as you well know, is the GT3 RS, best surmised as as damned near to a race car with licence plates as you can get.

Above the GT3 RS there's the track-only 911 RSR, sitting at the top of the Porsche performance pyramid. As we saw from our cover test of the Carrera RS 3.0 v RSR in issue 173, Porsche's RSR programme represents what the Editor described as a quantum leap in capabilities over a road-registered Rennsport. This is to be expected: a race car is built with the sole intention of going racing, with zero compromise for anything else besides. Superior to other Porsche race cars such as Cup and GT3 R 911s, an RSR is a top-level racer, driven by the best on world-class stages in the leading GT class. As such they are far removed from the aspirations of the everyday enthusiast.

That is, unless your name is Mark Cilani. His admiration for the ultimate 911 has led him to the purchase of his very own 997 GT3 RSR – albeit with some notable differences. For a start, the car has a licence plate attached to the rear PU, a rather conspicuous giveaway that this is an RSR destined for the motorway rather than the Mulsanne. The second and less blatant detail of note lies in its chassis number. If you know your numbers, you'll see this chassis didn't leave Porsche as a 997 RSR at all... what you're looking at actually began life as a 996.1 Carrera Cabriolet. We really have seen it all here at **Total 911**.

Mark has owned this striking RSR replica for two-and-a-half years, believed to be the only car of its kind in the world. "I love the look of the car. I love its sound. I love how it drives. I've always liked in-your-face cars and have an air-cooled 911 which is just as gnarly," he explains.

The story goes that the previous owner wanted an RSR-look 911 without the heinous running costs that inevitably come with such a machine. We're told he thus assembled an array of Porsche Motorsport parts where possible, though the body is a fibreglass affair courtesy of John Simone.

To begin with, the base car was completely stripped before a full Cup-style cage was installed, including joins to the shock mounts and chassis with full-width knee and door bars. Mounts and brackets for the air jack tubes were then incorporated into the car, which was bead blasted and then powder coated in white in true Porsche Motorsport fashion. The rear wheel arches were retubbed to accommodate wider race tyres in line with factory RSR specifications.

The car's suspension is largely made up of genuine Porsche Motorsport North America parts, from track rods to top mounts. Fully rose jointed, there are no rubber mounts left on the car. Its lower control arms are from Fabcar with Porsche Motorsport NA spherical ends, with five-hole adjustable Motorsport anti-roll bars with Tarret drop links. Sachs Cup car shocks and Eibach main and helper springs take care of damping. The three-piece BBS wheels pay homage to the original, centre-locking RSR monoblocks – these too are centre-locking, but have been machined to accommodate the 996's five-nut stud pattern. Behind them reside the original 996 Brembo brakes with Porterfied R4 racing pads.

Back in Mark's car den, we ask to see the engine. Although we're soon looking at the wet-sumped flat six of a 996 M96 rather than an RSR-spec engine, plenty of work has gone on here. The ➔



ABOVE With no expense spared, the original owner went to great lengths to mimic every single visual RSR detail possible on this project, thought to be the most extreme of its kind in the world



Model 996.1 Carrera Cabriolet to 997 GT3 RSR spec

Year 2000

Engine

Capacity 3,600cc

Compression ratio 11.3:1

Maximum power 320hp @ 6,100rpm

Maximum torque 340Nm @ 5,250rpm

Transmission Six-speed manual

Suspension

Front Independent; MacPherson strut; anti-roll bar

Rear Independent; Multi-link; anti-roll bar

Wheels & tyres

Front 8x18-inch Cup 2; 225/40/ZR18

Rear 10x18-inch Cup 2; 285/30/ZR18

Dimensions

Length 4,245mm

Width 1,795mm

Weight 1,232kg

Performance

0-62mph Not tested

Top speed Not tested



What does a real 997 GT3 RSR cost?

Of course not road legal, a genuine 911 RSR isn't even a suitable track-day companion: Weissach's ultimate Rennsport is therefore sought after by those who wish to take part in competitive motorsport. A 997 GT3 RSR in decent, useable condition is likely to cost from £200,000 for a vehicle without any significant provenance, though values vary greatly depending on condition of the car and hours used – race car engines and transmissions are measured in this way rather than miles covered. Cars with high provenance can fetch up to £500,000.

Indeed, comprehension of the hours since the last engine rebuild is critical for planning your costs going forward after purchase. An overhaul of the car's engine, transmission and suspension, for example, can set you back another six figures. Also note that some earlier 997 RSRs (2007 to 2008) may have been upgraded to later 997 RSR specification (2012 to 2013), including aerodynamic revisions as well as updates to the MOTEC system. Some have also been updated to paddle shift, which was introduced in 2011, so be sure to properly investigate the specification of the car as it may affect which championship you can race in. In any event you should speak to known race teams, who may be able to impart additional information on the car.



“What you're looking at actually began life as a 996.1 Carrera Cabriolet”



3.4-litre engine has been re-sleeved to 3.6-litre specification, which Mark believes was done by 9xx Motors. The work includes new JE pistons and rings, Carillo con rods plus high-performance valve springs. The headers are stainless steel, with a Porsche Cup centre-exit muffler. This being an M96 engine with its associated risks, the car has an updated IMS and Bilt Racing deep-sump oil pan with baffle, with Porsche oil pick-ups to ensure no oil starvation should super-sticky track rubber ever be fitted to this comprehensive RSR reincarnation.

RSS supplied the underdrive pulley and engine mounts, the power-steering pump was deleted and the clutch and lightweight flywheel were balanced to help make shifts up and down the gearbox smoother. The gearbox itself is still the H-patterned, G96 six-speed manual as found in the 996, with a few upgrades including a raised shifter base for ease-of-use, Numeric Racing shift cables, RSS mounts and a Sachs racing pressure plate. It's enough to give a subtle boost in performance without incorporating substantial running costs. In true RSR style, a centre-mounted clock resides in



ABOVE It may have come at a hefty cost to turn this 996 Cabriolet into a 997 RSR clone, but it's still cheaper than buying the real thing



the engine bay to track the engine's hours of use. Showing '70' at the time of writing, it's Mark's own memory box of sorts – any occasion at the wheel of such an outlandish 911 is likely out of the ordinary.

The race car conversion continues inside. Stripped down to its white paint, the interior comprises a Recaro halo seat with Schroth six-point belts, Simpson centre and window nets, and a Momo Mod. 07 wheel with, of course, quick release. As for electrics, a complete overhaul comprising the removal of the entirety of the old system took place, with all unwanted or unnecessary circuits removed to lighten the harness as much as possible. A Motec Club dashboard system has been housed in the carbon 997 dashboard, it programmed to talk to the car's stock ECU.

Back to that body. Made up of 19 pieces, all can be removed back down to the original chassis. Aside from the fibreglass roof, front and rear PUs, this reborn 997 features extensive carbon fibre: the lightweight doors are made from it, as are the rear wing, diffuser and Cup-style exterior mirrors. It's not all for show either: two NACA ducts in the

hood supply an air feed to the driver, while carbon inlets at the front feed air to all three radiators.

Window glass has been removed all round, replaced with plexi, though there's no window whatsoever in the doors. A lightweight battery and two high-output Motorsport headlights complete the tantalising spec of this unique 911 racer. With little expense spared, the project to build this was scheduled to last two years. It took five.

Swinging the driver's door open, it's near weightless in my hand. Climbing over the door bars and into the Nomex Recaro seat, it's hard not to believe you're in a genuine RSR. Starting the car up emits a loud bark from those centre-exit tailpipes. There's plenty of theatre to the noise, enough to match the car's extroverted appearance, though it's clearly not a Motorsport engine, it nowhere near as rough on idle.

Heading out onto the highway, the car religiously follows every contour in the road thanks to that near-Motorsport chassis. It may not be a genuine RSR but it quickly becomes clear it takes dedication and concentration to drive it, much

like the real thing. Mark though is revelling in the moment, clearly used to the demands of the drive – as well as the considerable attention this car attracts. "You get used to it," he says as we stop at a set of red lights, the eyes of occupants in cars either side of us pressed against windows, their expressions of shock evident.

Mark blips the engine as he focuses on that red light ahead. Hands fixed to the wheel, the wait seems to take forever. In this moment in time, we could be on the grid of any race track in the world! The tension in the car becomes insurmountable as the light stubbornly maintains its carmine illumination. Then, green. As the lights change we shoot forward, the car maintaining traction as it pulls away from the rest of the pack. We laugh at our little victory, and then it dawns on me. This might not be a real GT3 RSR, but does it need to be? Replicas may not be to everybody's taste, yet it's hard to deny the fun we're having. Life is your own, individual race after all and, judging by the sheer entertainment on offer in this road-legal RSR, Mark is certainly winning more than most. **911**

THE GREATEST OF ALL TIME

More than 40 years after Roger Penske founded IROC, we bring two of the bespoke RSRs from that inaugural season back together

Written by **Josh Barnett**

Photography by **Steve Hall**



In 2017, the Porsche Supercup celebrates its 25th anniversary. The one-make series has, alongside the various national Carrera Cup Championships, used its level playing field to allow the best up-and-coming racers to rise to the top. Two decades before the Supercup was even formed though, Porsche was involved in another one-make series, one with a unique aim: to find out, across the worlds of Formula 1, NASCAR, IndyCar and sports cars, who was the greatest driver of all.

For North American readers, IROC will likely be more familiar in Chevrolet or Pontiac circles, while in Europe, the International Race of Champions enjoyed little publicity over its 30-year run. However, before the succession of Camaros and Firebirds, the first series was actually run using 15 identical Porsche 911s: the IROC RSRs. Devised by legendary US team owner, Roger Penske, and the president of Riverside International Raceway, Les Richter, the IROC I championship would be contested over four races: three heats on the West

Coast at Riverside and a grand finale at Daytona in the east four months later. A points structure would be applied at Riverside with only the six best racers making it to Florida.

The whole thing would be televised on the popular Wide World Of Sports programme after TV marketer, Mike Phelps (working for the newly formed Penske Productions) struck a deal with broadcaster, ABC. With a plan in place, Porsche agreed to build 15 identical Carrera RSRs for the inaugural series. Penske's deal with Zuffenhausen came at a time when the RSR project was in a transitional phase, switching during the off-season from the 2.8-litre cars to the new 3.0-litre version scheduled for 1974. However, the 3.0 RS – the basis for the RSR – was not yet finished so Porsche took 15 impact-bumpered Carrera 2.7 MFI chassis off the production line as the basis for the IROC racers. Spec-wise, the IROC RSRs would be unique, blending elements from the 2.8 RSR, upcoming 3.0 RS and the latter's still-in-development RSR brother. ➔





The 2.7 Carrera shells (still being produced with the 2.7 RS's tunnel reinforcement) were further beefed up with extra triangulation welded in around the rear shock towers and at the back of the engine bay; while the 2.8 RSR's flared steel arches were fitted front and rear, along with glass fibre 3.0 RS bumpers. In order to reduce weight, the side windows and rear screen were replaced with Perspex, the doors were reconstructed in glass fibre and the pneumatic bonnet and decklid struts were removed (with both panels now using quick-release pin fasteners).

In the engine bay sat Porsche's 911/74 flat six, a 3.0-litre twin plug unit fitted with high butterfly throttles (rather than the slide mechanism that would later find its way onto the standard 3.0 RSR). Fed from a 110-litre plastic fuel tank in the front, the engine drove through the Type 915 gearbox (fitted with standard ratios) and a limited-slip differential, with 80 per cent locking on acceleration. On the suspension front, the Bilstein damper struts from the RSR were used alongside firmer torsion bars. Slowing everything down was the job of the four-piston 917-style calipers and cross-drilled discs from the 3.0-litre RS, housed inside nine- and 11-inch wide Fuchs front and rear respectively. All finished in different vibrant hues with large 'PORSCHE' script down each flank (perfect for the television

broadcast), the first dozen Porsche IROC RSRs were hurriedly shipped from Germany to Penske via one of VW's cargo ships.

When they arrived with 'The Captain', he was dismayed to find ducktails adorning the decklids, rather than the new-for-1974 whaletail. Word got back to Porsche and the final three RSRs were airfreighted to Riverside with the new glass fibre wing (and a further 12 were packed for the cars already delivered). Penske also replaced the chrome headlight surrounds with matte black covers and affixed a bespoke sticker to the radio delete panel. "Rev Limit 7,700/Press clutch to floor for up & down shift," it read, along with a diagram of the 915's shift pattern, designed to help the unfamiliar drivers with Porsche's notoriously fickle gearbox.

For the first season of IROC, Penske had arranged some of motorsport's biggest names, with the likes of F1 World Champions, Emerson Fittipaldi and Denny Hulme, going up against IndyCar stars Gordon Johncock and Bobby Unser. NASCAR was represented by legend-in-the-making Richard Petty (among others) while Can-Am champions George Follmer and Mark Donohue were also invited. Among the 12 stars, there was some worry that Donohue – a Penske driver familiar with the Porsche 911 – would dominate so the organisers employed armed guards to protect the race cars at all times

and prevent any of the drivers from tampering with the Porsche RSRs.

Held on the 27 and 28 October 1973, the first three races of the inaugural IROC championship took place in front of around 100,000 spectators gathered for the finale of the 1973 Can-Am season. A timed qualifying session would set the grid for race one, with the result from the first encounter reversed entirely for race two's grid (the same process being used for race three). To ensure complete parity, the winner of each race would – where possible – take the car used by the 12th-placed driver for the next encounter, with 2nd place taking 11th's chariot, 3rd getting tenth's, and so on. With drivers switching regularly into different coloured cars, large name decals were sported on the doors and windscreen to help fans quickly identify their favourite.

In qualifying, Fittipaldi beat Donohue to pole position only to miss the driver's briefing and be put to the back of the grid. Furious, the Formula One star had to be persuaded by Penske not to pull out from the IROC series completely. The grid reshuffle left Donohue with a clear road ahead, and in race one he cleared off into the distance in the Grand Prix white IROC RSR, winning the first encounter from Bobby Unser. Using his pent-up anger, Fittipaldi was charging through the pack in



Model Carrera RSR IROC
Year 1973

Engine

Capacity 2,994cc
Compression ratio 10.3:1
Maximum power 316hp @ 8,000rpm
Maximum torque 310Nm @ 6,100rpm
Transmission Five-speed manual

Suspension

Front Independent; MacPherson strut; Bilstein damper; torsion bar; anti-roll bar
Rear Independent; semi-trailing arm; Bilstein damper; torsion bar; anti-roll bar

Wheels & tyres

Front 9x15-inch Fuchs alloys; 215/55/R15 tyres
Rear 11x15-inch Fuchs alloys; 295/40/R15 tyres

Brakes

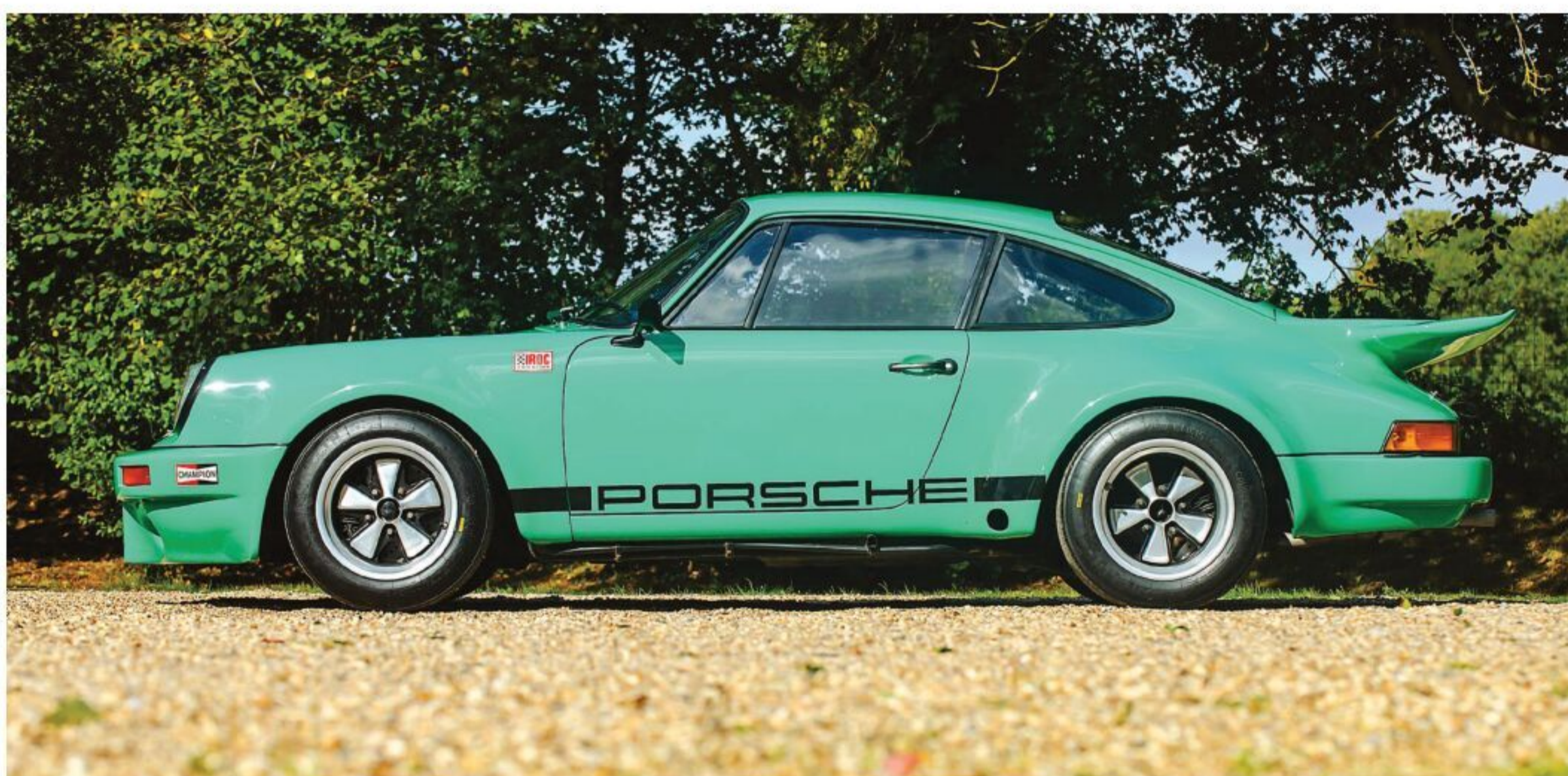
Front 300mm cross-drilled discs; four-piston calipers
Rear 300mm cross-drilled discs; four-piston calipers

Dimensions

Length 4,135mm
Width 1,680mm
Weight 967kg

Performance

0-62mph Unknown
Top speed Unknown



Penske, Donohue and the IROC Porsches

After a toe-in-the-water Can-Am effort in 1971 with the turbocharged 917/10, Porsche chose to throw its full developmental weight towards the US championship, striking a deal with Roger Penske's eponymous team to run two cars in 1972. The decision paid off. Stepping in to replace Penske's star driver, Mark Donohue, injured in a testing crash at Road Atlanta, George Follmer comfortably won the 1972 Can-Am title before Donohue doubled up for Porsche in 1973 with the ultimate iteration of the turbocharged prototype: the 917/30. During the development of the latter at Paul Ricard in the winter of 1972, Donohue was invited to test a prototype version of the upcoming Porsche 911 Carrera 2.8 RSR, the chance test leading to Penske running chassis 'R3' at the 1973 24 Hours of Daytona.

While the Sunoco-liveried 911 RSR would retire from the round-the-clock classic, Donohue was left suitably impressed with the Neunerfer's handling and reliability; when conversation with 'The Captain' turned later that year to the inaugural IROC season, Donohue was quick to recommend the Porsche 911 Carrera RSR. Penske, therefore, set about convincing Ernst Fuhrmann, then Chairman of the Board, to build a run of identical 911 RSRs for the planned series. Fuhrmann agreed and Penske Productions was briefly turned into an automotive importer under the Volkswagen of North America umbrella in order to get the 15 IROC RSRs into the United States.

the Desert beige car, only to run off the road and into retirement.

Starting from the back of the grid, Donohue's challenge in race two was curtailed after seven laps by a broken throttle, leaving Follmer to take the victory (having started ninth on the grid) from NASCAR champion, David Pearson. Donohue's demise would again put the Porsche ace on pole for the final Riverside race however, and with a clear track ahead again, 'Captain Nice' capitalised on the reverse grid format to lead the way for all 30 laps, beating Unser and Fittipaldi. The latter had also finished third in race two but it wasn't enough to book his place at Daytona as A J Foyt beat the Brazilian by just one point to join Follmer, Unser, Donohue, Grand Prix winner Peter Revson, and Pearson at the final.

Following Riverside, Penske immediately sold seven of the IROC RSRs to private racers and dealers, the eight remaining cars shipped back to Penske's headquarters in Reading, Pennsylvania, for repairs after a hard weekend of intense action. The engines and gearboxes were returned to Zuffenhausen to be freshened up before being shipped back Stateside. Daytona presented a new challenge for the IROC 911s so several upgrades

were made to the cars to suit the Florida circuit. Longer gearing and stiffer springs were fitted to the IROCs, while the brake bias of the dual cylinder system was adjusted. Headrests were added to the roll cage to aide the drivers on the high-speed banking, while windshield clips and straps were added front and rear respectively to prevent the screens from popping out. Daytona was designed as a winner-takes-all event in 1974, the \$6,000 prize for each win at Riverside dwarfed by the offer of \$43,000 to the race winner at Daytona. Having decided to retire after the inaugural IROC series, Donohue was determined to win. However, despite starting from pole, Revson led the first lap before Donohue's 1972 Can-Am replacement, Follmer, took the lead. After pulling away from the pack, Donohue made his move before quarter-distance, forcing Follmer into a mistake that proved inconsequential when the latter's gearbox expired. In the latter stages, Pearson began to close in as Donohue started to struggle with fading brakes, however, the Penske star's victory was assured when Pearson lost third gear, allowing Revson into second and Unser onto the final step of the podium.

With the series concluded (and Donohue a total of \$56,500 richer), the remaining IROC RSRs

were also sold off to private racers, with many of the cars used over the next few years in various American endurance races. Penske, meanwhile, accepted an offer from Chevrolet to use Camaros in the next running of the International Race of Champions. Through the 1970s and early 1980s, the 15 lurid 911s were scattered ever further to the four winds, modified in various ways to keep up with the competition along the way. They were, after all, just old racing cars. However, at the turn of the century, the significance of the unique IROC RSRs began to be unearthed as the cars came into the hands of collectors, restoring them back towards their original specifications. And that brings us here to the Aladdin's Cave that is Maxted-Page, the internationally renowned classic Porsche specialist, where two genuine Porsche 911s from the first International Race of Champions lay in wait.

Finished in Bright green, chassis no. 0042 was used in the three Riverside races by Petty, Foyt and Hulme with the IndyCar star giving this particular IROC RSR a best finish of fifth in the second heat race. The car was one of the first seven cars sold off ahead of the Daytona finale, initially staying in California before passing between a trio of owners in France and Austria during the

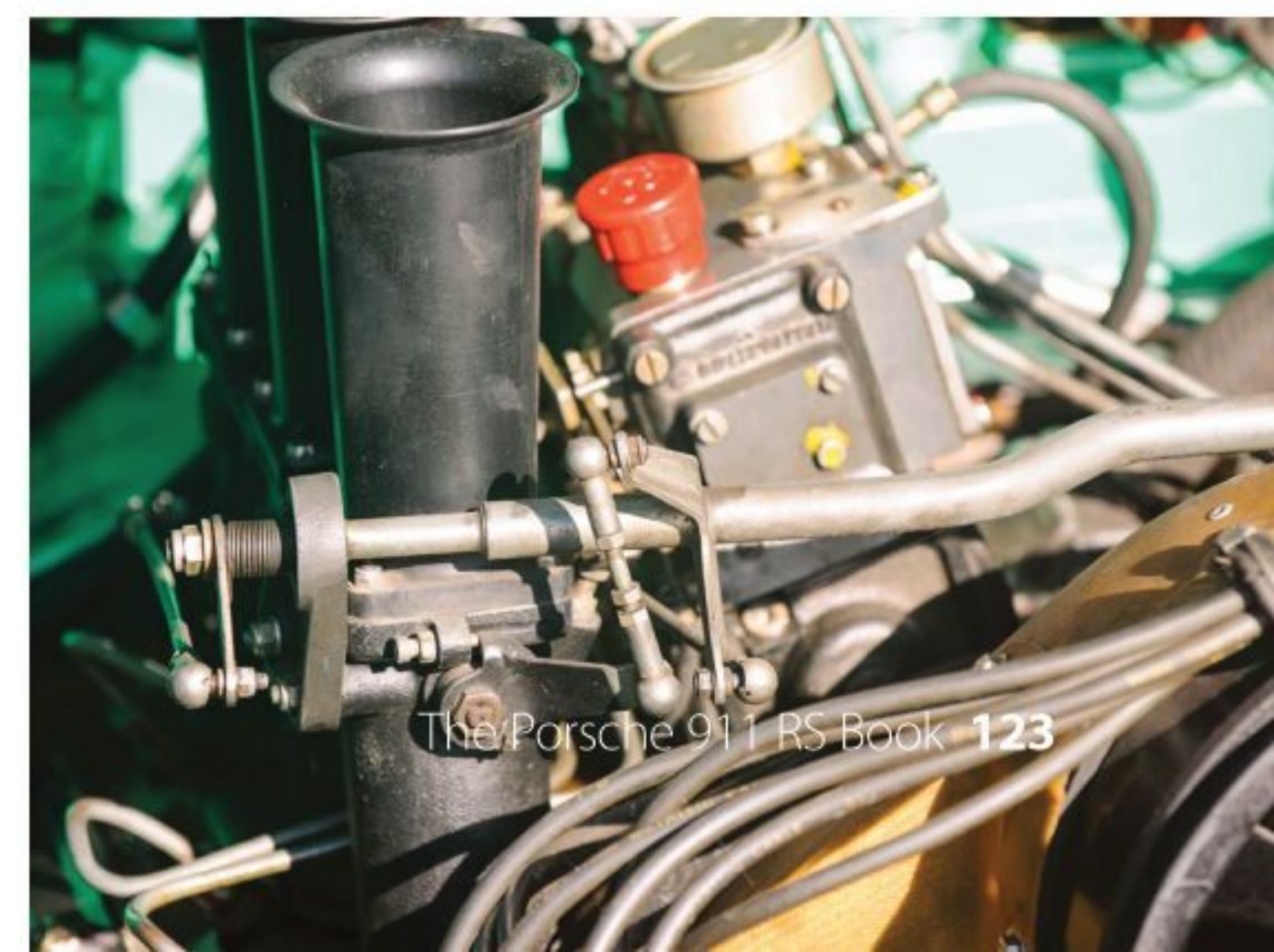


IROC

Right The interior of the IROC is built for racing, with lightweight bucket seats, a lack of carpet and trim, and a mounted fire extinguisher



Right A bespoke info sticker and 915 shift pattern diagram were added to the radio delete panel, to help unfamiliar drivers



IROC Prize Money

Driver	RIVERSIDE 1		RIVERSIDE 2		RIVERSIDE 3		DAYTONA		Total prize
	Pos.	Prize	Pos.	Prize	Pos.	Prize	Pos.	Prize	
E Fittipaldi	12	\$1,500	3	\$3,400	3	\$3,400	DNS	N/A	\$8,300
D Hulme	5	\$2,400	8	\$1,800	8	\$1,800	DNS	N/A	\$6,000
G Johncock	10	\$1,700	9	\$1,700	11	\$1,700	DNS	N/A	\$5,100
R Petty	7	\$2,000	10	\$1,700	10	\$1,700	DNS	N/A	\$5,400
B Allison	11	\$1,700	7	\$2,000	9	\$1,700	DNS	N/A	\$5,400
R McCluskey	8	\$1,800	11	\$1,700	12	\$1,500	DNS	N/A	\$5,000
M Donohue	1	\$6,000	12	\$1,500	1	\$6,000	1	\$43,000	\$56,500
P Revson	3	\$3,400	4	\$2,600	7	\$2,000	2	\$13,200	\$21,200
B Unser	2	\$4,000	6	\$2,000	2	\$4,000	3	\$9,100	\$19,100
G Follmer	4	\$2,600	1	\$6,000	5	\$2,400	5	\$5,000	\$16,000
D Pearson	9	\$1,700	2	\$4,000	4	\$2,600	4	\$6,300	\$14,600
A J Foyt	6	\$2,000	5	\$2,400	6	\$2,000	6	\$3,500	\$9,900



1990s. Returning to the USA just before the turn of the millennium, no. 0042 is now back for sale at Maxted-Page, just three years after last passing through Lee's eponymous doors. Amazingly, it retains its matching numbers engine, preserved with a beautiful patina, however, at some point in the car's life, the original RSR flares were replaced with the more uniformly curved Turbo arches.

Nearly 45 years after battling each other on track, we've brought no. 0042 face-to-face with another genuine RSR from the inaugural IROC series, chassis no. 0016. If the bright yellow Porsche 911 looks familiar, it should do; earlier this year American comedian and car nut, Jerry Seinfeld, consigned the car to Gooding and Co's Amelia Island auction, where it sold for nearly twice its estimate to the Fica Frio Collection. Driven by Peter Revson in the first and third Riverside heats (finishing third in race one), no. 0016 was the car used by Follmer in the Daytona showpiece event to try and disrupt Donohue's domination of the IROC Championship. It's an incredible history, making for a surreal experience as I lower myself into the lightweight bucket seat. This IROC family reunion we're about to enact is made all the more amazing when I glance at the famous press shot of the first

12 cars loaded onto Porsche's transporter in 1973. There, on the lower deck, is no. 0042, directly behind no. 0016.

In the auction catalogue at no. 0016's sale, Seinfeld said, "the sound will make your life." As the 3.0-litre flat six snarls into action, I immediately appreciate his sage words. Running its original unsilenced exhaust system, the ferocity of the engine is barely tempered, even at just a few thousand rpm. Bouncing off the walls of Maxted-Page's showroom with every blip of the throttle, the tidal wave of sound makes me break out in involuntary giggles. A full grid of 12 IROC RSRs would've been quite the symphony.

Venturing out onto the rural lanes, the huge yellow whaletail jutting out purposefully behind me is perhaps the biggest 'pinch yourself' moment I've had while in this job. Chasing the Bright green ex-Hulme car along the snaking tarmac helps to confirm it too. When was the last time two IROC RSRs stretched their legs together? Daytona, 1974? It's hard to think too much however. Every thought in my mind is washed away in a cacophony of glorious flat-six music every time I bury the traditional organ pedal under my right foot toward the floor. As a thoroughbred race engine, the

911/74 motor doesn't enjoy running much below 3,000rpm. But when it passes that magic threshold, a snarling howl erupts behind me. The sound grows louder and angrier towards 6,000rpm as the six tall trumpets suck in air greedily before, at 7,000rpm, the inner machinations of the twin plug engine are ejected into the atmosphere with such force that it seems the air is being torn. It's a sound track par excellence, unrivalled in any 911 I've driven before. As I lift off, there's a crack of unburned fuel before a moment of silence. "How crazy is this?" I contemplate, as my hand slots the next gear and the frenzy of speed and noise continues to assault my senses in the best way. Even without the switch-like slide throttles, the engine's response to my inputs is still razor sharp, as is the chassis.

Running what feels like the stiffer Daytona-spec springing, the whole car is kept on tenterhooks, alert and ready for every minute adjustment of the thick G-Series wheel. As I chase no. 0042 through each twist and turn, the nose eagerly bites into the tarmac before, as I feed in the throttle, the car starts to skip over each small bump and camber. Getting too firm with the throttle quickly sees me wrestling the wheel to keep the rear end in line. Fine-tuning myself to the IROC is akin to breaking in a stallion,

“When was the last time two IROC RSRs stretched their legs together?
Daytona, 1974?”



feeling every minute adjustment in attitude to prevent all hell from breaking loose. As experiences behind the wheel of a 911 go, it's easily the most visceral. With an IROC RSR at your disposal there would never be a need for a synthetic pick-me-up. All too soon, we're back in the confines of Maxted-Page – back in the real world. It takes me a moment to process everything: watching a genuine IROC RSR disappear into the distance ahead of me, all while piloting another 911 used in that first International Race of Champions. While I didn't come close to exploring the car's furthest limits, in a way, nor did the likes of Daytona 500 winner, Richard Petty, or World Champion, Denny Hulme. It was instead Donohue, a man with a much more modest racing résumé, who proved to be the ultimate champion of champions. I am, therefore, pretty happy with the company I've kept. After all, in the Porsche 911 world, there aren't many cars much more illustrious than the RSR from the International Race Of Champions. **911**

Thanks

For more information on chassis 0042, which is currently for sale, call +44 (0)1787 477 749 or visit www.maxted-page.com.



Bottom left The 15 IROC RSRs featured glass fibre whaletail rear wings, which were new for the 1974 model year



MARTINI

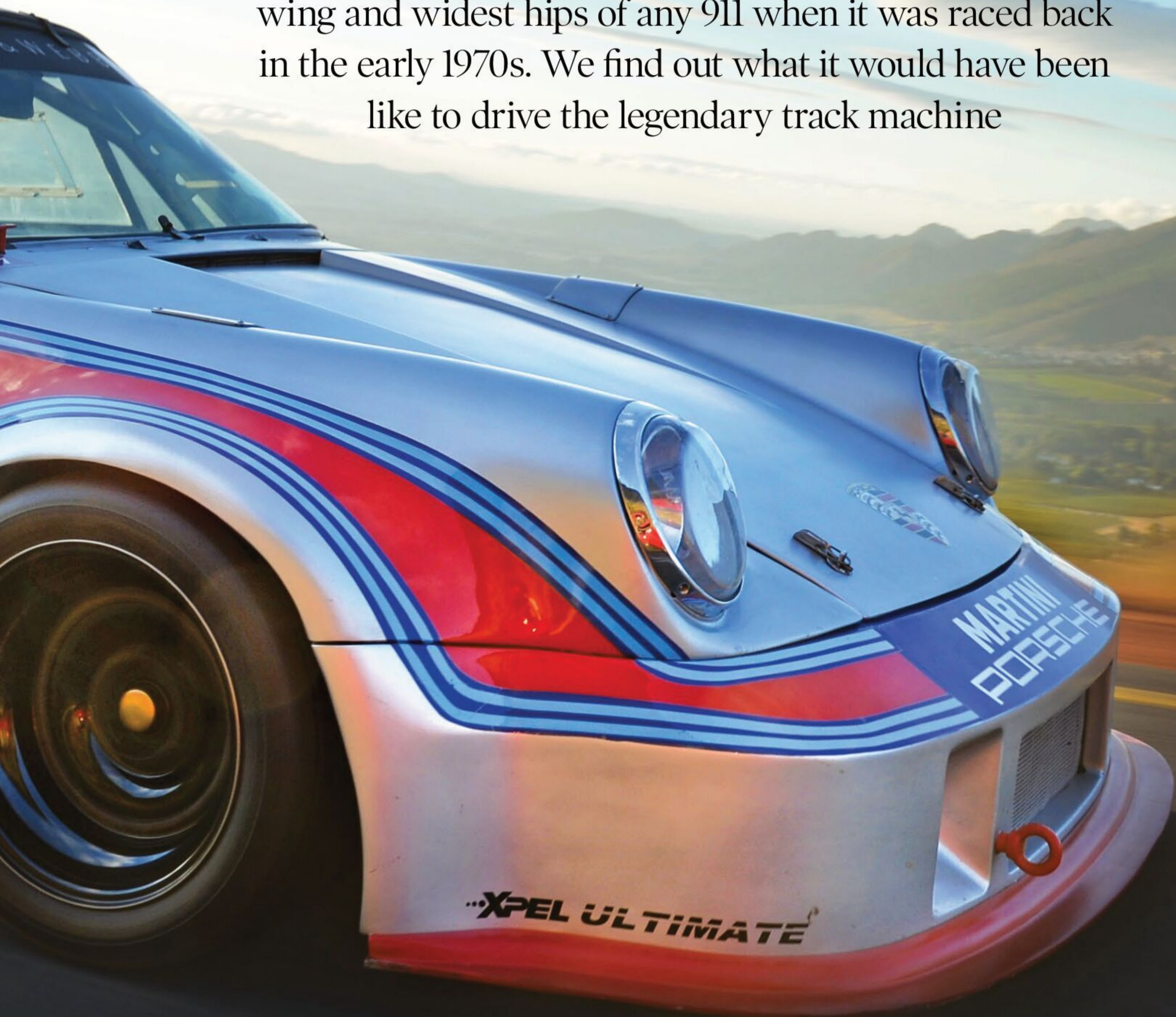


M A G I C

Written by
Wilhelm Lutjeharms

Photography by
Duwyne Aspeling

The original 2.1-litre Martini RSR offered the largest wing and widest hips of any 911 when it was raced back in the early 1970s. We find out what it would have been like to drive the legendary track machine





Above The Martini RSR had one of the largest and most aggressive rear wings in Porsche's racing history

It feels rather intimidating, but uniquely special and immensely exciting nonetheless. I'm ensconced in a Racetech racing seat with my legs almost parallel to the floor. I can hear every bit of road debris hitting the undercarriage of the car and I need to shout if I want to talk to my passenger, the owner of the car.

In front of me is a plastic windscreen (a weight-saving measure), while the cabin is stripped out with only the necessary buttons and switches you associate with a race car. Above the windscreen, down the A-pillar and to my right, the silver poles of the full roll cage won't leave anyone in doubt that this is a full-on 911 race car.

With a quick glance in the interior mirror – as I won't need it again on this drive! – I observe one of the largest wings in Porsche's racing history. As I peer in the side view mirrors, the massive, widened rear arches and end tips of the rear wing come into view. This car fills the road with its size and presence unlike any air-cooled 911 I've ever driven.

I need to feed in enough throttle to stop the car from stalling but also need to let the racing clutch out quickly, as any unnecessary slippage would damage

the clutch. The steering wheel conveys oodles of feedback; it goes light for only a brief moment before it weights up again and gives your arms a proper workout. The G50 gearbox allows for quick and direct shifts, while the long metal gearlever and gearknob (with the very industrial-looking linkage system below) contributes to the solid shift action every time

“The car is not happy being driven at anything less than full speed”

I change gear. This only further contributes to the solid nature of the car and ensures that you never miss a gear when shifting.

The car is not happy when being driven at anything less than full speed. There is a cacophony of mechanical sounds emanating from the drivetrain in the rear of the car, while the smallest of throttle applications prompts a blowing and hissing sound from the turbocharged system. If I (briefly) close my eyes, the experience is not far from that of the 993 GT2 Clubsport that I experienced in issue 121.

These mechanical sounds are so intense that you also want to pull over and switch off the car, because it almost sounds as if there is no oil or lubricants in the gearbox! I sense that this air-cooled engine would catapult me up or down this mountain pass like no other air-cooled 911 I've ever experienced before – not least some modern 911s – and therefore I slowly apply modest throttle applications.

As I press the throttle harder, and following a minor delay as the turbo gets up to speed, the RSR pushes us forwards and towards the next corner with a rush of a modern-day supercar, only with much more noise, feedback and excitement. Goodness, you need

to be awake! Ahead of me, the pronounced front wings are visible and through the steering wheel it is easy to experience how the front wheels sniff out any changes in the road camber and dive into bends like only a race car can. I realise that you need all your mental focus (and rather talented feet and hands) to get the most from this car.

Below 3,000rpm nothing happens but as I press on, I can hear and feel how the tyres barely cope with the levels of torque, which are twisted through them as the full force of the engine presents itself with

Model Turbo RSR replica

Original Model 2.2-litre 911T

Year 1972

Engine

Capacity M64/01 bored to 3,800cc

Compression ratio 8.5:1

Maximum power 554hp

Maximum torque 680Nm

Transmission G50 Five-speed manual

Modifications Single turbocharger with two waste gates; GT2 Evolution camshafts; GT3 Cup oil cooling

Suspension

Front MacPherson struts; coil springs; Sachs shocks; anti-roll bars

Rear Swing arms; coil springs; Sachs shocks; anti-roll bars

Wheels & tyres

Front 23.7x11.5-16; Hoosiers

Rear 27.0x14.0-16; Hoosiers

Dimensions

Weight 1,250kg

Performance

0-62mph 3.4 secs (est.)

Top speed 168mph (est.)



Below The Martini RSR's huge rear wheel arches grab your attention just as much as those widened front arches, highlighting the car's racing pedigree

astounding efficiency. It is a unique physiological experience; it feels as if the push is coming not only from behind you, but as if you are being pushed by something through your lower back. And it feels as if every ounce of the power and torque is on tap... if not more. Here, on this mountain pass, this Martini RSR feels like it will obliterate anything before it. Maybe it is a good thing that there are almost no other vehicles on this road.

On a public road, rolling on wet-weather racing tyres no less, full bore acceleration upon corner exits is not on the cards, but between my time behind the wheel as well as during a stint in the passenger seat while the owner, who races this car, was at the wheel, one thing became abundantly clear – this car is best suited to the track!

However, this car's origin is the same as all other 911T production cars that left the factory in 1972. It rolled off the assembly line as a standard production car but 45 years on, it is raced on South Africa's competition circuits and receives much love and

attention from its current owner. Apart from the significant development process of this car – which we'll get to in a minute – this 911 has been road registered every year since 1972. The owner says his car was already built (at great expense and with much effort) into a racing car by one of the previous owners. He bought the RSR a few years ago from a fellow 911 racer and enthusiast.

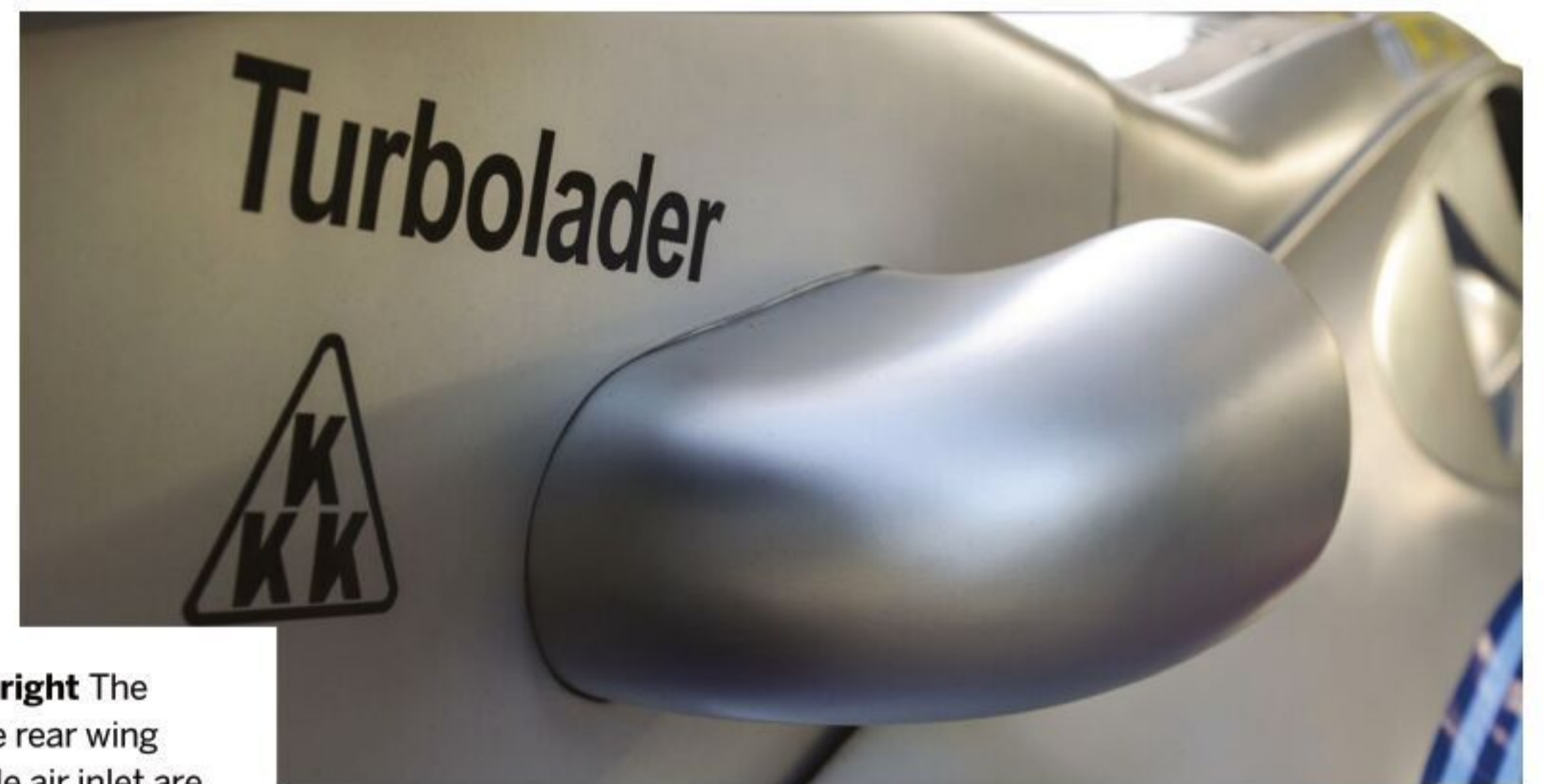
Following his purchase, he did the occasional race during the course of a year but soon realised that a full rebuild of the car was required. The result was that the car underwent a near two-year restoration. It was stripped, the wiring was redone, the chassis was straightened up and the entire car was repainted. Then, the engine was taken out, stripped and rebuilt, and the cooling system was upgraded, to name just a few of the alterations. The engine was originally a 3.6-litre engine from a 964 Carrera, which was of course turbocharged.

The owner explains: "I've campaigned it in this state but then rebuilt it and enlarged it to 3.8-litres.

Other upgrades included race bearings, specialised camshafts, and we rebuilt the turbocharger and actually made it smaller. Originally, the engine was converted to a turbocharged unit in Germany. This included special heads and porting, for example."

He continues, "We redesigned the entire oil-cooling system. I didn't like the number of oil pipes and reservoirs that were scattered all over the car and they also contributed to the heat soak in the cabin. So, we took some inspiration from older Cup cars and mounted the oil tank between the engine and gearbox. The boost pressure for the turbo has been set at 0.8 bar. We also rebuilt or re-commissioned every moving part, which are all from Porsche, on the car. We have tried to keep the Martini RSR as original as possible."

After the rebuild, a dyno test revealed (very) impressive outputs of 554hp and 680Nm. Let's not forget, this power is delivered in a car that weighs 1,250kg. "It is actually a little heavier than it should be," the owner explains. "But you have to realise ➔

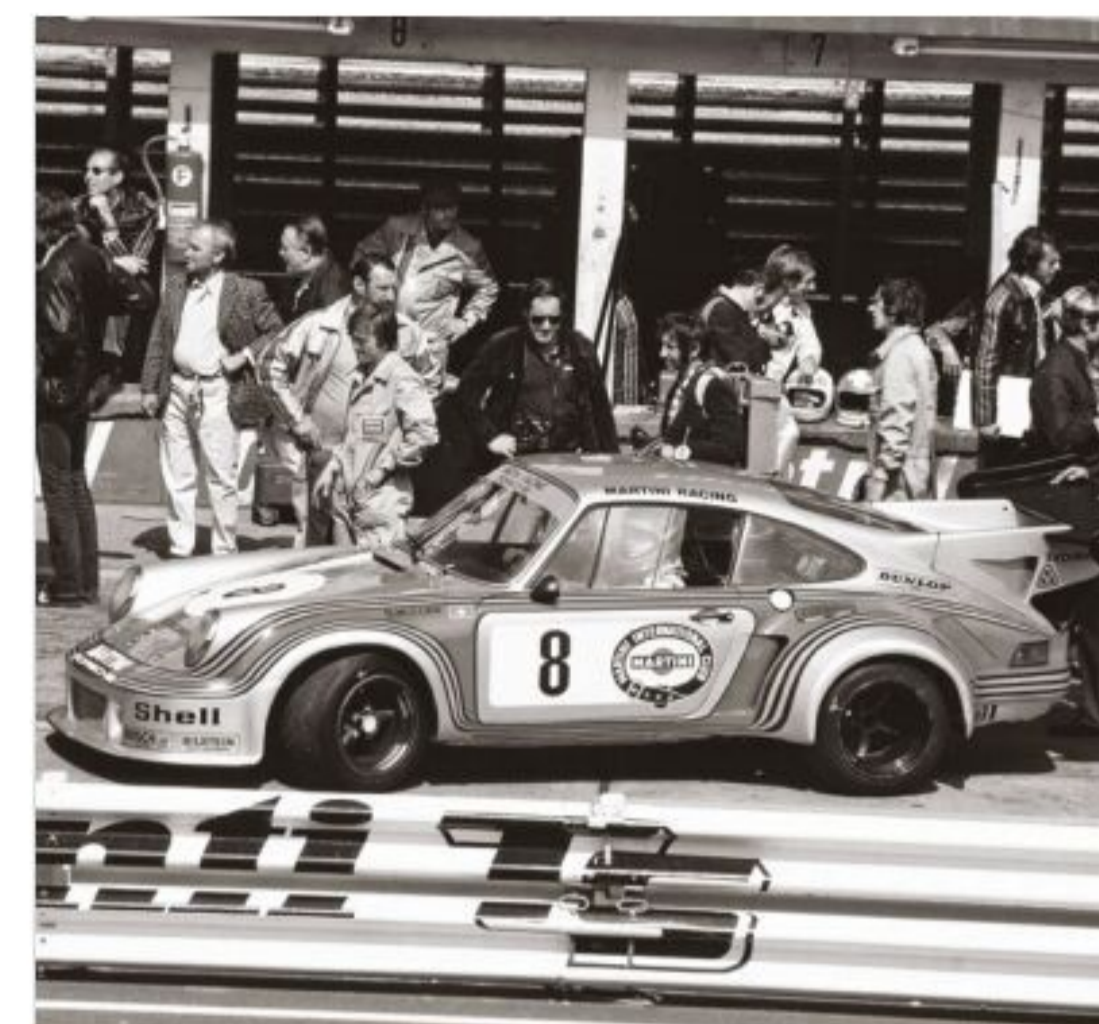
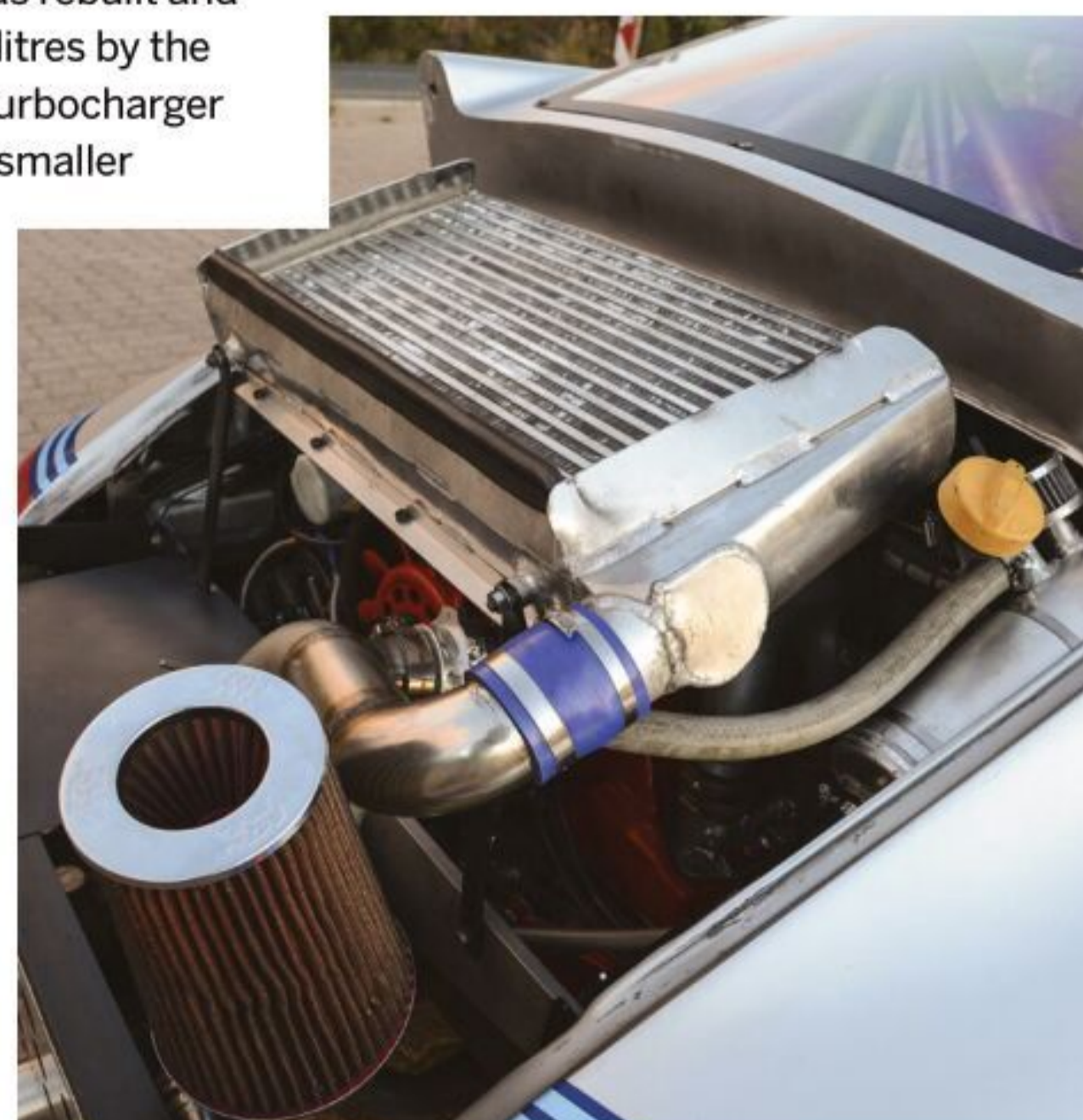


Above left and right The huge, adjustable rear wing and big-bore side air inlet are both iconic trademarks of the original Martini RSR. These details and vivacious wide arches are a sight to behold on the public road





Below Originally a 3.6-litre engine from a 964 Carrera, which was turbocharged, the RSR's engine was rebuilt and enlarged to 3.8-litres by the owner and the turbocharger was later made smaller



History of the Turbo RSR

1973 heralded the introduction of wide-ranging regulation changes for the World Championship for Makes. Porsche gained significant experience of turbocharging from the development of the 917/10 and 917/30 race cars used in the Can-Am and Interseries Championships, which the firm won in 1972 and 1973. Needless to say, the knowledge gleaned from the flat-12 engines could be easily transferred to the flat six. In accordance with the rules, this turbocharged engine's displacement was limited to 2.14-litres and suffice to say, the car was stripped of all unnecessary weight.

As is still the case today with Porsche's race cars, the Turbo RSR, Porsche's first turbocharged 911, was up against much stronger competition with V12 engines. Even so, it achieved two very successful second places: at the Watkins Glen 6-hour endurance race and most notably at the 24-hour race of Le Mans in 1974. Behind the wheel were Gijs van Lennep and Herbert Müller with their no. 22 car. In both cases it was the Matra-Simca V12s that beat the little 2.1-litre Turbo.

Interestingly, as Paul Frère described in his book *Porsche 911 Story*, the RSR might have won the Le Mans race if it wasn't for the fact that fifth gear broke several hours before the end. The RSR also utilised a solid drive to the rear wheels instead of a limited-slip differential. This was Porsche's decision after they tested a Type 917 racing car at Weissach using differentials with various locking factors.

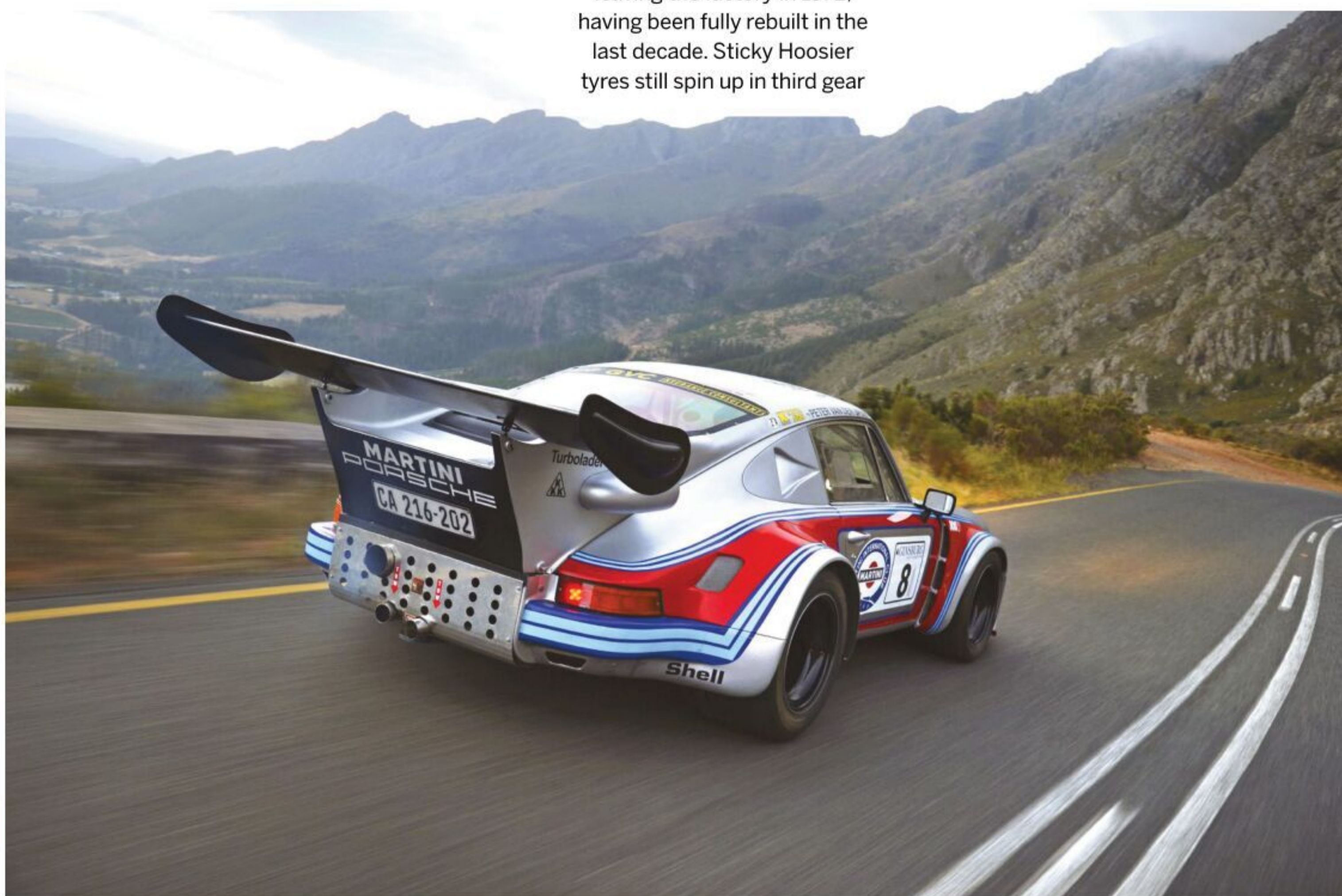
During one of my visits to Stuttgart in the early 2000s, I saw the real 2.1-litre RSR Martini at Porsche's dealership opposite the Museum and factory. It was a sight I will never forget; the RSR is undoubtedly one of the most impressive, jaw-dropping 911 race cars. After all, this race car gave birth to the lineage of 911 Turbo road cars that are widely celebrated as the most capable performance cars on the planet.

“On this mountain pass, the Martini RSR feels like it will obliterate anything before it”





Below Originally a 911T, this Martini RSR race car has been road registered ever since leaving the factory in 1972, having been fully rebuilt in the last decade. Sticky Hoosier tyres still spin up in third gear



that a tremendous amount of strengthening has gone into the structure of the car.” This is visible everywhere. Not only in the cabin but also below the bonnet there is a complete cross-strut bar, adding even more rigidity to the front of the chassis. The owner has had previous racing experience before he bought this car. However, I can sense his pride and passion for the RSR as he explains his path of ownership and the sheer enjoyment he gets from racing it.

The cabin is completely stripped and the only obvious modern equipment is the MoTeC digital screen. This small but informative screen displays the air temperature, fuel pressure, engine oil pressure, oil temperature, GPS speed and selected gear – pretty much all the necessary data and figures a racer would require pre, during and post-race. Digital bars running at the top of the screen indicate engine revs. There is the compulsory “ignition cut” switch, as well as a brake bias and turbo boost controller switches. The boost gauge is also visible while the fire extinguishing system can be activated by the pull of a lever – it is an important safety function when you are strapped in with a five-point harness and need to climb over so many pipes to get out!

As we parked at the top of the pass, the lightness of the driver’s door – it feels like you can lift it with a single finger – as well as the ease with which the front lid can be opened, and how quickly we can take the engine lid off, reaffirm the precision with which this car has been developed as a racing 911. The NACA ducts are pure race car cues and that large rear wing is adjustable. As much as the rear wheel arches grab your attention, the same is true for those widened front arches, too.

It was the earlier owner who made the effort to build this race car and, in the early 2000s, started the long development process of converting his 911T into a race car. He started by installing lightweight parts, widening the body and the axle tracks, and putting in a new floor among other modifications. The car was mostly developed on the Zwartkops Raceway outside Pretoria, close to Johannesburg, South Africa. “Racing is also something I was interested in and over the years, through my participation in a few events and with the help of the previous owner of this car, I gained more and more experience,” says the owner. “This is not the first Porsche race car I’ve owned. Previously, I owned a 996 GT3 Cup car. I campaigned that for just over a year. We even did the six-hour endurance race at Phakisa Freeway in the Free State, in which we came second. When I sold that Cup car, I bought this car. Being a Turbo, I like it a lot.”

It might be a bit of a novelty that it is still road registered but long may it continue, as the owner has no intention of letting the licence lapse. It is, without a doubt, one of the most exhilarating 911s I’ve ever had the chance to drive on the road. I think most of you reading this magazine must despise the concept of a 911 replica, but replica is the wrong word to use in this instance. This Martini RSR is a well-developed race car that pays tribute to the original, a car that formed the very foundation of so many road and race Porsches since the 1970s... **911**





BROTHERS IN ARMS

Two of Porsche's GT 997s have been brilliantly reborn in 4.1-litre spec – and they could well be the finest Neunelfers on the planet


Engine displacement is everything in the US. The home of the Hemi is also the land where big V8s are shoehorned into just about everything, whether it's for the school run or the race track.

Bigger is supposedly better when it comes to cars, this a heavily enriched ideology ingrained into many aspects of general US society.

However, in the world of Porsche, superior engine size has never formed part of the agenda. While Lamborghini's first car in 1963 was the 3.5-litre, V12 350GT, for example, Porsche's original 911 had a measly 2.0-litre flat six. Lamborghini still uses the V12 in its Aventador today, while Audi's R8 is powered by a 5.0-litre V10, and Ferrari's V8 and V12 powerplants are considered legendary among the wider car

enthusiast population. Despite this the plucky 911 sports car has continued to battle successfully against its bigger-engined rivals on circuit, sticking fiercely to its winning recipe of a robust flat six and an exquisite chassis.

It is this approach which Alex Ross, owner of Californian Porsche tuners SharkWerks, has always found favour with. British born, his extracurricular indulgence in Lotus is therefore forgivable, but the overachieving 911 has always been the primary source of his motoring aspirations. This, fused with a hint of that 'bigger is better' American way, is what has given us the SharkWerks 4.1.

Long-time readers of *Total 911* will already know of the prowess of the one-of-four Gulf-inspired Rennsport in our pictures, which we first featured 

BELOW As well as unbeatable performance, SharkWerks' 4.1s have been built to last, with tens of thousands of real-world development miles under their belt



in early 2015. Acquired in 2011 before being 'run in' with a 2,600-mile jaunt across the USA, Alex and the SharkWerks team found tuning potential in its 3.8-litre Mezger engine, this becoming the trailblazer for its pioneering 4.1-litre programme. It all started before Porsche had even released its own 997 GT3 RS 4.0 – we told you the States does it bigger and better.

The fruits of more than five years of development includes a partnership with EVOMS to produce a race-spec, lightweight billet 80.44mm crank, CNC machined from billet 4340 high-alloy steel and tested to more than 9,500rpm, as well as a 104.5mm bore piston and cylinder set. The cylinders use steel liners and the pistons are Teflon-coated with anti-wear skirts and titanium wrist pins, saving 20 grams per piston and wrist pin combo against factory. In terms of top end, SharkWerks' engine has 'Hammerhead' Shark-spec headwork along with race-style valve guides for longevity and cam adjuster strengthening, with everything balanced and blueprinted. A custom multi-indexed rotary-style oil pump is used, and the camshafts are SharkWerks/EVOMS spec.

The engine case has been race-prepped with, among other things, improved oiling techniques according to SharkWerks' own wizardry. This is all partnered to EVOMSit ECU tuning; an RS 4.0-litre clutch pack, though Alex says the original factory set-up does work; a choice of SharkWerks lightweight street or track exhaust, and a host of chassis upgrades including Brembo GT brakes, Bilstein Clubsport

double adjustable coilovers, RSS rear adjustable links, bump steer kit, thrust arm bushings and lower control arms, plus some aerodynamic adjustments.

During extensive R&D SharkWerks ran into inevitable physical limitations for the OEM Porsche parts. Many of these eventually showed up in the months and years that followed the release of Porsche's 4.0 RS in technical service bulletins and recalls. The build also involved significant investment from SharkWerks itself, with chief engineer extraordinaire James Hendry having to fabricate his own tooling to make the install possible – hence why the builds can only be carried out at either SharkWerks or EVOMS.

The result of SharkWerks' efforts is a staggering 540hp, up nearly 100hp from stock 3.8-litre spec, and 542Nm torque on 93 octane fuel. Even better, SharkWerks says its revamping work also helps lengthen the life of the Mezger six. For example, the lightweight design forged tool steel conrods – for 80.44mm stroke – were designed together with EVOMS for longevity and strength, both companies shying away from titanium.

There is a slight weight penalty but Alex says the additional weight of the rod is minimal in comparison to the overall weight saved from the rotating mass in other areas: "Titanium stretches and is best kept to race cars with 40 to 60 hour rebuild intervals. In 3.6 to 3.8 stock form they have lasted a good while, but beyond that..."

Needless to say, it's a positively intoxicating experience behind the wheel. In fact, it's so good that the last time we drove it we declared it the best Porsche 911 on the planet. We've since tested some tantalising Porsche metal in this magazine, both new and old, including the 911 R, GT3 Touring, 991.2 GT3 RS and 991 GT2 RS. All outstanding peers of performance in their own right, none have left us as mesmerised as SharkWerks' 4.1-litre GT3 RS. Make no mistake: this 'Bluefin', as Alex calls it, is still the undisputed best in **Total 911's** book.

However, the white 997.1 GT3 sitting next to it today represents what is arguably an even greater engineering feat. That's because it too is now resplendent in near-identical 4.1-litre specification, though in being a 3.6-litre GT3 to begin with has simply had more ground to make up to the majesty of its RS brother.

It too has been on our pages before, in 2015, albeit in SharkWerks' 3.9-litre specification where the car completed a successful 75,000 miles before upgrading to 4.1 litres. The three-and-a-half years which have passed feel like a lifetime ago, for the 997.1 is mechanically unrecognisable from its former self after using the blueprint of that Gulf-coloured Rennsport. The GT3 obviously differs in its chassis dimensions, its body and track widths being narrower than the Gen2 GT3 RS, and a different intake system and intake manifold means it's down on power by around 25hp, but its aero is more extreme, ➔



997.2 GT3 RS 2011

Engine
4,150cc
13.1:1

540hp @ 7,950rpm
542Nm @ 5,300rpm
Six-speed
manual gearbox

Suspension

Independent; RSS inner monoballs and adjustable thrust arm bushings; Bilstein Clubsport coilovers; anti-roll bar
Independent; RSS/SharkWerks rear adjustable links; RSS/SharkWerks bump steer/toe steer kit and lock-out plates; Bilstein Clubsport coilovers; anti-roll bar

Wheels & tyres

9x19-inch Forgeline GA1R; 245/35/19
Michelin Cup 2

12x19-inch Forgeline GA1R; 325/30/19
Michelin Cup 2

Dimensions

4,460mm
1,852mm
1,344kg

Performance

3.6 seconds
Not tested

Model
Year

Capacity
Compression ratio

Maximum power
Maximum torque
Transmission

Front

Rear

Front

Rear

Length
Width
Weight

0-62mph
Top speed

997.1 GT3 2007

Engine
4,150cc
13.1:1

515hp @ 7,950rpm
542Nm @ 5,300rpm
Six-speed
manual gearbox

Suspension

Independent; RSS inner monoballs and adjustable thrust arm bushings; Bilstein Clubsport coilovers; anti-roll bar
Independent; RSS/SharkWerks rear adjustable links; RSS/SharkWerks bump steer/toe steer kit and lock-out plates; Bilstein Clubsport coilovers; anti-roll bar

Wheels & tyres

9x19-inch Fifteen52 Apex RSR forged three-piece; Michelin Cup 2
245/35/19

12x19-inch Fifteen52 Apex RSR forged three-piece; Michelin Cup 2
305/30/19

Dimensions

4,445mm
1,808mm
1,365kg

Performance

3.6 seconds
Not tested



SHARKWERKS 4.1 VERSUS FACTORY GT3 & RS

Here's how the SharkWerks 4.1s stack up against their respective factory counterparts in the 997.1 GT3 and 997.2 GT3 RS

ENGINE CAPACITY

997.1 GT3	3,600cc
997.2 GT3 RS	3,800cc
SHARKWERKS GT3	4,100cc
SHARKWERKS GT3 RS	4,100cc

WEIGHT

997.1 GT3	1,395kg
997.2 GT3 RS	1,370kg
SHARKWERKS GT3	1,365kg
SHARKWERKS GT3 RS	1,344kg

MAXIMUM POWER

997.1 GT3	415hp
997.2 GT3 RS	450hp
SHARKWERKS GT3	515hp
SHARKWERKS GT3 RS	540hp

MAXIMUM TORQUE

997.1 GT3	405Nm
997.2 GT3 RS	430Nm
SHARKWERKS GT3	542Nm
SHARKWERKS GT3 RS	542Nm

0-62MPH

997.1 GT3	4.3sec
997.2 GT3 RS	4.0sec
SHARKWERKS GT3	3.6sec
SHARKWERKS GT3 RS	3.6sec



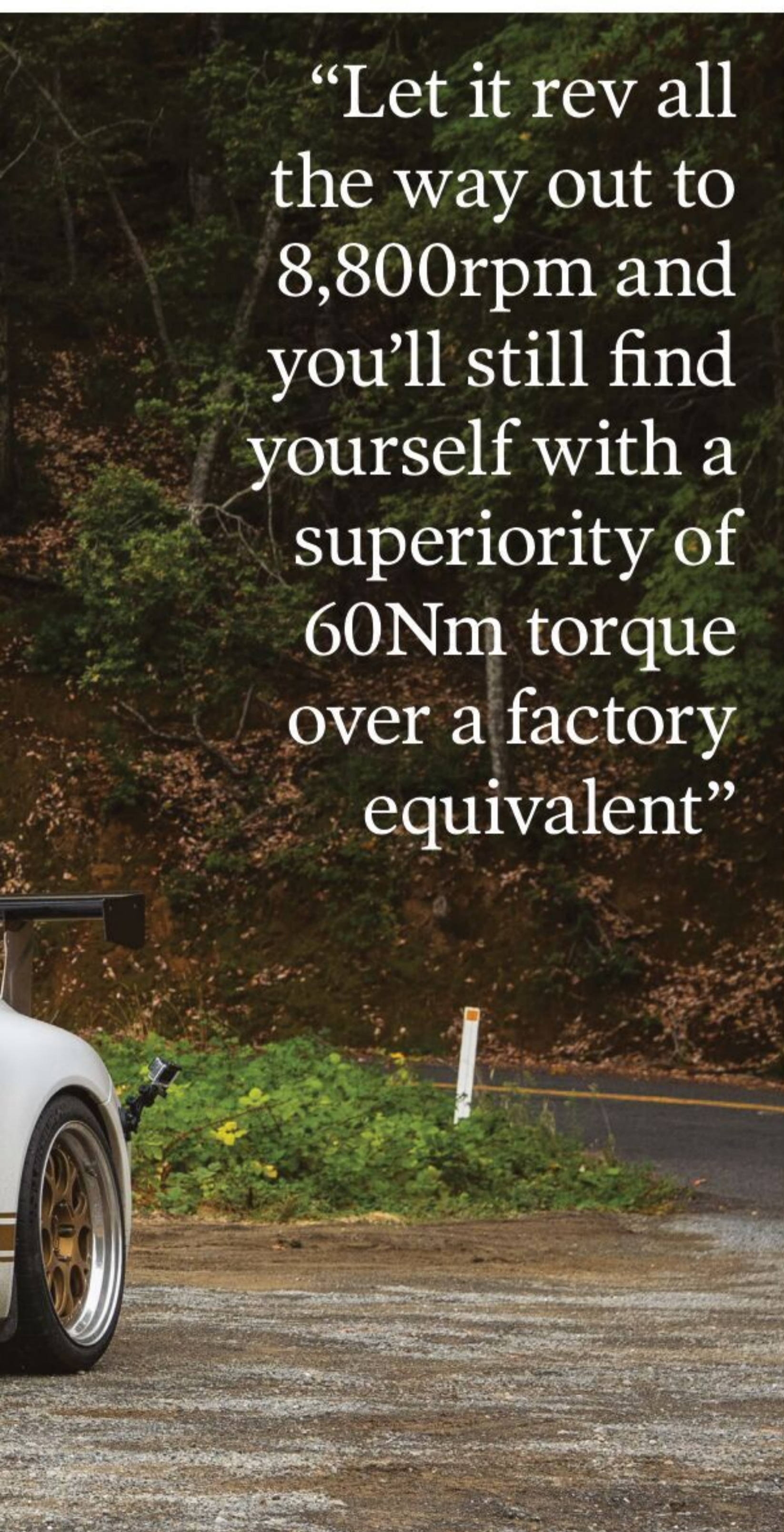
ABOVE 997.1 GT3'S aero package includes hero downforce-spec Cup wing



BELOW At last, the 997.2 GT3 RS 4.1 is joined at the very top table of Porsche performance by the 4.1-litre 997.1 GT3



“Let it rev all the way out to 8,800rpm and you’ll still find yourself with a superiority of 60Nm torque over a factory equivalent”



making use of a Cup wing and adjustable struts at the back, while a Cup spoiler better helps the flow of air at the front of the car.

It’s owned by Ralph Jackson, who worked for Vasek Polak as a teenager in the 1950s and 1960s. Ralph has Porsche on the brain and 100 octane petrol pumping through his veins, and also counts the 800hp GT2 built by SharkWerks in his extensive Porsche ownership history. However, Ralph doesn’t suffer fools gladly – he’s only interested if it’s pukka and, having helped put many development miles on the 997.2 GT3 RS 4.1, he knew exactly what he was in for when the opportunity arose to own the first 997.1 GT3 4.1 conversion. That he’s put 15,000 miles on the clock in the seven months since its conversion is some testament to what he thinks of its results. However, we’re itching to have a go ourselves on these fabulous roads carving up the northern California coast.

We hop in ‘Bluefin’ first to reacquaint ourselves with its charm which, once it’s fully up to temperature, doesn’t take long at all. The exhaust note is first to arouse our senses: it’s still got that full-bodied, 997.2 GT3 RS howl, yet it’s been upped a note or two. Impressively there’s no drone at low revs, but an application of the throttle pedal unleashes a fierce resonance that ascends into pure banshee as the RS 4.1 screams to 8,800rpm. From Porsche only the note from the rear of the 991.2 GT3 comes reasonably close in terms of its theatre, but even that feels stifled compared to SharkWerks’ combative system.

Without question, though, the jewel in the 4.1’s crown is that brilliantly reworked flat six. Its ability to rev so freely and so willingly – and for so long – is simply astonishing. The sum of all those lightweight, upgraded components is a Mezger on steroids. It’s hard to pick a weak spot, so extensive is its powerband. It begins with throttle response: pick-up, from as little as 2,500rpm, has previously been likened to that of a Carrera GT, and we’re not about to disagree. From there you can pick a spot on its torque curve between 2,900 to 5,300rpm and you’ll have anywhere up to 120Nm more at your disposal than the factory 3.8, and 80Nm more than even the RS 4.0. Usually regarded as something of a dead zone in a peaky Porsche GT3 Mezger, here the RS 4.1 is full of energy. And that doesn’t mean ‘Bluefin’ has been robbed of any drama at the top end, either. Peak horsepower is realised at 7,950rpm, but let it rev all the way out to 8,800rpm and you’ll still find yourself with a superiority of 60Nm torque over a factory equivalent. A regearing with a longer first and shorter second to fourth ratios adds to the drama, the RS 4.1 here rivalling the fluidity of the 911 R.

Its chassis, too, is excellent, particularly at the rear, that bump steer kit keeping the back axle settled over the impurities of the road beneath us. Combined with stellar brakes and the usual Rennsport recipe of fast, feelsome steering, this is a masterpiece in engineering – if its twin wasn’t patiently waiting for its own appraisal, we simply wouldn’t want to swap out this seat for anything.

SharkWerks’ GT3 4.1 is dominated from the outside by that frankly outrageous aerodynamic aid above its decklid. Sitting tall on extensively adjustable struts, the Cup wing with delicate Gurney flap on its trailing edge is monstrous even compared to the raised wing of the RS 4.1, the chunky end plates at either extremity almost usurping the width of the GT3’s arches.

Inside, the differences between the two cars are subtle, these mainly down to the generational change in buttons and switchgear on the centre consoles, while the GT3 obviously has proper door handles rather than pull straps. If the worn Alcantara around the head of the shifter isn’t a good enough indication as to how hard Ralph drives this thing, the fact he’s swapped the driver’s Sport seat out for a folding Recaro bucket surely is. There’s an alcantara TechArt steering wheel too, and we like its chunkier grip. Seat and mirrors adjusted, we’d better get moving.

From the outset this GT3 feels every bit as on par with its 4.1-litre forebear. To our ears it sounds slightly different to the RS, its tone a speck more sonorous, and it’s also running a more aggressive geo set-up, just how Ralph likes it, which helps give its nose a slight edge in terms of its directness into a turn. As a result the GT3 better highlights the supremacy of the job done by the Bilstein Clubsports and RSS/SharkWerks chassis set-up because in this state the nose should be tramlining all over the place, but it isn’t, the wheels staying loyal and true to where they are pointed. It’s just a ridiculously well-balanced car overall, possibly even more so than the RS.

The engine is, again, sublime. I can’t get past the intensity of its rush right to the redline, which surely won’t ever be beaten by anything out of the factory. It’s unlike any other 911 out there. However, it’s the relationship between the pedals and shifter which we find most outstanding in the 4.1. It’s the lightness of the car through the accelerator, the confidence exerted by the middle pedal, and the deftness of the clutch. This, mixed with that fluidity of the gearbox to let you shift quickly and precisely, is what makes the 4.1 so responsive, so visceral to drive. If the R was the factory benchmark in terms of precision in this area, the GT3 4.1 usurps it. There’s nothing about either 4.1 I find a dislike to, including the price, which Alex says starts at \$59,000 for the upgrade to include all of the necessary engine parts as well as the tuning, exhaust and upgraded clutch/pressure plate, lightweight flywheel, plus installation and break-in.

Since our first test drive of SharkWerks 4.1-litre 997.2 GT3 RS, nothing from the factory or otherwise has really gotten near it. However, this thrilling Rennsport is finally joined on its pedestal by its brother in arms, the 4.1-litre 997.1 GT3. We depart by telling Ralph we think his is the best 911 we’ve driven, ever, but he already knows it. A long-time Porsche owner, he says it’s his best and therefore last 911. Talk about bowing out at the top. **911**

Thanks

Thanks to SharkWerks and the legendary Ralph Jackson for use of their 997s in our test.





THE RAREST RENNSPORT

A 993-bodied 964 RS Speedster.
Sound crazy? Wait until you find out
it's from Weissach...

Written by **Lee Sibley**
Photography by **Steve Hall**

Just when you think you've seen it all, a car like this crops up. Of course, it is not unusual for **Total 911** to showcase delightfully rare Porsche exotica – it's all part of fulfilling our duty as the only magazine in the world dedicated to the 911 sports car. What is unusual, however, is for such a car to hail from the Porsche factory itself.


Our pictures show you what appears to be a 993 Speedster, itself a very rare car indeed (it is alleged Porsche made only two through its 'Special Wishes' programme, with one known to be built for Ferry Porsche and the other for Jerry Seinfeld). However, that only tells half the story here, with clues to be found chiefly in that timely Amethyst paintwork and spartan interior. The car's entire underpinnings, then, actually herald from the 964 generation of RS no less, crowned by a 964 3.8-litre Rennsport powerplant. Still with us? We did warn you as to the sheer absurdity of this creation.

The base car is actually a 1991 model year 964 RS, originally equipped with the 3.6-litre Rennsport engine. The story goes that the car's current owner saw the 993 Speedster 'birthday present' for Herr Porsche being built at Weissach and asked for an example to be built for him, too. His friends at the company agreed, but he had to supply the car for

the conversion. This, of course, means the Speedster in your pictures is the *only* such car to be based on an RS (the car made for Ferry Porsche, incidentally, uses a Carrera engine with a Tiptronic gearbox).

The mammoth conversion to Speedster-spec was carried out at the end of 1993: we're told Weissach engineers first started on repairing crash damage found on the Rennsport's body (this was not structural) before the factory conversion to Speedster. Huge works here involved removing the 964 RS roof, pillars and all glass before the updated 993 bodywork could be painted in its original 964-spec Amethyst hue and fitted to the car's body.

Completed by spring 1994, the Speedster came with a few choice additions at the request of its owner, reflecting his own motorsporting background. For example, to aid body stiffness, an N/GT-style Matter roll cage with door bars was fitted to the new-look Rennsport Speedster, along with a lightweight carbon-Kevlar fixed hardtop. Road registered, the car was given back to the owner to complete the first of its 62,000-kilometres as the world's most positively insane factory Porsche 911 Speedster.

The evolution doesn't stop there, however. In 1996, the body received some aerodynamic improvements including a wing from the pre- 



“Its individual curves and lines are wholly recognisable, yet the sum of all this is a silhouette that’s strikingly unfamiliar”

production 993 Turbo and a front splitter from the 993 GT2, along with 18-inch Speedline wheels (fitted at the time using spacers) and a revised exhaust system with duel pipes.

Then in 2001, the owner’s own team oversaw the Speedster’s final, eccentric upgrade, replacing the 3.6-litre M64/03 flat six with the M64/04 engine from the 964 RS 3.8-litre (in standard form this engine produces 359Nm of torque but 400Nm was achieved for the RS Speedster thanks to some subtle engine work). A six-speed G50/31 gearbox from the later 993 RS was then mated to this larger flat-six firecracker, before the 964 RS rear axle was swapped out for the wider axle of the 964 Turbo, which meant the Speedlines could be mounted without spacers. A final, altogether subtler touch to the Speedster was the fitting of a Momo Sport steering wheel.

So what’s the thinking behind this enigmatic Porsche 911 in the first place? Our owner is forthright with his answer: “As a former racing driver I wanted something different for my collection, but something that was still heavily

performance oriented, rather than just a show car. The project, as you can see, has evolved over a number of years, but I’ve always loved driving this thing. It’s so different to any other Porsche 911 you’ll ever drive.”

And with that I’m thrown the keys to what is, quite comfortably, the wildest Porsche Speedster on the planet. I start by walking around the car, attempting to take in the sights of this Frankenstein Neunelfer in front of me. The contrast in emotions encountered when ogling at the car makes for a peculiar experience: its individual curves and lines are wholly recognisable, familiar even, yet the sum of all this is a silhouette that’s strikingly unfamiliar. It’s all a bit of a head-scratcher, but then it doesn’t take long for me to realise that, despite the abnormality of the Speedster’s appearance, it is nevertheless endearing. Squat, broad and purposeful; I like it.

Opening the driver’s door continues the juxtaposition of familiarity and irregularity, the bulkier 993 door handle recognisable to my touch while the curvy, shortened glass of the window ➔



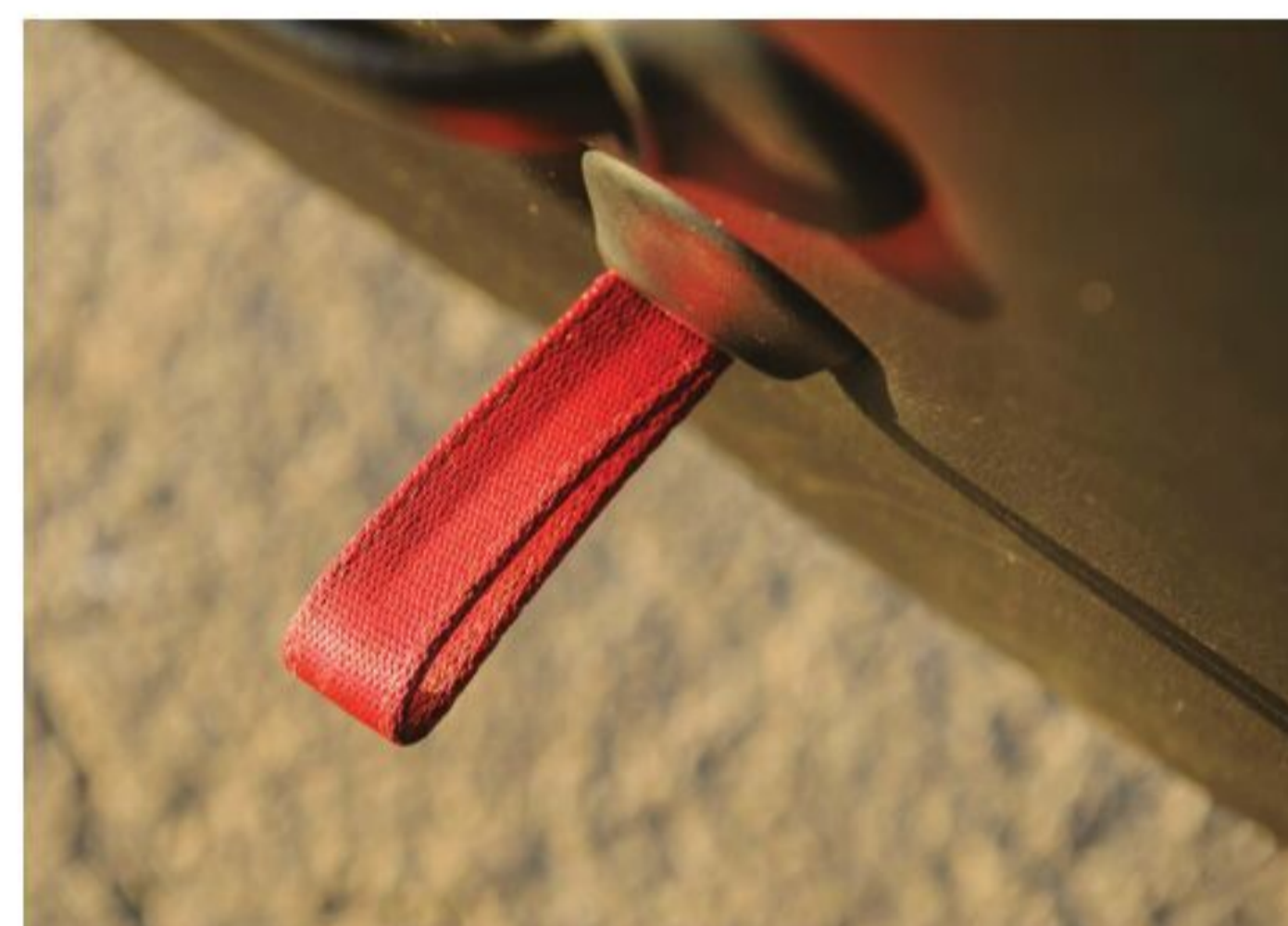
Centre Cabin unmistakably heralds from 964-generation of RS, identifiable thanks to dashboard, colour-coded leather Recaros, and pared back door cards. Original tachometer masks the redline of the Speedster's larger 3.8-litre Rennsport flat six

Bottom left Fixed carbon-Kevlar roof and Matter roll cage provide ominous clues as to the Amethyst 911's increased performance

Right This one-off Frankenstein 911 has the ability to raise pulses – and quickly – yet the brilliance of its engineering offers a more sedate side for day-to-day street driving

Far Left Most modifications to this Speedster have been executed using OEM parts. Only the side mirrors and fixed roof are from an aftermarket tuner





Above The 3.8-litre flat six from the later 964 RS looks at home in the Speedster's engine bay, mated to a six-speed 993 RS transmission. Wider 964 Turbo rear axle on Speedlines provides excellent poise and traction through corners

above it puzzles my eyesight. The Spartan door card on the other side is pure 964 RS, complete with colour-coded pull-strap, as are the two bucket seats with their purple-gradient centres.

Climbing over the door bars from the Matter cage will indeed be familiar with 964 RS N/GT owners; the broad-shouldered leather Recaro buckets resounding with those accustomed to the 964 RS Touring or Lightweight. That Momo Sport steering wheel and six-speed 993 shifter are the only deviances among otherwise complete 964 dashboard paraphernalia, the dished wheel's raked-back position and a short, sharp throw from the 993 RS gearbox giving plenty of race-car character. In fact, there's much inside this Speedster that amplifies its race-car feel: with the driver's door closed, it's dark, the small cabin further cosseted by door bars, and the narrow windscreen with low-slung roof gives an uncanny impression of what I

imagine the cockpit of today's 919 LMP1 prototypes feel like.

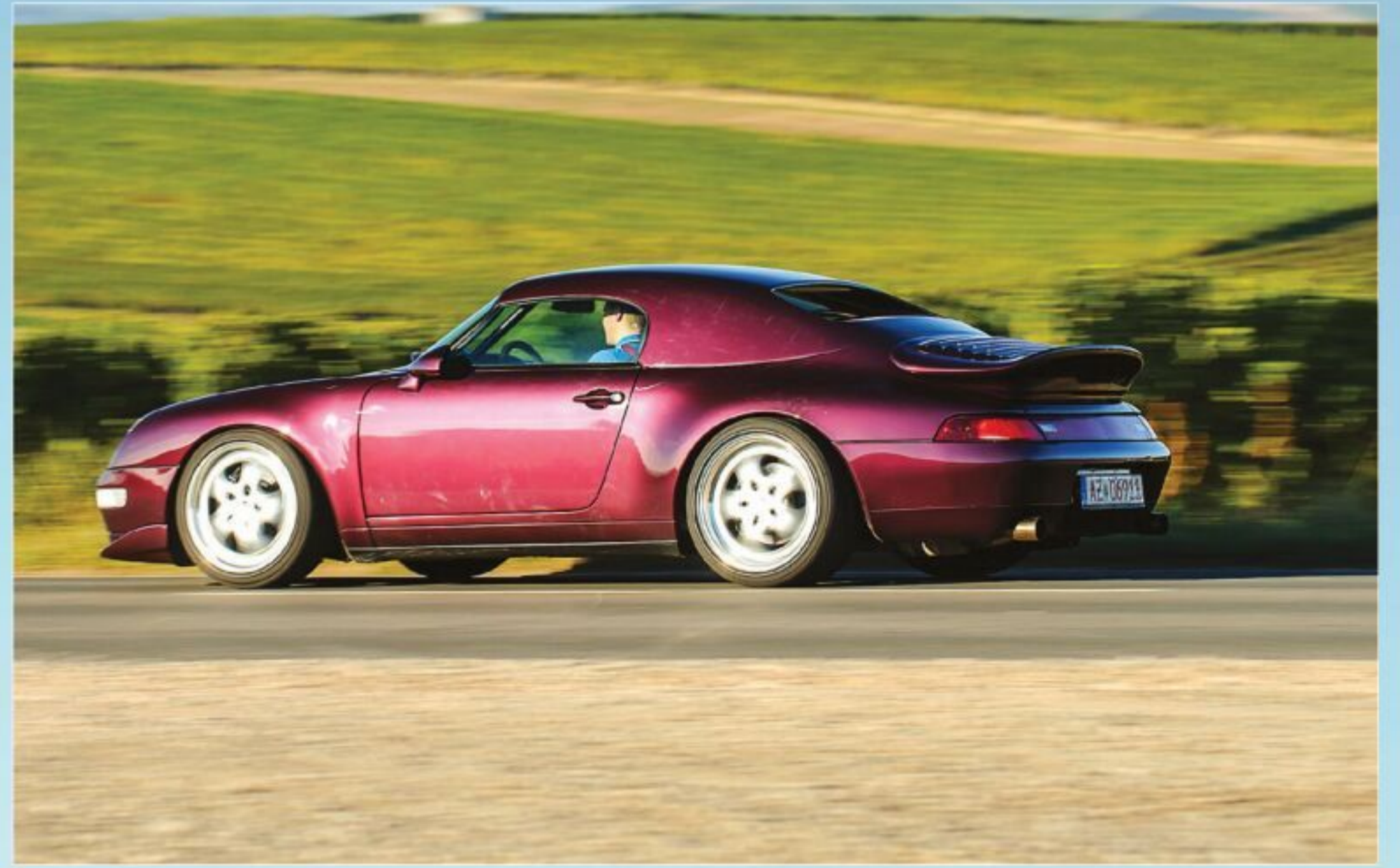
Turning to look behind the Speedster's two seats, there is no collapsible fabric roof stowed away, or indeed a twin-humped cover over where the rear seats would reside in a typical 964. Instead, I see neat carpet right up to where the body of the car meets the roof. A slither of light from the tiny, vertical rear window barely illuminates the seat backs, though light coming in from the front windows reveals the bare weaves of the carbon-Kevlar roof above my head.

Turning the key, the engine quickly catches, before settling to a smooth idle despite a raucous thrumming of the flat six reverberating through the bare cabin. The clutch, pleasantly, is lighter than expected, and after slotting the shifter into first, the biting point is found easily. In no time at all, Speedster and driver are away.

What strikes most is the level of noise: with little more than a bulkhead and thin carpet between you and that thrashing 3.8-litre Rennsport engine, driver engagement at the wheel is absolutely assured here. The pace of the engine wastes little time in exciting, too: there's plenty of low-down torque and the crank has a willingness to turn at the unmistakable rapidity of a Rennsport flat six. It's not long before I'm in need of second gear, then third, the familiar 993 RS gearbox offering a smooth passage through each gate. Into third gear, and a prod of the throttle is met with a growing crescendo of noise as the tachometer starts to swing around the tachometer at a ferocious pace once more. This is so much fun!

I eventually lift, aware I'm on public (albeit very quiet) roads, but it's clear this Speedster can climb to a ludicrously heady speed at an absurd rate. Unlike its other raked-windscreen cousins from the factory, this is by no means a mere boulevard





“This is a truly exquisite Rennsport creation made to the very highest calibre”



Model 964 RS Speedster
Year 1994

Engine

Capacity 3,746cc
Compression ratio 11.6:1
Maximum power 310hp
Maximum torque 400Nm @ 4,080rpm

Modifications Factory 964 RS body converted to 993 Speedster including 993 RS body with 993 Turbo pre-production rear wing, GT2 front lip and GT2-spec Speedline wheels; M64/04 engine mated to G50/31 gearbox; custom stainless steel exhaust including manifolds, downpipe and heat exchangers; 964 Turbo 3.6 rear axle; Momo Sport steering wheel; carbon-Kevlar hardtop and side mirrors from Strosek

Wheels & tyres

Front 8x18-inch Speedline wheels; 225/40/ZR18 tyres
Rear 10x18-inch Speedline wheels; 285/30/ZR18 tyres

Dimensions

Length 4,245mm
Width 1,735mm
Weight 1,210kg

Performance

0-62mph Unknown
Top speed 189mph

cruiser intended for the poseurs of Sunset Strip! That said, there's a compliancy to the ride I find welcoming. I expected the car to be too stiff, too rigid, for the public road, but it's nowhere near as bumpy as previously perceived. A water-cooled 911 with Sport suspension is a reasonable comparison.

What's truly astonishing though, is the Speedster's ability to dispatch of corners at such frightening pace for an air-cooled 911. Grip is inspirational and, propelled vehemently by that guttural 3.8-litre engine, I'm shooting through long, fast turns at the pace of a 993 Turbo. If the tyres weren't as old I'd be taking them even faster.

As I go on to find out, the Speedster's obvious weight advantage supports its dexterity, the car's low centre of gravity maintained by that super light Kevlar roof. Glued to the asphalt, we're twisting and turning through the German countryside with vigour – the Speedster is delightfully pointy from its nose, with just enough lateral body roll to communicate feel to the driver without subtracting precision from its chassis. Brakes clamp hard together to scrub speed with a firm press of the Speedster's middle pedal, though of course,

immeasurable fun lies in the immediacy of the car's velocity increase from a press of that offset accelerator pedal. What a gloriously misleading pocket rocket this thing is!

Stepping out from the car and handing the keys back to their owner, I try to make sense of what I've just experienced. Its concept may be as bizarre as its story, but what is undeniable is this is a truly exquisite creation made to the very highest calibre. This 964 Speedster is one of the most exciting 911s I've ever driven; its many parts marry beautifully together and the real shame lies in the fact this is the only one of its kind.

Weeks on from my test drive, it's still hard to believe a car like this even exists. That it has credible proof as a Weissach work of art is even more startling. As for the fact it's been driven – hard – for more than 62,000 kilometres on our public roads for the last decade? I think, at last, we really have now seen it all. **911**

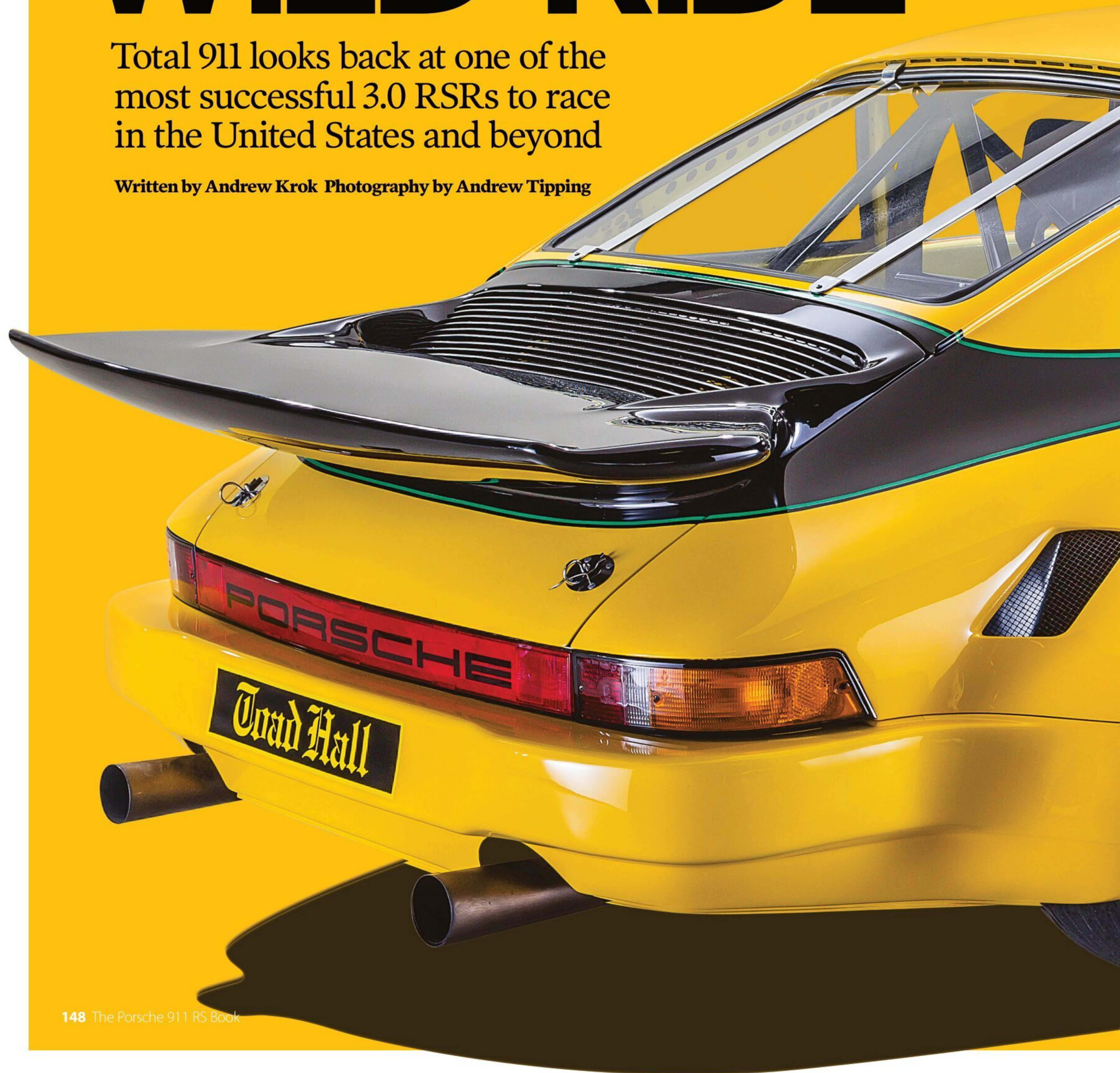
Thanks

The 964 RS Speedster in our pictures is currently for sale. Interested parties should contact rs@s-ic.com.

TOAD HALL'S WILD RIDE

Total 911 looks back at one of the most successful 3.0 RSRs to race in the United States and beyond

Written by Andrew Krok Photography by Andrew Tipping



The 917 was the first car to give Porsche an overall win at the 24 Hours of Le Mans. However, that success would prove to be short-lived, as the FIA promptly banned it at the end of the 1971 season for being such a dominant force. Thus, Porsche needed to go back to the drawing board. This time around, they conceived a production-based, naturally-aspirated race car that would go on to become one of

the most sought-after race cars ever – the Carrera RSR.

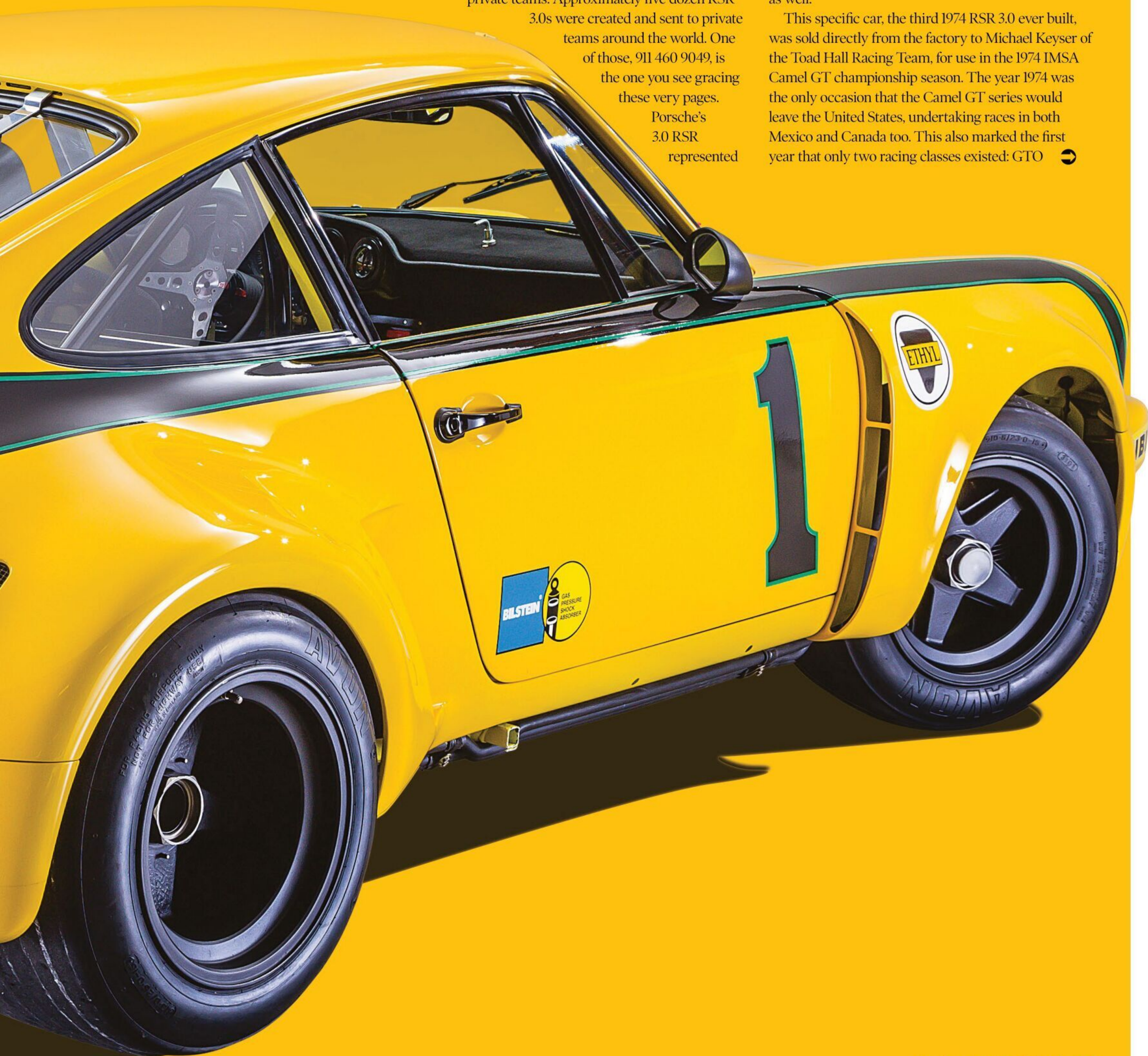
The RSR started out as a 2.8-litre, 280-horsepower racer that was run by both privateers and Porsche's works team. However, by 1974, the team were already elbows-deep in their attempt to create a turbocharged production-based car – a project that would go on to spawn both the 934 and 935, venerable champions in their own right. Thus, when Porsche created the 330-horsepower RSR 3.0, it was only ever raced by private teams. Approximately five dozen RSR

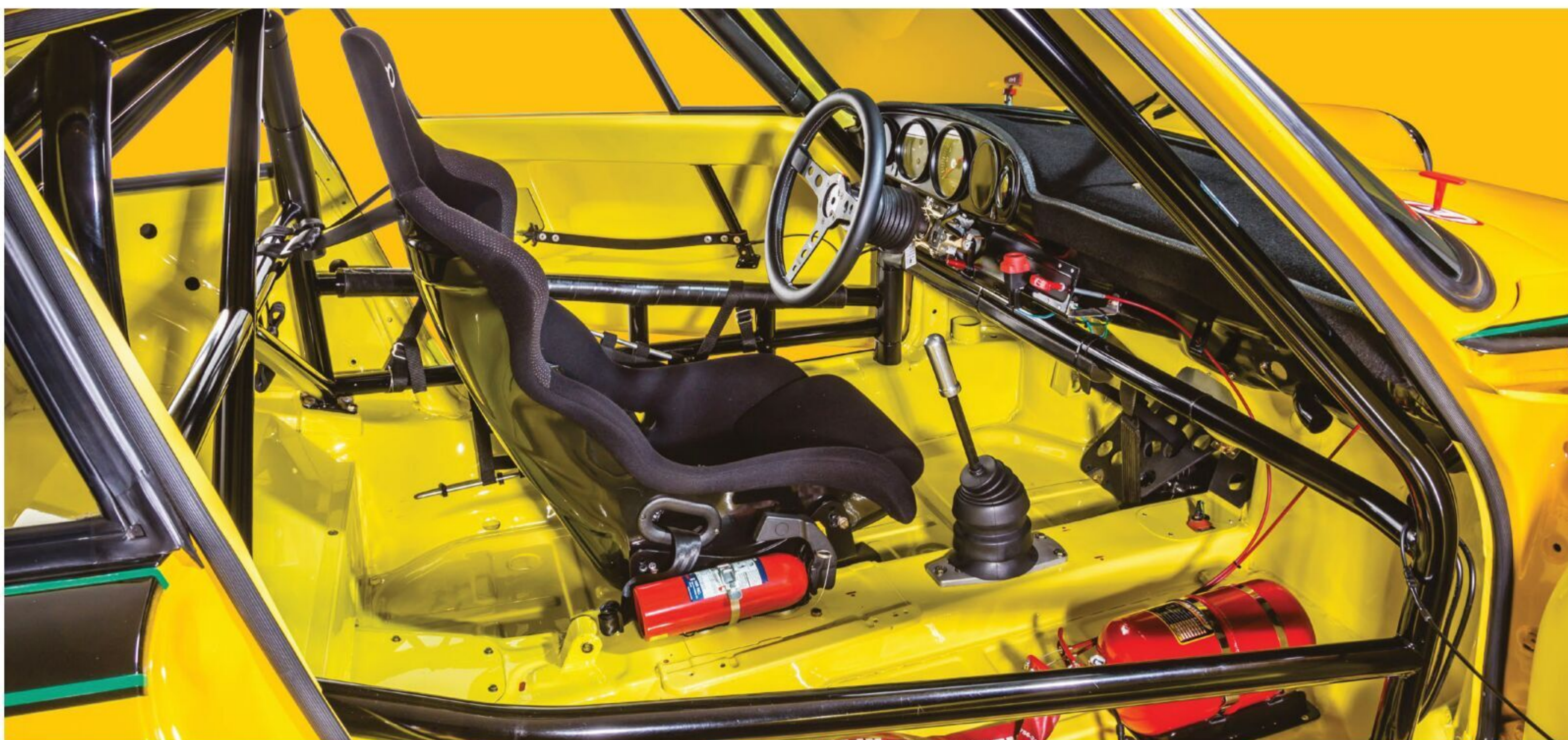
3.0s were created and sent to private teams around the world. One of those, 911 460 9049, is the one you see gracing these very pages.

Porsche's
3.0 RSR
represented

a serious departure from the smaller 2.8-litre models. Aside from increasing displacement, the 3.0-litre replaced the magnesium crankcase with an aluminium variant, in order to better handle the physical forces that came with this bump in output. The 3.0-litre complemented its increase in power by way of wider wheel arches, a full-width front spoiler and the ubiquitous 'whale tail' rear wing. In lieu of torsion bars, the 3.0's suspension was updated to utilise coil springs as well.

This specific car, the third 1974 RSR 3.0 ever built, was sold directly from the factory to Michael Keyser of the Toad Hall Racing Team, for use in the 1974 IMSA Camel GT championship season. The year 1974 was the only occasion that the Camel GT series would leave the United States, undertaking races in both Mexico and Canada too. This also marked the first year that only two racing classes existed: GTO ➔





and GTU. TO and TU, which were classes for former SCCA Trans-Am race cars, were discontinued and merged with GTO and GTU. Other notable contenders that season included the Chevrolet Corvette, BMW 3.0 CSL, Jaguar XK-E and Alfa Romeo Montreal.

Michael Keyser was quite the accomplished race car driver by the time 9049 made its debut in its dazzling Toad Hall livery. Keyser started Toad Hall with his photography partner John Shaw, and their first driver was Bruce Jennings in the 1969 SCCA Trans-Am series. Later that year, Keyser himself began learning to drive, and the following year he and Jennings were participating in FIA events. The racing bug had bit, and it bit hard.

During the 1974 season, 9049 had two primary drivers, Keyser and Milt Minter, the latter of whom had

been racing since the 1960s. Together, encased in an RSR with a 'Rain-X yellow' paint job including black and green trim, the pair started the 1974 season strong, achieving a second-place finish in the car's first outing at the Atlanta 6-Hour race at Road Atlanta – ironically enough, the only car it lost to was also an RSR 3.0, driven by Al Holbert and Elliot Forbes-Robinson under the Paris Properties banner.

From there, 9049 would go on to achieve two third-place finishes at the Ontario 4 Hour and Mid-Ohio 5 Hours, and a second-place finish at the Alabama 200 at Talladega Superspeedway. 9049's first taste of victory would come at the Lime Rock 100, a 100-mile race at Lime Rock Park in New York. It also won its class at the Watkins Glen 6 Hours, although its overall position was tenth.

That same year, Toad Hall and 9049 took its act overseas, competing in the 1974 24 Hours of Le Mans. Keyser and Minter were joined by Swiss driver Paul Blancpain, and the trio would race to an 11th-place finish in the GT class, coming 20th overall. Their 246 laps wasn't enough to compete with the best-performing RSR, run by Porsche Club Romand, which completed 312 laps for a third in class, seventh overall finish. This would however be the first and last time chassis 9049 participated at Le Mans, but certainly not the last time the car would venture overseas for top-level endurance racing.

Keyser and Toad Hall took 9049 back to the 1975 IMSA Camel GT series, starting with the 24 Hours of Daytona in December 1974. Milt Minter was replaced with two Mexican endurance racers, Guillermo





After racing with a 2.5-litre engine for some years, a correct 3.0-litre flat six was returned to power the Toad Hall RSR. The car remains primed for racing, with a front-mounted fuel tank and pared back interior



Model	Carrera RSR
Year	1974
Engine	
Capacity	2,996 cc
Compression ratio	10.5:1
Maximum power	330bhp
Maximum torque	314Nm
Transmission	Five-speed manual (type 915)
Suspension	
Front	MacPherson struts, lower wishbones, coil springs over shocks
Rear	Trailing arms, coil springs over telescopic dampers
Wheels & tyres	
Front	10x15-inch magnesium alloys; 10.5/23.0-15 slick tyres
Rear	13x15-inch magnesium alloys; 13.0/25.0-15 slick tyres
Dimensions	
Length	4,350mm
Width	1,896mm
Weight	900kg
Performance	
0-62mph	Not tested
Top speed	179 mph (est)



“9049 was ready, its Toad Hall livery as bright as the very day it left the Porsche factory”

‘Billy’ Sprowls and Andres Contreras. The three would go on to achieve a second-place at Daytona; again, their efforts were stymied by yet another 3.0 RSR, this time driven by Peter Gregg and Hurley Haywood of the Brumos team. In fact, the first six finishers that year were all driving 3.0 RSRs. The next race, the 12 Hours of Sebring, would find 9049 finishing 13th.

Keyser would go on to drive 9049 by himself for the majority of the 1975 Camel GT season, achieving a third place finish at Road Atlanta 100 Miles and a second place finish at Laguna Seca 100 Miles. At no other point in the season would Keyser achieve a podium finish in 9049; most of his remaining races ended with him placing somewhere in the double digits. Keyser and 9049’s final race together took place at the Mid-Ohio 6 Hours, where he and George Dyer finished 29th.

9049 did not compete in the 1976 season. Instead of racing, Toad Hall sold the car to John Wood, an

American driver. Wood’s goal was to use 9049 to run in the SCCA Trans-Am series, but the car was not within the specifications laid out by the SCCA. Thus, 9049 underwent some bodywork revisions to adhere to these regulations. The two most serious changes to the car were the addition of a 1976 911 Turbo rear wing, and a reduction in the width of the rear fender flares.

With the body now meeting SCCA specifications, the car was cleared to participate in the 1977 Trans-Am series. Wood’s time with 9049 did not get off to the best start; the car failed to start in the first race of the year at Kent. However, the remainder of the season proved to be a good one. Wood finished fifth in his class, Category I, at four races. Wood, with the help of American Formula Vee driver Robert ‘Bob’ Lazier, won the Category I class at the Watkins Glen 6 Hour race too. At the end of the season, Wood finished fourth in Category I with 80 points, trailing the third-place finisher by a 45-point margin.

In 1978, just after the 24 Hours of Daytona but prior to the 12 Hours of Sebring, 9049 was once again sold off. This time, it would land in the hands of the Miami Auto Racing team, helmed by drivers Jack Refenning and Dr. Ray Mummery. Oddly, 9049 traded hands without an engine being involved; thus, Miami Auto Racing had a blank slate on their hands. The narrow Trans-Am bodywork would prove to be a good fit in the IMSA Camel GT GTU class, but the team needed an engine that would work with the regulations. Therefore a 2.5-litre engine was sourced, and the car was sent to the 12 Hours of Sebring.

Sebring was not kind to 9049, despite initial testing proving it to be a very fast car. Troubles with the clutch would doom the car to finish towards the rear end of the pack, passing the checkered flag in 52nd place. Its highest-place finish in 1978 took place at Road Atlanta, where Mummery drove the car to a fifth place finish. American driver Tom Sheehy would occasionally join Mummery, and the two closed the 1978 season with a 24th place finish at the Daytona 250.

The year 1979 was no better; in fact, it was much worse. 9049 did not finish outside the double digits in any of the four races it ran that season. It finished 16th in the 24 Hours of Daytona, 49th in the 12 Hours of Sebring, 20th in the Road Atlanta Grand Prix, and 17th in the Paul Revere 250 at Daytona. Thus, 9049’s

illustrious racing career ended not with a bang, but rather a whimper.

In 1980, 9049 left the United States, having been purchased by Diego Febles, a Puerto Rican racing driver. The vehicle was raced on and off outside the United States, the specific history therein being a bit shrouded in mystery. After a decade-long absence from the U.S., the car once again returned to the States after being purchased by JR Borsos. Upon learning of its return, the car was immediately purchased by Kevin Jeanette, owner of Gunnar Porsche Racing. Jeanette was no stranger to Porsche's racing history, having raced 934s, 935s, and 962s while maintaining a business that specialised in restoring Porsche race cars.

Jeanette and Gunnar were not satisfied to see the Toad Hall RSR in its then current state, Trans-Am bodywork and all. What followed was a serious restoration to return the car to factory fresh. The 2.5-litre engine was removed and replaced with the correct 3.0-litre unit. The narrow fenders were removed and replaced with period-correct wide flares. That well-known 'Toad Hall' livery, complete in its dominant yellow hue, was reapplied, and the car saw light use during its time at Gunnar. On one of Gunnar's track days, racing legend Paul Newman took a spin behind the wheel.

In 2002, the car was sold to the Blackhawk Collection in California, where it sat for two years

prior to its arrival at Canepa. After purchasing the car from Blackhawk, Canepa once again tore the car down, preparing the vehicle for historic racing. After an extensive teardown, rebuild, and subsequent track test, 9049 was ready, its Toad Hall livery as bright as the day it left the factory.

Naturally, a car of this calibre can't stay in one place for too long, and shortly after its restoration at Canepa, it was sold off to a private owner. We can only hope that the new owner sees 9049's incredible pedigree and continues to take it out to historic racing events, be it in the United States or elsewhere. One of the most successful U.S. RSRs should not be left to languish, after all. **911**

“A car of this calibre
can't stay in one place
for too long”





AIR-COOLED KING

For many, the 993's engine is the pinnacle of air-cooled engineering. Total 911 takes to the track in its most extreme iteration


Written by **Wilhelm Lutjeharms** Photography by **Tim Moolman**

Even if you are not of the opinion, like several 911 fans, that the 993 should be put on a pedestal, you have to admit that it was, and still is, an exceptional era in the 911's heritage. Not only is its smooth exterior design a visual highlight, but being the last of the air-cooled generation gives it a unique place in the 911's history.

Dig a little deeper, and the 993 RS is one of a handful of 993s that most of us lust after. Until its design, the RS featured the same base engine as used in race cars such as the 964 RSR, the largest capacity engine fitted to a production 911. This engine was also

the foundation for other race cars.

However, in terms of naturally aspirated 993 engines, its zenith was reached in the design of the 993 RSR. Here the 3.8-litre engine developed, depending on which literature you have read, between 315bhp and 340bhp. There are also a few companies that would actually enlarge this engine's capacity to either 3.9 or 4.0-litres in size.

Today that power figure might not seem like much, but take into account that the RSR tips the scales at only 1,120 kilograms, and it is suddenly a very attractive result. This specific car was ordered with the lightweight package; the car has a different 



front splitter, and the doors and all the windows (except the windscreen) are lighter compared to a standard 993 RSR. The lighter windows also included the sliding mechanism for the driver's window.

This specific car has an interesting history though. Originally imported into South Africa, it belonged to two Porsche enthusiasts who used it on track, but didn't take part in any major races with the car.

However, the current owner has had it for several years. The most significant race that the car has done to date was a six hour endurance in South Africa, in which the current owner, together with the RSR's second owner, achieved third place overall.

As the front splitter is put in place after the RSR is taken off the trailer, the pop-riveted wheel arches are a strong reminder of the 993 GT2 road car and its race variants first. Today these arches are filled with full racing slicks, though.

One of the most attractive facts about this car is the fact that it is actually road-registered (the owner admits that more than half of the 5,500 miles the car has done were actually done on the road!). The rest has been done on the track, although admittedly not all of it while racing. If it wasn't for the fact the track wasn't more than 40 miles from this car's home, I would have happily driven it to the track – what a

As we get underway with the photography, it gives me the perfect opportunity to take in all the details. If you are used to road cars, these details include the peculiar tyre sizes, the fact that the wheels are pushed up into those wide wheel arches, the split-rim wheels and most notably, the bi-plane rear wing. The RSR really does look hunkered down and ready to tackle the next endurance race. The fact that it looks

like a GT2 from a distance but that a naturally aspirated engine sits between those two slick rear tyres makes it all the more appealing.

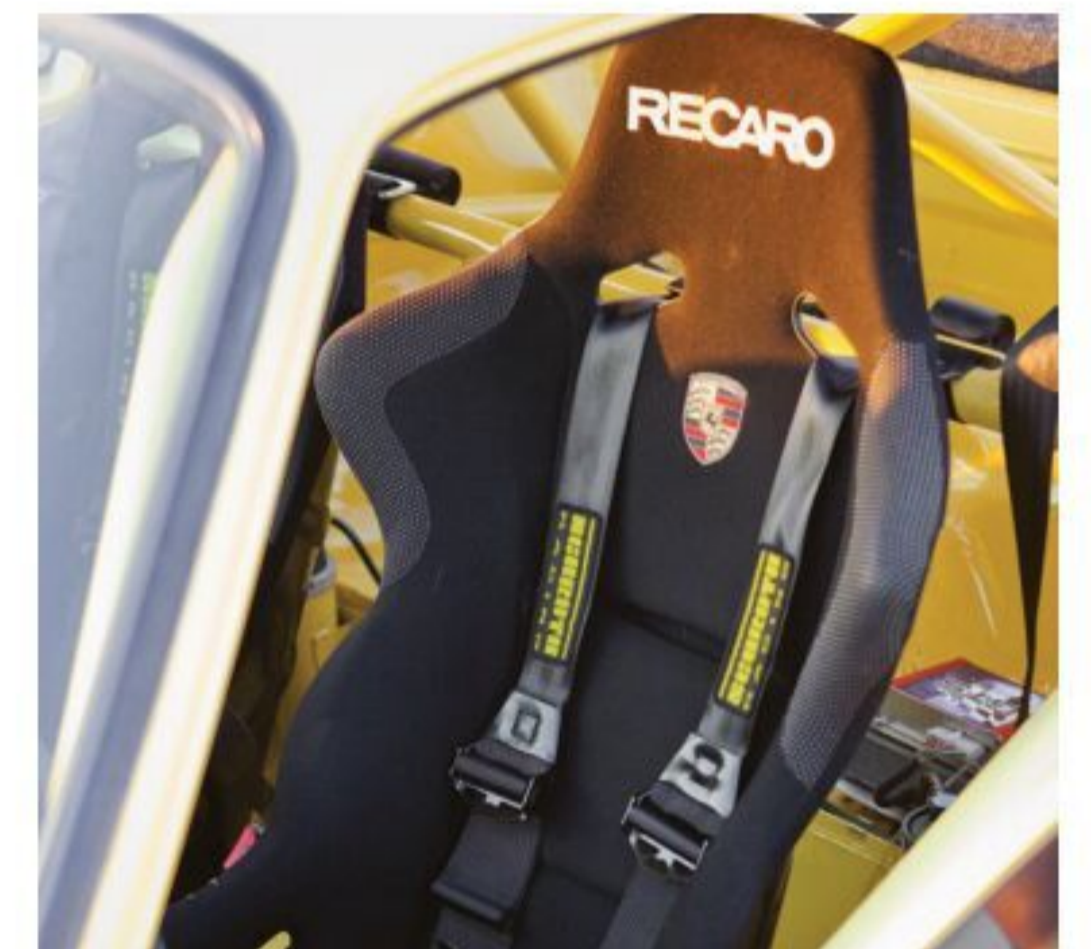
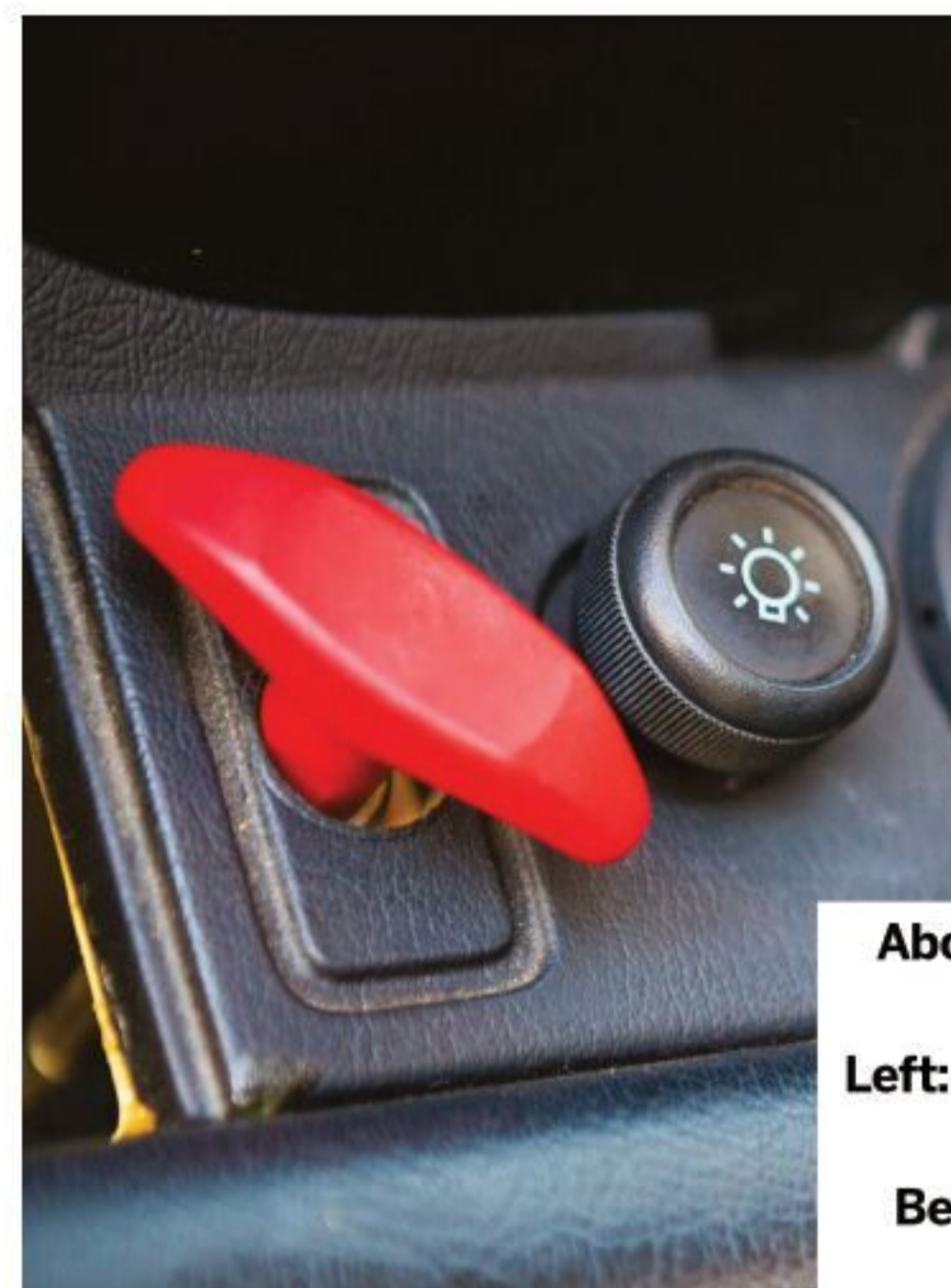
With most of the static photography done, it is time to climb over the roll cage's door

bars and into the cabin itself. The 911's door opens with the same click-clack sound when you pull its lever, as that of any other road-going 993. With the RSR this is simply amplified through the empty, lightweight door and stripped-out cabin. The moment you pull the lever, the door literally pops right open, its featherlight weight taking me by surprise. ➔

“Originally imported into South Africa, it belonged to two Porsche enthusiasts who used it on track”

memorable adventure that would have been!

However, even though it would have been quite an event to drive this race car on the road, the track is the perfect environment on which to experience the epitome of Porsche's naturally-aspirated, air-cooled development. This, of course, is the final evolution of the flat six before it adopted water-cooling.



Above: Kerb weight of just 1,120 kilograms is sprightly, making good use of the 325 available horsepower

Left: Acceleration is brutal above 5,000rpm as the RSR races for the horizon

Below Left: Level of steering directness in the RSR is staggering, says Wilhelm...



Finding a 993 RSR

With so few cars produced, finding a car for sale will be no easy task. Research on the internet indicated that one came up for sale last year in the USA, where 13 of the 30 cars had been exported to. This unit was a well looked-after example, with some slight modifications which didn't veer too far from the car's originality. The asking price was \$265,000. With the ever increasing demand for air-cooled 911s, having a factory air-cooled race car means you are unlikely to lose any money, though parts will be expensive.

I climb over the X-formed door bars and as I drop down into the racing seat, the contours of the Recaro seat with its famous Porsche crest pushes me into place, from my legs right the way up to my shoulders.

I move the seat slightly forward to have a commanding position over the steering wheel. Deciding to leave the three-point road belt, I opt for the full six-point harness. In front of me is a three-spoke racing steering wheel with a very neat Porsche inscription and the signature five dials.

The dials and ventilation controls are of a typical 993. However, that is it – the rest is a bare, stripped out yellow cabin, filled with the roll cage. In the passenger footwell is the fixed fire extinguisher, which I don't plan to use today. I pull the door shut and the noise of the action briefly echoes in the cabin.

A simple turn of the key kicks the 3.8-litre engine into life. The sound from the engine and exhaust is not as loud as I thought it would be – this is owing to the exhaust system which has been replaced with another, quieter, system, and offers a balance for both road and track use (the owner admits the original system would have had the authorities knocking on his door).

However, as soon as the engine catches, the cabin is filled with the harshest of clunking metal sounds that you could ever imagine. If you haven't experienced straight cut gears before, you will seriously think that the gearbox is about to rumble itself to pieces.

Press the clutch in, though, and all those noises disappear. I select first gear, let the clutch out and we are off. The gearbox has the same slick and easy shift action as that of other 993s, although here it has a springy action to it, assisting you as you move the lever out of each slot.

The first lap I take very easy. Suddenly my brain seems to forget all about the noise, focussing entirely on the directness of the steering system and the lightness of the car instead. As I become more comfortable with the RSR, I start to rev the engine that bit harder. It does feel like a massive punishment to the drivetrain, though. The engine actually only picks up speed as it swings past 5,000rpm, but by then the sound is already borderline ear-splitting. Then the needle simply swings faster and I quickly slot the next gear home a few 100revs before 7,000rpm. It is an intensive, raw and grinding sound. There is ➔

Model	993 Cup 3.8 RSR
Year	1998
Engine	
Capacity	3,746cc
Compression ratio	11.4:1
Maximum power	325bhp @ 6,900rpm
Maximum torque	353Nm @ 5,500rpm
Modifications	Factory lightweight package, restrictors removed
Transmission	Six-speed manual, straight cut gears
Suspension	
Front	MacPherson, coil springs, adjustable gas dampers, anti-roll bar
Rear	Multi-link, coil springs, gas dampers, anti-roll bar
Wheels & tyres	
Front	Split-rim wheels, Dunlop SP Sport 250/640 R18 slicks
Rear	Split-rim wheels, Dunlop SP Sport 280-640/R18 slicks
Dimensions	
Length	4,245mm
Width	1,735mm
Weight	1,120kg
Performance	
0-62mph	4.0 seconds
Top speed	162 mph





no doubt that the engine is built to be driven at high revolutions all the time.

Blip the throttle before a downshift, and the free revving nature of the engine is evident once again. Turn in, and the manner in which the nose darts into your desired direction is unlike any other road 911. Only a small amount of lock is needed as you turn the wheel, even through the tighter corners of the track.

As expected, there is no body roll, and with the high grip levels I find it rather difficult to sense exactly where the car's grip levels are. It is as if the slick tyres hide the fact that you have the weight of the drivetrain over the rear axle. They grip extremely well but don't give you that warning, via feeling or sometimes even a sound, that road tyres tend to do.

The same happens when you apply the brakes. Here, the fact that the car tips the scales at only 1,120 kilograms can immediately be experienced. The brakes scrub off speed in what feels like tenths of seconds, and each time I discover that I could have braked a lot later than I had done.

From the driver's seat, you sense that there is no movement of the car's body when pressure is applied to the brakes. It is not dissimilar to the feeling you experience when you brake hard in a road version of a 993.

I do a final lap and try my utmost to enjoy it, but at the same time take in every conceivable aspect of the

drive. For a moment I can imagine what racers must experience: the intensity, both physically and mentally, of piloting such a car lap after lap, must be wholly draining but also extremely exhilarating.

As the sun sets over the rural area outside Johannesburg, I can understand why this car forms part of this enthusiast's collection. As he said himself, it is an easy car to drive in terms of racing cars. Then there are also practical factors to consider. Most seasoned 911 specialists can work on the car, he can drive it on the road if he has to, and even the maintenance that is needed for this race car is reasonable. Lastly, there is, without a doubt, the desirability factor.

As we pulled the RSR back onto the trailer, I grasped the important connection between Porsche 911s that has been written about profusely. There definitely is a close link between Porsche's road and race cars. The road cars really do offer an extremely similar experience to those driven on the track.

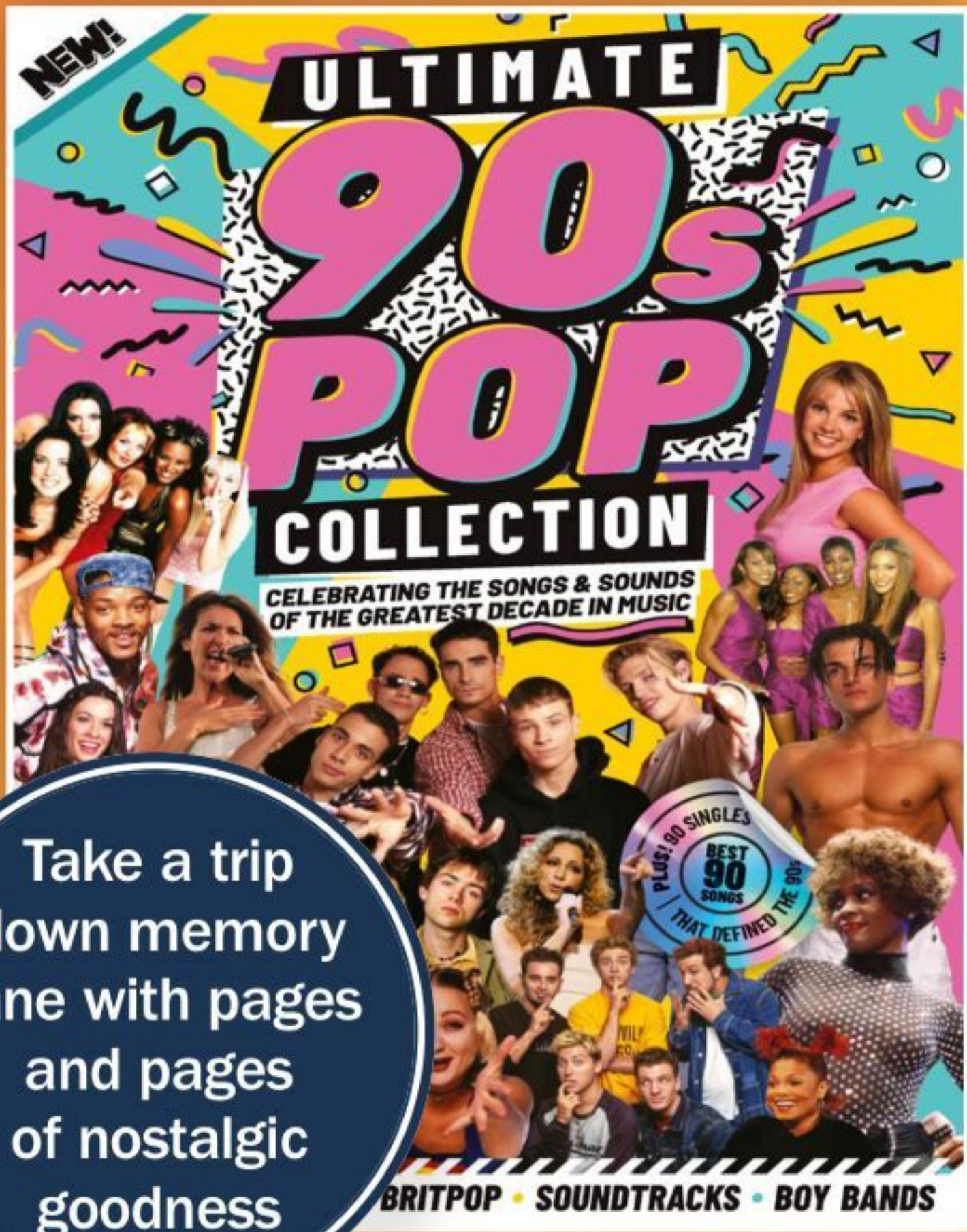
For that distilled 911 experience, a race car or in this instance an RSR, especially from the 993 generation, is a truly fantastic proposition. That additional 'R' really puts the car in an entirely different league.

I find it fascinating that so little has been written

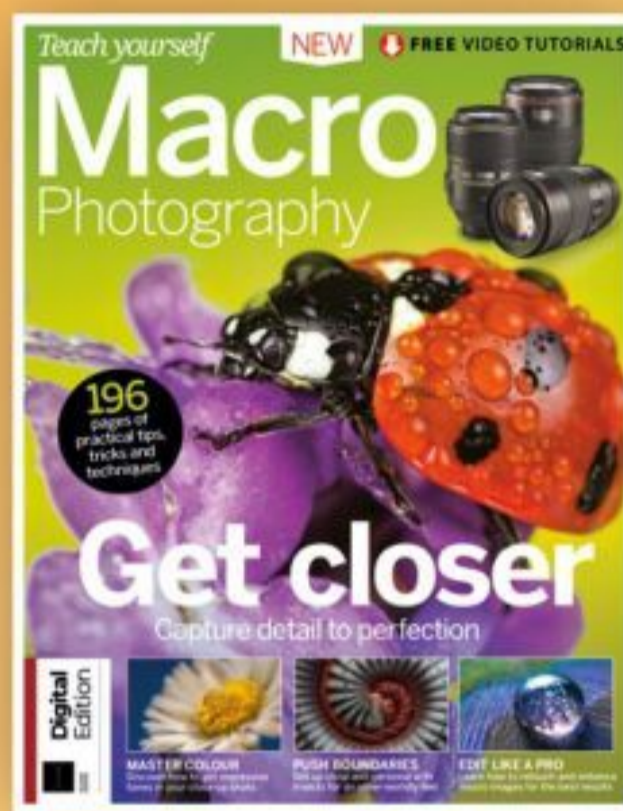
about these RSRs. It seems in this generation of race cars the GT2-based cars have received a lot more attention. Maybe rightly so; they were more powerful and there was also a close connection to the road cars, whereas the 993 RS looked tamer in comparison to the RSR. Mention RSR and most enthusiasts will think of the 2.8 and 3.0-litre RSRs of the 1970s, and maybe even the recent endurance versions. But back in 1997 and 1998, Porsche built just 30 of these cars and after driving this example, my top five 911 wish list has been well-and-truly reshuffled. **911**



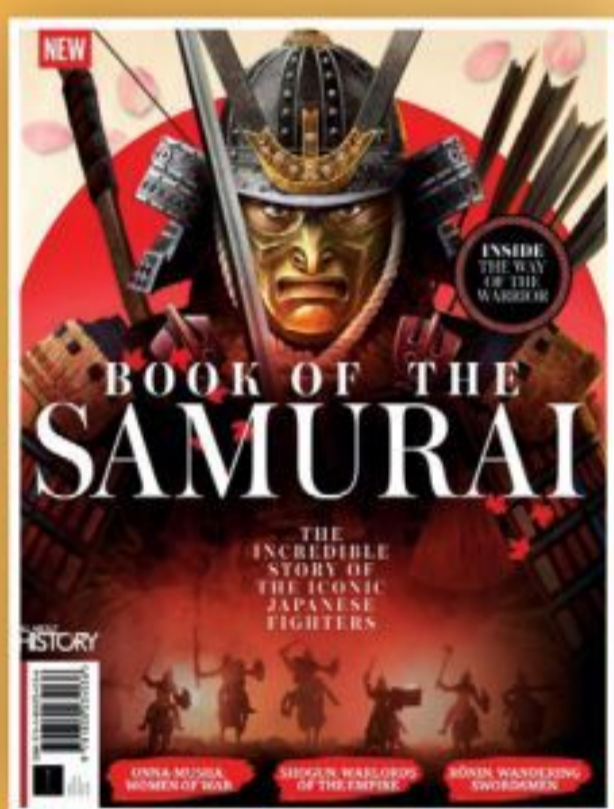
Right: ...while the huge bi-planed rear wing aids downforce when the 993 reaches big speeds



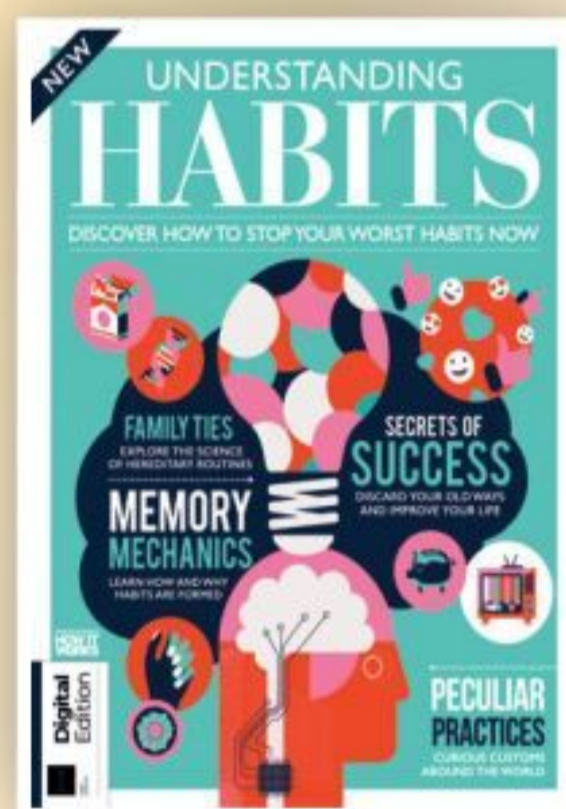
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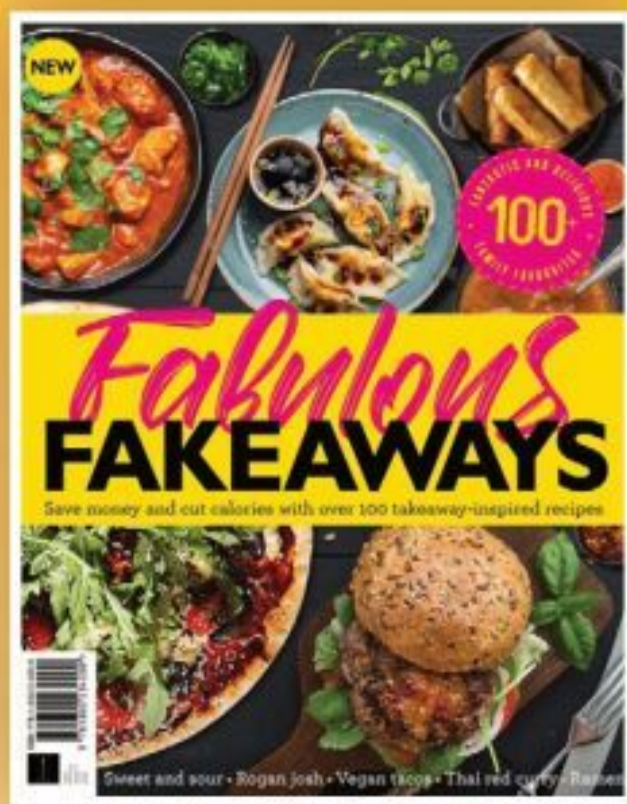
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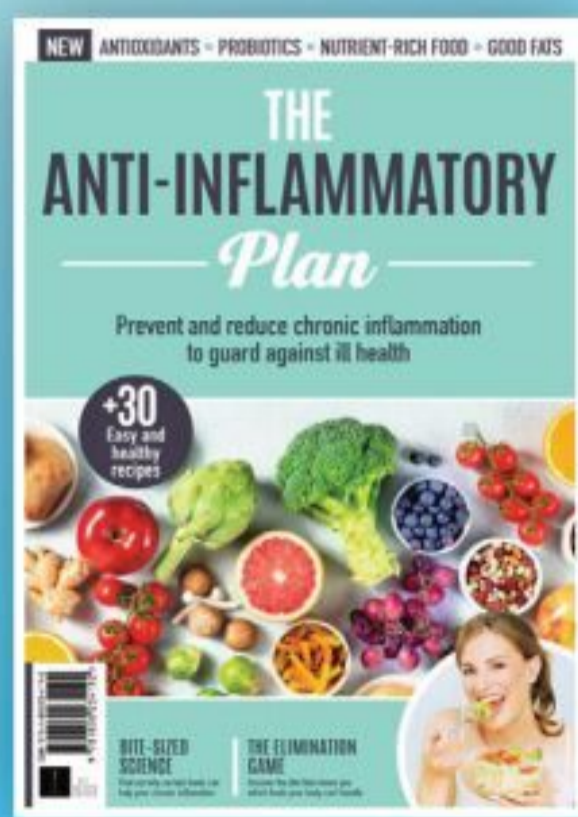
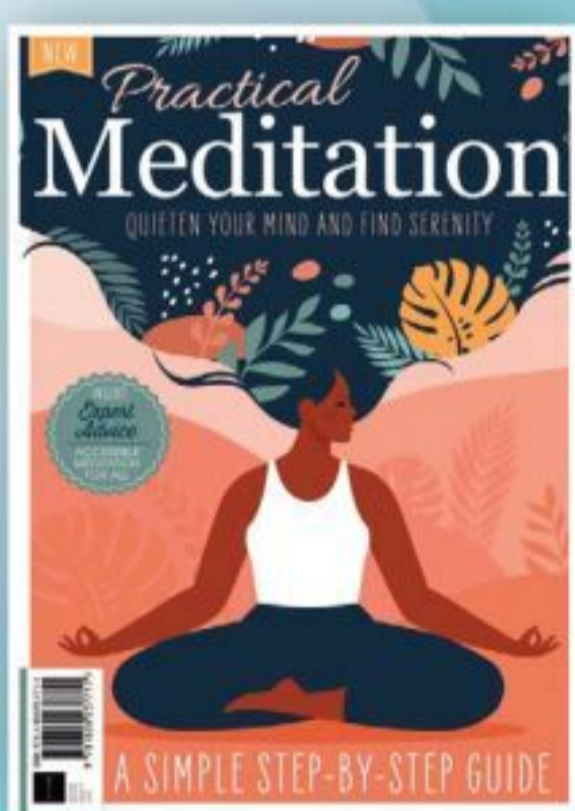
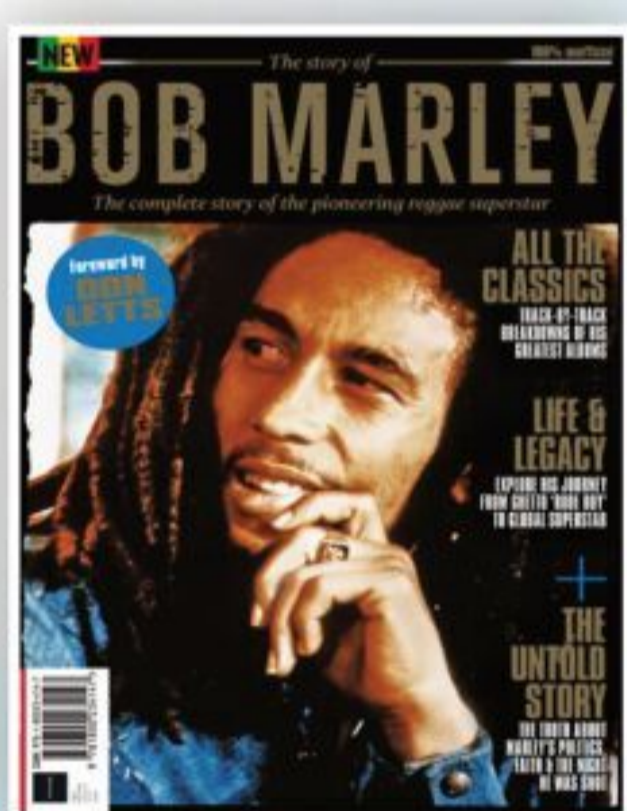


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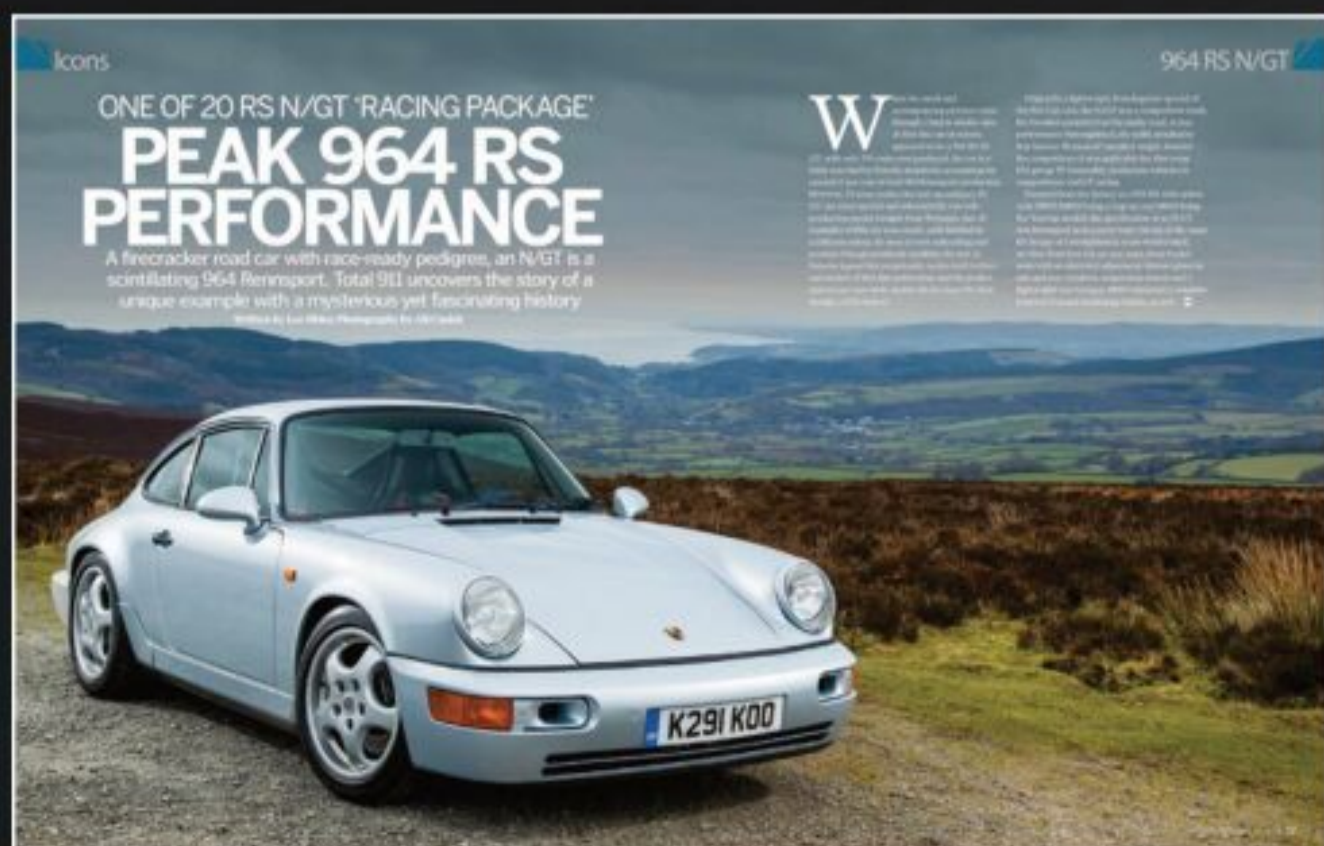
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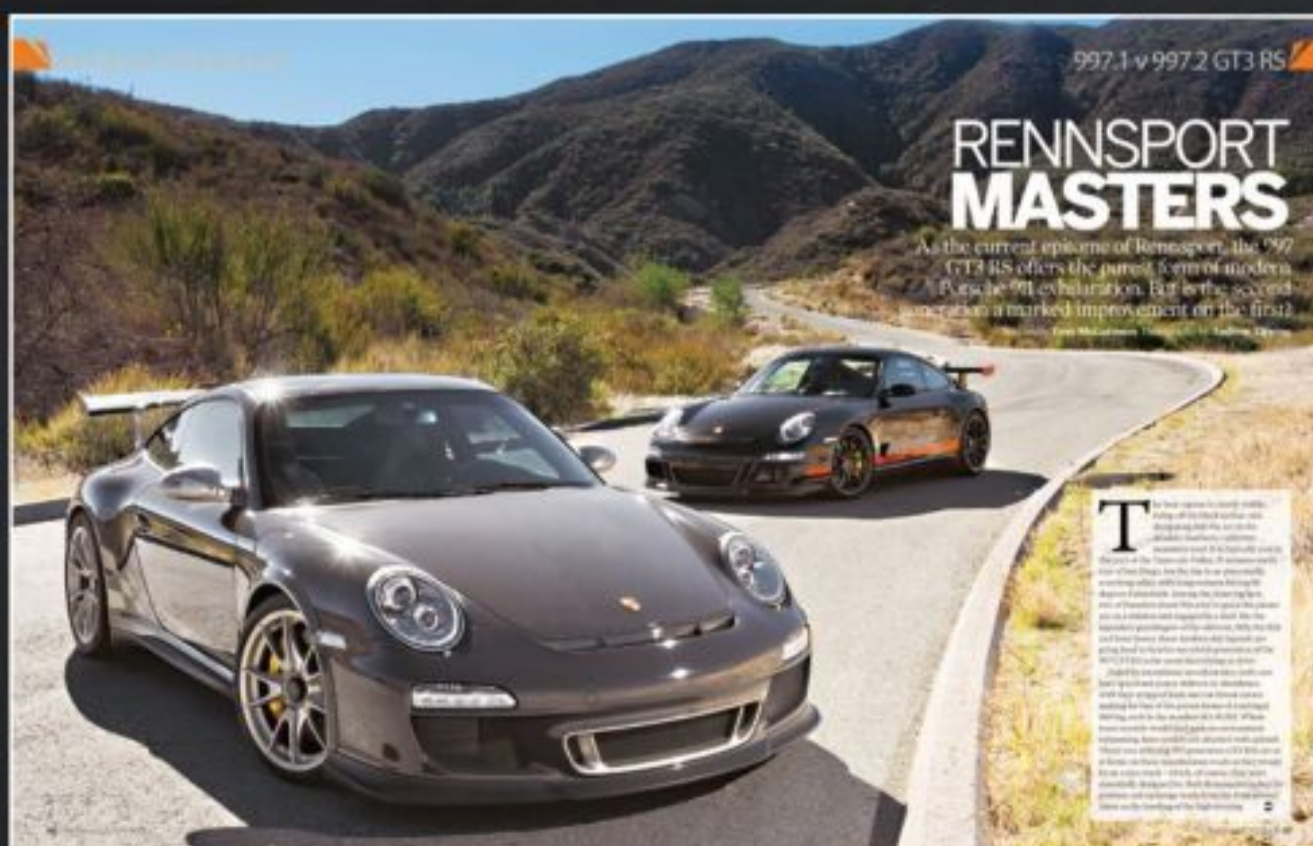


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