

930 LE ESSENTIAL BUYING GUIDE TO PORSCHE'S LIMITED EDITION TURBO

Total 911

THE **PORSCHE** MAGAZINE

991 GTS BREAKS COVER



www.total911.com

2.0 v 2.2 v 2.4

SUPER 911s

Which 'S' model is the ultimate purists' choice in our £500,000 showdown?

996 V 997 CUP

Which is the better weapon for the hardcore track enthusiast?

964 3.6 TURBO

At the wheel of Zuffenhausen's third attempt at a forced induction 964

PLUS

- Vasek Polak 934
- Porsche Museum profiled
- 991 Turbo Cabriolet on tour

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Welcome



Nothing excites us here at **Total 911** quite like a brand new model to get to grips with. It's a feeling we've grown somewhat unaccustomed to of late: save for the introduction of the new Targa (which, let's face it, boils down to little more than a swanky roof system), we've not had any new 911 metal since the '50 Jahre' Anniversary 991 last year. However, on initial inspection of the 991 GTS, the wait has been well worth it. Headline news is undoubtedly its manual gearbox; after the introduction of PDK-only 911 Turbo and GT3 models in 2013, traditionalists will be thrilled at Zuffenhausen's decision to offer gear changes at the throw of an arm rather than the (allegedly) uninvolving flick of a fingertip.

Mated to a mechanical LSD in rear-driven C2 GTS form and utilising the impressive Powerkit for 430hp, this is the fastest purist 991 straight out the box (there's no Powerkit on similarly specced UK Anniversary 991s, remember), which means it's welcome news for Porsche 911 fanatics. We can't wait to get behind the wheel of the new model and review it for you, so watch this space – it's set to be a cracker.

Of course, our excitement for a new 911 has ran parallel with our endearment to the trio of immaculate classics gracing this month's cover. A 911S of any ilk is a coveted classic indeed, so when our senior staff writer, Josh, announced that he'd like to put the first 911S against the later 2.2-litre and 2.4-litre variants in a group test, we knew had a mouth-watering feature on our hands. The magic begins on page 18.

Before I leave you to the rest of the issue, I'd like to pass on a huge congratulations to current **Total 911** columnist and Porsche Carrera Cup GB Scholar Josh Webster on being crowned 2014 Carrera Cup GB champion. Josh's achievements have left us all in awe of his talent at the wheel of the 991 Cup car. After a resounding first season, he's set himself up for a bright future in Porsche motorsport – and fully deserved, too.

"On initial inspection, the wait for a new 911 model has been well worth it"



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RJ63 DDF

Opening Shot

Separated by 20 years of Zuffenhausen manufacturing, the 964 3.6 Turbo meets its younger sibling in the 991. Much change in the Turbo model is highlighted here – including the development of a Cabriolet.

Photograph by **Alisdair Cusick**

Contents



18 SUPER 911s

"For six years they topped the 911 range; the fastest, the most luxurious, the most expensive"

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Essentials

08 **Update**
The latest 911 news, motor sport and Porsche lifestyle products in one place

16 **Views**
The best of your letters, emails and comments about everything 911

36 **Christmas subscriptions**
Check out these special Xmas offers

74 **Living the Legend**
These men and women live the 911 dream around the world

81 **Premier Porsche**
Home of the Company Profile, Data File and specialist traders' details

86 **Data File**
Your definitive guide to every production 911 from the last 51 years

113 **Coming soon**
What to expect in the next issue

114 **Great Roads**
We head to North California and the tantalising tarmac of the City by the Bay

Features

18 **The 'Super' 911s**
Josh bids to find out which pre-impact bumper 911S is the best to drive

28 **991 GTS revealed**
The lowdown on the newly unveiled Porsche 991 GTS

38 **964 3.6 Turbo driven**
Porsche had a second go at creating a 964 Turbo, but how does it stack up?

46 **Ultimate Guide: 930 LE**
Everything you need to know about this Limited Edition classic 911 Turbo

54 **996 v 997 Cup**
Two generations of 911 GT3 Cup car go head-to-head on the track

58 **991 Turbo Cabriolet**
We take the latest open-top Turbo on tour for a continental road trip

62 **Jochen Mass**
We chat with this racing stalwart

68 **Vasek Polak 934**
This racer ensured the 935 wasn't the only on-track 911 in the Seventies

82 **Porsche Museum**
Lee checks out Porsche's efforts to preserve its precious history



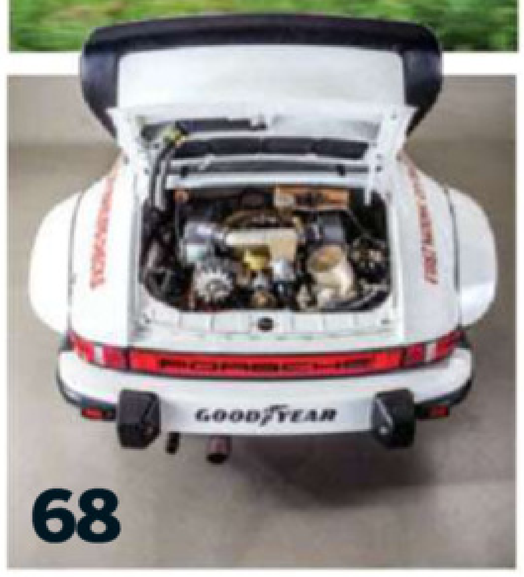














Update

Latest news, key dates, star products and race results from the world of Porsche









Photo Credit: MotorsportVision

Porsche Club GB's Festival success

'40 years of Turbo' celebrations take centre stage at a packed Brands Hatch weekend

The Porsche Club GB celebrated 40 years of 911 Turbo at the Brands Hatch Festival of Porsche at the end of September. Organised with support from Porsche Cars GB, the event was hosted by MSV at their historically iconic circuit, with plenty of track action complementing a number of busy and vibrant display paddocks hosting various Concours competitions.

The exciting racing programme provided the 5,000-strong crowd with a day-long viewing spectacle throughout the Sunday. Porsche motorsporting icons such as the very first 956 (with Derek Bell winding the clock back to 1982 to drive it), Mark Sumpter's GT1 '98 Evo, plus a 918 Spyder from the Porsche Museum took to the asphalt as part of a historic and iconic Porsche demonstration on the indy circuit between instalments of the current Porsche Club Championship action. When they weren't out on the track, the historic motorsport icons graced the pit garages in an evocative static display, allowing crowds to get up close to cars that have illuminated Porsche's rich racing heritage.

The finale to the Porsche Club Championship didn't disappoint either, with Pete Morris taking two wins from three races to be confirmed the overall 2014 champion, despite some marvellous driving from Mark Sumpter in the Paragon 964 C2 to cross the line first in the middle race. In between the racing action, a public one-lap parade of the circuit celebrated 40 years of the 911 Turbo.

Away from the track, the Concours' d'Elegance display brought out some of the finest Stuttgart metal residing in the UK, while a designated Turbo paddock provided the perfect ensemble to epitomise the hallowed Turbo's historical lineage to plenty of admiring enthusiasts.

The Festival also served as the final phase of competition for each Official Porsche Centre to present their 2014 restoration projects, which this year took on a Turbo/Targa theme. Porsche Centre Leeds won the Porsche Cars GB Award with its Guards red 1981 930, while the overall winner was Porsche Centre Leicester thanks to its 1986 3.2 SSE Targa, which accrued the most points across all categories to take the main prize.

Vote Total 911 911uk Awards now open and we want your vote

Voting has opened for the 2014 911uk Porsche Awards, and we want your help to ensure that **Total 911** regains its crown as best Porsche magazine (an award we held during 2011 and 2012).

If you needed an incentive to vote, this year we've brought you a host of rare, spectacular and classic 911s from every generation of the GT3 to a celebration of the venerable 3.2 Carrera. Online, Total911.com has released exclusive spy photos of upcoming 911 models, including the eagerly anticipated 991 GT3 RS.

To register your vote, head to www.porscheawards.co.uk and pay close attention to category six: 'Porsche Magazine & Media'. Voting closes on 19 December, with the results to be announced the following week.



What's on in 2014

September -

'Project: Top Secret'
17 September – 11 January 2015
The Porsche Museum's latest exhibition charts 60 years of prototypes and concept cars

November

PCA Palooza
7 November
This annual event marks its tenth anniversary in Eureka Springs, Arkansas

Porsche Club GB trackday, Goodwood
10 November
Your last chance to get out on the track in 2014

Classic Motor Show
14-17 November
Birmingham's NEC once again plays host to the UK's premier classic car show

Los Angeles Auto Show
19-30 November
The LA Auto Show will be the world's first look at the new 991 GTS in the flesh

Ace Café Porsche Night
24 November
The automotive-themed café in north London plays host to a Zuffenhausen evening





Historic network expanded

Over 100 OPCs become Porsche Classic partners

Zuffenhausen's drive to keep historic sports cars on the road continues, with Porsche Classic announcing that over 100 OPCs are now official partners.

It is often touted that over 70 per cent of all Porsches ever built are still in operational service, and with such high numbers, Stuttgart wants to ensure that there is a manufacturer-backed dealer and service network in place.

The initiative will see an international network of partners able to offer classic Porsche owners a range of services, from repair and maintenance work to partial restorations. Similarly, the Porsche Classic partners will be able to supply the 52,000-part catalogue of original spare components.

Porsche Centre Vélizy in France was the first partner to be officially certified, with German centres in Munich, Hofheim and Berlin-Potsdam following suit. The truly worldwide network will see similar certification awarded to OPCs in Japan, the USA and Great Britain among other countries.

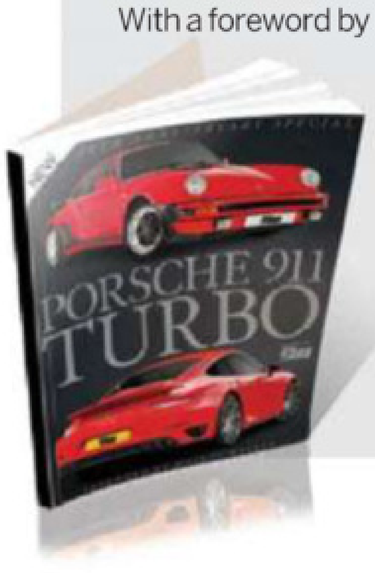
In the latter, restoration projects of classic Porsches have been encouraged for the last two years, with 2013 seeing UK Porsche Centres competing to restore a classic 911 to mark 50 years of the iconic sports car. The British OPCs this year were tasked with rejuvenating a classic turbocharged and/or Targa Porsche, with the results handed out at the Festival of Porsche (see opposite).

Turbo bookazine launched

Celebrate the 40th anniversary of forced-induction in style with Total 911 magazine

A new bookazine celebrating 40 years of the 911 Turbo has been launched by the makers of **Total 911**. *Porsche 911 Turbo: 40th Anniversary* has 162 pages of the best Porsche journalism and photography, letting you enjoy all aspects of Turbo culture.

With a foreword by Magnus Walker, this bookazine covers the last four decades of forced-induction 911s, with a 930 SE, 993 Turbo and a 911 GT1 all making appearances along the way.



Priced at just £9.99, *Porsche 911 Turbo* is available in store now. You can order your copy from www.imagineshop.co.uk or download it via www.greatdigitalmags.co.uk.

RPM light the way

Contemporary LED headlight unit now available for a selection of classic 911s

Renowned UK-based Porsche specialist RPM Technik has released an LED headlight unit suitable for classic 911s.

"I wanted to develop a unit that provided a powerful alternative, being simple to install whilst not ruining the look of these beautiful cars," explained RPM technical director Ollie Preston. "I think we can now give air-cooled 911 owners the perfect solution."

The units, sold as a pair, meet all European vehicle regulations, and are available for both left and right-hand-drive Porsche 911s. Priced at £870 plus VAT and fitting, further information on the Lume-Technik headlights can be found at www.rpmtechnik.co.uk.



In brief

Stéphane Dufour artwork revealed

You may recall in issue 113 we featured a 911 silhouette sculpture by French automotive artist Stéphane Dufour. Now celebrating the 40th anniversary of the 911 Turbo, Dufour has released this vibrant, limited edition print of a 1974 Porsche 930.

Porsche enthusiast Dufour's latest design captures the aggressive, widened rear arches of the original 911 Turbo, as well as the iconic whaletail rear wing. Measuring 60cm squared, the 'Turbo 74' design is printed on 300gr paper and will be limited to just 200 prints, each costing €99 (£78). To order yours, head to sdufour.com.



New Design911 HQ announced

Design911, the Porsche parts superstore, will be opening a new showroom and distribution facility in Brentwood, Essex in the first quarter of 2015. The 32,000-square-foot warehouse will be able to store millions of original, aftermarket and performance components, more than any other independent specialist in the UK or Europe.

While the large showroom will provide an attractive front-of-house, the new centre has been chosen to allow Design911 to offer the widest range of parts available for same-day collection and dispatch. Similarly, with increased floor space, Design911 will be able to hold more stock, allowing them to buy components in larger quantities, reducing the buying price and passing on the savings to customers.

911 in Motorsport

The latest news and results from racing series around the globe



Total 911 columnist Josh Webster is hoping to win the Supercup scholarship for 2015



Prize drive at stake for Josh

Webster named among Scholarship contenders

Porsche has announced the nine drivers put forward for the 2015 International Cup Scholarship, with recently crowned Carrera Cup GB champion Josh Webster among the racers put through their paces in a recent two-day evaluation at the Circuit Ricardo Tormo in Valencia, Spain.

The International Cup Scholarship provides one driver with €200,000 (£160,000) towards a 2015 Porsche Mobil 1 Supercup drive, with the winner also benefitting from fitness and psychological training, as well as media relation expertise. Last year's winner Earl Bamber has starred during the course of his maiden Supercup season, impressing Weissach bosses enough to earn a race drive in the factory 911 RSR at Petit Le Mans (see below).

Webster was joined by racers from seven other countries, with Carrera Cup France nominating Tom Dillmann and Côme Ledogar. Carrera Cup Italia champion Matteo Cairoli also joined the line-up, as did Ryo Ogawa from Carrera Cup Japan. Oscar Palm was sent to Valencia by Carrera Cup Sweden, while Sam Power was nominated by the Australian equivalent. Carrera Cup Asia gave the opportunity to impress to Alif Hamdan, with Michael Lewis earning his place thanks to some impressive performances in the GT3 Cup Challenge USA.

As well as turning the best lap time, the nine drivers also needed to impress with their attitude and intelligence. "We've witnessed some impressive performances amongst the drivers," explained Supercup manager, Jonas Krauss. "Now we need to take a look at the individual parameters and determine who the best candidate is." This process should see the latest winner announced in mid-November.

Tudor United SportsCar Championship standings after final round

Pos	Drivers	Team	Total
1	Kuno Wittmer	#93 Dodge Viper SRT	331
2	Jonathan Bomarito	#93 Dodge Viper SRT	326
3	Antonio Garcia	#3 Corvette C7.R	317
4	Marc Goosens	#91 Dodge Viper SRT	314
5	Dominik Farnbacher	#91 Dodge Viper SRT	309
6	Patrick Long/ Michael Christensen	#912 Porsche 911 RSR	303
7	Dirk Müller/ John Edwards	#56 BMW Z4 GTE	300
8	Bill Auberlen/ Andy Priaulx	#55 BMW Z4 GTE	298
9	Jan Magnussen	#3 Corvette C7.R	293
10	Oliver Gavin/ Tommy Milner	#4 Corvette C7.R	291
11	Nick Tandy	#911 Porsche 911 RSR	279

Porsche Mobil 1 Supercup standings after round eight

Pos	Drivers	Team	Total
1	Earl Bamber	FACH AUTO TECH	123
2	Kuba Giermaziak	VERVA Lechner Racing	118
3	Klaus Bachler	Konrad Motorsport	84
4	Sven Müller	Team Project 1	81
5	Michael Ammermüller	Walter Lechner Racing	76
6	Ben Barker	VERVA Lechner Racing	73

Porsche Carrera Cup GB standings after final round

Pos	Drivers	Team	Total
1	Josh Webster	Redline Racing	357
2	Michael Meadows	Samsung UHD TV Racing	349
3	Paul Rees	In2 Racing	250
4	Victor Jimenez	Redline Racing	242
5	Pepe Massot	Parr Motorsport	135
6	Justin Sherwood	Team Parker Racing	128

First for Falken

Second successive Petit Le Mans victory for customer Porsche squad

For the second year running, Team Falken Tires gave Porsche victory at the prestigious Petit Le Mans, the traditional end-of-season race run at the Road Atlanta track in Braselton, Georgia.

The Walker Racing-run Porsche 911 RSR had to withstand immense pressure in the closing laps after a late safety car period bunched up the field. Once again, the teal-and-blue machine held up well in the hands of Wolf Henzler and Bryan Sellers, with Porsche factory driver Marco Holzer joining the Falken crew. The victory secured the 2014 United SportsCar Championship manufacturers' title.

Chasing the Falken 911 home was the number 912 RSR run by Porsche North America Racing. With Patrick Long and Michael Christensen at the wheel alongside Earl Bamber, the leading factory entry settled for second. However, it was enough to ensure the pair would secure the inaugural North American Endurance Cup.

The number 911 Porsche 911 RSR of Nick Tandy, Jörg Bergmeister and Patrick Pilet looked like a strong contender after Tandy led the first hour from pole. However, a pitlane incident damaged the car, before a pitstop caused it to lose a lap.



Motor racing in 2014 - 2015

November

Historic 24 Hours of Daytona
12-16 November
This event will run around the clock on the famous banking.

FIA WEC Bahrain
13-15 November
Six hours of racing around this Middle Eastern circuit will help decide this year's world title.

Macau GT Cup
13-16 November
This tough Asian street circuit makes for a fearsome end-of-year race.

FIA WEC Brazil
28-30 November
Where will the 2014 FIA WEC crown fall? All will be decided at Interlagos.

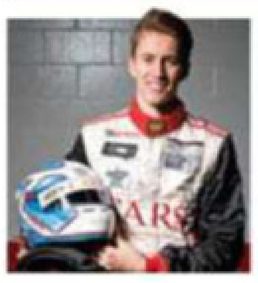
December-January 2015

Africa Eco Race
30 December – 11 January
The spiritual successor to the Paris-Dakar Rally heads across the African deserts.

January 2015

Roar Before The Rolex 24
9-11 January
The 2015 USCC season kicks off in earnest with the official Daytona test day.

Total 911's racing columnists



Supercup superstar: Ben Barker

Petit Le Mans was a race of many memorable firsts for Ben, even if the result was less than ideal

Incredible: that's the only way I can describe the Petit Le Mans event at Road Atlanta. This year's running was my first taste of this unique event, and it is certain to live long in the memory. It's such an individual event with its American style and the atmosphere is brilliant. Because the intensity of the race is stretched out over ten hours, it's less stressful than my regular Supercup racing too, which makes it more relaxing, as everyone takes time to talk to one another rather than hide in their respective motorhomes.

It wasn't the result we wanted – the car suffered an alternator problem during Philipp Eng's stint – but until that point it was running well. After Damien Faulkner started the car, I jumped in for two-and-a-half hours. There were so many safety cars during my stint we just kept splashing and dashing with the fuel, which meant I did more than a double stint.

Damien brought the car into the pits in seventh or eighth, and I managed to get through into second before leading the GTD class for the last 45 minutes of my stint as everyone cycled through pitstops.

After our problem, we considered withdrawing the car from the race, but decided to keep going, so to keep everyone energised and focused, Philipp and I just went out to better one another's times around the track to create some inter-team competition. Ultimately, our 11th-place finish didn't do justice to the team's efforts. It seems that we weren't destined to get on the USCC podium this year, though it wasn't through a lack of trying. We fully deserved a good result, but luck never seemed to go our way.

I did get to drive my first night stint at Petit, though. For half an hour, I was in the car after dark, and it was a truly eerie experience, especially as Road Atlanta is such a dark track thanks to the lack of floodlights. There was so much traffic, and whenever the prototypes passed, they would bottom out over the various undulations, causing a shower of these really intense, glowing sparks to fly over you around the back of the track. It was a really cool experience, and one that I hope I can replicate next year, but obviously with a better result.



Ben enjoyed the entire spectacle of Petit Le Mans, including his night drive





Carrera Cup champion: Josh Webster

Josh talks through a nail-biting final round, where he claimed more records

It wasn't easy, but I've done it! I've won the 2014 Porsche Carrera Cup GB. We went to Brands Hatch with just a four-point lead over Michael Meadows. To further complicate matters, I'd never raced on the GP circuit before.

Thankfully, I managed to take the two extra points for the poles, giving me a six-point lead. All I had to do was keep Michael behind me, something I was able to do in race one, taking 20 points and an extra one for fastest lap.

However, it wasn't enough to secure the title ahead of the final race. We were all on slick tyres when it began to rain just after the start. Not wishing to have an accident with Dan Cammish in the guest car, I slotted into second place before letting Michael pass so I could follow him.

With steady rain and fading light, the conditions were very difficult, causing other drivers to pit for wet tyres, leaving Michael and myself on slick tyres until the end. Second place was enough for me to wrap up the title; I've never been more relieved to see the chequered flag!

Michael Meadows has been a generous teammate and a good friend, while my race mechanic Alan Hudson has prepared my car so well that I finished all 19 races with a 100 per cent podium record. Redline Racing have secured the team and drivers titles, and have been great to work with, as has James Sutton, our driver coach.

My final thanks must go to Porsche Motorsport GB for the scholarship and to my sponsor partners: Nine Group, Porsche Retail Group, Admiral Group, Close Brothers Leasing, Swissvax, Whittlebury Hall, Melbek and Pas Ruggiero. I don't know what my programme will be for 2015 but I've been nominated for Porsche's International Scholarship. That's a story for next time though...


Josh was crowned 2014 Carrera Cup GB champion at Brands Hatch

Carrera Cup round-up



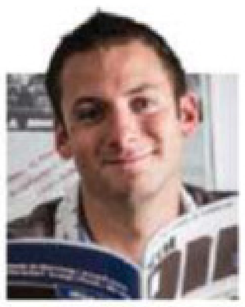
Carrera Cup Asia
Earl Bamber took a second successive Carrera Cup Asia title in Shanghai, beating Alexandre Imperatori and Martin Ragginger in race one.



Carrera Cup Australia
At Bathurst, championship rivals Steven Richards and Warren Luff shared victory in races one and two respectively, before being taken out in race three.



Carrera Cup Italia
Matteo Cairoli secured the Carrera Cup Italia with second place in race one at Imola. The 18-year-old nearly celebrated his title with a win in race two of the sixth round but for a drive-through penalty.



The factory driver:

Nick Tandy gives his views from beyond the pit wall



Road Atlanta brought an end to an incident-packed first season for Porsche racing in the US, culminating in manufacturers' title success







Petit problems in the US

There was no fairytale ending at Road Atlanta, but the season was still a success

So, Petit Le Mans didn't go our way. I guess it should have come as no surprise really after recent times when we've fallen out of the lead of the last two races at VIR and COTA due to freak component failure. The 911 RSR was generally the fastest car around Road Atlanta and we realistically could have had a Porsche 1-2-3. After a great run in qualifying, where we had three laps good enough for the pole and then comfortably leading the first hour of the race, a pile-up in the pit lane (of all places!) between the leading three GTLM runners spelt the beginning of the end. It was just an unfortunate incident that could have happened to anyone, but typically we were in the middle of it. I think we were the only car that truly had a chance to take it to the winning Falken Tire Porsche, but after the incident the pace was never there again.

The biggest problem was that the collision knocked the brake cooling ducting out of the front bumper, so we ended up losing brakes throughout the race. By the last couple of hours we were really struggling to get the car stopped, to the point where – at the end of the race – we were virtually out of brake pad material.

Our decision to change the nose (and the subsequent penalty we received for too many crew over the wall) sent us a lap down. Although we hoped to get back on the lead lap, the cautions never fell kindly for us and we finished fifth.

Despite this, it's difficult not to enjoy Petit Le Mans. It's one of those events where the atmosphere is so good. From the moment I arrived at the track, there were more people there on the Wednesday than a British meeting would have over the course of a whole weekend. There's a lot going on so it's just like a week-long party, and Porsche put a lot of effort into it, from both Porsche Cars and Motorsport.

Therefore, although I couldn't repeat my success from last year, the fact that Porsche still came out on top thanks to the Falken guys (and the no. 912 team weren't far behind either) still rendered the weekend a success. We've gone really well in the longer endurance races this year and I guess that comes from the wealth of experience that everyone within the Weissach team has got. Just like the Corvette Racing guys, we have a huge history in long-distance endurance racing, and that has rubbed off on all the new guys at Porsche North America Racing this year, from the drivers to the crew members.

Before this season started, when we all first got together before Daytona, it was explained to us very clearly and simply that Porsche was entered into the TUSCC to win the manufacturers' championship. That's why they're in this series, so to take the manufacturers' title in our first season is a huge success. Not many teams achieve their number-one objective at their first go. Obviously we had some bad fortune and bad results along the way, but with both cars (and the sister Falken entry) we have shown how strong, and how consistent, the Porsche team was as a whole.

Like any race team, we will learn from our mistakes and iron out our problems ahead of next season. It was great that as a first-year team we operated so well together, but there is more to come. Neither the no. 911 crew or the no. 912 could string together a full year.

Although my side of the garage as a team only finished 9th in the final standings, for me personally it's probably been the best season I've had behind the wheel of a race car. It gives me confidence that come next year, if we can have a cleaner, more-consistent run of finishing these things, we'll be up there as one of the favourites. Having won the manufacturers' title, it'd be great to reward the crew with the teams' title when we return next year and, for me, my aim is to win the drivers' championship. For now, even though I always look forward to the next race, I'm going to enjoy my time off, especially as testing is sure to keep me busy during the winter months.

‘What gives *you* the licence to do *this*?’

THE CEO OF A MAJOR SWISS WATCH BRAND ON HEARING ABOUT CALIBRE SH21, CHRISTOPHER WARD’S FIRST IN-HOUSE MOVEMENT.



The chronometer-certified ***C9 Harrison 5 Day Automatic***, with 120-hour power reserve, is the first watch to house our own movement. Conceived and designed by our master watchmaker, Johannes Jahnke, and manufactured by some of Switzerland’s finest watchmaking craftsmen, it is destined to be one of the most talked about watches in years. *And, yes, you do have the licence to own one.*



CALIBRE SH21

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Porsche lifestyle

Total 911 brings you the best selection of classic driving gloves for this year's winter motoring

Akapello County Driving Gloves £175

★★★★½

Sometimes, paying a premium really does bring excellent results. This is certainly the case with these gloves from boutique designer Akapello. They may be expensive, but alongside the exclusivity, the tan-and-brown colour combination is stunning. The internal seams produce a beautifully styled glove, yet unlike the black pair, the lining masks any feeling of the superb stitch work. Their fit is easily the best on test, and the lightweight yet quality leather makes for a glove that barely feels like it is being worn.

www.wolfandbadger.com

Historica Classic Driving Gloves £55

★★★½★

This Italian-made pair from British firm Historica Racewear are one of the most comfortable pairs of gloves on test, particularly around the palm and fingers, although they aren't as soft as the Akapello or Jeffery West gloves. Unfortunately, the aesthetics aren't as appetising, with the unsightly external seams, large breathing holes and admittedly practical ribs on the palm. The stitching isn't particularly neat either, but they are the most affordable offering here.

www.historicaracewear.com

Jeffery West Driving Gloves £95

★★★★½

Better known for their high-end shoes, these tan leather driving gloves from Jeffery West are certainly a match for the British designer's footwear. Visually, they are particularly understated, although the scarlet wrist piping and silver button fastening add some aesthetic intrigue. Despite the external seams, the stitching is first class, while the soft external leather is beautifully complemented by the red silk lining, making for a supremely luxurious feel.

www.jeffery-west.co.uk

Suixtil Endurance Race Gloves £96

★★★½★

Previously known for clothing F1 stars in the Fifties, the resurrected Suixtil brand offers these iconic brown leather gloves. The hide is of a premium quality befitting the price tag, and along with the soft lining, they are an excellent choice for colder winter excursions. The detailing is understated, although the suede pull tabs and thumb reinforcement are nice touches. The fit is on the larger side, especially around the wrist (which doesn't come with any fastening method).

www.suixtil.co.uk

Black Driving Gloves £72

★★★★★

Featured here in 'Navy and Tobacco', these classically styled gloves from Black are available in an evocative selection of colours. The styling, with its central pop fastener, contrast stitching and open back, is certainly appealing, but while the fit around the fingers is good, the lack of lining makes the internal seams unbearably uncomfortable, especially when flexing. However, they are well presented, coming with their own protective pouch.

www.black.co.uk

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Here are the best of the Total 911 team's Twitter photos this month:

Many rare beasts in the #40yrs911turbo parade @Brands_Hatch today. Tweet us the best of your snaps and we'll RT.



WIN!



Win a £400 Zircotec exhaust coating

Formerly a part of the Atomic Energy Authority, Zircotec originally developed its thermal barrier coatings for use in the nuclear industry. Since then, its range of high-temperature-resistant coatings have been used in all spheres of the automotive industry, from classic cars to Formula One.

Now, for **Total 911**'s latest competition, you could be in with a chance of winning a Zircotec exhaust coating up to a value of £400. This could be put towards Zircotec's attractive, durable, ceramic ThermoHold coating, perfect for classic 911 owners looking for a better alternative to the peeling factory paint on the silencer box.

Alternatively, if you're the owner of a later 911, the Zircotec Performance Colours coating may be of more interest to you. Available in a variety of 14 colours, this range of exhaust finishes provides improved heat protection combined with a coating that keeps your tailpipes looking in the very best condition.

To be in with a chance of winning this awesome prize – which can reduce surface temperatures by up to 30 per cent – all you have to do is answer this simple question:

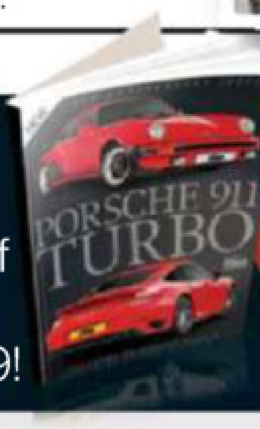
How many colours is the Performance Colours finish available in?

A) 16
B) 13
C) 14

Send your answer to competitions@total911.com with 'Zircotec' in the subject line. The Editor's decision is final, full terms and conditions can be found on the **Total 911** website. The closing date is 4 December 2014. Very best of luck to all!

Letter of the month

Write to or email us with your Porsche opinions and the author of the letter of the month will receive a complimentary copy of the **Porsche 911 Turbo 40th Anniversary bookazine** worth £9.99!



WIN! The Total 911 Collection bookazine



Growing 964 love

Dear Sir,

I purchased my second Porsche last October – a 1989 Carrera 4. I had previously also owned a 1978 SC back in the late Eighties.

Prior to my purchase, I had researched using a buyer's guide and after determining my price range and things that I liked, I decided upon a 1989 Carrera 4.

I live in western New York State and one of the deciding factors was four-wheel drive and specifically the ability to lock the differential. I also really liked the styling: it looks old and new – very European. I also love the solid feel and how it stays so wonderfully well planted to the road surface.

Since purchasing last year, I expanded my knowledge of the car and also became a member of PCA and its magazine. As I started reading these various titles, I noticed how much bad press the 964 was receiving and was almost wondering if I had made a mistake. I had definitely paid more than the 'fair prices' I was reading ($27,500 for a 100,000-mile car). It seemed that according to everyone else, I should have bought a 993 – that's the 'sweetheart' air-cooled model of the newer generations, although I don't like the slant-nose look.

In any event, I'm not sure where I came across **Total 911**, but I did and yours is my favourite publication. After subscribing and receiving an issue or two, I noticed that you like the 964 – in fact, you actually had praise for it. Well, of course, I appreciated this and have been a sponge for information. It now seems like the car is finally getting its dues and values are appreciating.

In issue 118 I even noticed an online survey that you did of all 911 models, with the 964 ranking the highest. So obviously, I'm now a visionary!

One last titbit: I was researching the GT3 and came across the fact that the Mezger motor, which is so praised, had its first general installation in the 1989 964. If this is correct, my car feels that bit more special.

Best regards,

Ken Senter, via email

The 964 is indeed a fantastic 911, as we found out in our head-to-head versus the 3.2 Carrera on page 36 of the previous issue. If the Mezger anecdote is true, it's a very intriguing story.

2015 UK trip

Dear Sir,

As a regular reader of **Total 911** I enjoy the magazine very much, especially because the variety of different aspects makes for very exciting reading.

As a driver of a 997 GT2 I had to wait quite a while before reading something about my car, but I know this type of car only concerns a small number of people.

The reason I'm contacting you today is a request for help, if possible. A group of our Porsche Club Kurpfalz is planning to visit the Festival of Speed in Goodwood next year. As we usually plan a lot of things around such a trip I was wondering if you could help us with some ideas of what to do?

From our point of view, a visit to McLaren, Morgan, Bentley, Rolls Royce or maybe a Porsche specialist would be really interesting, as well as a go on one or two race circuits, driving some interesting, challenging roads, or visiting a car museum.

I'm looking forward to hearing from you and appreciate your help.

Best regards,

Theo Schreiber, via email

The Goodwood Festival of Speed is definitely a good place to start. The National Motor Museum at Beaulieu isn't far away. If you don't mind the long drive, the roads in North Wales are also well worth a visit. We welcome any more suggestions from our readers.



If you're at the @Brands_Hatch #FestivalOfPorsche you can take a look at the PS AutoArt 911 featured in issue 116.



There's more bespoke 911 art here at the #FestivalOfPorsche too including this fine Speedster S from #Ninemeister



Magazine modifications

Dear Sir,

As the owner of three 911s (a 997 Gen1, a 993 C4S and a 1989 Carrera 3.2 25 Jahre edition converted into a 1,050-kilogram RUF track car), I'm obviously an avid reader of **Total 911**. Having said that, I do have a couple of suggestions for improving the magazine, which is not to say that I don't rip it open and read it cover to cover every month.

1) Could you consider adding the quarterly market price (with arrows pointing up, down or flat to indicate the trend), for each individual model listed in the Data File section.

2) I think many readers would be very pleased if you had a recurring segment in each issue that would walk them through the strengths and weaknesses of various 911 generations and versions, in particular the engineering and durability successes and failures.

I'm quite sure that readers both on the hunt and already in possession would benefit greatly from an objective overview devoid of the sometimes fanatically emotional critiques occasionally put forth by one school of thought or another.

Best regards,

Keith Silverang, via email

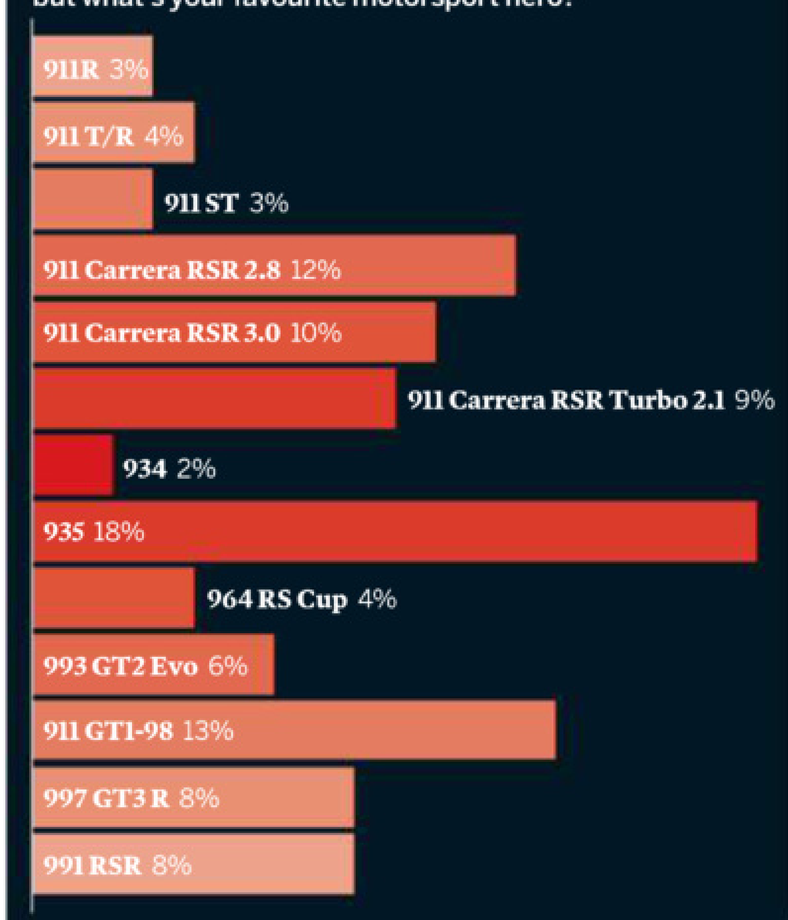
The market price indicators are a great idea and something we could implement without 911 values outpacing our rate of printing the magazine! However, we feel point two is already catered for by our Ultimate Guide, though we love to hear any reader feedback on the magazine. We're glad you enjoy each issue!



Online Poll

What is your favourite 911 race car?

We recently ran through a brief history of 911 racers online but what's your favourite motorsport hero?



Total911.com hot topic:

It's time to stop the retro backdates

Josh's online tirade at the growing number of classically styled 911 projects proved divisive. Here are the best of your retro backdate opinions:

I understand the sentiment expressed but I don't think a budget-minded (when is enough $$ enough?) retro build has to be or has become a bad thing, just because the builder isn't Singer or the PS boys. I may be naive or too much of a Porsche flag-waver, but I don't think the retro-trend or backdating builds inhibit creativity.

Paul Harford

Having seen the PS AutoArt 911 at the Porsche Festival of Brands, I loved what the team had done to it – encapsulating the European flair of the 911 while not displaying any American brashness :) keep up the good work I say!

C911

It's your car, do as you like, and if that means replacing a number of parts and panels so that your car has a cleaner, more-timeless look to it, then please, do it.

Eric Trytko

Yeah, stop using all the 3.0-litre 930 wings on everything and anything. I can't find one.

Shady Speedway

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SUPER 911s

As our pre-impact-bumper investigation shows, each iteration of 'S' model embodies something different, yet this long-nosed trio is still united under the most important letter in the 911 lexicon

Written by **Josh Barnett** Photography by **Phil Steinhardt**



"It was the S that took on responsibility for cementing the 911 legend"

These are the 911Ss. For six years they topped the 911 range; the fastest, the most luxurious, the most expensive. Then the RS was unveiled to an enthralled Zuffenhausen faithful in 1973. The S remained 'Super' for one more year but, as the 911 headed into the impact-bumper era it was usurped again, with the 911 Carrera 2.7 becoming prince to the Carrera 3.0 RS's king.

In 1978 the 911S died out altogether, amalgamated with the Carrera bloodline to form the SC. Its return to global-production 911s would take nearly two decades, with the launch of the 993 Carrera 4S in 1995 reviving the tradition of this smoothly snaking Latin letter. As of now, each generation of water-cooled 911 has featured at least a single Carrera S in the range.

Thanks to its turbulent history post-1973, all pre-impact-bumper 911Ss enjoy a special place in Porsche folklore, reflected by today's astounding classic values. 12 months ago this mouth-watering, air-cooled triumvirate could have graced your collection for the price of a single 1973 Carrera RS. Now your £300,000 budget is unlikely to even secure two of these 911 icons, such has been the surge of interest in this famed variant.

The 2.7 RS may often steal the plaudits, but it owes its fabled reputation more to the track than the road; it was the S that took on the responsibility for cementing the 911 legend during those formative years. Yet, with production of this classic halo car spanning seven and a half years (resulting in 2.0-litre, 2.2-litre and 2.4-litre variants), which series of 911S should you set your sights on?

Released in 1966, the 0-Series 911S's 901/02 flat six retained the 80mm bore and 66mm stroke of the original Porsche 901 engine. However, forged light-alloy pistons and steel con-rods replaced the standard items with 42mm intake and 38mm exhaust ports and twin Weber 40IDSC3 carburettors, to yield a significant 30bhp gain over the standard 911 powerplant.

Providing the first 911S with the dynamics it deserved, Helmuth Bott's team fitted a rear anti-roll bar alongside a stiffer front item, and adjustable Koni dampers. It also became the first 911 to gain internally vented brake discs, whose cooling was aided by the introduction of the new, 4.5-inch-wide, forged-alloy Fuchs wheels (a move that saved over 8kg compared with the previous steel wheels).

Our Ivory White example (owned by Marcus Carlton) previously went head to head with a 991 Carrera S in issue 114, sowing the seeds for this group test where its 'competition' comprises less-contemporary German engineering. Despite this, there are numerous aesthetic details that place this Porsche as the trio's elder statesmen. The original Fuchs wheels feature less black paint than later rims and, combined with the spindly 165-section tyres and high ride height, the original 911S has an historic aesthetic that continues inside.

Entry is via a push-button door handle and, slipping into the remarkably comfortable seats, I'm reminded how unsupportive these particular pews are. Bereft of any bulbous flanks, their design is firmly rooted in the past, complete with optional 356 headrests. The optional wood-rimmed sports steering wheel and ever-captivating green-numbered dials are charming yet classic, but the basket weave (making its 911 debut on the 2.0-litre 'S') at least attempts to modernise my surroundings. For all its outmoded idiosyncrasies, it's still a gorgeously decadent place to speed through the countryside. Starting the ➲



Pre-impact-bumper 911S

1966 0-series:
911S is introduced in 2.0-litre form. Alongside the standard gear set, the 901/02 gearbox could be specified with 'Le Mans' (long) or 'Nürburgring' (short) ratios. 1,823 Coupes are built between 1966 and 1967.

1968 A-Series:
Ostensibly the same as the 1966-67 cars, the green dials are replaced with more-modern white numbers, with the chrome bezel around each gauge switching from chrome to black. Sportomatic transmission is now an option and the Fuchs wheels are now 5.5-inches wide. 1,267 Coupes are built in this year.

1969 B-series:
This is still a 1,991cc engine, but now features a Bosch MFI system. The engine also has a magnesium crankcase, and oil-cooler in the front bumper. The wheelbase is increased by 2.3 inches, with the arches flared to take a six-inch-wide Fuchs. The throttle is moved next to the gear lever. Door cards change to include flush fitting pull handles. 1,492 Coupes are built.

1970 C-series:
The engine capacity increases to 2,195cc thanks to enlarged bore. This is honoured in a rear-window sticker placing the figure '2.2' inside a boxer engine. The decklid, now made of aluminium, features five vertical bars on the grill rather than six. The door handles change to trigger-style items, while Sportomatic is no longer available. 1,744 Coupes are built.

1971 D-series:
This is the same as the C-Series cars except the underbody is now zinc-coated. 1,430 of these Coupes are built.

1972 E-series:
The engine capacity is increased to 2,341cc with longer stroke. The '2.4' badge is mounted on the decklid grill (now painted black). The basket weave is replaced with smooth interior panelling. It features the new 915 gearbox and a chin spoiler is fitted. The oil tank is moved in front of the right rear wheel, accessed via an external cap.

1973 F-series:
The external oil filler is removed and the horn grills are changed from chrome to black to match the RS, as is the bright work around the front and rear light clusters. 3,160 Coupes are built between 1972 and 1973.




PORSCHE
HUK 34J

carburetted motor is a procedure also rooted in tradition, requiring a touch of throttle as I crank the engine over. As spark ignites fuel for the first time though, six cylinders effervesce into life with a youthful – albeit mechanical – verve.

Although the aggressive engagement requires finesse, the clutch pedal is light, and once underway the flat six's tone is orchestral right through the rev range, never failing to remind you that this is a Zuffenhausen-built boxer. Despite these acoustics, the 160bhp motor is relatively slow to spin up, however, there is a noticeable gallop as crank speed reaches the mid-5,000s and the gearbox proves a joy to use (even with the idiosyncrasies of age). Second to third gear requires a slightly slanted movement, while the motion through each gate feels swift yet vague. There is an innate positivity with each gear's engagement though, enhanced by the relatively short throw of the canted lever.

Despite the soft and compliant suspension, this 911S doesn't feel lazy as I throw the car into a corner. It feels moulded around me (an experience aided by the compact cockpit). However, the excitable handling of the short wheelbase chassis can catch you out. As tradition dictates, the nose is the first to call it quits, yet adding extra lock almost immediately forces the front to bite. It's easy to see why so many early Porsches ended up exiting the scene backwards.

The 0-Series 911S requires a classic, progressive driving style. Immediate full throttle chokes the engine as the carburettors struggle to breathe, while the brake pedal requires a hefty left foot before anything truly happens. When it does, the car doesn't slow with much urgency (despite the lack of mass) – a feeling exacerbated by the pedal's switch in feel from gum to granite.

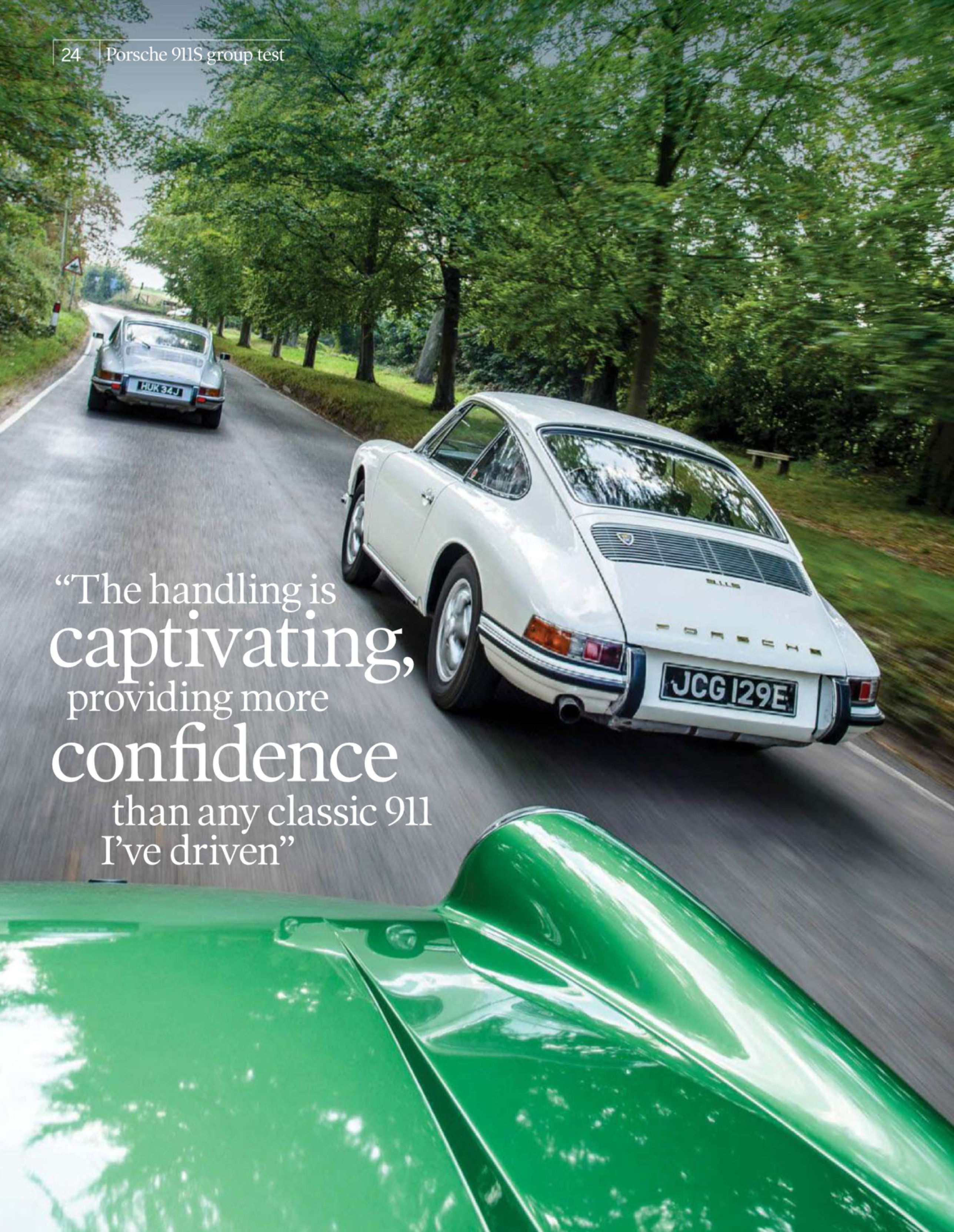
The 0-Series 911S is, therefore, for the thinking man, the one who wants to continually analyse his driving in the pursuit of further smoothness and speed. However, there comes a point where the car's ultimate impediment is the overall lack of grip offered by the skinny radial tyres that hinder the original 911S.

This is something that Porsche looked to rectify with the A-Series car, introduced for 1968. The green dials were replaced with more-modern white-numbered items but, most importantly, the 5.5-inch-wide Fuchsfelge enabled the 911S to put more rubber on the road.

For 1969, the B-Series 911S marked the first major change to the 911 platform, with new rear trailing arms increasing the wheelbase by 2.3 inches. This helped settle the nervous handling, as did the six-inch-wide Fuchs wheels (with 185/70VR15 tyres). The 911S's 901/10 engine was modernised with Bosch mechanical fuel injection and a 9.9:1 compression ratio, yielding an improved 170bhp.

As the Seventies dawned, Porsche never stopped making improvements to the 911S, releasing the C-Series in 1970. Thanks to an increased bore of 84mm, the engine's capacity had been enlarged to 2,195cc, leading to a new internal code: 911/02. The intake and exhaust ports were also enlarged up to 46mm and 40mm respectively, giving the 2.2-litre motor (mated to a new 911/01 gearbox that featured a larger, 225mm clutch) an impressive 180bhp. The following year the 911S (for the first time in its brief history) was left untouched, although





"The handling is captivating, providing more confidence than any classic 911 I've driven"





Our gorgeous 911S trio are full of intricate details. The subtle design differences are mirrored in each car's driving character







the introduction of a zinc-coated underbody led to Porsche brandishing these cars as part of the D-Series range.

International fame was guaranteed for the 2.2-litre 911S after starring in the opening scene of Steve McQueen's *Le Mans*. Immediately the 911 became affiliated with the star of *The Great Escape*, a deciding factor for owner Brandon Davies. Sitting behind the leather-rimmed wheel (restyled to smooth over the 'hockey puck' centre of the 0-Series) of his 1971, left-hand drive example, I certainly want to channel my inner King of Cool.

The revised trigger-style door handles give way to the immediately cosseting, black, Recaro-built sports seats, which precisely secure my body, providing the necessary support for spirited driving that the 0-Series lacked. The seating position urges you to push on, which is just as well because, under 3,000rpm, the engine of the 2.2S is surprisingly muted, with a low, bassy rumble emanating from behind me. This uncharacteristic sound is accompanied by a lack of mid-range torque, so much so that first and second gears are often required for lower-speed corners.

Between 3,000 and 4,000rpm though, the flat six signature comes to the forefront, before all hell breaks loose at 4,800rpm. There's an almighty kick as the car suddenly comes alive to catch up with my intentions, shooting forward with a vicious turn of pace that has me suddenly readying for the next gear. The motor is now reaching a howling crescendo; it's easily more addictive than the Mezger-engine banshee cry of modern GT3s, even if the gearbox isn't as user-friendly as those water-cooled cars.

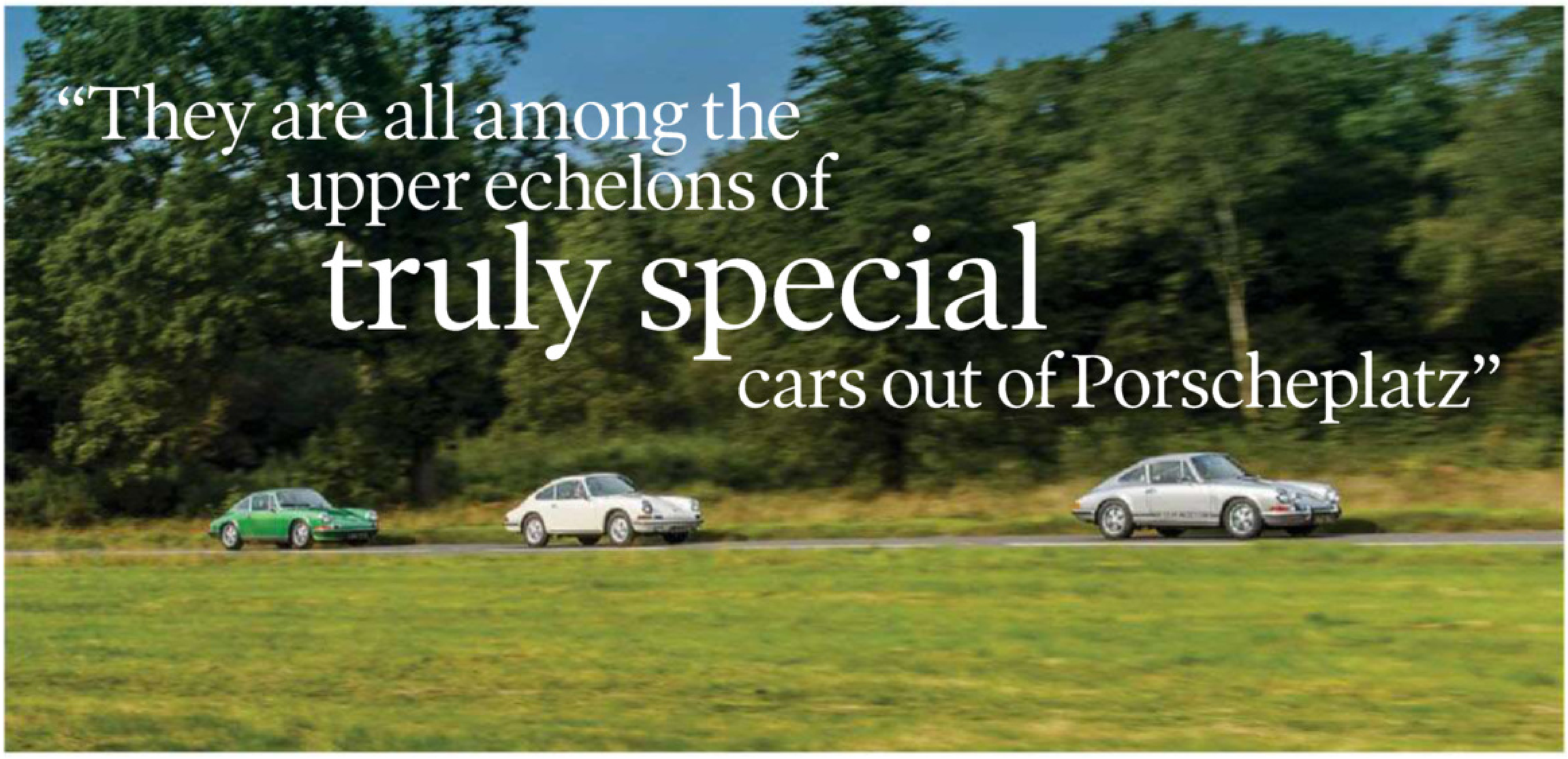
From cold, the recalcitrant 911 box proves a constant battle between man and machine. Once all the oil is up to temperature the relationship becomes workable, but you still need to be firmer than with the 901 shifter. It's stiffer between the gates (which does at least make the shift feel less sloppy) but, coming down the box, I'm constantly double-declutching to provide a seamless transition between ratios.

The suspension feels much stiffer than the 0-Series car too, providing steering so sensitive you just have to think before the car matches your intentions. There is so much more poise to the car (no doubt aided by the non-standard 195-section tyres), while the brakes are beautifully progressive, providing plenty of feel and power.

The handling is captivating and breeds more confidence than any classic 911 I've driven, although you have to keep the revs up in order to maintain momentum. Combined with the lack of compliance, it means this is not a car for regular town driving. The 2.2S rewards at a greater driving intensity although, at higher speeds, the communicative steering lightens with alarming alacrity, pushing the car into understeer.

This is something that Porsche rectified on the E-Series 911S, fitting a decidedly modern front chin spoiler developed by race engineer Tilman Brodbeck. Again though, the most noticeable change was in the engine bay, where the flat six's capacity was further increased with a lengthened 70.4mm stroke. The 2,341 resulting cubic centimetres were optimistically labelled 2.4 litres. With increased volume to play with, Zuffenhausen decreased the compression ratio of the 911/53 engine to cater for lower-octane petrol. Its 190bhp was fed to the rear wheels through the 915/02 transmission – a new gearbox featuring a magnesium casing and standard H-pattern shifting layout. However, for 1972 only, the oil tank – now found in front of the right rear wheel – gained an external filler.

The larger engine brings with it much more mid-range torque in the 2.4S. In reality, there is usable shove all the way from 2,000rpm, making this a much more all-round proposition than its 2.2-litre predecessor. The power supply is silky smooth, with a slightly more responsive throttle than the 1971 car. Nonetheless, it lacks the teeth-gritting



punch that the 2.2S enjoys at 4,800rpm. Instead, your delivery towards the horizon is seamless. It is probably much faster, thanks in main to the abundant torque, but it feels lazier, especially as the flat-six soundtrack is noticeable, more bassy and muffled (almost like a 3.2 Carrera).

Where the 1972 Porsche 911S excels, however, is in its ability to give you everything. The handling is remarkably well polished, providing the poise and responsiveness of the 2.2S, with all the compliance of the 2.0-litre car.

Despite being the heaviest car on test, the roll control was superb through each corner, enabling me to pinpoint each apex with Teutonic precision. At speed, the feel coming back through the wheel remains constant thanks to the lack of front lift – that spoiler really works – yet, despite the stiffness required to maintain such handling, the 2.4S doesn't want for comfort, breezing effortlessly over undulating road – neither tracking nor crashing.

The extra weight is particularly evident when the brakes are applied though. I was no doubt arriving at corners slightly faster than usual thanks to the added shove, but the pedal was particularly hard, with a lack of feel ensuring that retardation never felt in abundance.

Of the three, this is the perfect car for grand touring, with the lazy rapidity imbued by the 2.4-litre motor making it easy to imagine cruising across Europe. This daydream is enhanced by the interior, which is a bit special (and improved with the optional electric windows and sunroof). The sport seats, while less supportive than the 2.2S, are easier to get in and out of, and the basket weave dashboard trimming makes way for a solid section of leather, creating a more-modern vibe – especially in Ernie Boehm's tan-trimmed example, resplendent in Metallic Green.

Testament to Porsche's continuing ethos of gradual improvement, it is easily the most-refined car on test, noticeably highlighting the 2.0-litre's place at the start of the development curve while exposing how comfort and usability were compromised in Zuffenhausen's quest to make the 2.2S faster than its predecessor. The 1972 911S surely is the ultimate expression of the 'Super' 911, combining the seemingly dichotomous attributes of speed and comfort.

Yet, there is something indelibly special about the 1967 911S, of which there are only six RHDs known to be running in the UK. It may lack the rapidity of its successor, but the driving experience truly transports you to another era, with its classic handling and raucous engine note.

Similarly, the 2.2-litre 911S has the most-evident sporting credentials (a number were converted to ST spec in period). Its high-revving motor praises urgency, and the chassis is most dynamic when pushing on. It's involving on a race car-like level while still possessing some degree of comfort. It's my favourite of the bunch, but the allure of its rivals is just as evident and I'd not be disappointed if the keys to any of the cars here were dropped in my lap again. Ultimately they are all up among the upper echelons of truly special cars that have rolled out of Porscheplatz. This is because, despite their distinct characters, the intrinsic DNA in each variant ensures that, whether 2.0, 2.2, or 2.4-litre, each one is undeniably super at heart.

The modern 911S

The 'S v S' battle in issue 114 saw us assimilate the similarities and differences between an original Porsche 911S and the 991-type Carrera S, a car that carries the baton for the famous Porsche sub-type. While we found much that linked the two 911s, this test has highlighted that, among the current crop of Zuffenhausen sports cars, there is one 991 that stands above the rest as a natural successor to the pre-impact-bumper 911S.

That car is the new Porsche 911 GT3. This may seem like a bizarre choice given that the GT3 features electrically assisted steering and a compulsory automatic gearbox. However, with the ever-increasing, day-to-day usability of Porsche's race car for the road, it has a lot in common with this trio of Porsche 911Ss.

Like the 911S, the 991 GT3 currently tops the range (albeit the latter alongside the Turbo/Turbo S) and, just like the 911S, the latest GT3 is soon to be toppled from that perch by a more focused Rennsport version.

Thanks to the PDK gearbox, the Porsche 911 GT3 has become the ultimate everyday sports car. When I drove on-track in Germany, it proved as adept as any previous 911 to the rigours of hard driving yet, on the way to and from the circuit, it could be transformed into a car as benign as the driver wants. This is just like the classic 911S, a car with serious competition pedigree and performance but also the ability to operate almost seamlessly under normal driving conditions.

There may be an outcry in certain circles about the dilution of the GT3's hardcore ethos but, if the 911S is anything to go by, making it a more-usable prospect only ensures that the 991 GT3 is a sure-fire modern classic that will stand the test of time.



Model Year	911S 2.0 1967	911S 2.2 1971	911S 2.4 1972
Engine			
Capacity	1,991cc	2,195cc	2,341cc
Compression ratio	9.8:1	9.8:1	8.5:1
Maximum power	160bhp @ 6,600rpm	180bhp @ 6,500rpm	190bhp @ 6,500rpm
Maximum torque	179NM @ 5,200rpm	199Nm @ 5,200rpm	211Nm @ 5,200rpm
Transmission	901-type five-speed manual	911-type five-speed manual	915-type five-speed manual
Suspension			
Front	MacPherson strut; torsion bar; anti-roll bar	MacPherson strut; telescopic damper; torsion bar; anti-roll bar	MacPherson strut; telescopic damper; torsion bar; anti-roll bar
Rear	Trailing arm; torsion bar; anti-roll bar	Trailing arm; telescopic damper; torsion bar; anti-roll bar	Trailing arm; telescopic damper; torsion bar; anti-roll bar
Wheels & tyres			
Front	4.5x15-inch Fuchs; 165/80R15 tyres	6x15-inch Fuchs; 185/70R15 tyres	6x15-inch Fuchs; 185/70R15 tyres
Rear	4.5x15-inch Fuchs; 165/80R15 tyres	6x15-inch Fuchs; 185/70R15 tyres	6x15-inch Fuchs; 185/70R15 tyres
Brakes			
Front	282mm internally vented discs	282mm internally vented discs	282mm internally vented discs
Rear	285mm internally vented discs	290mm internally vented discs	290mm internally vented discs
Dimensions			
Length	4,163mm	4,163mm	4,163mm
Width	1,610mm	1,610mm	1,610mm
Weight	1,030kg	1,020kg	1,075kg
Performance			
0-62mph	8 secs	6.6 secs	6.6 secs
Top speed	137mph	145mph	140mph

Thanks

Thanks to Polesden Lacey for use of its premises for our photographs. Polesden Lacey is a country retreat owned by the National Trust. For more information on the house and grounds please visit **www.nationaltrust.org.uk/polesden-lacey** or call 01372 452048.

991 GTS BREAKS COVER

The GTS magic looks set to make this the must-have 911 outside of the current GT range, as Total 911 investigates...

Written by **Richard Aucock** Photography by **Porsche AG**




PORSCHE
911 Carrera GTS
S GO 4050

Until now, the GTS moniker has been a bit of a thorn in the side of the 991. From launch, the forever-cooking Carrera and Carrera S range was being compared with the brilliance that was the 997 Carrera GTS. Even at **Total 911**, we posed the question: 'why buy a new 991 when you could get a 997 Carrera GTS for one-third less cash?'

The Cayman GTS compounded it. Reports say this car is absolutely sensational, one of the greatest modern Porsches you can buy – and it costs not far shy of £30,000 less than even the most basic 991. We're all committed to the 911 here, of course, but this Cayman wasn't such an easy car to dismiss for some, and may have created a few awkward questions in OPC dealers.

But enough is enough: the GTS lineage is already a proven hit in making the 911 even greater, and that axiom rings ever true after we broke the news on Total911.com that a 991 Carrera GTS is on its way to showrooms as of November. Even better, the GTS and GTS4 will slot into the 991 line-up between the GT3 and the Carrera S – and this time not as runout specials like the 997, but as core parts of the 911 model range.

Headline news, of course, is Zuffenhausen's decision to offer a manual gearbox as standard specification. After the 991 Turbo, Turbo S and GT3 were all released last year with PDK-only transmission (much to the disbelief of purists), the seven-speed manual here will no doubt add extra appeal to those with a traditionalist disposition.

Other big news comes from the 991 Carrera GTS's power, which is supplied by a 3.8-litre DFI engine with Powerkit as standard, producing 430hp. That's a 30hp boost over the 991 Carrera S. The Powerkit has achieved this figure courtesy of some typically thorough engine enhancement. There are modified cylinder heads, brand new camshafts, a centre radiator, optimised engine electronics and a newly-developed two-stage variable resonance intake manifold, which boasts six plus one switchable valves. The idea here, says Porsche, is to positively oscillate the air according to engine speed: the benefit comes in a flatter and more even torque curve, plus enhanced torque at low engine speeds.

Encouragingly, the air filter attached to the lightweight plastic intake manifold boasts a speed-dependent switchable resonance volume that enhances intake acoustics – the sound ranges "from sonorous to biting", according to Porsche. At the other end of the air-flow path, GTS models get a standard Sports Exhaust system with twin-tube tail pipes that, when activated by the button on the centre console, will give greater bark to the bite of that flat six.

The extra potency of the engine is enhanced by some subtle options-list picking by Porsche. The Sport Chrono package is standard, ensuring there are no dual 0-62mph times for cars with and without it: all 911 Carrera GTS Coupe manual

"Headline news of course is Zuffenhausen's decision to offer a manual gearbox"



GTS: the official line

Porsche's reasoning behind bringing the GTS name to the 991 is clear, an official spokesman from Porsche GB told us. "The 911 Carrera GTS, as with existing GTS models, brings a combination of increased sporting dynamics with distinctive sports-orientated styling cues and a strong individual identity to the 911 range.

"It is the most sporting derivative of the Carrera model range and has a high degree of everyday usability and comfort from the 911 Carrera S, combined with thoroughbred GT features such as an engine tuned to 430hp, centre-lock alloy wheels with wide tyres, and Alcantara cues in the cockpit."

A big part of the appeal is the combination of wide-body rear and rear-wheel drive, claim Porsche GB. "This configuration was previewed in the 911 50 Years Edition, and is a particular highlight unique to this model." That's why the chassis and engine power changes are so significant – the package may well create a rather appealing GT3-lux experience (with the lack of a manual gearbox option on the GT3 ably answered, too).

It seems many within Porsche are expecting the GTS to tempt those keen to spend money on options for their Carrera S. "If a customer wishes to personalise their Carrera S, the GTS offers significant opportunities for individual expression, particularly for owners whose interest lies in dynamic optimisation in key areas." Because of this, it's a car for the real enthusiast: "Other features are not available except on the GTS... so the car offers strong appeal to the 911 fan."

So is the Carrera GTS now the ultimate everyday performance Porsche, we asked? "Of course, any Porsche is ideal for everyday use. It is one of our central philosophies," came the reply. Fair enough. It doesn't stop us thinking that the Carrera GTS is set to be the in-demand sweet spot of the 911 range – as indeed does our contact. With perhaps a little inside knowledge, they rounded out the interview by teasing us: "We wait with anticipation what the independent opinion of the 911 GTS will be!" Have they heard whispers within Porsche AG that we could have a bit of a superstar on our hands here?





Model	991 Carrera GTS Coupe
Year	2015
Engine	
Capacity	3,800cc
Compression ratio	12.5:1
Maximum power	430hp @ 7,500rpm
Maximum torque	440Nm @ 5,750rpm
Transmission	Seven-speed manual / seven-speed PDK, rear / all-wheel drive
Suspension	
Front	McPherson strut with antiroll bar; PASM
Rear	Multi-link with antiroll bar; PASM
Wheels & tyres	
Front	9x20-inch Turbo S alloys; 245/40ZR/20 tyres
Rear	11.5x20-inch Turbo S alloys; 305/30ZR/20 tyres
Dimensions	
Length	4,509mm
Width	1,852mm
Weight	1,425kg C2 / 1,470kg C4
Performance	
0-62mph	4.4 secs
Top speed	190mph



gearbox cars will thus take 4.4 seconds for the benchmark dash, and all Carrera GTS Coupe PDK variants will take 4.0 seconds (add on two-tenths for the heavier Convertible model). Sport Chrono brings standard active engine mounts too, keeping the 3.8-litre motor tightly locked into the chassis when you want it to be, and more (relatively) detached when ride quality is more of a priority.

An added bonus to the GTS comes in the form of fuel economy. The new GTS is unchanged over the Carrera S, so the standard PDK model will average up to 32.5mpg. This is even more admirable when you realise the top speed of every single GTS exceeds the 300kph barrier. In the UK, that means every GTS will do at least 186mph – the fastest is the standard Carrera GTS Coupe manual, which is capable of 190mph, meaning it's the fastest 911 Carrera made by Porsche.

It's not just the engine that's been boosted, though. Porsche has given the dynamic abilities of the 911 Carrera GTS a lift too – indeed, feedback from the recent Boxster GTS and Cayman GTS suggests that power enhancements are almost token: it's the way the sports cars go through corners that really sets them apart.

Encouragingly, PASM active suspension management is standard, lowering the suspension by 10mm and enhancing the aesthetical pleasure of the standard-fit 20-inch Turbo S wheels. These have an ultra-wide 305/30 profile at the rear, sitting on 11.5-inch wide wheels. It's no wonder Porsche has had to fit the wide-body Carrera 4 shell to all GTS models – even the rear-wheel-drive ones – to clothe the wider rear track. Porsche hasn't yet revealed exactly what changes it's made to the Carrera GTS's suspension, though an insider says the Sport chassis of the Cayman GTS, with bespoke antiroll bar and spring rates, may provide an indication of what has gone into the 991 GTS.

Porsche Torque Vectoring with limited-slip differential will ensure the extra power – and more accessible torque lower down the tacho – of the GTS can be cleanly deployed, while the 44mm wider rear body over regular 911 Carrera S facilitates the directional stability-enhancing wider rear track. Porsche confirms this does as you'd hope it would, boosting dynamic cornering.

But the lure of the 911 Carrera GTS isn't just how it drives. The wide-body stance enhances its posture on the road, as do the motorsport-derived centre-lock Turbo S wheels, which are finished in a neat matte black. GTS logos on the leading lower corner of the doors are subtle identifiers as to the special 991 you're entering, too. ➲

GTS: what's in the name?

The GTS name dates back to the 1963 904 Carrera GTS road-going race car. The GTS badge returned in the Eighties after a sustained hiatus, appearing on the 924 GTS and 928 GTS, before it lay dormant again for years. The cult-hit 2007 Gen1 Cayenne GTS revived the moniker once again, and, after appearing on the equally cult 997 Carrera GTS and Panamera models, it is now a core brand in the modern Porsche line-up.

It's Porsche's smart use of black detailing that really makes the GTS special though. The bi-Xenon headlights (with standard Porsche Dynamic Light System) are smoked, for example, and the black painted trim strips and emblem set things off at the rear. The plating of the four exhausts is black, as is the lettering on the engine cover that confirms this is a new generation GTS model. On rear-drive Carrera GTS models, the strip between the tail-lights is black too.

There are also some GTS specific additions. The SportDesign door mirrors are a neat feature, as is the addition of Carmine Red paintwork. For now, it's reserved for 911 Carrera GTS models, and will surely be the choice colour (after all, it's the shade associated with modern GTS models). Other hues on the restricted GTS pallet include black, Carrera white, Guards red and Racing yellow.

Inside, Alcantara dominates. It stands for motorsport, according to Porsche, so is used in areas where the manufacturer expects there to be a lot of wear: the steering wheel rim, gearlever, door pulls, door arm rests and centre cubby stowage box lid. Rather indulgently, the roof lining is Alcantara, as are the centre sections of the standard Sports seats Plus – their headrests are embroidered with a 'GTS' logo too for good measure.

There are more Carrera GTS logos for the door sill plates and rev counter, and you can have even more indulgence if you go for the optional GTS interior package. This brings contrast GTS logos on the seats, interior accents in Carmine Red or Rhodium Silver and a contrast colour for the rev counter. The package also brings carbon fibre dashboard trim strips, as well as centre console and door trims. You can also take things out with the GTS too: an option for Coupe models is to delete the rear seats to create a bit of 911 GT3-like kudos.

Prices for the GTS start from £91,098 for the Carrera GTS Coupe – that's £17,589 more than the base 350hp 911 Carrera and a more significant £7,553 increase over the 400hp Carrera S. However, the Powerkit on a Carrera S is nigh-on £9,000 alone, making the GTS great value already. The Carrera 4 GTS costs from £95,862, and both models are also available as a Cabriolet: £99,602 for the Carrera GTS and £104,385 for the Carrera 4 GTS.

So is this the best all-round 911 currently on sale? We'll find out very soon: deliveries begin in November, and ordering is open now for the entire 911 Carrera GTS range. If this new 991 Carrera GTS follows on from the brilliance of the previous 997-generation Carrera GTS, then it is going to be a superb 911 indeed.

"A rear-drive GTS could turn out to be the driver's pick of the non-GT3 range"

Total 911's first look: the verdict

GTS likes

- Perfected spec that hones the entry-level 991 into something approaching Porsche brilliance
- Superb value for money
- Manual transmission option offered as standard

GTS dislikes

- Could render a well-optioned 991 Carrera S pointless
- Will 430hp be enough of a power boost?



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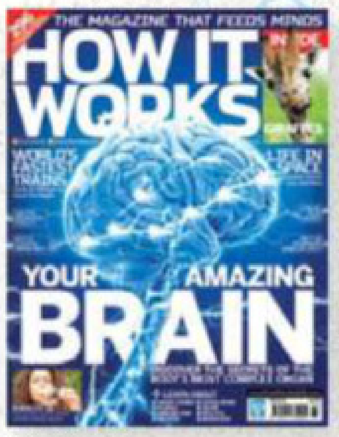


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BIGGER IS BETTER

After 15 years of tweaking the 3.3-litre engine in the forced-induction 911, the 3.6-litre 964 proved to be a welcome addition to the evolution of the Turbo story...

Written by **Glen Smale** Photography by **Ali Cusick**



The 3.6 Turbo's huge road presence was cemented by a 20mm chassis drop and 10-inch wide Speedlines at the rear

The evolution of the Porsche 911 Turbo is the stuff of automotive folklore. Now 40 years old, Porsche's fetish with forced induction has resulted in nearly 20 Turbo and Turbo S variants leaving the factory at Zuffenhausen during that time.

Porsche, of course, introduced the first 930 Turbo back in 1974 for the 1975 model year, then powered by a 2,994cc flat-six engine. In 1978 the Turbo was granted its first major revision in being fitted with a 3,299cc engine, which the model would retain for the next 15 years right up until 1993. During that time, power on these 'Turbo 1' 911s would creep up incrementally from 260bhp to 330bhp. Up until 1988 though, the Turbo had been driven through a four-speed gearbox and it was only in 1989 that it received a five-speed unit, which accounted for some of the models' increase in top speed.

Referring to the old 930 Turbo model, Thomas Schmitz, specialist in rare Porsche models and accompanying me on test, quips: "There is a common joke in Germany that if you drive a four-speed Turbo you don't need a throttle pedal; you can just have a switch, because it is either power on or power off. It is either everything or nothing!"

The introduction of the 964 Carrera 4 in 1989 brought with it a new 3.6-litre engine, but unfortunately the turbocharged unit was not ready for the new Turbo model at launch. It was a little more than a year before the 964 Turbo arrived in February 1991, and contrary to expectation it was fitted with the old 3.3-litre engine from the 930. However, power was up on its predecessor thanks to a larger turbocharger, a new injection system and revised electronic engine management. Those 964 Turbo models produced from 1991 onwards are referred to as 'Turbo 2' models, despite being powered by the same basic 3.3-litre engine. Notwithstanding the press department's efforts to convince the media that the new 3.3-litre 964 Turbo was more powerful and represented a great stride forward over the Turbo 1, in reality the much heavier body negated any real advantage in performance.

Then, at the Geneva Motor Show in March 1992, the 381bhp 964 Turbo S was unveiled, now sporting air inlet vents in the rear fenders ahead of the wheels – a feature that would become a hallmark of all future 911 Turbos. On top of the increase in power, the Turbo S was also stripped of around 170 kilograms of weight, and these days the coveted 964 is affectionately named as the 964 Turbo S Leichtbau.

However, at the Paris Motor Show in autumn of the same year, Porsche introduced its third and final iteration of the 964 Turbo, now featuring a 3.6-litre engine. In reality, this model was only going to be made for just one year, as the 964 was to be replaced by the all-new 993 series at the following year's Frankfurt Motor Show. This almost guaranteed that the 3.6 would become a sought-after model in time, with only 1,437 units being produced during that year.

An additional three millimetres on the bore and two millimetres on the stroke resulted in an increase in capacity of 300cc. Combined with the Turbo-optimised cylinders, pistons and crank train, and an increase in the compression ratio from 7.0 to 7.5:1, the Turbo 3.6's power was boosted to 360bhp. Torque was increased significantly to 520Nm at 4,200rpm, up from 450Nm at 4,500rpm in the earlier car, but importantly this range was available from as low as 2,400rpm right up to 5,500rpm. Gone were the days of waiting for the needle to crawl round the tacho before the sudden kick of inertia. The turbocharger with primary and bypass catalytic converter and intercooler system was taken over, unchanged, from the 3.3-litre. In a move to reduce internal and external noise levels, ➲

964 Turbo production

Year	Engine	Body	Detail	Production
1991	3.3	Coupe		2,840
1992	3.3	Coupe		1,023
1993	3.3	Cabriolet		8*
	3.3	Coupe	Turbo S	86
	3.6	Coupe		590
1994	3.6	Coupe		847
	3.6	Coupe	Slantnose	76

*Only eight 964 Turbo Cabriolet models exist, these being built by the Porsche Exclusive department.







Porsche executed numerous tweaks to the engine aside from its obvious increase in capacity, also carrying over the braking system from the 3.3-litre 964 Turbo S





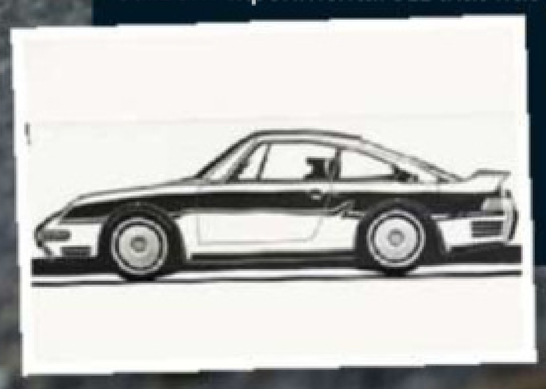
Model	964 Turbo 3.6
Year	1993
Engine	
Capacity	3,600cc
Compression ratio	7.5:1
Maximum power	360bhp @ 5,500rpm
Maximum torque	520Nm @ 4,200rpm
Transmission	Five-speed manual
Suspension	
Front	Independent suspension by transverse links; single coil spring; antiroll bar; twin-tube gas-pressure shocks
Rear	Independent suspension by semi-trailing arms; single coil spring; antiroll bar; twin-tube gas-pressure shocks
Wheels & tyres	
Front	8x18-inch Speedlines; 225/40ZR18
Rear	10x18-inch Speedlines; 265/35ZR18
Dimensions	
Length	4,250mm
Width	1,775mm
Weight	1,470kg
Performance	
0-62mph	4.8
Top speed	174mph

“The extra-wide rubber on iconic 18-inch Speedline wheels gives the car real presence”

The story of project 965

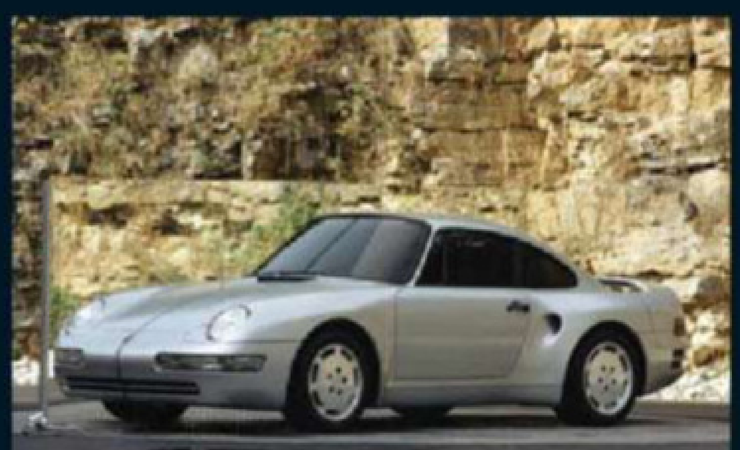
In some circles, the 964 Turbo is often mistakenly referred to as the 965. Much of the confusion here derives from the 959, the 1988 supercar priced at DM420,000, which was the preserve of the superstars and elite sportsmen and women of the time. Porsche, however, wanted to explore the possibilities of making this technological masterpiece more affordable, and so work commenced on a smaller, cheaper model.

The internal production code 965 thus refers to a stillborn experimental 911 that was produced in the mid to late Eighties and fitted with a rear-mounted V8 engine. There is no shortage of one-offs where various people over the years have tried to shoehorn a V8 into the back of a 911, but it so changes the character of the car as to render it a completely different beast.



This experimental 911/965 that the factory engineers toyed with was fitted with a V8 supplied by Audi, and as such, was a water-cooled engine. As a result, the experimental vehicle had to be heavily disguised when it was tested on public roads, hence the matt dark grey paint finish on the road-going experimental version. Based at the Porsche Museum, manager of Porsche's Historical Archives, Dieter Landenberger, explained that the intention was never to bring the experimental 965 V8-engined car to a production stage, but it was an interesting and valuable exercise that taught the company much.

Many different engines were tested in this experimental vehicle, but the one that resides in the car today is the Audi V8 unit. The 965 is one of Porsche's secret experimental cars and can be seen on display in the Porsche Museum.



The 965 was a shelved V8-engined experiment and not a 964 Turbo code







The opulence from the 3.3-litre 964 Turbo was carried over to the 3.6-litre variant, though the carbon-rimmed steering wheel here has in fact been sourced from a 993 Turbo S

the engine and gearbox were mounted on hydro-mounts, which combined the acoustic isolation function of a conventional rubber mount with balanced damping performance. These mounts ensured effective vibration isolation of the drive unit from the chassis.

Previously the reserve of the limited edition Turbo S, the three-piece Speedline aluminium 18-inch wheels made a fitting addition to the 3.6, clad with much wider 225/40 front and 265/35 rear rubber. Visible through the wheels were the same red four-pot brake calipers and ventilated/drilled discs back and front as used on the Turbo S. Moreover, the chassis of the 3.6 Turbo is 20mm lower than the earlier 3.3 model, and with the spring rates 12 per cent firmer, this reduced pitching, lift under acceleration and roll in cornering.

The body of the Turbo 3.6 was noticeably wider than the standard 964 by 25mm in order to accommodate the bigger tyres and increased track. The wider fenders and large rear spoiler gave the car a meaningful and powerful presence, while a smooth underbody ensured a more efficient aero shape, and accordingly the coefficient of drag, 0.35, was down slightly on its predecessor.

On-board comfort included air-conditioning, a computer with turbo boost indicator, electric seat adjustment, leather upholstery, headlamp washer, an alarm, airbag for driver and passenger, and either a radio/cassette player or radio/CD player. Lavish in specification, the Porsche press kit called it "what a sports car should be".

Standing in front of the 964 3.6 Turbo at German Sports Cars, owner Thomas Schmitz is bullish about the Porsche's need to readdress the earlier 964 Turbo: "With the 3.6 Turbo, the engine capacity was increased, the wheels were changed from 17-inch to 18-inch split rims, and the brake size was increased. But that was how it should have been from the beginning because the Turbo 2 964 model, the early 3.3-litre, was a bit disappointing with high fuel consumption. It was heavy and ultimately slower than the last version of the G-model 930 Turbo."

Even when walking around the 964 3.6 Turbo, it's immediately clear that it was made to perform. It oozes charm and character: the lowered suspension and ultra-wide stance, together with the muscular wheel arches, large tea tray spoiler, and extra wide rubber on those iconic 18-inch Speedline wheels just give the car unsurpassed presence. The window surrounds and door handles are finished in matt black, and Cup design exterior mirrors combine to give the Turbo 3.6 a sporty look from the outset. But does the business of performance match its superior aesthetics?

Although this particular example has covered around 62,000 kilometres, it is totally original in all aspects aside from the steering wheel, which is a half carbon wheel taken from a later 993 Turbo S. climbing inside the car, the electrically adjustable seats are comfortable and provide ample lateral support, with a luxurious feel given from the rich







leather trim. The car fires up instantly on the turn of the key, and while the interior and dashboard is simple by today's standards, the engine is as eager to stretch its legs today as it was when new.

At 21 years old, the 964 3.6 Turbo shows no signs of its age, as it soon gets into its stride, delivering an intoxicating burble from behind the rear seats. Heading for the open road gave us the opportunity to stir those 360 horses, with only a hint of turbo lag discernible on the squeeze of the loud pedal before power floods in. The noise from the flat six becomes more intense as the revs quickly rise, but there is no sense of straining from the motor. The Turbo just accelerates smoothly, purposefully, and with frankly frightening pace. Schmitz explains, "Whoever tells you there is simply no turbo lag is a liar. There is a turbo lag, which is a characteristic of the single turbo cars, but it's minimal". Learning to drive this car smoothly is therefore not a difficult task, and as you change up through the gears you quickly learn how to anticipate and adapt your throttle response to suit each change.

The overwhelming impression given by this car is that of being thoroughly civilised, predictable and smooth in its behaviour. It is a world away from the earlier Turbo models. The test drive was over all too quickly, and as we parked up, I was tempted to stay seated for a little longer, just to savour some more of that potent Nineties magic. This car had aroused in me the desire for the open road once again, a mountainous twisty route interspersed with fast, short straights to once feel that push in your back as the turbo spins up, delivering that unmistakable rush of pace. My dream was interrupted by the comments of Thomas from outside the car. "That was great, wasn't it?" he enthused.

All good things have to come to an end though, and in a way the 964 Turbo 3.6 represented the end of an era, being the last of the mono-turbo 911s with rear-wheel drive. The 964 3.6 Turbo represents a marked improvement over the 3.3-litre variant in terms of performance – and its sophistication in delivering that performance. Twinned with that presence on the road, the last forced-induction 964 makes for a formidable Turbo experience.

"It is thoroughly civilised, a world away from the earlier Turbo models"

Choose the right fit for YOUR car.





P204A (1965-68)
911/912

P204E (1968)
911/912



P204B (1969-73)
911/912

P204 (1974-89)
911/912

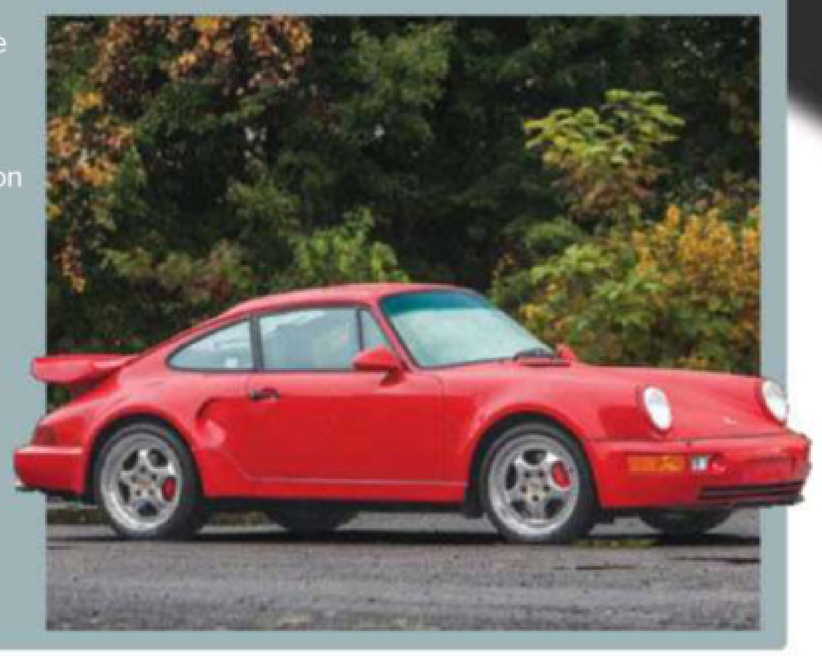
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964 TURBO S

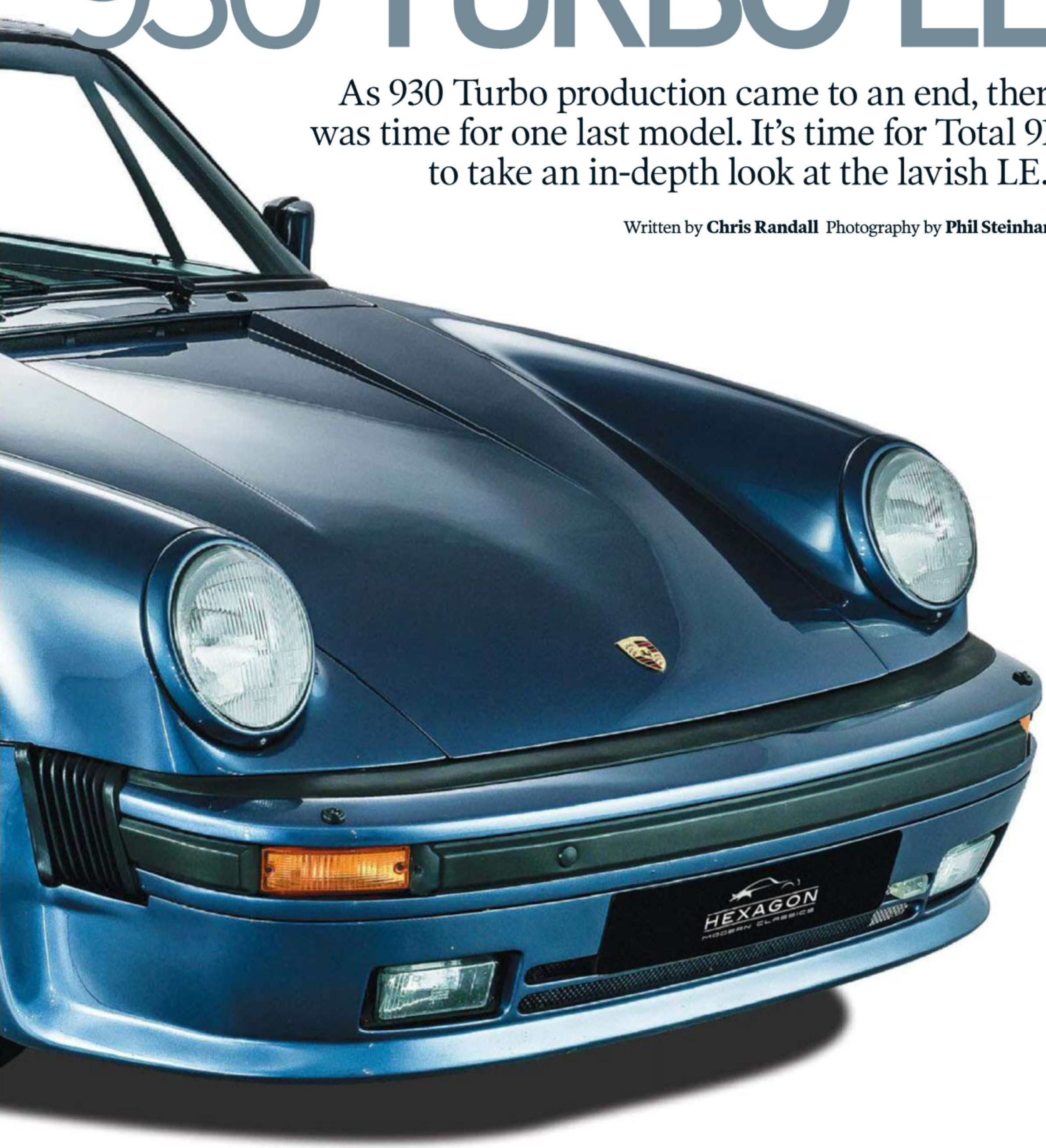
Never one to miss a trick with something special, Porsche repeated the 'limited edition' feat with the 964 Turbo platform. Introduced in 1992, just 80 examples of the superior Turbo S left the factory, but unlike the 930, the changes were a little more extensive. First off, it was put on a strict diet, with 180kg being shed thanks to lightweight panels and glass, and the removal of much of the luxury kit. Items such as electric windows and seats and air-conditioning were strictly off the menu. It looked the part on the outside too, benefitting from lower suspension, a purposeful body kit comprising front and rear spoilers from the Exclusive catalogue and air intakes in the rear wheel arches – oh, and gorgeous 18-inch Speedline rims. But even more serious changes were reserved for the hand-built engine, the addition of the X88 Power Kit bringing a larger turbo and valves, as well as tweaks to the ECU. The results were 381bhp and 490Nm of torque, 61bhp over the regular Turbo, and a 180mph top speed.



930 TURBO LE

As 930 Turbo production came to an end, there was time for one last model. It's time for Total 911 to take an in-depth look at the lavish LE...

Written by **Chris Randall** Photography by **Phil Steinhardt**



If you're a car enthusiast of a certain age then there's every chance your bedroom wall was adorned with a poster of the 911 Turbo, probably pinned right next to one of a white Lamborghini Countach. It's no surprise, of course, because the Turbo was a bona-fide supercar, its chunky Fuchs wheels and tea-tray spoiler more than capable of making a schoolboy's heart beat that little bit faster. But just like growing up, changes were afoot, and by 1989 a new generation of 911 was waiting in the wings. The 930 Turbo needed to go out on a high, which brings us to the car you see here: the very special LE.

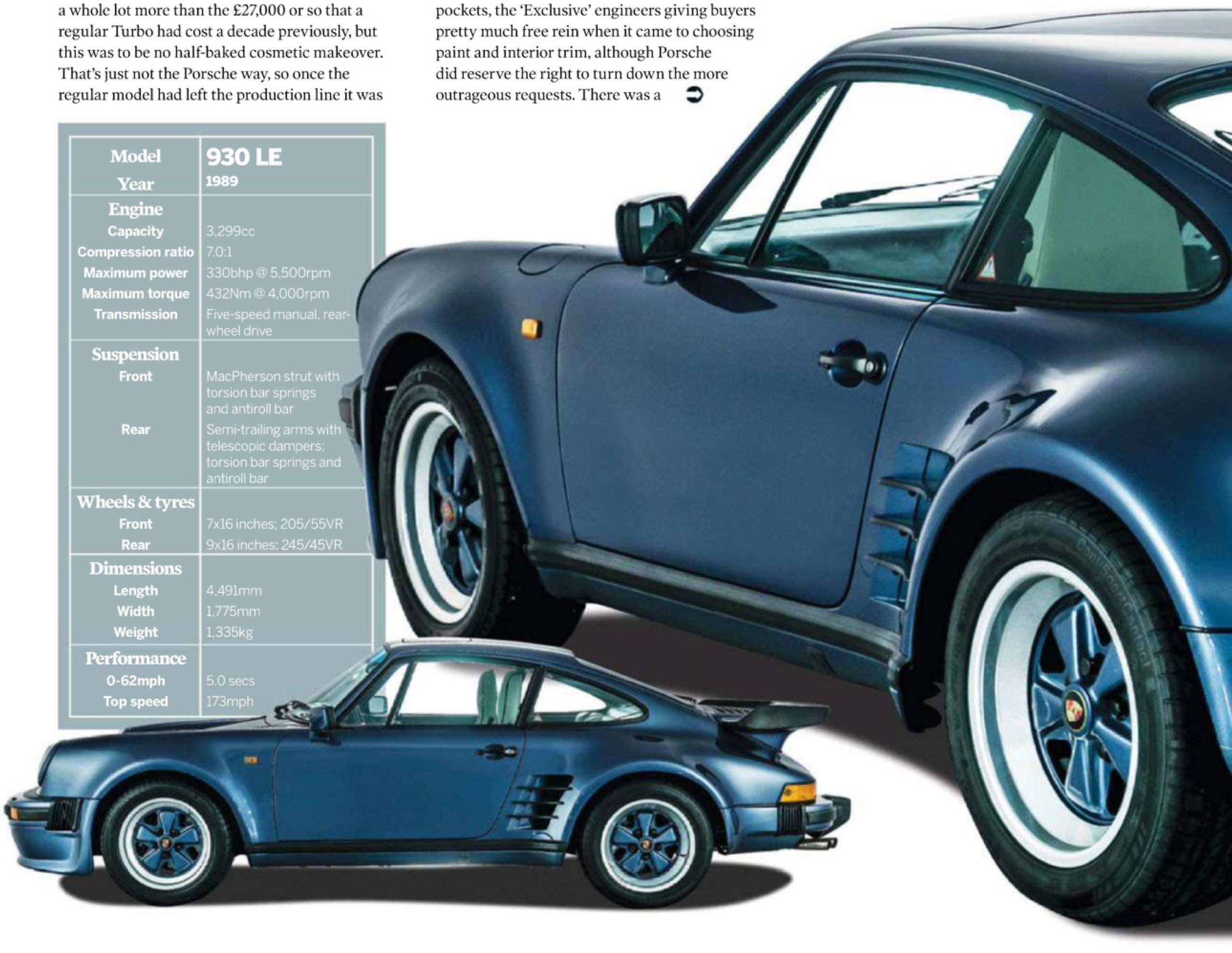
And for once, 'limited edition' meant just that. Just 50 examples were made – in Coupe form only, with each Porsche centre being allocated one car – and it arrived in March 1989, boasting a bold price tag of £84,492. Unsurprisingly, Porsche had no trouble shifting all 50 cars, just 14 of which were right-hand drive. That price was a whole lot more than the £27,000 or so that a regular Turbo had cost a decade previously, but this was to be no half-baked cosmetic makeover. That's just not the Porsche way, so once the regular model had left the production line it was handed over to the 'Exclusive' department, who stripped it down again and rebuilt it by hand, incorporating a host of unique upgrades, including any special requests from buyers.

Externally, it was still clearly a Turbo, and utilised the same galvanised body shell with a ten-year anti-corrosion warranty, but Porsche had taken things a bit further with the styling, starting at the front, where it now sported a deeper, more jutting air dam incorporating rectangular fog lamps and a single-slatted intake to feed air to the newly integrated oil cooler behind. The expansive rear wheel arches also benefitted from the straked air intakes found on the SE that were intended to direct air to the rear brakes, while dual exhaust outlets on each side poked from the rear apron, replacing the paired item of regular Turbos. The 'tea tray' spoiler remained though.

The colour palette was essentially standard Turbo, although there was plenty of scope for something different if you had deep enough pockets, the 'Exclusive' engineers giving buyers pretty much free rein when it came to choosing paint and interior trim, although Porsche did reserve the right to turn down the more outrageous requests. There was a ➲

> **THE TURBO WAS A BONA-FIDE SUPERCAR, ITS CHUNKY FUCHS WHEELS AND TEA-TRAY SPOILER MORE THAN CAPABLE OF MAKING A SCHOOLBOY'S HEART BEAT THAT LITTLE BIT FASTER. BUT JUST LIKE GROWING UP, CHANGES WERE AFOOT**

Model	930 LE
Year	1989
Engine	
Capacity	3,299cc
Compression ratio	7.0:1
Maximum power	330bhp @ 5,500rpm
Maximum torque	432Nm @ 4,000rpm
Transmission	Five-speed manual, rear-wheel drive
Suspension	
Front	MacPherson strut with torsion bar springs and antiroll bar
Rear	Semi-trailing arms with telescopic dampers; torsion bar springs and antiroll bar
Wheels & tyres	
Front	7x16 inches; 205/55VR
Rear	9x16 inches; 245/45VR
Dimensions	
Length	4,491mm
Width	1,775mm
Weight	1,335kg
Performance	
0-62mph	5.0 secs
Top speed	173mph











(Clockwise from top left): Power was boosted to 330bhp; badge under the whaletail was a neat touch; the whaletail spoiler remained, but the rear wiper was now standard; SE-style intakes fed air to the brakes





THE SPECIAL TURBO TIMELINE

1989
Essentially an SE without the slantnose, just 50 930 Limited Edition models were made, one for each OPC at the time. 330bhp and a special bodykit were standard.

1992
The addition of the X88 Powerkit boosted the 964 Turbo S engine to 381bhp, while weight was down by 180kg. It was extremely fast as a result, and just 80 were made.

1998
The 993 Turbo S was the final model for the air-cooled generation. With 450bhp and a manual gearbox, it was very quick and luxurious, with a big spec and lashings of carbon inside.

2004
With PCCB brakes as standard, the 996 Turbo S also benefitted from larger turbos and tweaks to the ECU and intercoolers. 450bhp got it to 60mph in just 4.2 seconds.

2010
Put a deposit on a 918 Spyder and you got the opportunity to buy a matching 997 918 Edition. Green paint highlights and 530bhp featured, and yep, you've guessed it – just 918 were built.

2014
Porsche celebrated 40 years of Turbo this year with a 991 Turbo S GB Edition. Only available in the UK, all tweaks over a standard 991 Turbo S were cosmetic.



Lavish standard spec included electrically adjustable leather seats and power operation for the windows, mirrors, and sunroof; gold crests adorned the steering wheel and shorter gear lever, while the gold plaque celebrated 14 years of turbocharged 911s; Blaupunkt stereo was standard but many owners opted for the latest Eighties tech in the form of a CD player

hard-fought reputation to protect after all, and it's unlikely that lurid hues – outside or in – would have quite fitted the bill.

If you lifted the be-spoilered engine lid, you would find the expected M930/60 3.3-litre flat six nestling beneath the air-to-air intercooler, fitted with Bosch K-Jetronic fuel injection and a single KKK turbocharger. Featuring an aluminium alloy crankcase, Nikasil-coated cylinder bores and a single camshaft per bank, the unit was more than capable of handling the 300bhp that was possessed by the regular Turbo. But this most special of 930s needed a little more to separate it from the pack, so it received the same revisions as the flatnose SE, namely a small increase in boost pressure, more aggressive camshaft profiles along with a slightly larger intercooler, and a freer flowing exhaust that saw power lifted to 330bhp at the same 5,500rpm, with torque peaking at 432Nm at 4,000rpm.

The compression ratio of 7.0:1 remained unchanged, as did the 6,700rpm red line. The result was stunning pace, with the top speed rated at 173mph and the 0-60mph sprint despatched in a claimed five seconds. This was partly down to the relatively lithe 1,335 kilogram curb weight, but it's a quick speed by any measure, and by way of perspective that's 997 Carrera pace for the same accelerative benchmark.

Playing a part in helping to get that power to the road was the five-speed G50 gearbox and hydraulically operated clutch that became common to all Turbos from 1988, in addition to a standard limited-slip differential. Incidentally, that gearbox had been a very welcome addition to the Turbo range, having already been available on normally aspirated Carreras since the previous year, the new unit ridding the 911 of the slightly recalcitrant four-speed gear change. Not only that, but the wider spread of ratios vastly improved driveability, as well as having the effect of helping to minimise the lag that had since added a layer of trickiness to the whole experience.

However, unlike today's iterations with their driver-protecting, acronym-laden drivelines, this still wasn't a 911 to be trifled with. There was still a substantial amount of weight slung behind the rear wheels – weight distribution was 39/61 per cent front to rear – and the job of keeping things under some semblance of control fell to the same torsion bar-sprung independent suspension found beneath regular Turbos. With MacPherson struts up front and semi-trailing arms aft, it was a familiar sight beneath 911s, although it had recently benefitted from improvements that included fatter antiroll bars and firmer dampers. The changes brought useful reductions in body roll, as well as less pitch and dive.

Stopping duties were the responsibility of the same servo-assisted – although ABS-free





“THE RESULT WAS STUNNING PACE, WITH THE TOP SPEED RATED AT 173MPH AND THE 0-60MPH SPRINT DESPATCHED IN A CLAIMED FIVE SECONDS”



BUYING TIPS

It's 25 years old, so caution is going to be needed. Regular usage is always good for older examples, and isn't a problem as long as it's been religiously maintained, but even cars that have been stored away in collections may need re-commissioning. Take great care either way, as restoration bills will be large.

- **Provenance:** Originality is everything with limited-number cars like these, and be sure you're buying the real thing. An OPC or specialist can decipher the identification plate for peace of mind.
- **Corrosion:** Rot affects a number of areas, and is costly to put right. The wings, sills and boot floor are key areas, but getting it on a ramp is advisable.
- **Engines:** The flat six can suffer from broken cylinder head studs and oil leaks. Also, make sure the turbo is healthy, with no signs of blue exhaust smoke.
- **Heating:** Corroded heat exchangers are a common issue, and renewing a complete system – including exhaust – will cost comfortably in excess of £2,000.
- **Low mileage:** Lack of use can cause issues, including binding brake calipers. A specialist overhaul will be needed, so budget accordingly.
- **Interiors:** Watch out for non-functioning electrics and broken air-con, which are costly to repair. Make sure the leather trim is undamaged and that LE-specific badging is present and correct.

– brakes, along with cross-drilled and ventilated discs front and rear of 304mm and 309mm diameter respectively. These were clamped by four-piston alloy calipers, while the deliciously feelsome unassisted rack and pinion steering also remained, although the LE now rolled on 16-inch Fuchs alloys wrapped at the rear with broad 245-section rubber. Additionally, colour co-ordinated wheel centres were a no-cost option.

So far so special then, but Porsche hadn't forgotten about the inside when it came to this particular 930. In fact, even for those that hadn't been tempted by personalised trim options, there was a raft of unique touches included to remind owners that they had purchased something considered most lavish with their nigh-on £85,000. The heavily bolstered sports seats were electrically adjustable and came smothered in top-quality leather, and there was a smattering of hide on the handbrake lever and gear knob. The latter sat atop a shortened, less wand-like lever, and the knob itself was embellished with a gold Porsche crest, as indeed was the boss of the three-spoke steering wheel.

Another addition unique to the LE was a gold plaque that sat at the base of the centre console, proudly marking the Turbo's 14-year lifespan, while the rich standard equipment list included Porsche's 'System I' remote-control alarm system, electric windows and central locking along with air-conditioning and a top-tinted windscreen. Not that most buyers stopped there of course, many dipping into the options catalogue to add extras, such as an electric sunroof and mirrors and seat heaters.

Let's face it: if you were going to spend this sort of money on such a special 911, why not blow your sizeable bonus and make it as lavish as possible? Aural enjoyment was provided by a Blaupunkt Berlin radio/cassette player as standard, although those that considered themselves at the cutting edge of late-Eighties audio could choose a radio/CD player as a no-cost option – perfect for listening to your Dire Straits CD as you made big-money deals on the in-car phone.

Eighties clichés aside, though, this was a very special 930 Turbo indeed, and one that was more than fitting in the way it represented a celebration of the end of an era-defining supercar. The cars that followed might not quite have been pin-up material, but turbocharging was now firmly routed into part of the fabled 911 legend, helping to cement its status as a model that us Porsche enthusiasts have looked forward to ever since. The LE was special in 1989 and it's arguably even more special now thanks to its provenance and that lavish spec. 911

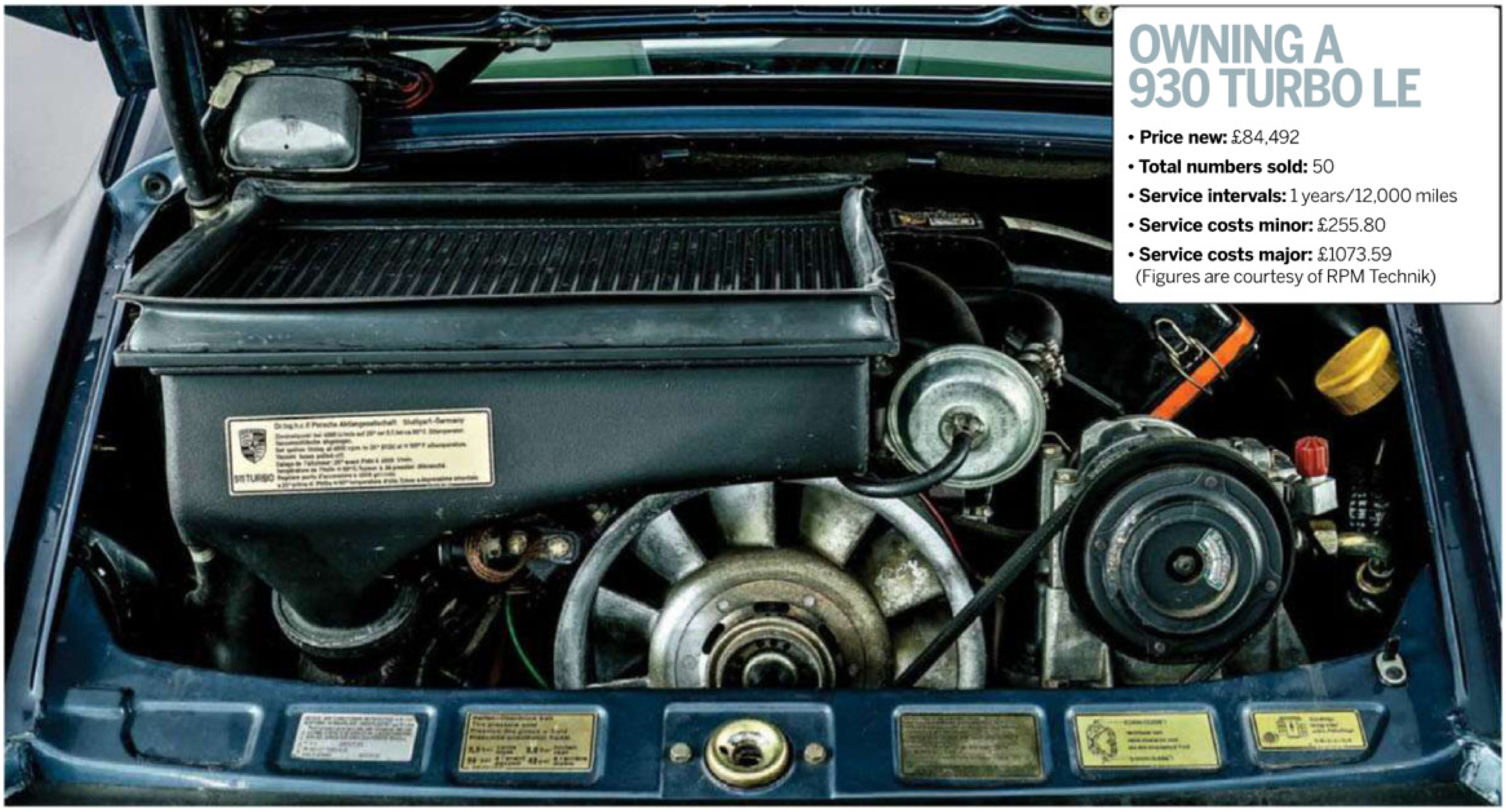
> **THIS WAS A VERY SPECIAL 930 TURBO, REPRESENTING A CELEBRATION OF THE END OF ONE OF THE ERA-DEFINING SUPERCARS**



SPECIALIST VIEW

"Like many older 911s the 930 Turbo is already sought after, so a model like the LE with just 50 made is always going to be ultra-desirable. They certainly don't hang around for long when they do come up for sale and values are already running at around £30,000 more than the regular Turbo. I'd certainly expect this gap to grow in the future, so the LE offers good investment potential, and without doubt this is one 911 to keep a very close eye on in the coming years."

Jonathan Franklin, Hexagon



OWNING A 930 TURBO LE

- **Price new:** £84,492
- **Total numbers sold:** 50
- **Service intervals:** 1 years/12,000 miles
- **Service costs minor:** £255.80
- **Service costs major:** £1073.59

(Figures are courtesy of RPM Technik)



"I'VE GOT ONE"



"The 911 LE has given me tremendous pleasure over the past year. We took the car to Le Mans Classic in June and I was fortunate enough to participate in a lap of the circuit to celebrate 40 years of Turbo. The car was fantastic on the circuit's long straights and I was able to exercise the terrific thrust and punch that this model is renowned for.

The 330bhp and extra gear that this model possesses over pre-'88 930s means that fast cruising, especially on foreign roads, is an absolute pleasure. Being one of just 50 models produced, its exclusivity is often admired by Porsche aficionados too."

David Newton

Thanks

This model is available for immediate inspection at Hexagon Modern Classic's London showroom. For more information on the 930 LE, call +44(0)2072253388 or visit hexagonmodernclassics.com.

996 v 997 CUP

There is a part of all of us that yearns to be racers. If your budget allows, Porsche's Cup cars from 2000 onwards could make for the ultimate track weapon – but which is better?

Written by **Wilhelm Lutjeharms** Photography by **Charles Russell**



The 911 Cup race cars have the front-engined 944 Turbo Cup to thank for their name. Today, we take 911 Cup cars for granted. We can watch them race almost every weekend, on almost every continent. This idea of an official Porsche car sold to customers for one-make racing started in 1990 with the 964, but fast-forward nearly 25 years and Porsche's 911 Cup is the best-selling series race car, a catalyst for over 30,000 race victories for the 911 at large.

However, being a 911, enthusiasts and privateers are quick to snap them up, and not only for competitions. After a top-end competitive lifespan of only a few seasons, competitive enthusiasts get behind the wheel and use these Cup cars for track toys. The most affordable of these is the 996 Cup car, while the more complicated – but faster – 997 Cup cars have decreased in price in recent seasons, perhaps as a result of the 991 Cup cars now being filtered into Carrera Cup competition.

Shortly after the Sun's first rays fell on Phakisa Freeway (the native Sotho language's meaning for hurry up) in South Africa's Free State province, we found ourselves on track with perfect examples of both vehicles. From previous experience, these cars are nothing like the road cars. Andrew Culbert, owner and racer of the 2009 997 Cup car, sums it up perfectly: "I once had my Cup car and a 997 GT3 RS at a Porsche trackday. After three laps I parked the GT3. It is simply too much money if something goes wrong, and secondly, there is nothing like a race car. Once you've driven a Cup car, it is very hard to go back to a road car."

Jeeva Moodley, owner of the 2003 996 Cup car, shares Andrew's opinion: "I've raced with my GT3 road car here before, but the Cup car is something else. You simply don't enjoy the GT3 as much as the Cup car. The harder you drive these race cars, the better they perform."

I asked Jeeva about the jump from a road car such as a GT3 to the race car. His answer comes as a bit of a surprise: "I think it is much easier. In the road car you carry a lot more weight, so if something goes wrong you are in trouble. All the tension of late braking and the accompanying stress are gone. I actually don't think I will be comfortable again in a road car on a circuit."

The 996 is clearly the more simplistic car. It starts with the manual six-speed gearbox, while there is little in terms of electronic gadgetry compared to the 997. The main challenge with 997s is the sequential transmission, of which Andrew has a lot of experience. He has raced competitively (and won) in South Africa and overseas. "The problem with the sequential 'box is if you damage it, it is very expensive to fix. In Europe you might find more people running 997s as track cars, because there are more teams and companies readily at hand to support them."

Running costs are another expense future buyers should consider. As expected, it depends on how hard you drive or race your car. At race pace, slicks last about an hour and a half. Even if you don't drive that hard, there is also the heat cycles of slicks to consider. A few shorter stints will always be more detrimental to the tyres than a single, longer one.

Gearboxes, both manual and sequential, will need some level of overhaul at around 35 to 40 hours, and engines around 60 to 70 hours (the latter costing anything from £7,000). Pads last about three race weekends, and discs around five weekends. You need to keep an eye on the drilled discs though; if a crack runs from one hole to other, you will need to replace them. In South Africa, Andrew and Jeeva use Hankooks, while Michelins are Andrew's preferred choice in Europe. From his experience, the Michelins heat up quicker and deteriorate more gradually than the Hankooks.

Obviously, you need much deeper pockets to run one of these cars than simply taking your GT3 and purchasing a set of semi-slicks. But get behind the wheel, and the additional cost slowly starts to fade in contrast to the fun of the car. Ear plugs in ➲









and helmet on, I opened the featherlight door to the 996. You soon realise there is little inside compared to a GT3 road car. The stripped interior is pure race car, while the full roll cage takes care of any lingering road-biased thoughts. The gear lever will look familiar to 996 Carrera or GT3 owners. The cross-bars in the door block your entrance, forcing you to put your right foot in the footwell, before you manoeuvre your body into the seat and pull your left leg into the cabin.

In a time when road and race cars are adorned with sophisticated double-clutch and automatic transmissions, this Cup car's gear lever is welcome. There is a simple instrumentation layout that doesn't deflect your attention from the job at hand.

Click the quick-release, Alcantara-covered steering wheel in place and turn the key, and the engine catches and the raw engine sound enters the cabin. Pull away, and within the first few yards you discover the car's racing intentions.

Heading out of the pits, I took the first lap and a half relatively slow to warm the tyres and brakes, just to get used to the car and the way it responds. As I guided the car through the corners, I was astonished at the lightness and how this is transmitted through the seat and controls. There is no body roll through corners or dipping of the nose under braking. If you are used to road cars, you need to readjust your mind in terms of braking points. As expected, the steering is super sensitive, and points the nose in your required direction.

The challenge is to execute each gearshift perfectly (which is easy, as the gearbox is as slick and direct as a 996 GT3 road car) by blipping the throttle correctly for each downshift. Even if you haven't yet mastered this, it should come naturally after a while. The highlight in left-hand-drive vehicles such as these is the manoeuvre of the gear lever from third to second gear. You simply pull the lever towards you as it slips across the gate.

The engine prefers speeds of over 3,000rpm, and it's really only at around 4,000rpm that it comes alive, singing all the way to 7,000rpm. It's raw and visceral, but not as intense as the 997 at full chat.

As I entered the pits, the wider 997 Cup's body looks the part. Five years of development has resulted in a few visual upgrades, but from behind the wheel the differences are even more notable. The tall gear lever for the sequential transmission and digital display are the first giveaways, followed by the control panel for features such as the Motec race data system.

The steering wheel feels similar to that of the 996, but your view, and access to information and switches, has gone up a notch. The 997's seat allows for less movement, with more support around the head area. You can also attach a Hans device for an additional level of safety.

Exiting the pits, the increase in power and torque is evident. The car is quicker to react, and the engine delivers its power with a new level of enthusiasm. The tyres and brakes take time to warm up, but as we built up speed, the grip and pace of the car shows. Once warmed up, brake markers can be moved. The speed the car carries through a corner is astonishing, especially if you limit the amount you scrub off before a corner – although that is easier said than done.

The intense, loud mechanical mix of the engine and exhaust note get the adrenaline flowing as much as the lateral g-forces that the car generates. A simple tug of the gear lever at 8,000rpm marks the upshifts, while changing down requires the precise input of the clutch. Get these formulas wrong, and you might have to fork out a hefty bill.

As a package, the 997 is a more serious piece of machinery. You will need to put in more effort and work before and after every track outing compared to the 996. However, there is more to play with, and you will have one of best race cars of recent years.

The 996 is a more logical first step into a serious 911 track car. The confidence of both owners in the engine and the manual gearbox illustrated that it will tick most boxes for drivers who want to experience one of the ultimate 911s on track without breaking the bank.

As the current 991 Cup car takes the level of technology to an entirely new level, Porsche race cars, like its road-car siblings, are getting more complicated, which leads to higher running costs. Maybe now is the perfect time for that sheer purist Cup car you have always promised yourself.

Market watch: buying a 911 Cup

The price of a Cup car will depend on the amount of hours its engine, transmission and suspension have done and to what level it has been maintained. 997 Cup cars (built from 2006) will set you back anything from £50,000 to £90,000. The more affordable 996 Cup cars range from £35,000 to around £50,000. These are guideline figures obtained from some of the most respected sellers of Porsche Cup cars including Parr (parr-uk.co.uk) and Specialists Cars of Malton (specialistcarsltd.co.uk).

The best way to approach sourcing a good Cup car is to speak with specialists and explain what you need in terms of requirements. They could potentially source a car, or at least point you in the right direction of good cars they've known in racing circles for a long time (including cars abroad). Always remember to have the chassis checked out for any major damage, and verify the chassis, roll cage, engine and gearbox numbers to get a better idea of its history.







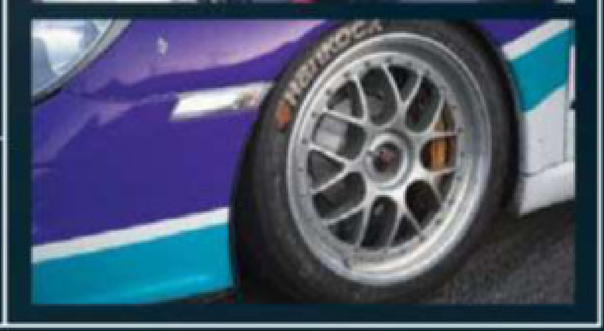


996 Cup	Model Year	997 Cup
2004		2009
	Engine	
3,598cc	Capacity	3,598cc
11.8:1	Compression ratio	11.8:1
390bhp @ 7,300rpm	Maximum power	400bhp @ 7,300rpm
400Nm @ 6,300rpm	Maximum torque	420Nm @ 6,500rpm
G96/92 six-speed manual, rear-wheel drive	Transmission	G97/63 six-speed sequential, rear-wheel drive
	Suspension	
MacPherson struts; adjustable camber; antiroll bar (five positions)	Front	MacPherson struts, coil springs; antiroll bar
Multi-link; antiroll bar (four positions)	Rear	Multi-link; dual coil springs; antiroll bar
	Wheels & tyres	
9x18-inch centrelocks; 24/64-18 Hankooks	Front	9.5x18-inch centrelocks; 25/64-18 Hankooks
11x18-inch centrelocks; 27/68-18 Hankooks	Rear	12x18-inch centrelocks; 30/68-18 Hankooks
	Dimensions	
4,430mm	Length	4,460mm
1,775mm	Width	1,808mm
1,150 kg	Weight	1,133kg
	Performance	
4.0 secs	0-62mph	not tested
170mph (depending on gearing)	Top speed	not tested











Servicing a 911 Cup

These agile cars need to be perfectly set up for each specific track they encounter, including camber and tow settings for the suspension and even tweaks to gearbox ratios. Therefore a crew, even if it only consists of two mechanics, will be necessary to assist a driver before, during and after a serious track day or club race.

Maintenance of the Cup car, particularly the more complicated 997, will require technicians who have the correct tooling and knowledge. Tyres are likely to be one of your major expenses: the harder you drive, the better performance you'll get, but the caveat is they'll wear faster - and these tyres have a limited amount of heat cycles.

So, in short, you're going to need to enlist in professional help to get the best from a Cup car, but fortunately there are plenty of such people at hand. In the UK, Parr offer pre-track day preparations and suspension set up, followed by track support and storage. Driver tuition can also be arranged to get the most from this thoroughbred 911.

SOFT-TOP GRAND TOURER

The 991 Turbo Cabriolet is the latest and greatest in Porsche's esteemed lineage of open-top cruisers. Total 911 samples one from the UK en route to Telgte, Germany...

Written by **Glen Smale** Photography by **Ali Cusick**

The brief from the Editor was simple: drive from the UK to Telgte, near Münster in Germany, to photograph four rare Porsche 911s and return home, all in four days. With two of those days spent driving across Europe to and from our destinations, this meant speed and efficiency was on the agenda, so we turned to an able 911 with these two prerequisites built into its DNA.

Our trip began at Porsche GB's HQ in Reading, where we collected the 991 Turbo Cabriolet, a swift soft-top offering that was to serve as much as a road-honed bullet as it was to provide an amicably comfortable ride. And, as Britain wallowed in what weather experts said was our driest September on record, what better time to indulge in the exuberance of a flat six with the added theatre brought about by a Cabriolet?

With the Sun promising to burn through the early morning mist, we set off for Dover, making good time for our midday ferry to mainland Europe. Joining me in the cockpit of the soft-topped Turbo was Ali Cusick, our award-winning photographer who naturally comes ready for such ventures with a substantial amount of equipment. It proved quite a task getting three tripods, lights, lenses, four camera bags and some personal cases into the front luggage compartment, but manage we did – despite no longer having the extra stowage space behind the rear seats as in the 991 Turbo Coupe, too. More impressive though was the Cabriolet's feel on the road: with the roof up, it assumed much of the Coupe's character, despite being some 70 kilograms heavier thanks to that roof system.

Once on the asphalt in mainland Europe, the 3.8-litre Turbo Cabriolet whisked us along the E34 with as much ease as it did comfort. Fitted with the compulsory seven-speed PDK transmission, the drop-top cruiser returned 32mpg, an impressive feat considering it uses 520bhp to accelerate 1,665 kilograms of supercar along the road. What's more, power in the Turbo Cabriolet, just like its Coupe sibling, is relentless – there's almost no lag evident as you put your foot down and duly take off to chase the horizon. With the layered roof up (reworked for the 991 generation to consist of three separate



PDK makes driving around town easy, while pushing on with the roof down still allows for a serene experience despite the audacious power

Model	991 Turbo Cabriolet
Year	2014
Engine	
Capacity	3,800cc
Compression ratio	9.8:1
Maximum power	520bhp @ 6,000rpm
Maximum torque	660Nm @ 1,950-5,000rpm
Transmission	Seven-speed PDK
Suspension	
Front	Strut suspension (MacPherson type, Porsche optimised) with wheels independently suspended by transverse links, longitudinal links and struts; cylindrical coil springs with internal dampers; electromechanical power steering
Rear	Multi-link suspension with wheels independently suspended on five links; cylindrical coil springs with coaxial internal dampers; active rear-wheel steering
Wheels & tyres	
Front	8.5x20-inch; 245/35ZR20
Rear	11x20-inch; 305/30ZR20
Dimensions	
Length	4,506mm
Width	1,880mm
Height	1,292mm
Weight	1,665kg
Performance	
0-62mph	3.4 seconds (3.2 secs in Sport Plus mode)
Top speed	195mph









With the roof down, the boosting flat six gave a delightful soundtrack, while with the roof up, the Cab assumed the able Grand Tourer personality of the Coupe

folding plates covering the roofline) tyre noise was no more evident than the usual 911 standard on the autobahn, and the car felt reassuringly like the tin-topped Turbo that has become a **Total 911** favourite in the last year.

However, a fault raised its head during the early stages of our European journey when a warning light advised us that the front/rear active aerodynamics would not deploy. Blighted by an errant sensor rather than there being a fault with the mechanism itself, this is the second time we've piloted a 991 Turbo with such a problem – ironically, after around 11,000 miles into the life of the car, too.

Of course, driving the Turbo Cabriolet is all about top-down motoring – cruising with the roof down around town is made easy, and can be done on the move. The Cabriolet really does take that all-weather feel to the extreme, being able to drop the roof in just 13 seconds at up to 31mph. Folding the roof down (or up) is done by holding down the appropriately allocated button in the middle of the centre console, with another button quickly erecting the all-important draught screen behind the driver and passenger. Much like in the Carrera Cabriolet, this wind deflector does wonders to reduce wind turbulence in the cabin, even under the more extreme acceleration and top-end speed of the Turbo. It allowed us to enjoy the aural delights of our flat six when cruising in Germany while keeping that all-important remit of relative serenity at the wheel.

There is no getting away from the fact that today's 911 in full automatic mode is just so easy to use. There was a time, not so long ago, that the thought of a high-performance sports car being fitted with an auto 'box seemed wrong, but having been born and perfected on the race circuits of the world, the Porsche PDK gearbox is a superb unit that's as fun as it is practical. Crucially, this is no different in the Turbo Cabriolet, where PDK proved to be a more than capable ally through heavy rush-hour traffic, taking away much of the tedious pedal work usually needed by the driver, while providing a clean, crisp sprint when Europe's more open driving routes permitted. While the 991 Turbo Cabriolet carries a hefty weight to it, the sheer brute force on offer at a squeeze of the right foot puts paid to any early quips of the weight being overtly detrimental to performance.

Despite Porsche's utter audacity in taking the roof away from a car with a 195mph top speed, the Turbo Cabriolet is everything a 911 Porsche should be, as demonstrated through our trip across Europe. At £129,223 without extras it isn't cheap, but it is a wonderfully perfected car, capable of pleasing in a plethora of conditions and environments.

911 Turbo Cabriolet evolution

The 3.3-litre 930 was the first model released by Porsche in Cabriolet form, giving buyers an alternative option to the ever-popular Coupe variant. The first Turbo Cabriolet was offered with either a manually operated folding roof or, as a no-cost option, an electrically operated system that most buyers went for. Despite being fitted with a single turbocharger with single intercooler, the 1987 Turbo Cabriolet boasted a top speed of 161mph. 918 units were sold.



The 1987 Turbo Cabriolet was a first for Porsche

While there was no Cabriolet option for the turn of the 964 Turbo, Porsche built a limited number of just six 964 Turbo Cabriolet cars through their Exclusive programme for the 1992 model year. The 964 Turbo Cabriolet actually offered increased performance with 0-62mph acceleration of 4.7 seconds and a top speed of 174mph. Reworked cylinder heads, sportier cams and modified intake manifolds saw power boosted to 355bhp for the rare forced-induction 964 soft-top.

The 993 Turbo Cabriolet was again only built by the Porsche Exclusive department, and a short run of just 14 cars were produced. Engine capacity was increased to 3.6 litres (now with twin turbochargers, don't forget) and marginally increased power at 360bhp. Despite this, top-end speed was unaltered.

Porsche chose the first water-cooled Turbo in the 996 as the perfect opportunity to bring back the Turbo Cabriolet from its mainstream production hiatus, though customers had to wait until the very end of the 996 era for it, in 2005. Like the 996 Carrera Cabriolet offered at the time, an aluminium hardtop and stand was included with the Turbo Cabriolet package.



The 996 marked a welcome return for the Turbo Cab

For the 997 generation of 911 Turbo, Porsche released the Cabriolet version much sooner, making it available just two years into 997 production. Launched at the 2008 Paris Motor Show, the 997 was fitted with a 3.6-litre unit now uprated to 480bhp. Then, at the 2009 Frankfurt Motor Show, the 3.8-litre model was introduced which boasted an output of 500bhp, with fuel consumption also improving by 16 per cent. The Cabriolet's acceleration from 0-62mph was now a rapid 3.8 seconds, while the Sport Plus feature (new to the 997 Turbo) dropped this by another two and a half tenths – not bad for a 'boulevard cruiser'.



The Gen2 997 Turbo Cab boasted 500bhp

KW competition



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OLAF MANTHEY
CEO Manthey Racing, 5-times overall winner 24h race Nürburgring

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Jochen Mass

Despite being a softly spoken man, there's a deep seriousness that underlies Jochen Mass's jocular personality. Total 911 takes a pew with the unrelenting racer to discuss his decorated career on the track

Written by **Johnny Tipler**
Photography by **Antony Fraser** & **Porsche AG**



Spanning almost five decades so far, Jochen Mass's racing career will never stop. From European Touring Car champ with Ford in 1972, to F1 with March, Surtees, Arrows and McLaren (just one GP win, Spain, 1975), he's had a good many Porsche wins too. With Jacky Ickx he was World Sportscar Champion in 1976 with the 936, and while outright Le Mans success eluded him till '89 with Sauber-Mercedes' C9, he did win the German Sportscar Championship with Porsche in 1985.

Other major career successes included the 1978 Silverstone 1,000kms in the 935 'Moby Dick', the '82 Fuji 6-Hours, Spa 1,000kms in '83, Silverstone and Mosport 1,000kms in '84, Silverstone and Mugello 1,000kms in '85 (with Jacky Ickx) and the '87 Sebring 12 Hours. He also entered Carrera Cup races in the early Nineties in a 993. Jochen is an indefatigable racer, and at 68 he's still on the historic race scene.

A perennial on the Mille Miglia, he's tackled the take-no-prisoners Carrera Panamericana as well as classic retro events like Nürburgring Old Timer, Spa Six Hours and Goodwood Revival, plus softer options such as Ennstal Classic and Tour Auto. He's still out there on the historic circuit, racing his heart out, and we managed to grab a tea with him in between the events filling his busy schedule.

CAREER HIGHLIGHTS

- **1972** ETCC Champion in Ford 'Köln' 2600 Capri.
- **1975** Spanish Grand Prix (Barcelona) winner in Marlboro McLaren-Ford.
- **1976** World Sportscar Champion (with Jacky Ickx) in Porsche 936.
- **1978** 1st at Silverstone 1,000kms in 935 'Moby Dick' with Jacky Ickx.
- **1982** 2nd at Le Mans with Vern Schuppan in Rothmans Porsche 956.
- **1989** 1st at Le Mans 24-Hours for Sauber-Mercedes.

Jochen, you started off racing an Alfa Romeo Giulia Super in Germany in 1968...

Yes, I started off with an Alfa Romeo. Coming straight from the navy I didn't have any money, and I needed somebody who would support me, so I knocked on a dealer's door and said, 'Can I work for you, I want to drive one day'. So I worked for him at shows and raced at the weekend. It's a humbling experience, but a good one, because you don't have the arrogance to begin with.

You were European Touring Car Champion in 1972 with Ford Köln Capri, and that seems to have been much more of a devil-may-care, swashbuckling era.

Yeah, it was a bit like that, of course, because you're younger and fresher and you really love it, the touring cars and the competition between the BMWs and Ford. Don't forget there were really only two makes in it, but still it was very interesting because we had all the good F1 guys driving then, Stewart, Scheckter, Peterson, Stuck and Fittipaldi. It was great, it was fantastic and that's why I think it was also very much appealing to the public.

You were a Porsche factory driver from 1975 to 1987. Tell me about the switch from Ford touring cars to driving the Porsche 935 and 936. How did that come about?

Because they asked me. And Porsche was Porsche, you know, running World Championship endurance cars. Ford was Ford, who had touring cars

Jochen Mass has piloted a huge variety of sports and race cars over the years, from the famous 936 in 1976 as a Porsche works driver (top) to spirited runs today up the hill at Goodwood (above)







Mass was a Porsche works driver for 12 years but today he drives for the other Stuttgart firm at automotive events

which I had driven from '70 to '75 and you cannot stick forever in the same situation. So when Porsche asked me to drive for them I was quite overwhelmed and I quite happily signed.

And they immediately put you in a 936?
A 935 or 936, because I think in '75 they had this black carbon-fibre 936 that we drove in a few small races, and that was quite good. Then we had the Martini sponsor in '76.

Tell us a little bit more about driving the 935.
Sure, they were fabulous cars, except that the 935 was a heavy beast. It was a very effective car, but it never had the same charm as the later ones. For me, the sports cars – the 956 and the 962 – were fabulous machines.

As well as the 935 you also won with the 'Moby Dick' 935 at Mount Fuji.
Yes, the 'Moby Dick' was a spaceframe car and a fabulous race machine, but you know I never liked the normal 935s that much because it was sort of like manoeuvring a hammer: you were the handle and the engine was the hammerhead! But I respected them and we won a lot of races. It wasn't a pleasing sort of car where you went in with a lot of joy, it was more like a duty. The 936 was nicer; it was an open sports car and it was good. At Hockenheim if you had it right with the setup you could take the bend after the long straight flat, and actually it took some convincing to take it flat, but eventually I took it flat every lap. But when I drove the 956 there in '82, I said 'where's the corner? Oh, I've just gone through it!' It was that different. The car was so good it was a joke, it was fabulous, and there were no more corners. Most of them were flat anyway, because of the efficiency of the ground-effect aerodynamics. Tremendous. I drove the 936 in '81 at the Silverstone 1,000kms, and I led the first lap, but there was so much water at Abbey. As I came under the bridge I was doing 186mph, and I hit the sleepers on the left of the guard-rail – the car disintegrated and it looked most spectacular because everything flew off. It looked good but didn't hurt at all.

You had many podiums with the 936 and 956 and should have really won Le Mans a few times...
We had small silly things go wrong. Once with the 936 the car was running on only five cylinders at the start, so I came in and I said there's a spark plug out on the right. It had to be on the right because the temperature gauge was showing cooler temperatures on the right so the unit was one cylinder not working. They said: 'Ah, it can't be', and sent me off again. I came in again and I said it's got to be the plug, dammit, and eventually they took the plugs out and one was broken, so I lost a lap and we finished a lap down on the winning car. Another time Jacky (co-driver Ickx) once had a mishap. He was hit by somebody on the first lap at the end of the long Hunaudieres straight: he spun, and then we had a water leak and I told them the temperature was going up and the pressure was down. They said: 'No problem, put some radiator sealant in it' and that promptly dissolved on the gaskets because it was not compatible with the rest of the material. So then it got worse and the following day we still had the leak, and after a pit stop the car wouldn't start anyway. With Jacky, I had no misgivings about the 24 Hours, but I had misgivings about the safety at Le Mans because the arrogance of the Automobile Club de l'Ouest was just mind-blowing. The pits were atrocious and the sheer danger was the principal of negligence, which I disliked at Le Mans. When we drove it there were still no chicanes, which was in fact a lot better because now it's inviting a lot more accidents than before. But the Porsches were great cars in Le Mans and I liked it while I was doing it. I was always of the disposition: 'If you don't like it, and if you think it's wrong, don't do it.'

So which is your favourite Porsche?
The car that was the biggest treat for me, over most of all the cars I've driven, was the 917/30, the Can-Am Spyder. That car was just unbelievable because of the sheer simplicity of it – of running and driving it. You slip into the cockpit, you turn the key and you press a button and it just starts like a Volkswagen. It runs 1,000bhp though, which makes a difference. I saw what the car would be with a solid rear drive, and I looked at it with a bit of a suspicious eye because I thought it might understeer like a pig, what with the damp and the slicks. So you know I swung it around the bottom corner with a bit of opposite lock to warm up the rear tyres, but that doesn't help the fronts much. But then after the start you go







Mass is full of praise for the work of Norbert Singer on the Porsche racers of the Seventies, Eighties and Nineties

from first, second and then there's a bit of turbo lag as it hesitates for a moment, then it goes like a cannon ball! It was fabulous, it was unbelievable and it was far better than I expected it to be. It was the original, it was perfect, and it turned in so swiftly and so perfectly that I couldn't believe it. The car was just magic, and of course this was just going up the Goodwood hill, and it really instilled the wish that I could drive it on a proper circuit, just once, in earnest! I'm still waiting for the moment, but it is a fabulous machine, and to me this is one of the all-time great race cars for certain.

So, back in 1970, what made the 917/30 that much more successful than the opposition? Power and handling, perhaps?

The aerodynamics were far more efficient than was fully realised at the time, which they found out only 10 or 12 years ago when they put it in a new wind tunnel just to see what the car would do compared with wind tunnel readings then. They found out the car was as much as 40 per cent better than they had expected it to be. It is amazing, and (Norbert) Singer did a sterling job there.

Presumably he used those lessons to good effect when designing the 956.

I'm sure he did. I mean, don't forget that a designer like Singer and his engineers are totally into it, they understand it and they don't achieve things at random. They know what's happening and it's quite remarkable. For example, at Hockenheim my 959 was very good and I was quickest, but it was mildly under-steering in some places, so I came in and said: 'Could we perhaps lower it a little bit at the front', and Norbert Singer said: 'Jochen, you know what, you race it a bit and see how you get on! Just persevere with it.' So I did, and of course it was fantastic, and he spoke about it afterwards to make me understand what's happening with the car. When a large amount of air-compressing under the car gets accelerated earlier, the centre of pressure moves forward, sending the downforce further forward, gluing it to the track surface. We're only talking about a millimetre, because that's how efficient and how sensitive these cars were, when actually they looked big and bulky, but a millimetre made a major change. Most people hadn't understood that, and they were milling around, putting on big splitters and wings and all that, so they had the downforce, but in a different way. The balance wasn't the same. I've driven a few of those and I didn't like them.

Did the handling characteristics of 956s and 962s vary from car to car?

They were always welded the same way, but sometimes the suppliers of the aluminium sheets used for the tub were slightly different, so the flexibility of the sheeting varied, and that made a difference. Some cars were nicer, more pliable, and we needed that degree of flexibility then. They were also quicker – even flexing a little more – but that's what we wanted. That's why sometimes the older models were faster than the new ones. It was only later when aerodynamics became so proficient and important that the chassis had to be rigidly stiff, and that's why the carbon chassis were far superior.

The 962 evolution was pretty much the same as the 956 apart from the slightly longer chassis?

No, the 956 and the 962 only varied in foot room really. For safety reasons, there was a safety distance for the feet, which in reality wouldn't have helped if you hit the wall or whatever, but all the rule-makers thought it might be better, so there was a certain standard measurement from the front axle that we had to comply with. But aerodynamically it wasn't much different, and maybe it was a little less good in places, yet better in others. I liked the 956 a little better than the 962, but it's such a small difference that I would hate to say it was exactly like that.

"I was doing 186mph and hit the sleepers. The car disintegrated. It looked good but didn't hurt at all"

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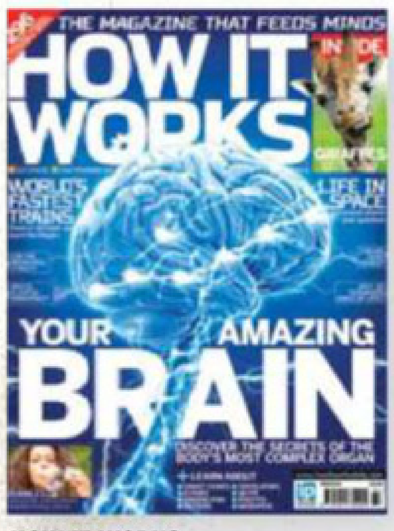
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THE FORGOTTEN FIRE-BREATHER

Now on display at Canepa, this forced-induction 911 played a pivotal role in Porsche's Seventies racing history, yet still remains in the shadow of the 935

Written by **Josh Barnett**
Photography by **Andrew Tipping**

Turbo fans

As racing car speeds increased dramatically during the Seventies, contemporary braking systems were pushed to their limits. The 934 and 935 racers used finned versions of 917 calipers along with drilled and vented calipers to aid heat dissipation, but brake cooling still proved to be an issue.

This led to the Porsche/BBS-developed 'turbo fan' wheel cover making its debut on the factory Porsche 935s at the 1976 Nürburgring 1,000km. After their inauguration at the Green Hell, turbo fans made it onto the 934 GT car, as well as the 956 and 962 prototypes, becoming synonymous with Weissach's racers.

The smooth or conical-shaped covers bolted to the face of each BBS wheel, with the vanes mounted on the inner side of each cover effectively turning the wheel into a turbine. This sucked air through the wheel and over the brake assembly, creating an accentuated cooling effect. By accelerating air from inside the wheel well to the outside of the car, they also created a low-pressure zone that improved front downforce. For this reason, the FIA eventually deemed them a moveable aerodynamic device and banned them.

If we asked you to think of a turbocharged racer built by Weissach in the Seventies, the chances are you would picture the slantnosed Porsche 935, probably in the 'K3' specification that Erwin Kremer's team used to win the 1979 24 Hours of Le Mans – the first outright victory at the French endurance race for a 911-based race car.

Thanks to its dramatic spoilers, wings and arches, the 935, in all its various specifications, is a truly memorable 911, aided by the evocative Martini livery they were campaigned in by the factory Porsche squad. However, it was not Weissach's only forced-induction sports racer.

Built to the parameters of the more restrained Group 4 class, the Porsche 934 was launched alongside the 935 for the 1976 racing season. Like the 935, the 934 was homologated for racing by Porsche's production of the 930, a car that more than exceeded the FIA's stipulated production figure of "400 units over a period not exceeding 24 consecutive months".

Apart from the reduced production requirement, the Group 4 guidelines were mostly carried across from the Group 2 regulations for touring cars. The latter controlled bespoke motorsport modifications, instead placing much of its emphasis on stock componentry. Iconic racers like the BMW 3.0 CSL 'Batmobile' had proved popular with fans and drivers in Group 2, with the rules transferring over to the 'Special Grand Tourers'.

The rules dictated that the standard road-going shell had to be maintained (with lightening of the structural coachwork and chassis elements not permitted). However, reinforcement of the chassis was allowed, leading to the 934 gaining an X-shaped cross brace between the front wheels. This helped stabilise the movement of the MacPherson strut front suspension, which retained the same pickup points as the Porsche 930 road car. The 934 did gain adjustable Bilstein coilover dampers all round though, with antiroll bars front and rear to add extra stiffness during cornering.

Compared to the 930, the 934's handling also benefitted from widened three-piece BBS wheels. The 16-inch rims measured 10.5 inches wide on the front axles, with an extra two inches of girth at the rear. The extra track width required Porsche to inflate the 930's already enlarged arches utilising fibreglass items that were pop riveted onto the 934's standard shell. Behind the magnesium split-rim wheels, the drilled and ventilated 917 discs were grabbed by finned four-piston calipers.

Like the imposing arches, the regulations also permitted aerodynamic development below the centre line of the front wheel. Unlike the 935, this meant the 934 had to retain the traditional Porsche 911 front end with its idiosyncratic raised front wings, but it did allow Weissach to fit an air dam-style chin spoiler. Not only did this bluff front create extra downforce, it housed an oil cooler, ducting for the front brakes, and two Behr air-to-water intercoolers (one for each bank of the flat six), cooling the 'charged air from the single, larger-than-standard KKK turbocharger.

The production 911 Turbo wouldn't gain an intercooler until the 3.3-litre motor was introduced in 1978, but regulations permitted much freedom under the bonnet – or in the 934's case, the decklid. Despite this, the powerplant in the Group 4 racer

shared much in common with the 930/50 flat six-mounted aft of the 930's rear wheels.

Despite new pistons, the compression ratio of the motor remained at 6.5:1, although boost from the turbocharger was set at 1.35 bar. The fan was now horizontally mounted rather than vertically, but the casing, crankshaft, con-rods and cylinder heads were all carried over from the road car. The intake and exhaust ports were both increased to 41mm from 32mm and 36mm respectively, while the cam timing was also altered which, combined with the revised Bosch K-Jetronic fuel injection system, meant the 934's engine could turn out 530bhp at 7,000rpm, with torque improved to 588Nm (a 71.5 per cent increase in rotating force).

A 120-litre fuel tank helped keep the 930/71 engine running, while it transferred its power to the road through a reinforced version of the road car's 915-type syncromesh gearbox. While the four-speed transmission may have hindered the 930, the FIA's rules did allow for three different sets of ratios, ensuring that keeping the 934 on boost was a simpler task across the breadth of circuits it was designed to race at.

While the engine shared much with the motor later offered to 935 customers, the improved aerodynamics and race-bred 2,856cc flat six of the 935 made the Group 5 racer the weapon of choice for the official Porsche team in 1976. This left the 934's reputation in the hands of Weissach's numerous independent clients. As the replacement for the 3.0-litre Carrera RSR that had been grandfathered at the end of the preceding season, the 934 was often seen sporting 'Turbo RSR' badging, a title it took from the 2.1-litre prototype raced by the works team during the 1974 season.

In Europe, the 934's thunder was stolen by its bigger, more extravagant brother, which helped Porsche to secure every World Championship for Makes title in the over-2.0-litre class between 1976 and 1981. Don't let this dampen the achievements of the GT-spec racer though. In the hands of Seventies 911 ace, Toine Hezemans, a Georg Loos-run 934 secured the 1976 European GT Championship, while the distinctively orange 'Jagermeister' cars tasted class success in the competitive Deutsche Rennsport Meisterschaft (German Racing Championship).

Across the Atlantic, the 934 was also finding its feet in US racing circles, especially in the famous Trans-Am series, a championship for modified production cars. Previously dominated by homegrown muscle cars such as the Penske-run Chevrolet Camaros and AMC Javelins, Porsche muscled in on the action in 1976 with two 934s entered by Vasek Polak, a name that may ring a few bells with Zuffenhausen aficionados.

Polak is easily worthy of a dedicated feature, such is the intrigue (and at times mystery) prevalent throughout the man's life. Born in 1914, he ran a bicycle repair shop in Prague before the outbreak of World War Two. In 1945, during the Germans' retreat from Czechoslovakia, Polak helped to disarm explosive charges mounted by the Nazi army to the famous Charles Bridge.

Three years later, with his homeland having been partitioned into the Soviet Union, he joined the underground resistance, fighting the communist rule. During a street fight with a Soviet tank, Polak was seriously injured. Two days later he was eventually found by his sister but, informed of the police's intent to arrest him, he was soon on the run, crossing the border into West Germany, where he joined the US Army motor pool as a mechanic.

It was here that he saved up money for eight years, eventually packing his VW van in 1956 and sailing for the USA, arriving in New York and picking up a mechanic's job for Max Hoffman, the famed

"The 934 was often seen sporting 'Turbo RSR' badging"



importer of luxury cars (including Porsches). Here, he developed a reputation as an excellent tuner of Zuffenhausen's flat-four engines, often taking on work for numerous teams who raced the diminutive 550 Spyder and 718 RSK.

After saving $3,000, Polak once again loaded up his VW van and, having always dreamed of living in California, headed to the west coast, eventually settling in Manhattan Beach. His racing exploits had given Vasek (pronounced Va-Shek) a strong friendship with Ferry Porsche, leading to the US expat opening the first Porsche-only dealership in the United States in 1959. By the mid-Sixties, the dealership was in the financial position to start purchasing its own race cars. Starting with 911s, Vasek Polak Racing campaigned a succession of Zuffenhausen machinery (including 908s and the fearsome Can-Am 917/10).

This is where the car before you steps in. Chassis number 903 670 0179 – resplendent in its original Vasek Polak livery thanks to the famed preservers of rare 911s, Canepa – was campaigned by legendary Porsche star Hurley Haywood in 1976 Trans-Am series. Haywood, who had built his reputation with a number of sterling performances aboard Brumos-run 911s at the start of the





Every inch of this 934 is historic, having lived and breathed the excitement and glamour of Seventies racing







Model Year	Porsche 934 1976
Engine	
Capacity	2,994cc
Compression ratio	6.5:1
Maximum power	530bhp @ 7,000rpm (with 1.35 bar boost)
Maximum torque	588Nm @ 5,400rpm
Transmission	915 four-speed syncromesh manual
Suspension	
Front	Independent; MacPherson strut; wishbones; coilover Bilstein dampers; longitudinal torsion bars; antiroll bar
Rear	Independent; semi-trailing arm; coilover Bilstein dampers; transverse torsion bars; antiroll bar
Wheels & tyres	
Front	10.5x16-inch BBS three-piece; 23.5x10.5-16 Goodyears
Rear	12.5x16-inch BBS three-piece; 25.0x13.0-16 Goodyears
Brakes	
Front	Drilled and ventilated 917 discs; finned four-piston calipers
Rear	Drilled and ventilated 917 discs; finned four-piston calipers
Dimensions	
Length	4,235mm
Width	1,775mm
Weight	1,120kg
Performance	
0-62mph	Not available
Top speed	Not available

decade, was brought in to drive the number 0 car alongside countryman George Follmer.

Follmer is something of a forgotten man in the annals of Porsche motorsport history, yet he played a key role in the development of the turbocharged racers produced in Germany in the early and mid-Seventies. After Penske's number one driver Mark Donohue broke his leg in testing ahead of the 1972 Can-Am season, Follmer was drafted in to drive the 1,000bhp+ 917/10 for the factory-backed team. At Road Atlanta, his first race outing in the car, Follmer secured the hat-trick of pole position, fastest lap and the race win. Four further wins would follow, allowing the American to secure the title at an eventual canter. Coupled with his 1972 Trans-Am championship victory, Follmer was the perfect match for Polak's fearsome hyper 930. However, at the first round of the 1976 season, it was Haywood who stole the show.

On the Pocono road course, Haywood would qualify second in the number 0 car before beating the Porsche 934 of Al Holbert by just a tenth of a second after 100 miles of intense racing. Follmer would finish third to complete a podium lockout for Weissach's fearsome forced-induction GT car.

Moving from Pennysylvania to the Nelson Ledges circuit in Ohio, Follmer enacted his revenge in the number 16 Vasek Polak Racing 934. Haywood could only qualify fourth, letting Follmer escape up the road, eventually running home the victor by just under five seconds. Haywood managed to limit the damage in chassis 670 0179, scything through to a second-place finish. With Holbert retiring after three laps with an engine failure, it meant he would retain the championship lead, although there was still a long season ahead.

Both Vasek Polak 934s would retire at Portland with turbo seal problems, but at Watkins Glen, Follmer managed to seize the championship lead, finishing second in class during the Six Hour race that counted towards the World Championship for Makes. This was despite a chin spoiler-destroying moment at the Esses where Follmer launched over the curbs after running wide on entry.

Despite this small moment, Follmer's consistency was incredible, finishing second at both Road America and Brainerd while Haywood didn't start the former and could only achieve fourth at the latter, having qualified fifth. For the final two rounds, the series would head north of the border into Canada, with Vasek Polak Racing looking assured of the title.

There would be no fairy tale ending to Haywood's first season aboard a turbocharged Porsche racer though. The Chicago native's other racing commitments prevented him from travelling to the penultimate round at Mosport, all but gifting the crown to Follmer, who would finish third behind the Carrera RSR of Ludwig Heimrath and Holbert.

Follmer would then secure the crown at Trois-Rivières. The number 16 Vasek Polak 934 would take the chequered flag in first, but there was more bad luck for Haywood. After qualifying in second place, Follmer's teammate would have to settle for tenth after mechanical gremlins stymied his challenge. Despite being little consolation for a thoroughbred racer, it was enough to finish the season runner-up in the Trans-Am standings.

It confirmed the often-belligerent Polak as one of the powerhouses of America road racing during the Seventies. More importantly though, with success on two continents, it proved that the Porsche 934 needs to be remembered as kindly as its Le Mans-winning brother, for this fearsome fire-breather was just as formidable. 911



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Ben enjoyed another trophy-laden Rennfest, this time with his 3.2 Carrera Cabriolet

1988 911 Cabriolet



Ben Przekop
Georgia, USA

Date acquired:
November 2011

I remember being asked, "What else are you going to do over the Labor Day weekend? You might as well join us at Rennfest, you'll have fun!"

My friend David Wilhide's suggestion over a leisurely Sunday coffee came a mere two weeks prior to the 46th Annual Rennfest event, which includes competition in concours, autocross, and rally, hosted by my local PCA chapter at the Brasstown Valley Resort in the North Georgia mountains. The last time I had attended Rennfest was in 2012, when my son Geoff and I executed a well-planned and successful assault on the overall Rennfest Championship awarded to the team with the best overall set of scores.

I had decided to forego attending this year since Geoff was unavailable, but David suggested I enter my 1988 Carrera "just for fun" in the less stringent 'Street' class of Concours (no engine or front boot inspection), drive it in the autocross competition, and forego the rally (since I would have no navigator). "Well," I thought. "The Carrera does need a good cleaning anyway, and since I won't have a prayer in the autocross I can just have fun sliding the Carrera around, and with no pressure to win the overall I won't kill myself preparing for the concours." This is called rationalisation mixed with delusion.

The next week was spent washing, polishing, waxing, vacuuming and Q-tipping the 911, using every spare moment before and after work. David is an experienced concours judge, and had offered to come by on the following Saturday to "pre-judge" the car and identify areas that needed additional attention. He examined every nook and cranny with a high-powered flashlight and pointed out about a dozen areas that needed closer inspection, which led to many more hours of work during that second week.

Suddenly, the Rennfest weekend was upon me, and on a warm and blessedly sunny Friday morning I was driving a very clean and very full 911 Cabriolet along the spectacular mountain roads to the resort. Upon arrival, I then spent another five hours in 'final prep', and an additional two hours on Saturday morning before judging started at 9:30am. All told, I had spent over 30 hours preparing my car, so I was really hoping for a respectable result, but had seen that the competition in my class (a large group of







1974-89 pristine 911s, many restored) was truly formidable.

So I was absolutely delighted when I actually tied for first place, and received a lovely crystal trophy at the Sunday evening banquet! I was even more surprised when I received a trophy for fourth in class in the autocross! The 1988 911 is a lovely touring car, but an autocross special it is not!

As always, though, the real reward was enjoying the company of my fellow competitors, whether we were drenched in sweat detailing our cars, sliding them around the autocross cones like deranged teenagers, or just socialising over dinner. It got me thinking: maybe next year Geoff and I should take another serious run at the overall championship – you know, just for fun...

2005 997.1 Carrera S



Chris Wallbank
Leeds, UK

Date acquired:
November 2012





My aim was to have had my Eibach Pro spacers fitted by now, but with work as hectic as ever I still haven't managed get the 997 in!

However, among the travelling up and down the country I did get a spare Saturday to go for a long overdue spirited drive on some excellent Yorkshire roads with the Redline247.com team. The destination was Whitby, a coastal town famous for its excellent fish and chips, which is exactly what our reward was going to be on arrival! The three-car convoy consisted of my 997S, a 997 Turbo and a Gen 2 Cayman S.

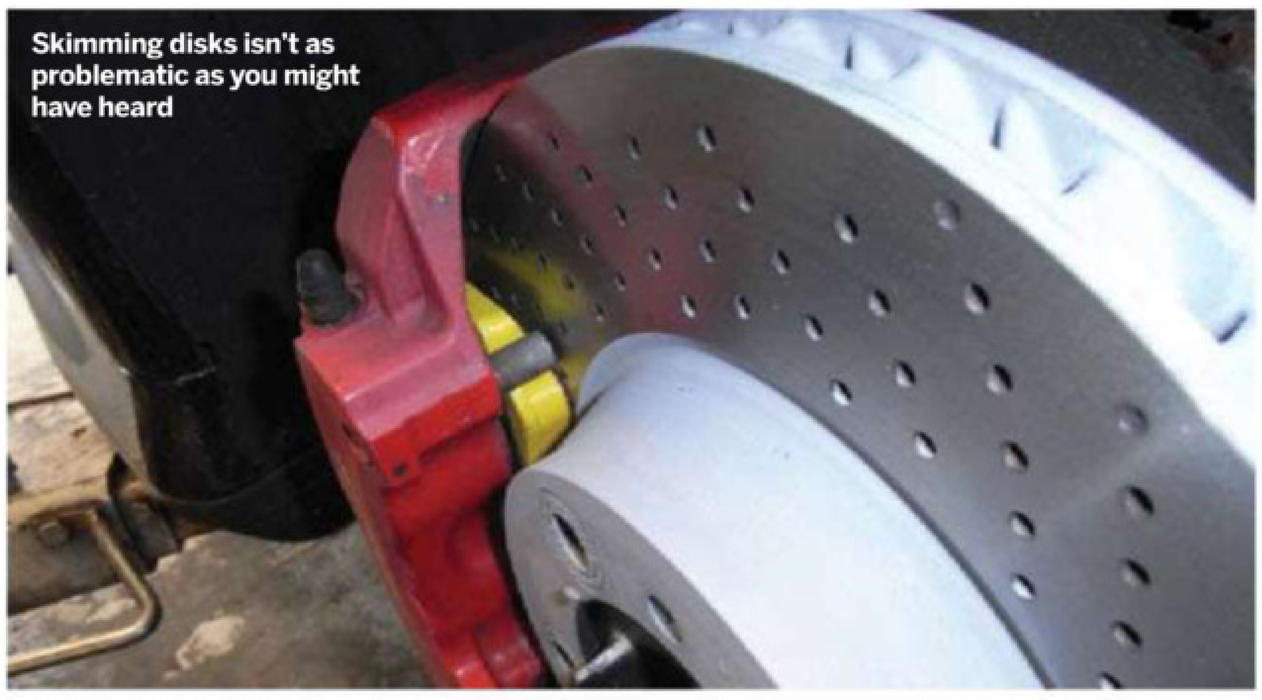
The planned driving route was the A169 from Malton to Whitby, which I had been informed had great bends and winding elevations, with a hairpin thrown in the mix. My friend was right; it was a great drive, definitely one that got the adrenalin flowing, just a shame we didn't luck in with weather as it pretty much rained all day – typical Yorkshire autumnal weather I guess! It's definitely a good road to try on a nice day if you're ever in the North Yorkshire area.

2003 996 Turbo



Joel Newman
London, UK

Date acquired:
April 2014



Skimming disks isn't as problematic as you might have heard

After I took the car to my local specialist, I discovered that there was slightly uneven disc wear.

It turns out my new discs could be skimmed for a mere fraction of the cost of replacements. Skimming is a lot more common than you might think, and perfectly safe in certain circumstances – namely, if your discs are relatively new but have been overheated, warped, pitted or corroded.

If your discs have plenty of meat left on them then skimming should be considered. Note that if your discs have worn below the minimum brake disc thickness, you must replace them!

I did some research, and discovered that a lot of 996 and Turbo owners have opted for Sport Formula EBC Yellow Stuff pads. Since installing them, brake judder has disappeared. The middle pedal feels a touch firmer, but is weighted so well that you know exactly how much pressure you need to apply. First and foremost though, good brakes give you confidence, and that means you can push the envelope further.

For around £250, I am pleased as punch. I can't imagine I would ever need any more braking force than this, so EBC I salute you – I'd recommend these pads to anyone that would care to listen.

1999 996 Carrera 4



Rob Clarke
Bristol, UK

Date acquired:
February 2014

It has been a busy few weeks in my 911 world. The first issue manifested itself when I tried to unlock the car. This may be common, but I know now that there is a correct entry procedure when you have not used your car. I tried to unlock it – nothing. Paranoia kicked in – something was wrong, and a big bill was looming!

I then tried the key in the lock, and it opened – but the alarm went off! Mild panic set in as I frantically pressed the key fob, trying to lock/unlock the door. After what seemed like an eternity, I managed to regain control of the car. I have since learned that this is normal behaviour (thanks TIPEC forum), as the car partially shuts itself down to conserve battery life while not in use. So I now know what to do next time: put the key in the door, turn it clockwise, wait, press the key fob button, wait until the light flashes in the lock then turn it left, pull the key out, and wait for the key fob to go active.

The next highlight was a trip to Castle Combe race circuit. One of the local car clubs (Pegasus Car Club) was having a trackday, and they had invited other like-minded car enthusiasts to turn up and park in the paddock to have a mini car show. Then, during the lunch break, there was an opportunity to do a few laps of the track behind a pace car to get familiarised with the circuit. I grabbed this opportunity, as driving on a circuit is not something I normally do, and this seemed like a safe way to do it. I have watched racing at Castle Combe many times over the years, and actually driving on it was exciting.

The next issue I noticed was that the car was very hot on the nearside. After five minutes of cooling, the near-side silencer box was still very hot. This was possibly down to heat soak from the brakes, as the track is predominantly right-hand bends, so I assumed the left rear was having more of a workout, but to test this further I have ordered a digital infrared thermometer to check out the temperatures.



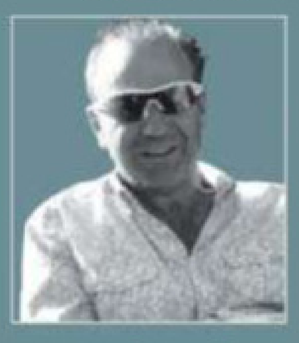
With myriad issues to deal with, it has certainly been an interesting month for Rob!

Additionally, the passenger window no longer drops down 10mm to clear the door seal. It only drops about 1mm, so that needs some attention. More significantly, I have been doing too many miles! I have the car insured on limited mileage, so should only use it three days a week, but I was using it for five! Consequently, I now have to reduce the use back to one day a week to bring the mileage in around the 10,000 mark.

The last instance of car-related excitement for me this month was a visit to the Avenue Car Club. This is a monthly event where anybody with a sports or classic kit car converges on a square in Bristol. My planned preparation for this event was to give the car a full wash and wax, but by the time I got round to cleaning it the light was fading fast, so after a quick wash I opted for the Autoglym Aqua Wax rather than full polish/gloss.

Early on Sunday morning, I headed into Bristol, and soon found myself in a convoy of some other like-minded souls with an eclectic mix of cars (F355, Opel Manta, SL55 AMG, S2000, Escort 1600 RS & my 911). Cars at this event are always varied: the oldest I have seen is a 1903 De Dion, and the newest a McLaren! There is always a helping of Porsches, they're so great for meeting other drivers and having a chat over a coffee.

1989 964 Carrera 4



Sean Parr
Harpenden, UK

Date acquired:
May 2014

You may remember at the end of the last issue that I had bought a new front wing from Nick Moss at Early 911, but I was sadly ignorant of the internal dimensions of a 911 and the massive size of a 911 front wing – it is really like trying to fit a clenched fist in your own mouth. The good news is that thanks to Nick, Vic and Steve Winter at Jaz, the wing is in my possession (well, actually in the paint shop at Tradewerx).

Goodwood for the second year was graced with my presence (this time with my lovely wife Julia) for The Revival. I've been to this before but not for some time. It's absolutely incredible, full of unbelievable cars racing around the circuit, which you can go and see up close and personal in the Paddock but with a style and elegance that you don't see anywhere these days.

We battled the M25 from Hertfordshire on the Friday morning in the 964, where it behaved perfectly all the way down and back. We spent ages looking around the tented village, where you could buy everything from a pair of excellent boots (which I did) to an original 1950's frock (which I didn't). The racing on the Friday was billed as the practice day, but don't believe for a second that they weren't actually racing. It's up close and personal, pedalling cars worth a literal fortune.





For me the race of the day was the St Marys Trophy, pitting saloon cars from the 1950's where Austin A35s met the Jaguar MkIIs and MkVIIs – amazing! It's making me think hard about buying an old car and going racing.

Aside from the fun at The Revival, I've got the 964 booked in at Tradewerx for the replacement wing and I think I'll get them to respray the ducktail to Diamond Blue metallic to match and fit it in place of the very cool, but very heavy rear wing. It'll give a bit of 2.7RS style to the more up-to-date looks of the 964. I'll let you know how it all looks next time.

1961 356 T5B; 1973 911E; 1974 2.7 MFI; 1975 Carrera MFI race car; 1981 930 3.3; 1995 993 RS Clubsport; 2012 991 Carrera S



Sven Burchartz
Victoria, Australia

Dates acquired:
Various



Sven's 356 went from a small renovation to a full-on rat-rod project







We've all heard the slippery slope tales about a small project turning into a major re-manufacture. In my case, it was more than a slippery slope; it was straight over the cliff.

The 356 was a sound car that had had a fair bit of work done to give it a bit of a rat-rod feel. I'd always wanted to build a hot rod, so thought I'd keep this one, drive it for a while, but keep it fairly subdued. It started with a casual surf around the Karmann Konnection site one Sunday, then the project went into overdrive.

Having settled on painting the car in a matt black two-pack with a coat of clear, we found that the body was in really good shape. No rust, and for a US sourced car, very little body filler. Back to the Karmann Konnection web surf. You're familiar with the 'Add to cart' button? I hit it a few times, hard. Before I knew it, we had the full set of plexiglass windows, half roll cage, speedster seats, louvred engine cover, centre fill fuel cap and Technomagesio wheels.

'Scope creep' might also be a term that's familiar to you. Well... when we looked at trimming the seats in red leather, the rest of the interior looked every bit of its 50 years. After a chat with the trimmer, we were not only trimming the seats; it was new carpets, interior linings, dash top, and because it really needed to be done, hand-stitched leather covering for the roll bar. A touch of Ruf perhaps?

It was all going well until another call from the trimmer. The interior was in and looked great, but the headlining looked sad. Of course. You know what comes next.

But wait, there's more. We needed to paint the fuel tank, as it looked patchy. The existing paint was removed, and we then found why there had been a persistent smell of fuel. A number of small pin holes. So, as you do, we fabricated a custom reproduction of the existing fuel tank in aluminium.

About those seats. They're hand-beaten aluminium with supporting gussets using copper rivets. Untrimmed, they looked great, so we decided to rub them back, give them a coat of clear and trim the centre sections. They're now the highlight of the interior.

The result? Everything I was looking for out of the project. A tough, loud little cruiser that hopefully brings a smile to people's face (or a scowl from the true believers!).

2006 997.1 Carrera 4S



Maxie Islam
Stevenage, UK

Date acquired:
August 2010



Maxie's car is sat on the driveway, awaiting its MoT



It's been an eventful month. Chiswick in west London is now my temporary home until I make the move abroad. The C4S is spending its first few weeks without a garage on a driveway, and currently awaiting its MoT – otherwise, it's not being driven. Leaving a car on the driveway versus a garage is a major difference, and after a few days the car seems to have lost its lustre. It's only temporary, I tell myself.

Aside from this, there is little else to report, as the car is not insured to drive until I get that MoT. However, the car started up for the first time after four weeks of being left alone on the driveway. I was a little surprised to think that the battery might have given up, but happily it didn't (perhaps it's the non-Porsche battery that put paid to that). I left the engine running for a couple of minutes before switching it off again.

I lost a few things in the move, so I'll be out to buy a wash mitt, bucket, shampoo and waxing materials to get it looking its best again. Still no takers for the car, so I'm having to revise my strategy and take on some good advice from a friend in the trade. I will report how things progress; meanwhile if there any readers following my column, please get in touch via the magazine for the full spec. I can assure you that it is quite a unique C4S.





1979 930 3.3

Richard Klevenhusen
Rio de Janeiro, Brazil

Date acquired:
May 2012

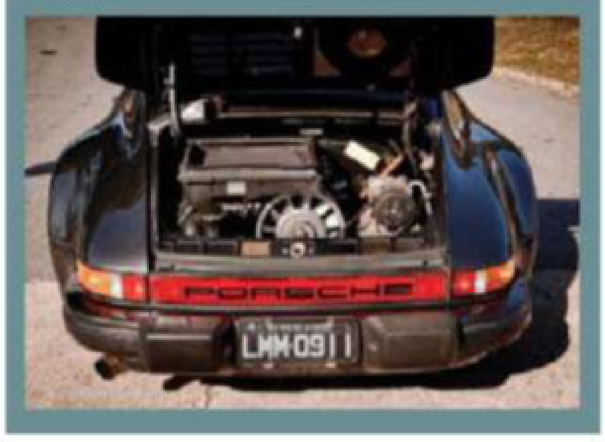
Ever since I acquired my 930 in 2012, I have followed the fluctuation of prices of Porsches. Since the end of last year, I noticed many ads for 911s, with prices escalating above what I was used to seeing.

I recently had to renew my car insurance and faced an increase in my premium, though when I look more closely at the reasons why, it's because insurance companies as well as the general market actually believe my 930 has appreciated in value.

My analysis of this phenomenon leads me to two conclusions: firstly, this is because of its rarity and the fact that it becomes increasingly a classic, so the price of these cars naturally tend to appreciate. Secondly, after the 2008 crisis and the current economic recovery, some people are deciding not to invest in banks, but a tangible good, ie real estate, art objects and cars. Classic cars, as we know, will never depreciate. By contrast, the natural tendency here is to always increase their value.

I believe that those who have invested in a good classic 911 have actually made a good investment.

Those who have not yet done so should take the chance and buy your dream quickly, before the price becomes truly priceless – take my word for it!



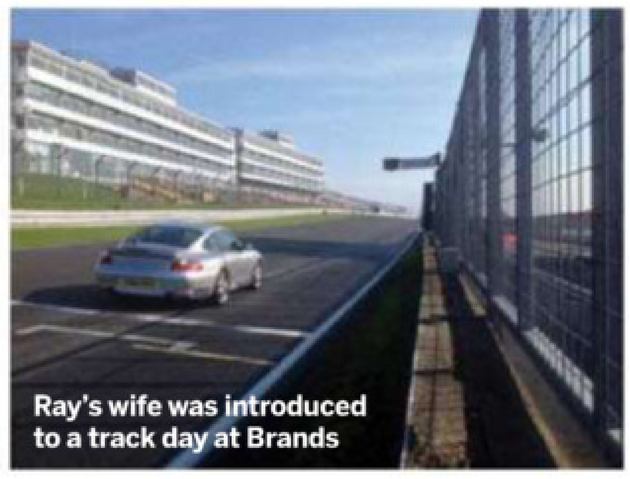
2003 996 Turbo



Ray Chandler
Surrey, UK

Date acquired:
August 2011




Ray's wife was introduced to a track day at Brands

I've hijacked my husband Ray's column for a bit this month, so if that's a bore, do pass this magazine straight to the significant woman in your life!

Ever since he bought the car, Ray has been really keen on doing a trackday in our 996 Turbo. I agreed to accompany my husband to the Brands Hatch PCGB September Track Day to watch him take part. But what I had not bargained on was the Head of PCGB Motorsport, Paul Grainger, at Ray's enquiry, quietly arranging for me to drive the circuit, in our car, with a qualified race instructor.

The experience really enthralled me in so many ways, getting me to look ahead, plan ahead with my inputs, quickly and accurately gauge what other track users might do and prepare for that. And to trust myself; coming down the straight and getting ready to plunge down and around Paddock Hill bend, with its odd camber, meant I had to put power on to stabilise the car, just when I'd usually be taking power off and putting the brakes on – hard, as it initially felt so counter-intuitive!

Was it a mad race around the track against others, as I thought it might be? Nothing like it; this trackday was about developing and extending your fine control of a car that was designed and built to do this, as well as 'everyday' driving. It's partly why the cars come at a premium; so having paid for it, do go and get your money's worth. It's tiring, as it requires high levels of concentration, but definitely exhilarating!

In summary, it was an exciting self re-discovery moment, and ladies, I really do recommend that you give it a go yourselves – particularly at a PCGB-organised event where they will look after you. So do contact me through the Editor if you wish to.

I'm grateful to both my husband for pushing me into this and Paul Grainger and PCGB for making it happen.

1989 964 Carrera 4



Gina Purcell
Oxford, UK

Date acquired:
September 2004


Gina's not short of fuses thanks to George at Paul Stephens

I'd not heard of the Fuse Twist before. No, it's not the next dance craze, but a piece of distilled wisdom from the on-line collective of SC Gurus.

Steffi decided she needed a rest in a car park on a sweltering July afternoon. Was my newly installed alarm/immobiliser being too officious? I had a dashboard full of lights, but the motor wasn't cranking over. A few requests for an over-the-phone diagnosis all pointed to getting the car towed home first, so I called in the RAC man. Tapping the starter had no effect, so he took a look at the fuse box. Sure enough, fuse number 16 (fuel pump) had melted and buckled at the top contact. I felt silly for not checking the fuses myself, but lesson learned.

I drove home and consulted the automotive authority that is Facebook. Very quickly, the advice came to give all the fuses a weekly twist to keep the contacts clean. George Tufnell (from Paul Stephens) took pity, and dispatched not only a huge bag of fuses, but also an abrasive contact cleaning pad and checked-and-tested spare fuel pump. Now, that's service!

2010 997.2 Turbo; 2011 997.2 GT3 RS



Tony McGuiness
San Diego, USA

Dates acquired:
January 2010 &
February 2011

San Diego has the largest military concentration in the world, with more than 100,000 active military members living and working in the San Diego area. To honour the men and women of the American military, San Diego's Fleet Week Foundation created a number of public events, including the famous Miramar Air Show – the largest military air show in the United States – and the Coronado Speed Festival. The weekend-long race features over 200 vintage race cars competing on the basis of their historic significance and authenticity.

In what is known as the 'Race at the Base', this year's 17th annual Coronado Speed Festival was held on 20-21 September at the Naval Air Station North Island. Once again, the Festival drew a very large number of Porsches, in particular the beloved 911. In issue 107, I reported on the 2013 Coronado Speed Festival, while last year's event celebrated the 50th anniversary of the Porsche 911. This year, the organisers celebrated the 50th anniversary of the Iconic American muscle car, the Ford Mustang.

Nowhere else in the USA can you see live racing on an active US Navy Runway. The



Tony had fun at the 'Race at the Base'



1.7-mile track is home to some of the most advanced aircraft in the world, yet two days a year it gives way to vintage race cars. Among the categories included are 1962-72 Sports Racing and Formula cars under 2,000cc, 1969-80 Sports Racing and Formula Cars, 1962-66 Production Cars over 2,500cc, and 1965-88 FIA Manufacturer Championship Cars.

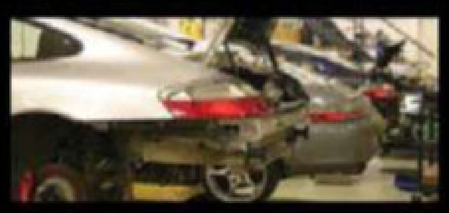
Over the two days, race enthusiasts, military families and members of the public gather to watch the many race groups compete. While the races are very popular and exciting, viewing the many generations of 911s and other Porsches in the Porsche Corral always seems to be the most popular activity for car enthusiasts.

This year was no different. Every generation of 911 was on display, including 996 and 997 generations of GT3s, several generations of Turbos, Cabriolets and Coupes, Cup Cars, and of course modified 911s. Porsche owners from as far afield as Northern California and Arizona made their way to this gathering of Porsches.

The sizzling heat didn't dampen the enthusiasm of Porsche owners. Dr Bell, British ex-pat and 964 Speedster owner, hosted a hospitality tent for Porsche owners, who were well hydrated and comfortable with complimentary cold drinks and snacks. With hospitality like that, the Porsche turnout next year at the Race at the Base can be assured to be even larger.



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911 PREMIER PORSCHE

Everything you need for your 911

ALL 911 STATS INSIDE

Full details of every 911 model, including the GT3, can be found in our Data File beginning on **page 86**

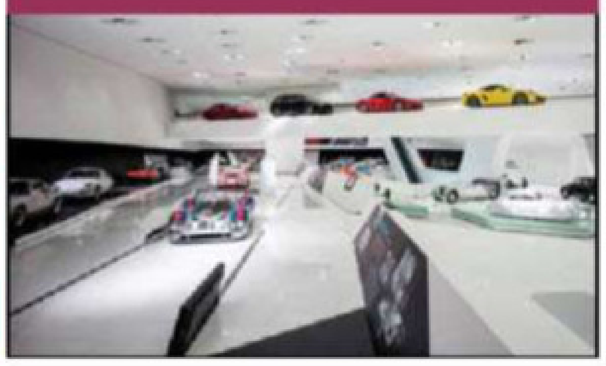
"Despite its name being rooted in racing, the GT3 is still a road car. It will redefine your idea of performance driving no matter what era you choose"



Find what you're looking for

Our Premier Porsche section mixes 911-related facts and information with advertisements from top Porsche suppliers around the world. To help you navigate through the section, we've colour-coded the tabs below.

COMPANY PROFILE 82



DATA FILE 86



ALSO INSIDE >>>

SHOWROOM 94

SERVICING & TUNING 99

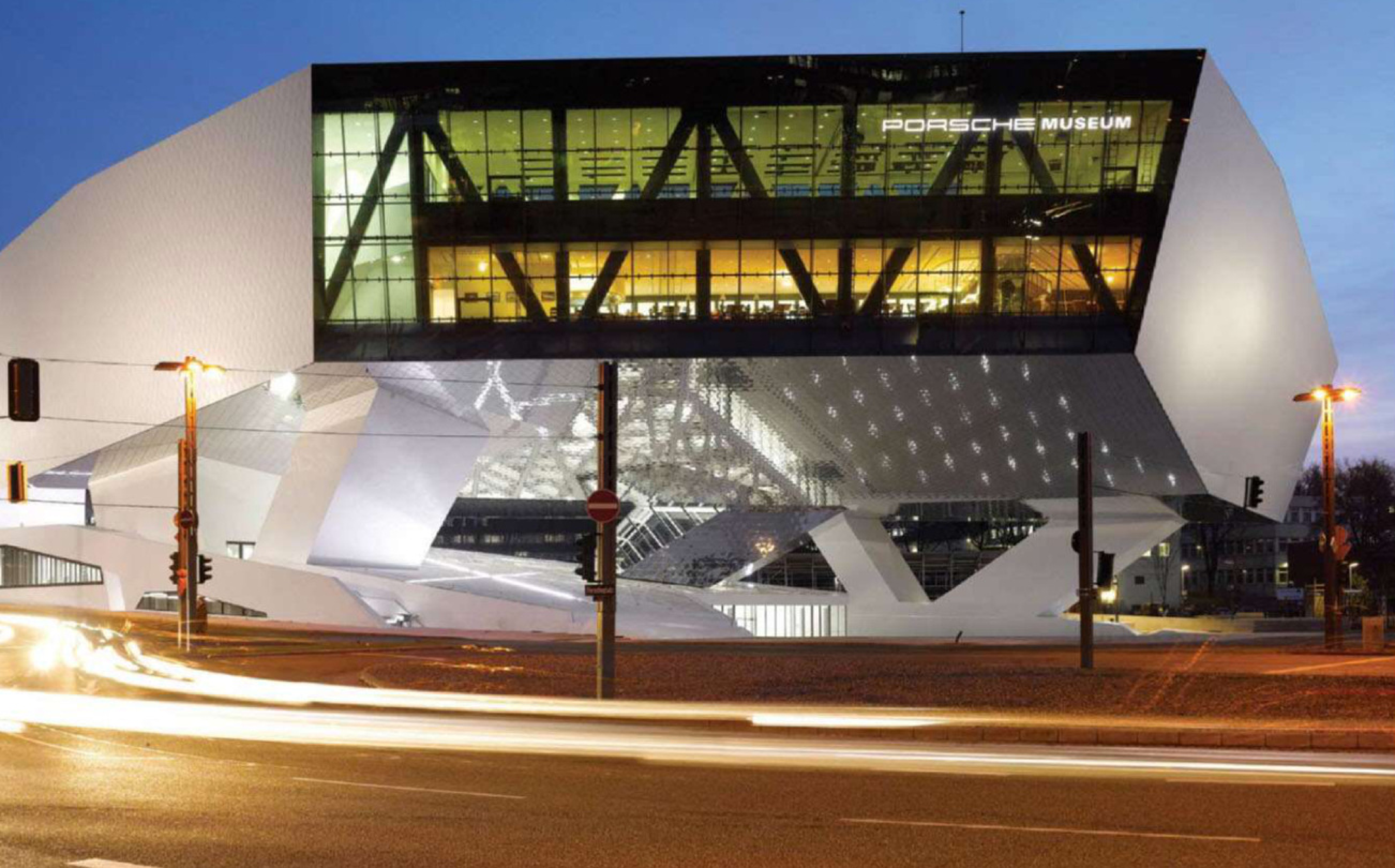
PORSCHE LIFESTYLE 109

INSURANCE & FINANCE 110

THE PORSCHE MUSEUM

Despite being only six years old, the Museum is now a pertinent symbol of Zuffenhausen's future, as well as its past...

Written by **Lee Sibley** Photography by **Phil Steinhardt**

















Never short of anecdotal machinery, the Museum rotates a number of cars on a regular basis to maintain the appeal to frequent visitors

You'll see the unmistakable, unorthodox silhouette of the Porsche Museum protruding into the Stuttgart skyline long before you recognise the rest of Porscheplatz. This isn't down to the height of the building; nearby factory structures spread over the home of Dr. Ing. h. c. F. Porsche AG protrude further skywards, but these carry function strictly over form and so they are otherwise nondescript, even ugly, in appearance. In stark contrast, it's the beauty of the Museum that immediately draws your eyes towards it.

At first it looks like the main structure of the Musuem is suspended in the air (in fact, it is supported by only three V-shaped columns), and its form appears to change drastically as you walk around its perimeter. No matter what angle, there's a crisp yet complex illusion emanating from it. Even from the outside then, there's no denying this entire complex is a fine example of architectural art.

The building itself was designed by Viennese architect office Delugan Meissl, whose design was chosen by the Porsche board from over 170 different entrants for the project. Construction work started in early October 2005 to implement those design renders, and on January 31st 2009, the building was officially opened to the public.

Inside, you'll find a 5,600-square metre exhibition space with a variety of motoring relics and icons spread eloquently over two spiralling floors, outlining the entire history of Porsche from Ferdinand's birth in 1875 to the present day.

Owned by Porsche AG, the Museum inhibits a special, innovative way of presenting the history of the manufacturer to the public, so much so that you could visit the displays two or three times in a year and enjoy an entirely difference experience, each time learning new things. It is this adage that helps the Museum attract so many visitors.

Displays are always centered around the visions that shaped the company. Here, you will find out more about Zuffenhausen's remit of lightweight construction, clever use of technology, fast and powerful performance, an intensity in sporting excellence, and a consistency in high standards as the blueprint for any car produced by Porsche.

What's more, the Museum operates by organising its exhibitions according to themes. Typically, two to three themes prevail in a 12-month cycle, each lasting several months. The Museum's management constantly liaise with Dieter Landenberger, Head of Porsche Archive, to decide on display themes relevant to the company, which can be time sensitive. For example, the display theme during our visit in the summer of 2014 was 'Le Mans', using Porsche's rich racing history at La Sarthe to mark Weissach's return to the top class of the race for the first time in 15 years.

Once a display theme is in place for the Museum to present historically, plans are then made with Landenberger over suitable sports cars to pull from storage to ensure a glorious ensemble of Porsches are permanently on display at Porscheplatz 1. "Of course, this is a difficult task," Landenberger tells me, "because some of the cars in storage could be going through a restoration or have one scheduled, and so we must carefully match which highbrow cars should go on display with the cars that can."

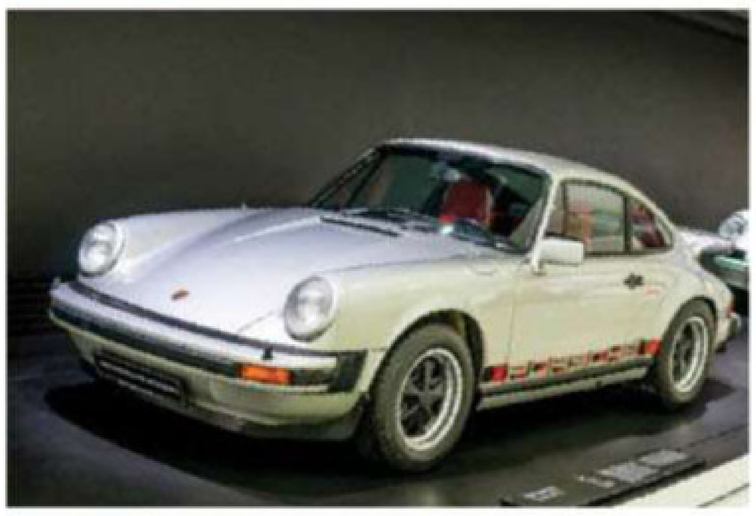
After a comprehensive hitlist of suitable cars is put in place to help illuminate each theme, detailed floor plans are then made to decide how these cars can best tell a story. Landenberger continues: "The cars you see in the Museum are not placed there just because we feel like it; they are there as a result of careful planning. As well as looking at what can be displayed from our history, we look at how the car can be displayed – for example, look at the 956, which is mounted upside down to highlight its superior downforce capabilities. Of course, such a presentation takes time to organise."

In a bid to appeal to the younger generation of Porsche fan (school and college visits here are not



911 or not, the Museum presents the entire history of Porsche through a variety of engaging displays









"Even from the outside, there's no denying this entire complex is a fine example of architectural art"

uncommon), classic Zuffenhausen relics are often presented in a fresh, modern way, with current technology deployed to aid the evocative learning experience. The sensory overload is welcoming: as well as being able to run your eyes fastidiously over each and every sports car on display, there are clever touch pods that allow you to hear the different engine notes of a 356's flat four, an early 911's flat six, or even the howl of a 956 charging down the Mulsanne Straight. Then there's the sensations of smell: despite an otherwise corporate environment, get close to the cars and you can smell the faint whiff of oil from the rear of classics above the quaint aura of polish and leather.

Up to 80 sports cars are on display at any one time in the Museum, and to ensure each theme retains its appeal over prolonged periods of time, a select few cars are swapped out every few weeks.

As well as providing an open display for the paying public to learn about the Porsche brand, the Museum also engages with enthusiasts by staging events at the venue. At least one conference event is held here a week, for what the Museum terms as 'big customers'. The premises also stages one-off occasions for the public to get closer to the Porsche experience, for example during Le Mans when you could rock up and watch the entire 24-hour race from inside the Museum.

There's much more to the Museum than merely presenting highly polished Porsche motoring artefacts and showing how a 911 et al is created and engineered, though. There's a Museum workshop on the complex, as well as the Boxenstopp and Christophorus restaurants.

Today, the Museum is much more than just a swanky holding lot for motoring relics to be displayed for adoring members of the public. Step outside afterwards, and you will realise that the Museum acts as the epicentre of Porscheplatz. Sports cars being built in the adjacent factory and then displayed in the Stuttgart OPC over the road all get their identity from the cars inside the Museum, and Porsche AG know it: it's the whole reason for the complex existing in the first place.

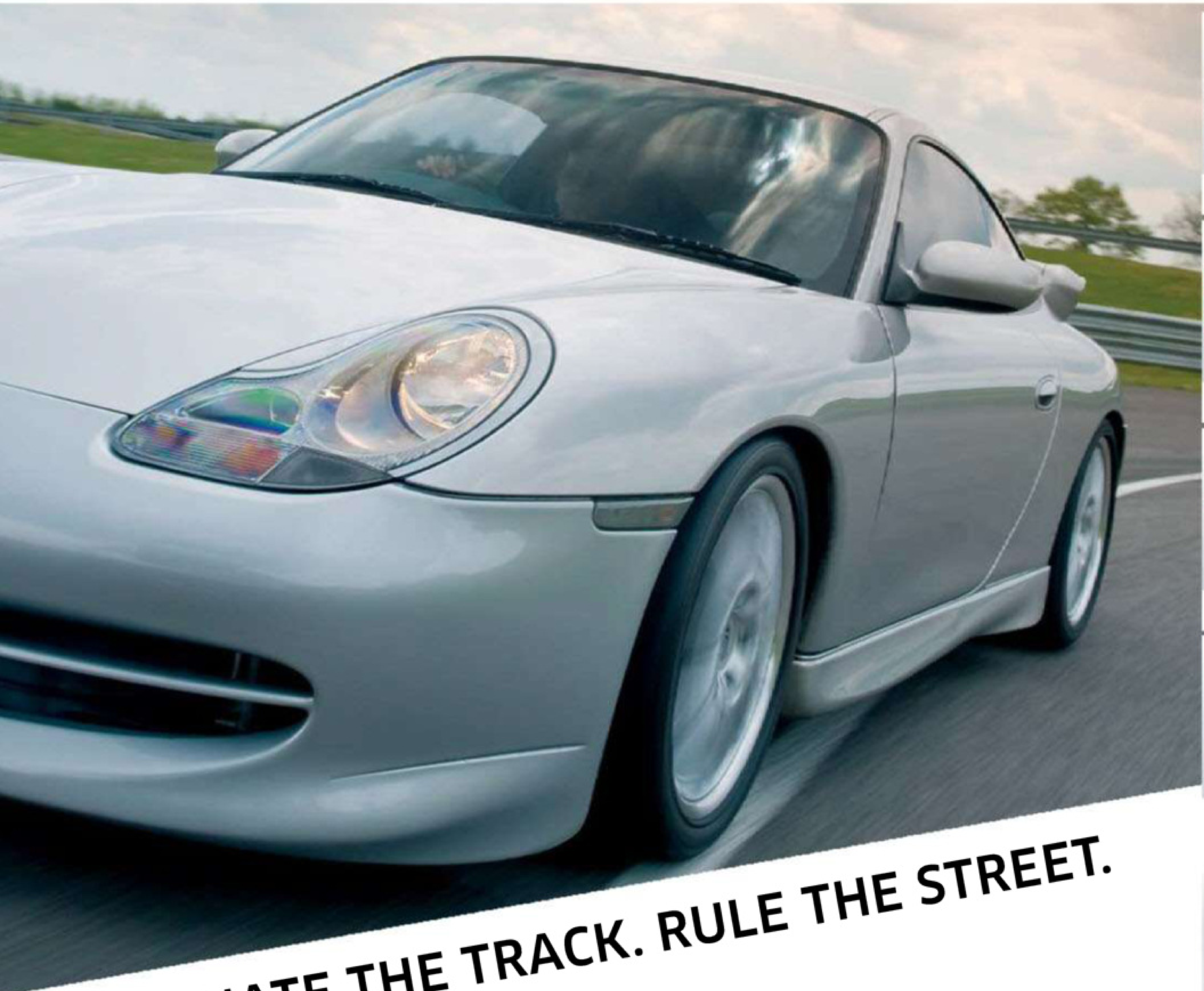
The area is just as special for enthusiasts too: throughout the day, 911s will constantly pull up onto the concourse in front of the Museum so owners can get a quick snap of their Porsche back on 'home turf'. They come from afar too – one Australian Porsche owner told me how he'd travelled to Europe on business and couldn't resist a quick stop at the place that built his beloved 997.2 C4S. "It doesn't disappoint here, does it?" he says as we ogle at our reflections in the mirrored roof high above our heads. It certainly doesn't. If you haven't yet been, you're simply missing out.

Company profile

- **Owner:** Porsche AG
- **Opened:** 2009
- **Location:** Porscheplatz, Germany
- **Rarest 911 on display:** Plenty of one-off original builds, including the first 930 Turbo (in 2.7-litre form)
- **Most common 911 on display:** A 996.1 Carrera, though this particular example was painted by aboriginal artist Graham Rennie Biggibilla.
- **Most expensive 911 on display:** Putting a figure on most of these is foolish – the majority of cars on display are priceless.
- **Interesting fact:** 21,000 cubic metres of concrete were used in the construction of the museum.

Contact

- **Website:** www.porsche.com/museum
- **Telephone:** 0049 (0)711 - 911 20 911



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Data file

Definitive facts and figures for every 911 model from 1964 – present

Welcome to the Total 911 data file, the definitive verdict to assist you in the world of 911s. All data here has been compiled, where possible, from Porsche's own figures. The cars are organised in rows according to release date beginning with the very first model in 1964, right up to today's latest 991. Many models were available in Coupe, Targa and Cabriolet forms, with the option of automatic transmission. Data here has been provided from the Coupe variants unless stated.

Ratings: ★★★★★
Each model is rated in half stars according to their performance, handling, appearance and desirability.
Do you agree? We'd love to hear from you: editorial@total911.com.

Sales debate: Can you modify a 911 and still add value?



The modifying scene has been around for nearly as long as the car itself, and it is generally accepted that tuning is a surefire way to knock value off your base car. However, even in the world of Porsche 911s – where the stock product is readily accepted as an example of engineering excellence – it is still possible to boost the residual value of your car, according to both RPM Technik's head of sales, Greig Daly, and Paul Stephens, head of bespoke 911 modifiers, PS AutoArt.

"The way we do it is to always do it on a base example," Daly explains, "rather than a GT3 or GT2. Don't try and perfect the halo car that Porsche already have out there." RPM also chooses to use Porsche parts where possible, concedes Daly, although choosing components with "race pedigree" can also bring financial benefits. "A set of Öhlins Road/Track dampers are a proven bit of kit that are superior to the standard items," say RPM's head of sales, especially if fitted to a non-PASM car.

Stephens agrees that the quality is fundamental to adding value, especially when modifying more classic 911 examples, explaining that, "it is down to how well executed the conversion is."
He admits that many RS-style builds would be better off keeping the 911 SC or 3.2 Carrera in stock form, especially as "people are quite keen to retain the original features and benefits of the car, but in a restored condition."

However, PS AutoArt has found that their bespoke builds can readily add value thanks to the extreme level of detail. "At that point people do appreciate the level of detail," Stephens explains. As well as the quality of work though, Stephens believes that the key to protecting residuals of his PS AutoArt cars – some of which are now trading for more than their original build price thanks to the increased value of donor cars – is down to creating a strong brand that is backed up with "proper engineering".

While Daly believes "it is easier to add value to water-cooled 911s" thanks to their low current values (especially 996s), Stephens' insistence that modifying classic examples like 964s can increase residuals provides fans of personalisation with a breadth of cars to pick from. One thing is key though; quality is king if you are looking for a financial return.

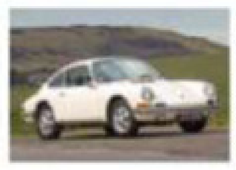
(0 series)
911 2.0-litre 1964-67



The 911 that started it all off when the prototype appeared in 1963, this is the car that set the style for all 911s to follow. Developed to replace the 356, a four-pot 912 was also made.

Production numbers: 9,250
Engine capacity: 1,991cc
Compression ratio: 9.0:1
Maximum power: 130bhp @ 6,100rpm
Maximum torque: 149Nm @ 5,200rpm
Brakes: Front: 282mm discs; Rear: 285mm discs
Wheels & tyres: Front: 4.5x15-inch; 165/80/R15
Rear: 4.5x15-inch; 165/80/R15
Length: 4,163mm
Width: 1,610mm
Weight: 1,075kg
0-62mph: 8.3 sec
Top speed: 131mph
Issue featured: 106
★★½☆☆

(0 and A series)
911S 1967-68



Porsche soon started more powerful variants. The first of these was the 911S (for Super), which had a higher compression engine and twin Weber 40IDS carburettors.

Production numbers: 4,015
Engine capacity: 1,991cc
Compression ratio: 9.8:1
Maximum power: 160bhp @ 6,600rpm
Maximum torque: 179Nm @ 5,200rpm
Brakes: Front: 282mm discs; Rear: 285mm discs
Wheels & tyres: Front: 4.5x15-inch; 165/80/R15
Rear: 4.5x15-inch; 165/80/R15
Length: 4,163mm
Width: 1,610mm
Weight: 1,030kg
0-62mph: 8.0 sec
Top speed: 137mph
Issue featured: 114
★★★½☆

(C & D series)
911E 1969-71



Engine improvements included revised cylinder heads, larger valves and stronger con rods. 1970 'D' series cars had hot-zinc coated undersides.

Production numbers: 4,927
Engine capacity: 2,195cc
Compression ratio: 9.1:1
Maximum power: 155bhp @ 6,200rpm
Maximum torque: 196Nm @ 4,500rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185HR
Rear: 6x15-inch; 185HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,020kg
0-62mph: 7.0 sec
Top speed: 137mph
Issue featured: 107
★★½☆☆

(C & D series)
911S 1969-71



An upgrade in engine size gave the 911S 180bhp. Unlike the 911E, the S didn't gain improved low-down power and torque, so you had to keep the revs up for good power.

Production numbers: 4,691
Engine capacity: 2,195cc
Compression ratio: 9.8:1
Maximum power: 180bhp @ 6,500rpm
Maximum torque: 199Nm @ 5,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185HR
Rear: 6x15-inch; 185HR
Length: 4,163mm
Width 1,610mm
Weight: 1,020kg
0-62mph: 6.6 sec
Top speed: 145mph
Issue featured: 112
★★★★☆

(F series)
911E 1973



After incidents of people filling E series 911s with petrol via the external oil-filler, the filler returned to under the engine decklid. Fitted with the front spoiler of the 911S.

Production numbers: 4,406 (including E series)
Engine capacity: 2,341cc
Compression ratio: 8.0:1
Maximum power: 165bhp @ 6,200rpm
Maximum torque: 206Nm @ 4,500rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch ATS; 185HR
Rear: 6x15-inch ATS; 185HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,077kg
0-62mph: 7.5 sec
Top speed: 137mph
Issue featured: 117
★★☆☆☆

(F series)
911S 1973



The 911S had same upgrades as the 911E, including deletion of the external oil-filler. Also adopted black trim around the front and rear lights and black front quarter grilles.

Production numbers: 5,054
Engine capacity: 2,341cc
Compression ratio: 8.5:1
Maximum power: 190bhp @ 6,500rpm
Maximum torque: 211Nm @ 5,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185/70/R15
Rear: 6x15-inch; 185/70/R15
Length: 4,163mm
Width: 1,610mm
Weight: 1,075kg
0-62mph: 6.6 sec
Top speed: 140mph
Issue featured: 56
★★★★½

(G & H series)
911 Carrera 2.7 1974-76



From 1974, Carrera name was given to range-topping 911. Essentially the same engine as previous year's RS for all markets except USA. Whaletail available from '75.

Production numbers: 1,667
Engine capacity: 2,687cc
Compression ratio: 8.5:1
Maximum power: 210bhp @ 6,300rpm
Maximum torque: 255Nm @ 5,100rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185VR
Rear: 7x15-inch; 205VR
Length: 4,291mm
Width: 1,610mm
Weight: 1,075kg
0-62mph: 6.3 sec
Top speed: 148mph
Issue featured: 104
★★★½☆

(I & J series)
911 Carrera 3.0 1976-77



Not sold in the US, the Carrera 3.0 was basically the same model as the previous Carrera, only fitted with a new 2,994cc engine, essentially from the 911 Turbo.

Production numbers: 3,687
Engine capacity: 2,994cc
Compression ratio: 8.5:1
Maximum power: 197bhp @ 6,000rpm
Maximum torque: 255Nm @ 4,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185/70/VR15
Rear: 7x15-inch; 215/60/VR15
Length: 4,291mm
Width: 1,610mm
Weight: 1,093kg
0-62mph: 6.3 sec
Top speed: 145mph
Issue featured: 3
★★☆☆☆

(A series)
911L 1967-68

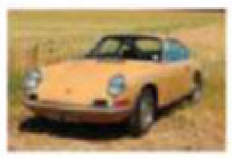


In 1967, the 911 was updated and the range expanded: the 911L (Lux) was standard and sat alongside the high-performance 911S and entry-level 911T.

Production numbers: 1,603
Engine capacity: 1,991cc
Compression ratio: 9.0:1
Maximum power: 130bhp @ 6,100rpm
Maximum torque: 173Nm @ 4,600rpm
Brakes: Front: 282mm discs; Rear: 285mm discs
Wheels & tyres: Front: 5.5x15-inch; 185HR
Rear: 5.5x15-inch; 185HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,080kg
0-62mph: 8.4 sec
Top speed: 132mph
Issue featured: n/a

★★☆☆☆

(A & B series)
911T 1967-69



To save money, the 911T's engine used cast-iron cylinder heads (as opposed to the Biral aluminium/iron items, which gave more efficient cooling) and carbs instead of fuel injection.

Production numbers: 6,318
Engine capacity: 1,991cc
Compression ratio: 8.6:1
Maximum power: 110bhp @ 5,800rpm
Maximum torque: 156Nm @ 4,200rpm
Brakes: Front: 282mm discs; Rear: 285mm discs
Wheels & tyres: Front: 5.5x15-inch; 185HR
Rear: 5.5x15-inch; 185HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,020kg
0-62mph: 8.8 sec (est)
Top speed: 124mph
Issue featured: 39

★☆☆☆☆

(B series)
911E 1968-69



The 911 received its first major update, evolving into what is known as the B series. The 911E replaced the 911L as the 'standard' car. The 'E' stood for 'Einspritz' (injection).

Production numbers: 2,826
Engine capacity: 1,991cc
Compression ratio: 9.1:1
Maximum power: 140bhp @ 6,500rpm
Maximum torque: 175Nm @ 4,500rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 5.5x15-inch; 185HR
Rear: 5.5x15-inch; 185HR
Length: 4,163mm
Width 1,610mm
Weight: 1,020kg
0-62mph: 7.6 sec
Top speed: 130mph
Issue featured: n/a

★★☆☆☆

(B series)
911S 1968-69



Like the E, the S gained a fuel injection, boosting power to 170bhp. To help cope with the extra demands on the engine, an additional oil cooler was fitted in the front right wing.

Production numbers: 2,106
Engine capacity: 1,991cc
Compression ratio: 9.9:1
Maximum power: 170bhp @ 6,800rpm
Maximum torque: 183Nm @ 5,500rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185/70/R15
Rear: 6x15-inch; 185/70/R15
Length: 4,163mm
Width: 1,610mm
Weight: 995kg
0-62mph: 7.0 sec (est)
Top speed: 140mph
Issue featured: n/a

★★½☆☆

(C & D series)
911T 1969-71



Like the E, the 911T's torque curve was now flatter, making the car more driveable. Ventilated discs from the S were fitted and a five-speed gearbox became standard.

Production numbers: 15,082
Engine capacity: 2,195cc
Compression ratio: 8.6:1
Maximum power: 125bhp @ 5,800rpm
Maximum torque: 169Nm @ 4,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 5.5x15-inch; 165HR
Rear: Front: 5.5x15-inch; 165HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,020kg
0-62mph: 7.0 sec (est)
Top speed: 127mph
Issue featured: 107

★★☆☆☆

(E series)
911E 1972



2,341cc was achieved by increasing the stroke from 66mm to 70.4mm while at the same time leaving the bore unchanged. New 915 transmission was stronger.

Production numbers: 4,406 (including F series)
Engine capacity: 2,341cc
Compression ratio: 8.0:1
Maximum power: 165bhp @ 6,200rpm
Maximum torque: 206Nm @ 4,500rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185HR
Rear: 6x15-inch; 185HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,077kg
0-62mph: 7.5 sec
Top speed: 137mph
Issue featured: 117

★★☆☆☆

(E series)
911T 1972



A lower compression ratio and the inclusion of Zenith 40 TIN triple-choke carburettors led to the relatively lower power output of 130bhp despite the new 2,341cc engine size.

Production numbers: 16,933 (including F series)
Engine capacity: 2,341cc
Compression ratio: 7.5:1
Maximum power: 130bhp @ 5,600rpm
Maximum torque: 197Nm @ 4,000rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 5.5x15-inch; 165HR
Rear: 5.5x15-inch; 165HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,077kg
0-62mph: 7.6 sec
Top speed: 128mph
Issue featured: n/a

★½☆☆☆

(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
Engine capacity: 2,687cc
Compression ratio: 8.5:1
Maximum power: 210bhp @ 6,300rpm
Maximum torque: 255Nm @ 5,100rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185/70/R15
Rear: 7x15-inch; 215/60/R15
Length: 4,163mm
Width: 1,610mm
Weight: 975kg (Sport)
0-62mph: 5.6 sec
Top speed: 152mph
Issue featured: 106

★★★★★

(F series)
911T 1973



US-bound F series 911Ts were the first 911s to have Bosch K-Jetronic fuel injection, improving emissions. This was mainly mechanical, with some electronic sensors.

Production numbers: 16,933 (including E series)
Engine capacity: 2,341cc
Compression ratio: 7.5:1
Maximum power: 130bhp @ 5,600rpm
Maximum torque: 197Nm @ 4,000rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 5.5x15-inch; 165HR
Rear: 5.5x15-inch; 165HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,077kg
0-62mph: 7.6 sec
Top speed: 128mph
Issue featured: n/a

★½☆☆☆

(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
Engine capacity: 2,994cc
Compression ratio: 8.5:1
Maximum power: 230bhp @ 6,200rpm
Maximum torque: 275Nm @ 5,000rpm
Brakes: 300mm discs; Rear: 300m discs
Wheels & tyres: Front: 9x15-inch; 215/60/VR15
Rear: 11x15-inch; 235/60/VR15
Length: 4,135mm
Width: 1,680mm
Weight: 900kg
0-62mph: 5.3 sec
Top speed: 152mph
Issue featured: 102

★★★★★

(G, H, I, J series)
911 1974-77



'911' was now the entry level. Bumpers were added to conform to US regs. From 1976, all 911s were hot-dip coated and fitted with 'elephant ear' mirrors.

Production numbers: 9,320
Engine capacity: 2,687cc
Compression ratio: 8.0:1
Max power: 148bhp @ 5,700rpm (165bhp from '76)
Max torque: 235Nm @ 3,800rpm (4,000 from '76)
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185VR
Rear: 6x15-inch; 185VR
Length: 4,291mm
Width: 1,610mm
Weight: 1,075kg
0-62mph: 8.5 sec
Top speed: 130mph
Issue featured: n/a

★½☆☆☆

(G, H, I, J series)
911S 1974-77



911S was now a mid-range model comparable to the previous 911E. It had the same body changes as the base model, and came as standard with 'Cookie Cutter' rims.

Production numbers: 17,124
Engine capacity: 2,687cc
Compression ratio: 8.5:1
Maximum power: 173bhp @ 5,800rpm
Maximum torque: 235Nm @ 4,000rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 6x15-inch; 185VR
Rear: 6x15-inch; 185VR
Length: 4,291mm
Width: 1,610mm
Weight: 1,080kg
0-60mph: 7.0 sec
Top speed: 142mph
Issue featured: n/a

★½☆☆☆

930 3.0 1975-77



Fitted with a KKK turbo, this was the world's first production car to be turbocharged. Flared arches, whaletail spoiler and four-speed gearbox were standard.

Production numbers: 2,880 in the US
Engine capacity: 2,994cc
Compression ratio: 6.5:1
Maximum power: 260bhp @ 5,500rpm
Maximum torque: 343Nm @ 4,000rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 7x15-inch; 185/70/VR15
Rear: 8x15-inch; 215/60/VR15
Length: 4,291mm
Width: 1,775mm
Weight: 1,140kg (1,195kg from '76)
0-62mph: 5.5 sec
Top speed: 155mph
Issue featured: 116

★★½☆☆

930 3.3 1978-83

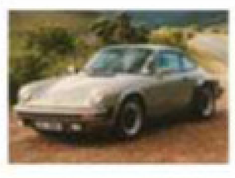


Larger engine resulted in an extra 40bhp, and an intercooler on top of the engine led to the adoption of a new 'tea tray' spoiler. Brakes were upgraded from 917 racer.

Production numbers: 5,807 (plus '78-'79 Cali cars)
Engine capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 300bhp @ 5,500rpm
Maximum torque: 412Nm @ 4,000rpm
Brakes: Front: 304mm discs; Rear: 309mm discs
Wheels & tyres: Front: 7x16-inch; 205/55/VR16
Rear: 8x16-inch; 225/50/VR16
Length: 4,491mm
Width: 1,775mm
Weight: 1,300kg
0-62mph: 5.4 sec
Top speed: 160mph
Issue featured: 104

★★★☆☆

911 SC 1978-83

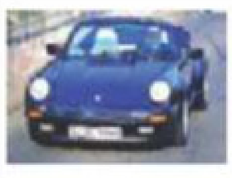


From 1978, the SC was the only normally aspirated 911. Developed from the Carrera 3.0, but produced less power to suit all markets. Upgraded Sport options were available.

Production numbers: 60,740
Engine capacity: 2,994cc
Compression ratio: 8.5:1/8.6:1/9.8:1
Maximum power: 180/188/204bhp @ 5,500rpm
Maximum torque: 265/265/267Nm @ 4,300rpm
Brakes: Front: 287mm discs; Rear: 295mm discs.
Wheels & tyres: Front: 6x15-inch; 185/70/VR15
Rear: 7x15-inch; 215/60/VR15 (16-inch optional)
Length: 4,291mm
Width: 1,626mm
Weight: 1,160kg (1978 Coupe)
0-62mph: 6.5 sec
Top speed: 141/146mph
Issue featured: 110

★★½☆☆

930 3.3 1984-89



Revised engine added more power and torque in 1984, while in 1987 Motronic engine management improved efficiency and emissions upon its return to the US market.

Production numbers: 11,135
Engine capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 300bhp @ 5,500rpm
Maximum torque: 432Nm @ 4,000rpm
Brakes: Front: 304mm discs; Rear: 309mm discs
Wheels & tyres: Front: 7x16-inch; 205/55/VR16;
Rear: 8x16-inch; 225/50/VR16
Length: 4,491mm
Width: 1,775mm
Weight: 1,300kg (1,335kg from '86)
0-62mph: 5.4 sec
Top speed: 161mph
Issue featured: n/a

★★★½☆

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Carrera 3.2 1984-89



Almost the same galvanised body as the SC. Engine was claimed to be 80 per cent new, and the first production 911 to feature an ECU to control ignition and fuel systems.

Production numbers: 70,044
Engine capacity: 3,164cc
Compression ratio: 10.3:1
Maximum power: 231bhp @ 5,900rpm
Maximum torque: 284Nm @ 4,800rpm
Brakes: Front: 286mm discs; Rear: 294mm discs
Wheels & tyres: Front: 7x15-inch; 195/65/VR15; Rear: 8x15-inch, 215/60/VR15 (16 inches for '89)
Length: 4,291mm
Width: 1,652mm
Weight: 1,210kg
0-62mph: 5.6 sec
Top speed: 152mph
Issue featured: 114

★★★☆☆

Speedster 1989



Carrera 3.2 with a chopped, steeply racked windscreen and hood and stripped-out interior. Porsche insisted the simple hood was not designed to be 100 per cent watertight.

Production numbers: 2,274 (including Turbo-look)
Engine capacity: 3,164cc
Compression ratio: 10.3:1
Maximum power: 231bhp @ 5,900rpm
Maximum torque: 284Nm @ 4,800rpm
Brakes: Front: 286mm discs; Rear: 294mm discs
Wheels & tyres: Front: 6x16-inch; 205/55/VR16
Rear: 8x16-inch; 245/60/VR16
Length: 4,291mm
Width: 1,775mm
Weight: 1,220kg
0-60mph: 6.0 sec
Top speed: 148mph
Issue featured: 114

★★★½☆

964 Carrera 2 1990-93

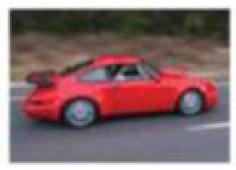


Rear-drive Carrera 2 offered an emphatically more traditional 911 experience, and was 100kg lighter, but looked identical to the Carrera 4. Tiptronic was a new option.

Production numbers: 19,484
Engine capacity: 3,600cc
Compression ratio: 11.3:1
Maximum power: 250bhp @ 6,100rpm
Maximum torque: 310Nm @ 4,800rpm
Brakes: Front: 298mm discs; Rear: 299mm discs
Wheels & tyres: Front: 6x16-inch; 205/55/ZR16; Rear: 8x16-inch; 225/50/ZR16
Length: 4,250mm
Width: 1,652mm
Weight: 1,350kg
0-62mph: 5.6 sec
Top speed: 164mph
Issue featured: 55

★★★☆☆

964 Turbo 1991-92



This used the revised 964 body shell, extended arches and 'tea tray' spoiler. The engine was essentially the 3.3-litre unit from the previous model, but updated.

Production numbers: 3,660
Engine capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 320bhp @ 5,750rpm
Maximum torque: 450Nm @ 4,500rpm
Brakes: Front: 320mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x17-inch; 205/50/ZR17
Rear: 9x17-inch; 255/40/ZR17
Length: 4,250mm
Width: 1,775mm
Weight: 1,470kg
0-62mph: 5.4 sec
Top speed: 168mph
Issue featured: 97

★★★½☆

964 C2 Speedster 1993-94



Combined the 964 bodyshell with the hood and windscreen of the Carrera 3.2 Speedster, plus RS interior. It is thought that Porsche planned to build 3,000, but demand fell.

Production numbers: 936
Capacity: 3,600cc
Compression ratio: 11.3:1
Maximum power: 250bhp @ 6,100rpm
Maximum torque: 310Nm @ 4,800rpm
Brakes: Front: 320mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x17-inch; 205/50/ZR17
Rear: 9x17-inch; 255/40/ZR17
Length: 4,250mm
Width: 1,652mm
Weight: 1,340kg
0-62mph: 5.5 sec
Top speed: 161mph
Issue featured: 46

★★★☆☆

964 Turbo 3.6 1993-94



Engine based on modified 3.6-litre 964 unit. Distinctive 18-inch split-rim Speedline wheels covered the big-red brake calipers. Suspension lowered by 20mm.

Production numbers: 936
Capacity: 3,600cc
Compression ratio: 7.5:1
Maximum power: 360bhp @ 5,500rpm
Maximum torque: 520Nm @ 4,200rpm
Brakes: Front: 320mm discs; Rear: 299mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/ZR18
Rear: 10x18-inch; 265/35/ZR18
Length: 4,250mm
Width: 1,775mm
Weight: 1,470kg
0-62mph: 4.8 sec
Top speed: 174mph
Issue featured: 17

★★★★☆

993 Carrera 4S 1995-96



The 4S was effectively a C4 with a Turbo wide bodyshell (albeit lacking a fixed rear spoiler). Also boasted Turbo suspension, brakes and Turbo-look wheels.

Production numbers: 6,948
Engine capacity: 3,600cc
Compression ratio: 11.3:1
Maximum power: 285bhp @ 6,100rpm
Maximum torque: 340Nm @ 5,250rpm
Brakes: Front: 322mm discs; Rear: 322mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/ZR18
Rear: 10x18-inch; 285/30/ZR18
Length: 4,245mm
Width: 1,795mm
Weight: 1,520kg
0-62mph: 5.3 sec
Top speed: 168mph
Issue featured: 109

★★★★☆

993 Carrera RS 1995-96



Lightweight body as per RS tradition, teamed with a 3.8 litre engine, VarioRam intake system and remapped ECU to create 200bhp, fed to the rear wheels only.

Production numbers: 1,104
Engine capacity: 3,746cc
Compression ratio: 11.5:1
Maximum power: 300bhp @ 6,000rpm
Maximum torque: 355Nm @ 5,400rpm
Brakes: Front: 322mm discs; Rear: 299mm discs
Wheels & tyres: Front: 18x8J, 225/40ZR18; Rear: 18x10J, 265/35ZR18
Length: 4,245mm
Width: 1,735mm
Weight: 1,279kg
0-62mph: 5.0 sec
Top speed: 172mph
Issue featured: 106

★★★★★

930 LE 1989

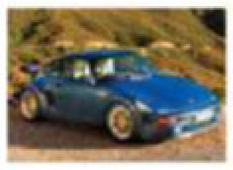


Essentially an SE without a slantnose front, the LE had the same engine, front spoiler, sill extensions and rear air intakes. One made for every OPC of the time.

Production numbers: 50
Engine capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 330bhp @ 5,500rpm
Maximum torque: 432Nm @ 4,000rpm
Brakes: Front: 304mm discs; Rear: 309mm discs
Wheels & tyres: Front: 7x16-inch; 205/55/VR16
Rear: 9x16-inch; 245/45/VR16
Length: 4,491mm
Width: 1,775mm
Weight: 1,335kg
0-62mph: 4.6 sec
Top speed: 173mph
Issue featured: 110

★★★★★

930 SE 1986-89



Slantnosed and based on 935 race cars, with pop-up headlamps. Front spoiler made deeper to accommodate extra oil cooler, rear intakes fed air to brakes.

Production numbers: 50 (UK only)
Engine capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 330bhp @ 5,500rpm
Maximum torque: 432Nm @ 4,000rpm
Brakes: Front: 304mm discs; Rear: 309mm discs
Wheels & tyres: Front: 7x16-inch; 205/55/VR16
Rear: 9x16-inch; 245/45/VR16
Length: 4,491mm
Width: 1,775mm
Weight: 1,335kg
0-62mph: 4.6 sec
Top speed: 173mph
Issue featured: 99

★★★★½

3.2 Clubsport 1987-89



Removing 'luxuries' sliced off around 40kg of weight. Revised engine management gave a higher rev limit of 6,840rpm. Suspension uprated and LSD standard.

Production numbers: 340
Engine capacity: 3,164cc
Compression ratio: 10.3:1
Maximum power: 231bhp @ 5,900rpm
Maximum torque: 284Nm @ 4,800rpm
Brakes: Front: 286mm discs; Rear: 294mm discs
Wheels & tyres: Front: 6x16-inch, 205/55/VR16;
Rear: 7x16-inch, 225/55/VR16
Length: 4,291mm
Width: 1,650mm
Weight: 1,160kg
0-60mph: 5.1 sec
Top speed: 152mph
Issue featured: 118

★★★½☆

964 Carrera 4 1989-93



Heavily revised bodywork, deformable bumpers over coil-spring suspension and four-wheel-drive marked this radical overhaul of the '87 per cent new' 911.

Production numbers: 13,353 (Coupe)
Engine capacity: 3,600cc
Compression ratio: 11.3:1
Maximum power: 250bhp @ 6,100rpm
Maximum torque: 310Nm @ 4,800rpm
Brakes: Front: 298mm discs; Rear: 299mm discs
Wheels & tyres: Front: 6x16-inch; 205/55/ZR16
Rear: 8x16-inch; 225/50/ZR16
Length: 4,250mm
Width: 1,652mm
Weight: 1,450kg
0-62mph: 5.7 sec
Top speed: 162mph
Issue featured: 111

★★½☆☆

964 C4 Lightweight 1991



964 Leichtbau made use of surplus parts from 953 Paris Dakar project. Highlights include four way adjustable differential, short ratio gearbox and stripped interior.

Production numbers: 22
Engine capacity: 3,600cc
Compression ratio: 11.4:1
Maximum power: 265bhp @ 6,100rpm
Maximum torque: 332Nm @ 4,800rpm
Brakes: Front: 322mm discs; Rear: 299mm discs
Wheels & tyres: Front: 8x17-inch; 245/620/17
Rear: 9.5x17-inch; 265/630/17
Length: 4,275mm
Width: 1,652mm
Weight: 1,100kg
0-62mph: unknown
Top speed: unknown
Issue featured: 54

★★★★½

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
Engine capacity: 3,600cc
Compression ratio: 11.3:1
Maximum power: 260bhp @ 6,100rpm
Maximum torque: 310Nm @ 4,800rpm
Brakes: Front: 320mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7.5x17-inch; 205/50/ZR17
Rear: 9x17-inch; 255/40/ZR17
Length: 4,250mm
Width: 1,650mm
Weight: 1,230kg (Sport)
0-62mph: 5.2 sec
Top speed: 168mph
Issue featured: 116

★★★½☆

964 Turbo S 1992-93



180kg lighter than Turbo. Intakes in the rear arches funnelled air to the brakes, while the engine power was boosted by 61bhp. RS-spec uprated suspension.

Production numbers: 81
Engine capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 381bhp @ 6,000rpm
Maximum torque: 490Nm @ 4,800rpm
Brakes: Front: 320mm discs; Rear: 299mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/ZR18
Rear: 10x18-inch; 265/35/ZR18
Length: 4,250mm
Width: 1,775mm
Weight: 1,290kg
0-62mph: 4.6 sec
Top speed: 180mph
Issue featured: 108

★★★★☆

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 twin exhaust.

Production numbers: 55
Engine capacity: 3,746cc
Compression ratio: 11.6:1
Maximum power: 300bhp @ 6,500rpm
Maximum torque: 359Nm @ 5,250rpm
Brakes: Front: 322mm discs; Rear: 290mm discs
Wheels & tyres: Front: 9x18-inch; 235/40/ZR18
Rear: 11x18-inch; 285/35/ZR18
Length: 4,250mm
Width: 1,775mm
Weight: 1,210kg
0-62mph: 4.9 sec
Top speed: 169mph
Issue featured: n/a

★★★★½

964 Anniversary 1993-94



'30 Jahre' anniversary 964 utilised a 'Turbo' wide body melded to the four wheel drive Carrera running gear. Available in Viola metallic, Polar silver or Amethyst.

Production numbers: 911
Engine capacity: 3,600cc
Compression ratio: 10.3:1
Maximum power: 250bhp @ 6,100rpm
Maximum torque: 310Nm @ 4,800rpm
Brakes: Front: 298mm discs; Rear:299mm discs
Wheels & tyres: Front: 7x17-inch; 205/50/17 tyres
Rear: 9x17-inch; 255/40/17 tyres
Length: 4,250mm
Width: 1,775mm
Weight: 1,470kg
0-62mph: 5.7 sec
Top speed: 162mph
Issue featured: 112

★★★★☆

964 RS America 1993-94



Offered in five colours, fixed whaletail spoiler and two cloth sports seats, with just four options: air con, sunroof, 90 per cent locking rear differential and stereo.

Production numbers: 701
Engine capacity: 3,600cc
Compression ratio: 10.3:1
Maximum power: 250bhp @ 6,100rpm
Maximum torque: 310Nm @ 4,800rpm
Brakes: Front: 298mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x17-inch; 205/50/ZR17
Rear: 8x17-inch; 255/40/ZR17
Length: 4,250mm
Width: 1,650mm
Weight: 1,340kg
0-62mph: 5.5 sec
Top speed: 164mph
Issue featured: 102

★★½☆☆

993 Carrera 1993-97



Restyled bodywork had swept-back headlamps, curvaceous wings and blended-in bumpers. Engine revised, with VarioRam available from 1996.

Production numbers: 38,626
Engine capacity: 3,600cc
Compression ratio: 11.3:1
Maximum power: 272bhp @ 6,000rpm
Maximum torque: 330Nm @ 5,000rpm
Brakes: Front: 304mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x16-inch; 205/55/ZR16
Rear: 9x17-inch; 245/45/ZR16
Length: 4,245mm
Width: 1,735mm
Weight: 1,370kg
0-62mph: 5.6 sec
Top speed: 168mph
Issue featured: 110

★★★☆☆

993 Carrera 4 1994-97



As per the 993-model Carrera, but with four-wheel-drive. Transmission was half the weight of the previous Carrera 4, and was designed to give a more rear-drive feel.

Production numbers: 2,884 (Coupe)
Engine capacity: 3,600cc
Compression ratio: 11.3:1
Maximum power: 272bhp @ 6,000rpm
Maximum torque: 330Nm @ 5,000rpm
Brakes: Front: 304mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x16-inch; 205/55/ZR16
Rear: 9x16-inch; 245/45/ZR16
Length: 4,245mm
Width: 1,735mm
Weight: 1,420kg
0-62mph: 5.8 sec
Top speed: 166mph
Issue featured: 111

★★★☆☆

993 GT2 1995-96



911 Turbo, but with reduced equipment. Also included rear-wheel drive, making it a better track car. Fitted with huge front and rear spoilers and bolt on arch extensions.

Production numbers: 194
Engine capacity: 3,600cc
Compression ratio: 8.0:1
Maximum power: 430bhp @ 5,750rpm
Maximum torque: 540Nm @ 4,500rpm
Brakes: Front: 322mm discs; Rear: 322mm discs
Wheels & tyres: Front: 9x18-inch; 235/40/ZR18
Rear: 11x18-inch; 285/35/ZR18
Length: 4,245mm
Width: 1,855mm
Weight: 1,290kg
0-62mph: 3.9 sec
Top speed: 189mph
Issue featured: 113

★★★★★

993 Turbo 1996-98



Fitted with two KKK turbochargers in order to reduce lag. Power went to all four wheels using the Carrera 4's transmission system. Brakes were 'Big Reds'.

Production numbers: 5,937
Engine capacity: 3,600cc
Compression ratio: 8.0:1
Maximum power: 408bhp @ 5,750rpm
Maximum torque: 540Nm @ 4,500rpm
Brakes: Front: 322mm discs; Rear: 322mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/ZR18
Rear: 10x18-inch; 285/30/ZR18
Length: 4,245mm
Width: 1,795mm
Weight: 1,500kg
0-62mph: 4.3 sec
Top speed: 180mph
Issue featured: 116

★★★★½

993 Carrera S 1997-98



The features that come with the Carrera S are similar to the Carrera 4S's, only this time in rear-wheel drive. Sought after for its superb handling and wide-body looks.

Production numbers: 3,714
Engine capacity: 3,600cc
Compression ratio: 11.3:1
Maximum power: 285bhp @ 6,100rpm
Maximum torque: 340Nm @ 5,250rpm
Brakes: Front: 322mm discs; Rear: 322mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/ZR18
Rear: 10x18-inch; 285/30/ZR18
Length: 4,245mm
Width: 1,795mm
Weight: 1,450kg
0-62mph: 5.4 sec
Top speed: 168mph
Issue featured: 118

★★★½☆

993 Turbo S 1998



The final hurrah for the last air-cooled 911. With 450bhp for UK models, it was the fastest and most luxurious road going model Stuttgart had ever produced. Manual only.

Production numbers: 345
Engine capacity: 3,600cc
Compression ratio: 8.0:1
Maximum power: 450bhp @ 5,750rpm
Maximum torque: 585Nm @ 4,500rpm
Brakes: Front: 320mm discs; Rear: 322mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/18
Rear: 10x18-inch; 285/30/18
Length: 4,245mm
Width: 1,795mm
Weight: 1,583kg
0-62mph: 4.1 sec
Top speed: 186mph
Issue featured: 115

★★★★★

911 technology explained



Intermediate shaft

An integral part of every 911 engine, Total 911 investigates the IMS and how its bearing can cause problems in the M96 engine

For every 911 engine up until the introduction of the 9A1 DFI unit, the crankshafts indirectly drive the camshafts via the IMS. Its use allows the speed of the timing chains to be reduced, increasing chain life. It's a setup that first appeared in the 547 flat four from the 356A Carrera.

Every Porsche IMS until the arrival of the M96 ran in plain bearings that were pressure fed by engine oil, preventing the possibility of them seizing. With the arrival of water-cooled engines in 1998 though, the design was changed, with the camshafts no longer driven off just one end of the IMS. The revised cylinder head design required sprockets mounted on either end of the intermediate shaft, with the front end of the shaft running in a plain bearing surface integrated into the front oil pump console.

The sprocket on the front end of the IMS is connected to the timing chain for the 4-6 cylinder bank, while the rearward sprocket on the IMS drives the camshaft for the 1-3 bank. At the very tail of the intermediate shaft is a smaller sprocket connected to the crankshaft via a chain. This is the connection that powers the IMS.

At the flywheel end of the M96 and M97's IMS is a sealed roller bearing. Due to the design of the oil galleries in these engines, a plain bearing at this end proved impossible to implement. This roller bearing is held in place by a steel flange, which holds the inner race stationery, allowing the outer race to rotate on a number of ball bearings. Initial IMS bearings were twin-row, with later designs moving to single-row designs.

All can suffer from the breakdown of the bearing seals though, which allows the grease packed inside the IMS bearing to wash out. This can cause metallic compounds to enter the oil flow of the engine, causing internal damage. In the worst cases the bearing seize, causing the IMS to snap, resulting in a catastrophic engine failure. This is a rare occurrence, however.

996 Carrera 1998-2001



An all-new 911 with larger, restyled bodywork and a water-cooled engine. Interior was redesigned in order to enable better ergonomic efficiency and more room.

Production numbers: 56,733
Engine capacity: 3,387cc
Compression ratio: 11.3:1
Maximum power: 300bhp @ 6,800rpm
Maximum torque: 350Nm @ 4,600rpm
Brakes: Front: 318mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x17-inch; 205/50/R17
Rear: 9x17-inch; 255/40/R17
Length: 4,430mm
Width: 1,765mm
Weight: 1,320kg
0-62mph: 5.2 sec
Top speed: 174mph
Issue featured: 117

★★☆☆☆

996 Carrera 4 1998-2001



Four-wheel drive transmission fed five per cent of power in normal driving, increasing to 40 per cent when required. PSM used for first time, rolled out across the range in 2001.

Production numbers: 22,054
Engine capacity: 3,387cc
Compression ratio: 11.3:1
Maximum power: 300bhp @ 6,800rpm
Maximum torque: 350Nm @ 4,600rpm
Brakes: Front: 318mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x17-inch; 205/50/R17
Rear: 9x17-inch; 255/40/R17
Length: 4,430mm
Width: 1,765mm
Weight: 1,375kg
0-62mph: 5.2 sec
Top speed: 174mph
Issue featured: 111

★★☆☆☆

996 GT3 1998-2000



Commonly called the Gen1 GT3, this was a lightweight 996 with power driving the rear wheels. Suspension was lowered by 30mm and brakes were uprated.

Production numbers: 1,858
Engine capacity: 3,600cc
Compression ratio: 11.7:1
Maximum power: 360bhp @ 7,200rpm
Maximum torque: 370Nm @ 5,000rpm
Brakes: Front: 330mm discs; Rear: 300mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/R18
Rear: 10x18-inch; 285/30/R18
Length: 4,430mm
Width: 1,765mm
Weight: 1,350kg
0-62mph: 4.8 sec
Top speed: 188mph
Issue featured: 99

★★★★☆

996 GT2 2001-03



A lightweight, Turbo-bodied 996 with uprated turbocharged engine and suspension. PCCB was standard. Revised ECU later gave an extra 21bhp.

Production numbers: 1,287
Engine capacity: 3,600cc
Compression ratio: 9.4:1
Maximum power: 462bhp @ 5,700rpm
Maximum torque: 620Nm @ 3,500-4,500rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8x18-inch; 235/40/R18
Rear: 12x18-inch; 315/30/R18
Length: 4,450mm
Width: 1,830mm
Weight: 1,440kg
0-62mph: 4.1 sec
Top speed: 196mph
Issue featured: 108

★★★★☆

Gen2 996 C2 2002-04



Facelifted with Turbo-style headlamps and revised front and rear bumpers, fitted with more powerful 3.6-litre engine and VarioCam Plus. Manual and Tiptronic 'boxes updated.

Production numbers: 29,389
Engine capacity: 3,596cc
Compression ratio: 11.3:1
Maximum power: 320bhp @ 6,800rpm
Maximum torque: 370Nm @ 4,250rpm
Brakes: Front: 318mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x17-inch; 205/50/R17
Rear: 9x17-inch; 255/40/R17
Length: 4,430mm
Width: 1,770mm
Weight: 1,370kg
0-62mph: 5.0 sec
Top speed: 177mph
Issue featured: n/a

★★½☆☆

Gen2 996 C4 2002-04



Facelifted in line with rear-drive Carrera, though the all-wheel-drive version drives very much like its rear-driven brethren. Cabin received minor updates over Gen1.

Production numbers: 10,386
Engine capacity: 3,596cc
Compression ratio: 11.3:1
Maximum power: 320bhp @ 6,800rpm
Maximum torque: 370Nm @ 4,250rpm
Brakes: Front: 318mm discs; Rear: 299mm discs
Wheels & tyres: Front: 7x17-inch; 205/50/R17
Rear: 9x17-inch; 255/40/R17
Length: 4,430mm
Width: 1,770mm
Weight: 1,430kg
0-62mph: 5.0 sec
Top speed: 177mph
Issue featured: 107

★★½☆☆

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
Engine capacity: 3,600cc
Compression ratio: 11.7:1
Maximum power: 381bhp @ 7,400rpm
Maximum torque: 385Nm @ 5,000rpm
Brakes: Front: 350mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8.5x18-inch; 235/40R18
Rear: 11x18-inch; 295/30R18
Length: 4,435mm
Width: 1,770mm
Weight: 1,360kg
0-62mph: 4.4 sec
Top speed: 190mph
Issue featured: 118

★★★★½

996 Turbo S 2004-05



A 911 Turbo with the previously optional 30bhp power upgrade, with larger turbochargers, uprated intercoolers and a revised ECU. PCCB standard.

Production numbers: 1,563
Engine capacity: 3,600cc
Compression ratio: 9.4:1
Maximum power: 450bhp @ 5,700rpm
Maximum torque: 620Nm @ 3,500-4,500rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/R18
Rear: 11x18-inch; 295/30/R18
Length: 4,435mm
Width: 1,830mm
Weight: 1,590kg
0-62mph: 4.2 sec
Top speed: 191mph
Issue featured: 62

★★★★☆

997 Carrera 2004-08



Fully revised 911 with 993-influenced bodywork and a new interior. Engine was like 996, but refined for more power. Six-speed Tiptronic option available.

Production numbers: 25,788
Engine capacity: 3,596cc
Compression ratio: 11.3:1
Maximum power: 325bhp @ 6,800rpm
Maximum torque: 370Nm @ 4,250rpm
Brakes: Front: 318mm discs; Rear: 299mm discs
Wheels & tyres: Front: 8x18-inch; 235/40/R18
Rear: 10x18-inch; 265/40/R18
Length: 4,427mm
Width: 1,808mm
Weight: 1,395kg
0-62mph: 5.0 sec
Top speed: 177mph
Issue featured: 112

★★★☆☆

997 Carrera 4S 2005-08



The same 3.8-litre, 355bhp engine as the Carrera S, with four-wheel-drive system on C4. 44mm wider than Carrera S to accomodate for wider rear wheels and tyres.

Production numbers: 30,973
Engine capacity: 3,824cc
Compression ratio: 11.8:1
Maximum power: 355bhp @ 6,600rpm
Maximum torque: 400Nm @ 4,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x19-inch; 235/35/R19
Rear: 11x19-inch; 295/30/R19
Length: 4,427mm
Width: 1,808mm
Weight: 1,475kg
0-62mph: 4.8 sec
Top speed: 179mph
Issue featured: 14

★★★½☆

997 Turbo 2005-10



Similar to the 997 C4S body, but with extra intakes at the front and sides. Essentially the 996 Turbo engine, but with all-new twin turbos. VTG gave the best of small and large turbos.

Production numbers: 19,201 (up to 2008)
Engine capacity: 3,600cc
Compression ratio: 9.8:1
Maximum power: 480bhp @ 6,000rpm
Maximum torque: 620Nm @ 1,950-5,000rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/R19
Rear: 11x19-inch; 305/30/R19
Length: 4,450mm
Width: 1,852mm
Weight: 1,585kg
0-62mph: 3.9 sec
Top speed: 193mph
Issue featured: 107

★★★★☆

997 GT3 2006-07



Track-focused, but based on narrow-bodied Carrera with reworked 996 GT3 engine. PASM standard, revs to 8,400rpm, 200 higher than the Gen2 996 GT3.

Production numbers: 2,378
Engine capacity: 3,600cc
Compression ratio: 12.0:1
Maximum power: 415bhp @ 7,600rpm
Maximum torque: 405Nm @ 5,500rpm
Brakes: Front: 380mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/R19
Rear: 12x19-inch; 305/30/R19
Length: 4,445mm
Width: 1,808mm
Weight: 1,395kg
0-62mph: 4.3 sec
Top speed: 192mph
Issue featured: 111

★★★★½

996 Turbo 2001-05



Distinguished by wide rear arches, air intakes and deep front spoiler, plus part-fixed, part-retractable spoiler. Different engine to naturally aspirated 3.6-litre 996 unit.

Production numbers: 20,499
Engine capacity: 3,600cc
Compression ratio: 9.4:1
Maximum power: 420bhp @ 6,000rpm
Maximum torque: 560Nm @ 2,700-4,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/R18
Rear: 11x18-inch; 295/30R18
Length: 4,435mm
Width: 1,830mm
Weight: 1,590kg
0-62mph: 4.2 sec
Top speed: 189mph
Issue featured: 114

★★★★☆

996 Carrera 4S 2001-05



Basically a Carrera 4 featuring a Turbo bodyshell, without rear air intakes, but with a full-width rear reflector panel. Suspension and brakes were similar to the Turbo spec.

Production numbers: 23,055
Engine capacity: 3,596cc
Compression ratio: 11.3:1
Maximum power: 320bhp @ 6,800rpm
Maximum torque: 370Nm @ 4,250rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/R18
Rear: 11x18-inch; 296/30/R18
Length: 4,435mm
Width: 1,830mm
Weight: 1,495kg
0-62mph: 5.1 sec
Top speed: 174mph
Issue featured: 101

★★★½☆

996 Anniversary 2003-04



Available in GT silver, and included a Turbo front bumper and chrome Carrera wheels. Powerkit, -10mm sports suspension and mechanical LSD standard.

Production numbers: 1,963
Engine capacity: 3,596cc
Compression ratio: 11.3:1
Maximum power: 345bhp @ 6,800rpm
Maximum torque: 370Nm @ 4,800rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x18-inch; 225/40/R18
Rear: 10x18-inch; 285/30/R18
Length: 4,430mm
Width: 1,770mm
Weight: 1,370kg
0-62mph: 4.9 sec
Top speed: 175mph
Issue featured: 112

★★★☆☆

Gen2 996 GT3 2003-05



Based on facelifted 996 Carrera, but with new spoilers. Suspension lowered and uprated, PCCB optional . Full spec interior unless Clubsport option was ordered.

Production numbers: 2,313
Engine capacity: 3,600cc
Compression ratio: 11.7:1
Maximum power: 381bhp @ 7,400rpm
Maximum torque: 385Nm @ 5,000rpm
Brakes: Front: 350mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8.5x18-inch; 235/40/R18
Rear: 11x18-inch; 295/30/R18
Length: 4,435mm
Width: 1,770mm
Weight: 1,380kg
0-62mph: 4.5 sec
Top speed: 190mph
Issue featured: 107

★★★★☆

997 Carrera S 2004-08



As per the 997 Carrera, but with more powerful 3.8-litre engine and PASM. 19-inch wheels as standard, with bigger venitlated brakes. Quad exhaust tailpipes.

Production numbers: 41,059
Engine capacity: 3,824cc
Compression ratio: 11.8:1
Maximum power: 355bhp @ 6,600rpm
Maximum torque: 400Nm @ 4,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x19-inch; 235/35/R19
Rear: 11x19-inch; 295/30/R19
Length: 4,427mm
Width: 1,808mm
Weight: 1,420kg
0-62mph: 4.8 sec
Top speed: 182mph
Issue featured: 107

★★★½☆

997 Carrera 4 2005-08



Like the 997 Carrera, but with drive to all four wheels via a multi-disc viscous coupling, transferring between five and 40 per cent of traction to the front. 44mm wider at rear.

Production numbers: 8,533
Engine capacity: 3,596cc
Compression ratio: 11.3:1
Maximum power: 325bhp @ 6,800rpm
Maximum torque: 370Nm @ 4,250rpm
Brakes: Front: 318mm discs; Rear: 299mm discs
Wheels & tyres: Front: 8x18-inch; 235/40/R18
Rear: 10x18-inch; 295/35/R18
Length: 4,427mm
Width: 1,852mm
Weight: 1,450kg
0-62mph: 5.1 sec
Top speed: 174mph
Issue featured: 3

★★★☆☆

997 GT3 RS 2006-07



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

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

★★★★½

997 GT2 2007-09



Essentially the 997 Turbo, but with rear-wheel drive only. Enjoyed a more track-orientated suspension and brake setup, with GT3-style interior and extra power.

Production numbers: 1,242
Engine capacity: 3,600cc
Compression ratio: 9.0:1
Maximum power: 530bhp @ 6,500rpm
Maximum torque: 680Nm @ 2,200-4,500rpm
Brakes: Front: 380mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/ZR19
Rear: 9x11-inch; 305/30/ZR19
Length: 4,469mm
Width: 1,852mm
Weight: 1,440kg
0-62mph: 3.7 sec
Top speed: 204mph
Issue featured: 31

★★★★½

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Gen2 997 C2 2008-12



Revised with restyled LED rear lights and front driving lights. M97 engine replaced with a 91 DFI unit, using fewer parts (with no problematic Intermediate Shaft).

Production numbers: 10,500
Engine capacity: 3,614cc
Compression ratio: 12.5:1
Maximum power: 345bhp @ 6,500rpm
Maximum torque: 390Nm @ 4,400rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x18-inch; 235/40/ZR18
Rear: 10.5x18-inch; 265/40/ZR18
Length: 4,435mm
Width: 1,808mm
Weight: 1,490kg
0-62mph: 4.9 sec
Top speed: 180mph
Issue featured: 89

★★★½☆

Gen2 997 C2 S 2008-12

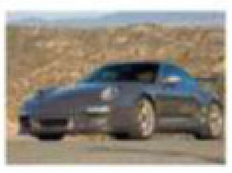


Altered as per the Carrera, but with larger 3.8-litre engine – again using fewer components and Direct Fuel Injection. Had seven-speed PDK optional, like the Carrera.

Production numbers: 15,000
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 385bhp @ 6,500rpm
Maximum torque: 420Nm @ 4,400rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x19-inch; 235/35/ZR19
Rear: 11x19-inch; 295/30/ZR19
Length: 4,435mm
Width: 1,808mm
Weight: 1,500kg
0-62mph: 4.7 sec
Top speed: 188mph
Issue featured: 61

★★★★☆

Gen2 997 GT3 RS 2009-12



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

Production numbers: 1,500
Engine capacity: 3,800cc
Compression ratio: 12.2:1
Maximum power: 450bhp @ 7,900rpm
Maximum torque: 430Nm @ 6,750rpm
Brakes: Front: 380mm discs; Rear: 380mm discs
Wheels & tyres: Front: 9x19-inch; 245/35/ZR19
Rear: 12x19-inch; 325/30/ZR19
Length: 4,460mm
Width: 1,852mm
Weight: 1,370kg
0-62mph: 4.0sec
Top speed: 192mph
Issue featured: 110

★★★★★

997 Speedster 2010



Built to mark Porsche Exclusiv's 25th anniversary. Shorter windscreen, but rake angle same as 997 Carrera. Wide body with 19-inch Fuchs wheels. Rear-wheel drive.

Production numbers: 356
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 408bhp @ 7,300rpm
Maximum torque: 420Nm @ 4,400-5,600rpm
Brakes: Front: 350mm discs; Rear: 350mm discs.
Wheels & tyres: Front: 8.5x19-inch; 235/35/ZR19
Rear: 11x19-inch; 305/30/ZR19
Length: 4,440mm
Width: 1,852mm
Weight: 1,540kg
0-62mph: 4.4 sec
Top speed: 190mph
Issue featured: 69

★★★★½

997 C2 GTS 2010-12



Features the C4's wider rear body, and powered by the 3.8-litre Carrera S engine, with a Powerkit producing 25bhp extra. The GTS is laden with Porsche options.

Production numbers: Unknown
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 402bhp @ 7,300rpm
Maximum torque: 420Nm @ 4,200-5,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/19
Rear: 11x19-inch; 305/30/19
Length: 4,435mm
Width: 1,852mm
Weight: 1,420kg
0-60mph: 4.6 sec
Top speed: 190mph
Issue featured: 118

★★★★½

997 C4 GTS 2011-12



Like the C2 997 GTS, but slightly heavier and with four-wheel drive. In either C2 or C4 form, it represented a great saving over optioning up a 997 Carrera counterpart.

Production numbers: Unknown
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 402bhp @7,300rpm
Maximum torque: 420Nm @ 4,200-5,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/ZR19
Rear: 11x19-inch; 305/30/ZR19
Length: 4,435mm
Width: 1,852mm
Weight: 1,555kg
0-62mph: 4.6 sec
Top speed: 188mph
Issue featured: 91

★★★★½

991 Carrera 4S 2012-



Same wider body styling as Carrera 4, coupled to 3.8-litre 400bhp engine. Also features six-piston brake calipers at front, as opposed to four. PTV spread torque more evenly.

Production numbers: Currently in production
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 400bhp @ 7,400rpm
Maximum torque: 440Nm @ 5,600rpm
Brakes: Front: 340mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8.5x20-inch; 245/35/ZR20
Rear: 11x20-inch; 305/30/ZR20
Length: 4,491mm
Width: 1,852mm
Weight: 1,445kg
0-62mph: 4.5sec
Top speed: 185mph
Issue featured: 118

★★★★½

991 GT3 2013-

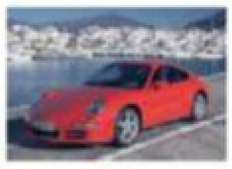


Wide body from 991 Carrera 4 was used for the first time. Mezger engine from previous GT3s replaced with revamped DFI version of Carrera S engine. PDK only.

Production numbers: Currently in production
Engine capacity: 3,800cc
Compression ratio: 12.9:1
Maximum power: 475hp @ 8,250rpm
Maximum torque: 440Nm @ 6,250rpm
Brakes: Front: 380mm discs; Rear: 380mm discs
Wheels & tyres: Front: 9x20-inch; 245/35/ZR20
Rear: 12x20-inch; 305/30/ZR20
Length: 4,545mm
Width: 1,852mm
Weight: 1,430kg
0-62mph: 3.5sec
Top speed: 196mph
Issue featured: 104

★★★★★

Gen2 997 C4 2008-12



Numerous engine and body changes as per the Carrera, but with a wider rear end plus full-width rear reflector. New all-wheel drive was initiated from the 997 Turbo.

Production numbers: 1,384 (Coupe)
Engine capacity: 3,614cc
Compression ratio: 12.5:1
Maximum power: 345bhp @ 6,500rpm
Maximum torque: 390Nm @ 4,400rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x18-inch; 235/40/ZR18
Rear: 10.5x18-inch; 265/40/ZR18
Length: 4,435mm
Width: 1,852mm
Weight: 1,545kg
0-62mph: 5.0 sec
Top speed: 176mph
Issue featured: 41

★★★½☆

Gen2 997 C4S 2008-12



Bodywork as per C4, but with larger engine. Utilised the 997 Turbo's four-wheel drive and PTM. Viscous coupling gives way to electromagnetically controlled multi-plate clutch.

Production numbers: 7,910 (Coupe)
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 385bhp @ 6,500rpm
Maximum torque: 420Nm @ 4,400rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8x19-inch; 235/30/ZR19
Rear: 11x19-inch; 295/30/ZR19
Length: 4,435mm
Width: 1,852mm
Weight: 1,555kg
0-62mph: 4.7 sec
Top speed: 185mph
Issue featured: 111

★★★★☆

Gen2 997 GT3 2009-12



Updated as per the Carrera, but with a unique front spoiler and rear wing, revised PASM, centre-lock wheels and better brakes. 2010 MY GT3s recalled to fix rear hubs.

Production numbers: 2,200
Engine capacity: 3,800cc
Compression ratio: 12.2.:1
Maximum power: 435bhp @ 7,900rpm
Maximum torque: 430Nm @3250rpm
Brakes: Front: 380mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/ZR19
Rear: 12x19-inch;305/30/ZR19
Length: 4,460mm
Width: 1,808mm
Weight: 1,395kg
0-62mph: 4.1sec
Top speed: 194mph
Issue featured: 99

★★★★½

Gen2 997 Turbo 2009-13



Same as the original 997 Turbo, but with new LED tail-lights and driver lights up front. Larger tailpipes and DFI engine, with fuel consumption cut by 16 per cent.

Production numbers: 3,800
Engine capacity: 3,800cccc
Compression ratio: 9.8:1
Maximum power: 500bhp @ 6,000rpm
Maximum torque: 650Nm @ 1,950-5,000rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/ZR19
Rear: 11x19-inch; 305/30/ZR19
Length: 4,450mm
Width: 1,852mm
Weight: 1,570kg
0-62mph: 3.4 sec
Top speed: 194mph
Issue featured: 90

★★★★½

997 Sport Classic 2010



Based on a 3.8-litre Powerkit, rear wheel-drive Carrera S, but with 44mm wider rear arches. Retro styling including iconic ducktail spoiler and large Fuchs wheels.

Production numbers: 250
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 408bhp @ 7,300rpm
Maximum torque: 420Nm @ 4,200-5,600rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/ZR19
Rear: 11x19-inch; 305/30/ZR19
Length: 4,435mm
Width: 1,852mm
Weight: 1,425kg
0-62mph: 4.6 sec
Top speed: 187mph
Issue featured: 57

★★★★★

997 GT3 RS 4.0 2010



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

Production numbers: 600
Engine capacity: 3,996cc
Compression ratio:12.6:1
Maximum power: 493bhp @ 8,250rpm
Maximum torque: 460Nm @ 5,750rpm
Brakes: Front: 380mm discs; Rear: 380mm discs
Wheels & tyres: Front: 9x19-inch; 245/35/ZR19
Rear: 12x19-inch; 325/30/ZR19
Length: 4,460mm
Width: 1,852mm
Weight: 1,360kg
0-62mph: 3.5 sec
Top speed: 193mph
Issue featured: 115

★★★★★

997 918 Edition 2010



These exclusive 997 Turbo S-spec 911s were only available to those who had paid a deposit for a 918 Spyder. Acid green badging and brake calipers.

Production numbers: 918
Engine capacity: 3,800cc
Compression ratio: 9.8:1
Maximum power: 530bhp @ 6,250-6,750rpm
Maximum torque: 700Nm @ 2,100-4,250rpm
Brakes: Front: 380mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/ZR19
Rear: 11x19-inch; 305/30/ZR19
Length: 4,435mm
Width: 1,852mm
Weight: 1,585kg
0-62mph: 3.3sec
Top speed: 195mph
Issue featured: 74

★★★★★

997 GT2 RS 2010-11



The GT2 went back to its roots with an RS-style lightweight body and interior, plus extra power. Recognisable thanks to carbon fibre on bonnet, air intake and mirrors.

Production numbers: 500
Engine capacity: 3,600cc
Compression ratio: 9.0:1
Maximum power: 620bhp @ 6,500rpm
Maximum torque: 700Nm @ 2,500-5,500rpm
Brakes: Front: 380mm discs; Rear: 350mm discs
Wheels & tyres: Front: 9x19-inch; 245/35/ZR19
Rear: 12x19-inch; 325/30/ZR19
Length: 4,460mm
Width: 1,852mm
Weight: 1,370kg
0-62mph: 3.5 sec
Top speed: 205mph
Issue featured: 114

★★★★★

997 Turbo S 2011-13



As standard 997 Turbo but more power and higher level of standard equipment including PCCB, centre-lock wheels, crested sports seats and Sport Chrono Plus.

Production numbers: 2,000
Engine capacity: 3,800cc
Compression ratio: 9.8:1
Maximum power: 530bhp @ 6,250-6,750rpm
Maximum torque: 700Nm @ 2,100-4,250rpm
Brakes: Front: 380mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/35/ZR19
Rear: 11x19-inch; 305/30/ZR19
Length: 4,435mm
Width: 1,852mm
Weight: 1,585kg
0-62mph: 3.3sec
Top speed: 195mph
Issue featured: 98

★★★★★

991 Carrera 2011-



First of the newest and latest Gen7 911, takes styling hues from 993. Redesigned chassis with lengthened wheelbase reduces overhang of engine.

Production numbers: Currently in production
Engine capacity: 3,436cc
Compression ratio: 12.5:1
Maximum power: 350bhp @ 7,400rpm
Maximum torque: 390Nm @ 5,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8.5x19-inch; 235/40/ZR19
Rear: 11x19-inch; 285/35/ZR19
Length: 4,491mm
Width: 1,808mm
Weight: 1,380kg
0-62mph: 4.8sec
Top speed: 179.6mph
Issue featured: 83

★★★★☆

991 Carrera S 2011-



Same as Carrera, including seven-speed manual 'box, but utilising bigger engine. Slightly larger front brakes than the standard Carrera, PASM as standard equipment.

Production numbers: Currently in production
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 400bhp @ 7,400rpm
Maximum torque: 440Nm @ 5,600rpm
Brakes: Front: 340mm discs; Rear: 330mm discs
Wheels & tyres: Front: 8.5x20-inch; 245/35/ZR20
Rear: 11x20-inch; 295/30/ZR20
Length: 4,491mm
Width: 1,808mm
Weight: 1,395kg
0-62mph: 4.5sec
Top speed: 188.9mph
Issue featured: 114

★★★★½

991 Carrera 4 2012-



22mm wider body than C2, with 10mm wider tyres connecting rear tale light as standard. Also features a torque distribution indicator on the digital dash clock.

Production numbers: Currently in production
Engine capacity: 3,436cc
Compression ratio: 12.5:1
Maximum power: 350bhp @ 7,400rpm
Maximum torque: 390Nm @ 5,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: 8.5x19-inch; 235/40/ZR19
Rear: 11x19-inch;295/35/ZR19
Length: 4,491mm
Width: 1,852mm
Weight: 1,430kg
0-62mph: 4.9 sec
Top speed: 177mph
Issue featured: 98

★★★★☆

991 Turbo 2013-



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

Production numbers: Currently in production
Engine capacity: 3,800cc
Compression ratio: 9.8:1
Maximum power: 520hp @ 6,000-6,500rpm
Maximum torque: 660Nm @ 1,950-5,000rpm
Brakes: Front: 380mm discs; Rear: 380mm discs
Wheels & tyres: Front: 8.5x20-inch; 245/35/ZR20
Rear: 11x20-inch; 305/30/ZR20
Length: 4,506mm
Width: 1,880mm
Weight: 1,595kg
0-62mph: 3.4sec
Top speed: 195mph
Issue featured: 109

★★★★★

991 Turbo S 2013-



Same dimensions as 991 Turbo, but with a tweaked map to provide an extra 40hp. Usual Turbo options as standard, including centre-lock wheels, PCCB, PDCC and Bose sound.

Production numbers: Currently in production
Engine capacity: 3,800cc
Compression ratio: 9.8:1
Maximum power: 560hp @ 6,500-6,750rpm
Maximum torque: 700Nm @ 2,100-4,250
Brakes: Front: 410mm discs; Rear: 390mm discs
Wheels & tyres: Front: 9x20-inch; 245/35/ZR20
Rear: 11x20-inch, 305/30/ZR20
Length: 4,506mm
Width: 1,880mm
Weight: 1,605kg
0-62mph: 3.1sec
Top speed: 197mph
Issue featured: 115

★★★★★

991 Anniversary 2013-14



Exuberantly styled Carrera S with wide body and generous spec. Many styling cues inside and out taken from original 901. Powerkit only came as standard spec in US.

Production numbers: 1,963
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 400bhp @ 7,400rpm
Maximum torque: 440Nm @ 5,600rpm
Brakes: Front: 340mm discs; Rear: 330mm discs.
Wheels & tyres: Front: 9x20-inch; 245/35/ZR20
Rear: 11.5x20-inch; 305/30/ZR20
Length: 4,491mm
Width: 1,852mm
Weight: 1,420kg
0-62mph: 4.5 sec
Top speed: 188mph
Issue featured: 112

★★★★½

991 Carrera GTS 2014-



Big-spec GTS utilises wide body and a host of good options including Powerkit, PASM, Sport chrono, Sport exhaust to name a few, all for £7,000 more than Carrera S.

Production numbers: Unknown
Engine capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 430bhp @ 7,500rpm
Maximum torque: 440Nm @ 5,750rpm
Brakes: Front: 340mm discs; Rear: 330mm discs.
Wheels & tyres: Front: 9x20-inch; 245/40/ZR20
Rear: 11.5x20-inch; 305/30/ZR20
Length: 4,491mm
Width: 1,852mm
Weight: 1,425kg
0-62mph: 4.0 sec
Top speed: 190mph
Issue featured: 120

Not tested



PORSCHE 997 - TURBO, C2S, TARGA, CARRERA

2010 - 997 GEN II TURBO COUPE (CARRERA WHITE) 19,000 Miles
Metropole Blue Leather Interior, Manual, PSM, PASM, PCM, Touchscreen Sat Nav, BOSE Surround Sound System, CD Changer, Xenon Headlights, 19" Turbo Alloy Wheels (GEN II), Full Porsche Service History.

2007/56 - 997 TURBO COUPE MAN (GT SILVER) 26,000 Miles
Full Black Leather Interior, PSM, PASM, PCM, Sat Nav, BOSE Sound System, Xenon Headlights, 19" Turbo Alloy Wheels, Full Porsche Service History.

2008 - 997 TURBO COUPE TIP S (BASALT BLACK) 19,000 Miles
Black Leather Interior, PSM, PASM, PCM, Sat Nav, BOSE Sound System, Porsche Crest Headrest, Xenon Headlights, Full Porsche Service History.

2007 - 997 TURBO COUPE TIP (BASALT BLACK) 47,000 Miles
Black Leather Interior, Sports Chrono Package, PASM, PSM, PCM, Sat Nav, White Dials, Porsche Crested Headrest, Traction Control, 19" Turbo Alloy Wheels, Full Porsche Service History.

2009 - 997 GEN II C2 COUPE PDK (GT SILVER) 33,000 Miles
Black Leather Interior, PSM, PCM 3, Touchscreen Sat Nav, BOSE Sound System, iPod Connector, Chrono Pack, Alcantara Headlining, 19" GEN II Carrera Alloy Wheels, Full Main Dealer Service History.

2009 - 997 GEN II CARRERA 2 PDK COUPE (SEAL GREY) 28,000 Miles
Black Leather Interior, PDK Gearbox, PSM, PCM 3, Touchscreen Sat Nav, White Dials, Alcantara Headlining, iPod Connection, Porsche Crested Headrest, Multi Function Steering Wheel, Xenon Headlights, Full Porsche Service History.

2008 - 997 C4S COUPE MAN (BASALT BLACK) 46,000 Miles
Black Leather Interior, PSM, PASM, PCM, Sat Nav, BOSE Sound System, White Dials, Alcantara Headlining, 19" Turbo Alloy Wheels, Full Porsche Service History.

2007 - 997 CARRERA 2 COUPE MAN (METEOR GREY) 41,000 Miles
Black Grey Leather Interior, PSM, PCM, Sat Nav, BOSE Sound System, Alcantara Headlining, 19" Carrera S Alloy Wheels, Full Service History.

2006 - 997 CARRERA 4S COUPE (BASALT BLACK) 39,000 Miles
Black Leather Interior, Manual, PSM, PCM, PCM, Sat Nav, White Dials, Multi Function Steering Wheel, Alcantara Headlining, Full Main Dealer Service History.

2006 - 997 C2S COUPE TIP (BASALT BLACK) - 55,000 Miles
Full Black Leather Interior, PSM, PCM, PCM, Sat Nav, BOSE Sound System, White Dials, Switchable Sports Exhaust, Alcantara Headlining, 19" Split Rim Alloy Wheels, Full Main Dealer Service History. Just Been Serviced.

2006 - 997 C2 COUPE MANUAL (BASALT BLACK) - 56,000 Miles
Sand Beige Leather Interior, PSM, PCM, PCM, Alcantara Headlining, BOSE Sound System, 18" Carrera Alloys, Full Main Dealer Porsche Service History.

PORSCHE 996 - TURBO

2003 - 996 TURBO COUPE MAN (POLAR SILVER) 70,000 Miles
Dark Metropole Blue Leather Interior, PSM, PCM, Sat Nav, BOSE Sound System, Sunroof, Alcantara Headlining, 18" Turbo Alloy Wheels, Full Service History.

PORSCHE 993 - TURBO, C2S, C2, C4, CARRERA

1998 - 993 TURBO "S" COUPE MAN (SPEED YELLOW) 60,000 Miles
Black Leather/Carbon Fibre Interior, Litronic Lights, Yellow Dials, CD Changer, Yellow Seat Belts And Callipers, 18" Turbo S Alloy Wheels, Full Service History.

1994 - 993 C2 COUPE TIP (BLACK METALLIC) 73,000 Miles
Black Leather Interior, Kenwood CD Player And Radio, Sunroof, Rear Wiper, Electric Windows/ Mirror, Factory Fitted Alarm System, 17" Alloy Wheels, Full Main Dealer And Porsche Specialist Service History.

1996 - 993 TURBO COUPE MAN (MIDNIGHT BLUE) 21,000 Miles
Grey Leather Interior, Electric Windows, Electric Mirrors, Air Conditioning, Becker Radio Player, 18" Turbo Alloy Wheels, Full Main Dealer Service History.

1995 - 993 TURBO COUPE MANUAL (ARENA RED) 31,000 Miles
Grey Leather Interior, Wood Package, Uprated Becker CD Player, Sat Nav, 18" Turbo Alloy Wheels, Official Porsche Centre Service History.

1997 - 993 C2S COUPE MAN (ARCTIC SILVER) 71,000 Miles
Varioram, Metropole Blue Leather Interior, White Dials, Factory Fitted Alarm System, 18" Turbo Alloy Wheels, Fully Documented Service History.

1995- 993 C2 COUPE MAN (MIDNIGHT BLUE) 99,000 Miles
Black Leather Interior, Porsche Immobiliser And Spare Keys, Recent Cosmetic Paintwork To Remove Stone Chips, Porsche Document Wallet And Manuals, Always Garaged, C16 UK Car, Very Nice Example In Excellent Condition.

1994 - 993 CARRERA COUPE TIP (BLACK) 92,000 Miles
Black Leather Interior, Becker Radio, Electric Seats, Rear Wiper, 17" Alloy Wheels, Full Porsche & Specialist Service History (Just Been Serviced).

1994 - 993 C2 COUPE TIP (BLACK) 99,000 Miles
Marble Grey Leather Interior, Sunroof, Becker Radio, Electric Seats, Electric Windows And Mirrors, 17" Alloy Wheels, Full Porsche And Specialist Service History (Just Been Serviced).

1987 - 930 TURBO COUPE MAN (BLACK METALLIC) 140,000 Miles
Deep Plum Leather Interior, 3.3L Engine, KKK27 Turbo, Alcantara Headliner, High End Sound System, Bi-Xenon Lights, Original 16" Fuchs Alloys With New Continental N1 Tyres, Full Service History, Concours Condition Throughout.

1987 - 911 CARRERA 3.2 CAB 1989 (G50 GEARBOX) 126,000 Miles
Immaculate Blue Metallic, Full Marble Grey Interior, Matching Numbers Example, Matching Dark Blue Hood, Period Correct Fuchs Alloy Wheels, Comprehensive Service History, Very Original Condition, 10 Years With One Owner.

1984 - 911 3.2 COUPE SPORT (BALTIC BLUE) 74,000 Miles
Manual, Baltic Blue Metallic Coach Work, Black Leather Interior, Factory Fitted Air Conditioning, Factory Fitted Alarm System, Fully Documented Service History.

1991 - 911 (964) CARRERA 2 COUPE TIP 64,000 Miles
Midnight Blue Coachwork, Full Grey Leather Interior, Air Conditioning, Becker Radio Player, 17" Alloy Wheels, Fully Documented Service History.

911 - (964) CARRERA 2 COUPE MAN (BLACK) 94,000 Miles
Full Black Leather Interior, Grundig Radio Player, 17" Alloy Wheels, Full Service History (Just Been Serviced At Official Porsche Centre - Bournemouth).

FERRARI - MODELS FROM 1967 +

2010 - CALIFORNIA (1) 2 PLUS 2 SPIDER 12,000 Miles
Grigio Silverstone With Sabbia, Crema Daytona Seats, Dual Mode Suspension, 19" Forged Diamond Wheel Rims, Full Ferrari Main Dealer Service History.

2008 - F430 SPIDER F1 (TITANIUM SILVER) 20,000 Miles
F1, Titanium Silver Exterior, Rosso Leather Interior, Carbon Fibre Trim, Ferrari Stereo, Telephone Module, Manettino With Sports And Track Settings, Climate Control, Ferrari Crested Headrests. Full Service History.

2003 - 360 SPIDER F1 (GRIGIO SILVER) 28,000 Miles
Black Leather Interior, F1 Gear Box, ASR, Challenge Grill, CD Changer, 19" Ferrari Alloy Wheels, Full Ferrari Service History, Two Previous Keepers.

1998 - 550 MARANELLO COUPE MANUAL (SILVER) 53,000 Miles
Navy Leather Interior, Sat Nav With DVD, ASR Sports Mode, Electric Seats, Upgraded Radio And 6 CD Changer, Climate Control, Ferrari Service History.

1996 - F355 SPIDER MANUAL (GIALLO MODENA) 28,000 Miles
Giallo Modena Yellow, Full Nero Black Interior, 18" Ferrari 355 Alloys, Full Service History, Recently Serviced, Known To Us For A Period Of 5 Years.

1973 - DAYTONA 365 GTB/4 RHD (ROSSO RED) 38,000 Miles
Black/Red Leather Interior Red Carpets, Climate Control, "Ferrari Classiche", Full Continuous History, Superb Provenance, 3 Owners From New.

1967 - 275 GTB/4 MANUAL LHD (ARGENTO SILVER) 59,000 Miles
Full Black Leather Interior, Detailed Restoration History, Sales Invoice, Numerous Concourse And Awards Winner, Engine Rebuilt By Ferrari In Johannesburg 26,000 KMS Ago, Comprehensive Photos, Exceptional Condition Throughout.

LAMBORGHINI

2011 - LAMBORGHINI GALLARDO (YELLOW) 9,700 Miles
Paddle Shift Gearbox (Automatic), Nero Leather Interior, Bi-Xenon Headlights, 19" Lamborghini Crested Alloy Wheels with Yellow Callipers, Full Official Lamborghini Service History, Recently Serviced, New Lamborghini Pirelli Tyres Fitted.

CLASSICS - AC, PORSCHE, JAGUAR, BENTLEY

1991 - AC COBRA LIGHTWEIGHT (BLACK METALLIC) 5,000 Miles
1 Of 26 RHD Lightweights, Black Leather, Black Metallic Coachwork With White Stripes Full Black Leather Interior, Absolutely Stunning Condition, Very Rare With Approximately Only 26 Vehicles Manufactured.

1964 - PORSCHE 356 B SUPER 90 COUPE LHD (SIGNAL RED)
1600cc Signal Red Coachwork, Soft Beige Leather Interior, 4 Speed Manual, Recent Restoration To Concours Standard, Eligible For Many European Events.

1964 - PORSCHE 356 C COUPE (SIGNAL RED)
Black Leather Interior, 1600cc, Recent Major Service, Excellent Condition And Fully Documented Service History. Originally Supplied To US.

1958 - PORSCHE 356 A COUPE 1600cc (SILVER) 73,000 Miles
Silver Coachwork, Green Leather Seats, Sunroof, 15" Wheels, Superbly Restored, Concours Condition.

1962 - JAGUAR 3.8 MARK II AUTOMATIC LHD (BLACK) 16,478 Miles
Automatic Black Coachwork, Red Leather Interior, Power Assisted Steering, Wire Wheels, Recent Restoration To Virtually Concours Standard.

1962 - JAGUAR 'E' TYPE ROADSTER 3.8
Opalescent Silver Blue, Black Leather Seats, Series 1, Refurbished By One Of The UK's Most Renowned E-Type Specialists, Restored To Concours Level, Manual, Chromed Wire Wheels, Restoration Work Fully Documented.

1936 - BENTLEY 4 1/4 PILLARLESS COUPE (MIDNIGHT BLUE)
Grey Leather Gurney Nutting Coachwork, 1 Owner In 40 Years, Exhibited At Luois Vuitton Concours D'Elegance In Paris 2003. Chassis Completely Original.

1998 - FIAT BARCHETTA CONVERTIBLE MAN 51,000 Miles
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£199,995



911 Turbo (993, 6-Speed)
Arctic Silver • Boxster Red Leather Sport Seats
Sports Exhaust • Air Conditioning • 57,873 miles
1997 (R)
£99,995



911 Carrera 2 S (991, PDK)
Guards Red • Black Leather Sport Seats Plus
Touchscreen Satellite Navigation • 20" Sport Design
Wheels • 6,180 miles • 2012 (62) 1996 (N)
£69,995



911 Carrera 2 S (991, PDK)
Carrara White • Black Leather Sport Seats
20" Carrera 'S' III Wheels • Sport Chrono Pack
7,507 miles • 2012 (12)
£69,995



911 Carrera 2 GTS (997, 6-Speed)
Basalt Black • Black Leather Sport Seats
19" Centre Lock Wheels • Touchscreen Satellite
Navigation • 20,598 miles • 2011 (11)
£59,995



911 Carrera 4 S (997 GEN II, PDK)
Basalt Black • Black Leather Seats • Touchscreen
Satellite Navigation • 19" Carrera S II Wheels
32,402 miles • 2011 (11)
£52,995



Boxster 2.7 (981, 7-Speed PDK)
Anthracite Brown • Agate Grey / Pebble Dual Tone
Leather • 20" Carrera Classic Wheels • Touchscreen
Satellite Navigation • 1,354 miles • 2014 (14)
£45,995



911 Carrera Sport (5-Speed)
Guards Red • Black Half Leather Seats with Cloth
Pinstripe Inserts • 16" Fuchs Wheels • Electric
Sunroof • 75,116 miles • 1984 (B)
£34,995



Boxster 2.9 (987 GEN II, 6-Speed)
Meteor Grey • Black Leather Seats • 18" Boxster
S II wheels • Sport Chrono Pack • 17,808 miles
2010 (10)
£28,995



Cayman S (6-Speed)
Midnight Blue • Sand Beige Leather Seats
19" Sport Design Wheels • Satellite Navigation
49,673 miles • 2006 (06)
£19,995



911 Carrera 2 (996, 6-Speed)
Polar Silver • Dark Blue Leather Seats • 18" Carrera
Wheels • Fully Electric Seats with Drivers Memory
Sports Exhaust • 75,773 miles • 2003 (52)
£17,995



Boxster S (987, 6-Speed)
Midnight Blue • Blue Leather Seats • 19" Sport
Design Wheels • BOSE Surround Sound System
38,512 miles • 2005 (05).
£16,995

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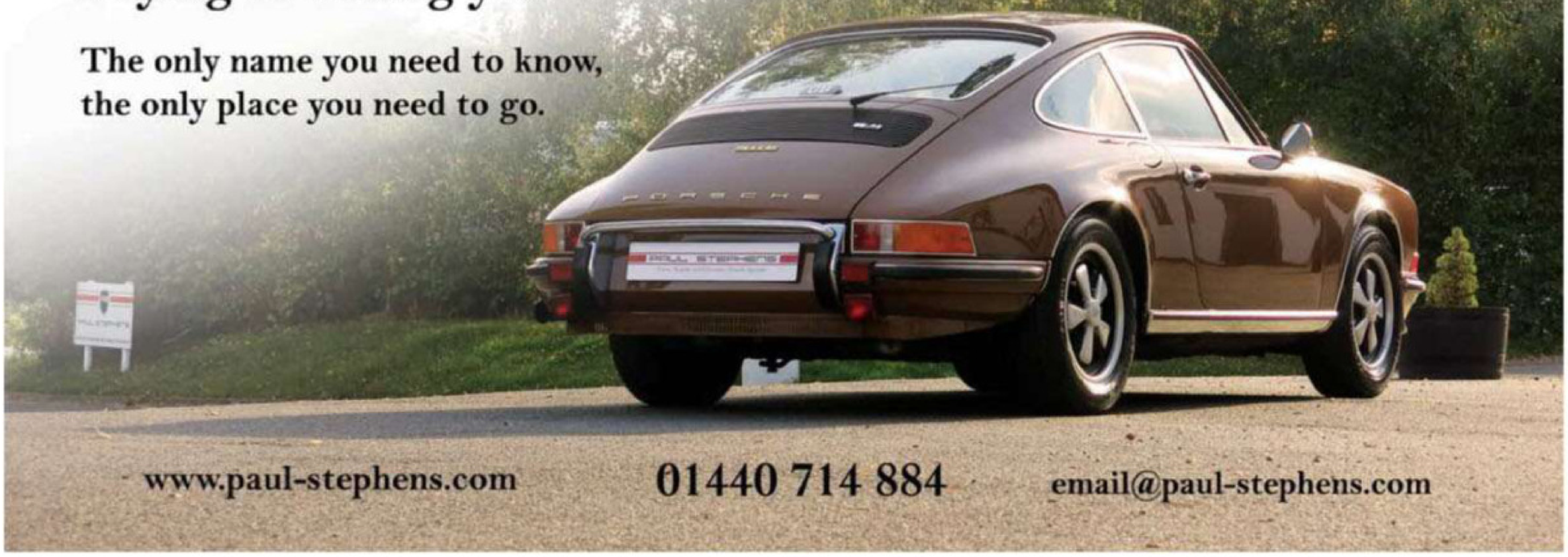
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997 Turbo 3.6 Tip (2008 - 08)
Basalt Black with Black Leather, Sat Nav,
43k miles.....**£47,000**



997 4S Gen 2 3.8 PDK (2009 - 09)
Basalt Black with Black Leather, Sat Nav,
41k miles.....**£45,000**



997 2S Gen 2 3.8 PDK (2010 - 59)
Basalt Black with Black Leather, Sat Nav,
48k miles.....**£43,000**



997 Turbo 3.6 Tip (2006 - 56)
Basalt Black with Black Leather, Sat Nav,
45k miles.....**£43,000**



997 Gen 2 3.6 PDK (2009 - 09)
Silver with Black Leather, Sat Nav,
38k miles.....**£39,000**



997 4S 3.8 (2009 - 58)
Basalt Black with Black Leather, Sat Nav,
37k miles.....**£38,000**



997 4S 3.8 (2008 - 08)
Midnight Blue with Black Leather, Sat Nav,
45k miles.....**£36,000**



997 2S 3.8 (2008 - 08)
Basalt Black with Black Leather, Sat Nav,
35k miles.....**£35,000**



997 4S 3.8 (2007 - 07)
Basalt Black with Grey Leather, Sat Nav,
39k miles.....**£35,000**



997 2S 3.8 (2007 - 57)
Basalt Black with Black Leather, Sat Nav,
46k miles.....**£33,000**



997 4S 3.8 (2006 - 56)
Silver with Black Leather, Sat Nav,
42k miles.....**£33,000**



997 4S 3.8 Tip (2006 - 06)
Midnight Blue with Ocean Blue Leather, Sat Nav, 29k miles.....**£33,000**



997 2S 3.8 Tip (2007 - 57)
Silver with Red Leather, Sat Nav,
34k miles.....**£33,000**



997 2S 3.8 (2008 - 57)
Silver with Black Leather, Sat Nav,
44k miles.....**£33,000**



997 2S 3.8 Tip (2007 - 57)
Basalt Black with Black Leather, Sat Nav,
42k miles.....**£32,000**



997 4S 3.8 Cab (2006 - 56)
Silver with Ocean Blue Leather, Sat Nav, 38k miles.....**£30,000**



997 2S 3.8 (2006 - 06)
Basalt Black with Black Leather, Sat Nav,
43k miles.....**£30,000**

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2007 997 TURBO TIPTRONIC £41,995

Basalt Black metallic with extended Black Leather interior
42,000 miles

Heated Seats	Onboard Computer	Phone Module	Climate Control
Multifunctional Steering Wheel	PSM and PASM	Bi Xenon Lights	Rear Park Assist
Silver Pack	SatNav and	Electric Sunroof	19" Turbo Alloys
		AirCon &	



2007 996 CARRERA C2 3.6 COUPE MANUAL £29,995

Just SOLD
More stock arriving daily

...th Black Leather

6 Speed Manual	Onboard Computer	Sports Steering Wheel	Assist
SatNav Module	Litronic Lights	Rear Park	19" Turbo Alloys
Comfort Seats			



2004 996 CARRERA C4S COUPE TIPTRONIC FACELIFT £19,995

Arctic Silver metallic with Metropole Leather interior 59,000 miles

Onboard Computer	AirCon & Climate Control	SatNav and Phone Module	Rear Park Assist
PSM	CD Multichanger	Sunroof	18" Alloy Wheels



2005 997 CS2 COUPE MANUAL £23,995

Seal Grey metallic with Black Leather interior 72,000 miles

6 Speed Manual	Hartech Engine Rebuild	SatNav and Phone Module	New clutch, shocks, springs and brakes
Heated Seats	PSM and PASM	Rear Wiper	
IMS Upgrade			



1998 996 CARRERA C2 MANUAL 3.4 COUPE £12,995

Arena Red metallic, with Grey soft ruffled hide trim 57,000 miles

6 Speed Manual	Onboard Computer	AirCon & Climate Control	years ago
Factory Sunroof	CDR22 Stereo	Sold by us 7	18" GT3 Alloys



2001 996 TURBO TIPTRONIC £31,995

Arctic Silver metallic with extended Stone Grey Leather interior
27,000 miles

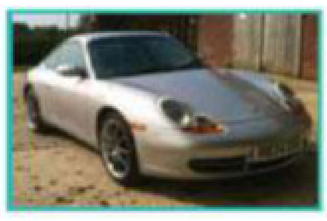
Heated Electric Memory Seats	+DSP	Assist	Front Panel
Bose Upgrade	Sunroof	Litronic Lights	Stunning Condition
	Rear Park	Armourfend	



2006 997 CARRERA C4S WIDEBODIED CABRIOLET MANUAL £22,995

Basalt Black metallic, with Black hide trim 89,000 miles

6 Speed Manual	Litronic Lights	PASM	Black Hood
Sports Heated Seats	SatNav Module	Switchable Sports Exhaust	19" Multispoke Alloys
	PSM		



1998 996 CARRERA C2 MANUAL 3.4 COUPE £11,995

Arctic Silver metallic, with Dark Blue hide trim 84,000 miles

6 Speed Manual	Onboard Computer	AirCon & Climate Control	History
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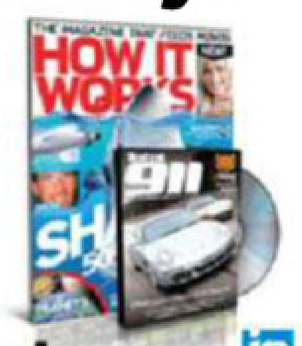
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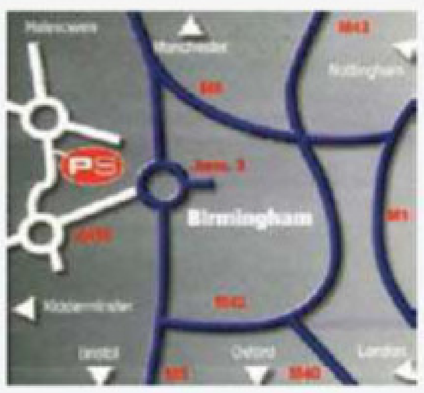
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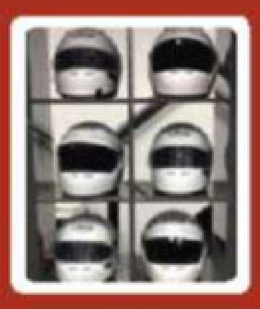


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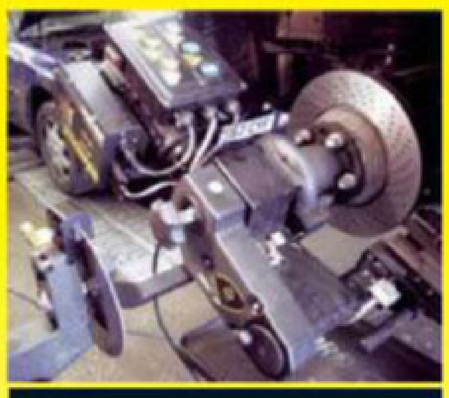
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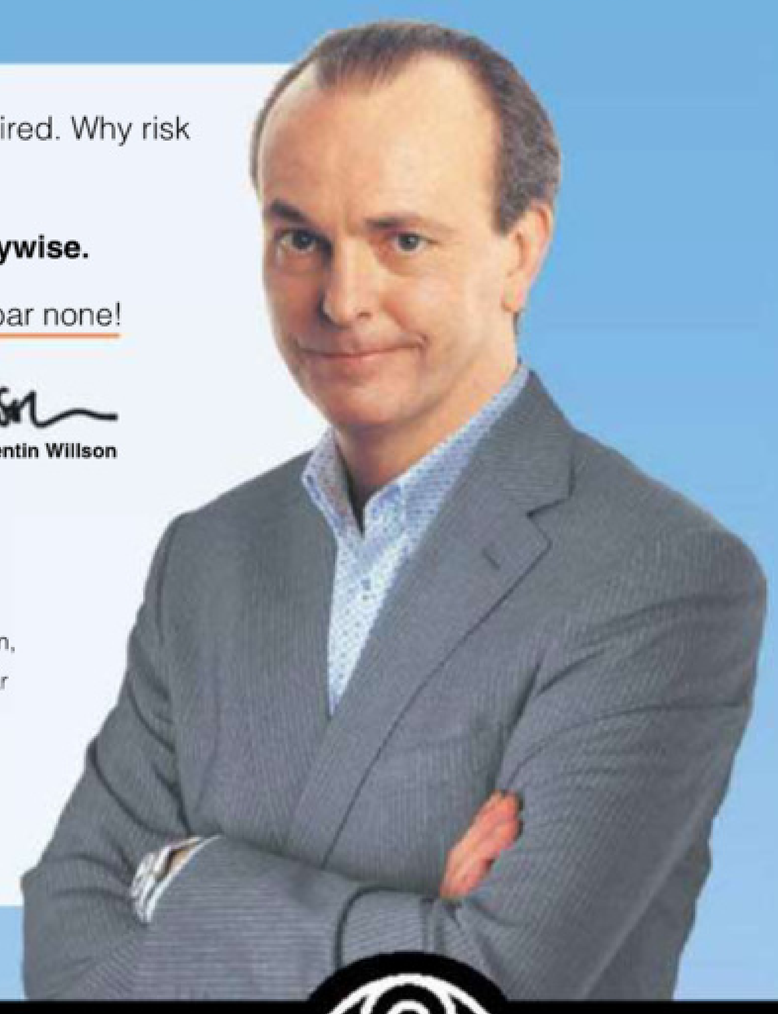
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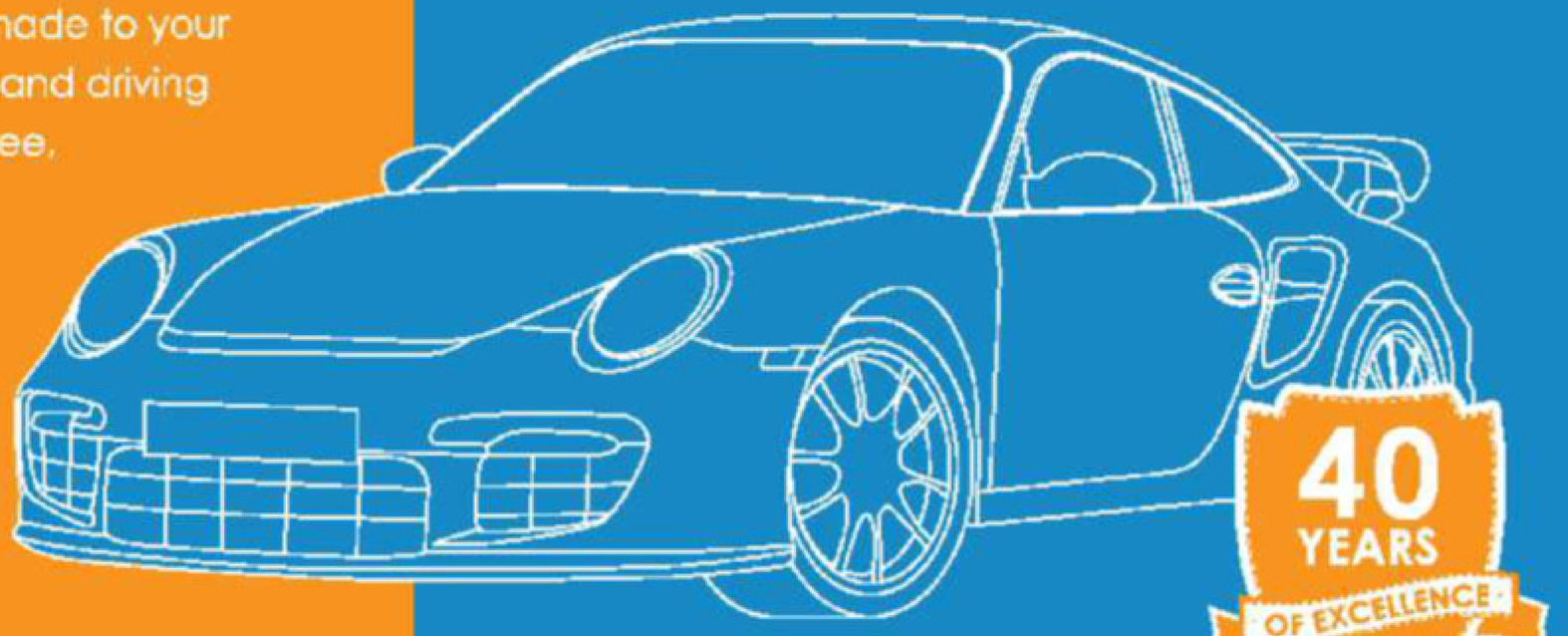
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DRIVEN: TWO 993 GT2S

At the wheel of not one but two very special 993 GT2s: do they represent the ultimate 911?



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Issue 121 in shops and available for download from 4 December

Contents may be subject to change

Route 130, California, USA

Written & photographed by **Ian Kuah**



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Essential info

LOCATION: Mount Hamilton, Route 130, off California Highway 680
LATITUDE: 37.3417° N, 121.6431° W



LENGTH OF DRIVE: 22.5 miles
POINTS OF INTEREST: Lick Observatory at the peak.
FOOD AND ACCOMMODATION: One hour away in San Jose

Gradients; slow, medium and fast turns; S-bends, short and medium straights – this Californian road has it all, and the view is spectacular

The Diablo Mountains, east of San Jose, offer some of the most spectacular roads in Northern California. Bordering the local state park, Route 130 starts in the foothills by Highway 680, and winds its way up mount Hamilton towards Observatory Peak at 4,213ft (1,284m) above sea level, and down the other side.

Running across Mount Hamilton for 22.5 miles, Route 130 has considerably more gradients than flats, a few short straights, and numerous tight bends, with the occasional hairpin thrown in.

In all, there are 365 curves, and all the tighter corners are cambered the right way. The backdrop is a rock face on one side and a drop on the other. As the population of Mount Hamilton is around 38 people, meeting another car during working hours is rare, so this is a drivers' road par excellence!

A GT3 is the perfect car for Route 130, as it has the speed, handling and brakes for a truly exhilarating drive, and its good visibility and modest width work where a lower, wider, mid-engined machine would be a liability.

You might graze the tarmac with the plastic front spoiler lip on some undulations if you are going hard enough, but no damage is done.

The downside is that this road was better maintained before the financial crisis. The subsequent lack of funding and a few hard winters have begun to degrade the surface.

Thus, you have to be careful of small rocks washed off the cliff face by the occasional rain. And just like at the Nürburgring, in spring, autumn and winter, the damp patches shaded by the trees do not dry out.

When you reach the summit, you can take a breather at the University of California's Lick Observatory on Observatory Peak. It takes just over 30 minutes of spirited driving from the highway, covering barely half of Route 130 to get there, and the free, guided tour is well worth taking in.

However, you will need to bring your own lunch, and make sure you fill up before making the ascent, as there are no food or fuel facilities. Even if you don't go in, the view from the car park to the valley is breathtaking.

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