



# 930 TURBO ULTIMATE BUYER'S GUIDE

# Total 911

THE PORSCHE MAGAZINE

## 911 ON SAFARI

Off-road adventure in an audacious SC restoration



MANUAL, RWD SHOWDOWN

# GTS VS RIVALS

NEW 992 TAKES ON ITS GT3 & C2S STABLEMATES IN THE BATTLE OF THE MODERN DRIVER'S 911. WHICH IS THE BEST VALUE FOR MONEY?



ARE EARLY CLASSICS STILL AS DESIRABLE?

BERND KAHNAU INTERVIEW

HOW A PORSCHE TURBOCHARGER WORKS



DigitalEdition

## 991.1 GT3 ENGINES

Everything you need to know about Porsche's GT-spec MA1 flat six

## WORLD'S BEST 993?

California test in Gunther Werks' stunning production version of its 993 Coupe







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# Welcome

From a new 911 perspective, 2022 has the potential to be a very exciting year indeed. It's hard to believe the 992-generation 911 has been with us for four years already but, while we've had great fun getting to know the car and watch its model lineup flourish, the time will soon be upon us to witness the arrival of the second-generation 992, bringing with it a host of new technology – starting with, for the first time, a hybrid powertrain.

Before all that, though, we are 'due' a GT3 Rennsport for the current generation, as is tradition, plus I find it hard to believe Porsche won't roll out a 992-spec Carrera T (with manual gearbox), such is the expansion of the 'T' moniker into other Porsche sports cars in recent years. Now essentially a sub-brand in its own right, much like the GTs series, surely the opportunity to produce a 992 Carrera T will be too good, commercially, to turn down.

Then there's the matter of those special-edition Heritage vehicles as stipulated by Porsche Exclusive Manufaktur. Upon release of the 992 Targa Heritage Design Edition in 2020, Porsche's modern-day Sonderwunsch department promised this would be the first of four such cars it would release by 2023 and so, seeing as nothing followed for 2021, we are expecting a double whammy of specials either this year or next. It's an exciting prospect when you consider we are approaching 50 years of the 911 RS, for example...

Of course, this supposition of Porsche's new model release programme is based entirely on what has previously been established as the norm – and that was prior to any worldwide grapples with coronavirus, not to mention the ensuing supply problems which has hit the automotive industry particularly hard. As a minimum then, it is safe to say Porsche will at least do 'some' of the above, and that makes for an exciting prospect for the enthusiast. Your move, 2022...

**"It's hard to believe the 992-generation 911 has been with us for four years already"**









# Shot by Opening

Photograph by  
**Ted7** for **Gunther Werks**

After a prototype development programme stretching back years, Gunther Werks is now finally ready to unleash its production reimagining of the 993. **Total 911** samples it on twisting mountain roads above Los Angeles, and the verdict is in. Check out the full story beginning on page 26.



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# Update

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



## Historic Porsche colours return

Porsche is expanding its range of Paint to Sample colour options for the 992 to include popular cult classics...

Porsche Exclusive Manufaktur – the official personalisation arm of Porsche – is expanding its range of special exterior colours for the 911 with its new Paint to Sample and Paint to Sample Plus options. Cult classic Porsche colours from days gone by are being added to the range of standard and special colour options, bringing the total number of off-the-peg shades available to 160. The move comes in response to increased demand for custom-painted Porsche in recent years, and has resulted in a brand-new colour-mixing bench being installed at the main plant in Zuffenhausen. Here, Porsche paint specialists blend ingredients down to the final milligram to achieve the desired colour.

Paint to Sample is the new name for Porsche Custom Colour, which is being expanded to include comebacks for iconic colours such as Maritime blue, Rubystar and Mint green – as found on the 964. This means that 992 customers can now specify these eye-catching hues with prices starting at around £7,500. There are more than 100

paint colours to choose from. Paint to Sample can be ordered as part of new vehicle configurations at Porsche Centres and, from early 2022, via the online Porsche Car Configurator. Be warned, however, this will add approximately three months to the delivery lead time of your new 911 compared with standard colours.

Finally, Paint to Sample Plus takes things to the next level, facilitating entirely individual colour requests. Here, customers provide a sample of their desired colour for matching. Samples can include anything from a handbag to a nail varnish pot, this is then sent to Germany for a feasibility check before Porsche colourists create the unique formulation. The process can take several months and involves tests through various stages before paint is applied to a customer's car. Should the desired shade prove impossible to recreate, Porsche will bear the costs of the feasibility test. Expect to pay around £15,000 for this ultimate option in personalisation.





## 993 Carrera breaks auction record

A 993 Carrera 4S in 'time warp' condition has smashed the auction world record for its type

A 993 Carrera 4S described as an 'outstanding example' has broken auction world records for the model with a winning bid of \$270,000 (£204,000). The 1997 Speed yellow example was offered for sale through online auction platform, Collecting Cars, and was said to be in original condition showing just 1,126 miles from new on its odometer. One of just 1,752 examples built for the US market, the car in question included sought-after options such as the Porsche Aerokit, Sport seats, and engine sound package.

According to the listing, in May 2021 the car was treated to a full inspection and recommissioning by a Porsche specialist in Connecticut, receiving a new fuel pump and pump relay, new lower valve covers and gaskets, front ABS sensors, front suspension struts and a fresh set of Michelin Pilot Sport 2 tyres.

The buyer's premium is capped at \$5,000 in the US, meaning the premium paid by the winning bidder worked out to be 1.85%.



## Porsche launches Vision Gran Turismo

A virtual racing car of the future, the vehicle will launch exclusively in the *Gran Turismo* 7 video game



Porsche has featured on the *Gran Turismo* video game series since 2017, but for the launch of the game's seventh iteration, Porsche has, for the first time, developed a vehicle purely for the virtual world. The Porsche Vision Gran Turismo has been created in collaboration with Polyphony Digital Inc and will be available exclusively in *Gran Turismo* 7, set for release in March 2022 for PlayStation 4 and 5.

The car features what Porsche calls 'future-oriented versions of familiar Porsche design elements'. The project freed designers from the constraints of developing vehicles for series production, allowing them to put their ideas for a concept car into practice.

## Order prints with VIN Art Configurator

Porsche enthusiasts can now immortalise their car as art prints via the Porsche VIN Art Configurator

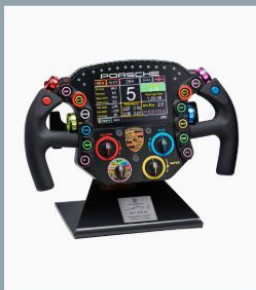


Porsche Digital has expanded its range of products with the Porsche VIN Art Configurator. Users can enter a vehicle identification number (VIN) or a Porsche code to create individual works of art. And you don't need to own a Porsche to use the system, as VIN Art creates portraits based on cars specified in the Porsche configurator too. The artwork is printed on a thin aluminium plate, available in a range of sizes and for wall or stand mounting. VIN Art portraits can be ordered via [www.vinart.digital](http://www.vinart.digital) for Porsche vehicles from 2016 onwards.

## News in Brief

### 1:1 replica 911 RSR wheel

This extremely detailed, high-quality replica of the 2019 911 RSR steering wheel is new to the Porsche Driver's Selection shop. The replica is actual size, measuring 160 x 320 x 280mm, and is attached to an acrylic base, it also features a limited-edition plaque. This Porsche collector's item is priced at £560, to purchase make a note of Porsche Item no WAP0260010MLKR.



### Heinrich named new Porsche Junior

German racing driver, Laurin Heinrich, is the new Porsche Junior for the 2022 season. The 20-year-old beat 11 rivals to the job in a shootout held at Aragon circuit in Spain. Heinrich secures Porsche sponsorship backing worth 225,000 Euros (£193,000) and support towards the upcoming Supercup season. Heinrich has already won a Supercup race in 2021, he was triumphant in Porsche Sports Cups in 2019 and took rookie category honours in Carrera Cup Deutschland in 2020.





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Printed by Wyndeham Bicester, Granville Way, Bicester, OX26 4QZ

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU [www.marketforce.co.uk](http://www.marketforce.co.uk) Tel: 0203 787 9060

ISSN 1746-8130

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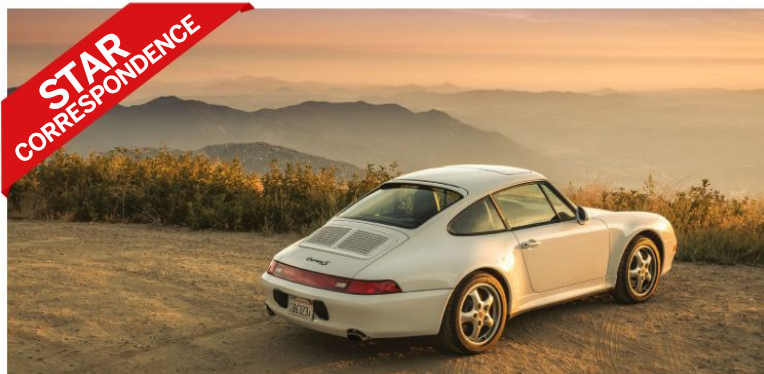
# Views

The very best of your Porsche opinions

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## 993 C2S: 3.5 or 4 stars?

Dear Sir,

As the proud owner of a 1997 993 C2S I noticed that of late you have reduced the star rating in the Data File to three and a half. This wonderful car has traditionally enjoyed four stars and some wonderful reviews in **Total 911**.

Has there been a shift in sentiment or is this a type-setting issue? I assume the latter as these are awesome machines. My car has been with me for five years and for me it's the full five stars!

David Fisher

We have adjusted the ratings on our Data File as the previous ratings were in place from many years ago, and we felt they needed a refresh. We asked our team of writers for their own, individual ratings for each car, before taking the mean result. As well as considering build

numbers and spec, our ratings are based on feedback from test drives and value for money.

While we are applying our specialist expertise, we are well aware the results are ultimately subjective – the Data File ratings system always has and always will garner considerable debate among enthusiasts and owners (I myself am disappointed my own 911 has one of the lowest ratings!), which of course we welcome.

We do however feel the ratings system is a worthy feature of the Data File section in serving as a rough guide for those looking to get a feel of the model lineup through the ages. The most important thing is, if you rate your own 911 at five stars, you have the right 911 for you – and in this regard, yours is the only opinion that should really matter to you.







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**PORSCHE**

## Great US roads

Dear Sir,

I recently purchased issue 209 of **Total 911**. I always enjoy reading the magazine and want to compliment you and your team on your work! This particular issue 'hit home' both figuratively and literally. You see, I live in Knoxville and the article 'Perfect Tennessee' was just fabulous. I feel particularly lucky living just a stone's throw away from all the fabulous drives there are in this part of the country.

I always enjoy reading the Living the Legend section and the interesting stories of Porsche enthusiasts like myself. I've always wondered if there is an application process to contribute to the Living the Legend section? Like some other owners, I own a few air-cooled Porsches which I'm very passionate about. Here's the list: 1972 914, 1973 911T, 1979 930, 1982 911 SC, 1998 993 S. I also own a couple of 'classic' Cayennes: a 2008 Cayenne GTS manual, and a 2009 Cayenne GTS.

The 914 has been in my garage for some time. I've been rebuilding the car to an 'Outlaw', original 2.0-litre engine but otherwise heavily modified. I'm planning on hitting the road in spring of 2022 for some great drives.

Attached is a photo of a recent drive on the Tail of the Dragon in the 993. At the end of the day, it's not the number of cars that counts but rather the passion that we all share. With that in mind I'd like to throw my name in the hat next time you are looking for contributing owners. Keep up the fabulous work.  
**Constantinos K. Constantinou**

**We're pleased the issue and its content has resonated, Cos. We were delighted to highlight some brilliant driver's roads in the US away from the usual suspects, and we thank contributor Anthony Coyne for his knowledge**

## Manual v PDK pt. 3

Dear Sir,

I write in regard to correspondence in your 'Views' section from Nigel Chapman (titled 'Manual errors'), page 14 of issue 211.

In my opinion there is a reason why PDKs sell more and it is nothing to do with being superior (!?) or "new" fashioned (!?): it is because of a disease called "I can't be bothered"... the easier the better... when we get there almost all people will prefer 100 per cent driverless cars that will open the door for them, and hopefully extend to the exterior of the car seats to ease ingress as getting into a car will then be, for most humans, a chore in itself...

And more to the point: most people who buy cars (including sports cars) do know little and understand very little about them and for the majority their driving skills are poor – they buy them for all sorts of reasons except for the reason why they were designed and engineered: the pleasure, engagement and skill that comes with



**and for sharing this information for the benefit of others.**

**Fantastic also to read of your 911 collection. Our Living the Legend section is currently fully subscribed, however I am happy to add you to the waiting list if you'd like to contribute and, once a suitable space becomes available, we can get you in! Living the Legend serves an important part of the magazine as real-world reports offer a completely unfiltered account of Porsche ownership, which has resonated with readers for years now.**

driving and is necessary for driving. I am certain all these people would and do end up with auto 'boxes in their stables.

Slower or faster in this context is irrelevant: nobody buys a GT3 or a GT4 to be the fastest man or woman on earth – 0.5sec quicker because of an auto box? Totally irrelevant unless you are competing and racing for position or fastest lap.

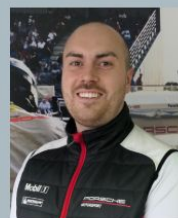
PDK? There is no skill in it and thus there is no driver's merit, and if there is no driver's merit then there is no interest and to me, within this context, they are irrelevant and the main reason why I find Ferraris, McLarens and Lamborghinis no match for what Porsche keeps offering to all of us who can't do without a manual gearbox.

Majority is not equivalent to rightness. If you were going to follow this rationale you would end up producing a magazine about Cayennes... the sin! Keep the emphasis on manuals!

**Miguel Lanca, Tewkesbury**

## Ask the expert

Got a question for our Porsche technician? Email us [editorial@total911.com](mailto:editorial@total911.com)



**Scott Gardner**  
Job title  
Technical Director,  
BahnSport  
Porsche  
experience  
15 years


Dear Sir,

I've a 991.1 C4S (2014MY) and keep getting a PADM light warning flashing up intermittently. Sometimes if I turn the car off and on again, the warning disappears, other times it does not. I don't have any Porsche Warranty as the car is now seven years old, so I'm reticent to take the car to Porsche to investigate. What's the likely prognosis? Is it expensive?  
Steve Baldwin

**991.1s can suffer from PADM failure, which is basically the 'Porsche Active Drivetrain Mount' or main engine mounts. They have a pressure sensor built into the mount and that sensor can open circuit, usually as a result of water ingress. I would suspect this to potentially be the case.**

**Best practice would be to replace your engine mounts as a pair, however they are not a cheap part. You could get the fault code read first and determine which side mount has failed or causing the warning message. The mounts are adjustable and offer stiffness at higher speeds for handling gains and then softer at lower speeds for comfort. Good luck!**





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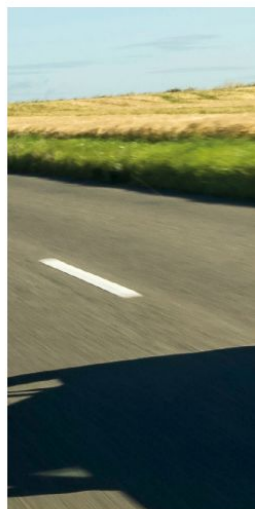
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PORSCHE



# GTS VERSUS Rivals





## The Carrera GTS traditionally slots in between the Carrera S and GT3 models, but just how convincing a package is it in comparison to both?

Written by **Kyle Fortune** Photography by **Ali Cusick & Porsche**



**W**e've all done it, right? In my case, regularly, Porsche's configurator being a frequent, immersive visit. There's so much choice (too much choice?) with no less than 21 different versions of the 911 to pick from, and that's before you fall down the wormhole of options and the resultant specification juggling, where a few option ticks make the next model up more appealing. That's theoretically rather than with real intent – in my case, at least. That choice has increased recently too, the 992 GTS's introduction adding a tempting crust on the top of the Carrera pie, before you take the step to a GT3 or, indeed, the Turbo.

But which one? Rest assured, there are no bad choices in the 911 line-up, just different ones and, depending on what you're after, you're almost certain to find the right fit. It's why the 911 is so enduringly

successful, why it's possible, even, to dedicate a monthly magazine to a sole model line. It also means I get to stand in a car park while Cusick takes some detail shots, pondering which set of keys of the three 911s we've borrowed from Porsche UK's Reading HQ to hang onto next.

Peddling three 911s is not a bad way to spend the day, particularly as each of them immediately fulfil the very first of my own requirements, being a rear-wheel-drive as opposed to a four-wheel-drive model. Not that there's such a thing as a GT3 4, even if, come to think of it, how brilliant it could be as a winter weapon. I like a four-wheel-drive 911, they're incredible, but a rear-wheel-drive one just sits more comfortably with my sensibilities. Likewise, a manual; here all three come with a stick between the seats and three pedals with which to operate it. The two Carreras have a seven-speed manual, the GT3 making do with six. PDK has its place, no question, but today is about proper engagement, leg and arm work rather than finger flipping efficiency. 🚗

I'm familiar with two of the cars here, having driven the Gentic blue Carrera S a while back on some favourite roads for these very pages, and the GT3, too. Not that I'm a stranger to the GTS, but this car is a first, because it's right-hand-drive and in the UK. All my previous GTS experience (992 at least) have been on the launch event in Italy; GTS it is then, because it's the car I'm least familiar with and, as the newest, it's also the impetus for this entire feature.

I'll admit a long-held soft spot for the GTS, ever since my first experience of the badge on a 911 back at the 997 GTS launch in Palm Springs. Indeed, that drive is so indelibly etched in my memory that, each time I've driven the same road in the US, as I was doing only a few weeks ago, I refer to it. A quick recap, if it's needed, for the GTS. Initially conceived as a bit of a titivating run-out special from Porsche back on that 997, it cherry picked elements from the Carrera and GT department models, without fully putting its wheels in the GT camp. A convincing halfway house,

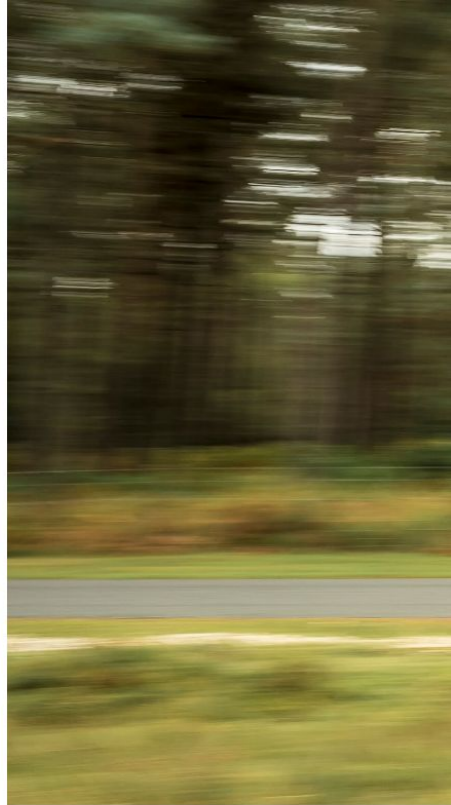
you only need to see how quickly Porsche weaved it into the Carrera line to understand that they'd hit on a winning formula; likewise, clamour for used GTSS, and the corresponding strong residuals, underlines its popularity among buyers. Thing is, there's a bit of me

that thinks as it's become a regular production model, expected in the line-up, its early specialness has been diluted. Indeed, you'll often find me arguing that Porsche should really re-badge the GTS as an SE (Special Equipment) model and give the GTS badge to the GT3 Touring, especially if they could put some seats in the back. I digress, again, something of a problem when musing 911s you'll

agree, but what's undeniable is how fine the GTS looks here.

Maybe it's a generational thing, but Carmine red with the GTS's grey and black contrasts just works. Never mind the bedroom posters of our youth manifesting in our car preferences as we age but, as a kid who grew up in the eighties where everything

**“The GTS rides with more authority than the Carrera S, though there’s a corresponding trade-off in relation to ride quality”**











“At no point driving the Carrera S do I feel the need for more”







was a mix of greys and reds, from bedspreads to wallpaper, subconsciously that combination seems to tick all the right boxes. You can have it in other colours, of course, and you would save a chunk of money if you did so, but here and now the GTS in Carmine is making a very convincing case for itself before I've even taken it for a drive. Visually, it fulfils its position here perfectly too, being a more confident hue than the classy understatement of the Carrera S's Gentian blue, but not so overt as the Shark blue on the GT3.

That's true inside, the GTS revisions elevating it over the Carrera S, even if it required some box ticking – a £2,811 GTS Interior Package, among others – to achieve that. The GTS doesn't only add its own line of equipment inside and out, but allows some not allowed elsewhere: Sports Buckets are offered on it, which is something you cannot do with the S. On the GTS launch, jumping from a car equipped with optional Adaptive Sports Seats Plus (as this one is) into one with buckets cemented my assertion that a bucket seat can be as transformational as suspension and mass reductions in how a car feels. It'd take it closer to that GT3, too, not least because you'd lose the rear seats in optioning them, so they're not without some clear compromises.

Power's up, as ever; the GTS's 3.0-litre flat six develops a 480hp maximum at 6,500rpm and 570Nm of torque from 2,300rpm-5,000rpm, that's 30hp more than the Carrera S's 450hp. It's not the horsepower gains that feel significant, instead it's the 40Nm bump in torque that's more transformational to the drive, giving the GTS greater flexibility at lower revs, which is to the benefit of its driveability, however you're using it. Not that you're ever likely to get out of a Carrera S and bemoan a lack of pace, but the GTS feels quicker everywhere, and it sounds better too, thanks to Porsche's removal of some sound deadening to go with exhaust tuning to up the tempo inside.

Even so, the Carrera S, and indeed its regular Carrera relation, are so damned competent, fast and engaging it's a valid argument that there's really no need for anything else. The happy memories of this car return the second I get back in it, Porsche's competence and engineering in its core model allowing it the possibility to spin off such compelling derivatives, but, crucially, without devaluing the car they're created from.

This car, naturally, isn't a pared options model, its £94,350 standard price having been elevated to £108,523 with some box ticking. Not all of



it is necessary, though the Gentian blue with the black and Iceland green two-tone leather would stay because, simply, it looks sensational. As would the PASM Sports suspension with its 10mm drop, and while Porsche's own Sports Exhaust System is undoubtedly appealing, there's part of me that would be keen to keep it stock, and explore an aftermarket system in time with the goal of liberating more sound than even the optional Sports system can muster. The rest of it you can keep, too, with a view of dropping the sticker price a whisker under £100,000, making the jump to the GTS a bigger one, and one that's more difficult to justify.

At no point driving the Carrera S do I feel the need for more. The PASM Sport chassis helps tie it down, the Carrera S doing without the GTS's helper springs in the rear, the GTS's suspension and brakes borrowing elements from the Turbo and mixing it with Carrera. As a result the GTS rides with more authority than the supple Carrera S, though there's

**“On the road at least, it's a drive that's too often mired in frustration”**

a corresponding trade-off in relation to ride quality, with the GTS less adept at shrugging off rougher ridges and ripples in the road surface. The Carrera's gearshift is crisp and light, not quite as quick across the gate compared to the GTS, and it's amazing how transformational the GTS shifter's lemniscate drop in height is for the seven-speeder. Nuances, but

collectively they conspire to bring either gains or compromises to the GTS, the greater focus it offers robbing it of some of its civility, which is, after all, unsurprising, given where it sits in the model line.

It's the GT3's turn now, deliberately last, because

the GT3 has the capacity to wield such authority over everything else that to drive the Carreras afterwards would do them a genuine disservice. This GT3 isn't a typically evolutionary model from the GT3 department: it feels like it's leapt forward, as if the team have thrown absolutely everything at it as the world races towards a future where such cars won't just be legislated off the road, but ➔







**LEFT** The GT3's chassis is different to both the GTS and Carrera S, with a double-wishbone front axle

**BELOW** 918-spec buckets and cage makes the 992 GT3 a fully-focused track weapon, which brings compromises for road use





positively frowned upon. Dare I say it, incredible as it is, particularly in relation to the new double wishbone front axle to its turn-in performance, so too does it feel compromised in a way that I've never experienced on the road in a GT3 before.

That alert front end is so busy, the suspension doing a fine job of finding control and contact on the awful UK roads, but the hyperactivity of the steering makes it a car that is *always* on, which here, as a manual, adds compromises. The GT3 is (whisper it) a far more exploitable, manageable, and enjoyable car with PDK – quite markedly so. That's particularly true on poor roads, where the idea of taking a hand off the wheel to shift if you're wringing out the engine to its intoxicating 9,000rpm redline, makes for a sometimes unsettling dartiness at the nose. The shift itself is incredible, the mechanical action light and quick, it positive when slipping into its gate, the

clutch weighting and feel similarly feelsome – but the manual would be enjoyed better with some tuning of the front axle to enable shifts without upsetting the trajectory. Something for the inevitable 992.2 updates, but change nothing else, please.

Particularly the engine, because what an incredible engine and what a sound: the GT3's 510hp screamer is one of the all-time greats. It needs working in a way that the Carreras don't, both to its credit and deficit, as it's a car that needs driving properly, and the opportunities to do so are so few that, on the road at least, it's a drive that's too often mired in frustration. Criticising the GT3 for its focus is unfair though; it's an incredible car in isolation, a bona fide high watermark driver's car, but here today, it's not the car I find myself gravitating to.

That's reserved for the Carrera S, which is such an incredibly rounded proposition it's very, very

difficult to ignore. As a fast, capable daily it's hugely compelling, even here with the manual, which is so light and easy to use that it's never a chore. The engine's plentiful turbocharged torque means you can skip around the 'box, block shifting up if you're so inclined. The GTS makes a very strong case for itself too, but I'd want the lightweight option, with the bucket seats to differentiate it more from the S, making it more special as a genuine fast road car with greater focus than a unique, spec-loaded and enabling range-filler.

Choice isn't a bad thing, then, even if it does create a great deal of conflict. And it's only likely to be greater if, as is rumoured, the Carrera range will gain a T and several more niche-filling specials to expand the model mix even further still. That's going to be an interesting carpark to re-visit, if and when the time comes... **911**





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A photograph of a green Porsche 400R driving on a winding asphalt road. The car is in the lower-left foreground, angled towards the viewer. The road curves into the distance, flanked by dry, hilly terrain. The background shows a range of mountains under a clear sky. The overall tone is cinematic and emphasizes the car's design and the driving experience.

# Ready to Roll

Four years have passed since we drove  
Gunther Werks' 400R prototype, and the  
production car is well worth the wait

Written by **Kyle Fortune** Photography by **Ted7**

“You need to drive the Coupe again.” That was Peter Nam’s response when I got in touch to request a drive in the forthcoming Gunther Werks Speedster. Who am I to argue? After all, it’s been four years since **Total 911** was first to sample the 400R, and a lot has happened since. That car was a prototype, it affectionately referred to as ‘the red car’, and I can remember driving it like I did so yesterday. Nam’s promising it’s changed, and for the better. It’s not just the car that’s changed either, as Gunther Werks HQ has, too. They’re still located in Huntington Beach, California, but the production of the cars necessitated a move to new premises, both bigger and better suited to the work it does. Which, to recap, is simply to make the world’s best 993. There’s your conclusion if you don’t want to read any more. If you’re still with us, then here’s how they do it, and crucially, how it drives.

In those four years Gunther Werks has sold every one of the 25 cars it promised to build. That alone underlines the quality of its work, because with a price starting comfortably north of half a million dollars, before you add any options or, indeed, the donor 993 Coupe to begin with, it’s not every air-cooled enthusiast who can afford it. The Gunther Werks appeals to an exacting, wealthy clientele then, the sort of buyers who are used to the very best and are not prepared to accept any compromises.

Not that Nam is, either. From the inception he’s been driven to produce the very best 993 possible, applying the latest thinking to the last air-cooled platform, using modern techniques to bring the 993 to the now. In no way are they knocking build convention here, but Gunther Werks’ original idea wasn’t, like so many others, to retrospectively look at Porsche’s greatest hits. Instead, Gunther Werks approaches its build of the 993 as it if were in perpetuation, bending time to rob history of the arrival of water cooling and the 996 and subsequent 997, 991 and 992 models. It’s not a case of reimagining or remastering, then, but applying modern thinking and techniques to it as if the 993 were a contemporary 911. Think of the Coupe – 400R name having been dropped – as a continuation then, and specifically, says Nam, as if Porsche itself applied the same approach that defines the current GT3 to the 993, today.

There have been moments while watching the Gunther Werks evolution from the other side of the Atlantic that had me thinking they might be deviating away from that original goal. Since my first drive all those years back, the team has clearly spent a great deal of attention on the visual elements. The resultant beautification of the interior and exterior raised my concerns that in focusing on these they might have lost direction in relation to the original, purist philosophy. It hasn’t. The Gunther Werks

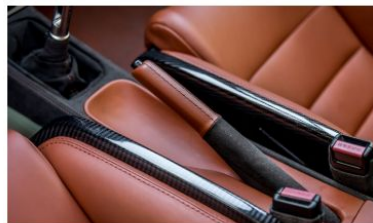
**BELOW** Milled alloy shifter swaps cogs of original G50 ‘box with bespoke ratios







BELOW Bespoke headlamps bring modern tech to a 993 appearance



Coupe has undeniably evolved into something that exhibits a jewel-like quality to its finish and detailing, but it remains resolute to its original driver-focused goal. It's a happy coincidence that the materials used and the finishes applied in the pursuit of that goal are both visually appealing and hugely tactile, the result a very clear representation of the obsessive attention to every single detail that goes into each of the 25 cars Gunther Werks has sold.

Outwardly the Coupe retains much the same silhouette – save the loss of the wing and in its place a neater ducktail – as the 400R prototype. It's widened six inches (152mm), the idea behind that being to deliver a square track, for the greatest stability. As with the interior, it's the detailing that has changed over the 400R. Gunther Werks evolving its own LED headlight design, while the rear taillights, also LED, add a pleasing, unique signature to the rear. You don't have to have those rear lights, they're optional. Indeed, each Gunther Werks Coupe is individually built to the owner's desires, the company having a suite in their HQ where customers go through the build process. Visit that suite and there are near endless possibilities for carbon, leather or metal trim and seat, steering wheel, wheel, brake and suspension choices. There's

the option of exposed carbon on the entirely carbon-fibre bodywork, though most are painted, the colour of the painted cars each finished in a bespoke formula that is unique to each commission.

There's been enough demand that Gunther Werks could have built significantly more than the original 25 it promised but, admirably, it's stuck to that count, leaving those wanting one having to buy off an

**“The Gunther Werks Coupe has undeniably evolved into something that exhibits a jewel-like quality to its finish and detailing, but it remains resolute to its original driver-focused goal”**

existing owner. It's testament to the quality of the cars that the few that have been re-sold have done so significantly over their original purchase price. Naturally, Gunther Werks knows every car and owner, and new owners can, and typically do, return the cars to add or update options. Gunther Werks seemingly in a perpetual state of development and evolution, much like Porsche itself.

To do that Gunther Werks has worked with a team of experts since the original idea was conceived. The list of people working in partnership with Gunther Werks will

be known to the Porsche cognoscenti, with Cary Eisenlohr being the driving force behind the chassis development, and Jeff Gamroth, from Rothsport Racing, building the 4.0-litre engine. Gamroth's visiting the Huntington Beach HQ when I arrive to drive the 'Greenwich' Coupe, Gunther's in-house



ABOVE The Coupe's entire body is made from carbon fibre

**Model** Gunther Werks Coupe

**Year** 2021

**Engine**

**Capacity** 4.0 litres

**Compression ratio** 11.0:1

**Maximum power** 430hp at 7,800rpm

**Maximum torque** 447Nm at 6,500rpm

**Modifications** Air-cooled 4.0L RS crank, custom Mahle pistons, custom forged conrods, twin plug, coil ignition, individual throttle bodies with high flow injectors, Motec ECU running dual switchable maps, double oil coolers, GT3 style carbon plenum, lightweight Li-ion battery

**Transmission** 6-speed G50 manual gearbox with bespoke ratios, a single mass flywheel, uprated single plate clutch and a carbon clutch differential with 40% locking

**Suspension**

**Front** Bespoke specification, JRZ electronically controlled remote reservoir damped suspension, with hydraulic nose lift, lightweight RS spec uprights, ball-jointed and solid mounted throughout with adjustable tie rods and a front strut brace

**Rear** Bespoke specification, JRZ electronically controlled remote reservoir damped suspension, ball-jointed and solid mounted throughout with adjustable tie rods

**Wheels & tyres**

**Front** 11x18-inch 295/30/18

**Rear** 13x18-inch 335/30/18

**Dimensions**

**Length** Not stated

**Width** 1,911mm

**Weight** 1,202kg (unladen)

**Performance**

**0-62mph** Not stated

**Top speed** Not stated



ABOVE 430hp flat six will rev out to 8,000rpm redline



demo and development car. It's a pleasure to finally meet the famed engine builder in person, having only previously ever discussed the flat six in the back of the Coupe over the phone. "Only the casing is original," says Gamroth, adding: "the rest is built to my specification." It's quite a specification, too: the capacity is increased to 4.0 litres, featuring custom billet barrels and a billet crank, unique Mahle pistons, forged conrods, plug coil ignition, a GT3 plenum and tail box, equal length stainless steel headers and throttle bodies, and injection system built to Gamroth's own design.

From that previous experience I know the engine's very special, not just to drive, but visually. Gamroth admitting that since I last drove it in the back of the 400R there have been some revisions to allow for greater low-rev tractability. That was something I noted on my original drive: not necessarily a complaint, but compared to the ferocious urgency above 3,800rpm it did feel slightly lacking at lower revs. Gamroth's solution was to trade a little low-end power for greater torque, and the effect





is worthwhile. There's slightly differing gearing now, too. Gunther Werks simply quotes 400-hp at 7800rpm, but the number is around 430hp with 447Nm of torque around 6,500rpm. That peak output is when the engine is on the more focused of its two map settings on offer from the Motec system, which unsurprisingly also adds some timbre to the exhaust's note in partnership with its slightly greater power and differing response.

It's a spectacular engine producing a huge specific output for a naturally aspirated air-cooled flat six, Gamroth's most impressive feat making what essentially equates to a race engine in spec work so convincingly on the road. He admits he could produce more horsepower, but it'd be to the detriment of driveability, taking the engine down a path a bit too singular, even here with such a driver-oriented car.

Firing it via the neat aluminium key, it settles into a smooth, regular idle straight away. A quick touch of the accelerator has memories of that 400R drive rushing back, as the engine responds immediately,

enthusiasm for revs being so keen, thanks to so little inertia and the fitment of a lightweight single mass flywheel. Consideration of that is required when manoeuvring the Coupe out of Gunther Werks' workshops; it needs a few more revs than you'd normally require, but the clutch is light and easily modulated, so it's simple enough to adapt to that. The steering lock needs a little bit more management. There's not much of it, but that's hardly surprising given the size of the wheels under those widened front arches. Still 18 inches in diameter, they have grown significantly in width, from the 400R's 9 inches to 11 inches, that seeing a 295/30/18 front tyre fitted, which is huge. The rears are 13 inches wide (an inch wider than previously) wearing 335/30/18 Pirelli P-Zero Corsas.

The chassis, as well as the detailing inside and out, is where the Gunther Werks Coupe has evolved significantly from my first drive of the 400R. The original KW coilovers setup is still offered, but customers typically take up the option of Gunther Werks specific JRZ electronically controlled dampers.

The JRZ setup features fully adjustable remote reservoir dampers that monitor, at a rate of up to 1,000 times a second, what each corner is doing, adjusting accordingly to suit. They're bi-directional in their response, chassis guru Eisenlohr working directly with JRZ on the specification. Thanks to the electronic valving there's the possibility of mode choices, which you can individualise, these accessed via an app on a smartphone. There are three choices of Default, Comfort and Sport. Regardless of the setting, the system will always aim to provide the finest ride quality, allowing the Coupe to produce that difficult balance of taut responsiveness and agility, but also with a quality to the ride that's not compromised by its focus.

It works, too, the suspension riding with a civility that's remarkable given the singularity of its specification, the mechanical grip on offer being scarcely believable. Gunther Werks demonstrated that ably in the hands of racer Randy Pobst, in late 2020, where the Greenwich car here, albeit with a sizeable rear wing, set a lap time around Laguna 🏁

“It feels lightweight in its agility and responsiveness, but impressively, there's no paucity penalty, it lacking nothing; instead it has a depth of quality that feels worth all, and more, of what Gunther Werks asks for it”





Seca that you'd need a contemporary supercar to match. Pobst likened the Gunther Werks car around 'Seca to the Alex Job Racing 993 RSR he raced in the IMSA GT championship, such was its pace and poise, which is high praise indeed.

That underlines any concerns I might have had about Gunther Werks losing focus. They are completely unfounded – if anything it's gained it but, cleverly, without adding compromises. On the same roads I drove the 400R on, the Greenwich car feels so alert and dialled in, the front end turning in with a speed and precision that I've not experienced in any 911 save for the later GT3s and their RS spin-offs. The steering weighting is spot on, that huge tyre informing, sometimes on rougher surfaces to the point of disruption, but it's a very occasional intrusion rather than constant frustration and worth it for the otherwise rich seam of information from the front axle. There's so much adjustability in the suspension, too, it's something that you could conceivably dial out. Indeed, and contrary to what you might think, it's the Sport setting, opposed to the looser Comfort, that ties down the front end and civilises it, particularly on the horrible combed concrete sections of highway en-route to the canyons.

The steering wheel guiding those huge front wheels is Gunther Werks' own optional hollow carbon fibre item, its nicely contoured rim, here covered in Alcantara. It feels light to the touch, and while its girth looks relatively thick, it doesn't feel cumbersome in your hands – indeed, it's quite the opposite. The same lightness of touch is evident in the seat. I love a deep, figure-hugging bucket seat, and the Coupe is fitted with Gunther Werks' own carbon fibre pew, its targeted padding leaving visible carbon for a beautiful look, that style not at the

expense of real comfort and an embracing hold. I could live without the optional leather floor mats, but the rest of the interior, be it the satin visible carbon weave on the dash top, or the warmth of the milled aluminium gearknob, the door pulls, everything really, underlines Gunther Werks' artful engineering in the pursuit of its goal.

That's weight loss, and it's worked because the car weighs in at around 2,650lbs, or just over 1,200kg, which is extraordinary. It feels lightweight in its agility and responsiveness but impressively, there's no paucity penalty, it lacking nothing; instead it has a depth of quality that feels worth all, and more, of what Gunther Werks asks for it. For all the interior's quality, it's quickly forgotten when you get to more demanding roads, where the Coupe just revels in being wrung out. Nam not just saying that I should drive the Coupe again, but to drive it hard. Nam's demand as I leave, "no short shifting," is happily accepted as the 4.0-litre repeatedly runs up close to its 8,000rpm redline. Visceral in a way that's uncommon today, that engine is a glorious thing, so quick and willing in its response, it delighting with every ask from the pedal, its output not having to work particularly hard to shift the Coupe's low mass. Fast, wickedly so if you want it to be, but still absorbing and interesting when driven with a mind on speed limits.

The brakes offer reassuring, neck-straining stopping power, the pedal being the perfect platform off which to roll your foot to blip for a rev-matched downshift. The gearshift, the 993's six-speeder with bespoke ratios, is quick enough across its gate; it's accurate, too, but if I'm being critical I'd want a slightly shorter throw to allow an even swifter shift. It's a minor point, and one that wouldn't be difficult

at all to change. While I'm picking, I don't recall being dissatisfied with either the ride or control of the original KW setup of the 400R, indeed, I appreciated its simplicity. If the JRZ system could be better incorporated, without the need to carry a phone with an app on it to adjust settings, it'd be a more appealing feature, for me.

Over 100 miles of driving the Coupe as intended on some magnificent roads only underlines my assertion first encountered with the 400R: that being for true driving thrills, there's no better period than the 1990s. What Gunther Werks achieves here is taking the very best of that time and finessing it, applying contemporary knowledge and engineering, without robbing the resultant car of that core appeal, elevating it instead to something that really is quite extraordinary. With all 25 gone, what's next promises to be very interesting, indeed. **911**

## Total 911 verdict

### LIKES

- Incredibly responsive engine
- Detailed feel through the steering wheel and chassis
- Artful engineering in the pursuit of its lightweight, driver-focused goal

### DISLIKES

- App-based electronically controlled suspension works, but it feels like an unnecessary complication over the original KW setup
- Turning circle means tight space manoeuvring is tricky





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THE BIG  
INTERVIEW

# Bernd Kahnau

He worked on five generations of Porsches, but Bernd Kahnau is best known as the project leader on the 993. He shares some of his experiences over three decades with the company

Written by **Glen Smale** Photography courtesy **Porsche Archive**

Bernd Kahnau followed in the footsteps of his father, Willi Kahnau, who had worked at Porsche since 1951 on the production of the 356. However, the young Kahnau did not gravitate naturally towards working at Porsche; he had wanted to work at BMW after finishing his engineering studies, but he was persuaded by a colleague of his father's to try Porsche. In 1979 his father died of a heart attack, and that same year, Bernd started work at the Porsche factory in Zuffenhausen.

His first experience at the company saw him involved in the production planning of the 928, followed by the 924 GTS and then the G-model 911 Speedster. Because of his interest in motorsport, the head of production at Zuffenhausen said, "Mr. Kahnau is interested in racing, he would be the right person to do the 924 GTS." And so it happened that Bernd Kahnau was given the job, together with Klaus Bischof, to build this limited-edition sports car.

But, Bernd Kahnau's time at Porsche is perhaps better known for his work on the 993, 996, 997 and 991. It is the first of these models that played a crucial role in saving the Porsche company at a time when it was in a dire financial position. So much hinged on

the success of the 993, as Bernd Kahnau outlines in this interview...

**The 993 was fractionally heavier than the outgoing 964 equivalent, why was that?**

The 993 and the 964 were almost the same weight, but we are more 'honest' with the 993! We had had a problem since the 911T model where the real weight of the cars was not given. Then, as from the 964, and even more so with the 993, we started to specify the real weight of the cars, so it was no longer a political weight!

**The 993 was a little bit shorter, wider and lower than the 964. Can you talk us through how these changes were achieved?**

I think the greatest problem with the 964 was the styling. Technically the 964 was a great improvement for the 911 model with power steering, ABS, airbags and four-wheel drive, but it looked like the old car. The body was all-new, but the back end was very heavy; it was not very good. With the 993, we had two aspects to work on: design development and styling. We wanted to make a new 911 – still





recognisable as a 911, but with greater harmony in the front and rear styling. The body was wider and it had a flatter nose, but I think they did a very good job with this. Not only was it the best air-cooled 911, I think it was one of the best 911s in terms of styling harmony.

**Did you always plan to have the flat six boxer engine in the 993, or did you explore other options?**

We were developing the 993 in parallel with the 989, the four-door concept, and we planned to put the V8 engine from the Audi A8 into that which used the 964 as the base. Therefore we started thinking about other ideas for the 993 and we tested the V8 in that car, still located in the rear. The weight difference from the front to back was a big problem, we had 40 per cent in front and 60 per cent in the rear. The two engines (air-cooled six-cylinder boxer and the V8) were the same weight but with the water and the radiator it worked out to be 20kg more. We used the air-cooled engine in the 993 in the end because of fuel economy and we also had no money to develop the [V8] engine further. For this reason we also stopped the 989 project. So we gave the air-cooled engine more torque and a new exhaust system, because each new 911 needs to have more power.

**So you stuck with the air-cooled engine but you developed it further. What other mechanical improvements did you make with the 993?**

We made a completely new crank drive, and remember we had no vibration damper, that was very heavy. We also changed to hydraulically operated valves which meant we could reduce servicing costs by 50 per cent. The engine of the 993 was more powerful, this is normal development when you make a new engine, and we also had 10 per cent more torque. And with the 993 we had a higher top speed but the five-speed gearbox [of the 964] was not enough, so the 993 has a six-speed gearbox. For this we made the first gear lower which was good for the clutch because we had more torque, and this also made it more sporty. Even with the extra gear, the gearbox was the same weight, because we made the 'box thinner. There were also other detail improvements such as reduced shifting forces in first and second gears.

**The 993 marked the first change in the basic design of the 911 since its introduction. Talk us through some of the changes.**

I showed the 993 to E. A. 'Butzi' Porsche, and he sat in the car for five or ten minutes. Then I asked him ➡







**ABOVE** The new 1993 year model 911 Carrera 3.6 Coupé – sitting on the bonnet front left is the 993 project leader, Bernd Kahnau, and behind with his hand on the bonnet is designer Tony Halter



**BELOW** Kahnau at the press conference for the introduction of the 911 Targa 3.6 (1996) in 2001



if what we had done with his 911 was good or not and he said, "Papa [Ferry Porsche], if he sat inside he wouldn't see the fenders." And that was a problem, but it was a new design and I think F. A. Porsche was happy with what we had done with his 911. At that time there was new headlamp technology available, so we made the headlamp angle as great as it was technically possible to do, but I think it was a little bit too flat. We did a lot of things to improve the drag coefficient, and although the car was wider, we had better airflow which entered through the centre of the car at the front, and exited ahead of the front wheels. We also had a bigger spoiler at the rear, and so we had no problems with top speed.

**The Targa model was introduced in 1996 with its revolutionary sliding roof. Can you explain some of the technical challenges you overcame to achieve this?**

In the beginning with the first Targa (1967) we had no Cabriolet, but in recent years the Cabriolet had become so good with its electric operation and a glass rear window. So we said we should reinterpret this 993 Targa, making it revolutionary. The development of the roof was really interesting because we had problems with the available headroom which was very limited, so it was a technical revolution to get it right. We also experienced a drumming sound where the wind would cause a vortex with the roof open, and we didn't know how to solve this. We drove this car every evening and we tried all kinds of new

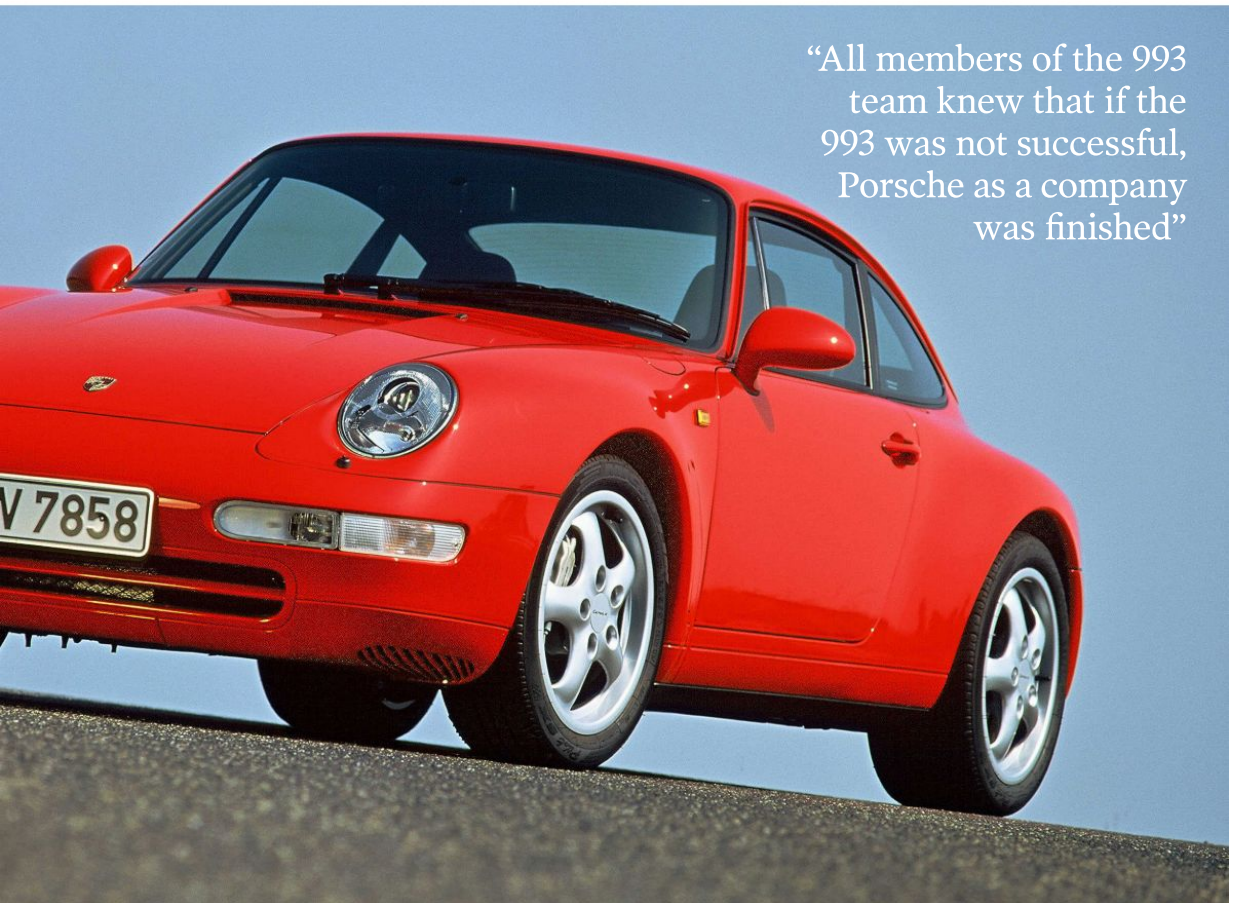
solutions to make it better, but it was a project manager from Smart who advised me. It is not very simple to produce this roof, but we placed a little spoiler at the front edge as there was insufficient space for a spoiler inside the car. The roof comes complete from the company Webasto, and we just had to fit it to the body of the 993 Cabriolet on the production line. With this innovative sliding glass roof, the model sits comfortably between the Cabriolet and the Coupe, and it is possible to drive in higher [or lower] temperatures in the Targa than it is with the Cabriolet. I think this is the father of all great roofs!

**Can you recall any problematic incidents while you were testing the 993?**

Testing the cars was not very simple for us because we had no money; and we couldn't use a 964 as we needed all the money from every 964 sale. We had to make special parts for the car and I tested these parts myself in the garage at night before driving the car. We did night testing in the United States and one time we were testing the headlamps because condensation tended to build up in them. So I drove the car without camouflage and I came around a corner and a photographer was there on the street side waiting for the GM prototypes. So while he was standing there, he took a photo of my car without its camouflage, and it was published in the motoring magazine, *Auto Zeitung*. I went back to my boss and told him about this problem, but the photo was so dark that nobody could see it! ☹







“All members of the 993 team knew that if the 993 was not successful, Porsche as a company was finished”

**There was a lot of pressure on the 993 development team to get this car right. Can you expand on this situation?**

All members of the 993 team knew that if the 993 was not successful, Porsche as a company was finished. It was a very hard time for this team, but I think that the 993 team had one great advantage because all members of this group were now free of responsibility for the 989. But this was also at a time when magazines such as *Auto Motor und Sport* didn't write anything about Porsche, and that was very hard for us.

Some months before the press launch, Horst Marchart asked Hans-Joachim Stuck and Paul Frère to drive the car. Mr Marchart asked us if it was perhaps not too comfortable for a 911, but [despite this] we had even better times at the Nürburgring with this car! With both the 993 and the 996, we had begun to make these models more comfortable, and this enabled us to sell more cars worldwide. But we knew at the press presentation that the 993 was a very good car.

**With the launch of the 996, Porsche took a huge and important step into the future. Such a momentous change must have resulted in anxious times in Zuffenhausen...**

We were very anxious with the 996, with its water cooling, but we thought that if the engine produced a good sound, and it had good power and fuel economy, that the people would have no problem with the water-cooled engine. We would typically introduce each new 911 with a higher power output, but we launched the 996 with only a little more power than the 993, because we had no chance to greatly increase it. So we made a new exhaust system for the 996 that made less noise and it had a catalytic converter that was good for 100,000 miles, which was also better for the environment too. It made a better sound than



the old car. I think the engine department did a very good job there.

The weight was a great problem because it was water-cooled. With the body of the 964 we had no chance [to introduce water cooling], and while the 993 was 70 per cent new, we had no money to do it at that time, but the 996 was a completely new car. Five years later I drove with F. A. Porsche in the 996 and he said, "This is the future of the 911, and the future of the 911 is the future of Porsche."

**Can you tell us a bit more about your involvement with the 924 GTS?**

I was always involved with road cars, and the 924 GTS was built in the production department. [Roland] Kussmaul and [Jürgen] Barth made the race cars, and Klaus Bischof and I made the 924 GTS. At

that time Mr. Fuhrmann said there was no future for the 911, which left the 911 group with spare time, so they made the best 924. The technical work was done by the 911 group in Weissach because we weren't involved in any racing at that time. The unpainted body would come from Neckarsulm and we would assemble the complete car in a special department in Zuffenhausen. [Of the 50 cars made] there was one white car which was crashed during testing and homologation, and one of the red cars was also involved in an accident. So when you see that famous photograph of the 50 red 924 GTS cars, the two furthest cars in the background are standard red 924s. But we did build 50 GTS cars (laughs).

The next big growth phase came when Peter Schutz arrived, he introduced the convertible 911. That was the beginning of the 911's future. **911**






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PORSCHE  
INDEX

# 930 TURBO

The iconic yet practical supercar that would define Porsche presents a rewarding ownership opportunity for the enthusiast – if you buy the right example. Total 911 shows you what to look for...

Written by **Kieron Fennelly**  
Photography by **Damian Blades**





## HISTORY AND TECH

In a magazine interview in late 1987, Tony Lapine suggested that it was really Ernst Fuhrmann, not Butzi, who 'made' the 911. The ruling Porsche and Piëch families were appalled at this heresy and Lapine, who subsequently suffered a heart attack, would never return to the company. But in a sense, he was right. In 1974 the 911 was a brilliant, unsurpassed sports car, the default choice of the keen driver, but its wider public reputation would come about thanks to the Turbo, the car with bodywork as outrageous as its acceleration, the sportscar that the stars wanted to be seen in: the Porsche Turbo broke all the rules.

A turbocharged Porsche was not a new idea: Piëch had had Valentin Schäffer carry out some experiments in 1969, but it was Fuhrmann who

seized the opportunity. Experience in the Can-Am had shown that Mezger's boxer engines (the 917 was effectively two flat sixes) tolerated the additional stress of boosting with little reinforcement. Post 917, Porsche needed a new competition model to get back into racing and turbocharging the existing 911 would also give the company a flagship model while the 928, which Fuhrmann saw as the future for Porsche, was readied in the wings. The 930 was a brilliant yet simple idea that Porsche executed with aplomb.

Initially built to homologate the 911 for Group 3 racing, the 930 was equipped with competition suspension parts and 8-inch rear rims which required substantially wider wings to accommodate them, as well as the 'whale tail' already used by the RSR. It also incorporated the 3-litre flat six developed for the RSR, but detuned with a 6.5:1 compression ratio, and breathing through Bosch K Jetronic

injection and of course, the single KKK turbocharger. It was not so much the 150mph top speed as the way it got there which made its reputation. The sudden thrust of the turbocharger above 3,000rpm was intoxicating and unique: the appeal to those who could afford it was obvious and in the popular mind, 'Porsche Turbo' became synonymous with high living and unfettered speed.

In its 13-year career the 930 changed little: its tyre sizes increased, the only visual change, although the observant might also have spotted the bigger, 917-derived brake calipers on post-1977 cars. MY1978 also brought the most significant change: as well as the bigger brakes, enlarging bore and stroke, making 3,299cc, and feeding the turbo through an intercooler increased both torque and power by 20 per cent and endowed the 911 Turbo with performance that no 1980s competitor would approach. ➔



## WHAT'S IT LIKE TO DRIVE?

The Porsche Turbo's 'widow-maker' reputation came of course from the way the power arrived abruptly, catching the unwary, sometimes with disastrous consequences. Although Porsche had attempted to configure the cylinder head and ignition settings to offset turbo lag, it was only partly successful and René Metge, future Dakar winner for Porsche, recalled how unmanageable the early 930 could be on the wet cobblestones of Paris's broad avenues. Exploiting to the full the 930's propensity to spin its rear tyres, Nick Faure famously wore its Pirellis down to the cords in an afternoon at Castle Combe power sliding AFN's 3-litre demonstrator for the benefit of journalists. In reality, driving a 930 today is not as daunting a prospect as some of the more lurid stories might suggest. Writing in 2007, Jeff Daniels put matters in perspective when he said that driven gently, the

930 was good natured with none of the plug-oiling or temperament which afflicted some of its highly strung competitors. Even when pressing on, the 930 remained calm, quietly understeering and easy to handle up to 80 per cent of its limit, but that extracting the last 20 per cent required both skill and hard work with the steering wheel. Peter Morgan, who has written extensively about air-cooled 911s, advises that to enjoy driving the 930, the driver needs to keep the revs between 3-5,000rpm.

Clearly the 930 is the antithesis of the modern car where 90 per cent of the thinking is done for the driver: the original Turbo really does require those vanishing skills, feel and technical sympathy, but getting it right and driving within the capacity of the car is immensely satisfying.

**RIGHT** Revised rear spoiler design in 1978 housed the intercooler as part of the 930's overhaul from 3.0 to 3.3 litres



## THE VALUES STORY

By 1980 the SC retailed at £16,700 whilst the Turbo cost £27,950, yet demand never wavered and when the end of production came in 1989, Turbo prices shot up and cars briefly changed hands for up to £100,000. Although they would fall back, the 930 would experience none of the severe depreciation which saw tired SCs selling for well below £10,000 in the early 2000s. After the financial crash of 2009-10, air-cooled prices rose quickly, none more so than the 930's which reached its zenith in 2015-16. Since then, a substantial range of pricing has developed: 930s are commonly advertised between £60-80,000, but other examples are offered at £150,000+. The original 3-litre cars are rare enough to be pure collectors' fare, and the SE and LE versions of 1987-9 often went straight into collections or led pampered lives, and their sometimes £200,000+ asking prices reflect this. ➔







## MARKET RIVALS

**Most 930s on offer fall in between £60-140,000, opening a choice of both air-cooled and modern 911 possibilities.**

### GT3 997

The last of the analogue 911s, at around £100,000 the 997 GT3 is a serious driver's car, immensely fast, obviously vastly more modern than a 930, but still demanding and less relaxed than the 930 at gentler velocities.



### 993 Turbo

Generally priced from £130,000, the twin-turbo 993 both tames the worst of turbo lag and adds the security of AWD, but feels more GT than sports car. Much rarer than a 930, less prone to corrosion and perhaps a better long-term investment.



### 2.2E

The best S versions of the 2.2 and 2.4 tend to be priced around £150,000, but the E with 35 fewer horses is easier-going and costs about 30 per cent less. For similar money an air-conditioned 930 is probably a better bet for longer journeys, though potentially more expensive to own.



### 964 C4 '30 Jahre'

The naturally aspirated widebody air-cooled 911s all tend to be collectors' items: the handsome 30 Jahre 964 is a case in point at about £100,000, and the same money might also buy a low-mileage 3.2 Supersport Cabriolet if an open 911 is preferred.



## BUYING ONE

**T**oday the 930 is a 35 to 45-year-old car and it has all the corrosion pitfalls of the G series – the ‘kidney bowls’ at the base of the B pillars, wings rusting through, alloy bumpers which corrode from the inside to name but a few of the usual problems. The flat six too will need to have been rebuilt at some point, a £5,000 outlay, without taking into account any work required on the turbocharger. The exhaust is complex and original Porsche replacement systems cost £4,000; heat exchangers at £1,500, are similarly expensive. It is also worth noting that the synchromesh on the four-speed gearbox weakens, manifested by difficulty engaging second and third. Clonks and rattles from the suspension usually point to worn bushes and anti-roll bars, nevertheless a suspension rebuild with Bilstein dampers will not leave much change from £5,000.

Generally speaking, the later cars, post 1986 with a Motronic DME (which improved torque and mpg) and post 1987 with five speeds are a better bet, but *the* criterion is condition. A £70,000 930 may appear attractive, but it could cost almost as much again to make it absolutely right. Colin Belton of Ninemeister speaks with the authority of an air-cooled 911 specialist and as an owner: in 2016 he acquired a black 930, and once he started looking at improvements, correction of one fault simply exposed another, “the very definition of mission creep,” he says ruefully. After five years’ work, he has an exceptional 930, but only after spending considerably more than the £50,000 he paid for it in the first place.

His advice to 930 buyers is to look for evidence of meticulous maintenance and dry storage. Any 40-year-old 911 will have corrosion and signs of wear and tear, which is how comprehensively restored examples can command £150,000. “A good, usable 930 will be expensive,” he cautions. The alternative is to identify a sound, sympathetically restored 930 around £80,000 where critical engine, gearbox and bodywork issues have received attention and finish the improvement process oneself. Even then, a buyer could spend upwards of £20,000 refurbishing a tired interior and obtaining a proper respray, a particularly labour-intensive process because of the amount of dismantling involved.

A Porsche fan determined on the 930 would clearly be advised to look at the top end of pricing, at the same time assessing any requirement for potential further expenditure. Purchasing a 930 calls for professional inspection for all buyers but real 911 experts. “If it is completely right, then the 930 is a great car, a real icon, but the buyer *must* go into it with eyes wide open,” says Belton. ➔

**BELOW** Cabriolet and ultra-rare Targa body styles were introduced on the 930 from 1987





**BELOW** The 930's interior was lavishly optioned as standard. Motronic engine management arrived in 1986, five-speed 'box was introduced in 1989



#### DESIRABLE OPTIONS

The 930 was marketed with a full leather interior and just about every accessory Porsche could build into it, including a boost gauge. A/C was not always fitted to European-specification cars so is worth seeking out; surprisingly most 930s have only a four-speed gearbox developed largely from racing. Anticipating that the five-speed 915 would rapidly be overwhelmed by the Turbo's torque, a specific 930 gearbox was fitted and only 1989MY Turbos have a five-speed derived from the G50. The additional ratio does improve the driving experience, particularly in traffic.

Some cars had sunroofs, and unusual colours such as Siena metallic add value. Genuine Sonderwunsch upgrades and in particular the X33 engine kit are rare and such cars are usually found at the top end of 930 pricing.



**THANKS** The stunning 930 Cabriolet in our pictures was supplied by First Choice Detailing. For more information visit [firstchoicedetailing.co.uk](http://firstchoicedetailing.co.uk) or call +44 (0) 1202 096096





## INVESTMENT POTENTIAL

**P**orsche built a total of 19,500 930s and at least three-quarters of them have survived. Because it always retained much of its value, the 930 was probably the first 911 to be worth restoring (closely followed by the Carrera 2.7 RS) and the upshot is that there is no shortage of them for sale today. In terms of investment potential, although it would be flippant to say that the 930 has a great investment future behind it, there are rarer Porsche

models which might do better long-term. The early 3-litre 930, of which about 2,500 were made (figures vary) is, if less driveable, a genuine collectible, as are the low-production special editions of 1987-9 and of course the 330PS 930S. Above all, and especially if bought judiciously, a good 930 Turbo should be a car to drive and enjoy, using regularly without too many worries about absolute originality or mileage, and will at least retain its purchase value.

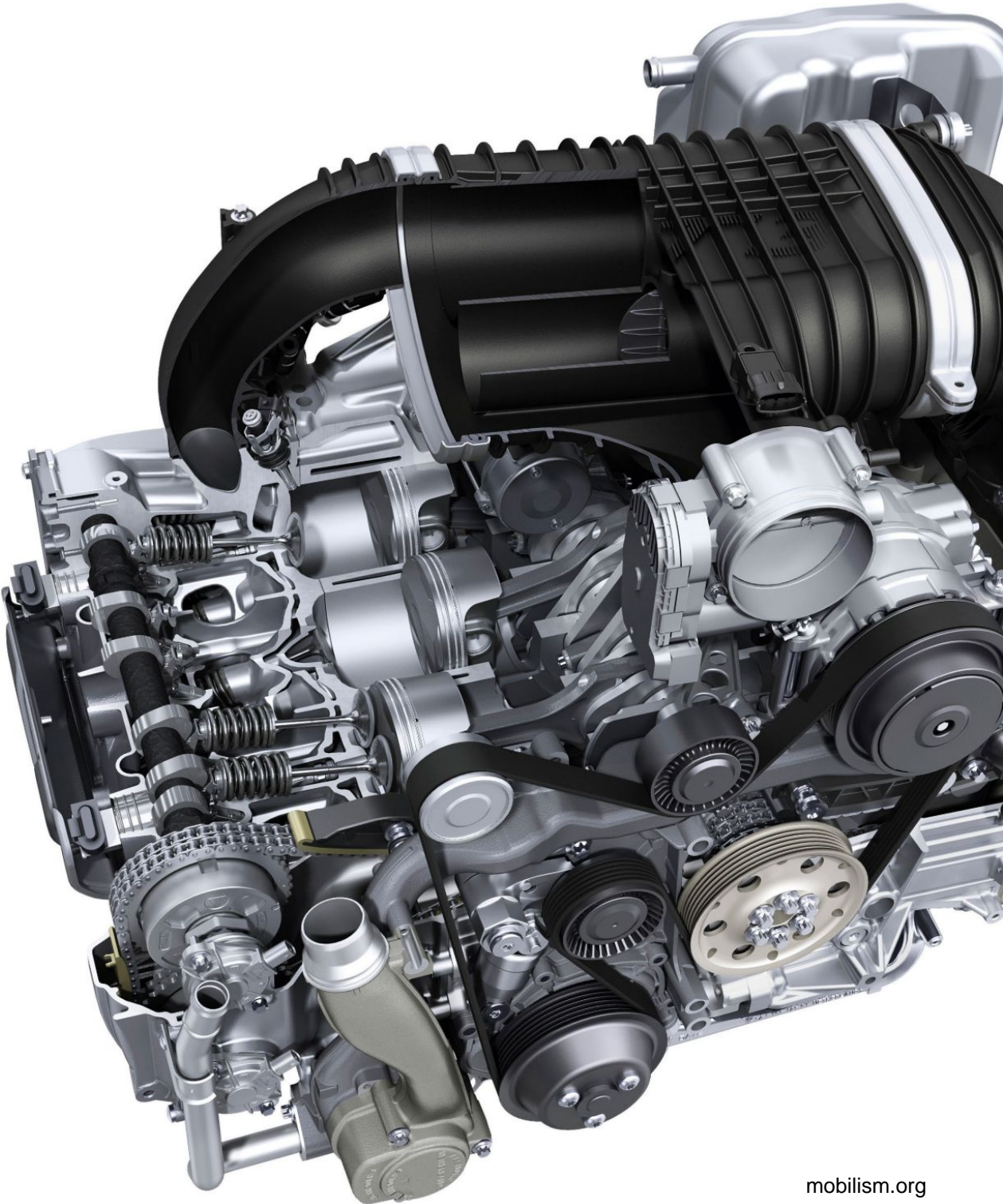
“A good 930 Turbo should be a car to drive and enjoy”

## TOTAL 911 VERDICT

The 930 is an automotive landmark, defining the wider public's perception of sports cars, like Malcolm Sayer's Jaguar E-type a decade earlier. But owning and driving an automotive landmark (as opposed to keeping it in a climatized vault) is a different proposition which will not suit everybody. The 930, at least the more common 3.3 version, is a practical third car which like all air-cooled flat sixes, thrives on regular use, but which, with its turbo and associated plumbing, will also need more attentive maintenance. That said, properly fettled the 930 will take readily to being driven in the way Porsche intended, a skill which for generations raised on assisted steering and automatic transmissions may have to be learned. But for the thinking driver, the intense involvement of pressing on in a 930 along a known, dry road is to experience a motoring nirvana which is slowly being legislated away. But ensuring that you acquire a sound example is an absolute prerequisite.

★★★★★







TECH

# THE BURNING QUESTION OF THE 991.1 GT3

The 991.1 GT3 is a brilliant sports car when on song, but is its engine its weak point? Total 911 investigates...

Written by **Kieron Fennelly**

**S**chadenfreude – pleasure at the misfortune of others. Strangely, this human if rather reprehensible trait has no word to describe it in English and the language has to resort to a foreign word to convey the sense. And that human trait was evident in February 2014 when reports appeared of engine fires in Porsche's latest flagship, the 991 GT3, released only the previous autumn. Plastered across social media and on the inside pages of what we used to call the popular press was a picture of a brand-new 911, a GT3 no less, blazing itself to destruction. For several days, the newsfeeds poked fun in that slightly sneering way that they seem to reserve for Porsche drivers. But this tabloid entertainment hid a serious problem which would rumble on inside Weissach for several years.

In the aftermath of the headlines, Porsche reacted with alacrity: all owners of the new GT3 were told to stop driving them and to contact their supplying OPC which would collect the car. It was anticipated that repairs – a new, revised engine – could take several months, and owners received compensation which included a loan 911 for the duration. In all, 785 cars were recalled, an exercise estimated variously to have cost Porsche a good 20,000,000 Euros, and owners informed that they would receive new (modified) engines. The contrast with the way the company had reacted to 996 and Boxster owners, whose engines had been destroyed by a disintegrating IMS, was striking. But then, the circumstances were different: the 991 GT3 failures all occurred within weeks of delivery; IMS failures happened largely outside Porsche's two-year warranty – which meant that the company was relieved of any strictly legal

responsibility. The absence of social media two decades ago meant owners were left seething on forums, but could do little else when Porsche merely offered a replacement engine at an alleged 40 per cent discount. Porsche had reckoned correctly that outside the realm of pure enthusiasts, its reputation would not be materially affected.

There was no such cynicism in 2014: the company needed to forestall more bad publicity (which, by reacting quickly, it managed fairly successfully) but there was also the question of what went wrong. There was considerable disquiet in Weissach that the bespoke 3.8, a significant rework of the stock 3.8 unit of the 991 Carrera S, of which Andreas Preuninger's men were understandably proud, was apparently faulty. Recalling all the engines enabled the motorsport engineers to analyse the entire production and discern whether this was the endemic flaw they feared it could be. Within a matter of weeks they would conclude it was.

The 991 GT3 was the first entirely new GT3 since the original 996 in 1999. The larger 991 platform allowed huge technical advances in terms of electronic chassis control, notably re-steer, and for good measure it also featured a new engine. The beloved 'Mezger', which in its final production guise had produced 500PS for the 4.0 997 RS, was consigned to the history books; a more modern design (which incidentally did not require its own separate production line) was developed. The 9A1-M used the crankcase, timing chains, cylinder head bolts (and ancillaries) of the Carrera S 3.8, but the head, pistons, connecting rods (in titanium), competition valve gear and a pure (i.e. separate) dry sump were all specific. Even the crankcase ➔



was reworked with more oil jets and hollowed for the higher compression pistons. This engine was designed to produce its 475 PS maximum at 8,250rpm yet rev to a dizzying 9,000rpm limit. Amongst series production engines only Honda's (much smaller) four-cylinder V-Tec unit reached these altitudes.

"We always want to stretch to the limit," said Preuninger at the launch of the new GT3 in 2013. "High rpm is an emotion for me and it is a unique selling point for our cars. It's fun, sounds great and it's also efficient: you produce power by revving higher. You just have to construct the engine in such a way that it can live with the revs for 100,000 miles."

The correspondents were deeply impressed: the direct-injection 3.8 of the latest GT3 was smoother, sharper and even more ballistic than the 3.8 Mezger, they found. The absence of a manual gearbox option was the only significant adverse comment, but the honeymoon was not to last long.

Within a few weeks after the recall, Porsche admitted that the fault had been traced to the fixing of the connecting rod to the crank. The rod had come

loose and in the case of the fires, had gone through the block, a common enough occurrence with highly stressed racing engines. Leaking oil had then ignited. The attachment of the rod to the crank was blamed and it was widely speculated, though Porsche did not confirm this, that an air tool used to set the torque had somehow lost its fine calibration; the rod screws had a very narrow torque tolerance and the incorrect tightening force could subsequently allow the rod to work loose and finally detach itself. An article in *Excellence* magazine offered this perspective of the mechanical forces involved here: "This engine has a 9,000rpm redline at which speed the crankshaft revolves at 150 times/second, each piston comes to a complete stop 300 times/second and at maximum rpm, reciprocating weights could exceed 20,000kg."

The article went on to point out, quite rightly, that this is a phenomenal set of figures for a road car intended to be driven daily.

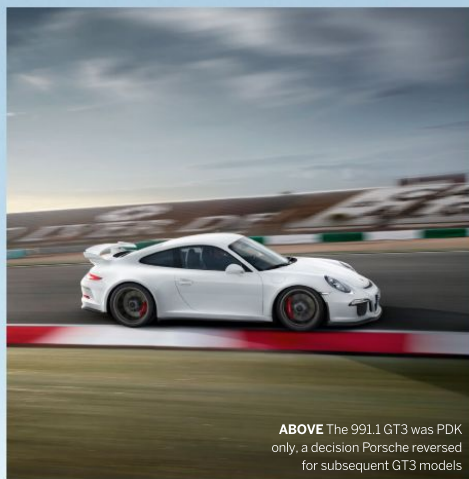
Porsche announced further that it was working with its supplier to revise the fastening of the rod to the crank. It gave no more detail than that. This

revision process was not rapid and it was a good four months after the recall before new engines, listed internally as EI, were ready. These were sent out to dealers to fit in customer cars which had been sitting engineless since February. That might have been the end of the story and indeed for most GT3 customers it was, but it might appear that the narrative of the 9A1-M saga would continue. Some enthusiasts even wondered what else Porsche had decided to modify during those four months, which seemed a long time to design and test a new connecting rod fastening. What is significant is that the launch of the 991 GT3 RS was delayed nine months, until Geneva 2015. The RS had a four-litre flat six, but it was vastly more than a simple boring out of the GT3's 3.8: with specific camshafts, connecting rods, pistons and its own crankcase made from the same exotic alloys as the 919 race car, this was clearly a different engine. This time Preuninger said that increasing capacity (rather than the rev range) was the route to more power and interestingly the rev limit was set at 8,800rpm rather than the 9,000rpm of the GT3. ➡

"Only Porsche is still building a pure, naturally aspirated engine, unencumbered by air or mechanical supercharging"







**ABOVE** The 991.1 GT3 was PDK only, a decision Porsche reversed for subsequent GT3 models



Meanwhile if the revision of the connecting rod fastener seemed to have done the job, there were still mutterings about the durability of the 3.8 of the GT3. Of all the 911 'clans', GT3 owners, especially track day devotees, are by far the most vocal if they perceive even the slightest power deficit in their steeds and there was talk of high-speed misfires on some cars. On one hand this might be dismissed, as can many of the claims made by individuals on the internet, and the occasionally wild exaggeration of IMS and later bore-scoring dangers is a case in point. However, it was clear that Weissach was not satisfied either, for between 2014 and 2016, no fewer than three versions of the 3.8 were built. The E1 was the replacement after the recall, F followed in 2015 and G in 2016 incorporated many of the cylinder head revisions of the 991 RS four-litre unit.

Porsche was particularly sensitive to ripples emanating in North America, by some distance the largest GT3 market, and by 2017 one association of GT3 lobbyists calling themselves the concerned owners' group (COG) had evidently caused enough of a stir for Porsche to go into action: in August 2017 Weissach boss Frank-Steffen Walliser flew to the US and met this group at the company's headquarters in Atlanta. His candour evidently impressed the assembled owners, for he began by announcing a much improved ten-year/120,000-mile warranty for all the GT3 991.1 cars (see boxout above) and then went on to present a model of the camshaft with finger followers. An intermittent flaw in the finish on some followers was said to be responsible for the high rev misfire which had provoked a steady series of complaints.

**BELOW** Porsche's brilliant 991.1 GT3 is a big rework from the 997.2

## Porsche's 991.1 GT3 extended engine warranty

"Porsche will extend the warranty on the engine of all 991.1 generation GT3 vehicles in all markets with respect to failure modes related to this issue. The extension will provide coverage for ten years from the original in-service date, or 120,000 total vehicle miles, whichever occurs first (the base bumper-to-bumper warranty remains unchanged at four years or 50,000 miles for the US, as do all other warranty terms and conditions). The warranty extension is fully transferable to any future owner. All US owners will be informed in writing and the change will be applied and processed with no additional owner action required. If a vehicle shows the described failure patterns (e.g. misfire at high revs and check engine light) and the inspection in the workshop shows the failure patterns, Porsche will replace the defective engine with a new engine having the latest parts. Porsche confirms the issue is isolated to the 991.1 GT3, and that the 991.1 GT3 RS and the 991 R are not affected."

In an explanation which had sufficient technical detail to make those present feel their concerns had been taken seriously, he indicated exactly what, Porsche believed, was causing this high-speed misfire which affected only a minority of GT3s and the steps Weissach had taken to resolve it. As a damage limitation exercise Walliser's was a five-star performance: technically the solution appeared convincing, was well presented, and the special warranty took all parties by surprise.

Of course, among GT3 owners, grumbles went on and they always will, because the car represents a level of driving perfection simply not to be found among other marques, though complaints about the current-generation GT3 did fade. Perhaps the affair also helped to put into perspective what is now a unique powertrain. Only Porsche is still building a pure, naturally aspirated engine, unencumbered by

air or mechanical supercharging whose steroidal, but artificial effect cannot but create a distance between driver and machine. Always naturally aspirated, the 'Merger' GT3s began with 100PS per litre and finished with the 125PS litre of the 997 4.0 RS; on subsequent GT3 generations Porsche has continued to make a production engine which despite ever greater environmental strangulation, still offers an output of 125PS/litre.

As *Excellence* observed, this is effectively a racing engine certified by its maker for road use. Seeing as significant further development of production petrol engines is unlikely given political pressures, the 9A1-M series fitted to the Porsche GT3s must undoubtedly rank as the greatest naturally aspirated engine ever made. Porsche's efforts to produce such an engineering feat is remarkable, and its resolve in giving an unprecedented warranty is admirable. **911**





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# off the Beaten Track

Written by **Wilhelm Lutjeharms**

Photography by **Peet Mocke**

In the heart of South Africa, a 911 collector decided not to simply restore his SC to be used as a daily, but to upgrade it to be taken far off the beaten track









**I**t feels weird. I’m driving a 911 on a gravel road... and at some speed! In 15 years of driving these cars, this has never happened. 911s are about grip and handling, but when the tarmac ended and I hit the gravel, in this car I could just nonchalantly continue driving. I quickly realise how much fun it is, as well as how practical a car such as this one can be.

The owner of this 911 is Douw Raimondo. He hails from Bloemfontein, the capital city of the Free State province, right in the heart of South Africa. His journey with Porsche 911s has taken many turns over the years, and many cars came and went. In recent years he has actually moved away from only owning original 911s to having cars that are very neat, yet not original.

This example ticks that box, but what makes this one more special is that it is an idea that had been germinating in his mind for some time.

“I searched hard for an affordable donor to do this project with. I eventually found one outside Cape Town. As the engine needed a rebuild, I got the car for a good price and sent it to Porsche Centre Cape Town for a full assessment. The result was better than I expected. There was no rust, it had never been in an accident and it was a matching numbers car.

“I wanted to build a type of 911 rally car that you can venture off the beaten track with. The idea was that my wife and I pack the car, put the bicycles on the roof and go away for a weekend. Within a year the car was done, perfectly built by Tim Abbot at Porsche Master Craftsman outside Johannesburg.

“To kick off the project, when I went to Tim and asked him to build me this car I also gave him an

entire build sheet, a thick folder that contained all my ideas. These included photos and ideas I’d collected over a period of time. I had put a lot of research into this car.”

Raimondo had some wild ideas for the suspension, but Abbot said that for how he wants to use the car, and setting the suspension on its highest setting with the standard Bilstein dampers will do the trick. The only mechanical upgrade has been an Elephant Racing tower strut brace at the front.

Inside, Raimondo wanted the car to be relatively luxurious. To this end he has fitted a decent sound system and upgraded the air conditioning by fitting a booster system. Raimondo confirms that this setup manages admirably with the hot summer days here in South Africa.

Understanding and appreciating fully original cars, Raimondo points out that the SC can easily be converted back to the way it was when it left the factory, should the need arise.

“The car was repainted and I did a few minor modifications. An electronic ignition module was installed. I replaced the chain tensioner and the wiring was completely redone. I replaced many of the bulbs with LED lights, including even the back lighting for the dashboard and dials. The headlights I imported from the USA and are the same units used by Singer Vehicle Design. They are truly impressive. If you drive at night with these and the spot lights switched on you can see clearly far ahead of you. The gold-coloured Braid Acropolis wheels were also imported from the USA, some of the best in the industry ☺

“I wanted to build a type of 911 rally car that you can venture off the beaten track with”



**ABOVE** Wood, aluminium, leather and houndstooth are more Monte Carlo than motorsport, but the interior of this SC plays into a requirement for practicality







## Porsche at the Paris-Dakar rally

Porsche has a long history of rallying the 911. However, none is as profound as that of the original and gruelling Paris-Dakar rally. In 1984 Porsche entered this rally for the very first time. Designated the 953, but often referred to as the 911 4x4, Porsche's first 911 race car was equipped with a developmental all-wheel-drive system that was to be used on its replacement, the 959. The model was short lived as the 959 Paris-Dakar race car was already entered for 1985. The 911 4x4 also had custom suspension and its flat six engine delivered 300bhp while the car tipped the scales at only 1,247kg. Three cars were entered in 1984, of which one was able to take the overall chequered flag, René Metge and Dominique Lemoine being in the cockpit.

This success laid the foundation for Porsche for off-road racing, with three 959s entered in 1985. Sadly none finished due to mechanical failures and crashes. However, in 1986 Porsche achieved a 1st, 2nd and 6th place with its 959, René Metge and Dominique Lemoine again bringing home their car 1st and with 2nd place going to none other than Jacky Ickx and Claude Brasseur. These cars were equipped with the 2.8-litre, flat six, twin-turbo engine developing 400bhp. Part of the reason why the engine delivered only 400bhp is because at times during the race the 959 had to be filled with 86 octane fuel, with a higher octane fuel not being available in the desert.



**Model** 911 SC “Safari RS”

**Year** 1982

**Engine**

**Capacity** 2,994cc

**Compression** 9.8:1  
ratio

**Maximum power** 204bhp at 5,900rpm

**Maximum torque** 267Nm at 4,300rpm

**Transmission** 5-speed manual

**Suspension**

**Front** Independent; wishbones;  
MacPherson strut; torsion  
bars; hydraulic shock  
absorbers; anti-roll bar

**Rear** Independent; semi-trailing  
arms; torsion bars; hydraulic  
shock absorbers; anti-roll bar

**Wheels & tyres**

**Front & Rear** Goodyear Wrangler All-Terrain  
Adventure, 7x15-inch,  
205/70 R15

**Dimensions**

**Length** 4,291mm

**Width** 1,626mm

**Weight** 1,160kg

**Performance**

**0-62mph** 6.5 seconds

**Top speed** 146mph







**LEFT** Thule roof rack can carry spare wheels or even bicycles if needed

**FAR LEFT** Rally-spec tyres and adjustable suspension at its highest setting gives this SC its off-road look

and in terms of colour complements the crayon hue of the body.

"When I bought the car it had around 138,000 miles on the odo, but the engine required a full rebuild. Furthermore, the spotlights were added and Tim hand made the bumpers as we could not find someone able to manufacture them. A bash plate was installed at the front of the car. There is also another plate at the rear, protecting the engine and gearbox. The result is that the car can really venture off-road. The roof carrier I simply bought from Thule.

"I often drive to Bethlehem and back for business, a 320-mile return trip. Other than that, I've taken it to Johannesburg a number of times, which is a 500-mile return journey. The car runs perfectly on the open road. I recently achieved an impressive speed on the GPS, especially considering the negative aerodynamic effect the roof rack has, as well as those heavy wheels. That is not the purpose of the car though, but after having had the car built, obviously one wants to see how it handles and how fast it is. I would classify it as an urban-type rally car. I got a quote for a full KW suspension so one can go faster off-road, but then you also need to fit a roll cage thus making the car much more focused and less versatile, so I decided against going down that route.

"The car didn't break the bank, which I'm quite happy with. The headlights were very expensive though, but overall, the total project plus the donor car cost me about the same amount as a good 911 SC would trade for at this stage."

Enough about the project, by now I am itching to drive this unique 911 again. I climb in and turn the key. The engine settles in what is that fairly typical metallic sound from the flat six. I pull off and within a few shifts I am reminded where the gears are and how to handle the 915 gearbox. It has a good mechanical shift action, but it shouldn't be rushed. The gear knob is a beautifully machined piece, being made from a combination of wood and aluminium – it feels perfect to the touch with every gearshift. Other interior highlights include the pull straps, with the overall combination of brown leather and the black-and-white Houndstooth cloth used for the centre parts of the seats complementing each other extremely well. And in case you were wondering, the luggage compartment is just as neatly trimmed too, with a matching carpet set and brown beading, making it more luxurious and better trimmed than most modern cars.

The increase in the ride height is not immediately noticeable, but as you exit the car, you realise that the action is easier than from a standard 911 SC. ➡





“...it gives you a glimpse of the 911’s off-road capabilities”

As I leave the tarmac and head onto the gravel stretch, first impressions are very positive, the tyre and suspension combination really absorbing the minor bumps well. There are no fancy suspension parts fitted, but even so I’m impressed with the bump absorption. The view over the bonnet is the same as that of any other air-cooled 911 from the era, except for the pair of spot lights mounted on the front bumper, a quirky visual reminder that this is not your average 911 SC. In the cabin there is still that solid feeling we associate with air-cooled 911s, albeit with a slightly stronger focus on luxury. The beautiful seats are soft and comfortable, but at the same time the side bolsters around my upper legs provide enough support. The three-spoke, Alcantara-clad MOMO steering wheel feels perfect in my hands and feeds much-needed front axle information to the driver.

As one would expect from a rebuilt engine, it feels new and is happy to rev, while also offering enough torque. Before having some fun, I decide to first find out whether the engine will be happy pottering around as low as possible in the rev range. After all, if you really need to drive slowly over challenging surfaces, tractability is an important feature of an engine. The 3.0-litre SC effortlessly obliges. With around 1,000rpm on the rev counter, the drivetrain is happy to tick over and I can easily see myself navigating much trickier terrain with this SC.

Increasing speed again, the engine clears its throat properly as the rev needle passes 4,000rpm. Although the knobbly tyres offer some much-needed grip on gravel, it is also very easy to overcome the grip levels with a prod of the throttle. Use the brake pedal with enthusiasm and the wheels will lock up (although the car still pulls straight) while you can easily have the rear tyres break traction through a corner.

What a fun car this is! Although in terms of engineering and design it might be far removed from the factory off-road 911 racers in the ‘70s and ‘80s, it still gives you a glimpse of the 911’s off-road capabilities and what it must have felt like racing the 911 on the world’s rally stages. It is a car that can be used every day, while also easily heading off-road onto any one of the plethora of gravel roads that criss-cross South Africa.

“My dream trip is to head to the Western Cape and do a route along the coast, through the well-known flower landscapes and then down the Southern part of the coast. The car is not meant to be a garage queen, which is why I use it often for a variety of trips.”

The journey of any 911 enthusiast is an interesting one, and this story is no exception. I, for one, find a car such as this very inviting and can’t think of a better combination of performance, practicality and passion all mixed into one to fully enjoy. **911**





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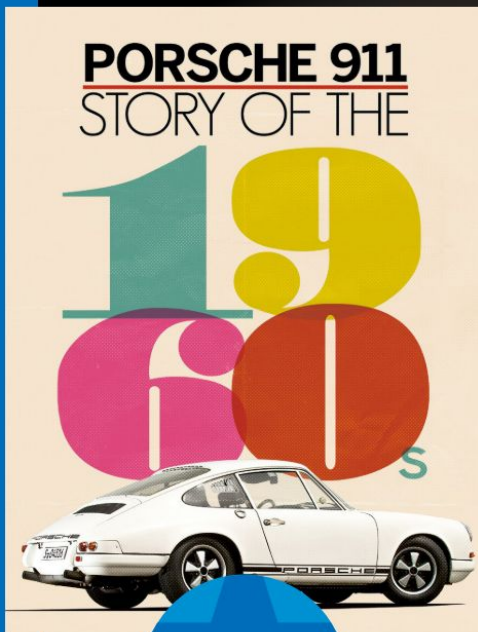
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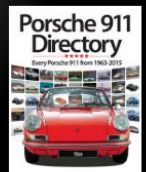
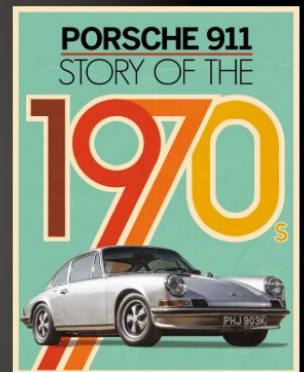
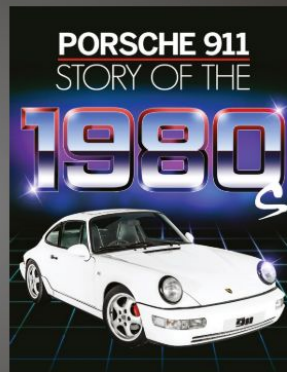
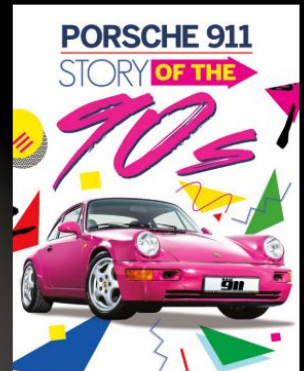
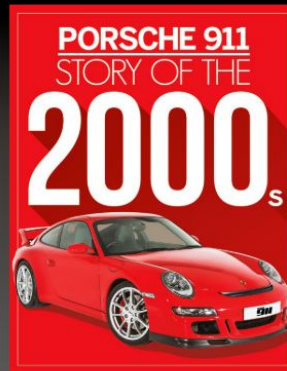
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# Living the Legend

Our contributing enthusiasts from around the world share their real-life experiences with their Porsche 911s



**Max Newman**  
Aylesbury, UK

@maxripcoor  
9WERKS Radio

Model **991.1 CARRERA S**  
Year **2013**  
Acquired **SEPTEMBER 2020**



There's clearly a financial element to buying your first 911 – savings, windfall, or an income that will cover the monthlies – but sometimes

there's another catalyst. For me it was a trip to Italy and my friend David Walter. David is actually my friend's Dad and some 25 years my senior, but with age comes wisdom, right?

Time spent together on an annual boys' food pilgrimage to Alba in Italy revealed my car nerd credentials and the desire I harboured to own a Porsche 911. David, a serial BMW M-car owner, was in no doubt that given my age at the time, my marital status, manageable mortgage, and financial position, I should be buying the car of my dreams without further procrastination or hesitation.

At this time we were flying to Italy, to Genoa or Turin, and wasting the fantastic mountain roads and vineyard-lined hills in a succession of depressingly ordinary hire cars. The November 2011 trip was the catalyst which led directly to my 997 purchase back in April 2012. That in turn led to the fitting of Pirelli Sottozero winter tyres and a handful of fantastic Alba road trips in the 997 over the next few years. It's on such adventures that you accumulate a lifetime of memories with a car.

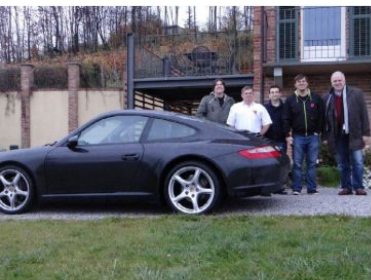
The flurry of WhatsApp chats and sharing of old photos in anticipation of each year's trip is what inspired these words, especially following the enforced hiatus. The pictures I can share here – the incriminating anecdotes will have to wait until we meet in person. Or perhaps they'll be worthy of inclusion in a future *9WERKS Radio* podcast.

I've yet to make the journey in the 991, and it will have to wait another year because we're chancing it in a 2007 Maserati GranTurismo this time round. Wish me luck.

Talking of the 991, I had a run-in with a friend of the feathered variety which has dislodged the trim that covers the space beneath the number plate on my non-Sport Design equipped C2S. Some clips have broken, and whilst I can push it back into place from behind, a bit of wind pressure soon dislodges it again.

**Total 911** magazine's resident technical expert, Scott Gardner, has assured me that bumper removal on a 991 is very straightforward, as is the fix for my trim piece, so I need not fear it – or rather the cost of it – and get it sorted. I won't attempt the job myself though, I'll book it in with a local specialist and let you know how I get on.





### James McGrath

Minneapolis, USA

@auto.amateur

Auto Amateur

AutoAmateur

Model **991.1 CARRERA**  
Year **2013**  
Acquired **2019**

Model **996.2 CARRERA**  
Year **2002**  
Acquired **2020**



The word 'Turbo' has always been synonymous with the Porsche brand for me, as far back as I can remember.

The 911 Turbo, the

Turbo S... as a kid I didn't really know what that meant, it just sounded menacing and I presumed it meant more powerful than other models. Of course both are correct, but I certainly didn't understand what made a turbo engine a Turbo, and certainly didn't appreciate what the difference was between naturally aspirated and turbo-powered engines. I suppose I don't know much more today, 30 or more years later, but I do respect the legacy of the 911 Turbo models and appreciate just how many mega-Turbo-enthusiasts are out there.

Since the beginning of my own Porsche ownership story, just five short years ago, I have come to discover that my preference is generally for the naturally aspirated engine. My 996s, my 997 and

now my 991 have all been base Carreras of one sort or another, so I suppose you could say I haven't had a choice. Those who buy the base Carreras usually do, in my experience, because that's what the buyer can afford. It's only really until you're about to choose between the GT cars or some other higher end models that you really have to choose between turbo or naturally aspirated engines. Still, I like to think that I've chosen my N.A. engine consciously, perhaps partially in denial. However, like many things in life, it's only once you experience something first hand that you can fully appreciate the attraction, magnitude or significance of such an object of desire as the 911 Turbo.

Flash back to earlier last summer, I had the opportunity to drive both N.A. and Turbo variants at the Porsche Experience Center in Atlanta, Georgia – or PECATL as it's referred to. On the day, I walked away from the track validated in my belief that the raw awesomeness of the N.A. engine that powered the GT3 I drove was still the one for me. Still today, I stand firm with that opinion. But... that's not to say the Turbo hasn't gone WAY up in my estimation. I've found myself looking at the used car market for Turbos, I've been watching endless YouTube videos about the Turbos... Worse, one of my good friends has really just acquired a 991.1 Turbo and I'm finding myself getting my hands on it as OFTEN as possible. I'll just say it – it's amazing. They're amazing. The feel of the thrust is different, the power is delivered differently, the overall power is greater and in fact the overall driving experience is different. Not better, just different. Am I going to get one? Well not just yet. Still... I'd have one.





**Andy Brookes**  
Poole, UK

@993andy

9WERKS Radio

Model **993 CARRERA**  
Year **1995**  
Acquired **SEPTEMBER 2018**



I began my story to Porsche ownership last month and left you with a few photos of the 993 I found. Produced on 5 October 1994, it's a

German specification 1995 model year car with the non VarioRam engine M6405-635 and manual short ratio two-wheel-drive gearbox G5021-20. The car came with possibly my perfect specification including aircon, no sunroof, LSD, computer, cruise control, left-hand-drive and black interior. The Guards red was not my ideal choice, but I decided to compromise; I actually love it now and can't imagine the car in one of the more staid colours of the time.

My first taste of the car was an advert on eBay; it was advertised by a garage called Marque 21 in Bridport, Dorset, and they were advertising it for their customer who had owned the car for 16 years.

I suggested to my wife that I would take her for dinner in Bridport to a lovely restaurant, oh, and as we were there, we'll take a look at a 993 that I heard was for sale! The plan worked and after doing a full inspection the deal was done.

The car came with a huge amount of history. I wanted to dig a little deeper into its earlier history. I found the name of a previous owner in Germany amongst the paperwork, I managed to trace him and after a little persuading he let me know what he knew about the car. The 993



was registered in Stuttgart and owned by the Porsche factory; it is believed it was a press/demo car until June 1996. He purchased it from the factory demo sales location in Stuttgart; he owned the car for four years until August 2000, and then sold it to a local car dealer.

From there I managed to discover that within a few days the 993 had made its way to London and was registered to an Italian lady, who owned the car until August 2002. It was then purchased by the guy I bought it from, he entrusted Marque 21 to carry out all services during the 16 years and carried out some great modifications. The seats were converted to sports seats by Southbound Trimmers, an RS steering wheel, red seat belts, lowering springs, refurbished Cup 2 wheels with red centres, tuning chip, motorsound air filter housing, big oval tailpipes amongst others. The owner completed many trips to Europe over the years. The sale of the car was due to the owner having a knee operation that made driving a manual difficult.

I wanted to make it my own and improve an already excellent condition 25-year-old car. The first stage of my modification trail was to have the wheels refurbished in satin platinum. I fitted RS air ducts and smoothed the front bumper, and fitted a magnetic front number plate mount. I refurbished the oil and aircon radiator mounts and underside access panels. The engine fan and housing were refurbished. I fitted an RS single fan pulley conversion, RS engine mounts, RS centre console cubby and red tachometer dial with redline at 12 o'clock by Carbone. All plated underbody and engine bay brackets were replated and fixings replaced with stainless steel. I built valved bypass pipes added to standard exhaust mufflers with black slash cut exhaust tips and S bumper surrounds. Orange indicators, side repeaters and yellow headlights were fitted. All fairly subtle modifications, but they added up to more than the total, OEM plus in my eyes.

Next month, I'll show you the second stage of the modification trail...







**Anthony Coyne**  
Fort Lauderdale, FL

@mr\_coyne

Model **997.2 CARRERA S**  
Year **2009**  
Acquired **FEBRUARY 2021**



I'm surprised **Total 911's** Editor-at-Large has not fired me from this section. My brief is to write 500 words each month, a sort of

long-term running report, relating to my own 911. Yet, to date, I've covered moving to America, Alfred our dog with brain cancer (he's doing well, and thank you to those who have messaged me with kind words through the blog and Insta), many, many miles on the road, and the dangers

of being tasered. To me, this is life with a 911. It is clear I have no idea what I am doing. Oh, and I don't even own this car, it's registered in Renée's name – technically I'm not supposed to be here.

My personal 911 journey began in a 964; a 60,000-mile dark blue C2 manual Coupe with red interior. It cost about £13k, and leaked oil wherever it went. Back then many owners were modifying them, driven I suspect by them being relatively cheap. Unlike if they had been messing around with the originality of a 993, this mutilation wasn't considered blasphemous. That the name 'Singer' was starting to mean something other than Rod Stewart perhaps justified the new trend. That's where the 997.2 differs. To me they are best left close to factory originality, although some .1 cars appear to be sought after by those who want to be a little creative.

Recently, the 997.2 was driven once more from Fort Lauderdale, Florida, to Knoxville, Tennessee. As the day became night, the roads cleared and I began to think about this car, and what I make of it. Approaching 17,000 miles in the (folding bucket) seat has given me a decent understanding of what it offers.



**Lee Sibley**  
Poole, UK

@lee\_sibs

9WERKS TV

9WERKS Radio

Model **996.1 CARRERA**  
Year **1998**  
Acquired **JAN 2019**



In years gone by, I have made my feelings very clear in this magazine that I feel cars – and Porsches in

particular – are built to be driven and not stored. Largely I still agree with this sentiment: from a practical point of view, if a 911 is laid up for a long time, parts dry out and seize, and it can lead to a lot of work to get it roadworthy again.

There's also the emotional side: cars aren't like paintings, they are the sum of thousands of mechanical parts working together in harmony, to borrow a quote

from Andreas Preuninger. They are intended for use on the road, for the joy of driving, and so owning a Porsche and not adhering to this is missing the point.

In this regard, I have always championed the merit of a 911 as a suitable daily steer. Indeed, in the six years I myself have owned 911s, I have practised what I preached, and used my 911 as my everyday drive... until the summer just passed.

The reality is, a 911 is, in principle, a very capable daily driver. However, 'a' 911 is not 'my' 911, so I soon became tired of rowing through the manual gearbox when stuck in traffic, of the harsh ride on bumpy b-roads, of negotiating icy roads in a rear-wheel-drive car in winter, and of trying to shoehorn a growing dog into the back who clearly wasn't happy with the small perch offered by a 911's rear seat. As I've mentioned, a 957 Cayenne was the answer, which has significantly reduced seat time in the 996 since.

So I'm eating a slice of humble pie when it comes to the sentiments at the top of this column, but there is a positive here: each and every occasion I jump behind the wheel of the 996, it feels so special – it's like the very first time I sat in 'my' 911, every time. Alright, so my 911 is 'just' a 996 and not exactly the



Put simply, this 997.2 is an astonishingly good car. Over 100,000 miles on the odometer yet it feels tight, it uses no oil between services (as in not needing a regular top up like my 964 and 993 did), and it drives arrow straight. There are no vibrations or unwanted noises. Everything works. The PDK gearbox has totally won me over, so much so, I will never choose a manual Porsche over a PDK-equipped car ever again. The reliable flat six DFI power makes it a very fast car, and the noise it makes, albeit perhaps a little muted, is a joy. Most importantly, I smile every time I see it. The contrast of the new arrival from 1986, a car that would have cost almost 40 per cent more than the equivalent 911 of the day, is a sobering one. Maybe that's the reason old rear-engined Porsches are so valuable.



most sought-after model out there but, genuinely, taking to the wheel in it feels as special a moment as any I've had driving any 911, ever.

I think this is a good thing: I appreciate the car in a way I simply didn't when driving it daily, and have a new-found admiration for it that means every time I drive it is a real occasion.

So where do I now stand on the 'how often should you drive your Porsche' debate? The blanket answer remains 'as often as you can'; what I now realise is, the definition of that may vary from one enthusiast to another. And, so long as you are driving your Porsche as often as you can, you really are getting the best out of your 911 ownership experience – just make sure it doesn't start collecting dust at any point...





**Peter Wilson**  
Adelaide, Australia

 @peterwilson\_oz

Model **930 3.3**  
Year **1980**  
Acquired **2011**



Spring has well and truly arrived in Adelaide and its surrounding countryside. There are plenty of lovely days and interesting

events to tempt the driving enthusiast and a recent example was the Climb to the Eagle. This event originated in the '80s when Adelaide hosted its own Formula One Grand Prix and featured classic and modern racing machinery being driven on the road with police escort and all traffic lights held green. The route started at the Grand Prix circuit within the CBD and ended at the Eagle on the Hill pub. School children were allowed out of class to line the streets and cheer at the procession of cars as they blasted by.

Celebrity drivers often participated; 1986 was an unforgettable year as Stirling Moss in a C-Type Jag and Fangio in a GP Mercedes raced each other up the hill as the police motorbikes did their best to get out of their way.

The GP has long gone to Melbourne (still a sore point for us South Australians) but the Climb to the Eagle has been revived by Richard Blanden, son of John Blanden who founded the original event. It is now a cruise for classic and performance cars, and I entered the 930 this year to soak up some of the sights and memories.

It was a beautiful morning and over 200 cars assembled on the site of the '80s GP circuit for the start. There was



a great array of Porsches from 356 Speedsters to current GTs, mixed with everything from Clubmans to McLarens. One car that attracted more than its share of attention was a bright pink Purvis Eureka. This was a VW-based kit car from the '70s, based on the UK Nova and achieved its wow factor due to the colour and lifting canopy.

Of more interest to me was a virtual 'sister car' to my own, albeit being a Carrera widebody Coupe (M491) rather than a Turbo. Sometimes known as a SuperSport, this model had all the underpinnings and bodywork of a 930 but with a 3.2 normally aspirated engine. This particular example was an almost identical colour to mine as well. We passed each other several times during the day but unfortunately never had the chance for a shared photo.

After an hour of mingling and ogling, the 200 cars were ushered onto the

streets to commence the cruise. First stop was a morning tea with guest speakers who were involved with the Adelaide Grand Prix, then it was back onto the road for a great drive through the vineyards of the Southern Vales to Victor Harbor for lunch. There was more Grand Prix history here as well, as we were all invited to do a lap or two of the 1937 Australian Grand Prix circuit, an event run on public roads between the towns of Victor Harbor and Port Elliot.

After lunch it was time to plot a course for home and I chose the quiet and gently winding Bull Creek Road. The car generally ran well all day, but I still need to get to the bottom of the mystery 'whooshing' noise plus slight left pull under braking. I still have a slight misfire at light loads, which together with the whooshing have me suspecting a small manifold leak. There is always something on this car to keep me busy!







**Nick Jeffery**  
Surrey, UK

Instagram @npjeffery

Twitter @npjeffery

Model **997 CARRERA**  
Year **4 GTS**  
Acquired **2012**  
Model **997.1 GT3**  
Year **2007**  
Acquired **NOVEMBER 2019**



I like Instagram. Out of all of the social media platforms it's the one for me that stands out from all of the others. Why? Well, for one, it is

all about sharing your pictures and is therefore a more visually led platform. That could explain why it seems a far less toxic environment, where users are nowhere near as judgemental, quick to criticise or be negative. Also, whilst some pages can be quite random or general in their nature, others are far more specific, like my brace of Instagram accounts dedicated to all things Porsche, be it my own cars over the years, or others that have caught my attention. @npjeffery is more general in its Porsche content and @gt3\_997.1 is devoted solely to pictures of my GT3. Through these accounts I have experienced a Porsche community which comes together virtually, whether

that relates to buying advice, problem solving, information about Porsche meets or just plain old-fashioned friendship.

It was the GT3's turn to go up on the ramp for a minor service, brake fluid change and of course MOT. The early morning drive down to Paragon was simply epic! We all know engines like cold air and the ambient temperature was around 6 degrees Celsius – great for the naturally aspirated Mezger block, not so much for the Michelin rubber saving me from leaving the cold tarmac! It was one of those drives down where everything fell into place and I felt at one with the car. For me, it's that perfect combination of a simple, thin rimmed steering wheel, a close ratio short shift manual gearbox falling closely to hand, a naturally aspirated free revving flat six behind you, blue sky and sunshine, colder ambient temperatures, a decent stretch of tarmac with no potholes or traffic, that add up to make something quite magical!

It was such a good run I had to apologise for arriving late because I'd been enjoying myself so much.

Following a thorough inspection the Paragon service team noted my rear tyres were starting to wear in the inner edge, and the offside front lower wishbone bushes were starting to perish. I have asked Paragon to pre-order the wishbone from Porsche Motorsport in addition to x4 Michelin Pilot Sport 4S with the work all booked in for mid Feb 2022, including full geometry. That way I beat any anticipated price rise on 1/1/22 and ensure the tyres will be available for fitting given the shortage of certain Michelin rubber in the UK right now.

In other news, I attended the We Are Scambler's (@wearescambler's) German Assembly at Bicester Heritage which offered a fabulous array of machinery including a good percentage of Stuttgart's finest. The organisers asked me to park the GT3 up on the main avenue with Guy Feltham's (@askgeez) 997.2 GT3 and a 996.2 GT3 which made for some awesome shots courtesy of my daughter Lauren (@lmj\_madwhips).

The following day, Max and I attended the 9WERKS (@9Werks) inaugural event at the newly opened OPC Bournemouth. A fabulous turnout of over 150 enthusiasts were in attendance, with a mightily impressive sales and workshop facility including Porsche Classic approved status and a dedicated area for EV sales and servicing.

Finally, I held another Exclusively Porsche event at Fuel Coffee House in West Sussex (@fuel\_coffee\_house) with around 70 cars attending, including a stunning red 991 GT2 RS Weissach. I always love the unexpected variety of cars that turn up to my events where everyone is most welcome, regardless of which model of Porsche they drive!



## 72 | Living the Legend – 911 owner reports



**Ron Lang**  
Ashland, Oregon

@ronlangsport

Model **911S 2.4-LITRE**  
Year **1972**  
Acquired **2018**

Model **930 3.3**  
Year **1982**  
Acquired **2020**

Model **964 CARRERA 2 REIMAGINED BY SINGER**  
Year **1991**  
Acquired **2016**

Model **993 TURBO**  
Year **1997**  
Acquired **2015**

Model **996 GT2**  
Year **2003**  
Acquired **2021**

Model **997.2 GT3 RS**  
Year **2011**  
Acquired **2015**

Model **991.2 C4S**  
Year **2017**  
Acquired **2016**

Model **GT3 TOURING**  
Year **2019**  
Acquired **2021**



One common theme in the 911 world is the question of whether or not to modify the car. We each have a different vision of how we want our 911

to look and perform – is there a logical way to approach this question?

In my experience over the last 25 years of 911 ownership, the best answer I've got to this mod/no-mod question is that there is no perfect answer. I suppose that if maintaining the value of your 911 investment is paramount, leaving the car bone stock is best. I've tried the 'keep it original' approach with several 911s and I've not been disappointed – the cars are so good and so well engineered that most of my dreams have been fulfilled by an original unmodified car.

Then there is the theme of 'tasteful mods'. Of course the definition of 'tasteful' is up to the definer and no two enthusiasts have the exact same view. For me, tasteful means subtle and elegant.

For example, on the 34,000-mile 1997 993 Turbo, I think it looks pretty much 100 per cent original, but then I realise that I've done a fair bit of modding on it. Mechanically it has a lightened flywheel



which enhances every shift up and down the 'box, and I always enjoy the chatter of the gears in neutral. I then had the turbos rebuilt with compressor wheels crafted from billet. The wheels spin up faster, resulting in more boost sooner with very noticeable performance improvement. I also had a short shifter installed and enjoy that every time I drive the car.

And yes, there are the tasteful (?) suspension mods. Bilstein PSS10 coilovers all around, the 993 Turbo then lowered to get that 'just right' stance and thin wheel spacers installed to get the tyres pushed out to just inside the fender lips.

I've had my 2017 991.2 Carrera 4S for over five years and driven over 13,000 miles, I truly love this car. I ordered it to

my spec and got all the goodies I wanted from new, from the Granite blue metallic paint to the seven-speed manual box, to the ceramic brakes and the Burmester sound upgrade. But did I leave it 100 per cent original – well, almost. The ECU was reprogrammed by GIAC, a well-regarded tuning firm in the USA. Did I need more power? Absolutely not. But this three-litre twin turbo is now a stealth hot rod with close to 500hp and 595Nm of torque. It's a jet, so fast and so confidence-inspiring on its otherwise stock suspension. So it has just one tasteful mod and I'm leaving it at that, at least for now.

To mod or not to mod, apparently the temptation to personalise the car runs strong with me. How about you?



**Natalie Stratos**  
London, UK

Model **911 SC TARGA**  
Year **1982**  
Acquired **NOV 1994**



The last time I contributed to **Total 911** my Targa was being investigated for the dramatic smoke coming from the engine. Frazer at

FD Mechanics has been my saviour yet again. He has taken time to investigate the issues to find a way that I can get the car back on the road and also not break the bank. The other garage wanted to take the whole engine out but at a cost of £10-£15k, which was totally unmanageable.

Frazer checked the oil level when the car was running and warm and it was

way too high. He drained the oil and removed the spark plugs to clean out the cylinders and plugs. While my car was in the workshop they found she had a bad engine oil leak. Further investigation was required and the outcome was that there was an oil leak from the rear of the block consisting of three components: 1. The oil thermostat housing sealing ring leaking. 2. Oil breather housing gasket leaking. 3. Oil pressure switch leaking (minor) from connection post.

Access was difficult and he recommended that he needed to remove the engine to obtain access to do repairs, however due to the age of the vehicle and the risk of damaging associated parts and fixings he decided to remove inlet manifold and associated parts from top of engine to gain access instead. He replaced the brittle seals, gaskets and cleaned the area thoroughly. He renewed the breather pipes and vacuum hoses which broke due to age and refitted removed parts. Poor earthing was found on the offside rear light cluster causing indicators and brake lights to work simultaneously. This has been rectified along with a long list of other soon-to-be-addressed issues.

Through all the various stages Frazer and his wife Sanna constantly kept in

touch with me to explain where they were at with the diagnosis and cost. This is so refreshing as so many garages get on with works without any consultation then present you with a huge bill. I love their respect and care for the customer.

Frazer also let me take his beauty out for a run, to get fish and chips, hence the fantastic photo opportunity. It is a 2002 996 Turbo in Cobalt blue. I went for a spin down the A3 and she was a dream to handle both in the fast lane and in traffic. The car has the right combination of sport and comfort that suits me. He is a Porsche lover so shares my enthusiasm for getting the Targa back on the road. Not having my car up and running has led me to drive a variety of newer Porsches, which I have to say has whet my appetite for getting one. Again I would never sell my 1982 Targa but she is in need of constant attention and without her in my life I feel lost. I miss driving her so much it is unbearable. She is part of my identity. So maybe I need to have a newer one to run around in whilst I get my Targa refurbished and rebuilt slowly but as an investment for the future.

So if all goes to plan I will have her back in a week or so. I am eternally grateful to the team at FD Mechanics. My Targa lives to see another day driving around London.







**Ben Przekop**  
Mercer Island, WA

@benjaminprzekop

Model **992 CARRERA S**  
Year **2022**  
Acquired **DECEMBER 2021**



My 2022 911 is still on its way to me, but now it is oh so close! After a lengthy sea journey which began on 27 October at Emden, Germany, it finally docked at Benicia, California on 29 November. As I write this, it is undergoing port-based servicing by Porsche, and then will be transported by truck to Porsche Bellingham, with an estimated arrival on 17 December, after which they need a couple of days to prep the car for delivery.

In the meantime, I thought I would share some lessons I learned about configuring and ordering a 911 in these COVID and supply chain constrained

times. More folks than ever before are ordering 911s for the simple reason that dealers simply don't have any new cars in stock to sell, and pre-owned cars, if you can find any worth having, are selling at a significant premium. The car shown in the photo was taken at my dealer, who is displaying some of the owner's personal collection to fill an otherwise empty showroom! So, if you want a new 911 the first thing you will have to do is get on a waiting list, and that usually involves putting down a deposit. Be wary of dealers who require you to pre-order a minimum number of options (read: max price), or demand a very hefty deposit, or worse still who tell you they have to add a 'Market Adjustment' cost of 10-20% to the MSRP. If you don't have a relationship with a reputable Porsche dealer, check with your local car club community to find out who is trustworthy; sadly, not all dealers are.

Secondly, as you spec out your dream 911, make sure you thoroughly research the myriad of options available on the 992, but at the same time be realistic and make some tough decisions about which ones you are really going to use... setting a budget helps! I strongly recommend you check out a YouTube video ("992 Every Option") by a jovial Porsche enthusiast

named Nick Murray that indeed goes through every option available on the new 992s. He also offers his personal opinion on the relative value of some of the newer options, for example rear-axle steering or dynamic chassis control, which I found helpful. In addition, he shows where you can actually get some things 'for free'. A good example of this is that the 'standard' Porsche interior has a limited amount of leather surfaces, so Porsche offers the extra cost option of ordering a 'full leather' interior. But even though you just paid a hefty fee for that full leather interior, if you want the stitching in a different colour (e.g. red stitching on black leather) it involves choosing the 'deviated stitching' option which costs as much as the full leather option itself! However, Nick points out that there are some 'standard' options to customise the interior which incur no extra cost, such as chalk stitching on black seats (my choice), or different coloured seat inserts, which are great things to be aware of.

In summary, configuring and ordering a new 911 can be one of the most enjoyable experiences of your life; this special car will be uniquely 'yours', even if you have to wait a bit longer for it. And isn't the delicious joy of anticipation half the fun?



**Ian Harris**  
Shoreham, UK

@harrisclassics

Model **3.2 CARRERA**  
Year **1988**  
Acquired **DEC 2020**

Model **911 SC**  
Year **1980**  
Acquired **JUNE 2020**

Model **964 CARRERA**  
Year **1993**  
Acquired **JULY 2021**

Model **991.2 GT3**  
Year **2019**  
Acquired **MARCH 2021**



As winter approaches, the salting of the UK roads is a classic car's worst enemy, so as much as I will find it difficult my 964 is

now stored away in my dry garage.

Whenever I put a car away for winter I always like getting them detailed and put away lovely and clean. I buy some dehumidifier sacks and place them in the car to draw out any moisture, put the batteries on a trickle charge and use a good-quality soft indoor cover.

With my 964 off the road for a few months I had been thinking about a new daily; I've just sold my VW T6 van and M3 and have been looking at Porsches to buy. I've spent months considering what would fit into my car collection, something that is fun to drive, engaging, isn't at the top of the market money-wise and is subtle, as it will be parked at my work Monday-Friday. The car that kept coming back to my mind was the 718 GTS 4.0-litre, my local OPC lent me one last year and I really enjoyed it. My main requirement was that I wanted the bucket seats. I phoned around my local Porsche dealers and was told that they had two demos due in, both



the same spec cars, both with the buckets with the exterior colour either black or Gentian blue, what a result!

I chose the blue one, it was almost the identical spec to what I wanted and with only 900 miles on the clock, it was like a new car. To make things even better it was well under the list price new, so I bought the car straight away.

Over the next week I went onto almost double the mileage to 1,600 miles and what a car, it really is the sweet spot for me. Naturally aspirated 4.0-litre engine, manual gearbox, mid engined and a compact package without any big spoilers or low splitters to worry about. It's spot on, the engine sounds great, chassis is superb, it's fun and engaging and can be used everyday. In fact on the week I collected it, Chris Harris from *Top Gear*



was driving one and said it was the best Porsche you could buy at the moment, apart from the 992 GT3, now that's quite the statement!

My first week of ownership has been superb even if the car does make some odd sounds on cold startup. Now it's time to get the wheels painted; the wheels I had custom made on the 964 are Porsche Satin Platinum, so it only seemed right that I should get the GTS wheels painted the same. My local alloy wheel centre repairs the alloys for Porsche, so I knew they would do a great job and four days later my alloys are now painted and fitted to the car. I personally think they look great, as they match my other car and hide brake dust well, and that will be needed as I'm planning on clocking up lots of miles on the GTS this winter!



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# PREMIERPORSCHE

## EVERYTHING YOU NEED FOR YOUR 911

### Data file

Full specs, ratings and market values of every Porsche 911 model, including the 3.2 Carrera generation, can be found beginning on page 76

### Plus

#### Showroom

Looking for a new 911? The classifieds from our independent specialist partners are the first place you should start your search

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Get the very best from your Porsche 911 with the help of our selected performance and maintenance specialists

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# Data file

Definitive facts and figures for every 911 model from 1964 to the present day



911s in the data file are organised in rows according to release date, beginning with the very first model in 1964. Many models were available in Coupe, Targa and Cabriolet forms, with the option of automatic transmission. Here, data has been provided from the Coupe variants unless stated. All data here has been compiled, where possible, from Porsche's own figures.

## General valuations

This reflects the general market trend for a model's used value compared to the previous financial quarter. The review for 2022 Q2 will be April. The review for 2022 Q1 was January.

## Ratings

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



● (O series) ★★★★★  
**911 2.0-litre 1964-1967**  
The 911 that started it all when the prototype appeared in 1963, this car set the style for all 911s to follow. Developed to replace the 356, a four-pot 912 was also made.

Production numbers	9,250
Issue featured	123
Engine capacity	1,990cc
Compression ratio	9.0:1
Maximum power	130hp @ 6,100rpm
Maximum torque	149Nm @ 5,200rpm
0-62mph	8.3sec
Top speed	138mph
Length	4,163mm
Width	1,610mm
Weight	1,079kg
Wheels & tyres	
F	5x15-inch; 165/80/R15
R	4.5x15-inch; 165/80/R15



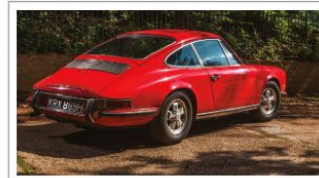
● (A series) ★★★★★  
**911R 1968**  
The lightest 911 of all time, the R was essentially a prototype racer fitted with a 906 flat six engine producing 210hp. Of the 19 produced, four would stay at the factory as works cars.

Production numbers	19
Issue featured	94
Engine capacity	1,990cc
Compression ratio	10.5:1
Maximum power	210hp @ 6,000rpm
Maximum torque	152Nm @ 6,800rpm
0-62mph	5.9sec
Top speed	152mph
Length	4,163mm
Width	1,610mm
Weight	800kg
Wheels & tyres	
F	6x15-inch; 185/70/R15
R	7x15-inch; 185/70/R15



● (C & D series) ★★★★★  
**911S 1970-1971**  
An upgrade in engine size gave the 911S 182bhp. Unlike the 911E, the S didn't gain improved low-down power and torque, so you had to keep the revs up for good power.

Production numbers	4,691
Issue featured	120
Engine capacity	2,195cc
Compression ratio	9.8:1
Maximum power	180hp @ 6,500rpm
Maximum torque	199Nm @ 5,200rpm
0-62mph	6.6sec
Top speed	145mph
Length	4,163mm
Width	1,610mm
Weight	1,020kg
Wheels & tyres	
F	6x15-inch; 185HR
R	6x15-inch; 185HR



● (C & D series) ★★★★★  
**911T 1970-1971**  
Like the E, the 911T's torque curve was flatter, making the car more drivable. Ventilated discs from the S were fitted, and a five-speed gearbox became standard.

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



● (F series) ★★★★★  
**911T 1973**  
US-bound F series 911Ts were the first 911s to have Bosch K-Jetronic fuel injection, improving emissions. This was mainly mechanical, with some electronic sensors.

Production numbers	16,993
Issue featured	127
Engine capacity	2,340cc
Compression ratio	7.5:1
Maximum power	130hp @ 5,600rpm
Maximum torque	137Nm @ 4,000rpm
0-62mph	7.6 sec
Top speed	128mph
Length	4,163mm
Width	1,610mm
Weight	1,077kg
Wheels & tyres	
F	5x15-inch; 165HR
R	5x15-inch; 165HR



● (G series) ★★★★★  
**Carrera 3.0 RS 1974**  
Updated version of the 1973 2.7 RS, complete with impact bumpers and Turbo-spec whitetail rear wing. Steel arches added by hand at the factory, with 917 brakes.

Production numbers	109
Issue featured	145
Engine capacity	2,994cc
Compression ratio	23hp @ 6,200rpm
Maximum power	275Nm @ 5,000rpm
0-62mph	5.3 sec
Top speed	152mph
Length	4,135mm
Width	1,680mm
Weight	900kg
Wheels & tyres	
F	8x15-inch; 215/60/VR15
R	8x15-inch; 215/60/VR15



★★★★★  
**930 3.0 1975-1977**  
Fitted with a KKK turbo, this was the world's first production Porsche to be turbocharged. Flared arches, whitetail rear wing and four-speed gearbox were standard.

Production numbers	2,850
Issue featured	157
Engine capacity	2,994cc
Compression ratio	6.5:1
Maximum power	260hp @ 5,500rpm
Maximum torque	343Nm @ 4,000rpm
0-62mph	5.5 sec
Top speed	156mph
Length	4,250mm
Width	1,775mm
Weight	1,340kg
Wheels & tyres	
F	7x15-inch; 185/70/VR15
R	8x15-inch; 215/60/VR15



★★★★★  
**930 3.3 1978-1983**  
Larger engine resulted in extra 40bhp, and an intercooler on top of the engine led to the adoption of a teatray. Brakes were upgraded from 917.

Production numbers	5,807 (plus 78 to '79 Call cars)
Issue featured	116
Engine capacity	3,298cc
Compression ratio	7.0:1
Maximum power	300hp @ 5,500rpm
Maximum torque	412Nm @ 4,000rpm
0-62mph	5.4 sec
Top speed	160mph
Length	4,281mm
Width	1,795mm
Weight	1,390kg
Wheels & tyres	
F	7x15-inch; 205/55/VR16
R	8x15-inch; 225/50/VR16



● (A series) ★★★★★  
**911S 1968**



Porsche soon produced more powerful variants. The first of these was the 911S – for Super – which had a higher compression engine and twin Weber 40D carburetors.

Production numbers	4,015
Issue featured	148
Engine capacity	1,991cc
Compression ratio	9.8:1
Maximum power	160hp @ 6,000rpm
Maximum torque	179Nm @ 5,200rpm
0-62mph	8.9 sec
Top speed	137mph
Length	4.163m
Width	1.610m
Weight	1,030kg

**Wheels & tyres**  
F 4.5x15 inch, 185/80/R15  
R 4.5x15 inch, 185/80/R15

● (A series) ★★★★★  
**911L 1968**



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

Production numbers	1,603
Issue featured	138
Engine capacity	1,991cc
Compression ratio	9.0:1
Maximum power	130hp @ 6,100rpm
Maximum torque	177Nm @ 4,600rpm
0-62mph	8.4 sec
Top speed	132mph
Length	4.163m
Width	1.610m
Weight	1,080kg

**Wheels & tyres**  
F 5.5x15 inch, 185HR  
R 5.5x15 inch, 185HR

● (A series) ★★★★★  
**911T 1968**



To save money, the 911T's engine used cast-iron cylinder heads, unlike the Bial aluminium/iron items, which gave more efficient cooling, and carbs instead of fuel injection.

Production numbers	6,338
Issue featured	127
Engine capacity	1,991cc
Compression ratio	8.6:1
Maximum power	110hp @ 5,800rpm
Maximum torque	156Nm @ 4,200rpm
0-62mph	8.8 sec (est)
Top speed	124mph
Length	4.163m
Width	1.610m
Weight	1,020kg

**Wheels & tyres**  
F 5.5x15 inch, 185HR  
R 5.5x15 inch, 185HR

● (B series) ★★★★★  
**911E 1969**



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

Production numbers	2,826
Issue featured	n/a
Engine capacity	1,996cc
Compression ratio	9.1:1
Maximum power	140hp @ 6,500rpm
Maximum torque	179Nm @ 4,500rpm
0-62mph	7.9 sec
Top speed	130mph
Length	4.163m
Width	1.610m
Weight	1,050kg

**Wheels & tyres**  
F 5.5x15 inch, 185HR  
R 5.5x15 inch, 185HR



● (B series) ★★★★★  
**911S 1969**  
Like the E, the S gained a fuel injection, boosting power to 170bhp. To help cope with the extra demands on the engine, an additional oil cooler was fitted in the front right wing.

Production numbers	2,106
Issue featured	n/a
Engine capacity	1,991cc
Compression ratio	9.1:1
Maximum power	170hp @ 6,800rpm
Maximum torque	182Nm @ 5,500rpm
0-62mph	7.0 sec (est)
Top speed	140mph
Length	4.163m
Width	1.610m
Weight	999kg

**Wheels & tyres**  
F 6.5x15 inch, 185/70/R15  
R 6.5x15 inch, 185/70/R15

● (C & D series) ★★★★★  
**911E 1969-1971**



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

Production numbers	4,927
Issue featured	107
Engine capacity	2,396cc
Compression ratio	9.1:1
Maximum power	155hp @ 6,200rpm
Maximum torque	196Nm @ 5,500rpm
0-62mph	7.0 sec
Top speed	137mph
Length	4.163m
Width	1.610m
Weight	1,020kg

**Wheels & tyres**  
F 6.5x15 inch, 185HR  
R 6.5x15 inch, 185HR

● (E series) ★★★★★  
**911E 1972**



2.341cc was achieved by increasing the stroke from 66mm to 70.4mm while at the same time leaving the bore unchanged. The new 915 transmission was stronger.

Production numbers	4,406
Issue featured	117
Engine capacity	2,341cc
Compression ratio	8.0:1
Maximum power	169hp @ 6,200rpm
Maximum torque	206Nm @ 4,500rpm
0-62mph	7.5 sec
Top speed	137mph
Length	4.163m
Width	1.610m
Weight	1,070kg

**Wheels & tyres**  
F 6.5x15 inch, 185HR  
R 6.5x15 inch, 185HR

● (E series) ★★★★★  
**911T 1972**



A lower compression ratio and the inclusion of Zenith 40 TINI triple-choke carburetors led to the relatively lower power output of 150bhp despite the new 2.341cc engine size.

Production numbers	16,933
Issue featured	107
Engine capacity	2,341cc
Compression ratio	7.5:1
Maximum power	130hp @ 5,600rpm
Maximum torque	197Nm @ 4,000rpm
0-62mph	7.8 sec
Top speed	129mph
Length	4.163m
Width	1.610m
Weight	1,070kg

**Wheels & tyres**  
F 5.5x15 inch, 185HR  
R 5.5x15 inch, 185HR

● (E series) ★★★★★  
**911S 1972**



A 2.4-litre engine increased torque. The mostly chrome brightwork had a black decal grid with a '2.4' badge. External oil filler on right rear wing confused some.

Production numbers	5,054
Issue featured	120
Engine capacity	2,341cc
Compression ratio	8.5:1
Maximum power	150hp @ 6,500rpm
Maximum torque	211Nm @ 5,200rpm
0-62mph	6.6 sec
Top speed	140mph
Length	4.163m
Width	1.610m
Weight	1,070kg

**Wheels & tyres**  
F 6.5x15 inch, 185/70/R15  
R 6.5x15 inch, 185/70/R15

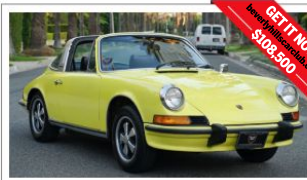
● (F series) ★★★★★  
**Carrera 2.7 RS 1973**



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

Production numbers	1,590
Issue featured	145
Engine capacity	2,687cc
Compression ratio	8.5:1
Maximum power	210hp @ 6,300rpm
Maximum torque	259Nm @ 5,100rpm
0-62mph	5.8 sec
Top speed	152mph
Length	4.163m
Width	1.652m
Weight	979kg (Sport)

**Wheels & tyres**  
F 6.5x15 inch, 185/70/R15  
R 7.5x15 inch, 215/70/R15



● (F series) ★★★★★  
**911E 1973**  
After incidents of people filling E series 911s with petrol via the external oil-filler, the filler returned to under the engine decklid. Fitted with the front spoiler of the 911S.

Production numbers	4,406
Issue featured	144
Engine capacity	2,341cc
Compression ratio	8.0:1
Maximum power	169hp @ 6,200rpm
Maximum torque	206Nm @ 4,500rpm
0-62mph	7.5 sec
Top speed	137mph
Length	4.163m
Width	1.610m
Weight	1,070kg

**Wheels & tyres**  
F 6.5x15 inch, 185HR  
R 6.5x15 inch, 185HR

● (F series) ★★★★★  
**911S 1973**



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

Production numbers	5,054
Issue featured	120
Engine capacity	2,341cc
Compression ratio	8.5:1
Maximum power	150hp @ 6,500rpm
Maximum torque	211Nm @ 5,200rpm
0-62mph	6.6 sec
Top speed	140mph
Length	4.163m
Width	1.610m
Weight	1,070kg

**Wheels & tyres**  
F 6.5x15 inch, 185/70/R15  
R 6.5x15 inch, 185/70/R15



● (G, H, J series) ★★★★★  
**911 1974-1977**

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

Production numbers	9,320
Issue featured	121
Engine capacity	2,687cc
Compression ratio	8.5:1
Maximum power	150hp @ 5,800rpm (165bhp from 76)
Maximum torque	239Nm @ 3,800rpm (400Nm from 76)

0-62mph	8.5 sec
Top speed	130mph
Length	4.291m
Width	1.680m
Weight	1,075kg

**Wheels & tyres**  
F 6.5x15 inch, 185VR  
R 6.5x15 inch, 185VR



● (G, H, J series) ★★★★★  
**911S 1974-1977**

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

Production numbers	17,124
Issue featured	n/a
Engine capacity	2,687cc
Compression ratio	8.5:1
Maximum power	173hp @ 6,300rpm
Maximum torque	239Nm @ 4,000rpm

0-62mph	7.0 sec
Top speed	142mph
Length	4.291m
Width	1.610m
Weight	1,080kg

**Wheels & tyres**  
F 6.5x15 inch, 185VR  
R 6.5x15 inch, 185VR



● (G & H series) ★★★★★  
**911 Carrera 2.7 1974-1976**  
From 1974, Carrera name was given to range topping 911. Essentially the same engine as previous year's RS for all markets except USA. Whaletail available from 1975.

Production numbers	1,667
Issue featured	134
Engine capacity	2,687cc
Compression ratio	8.5:1
Maximum power	210hp @ 6,300rpm
Maximum torque	259Nm @ 5,100rpm
0-62mph	6.3 sec
Top speed	148mph
Length	4.291m
Width	1.652m
Weight	1,075kg

**Wheels & tyres**  
F 6.5x15 inch, 205VR  
R 7.5x15 inch, 205VR



● (G, J series) ★★★★★  
**911 Carrera 3.0 1976-1977**

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

Production numbers	3,687
Issue featured	148
Engine capacity	2,994cc
Compression ratio	8.5:1
Maximum power	197hp @ 6,000rpm
Maximum torque	255Nm @ 4,200rpm

0-62mph	6.3 sec
Top speed	145mph
Length	4.291m
Width	1.610m
Weight	1,059kg

**Wheels & tyres**  
F 6.5x15 inch, 185/70/R15  
R 7.5x15 inch, 215/60/R15



● ★★★★★  
**911 SC 1978-1983**

From 1978, the SC was the only normally aspirated 911. Developed from the Carrera 3.0, but produced less power. Upgraded Sport options.

Production numbers	60,740
Issue featured	156
Engine capacity	2,994cc
Compression ratio	8.5:1 (8.1/8.1/8.1)
Maximum power	180/188/204hp @ 5,500rpm

Maximum torque	265/265/267Nm
0-62mph	6.5 sec
Top speed	141/146mph
Length	4.291m
Width	1.629m
Weight	1,100kg (1978)

**Wheels & tyres**  
F 7.5x15 inch, 185/70/R15  
R 7.5x15 inch, 215/60/R15



● ★★★★★  
**SC RS 1984**  
True homologation special built so Porsche could go Group B rallying. Six Rothmans cars used fibre glass front wings and lid. Tuned 3.0-litre engine had its basis on 924's engine.

Production numbers	21
Issue featured	158
Engine capacity	2,994cc
Compression ratio	10.3:1
Maximum power	259hp @ 7,000rpm
Maximum torque	250Nm @ 6,500rpm
0-62mph	4.9 sec
Top speed	153mph
Length	4.238m
Width	1.775m
Weight	940kg

**Wheels & tyres**  
F 7.5x15 inch, 205/55/VR16  
R 8.5x15 inch, 225/50/VR16



● ★★★★★  
**930 3.3 1978-1983**  
Larger engine resulted in extra 40bhp, and an intercooler on top of the engine led to the adoption of a 'Trakey' brakes were upgraded from 917's racer.

Production numbers	5,807 (up 78 to 5,787 Call cars)
Issue featured	116
Engine capacity	3,299cc
Compression ratio	10.1:1
Maximum power	300hp @ 5,500rpm
Maximum torque	412Nm @ 4,000rpm
0-62mph	5.4 sec
Top speed	160mph
Length	4.291m
Width	1.775m
Weight	1,300kg

**Wheels & tyres**  
F 7.5x15 inch, 205/55/VR16  
R 8.5x15 inch, 225/50/VR16



● ★★★★★  
**Carrera 3.2 1984-1989**  
Almost the same galvanised body as the SC. Engine was claimed to be 80 per cent new, and the first production 911 to feature an ECU to control ignition and fuel systems.

Production numbers	20,044
Issue featured	148
Engine capacity	3,164cc
Compression ratio	10.3:1
Maximum power	234hp @ 5,500rpm
Maximum torque	284Nm @ 4,800rpm
0-62mph	5.6 sec
Top speed	155mph
Length	4.291m
Width	1.652m
Weight	2,120kg

**Wheels & tyres**  
F 7.5x15 inch, 185/65/VR16  
R 8.5x15 inch, 215/60/VR16 (61 for 89)



● ★★★★★  
**930 SE 1986-1989**  
Slantroosed and based on 935 race cars, with pop-up headlamps. Front spoiler made deeper to accommodate extra oil cooler, rear intakes fed air to brakes.

Production numbers	50 (UK only)
Issue featured	148
Engine capacity	3,299cc
Compression ratio	10.1:1
Maximum power	330hp @ 5,500rpm
Maximum torque	432Nm @ 4,000rpm
0-62mph	4.6 sec
Top speed	173mph
Length	4.291m
Width	1.775m
Weight	1,339kg

**Wheels & tyres**  
F 7.5x15 inch

## Speedster 1989



Carrera 3.2 with a steeply raked windscreen and hood and striped interior. Porsche claim the hood was not designed to be 100 per cent water-tight.

<b>Production numbers</b>	2274 (for both wide and narrow-bodied)
<b>Issue featured</b>	128
<b>Engine capacity</b>	3.186cc
<b>Compression ratio</b>	10.3:1
<b>Maximum power</b>	230hp @ 5,500rpm
<b>Maximum torque</b>	284Nm @ 4,800rpm
<b>0-62mph</b>	5.0 sec
<b>Top speed</b>	162mph
<b>Length</b>	4.291m
<b>Width</b>	1.775m
<b>Weight</b>	1,229kg
<b>Wheels &amp; tyres</b>	
F	6x16-inch, 205/45/VR16
R	8x16-inch, 245/40/VR16

## 3.2 Clubsport 1987-89



Removing 'luxuries' sliced off around 40kg of weight. Revised engine management gave a higher rev limit of 6,840rpm. Suspension updated and 1.5D standard.

<b>Production numbers</b>	340
<b>Issue featured</b>	126
<b>Engine capacity</b>	3.164cc
<b>Compression ratio</b>	10.3:1
<b>Maximum power</b>	231hp @ 5,500rpm
<b>Maximum torque</b>	284Nm @ 4,800rpm
<b>0-62mph</b>	5.1 sec
<b>Top speed</b>	152mph
<b>Length</b>	4.291m
<b>Width</b>	1.650m
<b>Weight</b>	1,160kg
<b>Wheels &amp; tyres</b>	
F	6x16-inch, 205/55/VR16
R	7x16-inch, 225/55/VR16

## 930 LE 1989



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

<b>Production numbers</b>	50
<b>Issue featured</b>	110
<b>Engine capacity</b>	3.298cc
<b>Compression ratio</b>	10:1
<b>Maximum power</b>	330hp @ 5,500rpm
<b>Maximum torque</b>	432Nm @ 4,000rpm
<b>0-62mph</b>	4.6 sec
<b>Top speed</b>	173mph
<b>Length</b>	4.291m
<b>Width</b>	1.775m
<b>Weight</b>	1,359kg
<b>Wheels &amp; tyres</b>	
F	7x16-inch, 205/55/VR16
R	8x16-inch, 245/45/VR16



**1964 Carrera 2 1990-1993**  
Rear-drive Carrera 2 offered an emphatically more traditional 911 experience, and was 100kg lighter, but looked identical to the Carrera 4. Tiptronic was a new option.

<b>Production numbers</b>	39,464
<b>Issue featured</b>	119
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	250hp @ 6,100rpm
<b>Maximum torque</b>	310Nm @ 4,800rpm
<b>0-62mph</b>	5.6 sec
<b>Top speed</b>	162mph
<b>Length</b>	4.250m
<b>Weight</b>	1,350kg
<b>Wheels &amp; tyres</b>	
F	6x16-inch, 205/55/VR16
R	8x16-inch, 225/50/VR16



**1964 Carrera 4 1989-1993**  
Heavily revised bodywork with the hood and windscreen of the Carrera 3.2 Speedster, plus coil-spring suspension and four-wheel-drive marked this radical overhaul of the '87 per cent new' 911.

<b>Production numbers</b>	13,953 (20 per cent)
<b>Issue featured</b>	111
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	250hp @ 6,100rpm
<b>Maximum torque</b>	310Nm @ 4,800rpm
<b>0-62mph</b>	5.7 sec
<b>Top speed</b>	162mph
<b>Length</b>	4.250m
<b>Width</b>	1.652m
<b>Weight</b>	1,450kg
<b>Wheels &amp; tyres</b>	
F	6x16-inch, 205/55/VR16
R	8x16-inch, 225/50/VR16



**(C & D series) 1964 3.8 RS 1993**  
Identifiable by lightweight Turbo bodysell, large rear wing and 18-inch Speedline wheels. Power came from a new 3.8-litre unit with hot-film air sensor and twin exhaust.

<b>Production numbers</b>	55
<b>Issue featured</b>	132
<b>Engine capacity</b>	3,746cc
<b>Compression ratio</b>	11.6:1
<b>Maximum power</b>	300hp @ 6,500rpm
<b>Maximum torque</b>	309Nm @ 5,250rpm
<b>0-62mph</b>	4.9 sec
<b>Top speed</b>	168mph
<b>Length</b>	4.250m
<b>Width</b>	1.775m
<b>Weight</b>	1,210kg
<b>Wheels &amp; tyres</b>	
F	8x18-inch, 235/40/VR18
R	10x18-inch, 285/35/VR18



**1964 Anniversary 1993-94**  
'30 Jahre' anniversary 964 utilised a 'Turbo' wide body melded to the four-wheel-drive Carrera running gear. Available in Viola metallic, Polar silver or Amethyst.

<b>Production numbers</b>	911
<b>Issue featured</b>	112
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	250hp @ 6,100rpm
<b>Maximum torque</b>	310Nm @ 4,800rpm
<b>0-62mph</b>	5.7 sec
<b>Top speed</b>	162mph
<b>Length</b>	4.250m
<b>Width</b>	1.775m
<b>Weight</b>	1,470kg
<b>Wheels &amp; tyres</b>	
F	7x17-inch, 205/50/VR17
R	9x17-inch, 255/40/VR17



**1964 RS America 1993**  
Offered in five colours, fixed wheelie top and two cloth sports seats, with just four options: air-con, sunroof, 90 per cent locking rear differential and stereo.

<b>Production numbers</b>	701
<b>Issue featured</b>	157
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	250hp @ 6,100rpm
<b>Maximum torque</b>	310Nm @ 4,800rpm
<b>0-62mph</b>	5.5 sec
<b>Top speed</b>	164mph
<b>Length</b>	4.250m
<b>Width</b>	1.650m
<b>Weight</b>	1,340kg
<b>Wheels &amp; tyres</b>	
F	7x17-inch, 205/50/VR17
R	8x17-inch, 255/40/VR17



**964 C2 Speedster 93-94**  
Combined the 964 bodysell with the hood and windscreen of the Carrera 3.2 Speedster, plus RS interior. It is thought Porsche planned to build 3,000, but never got off the ground.

<b>Production numbers</b>	936
<b>Issue featured</b>	128
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	250hp @ 6,100rpm
<b>Maximum torque</b>	310Nm @ 4,800rpm
<b>0-62mph</b>	5.5 sec
<b>Top speed</b>	164mph
<b>Length</b>	4.250m
<b>Width</b>	1.652m
<b>Weight</b>	1,340kg
<b>Wheels &amp; tyres</b>	
F	7x17-inch, 205/50/VR17
R	9x17-inch, 255/40/VR17



**993 Carrera RS 1995-1996**  
Lightweight body as per RS tradition, teamed with a 3.8-litre engine. VarioRam intake system and remapped ECU to create 300bhp, led to the rear wheels only.

<b>Production numbers</b>	1,014
<b>Issue featured</b>	119
<b>Engine capacity</b>	3,746cc
<b>Compression ratio</b>	11.5:1
<b>Maximum power</b>	300hp @ 6,000rpm
<b>Maximum torque</b>	350Nm @ 5,400rpm
<b>0-62mph</b>	5.0 sec
<b>Top speed</b>	172mph
<b>Length</b>	4.245m
<b>Width</b>	1.735m
<b>Weight</b>	1,279kg
<b>Wheels &amp; tyres</b>	
F	8x18-inch, 225/40/VR18
R	10x18-inch, 265/35/VR18



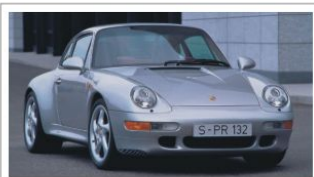
**993 Carrera 4S 1995-1996**  
The 4S was effectively a Carrera 4 with a Turbo wide bodyshell, albeit lacking a fixed rear wing. Also boasted Turbo suspension, brakes and Turbo-look wheels.

<b>Production numbers</b>	6,948
<b>Issue featured</b>	109
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	285hp @ 6,100rpm
<b>Maximum torque</b>	340Nm @ 5,250rpm
<b>0-62mph</b>	5.3 sec
<b>Top speed</b>	168mph
<b>Length</b>	4.245m
<b>Width</b>	1.795m
<b>Weight</b>	1,520kg
<b>Wheels &amp; tyres</b>	
F	8x18-inch, 225/40/VR18
R	10x18-inch, 285/30/VR18



**993 Turbo 1996-1998**  
Fitted with two KKK turbochargers in order to reduce lag. Power went to all four wheels using the Carrera 4's transmission system. Brakes were 'Big Reds'.

<b>Production numbers</b>	5,937
<b>Issue featured</b>	147
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	9.0:1
<b>Maximum power</b>	408hp @ 5,750rpm
<b>Maximum torque</b>	540Nm @ 4,500rpm
<b>0-62mph</b>	4.3 sec
<b>Top speed</b>	183mph
<b>Length</b>	4.245m
<b>Width</b>	1.795m
<b>Weight</b>	1,500kg
<b>Wheels &amp; tyres</b>	
F	8x18-inch, 225/40/VR18
R	10x18-inch, 285/30/VR18



**993 Carrera S 1997-1998**  
The features that come with the Carrera S are similar to the Carrera 4S, only this time in rear-wheel drive. Sought after for its superb handling and wide-body looks.

<b>Production numbers</b>	3,714
<b>Issue featured</b>	116
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	285hp @ 5,250rpm
<b>Maximum torque</b>	340Nm @ 5,250rpm
<b>0-62mph</b>	5.4 sec
<b>Top speed</b>	168mph
<b>Length</b>	4.245m
<b>Width</b>	1.795m
<b>Weight</b>	1,450kg
<b>Wheels &amp; tyres</b>	
F	8x18-inch, 225/40/VR18
R	10x18-inch, 285/30/VR18



**996 Turbo 2001-2005**  
Distinguished by wide rear arches, air intakes and deep front wing, plus part-fixed, part-retractable rear wing. Different engine to 3.6-litre 996 unit.

<b>Production numbers</b>	20,499
<b>Issue featured</b>	152
<b>Engine capacity</b>	3,596cc
<b>Compression ratio</b>	9.4:1
<b>Maximum power</b>	420hp @ 7,200rpm
<b>Maximum torque</b>	560Nm @ 2,700rpm
<b>0-62mph</b>	4.600pm
<b>Top speed</b>	188mph
<b>Length</b>	4.435m
<b>Width</b>	1.830m
<b>Weight</b>	1,540kg
<b>Wheels &amp; tyres</b>	
F	8x18-inch, 225/40/VR18
R	10x18-inch, 295/30/VR18



**996 Carrera 4S 2001-05**  
Basically a C4 featuring a Turbo bodysell, without rear air intakes, but with a full-width rear reflector panel. Suspension and brakes were similar to the Turbo spec.

<b>Production numbers</b>	23,059
<b>Issue featured</b>	150
<b>Engine capacity</b>	3,596cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	320hp @ 6,800rpm
<b>Maximum torque</b>	370Nm @ 4,250rpm
<b>0-62mph</b>	5.1 sec
<b>Top speed</b>	176mph
<b>Length</b>	4.435m
<b>Width</b>	1.830m
<b>Weight</b>	1,495kg
<b>Wheels &amp; tyres</b>	
F	8x18-inch, 225/40/VR18
R	10x18-inch, 295/30/VR18



**996 GT2 2001-03**  
A lightweight, Turbo-bodied 996 with updated turbocharged engine and suspension. PCCB was standard. Revised ECU later gave an extra 21bhp.

<b>Production numbers</b>	1,287
<b>Issue featured</b>	127
<b>Engine capacity</b>	3,600cc
<b>Compression ratio</b>	9.4:1
<b>Maximum power</b>	463hp @ 5,200rpm
<b>Maximum torque</b>	620Nm @ 3,500rpm
<b>0-62mph</b>	4.500pm
<b>Top speed</b>	181mph
<b>Length</b>	4.435m
<b>Width</b>	1.830m
<b>Weight</b>	1,490kg
<b>Wheels &amp; tyres</b>	
F	8x18-inch, 315/30/VR18
R	10x18-inch, 315/30/VR18



**996 C2 2002-2004**  
Facilitated with Turbo-style headlamps and revised front and rear bumpers, fitted with more powerful 13.6-litre engine and VarioCam Plus. Manual and Tiptronic 'boxes updated.

<b>Production numbers</b>	29,389
<b>Issue featured</b>	136
<b>Engine capacity</b>	3,596cc
<b>Compression ratio</b>	11.3:1
<b>Maximum power</b>	320hp @ 6,800rpm
<b>Maximum torque</b>	370Nm @ 4,250rpm
<b>0-62mph</b>	5.0 sec
<b>Top speed</b>	170mph
<b>Length</b>	4.435m
<b>Width</b>	1.790m
<b>Weight</b>	1,370kg
<b>Wheels &amp; tyres</b>	
F	7x17-inch, 205/50/VR17
R	8x17-inch, 255/40/VR17





★★★★★  
**964 C4**  
**Lightweight 1991**  
 964 Leichtbau made use of surplus parts from 963 Paris-Dakar project. Highlights include four-way adjustable differential, short-ratio gearbox and stripped interior.

Production numbers	22
Issue featured	131
Engine capacity	3,600cc
Compression ratio	11.3:1
Maximum power	265hp @ 5,700rpm
Maximum torque	304Nm @ 6,720rpm
0-62mph	4.5 sec
Top speed	125mph
Length	4.275m
Width	1.650m
Weight	1,100kg
Wheels & tyres	
F 7x16-inch, 205/55/2R16	
R 9x16-inch, 245/55/2R16	



★★★★★  
**964 Turbo**  
**1991-1992**  
 This used the revised 964 bodyshell, extended arches and 'teatray' wing. The engine was essentially the 3.3-litre unit from the previous model, but updated.

Production numbers	3,660
Issue featured	160
Engine capacity	3,296cc
Compression ratio	70:1
Maximum power	320hp @ 5,700rpm
Maximum torque	450Nm @ 4,500rpm
0-62mph	3.4 sec
Top speed	168mph
Length	4.250m
Width	1.775m
Weight	1,470kg
Wheels & tyres	
F 7x17-inch, 205/50/2R17	
R 9x17-inch, 255/40/2R17	



★★★★★  
**964 RS**  
**1991-1992**  
 120kg saved by deleting 'luxuries' and fitting magnesium Cup wheels. Power was boosted by 10bhp, suspension lowered by 40mm and updated, as were brakes.

Production numbers	2,405
Issue featured	138
Engine capacity	3,600cc
Compression ratio	11.3:1
Maximum power	250hp @ 6,100rpm
Maximum torque	310Nm @ 4,800rpm
0-62mph	5.4 sec
Top speed	162mph
Length	4.250m
Width	1.650m
Weight	1,230kg (sport)
Wheels & tyres	
F 7.5x17-inch, 205/50/2R17	
R 9x17-inch, 255/40/2R17	

★★★★★  
**964 Turbo S 1992-1993**  
  
 180kg lighter than Turbo. Intakes in the rear arches funnelled air to the brakes, while the engine power was boosted by 60bhp. RS-spec updated suspension.

Production numbers	81
Issue featured	108
Engine capacity	3,296cc
Compression ratio	70:1
Maximum power	388hp @ 6,000rpm
Maximum torque	490Nm @ 4,800rpm
0-62mph	4.6 sec
Top speed	180mph
Length	4.250m
Width	1.775m
Weight	1,290kg
Wheels & tyres	
F 8x18-inch, 225/40/2R18	
R 10x18-inch, 265/35/2R18	



★★★★★  
**964 Turbo 3.6**  
**1993-1994**  
 Engine based on modified 3.6-litre 964 unit. Distinctive 18-inch split-rim Speedline wheels covered the Big Red brake calipers. Suspension lowered by 20mm.

Production numbers	1,437
Issue featured	120
Engine capacity	3,600cc
Compression ratio	75:1
Maximum power	360hp @ 5,500rpm
Maximum torque	520Nm @ 4,200rpm
0-62mph	4.8 sec
Top speed	174mph
Length	4.250m
Width	1.775m
Weight	1,470kg
Wheels & tyres	
F 8x18-inch, 225/40/2R18	
R 10x18-inch, 265/35/2R18	



★★★★★  
**993 Carrera** 1993-1997  
 Restyled bodywork had swept-back headlamps, curvaceous wings and blended-in bumpers. The 3,600cc engine was revised, with VarioRam available from 1996.

Production numbers	38,626
Issue featured	160
Engine capacity	3,600cc
Compression ratio	11.3:1
Maximum power	272hp @ 6,000rpm
Maximum torque	330Nm @ 5,000rpm
0-62mph	5.6 sec
Top speed	162mph
Length	4.245m
Width	1.735m
Weight	1,370kg
Wheels & tyres	
F 7x16-inch, 205/55/2R16	
R 9x16-inch, 245/45/2R16	



★★★★★  
**993 Carrera 4** 1994-1997  
 As per the 993-model Carrera, but with four-wheel drive. Transmission was half the weight of the previous Carrera 4, and was designed to give a more rear-drive feel.

Production numbers	28,884 (Coupé)
Issue featured	131
Engine capacity	3,600cc
Compression ratio	11.3:1
Maximum power	272hp @ 6,000rpm
Maximum torque	330Nm @ 5,000rpm
0-62mph	5.8 sec
Top speed	166mph
Length	4.245m
Width	1.735m
Weight	1,420kg
Wheels & tyres	
F 7x16-inch, 205/55/2R16	
R 9x16-inch, 245/45/2R16	



★★★★★  
**993 GT2**  
**1995-1996**  
 911 Turbo, but with reduced equipment. Also included rear-wheel-drive, making it a better track car. Fitted with huge front and rear wings and bolt-on arch extensions.

Production numbers	173
Issue featured	131
Engine capacity	3,600cc
Compression ratio	9.0:1
Maximum power	430hp @ 5,750rpm
Maximum torque	540Nm @ 5,000rpm
0-62mph	3.9 sec
Top speed	189mph
Length	4.245m
Width	1.855m
Weight	1,290kg
Wheels & tyres	
F 9x18-inch, 235/40/2R18	
R 11x18-inch, 285/35/2R18	



★★★★★  
**993 Turbo S** 1998  
 The final hurrah for the last air-cooled 911. With 450bhp for UK models, it was the fastest and most luxurious road-going model Stuttgart had ever produced. Manual only.



★★★★★  
**996.1 Carrera**  
**1998-2001**  
 An all-new 911 with larger, restyled bodywork and a water-cooled engine. Interior was redesigned in order to enable better ergonomic efficiency and more room.

Production numbers	56,733
Issue featured	160
Engine capacity	3,387cc
Compression ratio	11.3:1
Maximum power	300hp @ 6,800rpm
Maximum torque	350Nm @ 4,600rpm
0-62mph	5.2 sec
Top speed	174mph
Length	4.430m
Width	1.765m
Weight	1,320kg
Wheels & tyres	
F 7x17-inch, 205/50/R17	
R 9x17-inch, 255/40/R17	



★★★★★  
**996.1 C4** 1998-2001  
 Four-wheel drive transmission fed five per cent of power in normal driving, increasing to 40 per cent when required. PSM used for first time, rolled out across the range in 2001.

Production numbers	22,054
Issue featured	111
Engine capacity	3,387cc
Compression ratio	11.3:1
Maximum power	300hp @ 6,800rpm
Maximum torque	350Nm @ 4,600rpm
0-62mph	5.2 sec
Top speed	174mph
Length	4.430m
Width	1.765m
Weight	1,375kg
Wheels & tyres	
F 7x17-inch, 205/50/R17	
R 9x17-inch, 255/40/R17	



★★★★★  
**996.1 GT3**  
**1998-2000**  
 Commonly called the Gen1 GT3, this was a lightweight 996 with power driving the rear wheels. Suspension was lowered by 30mm and brakes were updated.

Production numbers	1,885
Issue featured	117
Engine capacity	3,600cc
Compression ratio	11.7:1
Maximum power	360hp @ 7,200rpm
Maximum torque	370Nm @ 5,000rpm
0-62mph	4.8 sec
Top speed	188mph
Length	4.430m
Width	1.765m
Weight	1,350kg
Wheels & tyres	
F 8x18-inch, 225/40/R18	
R 10x18-inch, 285/35/R18	



★★★★★  
**996.2 C4**  
**2002-2004**  
 Facelifted in line with rear-drive Carrera, though the all-wheel-drive version drives very much like its rear-driven brethren. Cabin received minor updates over Gen1.

Production numbers	10,386
Issue featured	107
Engine capacity	3,596cc
Compression ratio	11.3:1
Maximum power	320hp @ 6,800rpm
Maximum torque	370Nm @ 4,250rpm
0-62mph	5.0 sec
Top speed	179mph
Length	4.430m
Width	1.770m
Weight	1,430kg
Wheels & tyres	
F 7x17-inch, 205/50/R17	
R 9x17-inch, 255/40/R17	



★★★★★  
**996 Anniversary** 03-04  
 Available in GT silver, and included a Turbo front bumper and chrome Carrera wheels. Powerkit, -10mm sports suspension and mechanical LSD standard.



★★★★★  
**996.2 GT3**  
**2003-2005**  
 Based on facelifted 996 Carrera, but with new wings. Suspension lowered and updated. PCCB optional. Full-spec interior unless Clubsport option was ordered.

Production numbers	2,313
Issue featured	142
Engine capacity	3,600cc
Compression ratio	11.7:1
Maximum power	381hp @ 7,400rpm
Maximum torque	385Nm @ 5,000rpm
0-62mph	4.5 sec
Top speed	182mph
Length	4.435m
Width	1.770m
Weight	1,380kg
Wheels & tyres	
F 8.5x18-inch, 235/40/R18	
R 11x18-inch, 295/30/R18	



★★★★★  
**996 GT3 RS**  
**2004-2005**  
 Same 3,600cc engine as in GT3, but with weight saving, offering 280bhp per ton – an improvement of four per cent over the 996 GT3 Clubsport. PCCB optional.

Production numbers	682
Issue featured	161
Engine capacity	3,600cc
Compression ratio	11.7:1
Maximum power	381hp @ 7,400rpm
Maximum torque	385Nm @ 5,000rpm
0-62mph	4.4 sec
Top speed	180mph
Length	4.435m
Width	1.770m
Weight	1,360kg
Wheels & tyres	
F 8.5x18-inch, 235/40/R18	
R 11x18-inch, 295/30/R18	

# Sales debate

Is the appeal of the long-bonnet 911s waning among enthusiasts?



## 996 Turbo S 2004-2005

A 911 Turbo with the previously optional 300hp power upgrade, with larger turbochargers, uprated intercoolers and a revised ECU. PCCB standard.

Production numbers	1,563
Issue featured	132
Engine capacity	3,600cc
Compression ratio	9.4:1
Maximum power	450hp @ 5,700rpm
Maximum torque	620Nm @ 3,500-4,500rpm
0-62mph	4.2sec
Top speed	191mph
Length	4.29mm
Width	1.850mm
Weight	1,500kg
Wheels & tyres	
F 8x18-inch; 225/40/R18	
R 11x18-inch; 295/30/R18	



## 997.1 Carrera 2004-2008

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

Production numbers	25,788
Issue featured	112
Engine capacity	3,596cc
Compression ratio	11.3:1
Maximum power	325hp @ 6,800rpm
Maximum torque	370Nm @ 4,250rpm
0-62mph	5.0sec
Top speed	177mph
Length	4.427mm
Width	1.808mm
Weight	1,395kg
Wheels & tyres	
F 8x18-inch; 235/40/R18	
R 10x18-inch; 255/40/R18	

There was once, believe it or not, a time when early 911s were forgotten, underappreciated and, well, almost apologised for, as just old Porsches. Water cooling came in and – for a while – the peculiarities of the earliest 911s were seen as negatives. Today is a different time, and those early long-bonnet models have become hot Porsche property over the last seven or eight years, with values skyrocketing almost overnight. But prices have softened lately; is their appeal on the wane? Is their fanbase, traditionally seen as older, dying out?

Jonathan Aucott of Avantgarde Classics thinks that's a misconception. Whilst there may be a perception of a fall in interest with prices dropping, values of the long-bonnet cars are actually creeping up again. "The correction is probably a reflection of their overnight rapid growth. They're probably finding their place in the market now," he thinks. "They're such great, useable and reliable cars. A right-hand-drive 'S', with a good history, in a good colour, will always be desirable."

Jonathan Ostroff, sales manager at Hexagon Classics, adds to that. "New, younger buyers of the original 911s first fall in love with what they perceive to be retro styling, but quickly learn that the original 911 is much more about honing driving skills." Aucott sees this too: "Younger buyers are definitely appreciating early 911s. There'll always be new people wanting such an iconic car."

The satisfaction of pedalling an early 911 properly will always appeal, it seems, for they offer a unique motoring proposition. Ostroff explains further: "Aficionados and collectors understand the first ten years of the 911 were very likely the golden years," he says. "They understand there is a purity in the way it drives and performs. They enjoy concentrating on their driving, balancing the engine's power and becoming 'at one' with the 911." To own and appreciate driving a long-bonnet 911 is not something that owners tire of, thinks Ostroff. "They will drive the old 911s into old age, until they are no longer able to do so."

Values of 911s will always fluctuate a little over time, but the appeal and depth of understanding for the earliest, simple cars isn't something that looks likely to change. The sheer driving purity and engineering integrity offered by those first models means they will always attract attention of 911 fans, new and old.



## 997.1 GT3 RS 2006-2007

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

Production numbers	1,106
Issue featured	156
Engine capacity	3,600cc
Compression ratio	12.0:1
Maximum power	411hp @ 7,600rpm
Maximum torque	409Nm @ 5,500rpm
0-62mph	4.2sec
Top speed	194mph
Length	4.40mm
Width	1.808mm
Weight	1,372kg
Wheels & tyres	
F 8.5x19-inch; 235/35/R19	
R 12x19-inch; 305/30/R19	



## 997 GT2 2007-2009

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

Production numbers	1,242
Issue featured	127
Engine capacity	3,600cc
Compression ratio	9.0:1
Maximum power	530hp @ 5,500rpm
Maximum torque	680Nm @ 2,200-4,500rpm
0-62mph	3.7sec
Top speed	204mph
Length	4.465mm
Width	1.852mm
Weight	1,440kg
Wheels & tyres	
F 8.5x19-inch; 235/35/R19	
R 12x19-inch; 325/30/R19	

## 997.2 GT3 RS 2009-2012



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

Production numbers	1,500
Issue featured	125
Engine capacity	3,800cc
Compression ratio	12.2:1
Maximum power	450hp @ 7,500rpm
Maximum torque	430Nm @ 6,750rpm
0-62mph	4.0sec
Top speed	192mph
Length	4.460mm
Width	1.852mm
Weight	1,370kg
Wheels & tyres	
F 9x19-inch; 245/35/R19	
R 12x19-inch; 325/30/R19	



## 997 Speedster 2010

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

Production numbers	356
Issue featured	128
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	408hp @ 7,300rpm
Maximum torque	420Nm @ 4,400-5,600rpm
0-62mph	4.4sec
Top speed	190mph
Length	4.440mm
Width	1.852mm
Weight	1,540kg
Wheels & tyres	
F 8.5x19-inch; 235/35/R19	
R 11x19-inch; 305/30/R19	

## 997 Sport Classic 2010



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

Production numbers	250
Issue featured	146
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	408hp @ 7,300rpm
Maximum torque	420Nm @ 4,400-5,600rpm
0-62mph	4.6sec
Top speed	187mph
Length	4.485mm
Width	1.852mm
Weight	1,425kg
Wheels & tyres	
F 8.5x19-inch; 235/35/R19	
R 11x19-inch; 305/30/R19	



## 997 Turbo S 2011-2013

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

Production numbers	2,000
Issue featured	123
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	510hp @ 6,250-6,750rpm
Maximum torque	700Nm @ 2,300-4,250rpm
0-62mph	3.3sec
Top speed	199mph
Length	4.455mm
Width	1.852mm
Weight	1,580kg
Wheels & tyres	
F 8.5x19-inch; 235/35/R19	
R 11x19-inch; 305/30/R19	

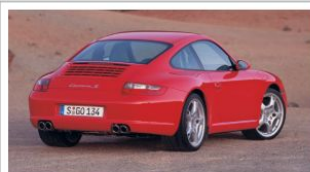


## 999.1 Carrera 2011-2015

The first of the newest and latest Gen7 911, it takes styling cues from the 993. A redesigned chassis with lengthened wheelbase reduces overhang of the engine.

Production numbers	Unknown
Issue featured	137
Engine capacity	3,436cc
Compression ratio	12.5:1
Maximum power	350hp @ 7,400rpm
Maximum torque	390Nm @ 5,600rpm
0-62mph	4.8sec
Top speed	179mph
Length	4.67mm
Width	1.808mm
Weight	1,380kg
Wheels & tyres	
F 8.5x19-inch; 235/40/R19	
R 11x19-inch; 285/35/R19	





### 997.1 Carrera S 2004-2008

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

Production numbers	41,059
Issue featured	307
Engine capacity	3,800cc
Compression ratio	11.8:1
Maximum power	355hp @ 6,600rpm
Maximum torque	400Nm @ 4,600rpm
0-62mph	4.9 sec
Top speed	182mph
Length	4,427mm
Width	1,808mm
Weight	1,429kg
Wheels & tyres	
F 8.5x18 inch, 235/35/R19	
R 12x19 inch, 295/30/R19	



### 997.1 GT3 2006-2007

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

Production numbers	2,378
Issue featured	117
Engine capacity	3,600cc
Compression ratio	12.0:1
Maximum power	415hp @ 6,800rpm
Maximum torque	405Nm @ 5,500rpm
0-62mph	4.1 sec
Top speed	193mph
Length	4,445mm
Width	1,808mm
Weight	1,399kg
Wheels & tyres	
F 8.5x18 inch, 235/35/R19	
R 12x19 inch, 305/30/R19	

### 997.1 Carrera 4 2005-08

Like the 997 Carrera, but with drive to all four wheels via a multi-disc drive system on C4. 44mm wider at rear.

Production numbers	8,513
Issue featured	3
Engine capacity	3,596cc
Compression ratio	11.1:1
Maximum power	329hp @ 6,800rpm
Maximum torque	370Nm @ 4,250rpm
0-62mph	5.1 sec
Top speed	174mph
Length	4,427mm
Width	1,852mm
Weight	1,450kg
Wheels & tyres	
F 8x18 inch, 235/40/R18	
R 11x18 inch, 255/35/R18	

### 997.1 C4S 2005-2008

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

Production numbers	30,973
Issue featured	111
Engine capacity	3,826cc
Compression ratio	11.8:1
Maximum power	355hp @ 6,600rpm
Maximum torque	400Nm @ 4,600rpm
0-62mph	4.9 sec
Top speed	179mph
Length	4,427mm
Width	1,852mm
Weight	1,479kg
Wheels & tyres	
F 8x19 inch, 235/35/R19	
R 12x19 inch, 305/30/R19	

### 997.1 Turbo 2005-2008

Similar to 997 C4S body, but with extra intakes at the front and sides. Essentially the 996 Turbo engine, but with all-new twin turbos. V10 gave best of small/large turbos.

Production numbers	19,201
Issue featured	159
Engine capacity	3,600cc
Compression ratio	9.8:1
Maximum power	480hp @ 6,000rpm
Maximum torque	620Nm @ 1,950rpm
0-62mph	3.9 sec
Top speed	193mph
Length	4,450mm
Width	1,853mm
Weight	1,589kg
Wheels & tyres	
F 8.5x19 inch, 235/35/R19	
R 12x19 inch, 305/30/R19	



### 997.2 Carrera 2008-2012

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

Production numbers	10,500
Issue featured	144
Engine capacity	3,614cc
Compression ratio	12.5:1
Maximum power	345hp @ 6,500rpm
Maximum torque	390Nm @ 4,400rpm
0-62mph	4.9 sec
Top speed	178mph
Length	4,435mm
Width	1,808mm
Weight	1,419kg
Wheels & tyres	
F 8x18 inch, 235/40/ZR18	
R 10.5x18 inch, 265/40/ZR18	



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

Production numbers	15,000
Issue featured	61
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	389hp @ 6,500rpm
Maximum torque	420Nm @ 4,400rpm
0-62mph	4.7 sec
Top speed	187mph
Length	4,435mm
Width	1,808mm
Weight	1,429kg
Wheels & tyres	
F 8x19 inch, 235/35/ZR19	
R 12x19 inch, 295/30/ZR19	



### 997.2 C4S 2008-2012

Body as per C4 but with larger engine. Utilised 997 Turbo's 4WD and PTM. Viscous coupling gives way to electromagnetically controlled multi-plate clutch.

Production numbers	7,910 (Coupé)
Issue featured	111
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	385hp @ 6,500rpm
Maximum torque	420Nm @ 4,400rpm
0-62mph	4.7 sec
Top speed	185mph
Length	4,435mm
Width	1,852mm
Weight	1,482kg
Wheels & tyres	
F 8x19 inch, 235/35/ZR19	
R 12x19 inch, 305/30/ZR19	



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

Production numbers	2,200
Issue featured	117
Engine capacity	3,797cc
Compression ratio	12.2:1
Maximum power	439hp @ 7,500rpm
Maximum torque	430Nm @ 6,250rpm
0-62mph	4.1 sec
Top speed	194mph
Length	4,460mm
Width	1,808mm
Weight	1,399kg
Wheels & tyres	
F 8.5x19 inch, 235/35/ZR19	
R 12x19 inch, 305/30/ZR19	



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

Production numbers	3,800
Issue featured	125
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	500hp @ 6,000rpm
Maximum torque	650Nm @ 1,950rpm
0-62mph	3.4 sec
Top speed	194mph
Length	4,450mm
Width	1,852mm
Weight	1,570kg
Wheels & tyres	
F 8.5x19 inch, 235/35/ZR19	
R 12x19 inch, 305/30/ZR19	



### 997 GT3 RS 4.0 2010

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

Production numbers	600
Issue featured	125
Engine capacity	3,996cc
Compression ratio	12.5:1
Maximum power	500hp @ 8,250rpm
Maximum torque	460Nm @ 5,750rpm
0-62mph	3.9 sec
Top speed	193mph
Length	4,460mm
Width	1,852mm
Weight	1,360kg
Wheels & tyres	
F 9x19 inch, 245/35/ZR19	
R 12x19 inch, 325/30/ZR19	



### 997 918 Edition 2010

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

Production numbers	121
Issue featured	74
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	530hp @ 6,250/6,700rpm
Maximum torque	700Nm @ 2,100rpm
0-62mph	4.250rpm
Top speed	3.3 sec
Length	395mm
Length	4,435mm
Width	1,852mm
Weight	1,385kg
Wheels & tyres	
F 8.5x19 inch, 235/35/ZR19	
R 12x19 inch, 305/30/ZR19	



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

Production numbers	500
Issue featured	155
Engine capacity	3,600cc
Compression ratio	12.5:1
Maximum power	620hp @ 6,500rpm
Maximum torque	700Nm @ 2,500rpm
0-62mph	3.5 sec
Top speed	205mph
Length	4,460mm
Width	1,852mm
Weight	1,370kg
Wheels & tyres	
F 9x19 inch, 245/35/ZR19	
R 12x19 inch, 325/30/ZR19	



C4's wider rear body, and powered by the 3.8-litre Carrera S engine, with a Powerflex producing extra 20bhp. GT2S is laden with Porsche options.

Production numbers	Unknown
Issue featured	157
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	429hp @ 7,300rpm
Maximum torque	420Nm @ 4,200rpm
0-62mph	4.6 sec
Top speed	190mph
Length	4,435mm
Width	1,852mm
Weight	1,420kg
Wheels & tyres	
F 8.5x19 inch, 235/35/ZR19	
R 12x19 inch, 305/30/ZR19	



Like C2 997 GT3 but slightly heavier and with 4WD. In either C2 or C4 form, it represented a great saving over optioning up a 997 Carrera counterpart.

Production numbers	Unknown
Issue featured	125
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	408hp @ 8,300rpm
Maximum torque	420Nm @ 4,200rpm
0-62mph	4.6 sec
Top speed	188mph
Length	4,435mm
Width	1,852mm
Weight	1,480kg
Wheels & tyres	
F 8.5x19 inch, 235/35/ZR19	
R 12x19 inch, 305/30/ZR19	



### 991.1 Carrera S 2011-2015

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

Production numbers	Unknown
Issue featured	114
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	400hp @ 7,400rpm
Maximum torque	440Nm @ 5,600rpm
0-62mph	4.5 sec
Top speed	188.9mph
Length	4,490mm
Width	1,808mm
Weight	1,399kg
Wheels & tyres	
F 8.5x20 inch, 245/35/ZR20	
R 12x20 inch, 295/30/ZR20	



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

Production numbers	Unknown
Issue featured	98
Engine capacity	3,436cc
Compression ratio	12.5:1
Maximum power	350hp @ 7,400rpm
Maximum torque	390Nm @ 5,600rpm
0-62mph	4.9 sec
Top speed	177mph
Length	4,490mm
Width	1,852mm
Weight	1,430kg
Wheels & tyres	
F 8.5x19 inch, 235/40/ZR19	
R 12x19 inch, 305/35/ZR19	



### 991.1 Carrera 4S 2012-2015

Same wider body styling as C4, coupled to 3.8-litre 400bhp engine. Also features six-piston brake calipers at front. PTV standard torque more evenly.

Production numbers	Unknown
Issue featured	118
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	400hp @ 7,400rpm
Maximum torque	440Nm @ 5,600rpm
0-62mph	4.5 sec
Top speed	185mph
Length	4,490mm
Width	1,852mm
Weight	1,449kg
Wheels & tyres	
F 8.5x20 inch, 245/35/ZR20	
R 12x20 inch, 305/30/ZR20	



### 991.1 GT3 2013-2015

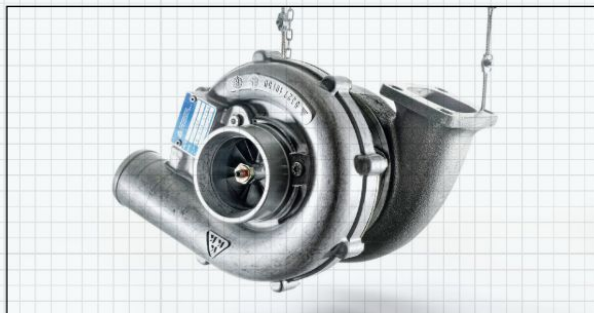
Wide body from 991 Carrera 4 was used for the first time. Mezger engine from previous GT3s replaced with revamped DFI version of Carrera S engine. PDK only.

Production numbers	3,000 (estimate)
Issue featured	143
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	479hp @ 6,250rpm
Maximum torque	440Nm @ 6,250rpm
0-62mph	3.5 sec
Top speed	196mph
Length	4,545mm
Width	1,852mm
Weight	1,430kg
Wheels & tyres	
F 9x20 inch, 245/35/ZR20	
R 12x20 inch, 305/30/ZR20	

# Technology explained

## 055 PORSCHE AND TURBOCHARGING

The Turbo moniker is well established with the 911. But what is a turbo, and why are they used?



An engine needs two ingredients to run: fuel and air. In sports cars such as the 911 where performance is the ultimate focus, you'd expect to simply turn up the wick to increase fuel, and hey presto, instant performance, right? Wrong. The combination of air and fuel is set to a fine balance, the so-called stoichiometric mixture of 14.7:1. For more fuel, the air must increase to match, but ambient air pressure dictates the amount of fuel needed to balance with 14.7 parts of atmosphere. That's where the turbo comes in.

In simple terms it is a turbine, which forces compressed air – sourced from the exhaust gases – back into the engine intake. More air at greater pressure means more oxygen, so fuelling can be increased. The extra oxygen allows a better burn of the fuel, so results in a bigger bang, basically. Which is why Porsche turned to a turbo for the 911, first racing one in the 1974 Carrera RSR Turbo 2.1. The first 911 road model to use a turbo was the 2.7 Turbo prototype of 1974 that was given to Louise Piëch.

Simple, reliable and effective, a turbo isn't without problems. Chiefly, being driven by the exhaust gas means engine revolutions need to increase before the turbine fans in the turbo take effect, and generate overpressure. This is the legendary turbo lag the first production 911, known as the 930, is known for. At 3,500rpm the 0.8 BAR boost kicks in, and with it a jump in engine output, famously catching out the unwary. Therein lies the issue. A big turbo may give a big bang, but takes a while to spool up, and the effect is rather pointed. A smaller unit spools up quickly, but struggles to maintain performance at high revs and maximum engine demand.

To get around this issue, Porsche eventually used twin turbos, first appearing on the 959. Working sequentially, a smaller unit kicked in at low revs, then a second, larger one operated at higher rpm. Twin turbo technology first appeared on a production 911 in 1995, on the 993 Turbo. In contrast to the 959, the 993 setup operated both turbos in parallel, each supplying its own cylinder bank.

Porsche pushed the technology further and introduced Variable Turbine Geometry in 2005 on the 997 Turbo. At low revolutions, the turbo vanes angle down, pushing air more quickly, increasing pressure. As boost increases with revs, the vanes open electronically, to meet the higher demand. The VTG technology combines the benefits of a small and larger turbo in one, giving the flat, endless torque curve of the 997.

The use of a turbo dictated the Turbo title, and today, twin VTG turbos still feature on the top-of-the-range Turbo, despite Carreras now being turbocharged.



### 991.1 Turbo 2013-2014

New Turbo marks introduction of rear axle steering, plus PDK-only transmission to forced induction 991 models.

Production numbers	Unknown
Issue featured	109
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	520hp @ 6,000rpm
Maximum torque	660Nm @ 1,950rpm
0-62mph	3.4sec
Top speed	195mph
Length	4,506mm
Width	1,885mm
Weight	1,595kg
Wheels & tyres	F 9x20-inch; 245/35/ZR20 R 11x20-inch; 305/30/ZR20

### 991.1 Turbo S 2013-2015



Same dimensions as 991 Turbo, but with a tweaked map to provide extra 40bhp. Turbo options standard, including centre-lock wheels and PCCB.

Production numbers	Unknown
Issue featured	115
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	560hp @ 6,500rpm
Maximum torque	700Nm @ 2,100-4,250
0-62mph	3.1sec
Top speed	197mph
Length	4,506mm
Width	1,885mm
Weight	1,602kg
Wheels & tyres	F 9x20-inch; 245/35/ZR20 R 11x20-inch; 305/30/ZR20



### 991.2 Carrera S 2015-2018

Shares Carrera's 3.0-litre turbocharged 9A2 engine, with revised turbos, exhaust and engine management to produce extra 50hp.

Production numbers	Unknown
Issue featured	132
Engine capacity	2,981cc
Compression ratio	10.0:1
Maximum power	420hp @ 6,500rpm
Maximum torque	500Nm @ 1,700-5,000rpm
0-62mph	3.9sec
Top speed	191mph
Length	4,489mm
Width	1,868mm
Weight	1,482kg
Wheels & tyres	F 8.5x20-inch; 245/35/ZR20 R 11.5x20-inch; 305/30/ZR20

### 991.2 Carrera 4 2016-08



New 9A2 turbocharged engine fused with all-wheel drive running gear, now electro-hydraulically controlled. Disturbance-free by wider body and full-width rear brake light.

Production numbers	Unknown
Issue featured	133
Engine capacity	2,981cc
Compression ratio	10.0:1
Maximum power	370hp @ 6,500rpm
Maximum torque	450Nm @ 1,700-5,000rpm
0-62mph	4.1sec
Top speed	181mph
Length	4,489mm
Width	1,868mm
Weight	1,482kg
Wheels & tyres	F 8.5x20-inch; 255/40/ZR19 R 11.5x19-inch; 255/35/ZR19



### 991.2 C2 GTS 2017-2019

Similar specification and 'black accent' styling as per 991.1, available in both rear-wheel and all-wheel drive form. C4 GTS quicker than C2 GTS.

Production numbers	Unknown
Issue featured	150
Engine capacity	2,981cc
Compression ratio	10.0:1
Maximum power	450hp @ 6,500rpm
Maximum torque	550Nm @ 2,150-5,000rpm
0-62mph	4.1sec
Top speed	194mph
Length	4,528mm
Width	1,852mm
Weight	1,579kg
Wheels & tyres	F 9x20-inch; 245/35/ZR20 R 12x20-inch; 305/30/ZR20

### 991.2 C4 GTS 2017-2019



As 991.2 Carrera GTS but with PDM four-wheel drive electrically controlling drive between both axes (rear always driven). Red connecting strip on rear.

Production numbers	Unknown
Issue featured	151
Engine capacity	2,981cc
Compression ratio	10.0:1
Maximum power	450hp @ 6,500rpm
Maximum torque	550Nm @ 2,150-5,000rpm
0-62mph	3.8sec
Top speed	193mph
Length	4,528mm
Width	1,852mm
Weight	1,579kg
Wheels & tyres	F 9x20-inch; 245/35/ZR20 R 12x20-inch; 305/30/ZR20

### 991.2 GT3 RS 2018-19



Latest GT3 RS gets GT3 facelift but with NACA ducts and suspension from GT2 RS. 20hp increase over Gen1, with chassis and aerodynamic revisions.

Production numbers	100UK cars (est)
Issue featured	164
Engine capacity	4,000cc
Compression ratio	Unknown
Maximum power	520hp
Maximum torque	480Nm
0-62mph	3.2sec
Top speed	192mph
Length	4,568mm
Width	1,880mm
Weight	1,420kg
Wheels & tyres	F 9.5x20-inch; 265/35/ZR20 R 12x21-inch; 325/30/ZR21

### 991 Speedster 2019



Limited-edition special from Flacht to mark 70 years of Porsche. Engine taken directly from 991.2 GT3 with its six-speed manual compulsory.

Production numbers	1,948
Issue featured	172
Engine capacity	3,996cc
Compression ratio	13.3:1
Maximum power	500hp @ 6,500rpm
Maximum torque	460Nm @ 6,000rpm
0-62mph	3.9sec
Top speed	199mph
Length	4,568mm
Width	1,852mm
Weight	Unknown
Wheels & tyres	F 9x20-inch; 245/35/ZR20 R 12x12-inch; 305/30/ZR20

### 992 Carrera S 2019-



All-new eighth generation of 911 carries over 9A2 engine from 991.2, though all cars are now wide-bodied with subtle visual tweaks.

Production numbers	In production
Issue featured	174
Engine capacity	2,981cc
Compression ratio	10.5:1
Maximum power	450hp @ 6,500rpm
Maximum torque	530Nm @ 2,500-5,000rpm
0-62mph	3.5sec
Top speed	191mph
Length	4,528mm
Width	1,852mm
Weight	1,515kg
Wheels & tyres	F 8.5x20-inch; 245/35/ZR20 R 11.5x20-inch; 305/30/ZR20





## 991 Anniversary 2013-2014

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

Production numbers	1,963
Issue featured	112
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	400hp @ 5,600rpm
Maximum torque	440Nm @ 2,500rpm
0-62mph	4.5 sec
Top speed	189mph
Length	4.49m
Width	1.85m
Weight	1,420kg
Wheels & tyres	
F 9x20-inch, 245/35/ZR20	
R 11.5x20-inch, 305/30/ZR20	

## 991.1 Carrera GTS 2014-16

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

Production numbers	Unknown
Issue featured	157
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	430hp @ 5,700rpm
Maximum torque	440Nm @ 5,750rpm
0-62mph	4.0 sec
Top speed	190mph
Length	4.49m
Width	1.85m
Weight	1,425kg
Wheels & tyres	
F 9x20-inch, 245/35/ZR20	
R 11.5x20-inch, 305/30/ZR20	

## 991.1 C4 GTS 2014-2016

Almost the same as the C2 GTS, but with additional traction offered by four-wheel drive. As a result, performance times are altered slightly over its rear-driven variant.

Production numbers	Unknown
Issue featured	125
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	430hp @ 5,700rpm
Maximum torque	440Nm @ 5,750rpm
0-62mph	4.1 sec
Top speed	188mph
Length	4.49m
Width	1.85m
Weight	1,470kg
Wheels & tyres	
F 9x20-inch, 245/35/ZR20	
R 11.5x20-inch, 305/30/ZR20	



## 991.1 GT3 RS 2015-2017

Unprecedented aero package now delivers 997 RS 4.0's max downforce at just 93mph. Features modified 4.0-litre DFI version of 991.1 GT3 engine; PDK only.

Production numbers	6,000
Issue featured	136
Engine capacity	3,996cc
Compression ratio	12.9:1
Maximum power	500hp @ 6,250rpm
Maximum torque	460Nm @ 6,250rpm
0-62mph	3.3 sec
Top speed	193mph
Length	4.545m
Width	1.88m
Weight	1,420kg
Wheels & tyres	
F 9.5x20-inch, 265/35/ZR20	
R 12.5x21-inch, 325/30/ZR21	

## 991.2 Carrera 2015-2018

Facelift model substantially changed underneath with power coming from completely new 3.0-litre 9A2 turbocharged engine. PASM now standard.

Production numbers	Unknown
Issue featured	137
Engine capacity	2,980cc
Compression ratio	10.0:1
Maximum power	370hp @ 5,500rpm
Maximum torque	450Nm @ 1,700-5,000rpm
0-62mph	4.2 sec
Top speed	183mph
Length	4.499m
Width	1.808m
Weight	1,452kg
Wheels & tyres	
F 8.5x19-inch, 235/40/ZR19	
R 11.5x19-inch, 295/35/ZR19	

## 991.2 Carrera 4S 2016-18

As per C4 but using revised turbos, exhaust and engine management from C2S to produce extra 50hp. Faster 0-62mph than C2S for first time.

Production numbers	Unknown
Issue featured	154
Engine capacity	2,980cc
Compression ratio	10.0:1
Maximum power	420hp @ 6,500rpm
Maximum torque	500Nm @ 1,700-5,000rpm
0-62mph	3.8 sec
Top speed	189mph
Length	4.499m
Width	1.85m
Weight	1,490kg
Wheels & tyres	
F 8.5x19-inch, 245/35/ZR20	
R 11.5x20-inch, 305/30/ZR20	



## 991.2 Turbo 2016-2018

Revised 9A1 engine from 991.1, producing 540hp thanks to modified inlet ports in cylinder head, new injection nozzles and higher fuel pressure.

Production numbers	Unknown
Issue featured	135
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	540hp @ 6,400rpm
Maximum torque	700Nm @ 2,250-4,000rpm
0-62mph	3.1 sec
Top speed	199mph
Length	4.507m
Width	1.88m
Weight	1,559kg
Wheels & tyres	
F 9x20-inch, 245/35/ZR20	
R 11.5x20-inch, 305/30/ZR20	



## 991.2 Turbo S 2016-2018

As per 991.2 Turbo but with power boosted to 580hp thanks to new turbochargers with larger compressors. Fastest ever 911 from 0-62mph.

Production numbers	Unknown
Issue featured	145
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	580hp @ 6,750rpm
Maximum torque	760Nm @ 2,250-4,000rpm
0-62mph	2.9 sec
Top speed	205mph
Length	4.507m
Width	1.88m
Weight	1,600kg
Wheels & tyres	
F 9x20-inch, 245/35/ZR20	
R 11.5x20-inch, 305/30/ZR20	



## 991 R 2016

991 GT3 RS engine mated to revised six-speed manual gearbox. Features Cabriolet active rear wing with diffuser aiding downforce. Lightweight flywheel option.

Production numbers	991
Issue featured	153
Engine capacity	3,996cc
Compression ratio	13.2:1
Maximum power	500hp @ 6,250rpm
Maximum torque	460Nm @ 6,250rpm
0-62mph	3.8 sec
Top speed	207mph
Length	4.532m
Width	1.852m
Weight	1,370kg
Wheels & tyres	
F 9x20-inch, 245/35/ZR20	
R 12x20-inch, 305/30/ZR20	



## 991.2 GT3 2017-2019

New 4.0-litre engine from 991.2 Cup car. Retains 9,000rpm redline; six-speed manual Sport transmission now a no-cost option. Revised airflow to front and rear.

Production numbers	222 (UK est)
Issue featured	153
Engine capacity	3,996cc
Compression ratio	13.3:1
Maximum power	500hp @ 6,250rpm
Maximum torque	460Nm @ 6,000rpm
0-62mph	3.9 sec (manual)
Top speed	199mph
Length	4.562m
Width	1.852m
Weight	1,413kg (manual)
Wheels & tyres	
F 9x20-inch, 245/35/ZR20	
R 12x20-inch, 305/30/ZR20	



Fastest factory 911 of all time. Highly modified Turbo S engine with sprayed intercoolers. Rear wheel drive, PDK only. New inlets on bonnet feeds air to brakes.

Production numbers	2,900 (estimate)
Issue featured	161
Engine capacity	3,800cc
Compression ratio	9.0:1
Maximum power	700hp @ 7,000rpm
Maximum torque	750Nm @ 2,500-4,500rpm
0-62mph	2.8 sec
Top speed	201mph
Length	4.549m
Width	1.880m
Weight	1,470kg
Wheels & tyres	
F 9.5x20-inch, 265/35/ZR20	
R 12.5x21-inch, 325/30/ZR21	



## 991 Turbo S Exclusive Edition

The work of Porsche's Exclusive department, with extensive use of carbon on the bonnet, roof and side skirts. Power is hiked to 607hp. Turbo Aerokit standard.

Production numbers	500
Issue featured	170
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	607hp
Maximum torque	750Nm @ 2,500-4,000rpm
0-62mph	2.9 sec
Top speed	205mph
Length	4.507m
Width	1.88m
Weight	Not specified
Wheels & tyres	
F 9x20-inch, 245/35/ZR20	
R 12.5x21-inch, 305/30/ZR20	



## 991 Carrera T 2018

Purist take on the 991.2 Carrera with 20kg of weight saved and rearing of seven-speed manual gearbox. Same 370hp engine as Carrera, PDK optional.

Production numbers	5,000
Issue featured	162
Engine capacity	2,980cc
Compression ratio	10.0:1
Maximum power	370hp @ 6,500rpm
Maximum torque	450Nm @ 1,700-5,000rpm
0-62mph	4.1 sec
Top speed	183mph
Length	4.499m
Width	1.808m
Weight	1,400kg
Wheels & tyres	
F 8.5x19-inch, 235/40/ZR19	
R 11.5x19-inch, 295/35/ZR19	

## 992 Carrera 4S 2019

As with the 992 Carrera S, but with active all-wheel drive providing variable torque to the front axle. Identifiable by silver decklid slats (C2S has black).

Production numbers	In production
Issue featured	174
Engine capacity	2,980cc
Compression ratio	10.5:1
Maximum power	450hp @ 6,500rpm
Maximum torque	530Nm @ 2,500rpm
0-62mph	3.4 sec
Top speed	190mph
Length	4.531m
Width	1.852m
Weight	1,565kg
Wheels & tyres	
F 8.5x19-inch, 245/35/ZR20	
R 11.5x21-inch, 305/30/ZR21	

## 992 Carrera 2020

The base 992 was revealed some nine months after the S. Visually different to the C2S thanks to smaller wheels and two single-exit exhaust tips.

Production numbers	In production
Issue featured	189
Engine capacity	2,980cc
Compression ratio	10.5:1
Maximum power	385hp @ 6,500rpm
Maximum torque	450Nm @ 1,900-5,000rpm
0-62mph	4.0 sec
Top speed	180mph
Length	4.531m
Width	1.852m
Weight	1,502kg
Wheels & tyres	
F 8.5x19-inch, 235/40/ZR19	
R 11.5x20-inch, 295/35/ZR20	

## 992 Carrera 4 2020

Same spec as the 992 Carrera, albeit with variable torque sent to the front wheels in an improved multi-plate clutch AWD PTM system over the 991.2.

Production numbers	In production
Issue featured	N/A
Engine capacity	2,980cc
Compression ratio	10.5:1
Maximum power	385hp @ 6,500rpm
Maximum torque	450Nm @ 1,950-5,000rpm
0-62mph	4.0 sec
Top speed	180mph
Length	4.531m
Width	1.852m
Weight	1,559kg
Wheels & tyres	
F 8.5x19-inch, 235/40/ZR19	
R 11.5x21-inch, 315/30/ZR21	

## 992 Turbo S 2020

3.8-litre version of 992 Carrera's engine, with intercoolers now on top and air filters housed behind side air intakes. PSE and Sports chassis optional for first time.

Production numbers	In production
Issue featured	190
Engine capacity	3,745cc
Compression ratio	8.7:1
Maximum power	640hp @ 6,750rpm
Maximum torque	800Nm @ 2,500rpm
0-62mph	2.7 sec
Top speed	205mph
Length	4.531m
Width	1.900m
Weight	1,640kg
Wheels & tyres	
F 8.5x20-inch, 255/35/ZR20	
R 11.5x21-inch, 315/30/ZR21	

## 992 Targa HDE 2020

First of four Heritage Design specials from Porsche Exclusive, inspired here by Porsche sports cars of the 1950s and 1960s.

Production numbers	992
Issue featured	193
Engine capacity	2,980cc
Compression ratio	10.5:1
Maximum power	450hp @ 6,500rpm
Maximum torque	530Nm @ 2,500rpm
0-62mph	3.6 sec
Top speed	189mph
Length	4.531m
Width	1.852m
Weight	1,679kg
Wheels & tyres	
F 8.5x19-inch, 245/35/ZR20	
R 12x21-inch, 305/30/ZR21	



## 992 GT3 2021

New swan-neck wing design, double wishbone front axle and GT3 R diffuser. 50% more downforce over 991.2 GT3, sub 7-min Ring time.

Production numbers	1,000 (est. for 2021)
Issue featured	199
Engine capacity	3,996cc
Compression ratio	13.3:1
Maximum power	510hp @ 8,400rpm
Maximum torque	470Nm @ 6,300rpm
0-62mph	3.4 sec
Top speed	199mph
Length	4.573m
Width	1.82m
Weight	1,418kg (manual)
Wheels & tyres	
F 9.5x20-inch, 255/35/ZR20	
R 12x21-inch, 315/30/ZR21	



# PCCM+

## IN-DEPTH REVIEW

Porsche's Classic Communication Management Plus brings modern connectivity to the 20-year-old 996 – but is it worth the investment?

Ask any owner of a classic Porsche and they will likely tell you its greatest appeal is its rudimentary approach to the sports car concept, offering a driving purity that's vastly removed from the technological creep (or is it override?) prevalent in contemporary rivals today. Juxtaposed to this notion of unfiltered driving purity though is the need for connectivity on the move: it is simply a must-have in our modern world. Whether in a modern or classic Porsche, we rely on technology to help navigate us on the road, communicate safely with friends, and listen to our favourite media, be it a podcast, playlist, or radio.

While new 911s of course have this covered as part of its factory specification, Porsche Classic has, since 2018, sought to bring similar levels of connectivity to older vehicles. Porsche Classic Communication

Management was introduced as a 1-DIN unit with 3.5-inch touchscreen for air-cooled cars, slotting straight into the dashboard as a replacement for the factory unit. A huge commercial success, Porsche Classic has now evolved the concept, providing a solution for the first water-cooled 911 in the 996.

Porsche Classic Communication Management Plus is a development of that original, now in 2-DIN format and boasting a seven-inch, high-resolution touchscreen, bringing modern functions such as DAB+, Apple CarPlay, Android Auto and onboard navigation to the manufacturer's youngest classic. Replacing the original PCM 1.0 (for Gen1 cars) or PCM 2.0 (for Gen2s) units, which are now merely a technological relic sitting centrally in the 996's dashboard, PCCM+ offers a direct swap, available via your preferred Porsche dealer.

A reflection of the march in both automotive and communications technology over the last two

decades, the PCCM+ unit is both lighter and more advanced than the one it is replacing. Additionally, the new system does away with the navigation CD player which came with PCM 1.0 and 2.0, saving further weight. Its replacement is a neat cubby hole, perfect for placing a modern smartphone, and also where the PCCM+ phone, AUX and additional USB charging ports now live. You simply connect your smartphone to the PCCM+ unit, place it in the handy cubby hole, and just forget about it until you leave the vehicle.

The PCCM+ fascia looks great, its two rotary knobs taking the exact appearance of those found in 996 Gen2s with PCM 2.0. They are nicely weighted to turn, and a neat row of buttons (indicated tuner, nav, phone, etc) between them offer a similarly positive measure of resistance when pushed, their profile and text font notably similar to those found on the 991's modern PCM system. It's a great mix of



modern and classic, and ensures that the PCCM+ looks right at home within the confines of the 996's dash. Elsewhere in terms of hardware, a microphone is mounted discreetly on the 996's steering column, and a small GPS box is affixed atop the dashboard, at the base of the drivers-side A pillar.

Turn your 996's key in its ignition and while that M96 out back offers that familiar, bassy thrum of a modern-classic 911, the vibrant colours and beautiful animations displayed on the PCCM+ screen on start-up indicate its readiness to take you firmly back into the modern world of infotainment.

The touchscreen is wonderfully responsive to scrolling, tapping and pinching applications, the system itself being fast and intuitive – exactly as a modern infotainment system should be. Its layout and application is almost identical to the system found in 991.2s, Apple CarPlay working seamlessly to allow us to select a route on our preferred navigation app, Waze, before pulling up a podcast on Spotify. The PCCM+ unit's own navigation is well presented and clear to follow, its 3D maps adding a welcome layer of detail that would have been simply unimaginable on the archaic PCM 1.0 housed in our 996 just a few hours earlier.

Positives of the new system's practicalities extend from its visual to the audio experience, too. Voice commands to Siri are easily detected and swiftly acted upon, even when contending with the 996's typically loud rolling tyre noise above 60mph. Similarly, the recipient of an outgoing call made with our 996 cruising at motorway speeds confirmed conversation of crystal clarity from inside the car, though we'd have liked to have been able to knock the volume up a touch from our side, though this wasn't an issue below 50mph.

**BELOW** The complete hardware kit for Porsche's game-changing PCCM+



The cost for all of this in the UK is £1,465 (inc VAT) for the PCCM+ unit and navigation SD card. Depending on whether your 996 originally had PCM or not, an additional tray may be required (at minimal cost) to replace the outgoing navigation CD unit, which is where, as we mentioned earlier, a technician will install the small box containing AUX and USB ports, as well as the USB input for your smartphone connection. Porsche quotes 3.2 hours book time to install PCCM+, giving you a final price of around £2,258 (inc VAT) including fitting and installation.

Expensive? Yes, especially in comparison to an aftermarket equivalent, though these tend not to fit as well, and their ultra modern appearance (often merely a digital touchscreen devoid of any buttons) can look jarring against the rest of the 996's millennium-era interior. Additionally, the presence of an aftermarket unit can pose questions for others when it comes

to selling, too. Has the wiring been done properly? Is a 911 with an aftermarket headunit as desirable as factory specification? PCCM+ allays both fears in that regard. In fact, we'd argue it actually increases desirability of the vehicle, and fitting at a Porsche dealership ensures high standards are upheld when it comes to the care and installation of the product.

Without doubt, this is a game-changing development from Porsche Classic: this is simply a brilliant solution to allow owners of the first water-cooled 911, many of whom use their car every day, to fully indulge in every practical aspect of their sports car experience, without compromise, while on the move. The PCCM+ unit is simply a must-have addition for the Porsche 996, and owners of the 997 should be excited by the very high probability that such a system will soon be available for their 911 too. **911**

## VERDICT

### APPEARANCE



### USABILITY



### HAPTICS



### VALUE FOR MONEY



### OVERALL



#### Period look

PCCM+ fascia was designed to complement the 996's unique interior

#### Original 996 styling

The infotainment system's two rotary knobs are styled on those from the original 996 PCM

#### Lighter and more advanced

PCCM+ is lighter than PCM 1.0 and 2.0 and saves space in the central dashboard, with no need for the original CD navigation player

#### 7-inch touchscreen

The high-resolution screen is bright, responsive, and doesn't get hot to touch (unlike those found in 991s)

#### Apple CarPlay

Seamless smartphone integration with Apple's CarPlay technology, and Android Auto is also available

#### 21st century functionality

DAB, 3D maps, and up-to-date navigation is all built-in



# COMMISSION YOUR PORSCHE 911 AS FINE ART

Many 911 owners would already consider their car to be a piece of automotive art – we certainly do – and gazing over the curvaceous bodywork can give many hours of pleasure. But there's more than one way to enjoy the stunning appearance, and having it committed to canvas would be special indeed. Which brings us to the work of renowned artist, Rob Hefferan. Fascinated with art since childhood, his first exhibition in 2003 showcasing his skills in figurative work and portraiture was a resounding success. It's those skills along with an international reputation for quality and unrivalled attention to detail that has led to his work being commissioned by numerous celebrity clients, and it turns out that Rob has another passion: "I've been obsessed with cars since I was young, and that developed into a love for Porsches, and the 911 in particular".

A serial owner of our favourite sports car, his collection has included the 996, both generations of 997 model, and he now enjoys a 991 Carrera S. A proper car guy, then, which is why he's decided to focus his talents on the Zuffenhausen marque, offering owners and enthusiasts the opportunity to have their pride and joy recreated as fine art. He admits this is a new challenge and one he relishes, already having set to work creating around a dozen paintings of various Porsches. While such artwork isn't entirely new, what's different here and core to Rob's ethos is capturing even the smallest of details that make each car unique. And having seen it for ourselves we are talking about beautiful pieces of art here, the sort of work that would complement

911 ownership in a way that other pictures just can't. Painted either in oils or acrylic depending on the timescales involved, each work can take anything from 150 to 300 hours to complete and the work is also unusual compared to other automotive artists in that he is happy to depict not just the car but to include the owner as well. It's where the talent for portrait work really pays off.

As for the process of commissioning a painting, an owner can either provide pictures of the car or Rob will travel to view your 911, employing a professional photographer to take dozens of detailed reference shots from which to work. It's a painstaking process but one that results in something very special, but there was something we were keen to ask and that's whether he had a favourite 911. "Not really" says Rob. "I love all of them, but if pushed I guess I'd have to say it's the cars from the 1960's that most capture my attention."

"It's the shape and form that I find so appealing, and the way the light falls on the bodywork. There are few cars like it, and I really admire Porsche's heritage, especially when it comes to motorsport." That emphasis on history and quality really shines through when it comes to the finished painting, and whether you own just the one car or are lucky enough to have a collection to see them represented in such a way is likely to prove very hard to resist.

You can see examples of Rob's work by visiting his website at [www.robhefferanautomotiveart.com](http://www.robhefferanautomotiveart.com), but we'll say now that you should be prepared to find yourself as tempted to commission his services as we are. **911**







“I’ve been obsessed with cars since I was young, and that developed into a love for Porsches, and the 911 in particular”





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# 2014

**PORSCHE  
991 TURBO  
SATIN GREY  
17,000 MI**



**2011**  
**PORSCHE**  
997 GT3RS 4.0  
#211 OF 400  
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GRANPRIX WHITE

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**PORSCHE**  
993 TURBO S  
RHD HIGH SPEC  
1 OF 23  
66,000 MI



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**911 Carrera RS (993)**

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**£249,995****911 Carrera 2 GTS (991)**

Carminé Red • Black Half-Leather Sports Seats • PDK Gearbox with Paddles • 20" Black Centre Lock Wheels • Sports Exhaust • Sport Chrono • 25,112 miles • 2014 (64)

**£77,995****911 Carrera 2 Targa (993)**

Iris Blue • Marble Grey Leather Seats Tiptronic S Gearbox • 17" Targa Split Rim Wheels • Air Conditioning • Sports Exhaust • Previously Sold & Serviced by Paragon • 29,259 miles • 1996 (P)

**£71,995****911 Turbo (997)**

GT Silver • Black Leather Adaptive Sports Seats • Tiptronic S Gearbox 19" Turbo Wheels • Satellite Navigation Previously Sold & Serviced by Paragon 52,542 miles • 2007 (07)

**£54,995****911 Carrera 4 S Targa (997)**

Atlas Grey • Black Leather Seats • PDK Gearbox with Paddles • 19" Carrera S II Wheels • Sport Chrono • Previously Sold & Serviced by Paragon • 45,287 miles • 2010 (60)

**£44,995****Boxster Spyder (987)**

Jet Black • Black Leather Sports Seats PDK Gearbox with Paddles • 19" Boxster Spyder Wheels • Full Leather Interior Sport Chrono • Air Conditioning Heated Seats • 14,528 miles • 2011 (11)

**£44,995****Boxster Spyder (987)**

Jet Black • Black Leather Sports Seats Manual Gearbox • 19" Turbo II Wheels Switchable Sports Exhaust • Heated Seats • Porsche Sound Pack Plus 33,234 miles • 2011 (61)

**£41,995****Cayman S (981)**

Carrera White • Black Leather Sports Seats • 19" Cayman S Wheels PDK Gearbox • Switchable Sports Exhaust • Previously Sold & Serviced by Paragon • 23,381 miles • 2015 (65)

**£39,995****Macan S Diesel**

Volcano Grey • Black Leather Seats PDK Gearbox with Paddles • 21" Turbo Design Wheels • Heated Seats Cruise Control • Front & Rear Parking Sensors • 22,373 miles • 2017 (17)

**£39,995****911 Carrera 2 S (997)**

Arctic Silver • Dark Blue Leather Adaptive Sports Seats • Tiptronic S Gearbox • Satellite Navigation • 19" Sport Design Wheels • Sport Chrono 23,707 miles • 2004 (54)

**£35,995****911 Carrera 2 S (997)**

Atlas Grey • Dark Grey Leather Seats Manual Gearbox • Switchable Sports Exhaust • Satellite Navigation Previously Sold & Serviced by Paragon 64,290 miles • 2004 (54)

**£31,995****Cayman S (987 GEN II)**

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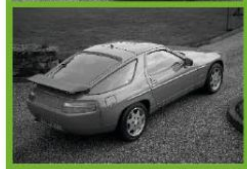
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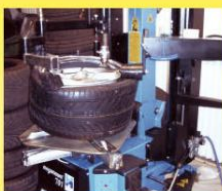
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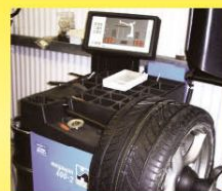


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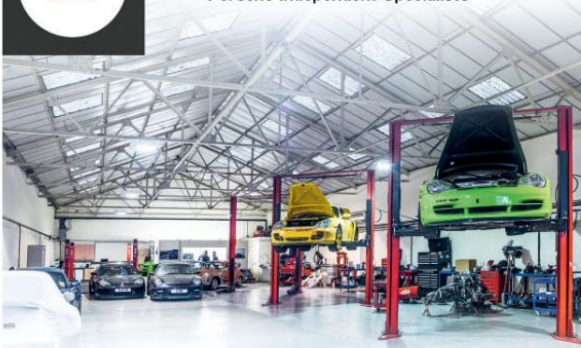
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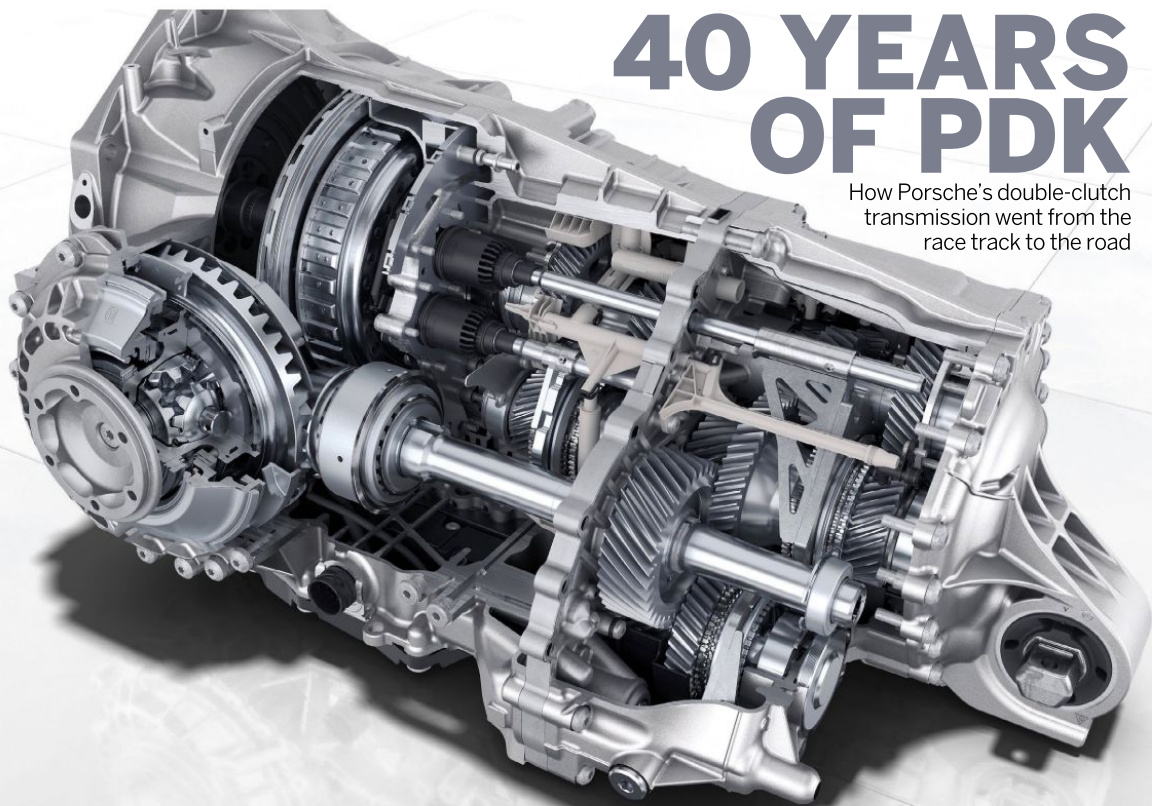


# NEXT ISSUE

Issue 214 in shops and available for download from **1 February**\*

## 40 YEARS OF PDK

How Porsche's double-clutch transmission went from the race track to the road



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Stunning '69 Targa takes on the Western Cape's best tarmac

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## Porsche Moment

Total 911 recounts the story behind a famous picture from Porsche's past...

This gathering of Porsche engineering top brass was not as might be expected at Le Mans or any other major race, but a purely internal get-together. The venue is the Weissach test track on a summer morning in 1984 and the initiative came from Helmuth Bott who was keen to settle an argument about whether Porsche's current Group C car, the 956, was as fast as the 917/30 Turbo of the previous decade. Senior engineer and 956 team manager Norbert Singer was quietly confident what the outcome would be, but he was not going to contradict Bott openly, content to see the board member for engineering find out for himself.


Works driver Derek Bell was engaged to assess both cars and the photo shows him discoursing on the 917/30, which he has just driven. Besides Helmuth Bott, the audience

comprises CEO Peter Schutz, who unlike his predecessor Fuhrmann was rarely to be seen at a test session, though he may well have had a hand in persuading Ferry, now 75 and semi-retired, to join the proceedings. In the centre of the picture is Valentin Schaeffer, largely responsible for developing the racing turbos, no doubt on hand to see the cars were performing properly. Behind him is the tall figure of Peter Falk, Motorsport director and probably responsible for securing the services of Bell, one of the works team's most reliable and easy-going of drivers that day. Behind Bott stands a thoughtful Singer, clipboard in hand. Porsche had invited two senior correspondents along as well: Paul Frère in snazzy white trousers, and to his left Jerry Sloniger, the editor of the English version of *Christophorus*.

Today Porsche's professional tweeters would be disseminating a running commentary on proceedings and an internet video would follow within a couple of minutes, the event milked for its PR value. But in 1984 the only publicity would be a short write-up in *Auto Motor & Sport* and a two-page feature in *Christophorus*, coverage which satisfied all parties: Porsche was still an (extended) family company with its roots deep in motorsport and the presence of the company's senior managers down at the track that morning reflected a genuine interest.

For Norbert Singer, the result of this time trial was never in doubt, as he had confided beforehand and once again that most scientific of Porsche engineers was right: "The 956 was not just faster than the 917, it was *seconds* quicker," he observed wryly.





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