



VOLUME 4

PORSCHE 911'RS BOOK



Featuring test drives, head to heads and ultimate guides

Welcome to...

PORSCHE 911 RS BOOK

Ever since the first model in 1973, the iconic 911 Rennsport was built to go racing. The efforts to improve on the 911's greatness at Weissach has long been fruitful: the RS can claim wins at legendary events all around the world including Le Mans, the Targa Florio, Daytona, Sebring and even in rallying. It is thanks to these successes that road-going Rennsports are held in such high esteem by enthusiasts today.

Of course, the 911 RS has evolved substantially since its inception more than four decades ago. There are now twelve scintillating Rennsport generations on the road, with the latest in the 991 GT3 RS boasting more than double the power of the first model, the 2.7 Carrera RS. Like the 911 itself, each new generation of Rennsport has sought to push the boundaries in performance capabilities. Each is faster and more powerful than the generation before it, with exceptional handling helping to deliver the ultimate experience at the wheel of a Porsche.

Perhaps the best thing about a Rennsport is that it's permitted to take to the street. A true racer for the road, the latest 991 generation is, according to Le Mans winner Nick Tandy, the closest thing to a Cup car he's ever experienced – and yet its proud owner can still drive to the shops or the cinema in comfort and style, exactly as the 911's creator, Butzi Porsche, intended. The RS then is the Porsche 911 in its most exhilarating form, and this book presents only the very best, in lavish detail.

Performance driving has never been so fun.



911 RS BOOK

Imagine Publishing Ltd Richmond House 33 Richmond Hill Bournemouth Dorset BH2 6EZ Website: www.imagine-publishing.co.uk
Twitter: @Books_Imagine
Facebook: www.facebook.com/ImagineBookazines

Publishing Director Aaron Asadi

Head of Design Ross Andrews

Editor

Senior Art Editor

Assistant Designer Steve Dacombe

Printed byWilliam Gibbons, 26 Planetary Road, Willenhall, West Midlands, WV13 3XT

Distributed in the UK, Eire & the Rest of the World by Marketforce, Blue Fin Building, 110 Southwark Street, London, SE1 OSU Tel 0203 148 3300 www.marketforce.co.uk

Distributed in Australia by
Gordon & Gotch Australia Pty Ltd, 26 Rodborough Road, Frenchs Forest, NSW, 2086 Australia
Tel: +61 2 9972 8800 Web: www.gordongotch.com.au

Disclaimer

Disclaimer

The publisher cannot accept responsibility for any unsolicited material lost or damaged in the post. All text and layout is the copyright of Imagine Publishing Ltd. Nothing in this bookazine may be reproduced in whole or part without the written permission of the publisher. All copyrights are recognised and used specifically for the purpose of criticism and review. Although the bookazine has endeavoured to ensure all information is correct at time of print, prices and availability may change. This bookazine is fully independent and not affiliated in any way with the companies mentioned herein.

Porsche 911 is a trademark of Porsche AG.

The Porsche 911 RS Book Volume 4 @ 2016 Imagine Publishing Ltd

ISBN 9781785463754







Contents

Rennsport icons

10 The last RHD 2.7 RS

An epic barnfind in Trinidad reveals the last ever right-hand-drive 2.7 RS to leave the factory

16 The King's RS

This iconic Rennsport has a very regal past, as we find out

22 964 RS N/GT

This road-legal racing special is one of just 22 cars on the planet. We take it for a blast through the Devon countryside

28 993 RS

The 993 RS is now a quarter of a million pounds, so we reveal what you need to look for when buying one

36 997.1 GT3 RS

Every statistic uncovered on a scintillating modern track car in the first-generation 997

44 997 GT2 RS

It's still the only turbocharged RS to this day, and we take it to the track for a high-octane test

54 991 GT3 RS

It's the latest and greatest Rennsport to the fold, so here's what you need to know about the 500hp superstar

SERS OF THE PROPERTY OF THE PR

Rennsport showdown

62 991 GT3 RS v rivals

How does the new arrival compare to its recent Rennsport ancestry? We find out on road and track

74 2.7 RS v 2.7 Carrera

They're separated by only a year of engineering, so how does the RS compare to its identically-engined Carrera counterpart?

80 964 RS v C4 Lightweight

Jürgen Barth's all-wheel-drive, lightweight special takes on the 964 Rennsport on track

88 993 RS: real v replica

Can the iconic Rennsport driving experience be truly replicated? Our head to head test reveals all

94 964 v 993 RS

It's the perennial debate among aircooled enthusiasts: which is better, the 964 or 993 RS? We put them head to head to find out

102 997 GT2 RS v 997 GT3 RS 4.0

They're top of the pile when it comes to scintillating Rennsports, so which is better: turbocharging or natural aspiration?

Modified & Motorsport

112 The original retro

This long-time 2.8 RSR backdate began life as a 964 RS – we drive it hard!

116 2.8 RSR

Get up close to the championshipwinning Kremer 2.8 from 1973

122 964 RS 3.8

This Rubystone red 964 is boosted by RS 3.8 looks and 993 RS power

130 Toad Hall 3.0 RS

This 1974 stalwart has an iconic livery and a noteworthy racing history

136 SC RS

Rennsports aren't only made for the race track, as our drive in this Rothmans rally special proves

144 993 RSR

We're on track in South Africa in this air-cooled fire breather

150 996 GT3 RS

We fire up the last Porsche factory endurance racer to be fitted with a coveted manual gearbox

RS legends & data file

158 Spiller & the SC RS

We reunite the British co-driver with the car that brought success for Porsche in the desert

164 Jürgen Barth

The Weissach legend sits down to discuss his glittering career building and racing Porsches

170 Nick Faure

The British former racer and demo driver gives his take on the 911's evolution

174 Rennsport data file

Vital stats for every 911 Rennsport to have left the factory







Rennsport icons

At the wheel of every generation of the legendary 911 RS

010 The last RHD 2.7 RS

Murder and mystery in the Caribbean: the full, fascinating story of this unbelievable barnfind Rennsport

016 The King's RS

We take to the wheel of a special 2.7 RS once owned by the King of Spain

022 964 RS N/GT

We test drive one of the rarest Rennsports on both road and track

028 993 RS

Our ultimate guide to the last air-cooled RS is all you need when entering the market for one of the best examples...

036 997.1 GT3 RS

...or, if a water-cooled RS is on your wanted list, our guide to the first-generation 997 is the answer

044 997 GT2 RS

We get to grips with what is the only turbocharged 911 Rennsport model to leave the factory to date

054 991 GT3 RS

Every stat uncovered on the latest and greatest GT3 RS as the naturally aspirated 991 reaches 500bhp





036









Icons

sort of stand back and look at the classic car market and wonder what it's all about, and ask myself where is it going to be when I'm long gone," explains Josh Sadler, Autofarm's resident RS polymath. "There are the investment cars – that's a nice investment RS there," he says, pointing to an immaculate 1973 RS under a car cover, "or do you want something like this, something that has a story? For me, life is about people, and the stories associated with them." This car, his car, has him conflicted, though to look at it you might wonder what all the fuss is about.

Let's backtrack to late summer last year. Sadler was arranging to race at Rennsport Reunion V at Laguna Seca and the Daytona Classic 24-Hour endurance race in Florida. He had shipped out his 1970 911S 'Prototype', a car he and the team at Autofarm had lovingly restored and built as a racer. They did a good job, too, the car running both races faultlessly – though Sadler didn't bring

it back. He had heard through a contact, called Rikard Asbjornsen, about an interesting RHD 1973 RS that he had located in Trinidad. Naturally, Sadler's interest was raised, and conveniently the asking price for it matched the amount he received in the sale of his 911S Prototype.

Back in 1973 when Gordon Durham was ordering his new sports car, he would never have known just how interesting its future would be. Delivered to him in Teesside, England, it cost £7,500 and wore the registration MXG 91IL. One of the 117 right-hand-drive cars built, its M472 code marks it as one of the 94 UK Touring models, though significantly its 9113601576 chassis code marks it out as the last RHD RS built. It was fairly comprehensively specified, too, the options added to it including a tinted and heated rear window (M102), limited-slip differential (M220), head restraints (M258), driver's side mirror (M423), rear wiper (M425), electric sliding sunroof (M650) and electric windows (M651).

It also came with the option of no rear wing and Royal purple paint, and was one of only 16 ever painted in that hue, of which just seven were RHD. The car would remain in the UK until June 1977 when, with 23,000 miles on its odometer, it was shipped to Trinidad, where it stayed until 2016, gaining its registration PY5 363.

The car then changed hands between three owners from 1977 to 1993, including one Dave Maraj, who subsequently moved to Florida and set up Champion Porsche, one of the biggest Porsche dealers in the US. After his ownership it underwent a 'modernisation' of sorts, gaining a teatray rear wing, BBS alloy wheels, US-specification headlights, Recaro seats, a non-standard steering wheel, a pramhandle rear centre tail light, window tints and additional bumpers. Naturally, there's an uprated stereo in there now, while the Rennsport's standard Royal purple paint was covered by a comprehensive re-spray in a metallic aubergine.



The last RHD 2.7 RS

Sadler isn't entirely dismissive of the changes; indeed, they tell the story of the car, and in a wider sense, the fact that even recently a 2.7 RS was considered little more than just another 911. The modifications weren't cheap, either. "Whoever did the changes threw their wallet at it," says Sadler, pointing at the second piston added under the winged bootlid, as the brackets, mounts and piston are genuine Porsche parts. Back in the 1980s, this car would have attracted a lot of attention, but not because it's a 2.7 RS.

The biggest twist in the car's fate came when it changed hands for the final time in Trinidad. Leon Paria, a local businessman who ran an air conditioning company, bought it in 1993. The 2.7 RS wasn't running when Paria bought it, and he worked on it himself to get it back on the road. An engine fault would see it garaged again, Paria not having time to work on it. Sadly, Paria would never drive the car again, as in 2002 he was found at the side of the road, murdered. His death remains unsolved to this day, as Trinidad at the time was notorious for kidnapping for ransom and had an appalling record for murder. After his death his wife, Carol Paria, would continue to run the business, while fighting with the authorities to keep digging into his case for an arrest and prosecution, but to no avail. His pride and joy would languish too, as Carol received many offers from people wanting to buy it, but she knew it was potentially a significant model. It was then discovered by a good contact of Sadler's in the US, Rikard Asbjornsen, who approached the family with an offer. Between Asbjornsen, Sadler and the family, a deal was struck, and that's how the car has found its way back home to the UK.

Looking at it, and knowing the beautiful, competitive, historical race car that Sadler sold to pay for it, could have you questioning the man's sanity, but if there's anyone who knows RSs then Sadler's the man. If it weren't for the numbers associated with it (this a fully matching numbers

2.7 RS), it would be an easy car to ignore, particularly in its current state. The car wears a patina of age, the paint bubbling in places, while Trinidad's rodent population has found some of the plastics to their liking, with nibble marks apparent on the bumper trims as well as some of the plastic components under that aftermarket rear wing. But Sadler's unconcerned, as he's had a good look at it and knows that fundamentally it's a solid car, with no signs - as so many have - of accident damage. Never raced or rallied but a bit gnawed perhaps, otherwise it's sound.

The Maraj connection to this 2.7 RS would come up again when the car was taken from Trinidad to Rikard Asbjornsen's house in Florida, with Maraj's two sons coming to look at it before Sadler crossed the Atlantic. "Rikard, bless him, was really quite keen for me to have it, for all the logical reasons. It's a UK car and a lot of the very first cars came through us," says Sadler. Even so, he admits: "I didn't know anything about this



Model Carrera

Year

Engine

Capacity 2.687cc Compression ratio 8.5:1

Maximum power 210bhp @ 6,300rpm Maximum torque 255Nm @ 5,100rpm

Transmission Five-speed manual

Suspension

MacPherson strut, Front

wishbones

Rear Trailing arms

Wheels & tyres

Front 6x15-inch; 185/70/R15

Rear 7x15-inch; 215/60/R15

Dimensions

Length Width 4,163mm 1.610mm

975kg

Weight Performance

0-62mph Top speed 5.8 secs

152mph





year. It was sand cast and used on the 1974 RS and RSRs, and in 1975 it went through production into a pressure die-cast aluminium.

"The whole RS series has a number of little changes," says Sadler, adding that he's found a few little oddities on it, pointing at the red glass fibre cowl that goes over the top of the engine for air. "They altered that very slightly, the shape of it, whatever colour it was, to cater for the K-Jetronic injection, because in 1973 the 911T went from carburettors to fuel injection on US market cars for emissions regulations," explains Sadler. "It meant they had to change the shape slightly to accommodate it. This has got the original one – indeed, it's probably never been off the engine. It's anorak stuff. I didn't even notice it until we were looking around it," he adds.

"The big worry was the state of the bodyshell but it's remarkably solid all things considered," says Sadler, which given that he's sunk a chunk of his pension into it, is a good thing. The biggest issue he's found is the fuel system: "Normally, you'll find a gel in the fuel tank but it's all evaporated. I can't work out what's happened! First we need to send the injection and fuel pump away and get them all re-conditioned," says Sadler.

e car, its s a different ts past. Ibber shows ts have gt oit, while paint is now I rusting

Interest in the car has so far been limited, Sadler not knowing what to do with it presently. He admits to falling for the backstory: "We try to restore cars with a patina in them as they're part of the story. The problem is going to social events with it outside the Porsche world." Sadler's a man who likes to see cars being driven, saying: "Once you've done a restoration you have to take the car out in bad weather, once you've done that you've cracked it, you've gotten over that hump." It will be a while before this RS is doing that, if indeed it ever does. "I'm guessing he zeroed the speedometer when the changes were made, but I'm certain it's a low-mileage car," explains Sadler, as finding out the backstory is part of the appeal.

What to do with it though? Sadler is undeniably conflicted: "It's a bit too soon in the marketplace, and I've not got the time to wait for the market to mature." He's going to wait until the winter to make a decision, though he understands it's worth significantly more as a restored car. "I'd have to spend £150,000 to restore it and finding the parts takes time. We did have parts all squirrelled away, but then 2013 came along for the 50 years and suddenly we were selling all those bits. We'll need to get the correct wheels with the right date stamping on them, it goes on and on, though we're fairly well placed to resolve these problems," he adds. "The car has two values: its value as a car and its investment value, which is a fixed sum. That market is here to stay. Classic cars are different visually, more individual in character to modern computer-generated cars, and that's going to be an eternal appeal. They're also simpler mechanically. And they aren't making any more 1973 RSs," laughs Sadler, remembering when they could be had for as little as £5,000.

Still, if you want one you know where to find Josh, though you'll need some more zeros – and if the Trinidad car has gone, you can always rely on Sadler and his network of well-connected 911-sleuthing friends to uncover another.

car at all. The chap who has the service book is DDK forum active, and there's a fair bit about it on DDK that Rikard picked up on. It was known to be out in Trinidad, but not to me. You think you're an expert... but you're not," he laughs, though walking around the car we'll forgive him the oversight of not knowing where every 911 2.7 RS in the world resides, as he knows everything else about them. The original documentation is out there, as is the engine lid and service book, Sadler working to get his hands on them and return them to the car, along with more sleuthing to uncover any other details of its interesting past.

The late build is significant. While many get excited about the earliest cars with their lightweight panels for homologation, the later cars, too, would see developments that allowed Porsche to campaign the RSRs so effectively in racing. Sadler mentions the differing suspension mounting points, the short trailing arms for what would become the Turbo's suspension geometry, allowing wider tyres to work better. The crankcase differs too, the magnesium one (post-1968) replaced by a Silumin one, this aluminium alloy being stronger than the one first seen on the 1964 91Is and which ran through to the 1968 model

The last right-hand-drive 2.7 RS: quick facts

19th July 1973

Chassis no. 9113601576, reg no. MXG 911L is delivered to its first owner in Billingham, Teesside. It is the last right-hand-drive 911 Carrera 2.7 RS to ever be built according to its chassis number.

3rd June 1977

The car is exported to Trinidad in the Caribbean where it changes hands between three owners before being sold to local businessman Leon Paria in 1993.

Between 1977 and 1993

The RS is 'updated' getting a full respray in metallic aubergine, new seats, an upgraded stereo system, a new steering wheel and a tea tray rear wing.

27th May 1993

Leon Paria buys the car, which had been sitting unused for a while. He gets it running, before a mechanical problem has him park it up himself.

October 2002

With Paria a victim of murder, the car is left standing. His family refuse many offers from people wanting to buy it.

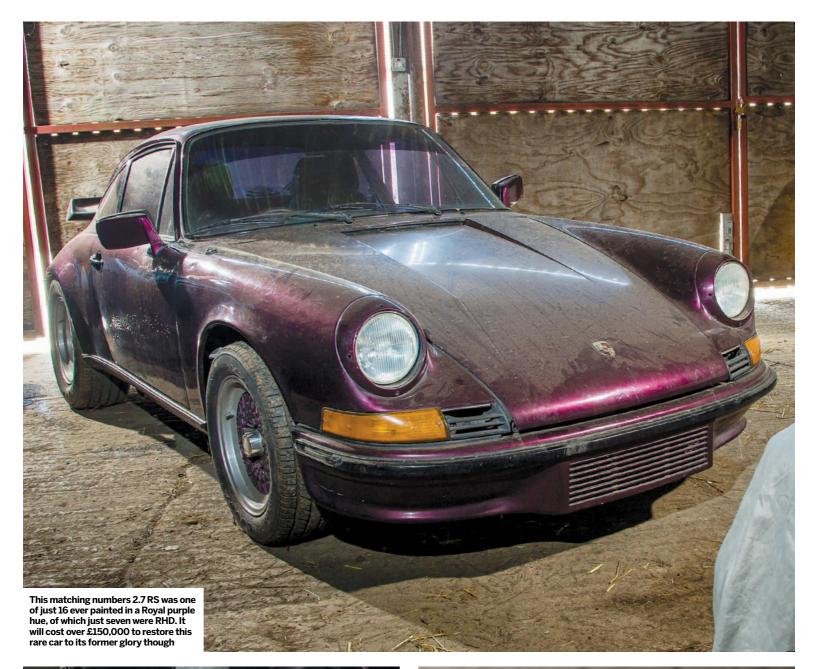
20th November 2015

Sale agreed between the Paria family and Josh Sadler from Autofarm, assisted by Rikard Asbjornsen in the US. Car exported to US from Trinidad.

10th February 2016

Car collected from CARS UK by Josh Sadler, Autofarm.

The last RHD 2.7 RS











RENNSPORT ROYALTY

The original 911 RS has always been regarded as Porsche royalty, with this regal Rennsport proving good enough for a king...







ing Juan Carlos I, the man bequeathed with the Spanish throne by the infamous General Francisco Franco, is an unabashed enthusiast of all things with an engine. You may have spotted the now former King of Spain at his native Formula One Grand Prix over the years, mingling on the grid with the drivers and presenting trophies on the podium. As well as his well-publicised interest in motorsport, Juan Carlos Alfonso Víctor María de Borbón y Borbón-Dos Sicilias (to give him his full name) is also known to be an avid motorcycle rider and, during the 1970s and 1980s, would apparently evade his security detail at the Palacio de la Zarzuela with alarming regularity in order to ride out into the hills north of Madrid incognito.

Rumour has it on one particular trip in the Spanish back lanes, King Juan Carlos happened across another biker at the side of the road. Disguised under his helmet, the King of Spain asked the man what the problem was? His fellow motorcyclist had run out of petrol, in the middle of nowhere (and in the days before mobile phones). Juan Carlos, still hiding his identity behind his visor, was more than willing to help out, ferrying the stricken rider to a local petrol station and back. It was only just before he left back for the palace that King Juan Carlos briefly removed his helmet, revealing the true identity of the mysterious Good Samaritan that this man had been riding pillion with.

Now, there is more than a hint of 'urban legend' about this particular anecdote; there has never been any official confirmation from the Spanish Royal Family, after all. Despite this, Juan Carlos' motorcycling exploits were a well-known secret so it may well be true. However, I personally prefer

to imagine the popular King of Spain not on an MV Augusta in the Madrid hills but at the wheel of a Porsche 911.

My vision is not outside the realms of possibility, for Juan Carlos was known to be a fan of Stuttgart's finest. During the 1970s, the King owned probably the most iconic Neunelfer of them all, a 911 Carrera 2.7 RS. The car showcased on these pages is believed to be the very Rennsport owned by the motor-mad royal. Delivered to West Germany in May 1973, the King's second series 'Touring' specification 911 Carrera RS was finished in the particularly unusual Glacier blue hue, one of just 16 2.7-litre Rennsports painted in this stunning colour. It seems remarkable, humbling even, that chassis no.1231 was likely in Juan Carlos' possession at the time of his ascension to the Spanish throne, following the death of General Franco in November 1975.

The original Carrera RS is a car of huge historical importance for Porsche and this particular example's history transcends even that. King Juan Carlos I was a man who helped unify and democratise Spain, so that he drove a Porsche 911 Carrera RS is entirely appropriate: Porsche has always been regarded as a less elitist sports car manufacturer, yet the Carrera RS retains the majesty befitting such a regal owner.

Chassis no.1231 remained registered in the sunny Spanish climes until 2002 when the royal Rennsport resurfaced in Madrid. Owned by Jose Ignacio Aguilar, the 2.7 RS had not lived an easy life outside of the palace walls. Like many Carrera RSs at that time, no.1231 had fallen into disrepair. The gorgeous Glasurblau paint had been covered with a red finish, fading badly in the sunlight, while the iconic Fuchs wheels were replaced

with ATS 'cookie cutters'. Heresy! Thankfully, a saviour for no.1231 appeared, intent on putting this regal RS back on its rightful throne. Bought by Dr Thomas Scholtz, the ex-King Juan Carlos car was exported back to its German homeland, arriving in Frankfurt for a painstaking restoration.

Over the course of the next two years, the 2.7 RS was stripped right back to a bare bodyshell before being meticulously rebuilt. While it may be common practice now (given the importance of proper restorations), photos were taken every step of the way through the process, creating an extensive history file for chassis no.1231. With the work complete, the regal Rennsport was issued with a Historic Technical Passport (HTP) by the FIA in September 2004, declaring it of a suitable period specification for competition in classic events around the world. Dr Scholtz had no plans to turn this particular RS into a garage ornament. Instead, no.1231 was used as Porsche originally intended, driven in numerous classic rallies, among which the Monte Carlo Historic and Eifel Classic events catch my eye in the history file.

To help keep the mechanical side of things in fine fettle during the 2.7 RSs adventurous exploits, between 2006 and 2009, Porsche Classic were entrusted with the car's maintenance and preparation. Back at its birthplace in Zuffenhausen, no.1231 was treated to an engine rebuild with a replacement casing at the factory. The flat six's identity was retained with Porsche stamping the 'AT' code after the engine number to signify the use of a new casing. By now though, 2.7 RS values had started on their stratospheric rise, the market moving towards today's desire for originality. Scholtz therefore decided to stop rallying King Juan Carlos' old Rennsport 911, entrusting the car to Classic911 in Frankfurt,



"The first Rennsport turned the 911 into an immortal entity and immediately cemented the 'Carrera RS' moniker into the stuff of legend"



Remarkable RSs

Porsche 911 Carrera 2.7 RS chassis no. 1231 is not the only Rennsport with a fascinating backstory. This trio of RSs all have incredible stories to tell:

The Beirut RS

Chassis no: 1247

Like the ex-King Juan Carlos Rennsport, this 2.7 RS was also built in May 1973 (albeit in rare Lightweight spec). Ordered without the iconic ducktail rear wing, chassis no. 1247 was delivered to a car dealer in Lebanon, who entered the Rennsport in the gruelling Beirut-Damascus Rally. However, when the Lebanese Civil War began, the car was abandoned and damaged during the collapse of a building, before resurfacing in 2007 and heading to the UK for a sympathetic recommissioning at independent Porsche specialist, Autofarm.



Dr Ferry Porsche's RS

Chassis no: 1281

It was only right that the father of the Porsche 911 was presented with a 2.7 RS. However, externally, Ferry Porsche's car – chassis no. 1281 – didn't look like any other Rennsport, bereft of its ducktail and fitted with forged ATS 'cookie cutter' wheels. Due to his preference for understatement, Dr Porsche's car was specced without the eye-catching 'Carrera' side script and was painted in a silver-green diamond metallic shade with a blue interior. Powering this special car was an experimental 2.8-litre flat six engine.

Louise Piëch's RS

Chassis no: 1411

Louise Piëch, sister of Ferry Porsche, was also presented with a 2.7 RS, planned in February and built in May 1973. Chassis no. 1411 wasn't handed over to Piëch until June though, thanks to a number of experimental components fitted to her Rennsport. These included a 2.9-litre engine and strengthened Sportomatic gearbox. Delivered with a ducktail, Porsche also gave her a decklid without the famous rear wing. The seats were early G-Series items finished in a bold floral print.





tasked with a full respray and returning no.1231 to its original, road-going M472 specification. That was in 2013, however, sitting outside its current residence at Maxted-Page (overseers of many a 2.7 RS sale), the restoration might as well have been yesterday. Chassis no.1231 looks every bit the royal Rennsport it once was. The Glacier blue panel work shimmers in the low winter sun with a deep lustre. It's hard not to be in awe in its presence. I feel like I should talk in hushed, reverential tones when within just a few paces of its legendary silhouette: the very 2.7 RS that once ferried around a king.

Even without this particular Rennsport's illustrious backstory, I feel slightly starstruck. In two and a half years at Total 911, this is (finally) the first time that I'm about to get behind the wheel of this Zuffenhausen icon, the car that turned the 911 into an immortal entity and immediately cemented the 'Carrera RS' moniker into the stuff of legend. The pages of this magazine have rightly told the story of the Porsche 911 Carrera 2.7 RS many times before yet it has been nearly 12 months since we last touched upon the tale and every time I revisit the details, something new always seems to catch my eye.

We all know that the Carrera RS was born out of Porsche's desire for the 911 to perform better on track. For 1972, the FIA's Group 5 rules were changed, effectively outlawing the dominant 5.0-litre 917s. Porsche took this as an opportunity to focus on the 911's racing exploits. However, the incumbent 2.5-litre STs and S-Rs (racing developments of the 911 2.4S) were outclassed by homologation specials from Ford and BMW. Ernst Fuhrmann was not impressed.

So, in the spring of 1972, after plans to create a six or eight-cylinder version of the mid-engined 914 were cancelled due to the prohibitive costs involved, Wolfgang Berger was put in charge of the project, the young engineer having been the one who realised Porsche needed to exploit the rulebook like its competitors. The 911 needed to be wider, lighter and more powerful; the formula for what would become the 2.7 Carrera had been set. Remarkably though, Porsche was already working on a 2.7-litre 911S, intended to replace the 2,341cc cars offered for sale in 1972. Zuffenhausen's

competition hadn't just strengthened on the track; the marketing department wanted better headline figures for the road cars, too. A 210bhp Neunelfer - bereft of any rear wing, but with widened arches - was pretty much a certainty, with dealers informed, pricing confirmed and adverts already designed and printed by the end of spring that year. Like the current 911S, there was even going to be a Targa version.

Then, the news from the CSI (the forerunner of the FIA) came in from Porsche motorsport stalwart, Huschke von Hanstein, 500 identical cars needed to be built but there was no confirmation from the governing body that they needed to be sold. Porsche could, therefore, make a lightweight version of the planned 2.7S that would be retrofitted with more luxuries after homologation. The marketing department were not convinced the numbers stacked up, claiming that, if past experience was anything to go by, "We can hardly expect to sell more than 80 of them to active, private drivers. The rest of the cars... would have to be sold to private customers. Considering the extremely spartan equipment... we do not believe

Model Carrera 2.7 RS Touring Year

Engine Capacity

2.687cc

Compression ratio 8.5:1

Maximum power 210bhp @ 6,300rpm

Maximum torque

255Nm @ 5,100rpm 915-type five-speed manual Suspension

MacPherson strut; telescopic damper: torsion bar:

Trailing arm; telescopic damper: torsion bar: anti-roll bar

Wheels & tyres

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

Brakes

Rear

282mm internally vented discs 290mm internally vented discs

Dimensions

4,163mm 1,610mm Weight 1.075kg

Performance

0-62mph Top speed 5.8 secs







The King's RS

we can effectively market the car." How wrong they were. Fuhrmann put his foot down, though. To him, racing success was imperative, so the lightweight 2.7S – with a new ducktail rear wing, developed by Tilman Brodbeck – was greenlighted. A new name was needed for this special 911 though, with Porsche deciding to introduce the 'Carrera' moniker, made famous on 356 racers during the 1950s, into the 911 bloodline. The Carrera RS was born. The retrofit comfort options proved more popular than anyone could imagine. Of the 1,590 2.7 RSs produced, 1,308 (the ex-King Juan Carlos car among that number) were ordered with the M472 option box ticked.

Inside, it's immediately obvious why the Touring specification was so popular. Although in this case the car was originally fitted with standard seats, the new Recaro S style sports seats now fitted provide just the right amount of support and, as Lee Maxted-Page points out, "they just look and feel right inside a 2.7 RS." The classic cross-centred steering wheel has a thicker grip than normal though, and hints at the extra sporting purpose, something confirmed as

the 911/83 flat six thrums into life. On paper, the Carrera 2.7 RS Touring should behave in a similar fashion to the 1974 911 Carrera MFI (a car I have driven before in issue 132). At their heart, both cars use the same 210bhp, 2,687cc flat six and even their claimed weights of 1,075kg are identical – though I find that hard to believe given the later 911's impact bumpers. However, on the road the Rennsport feels and sounds more raucous.

The 2.7-litre engine enjoys plenty of low-end torque, pulling impressively from about 2,000rpm. Yet it's a lively flat six, in the best Porsche traditions, willing to be revved all the way to its 7,200rpm redline. The engine note comes alive around 4,000rpm, with the first little kick before the idiosyncratic air-cooled tone comes to the fore with a second burst just after 6,000rpm. The more I keep my foot in, the more the RS rewards me.

Maybe it's the psychological effect of the Rennsport decal on the decklid but, where the 1974 Carrera felt like the perfect classic car for touring, the 2.7 RS invites you to grab it by the scruff of the neck. Unlike later RSs though, the 2.7-litre original is relatively relaxed in terms

of springing and damping, inspiring confidence through each turn. At road speeds, the car's attitude is undeniably one that favours understeer but the messages sent to my fingertips through that delightfully thick-rimmed steering wheel are crystal clear, allowing me to revel in the beautiful bobbing sensation from the front-end – a feeling only a classic 911 can achieve. It never feels like it wants to bite me; it's immediately clear why this was a successful platform for the 2.8 RSR.

The way chassis no.1231 drives fully justifies what must have been a substantial amount spent on its restoration. As classic 911s go, it feels wholly representative of what driving a new 2.7 RS must have been like. The brakes, while requiring a hefty dose of my right foot, feel sharp and the 915 gearbox is among the best I have driven, with no qualms entering any of the five forward gears.

It is a shame then, that so many of these cars are now locked away in garages and seldom enjoyed as, while my time behind its wheel has been brief, this regal RS has shown that Porsche's original Rennsport delivers a driving experience undeniably fit for a king.





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

964 RS N/GT

hen 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 flameretardant 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.

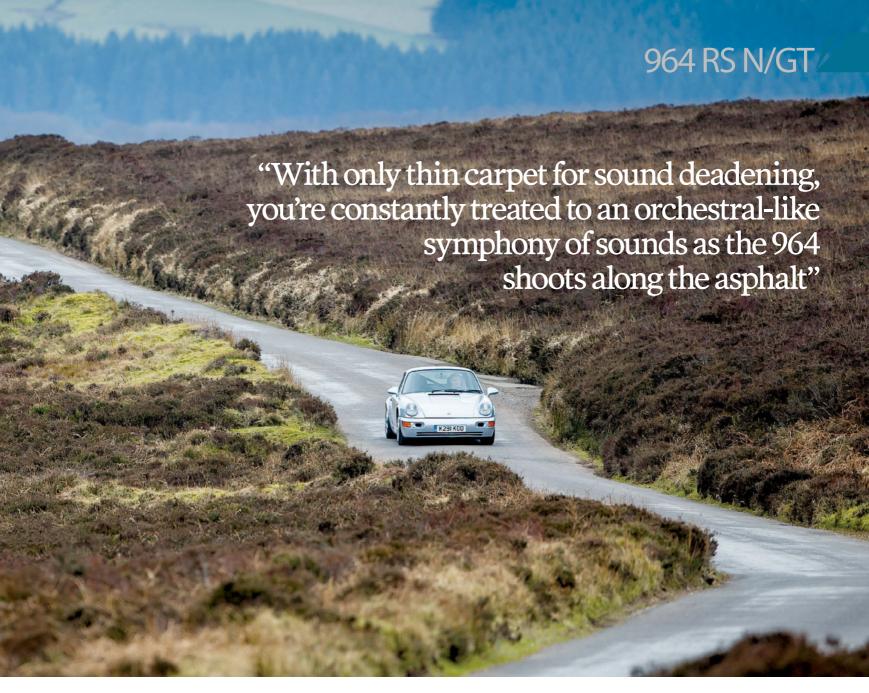


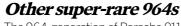












The 964-generation of Porsche 911 boasted a mouth-watering array of special models within its repertoire:



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



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 lightningquick acceleration. This was a true competition thoroughbred, illegible

Model 964 RS

Year 1992

Capacity

3 600cc

Compression ratio 11.3:1 260bhp @ 6,100rpm

Maximum power Maximum torque

Transmission Five-speed G50 Suspension

Front Independent;

MacPherson struts; coil springs; gas-filled double action shock absorbers; anti-roll bar

325Nm @ 4,800rpm

Independent; semitrailing arms with telescopic dampers; coil springs: anti-roll bar

Wheels & tyres

Front 7.5x17-inch magnesium Cup wheels;

205/55/ZR17 tyres 9x17-inch magnesium

Cup wheels: 255/40/ZR17 tyres

Dimensions

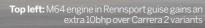
4,250mm Length 1,650mm Width Weight 1.230kg

Performance

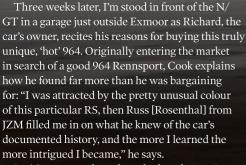
0-62mph Not tested Not tested Top speed







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



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 cutoff 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.

K291 K00

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 surefooted synergy in both steering wheel and throttle inputs from a committed driver. Steering itself is a wonderful experience here, with left-handdrive examples such as this benefitting from the heavy, unnassisted 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...

RARITY OF THE RS N/GT

964 RS: 2,405 964 RS: 2,405 964 RS N/GT: 290 964 RS N/GT RACING PACKAGE: 20

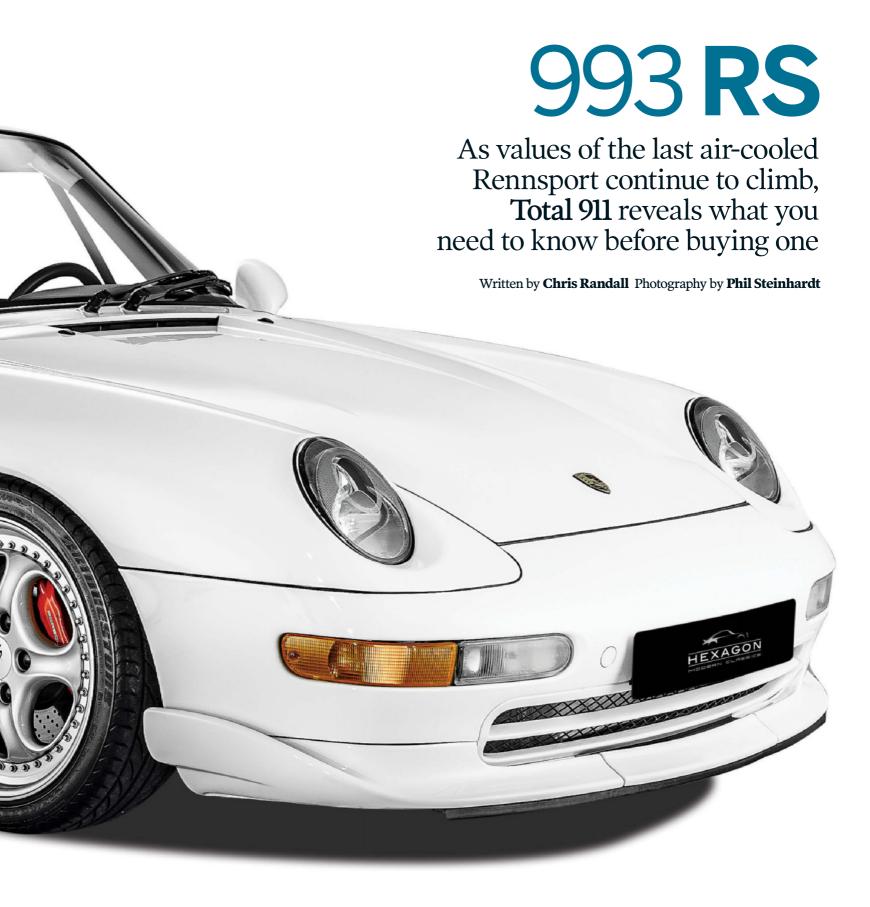




We already know the Clubsport version of the 993 RS was more hardcore, but for those buyers that ticked the option box marked M003, this was the ultimate incarnation of this special 993. Representing around 20 per cent of total production, the variant, also referred to as the RSR in some markets, wasn't 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.









t 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.

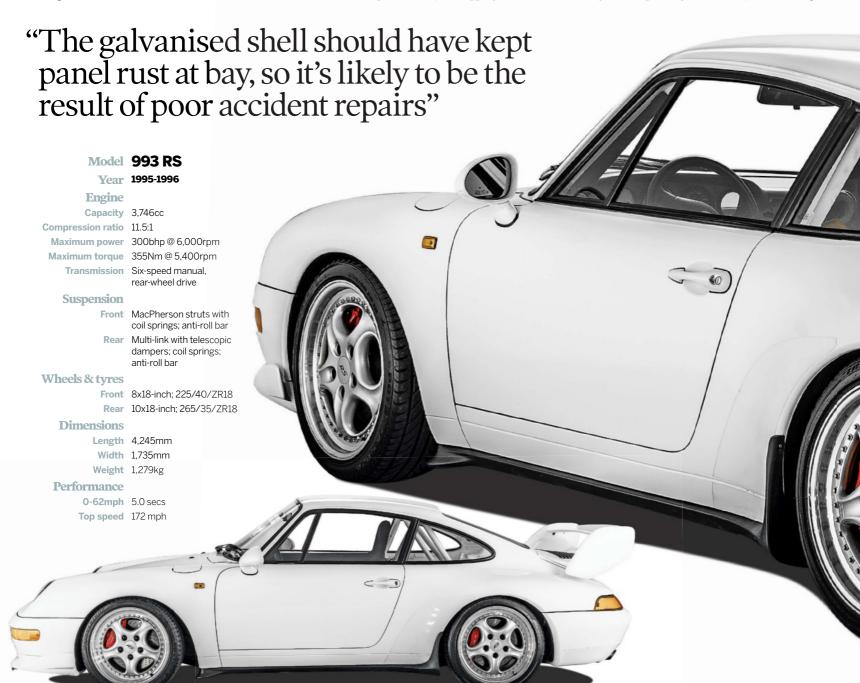
It's a rare beast and a bad one will be an expensive mistress, so as values climb it's vital to meticulously investigate the history before examining a potential purchase any further. Naturally, the paperwork should all stack up with no question marks over maintenance record or

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 9lls, 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, 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, so budget for re-painting if there's any evidence











"Compression and cylinder leakage tests will confirm the engine condition"

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 be exacerbated by the stiffer suspension set up – though it can be fixed without excessive difficulty or cost.

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, and with a re-build costing five figures – it could be double that if it extends to more major surgery such as replacing pistons or crankshaft – 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.





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. 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 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.



SPECIALIST VIEW

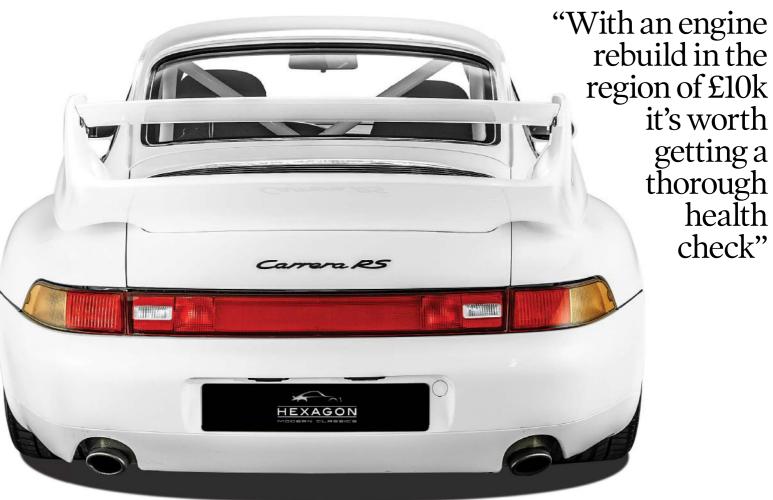
"The 993 RS is an incredibly special car indeed and has witnessed a huge leap in values since the start of last year. We're lucky enough to have had a few in stock including the immaculate Clubsport seen here in your pictures.

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



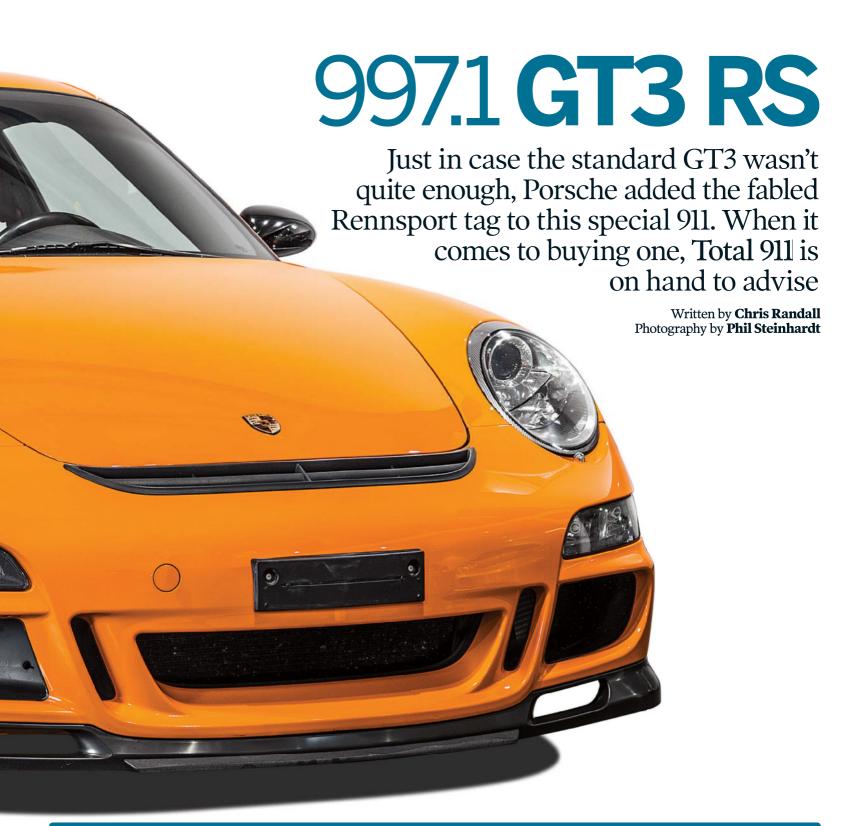




check"







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



ou 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.

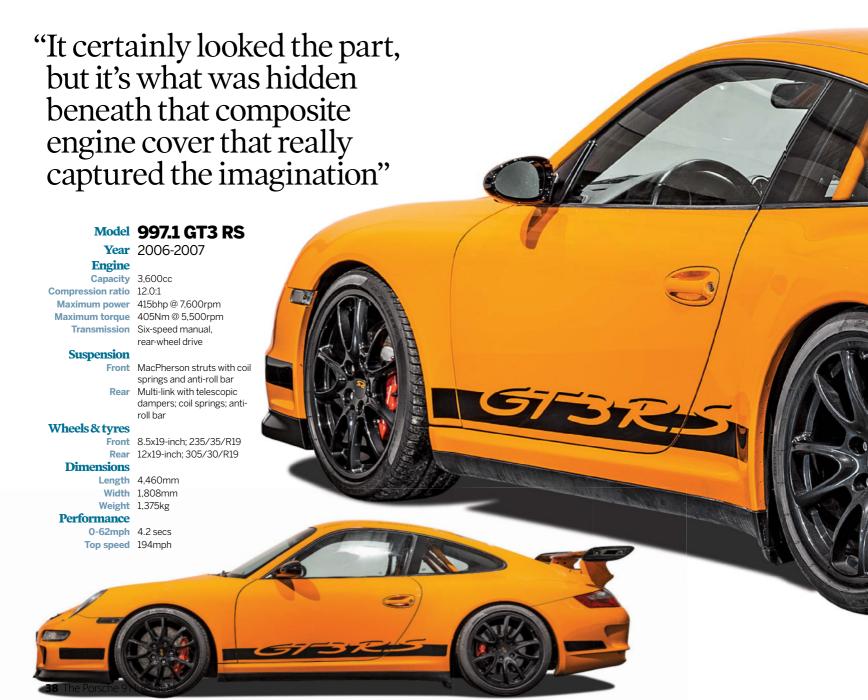
It would hardly come as a surprise, then, when Porsche announced that the 997 GT3 would also get the Rennsport treatment, although this time both models would arrive together in August 2006. 996 buyers had to wait five years or so for the same development. Even with an eye-watering £94,280 price tag,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









"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 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 9lls – 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 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 crossdrilling. 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 carbon items, identified by yellow calipers. While they might have saved a substantial amount





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 RSspecific 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.

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 19inch 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.



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 well as its investment potential."

Greig Daly, RPM Technik



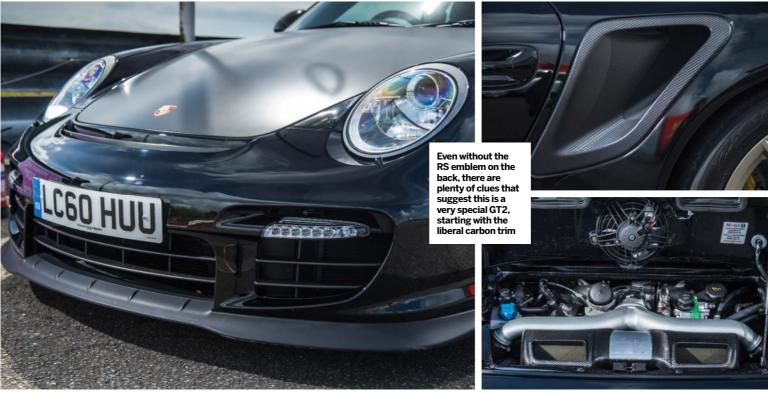












very now and then, you come across a sports car that stands out from the crowd. It's a feat that's often hard to achieve in Porsche circles, such is the high calibre of decorated sports cars to have left the Zuffenhausen factory over the last five decades. However, when the car in question is not only a turbocharged Rennsport, but also Porsche's fastest road-going production 911, you are dealing with a very special sports car indeed – and that's before we realise it has just 957 miles on the clock.

First introduced in 1995, the 911 GT2 has been powered by a 3.6-litre, twin-turbocharged flat-six boxer engine. This was originally air-cooled in the 993, of course, before switching to water cooling for both the 996 and 997. However, the halcyon GT2 in our pictures, a 2010 GT2 RS, draws on its premium sporting heritage from as far back as the 2.7-litre Carrera RS from 1973, when Porsche first started producing high-performance road-going 911 models with the 'RS' moniker. These legendary Rennsport models have always been produced in limited numbers, but all have been naturally aspirated – until the turn of this ferocious GT2 RS.

Plenty of evocative adjectives have been used to describe the car since its inception: brutal, overpowered, aggressive, monstrous, feral; even the 'Widowmaker' tag has been applied in portraying the performance of the GT2 RS. While the turbocharged Rennsport has elements of all of these in its character, in truth it possesses so much more because it can still be driven at street-legal speeds, and is capable of behaving in an assured and civilised fashion.

See it like this: it was once said that a child could fly a Boeing 747, but it took a qualified pilot to land the craft or handle an emergency. In the same way, most people would be able to drive the GT2 RS at normal speeds; it's only when you start getting an itchy right foot that you need to have an advanced level of ability in handling this high-performance supercar properly.

We've been forthcoming with the reputation of the GT2 RS, but as we stand before it, surely it's just another lightened 911 GT2 with a bit more power under the engine cover? Well, for starters, this model represents the last of a line of cars that featured the Mezger engine: the indirect-injection

engines that can trace their lineage all the way back to the Le Mans-winning GT1 of 1998 and ultimately, if tenuously, back to the 930 Turbo cars. The 997 GT2 RS is also the last of the top-end supercars still equipped with a manual gearbox, as the tendency today shifts to the sophisticated automatic gearboxes with steering wheel-mounted paddle shifts. Our feature car also has a special lineage in that it was acquired by a Mr Eric Clapton, before the current owner purchased it in July 2012. Clapton put 135 miles on the clock during his tenure at the wheel, the current owner duly adding another 822 miles in nearly two years of ownership. So, with less than a 1,000 miles on the clock, it's hardly run in yet! With a history as described, and being number 195 of a total production of 500 units, this GT2 RS is certainly rather special, whichever way you want to look at it.

The GT2 RS is arguably the pinnacle of the range, and while it's more track-focused, pleasingly it's still fully road-legal. The GT2 RS will complete a lap of the Nürburgring's Nordschleife in just seven minutes and 18 seconds – a full 14 seconds quicker than the 911 GT2. The 911 GT2 RS







Weight saving in the GT2 RS

True to its Rennsport moniker, the GT2 RS has enjoyed substantial weight-saving measures. As such, a reduction of 70 kilograms twinned with a 90hp boost compared with the 997 GT2 gives the GT2 RS a power-to-weight ratio of only 2.21 kilograms per horsepower, setting a new benchmark in its class.

Weight-reduction measures in the engine include a single-mass flywheel, which shaves off eight kilograms alone. The car's expansion-type intake manifold made from special synthetic material reduces weight by three kilograms, and the titanium muffler at nine kilograms is 50 per cent lighter than the equivalent stainless steel unit. The rear axle aluminium diagonal suspension bars are 1.4

kilograms lighter than on the GT2, while a further reduction of three kilograms is achieved with new front and rear axle springs. The brake covers on all four composite brake discs are likewise made of aluminium, cutting the weight of the crucial unsprung mass by a further 4.8 kilograms.

A distinguishing feature is the naked all-carbon boot lid, resulting in a reduction of 2.5 kilograms over the aluminium unit on the GT2. The flared wheel arches (26mm wider at the front) are made of a special plastic and finished in body colour, with a further four kilograms shaved off the overall weight through the use of a polycarbonate rear screen and rear side windows. Lightweight door panels carried over from the Carrera GT with their red opening loops and

the absence of the normal padding beneath the carpets at the rear of the passenger compartment reduce weight still further. Also contributing to the overall reduction in weight are a number of smaller, individual carbon body components, such as the wing-mirror housings and various air intakes/outlets.

For the first time, the driver also has the choice of front wheel arches in body colour and reinforced by carbon fibre, trimming a further five kilograms. Another option comes in the form of a lithium-ion battery, chopping more than ten kilograms off the scales. Lightweight headlights featuring halogen technology are also available as an alternative to reduce the mass of the turbocharged Rennsport.



"The sense of acceleration is other-worldly"

Icons

can reach the 200kph (125mph) mark in just 9.8 seconds, with 300kph (187mph) reached in 28.9 seconds - and the top speed of the GT2 RS is a heady 205mph. Such mesmerising statistics were not wasted on GT2 clientele; all of the planned 500 units had been sold within months of the 2010 launch date.

No 195 of 500 is owned by the Bigmore family, as son Ross shares: "The idea is to pick a nice day and get out there and enjoy the 911, and not to let it rot in a garage, and all the while you'll have a car that is hopefully going up in value. I came across the GT2 RS while searching on the internet; it was with an official Porsche Centre, so when you buy it from a proper dealer, you know the car is of a high standard."

Much of the car's limited mileage has been on local roads, as Bigmore explains, "It's never going to be used as a daily, and as we have such great roads in South Wales, if the weather is good we'll take it out and try to get away from the crowds and really drive the car."

However, the GT2 RS is born for the track. Starting with the same chassis layout as the GT2, the RS is further optimised for higher performance dimensional increases ensure improved roll stability, resulting in higher speeds when entering and exiting a bend. The increase in front track has been achieved by reducing the press-in depth of the Where possible, suspension bars are fabricated from aluminium instead of steel, and suspension components such as wheel track, antiroll bars and springs are adjustable, allowing for a variable setup depending on track layout and conditions.

The wheels are attached by means of a single lightweight central nut rather than a five-stud setup, drawing on the car's motorsport heritage. The GT2 RS is fitted with an improved tyre pressure control system, ensuring more accurate and quicker tyre pressure measurement of its bespoke-made tyres. The day of our photoshoot was the first time this 911 had seen a race track, and Bigmore is fully aware of his GT2 RS's most suited environment: "It's a catch-22 situation, because the car is optimised for the track, but you always have to temper that with how much they cost, as the car is pretty much irreplaceable."

In a straight technology transfer from the race track to the production line, the GT2 RS is

fitted with Porsche ceramic composite brakes (PCCB) as used in the Mobil 1 Supercup series. Up front, the GT2 RS is fitted with six-piston aluminium fixed calipers with four-piston calipers at the rear. The 911's Porsche Active Suspension Management (PASM) settings have been modified, reflecting the RS's motorsport intentions, with the 'normal' setting being modelled on the Nordschleife profile. The Porsche Stability Management (PSM) system is standard on the GT2 RS, simplifying the driver's preferred settings such as switching the Stability Control and Traction Control off, should this be required.

Under the decklid lurks a 3.6-litre twin-turbo flat-six engine, pushing out a gargantuan 620hp at 6,500rpm. The twin water-cooled variable turbine geometry (VTG) exhaust gas turbochargers are built to handle a maximum charge of 1.6 bar - up from 1.4 bar on the GT2. The Porsche turbo engine also requires an expandable air



997 GT2 RS



Model	997 GT2 RS		
Year	(2010)		
Engine Capacity Compression ratio Maximum power Maximum torque Transmission	3,600cc 9.0:1 620hp @6,500rpm 700Nm @2,250-5,500rpm Six-speed manuals		
Suspension			
Front	Spring-strut axle in MacPherson configuration optimised by Porsche with independent wheel suspension on wishbones; longitudinal arms and spring struts; split-track control arms; cylindrical coil springs with inner-mounted vibration dampers; wheel supports with ball bearings		
Rear	Multi-arm axle with independent wheel suspension on five arms; split-track control arms; cylindrical coil springs with helper springs and coaxially inner-mounted vibration dampers; PASM Porsche Active Suspension Management with electronically controlled vibration dampers; two manually adjustable control maps/setups		
Brakes			
Front	PCCB; six-piston aluminium monobloc brake calipers; cross-drilled and inner-vented composite ceramic brake discs with aluminium brake covers, diameter 380mm, thickness 34mm		
Rear	Four-piston aluminium monobloc brake calipers; cross-drilled and inner-vented composite ceramic brake discs with aluminium brake covers, diameter 350mm, thickness 28mm; two brake circuits with individual axle split		
Wheels & tyres			
Front	9x19-inch alloys; 245/35ZR19 tyres		
Rear	12x19-inch alloys; 325/30ZR19 tyres		
Dimensions Length Width Height Weight Performance	4,469mm 1,852mm 1,285mm 1,370kg		
0-62mph Top speed	3.5 secs 205mph		





intake manifold to accommodate the alternating pressure levels that build up in the intake system between the throttle butterfly and inlet valves. Such an expansion-type manifold is a prerequisite to best deal with the fluctuating high and lowpressure conditions within the turbo engine. Unlike Porsche's GT race cars that have a centrally mounted dual exhaust outlet, the rear end of the GT2 RS is characterised by two single-exhaust outlets, which exit left and right of the car's underbody. Due to the high temperatures generated by the turbos, the mufflers and tail pipes are made from titanium, which is not only lightweight, but also resistant to high temperatures.

All that power and performance potential requires an efficient aero package, and while similar to that of the GT2, there are also some significant differences. A new, wider front splitter, rear diffuser and higher-profile rear wing all help to keep the car well planted on the tarmac. Large end plates characterise the rear wing, which also houses a pair of openings to feed air into the engine. The aero modifications mean the car has a drag coefficient of 0.34.

At last, the time had come to climb on board for a few laps of the circuit in Llandow, Wales. First impressions on getting into the cockpit are how civilised it appears to be. There is no doubt that you're sitting in a high-performance car, with the red door pull straps replacing conventional door handles, but the GT2 RS is otherwise well appointed. This is the 'Comfort' interior with





conventional seat belts, carpeting, electric seats and a satnay. The dashboard and centre console is uncluttered and well finished off with high-quality leather and Alcantara. After acclimatising to the lavish interior, we fired up No 195, and the muted burble from behind the comfortable, leather-clad seats neatly disguised the mayhem that was soon to be unleashed.

The floodgates were instantly opened, and I was sure I could feel the wind through my hair, even with the windows up. The sense of acceleration is other-worldly, but there was no associated frantic grabbing of the gear stick to move up a gear, or wrestle with the steering – everything happened

with smooth and concise movements. There was a notable absence of noise, this being replaced with an urgent-sounding 'whoosh' as the turbos delivered their power and the GT2 RS surged forward at an alarmingly fast pace.

Being exhaust turbochargers, there is a slight delay in the acceleration when applying the throttle, but it is so imperceptible as to be almost unnoticeable. Arriving at the chicane, the turn-in is precise and the car is incredibly sure-footed, and under acceleration on exit the level of grip is sensational – just like a race car at full chat, thanks to the grippy Michelin Pilot Sport Cup rubber up front with huge 325/30 tyres at the back.

Inside though, lateral movement in the corners was minimal. The driver remains well planted and in comfort throughout – there's no sign of a widowmaker 911 here.

However, the sheer accelerative force of the GT2 RS is utterly relentless, no matter what gear or speed. Turbo lag isn't on the agenda as the car is launched up the road at a mere squirt of the accelerator. As we attack the track, Bigmore confirms to me, "Nothing this side of a Veyron or the very top echelon of supercars even gets close to the ferocity with which this car accelerates."

Despite the huge torque available, handling appears secure and grip levels are maintained.



There's the danger of overstepping the mark, of course, but if you know what you're doing then the GT2 RS is exhilarating. You realise that the car has incredible turn-in precision and bite: where lower level 91ls will understeer if you carry too much entry speed, the GT2 RS just digs in and grips.

The GT2 RS is so well put together, and even though many panels are lightweight and insulation material is at a minimum, the interior road and wind noise is minimal – although when out on the track, attention is wholly focused on the fast-approaching apex ahead.

It's on this note that Bigmore makes a perfect summary: "Even with its intimidating power

levels, the GT2 RS always feels predictable and manageable in a way that a 620 PS car just shouldn't. If you allow it to, the engine can utterly dominate the experience, but it doesn't have to. It is quite simply a masterpiece."

So, is it brutal? It can be. Is it aggressive? It could be. Is it overpowered? Not likely. What makes the Porsche 911 GT2 RS so exceptional, then, is the fact that it is just so phenomenally powerful and exhilarating in one breath, yet susceptible to being tamed and understated in another. Stepping away from the car for the last time, I wished Porsche had made a few more of them – but then, would more people be brave enough to pilot one?

911 GT2 in numbers

Think a GT2 of any generation is hard to come by? These figures highlight just how premium a GT2 RS is

Model Year	Туре	GT2	GT2 RS
1996	993	141	
1997	993	32	10 10
1998	993	21	
2001	996	247	20,12,6
2002	996	716	
2003	996	233	N.
2004	996	73	
2005	996	18	T. 1
2007	997	16	
2008	997	939	1,025
2009	997	287	4
2010	997	4	497
2011	997	1	13









As you will notice, the new GT3 RS utilises the 991 Turbo's bodyshell, the widest in the current 911 range. This has allowed the front and rear tracks to be widened compared to the 991 GT3, increasing the roll stability of both axles in order to improve the tyre contact patch when cornering. Talking of tyres, the 991 GT3 RS features the largest tyres ever fitted to a production 911. The 9.5 x 20-inch front centrelocks are shod with 265/30-section tyres, while the rear tyres are 325/30-section, sitting on incredible 12.5 x 21-inch wheels. This gives the latest Rennsport the same footprint as the mighty 918 Spyder hybrid hypercar – the Nordschleife lap record holder.

The GT3's electrically assisted power-steering system is retained, as are the rear-wheel steering units, although they have been retuned to deal with the RS's greater power output. PASM dampers are standard, with the spring rates hardened and bump and rebound settings increased, in keeping with the Rennsport's track-focused mentality. The 991 GT3's 'Big Red' brake system returns, complete with 380-millimetre discs all round. However, PCCB 'Big Yellows' are also available as a £6,248 option. Tick that particular box and you will be rewarded with 410-millimetre discs up front and a braking system that revels in heavy circuit use – ideal if you intend to use your GT3 RS properly.

With all that development in the pursuit of grip, it should come as no surprise that the new 911 GT3 RS has lapped the Nürburgring Nordschleife in seven minutes and 20 seconds. Yet, when it's revealed that this time is a full eight seconds faster than what the Carrera GT managed around the 'Green Hell' it becomes quite jaw-dropping, especially as the later was a full-bore supercar developed out of Porsche's stillborn LMP2000 project, a top-class prototype designed to take Weissach back to the top step of the Le Mans podium.

Of course, that lap time wouldn't have been achievable if it wasn't for a phenomenal powerplant. The new GT3 RS's engine doesn't disappoint, with an all-new flat six developed from the 991 GT3's unit. The cylinders have been bored out, producing a total displacement of 3,996cc (identical to the 997 GT3 RS 4.0). Inside, there are new pistons and con-rods, re-profiled camshafts and different valve springs. Of particular interest is the new crankshaft, made from a metal created by Porsche for the 919 Hybrid LMP1 car. This new material has resulted in a crank that is lighter, more durable and a lot more expensive than that of the 991 GT3.

Combined with a revised cylinder head design and dry sump oil system, the new engine – the largest direct fuel injection motor ever produced for a 911 – produces what Preuninger has described as a "very, very, very conservative 500 horsepower." This means, at worst, the latest RS generates the same power as the RS 4.0 at exactly the same crank speed: 8,250rpm. Torque between this new 9A1-derived engine and the legendary 4.0-litre Mezger are also identical, with 460Nm on offer. With the increase in capacity, the redline kicks







in at 8,800rpm – a 200rpm decrease from the GT3's stratospheric limit. However, Preuninger has promised the aural delights of the latest GT3 will not be lost in the RS package.

As you will have noticed, the new GT3 RS shares the 991 Turbo's intake scoops, mounted on the rear arches. It was these scoops that led some of the more ill-informed outlets to rumour the new Rennsport would switch to a turbocharged powerplant. However, while used to feed air to the intercoolers on a Turbo, Preuninger's team has rerouted these ducts to instead form the RS's induction system. The head of GT car production promises that, with the air running over two racestyle air filters, these ducts will help to accentuate the induction noise of the latest 911 GT3 RS. This should make Rennsport fans' hearts sing, as it was this very sound that helped give the Mezger generation of cars such character.

Something that may not sit so well with traditional RS fans is the continuation of Weissach's PDK-only policy, although there is a fully variable limited-slip differential added into the equation. Like the GT3, the 991 RS features an upgraded version of Porsche's double-clutch gearbox, although the final drive ratio has been increased from 3.97 to 4.19, allowing the car to sprint from 0-62 miles per hour in 3.3 seconds (using the Launch Control mode). The claimed top speed is 193 miles per hour, identical to an RS 4.0. However, if the rear wing is set to its lowest downforce setting, Porsche feels this newest Rennsport could top 200 miles per hour.

By this point you are most likely wondering if there has been any effort to save weight at all. After all, 'leichtbau' is a key philosophy in the Rennsport bible. At face value, the 991 GT3 RS's ten-kilogram saving over the GT3 sounds pitiful, especially as the 997 GT3 RS 4.0 managed to save three-and-a-half times that over the 997.2 GT3. However, when you consider the new RS features a bigger engine, larger wheels and a wider bodyshell than the 991 GT3, it becomes clear that any weight saving over the standard car is impressive.

The bonnet, featuring a 300-millimetre-wide sculpted gully to mimic the style of classic 911 front lids, is made from carbon fibre, saving two kilograms over the GT3. That distinctive groove continues onto the new roof panel, made from a sheet of magnesium. The decision to use this lightweight metal has saved a further kilogram compared to a CFRP roof, according to Preuninger. Reducing mass in this area has helped to lower the 991 GT3 RS's centre of gravity, another factor in its astonishing Nordschleife lap time.

The front wings are made from carbon fibre, so they're half the mass of the 991 GT3's aluminium affairs, while the rear bumper plastic has been refined to further reduce weight. And, of course, the Porsche badge has been replaced for a sticker. Some traditions obviously die hard. In total, Weissach estimates that around 20-25 kilograms have actually been saved compared to a standard GT3. However, this has been reinvested in areas such as the track width in order to yield greater performance gains.

Inside, much is standard Rennsport fare. There is plenty of Alcantara on the dashboard and door cards. The Clubsport pack comes as standard, bringing with it a bolted-in roll cage in the rear, six-

point harness for the driver and a fire extinguisher. Instead, the major difference is the 918-style steering wheel and carbon-backed bucket seats, helping to emphasise the ties between the latest RS and Porsche's hybrid halo car.

One detail that may not be evident on a first sweep of the cockpit is the 'Pit Speed' button on the centre console. With Porsche aiming to make this the most extreme RS ever, it is only appropriate that the latest iteration gains a pit speed limiter for all those track days. It's a definite nod to the motorsport pedigree of both the Weissach engineers and the RS moniker, something made more apt by the knowledge that the 991 GT3 RS is based on the upcoming GT3R racing car, designed for international competition in events such as the 24 Hours of Nürburgring.

At £131,296, the 991 GT3 RS has the bizarre accolade of actually being cheaper to buy than any of the previous Rennsport generations. With 964 RSs hovering around £160,000 and RS 4.0s climbing toward £400,000, the 991 looks like a relative steal. Not that you're likely to get your hands on one just yet. Porsche is limiting the numbers, with just 42 set to come to the UK. 918 owners were offered the chance to buy first, so if you haven't got a deposit down now, you will have to trawl the classifieds once the cars are delivered in May.

Of course, the exclusivity only makes this latest addition to Porsche's most illustrious line-up even more exciting. There may be no talk of a manual option to appeal the traditionalists, but with even more bias toward track work, the 991 GT3 RS is set to move the goalposts astronomically.



'Mr GT3' reveals a wealth of information on the new Rennsport exclusively to Total 911

here's an intense media scrum around the newly unveiled GT3 RS here in Geneva, and by chance we're stood next to Porsche GT boss Andreas Preuninger just away from the melee. His latest Rennsport has just been revealed to the world, and the man himself is happy to answer our questions on the most aweinspiring 991 yet...

How does the GT3 RS differ from the 991 GT3?

Most of the work has been with the aero, yet it has to look good and we have to make it homologatable.

Were there any particular challenges?

The front wings; they're one of the distinguishing features of the RS over the GT3. They are carbon fibre and have vents – this is something we use on the race cars. They vent the front wheel arches, allowing us to double the downforce over the GT3.

Double, really?

Yes, it is outrageous. The RS has a downforce of at least 360 kilograms, that's like the 918. They're difficult to homologate because you shouldn't be able to see the front tyre, that's why the grilles are there, though they're removable for use on track.

And that rear wing?

With the improved airflow over the front, the back works better. It's higher, you can really feel it on the road. Then there's the mechanical grip. The rear tyres are the same as on the 918 and as well as the new front tyres they create huge lateral grip. The front and rear tracks are wider, too.

What about lap times?

It'll do at least a 7.20 around the 'Ring, and, you know, we've only done so in less than perfect conditions. We'll try again in April or May. But the Nürburgring has become senseless, the times only achievable by pro drivers. We're more interested in driveability and capability for more moderate drivers; that's the art in setting these cars up. It's beyond anything that was possible before.

We'd heard rumours of a manual, just like the new Cayman GT4...

The GT4 is a standalone model in its class whereas the GT3 is the track rat, it has a lot of competition

pedigree. It's more than just swapping out a gearbox; it requires new suspension settings and more. My personal choice is simply a matter of taste. I think we need both in future models to get that right.

Speaking of the future, how will the GT cars fit with the turbocharged 911s?

Natural aspiration can be a USP on our GT cars. Rpms are emotion, it's an easy enough equation.

Back to the GT3 RS, explain those rear vents...

They look like the Turbo, but it feeds air through the body directly to the air filter, giving the engine an additional ram-air effect. You can really hear the intake noise of the <u>car</u>.

"It's like something out of space – and the 500bhp is conservative..."

And that 4.0-litre 500-horsepower engine is pretty special, tell us about that...

It is derived from the GT3, but it has been redeveloped with materials we've taken from the 919 LMP GT racer. The crankshaft uses a high-density metal that's very strong and clean, it's liquefied many times to remove impurities and bubbles. It's like something out of space. I don't want to hold back on anything. There are different pistons, camshaft profiles, conrods – and the 500 horsepower is a conservative figure.

Where to next for future GT models, then?

Everything you touch is different: there's a magnesium roof, saving weight over carbon fibre panels, that's a real innovation. The weight savings are good, but you are chasing a world of diminishing returns. It's 15 to 20 kilograms lighter, the wide body and bigger wheels adding back weight lost elsewhere. This is currently the pinnacle, but we share a roof with our racing engineers, and coffee and ideas can always find something... 911





The 964 RS was built to go racing?



Rennsport showdown

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

991 RS v rivals

How does the latest Rennsport compare to its GT3 RS predecessors? We find out on road and track

74 2.7 RS v 2.7 Carrera

They share the same MFI flat six but do these two classics have more in common?

80

964 RS v C4 Lightweight Two legends of the 964 era meet for a thrilling battle on track in Finland

993 RS: real v replica Can the virtues of the fabled 993 RS be mimicked with the help of aftermarket modifications? We test both to find out

94 964 RS v 993 RS

Which of these luftgekült legends will take the title as ultimate air-cooled 911 Rennsport?

102 997 GT3 RS 4.0 v 997 GT2 RS

These two halo Rennsports from the 997 generation go head to head









Rennsport showdown



The 991 GT3 RS is undoubtedly a technological phenomenon, a worthy heir to the Rennsport moniker in this digital age. But can the latest RS – complete with PDK, rear-wheel steering and all that aero – provide the analogue thrills of Andreas Preuninger's finest? We find out on track and road...

Written by Josh Barnett & Lee Sibley Photography by Ali Cusick

991 GT3 RS v rivals



OF BEST

Rennsport showdown



t its most reductive, the idea that certain activities can "make you feel alive" is a peculiar one, especially when you consider the flipside; I have certainly never done anything that has made me feel dead. Yet this supposedly tangential notion is never more evident to me than when I am out on a racetrack, pushing a car to its limits. The often delicate and sometimes brutal dance on the edge of adhesion from corner to corner is enough to get thousands of petrolheads' pulses racing. It is a sensation that is intrinsically woven into the fabric at Zuffenhausen and it is, therefore, the key ingredient in what is undoubtedly the 911's most exciting and renowned subdivision: Rennsport.

Based near the race teams in Weissach, Andreas Preuninger's GT cars department are the current custodians of this legendary moniker. This crack squad of engineers has proven that they truly understand what is needed to create an enthralling Neunelfer experience, with a track-focussed character that is equally captivating out on the open road. Nowhere is this more apparent than in the 997 generation of GT3 RSs. From the 3.6-litre, first generation iteration to the instantly iconic 997 GT3 RS 4.0, Preuninger's team never missed a beat between 2006 and 2010, somehow managing to improve on perfection with each revision, culminating in the aforementioned 4.0-litre Rennsport – a car that we concluded in issue 125 was "the king of kings". Now though, the RS ranks have been bolstered with a new 3,996cc pretender to the RS 4.0's throne.

The 991 GT3 RS is, on paper, the antithesis of the 997's analogue thrills: a PDK gearbox in place of the lauded six-speed manual shifter, a flat six based (loosely) on the Carrera's 9A1 engine rather than the motorsport-derived Mezger, and rearwheel steering in place of the previously passive back axle. These changes have made the latest RS devastatingly effective – our first drive in issue 128

proved as much – and hugely coveted, just like its 4.0-litre 997 forebear.

That was in isolation though; context is key here, which is why we have gathered both 4.0-litre Rennsports (as well as both previous generations of the 997 GT3 RS) together for the ultimate test on track and road. As a supposed standard production model, the 991 is intended to be the successor to the 3.8-litre 997.2 GT3 RS. However, I'm going to start with the RS 4.0. After all, to paraphrase De La Soul, "four is the magic number", especially in the world of water-cooled Porsches.

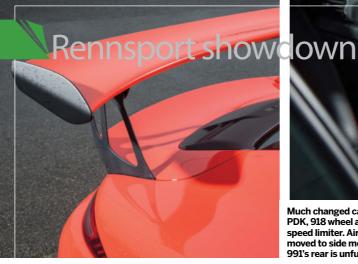
When it was released in 2010, I couldn't believe that the 997 GT3 RS 4.0 was road legal. More so than any Rennsport before it, it looked like a race-ready 911. Those dive planes and that rear wing (taken straight from the 997 GT3 Cup car) have never failed to catch my attention. Yet, sat alongside its successor, my gaze is very quickly diverted towards the 991. Mounted higher than ever before, the rear wing is even more of a focal point on the latest RS and, combined with those front arch louvres and induction scoops on the Turbo-width flanks, the 991 GT3 RS doesn't need garish decals to capture my attention. It makes the RS 4.0 look ordinary.

From behind the wheel, however, the 997 GT3 RS 4.0 certainly doesn't prove itself to be ordinary. In fact, on both road and track, it is anything but. The driving experience of this limited edition Neunelfer is fittingly defined by the flat-six powerplant from which its name is derived. Closely related to the similarly sized engine in the 997 GT3 Cup and 997 GT3 R racers, the Mezger in the RS 4.0 is ripsnorting proof that you can really have your cake and eat it. Compared to the 3.8-litre unit in the 997.2 RS, the extra low down torque helps you to punch out of corners with impressive verve, yet this is not that engine that solely thrives in



991 GT3 RS v rivals





















the mid-range. Letting the Mezger run out all the way to its 8,250rpm redline brings a symphony of aural pleasures that combine at the top end to produce a hair-raising mechanical melody. It's absolutely addictive.

The 991 GT3 RS's 9Al engine provides a very similar dynamic character, with the 4.0-litre architecture providing the shove that is lacking in the 991 GT3. However, there's something missing in the 991 RS's soundtrack. Where the standard GT3 finishes with its banshee-like 9,000rpm flourish, the 8,800rpm-limited RS lacks that final crescendo. What's more, while there's a pleasant organic-ness to the RS 4.0's note, the 991 sounds too... perfect. It's too refined and sounds too much like a steroidal Carrera to get my pulse truly racing.

Where the 991 really excels, though, is its chassis. While the RS 4.0's steering feel is undeniably more intuitive (the result of the hydraulic power assistance rather than the 991's

EPAS), the 997 is hampered by the idiosyncratic Neunelfer flaws. With all that mass over the rear end, the RS 4.0 is more prone to understeer on corner entry although, despite the canards, the front-end aerodynamics are still overpowered by the huge rear wing, causing the steering to go light, especially in medium-speed corners.

Understeer isn't even a concern in the 991, though. It's turn-in is so direct that it's almost un-911-like. It's become fashionable to attribute the latest Rennsport's nimbleness to the rear-wheel steering system, but on track and during fast road driving it is more likely to lengthen the wheelbase than shorten it. Instead, the wider front track of the 991 enables a softer front anti-roll bar without compromising roll control, providing the front end with more bite through each corner. Coupled with more mass on the nose (the result of moving the engine forward on the 991 platform), it means that the new GT3 RS is a much less compromised

track tool. Although it never feels like a car reliant on downforce, I'm sure those eye-catching aerodynamic devices help the overall grip levels too, especially on circuit. After all, this is a car capable of 1.7G lateral loads. On road legal Michelin Cup 2 tyres.

The caveat with the 991, though, is that, at the limit, it is more likely to suddenly bite you than the RS 4.0. While the 997's steering and chassis is more progressive, the 991 doesn't telegram its dynamic messages to you as effectively, creating a snappiness that makes it less approachable to Rennsport rookies.

Despite its talents on track, the 99l seems equally at home on the road, too. Unlike previous RSs, the latest iteration's damping makes the car feel beautifully pliant over the bumpy British back roads that such a car should thrive on. Combined with a steering system that filters out some of the harshest cambers around the centre point, it leaves you to enjoy pinning the 99l to each apex with prodigious pace and accuracy. If I had one complaint, it would be that, like the 9Al engine under its decklid, the 99l often feels too refined. It lacks the raw emotion so often associated with those other iterations lucky enough to wear the Rennsport badge.

I certainly can't say the same of the 997. If anything, thanks to the rose joints on the rear suspension, the RS 4.0 feels too fidgety on the open road. Despite this, with that delectable manual gearbox, the 997 is unquestionably the more involving experience. Combined with that delightfully communicative steering, the RS 4.0 is the last Rennsport built to satisfy Porsche 'purists'. The 991 may be the undoubted king of the racetrack but it doesn't have exclusive rights to the RS crown. The two 4.0-litre legends will have to learn to share.



Rennsport showdown

Road test: 991 GT3 RS VS **997.2 GT3 RS**



"There is so much grip in the 991 GT3 RS that it sometimes seems like the laws of physics are being wilfully broken"







While the 997 GT3 RS 4.0 more often than not finds itself more at home on track rather than road, the 3.8-litre 997 Rennsport can be considered as 'the everyman's RS'. Yes, it's still a £175,000 Porsche 911 but, in such accomplished company, such terms are all relative. It's less of a collector's piece than the 4.0-litre car and, as such, is more likely to find itself used as Preuninger's team intended. What's more, as the last full production RS, the second generation 997 is actually the true predecessor to the 991; with the 4.0-litre link it just seemed rude not to invite the RS 4.0 along first.

Sliding into the 997.2 GT3 RS, it instantly feels like a truly purposeful place to perch yourself. While 918-style seats in the 991 GT3 RS provide excellent support, there's real drama as I shoehorn myself into the Nomex-clad Recaro bucket seat in the 997, while the removal of the air-con and PCM units in this particular car makes it clear what this Rennsport's intentions are before I've even turned

the engine over. By comparison, despite the new steering wheel in the 991 RS, the cockpit feels like a more generic environment (although if the centre console went on a similar diet to the 997 I'm sure it would feel at least a little more special).

Starting the 997 is a similarly characterful experience, as that legendary Mezger fires into life with a snarl, settling into an angry, recalcitrant idle. The throttle pedal has an immediacy that causes the 3.8-litre unit to bark gregariously with a single, sharp prod; like all the best Rennsports, the 997.2 is a highly strung thoroughbred. It's a flat six that loves to live in the upper echelons of the rev counter, feeling relatively dead below at least 5,000rpm – there isn't the same punchy mid-range torque as found in the RS 4.0. This isn't a bad thing, though, as even on the open road the 3.8 RS's peaky nature encourages me to let it off the leash. Beyond 6,000rpm, the 997.2 really begins to take off, supported by a gloriously mechanical growl that

rewards you for chasing the redline through every single gear.

As the shift light blinks on just beyond 8,000rpm, I lift briefly, snapping from second to third before getting back on the throttle to do it all again. Each gear change is met with an intoxicating machine gun-like chatter as the Mezger refreshes itself, ready for another run towards the horizon. The whole symphony is backed by the induction hiss as the engine greedily sucks in more sustenance. There is only one modern 911 that sounds this good: the 991 GT3.

Without the rose-jointed rear suspension found on the RS 4.0, the 997.2 GT3 RS makes for a superb B-road blaster. Despite the 997 chassis' flaws, the hydraulic power steering system always lets you know what the front end is doing and, on the public highway at least, understeer is very rarely a real problem. Let there be no mistake, compared to most 911s, the 997.2 RS enjoys prodigious amounts of grip (even on damp tarmac and Michelin Cup 1 tyres). However, it doesn't have too much adhesion. Unlike the latest batch of Neunelfers, I'm very much the key component when driving the 997 RS and I'm having to concentrate completely to keep up with Lee (who is setting an impressively rapid pace in the 991). It makes for an addictive experience as I delicately balance the 997 through a succession of sweeping bends and, when it all goes perfectly, the whole thing is hugely rewarding.

Jumping out, I'm sweating a little (though that may just be the lack of air-con) and my arms have evidently had a work out as the 997 hunts around on cambers and bumps, but I just can't stop smiling. The 991 GT3 RS has some big boots to fill emotionally. It starts well, firing up with a convincing impression of previous Rennsport 91ls. Those imposing air intakes on the rear arches really help to amplify the induction sound, too; if you thought they were there just for show, put





your hand over one and prod the loud pedal. This may be an RS for the digital age but it seems to still have the 'show' as well as the 'go'.

Compared to the 997, the 991's extra capacity and improved induction definitely bring more thrust around the lower reaches of the rev counter: it's become a huge buzz word in automotive marketing circles but the latest RS is infinitely more tractable. It does mean that there is less incentive to wring the neck of the latest RS as I'm not required to head for the limiter to make

progress. There's no real aural reward at the upper end of the rev range either, with a clinically aggressive sound throughout each sweep of the needle.

Compared to previous RSs (and the current GT3), the last few hundred rpm are something of an anti-climax. If anything, the 9Al in the RS feels like it is running out of puff more keenly after 8,500rpm than the similar unit found in the GT3.

This is not to say it feels slow. Far from it. There's an effortless pace to the latest Rennsport and, even with less mass over its rear wheels than the 997, it's able to put its power down more effortlessly, too, thanks to those huge 325-section rear tyres. Where the 997.2 is spinning up in second and third gear, the 991 is instantly planted, shooting forward with greater verve and inspiring more confidence

mid-corner, vital in the damp and wet conditions that we're often blessed with here in the UK. The damping feels slightly softer, too, meaning that bumps are less likely to upset the 991's balance. The 991 gives me much greater confidence from the chassis on turn-in, too, darting its way towards each apex with minimal fuss. On the rare occasions when it doesn't want to play ball, you can simply trail brake into the turn, too, a benefit of the switch to the two-pedal PDK shift setup.

"That legendary 997 Mezger fires into life with a snarl, settling into an angry, recalcitrant idle"

The gearbox feels even faster than the standard GT3, with each change dispatched with a violently efficient crack at the slightest touch of the weighty metal levers. The technological prowess of the system is mind-boggling, and it does make you feel like you're driving a real 911 GT3 R or RSR but, for all its ability on the track, on the road it does feel like some of the skill necessary for previous RSs has been taken out of my hands. The 997's delicious steering feel has disappeared in the transition to the new generation of electric systems, too.

While the 991 RS's EPAS is by far the best I've driven in terms of communication, the messages supplied to my fingertips still feel vague in a direct back-to-back with the 997, and the weighting is, in comparison, too artificial.

Ultimately, this is the crux of the issue with the latest Rennsport. As a piece of engineering, it is unrivalled; I can't doff my cap enough towards the GT cars department at Weissach. With every mile that I drive in the 991 GT3 RS it continually

astounds me with its prowess, but there's a little bit of me that is left cold by the car's clinical ability to counter all that faces it. On the road, it's simply too able for its own good.

The thing is, on the track, the 991 is mighty, its full technological repertoire coming

to the fore. In fact, there is so much grip that it sometimes seems like the laws of physics are being wilfully broken, while the 997's dynamics – which made it so endearing on the road – make it feel like you're always battling a compromised package. Therefore, my only logical conclusion is that you really need both. Yes, seriously, both. In their own ways, they highlight the very best of what Porsche can achieve: the 991 is the blue-sky thinking side of those in Stuttgart, while the 997 is redoubtable heart and soul. .



Rennsport showdown

997.1 GT3 RS: left behind?

It's hard to believe the first-generation 997 GT3 RS is now a decade old but when you digest that time as over 3,650 days of engineering evolution having elapsed at Weissach, you can be forgiven for dismissing the early 997 Rennsport's technology as largely dated. The first track 911 to get PASM as standard (but not dynamic or active engine mounts), it is the only Rennsport of our quartet on test not to arrive with that coveted 'five star' Total 911 rating. Have we been harsh?

In issue 135, Josh, our Features Editor, climbed behind the wheel of this first 997 RS in isolation from its younger Rennsport brethren, where our original 4.5-star rating was found to be justified. He said, "With a heavier flywheel than the 997.2 and 35bhp less power, the 997.1 feels a less aggressive package. I'm not as on edge behind the wheel as I want to be." Josh then concluded, "With Gen1 cars retailing for less than 10 per cent under the price of a Gen2 Rennsport, you'd be mad not to stump up that little bit extra required for the keys to a 997.2 example.

On reflection, the 997.1 GT3 RS has always endured something of a tumultuous reputation. Even from release, commentators pointed to the fact it shared the same performance figures as its GT3 sister (again, the only RS here at our Silverstone test to do so), shedding just 20 kilograms of weight in the process. Even the Porsche

crest on its bootlid was a point of contention: merely a sticker on the 996 GT3 RS in homage to its motorsporting credentials, Porsche reverted back to a heavier metal emblem for the first 997. The real-world difference may have been a matter of grams but there was a principle to enthusiasts' outcries

Of course, the first-generation 997 GT3 RS's time at the top of the 911 performance tree was short lived, replaced only two years later by the second-generation, 3.8-litre Rennsport (the first time two or more Rennsports have been contrived in the same generation of 911 since the 964 some 15 years earlier). The 3.8-litre car improved suitably on the shortcomings of the 3.6-litre variant and ever since then the predecessor has rightly lived in the shadow of the successor. And, against today's 991, the 997.1 is very nearly a whole second slower to 62mph, a relatively huge gap in what is but an incremental measure of a car's performance.

Despite this, the first-generation 997 GT3 RS is still a superb 911, boasting feedback and weighting at the wheel that the electrically-assisted 991 can only dream of. In fact, when all is said and done, the 997.1 very much delivers that Rennsport spirit craved by so many – it's a shame that three of its contemporaries presewnt here are just so much better.





991 GT3 RS

- + Cup-rivalling performance in a road car
- + PDK Sport is supremely intelligent, smooth and lightning quick
- + Overall chassis balance is the best ever in

997.2 GT3 RS 3.8

- + Better front end grip than 997.1
- + Much-improved levels of downforce
- + Hugely undervalued in current market
- Power delivery is sluggish below 4,000rpm
- RS 4.0 shows weight could easily have



991 GT3 RS v rivals

991 GT3 RS

2015

3,996cc 12 9.1

500hp @ 8,250rpm 460Nm @ 6,250rpm

Seven-speed PDK automated manual

Independent; MacPherson strut; PASM dampers; coil springs; anti-roll bar

Independent; multi-link; PASM dampers; coil springs; anti-roll bar

> 9.5x20-inch centre-locks; 265/35/ZR20 tyres

12.5x21-inch centre-locks; 325/30/ZR21 tyres

MICHELIN & MICHELI

380mm discs with six-piston callipers 380mm discs with four-piston callipers

> 4,545mm 1,880mm 1,420kg

> > 3.3 secs 193mph

997.2 GT3 RS

2009-12

3,797cc 12.2:1

450bhp @ 7,900rpm 430Nm @ 6,750rpm

Six-speed manual

Independent; MacPherson strut; telescopic dampers with coil springs; anti-roll bar; PASM

Independent; multi-link; telescopic dampers with coil springs; anti-roll bar; PASM

> 9x19-inch centre-locks; 245/35/ZR19 tyres

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

> 380mm discs with six-piston callipers 380mm discs with four-piston callipers

> > 4,460mm 1,852mm 1,370kg

> > > 4.0 secs 192mph

Model 997.1 GT3 RS Year

2006-07

3,600cc

Maximum power **Maximum torque**

Suspension

Rear

Engine

Capacity

Compression ratio

Transmission

Wheels & tyres **Front**

Rear

Brakes Front

Rear

Dimensions

Length Width Weight

Performance 0-62mph Top speed

415bhp @ 7,600rpm

405Nm @ 5.500rpm

Six-speed manual

MacPherson strut; coil springs; anti-roll bar

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

8.5x19-inch alloys; 235/35/R19 tyres

12x19-inch alloys; 305/30/R19 tyres

380mm discs with six-piston callipers

360mm discs with four-piston callipers

4,460mm 1,808mm 1,375kg

4.2 secs 194mph

997 GT3 RS 4.0

2010

3.996cc

12 6.1

500hp @ 8,250rpm 460Nm @ 5,750rpm

Six-speed manual

Independent; MacPherson strut; telescopic dampers with coil springs; anti-roll bar; PASM

Independent; multi-link; telescopic dampers with coil springs; anti-roll

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

12x19-inch centre-locks: 325/30/ ZR19 tyres

380mm discs with six-piston callipers

380mm discs with four-piston callipers

4,460mm

1,852mm 1,360kg

3.9 secs 193mph

997.1 GT3 RS 3.6

- + Rennsport package in 997 specification is sublime
- + Steering weight and feedback is better than 991

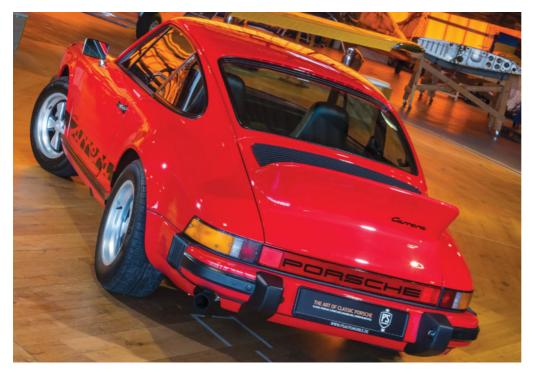


- + Increased torque at lower revs allows for cornering in higher gears over 3.8-litre 997 Rennsport
- + This is the Mezger engine in its final, most glorious form

 - Collector appeal means many examples are never likely







e drive up the cobbles into the square below the castle. Tourists stare fascinated, spurning the delights of dramatic Renaissance Schloss Wewelsburg for a moment as they contemplate two of Porsche's finest from the early 1970s. Two red cars that, to the uninitiated, look similar. But we know different, and here's why.

We've come to Lippstadt, in north Germany, as guests of PS Automobile's Dirk Sadlowski, a time-served Porsche enthusiast and racer who has created his own backdate, dubbed the S/T in appreciation of the 9ll race car from 1970/7l. He's taken a pair of original 9lls out of his showroom of road-race exotica for us to shoot, a 1973 2.7 Carrera RS Sport Lightweight and a 2.7 Carrera from 1975. But first of all, a bit of background to the models.

The 2.7 Rennsport was a racer for the road, and in less than a year it had spawned the 2.8 RSR, a purpose-built racing car, and for 1974, the 3.0 Carrera RS and the even more extreme RSR. There had already been a steady stream of competition oriented development that spawned the 911R, 911T/R and aforementioned S/T variants, and an FIA rule change for GT cars in 1970 prompted Porsche to raise the engine capacity to 2.7-litres.

ZOUBROJEO

The regulations called for a minimum of 500 units, but the specification was immediately attractive: a lightweight 975kg car with a 210bhp, 2.7-litre engine, a top speed of 150mph and a cost of 33,000 DM (£14,000) made it an instant hit.

Unveiled in November 1972 at the Paris Salon de l'Automobile, the first 500 RSs sold immediately. It was the first time the phrase 'less is more' reflected a commercial success. In keeping with Porsche's preoccupation with racing, the 2.7 RS stood out. The Carrera graphics were applied along the car's lower flanks, along with distinctive Porsche script on the engine lid, and Carrera RS written on the new flip-up ducktail. These decals could be ordered in green, red or blue, giving the white RS three colour variations. But like our Bahia red subject car, 2.7 RSs could be ordered in any colour on the Porsche palette. This extended to the Fuchs wheels, too, with matching five-spoke centres.

The price gap was mind-blowing: a fully equipped 911S cost £5,211 in 1971, rising to £6,249 by 1974, yet the 2.7 RS was more than double that. Aficionados who could afford the 2.7 RS were in a position to refine their purchase, and Porsche catered for this by building three subtly different versions. Their codes indicate their purpose: M471 is the Lightweight Sport version (200 units built),







perfectly road-usable but the weapon of choice for sprinting and mild competition use in the pre-trackday era. The M472 is the Touring version with 911S equipment (1,375 units made), and M491 is the hard-core racing version. 1,590 2.7 RSs were built in three production runs during 1972 and 1973, including the original 17 RSH ultra-light 960kg homologation cars and prototypes.

The M471 bodyshells were constructed in lighter gauge steel and weighed to satisfy TüV and FIA requirements, and during assembly they were fitted with glass fibre bumpers instead of the M472 Touring's steel ones. With only the bare essentials onboard, the Sport versions were lightweights by comparison. The Touring version's creature comforts were sourced from the 2.4 S parts bin and installed in the lightweight shell, according to customer order, adding 100kg. Comparative weights were 975kg for the M471 and 1,050kg for the M472. Then, only a year later in 1974, the goalposts shifted dramatically.

Our second red car in the story, the 2.7 Carrera, hails from one of the most significant moments in the evolution of the 911 when the classic longbonnet look that defined the first decade of 911 and 912 production was replaced by the formidable impact bumpers, designed to absorb 5mph nudges. When shunted, the concertina bumpers travelled backwards up to 50mm, bouncing off collapsible steel tubes in EU and RoW cars, and hydraulic rams in US cars. The 2.7 Carrera had the flared rear wheel arches introduced with the G-Series, along with the 2.7 RS's Fuchs wheels and tyres, while the entry-level 1974 2.7 S retained the narrow body of the F-Series cars, with the same sized Cookie Cutter wheels front and back, albeit with the new concertina bumpers and short bonnet.

Above: The 2.7 RS features original carbon fibre bucket seats, with no headrests, and the smaller-diameter RS steering wheel

Left: Carrera graphics were applied to the lower flanks and Carrera RS was written on the new flip-up ducktail





"They're different on the road, testimonials to the different eras they've come to represent"

With RSs no longer in production, the 2.7 Carrera was the flagship in 1974, retaining the 2.7 RS engine with its Bosch mechanical fuel pump, while residual narrow-bodied 2.7 911 Ss ran the latest low-emissions, 8.5:1 low compression engine with Bosch K-Jetronic injection, dumbed down to appease Stateside legislators. Twelve-blade cooling fans were still fitted, but the location of the new bumpers called for a single battery instead of two single ones. The exhaust system featured upgrades aimed at reducing noise levels and emissions, such as aluminium coatings on the heat exchangers and a double-skinned stainless-steel silencer. The flatsix engines differed externally, too, in the air intake and inlet manifold configurations.

We expect 911s of this era to have five-speed 915 gearboxes as a matter of course, and although RoW cars got them, the standard issue in the US was a four-speed gearbox, with five ratios optional. The Carrera's brake calipers were also larger and the fabricated-steel rear semi-trailing arms were replaced with lighter and stiffer forged

plate at the top of the doors and rear window surround, which is rounded rather than flat. Sadlowski continues: "If you take the door panel off you can see it's a specially made door for the RS Lightweight - they don't have a door opener, they only have this little leather thong." This degree of sophistication is not found in the 2.7 Carrera.

The seats are made of carbon fibre and are original, not reupholstered, and they look were available with them. The correct smaller-

aluminium items. Space saver spare tyres supplied by BF Goodrich were the new thing, along with an 80-litre petrol tank and a headlamp washer system. The 911S came with chrone window surrounds, while the Carrera's were black. The only anti-rust protection was a zinc coating of the floorpan and Porsche used the 2.7 Carrera RS unit until 1976.

So, back to our red devils. Only the lightweight

RS Sport had magnesium window frames, 40

per cent lighter than steel, with aluminium trim

peculiarly small, with no headrests, although they diameter RS steering wheel is still present, along

with the proper gauges including rev-counter, speedo, lightweight carpeting and factory rollcage, which is uncomplicated compared with modern constructions. The modern lap-anddiagonal belts are recent installations, replacing four-point harnesses for convenience. The gaiter around the gearlever is original, and there's no glove compartment or loudspeaker holes, because Lightweights usually didn't come with speakers or radios. The RS Sport's external panel work was of thinner gauge steel, and Sadlowski makes the point by pushing on the roof and doors; the metal has a certain give to it. The 2.7 Carrera doesn't behave in the same way, with virtually no bending under pressure. "The Lightweights, especially the early ones, are thinner. This is an early chassis number and the headlight lens is clear glass, coded 1973 H1 (Halogen 1), and the later ones weren't coded and the lens was frosted," says Sadlowski.

Our other subject here is a 1975 European-spec G-Series 2.7 Carrera, delivering 210bhp and unlike its illustrious forebear, it was never offered as a Lightweight Sport. "In 1974 they changed from mechanical fuel injection to electronic for the American market," Sadlowski explains, "because they couldn't meet Californian emissions standards with the mechanical fuel pump cars, but that's







what they sold in Europe, which is why this car is MFI. It's actually quite rare as only 780 were built in 1974, 650 in 1975 and another 240 in 1976. This is a 1975 car that went to Spain and has all the stamps in the logbook. The only problem is that red fades, so we painted it in its original colour again. It's got the original ducktail engine lid as the 1974/75 cars came with a ducktail, a plain rear wing, or without a rear wing at all and, for me, the ducktail is the nicest." Black window frames and trim replaced the aluminium and magnesium brightwork and chrome was available to special order.

Out on the road in the 2.7 Carrera, I'm anticipating a much softer touch. The seat upholstery is red tartan, which looks nice but there's not a great deal of support as it's a chair I'm sitting on rather than in; it's not a body-hugging bucket seat, and there's no lateral bracing, which means I'm also having to sit quite upright. At first I assumed that the seats had been re-stuffed and that after a while they will soften up, but Sadlowski says they are all original items.

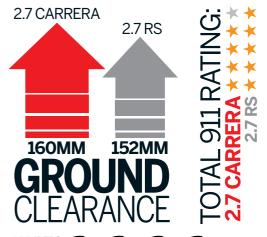
The relationship of feet-to-pedals is fine, as is arms-to-steering wheel. Unlike the RS's dogleg first gear, first in this 915 gearbox is straight ahead. On the move, the 915 gearbox is excellent, and at some point it's either been rebuilt or had its shims renewed - though fifth is quite a long way across the gate. It's a beautifully agile car, jinking this way and that in the corners, with a fair turn of speed in between, as you'd expect from an RS-powered 911, though it feels more planted and less flighty than its long-bonnet predecessor.

So, basically, the 2.7 Carrera is almost as sprightly as a 2.7 RS Touring, but the Sport version we have here is harder-edged in stance and when cornering; it's got the edge in everything like the handling, which is more acute, and the ride is firmer. During our shoot I'm following the lightweight RS Sport and it's a way more sexy posterior than the impact-bumper car. And in the turns it says racing car. But, both of these cars are so alive and, as you'd expect, the Lightweight Sport rather more so than the regular 2.7 Carrera.

So what about the respective values of these two red cars? The 2.7 RS Sport is pegged at €1.3m - that's not a pie-in-the-sky figure, it's just sold for that, as Sadlowski explains: "Good cars are selling fast and achieving good prices, whereas medium quality cars take a little longer. People are very knowledgeable and they want the best, so why sell for less if there are buyers? It's the same with the 2.7 Carrera you've been driving, you can pick up a car like this for €220,000 to €230,000, and my car is €275,000 because it has 87,000 kilometres and one owner, has been painted once and everything matches - every nut and bolt is correct."

These are two cars from opposite ends of two eras that abut one another: the 2.7 RS Sport is the culmination of the original 911 dynasty, and the 2.7 Carrera is the hopeful harbinger of the new impact-bumper generation, and while they share the same fundamental running gear - and paint scheme - they are different characters on the road, testimonials to the eras they've come to represent. A halcyon hero and a new kid on the block.











Carrera 2.7 RS **Lightweight**

1973

2,687cc (911/83) 8 5:1 213bhp @ 6,300rpm 255Nm @ 5,100rpm None

Five-speed, 915/08

Wishbones, MacPherson struts, longitudinal torsion bars, hydraulic dampers, anti-roll bar Semi-trailing arms, transverse torsion bars, hydraulic dampers, anti-roll bar

> 6x15-inch Fuchs; Pirelli P6000 185/70/R15 7x15-inch Fuchs; Pirelli P6000 215/60/R15

> > 4,163mm 1,610mm 975kg

5.8 secs 152mph

Model 911 Carrera 2.7

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

1975

2,687cc (911/83) 8 5:1 210bhp @ 6,300rpm

255Nm @ 5,100rpm None

Five-speed, 915/16

Wishbones, MacPherson struts, longitudinal torsion bars, hydraulic dampers, anti-roll bar Semi-trailing arms, transverse torsion bars, hydraulic dampers. anti-roll bar

6x15-inch Fuchs; Pirelli P6000 195/65/R15 7x15-inch Fuchs; Pirelli P6000 215/60/R15

4,291mm 1,610mm 1,075kg

6.3 secs 148mph







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...



s 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 Botniaring'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 nearpriceless 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 91ls. 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 l' alloy wheels, forged from magnesium. An instant icon, they were later

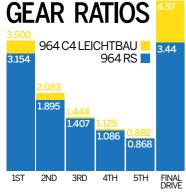
offered as an option on base Carreras (albeit in a heavier aluminium alloy guise).

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 \bigcirc







964 RS v C4 Lightweight

964 Carrera 4 Lightweight 1991-1992

Engine

Capacity

Compression ratio 11.3:1

Maximum power

265bhp @ 6,720rpm

Maximum torque

304Nm @ 6,720rpm

Transmission Five-speed manual with adjustable differential lock

Suspension

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

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

Wheels & tyres

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

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

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

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

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

Brakes

320mm drilled and vented discs

299mm drilled and vented discs

Dimensions

Length

Width 1,650mm

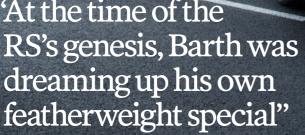
Weight 1,230kg (Sport)

Performance 0-62mph

5.4 secs

Top speed

















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

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.

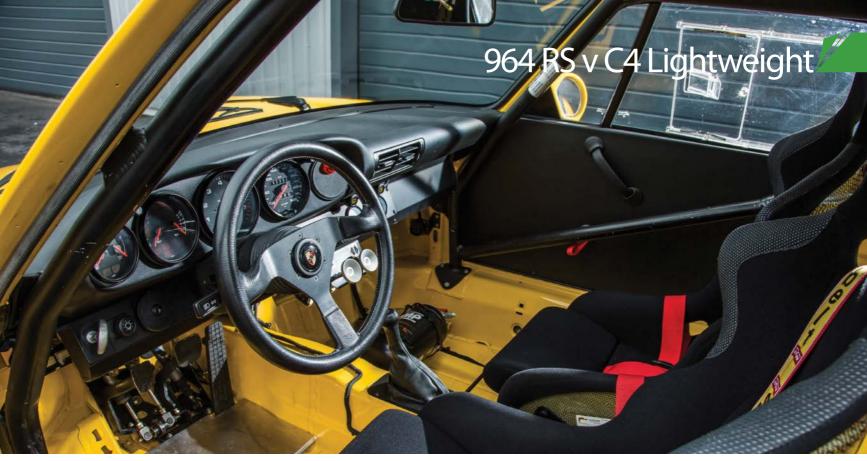
This is a 911 where managing your entry speed and angle is key. Every time I'm too aggressive with my turn in, the front end's trajectory quickly zeroes in on the track's edge (and the barriers beyond). Turning in too late only provokes large doses of understeer from the RS, requiring me to focus on 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

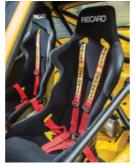
balanced relationship between anti-roll control and damping enabling me to catch the slide with relative ease. Unlike classic 91ls, where the torsion bar suspension setup catches out many, the coil sprung rear end of the 964 proves much more progressive, enabling you to really get down to the business 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 its 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











Left: Keylar-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

(as you do in later GT3s). The relationship between the engine and gearbox doesn't feel perfectly suited 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 fourwheel 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 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 Kevlarbacked 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 M64/0l 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 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.

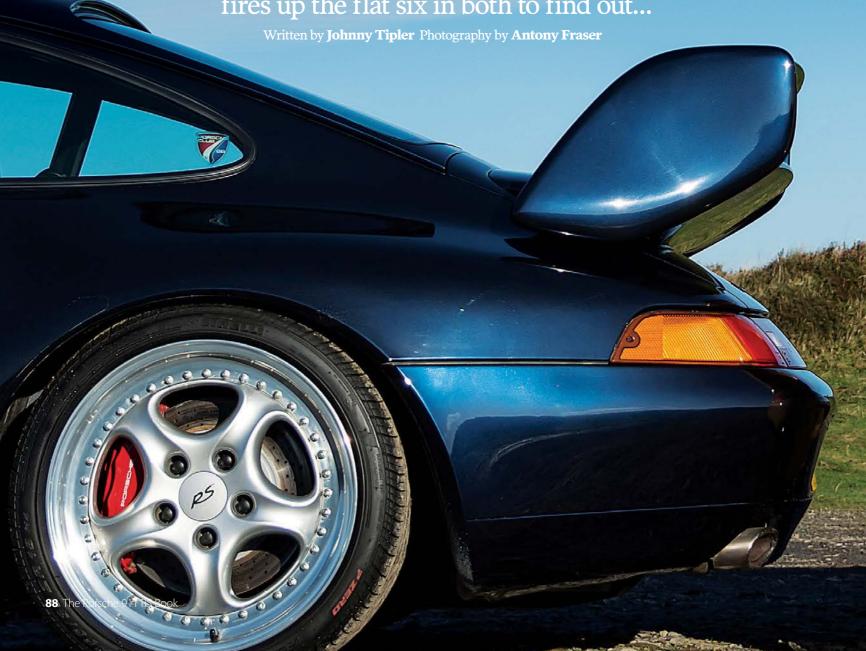
As the track dries out, I find myself winding the torque more and more to the rear while, thanks the much shorter ratios, I'm a gear up in every corner compared to the RS. It's truly invigorating. The sound, the chassis, the drivetrain, all combining to produce an on-track experience unlike any other 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. ■■■



PEAL S 993 RENNSPORT PLACE OF THE SECOND SEC

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...



993 RS v replica

utting 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

'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



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 heightadjustable 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 flitting 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 v replica

993 RS (Midnight blue)

1995

3,746cc

300bhp @ 6,000rpm 355Nm @ 5,400rpm

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

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

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

1,279kg

Model

993 RS replica (Speed yellow)

Year Engine Capacity

Compression ratio

Maximum power Maximum torque

> Engine modifications Transmission Suspension

Front

Rear

1995

11.3:1

280bhp @ 6,100rpm 330Nm @ 5,000rpm

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

Wheels & tyres **Front**

Rear

Bridgestone 265/35/ZR18

Dimensions Width Weight

Performance 0-62mph

Top speed



"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.



993 RS v replica

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 RSs 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 Clubsportstyled 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.







to answer for! The undeniable talent of one of Porsche's most esteemed motorsport engineers hasn't made my job easy today. The sun is fast approaching the horizon and I need to choose which Porsche 911 I'm grabbing the keys to for the drive home. Do I want the 964 Carrera RS or the 993 variant? I know, right. This is the enviable dilemma facing me atop Ditchling Beacon, one of many stunning vantage points in the South Downs, an area of the UK renowned for its natural beauty. However, the vista - bathed in a warm dusk glow - can't take my mind off the task at hand. This has to be the toughest decision I've had to make at Total 911. I mean, how are you really meant to choose between the two?

Leviathans of the air-cooled era, the 964 and 993 Carrera RS represent a golden age for the Rennsport philosophy. After a hiatus during the 1980s – the SC RS of 1984 wasn't really intended as a production road car – Porsche revived the lightweight legacy in 1991 with the launch of the 964 Carrera RS. After the 911's future had been secured at Zuffenhausen a decade earlier, the motorsport department was tasked with taking the Neunelfer back into international competition. The first step was to put the 911 at the centre of Porsche's one-make race series, the Porsche Turbo Cup, held in Germany and France since 1986 and 1987 respectively.

In order to do this though, a car was needed for the FIA's homologation process. The result, readied in time for the start of the 1990 season by Kussmaul's team in Weissach, was the new Porsche 964 Carrera Cup. A stripped out version of the Carrera 2, the Carrera Cup racer featured a seam-welded bodyshell with every luxury removed in the name of weight saving. And 18 months later, ahead of the 1992 model year, the first road going production versions of the Cup car rolled out of the factory, complete with an iconic designation on the decklid. The Porsche 964 Carrera RS was born.

The car marked the return of the Carrera RS for the first time in 17 years but, rather than universal rejoicing from Zuffenhausen's faithful, the 964 was met with an unusual level of indifference. Even the press weren't convinced. While on paper there was much to wax lyrical about – lowered Bilstein suspension, a seamwelded shell and a raft of weight saving (the RS was 120kg lighter than the Carrera 2) – the

lack of an upgraded engine put many people off, as did the lack of visual drama; the rear wing had been a defining feature of previous Rennsports and the 964's flatback looks just didn't hack it.

Despite the claims at the launch in 1989 that the generation was 80 per cent new, the reality was that the 964 was always a compromised effort, designed to try and modernise the 911 while the purse strings had been tightened by years of product stagnation. As Mark Sumpter, owner of independent specialist, Paragon, says, "If you look underneath, you can still see the mounting points for the old torsion bars." But, for the 993, Porsche chose to invest heavily, wiping the slate clean with a brand new platform. Calling it 'revolutionary' is to almost understate the significance of the upheaval. Gone were those distinctive front wings and, in their place, a front end undeniably inspired by the 959 supercar of the mid-1980s.

Launched two years after the Carrera 2 in 1995, the 993 Carrera RS is simply jaw-dropping to look at, especially when fitted with the optional Clubsport aerodynamics. It's not exactly modern but you could launch this car today and it would still turn heads. The deep chin spoiler, towering rear wing and split-rim Speedline alloys may not have been to everyone's tastes but the 993 Carrera RS is immediately recognisable as a Rennsport 911, something the 964 version could never boast of.

Kussmaul's team bestowed upon the 993 RS mechanicals worthy of the wild aesthetics, too. 'Big Red' calipers were entrusted with the stopping duties at all four corners, while at the rear there was new multi-link suspension, bringing the 911 firmly up to date. After the disappointment surrounding the 964's powerplant though, perhaps the most vital development on the last air-cooled RS came underneath the decklid, where a brand new 3.8-litre flat six sat. While the 993 Carrera was powered by the 3,600cc M64/05 engine (ostensibly an updated version of the standard 964 motor, modified to turn out 272bhp), the Rennsport's M64/20 flat six featured enlarged cylinder bores - increased to 102mm - providing a total capacity of 3,746cc. There were also new pistons, improving the compression ratio to 11.5:1. The forged items featured smaller skirts and a relocated wrist pin, which reduced the mass and allowed the engine to spin up quicker. The rocker arms were also lightened, while the latest Bosch Motronic 2.10 system was entrusted with running the twin plug ignition system. But the biggest alteration came in the induction system, where Porsche gave VarioRam its production debut. The system allowed the intake runners inside the 993's plenum chamber to change length, improving midrange torque by 20 per cent.

Ultimately, all of these changes meant a total power output of 300bhp at 6,000rpm and 355Nm of torque at 5,400rpm. Helping to keep it all cool and in check, the Carrera RS featured twin oil coolers mounted in the front bumper. Combined with an almost-as-extreme-as-the-964 level of



















Top left: The Recaro bucket seats, identical in both RSs, hold you close at the hips while allowing your shoulders to freely rotate

Above: Separated by just a few years, the last two air-cooled Rennsports could not look more different. The 993's rear wing casts an imposing silhouette



gewicht spar (weight saving for those not versed in the German tongue), the Rennsport 993 boasted a tantalising power-to-weight ratio of 234.6bhp, an II per cent improvement over the 964 RS. I know what you're thinking. "You're going to take the 993." Am I right? Well, on paper it's a no brainer. But behind the wheel, the 964 is, thanks to the very best Weissach wizardry, somehow more than the sum of its parts. I found that out the first time I drove one in issue 128 and I only have to turn my mind back to a morning blasting around in Paragon's Rubystone red example to confirm that...

Closing the door behind me with that familiar, metallic clink, I sink into the 964's colour-coded Recaro bucket seat. Identical in the 993, it holds



me perfectly, close at the hips while allowing my shoulders to rotate freely without impingement; it's how all road-going buckets should be. The driving position is more of a challenge to get right though. Idiosyncratically 911, the pedals are perfectly placed but the steering wheel is a bit far away for my liking (others may disagree, but I like to feel as if I'm grabbing a car by the scruff of the neck, elbows bent and all). These misgivings are soon thrust from my mind though, as the M64/03 fires into life with a big, brassy beat pulsing through the cabin. It's almost as if the engine is sat inside the cockpit, each and every mechanical melody from the flat six picked out of the air perfectly.

Underway, the gruff idle turns trebly. From a growling 3,000rpm, the engine winds up to a piercing crescendo at the 6,800rpm redline, a shrieking bark emanating from the single tailpipe. It's a great score to blast through the Sussex hills with; mixed with transmission whine through the lightweight carpets and a large amount of wind noise, the 964 RS isn't as loud as its harmonious tones suggest it should be. The theatre of the car's audio feels raw, unpolished, but it is all the more alluring for it. The 964 RS is not meant to be polished, it's meant to be engaging on road and track and - today - on the former it is certainly proving that. As a left-hand-drive car,

"Behind the wheel, the 964 is, thanks to the very best Weissach wizardry, more than the sum of its parts"

this particular example is bereft of power steering (RHD RSs for the UK market interestingly came assisted). Because of this, each apex needs real muscle to hit perfectly. My efforts behind the wheel are only lightened slightly by the slow rack - there are just under three turns lock-to-lock. In fact, all the controls have a satisfying heft to them.

The brake pedal requires a fair bit of force but the initial bite is surprisingly positive for a classic 911, while the feel through the pedal has impressive clarity, allowing me to feel the point of locking before I require any assistance from the primitive ABS. On the shifting front, the five-speed gearbox is stiff between each gate providing a race feel that many modern transmissions could learn a thing or two from. It only takes a few runs up the twisting road of Ditchling Beacon to get my blood racing, the older RS willing me to hustle it more

and more. It's not just the controls that require you to ride rodeo as the ostensibly classic chassis makes life more difficult (but no less fun) on the various switchbacks.

While the springing doesn't have much finesse over the bumps and lumps of our test route, there's a fair degree of roll around the front corner. Wrestling the nose of the 964 into one of the many hairpins, I pin the throttle and the inherent 911 character of the setup rears its head, the RS squatting over its haunches while the front end transmits that stereotypical bobbing sensation back to the seat of my pants and my hands on the thick-gripped steering wheel. It's a handful, but the sensible damping levels allow the chassis to communicate clearly and it never feels outrageous. If anything, the 964 feels easy to

Below: The 993's split-rim Speedlines are now rare and hugely costly. They help hide Porsche's 'Big Red' brake calipers, providing excellent stopping power

Bottom left: A 964 RS can outrun most things on a typical British B-road. Its Rennsport successor is not one of them



push beyond the abilities of its chassis, making feel surprisingly forgiving for an RS. I've said it before but don't believe those who say the 964 isn't suited to road use in the UK.

If the 964 RS was all you ever knew of aircooled Rennsports, you'd never want anything else. But, waiting for me in the car park at the summit of the Beacon is a 993 RS and, for a car bereft of the electronics we've become accustomed to during Andreas Preuninger's tenure over the RS legacy, the 993 feels electrified. Just from the driving position, the 993 feels more purposeful, the pedals still perfectly placed for heel-and-toe (as in the 964), but the Momo steering wheel is found closer to my chest. With a smaller diameter to boot, the whole cockpit fits me like a glove. If I felt like I wanted to get more of a grip on the 964, I don't have any such worries in the 993. With power steering as standard, the newer RS negates the need for any real muscle behind the wheel. Despite this, the hydraulic pump does not

sully any of the steering's feedback, the 225-section front tyres still telegraphing their grip levels back to me with perfect precision. The steering allows me to revel in the 993's real revelation: its chassis. Compared to the 964, you'd honestly think that the last air-cooled RS was mid-engined, such is the ability of the car to change direction. Despite sharing the same 24mm diameter front anti-roll bar, the 993's front end is an order of magnitude more direct on turn, immediately pitching towards each apex with a deft flick of my wrist. The slightly faster steering rack aids the feeling of immediacy, but the 993's chassis is truly sublime.

Where the 964 initially understeered before finding its nodding equilibrium, the 993 noses into each corner with militant accuracy before tackling the rest of the radius with a much flatter attitude. The rear end is noticeably more noncompliant and can be easily unsettled over bumps that the 964 would take in its stride. For the inexperienced pilot, this could be unsettling but for those well



versed behind the wheel of an RS, the 993's agility can be exploited to no end on a twisting B-road.

Once I've recalibrated my senses to cater for the 993's abilities, the chassis doesn't really have any nasty surprises. In fact, the more I push, the more the 993 seems to egg me on, unveiling new depths for me to explore and test myself. It's an incredibly gratifying experience, as if the car is developing alongside your own driving ability, never allowing you - at legal road speeds, at least - to overstep the mark. Yet it retains the key ingredient for any legendary Rennsport: engagement. My smile can't help but grow bigger with every mile that passes. Like the 964, the 993's relative lack of power compared to the water-cooled era of RS is one of its strengths when it comes to the car's real world fun factor. Despite this though, the 993's flat six is noticeably more potent than that of its successor, picking up strongly from the bottom end and revving freely through the range. Unlike the 964, the last aircooled RS doesn't have any perceptible peakiness, pulling keenly at all times. We have VarioRam to thank for its almost unnerving smoothness.

Contrary to the engine's impeccable behaviour, the M64/20 flat six's song rings loud through the 993's cabin with an unspoiled clarity. Whereas the 964's engine note is muted by the drivetrain, the transmission whine and differential chatter in its successor is more refined, and the smoothed front end eradicates any wind noise around the A pillars, leaving the motor free to broadcast its music throughout the cabin. And what music it is. A spit of fuel on the overrun, the 993 picks up instantaneously on the throttle, a Mezger-like machine gun rattle permeating from under the decklid. This is one of Porsche's great engines.

For today at least, the demise of the air-cooled era is being keenly felt; some of Zuffenhausen's latest offerings could benefit hugely from this sort of charm and character. But if there's one stick for me to beat the 993 with it's that, like the steering,

the rest of the control weights - the brakes and the gearshift - lack the substantial action of their forebears in the 964. They are perfectly serviceable (though the slightly higher mass of the 993 dulls the Big Red's initial bite) but they feel at odds to the scintillating chassis. The brake pedal has more travel and feels more assisted while the gearlever's travel is so slick that a mere twitch of my fingers is enough to move it gate-to-gate.

Objectively though, as you would expect given the development budget and extra R&D time, the 993 is the better Rennsport and, having tracked back through the lessons learned today, I have no doubt which set of keys I will be taking for my drive home. But the 964 is no awkward ancestor. They are both incredibly involving Neunelfers with a penchant for putting a smile on your face. Porsche hasn't built anything quite as captivating as this duo since. The 993 RS may have won today's battle but the air-cooled Rennsport legacy is the real winner. Long live luftgekühlt!



"If the 964 RS was all you ever knew of air-cooled Rennsports, you'd never want anything else"



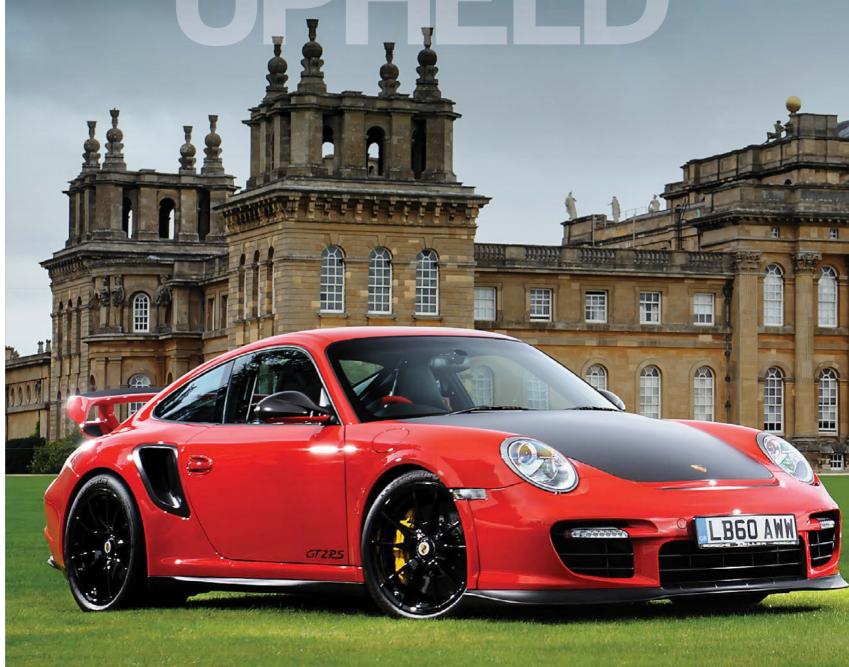






997 GT2 RS V 997 GT3 RS 4.0

TRADITION UPHELD



997 RS 4.0 v 997 GT2 RS

The GT2 RS and GT3 RS 4.0 represented the peak of 997 engineering and performance, as **Total 911** investigates

Written by Kieron Fennelly Photography by Steve Hall

f the 200,000 aforementioned examples of 997-generation Porsche 911s, the majority filled all the usual segments of the range from Coupés, Cabriolets and Targa models, rear or all-wheel drive to, of course, the Turbo and Turbo S. These were the volume models, but Zuffenhausen also built smaller quantities of its GT3 and GT2 911s. For owners keen to take their GT3s to the track, there were lightened and aerodynamically more sophisticated RS versions, the final edition coming in the shape of the revered 4.0 litre RS. To mark the end of

production of its turbocharged GT2, Porsche applied much of its expensive RS methodology to a final run to create the unprecedented GT2 RS which, if nothing else, will surely take the prize as the fastest manual transmission production supercar ever built, its acceleration eclipsing even the Carrera GT. The RS 4.0 and GT2 RS, voted best of the 997 generation by **Total 911** readers, provided not just the performance benchmarks for the 997, but in their four-litre naturally aspirated and 3.6-litre turbocharged forms, represented the last and most powerful incarnations of the incomparable





Mezger engine. Combined with their very limited production, this makes them not only the pinnacle of the 997 range but also by far the most valuable collectables of any water-cooled 911.

The RS tradition has its roots deep in Porsche history, the Rennsport moniker suggested by Ferry himself in 1955 for the works' new 1500 racer. Other RS racers followed, but it was not until 1973 that the RS badge appeared on a production car: this was the lightened Carrera RS 2.7 homologated for FIA Group 3. The RS badge was revived again in 1990 for the homologation model 964 and again in 1995 for its 993 successor and seemed to become a natural extension of the 911 range. But it would be nine years before another 911 RS appeared.

The switch to a water-cooled engine brought about significant manufacturing changes which

meant it was no longer practical to modify cars on the Zuffenhausen production line: special production had to be undertaken at Weissach. It was also quickly apparent that the new 996 engine would suffer oil starvation if used energetically on the track, so for competitions Porsche developed a separate RS successor, the GT3. This featured a dry sump engine, also the basis of the forthcoming 996 Turbo, which at its simplest combined the previous 964-993 crankcase with a completely new water-cooled, 24-valve head and cylinder jacket. The realities of twenty-first century crash protection and homologation norms meant that the days of shaving weight out of largely steel chassis and bodies were over, and when the 1999 GT3 was announced, it disappointed enthusiasts by being no lighter (in fact it was about 60kg heavier) than the standard

C2 996. The dynamic qualities of the new GT3 and its brilliant engine however redressed any initial negative impression and the production run of 1,900 cars quickly sold out.

When Porsche resumed GT3 production in 2003 with the Mk2 it completed manufacture with around 300 lightened and more highly tuned examples, which it called the GT3 RS. This established a pattern whereby the RS would now be the track-focused version of the already competition-orientated GT3. The first GT3 RS derivative was visually distinguished by a blue or red GT3 RS flash on its sides and, in keeping with the RS tradition, around 50kg was saved thanks to a bonnet, rear wing and window in polycarbonate. A stiffer, lower suspension was fitted and the engine modified with the Cup car's intake and exhaust ports. This added about 20bhp although Porsche still homologated the GT3 RS at the 381bhp of the standard car. With circuit-biased springing and - other than ABS - no electronic catch fencing, the first GT3 RS was generally considered too extreme for the road, but it firmly re-established the Rennsport benchmark.

Nevertheless, to enhance the model's appeal, Porsche fitted PASM to endow the 997 GT3 RS with road as well as track usability; RS lightweight genetics meant that 20kg was saved over the GT3 Clubsport by using carbon fibre rear wings and a polycarbonate rear window. A single mass flywheel and short shift gearchange were also included. For the Gen2 997 GT3 RS, the engine was bored out to 3.8 litres, which enhanced torque and output to 450bhp, and under the skin

Above: The RS 4.0's build is a pure work of art with meticulous attention to detail in terms of performance and weight saving, making it a real Total 911 favourite

Left: Despite having power boosted to 620bhp, the turbocharged RS weighs 70kg less than the 997 GT2 components and use of the GT3's carbon fibre body parts, it weighed 70kg less than the 997 GT2



997 RS 4.0 v 997 GT2 RS

997 GT2 RS

2010

Engine Capacity

Compression ratio

Maximum power

620hp @6,500rpm

Maximum torque 700Nm @ 2,500-5,500rpm

Transmission

Six speed manual driving rear wheels; single mass flywheel

Suspension

Lower wishbones and MacPherson struts with combined coil springs &

Multi link with parallel wishbones; combined coil springs & dampers; anti-roll bar

Wheels & tyres

Front 9x19-inch; 245/35/ZR19

Rear

Dimensions

Length

<u>Performance</u>















997 GT3 RS 4.0

2011

Engine

Capacity

3,996cc

Compression ratio

Maximum power

500hp @ 8,250rpm

Maximum torque

460Nm @ 5,750rpm

Transmission

Six speed manual driving rear wheels; single mass flywheel

Suspension

Lower wishbones and MacPherson struts with combined coil springs & dampers;

Multi-link with parallel wishbones; combined coil springs & dampers; anti-roll bar

Wheels & tyres

9x19-inch centrelocks; 245/35/ZR19

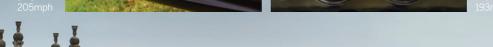
12x19-inch centrelocks; 325/30/ZR19

Dimensions

Length

Weight 1,360kg

Performance







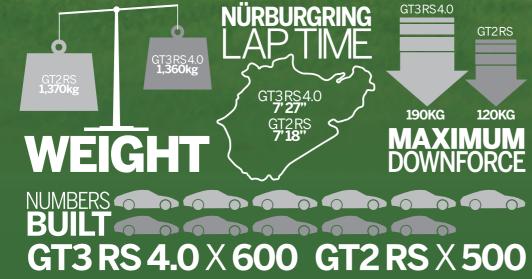
there were further dynamic improvements: as well as PASM, the latest RS featured a bespoke three stage PSM which could be fully on, traction control only, or completely off, and Active Engine Mounts added to stability. The 997 GT3 RS featured a 44mm wider Turbo body and on the Gen2 the front track was widened too. An optional lithium battery and 19-inch centrelocking

alloys saved around 15kg over the stock second-generation 997 GT3.

With the 991 imminent, the much admired RS 3.8 appeared to be the glorious swansong of the 997 range. The 911 Rennsport had in just three models and a mere seven years evolved from a barely disguised competition 911 that, off the track, travelled best on a trailer, to a brilliant circuit car

that was also pliable and comfortable enough to drive to the 'Ring and home again afterwards. But Porsche Motorsport had other ideas: one last throw of the analogue RS dice (for it was strongly rumoured the 991 GT3 and RS would be very different cars) involved building a road going version of the 4.0-litre GT3 R engine for a halo run-out RS. And so the car described by Autocar as the finest Porsche ever to wear a number plate was born.

The evolution of the 2010 GT2 RS was slightly different: in the early 1990s, the FIA-inspired demise of Group C, and the Iraq war recession, combined to cause a general decline of sports car racing. Together with race organisers Stephane Ratel and Patrick Peter, Jürgen Barth, then Porsche Motorsport manager, started the BPR, a new series for GT cars. Initially Porsche campaigned a 964 RSR, but for the 1995 event, Motorsport developed a lightened, rear drive 993 Turbo. For homologation purposes, a street version was made. This was the birth of the GT2. The track GT2 had a very successful career lasting until 1999, but Porsche did not build a competition 996 GT2 to follow in its footsteps. Wendelin Wiedeking had commandeered most of the racing budget to develop the forthcoming





Porsche SUV, the Cayenne. However the racing GT2 was not simply a victim of financial cuts: testing of 600bhp GT2 prototypes at the Nürburgring had shown they were simply not fast enough and Porsche tacitly acknowledged that, at this level, the 911 design was no longer competitive (significantly for US competition it developed the successful mid-engined LMP2 cars, which never raced in Europe).

So when Porsche announced a road going, rear driven 996 GT2 for model year 2001 there was some surprise – as it was not a 'homologation special' – and ultimately disappointment. This is because unlike the 996 GT3 from which much of its suspension was derived, the GT2 understeered too easily and was found distinctly wanting as a driver's car. With a dedicated rear spoiler and deeper front valance, it looked the part and

packing 457bhp brooked no arguments about its stupendous acceleration and straight line speed. But its ride and behaviour fell short of the GT3's precision and agility; it was too uncompromised a grand tourer for an asking price 20% above that of the much praised 996 Turbo. Like the 996 GT3 RS, the GT2 had no PSM and dealer Andrew Mearns of specialist Gmünd Cars remarked to **Total 911** that a high proportion of them ended





in the ditch. Porsche had failed to define whether its GT2 was an out and out performance car or a high performance tourer and classically it fell between two stools. "GT2 much," opined Autocar.

The 997 GT2 was a much more balanced car and the road testers were rather more complimentary. The adjustable suspension of the 997 GT3 and traction control contributed to a much improved driving experience and the 523bhp twin turbo exhibited less lag. The folding bucket seats now allowed luggage access to the rear cabin and this detail seemed to sum up how with the 997, the GT2 had become an altogether more resolved and usable model. Encouraged by its reception and with the knowledge that environmental politics would soon make it all but impossible to homologate and therefore

manufacture this kind of supercar, Porsche conceived the GT2 RS: as Car & Driver put it, the 997 GT2 "was deemed intense enough to skip straight to the RS designation reserved for Porsche's street-legal racers." As with the later RS 4.0, Motorsport boss Andreas Preuninger for his part was also keen to build a "skunkworks" car to showcase the best Weissach technology before it was legislated away.

When one considers the specification of both these RSs, the admiration they generate is understandable. Take the RS 4.0: for cost reasons the four litre engine had never been offered on earlier GT3s. With the bore at maximum, Weissach raised capacity by increasing the stroke to 80.4mm, which required a bespoke crankshaft and significant engine rework. Weissach also

revised the suspension from experience with the GT2 RS project, with components in aluminium and new spring and damper rates; externally the RS 4.0 featured the GT2's polycarbonate front wings and bonnet and carbon fibre bumpers. The neat and rather vulnerable 'dive planes' on the sides of the front bumper enhanced downforce by 15% alone; despite developing 121bhp/litre, the RS 4.0 was far from an undriveable, fire-breathing monster as could be imagined. Preuninger even claimed he was commuting daily in a preproduction example. When they got their hands on the RS 4.0, the magazines went into raptures over its "spectacularly good engine" and in terms of handling, Autocar gushed "nothing will engage you more this side of a Caterham or a single seater."



"The 4.0 RS and GT2 RS provided not just the performance benchmarks for the 997, but represented the last and most powerful incarnations of the incomparable Mezger engine"

997 RS 4.0 v 997 GT2 RS

The GT2 RS was the first time (with the exception of the one-off RS Turbo that Zuffenhausen built in 1976 for Herbert von Karajan) that Porsche had undertaken a proper lightweight Turbo: instead of the GT2's Turbo chassis, it was based on strengthened underpinnings of the GT3 RS and, thanks to a combination of aluminium components and use of the GT3's carbon fibre body parts, it weighed 70kg less than the 997 GT2. To put this achievement in perspective, at 1,370kg, the GT2 RS is a mere 10kg heavier than the 930 of 1978-89.

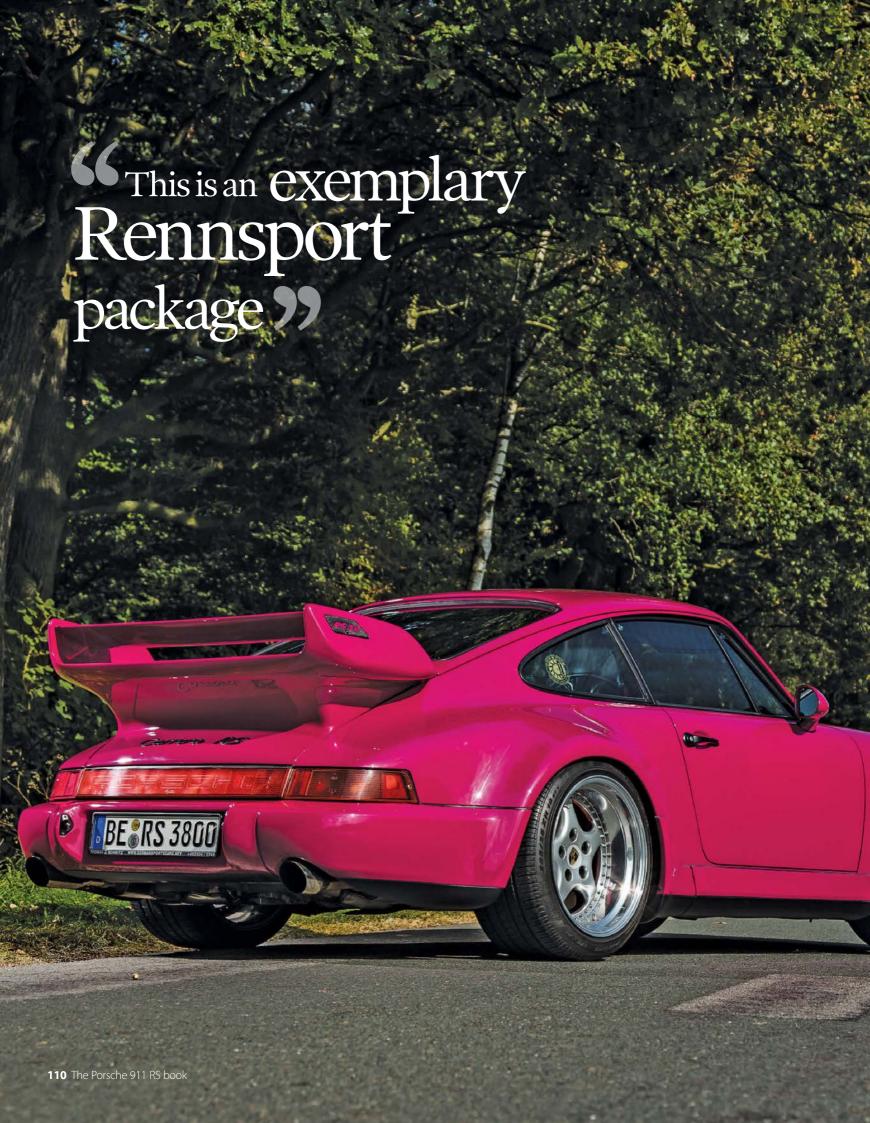
The GT2 RS used the latest PASM with the specially developed stability management, which could be brought in with or without traction control, or turned off altogether: this made the most explosive production turbocharged 911

altogether more reassuring, especially on wet surfaces. The final and most dramatic iteration of the 3,600cc turbo engine saw it fitted with variable vane turbochargers and with boost raised from 1.4 to 1.6 bar, power was enhanced by 88bhp over the earlier GT2. Roadtesters found the GT2 RS a revelation: the 997 GT2 had already corrected much of the 996 variant's more alarmingly wayward tendencies but in this RS incarnation, here was 600 horsepower genuinely useable on the public highway, albeit with greater circumspection than with a naturally aspirated RS. It is generally agreed that a turbo 911 will never have the precision of the unblown 911 because of the impossibility of entirely eliminating the delay before forced induction takes effect. Nevertheless, with the GT2 RS, Porsche had produced the most

convincingly engineered analogue turbo ever to be built and it – just – remains Porsche's fastest production 911.

The 991 watershed was seen by many as Porsche's great leap from air cooling in the 1990s. Collectors and well heeled enthusiasts had their cheque books at the ready for both RS models and each were sold out long before their respective production ended. Priced at £164,000 in the UK, the GT2 RS has appreciated steadily to around £340,000; heralded as the last manual GT3 (before the 991 R was unveiled in 2016), the RS 4.0 with its genuine race engine is held in higher esteem, as shown by its value which over four years have soared from a retail price of £128,000 to around £370,000 – proof enough that these really are the best of 997.







Generations of Rennsport in its most exhilarating form

112 The original retro

Most backdate projects are formed from a 964 Carrera base, but this pre-impact bumper was originally a 964 Rennsport

116 2.8 RSR

Up close to the 1973 European GT championship-winning M491 RSR from racing legends Kremer

122 964 RS 3.8

This Rubystone red creation has the evocative looks of the limited-numbers 964 in 3.8-litre guise

130 Toad Hall 911

The story of this 3.0-litre RS is a thrilling tale from more than 40 years of motorsport





136 SC RS

There were only 20 ever made, and the SC RS was the only Rennsport in an 18-year period for Porsche

144 993 RSR

Porsche's final, finest iteration of an air-cooled flat six race car is put through its paces on track in South Africa

150 996 GT3 RS

We take to Killarney race circuit with the last manual endurance racing 911







THE ORIGINAL REFERENCE IN THE ORIGINAL REPORT IN THE ORIGINAL REPORT

Thought retro-moderns were a recent idea? Not a bit of it. Here we unearth a little known 1972 RSR lookalike with the heart of a tuned 964 RS – built in 1994...

Written and photographed by Steve Hall





ou could be forgiven for thinking the trend towards so called retromoderns is something new, a recent phenomenon brought about by a groundswell of enthusiasm for classic cars coupled with a desire to use them like a modern car. It's a trend that's easy to understand, with the benefits clear: some of the most iconic classics of yesteryear are remixed with modern mechanicals to deliver a stunning and unique driving experience, with that delicious style we so love about classics. And it's becoming ever more popular, with reimagined versions of everything from the Jaguar E-Type and Jensen Interceptor to the Alfa GT and Austin Healey, available with a modern heart beating beneath their classic curves.

But surely the biggest exponent of the retromodern philosophy (and perhaps the most suitable) is the Porsche 911. While California based Singer grab many of the headlines (they are, undeniably, stunning objects), while Paul Stephens in the UK will happily build you something equally stunning via his PS AutoArt division, with Autofarm and 911 Retroworks getting in on the game too. Although it may seem to be a modern trend (Singer was formed in 2009), there is a little known company in the countryside west of Frankfurt who first imagined the concept and completed a car in 1994. It's the same car you see on these very pages, the first 'Emmerling Porsche'.

The story dates back to 1991 and the Geneva Motor Show introduction of the now enshrined 964 RS. Emmerling decided he had to try one

Top: 330hp and less than 1,200kg in weight means this retro-modern 911 truly carries the RSR spirit

Right: Rather than inserting the Rennsport M64 engine into an old chassis, Emmerling has backdated a 964 RS

as soon as possible, and the subsequent drive left a big impression on him. A fan of the classic 911 look, he started dreaming of how amazing it would be to transplant this level of performance and technology into his favourite classic 911 shape, the wonderful 2.8 RSR of 1972. Well, if you're going to recreate a masterpiece, why not choose the best version, of the best version?

Of course, this would be a challenge fraught with difficulty. The engine and gearbox should prove simple enough – but transplanting the modern electronics, the ABS system, the chassis components, and providing a shell with the requisite stiffness? This would be a far harder task. So it seemed natural to turn the whole problem 180 degrees, and think about it like this: if it's not possible to retrofit the older shell, why not fit the retro look, and a dose of that wonderful classic character, to the later car? So was born the first Emmerling project, the result so good that it was never sold. Just like the 1972 RSR it pays homage to, it looks sensational in the flesh.

Perfectly proportioned, elegant but purposeful, it's deliciously free of any unnecessary addenda, with only those tiny – almost useless – mirrors, ducktail spoiler and front splitter interrupting the clean curves. There is good reason why almost every retro 911 remake copies this shape – it's never been bettered.

The interior is similarly purposeful. The fanciful detailing found in other retro-moderns is not found here, for this car is about performance and low weight. So, instead, you sit behind a standard 964 dash with funky blue clock faces, the standard door cards have been ditched in favour of lightweight carbon inners with matching blue fabric door pulls, you're supported by a fixed back bucket seat and braced against an aluminium clutch footrest.

Behind you there's a half roll cage bolted to the shell whilst in front sits a lovely three-spoke Momo leather wheel, with your right hand falling to – what's this? – a gearlever with a six-speed pattern etched on top. This well-used car



eschews aesthetics at the altar of attitude, so where others place fancy stitched panels, a simple look below waist level exposes much of the car's wiring and, if you could see it, you'd find much of the weighty sound deadening gone from the rear of the car. It evokes exactly the atmosphere Emmerling wanted; this is a machine built purely for the joy of driving, for impressing with lap times and not leather work.

When you start inspecting the mechanical makeup, it's easy to see where those lap times could come from. The 964 RS donor was already a light car, and its 260bhp did a fine job of motivating 1,230kg. The lightweight panels of this car, in tandem with the no nonsense interior and lightweight wheels strip that further, ducking under the 1,200kg barrier. And whilst paring back weight from an RS was always going to be tricky, added power was more readily achievable. Now sporting a programmable ignition, integrated single ignition coils, an improved alternator, more aggressive camshafts, free breathing headers and exhaust, the result is 330bhp with a commensurate boost in performance levels. Access to the newfound power of the tuned M64 is via a sixspeed Porsche 993 G50/21 gearbox, ensuring easy access to the motor's rich power band. With a

gorgeous set of split rims, adjustable coilovers, a front strut brace and uprated discs, there's no doubting the thoroughness, the seriousness, in the single-minded pursuit of performance on display here. I can't wait to drive it. Thankfully, after a spot of lunch, that's next on the day's schedule.

This is probably one of the more unusual cars you'd find in a McDonalds car park. Trundling into town with me in the passenger seat, we're drawing attention everywhere we go, and - as often seems the way with classics - it's almost entirely positive, with smiles and thumbs up from onlookers. Whether it's the looks, the noise, or sheer lack of pretentiousness - most likely a combination of all three - it does make you feel a bit special. So we park up, wander in for our Big Macs, and talk tactics. Emmerling recants a tale of his first visit to Hockenheim in 1994, where person after person inquired about the RSR, asking "How could such an old car be so fast?" Meanwhile, outside, the grey skies have gone from threatening to drizzling.

In a massively powerful supercar with vast tyres, this could be a huge problem, but the joy of something like the RSR – and perhaps retro-moderns in general – is that they are rarely power cars. Sure, there's enough mojo to light up the rears and turn you around if you're clumsy, but with 8.5x17-inch items wearing 225/45 tyres up front and 10.5x17-inch items wearing 265/40 tyres out back, they're just slim enough to cut through the moisture, whilst the high-revving, linear nature of the power delivery makes it extremely driveable. Perhaps most of all, the car is just so communicative. The steering is sublime with the perfect balance of weight, precision, feedback, and speed - as the central hard point with which to control the car, it fills you with absolute confidence. Now that the rain has subsided, there is merely a greasy - but quickly drying - surface to contend with. It's a brisk fivekilometre drive to our chosen test road, a fantastic little ribbon of Tarmac perhaps four kilometres long, beautifully surfaced, and packed with some stellar corner combinations. Wide-open third and fourth gear curves give way to tighter second gear switchbacks, which tempt you to prod the tail wide on exit. We can go back and forth as much as we like. It'll do nicely.

But before we go any further, dear reader, I simply have to mention the element of the RSR's make up which dominates everything it does – that aspect which paints a huge smile across your face, whether cruising in town or



The original retro

kissing the limiter on a cross-country thrash. It is, of course, the magnificent acoustic show taking place behind my right shoulder, suffusing the cabin with a mechanical melody, the like of which I've never experienced before in something 911 shaped. Crisp, aggressive and resonant, the mid range evokes that classic flat six baritone rumble, smooth as you like and overlaid with the mechanical thrashings of various cams, chains, and belts. Crack open the throttle and the reward is instant. The note hardens and as revs climb the motor strikes a variety of points where the resonant thrashing of the intakes take over, ever changing until the buzzsaw shriek of the last thousand revs. It's loud, but such is the quality you just want to experience it over and over again.

And it's quick. The upper end of the rev range really gets your attention; such is the rate of acceleration and the frequency with which you have to throw gear changes at it. Thankfully, that's a pleasure because the six-speed gearbox melds beautifully with this tuned RS lump; all in all it's a joyous drivetrain. The engine never hesitates, it pulls from way down – you can feel the lightness – and builds in this delicious fashion that makes the redline hugely rewarding. The roads are dry now, and several runs over

our chosen route are revealing. The coilovers are beautifully tuned: supple enough to soak up whatever imperfection we encounter and allowing enough body movement to feel the grip levels, whilst simultaneously killing any wheel movements in the first compression. It's totally controlled. In tandem with the fantastic tiller, the wonderful balance of the chassis is a joy to exploit – it's definitively old skool 911, but also malleable.

Sadly, we can't drive until sundown, although I'd be happy to. Comparisons with Singer are inevitable, although I've not had that particular pleasure yet. If it gets anywhere near this in terms of pure driving thrills, then they've done a magnificent job... but, that price. Emmerling's focus on delivering a truly wonderful driving machine, and nothing more, is admirable, and the result borderline magical. This is a car that you just want to drive and drive. I have no doubt it'd be sensational on track but, as a road car, it is simply the most exciting, enjoyable and immersive 911 experience I've ever had. And you know what? I love the unreconstructed honesty of it. I want to drive - I don't need gorgeous stitching and Bluetooth readiness. It's built like a race car: everything you need, and nothing you don't. It's the original, and it might just be the best.

Model 964 RS / 2.8 RSR Replica

Year 1994

Engine

Capacity 3,600cc

Compression ratio 11.3:1

Maximum power 330bhp @ 6,100rpm
Maximum torque 396Nm @ 4,800rpm
Transmission Six-speed manual from

Porsche 993

Suspension

Front Independent; MacPherson

Struts; anti-roll bar

Rear Independent; Semi trailing

arms; anti-roll bar

Wheels & tyres

Front 8.5x17-inch split rim;

225/45/R17 tyres

Rear 10.5x17-inch split rim; 265/40/R17 tyres

Dimensions

Length 4,275mm

Width 1,775mm

Weight 1,180kg

Performance

0-62mph 4.2 secs (est)

Top speed 155mph (est)



KREMER 911 CARRERA RSR 2.8

POSTER BOY

The factory cars may have often hogged the headlines but it was this incredibly successful racer that cemented the 2.8 RSR's credentials during the 1973 season



rom the company's early motorsport exploits in the 1950s through to the 1980s Group C heyday, Porsche's racing posters helped to immortalise Zuffenhausen's multitude of track and stage successes. More often than not it was the works cars, resplendent in their various liveries, which adorned these iconic artworks. As a privateer, your triumph had to be truly tremendous in order for your car to even be considered worthy of celebration. However, Porsche 911 Carrera RSR 2.8 chassis no. 0885 was not the star of just one victory poster. Thanks to an especially successful 1973 season, its black and orange colour scheme was commemorated in two completely separate prints. For an independent entry, I don't believe it is a feat that has been repeated.

This remarkable RSR – one of just 49 genuine 2.8-litre cars built at the factory for the 1973 season – began its life on 28 March 1973 when it was collected from the factory by the famous Kremer Brothers Racing team. The car had been bought by Ets Oldenkott but, as head of the Oldenkott Tobacco Company, the German businessman was in no position to look after Porsche's fastest ever 911, instead entrusting chassis no. 0885's running to Erwin and Manfred's concern in Cologne. It was a sound decision.

After launching their race team in 1962, the Kremer Brothers initially raced Ford machinery (thanks to their geographic proximity to the Blue Oval's German headquarters) before making the switch to Porsche 91ls in 1971. From the get-go, it was the perfect partnership: in a 2.3-litre 91l S/T, Erwin helped Porsche secure the GT title in the World Sportscar Championship before, a year later, John Fitzpatrick triumphed in the inaugural European GT Championship at the wheel of Kremer's psychedelically-liveried 2.5-litre car. For their efforts in each respective season, Erwin and Fitzpatrick were awarded the Porsche Cup.

an accolade handed to each year's most successful Porsche privateer.

After two years running the 91lS, readied for racing with wider arches and upsized engines, ticking the M49l option code in 1973 made things a little more exciting. Homologated for FIA Group 4 competition by the standard Rennsport, the Carrera 2.8 RSR was the first Neunelfer to wear the legendary three-letter moniker. Using the 2.7 RS as its base, the extra 'R' cost an eye-watering DM 25,000 on top of the standard RS list price of DM 33,000. The upgrades were worth it though.

Starting life on the 2.7 RS production line, the RSR's flared arches – 5cm wider front and rear – were welded on before the shells were moved to the Werks 1 building for final assembly. There, under the stewardship of Rolf Sprenger's customer sport department, engineer Elmar Willrett and workshop foreman Rainer Ulbrich oversaw each RSR build. It was in the Werks 1 shed where the RSR's shell was married to its new 2,807cc flat six. The greater



Model Porsche 911 Carrera RSR 2.8

Year 1973

Engine

Capacity 2,807cc

Compression ratio 10.3:1

Maximum power 300bhp@8,000rpm Maximum torque 285Nm @ 6,500rpm

Transmission Five-speed 'Type 915' manual

Suspension

Front Independent; MacPherson

struts; torsion bars; additional coil springs: anti-roll bar Rear Independent; semi-trailing

arm; torsion bars; additional coil springs; anti-roll bar

Wheels & tyres

9x15-inch forged Fuchs alloys;

18/60/R15 tyres 11x15-inch forged Fuchs alloys;

23/62/R15 tyres

Rear

Front Drilled and ventilated discs;

917 finned calipers

Drilled and ventilated discs; 917 finned calipers

Dimensions

Length 4,147mm Width 1.752mm

Weight 917kg **Performance**

0-62mph Top speed Unknown

162mph (dependent

on gearing)

MSON

capacity was thanks to an enlarged cylinder bore of 92mm, a move that required new barrels and pistons, the latter changed to help increase the compression ratio to 10.3:1. The cylinder heads featured a new design with a revised valve angle and larger valves (the intake side increasing to a 49mm diameter), while a second hole was drilled for each cylinder to accommodate the twin plug ignition system.

All the ports were carefully smoothed out to improve gas flow and new four-bearing camshafts were fitted with the same valve timing as the 906's flat-six engine. The rules required the crankcase, crankshaft and con-rods to all be series production items from the 2.7 RS, however, each component was given a once over by the motorsport crew; each con-rod, for example, was polished, lightened and balanced with a tolerance of no more than 3g between each individual rod. To cope with the increased power output of 300bhp (although dyno figures actually showed each engine to be closer to 308 horses), the clutch was reinforced, mated to a flywheel and lightened by a kilo compared to the 2.7 RS's item. A centre oil cooler, mounted in the

middle of the front bumper, was fitted to help keep the 911/72 engine's temperatures in check. The flat six transmitted its power to the road through a 915 gearbox coupled to a limited-slip differential (set with an 80 per cent lock); there were a choice of ratios to tailor the car's gearing to different circuits and customers could also specify one of two alternate crown wheel and pinion sets.

On the suspension front, the ride height was reduced to 100mm with the help of specially designed (albeit nonadjustable) dampers built by Bilstein. The spring rates were increased at all four corners by stiffer torsion bars, with the anti-roll bars also uprated accordingly; the latter was now adjustable with five fixed positions. The factory cars were fitted with additional coil springs, allowing for minute ride height adjustments, a development that was eventually rolled out to preferred customer teams (albeit with cheaper steel springs in place of the works titanium items). Under the bonnet, the front struts were stiffened with a simple brace and the standard fuel tank was swapped out for a plastic 110-litre item.

Slowing the whole package up was entrusted to the tried and tested 917 brake system featuring vented discs and finned calipers (the latter aiding





both strength and cooling). Compared to the 2.7 RS, the RSR was fitted with dual master cylinders and a balance adjuster bar on the pedal, allowing the driver to fine-tune the braking force between the front and rear axles. At the front, the brakes were housed behind nine-inch-wide Fuchs wheels while at the rear, the forged aluminium alloys measured a monstrous 11 inches.

Inside, the cockpit was much the same as the 17 lightweight 2.7 RSH models built to homologate the RSR. The clock was deleted from the five-dial dashboard, replaced by an oil pressure warning light. As a car built in March 1973, no. 0885's gauge cluster also featured a VDO speedo calibrated all the way up to 300kph (RSs and RSRs built before 9 March 1973 only went up to 250 clicks). For racing, each 2.8 RSR was fitted with a roll cage and a fire extinguisher system.

After picking their new car up, Kremer didn't have much time to prepare no. 0885, the Cologne squad only having enough time to fit the 'Samson' and 'Oldenkott' decals to the black RSR ahead of its race debut on 1 April 1973 at the Nürburgring Nordschleife. German racer, Clemens Schickentanz (who had made a name for himself on the other side of Stuttgart with Mercedes-Benz in the late 1960s),

was entrusted with driving duties for the year and, thanks to Oldenkott's backing, was gunning for European GT Championship glory in Kremer's machine. 300km of racing – split across two heats – around the Green Hell marked round one of that year's championship, but the first of the two encounters didn't go to plan for Schickentanz. On the sixth lap, a broken fan belt forced the German to retire and, despite a third place in the second race, no. 0885 was only classified l6th.

Kremer didn't have to wait long to get onto the top step of the podium with the Samson 2.8 RSR though. After the disappointment of the Nürburgring, the team headed to Zolder in Belgium for a one-off appearance in the Belgian Touring Car Championship. Racing in the Group 4 event, Schickentanz romped home to victory some 21 seconds clear of Helmut Henzler's similar RSR. In the final – a combined race for the Group 4 GTs and Group 2 touring cars – no. 0885 could only manage fifth, however, its potential had been shown.

With a gap in the European Championship schedule, Kremer decided to take the RSR to Italy for the first round of the 1973 World Championship on 25 April: the Monza 1,000km. With Erwin joining Schickentanz behind the wheel of the

Samson car (temporarily sporting white front and rear bumpers as quick-fix replacements for the ones damaged at the Eifelrennen a week previously), the duo put on what is possibly no. 0885's best ever performance. Having started 35th on the grid around the high-speed Italian racetrack, the Porsche's sterling reliability and speed saw them cross the finish line in eighth place overall. More importantly though, they took the chequered flag as the first GT car, providing Porsche's latest 911 with the first of many WSC class victories and following in the footsteps of Erwin and Fitzpatrick's exploits in the 1972 season.

There were two more world championship outings for the chassis that year but neither could provide the same success. At the Spa 1,000km a few weeks after Monza, no. 0885 appeared for the first time in its definitive orange and black livery, with Kremer finally having time to add their personalised side-script and colour-coded wheels (all RSR Fuchs left the factory in the standard silver-with-black finish). After splitting the two factory Martini RSRs (R5 and R6) in qualifying and battling for the podium places for much of the race, the 2.8-litre engine failed on the last lap of the fearsome Belgian track. Despite this,



Schickentanz and new teammate, Fitzpatrick, were still classified fourth in the GT class. At the Nürburgring 1,000km, no. 0885 – piloted at the Grüne Hölle by Schickentanz, Paul Keller and Günter Steckkönig – fared better but still had to give best to the white-and-red sister Kremer RSR (chassis no. 0610), driven by Keller, Schickentanz and Jürgen Neuhaus.

Schickentanz and no. 0885 really came good in their main focus, the European GT Championship, however. A win and second place in the two heats at Montlhéry translated into second place overall for the round, before the German driver scored another podium finish in the Imola 1,000km, coming home as the leading Porsche driver in second place. After a few near misses, Schickentanz kick-started his title tilt during a return to the Nivelles track – the scene of his RSR's first race victory. The Samson and Oldenkott car dominated proceedings, winning both heats to close in on championship leader and season-long rival, Claude Ballot-Léna.

As one of Porsche's preferred customer teams, the Kremer squad were among the first to get the 3.0-litre engines developed during the early season by the factory Martini Racing RSRs. Ahead of the Estoril round, no. 0885 was fitted with its new Type 911/74 3.0-litre flat six and Schickentanz put it to good effect, finishing second behind Kremer teammate, Keller, after the duo shared one heat

win apiece. Typically wet British weather greeted the competitors at round six at Thruxton, where the German could only manage third as his French rival won. However, the tables once again swung in favour of Schickentanz at the super fast Hockenheim, where Ballot-Léna faded to an eventual fourth across the two heats as no. 0885 finished second.

With both men choosing to sit out the de facto final scoring round, the Tour de France Auto rally, the championship battle came to a head at the penultimate round: Monza. In a six-hour epic, Kremer put their WSC win from earlier in the season to good effect, dominating the event. Teamed with Keller and Erwin Kremer again, Schickentanz not only won the race, he also finished second in a second 2.8 RSR driven by Keller and Neuhaus. The result was enough to tie him on points with Ballot-Léna, the duo awarded the 1973 European GT crown for their efforts. But it was RSR no. 0885 that starred solely on the celebratory poster commissioned by Porsche.

Combined with a partial campaign in the Deutsche Rennsport Meisterschaft (where no. 0885 racked up five podium finishes), Schickentanz and the Oldenkott RSR finished the season as the most successful Porsche privateer and, following in the footsteps of Erwin and Fitzpatrick, gave Kremer their third consecutive Porsche Cup title to boot.

To celebrate the triumph, Stuttgart artist Erich Strenger was asked to draw up another artwork. Again, its star was the black-and-orange Samsonsponsored RSR. With Porsche introducing a new 3.0-litre RSR for the following season, no. 0885 was sold off to German privateer, Hubert Striebig. In his hands, the car was updated to 3.0-litre RSR specification, competing at the 24 Hours of Le Mans in 1974 and 1975. From there, a brief stint hill climbing ended with a substantial accident and the car being passed on to the famous Almeras brothers. However, no. 0885 was never touched under the custody of the race and rally experts. Instead, the restoration fell to Philippe Aunay, who purchased the car in 1986, returning the ex-Samson 911 to its original 2.8 RSR specification.

It wasn't until the car passed into the hands of British racing driver, Michael Burtt, that no. 0885 was returned to its iconic Oldenkott livery; ahead of a return to the track in a number of Historic Group 4 races just before the turn of the millennium, the car was completely overhauled by 911 specialist Dr Sigi Brunn. Incredibly, Burtt and co-driver, John Morrison, gave the ex-Schickentanz RSR even more success. However, after nearly 20 years in his hands, Burtt has now decided the time has come to let someone else enjoy this incredible piece of Porsche history. At least he'll have the posters to remember no. 0885 by.







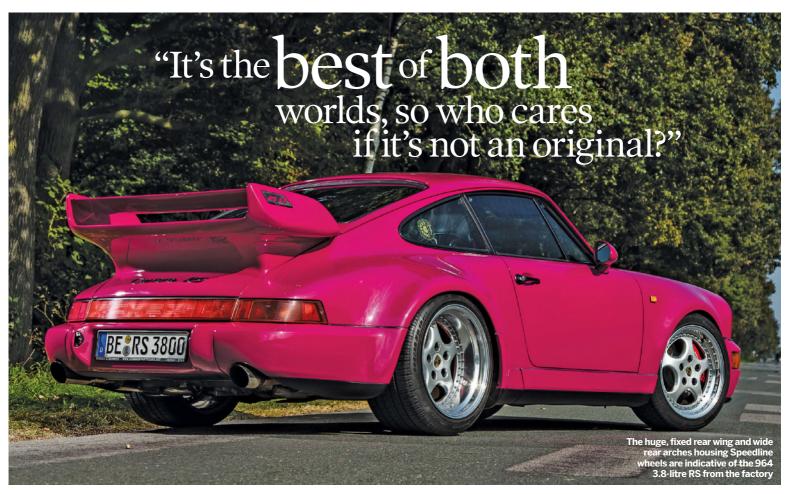
The Porsche 911 RS Book 121

ULTINATE 964RS?

Is a 964 RS with 993 RS power the perfect Rennsport concoction? Total 911 heads to Germany to find out...

Written by Glen Smale Photography by Ali Cusick





t is often overlooked that 1992 was a significant year for Porsche. While many may instead highlight a year later when the last air-cooled 911 was revealed in the 993, 1992 was the final year of the 964, which brought with it the return of a revered moniker: the RS. It had been eight years since the appearance of the very limited edition SC RS, and almost 20 years since the heyday of the 2.7 and 3.0-litre Carrera RS models, and so in the 964 Rennsport, Porsche once more dedicated an extremely focused model to

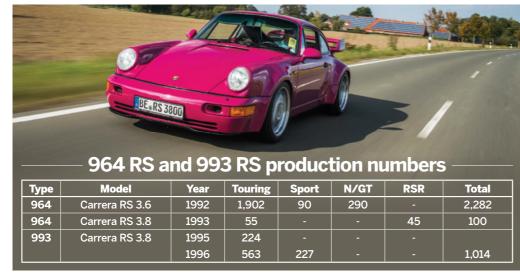
the 911 range that was aimed at the real enthusiast sports car driver.

In tandem with the earliest 911 RS, the 2.7 Carrera, which was available in Touring, Sport (sometimes referred to as Lightweight) and even Racing trim, the 964 RS could be specified in Touring, Sport and track-ready N/GT trim. Costing DM40,000 more than the 964 Carrera, 2,282 964 Rennsport models were produced, though just 90 of these were of the Sport variety, while 290 of the N/GT were sold for track use, leaving 1,902

units in Touring trim. For a limited-edition highperformance model, this was a healthy production run compared with the 1973 Carrera RS, of which just 1,508 units were built.

In terms of specification, the 964 RS had the same top speed as the Carrera 2 (161mph). However, its sprint times were improved. The M64/03 engine was more powerful, and the RS was 230 kilograms lighter as a whole (in Sport trim), with weight reduction going as far as eliminating unnecessary wiring from the car's harness for those components not included on the RS. With a tweaked chassis that sat the RS 40mm lower than the standard Carrera, the 964 Rennsport was a true performance machine. It was certainly worth the eight-year weight for that RS moniker to return to the 911.

By 1995, the 993 RS had upped the game yet again, with power output at 300bhp and a top speed of 172mph, despite a weight increase of 50 kilograms over its predecessor. Launched at the 1995 Amsterdam Auto Show, the 993 RS was now fitted with a larger 3,746cc engine, while the body was treated to a fixed, raised rear wing, an aluminium bonnet, and thinner side and rear glass. Most importantly, on the 993 the RS boasted Porsche's celebrated VarioRam induction system with larger intake and exhaust valves. The 993 RS gearbox also came with six gears, compared with the five-speed unit of the 964, and the 993 RS boasted a 0-62 improved sprint time of five seconds













The 'RS' badge

1973 marked a new chapter in the Porsche genealogy as the RS moniker was bestowed upon the 911. This identified the top performing sports car in the 911 range that was road legal. It was the brainchild of Porsche's chairman, Ernst Fuhrmann, in an effort to bring their racing programme back in line with their production models after the crippling, albeit highly successful, race car programme with the likes of the 906, 908, and 917. The 1973 Carrera RS 2.7 (below) was therefore the first in what would become an iconic sub-brand, but the ever-cautious Porsche marketing people underestimated the takeup for the car. Initially just 500 cars were planned for production, but eventually 1,508 were produced over a two-year period.

The Carrera RS 3.0 followed in 1974, but there would be a ten-year wait for the SC/RS and a further eight years before the 964 RS 3.6 appeared in 1992. Heritage is never built overnight...



flat. Only 1,014 units were produced, of which 227 were despatched in lighter Clubsport trim.

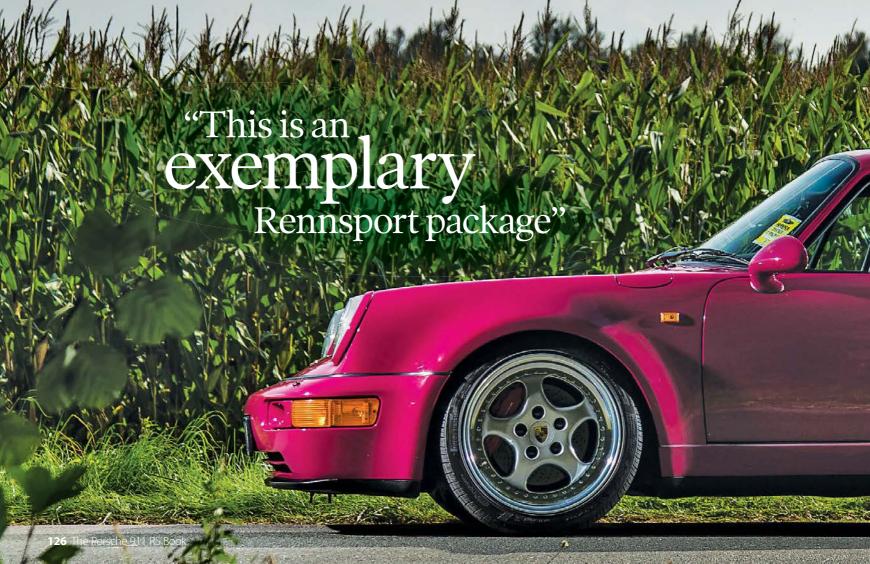
Whether in 964 or 993 form, the RS is a simply supreme Porsche 911 – for most. However, the Rubystone red example in our pictures is the result of an amalgamation of those successive generations of Rennsports – a 'best of both', if you will.

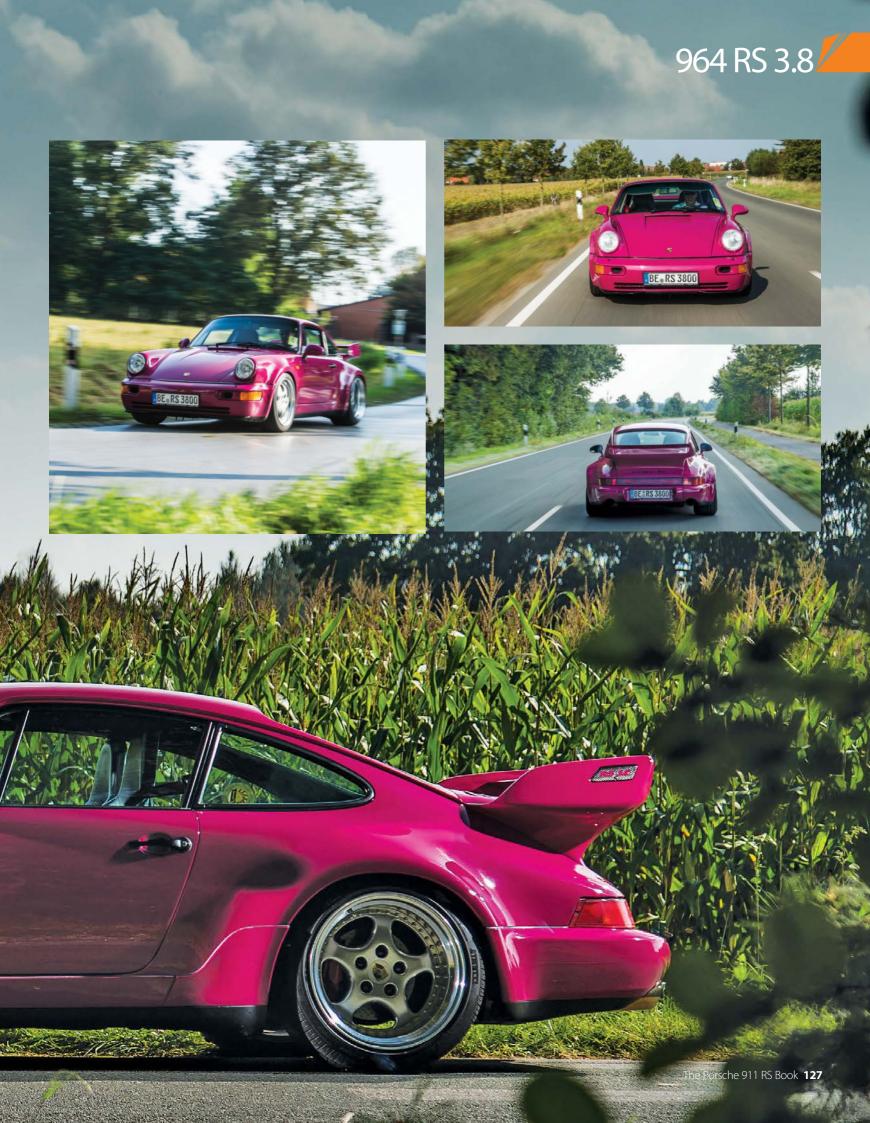
Sold as a 964 RS by Porsche Zentrum Düsseldorf in 1993, its first owner used it happily for everyday driving, but an increasing partiality to trackday activity led to the car being prepped for the 2006 trackday season.

The opening event was the well-known and popular four-day Scuderia Hanseat, held on the Nürburgring's Nordschleife. The event was brought to a premature end for the 964 RS as intense rain compromised the performance of the well-worn semi-slick tyres. On the drive home from the circuit, the heavy rain would once again have a detrimental effect on the 911, causing it to leave the road, finally coming to rest in an adjacent ditch. Despite the relative 'soft' impact, there was significant panel damage down the left-hand side of the car. What's more, the insurance company would not pay out because there was no tread left on the tyres, and so the car was de-registered on 27 April 2006.

The next chapter in this 964's life began in the capable hands of Hans Schroeder, a long-time Porsche specialist in Duren, who had always wanted a 964 RS 3.8, which was too expensive due to its limited numbers. The panel-damaged 964 RS provided Schroeder with the perfect donor car for his 'RS 3.6 to 3.8' project, which he parked in the corner of his workshop to work on when time allowed. Schroeder proceeded to buy all original RS 3.8-litre specification panels, including front and rear fenders, wide bumpers and the red caliperclad RS 3.8 brake system. He even managed to buy the very last set of original Speedline wheels that Porsche had at the time.

Of course, if you take a 3.6-litre car and merely fit wider body panels, it stands to reason that the greater body width would in effect render the car slower than a narrow-bodied equivalent due to increased weight and drag. To combat this, Schroeder acquired a 993 3.8-litre engine that he promptly dismantled and built up to RS 3.8 spec. By increasing the compression ratio and fitting higher-lift cams, power was pushed to 325bhp, which was 25bhp up on the standard 993 RS 3.8 factory figure. The gearbox, a 993 six-speed unit, was uprated with 993 RS ratios to cope with this increased power. To prepare the car for trackday work, Schroeder





replaced the original RS suspension with Bilstein adjustable PSS9s all round.

Sadly, while Schroeder started this formidable project build in 2008, once he had completed it three years later at the age of 69, he came to the conclusion that he was probably a bit too old for such an extreme car. As such, a decision was made to sell the Rubystone red 964 RS.

The car has since been sold by German Sports Cars, as proprietor Thomas Schmitz explains: "I bought the 964 in August 2014. I liked the idea of the car, because it is not a replica. The base was an original 964 RS, so the value is in the base and in the chassis number. What's more, the car is very powerful - it's a fantastic, fun car, and if somebody

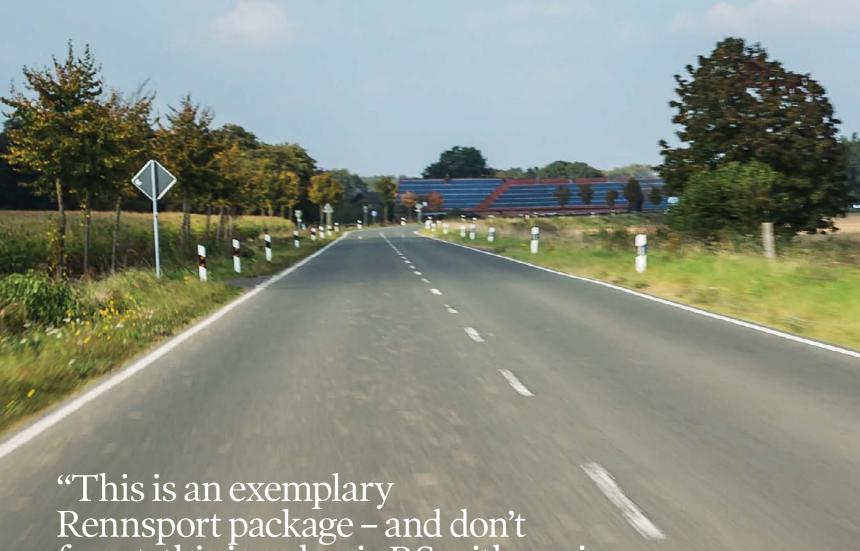
wants to have an affordable RS 3.8 and wants to do some trackdays and enjoy driving it, then this is absolutely the right Porsche." A genuine RS 3.8 these days, if you can find one, would set you back between €800,000-€900,000, and so at €250,000 this car offers a lot of value for money.

Approaching the 964 RS ahead of my test drive, I'm intrigued to see that the striking Rubystone red hue is continued inside on the seat inserts, door pulls and safety belts. The interior is still the factory 964 RS specification, which means it has the thin carpets, two Recaro bucket seats and door cards with pull straps. The Recaro bucket seats are comfortable while offering a firm hold, and the only deviation from the factory specification is

now staring at me: the optional three-spoke Sport RS steering wheel was installed by Thomas as a replacement for the four-spoke standard option.

As I head out for my drive, Thomas, accompanying me, opines that only a half cage and Michelin Cup tyres are what's needed for this to be a supreme, fire-breathing trackday car. He says: "It has the big brakes, a second oil cooler, the air ducts for brake cooling, stainless steel brake hoses, adjustable suspension by Bilstein, plus the shock tower brace (an option on the 964 RS), and an adjustable rear spoiler. It just spells high performance."

Despite the track-orientated setup, this 911 hasn't lost its road-going capabilities, as demonstrated



Rennsport package – and don't forget, this is a classic RS with a price tag that maintains usability"

964 RS 3.8 (modified)

Model

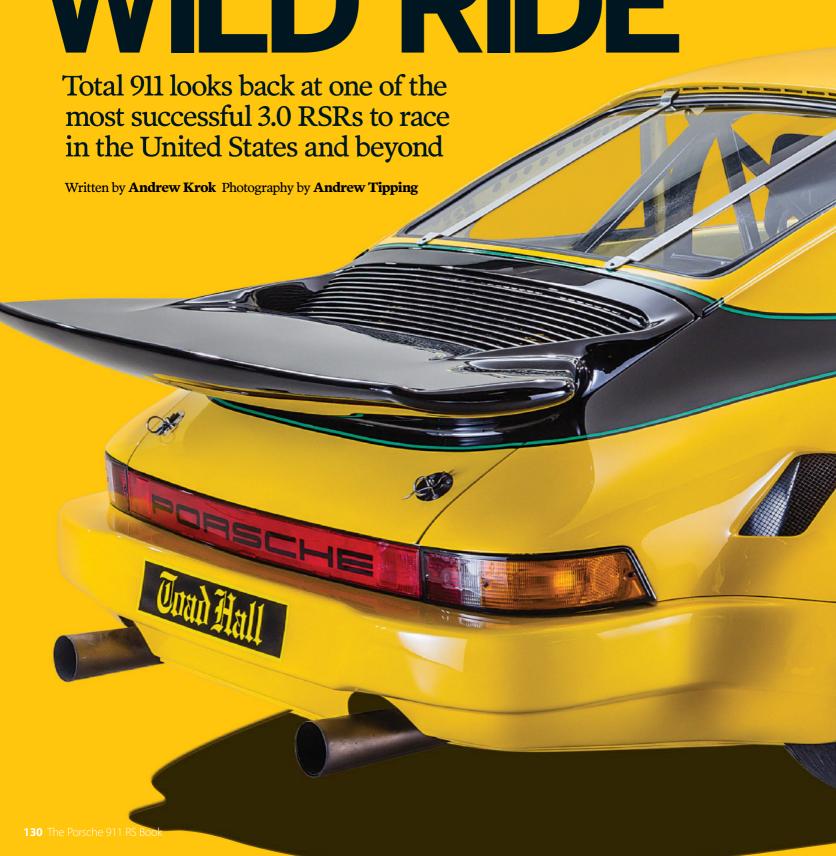
by Thomas's decision to take the car on a 1,600 kilometre round trip to last year's Goodwood Festival of Speed: "I wanted the trip to be one to remember, so we registered the car the day before the trip, fuelled it up and checked tyre pressures. We adjusted the damping to setting '5', which is medium – enough for a comfortable drive, but also with good road holding," Schmitz enthuses.

The sentiments from Thomas's drive to Goodwood are quickly echoed here in the German countryside. The symphony of sound emanating through the stripped interior from the VarioRam engine is unforgettable. Power is instantly accessible throughout the rev range, and the 3.8 RS lookalike feels beautifully lithe through corners.

As we recently reported in **Total 911**, the narrow-bodied 964 RS is a mesmerising performance machine, yet with the benefit of a more powerful engine melded to a refined suspension, the result is a breathtaking Rennsport experience. Refreshingly, usability on the road hasn't been compromised either. With a simple adjustment in damping, a smooth ride is obtainable, while the gearbox is palatable even on a cold start, before complementing a spirited driving style with lightning quick shifts. This is an exemplary Rennsport package – and don't forget, this is a classic RS with a price tag that maintains usability, giving you the best of both worlds. Who cares if it's not an original?

Year 1992 Engine Capacity 3,746cc Compression ratio 13.1:1 325bhp @ 6,500rpm Maximum power Engine modifications Cylinder heads modified on flow bench; highercompression pistons and cylinders; Schrick high-lift cams, rockers and arms Standard 993 six-speed **Transmission** converted to RS spec, with steel synchro rings Suspension Front Bilstein PSS9, fully adjustable Bilstein PSS9, fully adjustable Wheels & tyres Front 9x18-inch Speedlines; 235/40/ZR18 11x18-inch Speedlines; Rear 285/35/ZR18 Dimensions Length 4,275mm Width 1,775mm 1,210kg Weight Performance





Toad Hall 3.0 RS

he 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 shortlived, 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

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



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.

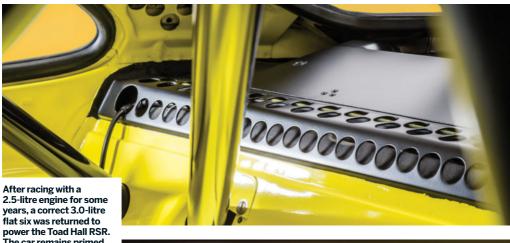
From there, 9049 would go on to achieve two third-place finishes at the Ontario 4 Hour and Mid-Ohio 5 Hours, and a second-place finish at the

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 1lth-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











Model Carrera RSR

Year 1974 **Engine**

Capacity 2,996 cc

Compression ratio 10.5:1 Maximum power 330bl 330bhp Maximum torque 314Nm

Suspension

Transmission Five-speed manual (type 915)

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

O-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"

last time the car would venture overseas for toplevel 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 'Billy' Sprowls and Andres Contreras. The three would go on to achieve a second-place finish 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 – Westwood, Road Atlanta, Mosport and Mont-Tremblant. 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

Toad Hall 3.0 RS

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

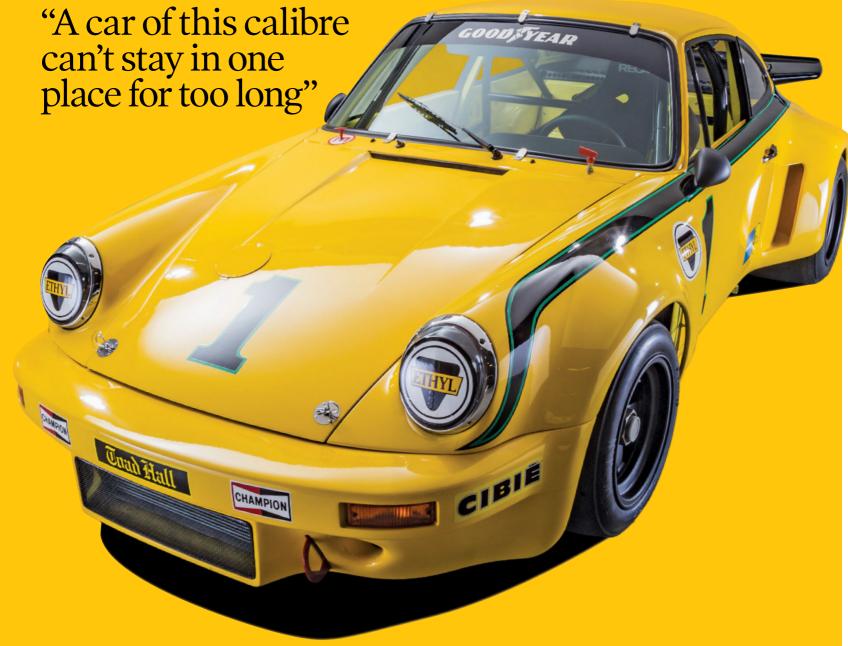
In 1980, 9049 left the United States, having been purchased by Diego Febles, a Puerto Rican racing driver. The vehicle was raced on and off outside the United States, the specific history therein being a bit shrouded in mystery. After a decadelong absence from the U.S., the car once again returned to 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. The Toad Hall livery 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.

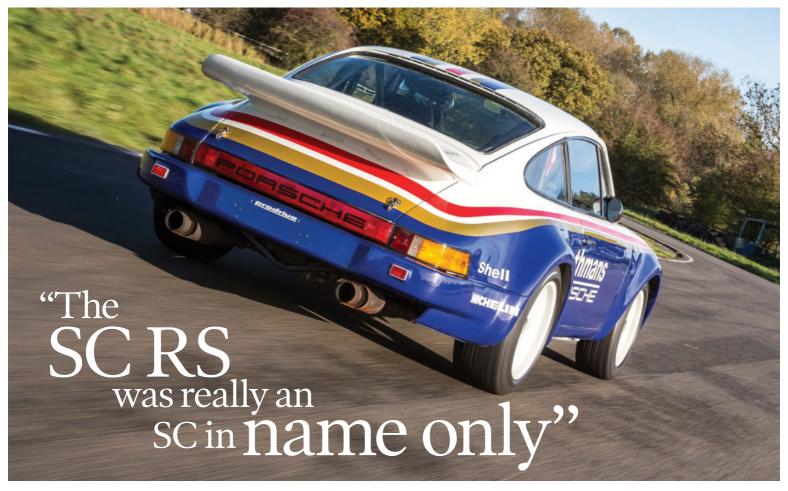
In 2002, the car was sold to the Blackhawk Collection in California, where it sat for two years prior to its arrival at Canepa. After purchasing the car from Blackhawk, Canepa once again tore the car down, preparing the vehicle for historic racing. After an extensive teardown, rebuild, and subsequent 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.









mixture of childish excitement and trepidation fills me as I arrive at Curborough Sprint Course to the sight of a Rothmans-liveried Porsche 911 SC RS being unloaded from Prodrive's unassuming box trailer. The white and blue colour scheme, with its red and gold pinstripes, has enthralled me since reading about the partnership's halcyon days, winning Le Mans with the 956 and 962 sports prototypes.

Driving a Rothmans Porsche has always been high on my wish list, and now, on a dry autumnal day, that wish is about to come true. However, while it was Weissach's Group C offerings that sparked a love affair with the Rothmans livery, this particular Porsche isn't designed for the track; this is a Group B rally car, designed to take the Stuttgart manufacturer back to the world's special stages.

The SC RS came about after David Richards, the man behind the Rothmans Porsche sponsorship deal, went to Weissach to talk about his passion: rallying. Richards had co-driven Ari Vatanen to the 1981 World Rally Championship, and wanted to set up his own team. With Porsche developing the 959 four-wheel drive car for Group B, an alliance with Stuttgart was logical, but the 959 project was suffering from delays, leading Porsche to suggest an interim programme with the new SC RS.

For the 1984 season, Weissach built 20 examples to satisfy the FIA's competition homologation

process, passing five cars onto Richard's fledgling Prodrive outfit to be run as part of the worksassisted Rothmans Porsche Rally Team.

The SC RS was an SC in all but name, with most of the components derived from the 930. The chassis is a modified version of the 911 Turbo's, with its wide-arched bodyshell also utilised, albeit featuring lightweight aluminium wings, doors and bonnet. The fibreglass bumpers and rear wing helped save further weight. The final carryover from the 930 is the use of its brakes, with the front calipers from the 3.3-litre version on all corners. Underneath its feathery clothes, a rally tuned 2,994cc motor powered the SC RS. New forged pistons, an increased compression ratio, higherlift cams, revised cylinder heads and a switch to Kugelfischer fuel injection helped Weissach's 930/18 engine produce 255bhp at 7,000rpm.

Jürgen Barth, Porsche's Racing Manager, was confident in the car's ability. However, Prodrive's first rally in the roughhouse environment of Qatar highlighted some major flaws. Although Saeed Al-Hajri guided the SC RS to victory on its debut, the new car crossed the finish line "virtually bent in half," according to Richards.

Something needed to be done. David Lapworth (who would later go on to head the team's dominant Subaru programme in the Nineties) was brought in to oversee a complete overhaul of the car. 'Lappie' was in Sardinia with the British Junior Rally Team

when he first met the Prodrive crew. "We were chatting out there and they obviously had loads of issues," he explains. "When we got back, I got a phone call from Charles Reynolds, who said, 'Do you fancy coming in for a chat?' That was it. I started working within days."

This was the start of Prodrive's constant diversification, moving from simply running cars to designing them. They set about completely reworking the SC RS in time for the car's World Rally Championship debut in the 1984 Acropolis Rally. Lapworth explains the main failing with the cars from Weissach: "The specification we'd inherited from Germany was a bit too underbuilt." While cars such as the Peugeot 205 T16 were purpose-built, no-compromise machines, the SC RS was "still a converted car."

Rather than modify the road-based components, Prodrive manufactured their own bespoke parts, fit for the world's rally stages. The experience would prove invaluable in later years as they started to build rally cars from the ground up. The 555 Subaru Impreza may be their most iconic offering, but the Rothmans Porsche 911 SC RS was the car that set Prodrive on their way to rallying greatness.

With all the modifications finished, Prodrive's SC RSs were radically different to the 15 other cars Porsche sold as road cars. Heavy-duty shock absorbers were now fitted, the strut brace reinforced and antiroll bars stiffened up massively.





Rothmans













The 915 gearbox (the SC RS's Achilles heel) could now be replaced in 12 minutes thanks to new, extralong bolts on the rear subframe. The works-assisted cars also now produced an impressive 290bhp, while (in its ultimate Tarmac specification) the dry weight of the SC RS was lowered to 940 kilograms – below the 960-kilogram minimum limit of the 3.0-litre Group B cars.

Prodrive didn't lack success with the Porsche 9ll SC RS, with victories in Qatar, Oman and Dubai landing Al-Hajri and co-driver John Spiller the Middle East Championship. In Europe, Toivonen missed out on the 1984 European crown after a recurring back injury forced him to miss the Manx Rally. Four wins were little consolation for the Finn. 1985 brought two more championships, with Al-Hajri defending his Middle East crown and Billy Morgan giving Rothmans Porsche the Irish Rally title. Prodrive also secured its first WRC points as Al-Hajri finished fifth on the Acropolis Rally.

Prodrive doesn't know the exact history of the car I'm about to step into. However, with just five cars given to them, it's likely this example has some serious stage pedigree. Ben Sayer, Prodrive's PR manager, also informs me that they have insured the car for over £200,000. Having never driven a rally car before (let alone a Group B example), the words 'baptism' and 'fire' spring to mind.

With the illustrious history and mighty performance of this car filling my head, I step inside the SC RS. For my first experience of Group B brutality, Lapworth (who often shakes down Prodrive's cars and knows more than his fair share about vehicle dynamics) is going to take me out as a passenger and show me the ropes. I relax: I'm in good hands.

David tells me that the brakes are "wooden" as we navigate Curborough's twists. This 911 is vicious, too, as Lapworth proves in an attempt to get sideways through the 180-degree left-hander at the start of our loop. With a bootful of throttle, we're suddenly pointing the wrong way. Now it's my turn.

The inside of the SC RS is bereft of creature comforts, with the stark metal of the exposed bodyshell a reminder that this 911 weighs under a ton. However, while much of the car's cockpit is bare compared to Zuffenhausen's road cars, the dashboard is anything but. Behind the steering wheel, the famous five-dial pod is the central focus, yet all is not what it seems. Three light switches have replaced the clock, while the fuel gauge has been exchanged for a fuel pressure dial. Although the ignition's location is unchanged, a red ignition cut-off switch supersedes the key, with a separate 'Start' button used to spark the engine into life.

Over on the co-driver's side, a gambit of exposed fuses is within easy reach, in case of in-stage failures. It's the aforementioned starter button that interests me now as I turn the ignition switch to the right and push the unassuming black button, using a little throttle to help the car roar into life. In the driver's seat you really get a true sense of the powerplant's anger. The noise is deafening, even with a full-face helmet on, and the throttle response is instant, with the revs rising and falling effortlessly; this engine is a true thoroughbred.

The clutch engagement is similarly aggressive. After pushing the gear lever across into reverse, the car judders violently as the centre plate bites the flywheel. Thankfully, I'm no stranger to competition clutches, avoiding an embarrassing stall before backing the car gently onto the

SC RS in numbers



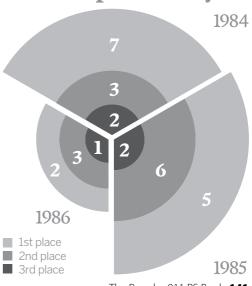
S Al-Hajri/J Spiller H Toivonen/I Grindrod H Toivonen/J Piironen J Kankkunen/J Piironen JL Thérier/M Vial R Clark/I Grindrod B Beguin/JJ Lenne B Coleman/R Morgan B Beguin/G Borie B Beguin/C Tilber J McRae/I Grindrod S Al-Hajri/R Morgan N Karam/J Saghbini

Championship results



World Championship points (5th place, 1985 Acropolis Rally)

Podiums per career year





circuit, guided by one of Prodrive's mechanics. This is it; I'm now in control of a Rothmans Porsche.

The first lap is for getting used to everything, so I accustom myself to the precise yet weighty steering and barely existent brakes. I hope they'll wake up once there's a bit of heat in the pads, as I'll need them at the end of the main straight. The pedal moves much further than I'd like, too; not providing me with much confidence or stopping power.

The 915's synchromesh isn't suitable for the rigours of rallying, where dog rings are what you really want for fast and reliable shifting. You can't rush the incredibly vague gear changes; jumping up and across the gate from first to second is akin to navigating a dark alley while blindfolded. Lapworth describes the difficulties with the SC RS's gearbox. "The synchromesh kept failing," he said. "The teeth used to just wear away, and while on a road 'box you can bang it into gear, this wouldn't go."

With the controls proving less than user-friendly, I decide to take the second lap to continue my crash

course in Group B cars. If only drivers like Henri Toivonen could drive this, I better not try anything too heroic after just 60 seconds behind the wheel.

The brakes are starting to warm up now, but the pedal is still pretty long, and the lack of feel is disconcerting. The offset pedal box is straight out of the road car, retaining the famous 'organ' accelerator. Coupled with the lack of performance from the 930 calipers, I don't have much confidence in the braking zones. Still, this is effectively a museum piece, so I imagine the brakes were better in period, although probably not as much as I'd like.

I'm feeling a bit more relaxed now, and my hands are sweating a little less beneath my nomex gloves. Coming out of Curborough's final corner, I feed in the power gently before hitting full throttle hard on the main straight. Behind me, a cacophony of sound erupts and I'm thrown back into the bucket seat. The acceleration is almost GT2-esque, and the engine note is similarly brutal. Through the two, unsilenced pipes it snarls and screams all the

way up to 7,000rpm, where I chicken out and shift up to second. Imagine a Mezger engine minus any muffling, and then splice it with the rawness of a chainsaw, and you'll have this SC RS in full flight. It is beautiful yet frightening, and I am quickly coming to understand the allure of the Group B era.

While the SC RS dispatches straight lines with ease, cornering proves more difficult. The shell of this car shows some of the hallmarks of a gravel-spec machine, with a plethora of dents inside the front wings. In order to provide the necessary traction, the front antiroll bar was stiffened with a 22mm diameter bar, making wheelspin nearly impossible on the bone-dry tarmac.

Instead, with a reasonable amount of midcorner throttle application, the SC RS just wants to understeer into the nearest greenery. With the soft springing, the car squats down onto its haunches under acceleration and, even with the fuel tank up front, the front tyres struggle to bite into the bitumen. Thankfully, the unassisted steering is







communicative, allowing the understeer, while excessive, to always feel manageable.

If I had the confidence to find and hit the brake pedal hard I could trail brake into the corners, forcing the car to pivot around its front axis. As it is, though, the brakes are scarily ineffective at high speed. It seems the only way to drive this car fast is to use a liberal amount of throttle. Power application needs to be hard and fast in order to break the superb traction and counter the car's will to dart head-first towards the scenery. However, as

Lapworth showed on my passenger laps, hustling the car leads it to bite back.

In an attempt to overcome the brilliant traction, I jab the throttle confidently through the left-right chicane. The tail violently jumps round, leading me to quickly correct it. The inherent understeer masks any feedback from the rear end. I can only imagine that on rally-specific rubber, rather than the current Michelin road tyres, the effect is accentuated. This SC RS is a car that wants you to fight, but it isn't afraid of fighting back.

The Finnish Connection

With a Lancia WRC contract already in his pocket, Henri Toivonen treated his year in the 911 SC RS as "a bit of fun," according to David Lapworth. The Finn had been signed by his former Opel team boss, David Richards, as the star of a planned WRC assault. However, with the 959 project getting delayed, 1984 turned out to be a stop-gap for Toivonen.

The Finn was a mercurial talent. As long as the 91 held together, Toivonen would very often win in the SC RS. With four victories, he was looking strong for the championship until an old back injury forced his absence from the Manx Rally.

the championship until an old back injury lorded his absence from the Manx Rally.

On Toivonen's advice, Prodrive signed "the next Finnish hotshot," Juha Kankkunen, for the Isle of Man event. Although forced into retirement, Kankkunen, who would go on to win three WRC titles, proved that he could overcome the SC RS's inherent understeer.

Toivogen had to concede the European grown to his

Toivonen had to concede the European crown to his Lancia WRC teammate, Carlo Capone, but he would not have been the first Toivonen to triumph in the European Championship. In 1968, Henri's father Pauli also won four rounds of the European series in a Porsche 911 to secure that year's title. Stuttgart and Jyväskylä, it seems, are inexorably linked.

Stepping out of the car, I feel belittled by Prodrive's illustrious SC RS. It may not be the behemoth that is the Audi Quattro A2, but it is still a Group B car that demands respect. To drive the team's first rally car, you need to be alert at all times, and of course being Henri Toivonen would certainly help, too. In a way I'm almost glad the experience in the SC RS is over, allowing me to lower my concentration levels but, like any adrenaline thrill, I already want to go again. Next time I want to come out on top.





AIR-COOLED

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

ven 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 memorable adventure that would have been!

"Originally imported into South Africa, it belonged to two Porsche enthusiasts

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.

who used it on track"

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 tyres 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 photography done, it is time to climb over the roll cage and into the cabin. The door opens with the same click-clack sound when you

pull its lever, as that of any other 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.

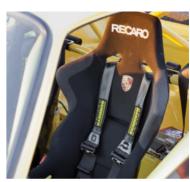
I climb over the X-formed door bars and as I drop down into the racing seat, the contours of the Recaro seat with its famous Porsche crest











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.

Modified & Motorsport

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 partly 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

Model 993 Cup 3.8 RSR

Year 1998

Engine Capacity

11.4:1

Compression ratio Maximum power **Maximum torque Modifications**

325bhp @ 6,900rpm 353Nm @ 5,500rpm Factory lightweight package,

restrictors removed

Transmission Six-speed manual, straight cut

Suspension

MacPherson, coil springs, adjustable gas dampers, anti-roll

Multi-link, coil springs, gas dampers, anti-roll bar

Wheels & tyres

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 Top speed 4.0 seconds 162 mph





home a few 100 revs before 7,000 rpm. It is an intensive, raw and grinding sound. There is 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 91ls 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

Right: ...while the huge bi-planed rear wing aids downforce when the 993 reaches big speeds

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 reshuffled.



Modified & Motorsport







In 2003 Porsche built its final 996-generation endurance racer equipped with a manual gearbox. We drive one of these fine examples on track in South Africa

Written by Wilhelm Lutjeharms Photography by Kian Eriksen

feel slightly jittery. This is, after all, a top-tier Porsche 911 endurance racer – and its owner has just made sure I'm properly strapped in with the six-point harness, handed me the steering wheel and quickly said, "Enjoy" as he shuts the wafer-thin door firmly; the high-pitched ping as it closes reverberates throughout the cabin.

I flip the ignition switch to its middle position, press the red button above it, and then push the starter button to the left of the steering wheel. The flat-six engine turns immediately and instead of the usual engine noise, the naked race cabin is infiltrated by the rough and raw clack-clack-clacking sound of the flywheel as I test out the gearbox's gate. Noise, vibration and harshness – yes, they are all accounted for!

But let's quickly rewind 15 minutes. The owner warmed up the car in the pits before I took to the track. This entailed blipping the throttle for just under ten minutes to bring the fluids up to temperature. I eagerly watched as the digital Motec information cluster indicated how quickly the revs rose and fell. One assumes

any road-going GT3's engine is free revving, but I was astonished by how quickly the digital bars appeared and disappeared here. Oil temperature and pressure, as well as water temperature and lap times are only a few of the measurements displayed. However, as I was to find out later, I could only spare glances at the rev counter during my track outing.

This car is one of only 20 GT3 RS race cars manufactured in 2003 and the only car of its kind in South Africa. In 2000, 66 GT3 Rs were produced, and the next year, when the race car's name changed to GT3 RS, 51 were made. In 2002, 48 rolled off the production line. And in 2004 (28 built, followed by only ten in 2005), the car's named changed again – to RSR. However, from that year onwards the 996-generation endurance racer featured the new six-speed sequential transmission. This means that these models from 2003 were the final 911 endurance racers to feature a six-speed manual gearbox. An interesting fact, as compared to the 911 road cars, Porsche is unlikely to ever build a manual race car again – the sequential box is integral to circuit racing.



These race cars were based on 911 GT3 road cars. This means the water-cooled 3.6-litre engine was, for the 2003 model year, developing 435bhp at 8,250rpm and 395Nm at a lofty 7,200rpm. This production year featured further updates to the car, including the fitment of larger brake calipers, but overall weight was reduced by 16kg. Unfortunately, the RS's full race exhaust is too loud for Killarney Raceway's noise restrictions, but this doesn't stop the owner from driving his car at Cape Town's racing circuit – GT Clubsport, the company that maintains the car, manufactured two silencers for the RS. As I would later notice, they only marginally soften the RS's voice.

The engine also features titanium connecting rods and valves, as well as a dry-sump lubrication system with an oil-water heat exchanger. The clutch pedal is connected to a single-disc sintered

friction clutch and an asymmetrical limited-slip differential with 40 per cent lock-up under load and 65 per cent on overrun and coasting. These are very tantalising details!

Back into my run in the car, and as I let out the clutch for the first time I quickly realise these machines are 100 per cent race cars – making a smooth pull-away is trickier to master. There is a different sensation from operating a race clutch than that of a standard GT3 road car. I can only describe it as 'rougher' than that of a road car. Finally, a part of me relaxes.

Because you sit so low in the car, you can't see its front wings, which are usually visible when you're in a road-going 911. You are so tightly strapped in, with the full roll cage visible around you and your helmet that your mind focuses on the track. The gearshift action feels the same

as a 996 Cup car and, as expected, similar to that of a 996 GT3. The fact that you can see all the mechanisms running to the rear of the car from the gearlever only contributes to the whole experience. The throttle pedal is perfectly sensitive; it elicits instantaneous reactions from the engine. The clutch action, however, is the true highlight. It literally has around three inches of travel to its stop, so you are certainly never in doubt about the point of engagement.

Even though the gearbox does not feature straight-cut – but helical – gears, the machinations of the gearbox are most apparent at modest speeds in the RS. But as the RS gathers speed through the circuit's (mostly constant radius) corners, I glance down to see the digital rev counter indicate 7,000rpm and snap to the next gear. At last the flat-six engine's voice drowns



out the gearbox. The owner of GT Clubsport in the Western Cape, Divan Luzmore, tells me that I ought to have heard the car before the silencers were fitted. "It positively sings down this main straight," he muses.

Although these wide, 18-inch race slicks are not new, they still do what they were intended to do – offer grip that is above my capability to fully explore, at least for the purposes of this excursion. But down the back straight I urge the RS all the way through third and fourth gears. The intensity with which the rev counter's digital bars run past 8,000rpm is worth savouring. If you have any mechanical sympathy, you almost feel as if you are doing the car an injustice, but then you realise it was built to be raced and relish the force of these naturally aspirated Mezger engines. Next I lean onto the brake pedal with a firm right

996 Cup car vs. 996 RS racer

Divan Luzmore, founder and owner of GT Clubsport in Cape Town, runs and maintains most of the 911 Cup cars in the Western Cape. He gave us insights to the technical and engineering differences between the 996 Cup cars and this 996 RS: "Everything is designed to be stronger and to last longer – how it should be for an endurance race car. For instance there are, in some cases, more back-ups for certain systems compared to the Cup cars. Apart from the bodywork, which is wider to accommodate the larger wheel and tyre combination, you will notice that at the front the radiators have been turned. The airflow is different as the bumpers and radiators have been turned to minimise the chances of being punctured by stones or debris on the track. This car also has a carbon fibre airbox and throttle bodies for each individual cylinder, while some of the engine's internals are lighter; the result is a much quicker engine revolution reaction. And, to lower unsprung mass, the wheels are lighter; three-piece split rims with magnesium innards



Modified & Motorsport

foot, and the RS quickly reduces its speed with no dipping of the nose whatsoever as the rubber digs into the tarmac. The steering configuration is sensitive in feel, but not overly so. You do discern a welcoming amount of feedback, but again, the faster you drive the more feedback you receive. Being an endurance racer, the RS's system is also power assisted.

You can drive someone else's car and push it to the limits, but only to a level that guarantees you will bring it back to the pits in one piece. So, as I stop the RS in the pit lane, I relish the opportunity to climb into the passenger seat while the owner takes up his position behind the steering wheel. "This is the first time the car has been fitted with a passenger seat," he tells me. "And you will also be its first passenger." The owner has more than 20 years of racing experience to his name, of which many were spent at the wheel of 91ls. However, it has been a year since he has driven this car and, although our time is limited, I sense that he is very much looking forward to it.

The moment he leaves the pits, the owner is immediately harder on the throttle and brake pedals than I was. He initially plays with the steering wheel through the corners to sense the grip levels and familiarise himself with the setup of the car. Slowly, he starts to brake later and press the throttle pedal earlier when exiting corners. I am amazed at the levels of grip available from these old tyres. From the passenger seat it constantly feels as if the car should start

to slide, but then it only grips more as its rear axle pushes the RS out of corners with urgency. The owner is evidently a talented driver. After a few laps he gets into his stride, and apart from purposely bringing the tail out a few times and quickly correcting it, he strings a number of corners together. At every exit from a bend, the rear of the RS squirms a smidge while the driver tucks the nose into the corner with a precision that won't be visible to bystanders, but that you certainly experience through your seat.

We arrive back in the pits, and for the next day or two these laps in the driver's and passenger seats linger in my mind. These cars are definitely a step up from the Cup cars, and they have myriad interesting, unique features. An obvious example is the fact that there is no fan over the front, centre radiator. This means that when you stop in the pits for a few minutes you have to switch the car off, otherwise it will overheat.

To have piloted these race cars continuously for six, nine, 12 or 24 hours during competitive and challenging race conditions must have been more of a challenge than in contemporary competition 91ls, now fitted with paddleshift systems. Having driven a 996 GT3 RS, a 996 Cup car and, now, an 996 RS endurance race car myself, I can attest to the fact that the same thread of iconic 911 DNA runs through the beating hearts and very souls of these road and race cars. It's a stirring characteristic that not too many manufacturers can lay a claim to...

Buying a 996 R, RS or RSR

996 Cup cars are far more prevalent in the international classifieds than endurance racers, but **racecarsdirect.com** is a good starting point. Before going to print, there were four RSRs posted for sale in the last two months. However, only one was a 996, the rest were 997s priced from \$175,500-\$250,000. You will have to ask yourself what the purpose of your purchase will be, however, as these cars do cost more to maintain compared with the Cup cars. What's more, in some cases it's difficult to find a class to race them in. UK specialist, Parr, has significant experience in running these cars, as they won the 2001 GTO title for Porsche with Marino Franchitti and Kelvin Burt.

Company owner, Paul Robe, has the following to say: "As with any race car, it's important to have them inspected by someone with experience and to have a clear history of what's been done on the car and when. In particular, engine and gearboxes need close inspection for running times as they need to be maintained in accordance with the Porsche Motorsports schedule. Driven in anger, the engines don't have much margin over and above the factory times. The same applies to the crown wheel and pinion with the gearboxes and driveshafts. ECU checks need to be carried out for over revs, as well as a close inspection for chassis damage."













Above: As with any modern 911 race car, the fuel system is housed under the front bootlid. An assortment of switches takes place of the customary PCM screen in the cabin of the 996, which has larger fenders to house wider tyres

Model 996 GT3 RS endurance race car

Year 2003

Engine

Capacity 3,598cc

Compression ratio 13.5:1

Maximum power 435bhp @ 8,250rpm

Maximum torque 395Nm @ 7,200rpm Transmission Six-speed manual

Engine None

modifications

Suspension

Front MacPherson front struts, anti-

roll bars with variable springs, adjustable shock absorbers

Rear Multi-link, anti-roll bars with

variable springs, adjustable

shock absorbers

Wheels & tyres

Front 8.5x18-inch split-rim three-

piece wheels; Pirelli PZero 265/645/R18 slicks

Rear 11x18-inch split-rim three-piece

wheels, Pirelli PZero 305/660/ R18 slicks

Length 4,430mm **Width** 1,765mm

Weight 1,110kg

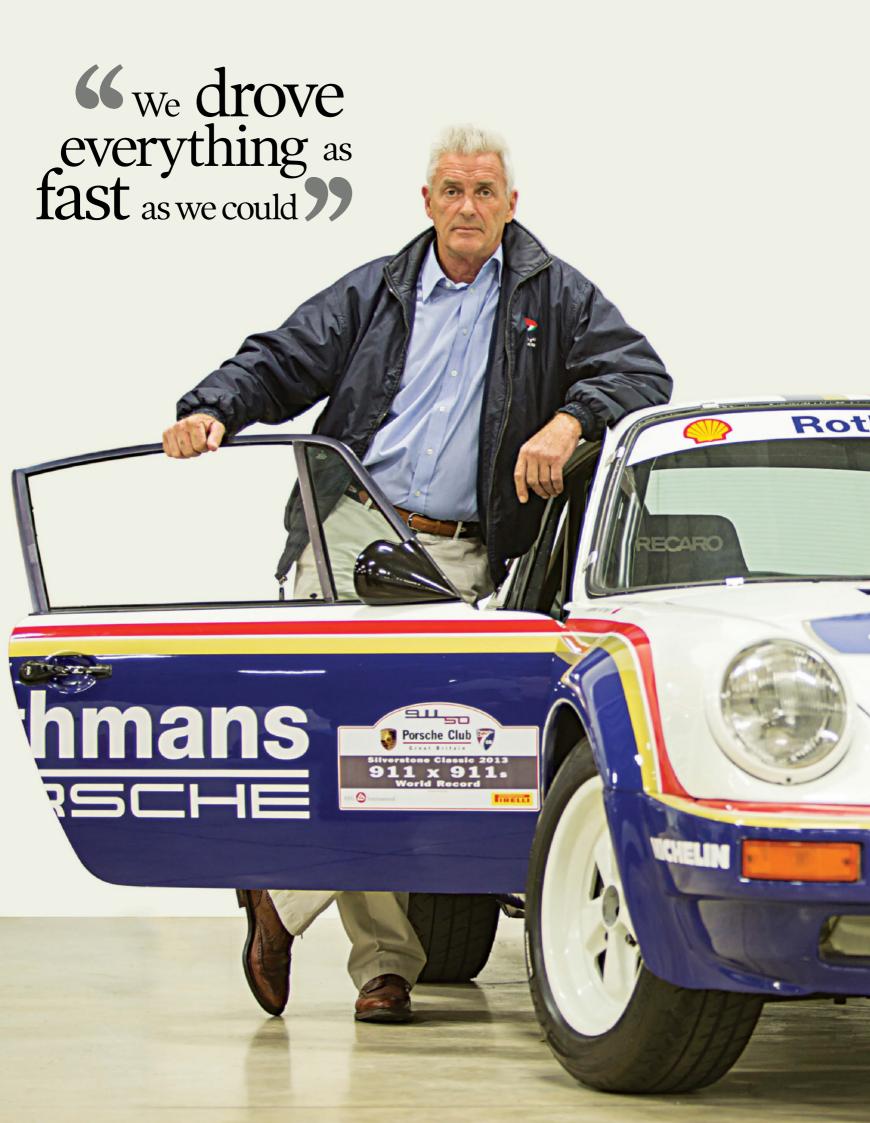
Performance

Dimensions

0-62mph Not tested

Top speed Not tested





RS legends

Three legends key to Rennsport evolution

158 Spiller and the SC RS
The co-driver to Saeed Al-Hajri recalls his career in the 'other' seat of the Rothmansliveried SC RS

164 **Jürgen Barth** We talk to the Porsche racing stalwart on his greatest achievements at Weissach

170 Nick Faure

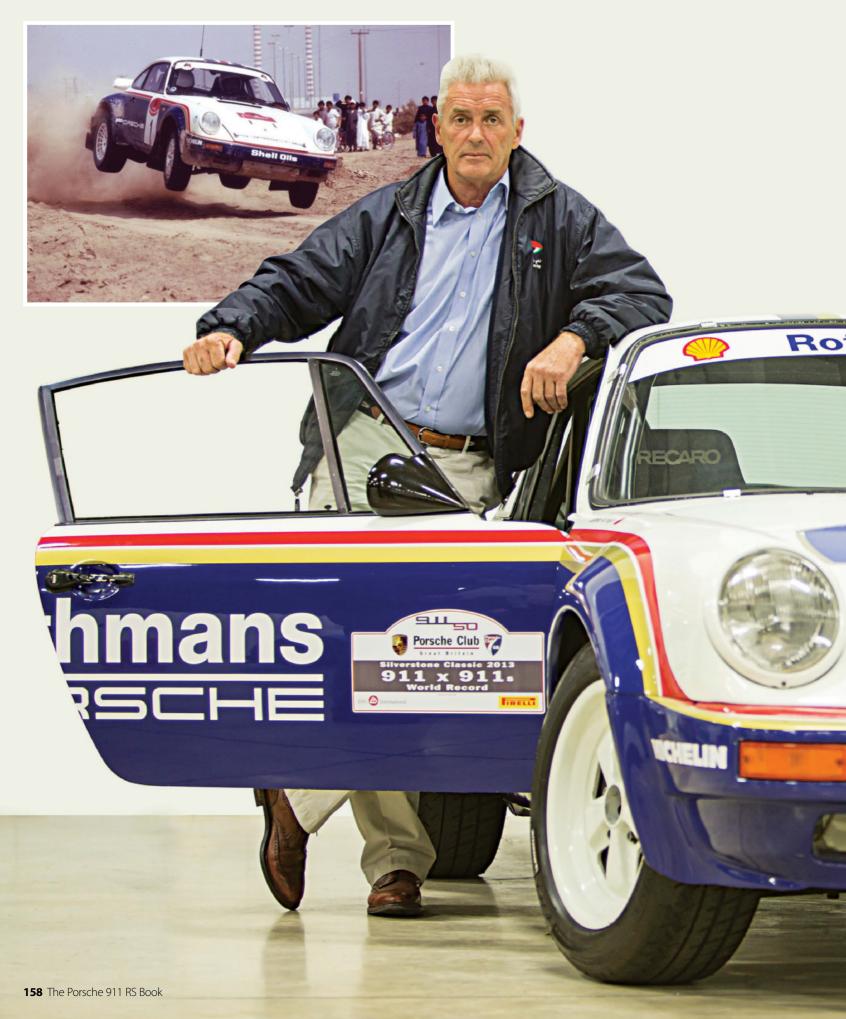
The revered former Porsche racer and demonstrator driver gives his take on the 911's continued evolution













John Spiller and the SC RS

From the dunes of Dubai to the lanes around Dublin, John Spiller has seen it all from the navigator's seat in this legendary SC RS

Written by Mike Taylor Photography by Ali Cusick



thmans





John Spiller originally grew up in North Wales into a family heavily involved with the motor trade. Spiller became an active member of a local motor club where he met fellow rally navigator David Richards, who helped Spiller

to enter national and international rallies through his business. Prodrive.

By the late 1970s, Richards was organising the embryonic Rothmans Middle East Rally Championship (MERC) and developing the sport in the region. As a result, Spiller found himself in the series for the first time, co-driving with Tariq Al Wazzan in the Kuwait Rally in a BMW 320i in 1978, finishing in second place.

In 1982 as co-driver with Saeed Al Hajri, they won the Gulf Challenge series in an Opel Ascona. The following year the pair entered seven rallies in the Gulf Rally Challenge before moving on to the famous Prodrive-prepared Porsche SC RS in 1984. In 1984 and 1985 they won the MERC. Today, John lives in the Middle East but flew back to the UK to speak to **Total 911** about his fascinating career in the 'other seat' of a Porsche 911.

John, describe your introduction to cars and motorsport in particular...

I fell into rallying almost by accident. The family were involved in the motor trade in North Wales; our mechanics would go rallying and on one occasion I was in the back of a rally car when the navigator managed to get us completely lost in a place that I knew very well, called Bontnewydd. I looked at the

map, saw the solution to their problem and all of a sudden I was considered the perfect navigator.

How did the meeting between you and Prodrive chairman, David Richards CBE, come about?

We met through both being members of the Clwyd Vale Motor Club and got together as compatriot navigators/co-drivers.

Tell us about how you became involved with Saeed Al-Hairi...

Saeed had already demonstrated that he had a natural talent for creating impressive results in standard cars like the Datsun 160J. He just needed some professional input from an experienced codriver. Our first rally was in Walter Röhrl's ex-Safari Opel Ascona 400, starting with the Oman Rally in 1982. We then completed seven rallies in the 1983 Gulf Rally Challenge and the Cyprus Rally in the European Rally Championship. The following year we moved on to the Porsche SC RS.

How did Prodrive come to be offered the 911?

The link between Prodrive and Porsche came about through Rothmans' relationship with Porsche in endurance racing and the Le Mans 24-hours race. The original plan was for us to rally the Porsche 959. However, Porsche said that they would build a special version of the 911 called the SC RS, featuring an alloy body and a fuel injected 290bhp engine. Twenty SC RSs were constructed, of which Prodrive had eight.

What were your first thoughts of rallying with Saeed Al-Hajri?

Bottom left: Reunited with the Porsche Rothmans SC RS, Spiller recalls his time spent in the 'other seat' of this rally champion car

Far right: Spiller and Al-Hajri won the MERC Championship in the Porsche SC RS in 1984 and 1985

We quickly established a special relationship in spite of a major language problem. As he learned much of his English from the mechanics, he would occasionally get things confused. He had heard the word 'traction' and would say, "there's something wrong with the traction," when what he really meant was there was something wrong with the steering. At the outset, Saeed was technically very naive; the fact that the 911 had a rear engine didn't really register. He simply applied his skills and on gravel he was almost unbeatable.

Did the union between the two of you gel right from the start?

Yes, the fact that he was such a natural driver helped enormously. He willingly absorbed all of the advice and pace note development that I could give him. Prodrive added a degree of sophistication to his driving skills through integrating him during testing with other team drivers like Ari Vatanen and Rauno Aaltonen. Unusually, he suffered from car sickness, which is rare for a rally driver and miraculously we helped cure him of that.

Did you feel the SC RS had the makings of a successful rally car?

The bodyshell required considerable strengthening around the 'A' pillar area, the bulkheads, the rear undertray mounting points, the area inside the





ht)







ESSENTIAL FACTS

- John Spiller fell into rallying almost by accident. The family were involved in the motor trade in North Wales, where rallying is a favourite sport.
- Spiller and David Richards first met when they were both members of the Clwyd Vale Motor Club and got together through being compatriot navigators/co-drivers.
- Spiller and Saeed Al-Hajri completed seven rallies in the 1983 Gulf Rally Challenge and the Cyprus Rally in the European Rally Championship, recording three first and three second places.
- The Porsche gearbox was quickly realised to be the weak link in the drivetrain. Through Prodrive's inventiveness, the time to change it was reduced from 80 minutes to just eight.
- By integrating Al-Hajri with team drivers Ari Vatanen and Rauno Aaltonen, Prodrive added a degree of sophistication to his already established driving skills.
- Despite competing against the latest Group B cars and the 911 being a rear-engined handful, Spiller and Al-Hajri won the Middle East Rally Championship in 1984 and 1985.









"In the right hands, the SC RS took a lot of beating on rallies and in the Rothmans livery it brought huge kudos to the sport"



front boot and the suspension mountings. Without doubt, the innovations that the Prodrive engineers introduced made a fundamental difference to our ability to win. We realised that the gearbox was going to be a weakness. It took an hour and 20 minutes to change, which caused us to retire on the Acropolis Rally in June 1984. However, by the end of our first season we'd reduced it to eight minutes!

On the Rothmans Circuit of Ireland in April 1986 you had an accident, what happened?

European events are very different from those in the Middle East. The conditions for this rally were wet and routed over narrow roads. We slid off at a point where the road camber was very adverse, irreparably damaging the front wing. Saeed left me with the car, took a train to Dublin still wearing his rally suit and eventually caught up with the rally.

We also came off on moss in Wales during the 1984 Lombard RAC in mid November. With much spectator muscle and determination we got started again and went on to finish. Saeed's experience had been in the Middle East; he had no concept of ice or the effect of wet leaves on the grip of the car's tyres.

What amusing incident reflects your personalities and differing sense of humour?

During the Acropolis Rally of June 1985, Saeed suddenly declared he couldn't engage a gear. Later, at a service point, the mechanics were well into a clutch and gearbox change when they found the window winder handle wedged under the clutch pedal; problem solved. We all collapsed in hysterics while Saeed looked on, a little mystified!

Are there any anecdotes that stick in your mind from your three seasons together?

One in particular occurred on the Jordan Rally in October 1984. To maintain weight over the front suspension we had to ensure the fuel tank was topped up. After sustaining a particularly nasty yump, the float stuck to the top of the petrol tank resulting in the fuel gauge permanently reading full. Inevitably, we ran dry.

I acquired a bottle of petrol from a passing Bedouin and on the next stage we achieved 19 kilometres in under 4.5 minutes. We passed the time control flat out, came back late and were told that we faced exclusion. Luckily, I managed to convince the marshals that we'd passed the board inside time and stayed in the rally.

Do you think all the hard work with the SC RS was vindicated in its performance during the three years you were involved?

Most certainly. David Richards and the mechanics were the brains behind the Porsche SC RS and its successes. We were competing against the latest four-wheel-drive Group B cars while the rear-engined Porsche was a bit of a handful. That said though, Saeed and I won the Middle East Rally Championship in 1984 and 1985.

So, what happened next –what did you do after your three years racing with Saeed?

In 1987 I co-drove with Mohammed Ben Sulayem in the Audi Quattro and the Sierra Cosworth. Then I hung up my helmet for a team management position at Prodrive. It was the end of the Group B

"monster" era and I feared that 110-kilogram codivers would not be so appreciated in the incoming Group N era. Then, in 2002, Mohammed asked me back to the Middle East and I competed with him in the Ford Focus RS.

Do you still speak with Saeed?

Yes, very much so. We are both based in the Middle East and although we don't have long, meaningful chats, we do a lot on Facebook, which keeps us both up-to-date.

So, what are you doing now?

I am self-employed and organise mainly desert rallies for both cars and bikes. I am also becoming increasingly involved with the Enduro Rally Association, organising rallies such as the Road to Mandalay, which involves over 70 classic and vintage cars driving for 25 days from Singapore to Mandalay, which, coincidentally, was won by Peter Lovett in his 911 (in 2015).

Finally, what do you think of the 911's evolution since the days when you competed in them?

When we began racing the 911 was 20 years old and already a legend. It is fascinating to see how it has evolved, especially with its water-cooled engine. Personally, I don't think that rallying had a significant benefit for Porsche and the 911 because the company's focus has always been on racing. But, in the right hands, the SC RS took a lot of beating on rallies and in the Rothmans livery it brought huge kudos to the sport during its brief reign at the close of the Group B era.





After a daring escape from behind the Iron Curtain, Jürgen Barth became a Porsche Motorsport legend. We delve into his extraordinary story with a frank face-to-face

Written by Josh Barnett Photography by Alisdair Cusick & Porsche AG



Today, despite the involvement of the Volkswagen Group, Porsche AG remains, at its heart, a family business. There is no doubt that, to help set the company on a path to

becoming an automotive powerhouse, Ferry and his closest relatives would have made many sacrifices. However, it is unlikely that they were as risky as those made by Jürgen Barth's family.

Forced to sacrifice their livelihoods in East Germany, Jürgen and his mother crossed the border into the Federal Republic on Totensonntag 1957 (the annual 'Dead Sunday' celebration in November), a process that was complicated further by the fact that their passports had been confiscated by the Communist authorities. Thankfully the festivities enabled them to catch their train and meet up with Edgar, Jürgen's racing driver father who had recently switched his allegiance from EMW to Porsche.

It was perhaps inevitable that Barth would follow in his father's footsteps – "At a certain stage, my parents put a sign around my neck saying, "If found, please return to pit number so-and-so" – but his widespread influence in the world of Porsche motorsport stretched far beyond his talents behind the wheel. After joining Porsche in 1963 as an apprentice, Jürgen's career in Weissach was spectacular, as the 1977 24 Hours of Le Mans winner explains.

ESSENTIAL FACTS

- Won the 1977 24 Hours of Le Mans alongside Jacky lcxk and Hurley Haywood in a factory Porsche 936/77.
- With Rolf Stommelen, Barth triumphed in a 908/03 Turbo at the 1980 Nürburgring 1,000km.
- Returned to Le Mans in 1993 after an 11-year hiatus, winning the new GT class in a 964 Carrera RSR.
- Alongside Patrick Peter and Stéphane Ratel, Barth formed the BPR Global GT Series in 1994 before it was taken over by the FIA in 1997.
- Author of multiple books about Porsche's cars and Weissach's racing history.

How did your family's association with Porsche first begin?

He [my father] was driving motorcycles and formula cars, and winning championships with those in East Germany. He was a factory driver for EMW. It was not possible to have a communist country running a race team and my father moved over to Porsche, winning his first race [for them] at the Grand Prix of Nürburgring in 1957. The organisers played the wrong anthem, the United Germany anthem, but he was still East German.

Every time he was in West Germany, the government took passports off my mother and myself, and there was always a KGB guy to 'look after' him. So he was celebrating and didn't think about the fact it was the wrong anthem. After this, he could not go back [to East Germany]. That was

the beginning of the year and at the end of 1957, in November, my mother and myself left the house and our sock factory, and went to East Berlin to take the train without any passports.

In 1959 he won the European Hill Climb Championship and the Targa Florio with an RSK. At Le Mans in 1963, he lost the rear suspension on the way to the pits and then pushed the car over one kilometre. The pits at Le Mans go a little bit uphill and he was completely finished afterwards, but they still got eighth place overall and won their class in the excellent 2.0-litre Porsche 718, which was a really nice performing car.

He won the European Hill Climb Championship three times with the same car – chassis number 047. In 1963/1964, the same car did all the long distance races and all the hill climbs, so they called it 'The Grandmother' because it did everything.

When did you start at Porsche?

I started at Porsche in 1963. I did two apprenticeships: mechanic and business from 1963 to 1968. I was working on engines like the four-cam 356 engine. Then in 1968 I was some sort of ice driver for Bjorn Waldegård and Pauli Toivonen. In 1968, 1969 and 1970 we won the rally world championship. I was doing the organisation: entries, hotel reservations and the service plans, and I was driving the ice car. I was driving the stages before and checking the conditions. There I learned a bit of my driving as we did some testing in December and January on the Monte Carlo stages.











Is that the point when you decided to start competing yourself?

Because I was the son of Edgar Barth (the European Hill Climb Champion), organisers wanted me to run. So I had some starting money with which I could buy this old car that had the engine broken. It was a 911, one of the rally cars at the time.

Then I drove with John Buffum – who was in the American army in Germany. We had a deal, I always prepared the car and, for this, I was co-driver. But at this time I didn't speak any English, so it was 'T-left', 'T-right' (using hand signals)! I remember one nice point though, he took this army food - little tins of chicken and noodles. We found a good way of heating them up. In the 911s (like the 356) you have these little things at the bottom of the engine bay's side, you just put it there and you had hot chicken and noodles.

Did your engineering background help you with your driving?

It helps a lot to understand. But it can also make you slower because you see much more. When I was driving the 908s, they had such fragile suspension that you had to not go over the kerbs. So you had that to think about and, of course, it makes you slower. But I was always the guy, and this is why the factory chose me, who was good with consumption, really good on consumption. I didn't use a lot of brakes, so I was a regular driver who could go a long time.

When Porsche put you as the head of customer racing, was that something you wanted?

No, when I finished my apprenticeships I was already in the press sports department, and at this time it also involved occupying the customers. So like I said, you could be sent here, you could be sent there with the job.

The real new order I got in 1982, when we started Group C, was to move out of the press department and build up a customer race department in Weissach with a store and do everything. That's what I did. We built all the Group C cars for the customers (and afterwards 964 Lightweights and 3.8s). Also, when there was no more racing for GT cars at Le Mans we started to create BPR - that's Barth, Peter, Ratel - where we organised our own races, because the federations didn't do it. I organised the series myself in order to sell cars. The biggest race in BPR, after three years, was 56 cars at Suzuka.

Was that something you were looking to get into once you finished your racing career?

I've not finished my racing career. When we were running the 956 and 962s and Le Mans, I was reserve driver and when Hurley got sick in 1982 I jumped in the car and finished third. I never stopped. It keeps you fit.

Once you became a works driver, did you continue working on the engineering side?

I won Le Mans in 1977, one week after I got sent

to Australia with my toolbox to service Sobieslaw Zasada, the Polish guy who was doing the London-Sydney Rally in a 911. At one service point near Ayers Rock, we asked the hotel guy to give us his pickup to get the toolbox there because we knew the driver had a problem with his steering. When we came to see Zasada, his steering column was cut off from the aluminium cross member. So what do we do in this situation?

I remembered seeing this old tractor around the farm. So, I'm driving back with this pickup quite sideways. I cut off this U-shaped piece, put some holes in it and drove back to Zasada. Afterwards, I took the piece with me back home, they tested it and it was much stronger than the standard piece! But the funny thing was, the guy with the pickup came walking to the service place where I was under the car and he started shouting at us, saying it's the last time he gives us the pickup because we'd been driving too fast.

In your career, what achievement are you most proud of?

I think the books are a nice thing and of course winning Le Mans. But it was nice when we started BPR, to end up with the factory building cars, especially for my series in GT1.

Even though the 911 GT1 tended to bend the rules quite a lot?

On the one side you are proud but on the other side, Porsche went to Spa and were going two







seconds faster than anyone else. You could see all the customers and the other manufacturers. It was a really bad thing.

At this moment we came up with the idea for Balance of Performance with Stephané. It's the best thing because what we did with BPR was nothing different to the current BoP. At each circuit, we got together with the major guys from the main manufacturers and said, "these holes on your fender, now we don't like them." And like this we started Balance of Performance. But then we come to the point where three guys want to rule over manufacturers and it's not possible. You need an independent group to make these decisions. It was possible in BPR because the series was really based around private drivers and private teams, but as soon as you have factory teams coming in it becomes impossible.

When the 3.8 RSR was introduced, did Porsche want to go back to GT racing or was that an idea you put forward?

Yeah, we convinced the management that we needed something to fill in, and I had some good talks with the manufacturers because I was sitting on the FIA manufacturers' commission. At the time of Group C, I was the head of the Sportscar Commission. In this, after Group C, we created the move towards GT, which nearly went wrong when we did the Dauer Porsche because Le Mans really

was not happy. Then, the next logical step was to do ${\sf GT}$ racing with the 3.8 RSR.

Is the 964 Carrera 4 Lightweight one of your favourite projects?

Yes, it is one of the interesting things because it is always nice to do a special car, and we did several other special cars before and after. But, I like to always have these toy cars; for me it's toy cars because it is what the customer likes. Really specialised, and sometimes we designed cars after the regulations, like the 2.7 RS. It was a logical step to go after the 2.5 S-R with this Lightweight. Then, afterwards, we did the 50 3.0-litre RSs.

Later on, we did the Monte Carlo Rally with Roland Kussmaul in the 911 SC (1981 or 1982). It was the end of the homologation for the 911 and we said, "It's not possible; it's the end of the 911". So we came back from the Monte Carlo and knocked on the door of our management. There was a hole in the regulations that meant we could build 20 other cars to keep the homologation running so it was decided, directly from the management, to build 20 SC RSs. Then we had a car that we could have five years racing from again.

Could Porsche build a special car like a C4 Lightweight now?

No, I think, for me the factory has got too big now (and also the racing department). There are too

many guys in the building and automatically work gets slower. Look at it when we were winning Le Mans with the 956 or even the 962, the racing team was 30 people, and today, how many are there? 350 people. It's all become very complicated.

In terms of the cars that you have had a hand in creating, which is your favourite?

I was always looking closely to see where the regulations would be going. Automatically you come back and you propose stuff, because at this time it was always based on the number of production cars: 50 cars or 500 cars. You had to see where you could fit your production car into something. That's how the 2.5 S-R then 2.7 and 3.0 RS led to the RSRs.

There is a nice story after the Group 5 didn't pick up as it should have done. We approached Mr Singer and said: "What we need is a series where engineers are free" but here, again, Mr Bott came and said: "We should make the base of a standard engine the homologation base. And we should make a sort of consumption regulation", which we did with Group C. To set up the regulations, I remember going into the museum and measuring the windscreen of the 917 as we said, "The 917 is so popular, let's use the same dimensions."

You are still impressed by the new FIA WEC cars today though...

Yes because for me it really sets the future. I think





in ten years time we will all drive hybrids. The performance that they are showing with their different systems is fantastic, and it will go back to the production. It did in Group C with the electronics and everything. As we had the fuel consumption regulations, the engineers had to think about different ways that they could make it better and, automatically, the standard production line was also using it.

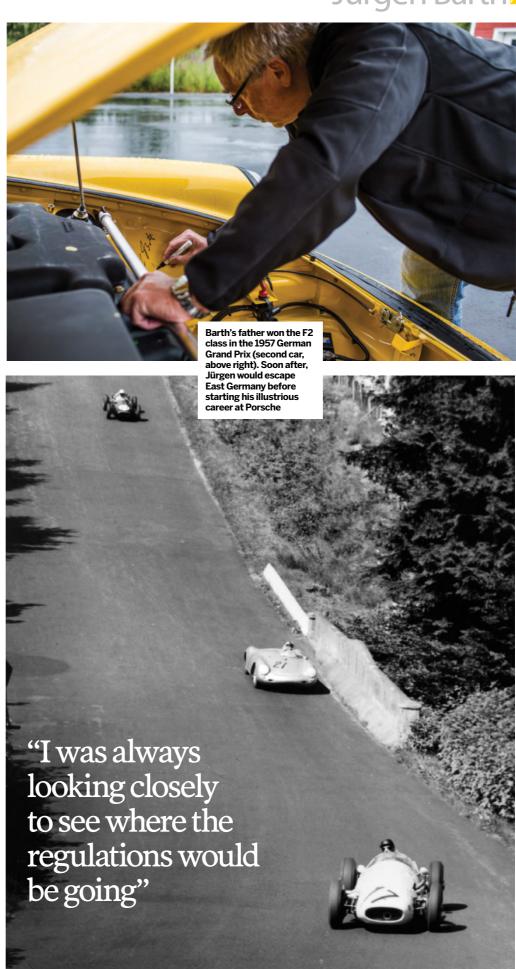
Do you think sports car racing has always fed into road car technology?

It should do, yes. Of course, disc brakes and things like this came from racing. We had a long time, after Group C, where there was no direct link to innovating something.

Now, with the hybrid thing, it gives people a chance to recover things out of racing. I think in the future, especially at Le Mans, you will see more manufacturers in attendence because they must be there to better their road cars, to understand the systems. I think the next one to get involved will be BMW and then I think Mercedes will follow, because they need to understand and figure out what is going on.

Do you like the proposed idea of a hybrid 911 road car though?

From what I understand, it will be full electric. I'm completely fascinated by it. **911**







Long known as 'Mr Porsche' due to his glittering racing and sales career with Zuffenhausen's finest, **Total 911** talks all things motorsport with the first man to race a Porsche 911 in Britain

Written by Kieron Fennelly Photography by Nick Faure



Nick Faure was the first man to race a 911 in Britain: he won the Saloon Car Championship in 1968 and later graduated to a very successful season with a 2.7 RS. He then had a year racing the 3.0 RS followed by a series of drives in RSRs, 934s

and the Kremer K3 at Le Mans. Appointed official demonstration driver by Porsche Cars GB, he alone was allowed to drive the first 911 Turbo in 1974. Long known as 'Mr Porsche', Nick Faure traded used Porsches for over 30 years and continued to race air-cooled 911s in occasional historic events until the early 2000s. **Total 911** met him at his home on the UK's south coast to reflect on his glittering career with Zuffenhausen's sports cars.

How did you become interested in racing?

I was at Stowe School in the early 1960s and you could hear Silverstone just over the hill. In those days, the circuit still belonged to the school and to get in [to the track] I just needed to be wearing my school tie. In fact, I got fantastic access and I was able to wander about the pits during the week when teams were testing. I took numerous pictures of people like Clark, McLaren and Hill and even managed to get some shots of John Surtees and Jack Brabham testing the very short-lived rearengined Vanwall F1 car.

Further education took you to Switzerland and your first car, a VW Beetle...

Yes, I was living in Neufchâtel and that's where I 170 The Porsche 911 RS Book learned car control with the Beetle. The winter of 1962 to 1963 was a very hard one and for weeks many of the roads were covered in ice or hard packed snow. Grip just disappears and steering and braking require altogether different techniques in those sorts of conditions.

You have been a lifelong Porsche exponent: how did that come about?

The chap I was sharing accommodation with in Neufchâtel had a 356. Compared with my Beetle, that was something else. It's the steering – a Porsche talks to you. It's a pure driver's car. When I got back to Britain in 1965, I bought a three-year-old 356 for £600. Imagine that! I also started racing, though not with the 356, but with a Mini Cooper: it was the oversquare 970cc engine so it really revved and that got me established in the British Saloon Car Championships.

But what I really wanted was a 911: Porsche had homologated the 911 for saloon car racing and I managed to buy GVB 911D. That's the 911 that started life as Isleworth's demonstrator, which Vic Elford used to beat the Lotus Cortinas in the first ever Rallycross event in Britain at Lydden Hill. Then the car was rebuilt with a 225bhp Carrera 6 engine, and Elford won the 1967 European Rally and UK Saloon Car Championships with it. I acquired GVB 911D in 1968: it cost me £4,000 and I had to sell a couple of family heirlooms to pay for it!

Did the results justify it?

I won the [1968] Saloon Car Championship against the likes of Gordon Spice, Frank Gardner and John

Fitzpatrick. I was even faster than Elford had been the previous year on some circuits. After the first few wins, Porsche UK took over the preparation of the car.

That proved useful...

We had lots of stupid problems because GVB had the oil tank high in the wing with the filler next to the petrol flap. When the car cornered, the drive shaft was crushing the oil feed pipe and we blew up three or four engines through oil starvation before we understood the reason. Another time, I was in the support race to the British GP at Silverstone and I went from the second row to the lead by Copse Corner, but the oil light came on and that was that. Someone had left a rag in the engine and it got twisted around the pulleys, pushing the fan belt off!

But I had some fantastic races in GVB. I remember at Cadwell Park in 1968, I just beat Mike Crabtree's Escort with three more Escorts in close attendance: 1.2 seconds covered first to fifth!









You didn't race in 1969?

No, as I had to start working! I'd been putting it off, so reluctantly GVB had to go. I am a freelancer as a commercial artist and over the years I have done a lot of work for Fleet Street. Paddy Hopkirk had a long running column entitled 'Driving With Paddy Hopkirk' in the Sunday Mirror and I used to do the illustrations for that.

When did you return to the track?

I had got to know John Aldington (boss of AFN)

when I had GVB and in 1972 he asked me to drive one of two Lightweight RS 2.7s that AFN was entering in the UK Saloon Car Championships.

By March 1973, Porsche still hadn't delivered our righthand-drive Lightweights and John didn't want to miss the season so he sent me out in

the demonstrator, a standard RS Touring with just a roll cage added. We won first time out and that qualified as the RS 2.7's first victory anywhere!

Then the Lightweights arrived and the demonstrator went back to the sales department. The Lightweight pair had exactly the same specification and at Castle Combe the lap times were identical. However, the steering was so

sensitive that it took some getting used to. We scored 17 wins that season.

For 1974, we switched to the 3.0 RS, but this time in the modified sports car class. That was more of a challenge: the RS was faultlessly reliable, but couldn't win against the highly tuned Jaguar XK 120 of Jack Pearce.

The 3.0 is reputed to have much more torque than the 2.7: what was it like?

Lovely to drive, it's a gorgeous car. It was the last

of family heirlooms to pay for it"

"I acquired GVB 911D in 1968: it cost me £4,000 and I had to sell a couple

generation of 911 to lift the inside front wheel. That was fun: you'd hear it thump as it came back into contact with the tarmac as you came out of the corner, rather like an aircraft landing wheel.

For the Turbo, Porsche designed shorter trailing arms, which countered the tendency to lift, and these became standard for all 911s. I don't think Porsche ever really appreciated how good those

RS 2.7s and 3.0s were and they were competitive in races well into the 1980s. I remember out of a stock of 20 911s for sale on my forecourt in the mid 1980s, five would be RS 2.7s selling for £12,000-£15,000.

Why did Porsche build so few RS 3.0s (109 were made of which 55 were then converted to RSR specification)?

First it was very expensive: the UK price was over £12,000 when the RS 2.7 had been below £6,000, which really disappointed people. Then the oil

crisis more or less killed it off. It was a real shame. Porsche had stated me as a works driver, one of six in RS 3.0s for the German championships, but in the end, it didn't happen.

But you managed to get into Le Mans...

I was hired by Jacques Swaters, team owner of Ecurie Belge, and asked to drive his RS 3.0 in the sixhour race at Brands Hatch in 1974. On the strength of that I was invited to race at Le Mans for Ecurie Belge in 1975. But the condition was that I had to get £1,000 sponsorship.

I managed to charm Harley Davidson and another sponsor into parting with the necessary amount

172 The Porsche 911 RS Book











and I painted the car myself – today it's known as the 'Harley Davidson' RS! It even ran with the 69 number I painted on it. I reckon that was probably the best £1,000 Harley Davidson ever spent because we finished second in class behind a Georg Loos (effectively works) RSR and sixth overall! I remember it was a fantastic race, tremendous camaraderie. In 1976 we went back, this time with the 934. But it was a disaster.

Porsche hadn't fully understood that when the engine is switched off, the turbo carries on spinning, but without proper lubrication. We went through four turbos just to finish the race. In 1977 I drove a Kremer K2 935 with Guy Edwards and John

Fitzpatrick: effectively a works car that was a mighty 911, with 750bhp and 220mph on the Mulsanne.

By then I was taking the kink (on the Mulsanne straight) flat out without thinking about it, but I could not resist sneaking back to this point on the circuit outside of my stints just to watch and listen to cars going past at maximum revs: quite staggering. John went off at Arnage so we failed to finish.

You became the fastest demonstration driver in the country. How did that come about?

When AFN at last got its hands on a right-handdrive Turbo in 1974, Porsche made it clear it was the only one they could have so they had to be a

bit circumspect about how they used it – there was no question of lending it to the press!

John Aldington asked me to be the demo driver and I worked my way round the official Porsche outlets doing customer rides. The dealer would draw up a route locally and the most important thing was to get the local police chief to come on the first run in order to impress him with the car and to show it was in safe hands, after which we got 'carte blanche' (otherwise known as minimal

interruptions from the local constabulary) for the rest of the day. Turbocharging was completely unknown in those days and the shock as the boost suddenly came in used to stun the passengers. This was really great fun: 40 years ago the roads were much quieter than they are today and with the Turbo I could blast well into three figures.

In fact, I remember doing over 160mph on Marlow Bypass. Approach speeds were so great you really had to learn to look ahead, though the Turbo's brakes (ex-917) were always up to the job. What we didn't know at the time was that our preproduction Turbo had 1.2 instead of 0.8 bar (and probably well over 300bhp against the standard car's 260bhp) so there were a few disappointed customers when Porsche finally started deliveries!

Do you think you had the best of it?

People said I was a natural driver and I never went beyond my ability. I could adapt to a car within a few laps and I could always remember circuits like the Nürburgring Nordschleife after just a handful of laps. I'd love to have had a chance to drive the Targa Florio in a works team, though.

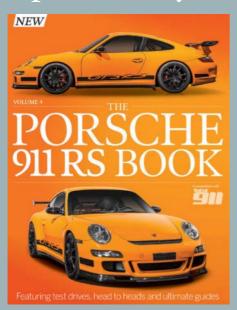
And what about today?

I still get invitations [to drive]: if it's ready in time you'll see me driving a Shelby Mustang at Goodwood this year.



Data file

Definitive facts and figures for every Rennsport from 1973 to the present day



Rennsports in the data file are organised in rows according to release date, beginning with the very first model in 1973. Rennsports were only available in Coupe form and until the 991 had manual transmission. All data here has been compiled, where possible, from Porsche's own figures.

Ratings: ****

Each model is rated out of five in our half-star system according to their performance, handling, appearance and desirability.



(F series

Carrera 2.7 RS 1973

The RS had a 2,687cc engine that developed 210bhp. The body was lightened and fitted with flared rear arches and an optional ducktail spoiler. Sport and Touring versions available.

Production numbers:	1,590
Issue featured:	106
Engine capacity:	2,687cc
Compression ratio:	
Maximum power:	210bhp@6,300rpm
Maximum torque:	255Nm@5,100rpm
0-62mph:	5.8sec
Top speed:	152mph
Length:	4,163mm
Width:	1,610mm
Weight:	975kg (Sport)
Brakes:	

Front: 282mm discs Rear: 290mm discs Wheels & tyres:

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

964 RS 1991-92



Around 120kg saved by deleting 'luxuries' and fitting magnesium Cup wheels. Power was boosted by 10bhp, suspension lowered by 40mm and uprated, as were brakes.

Production numbers:	2,405		
Issue featured:			
Engine capacity:	3,600cc		
Compression ratio:			
Maximum power:	260bhp@6,100rpm		
Maximum torque:			
0-62mph:			
Top speed:	162mph		
Length:	4,250mm		
Width:	1,650mm		
Weight:	1,230kg (Sport)		
Brakes: Front: 320mm discs, Rear: 299mm discs			
Wheels & tyres: Front: 7.5x17-inch; 205/50/ZR17, Rear: 9x17-inch; 255/40/ZR17			

964 3.8 RS 1993



 $Identifiable \ by \ a lightweight \ Turbo \ bodyshell, large \ rear spoiler \ and \ 18-inch \ Speedline \ wheels. \ Power \ came \ from \ a new \ 3.8-litre \ unit \ with \ hot-film \ air sensor \ and \$

Production numbers:	55
ssue featured:	n/a
Engine capacity:	3,746cc
Compression ratio:	11.6:1
Maximum power:	300bhp@6,500rpm
Maximum torque:	359Nm@5,250rpm
)-62mph:	4.9sec
Top speed:	169mph
ength:	4,250mm
Vidth:	1,775mm
Veight:	1,210kg
Brakes: Front: 322mm discsRear: 290mm discs	
Wheels & tyres: Front: 9x18-inch; 235/40/ZR18, Rear: 11x18-inch;	285/35/ZR18



Gen2 997 GT3 RS 2009-12

Wider front arches and a larger wing. Dynamic engine mounts and PASM are standard. Air-con is optional, with no door handles, wheel brace or sound proofing.

Production numbers:	1,500
Issue featured:	125
Engine capacity:	3,800cc
Compression ratio:	12.2:1
Maximum power:	450hp@7,900rpm
Maximum torque:	
0-62mph:	4.0sec
Top speed:	192mph
Length:	
Width:	1,852mm
Weight:	1,370kg
Brakes:	
Front: 380mm discs	
Poor: 200mm dises	

Rear: 380mm discs Wheels & tyres:

Wheels & tyres: Front: 9x19-inch; 245/35/ZR19 Rear: 12x19-inch; 325/30/ZR19



(G, H, I, J series)

Carrera 3.0 RS 1974

Updated version of the 1973 2.7 RS, complete with impact bumpers and Turbo-spec whaletail rear spoiler. Steel $arches\, added\, by\, hand\, at\, the\, factory,\, with$ 917 brakes.

Production numbers:	109
Issue featured:	
Engine capacity:	
Compression ratio:	8.5:1
Maximum power:	230bhp@6,200rpm
Maximum torque:	275Nm@5,000rpm
0-62mph:	5.3sec
Top speed:	152mph
Length:	4,135mm
Width:	1,680mm
Weight:	900kg
Brakes:	
Front: 300mm discs	

Wheels & tyres: Front: 9x15-inch; 215/60/VR15 Rear: 11x15-inch; 235/60/VR15

SC RS 1984





 $\label{thm:proposed} True homologation special built so Porsche could go Group Brallying in the 1980s. \\ Turbo body used lightweight fibreglass panels, while tuned 3.0-litre engine had its basis in 930's crankcase.$

Production numbers:	20
Issue featured:	109
Engine capacity:	
Compression ratio:	10.3:1
Maximum power: 255	5bhp@7,000rpm
Maximum torque: 250	Nm@6,500rpm
0-62mph:	4.9sec
Top speed:	153mph
Length:	4,235mm
Width:	1,775mm
Weight:	940kg
Brakes: Front: 304mm discs; Rear: 309mm discs	
Wheels & tyres: Front: 7x16-inch; 205/55/VR16; Rear: 8x16-inch; 225/50/VR16	

993 Carrera RS 1995-96





Light weight body as per RS tradition, teamed with a 3.8-litre engine, VarioRam intake system and remapped ECU to create 300 bhp, fed to the rear wheels only.

Production numbers:	1,014
Issue featured:	119
Engine capacity:	3,746cc
Compression ratio:	11.5:1
Maximum power:	300bhp@6,000rpm
Maximum torque:	355Nm@5,400rpm
0-62mph:	5.0sec
Top speed:	172mph
Length:	4,245mm
Width:	1,735mm
Weight:	1,279kg
Brakes: Front: 322mm discs, Rear: 299mm discs	_
Wheels & tyres: Front: 18x8-inch, 225/40ZR18; Rear: 18x10-inch, 265/	′35ZR18

996 GT3 RS 2004-05





Same 3,600cc engine as in GT3, but with weight saving, offering 280bhp per ton – an improvement of four per cent over the 996 GT3 Clubsport. PCCB optional.

Production numbers:	682
Issue featured:	
Engine capacity:	3,600cc
Compression ratio:	11.7:1
Maximum power:	381bhp@7,400rpm
Maximum torque:	385Nm@5,000rpm
0-62mph:	4.4sec
Top speed:	190mph
Length:	
Width:	1,770mm
Weight:	1,360kg
Brakes: Front: 350mm discs; Rear: 330mm discs	_
Wheels & tyres: Front: 8.5x18-inch; 235/40/R18; Rear: 11x18-inch	ch; 295/30/R18

997 GT3 2006-07





Similar to GT3, with inclusion of wider rear body shell of the Carrera S. 20 kg of weight saved from GT3 thanks to carbon engine cover and rear wing, and plastic rear window.

Production numbers:	1,106
Issue featured:	110
Engine capacity:	3,600cc
Compression ratio:	12.0:1
Maximum power:	415bhp@7,600rpm
Maximum torque:	405Nm@5,500rpm
0-62mph:	4.2sec
Top speed:	194mph
Length:	4,460mm
Width:	1,808mm
Weight:	1,375kg
Brakes: Front: 380mm discs; Rear: 350mm discs	
Wheels & tyres: Front: 8.5x19-inch; 235/35/R19; Rear: 12x19-inch; 305	/30/R19

997 GT3 RS 4.0 2010



The engine was upgraded and $ae rodynamically \,tweaked\,too, with\,the$ angle of the rear wing increased and dive planes on either side of the front nose. A future collectors' gem.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Production numbers:	109
Issue featured:	102
Engine capacity:	
Compression ratio:	8.5:1
Maximum power:	230bhp@6,200rpm
Maximum torque:	
0-62mph:	5.3sec
Top speed:	152mph
Length:	4,135mm
Width:	
Weight:	900kg
Brakes:	
Front: 300mm discs	

Wheels & tyres: Front: 9x15-inch; 215/60/VR15 Rear: 11x15-inch; 235/60/VR15

Rear: 300m discs

991 GT3 RS 2015



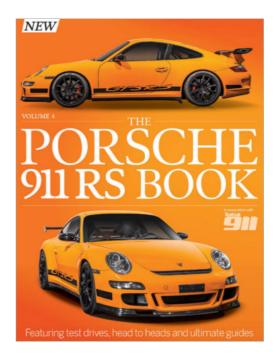


The new turbo marks the introduction of rear axle steering, plus PDK-only transmission to forced induction $991 \, \text{models}$. Rear fenders $28 \, \text{mm}$ wider than C4.

Production numbers:	42 (UK)
Issue featured:	136
Engine capacity:	3,996cc
Compression ratio:	12.9:1
Maximum power:	500hp@8,250rpm
Maximum torque:	460Nm@6,250rpm
0-62mph:	3.3sec
Top speed:	
Length:	4,545mm
Width:	1,880mm
Weight:	1,420kg
Brakes: Front: 380mm discs; Rear: 380mm discs	
Wheels & tyres: Front: 9.5x20-inch; 265/35/ZR20; Rear: 12.5x21-inch; 32	5/30/ZR21



Enjoyed this book?



Exclusive offer for new



^{*}This offer entitles new UK Direct Debit subscribers to receive their first 3 issues for £5. After these issues, subscribers will then pay £18.90 every 6 issues. Subscribers can cancel this subscription at any time. New subscriptions will start from the next available issue.

Offer code 'ZGGZINE' must be quoted to receive this special subscription price. Direct Debit Guarantee available on request. This offer will expire 31 July 2017.

^{**} This is a US subscription offer. The USA issue rate is based on an annual subscription price of £65 for 13 issues which is equivalent to \$102 at the time of writing compared with the newsstand price of \$9.99 for 13 issues being \$129.87. Your subscription will start from the next available issue. This offer expires 31 July 2017.



The **ultimate** Porsche 911 magazine

Unique focus

The only Porsche magazine dedicated to the legendary 911 model

Unrivalled stories

From exclusive first drives of the latest models to interviews with creators of modified monsters, **Total 911** has it all

Incredible style

Total 911 treats its beautiful subject matter with the love and respect it deserves

subscribers to...



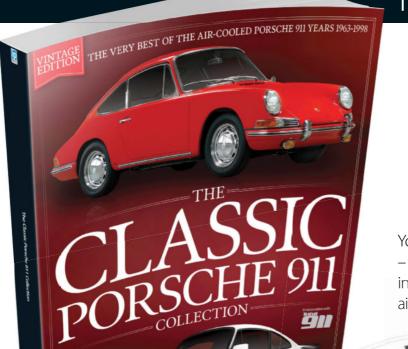
Try 3 issues for £5 in the UK* or just \$7.85 per issue in the USA** (saving 21% off the newsstand price)

For amazing offers please visit www.imaginesubs.co.uk/t9e

Quote code ZGGZINE

Or telephone: UK 0844 249 0463+ Overseas +44 (0) 1795 414 886

From the makers of



CLASSIC PORSCHE 911

COLLECTION:

Your must-have collector's special to mark the early – and best – years of the Porsche 911. Packed with in-depth articles and incredible road tests, this book covers all the best 911s from the air-cooled years of 1963-1998.











A world of content at your fingertips

Whether you love gaming, history, animals, photography, Photoshop, sci-fi or anything in between, every magazine and bookazine from Imagine Publishing is packed with expert advice and fascinating facts.





BUY YOUR COPY TODAY

Print edition available at www.imagineshop.co.uk
Digital edition available at www.greatdigitalmags.com









THE

PORSCHE 911RSBOK

Every model featured in your ultimate Rennsport 2016 bible



In-depth road tests
We put you in the driving seat as our experts deliver detailed reviews



Thrilling head-to-head battles
Air-cooled icons and modern greats
fight for the title of greatest Rennsport



Legends of the RS legacy
Sit down with some of the biggest
names associated with the RS moniker

