

CELEBRATING 50 YEARS OF PORSCHE 911 • NOTHING ELSE MATTERS

Total 911

THE PORSCHE MAGAZINE

www.total911.com



993 C4S DRIVEN

Is this the most desired Turbo-look 911 today?

PLUS

- ♥ Specs for every 911
- ♥ Classic 911 rallying
- ♥ Dave Richards speaks

911
versus
912

TRACK TITANS

Tackling Spa with three vastly different 911s

2000 MILES • 7 DAYS • ONE VERDICT

TURBO TRIUMPH

Why the 520hp 991 is the most astonishing everyday supercar yet

WIDEBODY HISTORY

Your car-by-car guide to Porsche's revered Carrera in a Turbo shell



Digital Edition
GreatDigitalMags.com
ISSUE 109

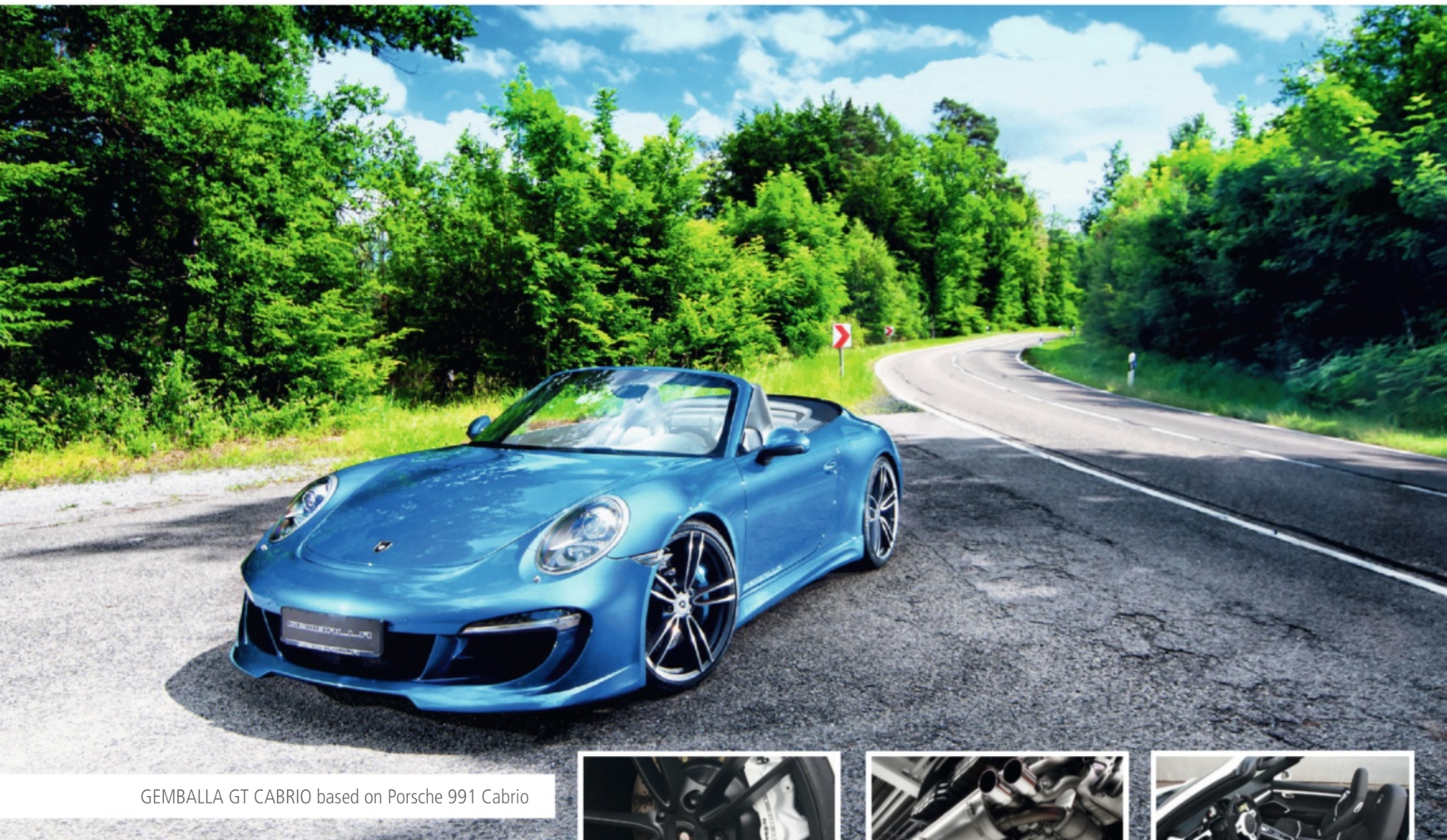
INSIDE SINGER

Exclusive access to the world-class crafters of custom Porsche 911s

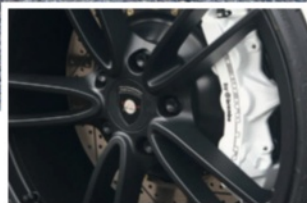


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Welcome



The next 12 months look set to be monumental for Porsche. We'll witness a landmark 40 years of the 911 Turbo, to be celebrated by **Total 911** throughout 2014 and beginning with a test of the 991 offering as the most exhilarating everyday supercar yet. Meanwhile in motorsport, Weissach has made a series of major announcements in the close season, a huge statement of intent for the company's competitive aspirations.

Headline news is that a record pool of 20 contracted works drivers will represent Porsche across a variety of championships and classes, the most notable being a return to the top category of the World Endurance Championship with the four-cylinder 919 hybrid LMP1 car.

“After experiencing a relatively quiet chapter of its sporting history, Porsche is back where it belongs”

As ever, the 911 will also be at the forefront of proceedings, with Porsche AG Team Manthey competing in the GT class of the WEC, fielding the new-for-2014 RSR Evo 991. What's more, the factory have also announced a 51 per cent majority shareholding in Olaf Manthey's eponymous Nürburgring-based motorsports company, while in the US, Porsche North America will compete with CORE Autosport in the reformed Tudor United Sportscar Championship.

In Porsche-only disciplines, the Mobil 1 Supercup will now continue supporting the money-spinning Formula One series to 2016, and national Carrera Cup competitions will be boosted by the presence of the 991 GT3 Cup on starting grids.

After experiencing a relatively quiet chapter of its sporting history, Porsche is back where it belongs. An automotive company with such a decorated competitive heritage deserves to be back at the pinnacle of motor-racing worldwide, and that can only have a positive effect on its future sports cars, too.



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Shot ⁹¹¹ Opening

Talking to drivers of this Rothmans 911 SC RS would have been an obvious choice. However, a chat with Prodrive's David Lapworth (left) proved it is the engineers who are often best placed to shed light on a car's idiosyncrasies.

Photograph by **Daniel Pullen**

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“Vibrant in glamour, tradition and superior décor, Paris is wholly resplendent of the Turbo’s character, still wonderfully epitomised by the 991”



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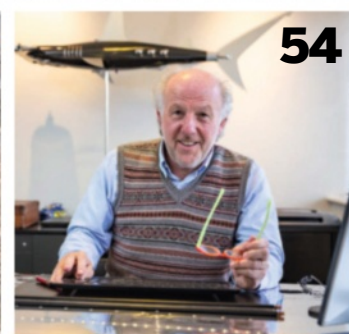
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Update

Key dates, latest news, star products and race results from the world of Porsche



Porsche to build Le Mans Experience Centre

New PEC to include section of the famous 24 Hour circuit

Porsche is planning to build a new Experience Centre at the Circuit de la Sarthe, home of the famous 24 Hours of Le Mans endurance race. Speaking to **Total 911** at the Los Angeles Auto Show, Wolfgang Hatz, member of Porsche AG's Board for Research and Development, confirmed that the Stuttgart manufacturer is in the planning stages of the all-new facility.

Like the PEC at Silverstone, UK, and the centre currently under construction outside Los Angeles, USA (announced in issue 107), the planned Porsche Experience Centre at Le Mans will include a track for Porsche owners to test-drive their cars. However, the intended layout for the Le Mans PEC is the new centre's unique selling point.

Where Silverstone's PEC resides next to the famous Grand Prix circuit, Porsche hopes to include

a section of the world-famous Circuit de la Sarthe in the new track's layout. While such a move is reliant on negotiations with the circuit's owners, the ACO, if the plans come to fruition the PEC would utilise a section of the fast, sweeping Porsche Curves.

With Porsche's impending return to the top class of world sports car racing, Le Mans is the logical location for the next Porsche Experience Centre. After first winning Le Mans in 1971 with a 917K, Porsche's last factory effort was in 1998 with the 911 GT1-98. The Circuit de la Sarthe is the spiritual home of the Stuttgart manufacturer's race efforts, producing 16 wins to date in the French enduro.

While the planned Le Mans PEC would be the centrepiece of Porsche's Experience Centre portfolio, Hatz explained that more centres are in the pipeline. "We will build more and more driving

experience centres," he said. "We have successfully introduced Silverstone, and have two in the USA. I was just at our new facility in Los Angeles, and it's unbelievable." Hatz explained that Porsche's expansion of the Experience Centre programme is central to the manufacturer's global strategy.

Hatz also hinted at the future direction of the Porsche 911 platform while talking to journalists in LA. The next generation of the iconic sports car will retain the option of a manual gearbox on some of the model range, while Porsche plans to make the car lighter. "We're not talking about hundreds of kilos; more like 20 kilograms", Hatz explained. While he acknowledged that Porsche could build a featherweight car, it would not fit with the 911's raison d'être as an "everyday sports car that's quick on the circuit or the road, but you can [always] use it."

What's on in 2013-14

October 2013 - March 2014

60 years of super sports cars
29 October 2013-14 March 2014
 The Porsche Museum is marking 60 years of supercars, including a 911 GT1 Straßenversion.

January

Detroit Motor Show
13-26 January
 Porsche to reveal the new 991 Targa at 'Motor City', the first show of the year.

RM Auctions Arizona
16-17 January
 An eclectic mixture of Porsche lots, including a 911 Carrera Speedster.

February

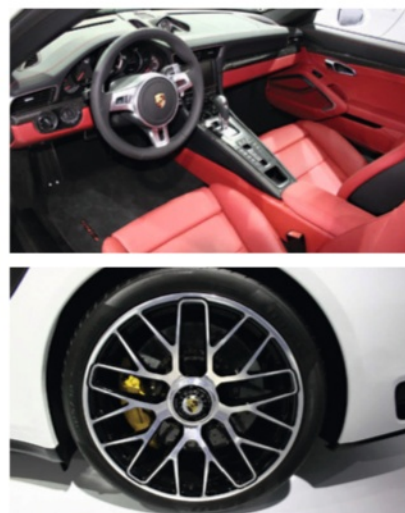
Camp4 Finland
10-14 February
 This official Porsche Driving Experience lets you discover the thrill of ice driving.

March

Amelia Island Concours
6-9 March
 The concours d'elégance will again display some of the finest cars in the world.

June

Goodwood Festival of Speed
26-29 June
 This year's theme is 'Addicted to Winning – The Unbeatable Champions of Motor Sport'.



991 Turbo Cabriolet unveiled in LA

The new Porsche 911 Turbo Cabriolet has been given its public debut at the Los Angeles Auto Show, showing the world the fastest open-top production 911 ever created.

Like its Coupe brother, the 991 Turbo Cabriolet will be available with PDK only, with both the Turbo and Turbo S variants being released concurrently.

The Cabriolet also shares the Coupe's new, wider stance. Compared to the current 991 Carrera 4 (which, in previous generations, shared the Turbo's widebody

shell) the new Turbo Cabriolet is 28mm wider, producing an imposing presence on the road.

One of the most important changes to the new Turbo Cabriolet is its revised roof. In order to create the iconic 911 silhouette with the roof up, Porsche has used a lightweight magnesium frame to support the redesigned roof panels. The roof, not feasible using Porsche's previous manufacturing techniques, can open and close within 13 seconds, at speeds up to 31mph (50kph).

Inside, a Bose stereo system is offered as standard while, for the first time, a Burmester will be offered as a £2,023 option. However, with the new 3.8-litre engine turning out 520bhp and rocketing from 0-62mph in 3.5 seconds, it is unlikely that you will want to listen to anything other than the flat six powerplant.

Available to order right now, the new 911 Turbo Cabriolet starts at £126,689 (\$160,700), with the Turbo S commanding a list price of £149,511 (\$181,100).

RPM announce Engine Condition Assessment

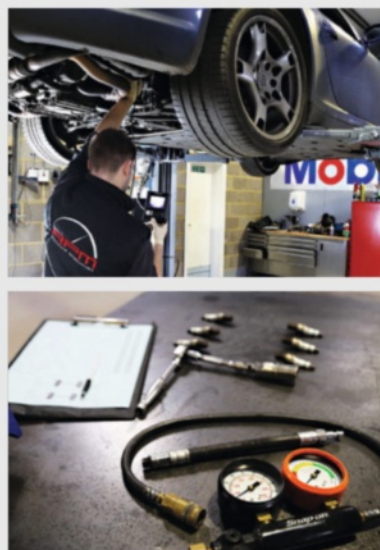
UK Porsche specialist RPM Technik has launched a new service designed to provide Porsche owners with a report on the condition of their engine, whether air or water-cooled.

The Engine Condition Assessment (ECA) comprises an eight-point check, including a cylinder leak down test for air-cooled engines, and a boroscope assessment for water-cooled models. On top of this, oil pressure and leak checks will be carried out, along with a full diagnostics test. After the workshop tests, a senior RPM technician will road-test the car,

before recording all the findings on the ECA certificate.

"We have seen an increase in customers having to deal with major engine issues, once they have developed to a very expensive state of repair," Ollie Preston, RPM's Technical Director, explains. "Some of these can be addressed if found early. Our eight-point check provides a detailed assessment on the whole engine and allows us to flag any areas of concern."

RPM's ECA service costs £99 plus VAT. For more information, visit www.rpmtechnik.co.uk.



In brief



Autofarm Classic 911 seats

Renowned Porsche 911 restorers Autofarm are now offering period-correct Sports Seats for 1971-73 911s. The German-manufactured seat is available with a host of options, including headrests, a tilting subframe and uprated runners.

Mimicking the original factory option seats, Autofarm's offerings include a range of trims, with leather or leatherette sides, and corduroy, basket weave or pepita tartan centres.

Prices start from £845. For more information, head over to www.autofarm.co.uk.



Numeric Racing Performance Shifter

Numeric Racing, the Florida-based CNC machining specialist, has released its first short-shift kit for all 996 and 997-type 911s.

Running on ball bearings, the multi-adjustable lever can be adapted to provide a range of different positions. CNC-machined from aerospace-grade aluminium, the Numeric Racing Shifter reduces lever throw by 40 per cent, and is claimed to reduce shift times by a tenth of a second, making it ideal for trackday enthusiasts.

For more information, visit www.numericracing.com.

911 in Motorsport

January

Autosport International Show

9-12 January

The show will be staged again at Birmingham's NEC, UK.

Rolex 24 Hours of Daytona

23-26 January

The first race of the USCC series will see CORE Autosport 991 RSRs in action.

February

Legend Boucles de Spa

15 February

This often snowy rally represents a great chance to watch some historic 911s.

March

12 Hours of Sebring

12-15 March

This event's 62nd running is round two of the United SportsCar Championship.



Factory 911s in 2014 FIA WEC return

Porsche AG Team Manthey to run two 991 RSRs

After returning to world GT racing, the factory Porsche AG Team Manthey will field two 991 RSRs in next season's WEC.

The factory squad will field two 2014-spec 911 RSRs and, after a successful debut for the 'Evolution' 911s in 2013's final round in Bahrain, Porsche has confirmed that the 991-type RSR will be available for the 2014 FIA WEC season.

While Porsche's return to the top flight of world sports car racing next year has been well publicised, Weissach had been quiet on its plans for the GTE-class team. However, Hartmut Kristen, Porsche's

Head of Motorsport, confirmed the importance of the 911's presence on the world motorsport stage.

"The WEC incorporates all of Porsche's most important markets," he explained. "We are keen to continue using this appealing platform. We are eager to follow up on the successes we achieved this year against tough opposition."

As well as the two works cars, Porsche has announced that it will make the 2014 911 RSR available to customer teams to run in the FIA WEC next season, with long-time Porsche runners Proton Competition planning to run at least one 991.

Porsche finish 2013 WEC with podium

After 60 hours of racing, the destination of the 2013 FIA World Endurance Championship drivers' and manufacturers' titles would be decided in the darkness of the Bahrain desert.

On the fourth lap, Richard Lietz and Marc Lieb's hopes were all but extinguished after an LMP2 competitor crashed into them, while Patrick Pilet and Jörg Bergmeister fought well with the lead AF Corse Ferrari 458, leading the race in the first hour.

Eventually, the duo would have to settle for second, while Lieb and Lietz came home in fourth.



Q&A with Dean Stoneman

Total 911 speaks with 2013s 'one to watch' from the Carrera Cup GB to assess his debut year on the grid



How did you find adapting to the Carrera Cup?

It was quite easy really. I've driven enough cars and, if you're a good racing driver, jumping between cars shouldn't be a problem. It's not good staying in an Aston Martin because you can't drive a Porsche, for example.

On a scale of one to ten, how would you rate the 2013 season?

I would probably say about eight. Obviously it was different; I took a different avenue with the Porsches to what I was used to. We had some bad luck, but we also had some good races. It's a very good championship, so to have the results we did was encouraging.

What is the Carrera Cup paddock like, compared to single-seaters?

It's quite relaxed. It's nice to be in the hospitality with the other drivers. In single-seaters, you're in your own team with your own food.

To read the interview in full, including Dean's plans for 2014, head over to Total911.com.

Racing updates latest news and results from racing series around the globe



United SportsCar Championship

Team Falken Tires has confirmed that it will run a new 991-type RSR in the USCC's GT Le Mans class.



Porsche Motorsport

Michael Christensen has been named as a 2014 factory driver. The 23-year old competed in the Supercup this year, winning at the Nürburgring.



Carrera Cup Deutschland

European F3 racer Sven Müller will race in the 2014 Carrera Cup Deutschland after winning the series' €150,000 (£125,000) scholarship.

Porsche lifestyle

Total 911 brings you the best fusions of classic and modern fashion with a selection of goods from revered brands

Casio Edifice EF-560 £200

The Casio Edifice range has come on strong in recent years (including a partnership with Formula One world champions, Red Bull Racing). The face of this stainless steel watch features a date display, stopwatch, and luminescent hands. The three-piece buckle confirms this watch is designed to survive everything you can throw at it.

www.casioonline.co.uk

Porsche 911 Turbo Classic Chronograph £450

We all know that Porsche's automotive offerings are superb. However, their watch range is a little-known treasure. This quartz movement chronograph combines the 911 Turbo's ability to offer both style and performance, as shown in its black anodised finish with red colour accents. The five-piece metal strap ensures this grips your wrist like a new 991 grips the road, too.

shop.porsche.com/uk



Christopher Ward C61 Trident-Pro 38mm £450

Based on the famous 1954 Rolex GMT Master, this watch from English brand Christopher Ward is a scaled-down version of their popular C60 automatic timepiece. The black leather strap features a butterfly clasp, while the gorgeous deep blue face and bezel makes a vibrant yet classy impression on your wrist.

www.christopherward.co.uk

Edition 901 by Paul Stephens Design £1,625

Renowned for his bespoke Porsche 911s, Paul Stephens has created this, the Edition 901, to celebrate 50 years of the 911. The face mimics the colour and style of the 901's green gauges, while the buffalo leather strap, ETA 2451 Swiss mechanical movement and limited 50-piece run ensures that this is a true collector's item.

www.paulstephensdesign.com

Views

Your letters, emails and tweets

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Email
editorial@total911.com

 @total911

Here's the best of your tweets to @Total911 this month:

@Total911 in response to your Turbo tweets, it's the front that is surprisingly wide for me @Alex997tt



Three Nürburgring yearbooks up for grabs

The Nürburgring 24 Hours is one of the world's most famous endurance races. The 2013 running didn't produce a Porsche 911 victory, though somewhat poignantly, late Porsche Supercup racer Sean Edwards was part of the winning team.

The Falken Tyres 997 GT3R led early on in the race, but had to pit for repairs after coming together with a back marker, putting it out of contention. Now, the tyre manufacturer is offering three readers the chance to win a 2013 Nürburgring 24 Hour yearbook, featuring an exclusive Falken Tyres cover. For a chance to win, answer the following question:

What put Falken's 997 GT3R out of contention in the 2013 24 Hours of Nürburgring?

Send your answer with your name and address to competitions@total911.com with 'Falken Tyres' in the subject line before 6 February.

Interview error

Dear Sir,
I couldn't help but notice in your interview with Gijs van Lennep that the answers for the penultimate two questions made reference to racing in 1986, even though van Lennep retired in 1976. Is this a mistake?

Best regards,

Nigel Tomkins, via email

You are correct, Nigel, van Lennep did retire from racing after his 1976 24 Hours of Le Mans victory. The two answers on racing in the Eighties are attributed to Derek Bell's interview, which snuck in and sat in place of Gijs' final contributions. We do apologise.

Letter of the month

Write or email in with your Porsche opinions and the author of the letter of the month will receive a complimentary copy of the special **Porsche 911 50th Anniversary Collection** bookazine!



South Africa in a 964

Dear Sir,
In honour of the 50th anniversary of the Porsche 911 and motivated by some of the previous stories I had read in **Total 911**, my wife and I recently completed a 5,000-kilometre round trip of South Africa in my 1991 Porsche 964 Carrera 2.

We split the two-week adventure into two legs. For the first, we left our home in Johannesburg and headed east, towards Pongola in northern KwaZulu-Natal, before driving all the way down the east coast of the country and on into Cape Town. While there, we caught up with the Porsche Club of South Africa's annual jamboree, where

we chatted to fellow Porsche folk and checked out all the lovely Porsches that were on display.

The return leg took us all the way up the west coast of the country, turning inland at Springbok before heading north back into Johannesburg. We averaged 250-600 kilometres each day, allowing us some time to relax and explore the countryside.

All in all, we had a wonderful road trip. For some folk, just the experience of driving through our beautiful country would have been enough. But for me, the highlight was being able to do it all from behind the wheel of such an iconic sports car.

The 964 was perfect in every way, from its frugal consumption across the thousands of kilometres, to 'giving it the horns', as we say in South Africa. It was a truly memorable way to celebrate the 50th anniversary of the 911.

Rob Fish, via email

*That sounds like a fantastic road trip, in the vein championed by **Total 911's** previous features. Your epic journey just goes to highlight the reliability that a 964 can offer, too. We'd certainly love to do something similar in such a beautiful landscape.*



Fast forward with PDK

Dear Sir,
With all the fuss about Porsche's move towards PDK gearboxes, I thought I should offer my experience. I own a 996 GT3 (with a manual six-speed) and 2010 VW Jetta Cup with PDK transmission.

The GT3 is phenomenal, sounding like a Carrera Cup car in full flight. However, on my weekend blasts, I long for the gearshifts to be faster, as everything about this car is geared towards speed.

This is where the Jetta comes in. With its PDK gearbox, this car is fast, beating big-block V8s away from the traffic lights. In the mountain roads around Washington, the transmission comes into its own. For this reason, I'm looking forward to PDK being rolled out.

Budget allowing, my next car will be a 997 Turbo with PDK; it's the way forward.

Best regards,

Norbert Pawelzick, via email

@Alex997tt try racing it round Monaco. I did my rear arch before my mirror!
@BenBarkerMsport

How fitting that my 911th tweet, as ed of @Total911, should be on my test drive of this brilliant new 911 Turbo
@itsleesibley



Yep, it's Friday
 #911 #RSR
 night again
@manj964



High-mileage 996s

Dear Sir,
 After using a 2006 Audi S4 for my daily run, I thought it was time to roll the dice and get a 911. Forgetting the horror stories I'd seen on the internet, I came across this 996 C2. It's a 170,000-mile car with a full OPC history. If ever there was a car to take a punt on, this was it.

After a long talk with the lady owner, it was clear the car was a sorted high-miler, used as her daily vehicle. Normally with such high mileage I would pass it by, but the long OPC service history (including MOTs) won me over.

So, with my wife and two-year-old daughter in tow, we made the 300-mile journey to Stirling, Scotland.

I knew immediately on arrival that this was the car for me. It was in great condition and paying £7,500 for a metallic black, facelifted 996 with Bose, PCM, and full-leather interior made the trip well worth it.

I would have loved an older model 911 but not being mechanically minded, my 996 makes a fantastically usable everyday car, with an even more fantastic price tag.

Best regards,

Michael Pendlebury, via email

This is proof that, despite the internet rumours, well looked-after 996s can make incredibly affordable 911s. Look out for a feature on the merits of a high-mileage example soon.



Regal Autosport competition winner

In issue 105 of **Total 911** (available from www.imagineshop.co.uk), we offered one reader the chance to win an EVOMSiT ECU recalibration from south-coast Porsche specialists Regal Autosport. That reader was Richard Gorman.

Gorman's 2001 996 C4 was put on Regal's rolling road to judge its initial power output, returning a respectable 310bhp. After the retune, Richard's car gained a modest 12bhp at 5,200rpm.

While peak performance was not a massive leap forward, Richard found that the driveability of the engine was now much improved. "The car now squats down and surges forward in the lower gears. It has changed the character of the car somewhat and it is now more urgent and responsive".

To find out more about Regal Autosport's EVOMSiT remapping service, visit www.regal-auto.co.uk.

Maximum performance

Dear Sir,
 I enjoyed reading Christian Ayre's analogy in issue 107. Deciding between a 997 Turbo S with £60,000 in cash on the passenger seat or a 991 Turbo S really makes you think about value – something second-hand Porsches offer in spades. As the happy owner of a 996 C4S (acquired for less than a new mid-level BMW 3 series), my biggest problem is people thinking I have a 'flash' car. However, I am just satisfying my love of great cars at a sensible price.

The comparison also drew my mind back to a recent Nürburgring visit, where I was watching an on-board video of a professional driver lapping in a 997 C2S at just over eight

minutes. The speeds he was achieving were amazing (well beyond my abilities). At that moment, I realised my aspirations to upgrade to a Turbo were meaningless, as I could still get so much more out of my C4S.

However, would I rather have my C4S and £25,000 on the passenger seat, or a 996 Turbo? Well, that's still a difficult choice!

Best wishes,

Oliver Chester, via email



Total 911

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TURBO TRIUMPH

After an exhilarating international bow on the track, the new 520hp Turbo thrills in the real world as the most astonishing everyday supercar yet

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

Power. Presence. Poise. Precision. Prowess. These ever-evocative adjectives have been synonymous with the very character of Porsche's most glamorous supercar of the last 40 years: the 911 Turbo.

What started in 1974 as the first homologated car in the world to utilise blown induction, the lavish first Turbo used a single KKK turbocharger as it sent 260bhp to the rear wheels – an unworldly figure for the time. Since then, the model has grown substantially in size, power and sophistication.

Intercoolers, another turbocharger, four-wheel-drive and latterly a glut of intricate electromechanical advancements have ensured that the Turbo has remained one of the 911's most refined drives in the intervening years. So much so, in fact, that in our final road test with the outgoing 997 Turbo S in issue 105, I wondered where Zuffenhausen could possibly go with the supercar from here.

The 2014 Type 991 Turbo duly arrived, and after Porsche invited us for a first drive of the new 520bhp car – exactly double the power of the first Turbo – our reporter Kyle Fortune heaped praise on “a technical masterpiece of rare ability.”

Delving deeper into the report, again from issue 105, Kyle surmises that the 991 model retains that Turbo trait of being as fun to drive as it is fast. Kyle goes on: “It's able to be backed into a bend with judicious use of the accelerator, while traction out of corners is simply sensational”.

The crux here, of course, is that the first drive of the 991 Turbo was on a quiet and incredibly smooth race circuit in Bilster Berg, Germany – a capable yet not default environment for a 911 with such luxury in its DNA.

You see, the 911 has long been touted as the perfect everyday sportscar, as famed for its performance and desirability as its usability. The Turbo model is the zenith of that proclamation, providing simply ferocious speed at the push of a pedal while lavishing the driver's immediate environment with a peerless commitment to refinery.

The 991 Turbo needed its merits examined in the real world, and **Total 911** duly obliged, embarking the grand tourer on an epic road trip among a variety of environments to investigate the true, more traditional spirit of Turbo.

Speaking of tradition, the 991 offering is in keeping with Porsche's ideology of increased road

presence for each new generation of 911 Turbo. This is the longest, largest and heaviest Turbo yet, and on first inspection of the car in the metal, it really does look as such.

First things to note include the much wider rear haunches of the 991 (the Turbo is 28mm wider than even the Carrera 4 models), which also come up higher on the car in comparison to the 997 Gen2 variant. Studying its side profile, the 991 appears much bulkier at the rear, too, though this is largely attributed to the protruding slats in the engine decklid, as opposed to the 997's, which are introverted. The 991's wheelbase also looks particularly huge in person, and although this whole package adds to sheer titanic presence on the road, I'm excited to ascertain whether this is to the detriment of its sporting prowess.

The first instalment of our real-world road test takes us from Porsche GB's Reading OPC to the north of France via a short blast on the UK motorway, followed by a choppy ferry crossing to mainland Europe. I use this time on the motorway to acclimatise myself to the view from the driver's seat, and note how the characteristics of the 991 evoke a so-far different Turbo experience from old. The much deeper dashboard and



That the new Turbo doesn't look out of place on the streets of Paris is indictment enough of its class and superior design





Specification

**991 Turbo
(2014)****Engine****Capacity:** 3,800cc**Compression ratio:** 9.8:1**Maximum power:**

520hp @ 6,000 – 6,500rpm

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; Porsche Active Suspension Management (PASM) with electronically controlled dampers; two manually selectable maps**Wheels & tyres****Front:** 8.5x20-inch forged alloy Turbo wheels, 245/35/20 winter tyres**Rear:** 11x20-inch forged alloy Turbo wheels, 305/30/20 winter tyres**Dimensions****Length:** 4,506mm**Width:** 1,880mm**Weight:** 1,595kg**Performance****0-62mph:** 3.4 secs**Top speed:** 195mph



protruding centre console make for the most isolated experience between driver, windscreen and passenger yet, adding to the feeling of enormity when piloting Porsche's biggest 911.

Looking out the side-view mirror, it's great to see the evocative side air intakes finally gracing the 991 body, though I conclude that the plastic-trimmed gaping hole has perhaps lost some elegance over the 997's colour coded intakes with neat centre slats.

Rolling off the boat in France, I begin my descent down the country on the empty toll roads with my photographer, Phil Steinhardt, and early impressions as to the Turbo's road-going application begin to filter through.

In 'Drive' mode, the 991 – using the same 3.8-litre engine as the 997 Turbo – is beautifully articulate, providing an abundance of power at the slightest push of the accelerator. The Turbo's compulsory PDK transmission is quick to jump up to the seventh forward gear, as with 991 Carrera models, so when pulling out and overtaking another vehicle, a quick kick-down of the accelerator pedal is necessary to drop a couple of gears and swoop around with suitable

aplomb. When cruising at speed, there's little evidence of any irritating engine drone from the back of the car, and as the suspension absorbs any anomalies in the road we duly eat up the miles in utter comfort. On motorways at least, the whole Turbo experience so far is refined, serene and effortlessly easy as we make our way towards the opulent city of Paris.

What a beautiful, quaint place Paris is. Vibrant with glamour, tradition and superior décor, it's wholly resplendent of the Turbo's character through the years, which is still wonderfully epitomised by the 2014 model.

Making our way towards the centre of the French capital, the reflection of the new Turbo looks absolutely stunning in the tall glass windows of the designer shops along Champs-Élysées. In a city built on art and intricate design, this Porsche really does fit in as an aesthetical work of notable modern craftsmanship. Kyle noted in the first drive on track that the new Turbo may lack an aggressive edge over old models in terms of looks, but when ascending the steep and unevenly cobbled streets around the Sacré Coeur basilica later in the

evening, for example, a real world driver will only be grateful for the added ground clearance afforded by the retracted front adaptive spoiler.

We absorb the Parisian landmarks long into our first night with the Turbo, before retiring with 11 hours of driving behind us. The 911 returns 24.5MPG from the day, a figure more resplendent of a Carrera S for motorway sprints and inner-city exploits, let alone a Turbo.

Sunrise over the eloquent city was witnessed from Sacré Coeur, before climbing back in the 911 to further explore the Parisian streets and their daytime hive of activity.

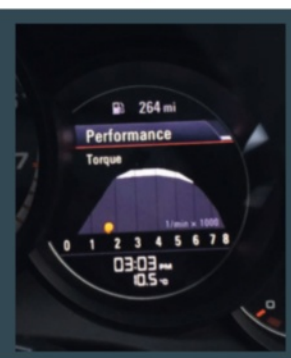
Driving the French city roads is, by the way, cut throat. Lane discipline is mythical among locals who sprawl across junctions and pile onto carriageways with unrelenting urgency. Traffic frequently comes to a standstill as the mélange of vehicles suffocates the road. City scooters continuously flutter past, appearing from the blind spot over my right shoulder to cut in just ahead of the Turbo's bonnet, before veering off left down a side street. I start to worry: is this the best spot for a £120,000 high-performance 911? ➡



Digitisation in the new Turbo

New to the 991 series of 911, and therefore a first on the 2014 Turbo, is a wholly digital screen in the instrument panel's fourth pod. Depending on your chosen options, there are a host of menus to warm the cockles of any driving enthusiast, including a detailed tyre pressure monitor (TPM) for each wheel, a live G-force measurement, and torque distribution monitor. However, the 'Performance' screen is the most notable addition, as it indicates the output of engine revs in comparison to the maximum torque band. If used wisely and with a bit of experience, this can effectively do away with the need for the main analogue rev counter, using the live graph to get the most torque (although not necessarily power) from the Turbo. In 'Sport' mode, the graph is adapted to cater for the extra 40Nm of torque available from the overboost function.

Porsche may be traditionalists when it comes to maintaining the old-fashioned clock-and-needle instrument setup, but this first major foray into a digital dash is a good one.



However, the 911 is championed as the premium everyday sports car, remember, and I'm duly surprised at just how much can be uncovered about this Turbo from such a situation.

Despite the argument that PDK isn't as involving as manual at higher speeds, here it's a saviour. What's more, the latest PDK is ever more intelligent, with gear changes from the system being varied even more greatly in accordance with driving style. Driving speed, accelerator position, longitudinal and lateral acceleration plus road profile all influence whether the system operates in eco mode, sport or even performance. Porsche Doppelkupplung ensures that the car is smooth and sophisticated in traffic, with no awkward jolts as the transmission flits between first, second and third gears. Away from the track, it's so elegant and easy that it's almost un-sportscar like.

Aside from the gearbox, a major advancement over the previous Turbo is the all-new rear axle steering, which is simply a revelation. Rear-axle steering was originally developed by Zuffenhausen for use on the 993 Turbo some 20 years ago, but with Porsche also deploying four-wheel drive on the model for the first time, rear-axle steering was abandoned by Porsche executives who believed the technology added too much weight to the rear of the car. Now, improvements in performance and weight distribution mean the extra load at the rear axle is more easily offset, and despite the 991's huge size and mass, it's surprisingly supple to manoeuvre through the city thanks to the system's opposite steer under 30mph. The result means the 991 is blessed with a reduced turning circle by 0.6 metres, which is keenly felt as the Turbo traverses its way through the busy Eiffel region of our road trip.

Agility from both car and driver is required to duck and dive through the Paris traffic, and as I get acclimatised to the local driving conventions and the morning rush hour passes, this deftness can be applied with greater application. I'm mesmerised by its new-found capabilities; the Turbo has a dexterity that belies its added presence. Reassuringly in this great city, the high-performance Turbo is not out of place here despite rarely seeing even 40mph.

Leaving the bright lights of Paris behind in late afternoon, we head north-west in search of more open, challenging roads for the Turbo to excel on. Destined for the coastal town of Cabourg, toll roads are avoided and we stumble across 25 miles of beautifully rural roads, which are tackled exuberantly. With longer corners and smoother surfaces, we push hard, and the Turbo comes alive: only once you put your foot down in 'Sport' and the car rockets along with unrelenting linear power, to the shrill of an all-encompassing 'whoosh' from the Turbos, do you begin to unleash the true potential of this £120,000 sports car.

With the press of a button, acceleration is incredibly responsive from the pedal, and lag is minute as the 3.8-litre engine delivers what feels like omnipotent speed in propelling the car along the route. We were now in sportscar utopia. ➡



Future everyday icon?
Certainly, the new
Turbo should have no
shortage of admirers

991 Turbo v 997 Turbo S

For those who might be considering the new Turbo as their next purchase, a model from Porsche's recent past may also provide an exemplary everyday supercar experience in the form of the 997 Turbo S. So how does it stack up against the 991 Turbo?

Before our European road trip in the 991, we took both cars for a drive through the Dorset countryside, where it was clear that neither was likely to outpace the other thanks to that same 3.8-litre VTG engine snuggled into the back of each model. It doesn't seem a lot has changed in performance, although the bite from the 997 Turbo S's stock PCCB brakes inspires more confidence before cornering.

Crucially, the 997 doesn't look dated when parked next to its younger 991 counterpart either, perhaps even benefiting from a more prim and proper 911 side profile compared to its rather plump younger brethren. That said, those 19-inch centre-locking wheels on the Turbo S can seem miniscule compared to the 20-inch items on the 991.

With production of the previous-gen Turbo S halting early last year, vehicle valuations have now dropped well into five figures as the model falls into the Porsche-approved used market, and when compared to the £120,000 price tag of the new Turbo, the huge spec of the 997 Turbo S becomes sorely tempting.



“Power is beautifully
linear and utterly
unrelenting”



Capable of absurd speed, the 991 Turbo wilfully consumes the road ahead when called upon



Despite the addition of yet more tech, the 991 gains only 10kg in weight over the 997 Turbo S



It may be the biggest, longest and widest 911 yet, but when pushing on, the new Turbo is still reassuringly agile



Gears become much longer and shift times are shortened to aid this incessant surge in acceleration, and although there are times when the PDK transmission wants to upshift just a little too quickly, the driver can prevent this by slightly coming off the accelerator pedal to remain in the desired gear. Likewise, downshifts happen earlier when braking, and are more aggressive in their execution without greatly unsettling the car. A sumptuous exhaust note now accentuates the earlier downshifts too: although usually quiet as per the traditional Turbo tone, quad pipes gurgle beautifully when off the gas, before unleashing a howling rasp when accelerating past 6,500 revs.

PASM with dynamic engine mounts combine with the rear axle steering, now pointing with your wheel, in ensuring the car remains poised and focused through turn in. Despite the larger wheelbase, the back of the car feels wonderfully connected to the front as the Turbo maintains its balance of being beautifully weighted, continually pushing you on for more. I'm left breathless by this change in character – it's a devilishly different

contrast to the suppleness displayed on the city streets of Paris.

What's more, adaptive aerodynamics enable the car to hunker down to the road, and I'm certain this is part of the reason I experience very little loss of feel in the steering wheel under any lift from hard acceleration.

I quickly realise that the 991 Turbo accentuates further what the modern 911 is incredibly adept at doing: making the driver look very good behind the wheel. It's effortlessly easy to drive this supercar, yet advanced drivers won't be found wanting here either; they will be mesmerised by its savage performance and deft agility.

Back to our road trip, and upon reaching the quiet town of Cabourg, we stop for lunch and give the Turbo some respite before setting off again, this time destined for the port of Le Havre for a ferry back to Britain. The cliff-top roads provide further entertainment as I draw my conclusions as to the new Turbo's real-world pedigree.

A delightfully enchanting 991, in 2014 guise the Turbo has simply never been more practical as an

everyday supercar. As adept at battling the busy streets of a thriving city in style and refinement, or comfortably consuming the motorway miles as it is excelling on fun, twisty roads or even a circuit, meticulous evolutions mean it's evermore engaging and all-encompassing. In many ways, it's the intelligent car for the intelligent driver in that when appropriately called upon, it will adhere to your driving demands perfectly.

Frightfully fast, it's simply too quick to fully enjoy on public roads – but then, this is not new, as it has been the trait of the modern 911 Turbo for a while now.

What surprises about the 991 Turbo is how it can improve on most things the 997 Turbo stood for. Slightly more faster and agile, Porsche hasn't concentrated on bettering outright performance over everyday practicality, or vice-versa. Instead, small improvements across the Turbo's entire spectrum mean we're witnessing quiet evolution rather than overt revolution, confirming our belief that this is Porsche's most breathtaking yet useable supercar yet. **911**



“The Turbo has a
dexterity that belies its
added weight”



— TRACK — TITANS

Factory vs modified, Turbo vs naturally aspirated, modern vs classic, weight saving vs sheer power: which spec represents the ideal 911 for the track?

Written by **Neill Watson** Photography by **Neill Watson** and **Jenny South**

WorldMags.net



There's a solid white line on the pit lane exit at Spa. "Cross at your peril," we're told in the drivers' briefing, and you're acutely aware that at times you don't want to.

Needless to say, you get that uneasy feeling as you roll out of the Spa pits and get on the gas smartish. Porsche 911 GT3 engines are good for that, as I recently discovered, with a throttle response more akin to a 1.6-litre BDA than a 3.6-litre six cylinder. As for the noise, don't get me started.

The Mezger block is the best engine in the world, in my humble opinion. Hard in second, 7,500rpm is seen before a shift to third, the exhaust tone bouncing back into your ears off the wall of the old pit complex as you head down the hill, tucking across to the right ready for Eau Rouge.

Once I've got my head around Eau Rouge, 7,800rpm in fourth is the yardstick for braking downhill, which is conservative, as it's not my car. Steve – the GT3s owner – is sitting alongside me, windscreen filling full of track, suspension compressing and me wondering exactly how good

GT3 rebound damping is as it unloads over the curb. I get the wheel straight ahead and send it launching over the inside curb at the top of Eau Rouge. We're in heaven, basking in the sunshine of a cloudless blue sky, 28 degrees Celsius of heat and soaring track temperatures at one of the greatest circuits on Earth, in the company of three Porsches that couldn't be more different for the environment.

The factory-spec 997 GT3 is joined by a featherlight 3.0-litre impact bumper 911 built for the track and weighing in at under 1,000 kilograms, plus a 997 Turbo that with a power output of 700bhp, has been tuned to the hilt. It should make for an interesting couple of days then as we attempt to explore the merits of each car as the perfect weapon for a concerted track enthusiast.

The friendship between each car's proprietors, Steve, Steve, and Allan, was born through the common thread of Porsche 911 ownership. Brought together by regular visits to Specialist Cars of Malton, they're part of a small group that come together every year for a trip to Spa Francorchamps. And yet their cars couldn't be more different.

Despite all carrying the Porsche 911 moniker, take any of the criteria you may normally use for measuring cars – be that weight, horsepower or price – and all three are totally disparate.

It's a Monday morning and the trackday is running well, the guys playing themselves in with a couple of sessions before taking a break in the midday heat. Standing on the pit wall, dew dripping from our ice-cold bottles of mineral water in the Spa sunshine, we talk about the Porsches and their post-Stuttgart history.

The air-cooled, Stone grey 911 belongs to Steve Schofield. Having owned 12 Porsches, this is the result of a casual chat with the technicians at Specialist Cars Malton. Steve mentioned how he yearned for something lightweight for trackdays, with an Elise on his mind. "They talked me out of that and pointed me towards a 1981 3.0-litre SC," he says. The car was technically sound, but needed the usual kidney bowls and other areas sorting, so Steve discussed an ideal spec for the car. "I wanted it to be reliable, drivable every day and, above all, good fun at all speeds." ➔



Three Porsche 911s: all markedly different in their application and layout, each car bringing its own challenges and rewards to the track



“Despite carrying the Porsche 911 moniker, all three are totally disparate, be that in weight, power or price”

With this in mind, the car was stripped back to bare metal. Everything that didn't need to be there – carpets, standard seats, side glass, electric window motors – was removed. The heavy impact bumpers of the G Series body were taken off and lightweight early model replicas put in. Competition seats were also added, plus a half roll cage and a Momo steering wheel, along with perspex door windows. It was then painted in Stone grey – a Porsche 356 racing colour – with some Mark Donohue CanAm-inspired Porsche door graphics, before sitting it on period Fuchs wheels running Kumho track tyres. The brakes are 3.2 discs, with Boxster brake calipers, race pads and Castrol SRF brake fluid.

As for the engine and horsepower, it's almost standard; simply a stainless steel exhaust and some minor ignition timing tweaks give the car around 220bhp after a top-end overhaul. Even the 915 gearbox is standard. “Everyone said I should put a Wevo shifter into her, but I like the period feel to the shift, as it suits the car. Once you get used to it, it's not a problem,” Steve confirms. Suspension is also standard, with Mick and the guys at Specialist Cars resetting the ride heights, corner weights and overall stance to settings ideal for racing.

Now, it's time for some laps. We get into the bucket seats, hip belts nice and tight, pausing to pull the door shut before pulling down the shoulder straps. Duly accelerating out of the pits and down to

Eau Rouge, the SC picks up speed faster than you'd expect. Over the curbs, then up the long Kemmel straight, she's outgunned by several GT3s, though the 3.0-litre engine pulls hard and the lack of soundproofing gives us the full effect of the engine's wails as it sings away. A few laps in, however, I'm dialling into her, and those GT3s that passed us up the long drag uphill are coming back to us. We wait with the brakes, keeping the throttle pinned. Then, a big squeeze on the 'stop' pedal, before rolling into the corner, still blending the brakes, the front end giving you the confidence to carry brakes into the corner, sucking the distance out of the cars ahead.

Down through Pouhon, we're taking more distance out of them, going hard on the brakes and using all the curbs, early on the power, and suddenly they're looking in their mirrors. The Kumho tyres are warm and sticky, and I've figured out the trick to her speed. It's in the lack of weight and great chassis setup the guys in the workshop dialled into her that gives you the confidence to brake deep into the corners and carry speed through, using its agility and low weight. A few more laps and we pull in, huge smiles on our faces.

After a short pit wall break, we head into Eau Rouge with the GT3 again, where the 'Mezger' noise is fantastic; there's something about it that makes the hairs on your arms stand up. Steve's GT3 is the least modified of the cars here. A REVO

remap giving another 25bhp plus an induction kit are small changes, but they help the car breathe deeply and release the unrelenting GT3 sound. Beyond 5,000rpm, it sings, the tone penetrating your helmet all the way beyond 8,000rpm. With significantly more horsepower than the little air-cooled SC, grip on the corner exits is at a premium, with the neutral GT3 chassis quite happy to oversteer anywhere from the apex out depending on your talent.

The high-speed run from Stavelot through to Blanchimont finds the GT3 gaining more and more speed, making that final bend before the new bus stop chicane one that demands courage and a calm head. But there are no nasty surprises, as the chassis is still typical Porsche despite the years of development, always talking and supplying feedback. Four laps in, and I'm forgetting that this is pretty much a standard production car; six-pot brake calipers with Pagid brake pads are the only other changes. If you're not into modifying Porsches, the GT3 is the essence of everything Porsche has built up to. The GT3 has an abiding success story on circuit, and we can see why.

Back on the pit wall, more water is consumed. That Turbo is now looking at me; the 700bhp graphic is mildly unnerving, and no matter how much you try to ignore it, that's a big figure. Alan smiles, 'Want to try it?' It would be a shame not to. The Martini motorsport full body wrap quickens your pulse as you walk towards it. Glossy black 20-inch mono block alloys contrast with the bright yellow Porsche PCCB ceramic brakes. I'd better bring my A-game to driving this one, then.

I open the door and slide inside, where there's no roll cage or wide harnesses. Instead, the plush 997 Turbo interior, with lots of leather and adjustable



997 GT3 (Gen1)

(2006)

Engine

Capacity: 3,600cc

Compression ratio: 12.0:1

Maximum power: 415bhp @ 7,600rpm

Maximum torque: 405Nm @ 5,500rpm

Engine modifications:

REVO remap; Specialist Cars hybrid induction kit

Transmission:

Standard six speed

Suspension

Front: Independent MacPherson struts

Rear: Independent multi-link

Brakes

Upgraded six-piston calipers; Pagid race pads

Wheels & tyres

Front: 8.5x19-inch alloys, 235/35/ZR19 tyres

Rear: 12x19-inch alloys, 305/30/ZR19 tyres

Dimensions

Length: 4,445mm

Width: 1,808mm

Weight: 1,395kg

Performance

0-62mph: 4.3 secs

Top speed: 192mph



911 3.0 SC

(1981)

Engine

Capacity: 2,994cc

Compression ratio: 9.8:1

Maximum power: 220bhp

Maximum torque: 272Nm

Engine modifications:

Stainless steel exhaust

Transmission:

Manual five-speed 915 with limited-slip differential

Suspension

Front: Bilstein dampers on standard torsion bar

Rear: Bilstein dampers on standard torsion bar

Brakes

Carrera 3.2 discs front and rear; Boxster calipers front;

Castrol SRF fluid

Wheels & tyres

Front: 7x15-inch Fuchs with Kumho soft/medium tyres

Rear: 8x15-inch Fuchs Kumho soft/medium tyres

Dimensions

Length: 4,291mm

Width: 1,626mm

Weight: 1,000kg

Performance

0-62mph: 6.5 secs

Top speed: 141mph



997 Turbo

(2005)

Engine

Capacity: 3,600cc

Compression ratio: 9.0:1

Maximum power: 703bhp

Maximum torque: 996Nm

Engine modifications:

Evolution Motorsport EVT700 kit comprising of:

- EVOMSit EVT700 Clubsport ECU calibration – with 7,000rpm soft rev limit
- EVOMS/Sach Race Engineering stage 3 street clutch package
- EVOMS high flow VTG turbochargers, 65mm billet compressor wheels
- EVOMS Clubsport 44.5mm exhaust headers
- EVOMS Gen2 Clubsport intercoolers (charge coolers)
- EVOMS reinforced silicone boost hoses
- EVOMS billet turbocharger boost recirculation valves
- Gaskets, hardware, spark plugs & installation component

Transmission:

Standard six-speed manual

Suspension

Front: Bilstein fully adjustable coilovers

Rear: Bilstein fully adjustable coilovers

Brakes

Porsche PCCB ceramic discs with six piston callipers

Wheels & tyres

Front: 8.5x20-inch custom made monoblock magnesium alloy wheels, Michelin Sport tyres

Rear: 12x20-inch custom made monoblock magnesium alloy wheels, Michelin Sport tyres

Dimensions

Length: 4,450mm

Width: 1,852mm

Weight: 1,585kg

Performance

0-62mph: 2.9 secs

Top speed: 190mph+



Track toolbox: what you need to excel on the circuit

First, get some advice. All the best drivers have a coach, so what makes you think you don't need one? If you've never driven a particular track before and there's a resident instructor, book one; their knowledge will prove invaluable.

Also, be clear on insurance. You can insure pretty much anything these days, and cover your car additionally for any stints on a track. We recommend checking the intricacies of your policy before you hit the track. If you're not covered, invest in a policy immediately for peace of mind.

Driving shoes are also a must: you don't need to spend hundreds of pounds, and they don't even need to be

specialist race shoes. Look for a slim fit across the toes, a grippy sole that's slim and not too chunky, and a high ankle style. **Total 911** recommends Sparco trackday shoes.

Diet is also important. Stay away from energy drinks, as they give artificial highs followed by tiring lows soon after. Instead, drink plenty of bottled water and eat a banana before you start, and again at lunchtime with a light lunch. This releases a steady stream of energy that will help you to concentrate for a sustained period.

These may appear trivial and not obviously relevant, but you would be surprised at how often they're overlooked.



Each of these 911s enjoy copious amounts of track time both in the UK and abroad

powered seats to keep you in place. I turn the key, where there's no barking or spluttering; just your standard smooth Turbo tickover, barely audible through my thick Bell helmet lining. We head out once more. At 2,500rpm, you feel the usual Turbo shove coming in. There's a whistle starting in there somewhere, and a whooshing noise too. Then, at 3,200rpm, all hell breaks loose. The induction whoosh shoots up in volume, there's a vicious hiss from the hybrid turbos, and suddenly it feels like the front wheels are off the ground, the rears digging into the track.

I grab third and repeat the process. I glance in the mirror, expecting to see the track melting behind us. Through Eau Rouge, in most cars you hear a small rpm drop as the engine works up the sheer incline. This thing's going for the crest like a Saturn V rocket, and I'm fully expecting it to leave all four wheels off the ground. Over the top, through more gears, and after the long Kemmel straight is dispensed with we're still accelerating at much the same rate. The PCCB brakes bite, and I take my first breath since cresting Eau Rouge. Back down the hill towards Pouhon, I'm not brave enough. Leaning on the turbos on the off-camber exit here makes the rear tyres squirm. In this heat, you can feel the horsepower and track temperature destroying the rears as we exit Pouhon in fourth gear, me really not feeling confident of catching this thing.

Through the Paul Fere curves, the unworldly rate of acceleration shows no sign of slowing, and we find ourselves debating the plan of action upon reaching Blanchimont. Ultimately, I opt for

discretion. After four laps, we cool everything down for an in-lap. As we go back into the pits, it's purring in standard daily-driver mode, showing no sign of the relentless manner in which it just behaved. It's a deeply modified car, the EVT700 Powerkit delivering figures of an almost caricature dimension. The fact that it all stays in one piece is impressive, and that this is Alan's daily driver even more so. Like Steve, he has owned many Porsches – this one is his seventh. The modified car cost tens of thousands of pounds to build, and taking on the potential bills for a car in this state of tune is not for the faint of heart, but when he heard it was on the market he didn't hesitate. Despite a frightening turbo fire in a subsequent trackday, Alan is keeping his monster, and I can see why.

Eight weeks on, we reconvene for some photography at Blyton Park in Lincolnshire, where the narrower, more twisting layout is perfect for the lightweight, air-cooled car. The factory GT3, as ever, is adapting to whatever track it's given, while Alan's mighty Turbo is finding that one gear is enough for pretty much the whole circuit. These three 911s all deliver a totally different experience, ideal for each driver and their driving style. The sub-£30,000 lightweight classic is relatively cheap yet fun, with the fiery 700bhp Turbo a more adrenaline-fuelled experience both on and off the track. In the middle, the Mezger-engined GT3 should be acknowledged as the perfect all-rounder. They may all have their own personalities, but as part of a legion of sublime sports cars, the 911 DNA remains evident in each. **911**

All-level circuit guide

Beginners: Blyton Park

Probably the best-kept secret in UK motorsport, Blyton Park in Lincolnshire is a 1.45-mile long track that is perfect for learning track driving, and is increasing in popularity each year. Owner Richard Usher has a can-do attitude and sensible booking system, plus regular trackday operators are now booking Blyton as a venue for their businesses, so there are plenty of opportunities to use it. Noise is rarely an issue due to Richard's proactive noise policies, and the track is cleverly designed to require brain power, with mistakes instantly evident. Generous runoff areas encourage experimentation, with a high-quality track surface and the likelihood of damage being pretty remote. It's not uncommon to share space with very well-known historic race teams shaking down something incredibly valuable, as Blyton's discretion is a useful asset. Regardless of your level of experience, Blyton is a must-drive track.

Intermediate: Croft Circuit

One of this writer's personal favourites and good for higher-speed corners. Croft has a chequered history with local residents, but right now there seems to be peace. Noise can be an issue, so if you have something over 98db you may have problems. The circuit itself is excellent, with long straights to exercise horsepower, some big stops into braking areas, plus the brilliant section from Tower through to Sunny-In/Sunny Out. Porsche Club GB holds days there yearly, in addition to several other independent trackday companies.

Advanced: Spa Francorchamps

Everyone talks about the Nürburgring, but this is just as great. We've heard all the scary bar room stories, with the death of Stefan Bellof in 1985 being a particularly tragic example, so some make a mental note not to overtake. But it's just straights and corners, isn't it? Well, yes and no. It is a track to be learned like any other, but it's a truly wonderful place, the whole area embracing the track's existence as a huge tourism benefit. But it's the elevation that gets you, from when you swoop down into Eau Rouge the first time, then up that long straight that seems to sap the power regardless of what you're driving, before back down through an endless selection of bends, with the second part of the negative cambered Pouhon making you work hard through the second apex. But Blanchimont is the dangerous one, as you pull big numbers there. If you have confidence, bravery and talent, it's flat in a GT3. The more cautious may take a slight, confidence-inspiring lift before committing, but be sure to get your turn-in point right, or you'll run out of road. Lift at that point, and you'll have a plane crash. It's fast, potentially lethal and amazing. It's not hard to see why so many love it.



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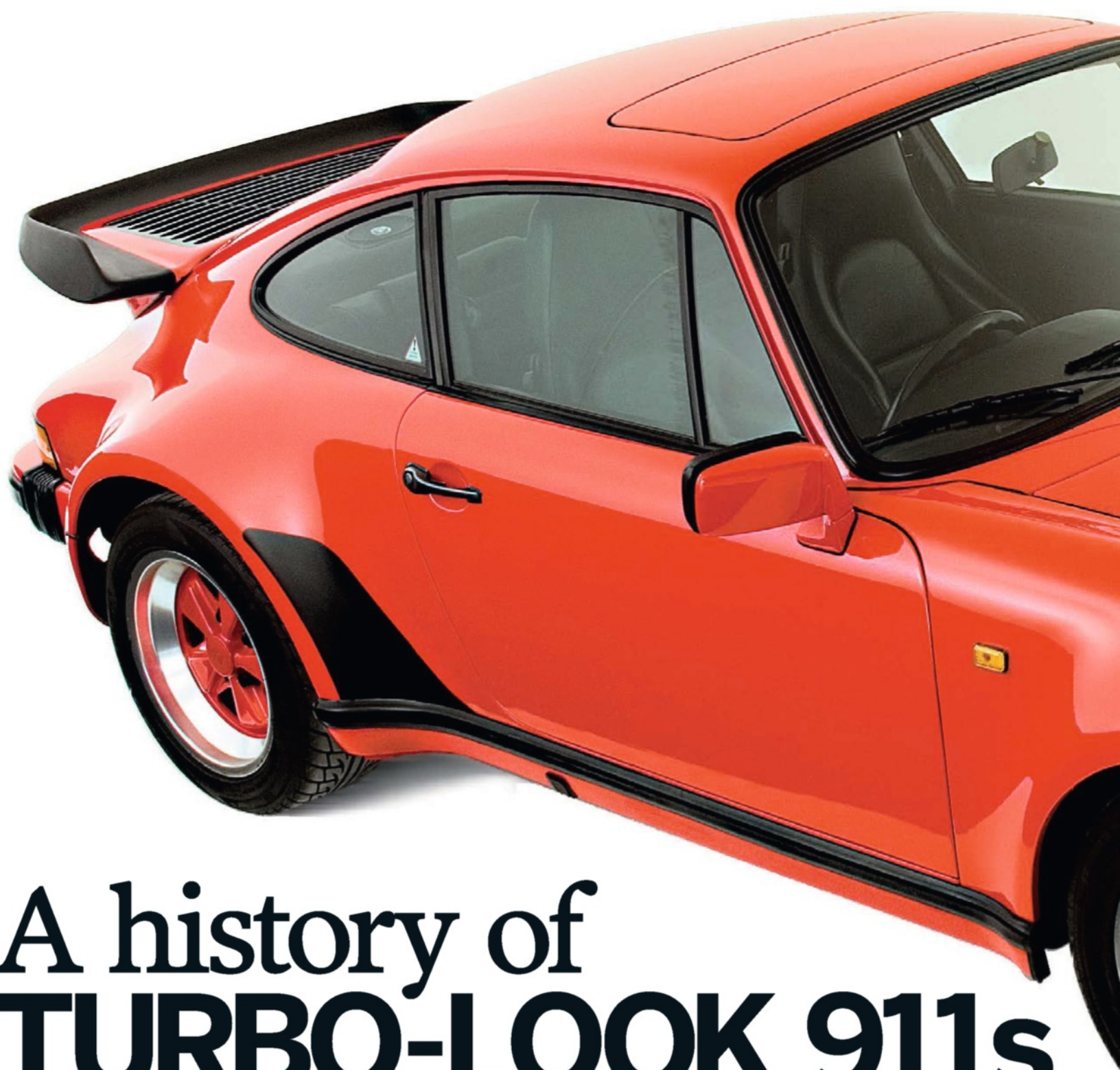
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A history of **TURBO-LOOK 911s**

Liked the looks of the Turbo but didn't want the performance? Porsche had an answer with the Turbo-look, wide-bodied 911 Carrera

Written by **Chris Randall** Photography by **Porsche AG**

“

MANY OWNERS WANTED
THE WIDEBODY LOOK OF THE
TURBO. THE RESULTS WEREN'T
ALWAYS TASTEFUL, BUT THEY
WERE DISTINCTIVE

”



Back in the Eighties, wanting to make your Porsche 911 stand out was nothing new. Hand your car over to companies such as Strosek, Gemballa and Rinspeed, and they would turn it into something special, and what many owners wanted particularly was the widebody look exemplified by the Turbo. The results weren't always tasteful, but they were distinctive, and if your budget didn't stretch to a specialist tuner then you could opt for one of the myriad glass fibre kits that were available at a fraction of the price.

It was a trend that didn't go unnoticed by Porsche, so in 1984 they made option 'M491' available, so for the first time you could buy a naturally aspirated 3.2-litre Carrera and equip it with the flared wheel arches and dramatic tea-tray spoiler of the contemporary Turbo. Known as the 'Turbo look', it was officially designated 'SSE' for 'Super Sport Equipment' (and later just 'Super

Sport'), and it was a look that was to become hugely popular, especially in the USA, where the Turbo had been temporarily withdrawn from sale after falling foul of stringent emissions legislation.

Initially available in Coupe form only, the option was made available on Targa and Cabriolet models from 1986, and while UK sales weren't huge – exact numbers are hard to come by, as factory records don't distinguish the wide-body cars from other models, but it's thought to be around 75 – Porsche had hit on a style that would remain for a number of 911 generations. Ticking that particular option box meant buyers got more than just a 123mm wider body on standard running gear, because the SSE also utilised some of the tasty suspension and brake upgrades that until now had been the preserve of the Turbo. Among other tweaks, that meant larger torsion bars and antiroll bars, beefed-up trailing arms, cross-drilled brakes with four-piston calipers and the fitment of 16-inch Fuchs wheels as standard. ➡

“

KNOWN AS THE 'TURBO LOOK', IT WAS OFFICIALLY DESIGNATED 'SSE' FOR 'SUPER SPORT EQUIPMENT' (AND LATER JUST 'SUPER SPORT')

”

Owning a 3.2 SSE

- **UK Price:** £29,616 (1984)
- **Numbers sold in the UK:** 75 in right-hand-drive
- **Service intervals:** One year/12,000 miles
- **Service costs major:** £300
- **Service costs major:** £700

(Figures courtesy of Dick Lovett Porsche, Swindon)



16-inch Fuchs wheels were part of the SSEs specification



Buying tips

If the Turbo look floats your boat then there are a variety of models to choose from. In some cases, finding one is going to be the biggest problem, but it pays to do your homework before taking the plunge.

- **Usage**
Some cars will have ended up in collections with subsequent low mileages. Do you really want to use it every day?
- **Damage/corrosion**
No more susceptible than any other 911, though as always older cars need careful checking.
- **Servicing**
Broadly similar to the models they are based on, but ensure any Turbo running gear has been properly fettled.
- **Values**
Rarity means values can fluctuate wildly, so it's worth chatting to a specialist to ensure you're not paying over the odds.
- **Provenance**
Conversions are rife, so make sure you're buying a genuine one. If in doubt, get a specialist inspection.

Lifting the decklid of the SuperSport reveals neither a turbocharger or intercooler



The 3.2 Carrera SuperSport came with wide rear hips and teatray spoiler from the 3.3-litre 930





Below: despite their popularity in left-hand-drive form, just 75 examples were built by Porsche in right-hand drive. Below right: of that 75, just 26 are known to be Cabriolets. Top right: Widebody 3.2 Speedsters were relatively popular



So it handled and stopped better than a standard Carrera – and was arguably better looking, too – but as its detractors were keen to point out, there were some downsides to the transformation, not least of which was extra weight. The new model was reckoned to be close to 70 kilograms heavier than a ‘narrow’ car, which with a greater frontal area blunted performance a little, lopping 12mph from the top speed. For a touch more subtlety, buyers could also choose option M470, which deleted the front and rear spoilers, but either way an SSE wasn’t cheap. In 1984 you’d have spent just over £6,000 more than on a regular Carrera, the amount jumping to four figures just a few years later.

The purists may have viewed it as form over function, but Porsche wasn’t to be deterred, and retained the look for another variation of the Carrera: the Speedster. First shown at the 1987 Frankfurt Motor Show, it didn’t garner universal acclaim, but was distinctive. As well as a shorter, more steeply raked windscreen, Porsche removed

the rear seats and fitted a smaller and lighter convertible hood beneath a humped fibreglass cover (Porsche reportedly made it clear to buyers that the hood was for emergencies only, and any claims for damage from water leaks were likely to be firmly rebuffed). Where it fits into this story is that despite offering the Speedster in both standard and ‘Turbo-look’ forms, the latter was to prove more popular. Of the 2,103 cars built, just 171 were of the narrow-bodied variety, so Porsche were clearly onto something, and despite the mixed reviews they weren’t finished with the Speedster theme.

Based on the Carrera 2 Cabriolet, the 964 Speedster was launched in 1992 for the 1993 model year, and Porsche planned a production run of 3,000 cars, almost all of which would be narrow-bodied. Aided by a reduced kit-count, the Speedster was lighter than the C2 Cabrio, although many owners raided the options list to add niceties like air conditioning and a limited-slip differential, and most examples sported lightweight ‘RS’ seats and

“

PURISTS MAY HAVE VIEWED IT AS FORM OVER FUNCTION, BUT PORSCHE RETAINED THE LOOK FOR ANOTHER VARIATION OF THE CARRERA: THE SPEEDSTER

”

The widebody line-up



Carrera 3.2 SSE 1984-89

The first official 911 to feature the Turbo look, along with suspension and brake upgrades. UK sales were modest, but it's popular now.



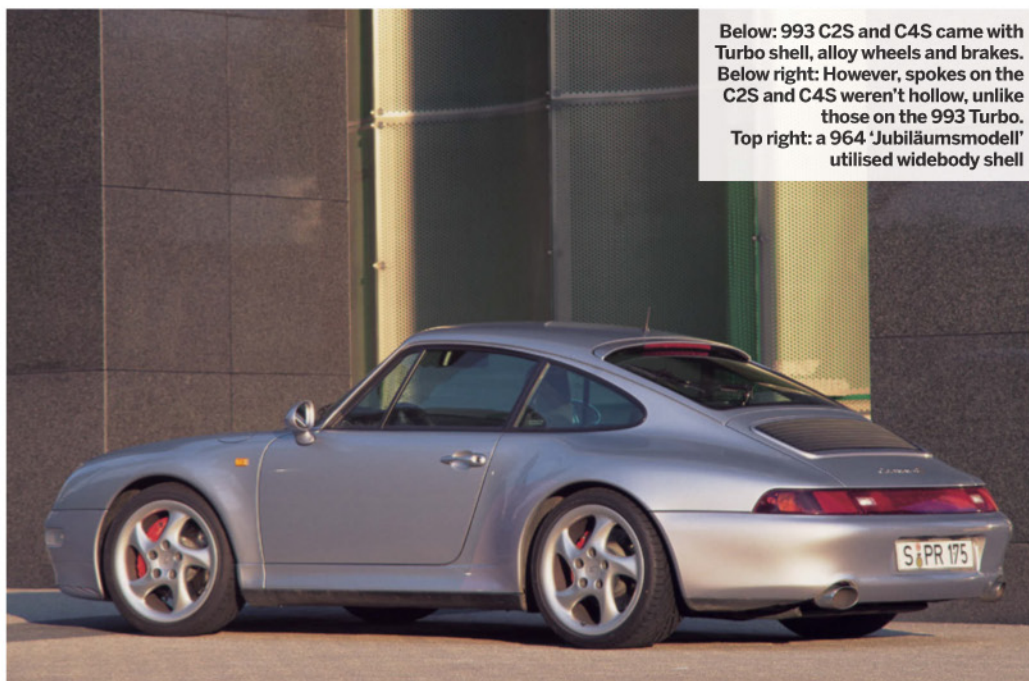
Carrera 3.2 Speedster 1989

Unusual looks characterised the Speedster models, and it wasn't admired by all. Most were Turbo look; many ended up in collections.



964 Speedster 1993-94

Porsche stuck with the Speedster theme, although less than 1,000 were made. The few widebody models are extremely rare today.



Below: 993 C2S and C4S came with Turbo shell, alloy wheels and brakes. Below right: However, spokes on the C2S and C4S weren't hollow, unlike those on the 993 Turbo. Top right: a 964 'Jubiläumsmodell' utilised widebody shell



Cup alloys. The limitations of the thinner manual hood weren't something that bothered the majority of buyers in the US, where the model proved especially popular (just 14 or so cars are thought to be right-hand drive). In the event, and despite high expectations from Porsche, only 936 were built, but it's the last few of those that interest us here. At considerable extra cost, 20 Turbo-look examples were built by Porsche's Exclusive workshop, and these are especially sought after today.

For those that admired the broader-hipped body style, the 964 generation provided rich pickings, as Porsche introduced two further naturally aspirated derivatives. First up was the 964 C2 Turbo-look Cabriolet, which was available for the 1992 model year. It proved popular with buyers, blending the wider bodywork of the Turbo with the pop-up electric spoiler fitted to standard 964s and adding 17-inch 'Cup' alloys and aerodynamic 'teardrop' door mirrors. The suspension was swapped for the setup beneath the Turbo model, and there was a

choice of manual or Tiptronic gearboxes, although the latter blunted performance somewhat, adding almost a second to the claimed 0-62mph time. Almost as hard to swallow as the name, though, was the price: north of £70,000 when new, and that was before you started dipping into the options list.

Another 964 to receive the Turbo-look treatment was the 30th Anniversary model launched at the 1993 Geneva Show and available only as a Coupe, but again retaining the standard retractable spoiler. Although exact numbers vary depending on the source – 894 are thought to have been registered, confused somewhat by the addition of a further 174 Turbo-look C4s that lacked anniversary badging – 911 examples were planned with standard colours limited to Viola, Polar silver and Amethyst, although both Guards red and green examples were said to have been built. Porsche went to town on the specification, though, with buyers getting air conditioning, leather trim and a full suite of airbags, along with an interior plaque and logos and

underlined '911' script on the engine cover. Once again, curb weight suffered, with approximately 50 kilograms added over a narrow-bodied C4 and the extra panelling reducing the top speed.

The introduction of the last of the air-cooled cars, the 993 generation, provided Porsche with yet another opportunity to satisfy Turbo-style cravings. 1996 saw the introduction of the C4S, which with an extra three inches or so of width was essentially a 993 Turbo without the blower. An electric rear spoiler was standard – the lack of an intercooler meant the fixed item wasn't required, although you could opt for it for the complete look, but under the skin you got lower suspension and the hugely effective Turbo brakes. 18-inch 'Cup 3' wheels were standard, though with solid rather than hollow spokes, and there was plenty of interior kit, including full-leather trim and electric seats. Given the modest output compared to the Turbo, the chassis modifications weren't strictly necessary, but they didn't harm the driving experience. 🚗



964 C2 Turbo-look Cabriolet 1992-93

Terrible name but great looks. Not cheap though, and performance was blunted by the Tiptronic gearbox – though the majority were manuals.



964 Anniversary 1993

Luxurious specification and special trimmings went with the Turbo-esque wide arches and 17-inch 'Cup' wheels.



993 C4S 1996-98

The only thing missing was the Turbo. Handling and stopping were first-rate thanks to the Turbo chassis.



993 C2S 1997-98

It lacked the suspension and brake tweaks of the 4S, although the 2WD layout reduced the weight penalty.

“

SEEKING OUT ONE OF THESE 911S WILL BE A WISE INVESTMENT... SPEAK TO SPECIALISTS, AND THEY WILL TELL YOU THAT ANYTHING TURBO-BODIED WILL FETCH MORE MONEY

”

If you didn't want to go the whole hog and preferred not to lug around the extra all-drive hardware, then the C2S launched in 1997 would no doubt have suited your needs rather well. Retaining the standard C2 underpinnings apart from 10mm lower suspension and with the retractable spoiler only, you did, however, get larger 17-inch Cup wheels (the inch larger Turbo items were optional) and some interior tweaks to remind you where your extra money had gone. In all, Porsche produced 10,662 of these particular 993s, 6,948 being C4S models, although these are actually rarer in the UK than the Turbo it aimed to replicate.

Clearly, then, 911 enthusiasts that appreciated the style but didn't want the complexity and performance of a Turbo were well catered for, but what of buying and owning one today? Well, the first thing you're getting – two-seater Speedster models aside – is a very useable 911, one that retains the practicality and driveability of the standard car, and that has to be good news for the majority of us. Not that they were all unanimously praised

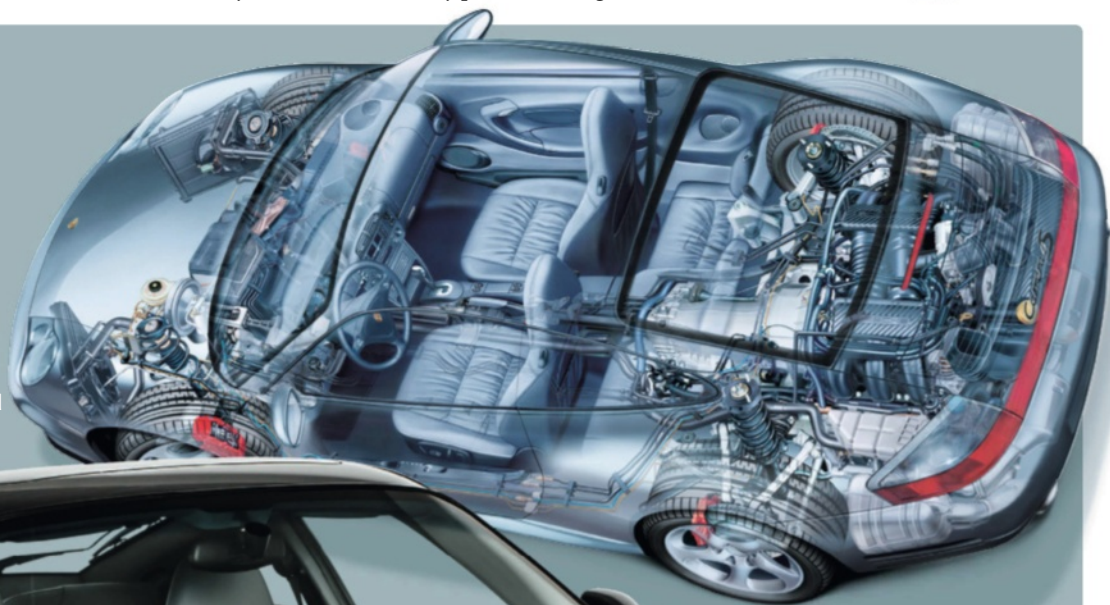
by the motoring press of the day; some journalists questioned the wisdom of paying extra for a car that was slower than the Turbo it mimicked.

The other thing you'll be buying into is rarity, depending on the model, which is more good news when it comes to values and saleability. Each of these cars are sought after, and some will have ended up in collections, so it is more than likely that seeking out one of these special 911s will prove to be a wise investment in the long run. Speak to specialists and they will likely tell you that anything Turbo-bodied will fetch more money.

Aside from the caveats that accompany any older 911, ownership shouldn't prove troublesome either. The Turbo-derived suspension and brake components may cost a little more, and you probably wouldn't want to damage the parts that make the Speedster models so unusual, but there really are few other downsides. A winning formula, then? Most definitely, and one that Porsche was more than happy to carry into a whole new generation: the water-cooled 996. **911**

996 C4S

The change to water-cooling may have been a momentous one, but it didn't affect the appetite of buyers for a Turbo-look widebody model, and Porsche obliged in late 2001 by introducing the 996 C4S. Underneath the wider wings (which lacked the air intakes of the Turbo), you'd find a broader track, lower suspension and 'big red' brakes. 18-inch wheels topped off the package, and there was a more luxurious interior as well as a red reflector panel between the rear lights. The security of all-wheel drive meant owners could fully exploit the 320bhp on offer, too. A future classic? We think so.



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—993 C4S— THE FINEST TURBO-LOOK 911?

One of the last air-cooled instalments of the Turbo-look Carrera, the 1996 Carrera 4S is revered as one of the most sought-after widebodies

Written by **Kieron Fennelly** Photography by **Chris Wallbank**



“The Turbo-look became a Porsche icon”



At a glance, the 993 C4S is indistinguishable from the Turbo

When it was launched in 1993, there were no arguments about the new 911's looks. The fared-in headlights may have seemed radical, but combined with the new 993's rounded hips, it was received with greater enthusiasm than the 964 five years earlier. Porsche recognised that the edict in 1984 to the 964's stylists 'to touch nothing above the axle line' was too conservative: 964 sales fell away after a strong start, and by 1990, such were Porsche's finances, the next 911 *had* to be a success.

Supervised by director of styling Harm Gagaaj, designer Tony Hatter did a fine job of smoothing the 964's coachwork, eliminating the obtrusive bumpers and melding the headlights with the wings. He would have liked to have gone further, recessing the windscreen wipers and revising the roofline, but the budget didn't extend to this. It did, however, let him flare the 993's rear haunches, a feature which created raptures and made its rear three-quarter angle one of the best views of any car.

As well as its looks, the 993 addressed the acknowledged failings of the 964: it was more refined, thanks partly to its rear suspension. In place of the 964's trailing arm was a multi-link configuration made in light alloy, and the twin-spark 3,600cc flat six was reworked with a stronger crankshaft, letting Porsche dispense with the 964's crankshaft damper and lighten the reciprocating parts, in the process enabling smoother operation. Separate exhausts and silencers for each cylinder bank removed much of its raucousness, the net effect being a more handsome and couth 911.

The magazine reviews were encouraging. In *Road & Track*, Peter Robinson said, "Its greater lightness and agility means that the 993 is alive in corners, and a mere rolling of the wrists is all that is needed to hold a power oversteer slide. This is the first 911 that's truly chuckable, and you would have to do something really stupid to get into trouble. Cornering flat on the chosen line without the thumps and harshness of the old car contributes enormously to its appeal."

This was praise indeed from the man who said as far back as 1978 that "the 911 should be put out to grass". The 993 was a hit, and Porsche's production figures would bear this out. 16,000 911s were built in 1994 and again in 1995, while 964 output had been 9,747 (excluding Turbos) in 1992, declining to 4,589 in 1993. The 993 has remained popular, often regarded as the entry to classic 911 ownership, without the problem of corrosion.

The Turbo 993 was launched after a gap of two years. It continued the tradition of wider rear quarters, originally conceived to accommodate the larger rear tyres. With the enlarged rear wing, which from 1977 incorporated an intercooler, the 'Turbo look' became a Porsche icon. It appeared on a number of limited-edition, naturally aspirated 911s, as you've just read in our 'history of the Turbo-look' feature, but never generated enough interest for series production. However, the positive reception given to the 993's pronounced hips persuaded Porsche that there could be a rich seam to be mined with a production model. ➡





Specification

993 Carrera 4S (1996-1998)

Engine

Capacity: 3,600cc

Compression ratio: 11.3:1

Maximum power:

285bhp @ 6,100rpm

Maximum torque:

340Nm @ 5,250rpm

Transmission:

All-wheel drive with variable torque split; G50/21 six-speed (no Tiptronic option)

Wheels & tyres

Front: 8x18-inch Turbo-look alloys, 225/40/ZR18 tyres

Rear: 10x18-inch Turbo-look alloys, 285/30/ZR18 tyres

Brakes

322mm discs all round

Dimensions

Length: 4,245mm

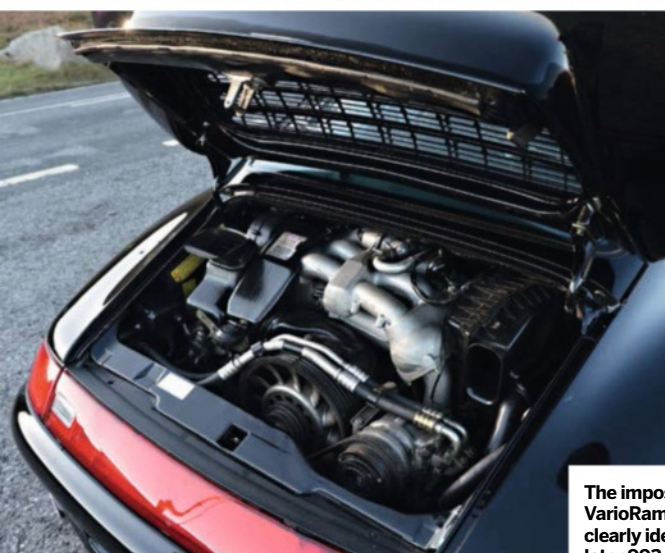
Width: 1,795mm

Weight: 1,520kg

Performance

0-62mph: 5.3 secs

Top speed: 168mph



The imposing VarioRam intakes clearly identify the later 993 engine, and the 993S's wheels are like the Turbo's, except solid spoked



How does the Carrera 4S compare today?

Anyone coming to the 993 Carrera 4S from an earlier 911 will feel immediately at home: that cabin is very familiar, especially the five-dial instrument cluster, and once underway, the driver will be struck by the smooth eagerness of the VR engine and superb matching of the six-speed gearbox to the torque curve. While not quite as nimble as earlier 911s, the 4S is very sure-footed. On tyres two or three sizes above the stock 993's, dry road grip is phenomenal, understeer almost undetectable unless really pressing on, and on its Turbo suspension this all-wheel drive model instills a level of confidence on an unfamiliar wet road that the rear-drive 993 cannot.

Stepping back to the 993 from, say, a 997 is slightly more of a cultural shock. The heavier controls, floor-hinged pedals, need for patience as the oil warms to operating temperature and throttle, which is not always easy to modulate in slow traffic, means the driving technique requires some technical empathy. But that surely is the reason for buying a classic Porsche. Near-last of the air-cooled line, the 993 Carrera 4S is no different; it's a thinking driver's car. Comfortable, refined and always an immense pleasure to look at, the Carrera 4S would be a purchase to cherish, but always with the proviso that it's driven as Porsche intended.



“Rather than dub it **Turbo-look**,
Porsche introduced the
new model as **Carrera 4S**”



993 Carrera 4S or 993 Turbo?

The general price gap between the Carrera 4S and 993 Turbo is around £25,000; the same as when they were new. Both have appreciated by up to 25 per cent in the last five years, and, given the 993 RS can fetch 20 per cent over its original price, both look like solid investments. As arguably some of the most exclusive and attractive 911s ever built, few will buy a 993 Carrera 4S or Turbo to drive daily. On the other hand, Porsches don't react too well to being stored, so which is better?

Even today, the 993 Turbo's step-off is amazing, its 408bhp propelling it to 60mph in 4.3 seconds on the way

to a top speed of 180mph. However, road testers remarked that it needed the open highways and Autobahns of the continent to be enjoyed to its full potential, and in a sense it handled almost too well: Porsche observer Peter Morgan said, "You struggle not to use the term 'sanitised'. This car is so accomplished that as a driver you can't help but feel a little detached from the action."

The Carrera 4S sits lower on its Turbo suspension and tyres than the plain Carrera, and handles with slightly less agility, but accelerates out of corners with authority. For an annual 5,000 miles, the Carrera 4S's routine running costs

are likely to vary between £500 and £1,500 (without fuel) depending on the amount of work required. The blown 993 will be more expensive if the turbochargers need replacing, which can cost £2,000 each, and although the Turbo has six rather than 12 sparking plugs, good access requires more dismantling so labour charges are higher.

So our notional, UK-based enthusiast might be better off with a good 4S: it has all the Turbo's aesthetics without potential maintenance complications, and enough performance to be used as a leisure 911. As an investment, the buyer won't be disappointed here either.



Porsche didn't compromise on the inside of the 993 C4S either, lavishing the Turbo-look Carrera in leather, with a host of options available



The star of the Porsche stands at the 1995 autumn motorshows was not just the new 408bhp 911 Turbo, but a similarly wide-bodied, albeit naturally aspirated 911. Rather than dub its new model 'Turbo look', which would have cast it somewhat into the shadow of the real Turbo, Porsche created a new model, introducing it as the Carrera 4S – the numeral indicating it was all-wheel drive and the S implying a special model, akin to the original 911S.

The other aspect of the 993 that improved on the 964 was this all-wheel drive. The 964 C4's fixed torque split (69:31) spoiled the 911's handling balance, proving prone to numbing understeer – the last thing buyers expected. The revised installation of the 993 C4 not only shaved 50 kilograms off the weight, but its infinitely variable allocation of torque transformed the handling. Testers found that the new C4 had the same agility and lightness of touch as the rear-drive version, and that rather than working against the handling, all-wheel drive aided it by enhancing stability when cornering in the wet. This was an advantage in the last generation of 911s to have no electronic safeguards beyond optional automatic brake differential (ABD).

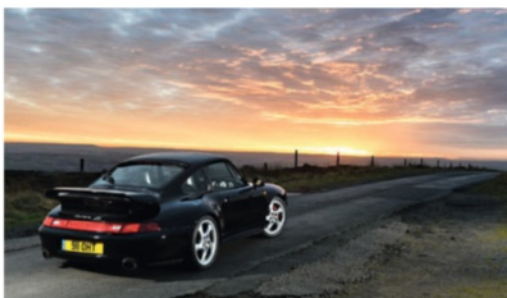
All the more reason, then, to make the Carrera S four-wheel drive. It made sense from a production standpoint too, as the C4S could assume both the Turbo model's coachwork and running gear – everything, in fact, except the twin turbochargers! This was reflected in the £74,790 price, above the 993 C4 at £61,250. This granted the buyer a distinct 911: besides the Turbo wings, the C4S's underpinnings were essentially the Turbo's – the same 322mm diameter brake discs, the Turbo's suspension, which was 10mm lower at the front and 20mm at the back, and 18-inch wheels. These were heavier, but cost less. They were nonetheless shod with Turbo-sized tyres – the 285 section rear and 225 front – filling the wider 993 C4S's wheel arches.

Under the rear hood was the stock 911 engine in its latest VarioRam guise. To modify the 911's torque curve to enhance response at lower rpm, Porsche used VarioRam to increase volumetric efficiency, particularly at lower engine speeds. The result was that at 3,000rpm, the torque figure at 310Nm was 18 per cent higher than the previous 993 engine, which endowed the Carrera 4S (and base 993) with better mid-range pick-up. The VarioRam engine

also benefited from larger inlet valves and a revised camshaft, which raised maximum power to 285bhp.

The Carrera 4S's cabin received the full leather treatment, and externally the only giveaway that this wasn't a Turbo was the elevating spoiler of the stock 993, though the static Turbo wing, side skirts and lower front valance were Exclusive options, making the unblown car very hard to discern.

By the time the Carrera 4S was on the market in 1996, spy shots of the 996 had already appeared, and it was clear the air-cooled 911 didn't have long to live. This contributed to the popularity of the C4S – a Carrera 2S would join it late in 1996, and the combination of looks and exclusivity meant Porsche had to keep widebody production going well into 1998. Often purchased with collection in mind, it is possible to find relatively low-mileage C4Ss, but buyers can expect to pay £40,000-50,000; twice the going rate for the plain 993. The C2S sells for £5,000-10,000 less, but the C4S is a far superior specification. The 2S, which sold in greater numbers, is essentially only a wide-body 993 on the stock 993 chassis, another reason why the C4S is perhaps the most revered Turbo-look 911 today. **911**





SIXTIES SHOWDOWN

Unknown to many, the plucky four-cylinder 912 of the mid Sixties enjoyed quieter success away from the company of its refined brother, the six-cylinder 911

Written by Glen Smale Photography by Alisdair Cusick



The mid Sixties was a significant period for Porsche at Zuffenhausen. A time often lauded for the launch of the 911, a model that ignited the passions of driving enthusiasts for the resulting five decades, little is said of its smaller 912 brethren that was also charged with helping to replace the popular 356.

Porsche's replacement for the 356 was already being planned by the mid-Fifties, and Ferry Porsche was well aware of the responsibility of designing a model that would not only satisfy their customers, but also take the brand forward. However, the thought of an understudy supplanting the iconic 356 horrified the model's enthusiastic following.

Ferry Porsche's philosophy of 'going light', combined with the engine location behind the rear axle was not only advantageous when accelerating, but with all the weight over the driving wheels it gave the Porsche excellent traction in mud, snow

and wet conditions. Herbert Linge explained, "There was a big advantage during braking, because the weight was transferred onto the front axle. It also helped in rallies because you could 'throw' the car."

Both the 356 and 901 – renamed 911 after production of 82 models – had many critics at launch, commenting that the car would be undrivable "with all that weight hanging out the back." "But," Linge added with a smile, "If you know how to play the violin, you could work it very nicely," implying that with a sensitive touch, a skilled driver could make the car perform just the way he wanted it to.

Porsche designed a completely new six-cylinder 2.0-litre boxer engine for the 911, which meant that like the 356, it was not reliant on water-cooled radiators. A sports car without a radiator up front resulted in a much lower overall frontal section, which in turn enabled better aerodynamics and

presented a much lighter overall package, ideal for better performance. The 911 also featured independent front and rear suspension, and the longer wheelbase over the 356 offered greater comfort with improved stability. These features gave the 911 a top speed of 130mph, making it significantly quicker than the model it replaced. The advantage the 911 offered the engineers in Stuttgart was a platform that could be developed well into the future, which was an important factor for Porsche, as not only had the 356 reached its development potential, but its rivals were making great progress too.

Right from the start of the 901's development, it was planned to introduce a four-cylinder model aimed primarily at those buyers whose budget could not stretch to the 911. In an astute move, Porsche sought to attract potential customers by offering them a 'budget' model in an attempt to build brand loyalty, hoping that drivers



Although subtle, a close examination of the 912 reveals many differences to the 911, including the pre-1967 three-gauge instrument panel, shown above



The cabin of the six-cylinder 911 was more refined, resplendent of its 5,500 DM price premium over the more basic 912





Specification

912
(1966)**Engine****Cylinders:** 4**Bore:** 82.5mm**Stroke:** 74mm**Capacity:** 1,582cc**Compression ratio:** 9.3:1**Maximum power:**

90hp @ 5,800rpm

Maximum torque:

122Nm @ 3,500rpm

Carburation:

2x Solex 40 PII-4

Transmission:

Four-speed

Dimensions**Wheelbase:** 2,211mm**Length:** 4,163mm**Width:** 1,610mm**Height:** 1,320mm**Weight:** 970kg**Performance****0-62mph:** 13.5 secs**Top speed:** 115mph

Specification

911
(1966)**Engine****Cylinders:** 6**Bore:** 80mm**Stroke:** 66mm**Capacity:** 1,991cc**Compression ratio:** 9.0:1**Maximum power:**

130hp @ 6,100rpm

Maximum torque:

173Nm @ 4,200rpm

Carburation:

Solex 40 PI (early)

Weber 40 IDA (from 02/66)

Transmission:

Five-speed

Dimensions**Wheelbase:** 2,211mm**Length:** 4,163mm**Width:** 1,610mm**Height:** 1,320mm**Weight:** 1,080kg**Performance****0-62mph:** 9.1 secs**Top speed:** 130mph



Thanks

Thanks to the PCGB for assisting with the 911 v 912 feature, and thanks also to Stamford council for their provisions with the location of the photoshoot.

would graduate to the 911 in future. While the 901 was in the development phase at the factory, a four-cylinder 902, as it was first named, was simultaneously put through its paces, before the renaming to 912 alongside the 911.

The attraction of the early, short-wheelbase 911 models is understandable, as many regard the pre-1969 models as the most pure of the 911 range. As owner Jonathan Goddard says, "In 1966 you could only buy the 911; there was no option of an 'S'. I like the simplicity of that, and I like the fact that every 911 is ostensibly based on that car – it was the beginning of the whole model range. It is unfussy, very basic, simple and easy to drive, and as a sports car it has a lovely, classic shape."

The 911 (at 21,900 Deutschmarks) was significantly more expensive than the 356 C (at 14,950), but this was justified because of the new car's greater performance and increased proportions. Porsche felt that with the addition

of the 912 (at 16,250DM) this would fill the price void left by the 356. With the 911 running at full production capacity at Zuffenhausen, the decision was taken to move the 912 to the Osnabrück plant.

In many ways, the two cars featured here started life in very similar ways, both being produced for the American market in the same model year, and although both cars are used extensively, it is for quite different needs that each owner sought out their steed.

Jonathan Goddard's 911 in our pictures was first registered in New York in January 1966, but early ownership details are sketchy at best. In 1977, the car's registration was surrendered back to the New York Department of Motor Vehicles, and it appears that car was not used much between that date and 2004, as the body had not suffered the ravages of New York's salted roads in winter.

With 71,000 miles on the clock, the 911 was sold as a 'rolling project together with a box of bits and

the gearbox on the passenger seat', arriving at Nick Moss' Early 911 workshop in 2004. The engine was completely stripped and rebuilt, with the body found to be remarkably clean. "Knowing the body and engine were all sorted meant I would not have to worry about it, and I could now enjoy the car and not have any maintenance issues. Being left-hand drive is also no problem for me," Goddard added.

Goddard doesn't plan on racing the car competitively, and even uses it on the school run. "I even got a cello in the front, and I remember the teacher at school saying it was quite a good school-run car. I have put seat belts at the back so I can get my two daughters around safely with my son in the front. It's a car I just want to use; I don't mind getting it dirty."

Introduced in April 1965, the Porsche 912 is the oft-forgotten baby brother of the 911, and lives, unjustifiably, in its shadow. The 912 was powered by the 356 SC-derived 1.6-litre four-cylinder engine,



resulting in a reduction of some 220lbs in overall weight over the 911. Although early 912s came with a three-dial dash, this was changed in 1967 to the five-dial setup like in the 911, and as most customers opted for the five-speed gearbox on the order sheet, the standard four-speed gearbox was later dropped.

Perhaps without the presence of the 912, the 911 might not have reached the heights it did, as the cheaper model provided much-needed revenue for the company, and so the 912 has been at the receiving end of some rather undeserved prejudice. It would, then, be reasonable to ask why the 912 was discontinued in 1969, but by this stage the 911 had established itself and it was clear the factory's intention was to phase out the 912, as the 911 was the model line that Porsche intended to build on.

There was a brief flurry of 912s produced between August 1975 and July 1976 (model year 1976), these being the 912 E variant powered by a fuel-injected, air-cooled 2.0-litre engine as fitted

to the 914 model. This was a USA-only car, and was planned to fill the gap following the run-out of the 914 and prior to the introduction of the 924 in the US market. The 912E holds the distinction of being the last four-cylinder, air-cooled car that was manufactured by Porsche.

Asked why he had specifically sought out a 912 when the 911 offered so much more performance, owner Brod Purdy recalled, "In 2000 I had a Hillman Imp, and during the 2000 Classic Rally between Ypres to San Remo I parked next to a 912. Seeing it performing on the rally is what impressed me, and so I decided to make the 912 my next classic car."

After a five-year search, Brod eventually spotted the right 912 in a classic car magazine in July 2005. This 912 arrived in California after crossing the Atlantic in August 1966, where it remained for more than three decades. In 1999, the car made its way to the UK, where it was relocated to Ireland, going

Production numbers

	912	911
1965	5,000	3,300
1966	6,692	1,708
1967	7,247	4,152
1968	7,242	6,957
1969	4,714	10,118
1976	2,099	10,677





on to France and then back to the UK and into the hands of its current owner.

What appealed to Brod about the 912 was not only that it was different, but in those days the 912 was not very popular, and therefore the prices mirrored the lack of popularity. Today though, the fortunes of the 912 have been reversed and prices are on the rise, and this is due in part to the model's impeccable road manners and handling characteristics.

"I won't say it is used on a daily basis, but it is not put away during the winter because it is raining or snowing. I have got winter tyres on it, and they will come off in May, then I'll put the summer ones back on," Brod commented.

In fact, this 912 is a hard-working car, as Brod has raised more than £7,000 for Macmillan Cancer Support by participating in four Cape-to-Cape tours. When asked if he had any plans to replace it, the reply was quite emphatic. "In a word, no! I have had a couple of offers for it, but I thoroughly enjoy it. It is not a specialist car, it's a hobby, and if I can find a navigator I'll go rallying again." **911**

Type 901 prototypes

Designing and developing a replacement model is a difficult and fraught procedure. This is made all the more critical when the model you're developing is to be the only one in the company's sales brochure, and the model it's replacing has achieved iconic status among its followers.

Although the prototype design team initially favoured a four-seater of fastback shape, a clear direction did not exist. Ferry Porsche knew what he wanted, and had the foresight to create two design teams and brief both with the task of creating the 356's replacement. In short, the new car should share its shape with its predecessor and be a 2+2 format rather than a four-seater.

The first design team, headed by Butzi Porsche, presented its creation as 'Type 644 T8', while Erwin Komenda's design was entitled 'Type 754 T9'. Perhaps Komenda, designer of the iconic 356, felt his work may be favoured because of his track record, but Ferry was unhappy with the direction his work was taking. Butzi, on the other hand, was closer to what he had in mind.

With the benefit of hindsight, the Type 901 would shape the company's future, as the platform created by Butzi was flexible enough to allow engine capacity increases well beyond Ferry's initial plans. The foundation laid by the early 901 has earned Porsche more international motorsport victories than any other model in history.



**901 Prototype
Type 754 T9:**
note the forward-
sloping B-pillar



**The 1963 Type 901
Prototype, still with
pre-production twin
exhaust outlets
located in the
rear bodywork**



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DR

David Richards

Prodrive may be better known for their all-conquering Subaru Impreza rally cars from the Nineties, but David Richards' incredible company wouldn't be where it is today without the Porsche 911. Total 911 sat down with this unsung hero to talk about the foundation of his successful team, the SC RS, and Colin McRae

Written by **Josh Barnett**
Photography by **Daniel Pullen**



After co-driving Ari Vatanen to the World Rally Championship title in 1981, David Richards had developed a good relationship with Rothmans, the sponsors of his Ford Escort RS1800.

The following year, Richards was helping the cigarette brand set up their Formula One team in collaboration with chassis constructors March. Despite tasting success in the Seventies (thanks to the likes of Jackie Stewart and Ronnie Peterson), March was a shadow of its former self by 1982, leading Richards to seek out an alternative path for Rothmans' motorsport strategy.

With his ear constantly to the ground, he heard about Porsche's plans to return to Le Mans with the 956 Group C prototype. "I spoke to Jochen Mass, one of the drivers in the [Rothmans] Formula One team," Richards explained. "I said, 'This will be far more effective for our sponsors and it will be good for you. Why don't we try to pull this together?'"

After a meeting with the key Porsche personnel at Weissach, including Ferdinand Piëch, a deal was done

ESSENTIAL FACTS

- Richards won the 1981 World Rally Championship, alongside Ari Vatanen, in a Ford Escort RS1800 for the Rothmans rally team.
- After being formed in 1984, Prodrive ran Saeed Al Hajri to the Middle East Rally championship title in 1984 and 1985 with a Porsche 911 SC RS.
- Prodrive's Subaru Impreza rally cars have won the WRC drivers championship in 1995 with Colin McRae, 2001 with Richard Burns and 2003 with Petter Solberg.
- The team's first Le Mans class victory came in 2003 after building and developing a Ferrari 550 Maranello, built from a standard road car.
- Prodrive currently runs the Aston Martin Racing team, whose V8 Vantage GTE car competes against Porsche's 911 RSR in the FIA World Endurance championship.
- Away from motorsport, Prodrive are involved with the construction of the new McLaren P1 hypercar.

and one of the most iconic partnerships in sports car history took to the track. But that wasn't the end of the relationship, as David explains.

How did the Rothmans Porsche rally team come about from this Le Mans partnership?

In 1983 we started talking about my real aspirations: to build a rally team. They said, "We've got the 959 coming, which will be a Group B rally car," and I said, "Okay, let's work towards a rally programme and contest the world championship." But they said, "It's going to be two or three years away. Why don't we do an interim programme?"

Jürgen Barth was running the motorsport programme there with Roland Kussmaul, and they said, "We could build a lightweight 911 for you with a normally aspirated engine, aluminium panels, and this, that and the other, and we could build our experience in that."

They were already running one themselves just prior to that. Walter Rohrl had driven the car at the San Remo Rally, and done very well. He'd led the event until he broke a driveshaft.

We thought, "That's a good starting point." So they did the homologation special (the SC RS), I went and signed Henri Toivonen to drive for us, and Saeed Al Hajri from the Middle East. ➡



The 1984 Acropolis Rally was Prodrive's first foray into the World Rally Championship. A year later, the rally would yield the team's first WRC points

“Today, you’re as likely to see us building a product that is going to end up landing on Mars as you are seeing us racing at Le Mans”





How did your first event with the 911 go?

The first event we went to was Qatar in 1984. We took the SC RS straight out the box, and Jürgen Barth said, "It should be fit to do anything, it'll be fine."

We won, but by the time we finished the car was virtually bent in half. We brought it back and sat down with David Lapworth, who had just joined the team. He took a look and said, "We're going to have to start again and really do a big redesign." Over the following year, we went through the car, redesigning lots of it.

Tarmac wasn't such a big issue, but even then we had to devise a special means to change the gearbox, the weakest link on the car. The first time we did it was in the desert – it took two hours! But we got it down to 12 minutes by the time we finished all the systems we put in. We had the whole rear subframe on long bolts so the gearbox could be dropped out.

Was this the only modification you had to make?

We had to stiffen up the whole front of the car, change the damping, a whole range of things. By the time we had finished, we had won Middle East events (which were particularly rough), we were fourth on the Acropolis Rally (the roughest of the European World Championship events) and had a great product.

The other weak link was the rear trailing arms, which were a cast trailing arm off a Turbo. They suffered from stone damage, so we eventually laminated kevlar onto them to protect them.

What was the greatest success of the 911?

I look back on that fourth place in the Acropolis Rally as a standout result. For Saeed, that was probably his best result in a World Championship event, and for us as a team it was a great result.

Of course, winning the Middle East championship as well. The crown prince remembers being there [in Bahrain] as his grandfather flagged the cars away.

Was Henri as special as everyone always says?

Henri was an extraordinary talent. Unfortunately, when he was driving for us he had hurt his back. The only reason he finished runner up [in the European Championship] was because we had to miss a couple of rounds. We should have won it that year.

Did the programme lead to other projects with Weissach?

We had quite a strong hand in the Paris-Dakar programme when they were doing the first of the four-wheel drive 911s. It was agreed that we would go to the Pharaons Rally in Egypt. They would develop a car from Weissach, and we would do one ourselves. They gave us a pile of bits and said, "If you can build it in time, you can come."

David Lapworth took a slightly different route than they did on a few aspects of our car, one of which turned out to be very perceptive. He looked at their car and said, "I don't really think the way you run the

oil coolers on the back of the car is very sensible on a gravel rally." They were more used to Le Mans and the Nürburgring. He said, "I wouldn't put them there," so on our car he relocated them.

On the very first stage of Pharaons Rally, Jacky Ickx's car had a stone through the oil cooler and went up in flames. Our car went on to finish the event completely unscathed.

What was your relationship with the Porsche factory like?

We had a great relationship with Porsche. I still see a lot of the people today: Norbert Singer, Jürgen Barth, Roland Kussmaul, all the old guys who are still around. We had a great rapport with them.

How important was that particular car to Prodrive's development?

I look back on those days, and it was a very important car for us, the 911. It set us on our way in terms of our credentials in rallying.

It set us on our path and built our engineering skills. It wasn't just a case of buying a complete product and taking it off to events, as we found out after that very first event in Qatar. We had to do a lot of engineering work ourselves, and we were respected for it.

Were you disappointed that the 959 programme didn't come to fruition? ➡



The pyramids look on as Saeed Al-Hajri and John Spiller blast by on their way to victory in the 1985 Pharaohs Rally, Prodrive's only event with the delayed 959 Group B project





Richards' office has a gambit of artefacts, like his Alistair Gibson carbon fibre shark sculpture, and his desk, a Douglas DC-3 Dakota wing tip

Well, the 959 programme got delayed, as it moved more slowly than they anticipated. The car grew more into a GT car, heavier than anyone was expecting. Audi were winning everything around, and it became quite clear that it [the 959] was not going to be the product we needed to win.

Moving away from the Porsche specifically, what do you think is Prodrive's greatest success?

Some of our greatest successes are the projects you never hear about; things that we do for engineering programmes or for people we can't publicise or are sworn to secrecy on.

Each decade of our history has had great accolades. In the era of Subaru, we really did punch well above our weight as a little company, beating the mighty likes of Ford, Toyota and Lancia, and going for the world title. More recently, we managed to do something similar with Aston Martin against the likes of Porsche and Ferrari.

Is that one of your favourite projects?

It's a project that I have a lot of passion for because I've always loved Aston Martins. But behind the scenes, there are success stories in our composites business, where we make the composites for the new McLaren P1 road car. We are working on a range of activities for different manufacturers at the moment.

It's the diversity of the business that excites me. We evolved from a rally team into a racing team,

an engineering business, into merchandising and R&D. Today, you're as likely to see us building a product that is going to end up landing on Mars as you are racing at Le Mans or running in a World Championship rally.

Who was your favourite driver to work with?

'Favourite driver' implies drivers that are easy to work with, but easy drivers don't often win things. If you want to have a driver that is going to be really successful, look for single-mindedness and focus. Those ones tend to be the more difficult ones to manage and control, none more so than Colin McRae.

How did the Subaru project come about?

It came about probably because of our track record prior to then, whether it was with the 911 or the BMWs. A gentleman called Mr Ryuichiro Kuze from Fuji Heavy Industries had been charged with changing the image of a very traditional Japanese motor company and bringing them into the modern era, because they had a new range of products coming.

They thought motorsport was the most powerful tool to do it with. He came to see me in 1989 and said, 'We're looking to set up a World Championship team. Would you be interested in doing that for us?'

It was a great relationship: he had enormous trust and faith in what we did. These kind of partnerships with car manufacturers are rare. Their effort goes

into capitalising on performance and marketing opportunities, leaving you to deliver on the track or on the rally stage.

Was it the trust that made the project a success?

To my mind that was the thing. I remember one day he said one of the most telling things: we we had Colin McRae driving on the Swedish Rally, and he said: "You never told me about him, and yet you've signed a contract with him. You never told me who he is or what the arrangements are." I said, "I thought you'd trust me to choose and get on with it." He said, "Yeah, okay, I suppose. Let's see how he gets on."

Where do you think the World Rally Championship is heading in the next few years?

I think it's got problems. It has lost direction, and if I had to single out one thing that would sort it out, it's to make the cars more exciting. The heyday of the WRC was these wonderful Group B cars. They had a safety issue, there was no getting away from that, but do you really want to go and watch a Ford Fiesta? No.

Do you think a solution will be found?

You've got to go back to the basics. I don't think it's any coincidence that sports car racing, Le Mans and the World Endurance Championship are seeing a great resurgence at the moment, because the cars at the centre of the action are exciting and aspirational, and we've got great racing. **911**



KING — OF THE — STAGE

30 years after its special stage debut, Total 911 gets behind the wheel of this brutal Group B champion, the SC RS

Written by **Josh Barnett** Photography by **Daniel Pullen**





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

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

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

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

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

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

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

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

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

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

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

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



The SC RS is an unforgiving drive: brutal on acceleration, with inherent understeer and "wooden" brakes. Only the best can master it



“Only a few
drivers really got a
good grasp of it”

Specification

911 SC RS (1984)

Engine

Capacity: 2,994cc air-cooled flat six

Compression ratio: 10.3:1

Maximum power:

290bhp @ 8,000rpm

Maximum torque:

250Nm @ 6,500rpm

Transmission:

Five-speed synchromesh
H-pattern

Suspension

Front: MacPherson strut
with coilover dampers

Rear: Trailing wishbones
with coilover dampers

Wheels & tyres

Front: 7x15-inch Fuchs
alloys, 205/55/16 tyres

Rear: 8x15-inch Fuchs
alloys, 225/50/16 tyres

Dimensions

Length: 4,235mm

Width: 1,775mm

Weight: 940kg (dry)

Performance

0-62mph: 4.9 secs
(dependent on gearing)

Top speed: 153mph
(dependent on gearing)



Thanks

Total 911 would like to thank Ben Sayer and Prodrive for making this test drive possible, as well as David Pattinson for arranging the use of Curborough Sprint Course.





Prodrive meticulously strengthened the chassis of the SC RS, despite the car still only weighing 940 kilos



moves much further than I'd like, too; not providing me with much confidence or stopping power.

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

With the controls proving less than user-friendly, I decide to take the second lap to continue my crash course in Group B cars. If only drivers like Henri Toivonen could drive this, I better not try anything too heroic after just 60 seconds behind the wheel.

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

I'm feeling a bit more relaxed now, and my hands are sweating a little less beneath my nomex gloves. Coming out of Curborough's final corner, I feed in the power gently before hitting full throttle hard on the main straight. Behind me, a cacophony of sound erupts and I'm thrown back into the bucket seat. The acceleration is almost GT2-esque, and the engine note is similarly brutal. Through the two, unsilenced pipes it snarls and screams all the way up to 7,000rpm, where I chicken out and shift up to second. Imagine a Mezger engine minus any

muffling, and then splice it with the rawness of a chainsaw, and you'll have this SC RS in full flight. It is beautiful yet frightening, and I am quickly coming to understand the allure of the Group B era.

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

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

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

In an attempt to overcome the brilliant traction, I jab the throttle confidently through the left-right chicane. The tail violently (and almost unexpectedly) jumps round, leading me to quickly correct it. The inherent understeer masks any

feedback from the rear end. I can only imagine that on rally-specific rubber, rather than the current Michelin road tyres, the effect is accentuated. This SC RS is a car that wants you to fight, but it isn't afraid of fighting back.

Stepping out of the car, I feel belittled by Prodrive's SC RS. It may not be the behemoth that is the Audi Quattro A2, but it is still a Group B car that demands respect. To drive the team's first rally car, you need to be alert at all times, and being Henri Toivonen would certainly help, too. I'm almost glad the experience is over, allowing me to lower my concentration levels but, like any adrenaline thrill, I already want to go again. Next time I want to come out on top. **911**

The Finnish Connection

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

The Finn was a mercurial talent. As long as the 911 held together, Toivonen would very often win in the SC RS. With four victories, he was looking strong for the championship until an old back injury forced his absence from the Manx Rally.

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

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

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TACKLING THE SAFARI

In the aftermath of the 2013 East African Safari, Tuthill Porsche reveal what behind-the-scenes preparations are needed to be competitive in one of the most gruelling rallies on Earth

Written by **Chris Randall** Photography by **McKlein/Tuthill Porsche**





Specification

911 SC (1980)

Engine

Capacity: 2.994cc

Compression ratio: 10.5:1

Maximum power:

300bhp

Maximum torque:

300Nm

Transmission:

915 gearbox with lowered ratios and LSD

Suspension

Front: Five-way adjustable dampers to Tuthill specification

Rear: Five-way adjustable dampers to Tuthill specification

Wheels & tyres

Front: 6x15-inch Fuchs

alloys, 185/70/VR15 tyres

Rear: 7x15-inch Fuchs alloys, 215/60/VR15 tyres

Dimensions

Length: 4,291mm

Width: 1,626mm

Height: 1,320mm

Weight: 1,200kg with fuel, spares, tools and two spare wheels

Performance

0-62mph: Not tested

Top speed: 125mph



15 of the 17 Tuthill Porsche 911s who started the rally crossed the finishing line, after driving for 1,050 gruelling miles over eight days



Richard Tuthill is no stranger to the East African Safari Rally, one of the most demanding classic rallying events today. Competing in the final WRC rally in 2002 and co-driving in the inaugural Classic held in 2003, he has been managing the participation of specially prepared Porsche 911s ever since, which brings us to 2013's epic assault, where Richard and his crew supported no fewer than 17 cars across the 1,050-mile epic. Total911.com posted daily reports on how Tuthill's contingent of SCs fared in Kenya, where the team just missed out on the ultimate prize when the car driven by rally legend Stig Blomqvist was pipped into second place. Stig admitted after the event, "It was disappointing not to win when we were so close, but you can't get your hopes up until you have crossed the finish ramp. Sometimes it comes down to luck of the draw, and unfortunately our luck ran out with a puncture just 20 kilometres before the end. We were driving over a rocky section, and I knew as soon as we had to stop we had lost the rally. Maybe we were pushing too hard, but it could have been a risk to slow down, as a lot can happen in one safari stage."

Ian Duncan's Ford Capri claimed victory, but there was a third-place finish for Belgian 911 duo Gérard Marcy and Stéphané Prevot, with sixth

place for Kenyan father and son team David and Alex Horsey in a field dominated by the classic Porsche 911. The car of Bjorn Waldegard had been eliminated on day three after a roll, which left son and co-driver Mathias with concussion, but thankfully nothing worse. "It was great to be part of Team Tido, and nice to see most of the team's cars get to the finish," Bjorn told **Total 911**. "It was not good having to retire on day three, but after Matthias and I returned from hospital, we were able to follow the team for the rest of the rally. It made us more determined to come back stronger next time."

In all, 15 of the 17 cars prepared by Tuthill finished, with nine in the top 20 – a tremendous achievement after thousands of hours were poured into preparing the 3.0-litre SCs in the months preceding the event, which was Tuthill's biggest yet.

Richard reflects on the enormity of the task presented by this year's event: "The Safari Classic is a special event for us, and we've built up a massive amount of experience, but a combination of new and old clients means things continue to grow. For example, we've previously run five to nine vehicles, but this year Team Tido asked us to run six cars just for them, so this really is something of an exception," he says. "It was a huge undertaking, but our clients are absolutely delighted with the quality of the service we provided and the cars' reliability.

We're hugely proud of the achievement." Of course, it isn't just the event that consumes time and energy, with Richard explaining that the whole rally essentially amounts to a two-year project. With that in mind, there will be little time to recover before 2015, and so the African exploits represent a significant part of the Tuthill business as well as months of hard graft.

On top of preparing the car, the event also requires extensive homework by the drivers. With a wealth of experience behind the wheel, Bjorn is philosophical about how a driver must prepare for such an event. "If you are mentally strong and have planned in your head what can happen beforehand then you'll have a chance of winning," says the winner of the 2011 event. "The drivers, co-drivers and teams have to be prepared for everything, but they also need the ability to respond quickly. Nothing can prepare you for the Safari – we drive on volcanic soil, dust, narrow farm roads, grassy tracks, rocky downhill sections and huge river crossings, which in 2011 were flooded. Then, of course, there are the wild animals. There can be a surprise around every corner, so you must be alert." Stig echoes Bjorn's sentiments: "It is very long compared to what people are used to these days, and there are so many surprises, so you need to look after yourself and the car. Sometimes it's about



An array of spare parts are carried for each vehicle, with good reason: Stig Blomqvist's car alone needed two new tyres in one day, plus a gearbox change

911 SC: 800 hours in the making

The gruelling conditions that a car will experience on an event like this means expert preparation is the key to ensuring a Tuthill 911 SC will make it to the finish line. That means spending more than 800 hours on each car, which is essentially built to FIA rally specification, with the addition of a few crucial extras such as 'roo' bars to fend off the wildlife that drivers are likely to encounter. Most of that time – around 300 hours – is spent preparing the bodysell with the reinforcements and safety equipment that the rules require, although Tuthill's clever suspension design means the cars can be constructed to 'tarmac' specification, so less strengthening is required, which crucially means less weight. Over 130 hours goes into building the engine and gearbox for each car, leaving a further 300 hours for final assembly to create a 911 capable of taking on and conquering the toughest conditions rallying has to offer. Despite missing out on the top step of the podium, the overall success is a clear testament to the company's efforts, a sentiment echoed by their most decorated drivers Bjorn and Stig: "The 911 is a fantastic machine, and Tuthill builds a car that can withstand more than most," Bjorn says. Stig clearly agrees: "The 911 is very reliable. We had no mechanical problems throughout the rally, and it is a lot of fun to drive! It's amazing what knocks and bumps the Tuthill car could take, but it still kept going."

preparing for the unexpected. Another problem here is the weather – some roads are nice to drive in dry conditions, but if it's wet it's a different story."

Tuthill's success with classic rallying is down to their intricate knowledge of the 911 and ability to expect the unexpected, as Stig allures to, in any environment. The logistics alone that are involved here to ensure each 911 is well equipped for the African plains are monstrous, as Richard explains the quantity of spare parts needed. "Although the reliability of the 911 means they probably won't be used, we need to carry them anyway. It adds up to an awful lot of gearboxes and suspension and brake parts, but we have to be prepared." The spare Porsche parts for the 2013 Classic Safari were enough to fill a number of large containers, with 17 long-wheelbase Toyota Land Cruisers and ten other 4x4s providing support to the 17 Tuthill 911s during the eight days of driving and one repairs day.

You also need people to successfully compete at such an event. Richard explains: "Our day-to-day business employs 27 staff, but there were around 100 of us in attendance at the Safari, all of who are dedicated to making the event a success. It's a huge commitment, and the teamwork is incredible. All of a sudden, all these people, many who haven't worked together before, have to pull together and put in heroic performances. The feeling of camaraderie is amazing, and it's an aspect of our involvement that I'm hugely proud of. It's a

life-changing experience for many of our support teams, not just the drivers." Indeed, the 2013 East African Safari proved as gruelling for the support team as it was enjoyable. Richard himself says he survived on less than five hours sleep a night and walked 20 kilometres a day: "You're living on adrenaline for three weeks. It takes a while to readjust to life once you come back," he says.

The hard work clearly paid off, despite overall success proving elusive. Richard is nevertheless feeling positive, with going one better in 2015 being the main objective. "The accident with Bjorn's car on day three was a shock, and although the car was destroyed, the important thing was that no one was seriously injured. There was also a gearbox failure that had never occurred before and was traced to a faulty hardening process on a batch of gears, but we coped and will ensure it doesn't happen again. It went really well this year, but there are always a few improvements we can make."

The East African Safari challenges both teams and drivers and presents some unique problems, but how can it be summed up? As Richard told us, "You need perfect car preparation, the right people around you, and a helping of bravery and luck."

Enjoyment is also evident from behind the wheel, as Bjorn tells us, "There's something about this rally which I can't let go. There's no other rally like it, and each year there is something different, and it always challenges me. I love Kenya and its people. Between the rallies it is just a very long wait before the next one, so if I get the chance I will be back in a heartbeat." Stig's response is equally enthusiastic: "If I get the chance then of course I'll be back. Bjorn is 70 now, so I have a couple of years to catch him up. If he can do it, so can I!"

Ringier endorsements don't come much louder, and Tuthill will already be preparing for 2015. I wonder if Richard is looking for someone to clean an air filter or two... **911**

"We drive on volcanic soil, dust, narrow farm roads, grassy tracks, rocky downhill sections and huge river crossings"





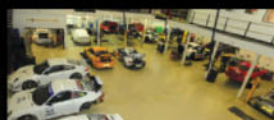
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Living the Legend

Our band of contributors from around the world share their real-life experiences with their Porsche 911s



Removing the front bumper gives better access to home the third radiator. This also presents a good chance to remove any road debris from the other front radiators before reassembly



Maxie Islam

• Stevenage, UK

2006 997 Carrera 4S



This month: Third radiator installation

Date acquired:

August 2010

Last report:

Issue 108

Total miles:

40,400

Costs:

£102

Prevention is better than cure. After fitting a low-temperature thermostat for last issue, I decided to add additional cooling by means of a third central radiator. This is the same radiator as fitted to Powerkitted X51 Carreras, GT3s, Turbos and GT2s. The kit to be ordered from any OPC is known as the retro-fit third radiator kit, and at the time of writing the 997 Gen1 kit costs £102 including VAT, but expect ten per cent off if you are PCGB member. If you prefer not to fit it yourself, Porsche centres can do this for £140 + VAT per hour for a three-hour job.

In the Gen1 kit you get a number of ancillaries. You probably won't use all of the pieces, but it covers all Gen1 cars for different markets, so surplus parts have been supplied regardless. What's more, OPCs don't supply any instructions on how to fit this kit; you really are left to your own devices!

First, I covered the driver's seat with a dust cover to minimise dirt from my own clothes. It also helps if the car is jacked up from the front end. I don't have any jacks or axle stands, but I was lucky in that my driveway has a gentle incline. This will help when you unplug the coolant system, as less will gush out than if the car had been standing level.

Removing the bumper took a while, but after several Google searches I found a guide on the Rennlist forum. You will need to remove the headlights, as this allows for more working space. If you haven't seen what a 997 xenon headlight looks like, be prepared; it is a lot bigger than you think! You will also have to take out the rest of the other lights, including auxiliary and indicator units. This allows the bumper to be completely clear of the car.

You can do some extra remedial work at this point, like cleaning out the left and right radiators. To do this, you need to remove both

air-scoops by undoing the three torx screws and unclipping the retainer brackets. I didn't take mine off completely, as after viewing inside there seemed to be minimal debris in there, so I used a toothbrush to get at anything that was stuck. If there's excess dirt, it will be advisable to take the whole assembly off and clean it.

Once the plugs to the coolant system are opened and resulting coolant caught (in a clean bucket), the central radiator appendage is good to go. However, it comprises several pieces, which need to be assembled first before it can be attached to the chassis of the car and then plumbed in. Once fitted, it looks a treat!

All manual gearbox 997 Carreras (except X51 editions) come with a cover on the central aperture on the front bumper, which must be removed so the airflow can reach the new radiator. Once done, I used some



Before: detaching the bumper grille before fitting the mesh



After: the mesh once attached to the bumper

aluminium mesh and cut to fit around the aperture. The mesh functions as a shield to exclude road debris that would have inevitably been kicked into the radiator and left to settle, or even rot.

Attaching the mesh to the intake can be done in a variety of ways. I didn't have any glue, but I did have some tacks. Subsequently, some members on the 911uk forum have used a hot glue gun to attach the mesh to the aperture. Once fitted, the bumper should look like the picture in this spread. Procedure is to re-attach the bumper back on to the body, put the car onto level ground and top up with the coolant you have collected in the bucket.

I then took it for a drive. When I got home, the coolant reservoir looked almost empty, so I topped up again. I also noticed that the water temp gauge was still at 80 degrees Celsius. However, the oil temperature

gauge now read a couple of degrees lower at speeds up to 4,000rpm at around 85 degrees. This is the new operating temperature, instead of 90. Over 4,000rpm, it reads 89 degrees. On a private road, I took the car up to 112mph and the reading gave me 90 degrees momentarily. Once I slowed down, the oil gauge temp dropped noticeably, which hadn't happened before.

This appears to show the third radiator – in conjunction with the low-temp thermostat – to be doing its job and cooling the engine more effectively than ever before. I have documented the whole procedure on the 911uk.com forum, replete with photos. If you know what you're doing, you can do the whole exercise in a day. However, as I had very few guides and spent most of the time searching for instructions on Google, it took me about five days. Like I said, prevention is so much better than the cure. **911**



Ben Przekop

2007 997 GT3

Date acquired: July 2012 Total miles: 17,208

Costs this month: Fuel

Lowlights: None.

Highlights: The year's last DE on 7-8 December at Roebling Road near Savannah. Great weather and a fun time on a new track.



Magnus Walker

'73.5 CIS 911T

Date acquired: December 2013 Miles this month: 125

Costs this month: None, other than the cost to buy it – came with a full tank!

Lowlights: None whatsoever.

Highlights: I've finally found the missing piece for my 64-73 911 collection with one of the first K-jetronic injection 911s.



Gina Purcell

1989 964 Carrera 4

Date acquired: September 2004 Miles this month: 0

Costs this month: £25 for a coin tray

Lowlights: Still without Wolfi. Progress is being made with the heater system, but it's a long and twisty road back to functionality.

Highlights: After removing the cassette holder, I finally plugged the unsightly gap with a new replacement coin tray.



Tony McGuinness

2010 Gen2 997 Turbo

Date acquired: January 2010 Total miles: 25,470

Costs this month: Fuel

Lowlights: I had to miss the Wounded Warrior Tour, giving war heroes a drive to the mountains in a 911, due to work commitments.

Highlights: Attending the LA auto show for **Total 911** and seeing the new Turbo Cabriolet for the first time. Met a few Porsche folk, too!



Kris Clewell

1972 911T

Date acquired: November 2012 Miles this month: 0

Costs this month: £1,850

Lowlights: It's cold, snowing, and salty out.

Highlights: The '72 T's new motor is nearing completion after what has been an expensive, monumental rebuild.



Maurice Tillaard

1972 911T/RS Hot Rod

Date acquired: February 2012 Miles this month: 0

Cost this month: £0

Lowlights: I will have to sell my car at Essen in March, as I am looking into purchasing a more modern 964 to do the miles in.

Highlights: I'm planning a trip the US in the new year in order to absorb some of the Californian Porsche lifestyle.



Chris Wallbank

2005 997S Cabriolet

Date acquired: November 2012 Total miles: 26,949

Cost this month: £40

Lowlights: I really want a 993 C4S just like the one I shot for this issue, but can't afford one unless I part with my immaculate 997 C2S.

Highlights: The chance to take my 997 for a great drive up in the Ilkley Moor reminded me just how much I love my first 911.

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**Richard Klevenhusen**

• Rio de Janeiro, Brazil

1979 930 3.3

This month: Introducing the 930 from Rio de Janeiro

Date acquired:
December 2012

Last report:
N/A

Total miles:
125

Costs:
\$50

Welcome to the formal introduction of my globe-trotting 1979 3.3-litre Porsche 930. To set the scene, I fell in love with the Porsche brand when I was living in Hamburg, Germany, in 1981. I always saw the 911 when passing in the street, and was instantly mesmerised by its style and elegance. I was particularly drawn to the 930, thanks to its world-class performance and style, those big rear arches and the tea-tray spoiler standing out most. I decided there and then that I had to own a 911, and it had to be the 930.

I now live in Rio de Janeiro, Brazil. My father was German and my mother Brazilian: they got married in Brazil and then moved to Germany because my father got a job at Volkswagen in Cologne. I was born one year later, when they decided to move back to Rio, as my father got a good job at Volkswagen in Brazil, and despite there not being many options for finding such a rare model as the Porsche 930, I was adamant that I was going to rise to the challenge of owning one for myself. I thus decided in December 2011 that I was going to import a model from the USA.

However, only in May 2012 did I find a car that was worth importing. This particular car was in San Diego on the west coast, and it was necessary to have it trucked to Miami on the east coast, where it would be shipped to me in Brazil. Needless to say, I suffered a lot with the Brazilian bureaucracy, having to pay huge local taxes, but it was worth it to have a coveted 930 in Rio. Imported cars are twice as expensive here than in the USA due to local taxes. Because of that, there are just a few 930s in Brazil – I myself hired a local import company to manage all the bureaucracy and payment of the taxes. To be honest, I've never seen another on the streets; my 930 cost me \$100,000, but if I wanted to sell it, I can feasibly ask for around \$200,000 here (not that I ever plan to sell it, though!).

Today, I'm happy to have accomplished my childhood dream. Since I knew the 930 was about to grace the third continent of its life (being built in Europe and spending years in North America before coming to me in South America), I decided it was in need of a small makeover. Under my ownership, I had the 3.3-litre motor completely rebuilt, as well as the air-con system, also wrapping new tyres

around the 16-inch Fuchs wheels, which was all done in the US before it was sent to me in Rio. The car finally arrived in December 2012, so the whole process took around one year from the decision to import a car to the 930 actually arriving outside my house in Brazil.

I now drive the 930 about twice a month, mostly at weekends. It's an icon of a car, so it's important to me that I preserve it as much as possible, and only drive it on rare occasions to ensure that every time I climb behind the wheel, it's a special one.

I'm a member of a Brazilian Porsche club, and attend regular meets. Due to the import laws and fees, most of the Porsches currently gracing Brazil are new models, including the 991, so enthusiasts are very keen to hear the story of how I imported the car, as well as how much power it has for its age!

The 930 is my ideal car. It's a powerful classic, full of character and great design, and 37 years after I first sat in a 911 (a Targa) at only eight years old, I finally have my hands on a Porsche that I can call my own. I look forward to documenting the continuing story of my 930 from Rio in the pages of **Total 911** in coming months. **911**



Above: Richard's immaculate 3.3-litre 930 is the latest addition to our 'Living the Legend' pages



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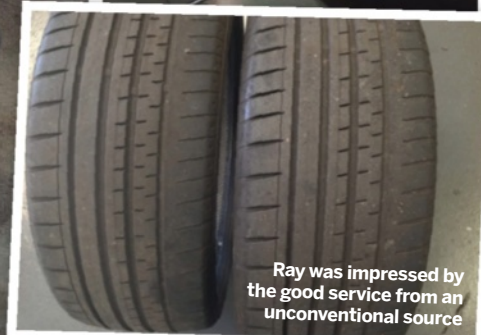
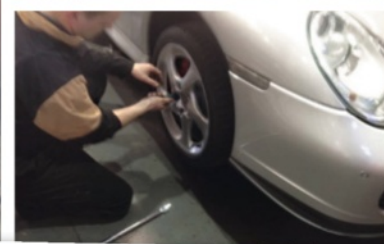
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This month: The Turbo gets new tyres



Ray was impressed by the good service from an unconventional source

Ray Chandler

• London, UK

2003 996 Turbo



Date acquired:

August 2011

Last report:

Issue 107

Total miles:

250

Costs:

£246

We had a really good run with PCGB recently, visiting Wiltshire, Somerset, Devon and Cornwall – all in three days! 14 cars made up the group, and some really good driving was enjoyed, particularly in the sections across Dartmoor. The car was encouraged to stretch its legs a little – a welcome change from the usual London traffic. However, it became apparent to me that the car lacked my confidence on cornering on rough road surfaces, darting around a little too much for my liking. Tyre pressures were spot on, and the tyres looked in good repair – until I happened to park the car with the steering lock on.

The off-side front tyre was worn on its inner edge, unlike the near-side front. This indicated a change in camber on one side, and a visit to Centre Gravity was booked. Centre Gravity's briefing notes recommend that your car goes to them with good tyres on it, with at least 3mm of tread left. So I set out to get the two front tyres replaced, the rears having been changed a month or so

ago. First stop was Porsche; I contacted my local OPC and got a price for the two tyres – Continental Contact2s in size 225/40/Z18 N2 – of £400.

I then tried my local Kwik Fit. They have supplied tyres for my other cars for a few years, their wheels bearing testament to that. They're quick and cheap, but you can't be too precious about painted wheels. They quoted a price (tyres, valves, balancing and tyre disposal and VAT) of £310.

Next was Halfords, but not as we know it. This is the Halfords Autocentre, where they offer servicing, air-con refills, brakes and – just what I needed – tyres. I got a quote from their website, and the price went down to £246. I spoke to the manager, David Haras, about my concerns over paint damage to the wheels, and he assured me they would take extra care, thus avoiding a costly refurbish.

I was asked if I would allow the technician to drive the car on the spider ramp, which I thought was strange until the manager told me that some Porsche owners refused to let anyone drive the car other than themselves! The technician assigned to the job, an ex-Goodyear engineer from Poland called Tomasz, who had worked on the production line and fitting bay there for over a decade, removed the wheel nuts manually rather than with the air gun as that, despite a plastic cover, often marks the bolt well paintwork. The work progressed, with real care being

taken over the removal of the tyre. Tomasz spent some time adjusting the machinery so that the bar was at exactly the right height to peel the tyre rim over the wheel rim, and protected leverage areas with cloths.

With the tyre off, Tomasz cleaned the inside and worked on removing the light remains of the rubber sealing band of the old tyre. Lots of lubricant was used to slip the new tyre on, and actually cleaned off and not left all over the edge of the rim and tyre. The technician confirmed the inflation pressure to me and used a rubber mallet to ease the centre hubcap out and slide the wheel onto the shaft of the balance machine without it touching the shaft, so as not to mark the paint inside the centre hub. Both wheels were cleaned once more and taken back to the car.

I noticed, too, that they run a Brakes4Life scheme. This is what it says on the website:

"Our Brakes4Life offer is designed to encourage you to keep your brakes in good condition and so we offer free brake pads or shoes after you've bought your first set, for your car and for any car you buy in the future. You only pay for your first set of brake pads or brake shoes at Halfords Autocentre. If you change your car, simply bring in your new car to register for the lifetime replacement, or transfer your lifetime replacement with the car to the new owner. We will supply and fit all future brake pads or shoes when needed, free of charge." Beat that if you can. **911**

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993 WIDEBODY SPECS INSIDE
Full details of the 993 C2S and C4S can be found in our data file beginning on **page 88**



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.

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SINGER VEHICLE DESIGN

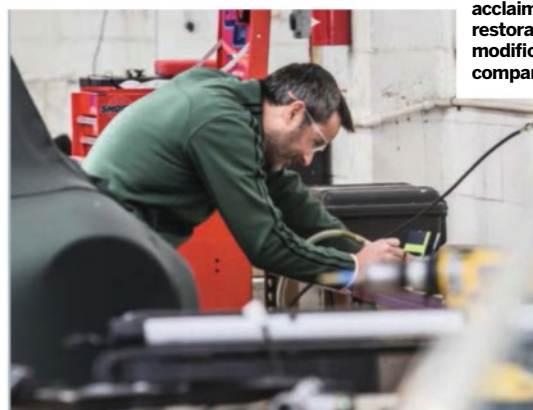
In just five years, Singer Vehicle Design has rocketed to worldwide prominence, popularising hot-rodded Porsche 911s with their bespoke reimaginations...

Written by **Josh Barnett** Photographed by **Andrew Tipping**





Rob had a "desperate idea" that became an internationally acclaimed bespoke restoration and modification company in LA



Rob Dickinson, head of Singer Vehicle Design, is no ordinary individual. This is a good thing, though, as it means that the result of a Singer restoration is no ordinary 911. The painstaking work carried out in their small Los Angeles shop has created a business that has shot to international acclaim, redefining the hot-rodded Porsche 911 genre.

The lead singer of the band 'Catherine Wheel' for ten years, Dickinson moved to LA after the alt-rock four-piece disbanded in 2000. Settling into life in the Golden State, Dickinson built a café racer-inspired 911E, nicknamed 'the Brown Bomber', in 2003 (featured in issue 95 of **Total 911**, above).

His personal build drew a lot of admirers during its time as his daily driver in Hollywood. "A lot of people wanted to buy it," explains Dickinson. "That car convinced me that I could come up with a car that looked a certain way and would push a lot of emotional buttons in people."

With an in-built love for 911s and the seed of an idea planted, Singer Vehicle Design was founded

in 2009 after Dickinson managed to attract some investors, allowing him to build a car to show at Monterey that year. "I was convinced that there was a way of restoring an old 911 and saving it from an uncertain future," he explains. "It wasn't like, 'Oh, I want to start a company.' I was just really obsessed with trying to present this idea. With a clean slate and a reasonably open cheque book, we could attempt to optimise every element of the car and celebrate the air-cooled era."

Inside their Sun Valley workshop, just north of Hollywood, Singer's restoration is made to sound remarkably simple by Dickinson: "We just run through the 964 and, with a 'money no object' approach, ask, 'How do we make this fantastic?' We cut the compromises that Porsche had to make in the Nineties and optimise every inch of it to a – some might say – ludicrously in-depth level."

These optimisations include a complete reworking of the interior, including a choice of two different seats, one of which is from Singer's own mould. Attention to detail is minute, with Singer perhaps one of the only modifiers that stresses as

much over the texture of the leather as the weight of the connecting rods.

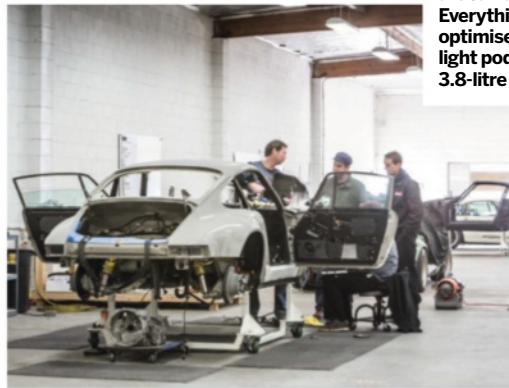
When it comes to the mechanical work, Dickinson himself admits that he is not an engineer, coming himself from a background in design and the arts. However, Singer's fastidious approach to restoration and modification has led to the company attracting some illustrious names and talented engineers to help create their bespoke reimaginations.

The carbon fibre bodies (which help to increase strength, while reducing weight) are produced by Aria Group, located 40 miles south in Irvine. Contracted to do a lot of military grade work, Aria produce the shells from Singer's moulds before painting them and returning to the Sun Valley workshop. This is when Singer begins the modification process in earnest, fitting custom-valved dampers, designed in conjunction with Öhlins' engineers.

The 3.8-litre engine at the heart of every one of Singer's Porsche 911s is the result of a partnership with Cosworth. "We needed our engines built



Singer's work is part automotive engineering, part artisan design. Everything is optimised, from the light pods to the 3.8-litre engine



“Creating a peerless end product, Singer has had no end of admirers”

and developed by somebody,” Dickinson says. “So we thought, ‘All we can do is ask Cosworth if they’d be interested.’ They were, and they helped us develop an engine that is a great compromise between a race-bred normally aspirated 911 engine, and a proper road-going engine that has the durability and the torque.”

The attention to every little detail does not come cheap. With well over 4,000 hours of work going into the cars, labour is one of the biggest costs (on top of the exotic materials). However, the \$350,000 (£213,000) approximate starting price creates a finished product that is simply jaw-dropping, changing perceptions about the fit and finish of a modified car.

Asked whether he thinks Singer’s approach to restoring and modifying has made people more accepting of 911 hot rods, Dickinson is typically modest: “It’s probably for other people to decide on those sort of levels,” he starts. “Maybe we have taken it to its logical zenith, and that was enabled because we knew that the services would be unavoidably expensive.”

By creating a peerless end product, Singer has had no end of admirers helping to boost its standing

in the industry. Dickinson cites Jay Leno as one such fan. “Without all these fantastic people whose opinions are trusted by the automotive community we wouldn’t be having this conversation,” Rob explains.

Thanks to the creative zest and ‘can do’ spirit that seems to permeate Los Angeles culture – and the powers of the internet, too – Singer is a business with truly international standing. Each new restoration (named after the car’s final destination) is eagerly anticipated and deservedly admired.

Currently, Dickinson has no plans to diversify the business in the short term. With the workshop awash with myriad Porsche 911 parts, a spares arm has not been ruled out, but it would take an incredible amount of infrastructure to make successful. “Anything we do in the future has to have that level of OCD madness. That sucks a lot out of everybody. We’re going to be doing some new stuff, but not immediately,” he explains. Whatever it is, the 911 will continue to be central.

With the past, present and future all accounted for, one question remains: how did the name come about? “Hayden Burvill – who runs WEVO – and I had a meeting about the concept, I think it was in

Company profile

- **Owner:** Rob Dickinson
- **Founded:** 2009
- **Location:** Los Angeles, California
- **Most expensive creation:** A couple of cars have cost in excess of \$500,000 (£300,000)
- **Average number of hours per car:** Around 4,500 man-hours (including contracted work)
- **Most exotic materials used:** Carbon fibre (used structurally, not aesthetically) and titanium in the engine

Contact

- **Website:** www.singervehicledesign.com
- **Telephone:** 001 (323) 799-1237

early 2008,” Rob elucidates. “He suggested that any mule we used to test our ideas should be named ‘Norbert’ [after Norbert Singer].

“I thought it might be offensive, but I did like ‘Singer’. I liked the relevance: celebrating the air-cooled flat six, which has a definite song and, of course, I was the singer in a band for years.”

With a stunning output of cars, built on a foundation of passion, not business, Singer is likely to be taking centre stage for many more years to come. The stars have well and truly aligned for this remarkable restorer and modifier. **911**

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PORSCHE 997 - TURBO, GT2, C2S, C2

2012 - 991 C2S PDK COUPE (GUARDS RED) 14,000 Miles

3.8L, Black Leather Interior, PDK Gearbox, Paddle Shift, PSM, PASM, PCM, Sat Nav, BOSE Sound System, Sports Chrono Pack, Sports Exhausts, Adaptive Sports Seats, Embossed Leather Headrests And Wheel Crests Fitted, Porsche Vehicle Tracking System, Bi-Xenon Headlights, Suede Headlining, 20" Alloy Wheels, Porsche Warranty.

2008 - 997 GT2 CLUB SPORT (GUARDS RED) 11,000 Miles

Carbon Interior Pack, Black Leather And Alcantara Interior, Original Rollcage Fitted, Alcantara Roof Lining, PASM, PCM, Sat Nav, Sports Chrono Pack, Xenon Headlights, Climate Control, Ceramic Brakes With Yellow Callipers, 19" GT2 Alloy Wheels With Michelin Super Cup Tyres, Full Porsche Service History And 2 Sets Of Keys, Outstanding Condition.

2008 - 997 TURBO CABRIOLET MANUAL (ATLAS GREY) 28,000 Miles

Black Leather Interior, PSM, PASM, PCM, Sat Nav, BOSE Sound System, CD Changer, Cruise Control, Porsche VTS, White Dials, Chrono Pack, Sports Exhaust, Multi Function Steering Wheel, Hardtop, 19" Turbo Alloy Wheels, Full Porsche Service History, One Owner From New.

2009/58 - 997 C2S COUPE PDK (GEN II) (MIDNIGHT BLUE) 32,000 Miles

Full Grey Leather Interior, PDK Gearbox, Sports Chrono Plus, BOSE Sound System, Sports Mode, PSM, PASM, PCM, Sat Nav, White Dials, 19" Turbo S Alloy Wheels, Xenon Headlights, Full Porsche Service History.

2006 - 997 C2S CABRIOLET TIP (SILVER) 22,000 Miles

Full Metropole Blue Leather Interior, PSM, PASM, PCM, Sat Nav, White Dials, 19" Carrera S Alloy Wheels, Xenon Headlights, Original Wind Deflector, Full Porsche Service History.

2006 - 997 C2S COUPE TIP (ARCTIC SILVER) 33,000 Miles

Black Leather Interior, PSM, PCM, Sat Nav, BOSE Sound System, CD Changer, Multi Function Steering Wheel, White Dials, Sports Exhaust, Climate Control, Xenon Headlights, Sunroof, 19" Carrera S Alloy Wheels, Full Porsche Service History.

2005/54 - 997 C2S COUPE TIP (ARCTIC SILVER) 59,000 Miles

Grey Leather Interior, PSM, PCM, Telephone, Computer, BOSE Sound System, CD Changer, Sunroof, 19" Carrera S Alloy Wheels, Rear Park Assist, Full Service History.

2005 - 997 C2 COUPE MANUAL (SEAL GREY) 37,000 Miles

2 Previous Owners Only, Full Black Leather Interior, PSM, PCM, Sat Nav, CD Changer, Part Electric Seats, Rear Parking Sensors, White Dials, 19" Carrera Alloy Wheels, Colour Crested Wheel Centre Caps, Tracker Fitted, Full Porsche Service History.

PORSCHE 996 - GT2, GT3, TURBO, C2

2003 - 996 GT2 (BASALT BLACK) 20,000 Miles

Full Black Leather Interior, Electric Windows, Climate Control, Rear Roll Cage, Porsche Radio With CD Player, 18" GT3 Alloy Wheels, Full Service History (Just Been Serviced).

2004 - 996 GT3 (ATLAS GREY) 30,000 Miles

Comfort Specification, Full Black Leather Interior, Porsche Crested Sport Bucket Seats, Guards Red Seat Belt, Porsche CD Player And Radio, 18" GT3 Alloy Wheels With Coloured Crested Wheel Centres, On-Board Computer, Only 2 Owners From New, Recently Fitted Tyres, Full Porsche Service History.

2004/54 - 996 TURBO "S" MANUAL (BASALT BLACK) 19,000 Miles

Full Black Leather Interior, Bilstein PSS10 Lowered Suspension, Performance Friction 350mm Brakes, Porsche GT3 Nomex Bucket Seats With 5 Point Seat Belts By Willems, Full Engine Rebuild, Very Low Mileage, Only 1 Previous Owner.

2004 - 996 TURBO CABRIOLET TIP (BASALT BLACK) 53,000 Miles

Full Black Leather Interior, PSM, PCM, Sat Nav, Cruise Control, BOSE Sound System, Climate Control, Xenon Headlights, 19" 997 Turbo Diamond Cut Alloy Wheels, New Tyres All Around, Full Porsche Service History.

2004 - 996 TURBO CABRIOLET TIP (BASALT BLACK) 67,000 Miles

Full Black Leather Interior, PSM, PCM, Sat Nav, Cruise Control, BOSE Sound System, Climate Control, 19" 997 Turbo Diamond Cut Alloy Wheels, Xenon Headlights, New Tyres All Around, Full Porsche Service History.

2004 - 996 TURBO COUPE TIP S (ATLAS GREY) 53,000 Miles

Full Black Leather Interior, PSM, PCM, Sat Nav With Full Set Of DVDs For Europe, BOSE Sound System, Cruise Control, Rear Parking Sensors, 18" Turbo Alloys With A Set Of New Tyres, Full Porsche Service History.

2003 - 996 TURBO COUPE MANUAL (BASALT BLACK) 45,000 Miles

Black Leather Interior, PSM, PCM, Sat Nav, Telephone, On-Board Computer, Bose Sound System, CD Changer, Cruise Control, Sports Seats, Heated Seats, Alcantara Headlining, Sunroof, Xenon Headlights, Rear Wiper, Rain Sensor, Full Porsche Service History.

2002 - 996 TURBO COUPE MANUAL (MERIDIEN SILVER) 44,000 Miles

Mid Grey Leather Interior, PCM, PSM, Sat Nav, Telephone Module, BOSE Sound System, Sunroof, White Dials, Computer Climate Control, Xenon Headlights, 18" Turbo Alloy Wheels, Official Porsche Centre Service History.

PORSCHE 993 - TURBO, C2, TARGA, CARRERA

1998 - 993 TURBO "S" COUPE MANUAL (SPEED YELLOW) 60,000 Miles

Black Leather/Carbon Fibre Interior, Litronic Lights, Sports Seats, Electric Seats, Electric Mirrors, Yellow Dials, Porsche Radio and Single CD Changer, Yellow Seat Belts, Sunroof, Rear Wiper, Yellow Callipers, 18" Turbo S Alloy Wheels, Full Service History.

1995 - 993 TURBO COUPE MANUAL (ARENA RED) 31,000 Miles

Grey Leather Interior, Wood Package, Electric Sunroof, Sports Seats, Cruise Control, Upgraded Becker CD Player, Bluetooth, Speakers, Sat Nav, 18" Turbo Alloy Wheels, Official Porsche Centre Service History.

1996 - 993 C2 COUPE TIP (IRIS BLUE) (VARIORAM) 73,000 Miles

Black Leather Interior, On-Board Computer, Upgraded Stereo and CD Changer, Electric Windows, Electric Mirrors, Electric Sunroof, Climate Control, 16" Carrera Alloy Wheels, Official Porsche Centre and Specialist Service History.

1996 - 993 C2 TARGA TIP 'VARIORAM' (TURQUOISE) 83,000 Miles

Marble Grey Leather Interior, Electric Glass Targa Roof, Electric Seats, Electric Mirrors, Porsche Stereo, Air Conditioning, Rear Wiper, On-Board Computer, 17" Targa Alloy Wheels, Full Specialist Service History.

1996 - 993 C2 COUPE TIP (ARENA RED) 73,000 Miles

Black Leather Interior, Part Electric Sports Seats, Sony Radio Player, Sunroof, Climate Control, 17" Alloy Wheels, Full Main Dealer And Porsche Specialist Service History.

1994 - 993 C2 COUPE TIP (BLACK) 92,000 Miles

Black Leather Interior, Upgraded Becker Radio System, 17" Alloy Wheels, Central Locking With Immobiliser, Full Service History, Extremely Comprehensive Service History. (Spare Key, Old MOTs And Tax Discs, Original Manuals, etc)

1994 - 993 C2 COUPE TIP (BLACK) 99,000 Miles

Marble Grey Leather Interior, Sunroof, Becker Radio, Electric Seats, 17" Alloy Wheels, Full Porsche And Specialist Service History (Just Been Serviced).

1989 - 911 CARRERA 3.2 CABRIOLET (G50 GEARBOX) 124,000 Miles

Iris Blue Metallic, Full Beige Interior, Manual Gearbox, Matching Numbers Example, Matching Dark Blue Hood, Fully Electric Softtop, Period Correct Fuchs Alloy Wheels, Comprehensive Service History, 10 Years With The Same Owner.

1989 - 911 CARRERA 3.2 CABRIOLET (G50 GEARBOX) 92,000 Miles

Black Metallic, Full Black Interior, Matching Black Hood, Manual, Matching Numbers Example, Fully Electric Softtop, Period Correct Fuchs Alloy Wheels, Full Service History, 21 Years With The Same Owner.

PORSCHE BOXSTER S

2008/57 - BOXSTER (987) 24V SPORT EDITION 12,000 Miles

Black Leather Interior, PASM, PASM, PCM, Sat Nav, Climate Control, BOSE Sound System, CD Changer, Colour Crested Wheels, Xenon Headlights, New Brakes, Recently Serviced, Striking Example.

2006 - BOXSTER (987) 2.7L TIP (BASALT BLACK) 30,000 Miles

Full Black Leather Interior, PSM, BOSE Sound System, CD Changer, Full Leather Seats With Electric Adjustment And Heating, Xenon Headlights, 19" Carrera S Alloy Wheels, Full Official Porsche Service History, Two Previous Owners Only.

PORSCHE PANAMERA

2010 - PANAMERA 4 TIP (CARBON GREY) 25,000 Miles

4.5L V8 Engine, BOSE Sound System, Sat Nav, PCM Unit, Active Suspension, Parking Sensors Front and Rear, Heated Seats, Multi Function Steering Wheel, Xenon Headlights, 22" Alloy Wheels With New Tyres, Foldable Tow Hook, Very Good Service History, One Previous Keeper.

FERRARI - MODELS FROM 1967 +

2006 - F430 SPIDER V8 MANUAL (TITANIUM SILVER) 28,000 Miles

6 Speed Manual, Titanium Silver Exterior, Rosso Leather Interior, Carbon Fibre Trim, Ferrari Stereo With A Telephone Module, Manettino With Sports And Track Settings, Climate Control, Ferrari Crested Headrests. Full Ferrari Service History.

2005 - FERRARI F430 SPIDER V8 MAN (NERO BLACK) 18,000 Miles

Crema Leather Daytona Seats With Black Stitching, Ferrari Becker CD Player And Radio, Electric Seats, Carbon Pack, Climate Control, New Ball Joints All Round, 19" Ferrari F430 Alloy Wheels, Full Ferrari Service History, Just Been Serviced.

2003 - 360 SPIDER F1 (GRIGIO SILVER) 28,000 Miles

Black Leather Interior, F1 Gear Box, ASR, Challenge Grill, Climate Control, 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, Optional Sports Mode, Electric Seats, Electric Hood, Tonnau Cover, Air Conditioning, 18" Ferrari 355 Alloys, Full Service History, Recently Serviced, This Car Has Been 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, Original Build Sheets, Sales Invoice, Tool Kit, Wallet, Hand Books, Numerous Concourse And Awards Winner, Engine Rebuilt By Ferrari In Johannesburg 26,000 KMS Ago, Comprehensive Photos Showing The Repair And Work Done By Ferrari, Exceptional Condition Throughout.

1962 - 250 GTE LHD MANUAL (NERO BLACK) 73,000 KM

Rosso Red Leather Interior, Matching Numbers 2nd Series, Ferrari's First Series Produced 2+2, "Ferrari Classiche" Certified, Nardi Steering Wheel, Chrome Rimmed Vaglia Instruments.

CLASSICS - AC, PORSCHE, JAGUAR, BENTLEY, PGO, LAMBORGHINI

1991 - AC COBRA LIGHTWEIGHT (BLACK METALLIC) 5,000 Miles

1 Of 26 RHD Lightweight, 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 SUPER 90 COUPE LHD (SIGNAL RED)

1600cc Signal Red Coachwork, Soft Beige Leather Interior, Left Hand Drive, 4 Speed Manual, Recent Restoration To Concours Standard, Eligible For Many European Events.

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.

1936 - BENTLEY 4 1/4 PILLARLESS COUPE (MIDNIGHT BLUE)

Grey Leather Gurney Nutting Coachwork, 1 Owner In 40 Years, Extensive History, A True Classic Completely Original Throughout And Has Been Exhibited At Luois Vuitton Concours D'Elegance In Paris 2003. Sunroof Produced By Gurney Nutting, Chassis Completely Original Throughout.

1935 - BENTLEY DERBY 3.8L SALOON

A True Classic. Completely Original Throughout and With a Very Well Documented History, Saloon, 3792cc, Petrol, 2-Axle Rigid Body, Chassis Frame no: B51EJ, Engine no: P3BP, Date Of First Registration: 30.08.1935, Had A Bare Chassis Restoration, Rebuilt To The Highest Standard. The Restoration Took Over 5 Years.

2010 - PGO BUGGY - 500 RCN PGO BUGRACER (White) 700 Miles

Original PGO Buggy, Powered by a 500 cc Motorbike Engine, Steel Tube Frame, Right Hand Drive, Road Legal, LCD Dashboard, Locking Differential, Hand Brake Reverse.

2008/57 - LAMBORGHINI GALLARDO SPYDER (BLACK) 21,000 Miles

Interior In Nero Leather With Yellow Stitching, 19" Lamborghini Crested Alloys With Yellow Callipers, Satellite Navigation, Fully Electric Seats With Lamborghini Crests And Yellow Piping, Tracker Fitted, Bi-Xenon Lights, Full Official Lamborghini Service History, Recently Serviced, New Lamborghini Continental Tyres Fitted, An Immaculate Example.

2007 - MERCEDES CLS320 CDI (SILVER METALLIC) 59,000 Miles

Full Black Leather Interior, Diesel V6, Tiptronic (Automatic Gearbox), Sat Nav, CD Changer, Multi Function Steering Wheel, Cruise Control, Full Climate Control, ESP, Xenon Headlights, 17" Alloy Wheels With Good Tyres, Full Service History, Spare Key, All Original Manuals Present.

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911 PREMIER PORSCHE

Data file

Definitive facts and figures for every 911 model from 1963 – 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, the 901 in 1963, 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 according to performance, handling, appearance and desirability. Do you agree? Tell us your thoughts: editorial@total911.com.

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An ideal first 911 – affordable and largely trouble-free.

Sales debate: are 993 Carreras good value for money?



The keen-eyed reader will have noticed in last issue's 'Performance Icons' feature there were no 993 models. In the last 18 months, prices of the last air-cooled 911 have rocketed, and Total 911 wanted to know if 993s were really worth the inflated asking price.

"I think good Coupes with low miles – sub-80,000 – are still worth around the £30,000 mark", explained Simon Lenton, director of Dove House Motor Company. "However, £35,000-40,000 for non-VarioRam and non 'S' models is less reasonable.

"You should avoid Targas and Tiptronic, and the general rule of thumb is that £35,000 should be a VarioRam car, and anything north of

that should be a widebody."

While Lenton feels there is value in the current 993 market, Total 911 wanted to know if 993s were a sensible proposition for long-term investment.

"The fact that they are the last air-cooled model will always give them the greatest appeal of any 911. It will probably be a safe bet for a long-term investment," Lenton explained. "If I had the money to invest, I would only put it into an S, RS or Turbo."

As with most ages of 911, the top-end models are likely to be the collectors' cars then. However, with Paragon recently selling a 993 Turbo S for £149,995, you will need to speculate to accumulate in the 993 market at large.

911 2.0-litre (O series) 1963-67



The 911 that started it all off exactly 50 years ago when the prototype appeared in 1963, this is the car that set the style for all 911s to follow. Developed to eventually replace the 356,

the 911 was an all-new design that was undoubtedly a better all-round drive than its predecessor.

Capacity: 1,991cc
Compression ratio: 9.8:1
Maximum power: 130bhp @ 6,100rpm
Maximum torque: 149Nm @ 5,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x4.5J, 165HR (15x5.5J, 185HR from 1967); Rear: 15x4.5J, 165HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,075kg
0-60mph: 7.9 sec
Top speed: 152mph

RATING: ★★★★★

911S (O and A series) 1966-68



Porsche soon started off something that would continue to be popular throughout the 911's history: producing more powerful variants. The first of these was

the 911S (for Super), which had a higher compression engine and twin Weber 40IDS carburettors.

Capacity: 1,991cc
Compression ratio: 9.8:1
Maximum power: 160bhp @ 6,800rpm
Maximum torque: 180Nm @ 5,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x4.5J, 165HR (15x5.5J, 185HR from 1967); Rear: 15x4.5J, 165HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,075kg
0-60mph: 7.9 sec
Top speed: 152mph

RATING: ★★★★★

911E (C & D series) 1969-71



The C series saw an increase in engine capacity to 2,195cc. Other minor improvements made to the engine included revised cylinder heads, larger valves and stronger connecting rods. In 1970 the D series cars had hot-zinc coated undersides and other minor changes.

Capacity: 2,195cc
Compression ratio: 9.1:1
Maximum power: 155bhp @ 6,200rpm
Maximum torque: 191Nm @ 4,500rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x6J, 185VR; Rear: 15x6J, 185VR
Length: 4,163mm
Width: 1,610mm
Weight: 1,020kg
0-60mph: 7.5 sec
Top speed: 137mph

RATING: ★★★★★

911S (C & D series) 1969-71



An upgrade in engine size from 1,991cc to 2,195 gave the 911S a useful 10bhp hike in power to 180bhp. Unlike the 911E, though, the S didn't gain such an improvement in low-down power and torque, so you had to keep the revs up to get the full benefit of the extra horsepower.

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: 15x6J, 185HR; Rear: 15x6J, 185HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,020kg
0-60mph: 6.6 sec
Top speed: 155mph

RATING: ★★★★★

911S (F series) 1973



For the F series, the 190bhp 911S followed the same upgrades as the 911E, the most significant being the deletion of the external oil-filler flap in the right-hand rear wing. It also adopted black trim around the front and rear lights and black front quarter grilles.

Capacity: 2,341cc
Compression ratio: 8.5:1
Maximum power: 190bhp @ 6,500rpm
Maximum torque: 216Nm @ 5,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x6J, 185VR; Rear: 15x6J, 185VR
Length: 4,163mm
Width: 1,610mm
Weight: 1,050kg
0-60mph: 6.6 sec
Top speed: 144mph

RATING: ★★★★★

911T (F series) 1973



US-bound F series 911Ts were the first 911s to have Bosch K-Jetronic fuel injection. This was fundamentally mechanical with some electronic sensors. It gave precise injections of fuel as required, in the process keeping emissions down and improving economy.

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: 15x6J, 185VR; Rear: 15x6J, 185VR
Length: 4,163mm
Width: 1,610mm
Weight: 1,050kg
0-60mph: 7.0 sec (est)
Top speed: 140mph (est)

RATING: ★★★★★

911 Carrera (G & H series) 1974-75



From 1974, Porsche used the Carrera name on its range-topping 911. The 911 Carrera used essentially the same 2.7-litre, 210bhp engine as the previous year's RS for all markets except the USA. In 1975 it was available with an optional new whaletail spoiler.

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: 15x6J, 185VR; Rear: 15x7J, 215VR
Length: 4,291mm
Width: 1,610mm
Weight: 1,075kg
0-60mph: 6.1 sec
Top speed: 149mph

RATING: ★★★★★

911 Carrera 3.0 (I & J series) 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, which was essentially that from the 911 Turbo. This engine, with the addition of some minor changes, continued to power the 911 until 1989.

Capacity: 2,994cc
Compression ratio: 8.5:1
Maximum power: 200bhp @ 6,000rpm
Maximum torque: 255Nm @ 4,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x6J; Rear: 15x7J, 215VR
Length: 4,291mm
Width: 1,610mm
Weight: 1,093kg
0-62mph: 6.3 sec
Top speed: 145mph

RATING: ★★★★★

911L**(A series)**
1967-68

In 1967, the 911 received its first update with the A-series. This coincided with an expansion to the range: the standard car became known as the 911L (Lux) and sat alongside the high-performance 911S and the entry-level 911T.

Capacity: 1,991cc
Compression ratio: 9.0:1
Maximum power: 130bhp @ 6,100rpm
Maximum torque: 173Nm @ 4,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x5.5J, 185HR; Rear: 15x5.5J, 185HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,075kg
0-60mph: 8.4 sec
Top speed: 132mph

RATING:
★★★★★**911T****(A & B series)**
1967-68

The entry-level 911T had a 110bhp engine that, to save money, used cast-iron cylinder heads (as opposed to the Biral aluminium/iron items which gave more efficient cooling) and carburettors instead of fuel injection. The interior specification was similar to that of the 912.

Capacity: 1,991cc
Compression ratio: 8.6:1
Maximum power: 110bhp @ 5,800rpm
Maximum torque: 156Nm @ 4,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x5.5J, 165HR; Rear: 15x5.5J, 165HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,020kg
0-60mph: 8.8 sec (est)
Top speed: 124mph

RATING:
★★★★★**911E****(B series)**
1968-69

In 1968 the 911 received its first significant update, enabling it to evolve into what is known as the B series. Central to the new model line-up was the 911E, which replaced the 911L as the 'standard' car. The 'E' stood for 'Einspritz', which is German for injection.

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: 15x6J, 185VR; Rear: 15x6J, 185VR
Length: 4,163mm
Width: 1,610mm
Weight: 1,020kg
0-60mph: 7.6 sec
Top speed: 130mph

RATING:
★★★★★**911S****(B series)**
1968-69

The 911S was updated to B series specification in line with the 911E. Like the E, the more sporty S gained a fuel injection, boosting power to a useful 170bhp. To help cope with the extra demands this put on the engine, an additional oil cooler was fitted in the front right-hand wing.

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: 15x6J, 185HR; Rear: 15x6J, 185HR
Length: 4,163mm
Width: 1,610mm
Weight: 995kg
0-60mph: 6.6 sec
Top speed: 155mph

RATING:
★★★★★**911T****(C & D series)**
1969-71

When the 911E and 911S increased their engine capacity to 2.2 litres, their little brother followed suit. Like the 911E, the torque curve was now flatter, in the process making the car more driveable. Ventilated discs from the S were fitted and a five-speed gearbox became standard.

Capacity: 2,195cc
Compression ratio: 8.6:1
Maximum power: 125bhp @ 5,800rpm
Maximum torque: 177Nm @ 4,200rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x5.5J, 165HR; Rear: 15x5.5J, 165HR
Length: 4,163mm
Width: 1,610mm
Weight: 1,020kg
0-60mph: 7.0 sec (est)
Top speed: 123mph

RATING:
★★★★★**911E****(E series)**
1972

An increase in engine capacity to 2,341cc was achieved by increasing the stroke from 66mm to 70.4mm while at the same time leaving the bore unchanged. The new 915 transmission was a stronger unit, making it better suited to the extra power.

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: 15x6J, 185VR; Rear: 15x6J, 185VR
Length: 4,163mm
Width: 1,610mm
Weight: 1,050kg
0-60mph: 7.5 sec
Top speed: 137mph

RATING:
★★★★★**911T****(E series)**
1972

The entry-level 911T received a boost in engine size to 2,341cc in 1972 to compensate for its increased power. However, a lower compression ratio and the inclusion of Zenith 40 TIN triple-choke carburettors led to the relatively lower power output of 130bhp.

Capacity: 2,341cc
Compression ratio: 7.5:1
Maximum power: 130bhp @ 6,200rpm
Maximum torque: 196Nm @ 4,000rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x5.5J, 165VR; Rear: 15x5.5J, 165VR
Length: 4,163mm
Width: 1,610mm
Weight: 1,050kg
0-60mph: 7.6 sec
Top speed: 128mph

RATING:
★★★★★**911E****(F series)**
1973

After a number of incidents in which people filled E series 911s with petrol via the external oil-filler, the filler returned to under the engine compartment lid. The 911E was fitted with a new type of ATS cast-aluminium wheels and had the front spoiler of the 911S.

Capacity: 2,341cc
Compression ratio: 7.5:1
Maximum power: 130bhp @ 6,200rpm
Maximum torque: 196Nm @ 4,000rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x5.5J, 165VR; Rear: 15x5.5J, 165VR
Length: 4,163mm
Width: 1,610mm
Weight: 1,050kg
0-60mph: 7.6 sec (est)
Top speed: 140mph (est)

RATING:
★★★★★**911****(G, H, I, J series)**
1974-77

For 1974, the entry-level car was badged '911' and fitted with a 2.7-litre engine. Bumpers were added to conform to US regulations, and from 1976 all 911s were hot-dip coated and fitted with 'elephant ear' mirrors.

Capacity: 2,687cc
Compression ratio: 8.0:1
Maximum power: 150bhp @ 5,700rpm (165bhp @ 5,800 from 1,976)
Maximum torque: 235Nm @ 3,800rpm (235Nm @ 4,000rpm from '76)
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x6J; Rear: 15x6J, 185VR
Length: 4,291mm
Width: 1,610mm
Weight: 1,075kg
0-60mph: 8.5 sec
Top speed: 130mph

RATING:
★★★★★**911S****(G, H, I, J series)**
1974-77

For 1974, Porsche realigned its model line-up, and the 911S was no longer the range-topping car, but rather a mid-range model comparable to the previous 911E. It had the same body changes as the base model, and came as standard with 15-inch ATS 'cookie cutter' wheels.

Capacity: 2,687cc
Compression ratio: 8.5:1
Maximum power: 175bhp @ 5,800rpm
Maximum torque: 235Nm @ 4,000rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x6J, 185VR; Rear: 15x6J, 185VR
Length: 4,291mm
Width: 1,610mm
Weight: 1,075kg
0-60mph: 7.0 sec
Top speed: 142mph

RATING:
★★★★★**ULTRA-RARE MODEL****ULTRA RARE****1972-73 Carrera 2.7 RS**

The RS had a 2,681cc engine that developed 210bhp. The body was lightened and fitted with flared rear arches and an optional ducktail spoiler. The RS Sport was an ultra-light model, while the Touring car retained some creature comforts.

Capacity: 2,681cc
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: 15x6J, 185VR; Rear: 15x7J, 215VR
Length: 4,163mm
Width: 1,610mm
Weight: 975kg (Sport)
0-60mph: 5.6 sec
Top speed: 153mph

RATING:
★★★★★**930 3.0****1975-77**

Fitted with a KKK turbocharger, this was the world's first production car to be turbocharged. Flared arches and a whaletail spoiler created a look that would become legendary. Brakes weren't good on early Turbos, and the four-speed gearbox was standard.

Capacity: 2,994cc
Compression ratio: 8.5:1
Maximum power: 260bhp @ 5,500rpm
Maximum torque: 343Nm @ 4,000rpm
Brakes: Front: 282mm discs; Rear: 290mm discs
Wheels & tyres: Front: 15x7J, 185/70VR; Rear: 15x8J, 215/60VR
Length: 4,291mm
Width: 1,610mm
Weight: 1,195kg
0-62mph: 5.3 sec
Top speed: 168mph

RATING:
★★★★★**930 3.3****1978-83**

A larger engine led to an extra 40bhp of power, and an intercooler on top of the engine led to the adoption of a new 'teatray' spoiler. The brakes were upgraded with 917 racecar-based items, larger discs and four-piston calipers.

Capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 300bhp @ 5,500rpm
Maximum torque: 343Nm @ 4,000rpm
Brakes: Front: 304mm discs; Rear: 309mm discs
Wheels & tyres: Front: 15x7J, 185/70VR; Rear: 15x8J, 215/60VR
Length: 4,491mm
Width: 1,775mm
Weight: 1,300kg
0-62mph: 5.0 sec
Top speed: 160mph

RATING:
★★★★★**911 SC****INTRO 911****1978-83**

From 1978, the SC was the only normally aspirated 911. It was a development of the Carrera 3.0, but the engine produced less power to suit all markets. A Sport option allowed for the inclusion of front and rear spoilers, 16-inch Fuchs alloy wheels, sports seats and dampers.

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: 15x6J, 185/70VR; Rear: 15x7J, 215/60VR (16-inch optional)
Length: 4,291mm
Width: 1,626mm
Weight: 1,160kg (1978 Coupe)
0-62mph: 6.5 sec
Top speed: 141mph

RATING:
★★★★★**930 3.3****1984-89**

A revised engine added more power and torque in 1984, while in 1987 Motronic engine management improved efficiency and emissions when the car returned to the US market. Perforated brake discs later appeared in 1988, while a five-speed gearbox arrived in 1989.

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: 16x7J, 205/55VR; Rear: 16x9J, 245/45VR
Length: 4,491mm
Width: 1,775mm
Weight: 1,335kg
0-62mph: 4.8 sec
Top speed: 173mph

RATING:
★★★★★



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Carrera 3.2 INTRO 911 1984-89



The Carrera 3.2 had almost the same galvanised body as the SC. The engine was claimed by Porsche to be 80 per cent new, and was the first production 911 motor to feature an ECU to control the ignition and fuel systems. The Getrag G50 gearbox appeared in 1987.

Capacity: 3,164cc
Compression ratio: 10.3:1
Maximum power: 231bhp @ 5,900rpm
Maximum torque: 284Nm @ 4,800rpm
Brakes: Front: 304mm discs; Rear: 309mm discs.
Wheels & tyres: Front: 15x7J, 195/65VR; Rear: 15x8J, 215/60VR (16 inches for 1989)
Length: 4,291mm
Width: 1,650mm
Weight: 1,210kg
0-62mph: 5.6 sec
Top speed: 148mph

RATING:



930 LE ULTRA RARE 1989



Essentially an SE without a slantnose front, the LE had the same engine, front spoiler, sill extensions and rear air intakes. The fully specced interior and 'Limited Edition' status meant the LE was initially thought by many to be the last ever 911 Turbo. Of course, that wasn't the case...

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: 16x7J, 205/55VR; Rear: 16x9J, 245/45VR
Length: 4,491mm
Width: 1,775mm
Weight: 1,335kg
0-62mph: 4.6 sec
Top speed: 173mph

RATING:



964 Carrera 2 1990-93



Not everyone wanted four-wheel drive. Reflecting this attitude, the rear-drive Carrera 2 offered an emphatically more traditional 911 experience and was 100kg lighter, but

looked identical to the Carrera 4. Tiptronic automatic transmission was a new option.

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: 16x6J, 205/55ZR16; Rear: 16x8J, 225/50ZR16 (17-inch rims optional)
Length: 4,250mm
Width: 1,650mm
Weight: 1,350kg
0-62mph: 5.5 sec
Top speed: 164mph

RATING:



964 Turbo 1990-92



This used the revised 964 body shell, extended arches and 'teatray' spoiler. The engine was essentially the 3.3-litre unit from the previous model, but updated to give more power.

Brakes were ABS-equipped. 17-inch Cup wheels were a new design, as were the 'teardrop' door mirrors.

Capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 320bhp @ 5,750rpm
Maximum torque: 450Nm @ 4,500rpm
Brakes: Front: 322mm discs; Rear: 299mm discs
Wheels & tyres: Front: 17x7J, 205/50ZR17; Rear: 17x9J, 255/45ZR17
Length: 4,250mm
Width: 1,775mm
Weight: 1,470kg
0-62mph: 5.0 sec
Top speed: 169mph

RATING:



964 Turbo 3.6 1993-94



The Turbo received an engine based on the 3.6-litre 964 unit, albeit one that had been modified. Distinctive 18-inch split-rim Speedline wheels covered the big-red brake

calipers. Suspension was lowered by 20mm (not in the US) and a front strut-brace was fitted.

Capacity: 3,600cc
Compression ratio: 7.5:1
Maximum power: 360bhp @ 5,500rpm
Maximum torque: 520Nm @ 4,200rpm
Brakes: Front: 322mm discs; Rear: 299mm discs.
Wheels & tyres: Front: 18x8J with 225/40ZR18 tyres; Rear: 18x10J with 265/35ZR18 tyres
Length: 4,250mm
Width: 1,775mm
Weight: 1,470kg
0-62mph: 4.8 sec
Top speed: 174mph

RATING:



964 3.8 RS 1993



Identified by a lightweight Turbo bodysell, 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.

Suspension was RS-derived, while brakes were a mix of RS and Turbo 3.6 items.

Capacity: 3,746cc
Compression ratio: 11.6:1
Maximum power: 300bhp @ 6,500rpm
Maximum torque: 359Nm @ 5,250rpm
Brakes: Front: 322mm discs; Rear: 299mm discs.
Wheels & tyres: Front: 18x9J, 235/40ZR; Rear: 18x11J, 285/35ZR
Length: 4,250mm
Width: 1,775mm
Weight: 1,210kg
0-62mph: 4.9 sec
Top speed: 169mph

RATING:



993 Turbo 1996-98



The Turbo was fitted with two KKK turbochargers in order to reduce lag. Also, the power went to all four wheels using the Carrera 4's transmission system. Brakes

were distinctive 'big reds' under hollow-spoked 18-inch wheels.

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: 18x8J, 225/40ZR18; Rear: 18x10J, 285/30ZR18
Length: 4,245mm
Width: 1,795mm
Weight: 1,500kg
0-62mph: 4.3 sec
Top speed: 180mph

RATING:



993 GT2 1995-96



Basically a 911 Turbo, but with reduced equipment. It also included rear-wheel-drive, making it a better track car. The massive front and rear spoilers and bolt-on wheel-arch extensions give it a distinctive appearance.

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: 18x9J, 235/40ZR18; Rear: 18x11J, 285/35ZR18
Length: 4,245mm
Width: 1,855mm
Weight: 1,290kg
0-62mph: 3.9 sec
Top speed: 189mph

RATING:



930 SE



1986-89



Slantnosed and based on that of the 935 racecars, with pop-up headlamps. The front spoiler was made deeper in order to accommodate the extra oil cooler, while intakes in the rear wings fed air to the brakes. The larger turbocharger and four-outlet exhaust gave 30bhp of extra power.

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: 16x7J, 205/55VR; Rear: 16x9J, 245/45VR
Length: 4,491mm
Width: 1,775mm
Weight: 1,335kg
0-62mph: 4.6 sec
Top speed: 173mph

RATING:
★★★★★

3.2 Clubsport

1987-89



Removing the 'luxuries' from the Carrera 3.2 sliced around 40kg off the car's weight. Revised engine management gave a higher rev limit of 6,840rpm, but Porsche never claimed there was any increase in power. Suspension uprated and limited-slip differential standard.

Capacity: 3,164cc
Compression ratio: 10.3:1
Maximum power: 231bhp @ 5,900rpm
Maximum torque: 284Nm @ 4,800rpm
Brakes: Front: 304mm discs; Rear: 309mm discs
Wheels & tyres: Front: 15x6J, 195/65VR; Rear: 15x7J, 215/60VR
Length: 4,291mm
Width: 1,650mm
Weight: 1,170kg
0-60mph: 5.1 sec
Top speed: 151mph

RATING:
★★★★★

Speedster

1989



Essentially a Carrera 3.2 with a chopped, more steeply raked windscreen and hood and stripped-out interior. Most had wide Turbo bodies. Porsche insisted that the simple hood was not designed to be 100 per cent watertight. 2,065 examples of this model were built.

Capacity: 3,164cc
Compression ratio: 10.3:1
Maximum power: 231bhp @ 5,900rpm
Maximum torque: 284Nm @ 4,800rpm
Brakes: Front: 304mm discs; Rear: 309mm discs
Wheels & tyres: Front: 15x7J, 195/65VR; Rear: 15x8J, 215/60VR
Length: 4,291mm
Width: 1,650mm
Weight: 1,210kg
0-60mph: 5.6 sec
Top speed: 148mph

RATING:
★★★★★

964 Carrera 4

1989-93



Heavily revised bodywork, deformable bumpers over coil-spring suspension and four-wheel-drive marked this radical overhaul of the 911, which Porsche claimed was 87 per cent new. The 3.6-litre engine featured two spark plugs per cylinder and ceramic exhaust port liners.

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: 16x6J, 205/55ZR16; Rear: 16x8J, 225/50ZR16 (17-inch rims optional)
Length: 4,250mm
Width: 1,650mm
Weight: 1,450kg
0-62mph: 5.7 sec
Top speed: 162mph

RATING:
★★★★★

964 RS

1991-92



Around 120kg was lost by deleting 'luxuries' and fitting magnesium Cup wheels. Power was boosted by 10bhp and fed through a flywheel and uprated clutch. Suspension was lowered by 40mm and uprated, as were the brakes. Sport and Touring versions were also offered.

Capacity: 3,600cc
Compression ratio: 10.3:1
Maximum power: 260bhp @ 6,100rpm
Maximum torque: 310Nm @ 4,800rpm
Brakes: Front: 322mm discs; Rear: 299mm discs
Wheels & tyres: Front: 17x7.5J, 205/50ZR17; Rear: 17x9J, 255/40ZR17
Length: 4,250mm
Width: 1,650mm
Weight: 1,230kg (Sport)
0-62mph: 5.2 sec
Top speed: 162mph

RATING:
★★★★★

964 C2 Speedster 1993-94



This combined the 964 bodysell with the hood and windscreen of the Carrera 3.2 Speedster plus the RS interior. It is thought that Porsche planned to build around 3,000, but only 936 were made, many in bright colours such as yellow or red with colour-coded wheels.

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: 16x6J, 205/55ZR16; Rear: 16x8J, 225/50ZR16 (17-inch rims optional)
Length: 4,250mm
Width: 1,650mm
Weight: 1,340kg
0-62mph: 5.5 sec
Top speed: 164mph

RATING:
★★★★★

ULTRA RARE MODEL



1992-93 964 Turbo S

Essentially a 911 Turbo, but with 180kg of weight saved. Intakes in the rear arches funnelled air to the brakes, while the engine power was boosted by 61bhp thanks to the larger turbocharger, bigger valves and revised engine management, with the suspension uprated as per the RS. Just 80 examples were built.

Capacity: 3,299cc
Compression ratio: 7.0:1
Maximum power: 381bhp @ 6,000rpm
Maximum torque: 490Nm @ 4,800rpm
Brakes: Front: 322mm discs; Rear: 299mm discs
Wheels & tyres: Front: 18x8J, 235/40ZR18; Rear: 18x10J, 265/35ZR18
Length: 4,250mm
Width: 1,775mm
Weight: 1,290kg
0-62mph: 4.6 sec
Top speed: 180mph

RATING:
★★★★★



993 Carrera

1993-97



Restyled bodywork had swept-back headlamps, curvaceous wings and blended-in bumpers. The engine was revised with hydraulic tappets and hot-film airflow sensor, plus VarioRam from 1996. All-new multilink rear suspension gave improved handling.

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: 16x7J, 205/55ZR16; Rear: 16x9J, 245/45ZR16 (17-inch rims optional)
Length: 4,245mm
Width: 1,735mm
Weight: 1,370kg (Coupe)
0-62mph: 5.6 sec
Top speed: 168mph

RATING:
★★★★★

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 the driving experience a more rear-drive-esque feel. Automatic Brake Differential (ABD) compensated for wheelspin.

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: 16x7J, 205/55ZR16; Rear: 16x9J, 245/45ZR16 (17-inch rims optional)
Length: 4,245mm
Width: 1,735mm
Weight: 1,420kg
0-62mph: 5.8 sec
Top speed: 166mph

RATING:
★★★★★

993 Carrera RS

1995-96



Had a lightweight body as per RS tradition, but teamed with a 3.8-litre engine, VarioRam intake system and remapped ECU to create 200bhp, fed to the rear wheels only, with suspension and brakes all uprated. It is recognisable by the fixed rear whetail and large front spoiler.

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

RATING:
★★★★★

993 Carrera 4S

1995-96



The 4S was effectively a Carrera 4 with a Turbo wide bodysell (albeit lacking a fixed rear spoiler). It also boasted Turbo brakes and suspension, and the 18-inch wheels were aesthetically similar to the equivalent Turbo items.

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: 18x8J, 225/40ZR18; Rear: 18x10J, 285/30ZR18
Length: 4,245mm
Width: 1,795mm
Weight: 1,520kg
0-62mph: 5.3 sec
Top speed: 168mph

RATING:
★★★★★

993 Carrera S

1997-98



The features that come with the Carrera S are similar to the Carrera 4S's, only in rear-wheel-drive. Sought after for its superb handling and looks, the split engine cover lid and wide body give it a distinctive appearance.

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: 18x8J, 225/40ZR18; Rear: 18x10J, 285/30ZR18
Length: 4,245mm
Width: 1,795mm
Weight: 1,450kg
0-62mph: 5.4 sec
Top speed: 168mph

RATING:
★★★★★

993 Turbo S

1998



The 993 Turbo S was a fitting final hurrah to 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 as Tiptronic had not been developed to manage the abundance of torque.

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: 18x8J, 225/40/18; Rear: 18x10J, 285/30/18
Length: 4,245mm
Width: 1,795mm
Weight: 1,583kg
0-62mph: 4.1 sec
Top speed: 186mph

RATING:
★★★★★

996 Carrera



1998-2001



An all-new 911 with larger, restyled bodywork and a 3.4-litre water-cooled engine. The interior was redesigned in order to enable better ergonomic efficiency and allow for more room. The Carrera was a rear-wheel-drive, entry-level model, ideal for first-time Porsche drivers.

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: 17x7J, 205/50ZR17; Rear: 17x9J, 255/40ZR17 (18-inch rims optional)
Length: 4,430mm
Width: 1,765mm
Weight: 1,320kg
0-62mph: 5.2 sec
Top speed: 174mph

RATING:
★★★★★

996 Carrera 4

1998-2001

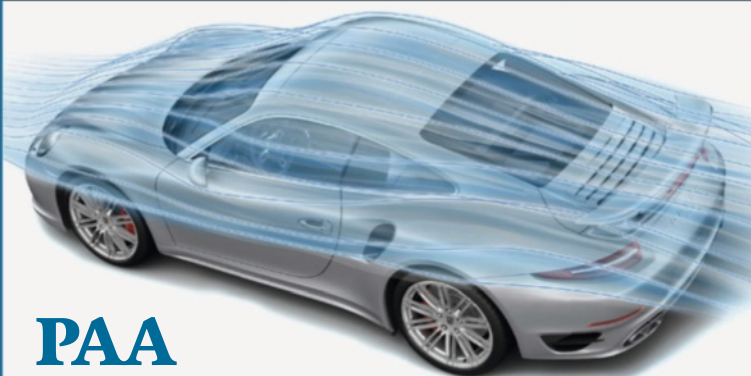


Four-wheel-drive transmission fed only five per cent of power to front in normal driving, increasing to up to 40 per cent when required. Porsche Stability Management combined traction control, anti-slip control and Automatic Braking Differential.

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: 17x7J, 205/50ZR17; Rear: 17x9J, 255/40ZR17 (18-inch rims optional)
Length: 4,430mm
Width: 1,765mm
Weight: 1,375kg
0-62mph: 5.2 sec
Top speed: 174mph

RATING:
★★★★★

911 technology explained



PAA

Downforce without drag is the Holy Grail for an aerodynamic engineer. With Porsche Active Aerodynamics (PAA), the new 911 Turbo tries to have both

After amateur racer Michael May mounted an inverted aerofoil onto his Porsche 550 racer in 1956, wings became a common sight in Formula One in the Sixties. Since then, the importance of downforce has played a key role in automotive design.

Downforce is created using an inverted aerofoil to split airflow through two paths (either over the longer bottom side or the shorter top edge of the aerofoil). The air taking the top route travels slower than the air underneath the aerofoil.

This creates a high-pressure zone on top of the wing, with a low-pressure area on the underside. The difference in pressure pushes the wing towards the ground from above and sucks the underside down. Increasing the angle of attack accentuates the difference in airspeed over the two sides of the aerofoil.

However, downforce brings with it an increased drag coefficient, reducing

fuel efficiency and top speed. To counter this, Porsche has developed PAA for the 991 Turbo in order to have the best of both worlds.

Below 120kph, the front spoiler and rear wing are fully retracted. However, as the car passes 120kph, the PAA system switches to the 'Speed' position, extending the outer two elements of the pneumatically controlled, three-part front spoiler, reducing front-end lift. Furthermore, the rear wing extends by 25mm to maintain aerodynamic balance. This is ideal for high-speed cruising.

The PAA system's third setting – Performance – is designed for maximum grip. In this position, the entire front spoiler is fully extended, while the rear wing is raised to 75mm and angled at seven degrees. At 300kph, the 991 Turbo can produce 132kg of downforce, allowing it to lap the Nordschleife two seconds faster than in the normal mode.

Head to head: 993 Turbo v 997 Turbo



You've got £60,000 to spend, and have got your heart set on either a 993 Turbo or a 997 Turbo. Which forced-induction offering do you go for?

For fans of 911s with all the modern conveniences, the 997 Turbo is the smart choice. Aesthetically, it still looks contemporary enough to hold its own on an OPC forecourt. The interior is also a luxurious place from which to watch the countryside blur by – and blur it will, because with 480bhp, it is seriously quick.

There are those that believe to be a true 911, the powerplant needs to be cooled by air, though. For these purists there is the 993 Turbo. Without myriad electronic devices, this isn't a car you can immediately drive quickly. Inside, the lack of distractions arguably leads to a more intimate driving experience.

To find out how they got on against each another, get your copy of issue 103 from the Imagine Shop at www.imagineshop.co.uk.

996 GT3

1998-2000



Commonly called the Gen1 GT3, this was a lightweight 996 with a 3.6-litre engine driving the rear wheels. Suspension was lowered by 30mm and brakes uprated.

Available in Clubsport and Comfort guises, 1,890 were built, of which 103 were right-hand-drive.

Capacity: 3,600cc
Compression ratio: 11.7:1
Maximum power: 360bhp @ 6,300rpm
Maximum torque: 370Nm @ 5,100rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 18x8J, 225/40ZR18; Rear: 18x10J, 285/30ZR18
Length: 4,430mm
Width: 1,765mm
Weight: 1,350kg
0-62mph: 4.8 sec
Top speed: 188mph

RATING:
★★★★★

996 Turbo

2000-05



Distinguished by wide rear arches, air intakes and a deep front spoiler, plus part-fixed, part-retractable rear spoiler. The 3.6-litre engine is different to the naturally aspirated 996 unit and fitted with twin KKK K17 turbochargers and VarioCam Plus. PSM is standard.

Capacity: 3,600cc
Compression ratio: 9.4:1
Maximum power: 420bhp @ 6,000rpm
Maximum torque: 560Nm @ 2,700 to 4,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 18x8J, 225/40ZR18; Rear: 18x11J, 295/30ZR18
Length: 4,435mm
Width: 1,830mm
Weight: 1,540kg
0-62mph: 4.2 sec
Top speed: 189mph

RATING:
★★★★★

996 GT2

2001-03



A lightweight, Turbo-bodied 996 with uprated turbocharged engine that produced 460bhp and drove the rear wheels. The suspension was uprated.

while brakes had ceramic discs. Revised ECU later gave extra 21bhp and came with PCCB as standard.

Capacity: 3,600cc
Compression ratio: 9.4:1
Maximum power: 462bhp @ 5,700rpm
Maximum torque: 620Nm @ 3,500 to 4,500rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 18x8.5J, 235/40ZR18; Rear: 18x12J, 315/30ZR18
Length: 4,435mm
Width: 1,830mm
Weight: 1,440kg
0-62mph: 4.1 sec
Top speed: 195mph

RATING:
★★★★★

Gen2 996 C2

2001-04



Face-lifted with Turbo-style headlamps and revised front and rear bumpers. Fitted with the more powerful 3.6-litre engine, VarioCam Plus and other refinements. Manual and Tiptronic transmission was also improved on. Moreover, the cabin received minor updates.

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: 17x7J, 205/50ZR17; Rear: 17x9J, 255/40ZR17 (18-inch rims optional)
Length: 4,430mm
Width: 1,765mm
Weight: 1,345kg
0-62mph: 5.0 sec
Top speed: 178mph

RATING:
★★★★★

996 GT3 RS

2004-05



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

GT3. Moreover, it also came with PCCB included as standard. White with side inscriptions in blue or red.

Capacity: 3,600cc
Compression ratio: 11.7:1
Maximum power: 381bhp @ 7,400rpm
Maximum torque: 385Nm @ 3,500 to 5,000rpm
Brakes: Six piston calipers front, four piston rear
Wheels & tyres: Front: 18x8.5J, 235/40ZR18; Rear: 18x11J, 295/30ZR18
Length: 4,435mm
Width: 1,770mm
Weight: 1,360kg
0-62mph: 4.4 sec
Top speed: 190mph

RATING:
★★★★★

996 Turbo S

2004-05



A 911 Turbo with the previously optional 30bhp power upgrade, consisting of larger turbochargers, uprated intercoolers and revised ECU. The ceramic brakes were standard, and 18-inch alloys finished in GT Metallic Silver paint, in addition to the highly specced interior.

Capacity: 3,600cc
Compression ratio: 9.4:1
Maximum power: 450bhp @ 5,000rpm
Maximum torque: 620Nm @ 3,500 to 4,400rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 18x8J, 225/40ZR18; Rear: 18x11J, 295/30ZR18
Length: 4,435mm
Width: 1,830mm
Weight: 1,590kg
0-62mph: 4.1 sec
Top speed: 191mph

RATING:
★★★★★

997 Carrera 4

2005-08



The Carrera 4 was much like the 997 Carrera, but with drive to all four wheels via a multi-disc viscous coupling that transferred between five and 40 per cent of traction to the front wheels. It was 44mm wider at the rear than the Carrera in order to allow for wider wheels.

Capacity: 3,596cc
Compression ratio: 11.8:1
Maximum power: 325bhp @ 6,800rpm
Maximum torque: 370Nm @ 4,250rpm
Brakes: Front: 318mm discs; Rear: 299mm discs
Wheels & tyres: Front: 18x8J, 235/40ZR18; Rear: 18x11J, 295/35ZR18
Length: 4,427mm
Width: 1,852mm
Weight: 1,495kg
0-62mph: 5.1 sec
Top speed: 174mph

RATING:
★★★★★

997 Carrera 4S

2005-08



The same 3.8-litre, 355bhp engine as the Carrera S, but coupled with the four-wheel-drive system on the Carrera 4. It also had 44mm wider rear arches to compensate for the 11-inch wider wheels and helped give a more aggressive look.

Capacity: 3,824cc
Compression ratio: 11.8:1
Maximum power: 355bhp @ 6,800rpm
Maximum torque: 400Nm @ 4,250rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 19x8J, 235/35ZR19; Rear: 19x11J, 295/30ZR19
Length: 4,427mm
Width: 1,852mm
Weight: 1,550kg
0-62mph: 4.8 sec
Top speed: 179mph

RATING:
★★★★★

GREAT VALUE GREAT

2001-2005 996 Carrera 4S

Basically a Carrera 4 with the Turbo bodyshell, without rear air intakes, and with a full-width rear reflector panel. The suspension and brakes were similar to the Turbo, while wheels were 18-inch items. The interior spec was higher than that of conventional Carrera 4.

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: 18x8J, 225/40ZR18; Rear: 18x11J, 295/30ZR18
Length: 4,435mm
Width: 1,830mm
Weight: 1,495kg
0-62mph: 5.0 sec
Top speed: 175mph

RATING:
★★★★★



Gen2 996 C4

2001-04



Face-lifted in line with the rear-drive Carrera, this was the four-wheel-drive incarnation of the aforementioned earlier model. For most people who have experienced it, it drove

a lot like the Carrera and, indeed, there is very little to choose from between them.

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: 17x9J, 205/50ZR17; Rear: 17x9J, 255/40ZR17 (18-inch rims optional)
Length: 4,430mm
Width: 1,765mm
Weight: 1,405kg
0-62mph: 5.3 sec
Top speed: 175mph

RATING:
★★★★★

Gen2 996 GT3

2003-05



Also known as the GT3 Gen2, it was based on the facelifted 996 Carrera, but with new spoilers. The 3.6-litre engine produced 381bhp. Suspension was lowered and

uprated, and ceramic brakes optional. The interior was full-spec unless you opted for the Clubsport.

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: 18x8.5J, 235/40ZR18; Rear: 18x11J, 295/30ZR18
Length: 4,435mm
Width: 1,770mm
Weight: 1,380kg
0-62mph: 4.5 sec
Top speed: 190mph

RATING:
★★★★★

997 Carrera

2004-08



Fully revised 911 with 993-influenced bodywork and a new interior. The 3.6-litre engine was like the 996, but refined for more power. Additionally, twin exhaust

tailpipes were coupled with rear-wheel drive via six-speed Tiptronic transmission.

Capacity: 3,596cc
Compression ratio: 11.8:1
Maximum power: 325bhp @ 6,800rpm
Maximum torque: 370Nm @ 4,250rpm
Brakes: Front: 318mm discs; Rear: 299mm discs
Wheels & tyres: Front: 18x8J, 235/40ZR18; Rear: 18x10J, 265/40ZR18
Length: 4,427mm
Width: 1,808mm
Weight: 1,395kg
0-62mph: 5.0 sec
Top speed: 177mph

RATING:
★★★★★

997 Carrera S

2004-08



As per the 997 Carrera, but with the more powerful 3.8-litre engine and PASM. 19-inch wheels came as standard, with larger 330mm ventilated discs. It had Quad

exhaust tailpipes, and was available as rear-wheel-drive only.

Capacity: 3,824cc
Compression ratio: 11.8:1
Maximum power: 355bhp @ 6,800rpm
Maximum torque: 400Nm @ 4,600rpm
Brakes: Front: 330mm discs; Rear: 330mm discs
Wheels & tyres: Front: 18x8J, 235/40ZR18; Rear: 18x10J, 265/40ZR18
Length: 4,427mm
Width: 1,808mm
Weight: 1,495kg
0-62mph: 4.7 sec
Top speed: 182mph

RATING:
★★★★★

997 Turbo

2005-10



Similar to the 997 Carrera 4S body, but with extra intakes at the front and sides. It essentially had the 996 Turbo engine, but with all-new twin turbos, Variable Turbine

Geometry (VTG) that effectively gave the best of both small and large turbochargers.

Capacity: 3,600cc
Compression ratio: 9.0:1
Maximum power: 480bhp @ 6,000rpm
Maximum torque: 620Nm @ 2,100-4,000rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5Jx19, 235/35/ZR19; Rear: 11Jx19, 305/30/ZR19
Length: 4,450mm
Width: 1,852mm
Weight: 1,585kg
0-62mph: 3.9 sec
Top speed: 193mph

RATING:
★★★★★

997 GT3

2006-07



Track-focused car based on narrow-bodied Carrera and with reworked 996 GT3 engine. PASM was standard, but reworked to suit the sporting traits. Revs to

8,400rpm, 200rpm higher than 996 GT3. VarioCam was used on the 997 GT3 to improve torque.

Capacity: 3,600cc
Compression ratio: 12.0:1
Maximum power: 415bhp @ 7,600rpm
Maximum torque: 405Nm @ 5,500rpm
Brakes: Front: 380mm discs; Rear: 340mm discs
Wheels & tyres: Front: 19x8.5J, 235/35ZR19; Rear: 19x12J, 305/30ZR19
Length: 4,445mm
Width: 1,808mm
Weight: 1,395kg
0-62mph: 4.3sec
Top speed: 192mph

RATING:
★★★★★

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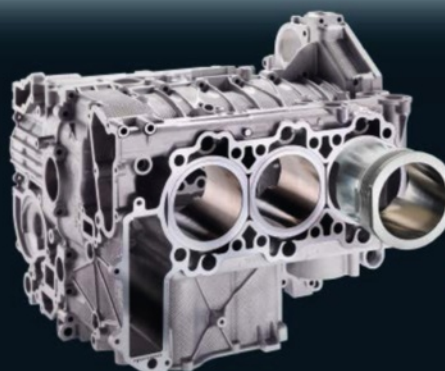


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997 GT3 RS

2006-07



The RS was similar to GT3, but with the inclusion of the wider rear bodyshell of the Carrera S. 20kg of weight was saved from the original model thanks to carbon fibre engine cover and rear wing and plastic rear window, not to mention the relatively lightweight interior.

Capacity: 3,600cc
Compression ratio: 12.0:1
Maximum power: 415bhp @ 7,600rpm
Maximum torque: 405Nm @ 5,500rpm
Brakes: Front: 380mm discs; Rear: 340mm discs
Wheels & tyres: Front: 19x8.5J, 235/35ZR19; Rear: 19x12J, 305/30ZR19
Length: 4,445mm
Width: 1,852mm
Weight: 1,375kg
0-62mph: 4.2 sec
Top speed: 187mph

RATING:
★★★★★

997 GT2

2007-08



Essentially the 997 Turbo, but with rear-wheel-drive only. Also enjoyed a more track-orientated suspension and brake setup, with GT3-style interior and extra power at 523bhp. Porsche Stability Management and Porsche Active Suspension Management used.

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: 8.5Jx19, 235/35/ZR19; Rear: 11Jx19, 305/30/ZR19
Length: 4,469mm
Width: 1,852mm
Weight: 1,440kg
0-62mph: 3.7 sec
Top speed: 204mph

RATING:
★★★★★

Gen2 997 GT3

2009-2012



This was updated as per the Carrera, but with a unique front spoiler and rear wing, revised PASM, centre-lock wheels and better brakes. An already great car made better.

Problems with rear hubs led to a recall for model year 2010 GT3s.
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: 8.5x19J 235/35 ZR 19 Rear: 12x19J 305/30 ZR19
Length: 4,460mm
Width: 1,808mm
Weight: 1,395kg
0-62mph: 4.1sec
Top speed: 194mph

RATING:
★★★★★

Gen2 997 Turbo

2009-13



Basically the same as the original 997 Turbo, but with new LED taillights and driver lights up front. Features larger tailpipes, plus a larger 3.8-litre engine with direct fuel injection. PDK transmission is optional. Fuel consumption cut by 16 per cent.

Capacity: 3,800cc
Compression ratio: 9.8:1
Maximum power: 500bhp @ 6,000rpm
Maximum torque: 650Nm @ 1,950-5000rpm
Brakes: Front: 350mm discs; Rear: 350mm discs
Wheels & tyres: Front: 8.5Jx19, 235/35/ZR19; Rear: 11Jx19, 305/30/ZR19
Length: 4,450mm
Width: 1,852mm
Weight: 1,570kg
0-62mph: 3.4 sec
Top speed: 194mph

RATING:
★★★★★

997 C4 GTS

2010-



As Carrera 2 997 GTS but slightly heavier with four-wheel drive. In either C2 or C4 form, the 997 GTS represented a great saving over optioning up a 997 Carrera counterpart.

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: 8.5Jx19, 235/35/ZR19; Rear: 11Jx19, 305/30/ZR19
Length: 4,435mm
Width: 1,852mm
Weight: 1,555kg
0-62mph: 4.6 sec
Top speed: 188mph

RATING:
★★★★★

997 GT2 RS

2010-



The GT2 went back to its roots, with an RS-style lightweight body and interior, plus extra power (620bhp). Instantly recognisable over standard GT2 thanks to lashings of carbon fibre on bonnet, air intake and mirrors.

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: 9Jx19, 245/35ZR19; Rear: 12Jx19, 325/30ZR19
Length: 4,460mm
Width: 1,852mm
Weight: 1,370kg
0-62mph: 3.5 sec
Top speed: 205mph

RATING:
★★★★★

991 Carrera 4

2012-



This model enjoys a wider body, with rear fenders pulled out by 22mm on each side. A major telltale sign that tells it apart from the Carrera 2 is the connecting rear tail light that comes as standard. Also features a torque distribution indicator, which keeps you informed on where the car is distributing torque.

Capacity: 3,436cc
Compression ratio: 12.5:1
Maximum power: 350bhp @ 7,400rpm
Maximum torque: 390Nm @ 5,600rpm
Wheels & tyres: 8.5Jx19 235/40 ZR 19 Rear: 11Jx19 295/35 ZR 19
Length: 4,491mm
Width: 1,852mm
Weight: 1,450kg
0-62mph: 4.9sec
Top speed: 177mph

RATING:
★★★★★

991 Carrera 4S

2012-



Has the same wider body styling as the Carrera 4, with a rear connecting tail light coupled to 3.8-litre 400bhp flat six engine. Also features six-piston brake calipers at front as opposed to four. Seven speed manual or PDK gearbox option available. Bigger wheels than C4 and 15kg heavier.

Capacity: 3,800cc
Compression ratio: 12.5:1
Maximum power: 400bhp @ 7,400rpm
Maximum torque: 440Nm @ 5,600rpm
Wheels & tyres: Front: 8.5Jx20, 245/35 ZR 20; Rear: 11Jx20, 305/30 ZR 20
Length: 4,491mm
Width: 1,852mm
Weight: 1,450kg
0-62mph: 4.5sec
Top speed: 185mph

RATING:
★★★★★

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) and direct-fuel injection to give much-improved economy. Seven-speed PDK transmission was a new option.

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: 18x8J, 235/40ZR18; Rear: 18x10.5J, 265/40ZR18
Length: 4.435mm
Width: 1.808mm
Weight: 1.490kg
0-62mph: 4.9 sec
Top speed: 180mph

RATING:
 ★★★★★

Gen2 997 C2 S

2008-12



Revised as per the Carrera, but with larger 3.8-litre engine – again using fewer components and Direct Fuel Injection. The engine stroke was reduced from 82.8mm to 77.5mm, while the bore went up by 3mm to 102mm, in the process reducing the capacity to exactly 3,800cc.

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: 19x8J, 235/35ZR19; Rear: 19x11J, 295/30ZR19
Length: 4.435mm
Width: 1.808mm
Weight: 1.500kg
0-62mph: 4.7 sec
Top speed: 188mph

RATING:
 ★★★★★

Gen2 997 C4

2008-12



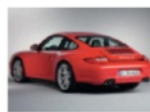
There were numerous engine and body changes as per the Carrera, but with a wider rear end plus the welcome return of the full-width rear reflector, situated between the light clusters. The new all-wheel drive was appropriated from the 997 Turbo.

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: 18x8J, 235/40ZR18; Rear: 18x10.5J, 265/40ZR18
Length: 4.435mm
Width: 1.852mm
Weight: 1.545kg
0-62mph: 5.0 sec
Top speed: 176mph

RATING:
 ★★★★★

Gen2 997 C4S

2008-12



The bodywork was as per the Carrera 4, but with the larger 3.8-litre engine. Utilised the 997 Turbo's four-wheel-drive, and Porsche Traction Management. Viscous coupling gives way to electromagnetically controlled multi-plate clutch.

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: 235/30ZR19; Rear: 19x11J, 295/30ZR19
Length: 4.435mm
Width: 1.852mm
Weight: 1.555kg
0-62mph: 4.7 sec
Top speed: 185mph

RATING:
 ★★★★★

Gen2 997 GT3 RS

2009-



Has 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. Has the lap record for road models at the Nürburgring.

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: 9Jx19, 245/35ZR19; Rear: 12Jx19, 325/30ZR19
Length: 4.460mm
Width: 1.852mm
Weight: 1.370kg
0-62mph: 4.0 sec
Top speed: 192mph

RATING:
 ★★★★★

997 Turbo S

2011-13



As standard 997 Turbo, but with face-lifted body, more power (530bhp) and higher levels of standard equipment, including PCCB, centrelock wheels and ceramic brakes to go with unique two-tone interior and Sport Chrono Plus.

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: 8.5Jx19, 235/35ZR19; Rear: 11Jx19 on 305/30ZR19
Length: 4.435mm
Width: 1.852mm
Weight: 1.585kg
0-62mph: 3.3 sec
Top speed: 195mph

RATING:
 ★★★★★

997 Sport Classic

2010



Based on a 3.8-litre, rear wheel-drive Carrera S, but with 44mm wider rear arches. Several instances of retro styling including iconic ducktail spoiler and large Fuchs wheels. Only 250 examples have been sold worldwide.

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: 19x8.5J, 235; Rear: 19x11J, 305
Length: 4.435mm
Width: 1.852mm
Weight: 1.425kg
0-62mph: 4.1 sec
Top speed: 194mph

RATING:
 ★★★★★

997 C2 GTS

2010-



Features the C4's wider rear body and is powered by the 3.8-litre Carrera S engine with a powerkit producing 25bhp extra. The GTS is laden with Porsche options, including PASM, sports exhaust and centre-locking alloys.

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: 8.5Jx19, 235/35ZR19; Rear: 11x19, 305/30ZR19
Length: 4.435mm
Width: 1.852mm
Weight: 1.420kg
0-60mph: 4.6 sec
Top speed: 190mph

RATING:
 ★★★★★

ULTRA RARE MODEL

ULTRA RARE

2010 997 GT3 RS 4.0

The pinnacle of 997 ownership, just 600 units were produced. The engine was upgraded and aerodynamically tweaked, too, with angle of rear wing increased and dive planes on either side of the front nose.

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: 9Jx19, 245/35ZR19; Rear: 12Jx19, 325/30ZR19
Length: 4.460mm
Width: 1.852mm
Weight: 1.360kg
0-62mph: 3.5 sec
Top speed: 193mph

RATING:
 ★★★★★

**991 Carrera**

2011-



The first 911 of the newest and latest seventh generation, the Carrera features a 350bhp 3.4-litre engine and takes styling hues from the 993. Completely redesigned chassis, with lengthened wheelbase reducing overhang of engine weight. Panamera-esque interior.

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: 8.5Jx19, 235/40ZR19; Rear: 11Jx19, 285/35ZR19
Length: 4.491mm
Width: 1.808mm
Weight: 1.380kg
0-62mph: 4.8 sec
Top speed: 179.6mph

RATING:
 ★★★★★

991 Carrera S

2011-



Same as Carrera, including seven-speed manual box, but utilising 400bhp from a bigger 3.8-litre engine. Slightly larger front brakes than the standard Carrera (10mm bigger discs), with MacPherson front axle and multi-link suspension at the rear. Distinctive 'S' badging on rear bumper.

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: 8.5Jx20, 245/35ZR20; Rear: 8.5Jx20, 245/35ZR20
Length: 4.491mm
Width: 1.808mm
Weight: 1.395kg
0-62mph: 4.5 sec
Top speed: 188.9mph

RATING:
 ★★★★★

991 GT3

2013-



Electric power steering and wide body shell from 991 Carrera 4 was used for the first time here. PDK transmission only, no manual option. Mezger engine from previous GT3s replaced with revamped version of direct injection 991 Carrera S engine. First deliveries imminent.

Capacity: 3.800cc
Compression ratio: 12.9:1
Maximum power: 475hp @ 8,250rpm
Maximum torque: 440Nm @ 6,250rpm
Wheels & tyres: Front: 9Jx20, 245/35ZR20; Rear: 12Jx20, 305/30ZR20
Length: 4.545mm
Width: 1.852mm
Weight: 1.430kg
0-62mph: 3.5 sec
Top speed: 196mph

RATING:
 ★★★★★

991 Turbo

2013-



The new Turbo marks the introduction of electric and rear axle steering, plus PDK-only transmission to forced induction 991 models. With a 100mm longer wheelbase than the 997 Turbo and rear fenders being 28mm wider than even the 991 Carrera 4, this is the longest and widest Turbo model yet.

Capacity: 3.800cc
Compression ratio: 9.8:1
Maximum power: 520hp @ 6,000 - 6,500rpm
Maximum torque: 660Nm @ 1,950 - 5,000rpm
Wheels & tyres: Front: 8.5x20-inch, 245/35ZR20; Rear: 11x20-inch, 305/30ZR20
Length: 4.506mm
Width: 1.880mm
Weight: 1.595kg
0-62mph: 3.4 sec
Top speed: 195mph

RATING:
 ★★★★★

991 Turbo S

2013-



Same dimensions as 991 Turbo, but with a tweaked map to provide an extra 40hp. Turbo S also benefits from usual Turbo options as standard including centre lock wheels and PCCB, with Porsche Dynamic Chassis Control (PDCC) offered standard for the first time. PTM is all new on both Turbo and Turbo S.

Capacity: 3.800cc
Compression ratio: 9.8:1
Maximum power: 560hp @ 6,500 - 6,750rpm
Maximum torque: 700Nm @ 2,100 - 4,250
Wheels & tyres: Front: 9x20-inch, 245/35ZR20; Rear: 11x20-inch, 305/30ZR20
Length: 4.506mm
Width: 1.880mm
Weight: 1.605kg
0-62mph: 3.1 sec
Top speed: 197mph

RATING:
 ★★★★★

991 50 Jahre

2013-



RATING:
 UNKNOWN

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997 Turbo 3.6 Tip (2007 - 57)
Silver with Ocean Blue Leather, Sat Nav, 40k miles.....£46,000



997 Turbo 3.6 (2006 - 06)
Cobalt Blue with Black Leather, Sat Nav, 44k miles.....£43,000



997 Turbo 3.6 Tip (2006 - 56)
Basalt Black with Stone Grey Leather, Sat Nav, 44k miles.....£43,000



997 "2S" Gen 2 3.8 (2009 - 09)
Basalt Black with Stone Grey Leather, Sat Nav, 23k miles.....£43,000



997 "2S" 3.8 (2008 - 08)
Silver with Stone Grey Leather, Sat Nav, 43k miles.....£36,000



997 "4S" Cab 3.8 Tip (2007 - 57)
Basalt Black with Black Leather, Sat Nav, 46k miles.....£36,000



Cayman "S" 3.4 Gen 2 (2011 - 61)
White with Black Leather, 13k miles.....£35,000



997 "2S" 3.8 Tip (2007 - 07)
Basalt Black with Black Leather, Sat Nav, 30k miles.....£34,000



Cayman 2.9 Gen 2 PDK (2011 - 11)
Meteor Grey with Black Leather, Sat Nav, 12k miles.....£33,000



997 "4S" 3.8 (2006 - 06)
Silver with Black Leather, Sat Nav, 37k miles.....£32,000



997 "4S" 3.8 (2006 - 06)
Basalt Black with Black Leather, Sat Nav, 33k miles.....£32,000



997 "4S" Cab 3.8 (2005 - 55)
Silver with Black Leather, Sat Nav, 44k miles.....£32,000

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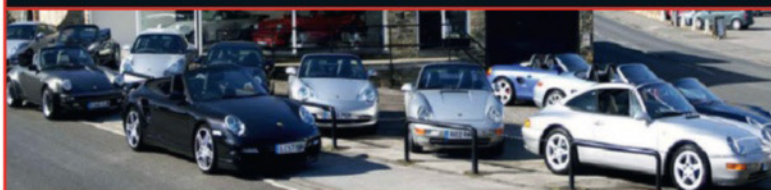
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Plus • 7,047 miles • 2012 (12)
£69,995



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Touchscreen Satellite Navigation • Sport Chrono
Pack Plus • 13,741 miles • 2009 (09)
£59,995



911 Turbo (1997, Tiptronic S)
Meteor Grey • Black Leather Seats • Satellite
Navigation • 19" Turbo Wheels • 32,101 miles
2008 (08)
£52,995



911 Carrera 2 S (1997, GEN II, PDK)
7-Speed PDK • Guards Red • Black Leather Sports
Seats • Sport Chrono Pack with Sport Plus • Paddle
Shift Wheel • 11,127 miles • 2010 (60)
£49,995



911 Turbo (1997, Tiptronic S)
Guards Red • Black Leather Adaptive Sport Seats
Sport Chrono Pack Plus • Satellite Navigation
43,950 miles • 2007 (07)
£45,995



911 Carrera 2 S (1997, GEN II, 6-Speed)
Arctic Silver • Black Leather Heated & Ventilated
Seats • Touchscreen Satellite Navigation • 19"
Carrera S II Wheels • 32,224 miles • 2009 (09)
£44,995



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Arctic Silver • Black Leather Seats • Sport Chrono
Pack Plus • Satellite Navigation • Sports Exhaust
35,687 miles • 2007 (56)
£44,995



911 Carrera 2 S (1997, 6-Speed)
Arctic Silver • Ocean Blue Leather Seats
Satellite Navigation • 19" Carrera S Wheels
33,775 miles • 2005 (05)
£27,995



911 Turbo (1996, 6-Speed)
Arctic Silver • Black Leather Seats • Aerokit
Satellite Navigation • 18" Turbo II Wheels
75,294 miles • 2002 (02)
£27,995



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'S' II Wheels • BOSE Sound System • 33,256 miles
2009 (09)
£23,995



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£16,995

Basalt Black metallic with Grey Leather interior 70,000 miles

Heated Comfort Seats	Porsche Logo incised in	AirCon & Climate Control	Part Carbon Fibre Interior
PSM	Headrests	CDR-23 Stereo	18" GT3 Alloys


**2001 996 CARRERA 2
TIPTRONIC COUPE**
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Rainforest Green metallic with Beige interior 56,000 miles

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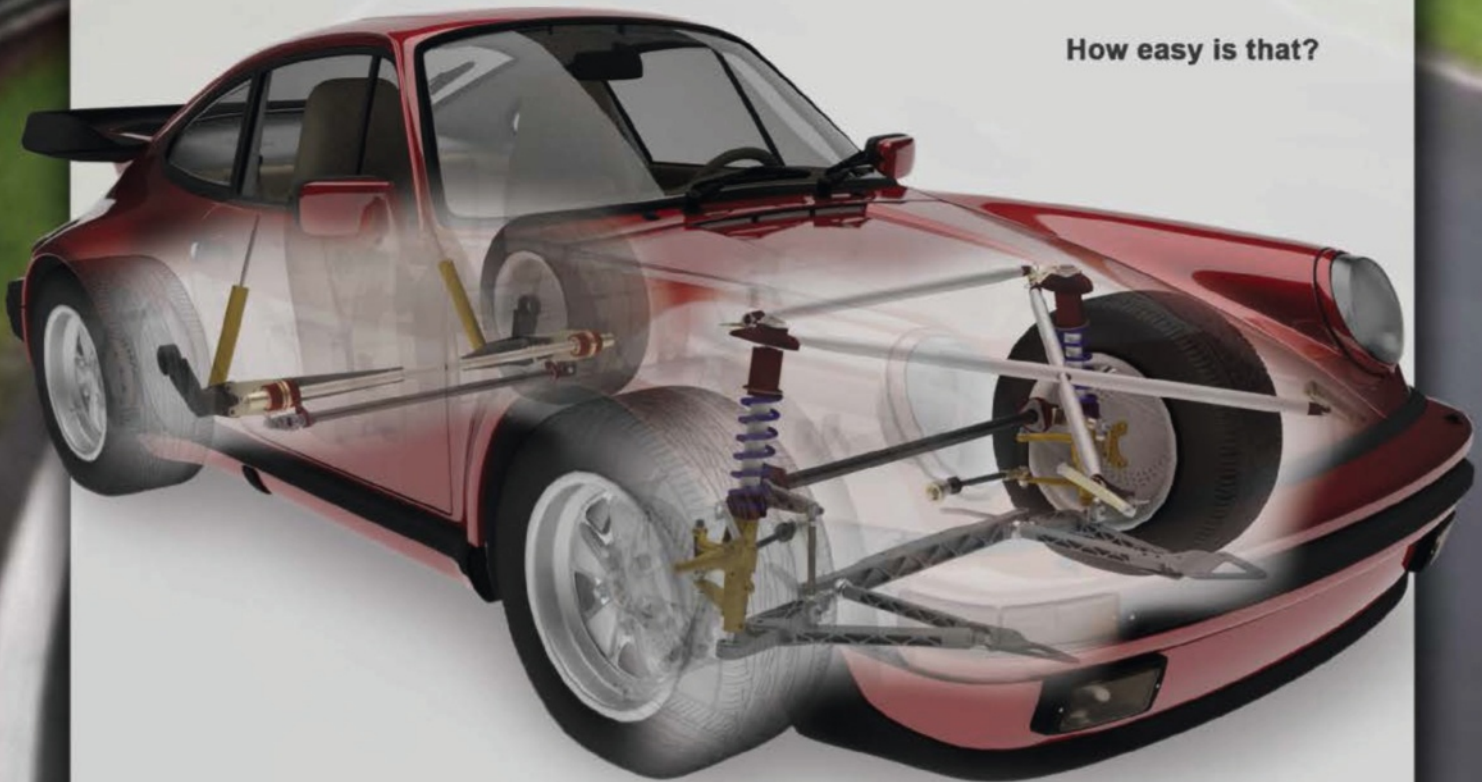
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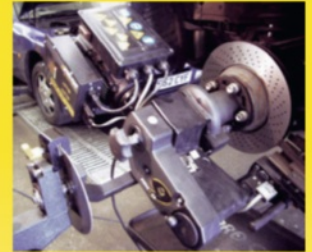


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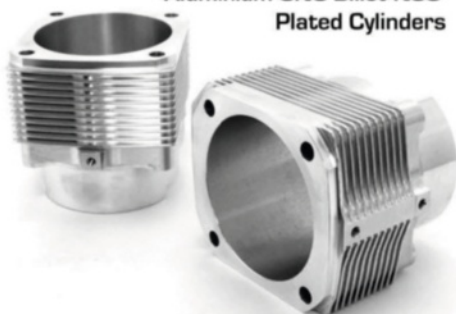
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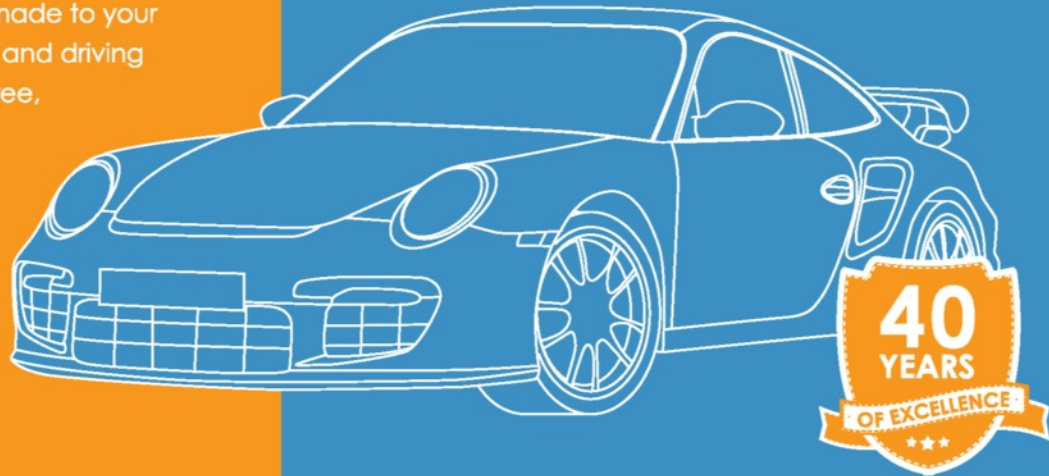
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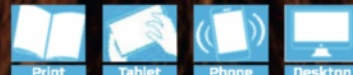


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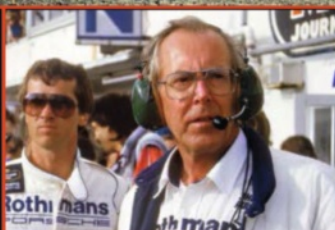
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Written and photographed by **Maurice van den Tillaard**



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Essential info

LOCATION: Francorchamps, Belgium
LATITUDE: 50.4372° N, 5.9714° E



LENGTH OF DRIVE:
Five miles

POINTS OF INTEREST:
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The town of Francorchamps plays host to part of the famous Spa circuit. Today, the public can still drive on part of the old track

As a boy travelling Europe with my parents, I have fond memories of Trips to Germany, where my father would detour en route to drive down part of the famous Spa Francorchamps circuit, which was on a public road in years gone by.

As we would enter the village of Francorchamps, I'd always beg him to stop at the sharp left-hand corner in town to see all the miniature cars at the circuit shop. It's still there today, and every time I visit Spa Francorchamps I park my 911 across the street to take a quick look inside.

Back in the day, the public road led to the world-famous La Source corner, where you would drive down

the hill by the old Formula 1 pits and grandstands. Shortly before entering Eau Rouge you would have to take a sharp left again, which led around the steep part of the track. After a right-hand hairpin you'd go further up the hill, entering the Kemmel straight after Eau Rouge. At the end of it, you left the track before the Les Combes S-bend to go down the public roads.

When leaving the E42 freeway, the same route (N640, Rue de Sart) can be taken. At the end of Rue de Sart, take a left onto Rue de Spa (N62), which leads into the village. Go left onto the Route du Circuit (N62), and soon you will be parallel to the Kemmel Straight. After Les Combes you end up at an old part of the track, again named Route du Spa. This

changes into Rue de Neuville, and later on Rue de Chefosse (N68). This is also called the Masta Straight, with the famous Masta Kink that would interrupt the ultra-fast straight between farm houses and light poles.

At the end of the Masta Straight just before Stavelot, a right-hander, formerly called Holowell, can be taken onto Route de l'Eau Rouge. It will lead dead-end at a gate where personnel can enter the race track. The track can be seen from here, and it's a cool stretch of historic asphalt to drive on.

If this isn't enough, the Nürburgring is only a 90-minute drive through Germany's Eiffel region. If you would like to visit two of the best tracks in the history of auto racing, take your chance. You won't regret it. **911**

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