

# 997 TURBO S ULTIMATE BUYER'S GUIDE

# THE PORSCHE MAGAZINE

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Presenting this Euro-Spec 1981 Porsche 911SC Coupe featured with matching numbers is available in its factory color code #655 Platinum fetaillic with a brown interior. The 911SC comes with a clean Carfac and se quipped with a 5-speed meanual transmission. Fast 6 Cylinder 30 after lengths, power windows, aurnoof, 4-wheel flice brakes, Fuchs wheels, and pare time. Also includes service documents and receipts copies totaling year. \$31,000. A well-maintained air-cooled Pondite that it mechanically

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1983 Porsche 911SC Cabriolet 14761

Presenting this 1983 Pounche 9115C Cabridote featured with matching number and is available in its factory color one 8190 flully fled Metallic with a sand beig instarior. The 9115C comes with a dean Carfax and is equipped with 3-5 speed many arransission, Filla C Cyfinder 3 Jolien engine, power windows, soft top, 4-wheel die brakes, Fuchs wheels, and gaves tire. Also includes the original comer's manuwarrant/maintenance booklet parts of stamps included by a well as service discussed and receipts copies during from 1995 to 2021 totaling over \$40,000.A well-maintain air cooked Practed that is mechanically sound.

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1983 Porsche 911SC Coupe-14700

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1990 Porsche 964 Carrera 4 Targa-14910

Presenting this exciting 1990 Poruche 964 Carvers 4 Targa featured with 73,428 miles on the odometer and is available in its factory color code #700 black with a black interior. The whicks comes with a clean Carfac and is equipped with a Sepoed manual transmission, Flat 6 Cyfinder 3-6-liter engine, automatic speed control, air conditioning power windows, power seeming spores seated Forcide D90 wheels, 4-wheel disc brailes, space and jack. Also includes paint meter reading photos. A very presentable and

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1996 Porsche 993 Carrera Coupe-1468

This beautiful color combination 1996 Porsche 993 Carrera Coupe is available in its factory color code #927M Polar Silver Metallic with a black interior. The vehicle comes equipped with a 6-speed manual transmission, Flat 6 Cylinder 3.6-liter engine, automatic speed control, air conditioning, power mirrors, power windows, power seats (driver passenger), salvage title, power steering, sunroof, 4-wheel disc brakes, and spare tire. A well-equipped eye-

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1977 Porsche 9115 Targa-14898

This matching numbers 1917 Poinsche 9115 Targa is available in Peru Red with a sand beige interior. The vehicle comes equipped with a 5-speed manual transmission, Flat Cylinder 27-liter engine, air conditioning, power windows Fuchs wheels, 4-wheel disc brakes, spare tire, and jack. A desirable color combination air-cooled 9115 Targa that is mechanically sound.



1990 Porsche 964 Carrera 4

33,599 on the odometer and is available in its factory color code #7000 black with a black interior. It comes with a clean Carfax and is equipped with 5 speed manual uranmission, flat 6 Cylindra 3-6-fitter englies, air conditioning, automatic speed control, power windows, power steering, jack, 4-wheel dischales, P09 wheels, and jack, both the color code and options sticked are still in place under the hood. Also included with this vehicle are jamit meter reading photos. An extremely desirable low mileage 96 Coupe that is mechanically sound.

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1964 Porsche 356C Factory Sunroof Coupe-13555

Here is a mre 1964 Ponche 356C Factory Sunnod Coupe featured with matching numbers (Kardex copy included), Available in its factory colo code #6407 Signal Red with a black interior. The vehicle comes equipped with a 4-speed manual transmission, 1600c engine, dual carbunetors sunnod, matching numbers hoodifedelid, drorne wheels, and 4-whee disc brakes. An excellent 356C Coupe that is ready to be driven an enjoyed. This extremely sought-farther Ponche had the same owner since

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1983 Porsche 911SC Cabriolet 13110

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here really is nothing out there quite like a Porsche Turbo. Sure, the 9ll generally is an amazing sports car and a pretty good all-rounder, but while other models within the 9ll family excel more at one aspect of motoring – for example, Rennsports take care of track work with aplomb – the Turbo really does raise the bar for EVERYTHING, and right up to 1l.

Today the 911 Turbo is known as the ultimate all-rounder, but how did we get here? This month's group test of the air-cooled Turbos made for a fascinating look back at how the Turbo dynasty started, to a time when there wasn't a lot else to rival it.

As a weekend toy today, whether it's a classic or modern Porsche, most enthusiasts tend to favour the purity of a naturally aspirated flat six, but there's no question a Turbo adds a layer of excitement to proceedings. What a Turbo lacks in throttle response it makes up for in brute power and, particularly with the earliest 911 Turbos, a different driving style is required to get the most from them. They're huge fun, but which is best? For

"What a Turbo lacks in throttle response it makes up for in brute power" me it's the original: managing the 930 3.0 with its excessive lag, followed by huge power, all through a four-speed gearbox, is a thoroughly entertaining experience time and again.

Elsewhere, over at 9WERKS we've just celebrated our inaugural Awards black tie event, with legendary 993, Carrera GT and GTI designer Tony Hatter flying in from Weissach as our guest of honour.

The 9WERKS Awards seeks to reward excellence across the Porsche industry, raising the bar for the benefit of you, the enthusiast. Voting for the awards was reserved for 9WERKS Members alongside our nine-strong panel of independent experts to ensure genuine excellence rather than popularity was rewarded, and with plans already in place for next year, 2023 is set to be bigger and better. Not signed up to 9WERKS yet? Doing so is free, and provides you with a whole host of benefits. Head over to **9werks.co.uk** for more information.



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# Update the key dates start

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



## **9WERKS Awards celebrates the best in the business**

Industry excellence is rewarded at the black-tie ceremony, with Tony Hatter as guest of honour

9WERKS, the innovative online platform for Porsche enthusiasts created by **Total 911** editor Lee Sibley, has conducted its inaugural awards evening to celebrate the finest in quality and customer service across the UK Porsche industry.

Held on 7 April at Shorade Accident Repair in Staffordshire, one of a handful of Porsche Recommended body repairers in the UK, the 9WERKS Awards with Design911 presented nine trophies on the night to both personalities and businesses. On presentation duties that evening was the legendary 993, Carrera GT and GT1 designer Tony Hatter, who flew in from his home in Weissach to be guest of honour for the black tie event. The ceremony was attended by a sold-out audience of 80 guests, with many more watching live online via the 9WERKS TV YouTube and @9werks\_lee Instagram channels.

Paragon Porsche won Best Porsche Sales, while Best Porsche Servicing went to the Oxfordshire concern, Wrightune. Singer Vehicle Design was recognised for its excellence with the Best International Specialist award, while RPM Technik took the gong for Best Porsche Tuner.

Remaining winners included Rare Car Finance, which took home Outstanding Customer Service, while Derek Bell MBE added to his collection of trophies by claiming Best 9WERKS Radio podcast Guest. Shorade won Best Restoration for its 986 Boxster 25th Anniversary project, before Seán Matthews of RennEleven took home Personality of the Year for his work in promoting the modified Porsche scene in the UK.

"The 9WERKS Awards with Design911 has been a resounding success for two reasons," said Lee. "Firstly, it's brought the majority of the UK Porsche industry under one roof for one night, allowing our guests to put faces to names and encourage further co-operation going forwards, for the benefit of enthusiasts. Secondly, and more importantly, in promoting excellence the awards have raised the bar for quality and exceptional customer experience across our industry. Our awards are highly coveted and act as the one



true, independent marker of quality to enthusiasts across the country."

Voting took place in two stages. 9WERKS Members cast their votes, before a nine-strong independent panel cast their votes separately, with mystery shopping used to ensure all prizes were awarded for excellence rather than popularity.

More information on the awards, including a highlights gallery, can be found at **9werks.co.uk**.

### Gijs van Lennep at 80

Porsche salutes its highly successful racing driver

Dubbed the "best Dutch race car driver of the 20th century", Gijs van Lennep turned 80 in March and Porsche has been marking the milestone.

Gijs began his racing career at the wheel of a Volkswagen Beetle before taking victory at Zandvoort in a Porsche 904 in 1965. It was here that the Dutchman began a lifelong relationship with the Porsche brand. Further successes at the wheel of a Porsche came in 906, 908/2 and 911 models, and Gijs also drove a privateer 917 KH in 1970.

As a Porsche Works driver in a 911 Carrera RSR and partnered with the Swiss pilot Herbert Müller, Gijs won the last Targa Florio in 1973. The Dutch-Swiss duo competed again at Le Mans just a few weeks later, coming home in fourth overall. There were other notable outings for Gijs, including in 1974 when he drove a Works 911 Carrera RSR Turbo 2.1 – Porsche's first Turbo entry at Le Mans – to a second place finish. In partnership with Jacky lckx, Gijs drove the Porsche 936 to victory in the car's very first 24-hour race.

"It's best to quit when you're on top" Gijs is quoted as once saying. He did just that when he hung up his helmet to end his racing career and become a Porsche ambassador, which he remains to this day.



# Emma Raducanu takes on the mantle of Porsche Brand Ambassador

The rising star of the tennis courts will represent Porsche around the world



Porsche was courting US Open tennis star Emma Raducanu before the British player took her Grand Slam tournament victory in New York last summer. Now the relationship has been made official with Emma becoming a Porsche Brand Ambassador.

Following her success at the US Open, Emma was named a Member of the Order of the British Empire, the youngest woman ever to receive the honour. The 19-year-old is currently world ranked number 13 and will

represent Porsche across the world. In April, she will make her debut at the Porsche Tennis Grand Prix in Stuttgart's Porsche Arena.

"Porsche is one of the brands I've always loved from a young age," said Emma. "Growing up, I would go to Brands Hatch to watch Porsche Carrera Cup GB. The adrenalin I would get from motorsports and seeing the Porsches was actually the most fun part of my week."

## Porsche's track app expands to the road

The Porsche Track Precision App will now incorporate everyday road driving alongside racetrack recordings



Since its creation the *Porsche Track Precision App (PTPA)* has focused on the racetrack, but now Free Drive mode makes it possible to record every drive so it can be enjoyed again.

Previously, the Porsche app documented drives on demand, accessing ECU information, reading vehicle position, speed, braking force, steering angle and more while driving. Free Drive mode now enables drivers to document idyllic road drives, which are recorded on a moment-by-moment basis when the vehicle

automatically recognises a special driving event. Then a one-minute video is stored: 30 seconds before and 30 seconds afterwards.

Triggering moments could be manoeuvres such as high braking pressure, strong accelerations or higher G-forces, which inform the app that something unusual is taking place. The driver can also mark such moments to capture them on video, and add photos and video clips to the *PTPA*'s videos. Note that the system's full analysis capabilities are still restricted for track use.

#### **News in Brief**

#### G Series Tool Bag

This stylish tool bag for the G Series 911 (1983 to 1989) is new from Porsche Classic. The leather and black-and-white pinstriped velour bag contains a range of tools, including instruments for use in the event of a faulty sliding roof or window regulator motor. Other versions of the bags contain tools specific for different eras of 911. Porsche item number PCG93072110 is priced at £389.33 available from shop.porsche.com.



#### Playmobil 2.7 RS

Perfect for the smaller Porsche person in your life (and the big kids too) is this Porsche 911 Carrera RS 2.7 – new from toy manufacturer Playmobil. The car's roof is removable for placing the figures in and out of the vehicle, while an opening rear decklid reveals a sixcylinder engine. The model comes with two figures, a picnic basket, rug, roadmap and other extras, and is available via playmobil.co.uk priced at \$52.49





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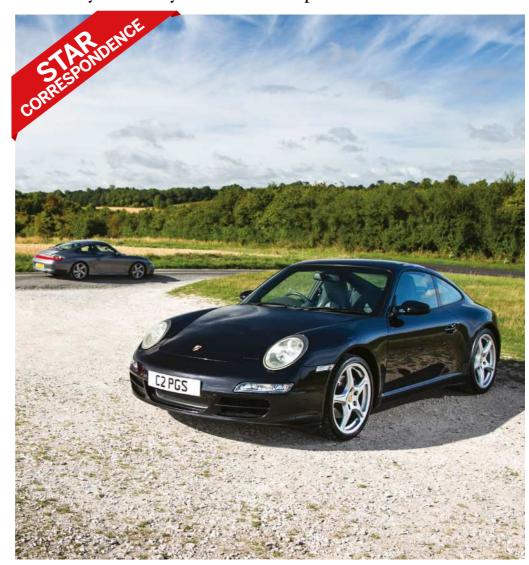
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## In support of the 997.1

#### Dear Sir,

While it's great to see promotion of affordable 911s in your magazine, in reference to your recent 'praise of the 996' issue, might I suggest casting a light on the merits of the 997.1? It seems my car has been forgotten by the mainstream media while everybody falls in love with the 996.

As we know, the 997.1 is a superior 911, and not for a great deal more financial outlay. A semimodern 911 that can be had for as little as £25k is worth further coverage, in my book!

#### Steven Whatmough

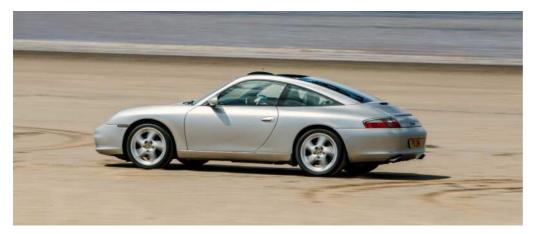
Our 996 article wasn't "in praise of the 996", it was celebrating the generation's 25-year milestone. As a magazine that seeks to support and enhance all aspects of the 911 enthusiasts' sphere, it's our duty to pay tribute to such milestones, just as we will for the '50 years of RS' later in 2022.

You're right to say that the 997.1 is fantastic value for money, though. It's certainly more car for the money than the 996 because, as you point out, you get a lot more with the car (in terms of tech) than you do the 996, for only a fraction more cash.

We've previously ran an issue underlining way the 997.1, and not the 996, may be the entry-level 911 to buy. We hope you're enjoying your 997.1 and will look forward to covering this and every other aspect of 911 culture moving forward.







## Just do it, part three

It's great to see the 996 going through a bit of a revival in Total 911 and in general. At long last it's starting to get the positive recognition that it really does deserve.

I just thought I'd give another update on my 996 Targa since the completed rebuild last September. The engine now has around 4,600 miles on it and is pulling hard and strong. An interesting issue I had noticed over the past couple of months was that it was only charging at around 12.5V. Furthermore, the engine was a bit slow when cranking, the oil pressure gauge was either low or dancing around a bit and the Targa roof was very slow to open

Four separate issues I thought, but rather than spend lots of money on a new battery and/or alternator, I thought I'd check the engine/chassis earth lead because it's only a 10-minute job. I removed the nut from the chassis and gave the lead and chassis mounting point a good scrub with a wire brush (it was pretty clean anyway), not really expecting much difference.

Wow, what a difference. The battery now charges at 14V, the engine cranks like an eager beaver, the oil pressure gauge remains stable and at the correct value and the roof now slides without hesitation. The engine also feels as though it has more power and is more lively, presumably because the plugs are now firing better and producing better combustion. It goes to show the very small tolerance between a good and a bad ground, so if you have any of the above symptoms, check that cable.

#### Peter Flynn

Great to see the hard work from your 996 Targa project has paid off, Peter, and just in time for the summer weather, when a Targa of any generation really comes into its own. Thanks also for your battery advice - we'll pass this on to readers in the hope it helps them too.



## Why has the 991.1 GT3 been downgraded?

#### Dear Sir.

The 991.1 GT3 has been downgraded to 4.5 stars? This is a car that won Evo Car of the Year among many other awards. The engine issue has been resolved with a 10-year warranty and a new G-series engine, which is effectively RS-spec, and is stellar.

**James Wyatt** 

You raise great points, James. Our panel felt

that compared to the 991.2 and 992, the 991.1's PDK gearbox isn't as sharp and intelligent, and the ride quality isn't as good as models that have gone on to replace it.

What we will say, though, is the 991.1 GT3 is excellent value for money currently and, providing it's had a replacement engine (not all have!), the car should present relatively worryfree motoring from here on in, despite that 10-year warranty soon coming to an end...

# Ask the expert

Got a guestion for our Porsche technician? Email us editorial@total911.com



Gardner

Air-cooled era 911s do have a tendency to weep oil from certain areas as the years go by. This is the result of either seals or gaskets ageing and hardening. 993s typically leak from a handful of common areas, these being the lower cam covers, chain housing covers, the chain housings themselves or in the area of the crankcase halves.

The most cost-effective repair is the cam cover gaskets, and these are usually the culprit if you can smell hot oil, because they can leak down on to the heat exchangers. I would advise having your engine cleaned down fully. You'll then be able to assess the severity of the leaks and determine the locations following an extended road test.

leaks and determine the locations following an extended road test.

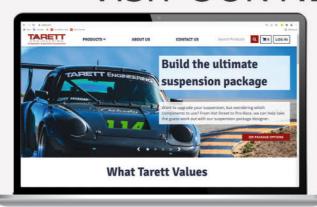
If the leak is bad then it should manifest itself immediately. If the cam covers or chain housing covers are the main source, I'd advise scheduling these in to be resolved with new rubber gaskets and fixings at its next service. The chain housing covers can be done in situ without the need to remove the engine.

If the leak is from the crank case halves or chain housings, the decision needs to be made if it's a minor weep and not causing any drips and whether the financial outlay of a rebuild is feasible and justified for a minor weep. If, however, the leak is to the point where it's dripping and depositing oil on your driveway/ garage frequently then it could be time to save up for a more costly repair to sort it out.

Your local independent garage or Official Porsche Centre should be able to advise and offer advice depending on the oil leaks' locations and severity. It's amazing how much a small oil leak can build up and spread oil residue over the years and often look worse than perhaps first thought. I hope this helps.



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#### GUEST COLUMN



# Master the middle pedal

With an engineering background and previous career in Formula One, performance driver coach Neil Furber reveals his blend of driving tips and vehicle technology explanations to help you get more from your rear-engined machine

hen asked what's the hardest thing to learn in performance driving, I'd have to say the brake pedal. You might think it should be picking the best line on track or managing the car at the limit in a corner. Granted, these two skills don't come easily, but the brake pedal is one of the most difficult driver controls to master. It's not there just to slow you down.

If you're new to performance cars and a 911 is your first 'proper' sports car, then I'm sure you're more concerned with its powerful rear-wheel drive nature than polishing your relationship with its stoppers. For readers best described as 'old hands' when it comes to performance driving, I'll wager that the brake pedal is where you'll find the remaining room for improvement. So, what does it do beyond reducing speed, I hear you ask?

For engine performance in the Neunelfer range, powerful, communicative brakes are an essential part of the mix. There aren't many road-going cars with brakes like a Porsche! The clever stuff starts when you begin to consider driving from the perspective of the tyres, and how they interact with the ground. Don't view driving in simple terms: speed up, slow down, point it with the wheel. Instead, try and visualise the car as something that floats on the road, like a hovercraft. Your use of the controls varies the tyre-to-road interaction, affecting stability, agility and direction. This includes using the pedals to speed up and slow down; you'll induce dynamic 'weight transfer'. I'm sure this term isn't new to Total 911 readers, so we'll get a little more granular to help you hone your skills and knowledge further still.

Because the middle pedal loads the front end more of the car's weight is supported by the front tyres the harder you press it - we increase vertical load on the front tyres. Avoiding graphs showing relationships between sideforce, slip angle and vertical load, the important point is that, generally speaking, a tyre's capability increases the more weight you put on it. Beyond reducing speed, the brake pedal enables you to rebalance your 911, by increasing front grip at the expense of the rear. (Astute readers will infer correctly that pressing the accelerator does the reverse.)

To master things you must truly integrate brake pressure into your driving toolkit. As with all good

things, there's compromise. Technically speaking, the harder you press the brake, the more weight you 'win' on the front end. Even so, 'stealing' weight from the rear affects stability and any gains aren't completely free or without limit. You'll have noticed that the front brakes are beefier than those at the back. This is because dynamic, forward-biased weight gains enable those tyres to work harder. This is true until you saturate the boots under the nose. Crucially, the more you demand from a tyre through braking, the less it can offer for cornering.

Under simplified steady-speed conditions a tyre can offer 100 per cent of its grip for cornering. If you introduce braking you'll use a little of this grip. To complicate matters, this also increases total grip at the front axle. Imagine you're cornering at steady speed, using around 70 per cent of front tyre grip. If you squeeze the middle pedal a touch, available front grip may now increase to around 110 per cent of the original. Cornering is still 70 per cent of the original (now nearer 64 per cent of total grip), but braking is using up perhaps 15 per cent of the original grip.

To clarify, that would mean you're now using 77 per cent of the increased front grip. You still have some in reserve. That doesn't mean all is well. The rear tyres now support less weight - they've lost grip. Depending on your speed and the conditions, you may fall short and have a tail-out moment. This is where the simplistic sage advice comes from (never brake in a corner). If you've not overdone it, the car could just tighten its line abruptly and continue to slow down once it finds its new groove.

I expect the information will be enlightening to some readers, while others would prefer a little



more explanation. To this end, let's build upon the hovercraft analogy. When we consider use of the steering wheel for destabilising rather than steering (changing direction), we can understand the greater role of the brake pedal more clearly.

I won't explain everything here, but we must realise that driving a car through a bend is like swinging a conker on a string. The 'lump' rotates around the centre of a circle. Furthermore, the car rotates about itself. View it as a graceful spin under control. The steering wheel starts this spin (what we call 'yaw'), while the rear tyres adopt a passive steering stance and deliver a form of dynamic stability. Brake pressure alters how the weight is supported and tunes this behaviour. Once your car is rotating about itself as a result of a steering wheel input, the brake (and accelerator) can be used to steer the car. This can be both through weight transfer and pushing tyres toward their limits.

Reversing the order – keeping the brake applied as you enter a corner - can load the nose to deliver more agile steering. This behaviour is the foundation of trail braking. It's one area where lap times can be forced to tumble, but there's hidden elegance in the art. Some extra depth can be found in brake application. More skilled drivers build pressure smoothly and provide progressive inputs to load their car under braking while managing available grip. For all-out lap times this concept needs some redefinition. At high speeds, the momentum in the hub-wheel-tyre-brake-disc rotating assemblies can prevent wheel locking, even for a violent stamp on the brakes. This is particularly true for 'slicks and wings' racing cars where a 'saw tooth' brake pressure profile can be the order of the day. That's high brake pressures at the end of a straight followed by an easing off to avoid wheel lockups as speeds drop and the aerodynamic grip gains diminish.

Perhaps we'll dig deeper into brake pressure profiles in another issue, because I've run out of space this month. For now, try to visualise forward weight transfer as you brake and consider how adding pressure can affect both demand for and gains in grip. In almost all cases, smooth, progressive pedal application is the goal. 'Smooth' requires context and shouldn't be confused with 'gentle'...

You can find more information on Neil and his driving tuition by visiting drive7tenths.com.

# Sootted

Total 911 assesses the rare and unusual Neunelfers currently for sale from around the world



After strong sale prices of the auction cars featured in last month's Spotted, we've been perusing the classifieds for other interesting 911s for sale. We love a Special Wishes car, and back in the early 1990s Porsche's dream-makers were applying some RS philosophy to the 964 Turbo, and produced some 964 Turbo S Leichtbau (lightweight) models for its most discerning – and deep of pocket – customers.

It's said that just 86 of these special Turbos were built, and according to the paperwork this is the last of them. Carbon composite and aluminium body panels featured, as did RS door cards, no rear seats, less sound deadening, thinner glass



and carpets and RS bucket seats. These changes reduced the mass by 180kg over a standard Turbo.

Just to make sure it's quicker than the standard Turbo, power for the 3.3-litre turbocharged flat six was upped to 381hp. This was achieved thanks to differing camshafts, machined intake ducts, higher boost pressure, and revised ignition and injection. The chassis mixes elements of Turbo and RS, sitting lower and riding on larger 18-inch split-rim alloys, which are an inch wider than the standard Turbo. Of the 86 cars, only 11 were in C16 UK right-hand drive form, so they're among the most coveted 911 Turbos out there.

All of which makes the white car we found on sale at Ascot's SuperVettura Sales even rarer. It's essentially new with just 61 miles on its odometer, and its £1,495,000 asking price reflects that. Finished in white with a full burgundy interior, it's clearly a collector's piece — but we'd love its next owner to use it. If that's you, and you do, you know where to find us.

Light and rare 911s are very much this month's theme, because the next car that we've found ourselves reading, and re-reading, the advert for is a 1971 911 S/T. On sale at Sports Purpose in Bicester, this Conda green is an example of a 1971

car that left the factory with the M471 lightweight body, to be built to Group 4 specification. It has all its correct VIN and production numbers intact, and comes with a Certificate of Authenticity from Porsche as a factory-supplied S/T. Fully restored over three years, the short ratio gearbox and engine were rebuilt by Manfred Rugen, with the engine modified to full race specification with its 2,340cc capacity, twin-plug ignition, a racing fuel injection pump and high butterfly induction. Unlike the previous lightweight we've highlighted, someone's had the sense to use this one, with the odometer reading 20,166km, with less than 2,000km of those having been driven since its restoration.

After the luft of the previous two cars, it's time for some wasser. We're big fans of the 997.1 GT3 RS here, thinking they're seriously undervalued – something the experts in our annual cars to buy review at the start of the year also highlighted. We found a beautiful 2007 example at Paragon, which has covered just 15,441 miles from new and, unsurprisingly, is immaculately presented. Jet black with orange and fitted with PCCB, sat nav and bi-xenon lights, it's nigh-on perfection in our eyes, and at £149,995, it's unlikely it'll be around for long so be quick if you're interested.

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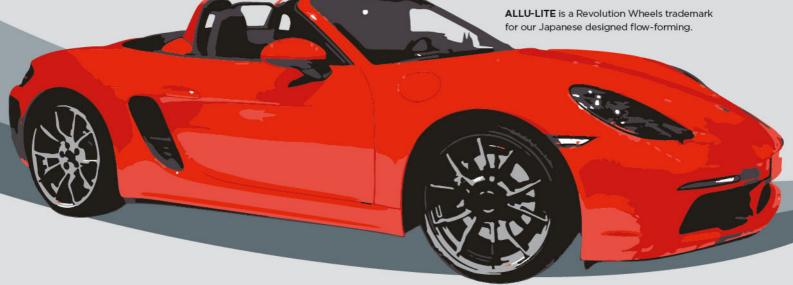
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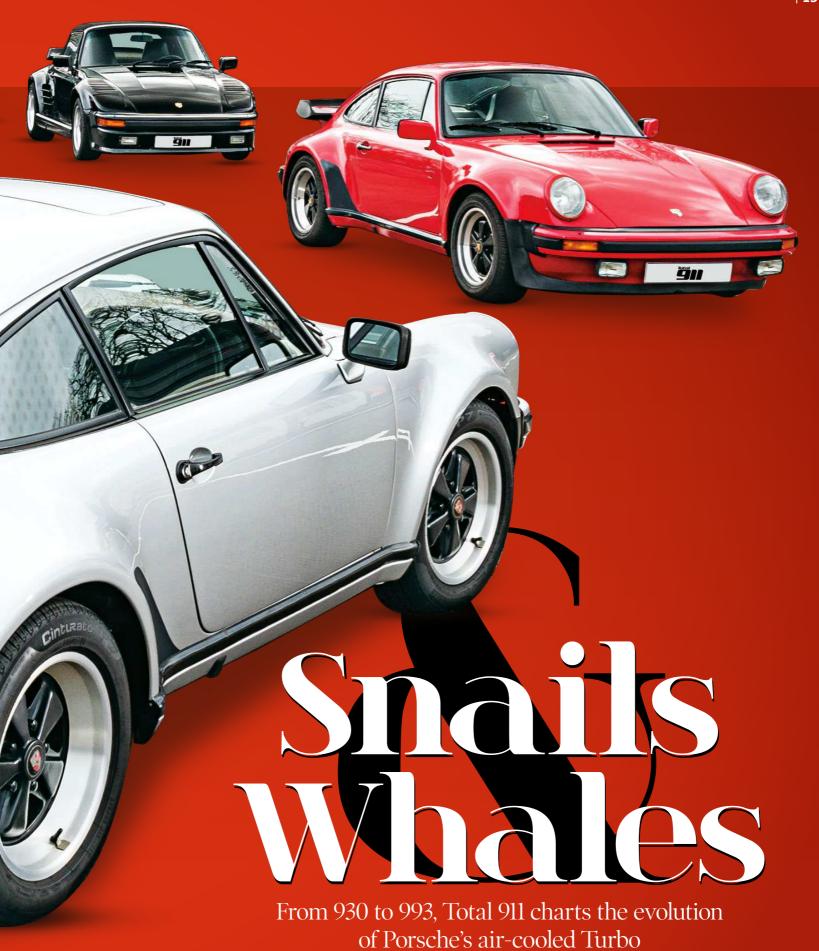








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Written by **Tim Pitt** Photography by **Ali Cusick** 



**Model 930 3.0 Turbo** 

Year 1977

#### **Engine**

Capacity 2,994cc Compression 6.5:1

ratio

Maximum power 260hp @ 5,500rpm Maximum torque 343Nm @ 4,000rpm Transmission Four-speed manual

#### **Suspension**

Front MacPherson struts, lower wishbones, longitudinal torsion bars

Rear Semi-trailing arms, lateral

torsion bars

#### Wheels and tyres

Front 7x15-inch; 185/70/VR15 Rear 8x15-inch; 215/60/VR15

#### **Dimensions**

Length 4,291mm Width 1,775mm Weight 1,140kg

#### **Performance**

**0-62mph** 5.5 seconds **Top speed** 155mph









"This is the only

air-cooled Turbo

that doesn't hide

its engine under

a huge slab of

intercooler - and

I'd swear it's

louder as a result"

ndreas Preuninger often reminisces about the white and blue Carrera 2.7 RS that occupied his bedroom wall. For me, being a few years younger than the head of Porsche's GT division, pride of place went to a red 930 Turbo. To a car-obsessed kid in Croydon, the flagship 9II seemed impossibly exotic.

In many respects, the 930 was the yang to Andreas' yin. It traded lightweight for luxury, unambiguous focus for a split personality, and linear throttle response for bludgeoning boost. It also had

huge haunches instead of slim hips, while delicate chrome gave way to bulbous black plastic. The Turbo was more at home on an autobahn than at a racetrack. Many Porsche purists were miffed. I loved it.

In recent years, 'A' to 'F' Series cars – particularly the 1973 RS – have been put on a pedestal. They were, it seemed, what every restomod 9ll aspired to be. However, the arrival of Singer's sensational Turbo Study, which reimagines the 930 in all its rubber-bumpered, whale-

tailed glory, suggests the classic Turbo is ripe for reappraisal. With help from Porsche collector, Nigel Gore, plus the Classic team at Porsche Bournemouth, that's exactly what we have planned.

The five cars assembled here represent the evolution of the air-cooled Turbo, each one more potent and capable than the last. There's a rare 930 3.0, its 3.3-litre successor – in Guards red, just like my

childhood poster – an outrageous 930 SE Cabriolet and a brawny 964 3.6. A 993 Turbo with the X50 Powerkit serves as a final flourish. That wide-eyed schoolboy wouldn't have believed his luck.

The Turbo has become a mainstay of the 9ll range, but rewind to the early 1970s and its trajectory certainly wasn't set. The prototype was a stripped-out road racer, with a 2.7-litre engine inside the wider body of a 3.0 RS. Porsche initially planned just 200 cars for homologation purposes, but the marketing department had other ideas. By the time the production 930 reached the 1974 Paris Motor Show, the Turbo had transformed into a plush

super-GT. Standard equipment included air-conditioning, electric windows, a four-speaker stereo and a rear wiper.

With a KKK turbocharger and 0.8 bar of boost, the original 3.0-litre 930 serves up 260hp – scarcely more than a new Golf GTI, and just 40 per cent of what a 992 Turbo S can muster. Yet even today it looks like the fastest thing on the road. Its shape isn't voluptuous and feminine like the supercars of the 60s, or angular and sci-fi like the wedge-shaped exotics that

followed. Instead, it's a 911 on steroids, a factory hot-rod pumped up for performance. Seriously, what could be cooler?

The inside of Nigel Gore's metallic silver car is more of an acquired taste, with brown leather and pinstriped orange trim. It's so 1977, I half-expect to see a pair of furry dice dangling from the mirror. The three-spoke steering wheel (another part recently •





Length 4,291mm Width 1,775mm Weight 1,335kg

Front 7x16-inch; 205/55/VR16 Rear 8x16-inch; 225/50/VR16 Dimensions

Performance

**0-62mph** 5.4 seconds **Top speed** 161mph







**ABOVE LEFT** The 3.3 heralded use of an intercooler for the first time necessitating a change in spoiler profile to a 'tea tray'

**ABOVE** The driving position of the 930 3.3 SE is an improvement over that of the original 930 3.0

reworked by Singer) looks fantastic, but the soft seats offer little side-support and the driving position is oddly upright for a sports car. You feel as though you're sitting on top of the 9ll rather than within it, peering down over those familiar front wings.

This is the only air-cooled Turbo that doesn't hide its engine under a huge slab of intercooler – and I'd swear it's louder as a result. The flat six sounds breathy, urgent and entirely mechanical, the commotion overlaid by a distinct hiss when the turbocharger wakes up. That frontier is crossed at 3,500rpm, and while the rush of forced induction isn't as head-spinning as it surely was 45 years ago, the classic 930 still has a startling turn of pace. With a perfect launch, 0-62mph takes just 5.5 seconds.

You need to keep it on the boil, though. With only four gears and a long-throw 930 gearbox, it's easy to drop below the boost zone. Do so mid-corner and the 930 may deliver on its spiky reputation, snapping into oversteer that takes quick hands and a cool head to correct. It's a car that demands forethought and rarely lets you totally relax – and that is, of course, part of its enduring appeal.

After three years in production, a major update for the Turbo came in 1978. The air-cooled engine grew by 305cc and 40hp, for a total of 300hp at 5,500rpm. This shaved the 0-62mph dash to 5.4 seconds, while beefed-up 917 brakes and a tweaked chassis helped to tame the Turbo's wild side. The 911 SC gained five speeds that same year, but the 930 soldiered on with four ratios, its 412Nm of torque reportedly too much for the updated 915 transmission to handle. Not until 1989, its final year on sale, would the 930 enjoy a fifth gear.

Park the 3.3 alongside the 3.0 and the most obvious difference is the enlarged 'tea tray' spoiler, required to feed air to the intercooler. Look closely and you'll spot the new headlight washers, which are

no longer on insectoid stalks, and the boost gauge that reads to a more realistic 1.0 bar (1.5 bar in the earlier car). The dished Fuchs alloys also grew an inch in diameter, helping to fill out the 930's flared arches, although this 3.0 has subsequently been fitted with the larger 16-inch rims.

I'm itching to get behind the wheel, but the demands of photography mean there's only time to sample one of the 3.3-litre cars. And who could resist the chance to drive a genuine 930 SE? Like the Turbo itself, the SE's roots are in racing. Its distinctive profile was inspired by the 935 (a contraction of 'Group 5 930'), which had a flachbau nose designed by Norbert Singer to improve the 911's aerodynamics.

Porsche tuners such as DP Motorsport and Kremer soon copied the flatnose look, but the story of the official 930 SE starts with Mansour Ojjeh. A key player in Porsche's return to FI in the 1980s, Mansour commissioned the Sonderwunsch department to build a road-legal '935 Street'. This was tuned to 380hp and featured a bi-plane wing, slabsided wheel arches and steamroller 345-section rear tyres. After more requests for 935-style conversions, the official 930 SE followed in 1986.

For this child of the 1980s, the flatnose evokes excess-all-areas modified specials such as the Gemballa Avalanche – perhaps even more vividly than Porsche's Le Mans-winning 9ll racers. Glinting in the stark winter sunshine, its black bodywork is peppered with cooling vents, and accessorised with chunky side skirts and quad tailpipes. A larger turbo and extra oil cooler help lift output to 330hp: good for 0-62mph in 4.6 seconds.

Climbing aboard, the first thing I notice is the improved driving position. You sit lower than in the 3.0, secured in place by bigger bolsters, while the leather seats have electric adjustment. The roof of this Cabriolet model is electric, too. It retracts in

#### **24** | Air-cooled Turbos

just a few seconds, although you need to attach the fiddly tonneau cover by hand. Insert the trad-1980s immobiliser, twist the key and the engine fires with a brusque bark. It sounds gruff and busy, although more civilised than the silver car.

On the road, the SE's gearshift is more positive and its extra 70hp is immediately apparent, with a surge of turbocharged shove that borders on violent. Its unassisted steering is hard work at low speeds and easily deflected on uneven roads, but the payoff

is a constant sense of communication. You sense the rear end squat and the tyres dig into the tarmac, the four-spoke wheel always restless in your hands. This assault on your senses is further heightened by driving al fresco. With the roof down and headlights popped up, I've never seen a 9II turn so many heads.

The next Turbo arguably looks even more exciting, though. To my eyes, the

stretched proportions and ultra-squat stance of the 964 are a little cartoonish, but plenty of people – including Chris Harris of *Top Gear* fame – consider this the best-looking 911 of all. Rolling on the same polished 18-inch Speedline alloys as the 964 3.8 RS, it looks like a square-jawed action hero. The connection to a certain big-budget Hollywood movie (you know the one) seems very apt.

The 964 Turbo was first launched in 1990, with a reworked version of the 930's 3.3-litre engine that produced 320hp. It took a further three years for the 3.6 Turbo to arrive, using the same 7.5:1 compression ratio and camshafts from the 3.3 Turbo S. The result

was 360hp and 0-62mph in 4.8 seconds. Quick enough to drag-race a Shelby Cobra, apparently.

Porsche's original plan was to replace the 930 Turbo with a sub-959 supercar called the 965. Eventually killed by the accountants, this could have boasted air suspension, four-wheel drive and PDK – some 15 years before a dual-clutch gearbox debuted on the 91l. By comparison, the 3.6 Turbo was defiantly old-school, with Bosch K-Jetronic injection (the 964 Carrera used a Bosch Motronic ECU), a

"Rolling on the

same polished

18-inch Speedline

alloys as the 964

3.8 RS, it looks like

an action hero"

single turbo and rear-drive. The last of the old guard, it wouldn't be leaving quietly.

Slide behind the ugly air-bagged wheel and the swinging boost gauge is replaced by an LCD display, while the stubby gear lever has five ratios marked on the top. Sitting with both arms and legs skewed slightly to the left (Nigel's car is one of only 159 right-hand-drive 3.6 Turbos), the 964's fulsome hindquarters fill the

teardrop-shaped Cup mirrors. Its engine idles more smoothly than the 930, with a deep menacing throb from the twin exhausts.

On the coarse and crumbling tarmac of the New Forest, the 964 reveals itself as a car of contrasts. The clutch, gearshift and power-assisted steering are all lighter than its predecessor, and the latter filters out much of the 930's fidgety white noise. However, the chassis as a whole seems less suited to British B-roads; a wide track and stiffer suspension making it feel a little skittish. The limits of the 265-section rear tyres are high, but the transition from understeer to oversteer isn't subtle.  $\clubsuit$ 



Model 930 SE Cabriolet

Year 1987

**Engine** 

**Capacity** 3,299cc **Compression** 7.0:1

ratio

Maximum power 330hp @ 5,500rpm Maximum torque 432Nm @ 4,000rpm

Transmission Four-speed manual

**Suspension** 

Front MacPherson struts, lower wishbones, longitudinal

torsion bars

Rear Semi-trailing arms, lateral torsion bars

Wheels and tyres





Model 964 Turbo 3.6

Year 1993

**Engine** 

Capacity 3,600cc

Compression 7.5:1

ratio

Maximum power 360hp @ 5,500rpm Maximum torque 520Nm @ 4,200rpm Transmission Five-speed manual

**Suspension** 

Front MacPherson struts, transverse

arms, coil springs

Rear Semi-trailing arms, coil springs

Wheels and tyres

Front 8x18-inch; 225/40/ZR18 Rear 10x18-inch; 265/35/ZR18

**Dimensions** 

Length 4,250mm Width 1,775mm Weight 1,470kg

Performance

**0-62mph** 4.8 seconds **Top speed** 174mph



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#### Model 993 Turbo X50

Year 1997

#### **Engine**

Capacity 3,600cc Compression 8.0:1

ratio

Maximum power 430hp @ 5,750rpm Maximum torque 585Nm @ 4,500rpm Transmission Six-speed manual

#### **Suspension**

**Front** MacPherson struts, transverse arms, coil springs

Rear Multi-link LSA axle

#### Wheels and tyres

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

#### **Dimensions**

Length 4,245mm Width 1,795mm Weight 1,500kg

#### **Performance**

**0-62mph** 3.7 seconds **Top speed** 188mph

That said, the 964's party-trick is worth the price of admission alone. The turbo starts to spool at around 2,700rpm, then by 3,500rpm all hell is unleashed. It feels like going into freefall, a sustained rush that literally takes your breath away. The 9II accelerates like a lit firework, hitting 62mph in 4.8 seconds. Even writing this, days later, Γm still smiling at the madness of it.

The final classic Turbo almost acts as a cool-down exercise after the intense, all-guns-blazing 964. Yet the 993 is also the quickest car here, particularly with the optional X50 Powerkit. This included an oil cooler, remapped ECU and freer-flowing exhaust system for 430hp – half-way between the 'standard' 409hp Turbo and the last-hurrah 450hp Turbo S. With viscous-coupled four-wheel drive from the Carrera 4, the 0-62mph sprint takes 3.7 seconds.

In some ways, the 993 came good on the 'junior 959' project, introducing technology such as a dynamic limited-slip diff and twin turbos (albeit one per cylinder bank, rather than a sequential setup) to the air-cooled 9ll platform. Its bar-of-soap styling also bears some resemblance to the 1986 supercar, while the snug interior will still feel familiar to owners of classic 9lls – unlike the clean-sheet 996 that followed.

As a driving experience, though, the 993 very much aligns itself with the 21st century Turbo: a civilised and devastatingly effective all-weather performance car. The second turbo eliminates the all-or-nothing lag of the 964, and 4WD (which diverts up to 40 per cent of torque to the front wheels) means tenacious traction out of corners. There's even a sixth ratio for the manual gearbox.

Twenty-six years after launch, the 993 Turbo remains a car with huge bandwidth – and one you could drive every day. The richly organic steering is the best of any 9ll here and the damping offers an extra layer of silken sophistication. Hugged by shapelier bucket seats, with a hit of turbocharged torque always at the ready, you feel instinctively more able to exploit its abilities. I longed to spend more time with it, but the light was fading and we needed to head home.

These five 9ll Turbos are all so different that, ideally, you'd follow Nigel's example and have one of each. However, a group test demands a winner – and that car is the 930 3.0 Turbo. Its place in Porsche history is assured, and it still can't be trumped for sheer sense of occasion. Wherever the 9ll Turbo goes next, this is where it all started.



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# PORSCHE 1997 TURBO S

The pinnacle of refined performance, the 997 was the last Turbo S to be



#### HISTORY AND TECH

he 997.2 made history by being the first Turbo since the 930 in 1974 not to use a Mezger-derived engine. The water-cooled 3.6-litre flat six that Herbert Ampferer had conceived for the 996 GT3 and developed for the 996 Turbo had served its purpose. Emissions reasons alone would have justified the end of production, but not only did a brand-new power unit offer better mpg possibilities, the fresh start enabled Weissach to improve refinement and especially torque at low RPM.

The new MA1 3.8 flat six introduced with the 997 Gen2 was also conceived to be turbocharged.

This led the way for the separately manufactured Mezger, which had no

common parts with the M97 unit, to be replaced by an engine that suited both n/a and turbo applications. Some 15 per cent of the 136,000 first-generation 997s built had been Turbos and there was speculation that the Gen2 Turbo cost Porsche as much as 6,000 less to build, thanks to powertrain savings alone.

The Turbo version of the MA1 3.8 required relatively few non-standard components, with the key difference being a specific crankcase. Assembly on the same line as the naturally aspirated versions simplified manufacture. Furthermore, commonality meant that Porsche's growing list of drive technologies such as direct fuel injection, Variocam plus and PDK could be integrated on a single engine.

Combustion efficiency was at the top of the Weissach engineers' list for the blown 3.8-litre engine, and induction ports were shaped to maximise rate of charge and a better fuel/air mixture. Still on the inlet side, valve lift increased

by 0.5mm while the valves were 2.5mm greater in diameter. The valve train was lighter than the Mezger's and the rev limit set at 7,000 instead of 6,800rpm. Similarly, the new design enabled the compression ratio to be raised from 9.0 to 9.8:1.

Beside changes to the intercoolers, the exhaust was substantially rethought. The previous one-each-side catalytic converters were now twinned, their monoliths constructed to reduce resistance yet work more effectively than before. Exhaust diameter increased from 60 to 65mm and the silencer received a less-restrictive baffle.

The Gen2 Turbo's maximum power of 500bhp and torque 479lb/ft between 1,900 and 4,000rpm were, as intended, improved upon by the S. Here, Porsche claimed 530bhp and 700Nm between 2,100 and 4,250rpm. These increases were achieved largely by adjusting boost pressures and without changes to turbos or intercoolers. The 997 Turbo S was the first Porsche to be available with PDK only.



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#### WHAT'S IT LIKE TO DRIVE?

orsche Turbos have always wowed the motoring reviewers. In the air-cooled era it was the brutal rush when the turbo charger (twin on the 993) woke up and the 911 took off like no other car. Post 2000, it was how the 911 integrated this power with amazing smoothness and a sense of control, enhanced by four-wheel drive and increasingly sophisticated electronic control. Each new edition of the Porsche Turbo had writers looking for fresh superlatives.

The big difference between the 997 Gen1 Turbo and the second generation was the engine. Motor Trend raved about the "muscular" 3.8's "exceptional flexibility". It could pull gently from low revs "or kick with tremendous force, elevating your soul and widening your grin." It also noted that the throttle response "was sharper than ever."

This was just what Weissach wanted to read. The Mezger engine, which did its best work at high rpm, was always a compromise in the increasingly refined Turbo and the new 3.8 overcame previous criticisms. Writing in *Autocar*, Steve Sutcliffe went further, noting the almost entire absence of lag even at the smallest throttle openings in high gear.

The S was so similar in mechanical spec to the plain Turbo that few magazines tried it. In *Autocar*,

Greg Kable noted that subjectively, there was little to compare between them. "Apart from a stronger feel to the engine above 5,000rpm, the S feels like the Turbo, eager, planted, the destroyer of any road yet an easy car to drive in all conditions."

Few people missed the manual gearbox. Pete Stout, then *Excellence's* editor, observed that the S's "sheer back-road pace makes fingertip shifts indispensable," and although he thought that with other Porsches, PDK stole driver involvement, "I'd have it in this car, which is plenty fast enough between corners to keep your mind busy."



#### THE VALUES STOR'

n S version late in the 997 Turbo's career was launched a year after the 997 Gen2 Turbo. Like the 993 and 996 Turbo S versions, it was a run-out model rather than mainstream version as per the subsequent 991 and 992 generations, with around 2,000 made – less than half of the 5,000 or so regular Gen2 997 Turbos. In the UK the S was priced at £123,000. This was some £14,000 more than the 997.2 Turbo, but this significant increase in on-the-road price seemingly proved no obstacle to showroom sales.

As a top-end model, the 997 Turbo S experienced only minor depreciation, then increased with all Porsche pricing in 2015-6. Values fell to their lowest point – between £70,000 and 75,000 in 2018 – before rising steadily and, reckons Jason Shepherd of Paragon, plateauing in the past year or so. More expensive initially, the Cabriolet has depreciated slightly more.  $\Box$ 





These days the 997
Turbo S sells largely
between £80,000 opens a wide field, but isn't enough for either rarer or collectors 911s.

#### 997.1 GT3

£90,000 buys a correctly maintained 2007 GT3 which may have seen some track use. Nervous when the Turbo S is calm, when the llurbo S is calm, when the blown Turbo S seems unbelievably fast, the manual GT3 is always a driving challenge. The opposite of Turbo S, but a more solid investment.



991.1 Turbo S
If the 3.8-litre was virtually as before, the 991.1 Turbo S brought a new chassis that was larger in all dimensions, the larger wheelings are the larger whee was larger in all dimensions, the longer wheelbase granting greater stability, better ride and refinement and a more spacious, refreshed cabin. It generally sells around £100,000-plus.



992 C2S
All current 911s are turbocharged: the S has 80 horses fewer than the 997 Turbo S (but not noticeably less of a performance), and has a state-of-the-art cabin and the expected improvements in ride and refinement. £93,000 buys a privately owned 29,000 mile example in Surrey.



#### 993 C2S

The air-cooled Turbo 993 costs well into six figures, but the 993 C2S is an attractive alternative. Motorhouse has an automatic Motorhouse has an automatic 1997 993S priced at £79,995. The Tiptronic shifts with nothing like the alacrity of PDK, but it makes this 911 a semi-vintage tourer. The best investment here.



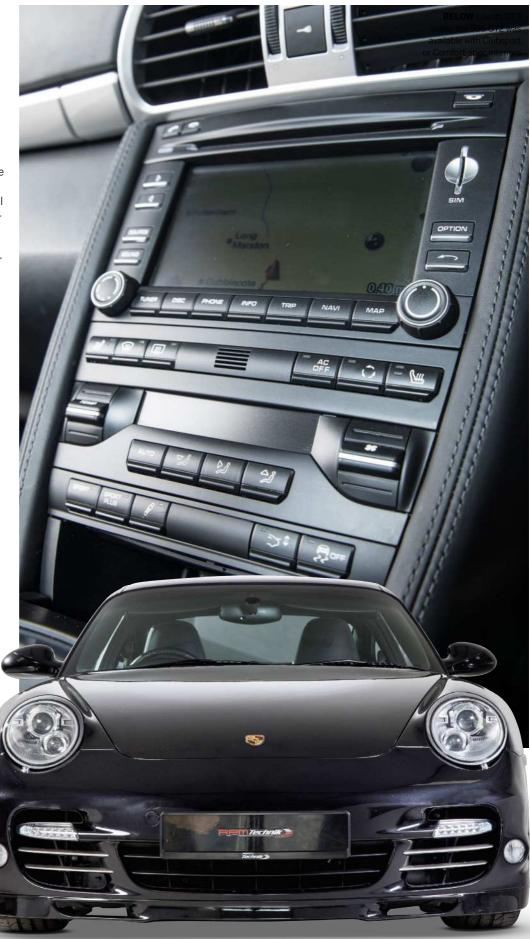
he S had a relatively short production life and virtually all the RHD cars for sale were registered between late 2010 and 2012. About a third of production comprised the Cabriolet, which originally retailed for £7,000 more than the Coupe. Interestingly, a decade later on the used market both open and closed models sell for the same price. Most cars show low mileages – 30,000 is the norm and examples with 50,000 or more miles unusual.

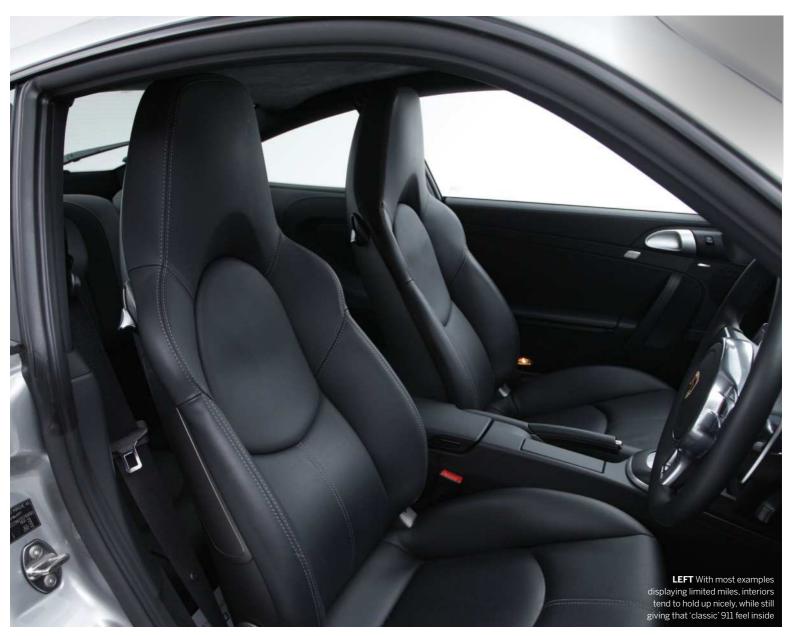
All 997 Turbo Ss should have a complete dealer history, but with such low mileages (in some instances fewer than a 2,000-mile annual figure), it's worth checking to see whether any service intervals have been missed. This is more frequent with older, lower-value Porsches that have dropped out of the OPC or specialist independent network. Prices of the 997 Turbo S are still at a level where most owners would be looking after them properly and any faults likely to be the product of age and under- rather than overuse.

On the mechanical side, a Turbo S of this vintage should be in first-class order, but as Paragon's Jason Shepherd points out, these are 10-year-old cars, and parts either wear out or deteriorate from corrosion or simply lack of use. He suggests examining the suspension: after a decade bushes fail, control arms slacken, struts and dampers can become fatigued, and the brake and engine coolant pipes corrode. The 997's underside – including its coil packs – is exposed to the vicissitudes of northern Europe's salty winter roads.

On the other hand, a proper service history will show where replacements have been fitted; air conditioning radiators too may well have been replaced. The originals, if still in situ, might constitute a negotiating point for some buyers. Jason has also seen incidents of alternators and water pumps failing (997 cooling systems often need attention before those 10 years are up) and the very occasional case of the PCM module crashing.

Mechanically, the 3.8-litre in blown guise has proved a very reliable unit, exhibiting nothing of the crankshaft problem that would dog the first version of the 991 GT3. Admittedly, this used a far more highly strung (naturally aspirated) version of the 3.8-litre engine. Off-hand, Ray Northway of Northway Porsche is unable to think of any recurrent problems with the 3.8-litre, a much more modern and refined unit than the "rattly old Mezger". Neither does the PDK, the first application on a 911 Turbo and particularly well-matched, give any cause for concern.







#### DESIRABLE OPTIONS

The Turbo S came, in that expression beloved of the used car trade, fully loaded. To the Turbo specification, Porsche had added PDK, PCCB brakes, 19-inch centre-lock wheels from the RS Spyder, dynamic 'bending' lights, Sport Chrono and two-tone cabin leather. Porsche observed that if you added all these to the Turbo, it would cost £4,000 more than the S and the genesis of the GTS sub-brand can be seen here: the 997 GTS was in fact released later in the same year. Given the wide choice on the used market, buyers might want to customise their Turbo S further by looking out for a rare colour, or a Paint To Sample shade. The lightweight aluminium hardtop, which was part of the 996 Turbo S package, wasn't offered on the 997 Turbo S Cabriolet.

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production run of 2,000 units means the 997 Turbo S was never destined to be an ultimate collectors' special like the concurrent Sport Classic. However, like most high-end Porsches, the semi-exclusive 997 Turbo S has retained slightly more of its original value than the plain Gen2 Turbo, its residual value in

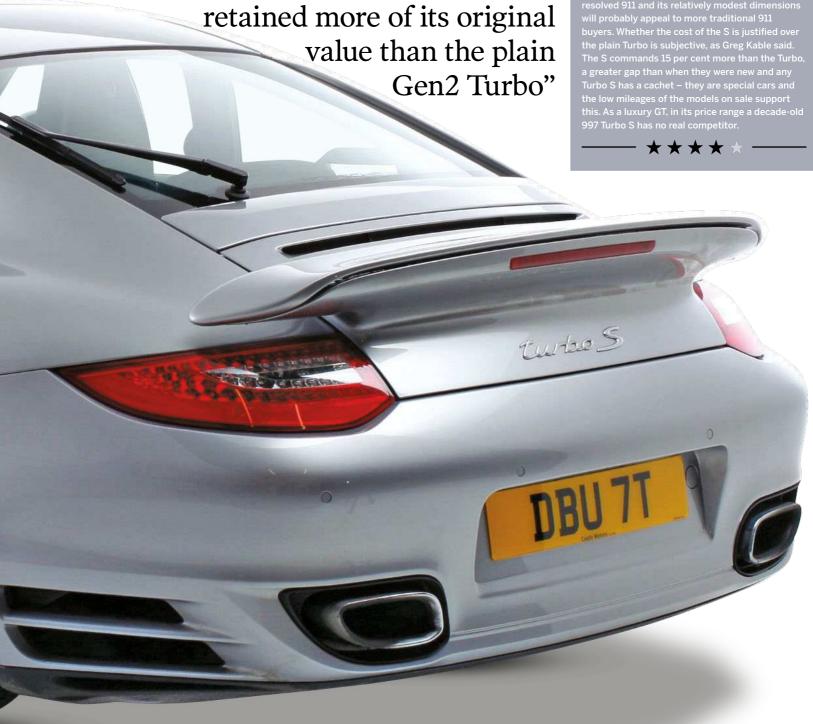
2022 around 75 per cent of its retail cost a decade or so ago. Although the second-hand market has been inflated by new car shortages, the consensus is that a 997 Turbo S will depreciate only slowly, especially if annual mileage is limited, which tends to be the case with these luxury 911s. The Coupe holds its value slightly better than the Cabriolet.

"The semi-exclusive 997 Turbo S has

#### TOTAL 911 VERDICT

that the new engine that replaced the Mezger wouldn't live up to its predecessor. "But then I discovered that the combination of the DFI 3.8 and PDK was brilliant and made the Gen2 Turbo fantastic fun. It's really a GT in the old sense: fas refined and very easy to drive. We have a Turbo S Cabriolet on the forecourt and I think at £83k it'the best-value Porsche we have at the moment."

Turbo S has a cachet – they are special cars and





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### THE MAGIC OF

### Hans Mezger

Porsche's late, legendary engineer Hans Mezger was responsible for an array of racing machinery to roll out of Stuttgart. Total 911 charts some of the best

Written by Glen Smale Photography courtesy Porsche Archive

ans Mezger started with Porsche on 1 October, 1956, and was initially assigned a role in the diesel engine development department. He moved quickly to the calculation department where he worked on the four-cam Type 547 engine, developing a formula for calculating cam profiles. This led to an opportunity in 1960 to work on the Type 804 project. Hans' keen appetite for learning, and the application of this knowledge to Porsche engines, can be seen throughout his career at the Stuttgart company.

In honour of Herr Mezger, Total 91l has delved into its archives to recall past recordings from interviews with the late, legendary engineer, to shed new light on some of his finest creations. The result makes for fascinating reading.

One of the most fascinating periods in motorsport, and certainly the busiest at Porsche, was the decade of the 1960s. Hans once explained, "In the 1960s, Porsche built 10 new cars starting with the Type 804, being followed by the 9ll in 1963. In

1964 the 904 was introduced and after that came the Ollon-Villars hill climb car in '65. The 906 and 910 followed in 1966 with the 907 in '67, the 908 and the 909 Bergspyder both in '68, and the 917 rounding out the decade in 1969."

While these 10 race cars mentioned above are clearly defined and can each be pigeon-holed in terms of the years and classes in which they raced, they're actually all interconnected and share a common engine architecture.

### Types **75**3 and **77**1

Porsche's efforts to raise its game in motorsport began with the construction of its Formula One racer. The Type 804 Monoposto certainly captured the seriousness with which Porsche had committed itself to this endeavour. The 804 was powered by a 1,494cc flat eight Type 753 engine that produced 185PS, developed by a team of talented engineers under the watchful eye of Hans Hönick, which included the likes of Werner Enz, Valentin Schäffer and of course Hans Mezger.

Being a 1.5-litre engine, Ferry Porsche insisted that it should also be capable of capacity increases

to allow for additional applications. Hans previously told us, "The Type 753 was a 1.5-litre engine and when the Formula One project was started, Ferry Porsche was more interested in long-distance racing than in Formula One, because he famously said, 'We spend a lot of money in motorsport to build the best sports car for the road.' So we were told from the beginning that it shouldn't be just a Formula 1 engine, but also for long-distance racing."

Increasing the capacity was simple enough, as Hans revealed. "It was just the bore that we changed, which on the air-cooled engines was very easy to do, so we just ordered bigger cylinder liners from Mahle." Of course, quite apart from just increasing the capacity, preparing the same basic engine for short Grand Prix races of approximately one and a half hours is quite different from a 24-hour endurance race. Greater performance was thus obtained by increasing the displacement first to 1,981cc and later to 2,195cc, creating the Type 771 engine... but more on that later.

### **Type 587/3**

While the tried and tested four-cylinder Carrera four-cam Type 587 engine was a known quantity, its power ceiling had been reached, necessitating the design and development of the Type 753 eight-cylinder engine for the Formula One racer. But the Type 587 engine was still in use in the Porsche 904 Carrera GTS in 1964, now in 2.0-litre format.

The 904's introduction coincided with the launch of the 911 model, and although the new racer was to be powered by Porsche's latest 2.0-litre, six-cylinder engine, this power unit wasn't ready for competition use. This meant that the 904 would have to be fitted with the proven four-cylinder, four-cam engine.

Hans was charged with improving the Type 587 four-cylinder Carrera four-cam engine, and increasing its power to 180 horsepower for use in the 904. "It

was decided to use the Carrera four-cam engine, but there were some things that needed to be improved on that engine," he said. "It was a good engine, but I was asked to improve its durability and because we had to build 100 cars, that was a lot of 'not so simple engines' that had to be assembled on the production line. Because of this, I also had to improve the assembly process as far as possible.

"Looking back, we were successful by all accounts because in 1964 we had five 904s at Le Mans, and all five finished the race."

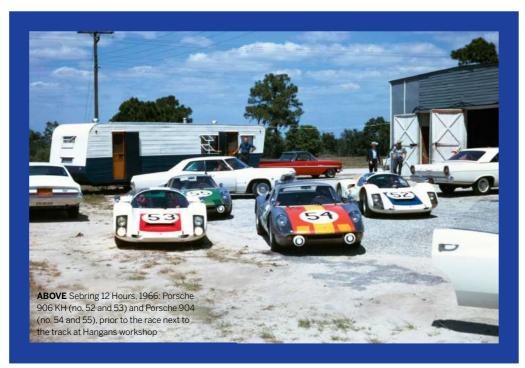
### **Ollon-Villars**

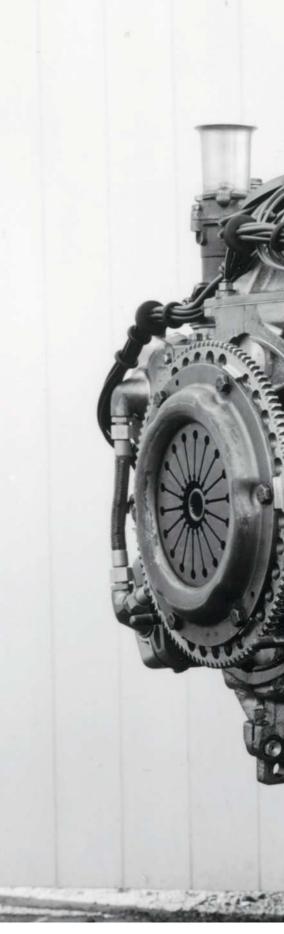
Hans once revealed that, "The Ollon-Villars Spyder was built by my department which, at that time, was still an engine department." Porsche didn't have an answer for Scarfiotti in the new Ferrari Dino, who frustratingly swept the board with little opposition. Porsche still saw itself as the underdog, and the only race where it stood a chance of victory was in the European Hillclimb Championship where there was a 2.0-litre engine capacity limit.

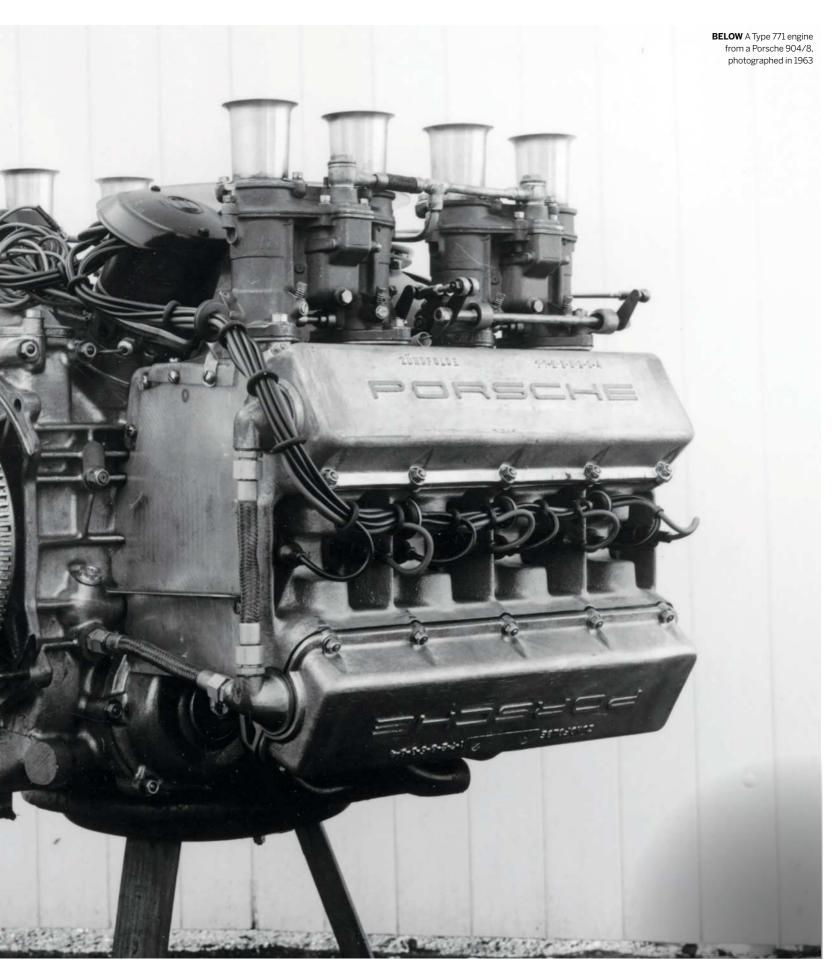
"So we built a new car within 23 days – we worked day and night! We designed a new chassis for this car, and we had the suspension parts [and wheels] from Lotus," added Hans. This became the Ollon-Villars Spyder, named after the hill climb in Switzerland for which this car was built. It was Valentin Schäffer's job to improve the 2.0-litre Type 771 engine for the hill climb. Gerhard Mitter didn't beat the Ferrari that time, but the unique racer did lead to the 910, which was very successful.

### The 906 and 910

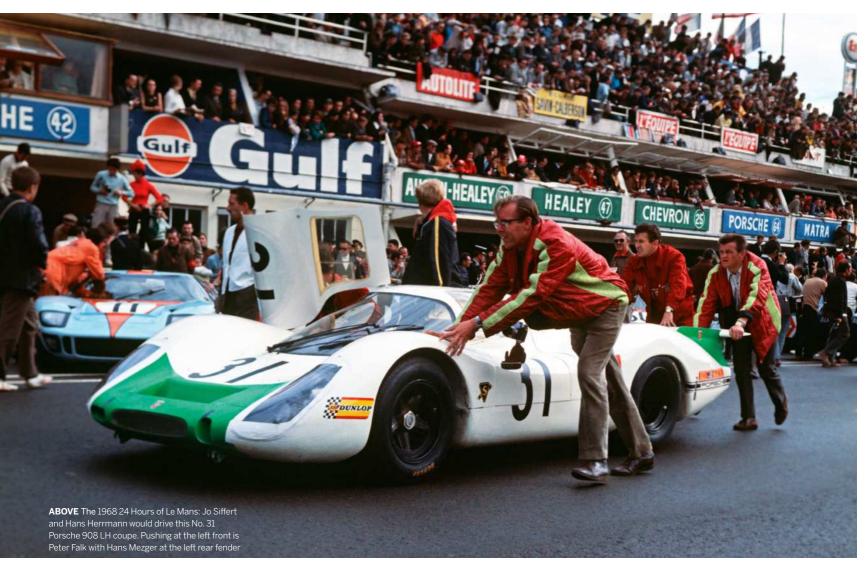
It's been said that Porsche's real thrust into the world of prototypes began with the 906 Carrera 6. In its first outing at the 1966 Daytona 24 Hours, the new 906 finished in sixth place overall, behind four Ford GT40s and a Ferrari. Fully tested and ready







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for competition, the 906 was powered by the same 2.0-litre flat six Boxer engine found in the 911 road car, but with some important differences.

Hans was again part of the team responsible for developing the 2.0-litre 901 race engine. "We made the engine much lighter," he said. "The production version weighed 180kg, but the race version was only 130kg. The crankcase was cast in magnesium and in all the racing engines we used forged aluminium pistons, but we used titanium con-rods for the first time on the race version of the 911 engine.

"The forging process is completely different and so we took a long time to get it right. Nobody in Germany had any experience in using titanium. I think we were pioneers there," Hans revealed.

The 910, which followed the 906 six months later, used the same engine as its predecessor. However, the Type 771 eight-cylinder engine was also used in the 910 for the 1967 Targa Florio. Hans said, "The 2.0-litre six-cylinder produced 210 horsepower with carburettors and 220 horsepower with fuel injection. Although the eight-cylinder 771 engine generated an additional 50 horsepower, the six-cylinder was more reliable than the eight-cylinder."

### **Type 916**

The Type 916 six-cylinder, four-cam engine enjoyed perhaps the shortest competition life of all, being

used in just a couple of races. But the rationale behind the development of this engine is all-important, because it served ultimately as a research unit for the mighty 12-cylinder Type 912 engine that powered the 917 into the history books.

Launched as an experiment in 1967, Ferdinand Piëch asked Hans to develop a 2.2-litre, four-cam, six-cylinder engine that could rev higher than the normal two-cam version. With one eye on a possible option for the 9II road car, the four-cam engine became a jewel of an engine that in itself went no further within Porsche, except that it provided a valuable insight into the potential of the 4.5-litre, 12-cylinder unit.

It's this engine that Hans was most proud of, as he explained. "We had a very short time in which to develop the 12-cylinder engine, so we used the 2.2-litre, six-cylinder which was half the displacement of the 917 engine.

"We did a lot of testing on the dyno with the six-cylinder, four-cam engine to find out what power it gave. This was to save time on the development of the 12-cylinder engine. It produced exactly 260 horsepower and that was important because all the documents and brochures we produced for the 1969 Geneva Motor Show where the 917 car was shown to the public for the first time, announced the engine power of 520 horsepower – exactly double that of

the six-cylinder, four-cam engine. But in fact, the 12-cylinder engine produced 542 horsepower. I will never forget it."

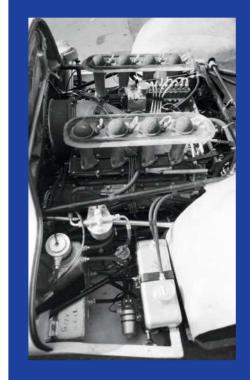
### Types 907 and 908

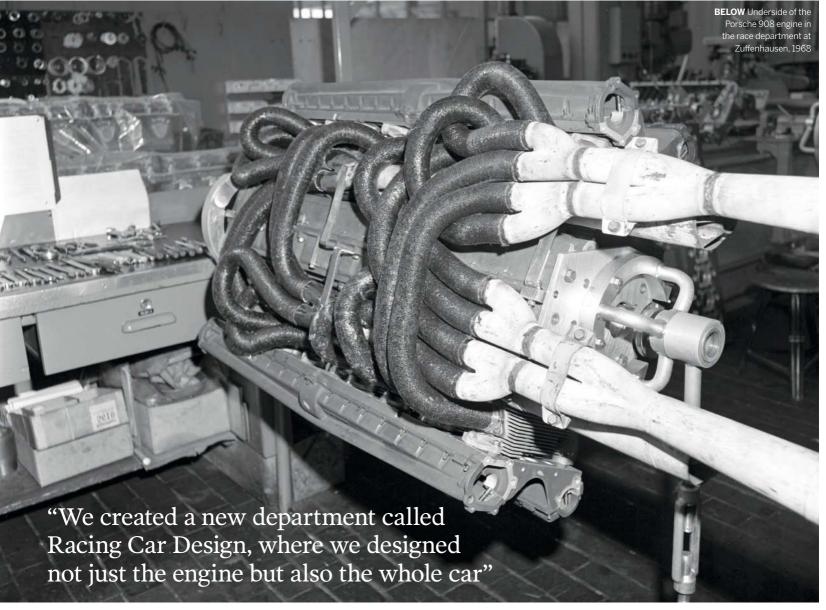
To say that the 907 was just a development of its predecessor, the 910, is to do this new racer an injustice. The 907's greenhouse was narrowed to offer less wind resistance, and it was converted to right-hand drive because most tracks in Europe ran in a clockwise direction and this would help with overall balance. The 907 was developed specifically with Le Mans in mind, and was powered mostly by the eight-cylinder, 2.2-litre Type 771 engine.

The 907 was the last model used by the factory team to be powered by the Type 771 2.2-litre, eight-cylinder engine. Of course, the 909 Bergspyder used the 2.0-litre version, but as far as the factory was concerned the 2.2-litre engine was about to make way for the larger 3.0-litre engine that was to power the new 908 in 1968 and 1969.

Hans was the team leader on the 3.0-litre, eight-cylinder engine project. "We decided in late summer of 1967 to design the 3.0-litre 908 engine," he said. "We created a new department called Racing Car Design, where we designed not just the engine but also the whole car. Ferdinand Piëch didn't want to be the underdog anymore, so we were pushing







#### **44** | The magic of Hans Mezger

to win the World Championship and of course Le Mans, which was important for the Porsche market in the USA. Because it had to be done within just a few months, we used the six-cylinder engine and we made an eight-cylinder version of that, which we tested on the dyno in December 1967."

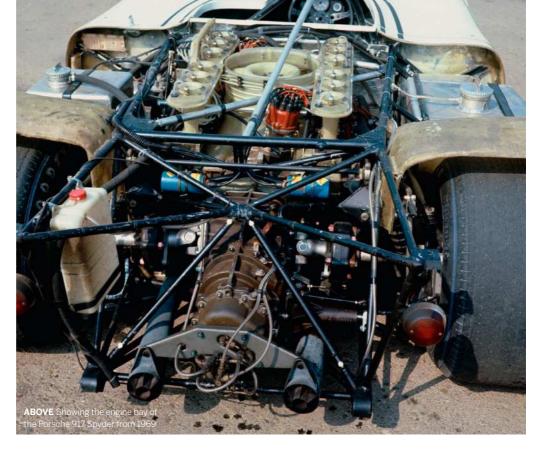
### Porsche 917

While the 908 was very successful, almost winning Le Mans in 1969, Ferdinand had his sights firmly set on lifting the trophy at the world's most prestigious endurance race. For this task he risked everything by ordering the creation and development of the mighty 917, and the responsibility fell to Hans and his team.

"Ferdinand Piëch was the driving force behind all of this progress for sure, but he wasn't easy to deal with. But we had a good working relationship because he knew what I could achieve," Hans had said with a smile.

In developing this mighty engine, the aim was to reduce weight, as Hans confirmed. "The FIA regulations required an 800kg minimum weight for the 5.0-litre sports car in 1969. So for the 917 we used magnesium alloy for the crank and the crankcase. The weight of the crankshaft per cylinder was lighter than on the six- or eight-cylinder because it wasn't a Boxer design, but a 180-degree V-design, with two con-rods on one crank pin.

"So we reduced both the crank pin diameter and the main bearing diameter while retaining the same crankshaft stiffness, which was necessary because the webs between the crank pins and main bearing pins were much thicker. With the exception of the cylinders and the cylinder heads, all other cast parts on the 917 are made from magnesium."



There were many improvements made to the 12-cylinder engine between 1969 and 1971. The initial 4.5-litre capacity was increased to 4.9-litres and then to 5.0-litres, which may seem like small increases in displacement, but the improvement in power output was significant. Hans outlined some of these changes. "There were many other improvements. For instance, we used Nikasil cylinders liners for the first time in the 5.0-litre version. There was a very small increase in the displacement of the engine, but it was a big step up in the power of the engines. We found that the Nikasil surface reduced friction loss when compared with chromium plating, which gave us a

power increase. Officially, we said the 4.9-litre engine produced 600 horsepower and for the 5.0-litre version it was 630 horsepower."

From its humble beginnings, Porsche has grown into a motorsport giant, and just as in nature where the fittest survive, the same can be said of Porsche. It's in the tough world of racing that the Stuttgart manufacturer has not only survived, but thrived. And it's thanks to these hardy engineers that Porsche is the most successful motor racing manufacturer in the world. "We were very busy in the 60s!" said Hans. "It was a lot of hard work, but I have always said it was fun too, to do such a job."







## Written and Photographed by Steve Hall

Is there such a thing as a cheap Porsche? Total 911 follows the story of a reader who purchased a 996 for nine grand.

Has it been a great buy or a grave mistake?





wise man once said there's no such thing as a cheap Porsche, and he wasn't wrong. Sure, a few years ago you could probably bag a 924 for a four-figure sum beginning with a 2, but it'd be, er, 'ratty' I think is the term. And then there's the debate about it being a real Porsche at all. I'll leave that can of worms firmly closed.

Of course, nowadays there are still a few early Boxsters available for under £5k if you browse eBay/ Facebook/Pistonheads hard enough, but they come loaded with issues that could easily chew through the same amount of cash all over again. Besides, if you fancy a Porsche at the budget end of the market you probably want a 'real' one don't you? Which means having a flat six located behind the rear axle – right?

And the words 'Porsche 9II' and 'cheap' don't really meld very well do they... or do they? The 996 has for far too long been the black sheep of the 9II family. It's unloved by the air-cooled die-hards, while the 997 (which is essentially a heavily revised 996) brought with it refreshed styling and a more modern interior that solved many of the supposed problems some saw in the 996. But times are a-changing, just as

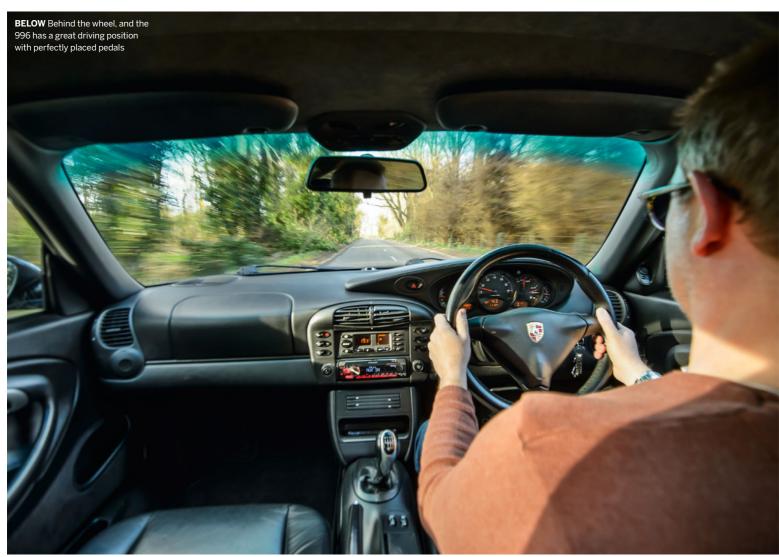
they always seem to with 9lls. Let's not forget there was a time when the now-revered 964 was seen in much the same way, with market values reflecting its lack of acceptance among the hardcore 9ll fans. Less than £15k would have bagged a very good, useable 964 once upon a time.

Much the same appears to be happening in the world of the 996 now, with the model being recognised for its sheer excellence as a driving machine. Meanwhile, the styling has taken on a modern classic aura. Ubiquity means they'll probably never be as valued as those that have gone before (175,000 sold vs 66,500 964s and 69,000 993s) but the 996 is enjoying its time in the limelight, a focus helped by the model celebrating its 25th anniversary this year. So with values holding strong, and possibly offering some investment potential for the best examples, there's probably never been a better time to get into this long-underrated 91l.

It's a thought clearly shared by Chris Mapey, who purchased the car on these pages last summer for what seems an inconceivably cheap £9,175. That's not a typo. It was, by a margin, the cheapest 9ll available in the UK at the time (at the time of writing the cheapest 996 was a 170k Tiptronic for £3,000 more). And it seemed a good one, too. Collection day ♣



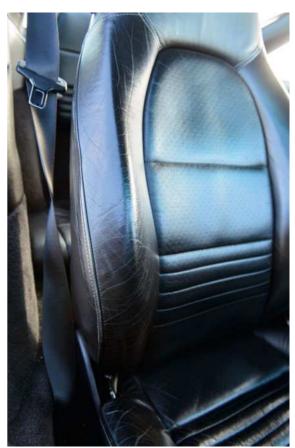




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revealed a perfectly useable car that started and drove just fine. The bodywork was showing some signs of age as you'd expect, but was fundamentally solid. A little rust on a wheelarch, some bubbling around the bonnet badge, a few scuffs and the inevitable road rash was all it had to show for its 22 years and 110k miles. The paintwork was merely slightly faded, promising that a thorough detail polish would breathe new life into its metallic black hue.

An inveterate car nut and serial buyer of 'interesting' cars (as we shall see), Chris had previously enjoyed a couple of weeks in a friend's 996 running an aggressive suspension setup and outrageously loud exhaust. Chris says it was "hilarious fun", so when the opportunity arose – and enjoying a risky bargain – he jumped at the chance to acquire X251 WRG.

But something wasn't right. This time he just wasn't gelling with his 996 like he had with his friend's 996 hot rod. As Chris says, "I was caught in two minds. It's a brilliant daily, so refined and useable, but I need more space in a daily. And when I want to have fun it's almost too competent for its own good." This is probably a good juncture to mention Chris has a Ferrari 355 and TVR Cerbera in his garage, so while the 996 is a wonderful single car solution for anyone's sports car needs, it's not hard to understand how it couldn't match the excitement and theatre available in that pair.

Ultimately it was used less and less while a Volvo estate covered daily duties. In the meantime a visit to the garage had revealed several things that needed sorting – not unreasonable for a cheap old 996 you'd think – and so it was sent off for the 'full works' in the hope this would reveal some previously hidden character and deliver the exciting daily driver he was hoping for.

And while it undoubtedly drove better, the work – totalling £6,200 – wasn't transformational, instead enhancing and improving what was already there. Many typical 996 issues were sorted: new coffin arms, brakes refreshed with new brake lines and ABS sensor, every filter, belt and plug renewed. Suitably revived, the M96 ran sweeter and revved cleanly, just as it should, while the refreshed suspension and tracking delivered the concise, linear responses you'd expect of a 996. But Chris just wasn't bonding with it, for the same reasons as before, so it was time to move it on.

If this reads as something of a horror story so far, it's not meant to. The reality is Chris was probably a little unlucky to uncover several expensive problems with his 996, and while he was willing to spend more than most, it was arguably going over the top to fix almost everything. But there really is no such thing as a cheap Porsche; these were expensive cars when new and while used values might change over time, the bills they can elicit are still breath-taking.

It may make more sense to find yourself a car on the other side of this equation: one with lots of recent work done, or at least go into a cheap car with eyes wide open, knowing the risks and being prepared for the possibility that it may require an expensive visit to the garage. Chris took an educated risk on this car, one which would have paid back handsomely over time had he fallen in love with it. After all, with so much of the car now 'sorted' he undoubtedly had a good one. But it just wasn't to be, and someone else would reap the benefit.

Which is where Marc Bentley, current owner of X251 WRG steps in. Being acquainted with Chris, Marc was aware of the travails of the 996 and with a change of circumstances removing his need for an economical commuter car (instead of his BMW M140i), having previously pondered a 997 he saw the opportunity to try a 996. "It seemed like an ideal way to get into a 9ll with a lot of the potential issues sorted," says Marc. Wise words indeed. And how has it worked out so far? "It's a proper 9ll, despite what some said at the time it was launched," says Marc. "It's got the classic flat six bark, the handling isn't too tail happy but is still fun, and my six-year-old daughter fits in the back."

Well aware of what he's bought, Marc understands that there will be bills in future, but that goes with the territory when you're running a sports car from the turn of the century. Suffice to say, 1,000 miles



into ownership and the C4 is living up to all that Marc had hoped for. "Best drive so far was coming to this photoshoot; the run through Bedford, Royston and out into the Essex countryside. The roads were open but twisty and the car handled it really well. The engine was in its sweet spot, the sun was shining and the car showed its character."

Just goes to show how divisive our beloved 9lls can be, doesn't it? Or perhaps it proves that the 9ll's 'trick' of being a brilliant all-rounder plays perfectly into the hands of someone looking for one sports car that does it all. As such, it's perfectly suited to Marc's needs, but perhaps too compromised for Chris, being used to a bombastic TVR and a screaming Ferrari.

Driving the fettled Carrera 4, I can see where Chris is coming from. I know, I know, this is a 9ll magazine and I should just say everything is absolutely perfect, but the first couple of miles present a car which is utterly, well, straightforward to drive other than sitting a little lower than your average car. It's easy to see out of, it has a great driving position and perfectly placed pedals. The



3.4 motor isn't over-endowed with torque and so it's not intimidatingly quick, while the motor spins smooth, sweet and relatively quietly, managed by a light, accurate clutch and gear change. You could pop your (small) kids in the back and take this on a family weekend away, sacrificing little to your average luxury car (typical 9ll road noise notwithstanding).

It would be remiss of me not to complete the picture of course, for the joy of a 911 - certainly this one, as I found - is it would be worth sneaking out of bed a couple of hours before the family to have a proper drive on some proper roads. Because once you wind it up, this 996.1 C4 starts to wake up in your hands. With load, the steering streams feedback into your synapses, while with revs the flat six takes on an edge in the final third of the rev range aurally and acceleratively. This is still a 300bhp car, after all. And as you'd expect with all the work done, it drives pinpoint accurate and smooth with responsive brakes and great pedal feel. Arriving into a corner at pace, blipping down to second as the lever snicks smoothly through the gate, loading up the front then utilising that unique rear balance on exit, it's an absolute joy. Just as the folks at Weissach intended, I guess. To think you can find one of these cars, fully sorted, midway between £10-20k... well, I struggle to think of anything better. I'm an undiluted 911 fan, but it's my job to have a wider view of the motoring world and yet I just can't think of anything so multifaceted, yet so rewarding when you have the chance to drive.

Given who I'm writing for I'm probably preaching to the converted, but there's good reason for it. Even this least-loved of the 9ll family is still an incredibly satisfying thing to drive and, if you go in with eyes open, one of the most useable and enjoyable ones to put miles on. There may be no such thing as a cheap Porsche, but a good 996 offers incredible bang for your buck. Get one now before the secret is out.

### 996: THE KNOWN ISSUES

One of the reasons the 996 has struggled to gain popular acclaim among 911 aficionados can be laid at the door of... the internet. Allow me to explain. Like almost all cars that have reached this age, a few common problems have manifested and while they range from easily fixed to catastrophic, the echo chamber of social media has exaggerated these to a level beyond reality. It's nigh-on impossible to research any 996 purchase without the words 'IMS' and 'bore scoring' popping into your results. Both problems can be terminal for the much-maligned M96 motor, with fixes approaching £10k to put right.

Were you to believe the internet you'd imagine it's inevitable your 996 engine will catastrophically fail at some point. The reality is somewhat different. For starters, as most M96-powered 996s approach 20-plus years old with mileages to match, many of the engines with problem parts will likely have failed long ago. If your potential purchase has accrued 80,000 or more miles on an original engine it's probably one of the good ones. Class action lawsuits in the US put the failure rate well below 10 per cent, and for double-row bearing cars (in other words, later models) that figure is around one per cent.

With that in mind, the prospect of a six-figure mileage 996 doesn't seem so scary, does it? Of course, there's more to it than engine failure. Common faults include the air-con rads that are situated in the nose so they're exposed to the elements; not catastrophic but easily a few hundred pounds. Another fault which can look terminal (but isn't) is the air/oil separator – I know this well because it happened on my C4S. The result is lots of smoke under load, but rather than engine failure it just means oil inadvertently finding its way into the combustion chamber. Not a cheap fix, but £700 is better than a £10k rebuild.

So-called 'coffin arms' are a common item that wear out; like any car with age and mileage, suspension components will need replacing. Not cheap (of course), but once they're done you can forget about them. It's not unusual for exhausts to rot through given their exposure to the elements, but again once fixed (numerous quality aftermarket solutions exist) you can put it to the back of your mind.

The interior is liable to show its age. Some of the switchgear can feel a little flimsy, but mostly it's quite hard-wearing. As with any car, a shiny steering wheel and scuffed seat bolsters will belie usage. Glovebox and middle lid catches can fail at any time – most owners don't care. Overall, the 996 is a well-built and reliable car, no more susceptible to problems than a similarly aged Golf. A specialist check is well worth the investment, and with a clean bill of health you can expect many miles of driving enjoyment.



## Vic Elford

The former Total 911 columnist, undoubtedly one of the best to ever drive for Porsche, passed away on 12 March. Kieron Fennelly looks back at his life and career

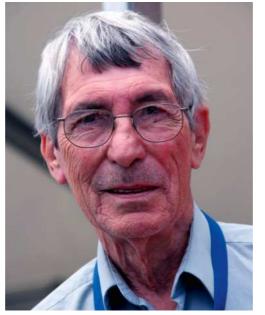
Pictures courtesy Porsche Archive

ic Elford died at his home in Florida on 12 March after a long battle with prostate cancer. He was 86. After emphatically putting the 911 on the international rallying map in 1968 by scoring the first of Porsche's three Monte Carlo victories, Vic was selected for Porsche's works sports car team. He was one of only two drivers (Rolf Stommelen was the other) who wasn't intimidated by the first savagely powerful, but horribly wayward Porsche 917s. Codriving with Richard Attwood, Vic came within 90 minutes of winning Le Mans in 1969 before the clutch housing failed. It was no surprise that of all 917 drivers, Vic was the first to lap La Sarthe at more than 150mph in 1970. Despite his prowess, outright victory with a 917 would elude him until the following year.

Born and brought up in Peckham, south London, the young Victor was a bright boy whose A levels in maths and physics earned him an engineering apprenticeship with the Gas Board. He then moved on as a design engineer in a construction company. But what he really wanted to do was motor racing: his father had taken him to Silverstone to the first British Grand Prix in 1948 and he was hooked. Despite the fact that Brands Hatch wasn't far away, rallying seemed to offer more possibilities. It was more exotic, involving foreign travel, but in any case purchasing

his own racing car was out of the question. Navigating at least got him into a competition car, if in the 'wrong' seat. By 1958, Vic was an established navigator, a role he occupied patiently in the hope of getting behind the wheel of a works car.

Sixty years on, it's hard to imagine the importance of an event like the Monte Carlo Rally, but for the



entertainment-starved post-war public, it was the focal point of winter sports coverage. Competing cars were virtually standard and manufacturers saw these events as vital publicity. BMC used to enter a variety of cars, ranging from 40bhp Austins through to lumbering A99 Westminsters and MG Magnettes, in the hope of a class win somewhere, although it was not until the Healey 3000 that the conglomerate had a properly competitive car. By the early 1960s Vic was driving for BMC, but the works cars were neither fast enough nor reliable.

It was during the 1959 Monte Carlo Rally that Vic made a discovery which would put him on the path to mastery of the 9ll. Co-driving a privately entered Al05, the big Austin broke a wheel in the Alps and had to retire. The owner rented a Renault Dauphine to get to Monaco to see the finish of the rally, and asked his young navigator to drive. Vic found himself steering a rear-engine car for the first time. Much as he had already learned to drive confidently in the wet, he quickly took to sliding the feather-light Dauphine through the snow – to the considerable alarm of his passenger. It's no coincide that Jean Rédélé would use the Dauphine as the basis of his Alpines, whose sheer agility would by 1971 prove too much even for the factory 9lls.

After forays in 1962 and 63 with the works TR4 in the Liège-Sofia-Liège and in the RAC in a special 2.0-litre Vitesse (whose torque overwhelmed its



gearbox), Vic was becoming disillusioned. At 28, he had seemed to have made only limited progress. Then Ford offered him a drive (and a salary!) to compete with a works Cortina GT. Three seasons with the more professional Ford works team would vastly expand his experience, including the mud and dust of the East African safari, and the tarmac of the Tour Auto. When his Lotus Cortina was entered at Norisring in 1965, Vic three-wheeled the car, Jim Clark-style, to win the race.

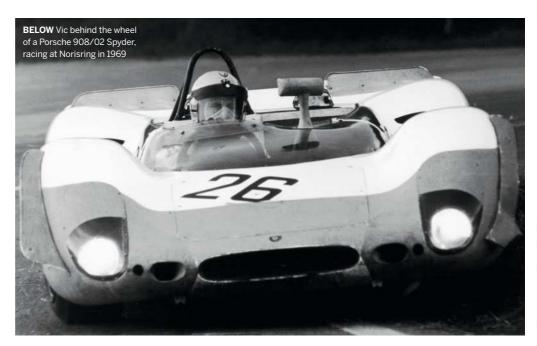
Yet by the end of 1966, Vic - despite being an exceptional rally and circuit exponent - was completely demoralised. He was clearly Ford's fastest driver, but his season was dogged by machinery that too often failed, or disqualification (such as after he'd won the Acropolis rally) because Ford had made documentary errors in declaring the car's specification. Another retirement occurred in the Marathon de la Route, which was now 84 hours round the Nürburgring that had replaced the Liège-Sofia-Liège rally. Vic's Cortina overheated when comfortably in the lead and expired only 12 hours short of victory. Exasperated, Vic realised that he would never reach the top with Ford. British cars and organisation had proved so unreliable that he wondered what other opportunities existed. Porsche was the obvious choice.

He approached Huschke von Hanstein, who knew how fast Vic could be. "But your reputation for wrecking the engine or going off the road precedes you," Huschke told the Briton. But he did allow Vic to put forward his case: that Ford's organisation and the fragility of the Cortina had consistently let him down. The upshot was that the Baron said he would make a 911 available for Vic to try in the (tarmac) Corsica rally, but with no spares, minimal service support and no money.

Vic, who had never driven a 9ll before, was surprised yet impressed by Huschke's confidence, both in him and in the 9ll. He and navigator David Stone rented a Simca and set about systematically learning the route. In the rally itself, for once Vic restrained himself and let the other works 9ll driven by Günther Klass race off at the front. The result for Vic was an untroubled run to third place, a delighted Huschke and a contract to drive for Porsche in 1967. The next five years would really show what the Peckham man was made of.

Prior to the Monte Carlo Rally, Vic was looking for more experience with the 9ll. ITV, which was then the only television alternative to the BBC, invited him to take part in the inaugural rally cross event: a mixture of tarmac and grass racing at Lydden Hill in Kent. Lacking a car, Vic approached Porsche importer AFN, which lent him its red demonstrator.

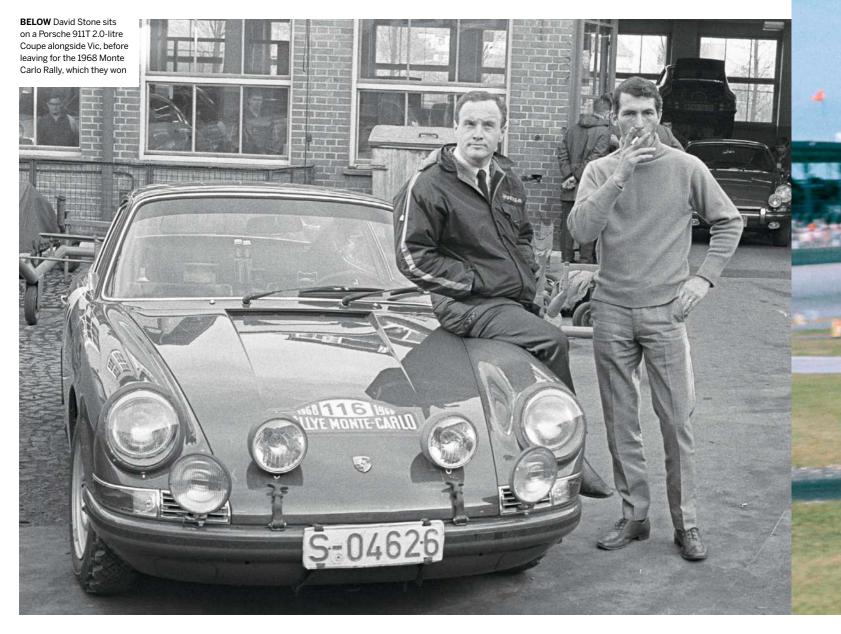
The race has gone down in the annals of Porsche history. Vic's main competition came from the works Cortinas of Brian Melia and Roger Clark. The circumstances of his recent departure from the Ford team meant that there was no love lost between him and his former team mates. Roger and Brian operated in combination in a determined attempt to force Vic off the circuit. Several million viewers watching the first ever televised rally cross sat enthralled while











a bruising battle more akin to a stock car scrap than motor racing unfurled before them. But try as they might, the Ford men couldn't get past Vic.

Among the viewers was AFN's managing director John Aldington, who was watching from his home in Henley. His consternation grew to dangerous levels when he saw that his 911 - AFN's only demonstrator (and reportedly one of only four 9lls in the UK) - was mauled to the point where no panel remained intact. Vic's win was almost of no consequence to John, who demanded an explanation. An apprehensive Vic duly presented himself and a sorry-looking 911 at Isleworth on Monday morning, but before he arrived AFN's telephones had been ringing off the hook with enquiries from would-be customers: where could they buy this stunning sports car? John quickly changed his tune. The battered demonstrator was sent back to Zuffenhausen to be converted into a track racer and with it, Vic duly won the 2.0-litre class of the British saloon car championship for 1967.

The same year saw three other victories for Vic, and with navigator David Stone he won the European

rally championship. However, the event he really wanted to win – Monte Carlo – eluded him. Vic and David carried out a thorough reconnaissance, and Vic was confident about his chances, but the choice of heavily studded tyres wore down too quickly in melting snow and a spin in the dark knocked out the headlights. Repairs would relegate the 9IIS to third place. Vic made no misjudgments in 1968, and in heavy snow swept to victory. This marked the start of a remarkable streak: a win at Daytona sharing a 907 with Jochen Neerpasch was followed by second at Sebring, again with Jochen, and third in the Brands Hatch 6 Hours event.

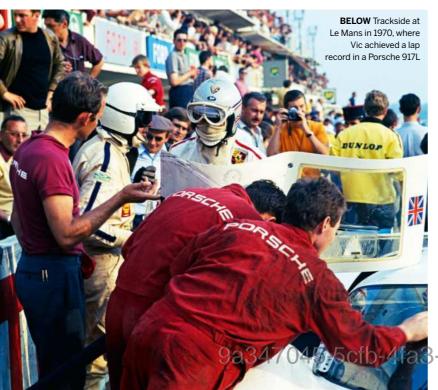
Vic's most outstanding effort, and probably the greatest in his career, was at that year's Targa Florio. Sharing a flat eight 907 with Umberto Maglioli (who had scored Porsche's first Targa victory in 1956), the pair lost a total of 18 minutes when, twice, road wheels came adrift. Vic took over from Umberto and drove like a fiend over the last four (of ten) laps. He caught up with the leading Autodelta Alfa Romeo and sliced 67 seconds off the 35-minute lap record. A

couple of weeks later he and Joseph Siffert won the ADAC 1,000km at the Nürburgring with the maiden outing of the 3.0-litre 908.

Fourth place when driving an obsolete BRM-engined Cooper in the French Grand Prix at Rouen demonstrated Vic's versatility. Yet like many top sports car drivers, such as Rolf Stommelen or Derek Bell, he was never able to secure a competitive drive to realise his potential in Formula 1.

In 1969, the 917 was, of course, brand new – obtaining homologation only at the end of March. Porsche intended to field just one at 1969's Le Mans, but the irrepressible Vic had other ideas. He lobbied Ferdinand Piëch, with whom he was quite friendly – the Elford family stayed with the Piëchs prior to Le Mans – to run a 917 for him. Given that Porsche reckoned the 917 would last only six hours, 22 and a half hours could be seen as quite an achievement. Richard Attwood, Vic's co-driver, still thinks nevertheless that their mount's clutch failure wasn't unconnected with Vic's tendency to lap flat out at all times. Vic's luck with the 917 didn't improve in 1970. ❖







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Years later, he told Michael Cotton: "That car [the 1970 Le Mans-winning 917] raced seven times and I drove it on six of them!" Indeed, Vic wouldn't savour a 917 victory until Sebring in 1971.

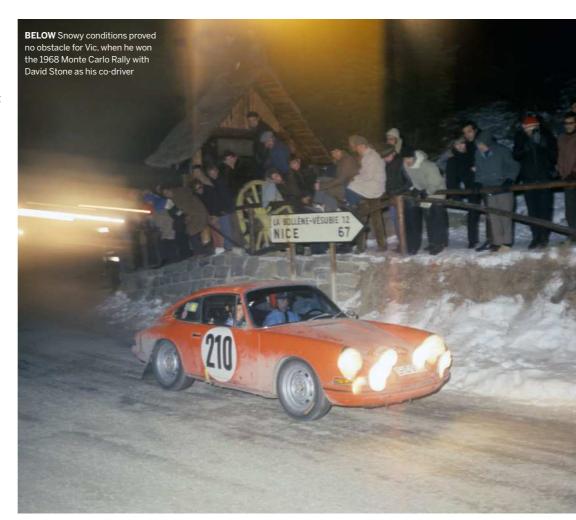
This was the last year of the 917 and its demise, at least in Europe, affected the careers of several leading drivers. Richard retired, while others joined lesser teams with consequent detrimental effect on their careers. Vic was now 37. He joined the Autodelta Alfa Romeo team for 1972, but as Rolf also had found, Alfa wasn't Porsche. Sharing the Tipo 33 with Helmut Marko, the pair lasted only a quarter of the distance at Le Mans; the following year was better: first in the GT class and sixth overall in a Charles Pozzi Ferrari 365. Vic was now a gun for hire. He drove Bill Nichols's controversial 13-inch wheel Shadow briefly in the CanAM series, a Chevrolet in the TransAm, and in 1974 returned to La Sarthe in a privately entered 911 RSR, but again failed to finish.

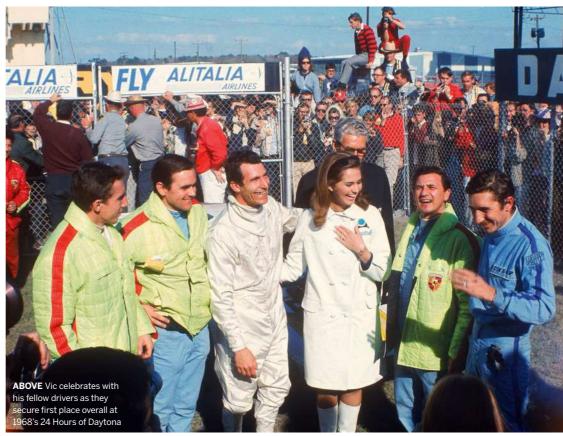
By now he had effectively retired from competition. Vic cast about, attempting to sustain a role for himself in motorsport. A fluent French speaker and Francophile, he had many motor-racing friends and contacts, especially in France and appropriately his autobiography first appeared in French in 1972 as *La victoire ou... rien*, written with author Michel Delannoy. Vic became involved with Jean Rondeau's Inaltera sports car project (a Rondeau would win Le Mans in 1980) and later managed the ATS FI team, the first équipe to hire Alain Prost.

Vic had separated from Mary, his first wife, and was living with second wife Anita in her native Belgium when during the course of a conversation with his great friend and rival Gérard Larrousse, he said he would like to work in the US again, but would need a job to obtain a Green Card. Returning a favour (when Peter Falk had been looking for a French driver for the Corsica rally in 1968, Vic had recommended Gérard), the Frenchman put him in touch with Renault Motorsport, which needed a manager for its US operation.

'Quick Vic', as everyone referred to him, flourished in the US: outgoing, personable and a Porsche enthusiast to boot, he was soon co-opted into the PCNA. Vic's influence and lobbying was instrumental in the conception of the 9ll RS America, a reduced specification Carrera – a sort of compensation for US enthusiasts deprived of the 964 RS. Sold for \$10,000 less than the 964 Carrera, the RS America was a great success in its 18-month career and today fetches twice the money of the stock 964. Vic himself became a popular feature of Porsche gatherings such as Rennsport, and would periodically return to Europe as a guest at events like Goodwood.

When Michael Cotton interviewed Vic on his 80th birthday, the inveterate two-packets a day man admitted that at his doctor's suggestion, he had given up smoking in 2008 "and felt a lot better." He also revealed that he and Anita had divorced – "we just drifted apart," he recalled – but one day she had asked him to babysit her cat because she had to go to Europe. It struck them both when she returned that in their early 70s, it was daft to live apart and they remarried. She would nurse him to the end.





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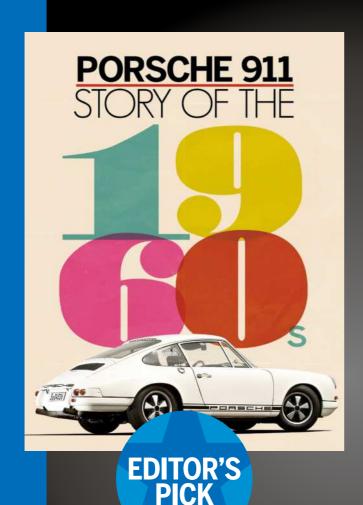




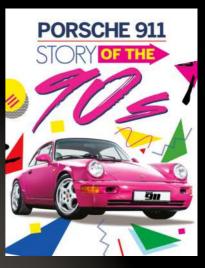


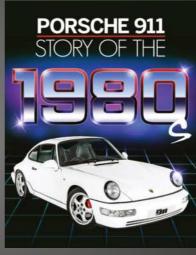
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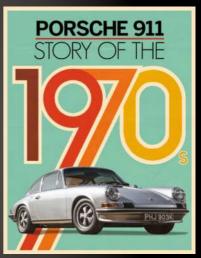
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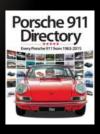












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**Andy Brookes** Poole, UK

@993andy

9WERKS Radio

993 CARRERA Year 1995 Acquired SEPTEMBER 2018



Project 'running gear' is progressing well. My aim is to bring the running gear up to a decent standard that's easy to maintain, and not

to make the car into a garage queen that I won't want to use.

With this in mind, I decided I wanted to remove 27 years of dirt to enable me to get Gustavo dirty again. To this end. I had a visit from Tom of @theblastsmith to give the bottom of the car a freshen-up with his dry ice setup. There's been a lot of talk about this process in recent times and I was intrigued to see what all the fuss was about.

I spent a couple of evenings getting ready for Tom's arrival: making lots of

space around the car, vacuuming my garage carpet and placing green plastic sheeting over all the other stuff. It looked like an operating theatre, or a scene from Dexter! Tom turned up at exactly 8am on Saturday morning, towing his mighty compressor behind his van that contained the dry ice machine. A welcome cup of coffee and a bit of setup, and we were ready to go.

As you know, I have all the suspension components removed from the car including the rear subframe, so access is currently pretty easy. Tom started with a good cleanup of the engine, gearbox and the surrounding bodywork. In terms of the level of dirt present, the car was not nasty, just grubby. The 'after' photo (above) of that area is a total transformation - it looks like new!

As I've said before, the 993 has always been well looked after, with very little corrosion to any of the running gear. We were starting with a good base, which is key with this process. Ice blasting isn't like other media-blasting such as sand or glass bead. The aim is to remove materials that have built up on the finished surface, not to remove the finished surface or thick corrosion. Once this fundamental point is understood, you then know what to expect.

In the afternoon Tom was giving my friend Lawrence's 996 the same treatment. It was interesting to see the difference in the results on a couple of points. When new, the 993's underbelly is a beige colour with a little overspray of the body colour in some areas. Whereas the 996 underside is the same as the





Lee Sibley Poole, UK

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Model 996.1 CARRERA Year 1998 Acquired JANUARY 2019



I'm pleased to report the interior of my 996 is now blessed by the presence of stunning 997 Sports seats! You'll recall last issue I

mentioned I'd bought a set (actually they're 987 Boxster seats, which are the same as those for the 997) and, thanks to the wizardry of Scott from Bahnsport, the electric Sports seats are in the 996 and fully functional.

The swap itself is relatively straightforward: undo the four bolts holding the 996 seats in, unclip the electrics, whip the seats out, then prepare the 997s. Some trickery is needed with the connections, because 997 seats don't use the same connectors as the 996.

However, we took the wires from the base of the 997 seats that we needed, made our own connection to the 996 wiring, then bolted the seat in and... voilà!

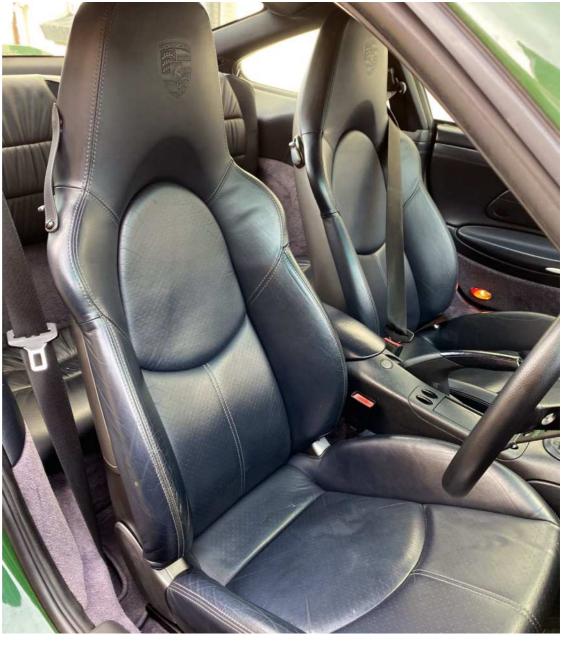
I'm so impressed with the outcome: the 997 seats sit you much lower down, so the driving position is improved. They're infinitely more comfortable and their thicker side-bolsters offer decent amounts of lateral hold. The colour match is also pretty spot-on too, with the Ocean blue 997 seats marrying up nicely with the rest of my Metropole blue 996 interior.

Their increased comfort, improved driving position and better aesthetics means the 997 Sports seats are a huge win, and have helped to elevate the driving experience of Little Irish. I highly recommend this mod to any 996 owner get on eBay and find some suitable seats!



body colour. The 996 was still assembled: the undertrays were removed for the clean, but all the suspension was still in place. The body colour and the contrast of the clean suspension components on the 996 made it all look jewel-like in comparison to the 993, with its beige underbelly devoid of any blingy parts. This almost seemed disappointing, but I know that once I reassemble my refinished parts, it's going to look great and be easy to keep clean in the future.

If you'd like to hear more about what we thought of the results and what the process entails, allow me to point you to the later section of episode nine of the current series of the 9WERKS Radio podcast. There's lots of good information in that episode for those interested in what dry ice has to offer.





**Peter Wilson** Adelaide, Australia

@peterwilson\_oz

Model

930 3.3 Year 1980 Acquired 2011



February has been a busy month, partly the result of completing the major service and reassembling the

car in preparation for our road trip to Phillip Island. As usual, once the engine is rebuilt I cut open the old oil filter and examine the drained oil, checking for any metal particles. Then there are a few last-minute adjustments, including examining the fan belt and clutch cable, before going on test drives and checking for leaks. Based on recent electronic failures, I'm taking a growing list of spare parts on long trips to reduce the risk of

an unexpected roadside intermission. This now includes a spare CDI (a rebuilt standard unit because I'm now running the Classic Retrofit CDI+ unit), spare coil, rotor, voltage regulator and spark plug.

Those familiar with G-series 911s will probably be aware of the problems with the inflatable space-saver spare wheel and staggered tyre sizing. The spare can only be fitted to the front of the car because of its load limitation, so a rear puncture requires the side of the car to be jacked up, inflated spare on to the front, front on to the rear and rear on to the passenger's lap because it won't fit in a frunk full of luggage! Then a slow limp at 80kph on a 40-year old spare tyre to find a replacement. Hence I carry a tubeless puncture repair kit in addition to the factory jack and compressor. Plugging a puncture is far preferable to the aforementioned rigmarole.

I also carry a couple of litres of oil and a comprehensive tool kit that I've assembled over the years. It has everything from common tools to a multimeter, wiring diagrams and even a hip flask of whisky if everything goes awry. A final addition to the packing list is my driving shoes, because of the narrow pedal placement of the 930.

In parallel with getting the car prepared, I've been investigating paint colours with the mid- to long-term intention of respraying the car. The original 436-9-3 Sienna metallic still intrigues me, so I had a local panel shop spray a test panel so that I can check it out in different lighting. Initial impressions are positive, with the colour providing lots of variation depending on ambient lighting and angle.

Regular readers will recall my efforts to improve the 930 headlights. This included replacing reflectors and lenses, upgrading to high-performance halogen bulbs and adding a relay kit (which made a huge difference). The final step was installing LED H4 bulbs, which provided a quantum leap in brightness.

However, I'd been experiencing strange switching delays when on the open road and dipping from high beam to low. This was a real issue on night country drives, because it was taking up to two seconds to dim the beams and impossible to avoid dazzling oncoming drivers when they came over a crest. After lots of investigation, I confirmed that the "sticking" is actually a heatrelated issue within the LEDs rather than anything to do with my switching or relays. Unfortunately, I've had to revert back to halogen bulbs for safety reasons until I can find an LED solution without this anomaly.









**Natalie Stratos** London, UK

Model

911 SC TARGA Year 1982 Acquired NOVEMBER 1994



My Targa has been back to the garage to fix the stalling issue, but not before I took a long, hard look at the interior

that I've become accustomed to. Mostly to draw up a list of must-do repairs, but it also made me study all the features that make my Targa the classic it is.

I came from a design aesthetic when choosing my forever car back in 1994. It was always about the design. So when I decided to look more into it, it was wonderful to see why the whole 1982 model resonated so well with me. So much craftsmanship was put into all aspects of the simple yet pure perfection of the interior.

My favourite thing about my Targa is the speed dial. It's magnificent. The spec ratio of the dashboard to the dials is so pleasing to the eye. When I started my driving life I had a Mini 850, followed by a Mini GT. Both cars had the huge, round dials that remind me of my car. The Targa is all about its curves, which are repeated all over the car: from the gear stick, to the seat adjuster dial, to the petrol cap releaser, to the heating and

ventilation controls, all the way through to the curve of the Targa's back window. The finish and edges are smooth and aesthetically pleasing. The whole dashboard is self-explanatory: no fancy frills, just clean and precise. It does what it says on the tin, so to speak. I have the original Porsche driver's manual that illustrates the whole dashboard so beautifully. I'll actually make a print of it and frame it for prosperity.

Porsche introduced the 911 Targa at the International Motor Show in Frankfurt in September 1965, which I found out while doing research for this piece. For me this is serendipitous because we were both born in the same month and year! It's a huge sign. We were meant for each other, soul mates.

The Targa's origins date back to the 1965 MY Porsche 911 Targa. Porsche got the name from the Targa Florio - the road race in Sicily where Porsche was very successful. Targa actually means 'number plate' in Italian! According to Porsche, "The Targa was the first safety cabriolet in the world with a fixed safety or roll bar, which was a new concept in reaction to the increased safety requirements for open-top cars on the

American market." So I guess it was a happy necessity from a design point of view, because the concept continued into many future models.

I'm hoping that she'll be up and running soon for the spring drives with her roof off. To me, it's the best way to drive a Targa!





Ron Lang Ashland, USA



Model 911S 2.4 Year 1972 Acquired 2018

Model 930 3.3 Year 1982 Acquired 2020

Model 964 CARRERA 2 REIMAGINED BY SINGER Year 1991 Acquired 2016

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 991 GT3 TOURING Year 2019 Acquired 2021



I've reported recently on the 1982 Euro 930 Turbo project, so here's another update with the inevitable

growing list of 'while we're there' work to be performed. The gearbox rebuild is completed and we're now waiting for it to arrive from the specialist. The FabSpeed exhaust system and components are still on order and might arrive in the next month.

But first, a bit of a recap. Part of the Living the Legend ethos, particularly as applied to classic 911s, is 'repairing the legend'. These older, original, analogue cars such as this 40-year-old example require work as old components wear out. This project started with a balky shift into and out of third gear. Removing the gearbox to ship to the rebuilder meant removing the engine.

Once the engine was out, the archeology dig commenced. As I noted in a prior Living the Legend article in this magazine, the Turbo's ageing exhaust system was worn out, with older weld repairs evident on several of the joints. This prompted the ordering of a replacement complete exhaust system, together with a stainless steel FabSpeed unit.

The engine, when on the stand, looked horrible. Lots of dark grease and grime was evident, totally hiding the orange-coloured engine shrouding. The engine externals have been cleaned and many of the bolt-on components look fine. However, there are phenolic blocks that attach the intake manifold to the heads and they were all leaking. The good news is that the replacement blocks and their installation was straightforward, but since the intake manifolds were leaking, I wasn't achieving full turbo boost.









The 930 engine wiring harness looked in bad shape with several wires either worn through or broken. The spark plug leads were shot as well. All these components have been replaced and I'm looking forward to increased power from a properly boosted and sparked engine.

Keep in mind that all of the fuel injection is fully mechanical and spark comes from a points-and-condenser distributor. This is an old-school engine management system and getting its current level of repair and attention means that, even at 75,000 miles on it, the outlook is promising.

Another element of this kind of project is that patience is required. Not only is significant labour required to remove, repair and refit the drivetrain, but there's also the waiting time because parts and outside repairs are sourced and ordered. The car went into the project back in mid-December last

year and I'm writing this update in mid-March. That's three months already; I suspect there are another three months or so to go.

Then there's the question of justifying the investment. Is it worth spending 20% or more of the value of the car in making it 'right'? From a financial point of view, the answer is likely 'no'. However, these 911s aren't investments (unless one gets lucky). The joy of the driving experience and sharing a car like this with my friends and local Porsche Club members is my aspiration. I'm hoping for a high joy-on-investment (JOI) ratio. I've had good JOI on prior projects such as with my 1997 993 Turbo and 1972 911 S. Those cars are wonderful on every drive. I'm confident the same JOI will result from this 930 project. Having had prior similar projects turn out well increases my confidence of a good result this time around, too.



**Max Newman** Aylesbury, UK

@maxripcor

9WERKS Radio

Model

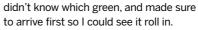
991.1 CARRERA S Year 2013 Acquired SEPTEMBER 2020



I don't spend as much time on Porsche's new car configurator as you might imagine. I find myself taking

it too seriously and agonising over the smallest details. The thought of ever being allocated a PTS build slot gets me in a spin, and even when I helped my good mate James work through his PTS 992 GTS colour options, it felt like quite a responsibility. Can't wait to see that one when it arrives.

It was with real excitement that I set off to meet another friend Pete for breakfast recently and a rendezvous with his box-fresh PTS 992 GT3 - of the winged variety. I knew it was green but



The colour is Underberg green (P6G), a non-metallic hue and not one of the more 'common' PTS greens. Combined with Neodyme wheels and door script decals it looks fantastic, and to my eyes has a bit of a classic racer look about it. Yellow deviated stitching and details inside continue that theme, alongside the mega carbon buckets but no roll cage, to make the car more practical for touring.

What I found interesting while chatting to Pete was that he had a clear idea in his mind and quickly arrived at his main spec choices, including the Underberg green, on learning that the slot he had been allocated was PTS. I've made the mistake now of perusing the PTS palette and I'm even further away from making my decision!

The most difficult decision on Pete's build was the gearbox: PDK or manual. I don't think there's a right or wrong on this. Perhaps one would be swayed by how you plan to use the car and what else you have access to. Pete chose PDK and I think I might be inclined to do the same.

Having covered a mer 80 miles by the time he arrived at our meeting point there was little to say about the performance of the car, but what he did say is that it felt perfectly comfortable and usable over those early miles. My own wonderful Anthracite brown metallic (not PTS but quite unusual) 991 C2S looked rather ordinary in exalted company, and I harbour a desire to own a 991 GT3 one day, to experience that GT magic for myself. It's a car that many people have said is as usable as a Carrera, so I think it could fit into my life and the way I use my 911 - regularly quite nicely.

Chatting to another friend who is five weeks into 718 Spyder ownership, my GT dreams were brought back down to earth. This guy has traded up from a 981 Cayman S and the Spyder is his only car. He told me that while GT Porsches look amazing, he's finding the 718 a pain in the proverbial to daily. The nose is too low, the bucket seats are a chore to get in and out of, parking is a hassle, it's expensive to refuel, and it's value and the need to retain that is stifling his enjoyment.

I know the option of comfortable seats and nose lift in a 991 GT3 would alleviate some of those issues, but I do remember reading once that you should always buy a less-expensive car than you can afford, because high value limits enjoyment.





**James McGrath** Minneapolis, USA



@auto.amateur



AutoAmateur

Model 996.2 CARRERA Year 2002 Acquired 2020



As I write this month's column, my 996 is on the back of a flatbed truck on its way to Porsche Minneapolis. My

replacement transmission arrived over the New Year, but it took a little longer to source a replacement engine. The 'new' 3.6-litre flat six 996.2 engine arrived just a few days ago though and so now the car is off to get its guts replaced. But this story is for another day because it's still in the making.

Keeping me busy this month has been another mod though, as the days and hours inched further forward to the delivery of my replacement engine. Like in my 991 where I went for red, in my 996 I've been adding several blue accents to tie in with its new exterior colour. Last month's column previewed my new blue seat belts that pop nicely against the black interior and so this month it's a matching blue tach face for the instrument cluster.

This job was fun from end to end. I used the factory black tach face to design this blue replica. The faces for the 996 and 986 models are a lot easier to replicate than the more intricate versions



made for the 991, 981, 718 and so on. The surface area is smaller, the font is slightly bigger and there are only one or two translucent icons in the middle of the face as opposed to the selection box variety in the newer instrument clusters. You pop off two trim pieces, remove a couple of screws and then pry off the unit after unplugging several wires.

Once you've managed to get the instrument cluster off the dash, it's simply a case of removing another couple of screws and fasteners around the rear of the unit and then you have direct access to the gauge faces.

Overall, the job is easier than the 991 or 718 due to the instrument cluster's position 'on' top of the dashboard as opposed to integrated 'in' the dashboard. For anyone wanting to do something similar, you can find the DIY installation video on my YouTube channel. Overall, I would give it a 6/10 on the difficulty scale. But enough with the window dressing... on to the engine. I can't wait to get this baby back on the road!



**Nick Jeffery** Surrey, UK





**Ian Harris** 

Model

Model

Model

Year

Acquired

Acquired

Shoreham, UK

@harrisclassics

Model 3.2 CARRERA COMMEMORATIVE EDITION

Year 1988 Acquired DECEMBER 2020

964 ANNIVERSARY

1993 FEBRUARY 2022

964 CARRERA

1993 JULY 2021

997 CARRERA Model

4 GTS 2012 OCTOBER 2018 Year Acquired

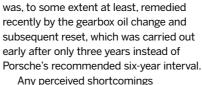
997.1 GT3 Model 2007 NOVEMBER 2019 Acquired



Having owned three Porsches equipped with PDK transmission my thinking has come full circle. Initially, I

was impressed with the PDK in my 2012 997.2 Carrera 4GTS, but I was comparing it to my 2002 996.2 Turbo fitted with the Tiptronic S gearbox. Hardly a fair fight!

As the mileage in the GTS has increased, I've realised that while it was a huge improvement over the Tiptronic gearbox, it's far from perfect. It feels clunky and slow-witted at times, often requiring more revs than you'd expect to either pull away or reverse. That



were brought into sharp focus by my acquisition of a 2015 981 Cayman S. This had the next-generation PDK, which felt far more intuitive to use and quicker in every respect. And yet, with my acquisition of a 2011 987 Spyder last year, all that seems to have been turned upside down!

The 987 Spyder is one of the lightest sports cars Porsche has ever produced. Its first-generation PDK gearbox feels far more suited and at home in the lighter, mid-engined, rear-wheel drive chassis than the same era four-wheel drive, rear engined and heavier Carrera 4GTS. Gear changes in the Spyder are crisper and in automatic mode tend to flow evenly, with none of the idiosyncrasies experienced in the Carrera 4GTS. I can only surmise this must have something to do with the weight of each vehicle, the different engine positions and drivetrains, because to all intents and purposes it's the same PDK transmission fitted to both cars, and yet they couldn't feel more different!

To my mind the PDK gearbox, is five gearboxes in one with the optional Sports Chrono pack with Sport Plus fitted with automatic or manual driving modes in standard, sport or sport plus settings. PDK performance and your preference will depend on the type of Porsche it's fitted to.

In other news, the GT3 has been into Paragon for a new set of Michelin Pilot Sport 4S tyres, a replacement offside front lower wishbone, full geometry on their Hunter rig plus a new offside rear wheel arch mud spat. While at Paragon, I noticed a smart-looking GT Silver 997.2 Carrera with a manual gearbox, optional PSE and PASM, plus Sport Design alloys and extended leather. I took the car for a test drive to see if it would remind me of my 994 Carrera 4S. Unfortunately not. I think this has more to do with what's in my collection than any shortcomings in the entry-level Carrera.

I thought the Carrera would feel more analogue than it did and that the PSE would give it a sonorous note that would hark back to my 996 '4S, but it felt muted by comparison and sophisticated, which surprised me! I didn't think such a nice Carrera would last long, and sure enough it's already found a new home.





Another good month with the 964s and a tasty upgrade to my personal 3.8 964 C2. The car is fitted with Ohlins road and

track coilover suspension and has a lot of other performance upgrades, including an Elephant Racing front end. I was happy with the way the car handled and it's still one of the best driving 964s I've driven.

Later this year I'm planning a road trip covering over 2,000 miles across the French Alps into Italy. The last time I did the tour I was in a modified Carrera T. It was a great car, but I was jealous of the few brave ones in our group in 964s, so

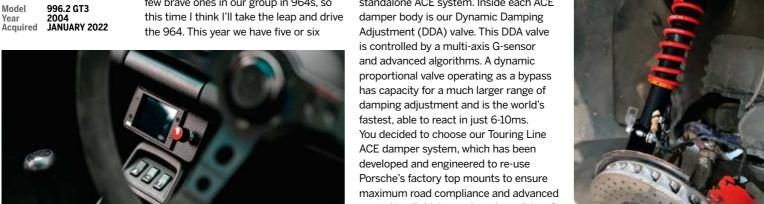
964s doing the tour. They're perfect for the narrow passes where you don't need a huge amount of power. In a narrow body car that's set up well, the 964 is the perfect weapon of choice.

I'd seen a suspension company on Instagram and also heard it mentioned on a few of my car WhatsApp groups called TracTive Suspension. It's a Netherlandsbased company that makes the retro fit active suspension and I've recently had it installed on my car. I asked Steve Bennett from TracTive on some details on the system fitted to my car.

Steve said: "Your 1990 964 C2 is fitted with TracTive Suspension's aftermarket standalone ACE system. Inside each ACE control in all driving and road conditions."

First impressions after the install are very good. I've noticed how fast the car can cover ground. It's more compliant, and flows down bumpy roads a lot better. The car is also flat in the corners: you can feel the shocks loading up and the car is very composed. My biggest concern is that I would lose some of that analogue feel that we love on the earlier 911s. But this isn't the case. I get plenty of feedback and the active suspension gives you so much confidence to push on. I can't wait to play with the settings more and get some serious miles done.







**Anthony Coyne** Fort Lauderdale, USA

@mr\_coyne

Model

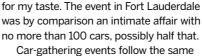
997.2 CARRERA S Year 2009 Acquired FEBRUARY 2021



This month I attended my second ever Cars & Coffee event in the USA. The first was last year in Tennessee, mid-

pandemic. Packed with thousands of cars and even more people - yet not a face mask in sight despite being mandated at the time. I had one on, and the looks I got made me feel like I was wearing a McDonalds T-shirt at a vegan convention.

The Cars & Coffee five minutes from my home in Fort Lauderdale, Fuelfed FTL, turned out to be an improved experience. I'm not saying the one in Tennessee wasn't good – it was more than impressive - it's just that it was too big



format everywhere. Organise a date to meet other like-minded nerds and showoffs early one Sunday morning, there will be some coffee that won't be as good as mine at home, and possibly a food truck that I won't go near. Everyone walks around and looks at everyone else's bits, some of us take photos that we'll never look at on our phones. We all leave before mid-day.

Anyway, back to cars. There were plenty of them. My favourite was a battered air-cooled 911 wearing the personalised plate WAS RICH. In a time when these cars are perceived as valuable items, it was refreshing to see one that looked dog rough and well used: bad paintwork, chips everywhere, dents, dirty, stripped-out interior, bits of duct tape holding things together. It wore a set of fifteen52 wheels and looked awesome. I was compelled to say something to the owner (middle aged, a bit tubby around the middle) and I muttered to him how I thought his car gave the impression he didn't care how it looked. His reply? "I really don't. I don't give a damn".



And there we have it. I've finally met someone who is actually cool. He didn't need his wife to come along for support, he didn't care to wear some sort of fancy paddock jacket with patches sewn on it or a baseball cap. He wasn't asking for random people's numbers or taking snapshots. I doubt he even has an 'Insta' account. While others within our midst spent the previous day washing and waxing, he was likely enjoying other gentlemanly pursuits. I doubt he even showered. Just picked up the keys to a knackered 911 and parked it up AMOG style among the Pebble Beach wannabes.

Forget living the legend, this man is the legend. A dying breed of 911 owner. A true silverback.





**Ben Przekop** Mercer Island, USA

@benjaminprzekop

Model Acquired

992 CARRERA S 2022 DECEMBER 2021



The Pacific Northwest has a large and thriving car enthusiast community, due in no small part to

the enormous economic growth that has transformed this area over the past three decades. Microsoft, Amazon, Starbucks and Boeing are all based here, and their rapid expansion has provided tens of thousands with great-paying careers that have enabled them to live out their automotive dreams.

Our local Porsche Club of America chapter - Pacific Northwest Region - has nearly 3,400 members and is the 12th largest out of the 147 PCA regions. There are also other active marque-specific clubs for BMW. Audi. Ferrari and more.



However, this economic boom that's been so good for car lovers has a downside - construction! No matter where you drive in the area, there's a huge building project going on: yet another high-rise structure to house all those hi-tech workers, a major highway expansion, or the huge multiyear light rail project that covers the entire metropolitan area. With all that construction comes road debris, such as the gravel spewed from the backs of dump trucks and concrete mixers... the perfect projectile to put deep rock chips in your pristine Porsche's paint.

So it was a given that after I took delivery of my 992, I would have Paint Protection Film (PPF) installed as soon as possible, and that I would turn to my trusted friends at Metropolitan Detail in Redmond, who had done such an awesome job on my GT4 a couple of years ago. Co-owners Benjamin Nussbaum and John Kleven are admitted OCD-afflicted guys, and to say they view "detailing" with a very large capital D is one of automotive's greatest understatements, much like saying Porsche takes the 911 pretty seriously.

Last week, under the direction of shop managers Jumar Newman and Lee Luna.

the team spent over four days washing, cleaning and polishing my car, and then applying STEK DYNOshield film. They swear by this particular PPF product because they've found that it offers "best in class clarity, self-healing, puncture resistance, stain resistance and an infused hydrophobic top coat, STEK HYDROphobe".

In addition to their "Full Front" package (front bumper, hood, fenders, headlights) I had them install a one-piece "hockey stick" of PPF to cover the rocker panels up through the front of the rear wheel fender bulge, replacing the smaller factory piece. Due to the wider body of the new 992, this area will get a lot of road debris thrown at it, so they agreed to install this larger and more robust piece of STEK PPF. They applied two coats of **CQuartz Professional ceramic coating** to both film and paint, for ultimate gloss and protection. When I arrived on the Friday morning and got my first look at the finished product I was speechless; it looked better than even my wildest expectations.

And now my dream 911 has its own 21st century high-tech armour to brave the freeway, it's time to put the hammer down and let that flat six really roar!

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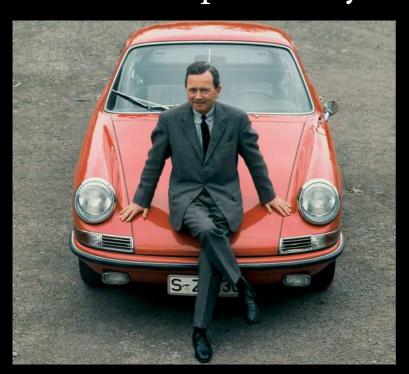
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# Data file

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 Q3 will be July. The review for 2022 Q2 was April.



#### **Ratings**

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



#### **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	1,991cc
Compression ratio	9.0:1
Maximum power	130hp @ 6,100rpm
Maximum torque	149Nm @ 5,200rpm
0-62mph	8.3 sec
Top speed	131mph
Length	4,163mm
Width	1,610mm
Weight	1,075kg
Wheels & tyres	
F 4.5x15-inch; 165/80/	R15
R 4.5x15-inch; 165/80/	'R15

## (A series) 911R 1968 The lightest R was essent racer fitted w

The lightest 9.11 of all time, the Rwas 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 numbe	rs 19
Issue featured	94
Engine capacity	1,991cc
Compression ratio	
Maximum power	210hp @ 8,000rpm
Maximum torque	152Nm @ 6,800rpm
0-62mph	5.9 secs
Top speed	152mph
Length	4,163mm
Width	1,610mm
Weight	800kg
Wheels & tyres	
E 6v15-inch: 185/70	/P15

R 7x15-inch; 185/70/R15

© (C&D series) ★★★★ 911S 1970-1971



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

Production number	rs 4,69
Issue featured	120
Engine capacity	2,195c
Compression ratio	9.8:
Maximum power	180hp @ 6,500rpn
Maximum torque	199Nm @ 5,200rpn
0-62mph	6.6 sei
Top speed	145mpl
Length	4,163mn
Width	1,610mn
Weight	1,020kg
Wheels & tyres	
F 6x15-inch; 185HR	



#### **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.

k	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 5.5x15-inch; 165HR	
	R 5.5x15-inch; 165HR	



#### **911T** 1973

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

	Production numbers	16.933
r	Issue featured	127
	Engine capacity	2,341cc
	Compression ratio	7.5:
	Maximum power	130hp @ 5,600rpm
	Maximum torque	197Nm @ 4,000rpm
	0-62mph	7.6 sec
	Top speed	128mph
	Length	4,163mm
	Width	1,610mm
	Weight	1,077kg
	Wheels & tyres	
	F 5.5x15-inch; 165HR	

R 5.5x15-inch; 165HR

(G series)	****
Carrera 3.0	RS 19/4
	AVID
1	(4)

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

Production number	ers 109
Issue featured	145
Engine capacity	2,994cc
Compression ratio	8.5:1
Maximum power	230hp @ 6,200rpm
Maximum torque	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
D 0.15 : 225 /C/	0.0/D1E



#### **930 3.0** 1975-1977

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

	Control of the last
Production numbers	2,850
Issue featured	15
Engine capacity	2,994c
Compression ratio	6.5:
Maximum power	260hp @ 5,500rpn
Maximum torque	
0-62mph	5.5 se
Top speed	155mpl
Length	4,291mn
Width	1,775mn
Weight	1,140kg
Wheels & tyres	
F7x15-inch; 185/70/V	R15
R 8x15-inch; 215/60/\	/R15
	Issue featured Engine capacity Compression ratio Maximum power Maximum torque 0-62mph Top speed Length Width Weight Wheels & tyres F7xl5-inch; 185/70/V



upgraded from 917 racer.	
Production number	ers 5,807 (plus '78 to
	'79 Cali cars)
Issue featured	116
Engine capacity	3,299сс
Compression ratio	7.0:1
Maximum power	300hp @ 5,500rpm
Maximum torque	412Nm @ 4,000rpm
0-62mph	5.4 sec
Top speed	160mph
Length	4,291mm
Width	1,775mm
Weight	1,300kg
Wheels & tyres F 7x16-inch; 205/55/ VR16 R 8x16-inch; 225/50/VR16	



Production numbe	rs 4,015
Issue featured	148
Engine capacity	1,991cc
Compression ratio	
Maximum power	160hp @ 6,600rpm
Maximum torque	179Nm @ 5,200rpm
0-62mph	8.0 sec
Top speed	137mph
Length	4,163mm
Width	1,610mm
Weight	1,030kg



Production number	rs 4,015
Issue featured	148
Engine capacity	1,991cc
Compression ratio	9.8:1
Maximum power	160hp @ 6,600rpm
Maximum torque	179Nm @ 5,200rpm
0-62mph	8.0 sec
Top speed	137mph
Length	4,163mm
Width	1,610mm
Weight	1,030kg
Wheels & tyres	
F 4.5x15-inch; 165/8	0/R15
R 4.5x15-inch; 165/8	80/R15





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

Production numbe	rs 1,603
Issue featured	138
Engine capacity	1,991cc
Compression ratio	9.0:1
Maximum power	130hp @ 6,100rpm
Maximum torque	173Nm @ 4,600rpm
0-62mph	8.4 sec
Top speed	132mph
Length	4,163mm
Width	1,610mm
Weight	1,080kg
Wheels & tyres	
F 5.5x15-inch; 185HF	?
R 5.5x15-inch; 185Hf	?



noney, the 911T's

carbs instead of	fuel injection.
Production numbe	rs 6,318
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	4,163mm
Width	1,610mm
Weight	1,020kg
Wheels & tyres	
F 5.5x15-inch; 185H	?
D 5 5v15-inch: 185H	D



known as the Bseries. The 911E replaced the 911L as the 'standard' car. The 'E' stood for 'Einspritz' (injection).

Production number	rs 2,826
Issue featured	n/a
Engine capacity	1,991cc
Compression ratio	9.1:1
Maximum power	140hp @ 6,500rpm
Maximum torque	175Nm @ 4,500rpm
0-62mph	7.6 sec
Top speed	130mph
Length	4,163mm
Width	1,610mm
	1,020kg
Wheels & tyres	
F 5.5x15-inch; 185HF	₹
B C C 15 : 1 10511	



#### (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. R 6x15-inch; 185/70/R15

Production numbers	2,106
Issue featured	n/a
Engine capacity	1,991cc
Compression ratio	9.1:1
Maximum power	170hp @ 6,800rpm
Maximum torque	183Nm @ 5,500rpm
0-62mph	7.0 sec (est)
Top speed	140mph
Length	4,163mm
Width	1,610mm
Weight	995kg
Wheels & tyres	
F 6x15-inch; 185/70/F	215



Production number	ers 4,927
Issue featured	107
Engine capacity	2,195cc
Compression ratio	9.1:1
Maximum power	155hp @ 6,200rpm
Maximum torque	196Nm @ 4,500rpm
0-62mph	7.0 sec
Top speed	137mph
Length	4,163mm
Width	1,610mm
Weight	1,020kg
Wheels & tyres	
F 6x15-inch; 185HR	
D 6v1E inch: 10EUD	

### **911E** 1972

2.341cc was achieved by increasing the stroke from 66mm to 70.4mm while at

Production number	ers 4,406
Issue featured	117
Engine capacity	2,341cc
Compression ratio	8.0:1
Maximum power	165hp @ 6,200rpm
Maximum torque	206Nm @ 4,500rpm
0-62mph	7.5 sec
Top speed	137mph
Length	4,163mm
Width	1,610mm
Weight	1,077kg
Wheels & tyres	
F 6x15-inch: 185HR	

R 6x15-inch: 185HB



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

Production numbe	rs 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	7.6 sec
Top speed	128mph
Length	4,163mm
Width	1,610mm
Weight	1,077kg
Wheels & tyres	
F 5 5x15-inch: 165HI	R

R 5 5y15-inch: 165HB



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

Production numbe	rs 5,054
Issue featured	120
Engine capacity	2,341cc
Compression ratio	8.5:1
Maximum power	190hp @ 6,500rpm
Maximum torque	211Nm @ 5,200rpm
0-62mph	6.6 sec
Top speed	140mph
Length	4,163mm
Width	1,610mm
Weight	1,077kg
Wheels & tyres	
F 6x15-inch; 185/70.	/R15
R 6x15-inch: 185/70	/R15



The RS had a 2.687cc engin that developed 210bhp. The body was lightened and fitted optional ducktail. Sport and Touring available.

Production numbe	rs 1,590
Issue featured	145
Engine capacity	2,687cc
Compression ratio	8.5:1
Maximum power	210hp @ 6,300rpm
Maximum torque	255Nm @ 5,100rpm
0-62mph	5.8 sec
Top speed	152mph
Length	4,163mm
Width	1,652mm
Weight	975kg (Sport)
Wheels & tyres	
F 6x15-inch; 185/70	/R15
B 7 15 : 1 015 (00	/D1E



#### (F series) **911E** 1973

After incidents of people filling E series 911s with petrol via the external oilfiller, 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	165hp @ 6,200rpm
Maximum torque	206Nm @ 4,500rpm
0-62mph	7.5 sec
Top speed	137mph
Length	4,163mm
Width	1,610mm
Weight	1,077kg
Wheels & tyres	
F 6x15-inch ATS; 185H	R
R 6x15-inch ATS: 185H	R



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 numbe	rs 5,054
Issue featured	120
Engine capacity	2,341cc
Compression ratio	8.5:1
Maximum power	193hp @ 6,500rpm
Maximum torque	211Nm @ 5,200rpm
0-62mph	6.6 sec
Top speed	140mph
Length	4,163mm
Width	1,610mm
Weight	1,075kg
Wheels & tyres	
F 6x15-inch; 185/70.	/R15
R 6x15-inch: 185/70	/R15



#### (G. H. I, 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

<b>Production numbers</b>	9,320
Issue featured	121
Engine capacity	2,687cc
Compression ratio	8.0:1
Maximum power	150hp @ 5,700rpm
	(165bhp from '76)
Maximum torque	235Nm @ 3,800rpm
	(4,000 from '76)
0-62mph	8.5 sec
Top speed	130mph
Length	4,291mm

 Width
 1.610mm

 Weight
 1.075kg

 Wheels & tyres F&R 6x15-inch; 185VR



(G, H, I, 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 @ 5,800rpm
,	Maximum torque	235Nm @ 4,000rpm
	0-62mph	7.0 sec
	Top speed	142mph
	Length	4,291mm
	Width	1,610mm
9	Weight	1,080kg
	Wheels & tyres	
	F 6x15-inch; 185VR	
	R 6x15-inch; 185VR	



given to range-topping 911. Essentially the same engine as previous year's RS for all markets except USA. Whaletail available from 1975

Production number	rs 1,667
Issue featured	134
Engine capacity	2,687cc
Compression ratio	8.5:1
Maximum power	210hp @ 6,300rpm
Maximum torque	255Nm @ 5,100rpm
0-62mph	6.3 sec
Top speed	148mph
Length	4,291mm
Width	1,652mm
Weight	1,075kg
Wheels & tyres	
F 6x15-inch; 185VR	
R 7x15-inch: 205VR	



#### 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	3.68
Issue featured	
Engine capacity	
Compression ratio	
Maximum power	
Maximum torque	
0-62mph	
Top speed	
Length	4,291m
	1,610m
	1,093
Wheels & tyres	
F 6x15-inch; 185/70/\	/R15
R 7x15-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.

60,740 Engine capacity Compression ratio 8.5:1/8.6:1/9.8:1 5,500rpm 6.5 sec 141/146mph 4,291mm

ght 1,160kg (1978) rels & tyres F 6x15-inch; 185/70/VR15

R 7x15-inch; 215/60/VR15

1,652mm



used fibre glass front wings and lid. Tuned 3.0-litre engine had its basis in 930's crankcase.

Production number	rs 21
Issue featured	158
Engine capacity	2,994cc
Compression ratio	10.3:1
Maximum power	255hp @ 7,000rpm
Maximum torque	250Nm @ 6,500rpm
0-62mph	4.9 sec
Top speed	153mph
Length	4,235mm
Width	1,775mm
Weight	940kg
Wheels & tyres	
F 7x16-inch; 205/55	i/VR16
R 8x16-inch; 225/50	)/VR16



engine led to the adoption of a 'teatray'. Brakes were upgraded from 917 racer.

Production number	rs 5,807 (plus '78 to
	'79 Cali cars)
Issue featured	116
Engine capacity	3,299сс
Compression ratio	7.0:1
Maximum power	300hp @ 5,500rpm
Maximum torque	412Nm @ 4,000rpm
0-62mph	5.4 sec
Top speed	160mph
Length	4,291mm
Width	1,775mm
Weight	1,300kg
Wheels & tyres F 73	
VR16 R 8x16-inch; 2	25/50/VR16



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.

0	.,
Production numbe	rs 70,044
Issue featured	148
Engine capacity	3,164cc
Compression ratio	10.3:1
Maximum power	231hp @ 5,900rpm
Maximum torque	284Nm @ 4,800rpm
0-62mph	5.6 sec
Top speed	152mph
Length	4,291mm
Width	1,652mm
Weight	1,210kg
Wheels & tyres	
F 7x15-inch; 195/65	/VR15
R 8x15-inch, 215/60	/VR15 (16" for '89)



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

all to brancs.	
Production number	rs 50 (UK only)
Issue featured	146
Engine capacity	3,299cc
Compression ratio	7.0:1
Maximum power	330hp @ 5,500rpm
Maximum torque	432Nm @ 4,000rpm
0-62mph	4.6 sec
Top speed	173mph
	4,291mm
Width	1,775mm
Weight	1,335kg
Wheels & tyres	
F 7x16-inch; 205/55	5/VR16
R 9x16-inch; 245/45	5/VR16



available, featuring lighter cloth Sport seats, five-point harnesses and a roll cage.

Production numbers 337	
Issue featured	142
Engine capacity	2,850cc
Compression ratio	8.3:1
Max power	450hp @ 6,500rpm
Max torque	500Nm @ 5,000rpm
0-60mph	3.9 sec
Top speed	196mph
Length	4,260mm
Width	1,840mm
Weight	1,450kg
Wheels & tyres	
F 8x17-inch; 235/45/	ZR17
R 9x17-inch; 255/40/	ZR17





Carrera 3.2 with a steeply raked windscreen and hood and stripped interior. Porsche claims the hood wasn't designed to be 100 per cent watertight.

Production number	ers 2,274 (for both
wic	de and narrow-bodied)
Issue featured	128
Engine capacity	3,164cc
Compression ratio	10.3:1
Maximum power	235hp @ 5,900rpm
Maximum torque	284Nm @ 4,800rpm
0-60mph	6.0 sec
Top speed	148mph
Length	4,291mm
Width	1.775mm

Weight Wheels & tyres F 6x16-inch; 205/45/VR16 R 8x16-inch; 245/60/VR16



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

Production numbers 340	
Issue featured	126
Engine capacity	3,164cc
Compression ratio	10.3:1
Maximum power	231hp @ 5,900rpm
Maximum torque	284Nm @ 4,800rpm
0-60mph	5.1 sec
Top speed	152mph
Length	4,291mm
Width	1,650mm
Weight	1,160kg
Wheels & tyres	



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

Production number	rs 50
Issue featured	110
Engine capacity	3,299сс
Compression ratio	7.0:1
Maximum power	330hp @ 5,500rpm
Maximum torque	432Nm @ 4,000rpm
0-62mph	4.6 sec
Top speed	173mph
Length	4,291mm
Width	1,775mm
Weight	1,335kg
Wheels & tyres	
F 7x16-inch; 205/55	5/VR16
R 9x16-inch; 245/45	5/VR16



#### **964 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.

		-
r	Production numbers	19,484
	Issue featured	119
	Engine capacity	3,600cc
	Compression ratio	11.3:1
	Maximum power	250hp @ 6,100rpm
	Maximum torque	310Nm @ 4,800rpm
	0-62mph	5.6 sec
	Top speed	162mph
_	Length	4,250mm
g	Width	1,652mm
l		1,350kg
	Wheels & tyres	
	F 6x16-inch; 205/55/Z R 8x16-inch; 225/50/Z	



#### **964 Carrera 4** 1989-1993

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

911		
k	Production numbers	13,353 (Coupe)
	Issue featured	111
	Engine capacity	3,600сс
	Compression ratio	11.3:1
١.	Maximum power	250hp @ 6,100rpm
k,	Maximum torque	310Nm @ 4,800rpm
er	0-62mph	5.7 sec
	Top speed	162mph
	Length	4,250mm
	Width	1,652mm
	Weight	1,450kg
	Wheels & tyres	-
	F 6x16-inch; 205/55/Z	
	R 8x16-inch; 225/50/Z	R16



#### ● (C&D series) ★ **964 3.8 RS** 1993

Identifiable by lightweight Turbo bodyshell, 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.

Production numbers	55
Issue featured	12
Engine capacity	3,746cc
Compression ratio	11.6:1
Maximum power	300hp @ 6,500rpm
Maximum torque	
0-62mph	4.9 sec
Top speed	169mph
Length	4,250mm
Width	1,775mm
Weight	1,210kg
Wheels & tyres	
F 9x18-inch; 235/40/Z	R18
R 11x18-inch; 285/35/2	ZR18



#### **964 Anniversary** 1993-94

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

Production number	s 911
Issue featured	112
Engine capacity	3,600cc
Compression ratio	11.3:1
Maximum power	250hp @ 6,100rpm
Maximum torque	310Nm @ 4,800rpm
0-62mph	5.7 sec
Top speed	162mph
Length	4,250mm
Width	1,775mm
Weight	1,470kg
Wheels & tyres	
F 7x17-inch; 205/50/	17
R 9x17-inch: 255/40/	17



#### **964 RS America** 1993

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

Production number	s 701
Issue featured	157
Engine capacity	3,600cc
Compression ratio	11.3:1
Maximum power	250hp @ 6,100rpm
Maximum torque	310Nm @ 4,800rpm
0-62mph	5.5 sec
Top speed	164mph
Length	4,250mm
Width	1,650mm
Weight	1,340kg
Wheels & tyres	
F 7x17-inch; 205/50/	ZR17
R 8x17-inch: 255/40/	7R17



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

Production numbe	rs 936
Issue featured	128
Engine capacity	3,600cc
Compression ratio	11.3:
Maximum power	250hp @ 6,100rpm
Maximum torque	310Nm @ 4,800rpm
0-62mph	5.5 sec
Top speed	161mph
Length	4,250mm
Width	1,652mm
Weight	1,340kg
Wheels & tyres	
F7x17-inch; 205/50	/ZR17
R 9x17-inch: 255/40	/7R17



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

Production numbe	rs 1,014
Issue featured	119
Engine capacity	3,746cc
Compression ratio	11.5:1
Maximum power	300hp @ 6,000rpm
Maximum torque	355Nm @ 5,400rpm
0-62mph	5.0 sec
Top speed	172mph
Length	4,245mm
Width	1,735mm
Weight	1,279kg
Wheels & tyres	
F 8x18-inch, 225/40	ZR18
R 10x18-inch, 265/3	5ZR18



#### **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.

Production numbers	6,948
Issue featured	
Engine capacity	3,600cc
Compression ratio	11.3:1
Maximum power	285hp @ 6,100rpm
Maximum torque	
0-62mph	
Top speed	168mph
Length	4,245mm
Width	1,795mm
Weight	1,520kg
Wheels & tyres	
F 8x18-inch; 225/40/Z	R18
R 10x18-inch; 285/30/	ZR18



#### **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'.

k	Production number	s 5,937
	Issue featured	147
	Engine capacity	3,600cc
	Compression ratio	8.0:
	Maximum power	408hp @ 5,750rpm
		540Nm @ 4,500rpm
	0-62mph	4.3 sec
	Top speed	180mph
	Length	4,245mm
	Width	1,795mm
	Weight	1,500kg
	Wheels & tyres	
	F 8x18-inch; 225/40/	ZR18
	R 10x18-inch; 285/30	)/ZR18



#### **993 Carrera S** 1997-1998

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

$\star$	Production numbers	3,714
	Issue featured	118
	Engine capacity	3,600c
	Compression ratio	11.3:
	Maximum power	285hp @ 6,100rpn
	Maximum torque	340Nm @ 5,250rpn
	0-62mph	5.4 se
S,	Top speed	168mpl
	Length	4,245mn
el	Width	1,795mn
	Weight	1,450kg
e-	Wheels & tyres	
	F 8x18-inch; 225/40/Z	
	D 10v18-inch: 285/30/	7D18



#### **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.

Production numbers	20,499
Issue featured	152
Engine capacity	3,600сс
Compression ratio	9.4:1
Maximum power	420hp @ 6,000rpm
Maximum torque	560Nm @ 2,700-
	4,600rpm
0-62mph	4.2 sec
Top speed	189mph
Length	4,435mm

Weight 1,540kg Wheels & tyres F 8x18-inch; 225/40/R18 R 11x18-inch; 295/30/R18



#### **996 Carrera 4S** 2001-05

Basically a C4 featuring a Turbo bodyshell, without rear air intakes, but with a full-width rear reflector panel. Suspension and brakes were similar to the Turbo spec.

Production numbers	23,055
Issue featured	155
Engine capacity	3,596cc
Compression ratio	11.3:1
Maximum power	320hp @ 6,800rpm
Maximum torque	370Nm @ 4,250rpm
0-62mph	5.1 sec
Top speed	174mph
Length	4,435mm
Width	1,830mm
Weight	1,495kg
Wheels & tyres	
F 8x18-inch; 225/40/R	18
R 11x18-inch; 295/30/F	R18

## 996 GT2 2001-03

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

Production numbers	1,287
Issue featured	127
Engine capacity	3,600сс
Compression ratio	9.4:1
Maximum power	462hp @ 5,700rpm
Maximum torque	620Nm @ 3,500-
	4,500rpm
0-62mph	4.1 sec
Top speed	196mph
Length	4,450mm
Width	1,830mm
Weight	1,440kg
Wheels & tyres F 8x1	8-inch; 235/40/
R18 R 12x18-inch; 315.	/30/R18



#### **996.2 C2** 2002-2004

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

Production numbers	29,389
Issue featured	136
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	177mph
Length	4,430mm
Width	1,770mm
Weight	1,370kg
Wheels & tyres	
F 7x17-inch; 205/50/R	17
R 9x17-inch; 255/40/R	17



#### **964 C4 Lightweight** 1991

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

Production number	s 22
Issue featured	131
Engine capacity	3,600cc
Compression ratio	11.3:1
Maximum power	265hp @ 6,720rpm
Maximum torque	304Nm @ 6,720rpm
0-62mph	4.5 sec
Top speed	125mph
Length	4,275mm
Width	1,652mm
Weight	1,100kg
Wheels & tyres	
F 7x16-inch; 205/55/	ZR16
R 9x16-inch; 245/55/	/ZR16



#### **964 Turbo** 1991-1992

This used the revised 964 bodyshell, extended arches and 'teatray' wing. The engine was essentially the 3.3-litre uni from the previous model, but updated.

Production numb	ers 3,660
Issue featured	160
Engine capacity	3,299cc
Compression rati	io 7.0:1
Maximum power	320hp @ 5,750rpm
Maximum torque	450Nm @ 4,500rpm
0-62mph	5.4 sec
Top speed	168mph
Length	4,250mm
Width	1,775mm
Weight	1,470kg
Wheels & tyres	
F 7x17-inch; 205/5	0/ZR17
R 9x17-inch; 255/4	0/ZR17



#### **964 RS** 1991-1992

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

Production numbers	2405
Issue featured	131
Engine capacity	3,600сс
Compression ratio	11.3:1
Maximum power	260hp @ 6,100rpm
Maximum torque	310Nm @ 4,800rpm
0-62mph	5.4 sec
Top speed	162mph
Length	4,250mm
Width	1,650mm
Weight	1,230kg (Sport)
Wheels & tyres	
F 7.5x17-inch; 205/50/	ZR17
R 9x17-inch; 255/40/Z	R17



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

apratoa sasporn	31011.
Production number	s 81
Issue featured	108
Engine capacity	3,299сс
Compression ratio	7.0:1
Maximum power	381hp @ 6,000rpm
Maximum torque	490Nm @ 4,800rpm
0-62mph	4.6 sec
Top speed	180mph
Length	4,250mm
Width	1,775mm
Weight	1,290kg
Wheels & tyres	
F 8x18-inch; 225/40/	ZR18
R 10x18-inch; 265/35	5/ZR18



#### **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	7.5:1
Maximum power	360hp @ 5,500rpm
Maximum torque	520Nm @ 4,200rpm
0-62mph	4.8 sec
Top speed	174mph
Length	4,250mm
Width	1,775mm
Weight	1,470kg
Wheels & tyres	
F 8x18-inch; 225/40/2	R18
R 10x18-inch: 265/35/	7R18



	*	*	*	$\star$	×
993 Carrera	19	99	3-1	90	7

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	168mph
Length	4,245mm
Width	1,735mm
Weight	1,370kg
Wheels & tyres	
F 7x16-inch; 205/55/ZI	R16
R 9x16-inch: 245/45/Z	R16



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 number	s 2,884 (Coupe)
Issue featured	111
Engine capacity	3,600сс
Compression ratio	11.3:1
Maximum power	272hp @ 6,000rpm
Maximum torque	330Nm @ 5,000rpm
0-62mph	5.8 sec
Top speed	166mph
Length	4,245mm
Width	1,735mm
Weight	1,420kg
Wheels & tyres	
F 7x16-inch; 205/55/	ZR16
R 9x16-inch: 245/45/	7R16



#### **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 bolton archestensions

Production numbers	173
Issue featured	131
Engine capacity	3,600сс
Compression ratio	8.0:1
Maximum power	430hp @ 5,750rpm
Maximum torque	540Nm @ 4,500rpm
0-62mph	3.9 sec
Top speed	189mph
Length	4,245mm
Width	1,855mm
Weight	1,290kg
Wheels & tyres	
F 9x18-inch; 235/40/Z	R18
R 11x18-inch: 285/35/3	7R18

## 993 Turbo \$ 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.

Issue featured	115
Engine capacity	3,600cc
Compression ratio	8.0:1
Maximum power	450hp @ 5,750rpm
Maximum torque	585Nm @ 4,500rpm
0-62mph	4.1 sec
	186mph
Length	4,245mm
Width	1,795mm
Weight	1,583kg
Wheels & tyres	
F 8x18-inch; 225/40	
R 10x18-inch; 285/3	30/18



#### **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.

Marie Control of the	SECTION SHOWS THE
<b>Production numbers</b>	56,73
Issue featured	16
Engine capacity	3,3870
Compression ratio	11.3
Maximum power	300hp @ 6,800rpr
Maximum torque	350Nm @ 4,600rpr
0-62mph	5.2 se
Top speed	174mp
Length	4,430mr
Width	1,765mr
Weight	1,320k
Wheels & tyres	
F 7x17-inch; 205/50/F	217
R 9x17-inch; 255/40/F	217



#### **★★★ 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	
	5.2 sec
Top speed	174mph
Length	4,430mm
Width	1,765mm
Weight	1,375kg
Wheels & tyres	
F7x17-inch; 205/50/R	17
R 9x17-inch; 255/40/R	17



#### **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 uprated.

Production numbers	1,88
Issue featured	11
Engine capacity	
Compression ratio	11.7
Maximum power	360hp @ 7,200rpr
Maximum torque	
0-62mph	4.8 se
	188mp
Length	4,430mr
Width	1,765mi
Weight	1,350k
Wheels & tyres	
F 8x18-inch; 225/40/F	118
R 10x18-inch; 285/30/	'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	3,596сс
Compression ratio	11.3:1
Maximum power	320hp @ 6,800rpm
Maximum torque	370Nm @ 4,250rpm
0-62mph	5.0 sec
Top speed	177mph
Length	4,430mm
Width	1,770mm
Weight	1,430kg
Wheels & tyres	
F 7x17-inch; 205/50/F	217
R 9x17-inch; 255/40/F	R17



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

rs 1,963
112
3,596cc
11.3:1
345hp @ 6,800rpm
370Nm @ 4,800rpm
4.9 sec
175mph
4,430mm
1,770mm
1,370kg
/R18
0/R18



#### 996.2 GT3 2003-2005

Based on facelifted 996 Carrera, but with new wings. Suspension lowered and uprated, 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	190mph
Length	4,435mm
Width	1,770mm
Weight	1,380kg
Wheels & tyres	



#### 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.

k	<b>Production numbers</b>	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	190mph
L	Length	4,435mm
L	Width	1,770mm
	Weight	1,360kg
	Wheels & tyres	
	F 8.5x18-inch; 235/40/	/R18
	R 11x18-inch: 295/30/	R18



#### Sales debate

Are booming petrol prices having an effect on the used 911 market?



The world has changed in the past month or so. The war in Ukraine has sent shocks around the world, both emotionally and financially. Aside from the horrors inflicted on Ukrainian people, the world is learning to cope with new supply chains for all manner of goods, including Porsche. Earlier last month production temporarily halted due to Ukrainian wiring harness supply being affected. The fallout filters down to us all, as consumers, notably with record petrol prices in recent weeks. Have booming petrol costs had an impact on the 911 market?

Avantgarde Classic's Jonathan Aucott says yes: the rising cost of fuel – and of living – is having an effect not just on 911s, but the market for classic cars in general. "The froth has perhaps blown very slightly off the top" he says, "but the market is still strong, and demand for quality cars is still out there." Jonathan says it can be hard to source quality stock, which means enquiries may be down a little, but people are still looking and cars are still selling. "911s aren't spectacularly efficient, but neither are they terrible. 911 buyers tend to be aware of markets and economic pressures."

What of the servicing end of the used market? Chris Wright of Wrightune says he hasn't noticed any difference in customer's attitudes to work. What he has picked up on is the rising cost of running a business. "Every single thing that we use has shot up in price," he says. "Not just a little bit, either." Interestingly, he notes mutterings of possible difficulties in getting some oils, because favoured brands may be in short supply. Whether that persists and becomes a problem, we will have to see. "But in terms of customers, no, behaviours haven't changed," Chris says.

We live in a time of great uncertainty at the moment, and **Total 911** sends love and support to the suffering of the Ukrainian nation. The fact is, the whole world shares the financial burden of war, across all walks of life. Record petrol prices might be the headline, but there's a great deal linked to that in economies, affecting everything from energy, to bread, to car production.



#### **996 Turbo S** 2004-2005

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

Production numbers	1,563
Issue featured	132
Engine capacity	3,600сс
Compression ratio	9.4:1
Maximum power	450hp @ 5,700rpm
Maximum torque	620Nm @ 3,500-
	4,500rpm
0-60mph	4.2 sec
Top speed	191mph
Length	4,291mm
Width	1,830mm
Weight	1,590kg
Wheels & tyres	
F 8x18-inch; 225/40/R3	.8
R 11x18-inch; 295/30/F	18



#### **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.

	を 日本
Production numbers	25,788
Issue featured	112
Engine capacity	3,596сс
Compression ratio	11.3:1
Maximum power	325hp @ 6,800rpm
Maximum torque	370Nm @ 4,250rpm
0-62mph	5.0 sec
Top speed	177mph
Length	4,427mm
Width	1,808mm
Weight	1,395kg
Wheels & tyres	
F8x18-inch; 235/40/R	18
D10v19 inab: 265/40/8	010



#### **997.1 GT3 RS** 2006-2007

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

Production numbers	1.106
Issue featured	156
Engine capacity	3,600сс
Compression ratio	12.0:1
Maximum power	415hp @ 7,600rpm
Maximum torque	405Nm @ 5,500rpm
0-62mph	4.2 sec
Top speed	194mph
Length	4,460mm
Width	1,808mm
Weight	1,375kg
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 @ 6,500rpm
Maximum torque	680Nm @ 2,200-
	4,500rpm
0-62mph	3.7 sec
Top speed	204mph
Length	4,469mm
Width	1,852mm
Weight	1,440kg
Wheels & tyres	
F 8.5x19-inch; 235/35/	ZR19
R 12v19-inch: 325/30/	7R19



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

Journa prooffing	
Production numbe	rs 1,50
Issue featured	12
Engine capacity	3,800c
Compression ratio	12.2
Maximum power	450hp @ 7,900rpr
Maximum torque	430Nm @ 6,750rpr
0-62mph	4.0 se
Top speed	192mp
Length	4,460mr
Width	1,852mr
Weight	1,370k
Wheels & tyres	
F 9x19-inch; 245/35	/ZR19
R 12x19-inch; 325/3	0/ZR19



#### **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:
Maximum power	408hp @ 7,300грп
Maximum torque	420Nm @ 4,400
	5,600rpm
0-62mph	4.4 sec
Top speed	190mph
Length	4,440mm
Width	1,852mm
Weight	1,540kg
Wheels & tyres F 8.5x1	19-inch; 235/35/
ZR19 R 11x19-inch: 305.	/30/ZR19

	****
997 Spc	ort Classic 2010
	-
	A DIWIN

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

Issue featured	146
Engine capacity	3,800сс
Compression ratio	12.5:1
Maximum power	408hp @ 7,300rpm
Maximum torque	420Nm @ 4,200-
	5,600rpm
0-62mph:	4.6 sec
Top speed:	187mph
Length:	4,435mm
Width:	1,852mm
Weight:	1,425kg
Wheels & tyres	
F 8.5x19-inch; 235/3	5/ZR19
R 11x19-inch: 305/30	1/7R19



#### **997 Turbo S** 2011-2013

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

Production numbers	2,0
Issue featured	
Engine capacity	3,80
Compression ratio	9
Maximum power 530	np @ 6,250-6,750r
Maximum torque	700Nm @ 2,1
	4,250r
0-62mp	3.3
Top speed	195n
Length	4,435r
Width	1,852r
Weight	1.58



#### **991.1 Carrera**2011-2015 The first of the power.

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

Production numbers	Unknown
Issue featured	137
Engine capacity	3,436cc
Compression ratio	12.5:1
Maximum power	350hp @ 7,400rpm
	390Nm @ 5,600rpm
0-62mph	4.8 sec
Top speed	179.6mph
Length	4,491mm
Width	1,808mm
Weight	1,380kg
Wheels & tyres	
F 8.5x19-inch; 235/40	/ZR19
R 11x19-inch; 285/35/	ZR19



#### **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 ruad exhaust tailpipes.

	<b>Production numbers</b>	41,059
	Issue featured	107
	Engine capacity	3,824cc
	Compression ratio	11.8:1
	Maximum power	355hp @ 6,600rpm
	Maximum torque	400Nm @ 4,600rpm
	0-62mph	4.8 sec
	Top speed	182mph
	Length	4,427mm
	Width	1,808mm
	Weight	1,420kg
1	Wheels & tyres	



#### **997.1 GT3** 2006-2007

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

Production numbers	2,378
Issue featured	117
Engine capacity	3,600c
Compression ratio	12.0:
Maximum power	415hp @ 7,600rpm
Maximum torque	405Nm @ 5,500грп
0-62mph	4.3 sec
Top speed	192mpt
Length	4,445mn
Width	1,808mn
Weight	1,395ks

## 997.1 Carrera 4 2005-08

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

Production number	rs 8,533
Issue featured	3
Engine capacity	3,596сс
Compression ratio	11.3:1
Maximum power	325hp @ 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; 295/3	5/R18

## 997.1 C4S 2005-2008

The same 3.8-litre, 355bhp 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 number	ers 30,973
Issue featured	111
Engine capacity	3,824cc
Compression ratio	11.8:1
Maximum power	355hp @ 6,600rpm
Maximum torque	400Nm @ 4,600rpm
0-62mph	4.8 sec
Top speed	179mph
Length	4,427mm
Width	1,852mm
Weight	1,475kg
Wheels & tyres	
F 8x19-inch; 235/35	5/R19



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. VTG gave best of small/large turbos.

Production number	s 19,201
Issue featured	159
Engine capacity	3,600сс
Compression ratio	9.8:1
Maximum power	480hp @ 6,000rpm
Maximum torque	620Nm @ 1,950-
	5,000rpm
0-62mph	3.9 sec
Top speed	193mph
Length	4,450mm
Width	1,852mm
Weight	1,585kg
Wheels & tyres F 8.5	5x19-inch;235/35/
D10 D 11-10 : 20	T (20 (D10



#### **997.2 Carrera** 2008-2012

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

*	Production numbers	10,500
	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	179mph
	Length	4,435mm
t,	Width	1,808mm
	Weight	1,415kg
	Wheels & tyres	
	F 8x18-inch; 235/40/Z	R18
	R 10.5x18-inch: 265/40	)/7R18



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 number	ers 15,000
Issue featured	61
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	187mph
Length	4,435mm
Width	1,808mm
Weight	1,425kg
Wheels & tyres	
F 8x19-inch; 235/35	5/ZR19
D 11v10-inch: 205/3	n/7R19



#### **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 multiplate (ultrch

	7010 10
Production numbers	7,910 (Coupe)
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	1,480kg
Wheels & tyres	
F 8x19-inch; 235/35/Z	R19
R 11x19-inch; 305/30/	7R19



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

rear hubs.	
Production numbers	2,200
ssue featured	117
Engine capacity	3,797сс
Compression ratio	12.2.:1
Maximum power	435hp @ 7,900rpm
Maximum torque 4	130Nm @ 6, 250rpm
0-62mph	4.1 sec
Top speed	194mph
Length	4,460mm
Width	1,808mm
Weight	1,395kg
Wheels & tyres	
F 8.5x19-inch; 235/35	/ZR19
12.40 : L-20E /20	7010



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

consumption cut by 16 per cent.	
Production numbers 3,800	
Issue featured	152
Engine capacity	3,800cc
Compression ratio	9.8:1
Maximum power	500hp @ 6,000rpm
Maximum torque	650Nm @ 1,950-
	5,000rpm
0-62mph	3.4 sec
Top speed	194mph
Length	4,450mm
Width	1,852mm
Weight	1,570kg
Wheels & tyres	
F 8.5x19-inch; 235/3	5/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.

k	Production numbers	600
	Issue featured	125
	Engine capacity	3,996cc
	Compression ratio	12.6:1
	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/Z	R19
	R 12x19-inch; 325/30/	ZR19



#### **997 918 Edition** 2010

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

Production numbers	12
Issue featured	7
Engine capacity	3,800c
Compression ratio	9.8:
Maximum power 530h	р @ 6,250-6,750грп
Maximum torque	700Nm @ 2,100
	4,250rpn
0-62mph	3.3 se
Top speed	195mp
Length	4,435mn
Width	1,852mr
Weight	1,585k
Wheels & tyres F 8.5x1	9-inch; 235/35/
ZR19 R 11x19-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	9.0:1
Maximum power	620hp @ 6,500rpm
Maximum torque	700Nm@2,500-
	5,500rpm
0-62mph	3.5 sec
Top speed	205mph
Length	4,460mm
Width	1,852mm
Weight	1,370kg
Wheels & tyres	
F 9x19-inch; 245/35/2	ZR19
R 12x19-inch: 325/30.	/7R19



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

Issue featured	157
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	408hp @ 7,300rpm
Maximum torque	420Nm @ 4,200
	5,600rpm
0-60mph	4.6 sec
Top speed	190mph
Length	4,435mm
Width	1,852mm
Weight	1,420kg
Wheels & tyres	
F 8.5x19-inch; 235/3	85/19
R 11v19-inch: 305/3	1/19



997 C4 GTS 2011-2012

Production numbers	Unknow
Issue featured	12
Engine capacity	3,800c
Compression ratio	12.5
Maximum power	408hp @ 7,300rpr
Maximum torque	420Nm @ 4,200
	5,600rpr
0-62mph	4.6 se
Top speed	
Length	
Width	1,852mr
Weight	1,480k
Wheels & tyres	
F 8.5x19-inch; 235/35	/ZR19

R 11x19-inch: 305/30/7R19



#### **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.

7	Production numbers	Unknown
	Issue featured	114
	Engine capacity	3,800сс
	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	4,491mm
	Width	1,808mm
	Weight	1,395kg
	Wheels & tyres	
	F 8.5x20-inch; 245/35.	ZR20
	R 11x20-inch; 295/30/	ZR20



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

Production number	ers 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	4,491mm
Width	1,852mm
Weight	1,430kg
Wheels & tyres	
F 8.5x19-inch; 235/4	40/ZR19
D 11v10.inch:305/3	5/7R19



#### **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 spread torque more eventy.

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	4,491mm
Width	1,852mm
Weight:	1,445kg
Wheels & tyres	
F 8.5x20-inch; 245/35/	ZR20
R 11x20-inch: 305/30/	ZR20



#### **991.1 GT3** 2013-2015

Wide body from 991 Carrera 4 was used for th 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	3,800сс
	Compression ratio	12.9:1
	Maximum power	475hp @ 8,250rpm
	Maximum torque	440Nm @ 6,250rpm
nе	0-62mph	3.5 sec
ż	Top speed	196mph
	Length	4,545mm
	Width	1,852mm
	Weight	1,430kg
	Wheels & tyres	
	F 9x20-inch; 245/35/2	R20
	R 12x20-inch: 305/30/	ZR20



#### **Technology explained**

#### 059 X51 POWERKIT

Alisdair Cusick explains how the X51 Powerkit extracted more from the 911's nat-asp flat six



For some owners, standard is never enough – even on a 911. With this in mind, Porsche offered a performance increase package for the 911 called the X51 Powerkit. Since the 993, the X51 was a factory-approved package to give a 911 engine a little bit extra.

The X51 floated around on options lists for both the 993 and 996, but you may not have known this, so uncommonly was the option specified. It was the 997 specifically 997.2 models - that saw the package come into wider awareness, thanks to models like the Sport Classic, Speedster and GTS, which all came with the X51. Rather than a scant mention buried near the back of a brochure, the Powerkit started to become central to the performance of the specials.

The kit, originally only for 997 Carrera S and 4S models, is far more than just a simple chip retune. It used cylinder heads with flow-optimised intake and exhaust ports, a larger intake manifold and throttle body, flow-optimised X51 headers with a larger cross-section, a third radiator and special maps for the DME control unit. Visually, the only differences were the carbon-fibre airbox, fed by two channels, and an optional Sports Exhaust with twin chrome tips. The result wasn't an extra push across the rev range as some may have expected, but instead brought benefits at the top and bottom. For some, that wasn't dramatic enough, but an X51 997.1 is decidedly rev-happy and a joy to pedal.

For the 997.2, the X51 intake tract was redesigned to further enhance performance, and incorporated six switchable valves. Referred to as the variable resonance intake system, the valves could adjust to suit power or torque airflow requirements for engine speed and throttle position. Essentially, the intake encourages the air to behave in a way that compresses more air charge into the cylinder to benefit either power or torque as needed. More air coming in means more fuel can burn, and a bigger bang means more performance. Combined with DFI of the 997.2, the performance benefit spread across the rev range.

On the 997.2 the X51 took power from 385 to 408bhp, but peak torque remained at 420Nm, albeit with a much flatter torque curve, and lowering the peak to 4,200rpm. Put another way, the Powerkit gave you the power of the revered 993 Turbo, but with the linear delivery from a naturally aspirated engine.



#### 991.1 Turbo 2013-2014

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

Production numbers	Unknow
Issue featured	109
Engine capacity	3,800c
Compression ratio	9.8:
Maximum power	520hp @ 6,000rpn
Maximum torque	660Nm @ 1,950rpn
0-62mph	3.4 se
Top speed	195mpi
Length	4,506mn
Width	1,880mn
Weight	1,595k
Wheels & tyres	
F 8.5x20-inch; 245/35	i/ZR20

991 1 Turbo S 2013-2015

Production numbers	Unknown
ssue featured	115
Engine capacity	3,800сс
Compression ratio	9.8:1
Maximum power	560hp @ 6,500-
	6,750rpm
Maximum torque 7001	lm @ 2,100-4,250
0-62mph	3.1 sec
Top speed	197mph
-ength	4,506mm
Width	1,880mm
Weight	1,605kg
Wheels & tyres	
Qv20_inch: 245/35/70	220



#### 991.2 Carrera S 2015-2018

Shares Carrera's 3.0-litre turbocharged 9A2 engine, and features revised turbos, exhaust and engine management to produce an additional 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	3.9 sec
Top speed	191mph
Length	4,499mm
Width	1,808mm
Weight	1,440kg
Wheels & tyres F 8.5x	20-inch; 245/35/
7R20 R 11 5x20-inch:	305/30/7R20



Production numbers	s 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	4.1 sec
Top speed	181mph
Length	4,499mm
Width	1,852mm
Weight	1,480kg
Wheels & tyres F 8.5	
ZR19 R 11.5x19-inch; 2	295/35/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	Unknow
Issue featured	150
Engine capacity	2,981c
Compression ratio	10.0:
Maximum power	450hp @ 6,500rpn
Maximum torque	550Nm @ 2,150
	5,000rpm
0-62mph	4.1 se
Top speed	194mp
Length	4,528mn
Width	1,852mn
Weight	1.450ks

	***
991.2 C4 (	GTS 2017-20
T.	THE COLUMN TWO IS NOT
A = 001 2 C ===	OTC but in

PTM four-wheel drive electrically controlling drive between both axles (rear always driven). Red connecting strip on rear

Issue featured	15
Engine capacity	2,981c
Compression ratio	10.0:
Maximum power	450hp @ 6,500rpn
Maximum torque	550Nm @ 2,150
	5,000rpn
0-62mph	3.8 se
Top speed	193mpl
Length	4,528mn
Width	1,852mn
Weight	1,515k
Wheels & tyres	
F 9x20-inch; 245/35.	/ZR20
R 12x20-inch; 305/3	0/ZR20



Latest GT3 RS gets GT3 facelift

Production numbers	100 UK cars (est
Issue featured	164
Engine capacity	4,000c
Compression ratio	Unknow
Maximum power	520hp
Maximum torque	480Nn
0-62mph	3.2 sei
Top speed	193mpl
Length	4,549mn
Width	1,880mn
Weight	
Wheels & tyres	
F 9.5x20-inch; 265/35/	ZR20
R 12 5y21-inch: 325/30	/7R21



Wheels & tyres F 9x20-inch; 245/35/ZR20

Production number	rs 1,948
Issue featured	172
Engine capacity	3,996c
Compression ratio	13.3:1
Maximum power	500hp @ 8,250rpm
Maximum torque	460Nm @ 6,000rpn
0-62mph	3.9 sei
Top speed	199mpl
Length	4,562mn
Width	1,852mn
Weight	Unknowr
Wheels & tyres	
F 9x20-inch; 245/3	5/ZR20
R 12x12-inch; 305/3	30/ZR20



Production number	rs In production
Issue featured	174
Engine capacity	2,981cc
Compression ratio	10.5:1
Maximum power	450hp @ 6,500rpm
Maximum torque 5	30Nm @ 2-5,000rpm
0-62mph	3.5 sec
Top speed	191mph
Length	4,519mm
Width	1,852mm
Weight	1,515kg
Wheels & tyres	
F 8.5x20-inch; 245/	35/ZR20
R11 5y21-inch: 305/	30/7R21



#### **991 Anniversary** 2013-2014

Exuberantly styled Carrera S with wide body and generous spec. Many styling cues inside and ou. 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 @ 7,400rpm
Maximum torque	440Nm @ 5,600rpm
0-62mph	4.5 sec
Top speed	188mph
Length	4,491mm
Width	1,852mm
Weight	1,420kg
Wheels & tyres	
F 9x20-inch; 245/35/.	ZR20
R 11.5x20-inch; 305/3	0/ZR20



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.

than Carrera S.	
Production numbe	rs Unknown
Issue featured	157
Engine capacity	3,800cc
Compression ratio	12.5:1
Maximum power	430hp @ 7,500rpm
Maximum torque	440Nm @ 5,750rpm
0-62mph	4.0 sec
Top speed	190mph
Length	4,491mm
Width	1,852mm
Weight	1,425kg
Wheels & tyres	
F 9x20-inch; 245/35	/ZR20
D 11 Ev20 inch: 20E	/20 /7020



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 reardriven variant.

s Unknown
125
3,800cc
12.5:1
430hp @ 7,500rpm
440Nm @ 5,750rpm
4.4 sec
188mph
4,491mm
1,852mm
1,470kg
/ZR20
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.

		- W W 1
k	Production numbers	6,000
	Issue featured	136
	Engine capacity	3,996cc
	Compression ratio	12.9:1
	Maximum power	500hp @ 8,250rpm
	Maximum torque	460Nm @ 6,250rpm
	0-62mph	3.3 sec
	Top speed	193mph
	Length	4,545mm
	Width	1,880mm
	Weight	1,420kg
	Wheels & tyres	
	F 9.5x20-inch; 265/35.	/ZR20
	R 12.5x21-inch; 325/30	)/ZR21



Facelift model substantially changed underneath with power coming from completely new 3.0-litre 9A2 turbocharged

erigine. i Adiviriow standard.		
Production numbers	s Unknown	
Issue featured	137	
Engine capacity	2,981cc	
Compression ratio	10.0:1	
Maximum power	370hp @ 6,500rpm	
Maximum torque	450Nm @ 1,700-	
	5,000rpm	
0-62mph	4.2 sec	
Top speed	183mph	
Length	4,499mm	
Width	1,808mm	
Weight	1,430kg	
Wheels & tyres		
F 8.5x19-inch; 235/40	)/ZR19	
R 11.5x19-inch; 295/3	5/ZR19	



As per C4 but using revised turbos, exhaust and engine management from C2S to produce extra 50hp. Faster

Production numbers	s Unknown
Issue featured	154
Engine capacity	2,981cc
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	4,499mm
Width	1,852mm
Weight	1,490kg
Wheels & tyres	
F 8.5x20-inch; 245/3	5/ZR20
R 11.5x20-inch: 305/3	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.

	40000
Production numbers	Unknown
Issue featured	135
Engine capacity	3,800сс
Compression ratio	9.8:1
Maximum power	540hp @ 6,400rpm
Maximum torque	710Nm @ 2,250-
	4,000rpm
0-62mph	3.1 sec
Top speed	199mph
Length	4,507mm
Width	1,880mm
Weight	1,595kg
Wheels & tyres F 9x2	
R 11.5x20-inch; 305/3	0/ZR20

991 GT2 RS 2017-2019



#### **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 eve 911 from 0 to 62mph.

	The Party of the P	
*	Production numbers	Unknown
	Issue featured	145
	Engine capacity	3,800cc
	Compression ratio	9.8:1
	Maximum power	580hp @ 6,750rpm
	Maximum torque	750Nm @ 2,250-
		4,000rpm
	0-62mph	2.9 sec
	Top speed	205mph
	Length	4,507mm
er	Width	1,880mm
	Weight	1,600kg
	Wheels & tyres F 9x20	inch; 245/35/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 optional

×	Production numbers	9
	Issue featured	15
	Engine capacity	3,996
	Compression ratio	13.2
	Maximum power	500hp @ 8,250rp
1	Maximum torque	460Nm @ 6,250rp
	0-62mph	3.8 s
3	Top speed	201mg
,	Length	4,532m
	Width	1,852m
	Weight	1,370
	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 @ 8,250rpm
Maximum torque	460Nm @ 6,000rpm
0-62mph	3.9 sec (manual)
Top speed	199mph
Length	4,562mm
Width	1,852mm
Weight	1,413kg (manual)
Wheels & tyres	
F 9x20-inch; 245/35/2	ZR20
R 12x20-inch; 305/30.	/ZR20





#### 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 @ 2,250-
	4,000rpm
0-62mph	2.9 sec
Top speed	205mph
Length	4,507mm
Width	1,880mm
Weight	Not specified
Wheels & tyres F 9x20	inch; 245/35/ZR20
R 11.5x20-inch; 305/30.	/ZR20



#### **991 Carrera T** 2018

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

Issue featured	162
Engine capacity	2,981cc
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	4,499mm
Width	1,808mm
Weight	1,410kg
Wheels & tyres F 8.5	d9-inch; 245/40/
ZR19 R 11.5x19-inch: 2	95/35/ZR19



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).

Issue featured	174
Engine capacity	2,981cc
Compression ratio	10.5:1
Maximum power	450hp @ 6,500rpm
Maximum torque 5	30Nm @ 2-5,000rpm
0-62mph	3.4 sec
Top speed	190mph
Length	4,519mm
Width	1,852mm
Weight	1,565kg
Wheels & tyres	
F 8.5x20-inch; 245/	35/ZR20
R11.5x21-inch; 305/	30/ZR21



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.

Issue featured	189
Engine capacity	2,981cc
Compression ratio	10.2:1
Maximum power	385hp @ 6,500rpm
Maximum torque	450Nm @ 1,900-
	5,000rpm
0-62mph	4.0 sec
Top speed	182mph
Length	4,519mm
Width	1,852mm
Weight	1,505kg
Wheels & tyres F 8.5	x19-inch; 235/40/
7D10 D 11 Ev20 inch:	20E/2E/7D20



Same spec as the 992 Carrera, albeit with variable torque sent t 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	2,981cc	
Compression ratio	10.5:1	
Maximum power	385hp @ 6,500rpm	
Maximum torque	450Nm @ 1,950-	
	5,000rpm	
0-62mph	4.0secs	
Top speed	180mph	
Length	4,519mm	
Width	1,852mm	
Weight	1,555kg	
Wheels & tyres F 8.5x19-inch; 235/40/		
ZR19 R 11.5x20-inch; 25	95/35/ZR20	



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.

<b>Production numbers</b>	In production
Issue featured	190
Engine capacity	3,745cc
Compression ratio	8.7:1
Maximum power	640hp @ 6,750rpm
Maximum torque	800Nm @ 2,500-
	4,000rpm
0-62mph	2.7 secs
Top speed	205mph
length	4,535mm
Width	1,900mm
weight	1,640kg
Wheels & tyres F 8.5x	20-inch; 255/35/
ZR20 R 11.5x21-inch; 31	15/30/ZR21



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

Production numbe	rs 992
Issue featured	193
Engine capacity	2,981cc
Compression ratio	10.5:1
Maximum power	450hp @ 6,500rpm
Maximum torque	530Nm @ 2-5,000rpm
0-62mph	3.6secs
Top speed	189mph
Length	4,519mm
Width	1,852mm
Weight	1,675kg
Wheels & tyres	
F 8.5x20-inch; 245/	35/ZR20
R 11.5x21-inch; 305/	'30/ZR21



#### **992 GT3** 2021-

New swan neck wing design, double wishbone front axle and GT3 R diffuser. 50 per cent more downforce over 991.2 GT3, sub sevenminute '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 @ 6,100rpm
0-62mph	3.4secs
Top speed	199mph
Length	4,573mm
Width	1,852mm
Weight	1,418kg (manual)
Wheels & tyres	
F 9.5x20-inch; 255/35.	/ZR20
R 12x21-inch: 315/30/	7R21

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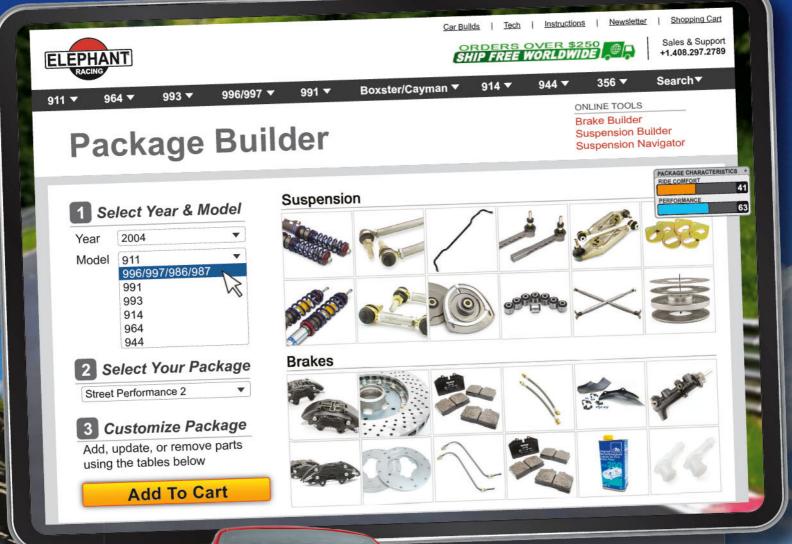
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A silver 1995 Porsche 911 3.6 Carrera Coupe automatic is among the star cars up for auction at the Practical Classics Classic Car and Restoration Show.

The Carrera goes under the hammer at the NEC in Birmingham at the end of March and may be regarded as a bit of a snip at £35,000-£40,000.

It's racked up just 56,000 miles and it sets the pulses racing. Sale notes advise the car is newly resprayed in Polar Silver Metallic with grey leather interior, "Cup" alloys, Tiptronic "S" gearbox and sports suspension.

It also boats air con, electric sunroof and mirror, headlamp washers and a full main dealer service history.

The great and the good of the motoring world seem to agree that the Porsche 911 is probably the most enduring performance

car ever made. From its origins in the 60s through to the latest water-cooled GT2 models, it has remained at the cutting edge of automotive technological innovation.

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### COMMISSION YOUR PORSCHE 911 AS FINE ART

any 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 9ll 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

9ll 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 91l, 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 91l. "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**, but we'll say now that you should be prepared to find yourself as tempted to commission his services as we are











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Arena Red • Black Leather Sports Seats 18" Turbo Wheels • Electric Sunroof Full Leather Interior • Air Conditioning Previously Sold & Serviced by Paragon 62,139 miles • 1996 (P)

£154,995



#### 911 GT3RS (997)

Jet Black • Black Nomex Bucket Seats 19" Orange GT3 Wheels • Porsche Ceramic Composite Brakes • Satellite Navigation • Orange Rear Roll Cage 15,441 miles • 2007 (07)

£149,995



#### 911 Turbo S GB Edition (991)

GT Silver • Black Leather Sports Seats PDK Gearbox • 20" Sport Classic Wheels Touchscreen Satellite Navigation Sport Chrono • Burmester Premium Sound System • 16,357 miles • 2015 (64)

£117,995



#### 911 Carrera 2 S (992)

GT Silver • Graphite Blue Leather Seats PDK Gearbox • 20/21" Carrera Classic Wheels • Switchable Sports Exhaust Glass Electric Sunroof • 9,772 miles 2019 (19)

£102,995



#### Boxster GTS 4.0 (718)

Guards Red • Black Half-Leather Sports Seats • Manual Gearbox • 20" Satin Platinum Carrera S Wheels • Switchable Sports Exhaust • Sport Chrono 1,501 miles • 2021 (71)

£82,995



#### 911 Turbo S (997)

Carrara White • Black Leather Adaptive Sports Seats • PDK Gearbox • 19" Centre Lock Wheels • Porsche Ceramic Composite Brakes • Sport Chrono 29,893 miles • 2010 (60)

£82,995



#### 911 Turbo (997)

GT Silver • Dark Blue Leather Sports Seats • Manual Gearbox • 19" Turbo Wheels • Porsche Ceramic Composite Brakes • Satellite Navigation • Sport Chrono • 50,128 miles • 2008 (57)

£62,995



#### 911 Turbo (996)

Seal Grey • Black Leather Seats Manual Gearbox • 18" Turbo II Wheels Electric Sunroof • Bose Sound System Aluminum Handbrake & Gearknob 43,723 miles • 2003 (52)

£54,995



#### Boxster GTS (981)

Guards Red • Black Half-Leather Sports Seats • PDK Gearbox • 20" Turbo Design Wheels • Switchable Sports Exhaust Touchscreen Satellite Navigation Sport Chrono • 41,498 miles • 2014 (64)

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#### 911 Carrera 2 (997)

Meteor Grey • Black Leather Seats PDK Gearbox • 19" Carrera S Wheels Sport Chrono • Previously Sold & Serviced by Paragon • 44,004 miles 2009 (09)

£44,995



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PS86-002	PORSCHE 911S 2.5L 10.3:1
PS98-005	PORSCHE 911 3.0-3.2 CIS 9.8:1 (Wedge Dome Max Moritz Style)
PS98-009	PORSCHE 930 TURBO 3.4L 7.5:1 (3.3-3.4)
PS98-010	PORSCHE CARRERA 3.2-3.4L9.8:1 (3.2-3.4 Motronic inj.)
PS102-017	PORSCHE 964 NA 3.8L 12.3:1 (107mm slip-in cyl 3.6-3.8)
PS102-018	PORSCHE 964 NA 3.8L 12.3:1 (bore in 109mm cyl 3.6-3.8)
PS102-019	PORSCHE 993 TWINTURBO 3.8L8:1 (109mm bore in cyl 3.6 TO 3.8)
PS102-020	PORSCHE 993T 3.8L 8.5:1 PP102- 013 (107mm slip-in cyl 3.6-3.8 NA to Turbo conversion)
PS102-021	PORSCHE 993T 3.8L 8.5:1 PP102-01 (109mm cyl bore in 3.6 TO 3.8)
PS102-02	MMS 993 RSR 3.6L 11.4:1 (107mm slip in cyl 3.6 TO 3.8)
PS102-023	MMS 993 RSR 3.6L 11.4:1 (109mm bore in cyl 3.6 TO 3.8)
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996 103 942 3.8 MA	PORSCHE 996 GT3 3.8 late (102mm 21mm pin 12:1CR 3.6-3.8)
996 103 942 4.0 MA	PORSCHE 996 GT3 4.0 late (105.4mm 21mm pin 12:1CR 3.6-4.0)
997 103 915 3.8 MA	PORSCHE 997TT 3.8 liter (102mm 23mm pin 9.4:1CR 3.6-3.8)
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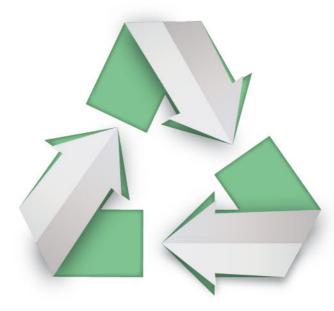
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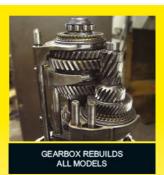


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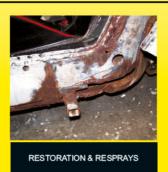
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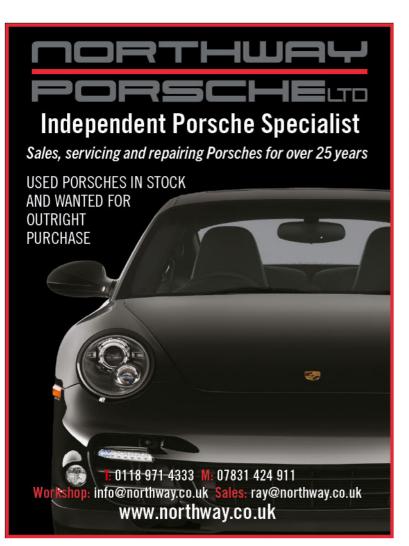


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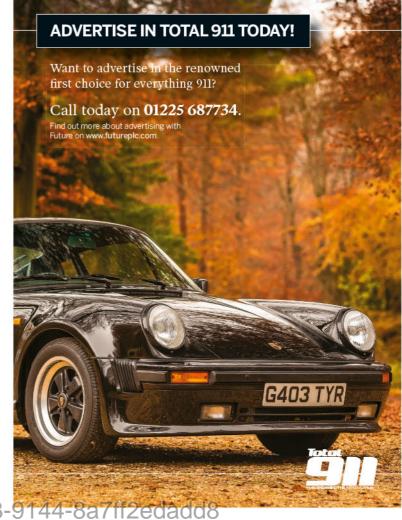


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Issue 218 in shops and available for download from 24 May\*





#### THE WORLD'S LIGHTEST 911

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#### Porsche Moment

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

Events bringing Ferry Porsche and his four sons together became rarer as the years passed. Yet for his 80th birthday in September 1989, most of the family and a few close friends descended on Zell am See, the traditional Porsche home south of Salzburg. In the foreground, beside the Panamericana that the company had presented to Ferry for the occasion are Hans-Peter, Gerd, Butzi and Wolfgang. It's said that Ferry disliked the "beach buggy" Panamericana intensely.

What his sons might have thought isn't recorded. On the left is Hans-Peter, born 1940. He was the second son to join Porsche where, as production manager, he would clash with his cousin Ferdinand Piëch, the engineering director until 1972 when the Porsches and Piëchs all gave up their management roles. A major shareholder, Hans-Peter continues to serve on the VW and Porsche advisory boards and has spent much time creating a toy museum as well as perfecting his golf handicap.

On his left is Gerd, two years older, who was never interested in the car business and became a farmer in Austria. He didn't escape the malign attentions of Ferdinand either: in 1972, his cousin stayed at his farm and his affair with Gerd's wife resulted in a son who would be brought up with Gerd's other children.

The most famous Porsche son is, of course, Butzi who despite being a mere 54 looks almost as old as his father here. The heir apparent, he was cowed by Ferdinand and the opportunity (in 1972) to leave Porsche and run his own Porsche Design business couldn't come soon enough. His appointment as head of the supervisory board to succeed his father in 1990, which coincided with a very difficult time for Porsche, wasn't the happiest three years of the easy-going and likeable Butzi's career.

Youngest son Wolfgang, like Gerd, never joined the firm and ploughed his own furrow, establishing the import of Japanese motorcycles

to Austria and later working for Daimler Benz's finance arm. From 1978, as a shareholder, he was a member of Porsche's supervisory board and appointed Porsche spokesman after Ferry died in 1998; in 2007 he was elected chairman of the board. There he supported Wiedeking's plan to take over VW, then suffered the humiliation of the reverse takeover engineered by VW chairman Piëch, which effectively made Porsche a VW subsidiary. In 2015 Wolfgang appeared to avenge this by leading the dissident group of fellow VW directors who forced Piëch to resign. When Dieselgate blew up six months later, it appeared a pyrrhic victory. A collector and sports car fan, Wolfgang, now 78, remains the Porsche figurehead.

In the background is the balding pate of Heinz Branitski, Porsche's long-serving finance man. On this sunny autumn day in 1989 he was enjoying the last of his 15 months in the limelight as Porsche's interim CEO.

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