

NEW

1998



996 Carrera

1964



911 2.0-litre

2013



991 GT3

PORSCHE 911 BUYER'S GUIDE

YOUR ULTIMATE GUIDE TO THE
GREATEST PORSCHE 911s OF ALL TIME

1993



964 Turbo

1974



911 Carrera 2.7

1997



996 Carrera 4S

1989



930 Turbo LE

COLLECTOR'S EDITION

Digital
Edition

FUTURE

FOURTH
EDITION

100% UNOFFICIAL

Welcome to...

PORSCHE 911 BUYER'S GUIDE

For 55 years and counting, the Porsche 911 has been a motoring icon. Produced in many iterations including Carrera, Turbo, GT3 and Rennsport in Coupe, Cabriolet and Targa body styles, the 911 has captivated the heart and soul of many as the sports car par excellence.

Since the 911's 50th anniversary in 2013, values across the board have risen sharply. Rare and exotic models have attracted truly exotic prices, while models previously considered more 'everyday' in their nature have also become collectable. As values of these cars – as well as their overall desirability – continue to soar, it is more important than ever to be scrupulous in your endeavours to buying one.

This new edition of the Ultimate Porsche 911 Buyer's Guide provides you with the means to buy the very best 911 example for your budget. With expert analysis and industry tips, this bookazine is your number one resource for buying that coveted 911, whether it be your first model, your next model, or an addition to a larger collection.



┌ ┐
F U T U R E
└ ┘

PORSCHE 911 BUYER'S GUIDE

Future PLC Richmond House, 33 Richmond Hill,
Bournemouth, Dorset, BH2 6EZ

Bookazine team

Editor **Lee Sibley**
Compiled by **April Madden**
Designer **Ali Innes**
Editorial Director **Jon White**
Senior Art Editor **Andy Downes**

Total 911 team

Editor **Lee Sibley**
Senior Art Editor **Steve Williams**

Photography

All copyrights and trademarks are recognised and respected

Advertising

Media packs are available on request
Commercial Director **Clare Dove**
clare.dove@futurenet.com

International

Head of Print Licensing **Rachel Shaw**
licensing@futurenet.com

Circulation

Head of Newstrade **Tim Mathers**

Production

Head of Production **Mark Constance**
Production Project Manager **Clare Scott**
Advertising Production Manager **Joanne Crosby**
Digital Editions Controller **Jason Hudson**
Production Managers **Keely Miller, Nola Cokely,**
Vivienne Calvert, Fran Twentyman

Management

Chief Content Officer **Aaron Asadi**
Commercial Finance Director **Dan Jotcham**
Head of Art & Design **Greg Whitaker**

Printed by **William Gibbons**, 26 Planetary Road,
Willenhall, West Midlands, WV13 3XT

Distributed by **Marketforce**, 5 Churchill Place, Canary Wharf, London, E14 5HU
www.marketforce.co.uk Tel: 0203 787 9001

Porsche 911 is a trademark of Porsche AG.

Porsche 911 Buyer's Guide Fourth Edition
© 2019 Future Publishing Limited

We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards. The manufacturing paper mill holds full FSC (Forest Stewardship Council) certification and accreditation

All contents © 2018 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be used, stored, transmitted or reproduced in any way without the prior written permission of the publisher. Future Publishing Limited (company number 2008885) is registered in England and Wales. Registered office: Quay House, The Ambury,



Future plc is a public
company quoted on the
London Stock Exchange
(symbol: FUTR)
www.futureplc.com

Chief executive **Zillah Byng-Thorne**
Non-executive chairman **Richard Huntingford**
Chief financial officer **Penny Ladkin-Brand**

Tel +44 (0)1225 442 244

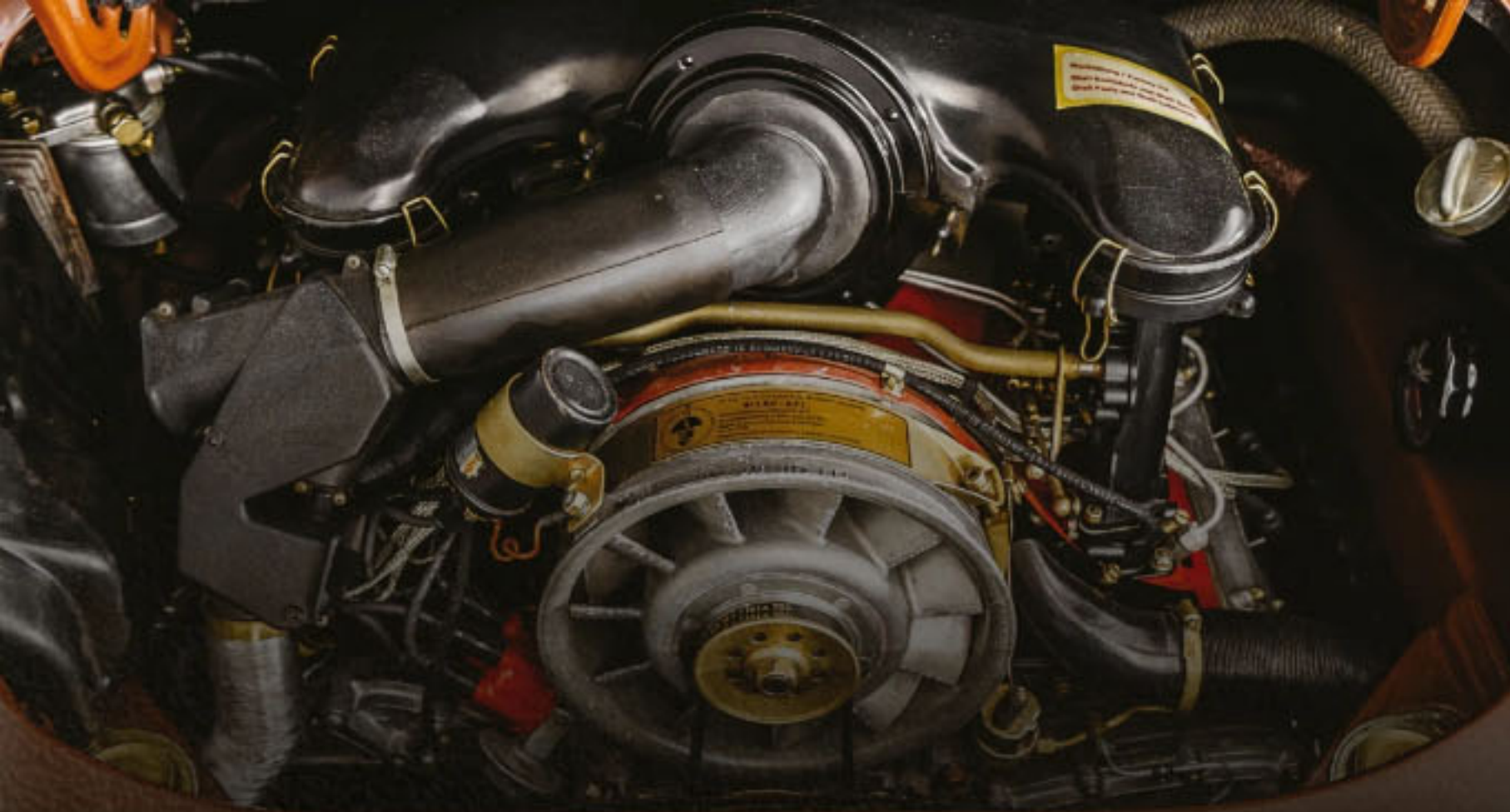
Part of the

Total
911
THE PORSCHE MAGAZINE
bookazine series



CONTENTS





008 AIR-COOLED

Take a seat in the air-cooled 911 of your choice with our extensive collection of ultimate guides of each generation, featuring the short wheelbase 911, 2.7 Carrera, 964 Carrera and 993 Carrera



042 WATER-COOLED

1998 marked the beginning of a new era for the fabled Porsche 911. Take your pick from guides of the 996.1 Carrera, 996 Carrera 4S, 997.1 Carrera, 997.2 GT3 and 991.1 GT3



084 TURBO

Few supercars can match the sheer history and prowess of Porsche's iconic 911 Turbo. Choose the best generation for you with our extensive 930, 964, 993, and 996 Turbo ultimate buyer's guides



118 RENNSPORT

The 911 RS is one of the very best performance supercars of all time. We bring you guides to three of the best from the pre-impact bumper 2.7RS to the 964 and 997.2





AIR-COOLED

| | |
|---------------|-----|
| 911 2.0-litre | 010 |
| 2.7 Carrera | 018 |
| 964 Carrera | 026 |
| 993 GT2 | 034 |



911 2.0-Litre

Get it for
£180,000-£250,000

Performance

★★★★☆

Maintenance costs

★★★★☆

Rarity

★★★★☆

Value

★★★★☆



THE 911L

With US sales booming, the fact the more powerful 'S' couldn't meet new, stricter emissions legislation was becoming a problem. In fact, it forced Porsche to introduce the 911 in 'Luxury' specification, a model that would only be on sale from 1967 to 1968. Still, with 130bhp and Weber carburetors, it was also fitted with a rudimentary system of air pumps to clean up the exhaust gases, and came with the dual-circuit braking system demanded by the US market. Brakes were the ventilated 'S' items and it also retained all of the kit fitted as standard to that model. The 'L' also benefitted from some exterior tweaks including polished aluminium window frames and push-button door handles, while inside the wood fascia trim had gone, and there were now black bezels around the instrument gauges on the dashboard.

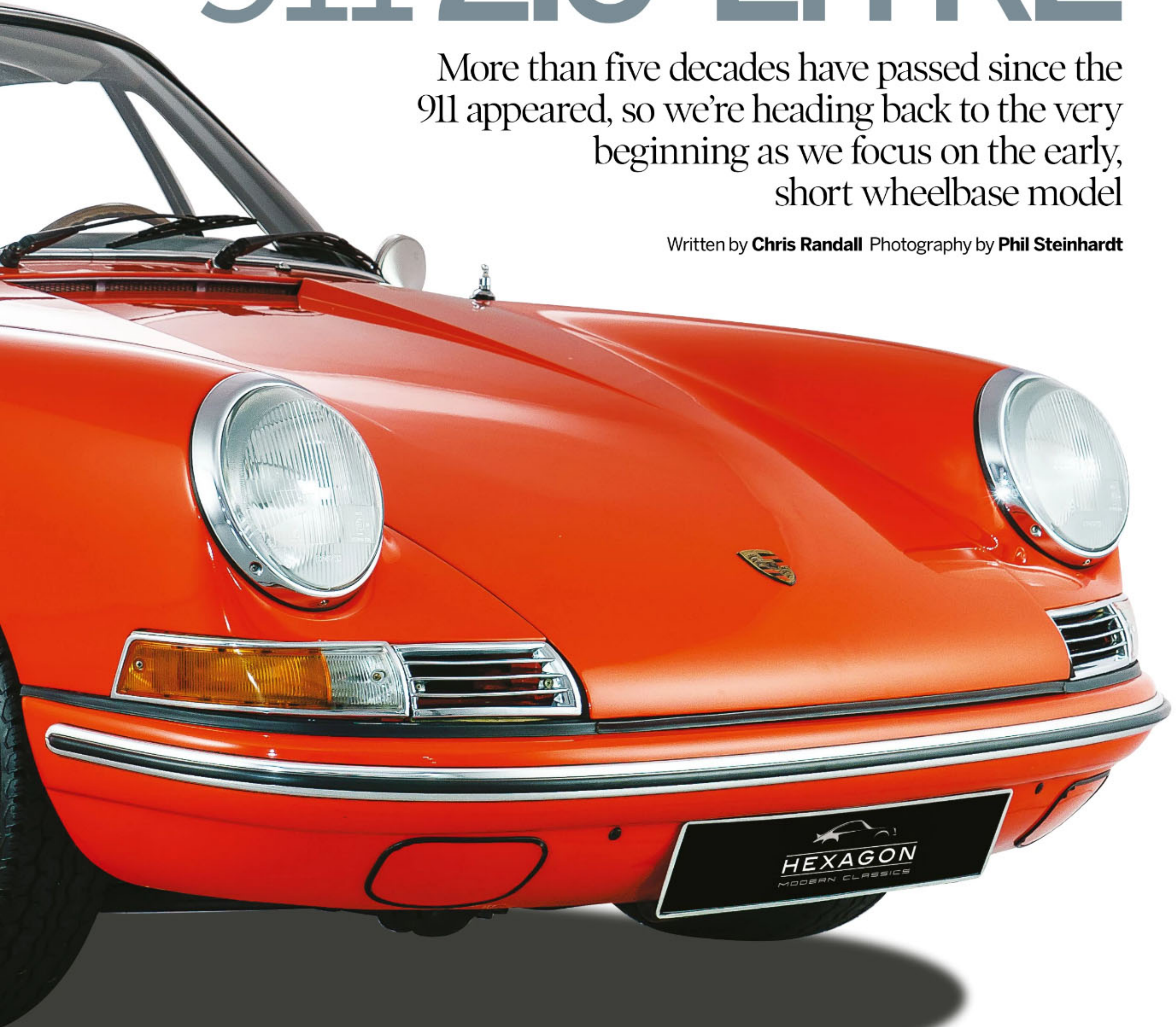




911 2.0-LITRE

More than five decades have passed since the 911 appeared, so we're heading back to the very beginning as we focus on the early, short wheelbase model

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



As the 911 gets bigger, faster and ever-more luxurious, it's easy to forget that there was once a much simpler way. Nothing epitomises that more than the car featured here, a 911 shorn of the electronic driver aids and the clever aerodynamic enhancements we've become used to seeing with every new generation. Scrolling back half a century brings us to this, the short wheelbase (SWB) 911.

Back in 1964, when the 911 was finally launched to an expectant public, this was a sports car that looked impossibly pretty. Delicate and with a purity of line that, some argue, has been lost in the race for ballistic performance and the ability to brag about lap times, the simplicity of Porsche's approach was more than a little breathtaking. And that simplicity extended to a two-door coupe body shell that was constructed – beautifully, it should be said, and with traditional attention to detail – as a straightforward steel monocoque. Little was needed by way of embellishment, certainly no ungainly spoilers or other aerodynamic protuberances, just the slimmest of bumpers and with chrome surrounds for the windows and delicate grilles adjacent to the sidelight/indicator units. Chrome was also used for the small door mirror

and handles, and the whole effect was one of neatness and understatement.

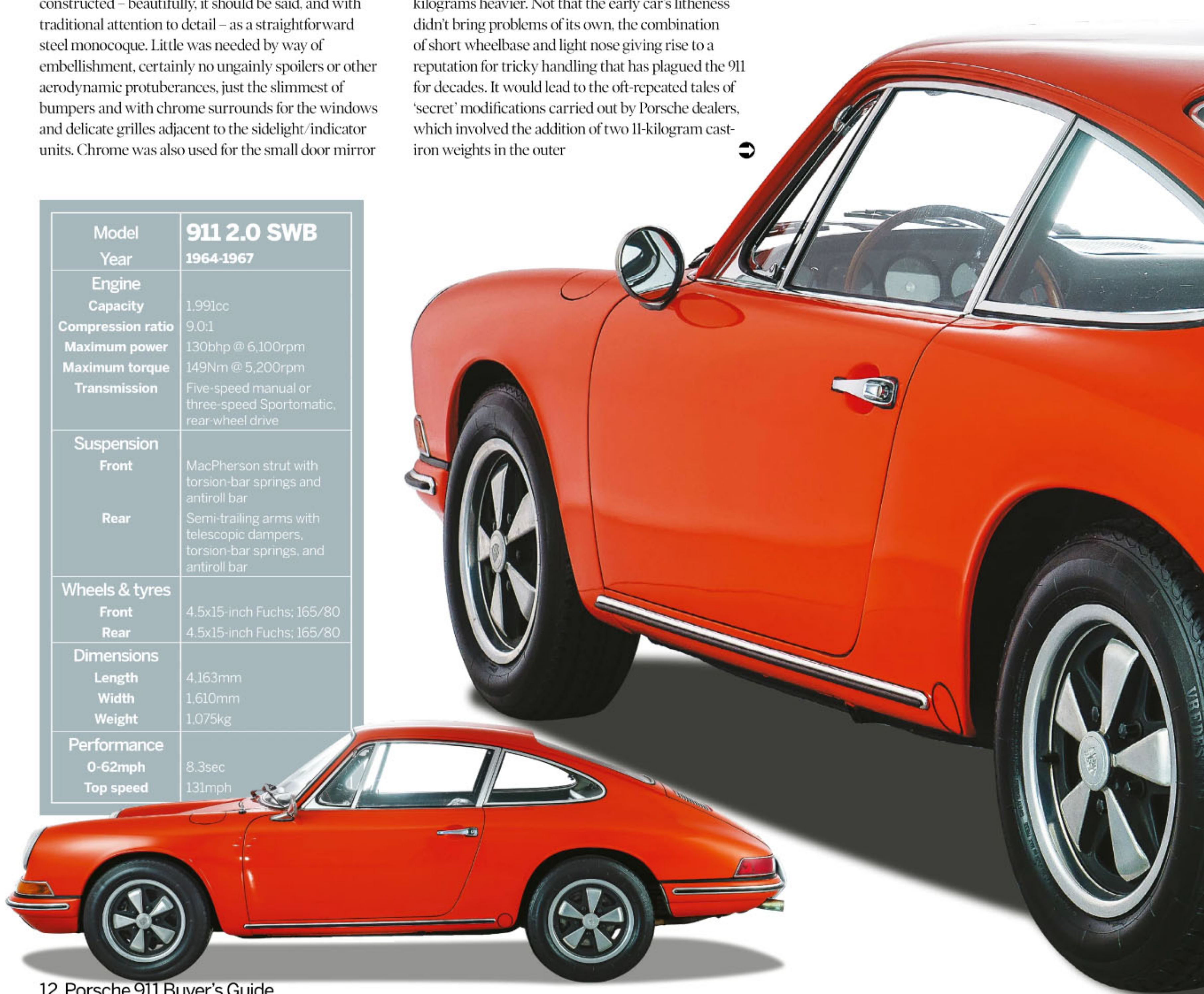
This was truly a case of function over form, and the earliest 911 was all the better for it. A Targa model would appear in 1967 with its now-iconic steel roll hoop and a zip-out plastic rear window, although this latter feature proved fiddly and 1968 saw a fixed-glass item offered as an option. But whatever the body style, the dimensions too were somewhat less than we're used to today, a SWB car measuring around 30 centimetres shorter overall and 20 centimetres narrower than a current 991 Carrera. The older car is also a substantial 241 millimetres shorter in the wheelbase – it would grow by 57 millimetres for the 1968 model – than the 991, which goes to show how much extra cabin space today's occupants enjoy. And if any further comparison were needed, a 991 Carrera is also more than 300 kilograms heavier. Not that the early car's lighthness didn't bring problems of its own, the combination of short wheelbase and light nose giving rise to a reputation for tricky handling that has plagued the 911 for decades. It would lead to the oft-repeated tales of 'secret' modifications carried out by Porsche dealers, which involved the addition of two 11-kilogram cast-iron weights in the outer

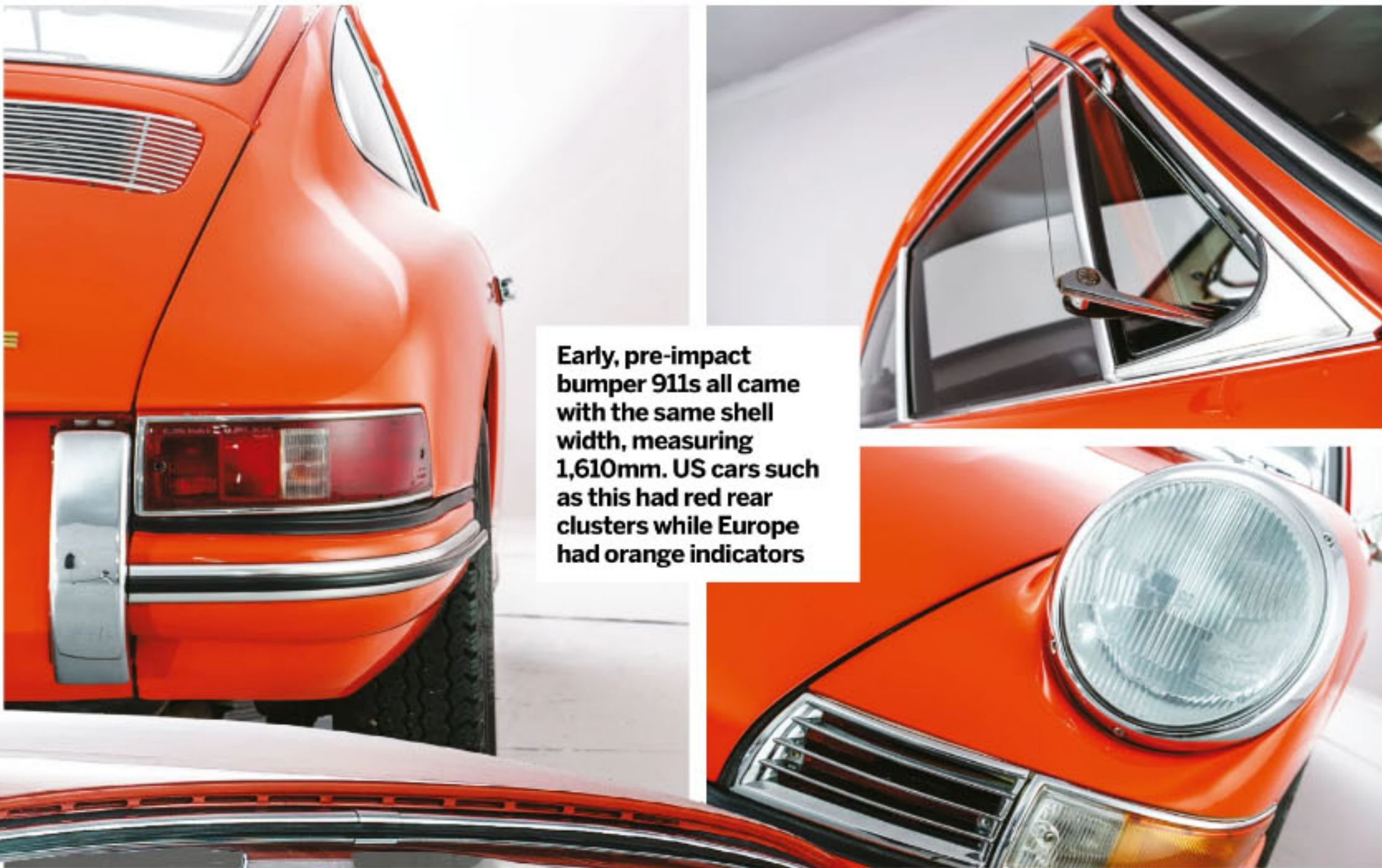
“

THE 'S' SHAVED 0.3 SECONDS FROM THE 0-62MPH SPRINT TIME AND ADDED 6MPH TO THE TOP SPEED, BUT THE REAL BENEFITS WERE IN IMPROVED DRIVEABILITY

”

| | |
|-------------------|---|
| Model | 911 2.0 SWB |
| Year | 1964-1967 |
| Engine | |
| Capacity | 1,991cc |
| Compression ratio | 9.0:1 |
| Maximum power | 130bhp @ 6,100rpm |
| Maximum torque | 149Nm @ 5,200rpm |
| Transmission | Five-speed manual or three-speed Sportomatic, rear-wheel drive |
| Suspension | |
| Front | MacPherson strut with torsion-bar springs and antiroll bar |
| Rear | Semi-trailing arms with telescopic dampers, torsion-bar springs, and antiroll bar |
| Wheels & tyres | |
| Front | 4.5x15-inch Fuchs; 165/80 |
| Rear | 4.5x15-inch Fuchs; 165/80 |
| Dimensions | |
| Length | 4,163mm |
| Width | 1,610mm |
| Weight | 1,075kg |
| Performance | |
| 0-62mph | 8.3sec |
| Top speed | 131mph |





Early, pre-impact bumper 911s all came with the same shell width, measuring 1,610mm. US cars such as this had red rear clusters while Europe had orange indicators



911: FIRST 10 YEARS

1964

The 911 goes into production with a 2.0-litre flat-six producing just 130bhp. It is the start of the making of a legend.

1967

The first 'Super' model arrives. Detailed engine changes generate 160bhp and it also receives upgraded brakes and suspension.

1969

All 911s now get an enlarged 2.2-litre motor, with power ranging from 125-180bhp. It's a substantially revised unit that brings a healthy 7.0-second 0-62mph sprint time.

1972

With the launch of the latest 911E there's a longer-stroke engine for 2.4 litres and it's the first time we see the 915 transmission.

1973

Hugely valuable now, the 2.7 RS is launched with lightened bodywork, 210bhp, and that iconic duck-tail spoiler.

1974

The G-series 911 gains a 2.7-litre engine and impact bumpers to comply with US road safety regulations. Top of the range is the Carrera.





Although the interior is basic by today's standards, a buyer in the 60s could choose different trim options including a wood steering wheel or basket weave seat inserts. A four-speed Sportomatic was also available on certain models, which still utilised a conventional shifter

corners of the front bumper. And staying up front, all models got a 62-litre fuel tank in the trimmed front luggage compartment.

Things would be kept simple beneath the unadorned engine cover too, the beautifully engineered flat-six boasting the sort of accessible installation a 911 owner can only dream about. It was a 1,991cc unit with an 80-millimetre bore and 66-millimetre stroke, a single overhead camshaft per bank, sodium-filled exhaust valves and a 9.0:1 compression ratio. At its core was an aluminium alloy crankcase, cast-alloy pistons running in 'Biral' cast-iron barrels with aluminium cooling fins, and an eight-bearing crankshaft. Lubrication was via a dry sump arrangement and it was fuelled by Solex carburettors that would be replaced with the ubiquitous Weber items in March 1966. The upshot was an output of 130 brake horsepower at 6,100rpm that was enough to get the lightweight coupe to 62 miles per hour in 8.3 seconds and on to 131 miles per hour. What hadn't changed, though, was Porsche's eagerness

to give buyers something more. That would arrive in 1967 in the shape of the 911S – or Super – that brought substantial changes to the 2.0-litre powerplant. There were now forged-alloy pistons allied to stronger, forged-steel connecting rods and larger intake and exhaust valves that had grown from 39 and 35 millimetres to 42 and 38 millimetres respectively. With Bosch ignition, a compression ratio upped to 9.8:1 and the addition of two Weber 40IDS carburettors, power had risen to 160 brake horsepower while torque had increased to 179Nm at a higher 5,200rpm. It was enough to shave 0.3 seconds from the 0-62 miles-per-hour sprint time and add six miles per hour to the top speed, but the real benefits were felt in improved driveability; an early sign that continuous development was very much on the Zuffenhausen agenda.

But whichever model you chose, power was delivered to the rear wheels via the five-speed manual gearbox (designated 90I) and there was the option of a ZF limited-slip differential. Also available for those who

wanted a more relaxed, two-pedal approach to 911 motoring was the Sportomatic '90S' transmission that arrived in late-1967. Developed by Fichtel and Sachs and offering four-speeds – L, D, D3, and D4 – this was a torque convertor 'box that also included an automatic clutch operated by a micro-switch in the gear-lever knob. However, this gearbox didn't draw universal praise from owners or journalists of the day, although it somehow survived in Porsche's options catalogue all the way to 1979. Thankfully, the rest of the running gear was a little less quirky. The unassisted rack-and-pinion steering was courtesy of ZF and stopping duties were taken care of by a single-circuit braking system with 11.1-inch diameter ATE discs at the front and 11.2-inch items at the rear, ventilated on the 'S'. The suspension was independent at all four corners and used a combination of MacPherson struts and longitudinally mounted torsion-bar springs up front and trailing arms allied to telescopic dampers and transverse torsion bars at the rear. A 13-millimetre anti-roll bar was



“

WHEN YOU CLICKED OPEN THE LIGHTWEIGHT DOOR OF AN EARLY 911, THE CABIN APPEARS AS A MODEL OF SPORTING RESTRAINT

”



BUYING TIPS

A 911 of this age is always going to present a risk unless it's already been subject to a top-quality restoration. A car in need of major work is going to require substantial financial investment, so getting it checked by an OPC or specialist is always going to make sense.

- **Originality and rarity:** A car that's correct in every detail will always be valued. Rarity of parts is an issue, though, exacerbated by the various changes over the years, so be prepared to settle for second-hand items or a lengthy search for the right bits.
- **Corrosion:** The only option is to examine every panel with forensic levels of care as eradicating all traces of rot will be pricey. Check for accident damage and previous bodes, and don't assume US cars are rot-free. Panel prices can exceed £1,000 so be warned.
- **Engines:** The aluminium crankcase unit is considered pretty bulletproof, although parts are costly. Engine swaps aren't uncommon, especially with imported vehicles, so make sure you know what you're buying.
- **Low mileage:** Collector cars may need substantial recommissioning so budget accordingly. It's not necessarily difficult, but the costs can add up so you might be better off with one that's been used regularly.
- **Interiors:** Wear and damage should be obvious. It can obviously be re-trimmed – at a price – but it's worth checking that trim and materials are original, as well as looking for signs of water leaks.

optional, although the 'S' would receive an upgrade in the form of stiffer Koni dampers and anti-roll bars front and rear as standard in 15 and 16-millimetre diameters respectively. It was a set-up that would serve the 911 well for many years, but there's one last detail that amply demonstrates the gulf that separates these early cars from the current generation, and that's in the choice of wheels and rubber. The earliest SWB models employed plain-Jane 4.5x15-inch steel wheels – albeit with lovely chrome hubcaps – fitted with 165/80 tyres, and it wasn't until the 'S' arrived that you got a marginally wider wheel fashioned from a more exotic alloy. In fact, this was the first 911 to get the iconic wheels from Otto Fuchs that were a useful 2.3 kilograms lighter than steels. It's something of a revelation compared to the steam-roller sized boots that fill the arches of a modern 911, even if it does go a long way to explaining the agility and delicacy of response that so enchanted the buyers of Porsche's finest back in the day, and indeed continues to do so even now.

The simplicity employed elsewhere would also be found when you clicked open the lightweight door, the cabin appearing as a model of sporting restraint. There was no bulky and intrusive dashboard here, with

passengers separated by a leather-clad and button-festooned centre console. Instead what you'd find was a slim, wood-trimmed fascia with the classic five-dial instrument pack facing the driver, chrome instrument bezels, and a modest – if a little random – scattering of knobs and switches. And if the seats looked a little minimalist, they would actually prove very supportive, and just like today Porsche understood the importance of ergonomics, so the driving position itself was spot on. Those perches were trimmed in vinyl as standard, but leather was optional and you could also choose to have the centre panels covered in basket-weave leatherette or cloth. Buyers could choose to team the subtle interior with typical colourful 1960s exterior hues such as canary yellow or tangerine, although there were more subdued tones available as well as various special-order colours for those who appreciated a more low-key approach for their Porsche.

Going back to basics reveals a charmingly simple 911, one that was just the first taste of the top-notch engineering Porsche would employ for many decades to come, and that is something all fans of this evergreen sports car can appreciate. Here's to the next half century of evolution, too. **911**

“

A SWB 911 MEASURES 30 CENTIMETRES SHORTER OVERALL AND 20 CENTIMETRES NARROWER THAN A CURRENT 991

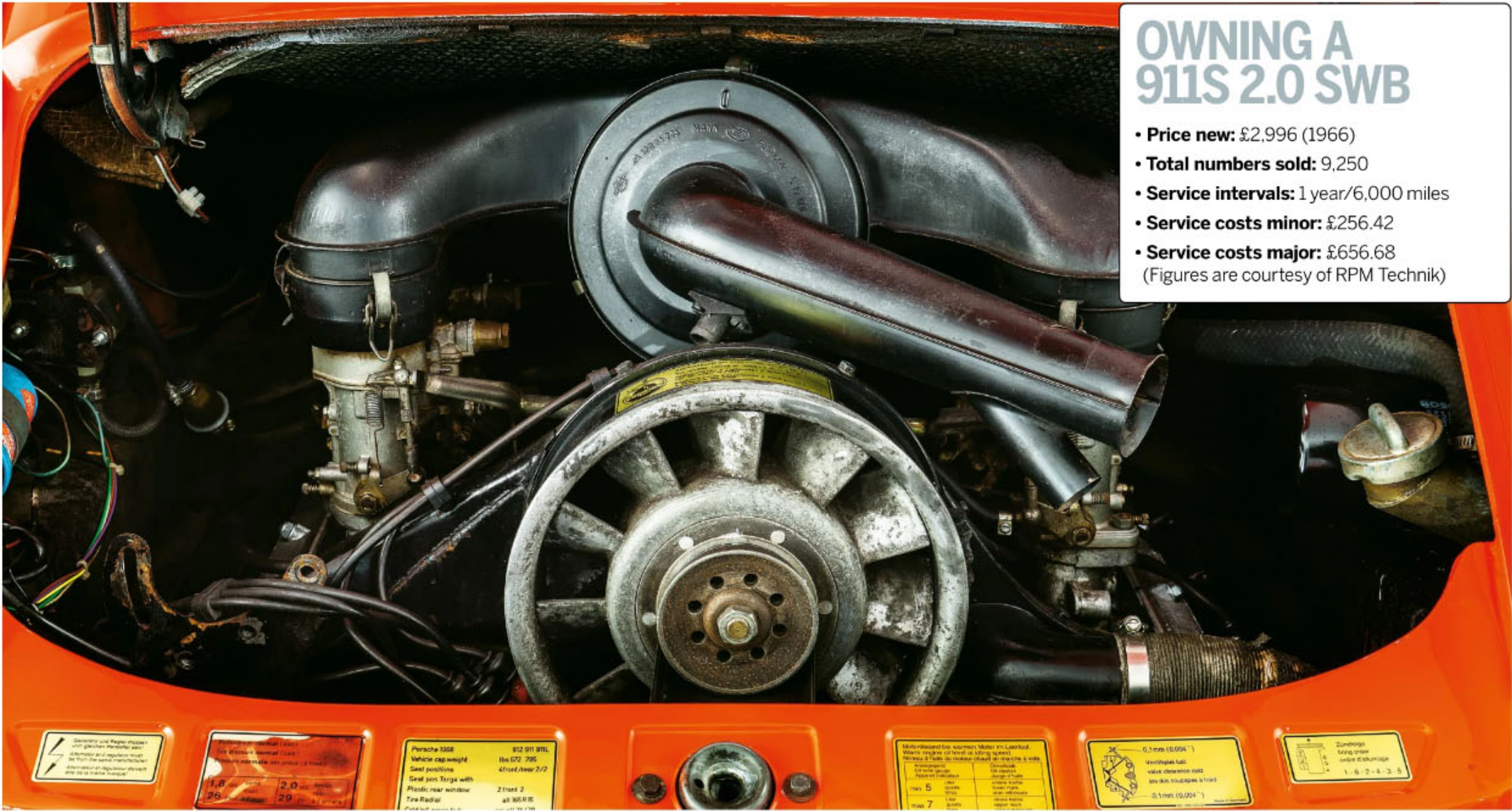
”

SPECIALIST VIEW

“There's no doubt that when you're talking about a 911 produced in such small numbers, prices are going to be kept very buoyant in the future. Values of SWB models clearly have some way to go yet, I think, but interest in these earliest cars is growing strongly as more and more people come to appreciate the purity they offer, and that almost certainly means there is going to be strong investment potential. Having said that, I do think they offer excellent value at the moment, especially when compared to other sports cars of the period, so it's going to be really interesting to see how the market reacts over the next few years.”

Jonathan Franklin, Hexagon





OWNING A 911S 2.0 SWB

- **Price new:** £2,996 (1966)
- **Total numbers sold:** 9,250
- **Service intervals:** 1 year/6,000 miles
- **Service costs minor:** £256.42
- **Service costs major:** £656.68

(Figures are courtesy of RPM Technik)



"I'VE GOT ONE"

"The short wheelbase 911 represents the Porsche 911 in its original and purest form. Without any of the later bulges and wings to disrupt the smooth flow and svelte lines one can appreciate the artistry and beauty of the original design. There are very few cars that can connect you so closely to the road through the steering and suspension like an original 911, making every journey a visceral experience."

Marcus Carlton

2.7 Carrera

Get it for
£120,000-£250,000

Performance

★★★★☆

Maintenance costs

★★★★☆

Rarity

★★★★☆

Value

★★★★★



2.7 CARRERA: MFI v RoW

Although buyers in the US could get their hands on a 2.7 Carrera, it was a different beast to that offered in Europe. For one thing, they missed out on the delights of the 210bhp RS motor, as the mechanical injection system dispensed fuel far too casually to work with the forthcoming catalytic convertors. The only option was to fit American models with what was essentially the 911S engine – the 911/93 unit that was fuelled by the far more accurate K-Jetronic system and featured milder camshafts and cast rather than forged pistons. But while it ran efficiently, it lacked the whip-crack response of the MFI engine and rather more importantly lost 35bhp in the process. Torque was also down, all of which had a predictable effect on outright performance. There was an external difference, too, the US car getting more sophisticated dampers for the 5mph impact bumpers, which made them slightly longer compared to the simpler European-spec items. Hard to value today, these cars certainly fetch a good deal less than the full-fat MFI.

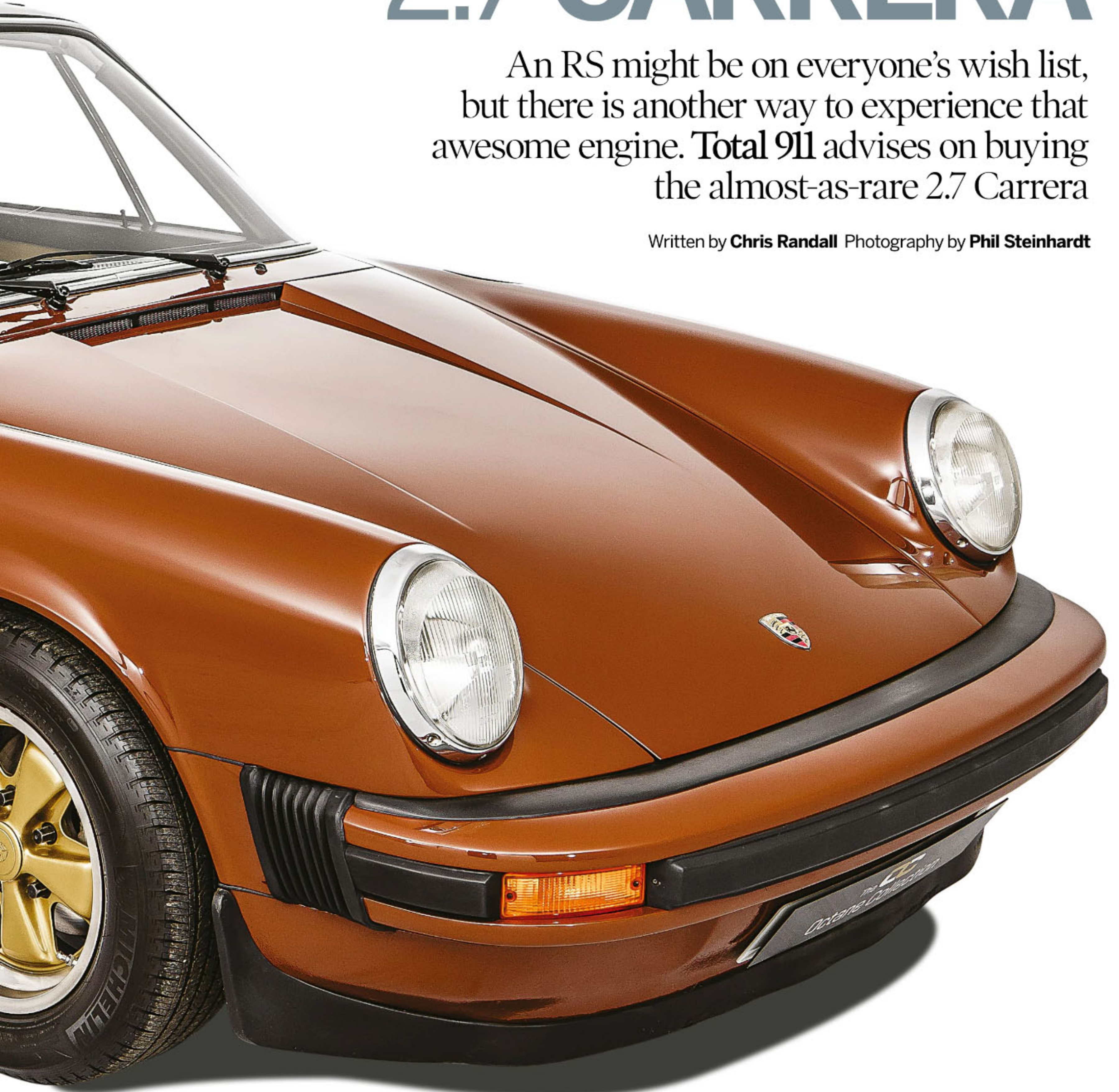




2.7 CARRERA

An RS might be on everyone's wish list, but there is another way to experience that awesome engine. Total 911 advises on buying the almost-as-rare 2.7 Carrera

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



Hugely sought after and with values already high in the stratosphere, Porsche's first Rennsport, the 2.7 RS, fully deserves its position as one of the finest 911s ever made. But with production limited to 1,590 examples, the chance to sample this exquisite confection is somewhat limited.

Its demise also left Porsche needing a new range-topper and it would arrive in the form of the car you see here, the 2.7 Carrera. It was hardly more numerous – 1,667 examples rolled out of Zuffenhausen between 1974 and 1976 – and examples are already fetching in the region of £200,000. But what you had was a car that blended the impact bumper, G-series bodyshell with the mechanically injected 2.7-litre engine from the RS, for some the perfect marriage. When it comes to buying one, it makes sense to start

with that legendary flat six. The 2,687cc unit was the last outing for mechanical fuel injection on a Porsche road car, and managed a useful 210bhp and 255Nm of torque. With an 8.5:1 compression ratio, it also featured forged aluminium pistons and Nikasil cylinder bores, a magnesium light alloy crankcase, chain-driven valves and dry sump lubrication. And, like many aspects of early 911 ownership, originality is key so it's vital to know what you're dealing with.

Check the number stamped on the crankcase tallies up with the paperwork – if it's been ground off, that suggests replacement (the same applies to the gearbox). The good news is that the 911/83 engine is fundamentally strong, but with the youngest examples now 40 years old, some deterioration is to be expected. Corrosion of the magnesium alloy crankcase could have led to it becoming porous, and it goes without saying that a thorough examination for

signs of internal wear is vital. Bear in mind that a rebuild could approach £25,000 depending on the extent of the work required and it needs to be completed by someone who knows these engines – done badly and it simply won't go back together properly.

The condition of the engine ancillaries is equally important, as a major overhaul will add a substantial chunk to the final bill. A key aspect is that Bosch mechanical injection (hence the MFI moniker). Using a complex six-plunger pump, the system was reliable when new but ageing components could mean an overhaul is due, and that needs someone that understands its workings. Neil Bainbridge at BS Motorsport is such an expert, and advises that a pump rebuild alone will cost in the region of £2,000 and take a couple of days. Wear in the throttle bodies and injectors will add further cost, so be wary of an engine that doesn't run cleanly. ➔

“The 2.7 Carrera blended the impact bumper, G-Series bodyshell with the mechanically injected 2.7-litre RS engine”

Model 911 Carrera 2.7

Year 1974-76

Engine

Capacity 2,687cc

Compression ratio 8.5:1

Maximum power 210bhp @ 6,300rpm

Maximum torque 255Nm @ 5,100rpm

Transmission Five-speed manual;
rear-wheel drive

Suspension

Front Trailing arms with
telescopic dampers;
torsion bar springs;
anti-roll bar

Rear Telescopic dampers;
torsion bar springs;
anti-roll bar

Wheels & tyres

Front 6x15-inch; 185/70/R15

Rear 7x15-inch; 215/60/R15

Dimensions

Length 4,291mm

Width 1,610mm

Weight 1,075kg

Performance

0-62mph 6.3 secs

Top speed 148mph





Early examples of the 2.7 Carrera were available with the optional duck tail, as here, though a whale tail was available from '75. Black window trim was standard, with chrome a designated option (M446)

PRICES OF PARTS

| | |
|----------------------|---------|
| • Front bumper | £719.14 |
| • Front wing | £749.99 |
| • Timing chain kit | £270.04 |
| • Clutch kit | £739.19 |
| • Front strut insert | £181.86 |

VALUES

Issues of age and rarity rear their head again here and, with prices changing rapidly, meaningful valuation isn't straightforward. What we do know is that the best examples are being advertised for more than £200,000 and you could easily pay half that for something in need of major work. Anything between that is far harder to pinpoint, but you can bet on prices only heading one way.

| | |
|---------------|-----------|
| • Project | £100,000 |
| • Regular use | £150,000 |
| • Concours | £200,000+ |





“Tired anti-roll bar bushes are often the source of knocks and clunks”

The 915/06 five-speed transmission is a known quantity and not especially difficult to re-build, although some components can be hard to source and don't come cheap. The shift isn't especially quick, and ham-fistedness causes premature wear of the synchromesh, so look for a gearbox that changes gear cleanly and without crunching or excessive baulking. You'll need to budget in the region of £1,200 for a basic overhaul, although it could be three times that if things are bad. As for the rest of the running gear, the MFI shared the basic layout and a number of components with the RS. That means unassisted rack and pinion steering that should feel pin-sharp, and a suspension set-up comprising of struts at the front, alloy semi-trailing arms at the rear, and Bilstein dampers and torsion bar springs all round. There were anti-roll bars at both ends. It's a straightforward

arrangement and one considered bulletproof by most specialists. Also ensure that joints and bushes aren't worn or perished. Tired anti-roll bar bushes are often the source of knocks and clunks.

Equally important is getting the car on a ramp so that suspension mounting points can be checked for signs of rot. Fixing points for the front struts and the torsion bars can suffer, and sorting it properly will be an expensive business. The braking system employed ventilated discs all round, and were capable enough for road use. The front calipers were alloy items, shared with the RS, and can suffer from corrosion, which in turn can lead to sticking pistons. Problems here will require an overhaul, although the rear calipers were simpler items which can be replaced at a reasonable cost. Having said that, expect a four-figure bill if a complete brake refresh is required.

The Fuchs wheels – 6x15-inch items in front and 7x15-inch items at the rear (7x15-inch and 8x15-inch items were optional) wearing 185/70 and 215/60 tyres – suffer from corrosion, and while refurbishment isn't especially pricey, clumsy attempts in the past may mean starting again. And, the date stamped on the inside of a wheel spoke is a further clue to originality.

It's time, though, to tackle the thorny issue of corrosion, the bane of many an early 911. The G-series shell was stronger than that used previously, but despite Porsche's attempts to better protect the metalwork, it's susceptible to rotting away. A bad one will lay waste to your bank account, and it's all too easy to spend thousands of pounds eradicating all traces of corrosion.

It's also vital to consider any previous work, as it's likely to have been restored at least once in its lifetime, and establishing the quality of any work and the effect that might have had on originality is key. Values weren't always so high, so previous owners might have skimped, and an unsympathetic restoration could have led to original details being

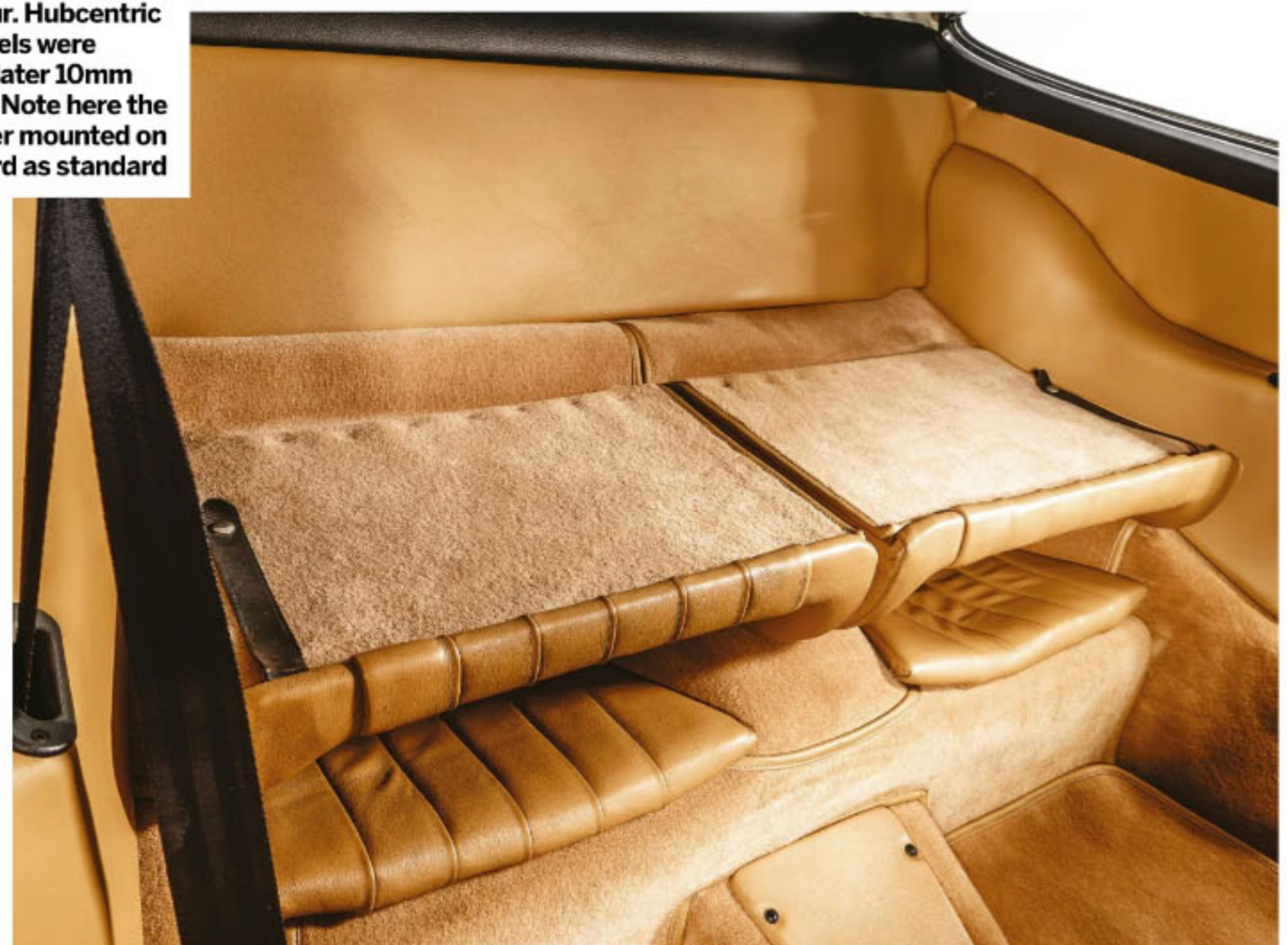


In '75 cars the dashboard, knee protection and door top trim matched the interior colour. Hubcentric steering wheels were thicker than later 10mm offset items. Note here the mono speaker mounted on the dashboard as standard

lost; the original finish was scrappy in places, so is it too perfect?

As for rot-spots, every panel will need careful examination for tell-tale bubbling or evidence of previous botched jobs. The front wings rust around the wheel arch lips, fuel filler aperture and headlamp bowls, while road muck accumulates around the bumper mountings, rotting the wing from the inside. Also examine the front luggage compartment, checking the floor section, inner wings, and seams, and remove the carpet and trim, as water leaks will cause serious problems and could have affected the fuel tank and its mountings. The front scuttle and front and rear bulkheads need examination, the latter from inside the engine bay. Check the screen and side window seals, as perished items can allow water into the cabin, encouraging floorpan rust.

Both the 'A' and 'B' pillars need checking as they can corrode around the door hinges and latches, while the kidney bowls at the rear of the sills are notorious for rotting out, as are the sills themselves – the condition and strength of the jacking points are



BUYING TIPS

Age, relative rarity, and the sheer cost of major restoration mean that care needs to be taken if the idea of a 2.7 Carrera floats your boat. Of course, the same can be said for most 911s of this period, but as values are certain to climb, plunging in without caution could easily see defeat snatched from the jaws of victory.

- **Originality:** This is going to matter, so you need to be certain of exactly what's been done in the past and by whom. Check whether chassis and engine numbers match the paperwork, while date stamps on most components are further clues to the car's past
- **Bodywork:** Corrosion of the bodywork, and the cost of eradicating it, will always be the biggest concern. The only option is to examine every inch of the bodywork to establish the extent of any problems. And don't assume that minor issues will be easy to sort: they almost certainly won't be.
- **Engines:** Although it's essentially robust, a complete rebuild can swallow £25,000 and needs to be carried out by someone who knows what they're doing. Check for matching numbers if you're investing, including the reciprocating four-digit numbers on each side of the crank case.
- **Transmission:** Unsympathetic use will take its toll, and you'll need to set aside a four-figure sum for a rebuild. Watch out for grinding synchromesh, the whine of worn bearings, or an obstructive shift that could be gearbox or clutch related.
- **Brakes/suspension:** Not a particular Achilles' heel but corrosion and age-related deterioration will mean a costly overhaul is on the cards. Perished suspension bushes will ruin the handling and cause knocks from beneath the car.
- **Interior:** Like any 911 of this era, the cost of re-trimming with original materials can mount up alarmingly. Budget accordingly if it's a bit scruffy, and make sure items such as electric windows and air-conditioning are working properly.

good indicators. Other areas at risk include the rear quarter panels and the front and rear valances, and if a sunroof is fitted, blocked drain holes can lead to the base of the A-pillar rotting out. On the whole, panels and repair sections are available but at a cost, which will be more if fettling is required during fitting.

Finally, it's worth mentioning those bumpers. Made from aluminium, the paint could be hiding serious pitting beneath and the only answer will be to have them stripped and shot-blasted. A replacement front item is more than £700, and removal can be fiddly. While on the bodywork, the rear spoiler for 1974 models was the 'ducktail' while cars from 1975 onwards had the 'whaletail', although both could be deleted for a cleaner look. It's worth establishing the original specification as they could have been added or removed later.

It is also worth acknowledging the existence of the open-topped Targa variant – around 600 were made and while the roof arrangement is straightforward, it's important to check the condition of the roof panel and seals. Replacing the latter isn't too costly but if damaged by cack-handed owners, they could have allowed water to enter the cabin, leading to damp

carpets and the onset of corrosion. These roofless cars are also more prone to chassis flex, so get it checked. Which brings us to the interior. It's typically simple, although owners could add plenty of options such as air-conditioning or leather trim, and from 1976 Porsche made huge changes to the available choices of interior fabrics on offer. Most examples were trimmed in tweed cloth or leatherette, and the condition will be obvious. Original materials for a re-trim can be sourced, but at a price. Lift as much of the carpet as possible to check the condition of the floorpan and to ensure everything is working properly, as aged wiring and electrical connections can cause issues. Corroded heat exchangers are a common problem on older 911s, too, so check the heating operation. There's little else to worry about – it's the condition of the bodywork and engine that are of far greater importance.

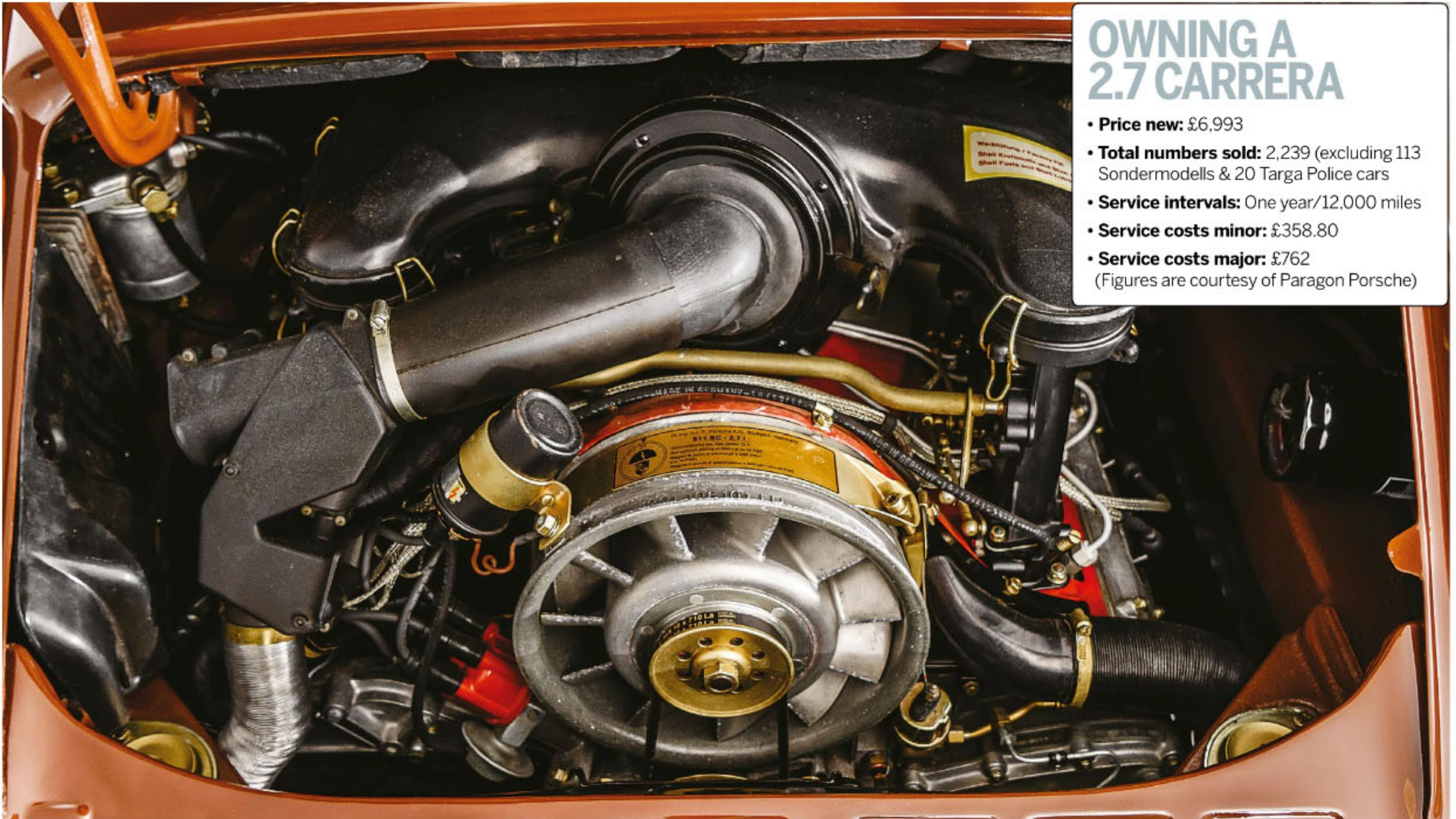
Ultimately, the 2.7 Carrera is an appealing proposition, and that RS-derived engine is a gem, but like any older 911 it takes careful buying. Originality is everything, especially with values continuing to climb, and the cost of a major restoration will be significant. So, it's vital to get it checked out before taking the plunge on this impact-bumper icon. **911**

SPECIALIST VIEW

"The 1974 Carrera RS was built on the new short-bonnet G-series chassis, which incorporated a strengthened floorpan, front and rear impact bumpers, revised lighting, and other features to improve crash-worthiness demanded by the United States. For reasons of economy, Porsche manufactured all-new 911s on the same chassis. They also changed the engine specs for the '74 Carreras. The short-bonnet G-series chassis will therefore forever remain a hallmark of automotive design and this outstanding example is presented in a period hue of the wonderfully named 'Bitter chocolate.'"

Lucas Hutchings, The Octane Collection





OWNING A 2.7 CARRERA

- **Price new:** £6,993
- **Total numbers sold:** 2,239 (excluding 113 Sondermodell's & 20 Targa Police cars)
- **Service intervals:** One year/12,000 miles
- **Service costs minor:** £358.80
- **Service costs major:** £762
(Figures are courtesy of Paragon Porsche)



PORSCHE

Carrera RS

The  Octane Collection

964 Carrera

Get it for
£40,000-£60,000

Performance

★★★★☆

Maintenance costs

★★★★☆

Rarity

★★★★☆

Value

★★★★☆



964 CARRERA 4

Somewhat unusually, for the 964 it was the all-wheel drive Carrera 4 that arrived on the market first. Launched for the 1989 model year, it featured 'Porsche Dynamische Allrad Steuerung' (Porsche Dynamic All-Wheel-Drive Control, or PDAS for short) with a torque split a nominal 31 per cent/69 per cent front-to-rear via an electronically controlled multi-plate clutch. It apportioned drive to whichever axle had the most grip depending on information received from a variety of sensors. Meanwhile, a knob on the centre console could be used to lock the centre and rear differentials for maximum grip, with the system defaulting to automatic operation above 25mph. Unlike the C2, which retained a vacuum servo, the brakes utilised a high-pressure hydraulic booster operating at 2.600psi. If you prefer the added security of four-wheel drive, it's crucial to ensure the system is healthy and has been maintained with regular oil changes.

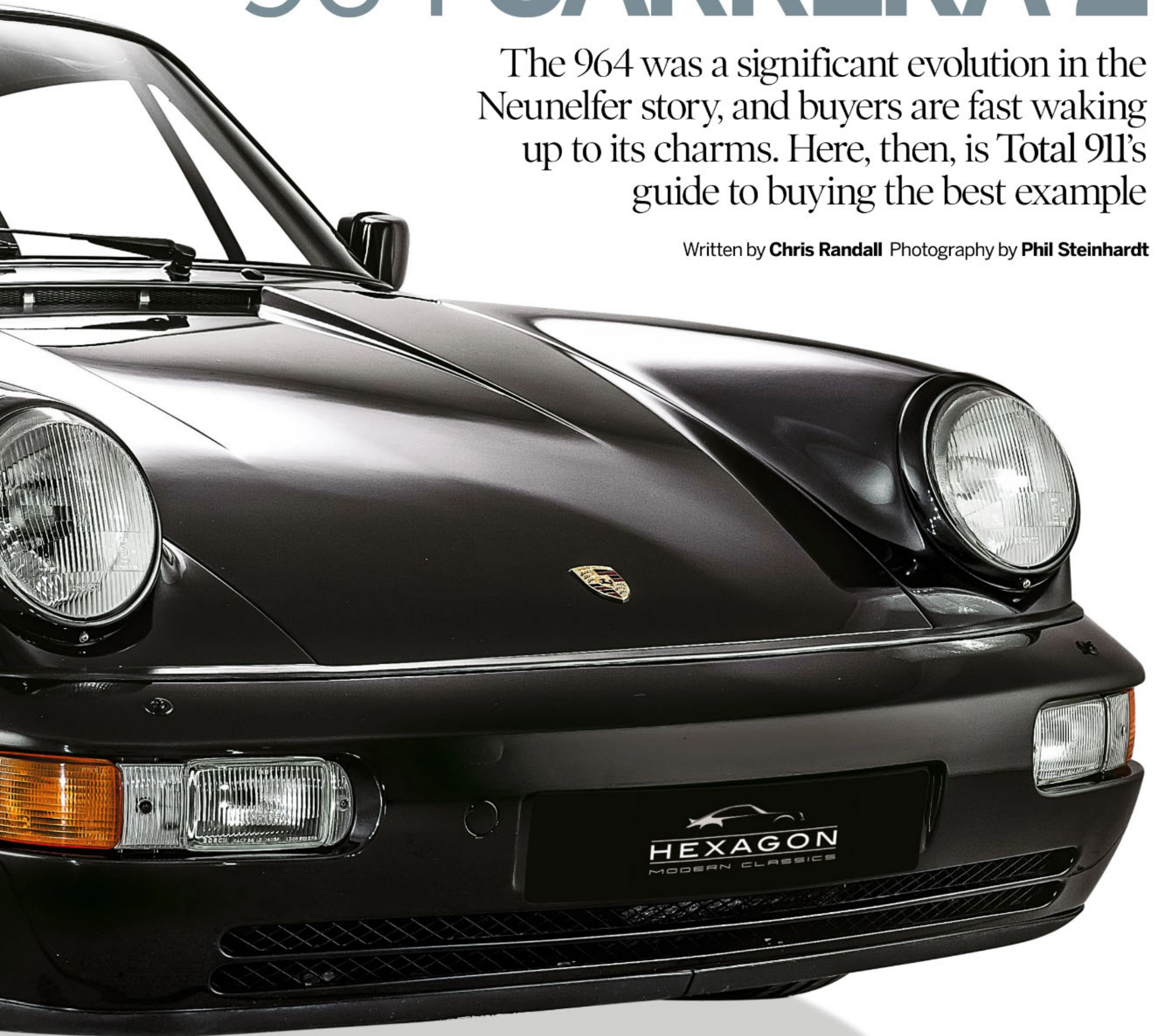




964 CARRERA 2

The 964 was a significant evolution in the Neuner story, and buyers are fast waking up to its charms. Here, then, is Total 911's guide to buying the best example

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



The 964 last graced our Ultimate Guide pages in Issue 130 when we got beneath the skin of the awesome 3.6 Turbo. This time it's the naturally aspirated Carrera 2 that's the focus of our attentions.

Rather more accessible than the blown car, prices are nonetheless rising as buyers come to appreciate its abilities, but is care needed when buying one?

On the outside, the bodywork needs the same careful scrutiny you'd afford any 911. The occasional track day and making full use of the performance on the road can result in accident damage, so examine the alignment of the panels, especially around the doors and rear quarter panels, and examine the inside of the front luggage compartment for ripples in the floor or inner wings. The original finish wasn't that good, so particularly tidy seams could indicate

previous repairs. Stone chipping around the nose isn't uncommon and look for cracks in the polyurethane bumpers and front lights, but if the paintwork is scruffy what else has been neglected?

The good news is that the shell was fully galvanised, which limits the advance of tin-worm, but it's worth checking beneath the screen rubbers and around the scuttle for tell-tale bubbling where the wipers are fitted. Blocked sunroof drain holes can cause problems too, so look for any corrosion around the opening or evidence that water has entered the cabin. This was the first 911 to get plastic wheel-arch liners, which afford extra protection, although an accumulation of road muck can rot the bumper mounts. Rust around the inner rear wing and above the light units could be a result of poor accident repairs, and replacing cracked light units is around £800 a pair. Another first was the electric rear spoiler,

which rose at 50mph and disappeared again at 6mph and could be manually operated via a cabin switch. This switch can stick, so look for correct deployment as a sticking switch can result in engine overheating. Replacement micro-switches are inexpensive, and an exchange control unit is around £160. The curtain will split over time but can be sourced for £70 or so.

As for the 250bhp, 3.6-litre flat six, the M64/01 unit is inherently strong. The bottom end is good for 200,000 miles with conscientious servicing but a degree of oil leakage is to be expected. Early examples suffered from seepage between the cylinder head and barrel, mainly due to heat distortion, but a sealing ring and steel head studs fitted for the 1991 model year effectively cured the problem. Still, don't expect the motor to be completely oil-tight but leaks should only be minor and can be lived with. Oil pressure should be at least 2.0 bar at idle. ➔

“As for the 250bhp, 3.6-litre flat six, the M64/01 unit is inherently strong but a degree of oil leakage is to be expected”

Model 964 Carrera 2

Year 1990-1993

Engine

Capacity 3,600cc

Compression ratio 11.3:1

Maximum power 250bhp @ 6,100rpm

Maximum torque 310Nm @ 4,800rpm

Transmission Five-speed manual or Four-speed Tiptronic, rear-wheel drive

Suspension

Front MacPherson struts with coil springs and anti-roll bar

Rear Semi-trailing arms with telescopic dampers, coil springs, and anti-roll bar

Wheels & tyres

Front 6x16-inch, 205/55/ZR16

Rear 8x16-inch, 225/50/ZR16

Dimensions

Length 4,250mm

Width 1,652mm

Weight 1,350kg

Performance

0-62mph 5.6 secs

Top speed 162mph





The 964 was the first 911 to get an active rear wing rising at speeds above 50mph; Design 90s were a new wheel style; on later cars, curved 'teardrop' exterior mirrors replaced 'elephant ear' items



PRICES OF PARTS

| | |
|---------------------------|-----------|
| • Front brake caliper | £631.47 |
| • Dual mass flywheel | £1,280 |
| • Air-con evaporator | £692.77 |
| • Dry-sump oil tank | £1,150.72 |
| • Front wishbone | £497.24 |
| • ABS control unit (exch) | £2,288.65 |
| • Tiptronic control unit | £1,272.44 |

Prices are inclusive of VAT and come courtesy of Paragon Porsche.

VALUES

Issues of age and rarity rear their head again here and, with prices changing rapidly, meaningful valuation isn't straightforward. What we do know is that the best examples are being advertised for more than £60,000 and you could easily pay half that for something in need of major work. Anything between that is far harder to pinpoint, but you can bet on prices only heading one way.

| | |
|---------------|-----------------|
| • Project | £27,000 |
| • Regular use | £38,000-£45,000 |
| • Concours | £60,000+ |



“The five-speed manual is considered to be pretty much bulletproof”

One area that will require careful checking, though, is around the oil tank for the dry-sump lubrication system. Located in the offside rear wing, not only can the rubber mounts perish, but also any signs of seepage will need thorough investigation as the tank and pipework can corrode. The tank itself is over £1,000 and budget around the same again to have the entire system removed and overhauled. You'll also need to establish the condition of the front-mounted oil cooler ahead of the offside wheel, and the pipes that run through the right-hand sill. It's often said that the engine will require a top-end rebuild at around 100,000 miles and while this is not necessarily the case, a specialist check is certainly worthwhile given the hefty four-figure sum that it can result in. And, while a little blue smoke on start-up is okay, anything excessive could point to worn valve guides, so get a

cylinder leakage test carried out for peace of mind. This engine was one of the last to feature mechanical tappets and adjustment is time-consuming, as parts of the exhaust need to be removed for access – it may have been ignored by a penny-pinching owner, so bear in mind that dealing with corroded exhaust fittings and flanges will add to labour costs. A heat exchanger is around £2,000 and two are fitted.

The 964 also benefitted from a twin distributor arrangement, the two units linked by a rubber belt. This belt can perish due to an ozone build-up within the distributor body, and Porsche added a small plastic vent pipe later on to minimise the problem. Check to see if this has been retrofitted. At the very least, failure of the belt will cause poor running and sluggish performance but the worst-case scenario is that the rotor arm stops in a position where it continually

fires a spark plug, which will destroy a piston with predictably calamitous consequences.

Transmission-wise, the five-speed manual unit is considered to be pretty much bulletproof and is certainly the enthusiast's choice. Hard use will take its toll, though, so listen out for any odd noises – especially in second or third gear. There's also the dual-mass flywheel, and while it should have been sorted by now – either by replacing the troublesome Freudenburg item fitted early on with the later LUK one (fitted from 1993), or by fitting a solid flywheel – it's worth checking for unusual rattles or vibrations at idle or as the clutch is operated. Clutch replacement is an expensive engine-out job, so be wary of juddering. The 964 was also the first recipient of the four-speed Tiptronic automatic gearbox, and although it's not especially troublesome, it doesn't provide the involvement that many 911 owners crave. Regular oil and filter changes will keep things healthy, but if you must have just the two pedals, make sure there's no slippage or jerky shifts. Failure of the control unit will mean a £1,200 bill for a new part.



A Tiptronic gearbox was optional on the 964, the first auto 'box since the Sportomatic was discontinued nearly a decade previously. New four-spoke steering wheel was also a new design, though a smaller diameter, three-spoke Clubsport option was available

As part of the far-reaching changes for the 964, the torsion bar suspension was replaced with a set-up comprising MacPherson struts and coil springs with lower wishbones at the front and semi-trailing arms aft, both in light alloy. A reliable arrangement, it's worth ensuring that quality parts have been used during any overhaul as well as checking for any modifications. The front ride height was deemed oddly high at launch, with many owners opting for a lower set-up, but uneven tyre wear is a sign that something is awry with bushes or wheel alignment. Front wishbone bushes perish, and a common fix is replacing the entire arm at around £500 for the part, while rear anti-roll bar links are another wear point, which can lead to rattles and odd handling. The brakes were more than up to the job but, given the four-figure cost of a complete overhaul, it's wise to examine the discs and pads for wear or neglect.

ABS was another 911 first, so ensure the warning light illuminates and extinguishes correctly on start-up. Moisture can affect the control unit located in the front compartment – a replacement is more than



BUYING TIPS

Modest values at one time ensured a steady supply of buyers wanting to own a slice of the 911 legend, but without necessarily spending on maintenance. That presents a risk today, along with the chance of over-priced substandard examples. It's tempting to view the 964 as a modern car that will soldier on without much care, but that would ultimately be a mistake.

- **History:** You'll want to be certain that previous owners haven't skimped on servicing, so expect a fat sheaf of bills. Accident repairs are also a risk, so check to ensure nothing nasty lurks in the car's history.
- **Bodywork:** Corrosion isn't a major concern, but don't ignore the possibility as it can nibble at the edges. More pressing is the need to avoid scruffy or badly re-painted examples, or ones that need exterior parts replacing or renovating.
- **Engines:** Tough if looked after, get compression and cylinder leakage tests done for peace of mind. You'll probably have to live with a few oil leaks, but ensure that the ignition and injection system are in good fettle. Also watch for corrosion in the dry-sump system.
- **Transmission:** Little to worry about with the manual, but check the paperwork for evidence of clutch or flywheel replacement as both are pricey. Tiptronic autos last well, but try before you buy as they don't suit everyone.
- **Brakes/suspension:** A major overhaul of either won't be cheap, so budget accordingly if it looks due. Corroded brake calipers and ABS woes are the main issues, along with perished front wishbone bushes and iffy wheel alignment.
- **Interior:** There's no need to put up with a scruffy cabin, so find another that's been better cared for. Sorting a failed heating and ventilation system will get expensive, so be sure it operates properly.

£2,000 on an exchange basis, although companies such as BBA Reman can repair them. There's also a common problem with the aluminium calipers which have a steel insert and the ensuing corrosion can cause the pads to stick, resulting in binding or pulling to one side under braking, and it makes changing the pads difficult. Stripping them down and removing the oxidation is time-consuming and costly, but the alternative is replacing the caliper at £630.

Also new was the appearance of hydraulically-assisted steering, and it's a case of checking the pump for leaks, along with corroded pipework. The C2 wore 16-inch Design 90 wheels, with 17-inch Cup 1 items appearing in 1992 – scuffs and corrosion points to careless ownership. Oily stuff out of the way, attention should turn to the cabin. It's reasonable to expect some signs of wear here, especially on the seat bolsters, but anything too scruffy signals neglect and is best avoided.

One area for particular scrutiny is the heating and ventilation system, which was thoroughly upgraded for the new model. It can prove troublesome and costly, though, with control motors seizing and failure

of the electronic control unit. Check that every setting works correctly and don't assume a re-gas will revive the air-conditioning, whatever the vendor might say. The condenser and evaporator are both prone to failure and replacements are eye-wateringly expensive. Electrics aren't a particular issue, but it is common sense to ensure that powered seats, sunroofs and the like all operate properly, as 1990 saw the introduction of Cabriolet and Targa variants.

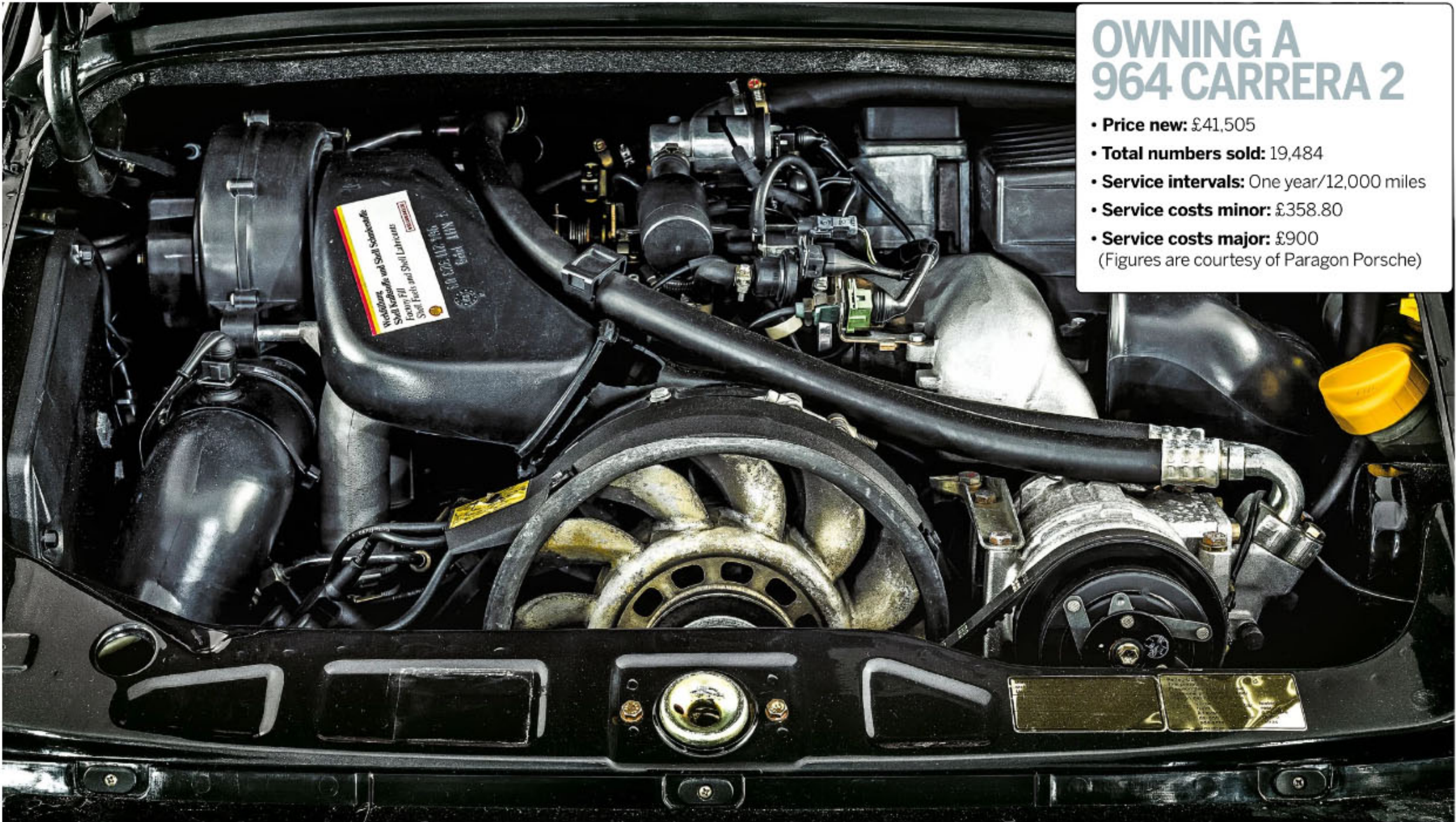
If open-air motoring tempts you, pay close attention to the condition of the roof panel and the associated seals. Ensure the mechanism for the former operates smoothly and be sure that water leaks haven't led to damp carpets or mouldy trim. If all that seems like a litany of woes, don't be put off, as the 964 is well understood by specialists. Clearly, with the earliest examples a more than a quarter of a century old, caution is needed, but this model brought the 911 into the modern age and buyers are beginning to appreciate this. Opinion continues to be divided over exactly where values may head, but given they will only be upwards, now seems a good time to grab a slice of this game-changing generation. **911**



SPECIALIST VIEW

"The 964's turnaround in fortunes in the last five years has been nothing short of spectacular: once the unloved 911, this generation is now many people's favourite as it provides more of a modern driving experience over a G-series car while retaining classic looks. Any 964 with a good service history is extremely sought after and if it's been restored, make sure it's had good money spent on a proper restoration. Find the right car and it's likely you'll want to hold on to it for a very long time indeed."

Jonathan Franklin, Hexagon



**OWNING A
964 CARRERA 2**

- **Price new:** £41,505
- **Total numbers sold:** 19,484
- **Service intervals:** One year/12,000 miles
- **Service costs minor:** £358.80
- **Service costs major:** £900

(Figures are courtesy of Paragon Porsche)



993 GT2

Get it for
£750,000-1.25million

Performance
★★★★★

Maintenance costs
★★★★★

Rarity
★★★★★

Value
★★★★☆



WATER-COOLING AND THE GT2

With such a rapturous reception for the 993 variant, it was hardly a surprise that Porsche would look to repeat the success with the water-cooled 996. The GT2 model duly arrived in 2001, once again, based on the Turbo model and boasting a hefty six-figure price tag. The wider body shell was to receive the attention of the aerodynamicists, gaining a composite front splitter and adjustable rear wing as part of a package of measures aimed at keeping the car in proper contact with the ground. It was for the best, as the top speed was now just a whisker short of the magic double-ton, propelled there by a further development of the 996 Turbo engine. Larger KKK24 blowers and 13.5psi of boost helped stretch the power to 462bhp, and once again, a six-speed manual gearbox and rear-wheel drive were standard. It was also the first Porsche to get PCCB composite brakes as standard and buyers could again choose from 'Comfort' or 'Clubsport' specifications.

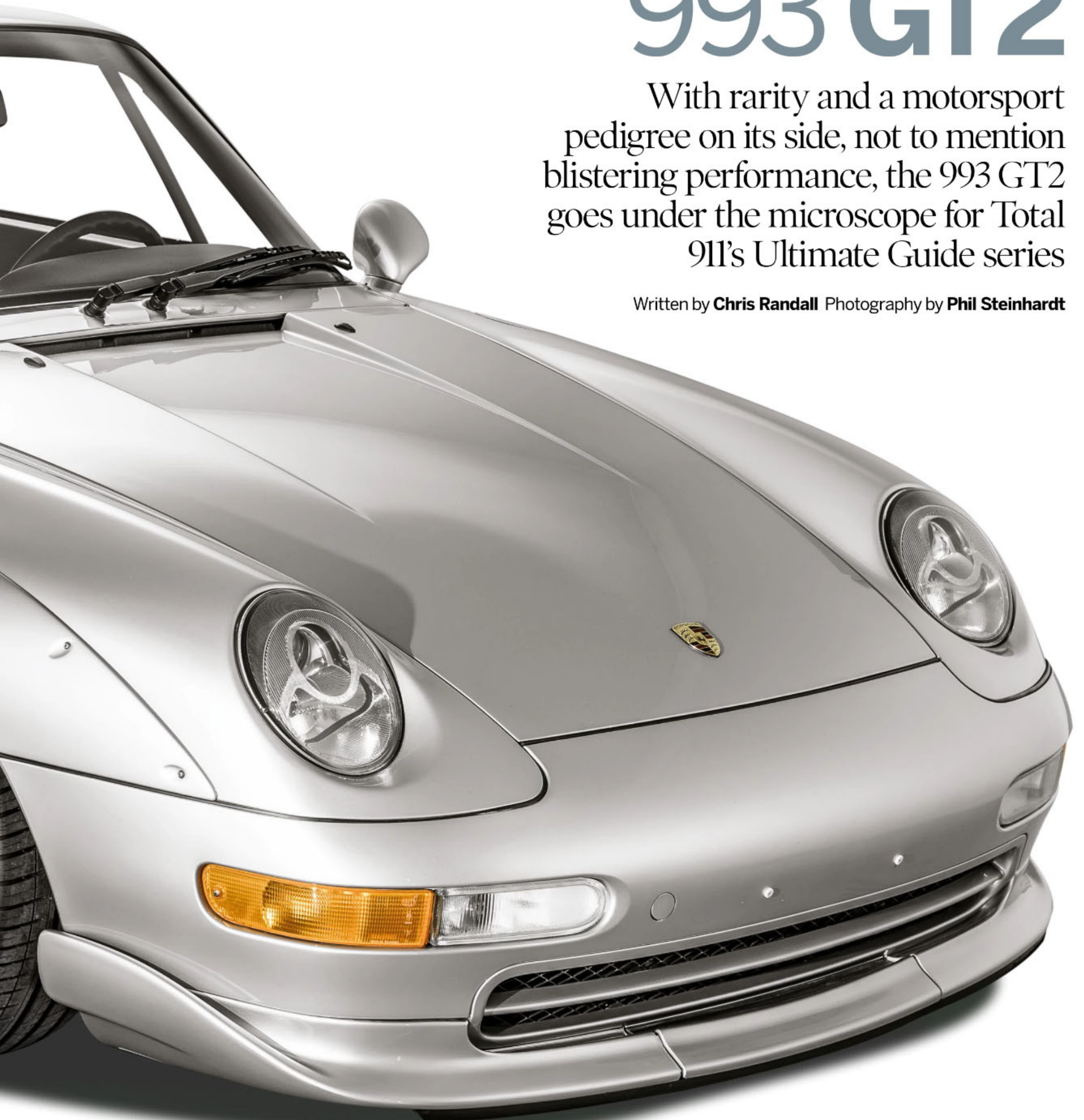




993 GT2

With rarity and a motorsport pedigree on its side, not to mention blistering performance, the 993 GT2 goes under the microscope for Total 911's Ultimate Guide series

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



Porsche's motorsport history is truly legendary. Let's face it, they've now won the Le Mans 24 Hour race a record 17 times and on this occasion they had our very own Nick Tandy at the wheel, so there's plenty to celebrate at Zuffenhausen and Weissach these days. Part of the reason that they've been able to dominate in so many motorsport disciplines is the ability to adapt – to meet changing regulations and the needs of those that sat right at the top of their respective sports. In the 1990s, that would lead to the development of the 993 GT2. Designed to compete in the new GT2 class, it would go on to be a huge success on track and form the basis of a very special homologated road car.

Soon granted the dubious 'widowmaker' tag, the GT2 appeared at the 1995 Geneva Motor Show being nothing more than a thinly disguised racer – and

nowhere was this more apparent than on the outside. The 993 Turbo formed the basis of the new car, which adopted the same hot-dip galvanised steel body but with added stiffening, including a front strut brace. However, from there the appearance took on a far more brutal slant compared to the smooth lines of the original Tony Hatter design.

At the front was a deeply sculpted bumper made from polyurethane, which fed air to the twin oil coolers mounted in the nose and featured a prominent air dam, complete with wing-like extensions at the outer edges to aid airflow around the front wheels. Purposeful sill extensions added to the hunkered down look, and while the rear bumper was a smooth and fairly simple affair, the spoiler that sat above it was anything but. The biplane wing sat atop a plastic engine cover and not only was it adjustable, but it was also the biggest yet to be seen on a 911. It also featured

a pair of distinctive air intakes, one on each side, that helped feed air to the glorious flat six – we'll come to those details in a moment.

In a move that would contribute to the shedding of nearly 200 kilograms from the weight of a Turbo model – the GT2 tipping the scales at a relatively lithesome 1,290 kilograms – the doors and front luggage cover were fashioned from aluminium and there was thinner glass for the side and rear windows. Of course, then there were those wheel arches. With metal pared from the edges of the wings in preparation, Porsche bolted plastic extensions to the arches. Measuring an extra 32 millimetres at the front and 30 millimetres aft, their ease of replacement suited the motorsport ethos perfectly, not to mention cementing the GT2s racetrack refugee image. With its look completed by the classic red reflector panel between the rear lights containing fog and reversing

“Designed to compete in the new GT2 class, it would go on to be a huge success on track”

Model 993 GT2

Year 1995-1996

Engine

Capacity 3.600cc

Compression ratio 8.0:1

Maximum power 430bhp @ 5750rpm

Maximum torque 540Nm @ 4500rpm

Transmission Six-speed manual, rear-wheel drive

Suspension

Front MacPherson struts with coil springs and anti-roll bar

Rear Multi-link with telescopic dampers, coil springs, and anti-roll bar

Wheels & tyres

Front 9x18-inch; 235/40/ZR18

Rear 11x18-inch; 285/35/ZR18

Dimensions

Length 4,245mm

Width 1,855mm

Weight 1,290 kg

Performance

0-62mph 3.9 secs

Top speed 189mph





Styling of the 993 GT2 – badged 911 GT – left little illusion as to its homologated racing heritage, with ram-air intakes, plastic bolt-on arches and tweaked bodywork to better manage airflow at speed

TIMELINE OF THE PORSCHE 911 GT2

- **1995**
Porsche introduces the first GT2 with the 993 generation. Its 430bhp and beefy aerodynamic addenda distinguish it from lesser 911s.
- **2001**
996 GT2 becomes the most powerful 911 to date. Rear-wheel drive only and with no traction control, it's as focused as they come.
- **2004**
A revised model goes on sale, now boasting a massive 483bhp via tweaks to ECU and turbos. Thankfully, carbon ceramic brakes are standard.
- **2007**
The 997 GT2 arrives with 530bhp and 680Nm of torque. Essentially a Turbo with rear-wheel drive and the wick turned up to 11.
- **2010**
Porsche go back to basics, shedding weight from the bodywork and interior, and adding more power to create the 997 GT2 RS.
- **2013**
Spy pictures emerge of the 991 GT2 testing at Nurburgring. Porsche then announce there are no plans for another GT2.





“There was no doubting the ferocious performance on offer with the GT2”

lamps, this was a 993 like no other. Lastly, as an interesting aside, the badges were somewhat unusual, as the car wore a '911 GT' badge on the engine cover and 'GT' was embossed into the ends of the rear spoiler. Needless to say, the mechanical recipe was just as enticing. Once again it was the Turbo model that donated its engine – a 3.6-litre unit featuring twin KKK blowers boosting at 0.9 bar, and twin intercoolers that were fixed directly above the motor. Along with dry sump lubrication, the cylinder heads were forged rather than cast and there were stronger connected rods, while the re-profiled camshafts were driven by double-row chains and operated two valves per cylinder. With fuel and ignition taken care of by a modified version of Bosch's DME Motronic 5.2 system

that featured full OBDII diagnostics, tweaks to the exhaust and an 8.0:1 compression ratio, the results were nothing short of sensational. Maximum output was 430bhp at 5,750rpm, backed by 540Nm of torque at an accessible 4,500rpm, with the specific output at an impressive 119.4bhp per litre. All of which translated into a maximum speed of 189mph and a sub-four second 0-62mph time – the sort of numbers that wouldn't be matched until the 997 Turbo appeared a decade later. As for fuel consumption, it was probably better not to ask. Making proper use of the performance would see the 92-litre fuel tank empty remarkably quickly, as the figures tumbled into the early to mid-teens. It's unlikely that potential buyers cared one jot, of course. Somewhat unbelievably,

given the sledgehammer performance that was on offer, Porsche had chosen to ditch the four-wheel drive hardware that featured on the 993 Turbo, so drive was transmitted to the rear wheels only, via a dual mass flywheel and the G64/51 six-speed manual transmission. Overall gearing was slightly higher and the GT2 benefitted, thankfully, from a limited slip differential with a locking ratio of 25 per cent under load and 40 per cent on the overrun.

So it certainly looked the part, and there was no doubting the ferocious performance on offer, but Porsche weren't finished yet as the chassis was to come in for some detailed changes. Power assisted steering was standard, although more direct than that fitted to the Turbo, and the brakes comprised of ventilated and cross-drilled discs at all four corners – 322 millimetres in diameter, 32 millimetres wide at the front and 28 millimetres wide at the rear. The 'Big Red' calipers were made from aluminium alloy and used four pistons to clamp the upgraded pads,



Comfort-specification GT2s such as this example had carpets and leather-trimmed seats rather than buckets and a Matter rollcage as found in the Clubsport. Air conditioning, airbags and audio were all options

then everything was backed by Bosch ABS. As for the suspension, the front featured the ubiquitous MacPherson struts with dual-tube dampers, while the lower wishbones were in light alloy. At the rear was the 'Lightweight, Stable, Agile' arrangement, again in lightweight alloy and with dual-tube dampers, and there were beefier anti-roll bars at both ends. The ride height was 20 millimetres lower than normal and there was considerable more use of solid bushings and added adjustability.

The final piece of the aesthetic puzzle was provided by three-piece Speedline wheels that used aluminium for the rim and even lighter magnesium for the centres. Measuring a total of 18-inches in diameter, they wore 235/40 rubber up front and a rubber band-like 285/35 at the rear.

As usual with Porsche, buyers had a further choice to make – whether to go with the 'Comfort' specification (relatively speaking, of course, for such a road racer) or tick the option box



BUYING TIPS

Given the rarity and spiralling values, you could almost consider this section to be somewhat immaterial. Buying from a specialist source and exercising due diligence on condition and history are going to be the crucial factors.

- **Provenance:** With so few around, it will be easy to establish the car's past. Let's face it, no one should part with such serious sums of money without being certain of the history.
- **Bodywork:** Chances are the car has sat rarely used in a collection, so any damage should be viewed with suspicion. Replacing or repairing the lightweight parts is going to be costly, while it appears that items like the rear wing are no longer available new. It would have cost £5,000 with VAT.
- **Engine:** It should be faultless, but examine the history for any signs of major work. Needless to say, a rebuild is going to be a pricey business so a potential purchase will need a thorough inspection, including a computer diagnostic check for any signs of abuse.
- **Running gear:** Neither the brakes nor the suspension should exhibit any inherent weaknesses, but a complete overhaul isn't cheap. A full set of brakes will cost in the region of £1,300 in parts alone, while the Speedline wheels are near to a thousand pounds each.
- **Interior:** Build and material quality should be top-notch and, like the rest of the car, it should look like it hasn't been used at all.

marked M003, which would buy them something a little more extreme in the form of the Clubsport. Either way, manual windows and a lack of sunroof were the order of the day, although those that opted for a tad more civility benefitted from beautifully sculpted leather trimmed bucket seats and three-point seatbelts. A Momo steering wheel was standard too, while air-conditioning, air bags and an audio system were all available as options – although the limited soundproofing and carpeting in all GT2s would no doubt have rendered the latter somewhat pointless. That's without considering the aural delights of that engine which is surely all the soundtrack you'd ever need. Clubsport buyers, on the other hand, would find themselves behind the wheel of something that made no pretence of hiding its circuit origins.

A Matter roll cage was welded in place, and there were fixed racing seats covered in fire-resistant Nomex with full harnesses. Simple pull straps were fitted to the doors, the roof lining was deleted and there were mats rather than carpets – and just in case you needed further reminding that this was a

911 built for Silverstone and not suburbia, the cabin featured a battery kill switch and fire extinguisher. If all that mattered to you was the serious business of driving, then this would certainly have been your car of choice, any comprises it demanded for road use paling into the background the first time those blowers spooled up.

At this stage it's worth talking numbers. The headline alluded to the GT2s rarity – there are 173 examples built in total, with 16 of those reckoned to be Clubsport variants. Although the GT2 was officially made between 1995 and 1996, a further 21 examples were made in 1998 – these differed by featuring steel doors, standard rather than thinner gauge glass, and engine mods that resulted in 450bhp. The price for these last models was in the region of DM 287,500 – not an insubstantial sum back then – although the 'standard' model demanded DM 268,000, which was around £135,000. But then such excellence never comes cheap, and the first of the GT2s was excellent indeed. Judging by the values being fetched today, it's a star that's unlikely to wane any time soon. **911**

“Such excellence never comes cheap, and the first of the GT2s was excellent”

SPECIALIST VIEW

“The Porsche 993 GT2 is an exceptionally desirable sports car. With such limited production numbers, seeing one in the metal is a rare sight, and its phenomenal performance credentials has many believing it represents the pinnacle of the air-cooled flat six – and I'd have to agree.

A race-ready car with a licence plate, it is perhaps one of the most coveted and breathtaking 911s you could ever hope to own.”

Jonathan Franklin,
Hexagon Modern Classics





OWNING A 993 GT2

- **Price new:** £135,000 (1995)
- **Numbers built:** 173
- **Service intervals:** 1 year/12,000 miles
- **Service costs minor:** £528
- **Service costs major:** £900
(Figures are courtesy of Paragon Porsche)





WATER-COOLED

| | |
|----------------|-----|
| 996.1 Carrera | 044 |
| 996 Carrera 4S | 052 |
| 997.2 Carrera | 060 |
| 997.1 GT3 | 068 |
| 991.1 GT3 | 076 |





996.1 Carrera

Get it for
£12,000-£20,000

Performance

★★☆☆☆

Maintenance costs

★★☆☆☆

Rarity

★★☆☆☆

Value

★★★☆☆



THE GEN2 996

With some of the brouhaha surrounding the water-cooled 996 having died down, it was time for a round of updates. The Gen2 model arrived in 2001, with the biggest difference being the adoption of a 3.6-litre motor boasting more power and torque, as well as Variocam Plus that operated on both inlet and exhaust camshafts. Considered less prone to failure than the earlier 3.4, it provided a useful step up in response and performance despite an overall weight gain of around 25kg. The looks came in for some subtle tweaks too, with re-profiled bumpers and the use of Turbo-style headlamps with clear rather than orange indicators. The covers for the front and rear compartments got electric releases rather than cables, while the Cabriolet would see the plastic rear window replaced with heated glass. 2002 model year cars also benefitted from cabin improvements in the form of an opening glovebox lid and cupholders, while the ventilation system and cabin plastics were improved. New

engine aside, the changes were modest but effective, and kept the car fresh until the arrival of the 997 in 2005.

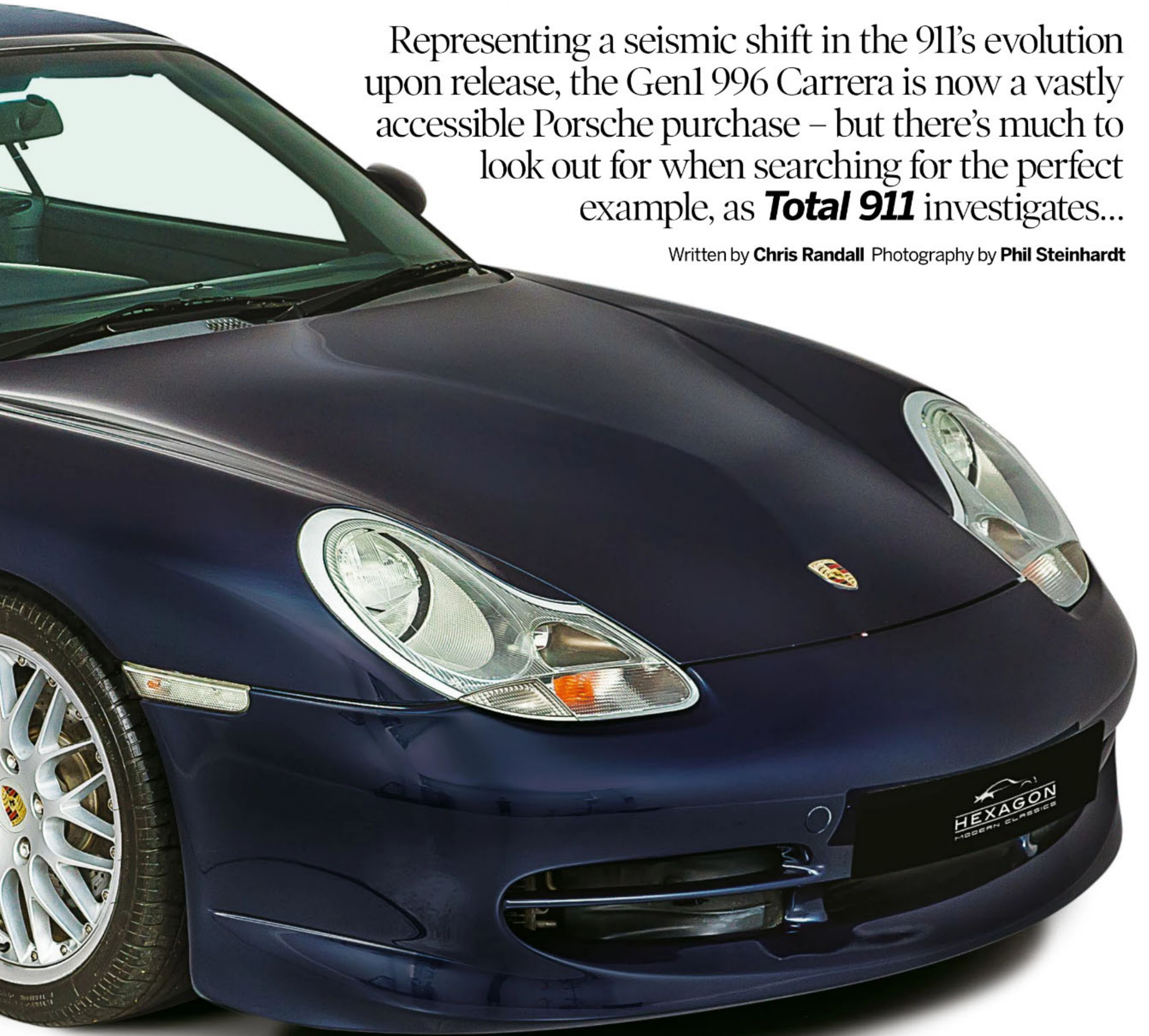




996 CARRERA

Representing a seismic shift in the 911's evolution upon release, the Gen1 996 Carrera is now a vastly accessible Porsche purchase – but there's much to look out for when searching for the perfect example, as **Total 911** investigates...

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



After its launch at the 1997 Frankfurt Show, the new 996 left sections of the 911 faithful underwhelmed with the new direction Porsche had decided to take with the car. The design was the work of Pinky Lai and Harm Lagaay, and was in itself a marked change of direction for the evergreen sports car, following on as it did from the more classic proportions of the 993.

Firstly, it had grown in size over the outgoing model, carrying an additional 185mm in length and 30mm in width, although it was 50 kilograms lighter than the 993, weighing in at 1,320 kilograms in Carrera 2 form. It was also 45 per cent stiffer and more aerodynamic, boasting a drag coefficient of just 0.30. In fact, it was a good deal smoother than its predecessor, with a windscreen now raked at 55 degrees rather than 60, and a sleeker nose cone incorporating what would become known colloquially as 'runny egg' headlamps.

Likewise, the shape of the front bumper had been tuned to manage the airflow that passes over the twin radiators before it exits from the wheel arches, instead of beneath the car. Combined with the electrically raised rear spoiler that popped up at 75mph, Porsche claimed low levels of lift at both axles. However, with an increase in size and an ever-luxurious interior,

some were worried that their favourite sports car was morphing into more of a long-distance GT, but it was the new engine that was to cause the most angst.

In a move considered sacrilege by many, the M96 3.4-litre flat six was now cooled by water rather than air, a development necessitated by the need to meet ever more stringent emissions and drive-by noise regulations. Porsche had no choice if the 911 was to continue to flourish, and they took the opportunity to update the powerplant, which in GenI form managed a useful 300bhp.

The four valves per cylinder used hydraulic lifters and were operated by chain-driven camshafts. There was VarioCam variable valve timing for the inlet camshafts, and a two-stage resonant inlet manifold was employed. The latter was fitted with a butterfly valve controlled by the Motronic engine management – an arrangement that brought notable improvements in low-rev torque and top-end breathing. Also new were knock sensors for each cylinder, forged aluminium pistons and connecting rods that were forged in one piece before being snapped for a perfect fit. Further improvements were made to the lubrication system, an integrated dry-sump arrangement that saw oil lines cast directly into the block and heads that avoided the likelihood of leaky external pipework. ➔

“

IN A MOVE CONSIDERED SACRILEGE BY MANY, THE M96 3.4-LITRE FLAT SIX WAS NOW COOLED BY WATER RATHER THAN AIR, A DEVELOPMENT NECESSITATED BY THE NEED TO MEET EVER MORE STRINGENT EMISSIONS AND DRIVE-BY NOISE REGULATIONS

”

| | |
|---------------------------|--|
| Model | 996.1 Carrera |
| Year | 1998-2001 |
| Engine | |
| Capacity | 3,387cc |
| Compression ratio | 11.3:1 |
| Maximum power | 300bhp @ 6,800rpm |
| Maximum torque | 350Nm @ 4,600rpm |
| Transmission | Six-speed manual or five-speed Tiptronic, rear or four-wheel drive |
| Suspension | |
| Front | MacPherson strut; coil springs; antiroll bar |
| Rear | Multi-link with telescopic dampers; coil springs; antiroll bar |
| Wheels & tyres | |
| Front | 7x17-inch, 205/50/17 |
| Rear | 9x17-inch, 255/40/17 |
| Dimensions | |
| Length | 4,430mm |
| Width | 1,765mm |
| Weight | 1,320kg (Coupe) |
| Performance | |
| 0-62mph | 5.2 secs |
| Top speed | 174mph |





Clockwise from top left: the 'runny egg' headlamp design; spoiler-mounted brake lights; fixed aerokit spoiler option; the famous rear badge



CARRERA TIMELINE



1973

The Carrera badge appears for the first time on the 911, at the time denoting the top-of-the-range Rennsport model.

1984

The SC, which replaced the Carrera 2.7 and 3.0, makes way for the 3.2 Carrera, its electronically managed flat six pushing out a healthy 231bhp.

1989

The arrival of the 964 heralds a major overhaul for the 911, and the Carrera is the first model to benefit from four-wheel drive.

1993

As the last of the air-cooled cars, the 993 Carrera is guaranteed a place in Porsche history. It's also the first model to carry Carrera S badging.

1998

Water-cooling arrives courtesy of the 996. Not everyone is convinced and engine problems are a concern, but it's a great entry-level 911 now.

2005

Many consider the 997 Carrera to be a return to form. Styling is less slippery than on the 996, although the M97 engine is similar to the M96.

2012

The 991-model Carrera and Carrera S arrive, the 3.8-litre DFI engine showing how far things have



A big change for the 996 was the redesigned interior. Climate controls were sited in the centre console, while many owners took advantage of the lengthy options list; Tiptronic automatic was a popular choice, Porsche claiming manual shifts in 0.2 seconds. The 996 boasted plenty of safety kit, including a full suite of airbags

Porsche also fitted twin catalytic convertors that used metal rather than ceramic internals, which they deemed more efficient.

Much has already been written about this engine's apparent propensity to explosively self-destruct, but there was no doubting the technical advances that were made. Once again, a dual-mass flywheel was bolted to the crankshaft and helped feed drive to a choice of transmissions. The manual was a six-speed unit that had been beefed up with double-cone synchromesh and a cable-operated shift, while those after a more relaxing experience could opt for the five-speed 'Tiptronic' automatic. Left in 'Drive', it was capable of smooth and responsive gear changes, but for more control it needed the lever nudging left into manual mode, where you could use the wheel-mounted buttons.

Porsche claimed that shifts were achieved in just 0.2 seconds – rapid at the time, but a world away from the millisecond response of today's PDK units. The Carrera 4 that arrived in 1999 used a viscous coupled

four-wheel-drive setup that incorporated Porsche's 'Automatic Brake Differential' system as well as 'Porsche Stability Management' (PSM, which became an option for the C2 at the same time). Just five per cent of drive was sent to the front wheels in normal running, although up to 40 per cent of power could be shuffled forwards if slip was detected. Choosing the C4 brought few penalties; overall weight rose by 55 kilograms, weight distribution was now 40/60 compared to 38/62 for the C2, and the front luggage compartment shrank slightly, requiring the fitment of a deflated spare.

Just as much attention had been paid to the rest of the running gear, the 996 being fitted with an aluminium-rich MacPherson strut front suspension and a multi-link arrangement mounted on a separate alloy subframe. The latter was dubbed the 'Lightweight-Stable-Agile' system, but whatever the acronym it certainly contributed to the confidence-inspiring handling. The 996 stopped well too, courtesy of larger cross-drilled and ventilated discs squeezed by four-piston Monobloc

calipers (black on C2s, silver on C4s), backed by the Bosch 5.3 ABS. The hydraulic power steering required just 2.98 turns between locks, while the cast-alloy wheels were 17 inches as standard, although many buyers were enticed by the optional 18s.

Extensive changes were also wrought on the inside, where the previously haphazard control layout was replaced with something more befitting the 911's position among the sports car elite. The distinctive five-dial instrument pack was still present and correct, the tachometer still dead ahead and now incorporating a digital speed readout, but controls for the hi-fi and climate control were now logically grouped in a new centre console.

The heating and ventilation system itself was much improved, and buyers could choose from a wide range of entertainment options featuring additional speakers and amplifiers and a six-disc CD changer mounted in the front compartment. And while not everyone was sold on the build quality (although it has



“

MUCH HAS BEEN WRITTEN ABOUT THIS ENGINE'S APPARENT PROPENSITY TO EXPLOSIVELY SELF-DESTRUCT, BUT THERE WAS NO DOUBTING THE TECHNICAL ADVANCES THAT WERE MADE

”



BUYING TIPS

A 911 of this type needs to be in nothing short of perfect condition, and signs that it might not have received anything approaching fastidious care should have you running a mile. The cost of sorting a bad one is likely to prove stratospheric, so you have been warned.

- **Bodywork:** Rust shouldn't be an issue, and is likely to result from poorly repaired accident damage. Stone-chipping is common though, and watch for damage to bumpers and condensation inside light units.
- **Engine:** The 3.4-litre engine is much maligned, but serious issues will likely have occurred by now. It's worth checking the history for evidence of major work, but a specialist inspection is best to search for symptoms of scored bores or RMS leaks.
- **Transmission:** Hard-worked manuals can suffer from weak synchromesh and pop-out of gear. The notorious IMF bearing will show few symptoms before failing, though check for oil leaks between the engine and transmission.
- **Suspension/Brakes:** Wear and tear is likely to be the main concern, and complete refurbishment is a costly job. Budget accordingly if it has been neglected.
- **Cooling system:** The front-mounted radiators and air-conditioning condenser are prone to rot thanks to a build-up of detritus. Check they are clear and that there are no signs of leaks.

actually proved quite robust), there was no doubt that the 996's cabin was a refined and luxurious place to be.

Plenty of leather was applied to the seats and surfaces, and a raft of modern conveniences on the options list, which many buyers found hard to resist – hence the number of examples littering classifieds today – and there was always the lure of the Porsche Exclusive programme. In one final split from the past, the pedals were no longer floor hinged, this last remaining 911 idiosyncrasy confined to the history books, although the new car did get a roomier footwell.

Of course, Porsche weren't about to forget those that liked blending rear engine thrills with wind in the hair, and the Cabriolet duly arrived for the 1999 model year. The multi-layer cloth hood could be raised or lowered in 20 seconds, all at the push of a button located adjacent to the ventilation controls. In a bid to ensure perfect sealing at speed, opening the doors would see the window glass drop two millimetres before lifting snugly against the roof seal when the door was closed.

The system worked too, with impressive refinement on offer at motorway pace with the roof raised. If there was a penalty to be paid for al-fresco enjoyment,

it was the 75 kilograms or so added by the folding roof mechanism, although in reality there was a negligible effect on performance. Those wanting greater security and weather resistance also benefitted from a standard aluminium hardtop weighing just 33 kilograms, although fitting it was a job for at least two people. As you might expect, Porsche continued to make improvements to the Gen1 car.

Safety credentials were boosted by the Porsche Side Impact Protection system (POSIP), while in 2000 all models got the improved Bosch Motronic 7.2 engine management system with a drive-by-wire throttle. Known as 'E-gas', the system had been fitted to Carrera 4 models from the start. So where does all that leave us? Well, first off with a 911 that continues to divide opinion, even although it's fast heading for two decades since launch. Secondly, with one that – for the time being – still offers a cost-effective way into 911 ownership. The 996 wasn't perfect, and a combination of water cooling and a reputation for expensive engine problems soured the experience for many would-be buyers, but changes were needed, and as always Porsche ultimately delivered. **911**

“

THOSE WANTING GREATER SECURITY AND WEATHER RESISTANCE BENEFITTED FROM AN ALUMINIUM HARDTOP WEIGHING JUST 33 KILOGRAMS

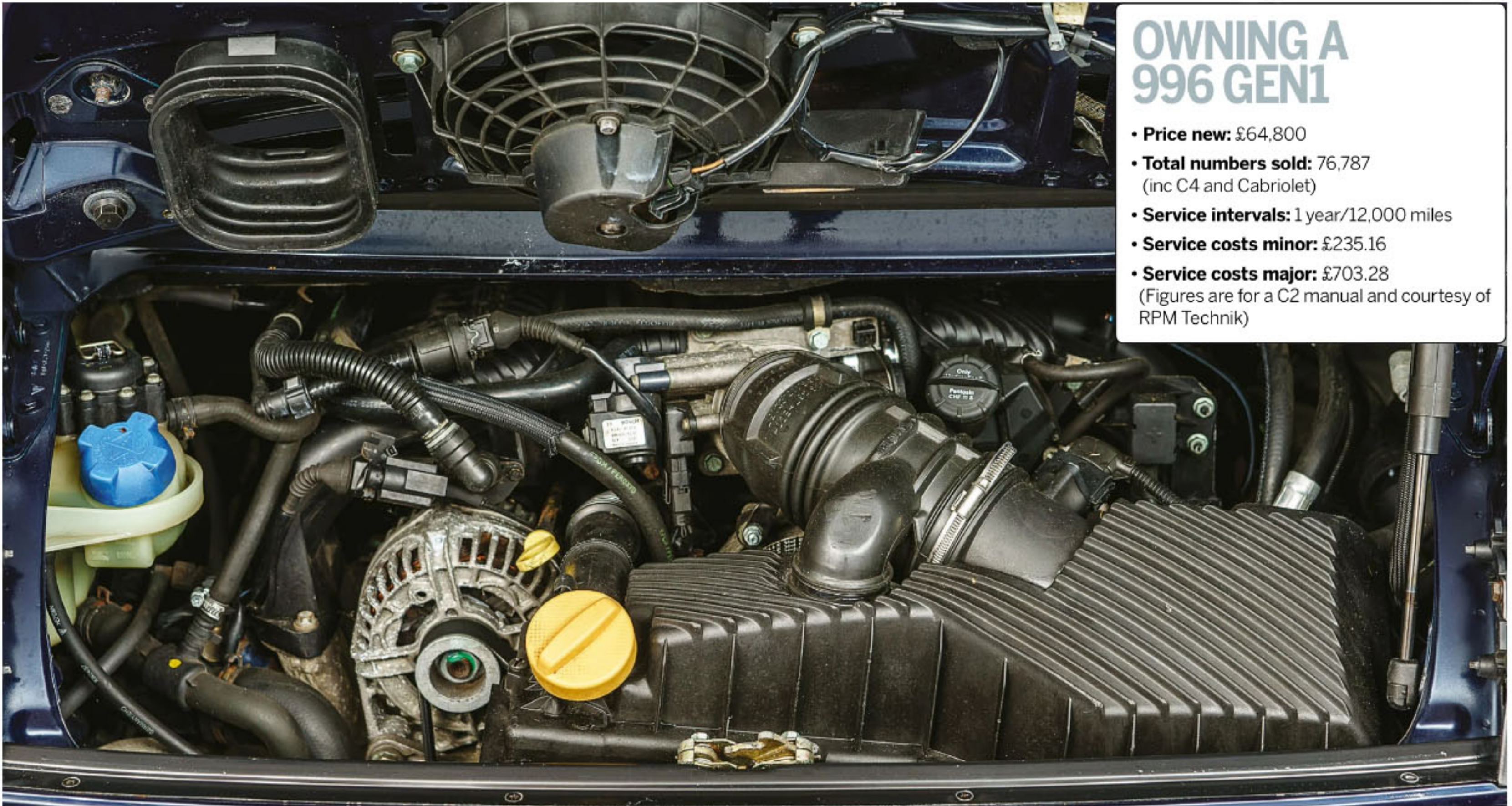
”

SPECIALIST VIEW

“The 996 hasn't always been the most desirable model, but it does offer tremendous value for those looking to enter 911 ownership. They need maintaining properly though, so you need to be sure you can afford to keep it in top condition. Of course, you must be aware of the potential for engine problems, although not all cars are affected. There are also quite a few on the market, so it's hard to predict how Carrera model prices will develop short term, but the model to keep an eye on is the Turbo. It's a lot of car for the money, and that would certainly be my choice.”

Jonathan Franklin, Hexagon





OWNING A 996 GEN1

- **Price new:** £64,800
- **Total numbers sold:** 76,787 (inc C4 and Cabriolet)
- **Service intervals:** 1 year/12,000 miles
- **Service costs minor:** £235.16
- **Service costs major:** £703.28
(Figures are for a C2 manual and courtesy of RPM Technik)



"I'VE GOT ONE"



"To me, the word 'Carrera' conjures up the Eighties icon. Fast-forward, and I now own one from a newer generation. This is by far the best car I have owned. For what is a supercar of its day, it is comfortable, spacious, performs well and can take daily use like a modern hot hatch. For my particular car, the body colour and Turbo wheel combination looks fantastic, and the four-wheel-drive system gives it that added level of on-road stability. It inspires confidence in its ability to cover ground at speed, and mine, coupled with the Tiptronic gearbox, makes this an effortless GT car."

Rob Clarke

PORSCHE INDEX

Written by **Chris Randall**
Photography by **Neil Godwin**

996 CARRERA 4S

The 996 has its detractors, but the C4S is an affordable route into wide-body ownership. It's time for a more in-depth look...

996 Carrera 4S

Get it for
£22,000-35,000

Performance

★★★★☆

Maintenance costs

★★☆☆☆

Rarity

★★☆☆☆

Value

★★★★☆



Background to the 996 C4S

Turbo look' is a familiar part of the Neunelfer enthusiast's parlance, but you have to head back to 1984 for its first appearance. Back then, it meant the M491 option for the 3.2 Carrera, a car that featured familiar mechanicals clothed in the wider-hipped shell of the groundbreaking Turbo, and it soon became clear that Porsche had hit on a winning recipe.

Continuing with both the 964 and 993 generations, it debuted on the car you see here in the latter part of 2001, before going on sale the following year. Buyers were asked to pay around £65,000 for the privilege if

they opted, as many did, for the optional Tiptronic gearbox – £25,000 less than the amount asked for the full-fat Turbo – but that didn't stop more than 23,000 of them signing on the dotted line. Today, according to Paragon Porsche's Jason Shepherd and RPM Technik's Greig Daly, £27,000-£35,000 will secure a very nice Coupe. Viewed in the context of the savage depreciation that afflicts many modern cars, that's impressive for a 911 that's a decade and a half old, and quite astonishing value given the looks, performance and desirability on offer. What attracted many original buyers were those more muscular looks that came courtesy of an additional 60mm of rear width and the front and rear bumpers from the Turbo. The front item was re-profiled to account for the fact that the blown model's rear spoiler was missing, and there were no air intakes on the rear haunches, but the C4S did gain a full-width reflector strip between the

rear lights, along with the same style of alloy wheel (although these featured solid rather than hollow spokes). The new model also shared the Turbo's 10mm-lower suspension setup – albeit slightly retuned and softened – and the 'Big Red' brakes with 330mm discs. Otherwise, it was standard C4, which meant a viscous-coupled four-wheel drive system with Porsche Traction Management (PTM) and a 320bhp 3.6-litre flat six that could be paired with six-speed manual or five-speed Tiptronic transmissions.

The extra width did bring a marginal performance penalty, adding 0.1 seconds to the 0-62mph sprint and lopping 3mph from the top speed (now 5.1 seconds and 174mph respectively) compared to the C4, but it was of no consequence in reality. A Cabriolet version was also offered, and reckoned to account for around a third of total sales, but the C4S would prove relatively short-lived as the 997 arrived in 2004. ➔





ABOVE AND RIGHT Rear spoiler automatically deploys at 75mph; Primitive PCM1 screen narrower than PCM2 found on later MY 2004 996s and onwards



What's it like to drive?

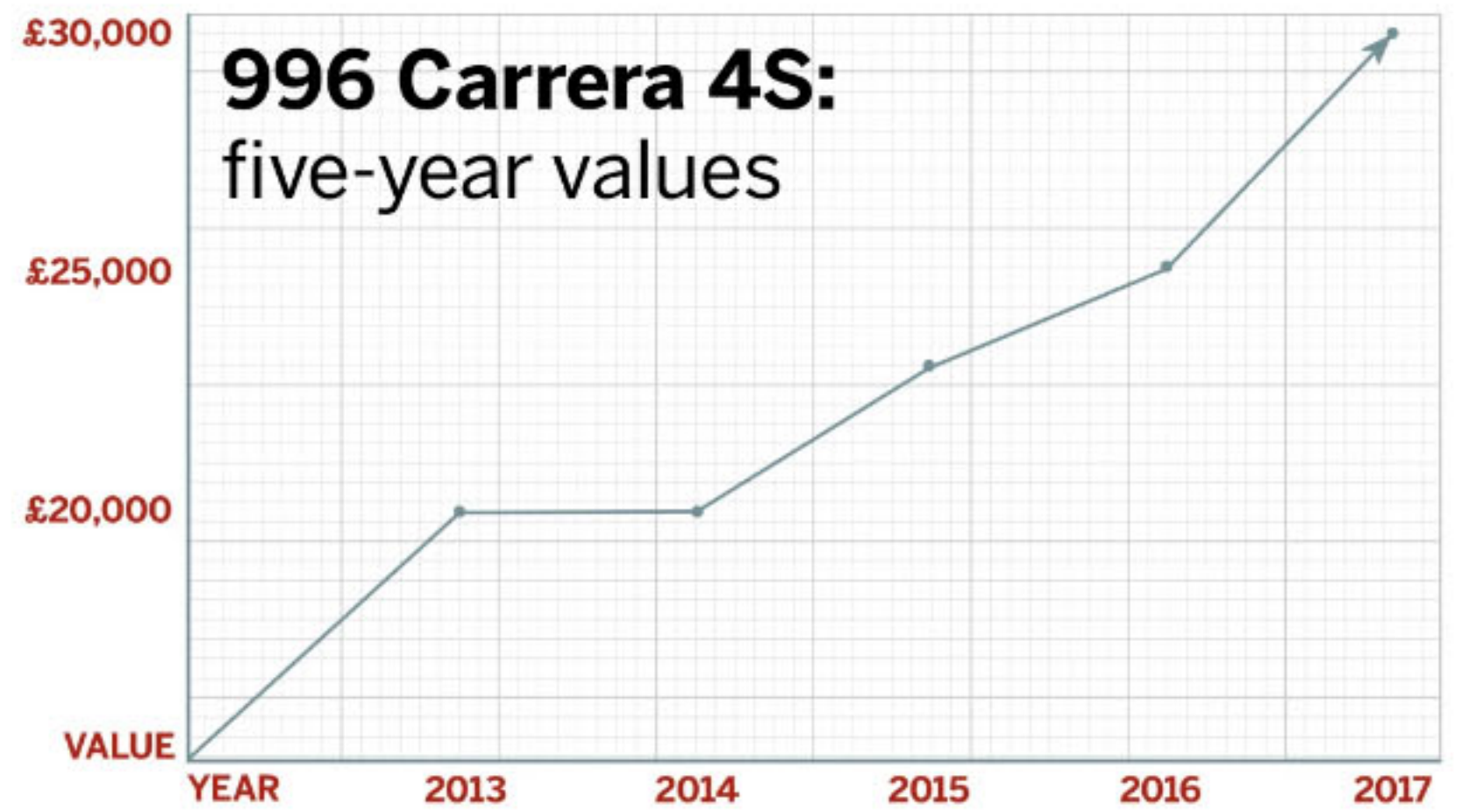
The C4S is no stranger to the pages of this magazine. As recently as issue 152, Kyle Fortune pitted it against the pricier – and much quicker – 996 Turbo, and came away from the encounter more than a little impressed by what the C4S had to offer. Yes, the Turbo was ferociously quick, but the C4S countered with a less daunting driving experience, one where you could make fuller use of the power on offer. But it wasn't just about speed, as he also relished the greater delicacy when it came to responses and feedback, commenting on the “enjoyable balance between the chassis and the way the flat six delivers its power”. Add in a slick manual gearbox and well-matched control weights, and it was, said Kyle, “So much more than the sum of its Turbo-look parts.” ↻



“

THE TURBO WAS QUICK, BUT THE C4S COUNTERED WITH A LESS DAUNTING DRIVING EXPERIENCE

”



Market rivals

We know that 996 prices are on the rise, but the value offered by a tidy C4S still seems remarkable. While that's good news in many respects, it does mean the choice of other 911s available for similar money is somewhat limited



996 C2/C4

Being the first water-cooled Neunelfer was always going to mean a difficult start, and a reputation for unreliability and expensive engine failures didn't help. With values depressed, it became the generation of choice for those on a budget, but times are changing. C4S money could get you a very low miles C2/C4.



997.1 Carrera

The replacement for the 996 moved the game on, impressing owners with a blend of refinement and strong build quality. Benefitting from more compact dimensions compared to the 991, it meant the 997 felt wieldy when the going got twisty, and it was quick enough in entry-level form compared to the 996 C4S.



Air-cooled

The money required for a good C4S will just about secure an air-cooled car, but you'll be heading into riskier territory. Left-hand drive and/or high-mileage examples exist, but care is needed to avoid a costly project. You might unearth a gem, but it would be unwise to buy without specialist advice.

RIGHT Example here has narrower standard seats that are heated (optional), wider Sports seats were also optional

Running costs

Given that previous issues of **Total 911** have covered 996 engine matters at some length, there's little need to labour the point again here. Suffice to say that the health of the motor is paramount, and as age and mileage take their toll, it would be prudent to invest in a thorough pre-purchase inspection before you commit. Respected specialists Charles Ivey Ltd charge £370, for example, and it would be money well spent if you have any doubts over the history of the car you're considering.

With that concern satisfied, regular maintenance is both straightforward and reasonably priced: expect to pay around £220 for a quick change of oil and filter at a specialist, with RPM Technik asking £300 for a 12,000-mile check and £1,080 for the bigger 96k service. If you do decide to take the plunge without a professional inspection then check the history for evidence of IMS or RMS upgrade/replacement, and ensure there's no sign of hesitation or uneven running, which can be down to failing coils or air-mass meters, or problems with the VarioCam. You'll also want to keep a close eye on the temperature gauge during the test drive, as the nose-mounted radiators are prone to corrosion, something that also affects the air-conditioning condensers. Parts cost £470 and £292 respectively, so budget accordingly if you think replacement might be imminent.

Transmission-wise, neither gearboxes nor four-wheel-drive system should give trouble unless abused, although the threat of stomach-churning bills (£11,000 for a new Tiptronic, for example) means exercising a degree of caution. £1,100 for a fresh clutch is about par for the course, but while that Tiptronic 'box is considered bullet-proof, make sure the steering-wheel shift buttons and instrument panel display function correctly. Sharing suspension and brakes with the Turbo means the potential for heftier bills, so ensure regular fettling hasn't been neglected, as fresh discs and pads all round will be £1,384 at RPM (it would be £212 less for a C2 by way of comparison), with a replacement front caliper costing £611. New lower front suspension arms ('coffin' arms) are £272, with front dampers coming in at £523.

In terms of bodywork, even the earliest examples ought to be in fine condition, so be very suspicious of any that aren't. Don't be surprised if the front end has been the subject of local re-painting, as stone chips are a common problem, but be wary of damaged bumpers, as they aren't cheap, while a replacement hood is going to set you back the best part of £2,000 before fitting, so check the condition and operation.

Lastly, the cabin; any wear or abuse should be obvious, but make sure that there are no issues with the electric windows or PCM system, as both can play up with age. ☺





Desirable options

Buying one of these new might have saved a wad of cash compared to the full-fat Turbo, but that doesn't mean that owners were short-changed when it came to specification. Reflecting its position towards the top of the 996 range, the cabin of a C4S was a fine place to be with extensive leather trim and the likes of climate control, upgraded hi-fi and electric seats all fitted as standard. Plenty of luxury, then, but what do the experts think when it comes to spec?

Manual gearbox

There were plenty of owners who preferred the Tiptronic self-shifter – arguably a Cabriolet, thus equipped as a rapid and relaxing sun-trap – but both Greig Daly and Jason Shepherd would pick one of the rarer manual cars. The six-speeder boasted a slick shift and ratios that perfectly exploited the flat six's prodigious power and torque outputs.

Sports seats and exhaust

Another choice from both of our experts, and common options on many a 911 before and since the 996's arrival. The greater bolstering and adjustment of the seats add comfort to the car's mile-munching credentials, while for many the C4S's switchable exhaust system is one of the best 911 soundtracks.

Infotainment

Plenty of C4S buyers were tempted to splash out on the Porsche Communication Management system with its integrated satnav, trip computer and audio. It's just as popular today, although Daly says the dated appearance may detract from the cabin's appeal. A matter of personal taste, then, but it's hardly a deal-breaker.

Colour and trim

Once again this comes down to taste, but the combination of Seal Grey Metallic paint and black leather is a great combination according to Shepherd. Rarer colours, such as Guards red, are still appealing, but it's probably worth steering clear of lighter interior hues and wood finishes.



ABOVE Extensive choice of interior colours, seats and trim packs, including aluminium or carbon fibre as here, mean specs vary greatly from one C4S to another
LEFT Quad exhaust tips were a Porsche Equipment option, standard tips were twin oval

Before you buy

While corrosion shouldn't be a factor, even the newest C4S is more than a decade old, so it pays to be cautious. It goes without saying that a thorough check of the history is required to ensure no major accidents lurk in the car's past, and check that those unique bumpers are undamaged, as replacements are pricey; the front one costs £835 before painting and fitting, for example

With modest values come the danger that previous owners may have skimmed on maintenance, so check that service stamps aren't missing. And while the 3.6-litre engine was less prone to RMS and IMS issues, evidence of replacement or upgrade is good news. RPM Technik can upgrade the latter for around £900 if it's done at the same time as clutch replacement.

Check that engine and cabin cooling systems are healthy. Muck building up around radiators and air-con condensers leads to corrosion – conscientious owners should have cleared them regularly – and replacing the whole lot will get expensive.

The 'Big Red' brakes mean larger bills come replacement time; specialists will charge around £1,300 for fresh discs and pads all-round, so it's a good bargaining point if a refresh is

imminent. The suspension is trouble-free providing it's not been neglected by a penny-pinching owner, although worn front lower arms are a common issue. If they need replacing then Paragon Porsche sell good-quality alternatives to the OEM items, saving around £100 per side and with a two-year warranty.

While not quite feeling hewn-from-solid, cabin quality was still impressive, so there's little reason to be lumbered with a scruffy example. Key areas to check are the operation of the PCM system where fitted, and the electric windows, which can be prone to failing motors and regulators.



BELOW Front radiators can be prone to corrosion if not regularly cleared of road debris



“
WHILE THE 3.6-LITRE ENGINE WAS LESS PRONE TO RMS AND IMS ISSUES, EVIDENCE OF REPLACEMENT OR UPGRADE IS GOOD NEWS
”

Total 911 verdict



It's not often that the words '911' and 'bargain' are mentioned in the same sentence, but that's what we have here. Sure, the 996 has its critics, and there are plenty of enthusiasts for who it will never be an option, but for those that are

convinced, the C4S is a very sound choice indeed. The Turbo-aping looks are a major part of the appeal, but set that aside and you're still looking at a very capable Neunelfer, one that merits a four-star rating from us for very good reason.

LEFT Turbo-look body with usable everyday performance means a good 996 C4S is already a modern classic



Investment potential & ownership experience

This car is all about that Turbo-look, and judging by how quickly they leave showrooms, there's no doubt that today's buyers are drawn to the more muscular appeal of this particular 996. An added attraction is the sheer value offered by what is a very capable Neunelfer, and while the rises in value have been relatively modest,

it's a steady climb that looks set to continue. Both Shepherd and Daly are full of praise for the styling, with the latter describing it as arguably the best looking 996 and one that he'd very much like to own himself, while Charles Ivey's Alvaro Crego also reports significant interest from buyers and is equally keen on the way this car looks. Aesthetics aside, the

C4S also boasts strong and accessible performance, and running costs are reasonable compared to the Turbo, plus there's a level of comfort and usability that make for an enjoyable daily driver. But as Shepherd points out, the key is to buy a good one and maintain it; follow his advice, and its desirability should make it a safe place to put your money. **911**

997.2 Carrera

Get it for
£40,000-£55,000

Performance

★★★★☆

Maintenance costs

★★★★☆

Rarity

★★★☆☆

Value

★★★★☆



997 CARRERA S

Since the arrival of the 993, Carrera buyers with an extra wedge of cash to spend have had the opportunity to tick the box marked 'S'. And so it was with the Gen2 997, the extra £7,000 asked by Porsche securing a rather tasty specification that centered around the larger 3.8-litre motor that was still directly injected but boasted 385bhp and 420Nm of torque. The S had handy improvements over Carrera models, and enough to cut 0.2 seconds from the 0-62mph sprint (it was down to 4.5 seconds with PDK) and ensure a top speed just below 190mph. The bigger engine also featured further tuning of the intake system and increased cooling capacity. And that wasn't all, as the extra money bought larger 19-inch wheels, PASM suspension with a 10mm lower ride height, and beefier brakes with larger, red-painted calipers along with larger pads and thicker discs up front. You could choose your S in Cabriolet form, too.



997.2 CARRERA

Blending adept dynamics with everyday usability was the 997's hallmark, and it was to receive some choice upgrades in Gen2 form, now available for under £50k

Written by **Chris Randall**
Photography by **Daniel Pullen**



CARRERA TIMELINE

1973

The Carrera name appears for the first time on the legendary 2.7 RS, boasting 213hp. 1,590 produced

1984

More than a decade on, Porsche launch the 3.2, one of the most successful Carreras. Values risen rapidly. 70,044 produced

1989

A raft of modern tech heralds the arrival of the 964, with ABS and power steering. 4WD model appears first. 19,484 produced (C2)

1993

More traditional styling marks out the 993 Carrera, which manages a healthy 276hp from the 3.6-litre motor. 38,626 produced

1998

Probably the most divisive model yet, the 996 brings water-cooling to the 911 and those familiar IMS and RMS issues. 56,733 produced

2004

Something of a return to form, the 997 is hugely accomplished and quick in entry-level 330hp form. 25,788 produced (Gen1)

2011

Larger, loaded with technology and more comfortable, the 991 generation is launched. Unknown number produced

Ever since the 964 arrived back in 1989, there has been a decision to make before signing on the dotted line for a new Neunelfer, and that's whether to choose a car driven by two wheels or four. Capable as it is, the latter usually brings with it a penalty in terms of weight and complexity, so if all-weather security isn't a priority and you prefer an arguably purer 911 experience, then rear-wheel drive it is. Fast forward 20 years and that decision brings us to the 997 Carrera 2 in Gen2 form, a model launched for the 2009 model year and one that was to introduce 911 buyers to some new technology.



THE CHANGES FOR THE GEN2 997 C2 BEGAN AT THE BACK WHERE THE CHAIN-DRIVEN 3.6-LITRE FLAT SIX BOASTED IMPROVEMENTS IN BOTH POWER AND TORQUE



The changes for the Gen2 began at the back where the chain-driven 3.6-litre flat six boasted improvements in both power and torque over the first-generation car. An extra 15bhp and 20Nm respectively boosted outputs to a very useful 345bhp and 390Nm, resulting in a 0-62mph time of 4.9 seconds and a 179mph top speed. Of lightweight alloy construction, the revised unit featured chain-driven camshafts with VarioCam Plus variable valve timing and lift on the inlet side, and a dry sump lubrication system with electronically controlled on-demand pumping to improve efficiency.

The real interest, though, came with the addition of the DFI system, which injected fuel at up to 120 bar and allowed a notably higher 12.5:1 compression ratio. Euro 5 compliant, the new unit boasted a reduction in CO₂ emissions of nine per cent and six per cent better economy in manual form; claimed figures were now 225g/km and 29mpg combined. Impressively

reliable and with no bankrupting IMS or bore-scoring issues to worry about, there's few concerns for the buyer as long as the example you're looking at is accompanied by a detailed service history and a fat wad of bills. With the last cars barely four years old, regular maintenance at an OPC is quite likely, but specialist servicing isn't prohibitive, with RPM Technik charging £375 for a 20,000-mile check and £953 for the bigger 60,000-mile service. The latter includes a clutch oil change for PDK-equipped cars, adding £100 to the bill, but it's worth ensuring that spark plug changes haven't been ignored; the rear bumper and exhaust silencers need to be removed so you're looking at around £300 all in if done separately.

A switchable Sports exhaust was optional and one worth having for the richer sound, but it's worth checking that the valve works and the noise actually changes when you press the Sport button. Keep an eye out for aftermarket items, too. And while the

- Model** 997.2 Carrera 2
- Year** 2008-2012
- Engine**
- Capacity** 3,614cc
- Compression ratio** 12.5:1
- Maximum power** 345bhp @ 6,500rpm
- Maximum torque** 390Nm @ 4,400rpm
- Transmission** Six-speed manual/ seven-speed PDK; rear-wheel drive
- Suspension**
- Front** MacPherson struts with coil springs and anti-roll bar
- Rear** Multi-link with telescopic dampers; coil springs; anti-roll bar
- Wheels & tyres**
- Front** 8x18-inch; 235/40/ZR18
- Rear** 10.5x18-inch; 265/40/ZR18
- Dimensions**
- Length** 4,435mm
- Width** 1,808mm
- Weight** 1,415kg
- Performance**
- 0-62mph** 4.9 secs
- Top speed** 179mph





The 997 brought about modern looks in a traditional package, though active rear wing was similar in shape and design to 996. 997 had the biggest boot space yet on a 911, and Sport exhaust was now a popular option



PARTS PRICE CHECK

| | |
|--------------------------|---------|
| • Headlight | £966.52 |
| • Wheel (18-inch, front) | £802.35 |
| • Coolant radiator | £238.59 |
| • Front brake caliper | £498.56 |
| • Front suspension strut | £315.15 |
| • Electric window motor | £330.26 |

Prices are inclusive of VAT and come courtesy of Paragon Porsche

997.2 C2 VALUES

According to Greig Daly at RPM Technik, current prices make for a relatively affordable 911, and you can expect to pay from around £35k for an early Gen2. That will secure an example from late 2008/early 2009 with around 60,000 miles on the clock, but you'll need to spend another £20k if you want one of the last models, which should be in immaculate condition. Cabriolets add a further £2,000-£3,000 on average. And it seems that where PDK-equipped cars were once worth a bit more, that's changing as buyers are favouring three pedals again.

| | |
|---------|---------|
| • Early | £40,000 |
| • Late | £55,000 |



C2 is perhaps less of a track weapon, it's advisable to get an over-rev check done; regular readings in the 4-6 range are evidence of over-enthusiastic use. Transmission-wise, a six-speed manual gearbox was standard and shouldn't exhibit any problems unless

“

INSIDE, THE GEN2 997 CARRERA OFFERS A BEAUTIFULLY CONSTRUCTED AND OPULENTLY TRIMMED CABIN THAT HAS PROVED AS LONG-LASTING AS IT IS COMFORTABLE

”

subjected to ham-fisted abuse. The clutch should last 50,000 miles and will cost £1,100 to replace.

But one of the most significant changes for the Gen2 was the arrival of the seven-speed PDK transmission, a complex dual-clutch unit that replaced the earlier car's Tiptronic gearbox. Inherently reliable, it needs a £150 oil change every six years, so ensure this has been done on the earliest examples; if a new unit is needed you're unlikely to see any change from £15,000 once labour and VAT are taken into account, so any hint of trouble should ring the loudest of alarm bells.

Carried over from the Gen1, the aluminium-rich suspension is by MacPherson struts at the front and the multi-link ISA axle at the rear. The 20mm lower Sports suspension was an option when new, as was the Porsche Active Suspension Management (PASM) system, so it's worth checking whether the original owner ticked those boxes. There's little concern other than listening out for a creaking from the front, which signals lower arm bushes past their best – a complete new arm is around £280 – or the rattling of worn

anti-roll bar bushes. It is, though, worth ensuring that the dampers on an early car aren't ready for replacement, especially a PASM-equipped example; new front dampers for those are almost £500 apiece so all-round replacement is pricey.

In terms of reliability, it's much the same story for the brakes. The C2 was brought to a halt courtesy of 330mm discs at both ends, clamped by four-piston Monobloc calipers that were fashioned from aluminium and with a black finish. It's worth checking that the inner faces of the discs aren't exhibiting corrosion on a low mileage example but there's little to worry about otherwise. Replacing the discs and pads at both ends will result in a four-figure bill from a specialist so it's good news if they've been refreshed recently. Only the most serious (or wealthy) road or track warriors would have opted for the optional Porsche Ceramic Composite Brakes (PCCB) for their C2 and the huge cost of replacement means they are best avoided today.

There's nothing to worry about when it comes to the steering though, so you can just revel in the



Left Standard specification on the 997.2 C2 included Sound Package Plus, tyre-pressure monitoring and PCM with a 6.5-inch touch screen. Other options could be specced, such as cruise control, TV tuner, navigation, 13-speaker BOSE audio and more sporting seats

oily-smooth feedback from the hydraulically assisted variable ratio rack. But it is worth scrutinising the wheels for signs of impact damage as town-bound cars could have suffered from clumsy parking, which may have knocked suspension settings awry. Wear to the inner edges of the tyres is another giveaway that all is not well, so budget for an alignment check; £265 will get you a health-check and geometry adjustment at RPM Technik and it's money well spent if you're to get the best from a 997.

Externally, the changes for the Gen2 car were harder to spot and mostly came in the form of a nip and tuck here and there to freshen things up. There are certainly no corrosion woes to worry about, so it's a case of ensuring no accidents lurk in the history and checking for stone chips around the nose; it's common so don't be surprised to discover a record of local re-painting.

Bi-xenon headlights were standard along with LED units at the rear, and both are pricey so it's worth checking for any damage; replacing a damaged headlight with the dynamic cornering function



BUYING TIPS

The 997 has a reputation for excellent quality and trouble-free ownership. Indeed, a late example is barely four years old so condition should be perfect, but get a specialist inspection for peace of mind.

- **Bodywork:** No inherent concerns here. Ensure the panels and paintwork are in top condition. High-mileage cars are likely to have stone chips, and check exterior trim and light units as they are pricey.
- **Engines:** Check the service record is complete. An over-rev check will establish previous use, but the new DFI motor means no concerns over IMS failure.
- **Transmission:** Both manual and PDK transmissions are tough and reliable in normal use. Replacing the latter will be a wallet-draining experience so avoid problems at all costs. Clutches on manuals last around 50,000 miles so budget accordingly.
- **Brakes/suspension:** The stoppers are well up to the task but are four figures to replace. Hard used examples could be ready for an overhaul, so haggle accordingly if you detect any creaks or clunks.
- **Interiors:** Excellent build and material quality means issues are rare. Check for scuffed trim on early high-milers and make sure everything works. It's worth taking the time to establish the exact specification.

fitted will cost nigh-on £1,000 for the part alone so you've been warned. And as always with a 911, you'll want to think hard before taking the plunge on a car with an extrovert colour scheme – the standard 997 palette didn't offer anything too outrageous but the more sober metallic hues are the safest re-sale bet.

And like the 996 that preceded it, this one was available in Cabriolet form with a fully-electric hood that folded away in 20 seconds and at up to 30mph. With a replacement top costing around £2,000 before fitting, it's worth examining it for any damage caused by envious passers-by. An aluminium hardtop was a pricey option, and one worth having, but ensure both it and the mounting points are unmarked. Cold weather could adversely affect the side window seals so ensure sticking glass hasn't caused damage, and make sure the windows drop the requisite couple of millimetres when the door is opened. A rear wiper is a desirable find, too.

Inside, it was business as usual, with the 997 offering a beautifully constructed and opulently trimmed cabin that has proved as long-lasting as it is comfortable. Indeed, only wilful neglect will lead to any hint of shabbiness, in which case you should walk away as it simply isn't worth the bother. A trickier

matter is establishing the specification because, as always, Porsche had a hefty options catalogue on hand with which to tempt buyers. Many couldn't resist the lure of goodies including a TV tuner, navigation, 13-speaker BOSE audio, cruise control, and more sporting seats, so spend time finding out exactly what's fitted to the example you're looking at. And bear in mind that Porsche Exclusive opened up a whole other avenue of choice when it came to trim and colours.

Suffice to say you should have no trouble finding the specification you want, but we'd advise a chat with a specialist to ensure you're not paying over the odds nor landing yourself with a specification that could prove hard to sell. The standard spec was actually quite generous with Sound Package Plus (nine speakers and 235 watts of aural delight), tyre-pressure monitoring, and PCM with a 6.5-inch touchscreen all included, and there's no reason why it shouldn't all be working perfectly today. Ultimately, whether it's a 911 for daily use or weekend entertainment, the Gen2 997 will fit the bill very nicely. And a car that's been looked after shouldn't prove prohibitively expensive to run, either. A somewhat tempting proposition, then. **911**

SPECIALIST VIEW

"These cars are very popular stock as they are at a price point that is achievable for many, with running costs that are manageable and could even be described as low! The Gen2 997s have the DFI engine, which so far has proved to be a very reliable unit, something that buyers of 997s generally are wary of. Plenty of buyers we speak to would rather take a higher mileage Gen2 3.6 rather than run the gauntlet with a Gen1 C2S because of this, plus the performance is very similar. As long as you buy from a reputable specialist, you can't go too far wrong with one of these, and they are one of my favourite 911s."

Greig Daly,
RPM Technik





OWNING A 997.2 C2

- **UK Price new:** £63,070 (Coupe)
- **Total numbers sold:** 10,500
- **Service intervals:** Two years/20,000 miles
- **Service costs minor:** £375
- **Service costs major:** £953

(Figures are courtesy of RPM Technik)



WATER-COOLED

997 GT3

The rear bi-plane wing with 'Gurney flap' was mildly adjustable, despite appearing to be fixed in position



997 GT3

Get it for
£80,000-£120,000

Performance
★★★★★

Maintenance costs
★★★★★

Rarity
★★★★☆

Value
★★★★★

“
IF TURBOCHARGED
PERFORMANCE DIDN'T
APPEAL, PORSCHE HAD AN
ANSWER IN THE FORM OF
THE GT3
”

The 996 generation introduced buyers to the GT3 tag, but how did its successor stack up? Total 911 turns the spotlight on the first 997 version introduced in 2006

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

First 997 GT3 had bigger air intakes while new front spoiler was deeper than ever before

A new vent ahead of the luggage compartment fed air to the radiator and dispelled air over the top of the car, aiding downforce

| | |
|---------------------------|--|
| Model | 997.1 GT3 |
| Year | (2006) |
| Engine | |
| Capacity | 3,600cc air-cooled flat six |
| Compression ratio | 12.0:1 |
| Maximum power | 415bhp@7,600rpm |
| Maximum torque | 405Nm@5,500rpm |
| Maximum torque | Six-speed manual; rear wheel drive |
| Suspension | |
| Front | MacPherson strut; coil springs; antiroll bar |
| Rear | Multi-link; telescopic dampers; coil springs; antiroll bar |
| Wheels & tyres | |
| Front | 8.5x19-inch alloys; 235/35/ZR19 tyres |
| Rear | 12x19-inch alloys; 305/30/ZR19 tyres |
| Dimensions | |
| Length | 4,445mm |
| Width | 1,808mm |
| Weight | 1,395kg |
| Performance | |
| 0-62mph | 4.3 secs |
| Top speed | 192mph |



There's no doubt that buyers after the cream of 911s were spoiled for choice when it came to the 997 generation, a range that encompassed the mighty Turbo and the seriously focused GT2 that somehow managed to push more than 500bhp through its overworked back wheels. But if turbocharging didn't appeal when it came to performance then Porsche had an answer in the form of the GT3. The name tag was first seen back in 1999 when it adorned the rump of the 996, a car that would qualify – appropriately enough – for the GT3 endurance racing category. So successful was the formula that the 2006 Geneva Show saw the launch of the latest 997 variant that arrived in the UK in August that year.

Wedged beneath the new bi-plane rear wing was a 3.6-litre motor that had been carried over relatively unchanged from its 996 installation, although power had increased from 381bhp to 415bhp at a howling 7,600rpm,

with torque up by 20Nm to a peak of 405Nm. Output was slightly over 115bhp per litre, and the rev limit was also raised, action not being curtailed, until 8,400rpm was showing on the tachometer. Essentially, the engine was the water-cooled bottom end from the 996, but topped with the latest cylinder head design, featuring four valves per cylinder and 'Variocam' variable valve timing on both inlet camshafts.

Using rotary-type adjusters to tweak the timing according to load and engine speed and controlled by the Bosch Motronic ME7.8 management system, it improved driveability as well as contributing to those hugely impressive headline figures. The engine featured lightweight pistons with titanium con-rods along with specially lightened tappets and hydraulic adjusters, and there were revisions to the lubrication system. The latter was a dry sump arrangement that featured two pumps in the cylinder head, driven from the exhaust camshafts, and two pumps in the crankcase, while an oil/water

heat exchanger helped keep temperatures under control. Rounding off the revisions were resonance valves in the inlet plenums (dual units linked by three separate pipes), larger exhaust tracts for better gas flow, and a lightweight sports exhaust system with two catalytic converters that now exited via centrally mounted pipes.

Driving through a dual-mass flywheel, power was fed to the rear wheels and a limited-slip differential via a six-speed manual gearbox that featured a cable-operated change and a shorter throw to the gearshift. First gear apart, all the other ratios had been shortened for greater straight-line punch, and things were beefed up with steel baulk rings for third to fifth gear and a heat exchanger for the transmission fluid. What this all amounted to were some very impressive performance figures, the GT3 claiming to stop the clock at 4.3 seconds for the 0-62mph sprint and passing 100mph in 8.7 seconds on the way to a 193mph maximum speed. Porsche also added a traction control system for the

GT3 TIMELINE

1999

Porsche introduce the first GT3 with the 996 generation. Substantially lighter than the Carrera, 1,890 'Gen1' cars are built.

2003

The Gen2 996 facelift version arrives, boasting a revised rear spoiler, 381bhp and optional ceramic brakes.

2006

Once again it's a Geneva Show launch for the 997 GT3. Power is raised to 415bhp helped by the addition of VarioCam.

2009

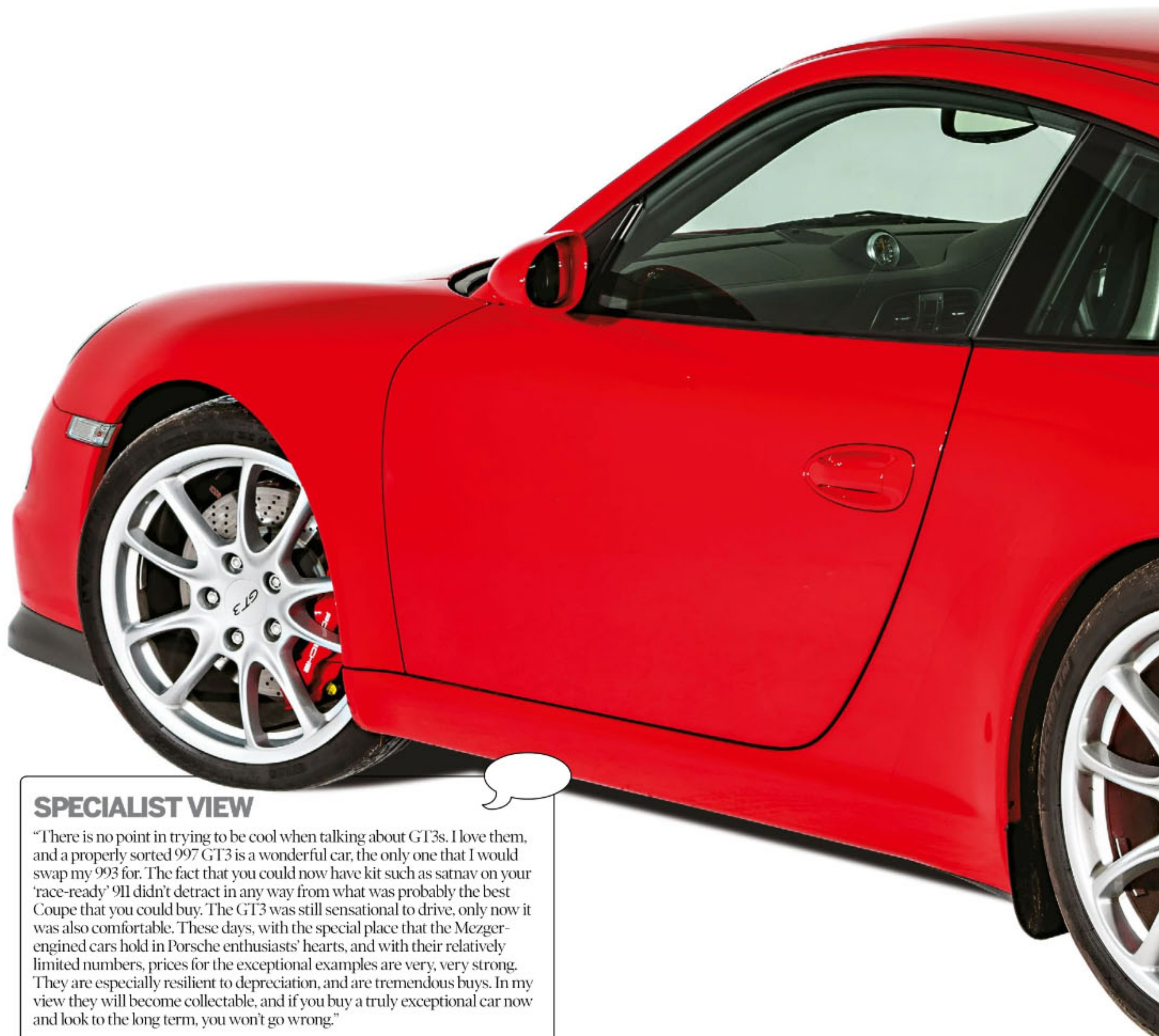
In Gen2 form, a power hike produces 435bhp, with revised spoilers and better brakes. The lighter RS variant saves 25kg.

2010

Porsche introduces a 997 GT3 RS with nigh-on 500bhp from a 4.0-litre engine and a 0-60 time below four seconds.

2013

The latest 991 gets the GT3 treatment, with power upped to 475bhp from the 3.8-litre DFI engine with PDK.



SPECIALIST VIEW

"There is no point in trying to be cool when talking about GT3s. I love them, and a properly sorted 997 GT3 is a wonderful car, the only one that I would swap my 993 for. The fact that you could now have kit such as satnav on your 'race-ready' 911 didn't detract in any way from what was probably the best Coupe that you could buy. The GT3 was still sensational to drive, only now it was also comfortable. These days, with the special place that the Mezger-engined cars hold in Porsche enthusiasts' hearts, and with their relatively limited numbers, prices for the exceptional examples are very, very strong. They are especially resilient to depreciation, and are tremendous buys. In my view they will become collectable, and if you buy a truly exceptional car now and look to the long term, you won't go wrong."

Jason Shepherd, Paragon Porsche



A variety of gills in the rear of the GT3 helped dissipate heat from the high-revving, dry-sump Mezger engine



“

THE CABIN OF A 997 WAS ALREADY A FINE PLACE TO BE, WITH EXCELLENT BUILD AND MATERIAL QUALITY, SO PORSCHE SAW LITTLE REASON TO MESS WITH THE RECIPE WHEN IT CAME TO THE GT3

”

first time, albeit one that could be switched off by those who had taken their bravery pill.

As you might expect, Porsche altered the exterior, starting at the front, where you'd find a redesigned bumper with bigger intakes and a deeper front spoiler. Feeding air to an additional central radiator was a new vent just ahead of the luggage compartment lid that then expelled the air over the car to provide much-needed, added downforce.

Balancing the aero package was the previously mentioned bi-plane rear wing that featured a rubber 'Gurney flap' on the lower section, along with a degree of adjustability despite appearing fixed, while vents in the engine lid helped remove hot air from the engine bay via the rear apron. The bodysell itself featured improvements to the crash structure compared to the 996, and there was greater use of super high-strength

steels and tailored blanks and a larger proportion of lightweight alloy, with the doors and front bonnet in aluminium. With a claimed curb weight of 1,395 kilograms, it amounted to a power/weight ratio of 297bhp per ton. No wonder it was quick.

The cabin of a 997 was already a fine place to be, with excellent build and material quality, so Porsche saw little reason to mess with the recipe when it came to the GT3. Climate control and a decent stereo were standard along with lightweight, race-derived seats, and most interiors were smothered in Alcantara and leather. Safety was top notch too, with a full complement of airbags, while the dials featured GT3 logos, yellow needles and a change-up light. Where things departed from standard was the chance to equip the car with all the accoutrements needed for an assault on the Nordschleife, the no-cost 'Clubsport' package →



The addition of PASM to the factory spec list wasn't the interior's only impressive new feature. PCM with satnav was ideal for finding your way home, the Sport Chrono package great for lap timing, and a blend of leather and Alcantara in Comfort guise ensured the GT3 retained as much class as it did purpose. Note that manual gear shifter, too: with PDK-only on 991 GT3 variants, the transmission alone has assured the 997 GT3 of its long-term desirability



GT3 RS



Porsche wasn't going to pass up the opportunity to add the latest GT3 to the rich heritage of RS models. Introduced in autumn 2006, it was now based on the wider C4 bodyshell, adding 44mm across the hips, but it had also lost 20kg in the process thanks to the use of carbon fibre for the seats and rear wing, and a plastic rear window. Power remained the same, the engine now sporting a single-mass

flywheel, and there was a scant 0.1 sec reduction in the 0-62mph time. Porsche claimed the same top speed, although in reality the wider bodywork and more aggressive rear wing would have reduced it a little. It didn't matter though, as the roll cage and six-point harnesses were standard for the full race effect. And the price? A mildly eye-watering £94,000.



GT3s with the Comfort pack had the rear seats deleted, as shown here, while the Clubsport pack went a step further, with a full rear roll cage fitted in place. Sports seats were optional for Comfort GT3s, but a required option for Clubsport variants



including a rear roll cage, six-point safety harness, fire extinguisher and wiring for a battery master switch. The CS option was only available in conjunction with the lightweight carbon bucket seats based on those fitted to the Carrera GT, weighing ten kilograms each and covered in flame-retardant fabric.

There was no need to be too minimalist when equipping a GT3, with plenty of opportunity to offset the weight savings by raiding the options list. Niceties like bi-xenon lights, electric seats, carbon interior garnishes, an upgraded sound system and tyre pressure monitoring were just a tick of a pen away, as were some particularly lurid exterior hues. Another popular choice was the Porsche Communications Management system, which provided satellite navigation, a high-resolution colour screen and phone prep – necessary if you wanted Sport Chrono Plus, which gave added lap-timing and data storage capability (basic Sport Chrono was effectively little more than a dash-mounted stopwatch).

The fettling didn't stop there, and there were major changes to the suspension compared to 'regular' 997s. Approximately 30mm lower all-round than a Carrera, up front was still the familiar MacPherson strut arrangement, but with rose joints and a range of adjustability that included the ability to tweak camber, ride height and toe angle. If you were after the perfect setup, the GT3 could certainly oblige. Propping up the rear was the subframe-mounted multi-link arrangement that Porsche named 'Lightweight-Stable-Agile' (LSA), first seen on the 993 and still pinning down the rear end. Steel bearings on the front strut mounts and an absence of rubber in the rear subframe mountings helped eliminate movement between suspension and the body for better wheel control.

More interesting still was the use of 'Porsche Active Suspension Management' as standard, in essence a system of continually adjustable dampers. A button on the centre console allowed the driver the pick of 'Normal' or 'Sport' modes depending on preference or road surface, although the harder setting was reckoned to be a bit extreme for anything other than a smooth circuit, while a variety of sensors monitored body movement during cornering, acceleration and braking.

The ECU then adjusted the valving of individual dampers to keep things even. The merits of such a system are still debated, but there is no doubting the effectiveness of the system in reducing body deflection. The stoppers received attention too, the GT3 getting 350mm vented and cross-drilled steel discs as standard squeezed by six-piston Monoblock alloy calipers at the front and four-piston items at the rear, backed by ABS. But for maximum stopping power it was the optional Porsche Ceramic Composite Brake (PCCB) setup that many buyers coveted, with larger 380mm front discs, yellow calipers instead of red and a claimed 50 per cent

BUYING TIPS

Offering epic performance and real track ability, a 997 GT3 is a special machine, but it needs to be treated like one.

- **History:** Buying from a recognised specialist or Porsche-approved seller is advisable for peace of mind. At the very least, get it inspected if you decide to buy privately.
- **Bodywork:** Accept nothing less than perfect when it comes to the body and paintwork. It's worth making sure it hasn't visited a gravel trap or two.
- **Engines:** Essentially bulletproof as long as the maintenance record is unimpeachable. Anything neglected should be avoided at all costs.
- **Gearbox:** Any issues caused by track abuse will be costly, so make sure there are no nasty noises. Clutch replacement is labour intensive too, so watch for signs of slippage.
- **Suspension:** Not known to be problematic, but hard use will take its toll on bushes and joints. It's also worth checking to see if the various settings have been needlessly fiddled with.

“ THERE WAS NO NEED TO BE TOO MINIMALIST WHEN EQUIPPING A GT3, AND THERE WERE PLENTY OF OPTIONS TO OFFSET THE WEIGHT SAVINGS ”



OWNING A 997 GT3

- **Price new:** £79,540
 - **Total numbers sold:** 3,329
 - **Service intervals:** 1 year/12,000 miles
 - **Service costs minor:** £358
 - **Service costs major:** £714 (including spark plug change)
- Figures courtesy of Paragon Porsche

weight reduction over the steel items. Like other 997s, the GT3 was fitted with variable-ratio steering with hydraulic assistance, and there were new one-piece, 19-inch wheels wrapped with tyres of a special tread design and compound.

It's a tasty spec, but what's important here is the true purpose of the 997 GT3. It substituted the sledgehammer performance of the Turbo and GT2 for an altogether more subtle blend of road and track ability, and rightly has a reputation for being one of the most thrilling 911s. **911**

"I'VE GOT ONE"

"I've owned my 997.1 GT3 since February 2011. I was immediately excited when I first set my eyes on the 'for sale' advertisement, which revealed a generous spec: finished in rare Cobalt Blue with PCCB, carbon Cup seats, and an RS-spec rear roll cage.

The first test drive was a little intimidating, but in the end the full Porsche history pushed me into the seat and I bought it.

It's a great car for track use and driving all day. After a stint on track I just put my racing helmet in the boot and drive home with the air conditioning on, so it really is the perfect package. Every time I climb into the GT3, I get excited: you know the drive ahead is going to be fun."

Chris Stewart, Southampton



991 GT3

Get it for
£120,000-£140,000

Performance
★★★★★

Maintenance costs
★★★★★

Rarity
★★★★☆

Value
★★★★☆



991 GT3 RENNSPORT

On the off chance that the GT3 doesn't quite manage the lap times you were looking for, then the Rennsport version will provide the answer. Launched in 2015 and with around 60 UK examples, spending £131,296 (\$174,407) secured a 911 that benefitted from a package of aerodynamic measures that substantially reduced lift at the front and increased downforce at the rear. Chief among the former were exit vents cut into the tops of the front wings, items fashioned from carbon-fibre along with the front and rear compartment lids and the rear wing. A plastic rear window and magnesium roof panel further contributed to weight saving, while 21-inch rear wheels completed the racer looks. Under the lid was a 4.0-litre, 500hp motor that drove through a PDK gearbox and shoved the RS from 0-62mph in just 3.3 seconds. The optional Sport Chrono package included the new Porsche Track Position app, which allowed detailed lap data to be shared with a smartphone. Nice.



991 GT3

More spacious, opulent and technically advanced, the 991 fully deserves the GT3 badge. Here's how to buy

Written by Chris Randall
Photography by Daniel Pullen



GT3 TIMELINE

1999

First GT3 launched at the Geneva Motor Show in 996 form, with a choice of Comfort or Clubsport. 1,858 produced

2003

The 'Gen2' 996 boasts 381bhp, optional ceramic brakes and changes to the engine and transmission. 2,313 produced

2004

The 996 GT3 gets the RS treatment. Power and torque remain the same, but weight-saving is implemented. 682 produced

2006

Again, it's a Geneva launch for the 997 GT3. Power is up to 415bhp with VarioCam Plus, while PASM is standard. 2,378 produced

2009

In 'Gen2' form, the GT3 RS gets a power hike to 450bhp. Minimal standard spec leads to a road car lap record at the 'Ring. 1,500 produced

2010

Perhaps saving the best for last, Porsche introduce a 997 GT3 RS with a 4.0-litre engine that produces 500bhp. 600 produced

2013

The 991 gets the GT3 treatment. Power is upped to 475hp from the 3.8-litre engine, but it's PDK only. Still in production

We've previously subjected the first model to sport the GT3 badge, the awesome 996, to our Buyer's Guide microscope. This time, we fast-forward more than ten years to the very latest. Make no mistake, Total 911 is a huge fan of the latest GT3, and having pitted it against a 997 GT3 RS back in issue 131, we were left staggered by its combination of technology, cossetting luxury, and exquisite handling. Not only is it the most breathtaking, it's possibly the most everyday-friendly 911 ever to sport the GT3 badge, ever the embodiment of a proper Porsche according to Butzi himself.

One of the reasons we rated it so highly was down to what lies beneath that purposeful rear wing, a 3.8-litre motor producing 475hp at a spine-tingling 8,250rpm. Almost 100bhp more than the original GT3, it's a thrilling confection of cutting edge,

lightweight construction with titanium con-rods and forged pistons that allow it to rev to an intoxicating 9,000rpm. With VarioCam variable valve timing for both inlet and exhaust camshafts and an advanced dry sump lubrication system, it's also the first GT3 to feature direct fuel injection.

But as regular readers will know, it hasn't been without issue, with a spate of high profile engine fires threatening to put a dent in Porsche's reputation for peerless engineering. We've previously covered the problem in some detail, but essentially a failed connecting rod bolt could lead to terminal engine failure, with the resulting oil leakage leading to the much-publicised infernos. After issuing a 'stop driving' notice to owners – some of whom were understandably dismayed after parting with more than £100,000 (\$133,000) for their car – Porsche set about changing the engines in the 785 model year 2013-2014 cars affected.

However, despite a dozen examples being fitted with a second new motor due to a valve-train issue, and the recall of 35 model year 2015 cars to have the spark plugs and coil packs replaced (a short circuit could have caused damaging engine misfires), it seems that Porsche's quick action has left used values unharmed. These cars are almost certainly being maintained within the dealer network so there's nothing to worry about in terms of service history, although the 20,000-mile/two year maintenance intervals means some OPCs are seeing conscientious customers opt for an annual oil change as well; at around £300 it's a sensible decision, especially as the GT3's everyday usability sees some cover healthy mileages. And while on the subject of lubricant, some owners have expressed concern over high oil consumption, although it differs between cars and is dependent on the extent of track use; requiring a pint of oil every 600-1,000 miles could prove normal. ➔

“The 991 is the most everyday-friendly 911 ever to sport the GT3 badge, ever the embodiment of a proper Porsche according to Butzi himself”

Model 991 GT3
Year 2013

Engine

Capacity 3,800cc

Compression ratio 12.9:1

Maximum power 475hp @ 8,250rpm

Maximum torque 440Nm @ 6,250rpm

Transmission Seven-speed PDK, rear-wheel drive

Suspension

Front MacPherson struts with coil springs and anti-roll bar

Rear Multi-link with telescopic dampers, coil springs and anti-roll bar

Wheels & tyres

Front 9x20-inch; 245/35/ZR20

Rear 12x20-inch; 305/30/ZR20

Dimensions

Length 4,545mm

Width 1,852mm

Weight 1,430kg

Performance

0-62mph 3.5 secs

Top speed 196mph





Porsche equipped the latest GT3 with 380mm discs at all four corners, clamped by six-piston aluminium monobloc calipers at the front and four-piston items at the rear. It also featured a composite rear wing



PARTS PRICE CHECK

| | |
|--------------------------------|------------|
| • Centre lock wheel (front) | £2,271.24 |
| • Front damper (with lift kit) | £635.83 |
| • Set of PCCB brake discs | £16,624.32 |
| • Exhaust system (complete) | £6,111.86 |
| • Catalytic converter | £1,546.86 |
| • Front brake caliper | £917.17 |

Prices are inclusive of VAT and come courtesy of Paragon Porsche

991 GT3 VALUES

Greig Daly at RPM Technik reveals that prices dipped around six to eight months ago, but now seem stable in the short to medium term. Of course, values vary from £130,000 to £160,000 depending on specification, though there is some variation present in the market. Comfort models sit at the lower end of the price spectrum, while a Clubsport with Paint to Sample is at the upper end.





“PDK is a reliable gearbox that’s fully up to the rigours of track work”

Less acceptable to a number of potential owners though, was Porsche’s decision to equip the 991 GT3 with a PDK transmission only. A seven-speed unit, it was retuned with specific ratios for the new application and featured shorter-throw shift paddles for improved response, along with a ‘paddle neutral’ function; pulling both paddles disengaged the pair of clutches, which could then be re-engaged either from a standstill or on the move with predictably spectacular results (and the loss of a few millimetres of rear tyre tread!). Still, it is a reliable gearbox that’s fully up to the rigours of track work and avoids any over-rev scares.

Keeping everything under control on road or track was a chassis featuring MacPherson-type struts up front and a multi-link axle at the rear, with the ability to adjust settings for optimum

handling. Riding 30mm lower than a Carrera, the GT3 also benefitted from PASM (Porsche Active Suspension Management) as standard, along with the electromechanical rear-axle steering system that provided a virtual shortening of the wheelbase. Porsche Active Drivetrain Mounts (PADM) were also standard, along with Porsche Torque Vectoring Plus that further sharpens handling and stability by braking an inside rear wheel. The front-axle lift system was optional and was chosen by a large proportion of buyers with more of an eye on street use. GT3s of this age certainly shouldn’t be exhibiting any issues with the suspension, although it is worth checking for wear on the inner edges of the tyres as this points to time spent on a circuit.

Take to the track and you’d have found the brakes more than up to the task, Porsche equipping the

latest model with 380mm discs at all four corners, clamped by six-piston aluminium monobloc calipers at the front and four-piston items at the rear. PCCB composite brakes were a £6,248 option, one not taken up by many buyers, and largely unnecessary given the abilities of the standard setup, which wear well. A replacement set of pads and discs will cost £3,500 at a specialist such as RPM Technik, so it is worth checking them over. The stoppers are fronted by 20-inch forged alloy wheels with centre-lock fixings, so ensure the rims are undamaged as replacements are over £2,000 each.

Externally, the latest car had grown over the 997 with an extra 100mm in the wheelbase significantly improving cabin space, while the rear wings and track were 44mm and 31mm broader respectively. And with a widened front splitter and composite rear wing, Porsche had given plenty of attention to the 991 GT3’s aerodynamics.

Any example you find today should be in immaculate condition but it is worth consulting an OPC regarding any dealer campaigns affecting the



Inside the 991 GT3's cabin, comfort trim was standard, bringing a feast of leather, Alcantara and brushed metal finishes, along with a seven-inch touchscreen. Clubsport variants got a roll cage and fire extinguisher, which was housed in the front passenger footwell

model; one involved the addition of a mesh grille within the front wheel-arch liners to prevent stone damage to the radiators, while another involved checking the hydraulic pipe unions for the front-axle lift system, so ensure that the example you're considering has had any update work carried out. And then there's the issue of accident damage; track mishaps are a distinct possibility so scrutinise the history to ensure there's nothing unpleasant lurking in the car's past.

A final point on this special GT 991's exterior is in regards to colour, a choice that can significantly effect resale values. Porsche offered a number of solid, metallic, and special finishes for the GT3, and whether 'Lime gold' floats your boat is down to personal choice, but experts say that quite a few buyers opted to go down the unique 'Paint to Sample' route that provides an almost unlimited choice of colours. A carefully chosen shade could have increased the value of a used example so it's worth getting the views of an OPC or specialist before you buy your example in question. ➡



BUYING TIPS

Obviously a much more recent model than our usual **Total 911** Buyer's Guide subjects, but you'll still need to ensure that the example you're looking at is in perfect condition. It's advisable to discuss specification with an OPC or specialist beforehand to decide which options will best suit your needs.

- **Comfort or Clubsport?** The latter are more numerous, with 50 to 70 per cent of cars specified this way, and will be worth more come resale time, but don't dismiss the Comfort option if you plan on plenty of road use.
- **Specification:** You'll be hard-pressed to find an example that hasn't been lavished with plenty of options, so it's worth taking the time to find the one that suits you best.
- **Bodywork:** Don't settle for anything less than spotless. Special paint colours can add value, but check for any track-induced accident damage.
- **Engine/transmission:** Neither should be a source of worry; don't be surprised to find a record of additional servicing by meticulous owners.
- **Brakes/suspension:** Both are incredibly robust even when used hard. It's worth checking for any signs of premature wear, as replacements are pricey.

Inside you'll find a spacious cabin that's supremely comfortable and luxuriously appointed, and there's the usual bewildering array of trims and options to consider. Comfort trim was standard, bringing with it a feast of leather, Alcantara, and brushed metal finishes along with a seven-inch touchscreen for control of the hi-fi system, climate control, and for the first time in a GT3, a 4.6-inch TFT display in the instrument panel that could display readouts from the trip computer. It doesn't end there, of course, plenty of buyers plundering the options list to add cruise control, electrically-adjustable adaptive Sports seats, the Porsche Communications Management system and the Sport Chrono Package.

Indeed, many buyers were acutely aware of what was needed when it came to resale time, so don't be surprised to find this track-focused Neunelfer laden with convenience kit, although modestly-specced examples are out there if you prefer more driver focus and less opulence.

But it's the Clubsport option that attracts the most attention on the forecourt, the addition of a roll cage, six-point harness, fire extinguisher, and battery master switch prep delivering the sort of track appeal

that GT3 buyers demanded. According to specialists, it's possible that between 50 and 75 per cent of cars were specified this way – although even these cars benefitted from a raid on the options list to add extra luxury – and it's likely to prove the best decision in terms of investment. A quick trawl of OPCs will find GT3s sporting price tags of up to £145,000 (\$193,000) – a tidy profit on the original £100,000 (\$133,000) asking price.

Don't shy away from a Comfort model though; the supreme blend of everyday usability and track talent means you're unlikely to feel short-changed if you prefer a less hardcore approach. Whichever model you choose, expect an interior that's nothing less than perfect in terms of condition.

Ultimately, a used GT3 is going to prove a spectacular ownership proposition and one of which you'll almost certainly never tire from. Buying one should be a painless exercise, although if you choose to buy privately, you should certainly have the car checked by an OPC or specialist – there is too much money involved here to take any chances. But whichever route you take, you're in for a very special, and potentially profitable, experience indeed. **911**

SPECIALIST VIEW

"Like all GT3s, the 991 is an amazing car to own and drive and benefits from relatively manageable running costs compared to models from the likes of Ferrari and Lamborghini. That means it will always appeal to buyers wanting something special, so despite the economic uncertainty caused by the recent EU referendum in the UK, it will be a safe place to put your money. Having said that, the best thing is to buy one to enjoy now rather than worrying about investment, although some care is needed as we're already aware of examples that have been damaged on a race circuit, so it's important to check the history before you part with

Greig Daly,
RPM Technik





OWNING A 991 GT3

- **UK Price new:** £100,540
 - **Total numbers sold:** Still in production
 - **Service intervals:** Two years/20,000 miles
 - **Service costs minor:** £396
 - **Service costs major:** £756
- (Figures are courtesy of RPM Technik)





TURBO

| | |
|---------------|-----|
| 930 Turbo LE | 086 |
| 964 Turbo 3.6 | 094 |
| 993 Turbo | 102 |
| 996 Turbo | 110 |



930 LE

Get it for
£150,000-180,000

Performance

★★★★☆

Maintenance costs

★★★★★

Rarity

★★★★★

Value

★★★★★



964 TURBO S

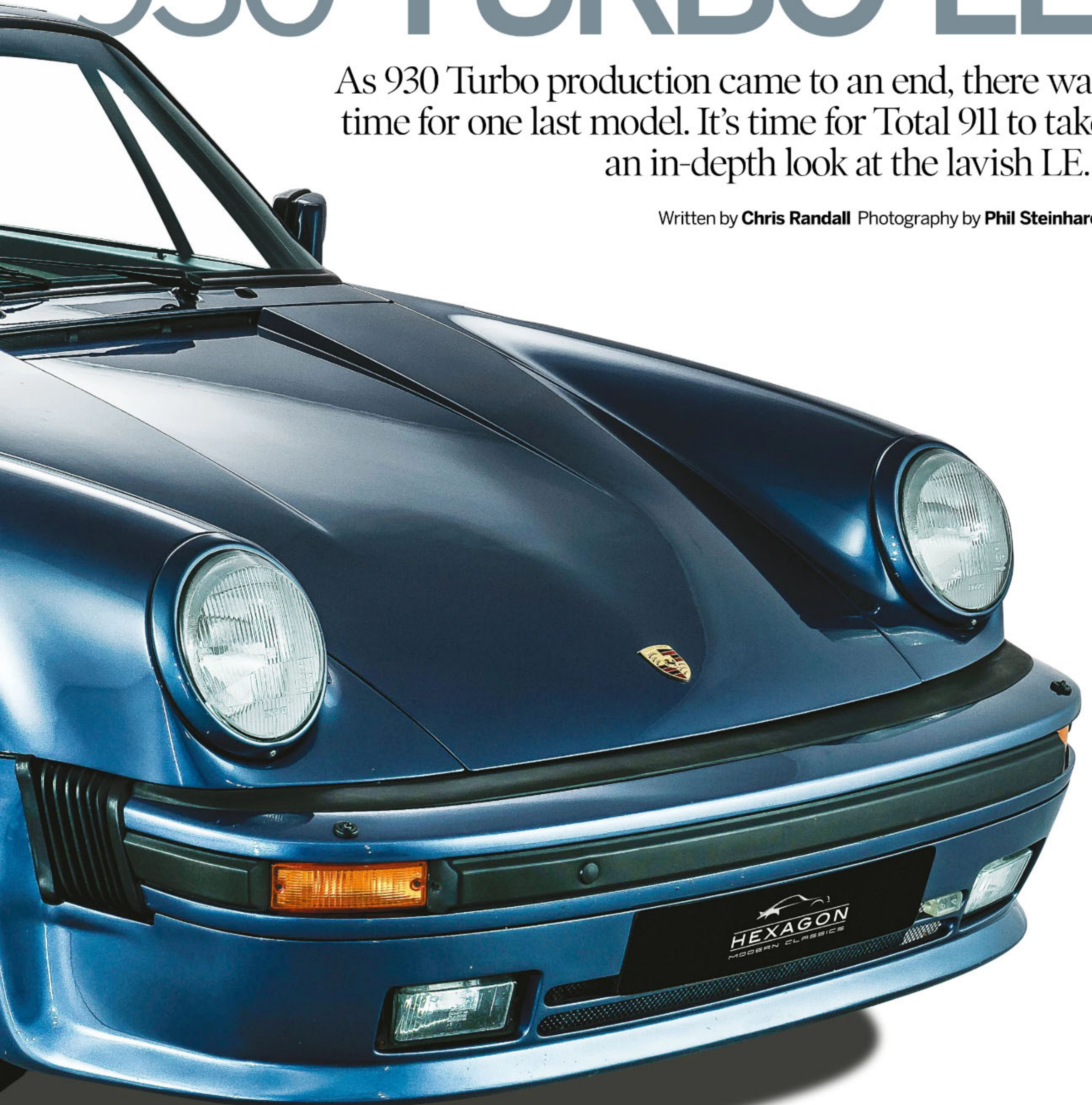
Never one to miss a trick with something special, Porsche repeated the 'limited edition' feat with the 964 Turbo platform. Introduced in 1992, just 80 examples of the superior Turbo S left the factory, but unlike the 930, the changes were a little more extensive. First off, it was put on a strict diet,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



930 TURBO LE

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

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



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

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

host of unique upgrades, including any special requests from buyers.

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

The colour palette was essentially standard Turbo, although there was plenty of scope for something different if you had deep enough pockets, the 'Exclusive' engineers giving buyers pretty much free rein when it came to choosing paint and interior trim, although Porsche did reserve the right to turn down the more outrageous requests. There was a hard-fought reputation to protect after all, and it's unlikely that lurid hues – outside or in – would have quite fitted the bill.

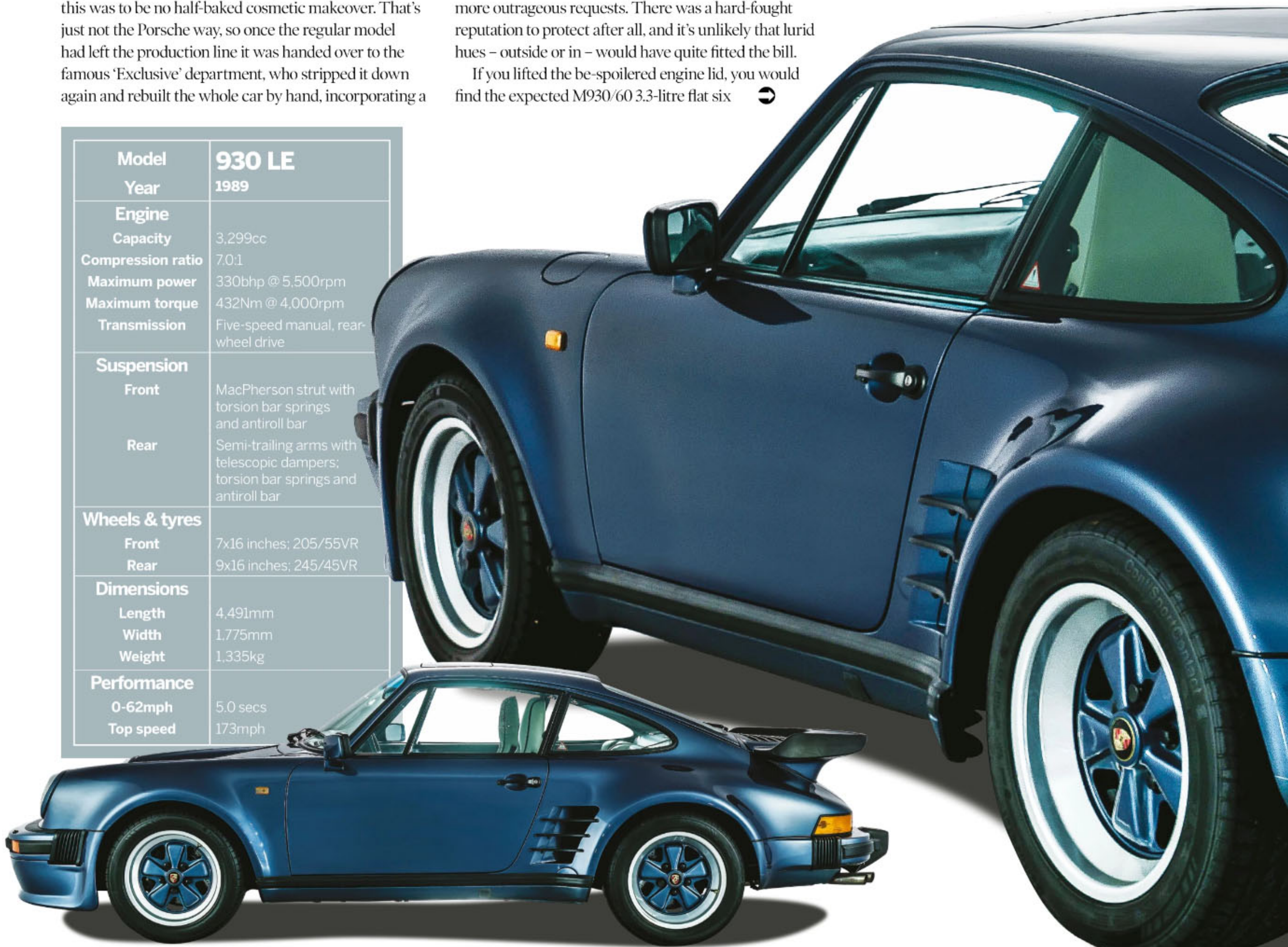
If you lifted the be-spoilered engine lid, you would find the expected M930/60 3.3-litre flat six

“

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

”

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





THE SPECIAL TURBO TIMELINE

1989

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

1992

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

1998

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

2004

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

2010

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

2014

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



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





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

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

A compression ratio of 7.0:1 remained unchanged from the regular 930 Turbo, as did the 6,700rpm red line. The result was stunning pace, with the top speed rated at 173mph and the 0-60mph sprint despatched in a claimed five seconds. This was partly down to the LE's relatively lithe 1,335 kilogram kerb weight despite its hefty spec, but it's a quick speed by any measure, and by

way of perspective that's 997 Carrera pace for the same accelerative benchmark.

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

However, unlike today's iterations with their driver-protecting, acronym-laden drivelines, this still wasn't a 911 to be trifled with. There was still a substantial amount of weight slung behind the rear wheels – weight distribution was 39/61 per cent front to rear – and the job

of keeping things under some semblance of control fell to the same torsion bar-sprung independent suspension found beneath regular Turbos. With MacPherson struts up front and semi-trailing arms aft, it was a familiar sight beneath 911s, although it had recently benefitted from improvements that included fatter antiroll bars and firmer dampers. The changes brought useful reductions in body roll, as well as less pitch and dive.

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

So far so special then, but Porsche hadn't forgotten about the inside when it came to this particular



“

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

”

BUYING TIPS

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

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

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

Another addition unique to the LE was a gold plaque that sat at the base of the centre console, proudly marking the Turbo's 14-year lifespan, while the rich standard equipment list included Porsche's 'System 1' remote-control alarm system, electric windows and central locking along with air-conditioning and a top-tinted windscreen. Not that most buyers stopped there of course, many dipping into the options catalogue to add extras,

such as an electric sunroof and mirrors and seat heaters plus other personal touches.

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

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

“

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

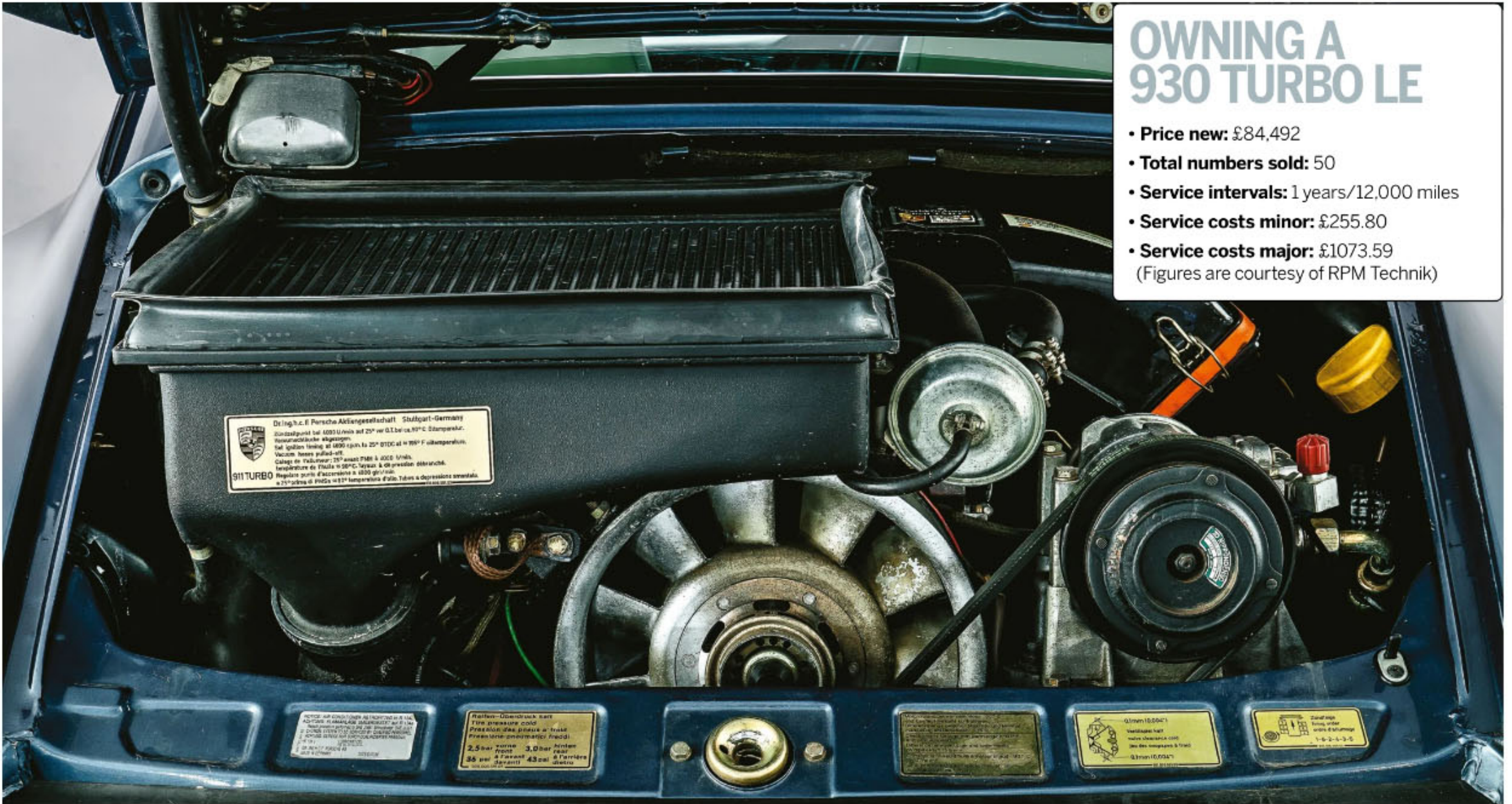
”

SPECIALIST VIEW

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

Jonathan Franklin, Hexagon





OWNING A 930 TURBO LE

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

(Figures are courtesy of RPM Technik)



"I'VE GOT ONE"



"The 911 LE has given me tremendous pleasure over the past year. We took the car to Le Mans Classic in June and I was fortunate enough to participate in a lap of the circuit to celebrate 40 years of Turbo. The car was fantastic on the circuit's long straights and I was able to exercise the terrific thrust and punch that this model is renowned for. The 330bhp and extra gear that this model possesses over pre-'88 930s means that fast cruising, especially on foreign roads, is an absolute pleasure. Being one of just 50 models produced, its exclusivity is often admired by Porsche aficionados too."

David Newton

964 Turbo 3.6

Get it for
£120,000-£160,000

Performance

★★★★☆

Maintenance costs

★★★★☆

Rarity

★★★★☆

Value

★★★★☆



TURBO 3.6 S

Having launched a Turbo S version of the 3.3-litre car at the 1992 Geneva Motor Show, it's perhaps no surprise that Porsche would look to repeat the trick with the outgoing 3.6-litre model. Built by Porsche Exclusive, there's the usual debate over the actual numbers produced, but the most accurate story seems to be 93 examples with 76 of those in flat-nose 'Flachbau' form and 17 with the standard front. The majority utilised the same headlamps as the 968 coupe, but interestingly the cars for the Japanese market received a front end more reminiscent of the 930 SE. The engine – now known as the M64/50S unit – benefitted from the X88 upgrade which resulted in 385bhp and would receive a raft of changes that included a re-designed sports exhaust system, a larger KKK K27 blower, a larger intercooler and alterations to the cylinder heads, valves and valve timing. A different clutch and flywheel also featured. Costing around £130,000, the 'S' also received a different design of front and rear spoiler along with air intakes in the rear wings.





964 TURBO

Turbocharging has been part of the Porsche legend for decades and with so few built, the later 3.6-litre 964 model is particularly sought after. Total 911 takes a closer look

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



Regular readers of this magazine will need little reminding of just what a step change the 964 generation represented when it came to the evolution of our favourite sports car. It was a model that ushered in a whole new era, one that was smoother and more aerodynamic – the drag coefficient of standard models was a creditable 0.32 – not to mention a great deal more rigid than the 3.2 Carrera it succeeded. There was an electrically-operated rear spoiler for the first time, and even greater changes beneath the skin with 911 buyers getting their first taste of power-assisted steering, anti-lock brakes and a more modern suspension arrangement to replace the torsion bar springs of old.

However, despite the introduction of a new 3.6-litre, 'M64' engine, what the range lacked was

a turbocharged variant. In fact, it would be around a year before one arrived and when it did, it was equipped with an updated version of the 3.3-litre motor from the 930, albeit one that promised greater performance according to Porsche. Neither the media nor the Porsche faithful were entirely convinced, and it took until the Paris Motor Show in the autumn of 1992 before a blown variant of the larger flat six engine was unveiled.

With the 993 waiting in the wings, the 3.6 Turbo was on sale for barely a year with Porsche building just 1,437 examples (the number of right-hand drive variants is hard to pin down, estimates ranging from around 50 to 150 examples depending on who you ask). Valuable and sought after today, just what made it so special? Well, the first thing was the engine – dubbed M64/50, it was a unit that had

come in for some major modification compared to that found beneath the engine lid of standard 964s. With a 100 millimetres stroke and 76.4 millimetres bore (an extra three millimetres and two millimetres respectively), the headline numbers for the Bosch K-Jetronic injected and catalyst-cleansed 3.6 were an impressive 360bhp at 5,500rpm and 520Nm of torque at 4,200rpm, increases of 40bhp and 70Nm over the earlier 3.3. The compression ratio was raised slightly to 7.5:1 and while still utilising the single KKK turbocharger and intercooler from the smaller engine, it was deep inside the flat-six where the real changes had been made. The M64 crankcase effectively remained the same but the pistons, con rods and crankshaft were all upgraded to cope with the extra power, the latter also receiving a vibration damper for smoother running. The cylinder bores were Nikasil

“With the 993 waiting in the wings, the 3.6 Turbo was on sale for barely a year with Porsche building just 1,437”

Model 964 Turbo 3.6

Year 1993-1994

Engine

Capacity 3,600cc

Compression ratio 7.5:1

Maximum power 360bhp @ 5,500rpm

Maximum torque 520Nm @ 4,200rpm

Transmission Five-speed manual, rear-wheel drive

Suspension

Front MacPherson struts with coil springs; anti-roll bar

Rear Semi-trailing arms with telescopic dampers; coil springs; anti-roll bar

Wheels & tyres

Front 8x18-inch; 225/40/18

Rear 10x18-inch; 265/35/18

Dimensions

Length 4,250mm

Width 1,775mm

Weight 1,470 kg

Performance

0-62mph 4.8 secs

Top speed 174mph





Though the teatray wing from the earlier 3.3-litre 964 Turbo remained, the 3.6 was treated to 18-inch lightweight Speedline wheels sitting under a wide body that sat some 20mm lower to the floor

THE AIR-COOLED TURBO TIMELINE

1974

The 3.0-litre 911 Turbo with 260bhp is revealed at the London Motor Show in October, receiving huge acclaim

1977

Porsche announce the revised version with power hiked to 300bhp courtesy of a bigger 3.3-litre engine and an intercooler

1990

964 Turbo is launched, first generation cars appearing with a modified version of the 3.3-litre engine and 320bhp

1993

A blown 3.6-litre unit is fitted. Based on the standard M64 engine, power is up to 360bhp joined by lower suspension and 18-inch wheels

1995

993 Turbo arrives with more power and fitted with twin-turbochargers. Four-wheel drive and 'Big Red' brakes help keep things under control

1998

With air-cooling about to disappear, the 993 Turbo S is a fitting finale. Manual only, 450bhp is enough for a 186mph top speed and 0-60mph in a whisker over 4.0 seconds





“The upshot of all this work was a 964 Turbo that now boasted some mighty impressive performance figures”

coated and stainless steel rings had been added to improve the sealing of the cylinders, effectively curing the engine's propensity to leak oil.

The rocker arms and shafts were carried over from the 3.3, but new camshafts were fitted to operate the two valves per cylinder, a more aggressive profile increasing the valve lift on both intake and exhaust sides, and the cam timing had also been altered. The intake valves themselves were as found on the 3.3 but the exhaust valves that were increased in size to 42.5 millimetres were now made from 'P25' steel and no longer sodium filled. While we are on the subject of the cylinder heads, they now boasted just one spark

plug per cylinder, the twin distributors and dual plugs of the standard engine ditched for the new application. The plugs themselves were long-life items and the distributor drive was modified too. The heads also allowed for the addition of secondary air injection as part of the emissions system, with an air pump driven by a belt from the camshaft.

The lubrication system was essentially the same dry sump arrangement found on the standard M64 engine, although it received minor modification in order to provide an additional oil feed to the turbocharger. Alterations to the throttle body and a re-mapped ignition ECU completed the mechanical

changes, while the engine and gearbox themselves now sat on revised hydraulic engine mounts. The upshot of all this work was a 964 Turbo that now boasted some mighty impressive performance figures, with a top speed raised to 174 miles per hour and the 0-62 miles per hour sprint despatched in an internal organ-rearranging 4.8 seconds. Not only that, but Porsche also claimed that the plumper torque curve noticeably reduced turbo lag, while economy was improved by somewhere in the region of five per cent. It's probably fair to say that the former would be more important to owners than the latter.

To cope with the added power now heading for the rear wheels, the clutch came in for some beefing up, as did the driveshafts, and the 3.6 was fitted with the five-speed manual G50/52 transmission and a dual-mass flywheel. Also standard for the new model was a limited-slip differential that featured carbon plates for greater durability, with a locking ratio of 20 per cent under power and 100 per cent on the



The opulent 964 Turbo 3.6's cabin is well appointed, with electrically adjustable front seats covered in an abundance of supple leather. A five-speed manual transmission was of course compulsory

over-run. Needless to say, Porsche ensured that the new car would stop as well as it went and that meant the fitment of 322 millimetres discs at the front and 299 millimetres items at the rear, both ventilated and cross-drilled and clamped by aluminium alloy four-piston 'Big Red' callipers with larger brake pads. Bosch ABS was standard.

Suspension-wise, the 3.6 Turbo still featured the basic 964 arrangement of struts up front and semi-trailing arms at the rear, and incorporated anti-roll bars at both ends and twin-tube gas dampers. However, with the M030 suspension package as standard, the new car sat 20 millimetres lower than the 3.3 and the spring rates had been stiffened by some 12 per cent. Standard wheels fitted to the 3.3 were replaced by rather more dramatic looking 18-inch Speedline rims of a three-piece design. An inch wider at both the front and rear – measuring eight and ten inches respectively – they wore 225/40 rubber at the front and 265/30 at the rear. ➔



BUYING TIPS

Relative rarity in 911 terms should mean that cars have been pampered, but there's no guarantee. Given their value, a forensic examination before purchase is a must.

- **Bodywork:** Expect it to be immaculate – be wary of anything that isn't. Look closely for signs of mismatched paintwork signifying previous repairs, and make sure you know what was done.
- **Engine & Transmission:** Strong if looked after, though broken cylinder head studs are worth checking for. Specialists recommend having a cylinder leak-down test to ensure the head and cylinders are healthy. Be wary of any modifications, unless you're sure of their provenance. The gearbox is considered bomb-proof in normal use and the LSD shouldn't give trouble.
- **Running gear:** A steel plate within the alloy brake calliper can lift due to corrosion, so get them checked. At the time of writing, rear axle strut bushes (at the camber and toe adjustment point) were unavailable. They were £650 new. Watch for perished front wishbone bushes too – you'll need two of them at £500 each including VAT.
- **Wheels:** Those Speedline rims are lovely, but they can suffer from corrosion and may have been refurbished. They aren't cheap to replace – around £1,500 each.
- **Interior:** Aside from signs of wear and tear, there's little to worry about. Check everything works, especially the heating and ventilation system as it's known to play up.

It's perhaps no surprise that the exterior of the new car would receive attention too, buyers keen to ensure that onlookers were aware of the fact that they'd parted with almost £73,000 to get behind the wheel of this final 964 iteration. The first thing to give the game away would have been the more flared wheel arches, the result of a 25 millimetres increase in width to cope with the wider track and fatter wheels, and the particularly keen-eyed might also have spotted the more aerodynamic 'Cup' door mirrors and the rear bumper that featured the same centre section as the naturally aspirated 964 RS.

Less obvious would have been the re-profiled undertray beneath, and the fact that the drag coefficient had increased from 0.32 to 0.35. Still, with those split-rim wheels, fixed rear spoiler and lowered stance, little more adornment was needed to denote this particular 964 as something very special. Mind you, if a nosey passer-by had peeped through the windows, they would have certainly noticed the opulent interior that Porsche had endowed upon this new Turbo variant. The basic cabin architecture might have been familiar from the rest of the 964 range – think classic five-dial instrument pack,

centre console and electronically controlled heating and ventilation that actually worked – but it was smothered in soft leather. The sports seats were electrically adjustable and were matched by a lavish standard specification that included electric windows and central locking, an alarm and immobiliser, air-conditioning, a top-notch hi-fi and a trip computer. As with all 964s, driver and passenger air bags were standard as well – the former still fronted by a slightly ugly steering wheel – but there was still some scope for buyers to add to the kit count, an electric steel sunroof and upgraded sound system being amongst the most popular choices.

Today, this coveted iteration of the Turbo breed commands very high prices, and it takes only the briefest skim of the facts and figures to realise why. Not only is it relatively rare – a fact guaranteed to get 911 enthusiasts like us drooling – but, more importantly, it's immensely capable. That engine packed a sledgehammer punch, but still managed to be civilised and controllable when you weren't in the mood, while the chassis modifications provided the 3.6 with supreme ability at maximum attack. Together with those looks, it's a very potent recipe indeed. **911**

“Today, this coveted iteration of the Turbo breed commands very high prices”

SPECIALIST VIEW

“Any Turbo is of course a special 911 but the 964 in later 3.6-litre specification is even more so. With only a very short production life, numbers of these are low, particularly for a right-hand-drive car as we have here. We've also been lucky enough to sell one or two examples with the ultra-desirable X88 Powerkit option.

Boasting great power that's usable on our roads, the 964 Turbo 3.6 holds provenance as it's the last 911 Turbo to utilise that single turbocharger, just like the original 930.”

Jonathan Franklin,
Hexagon Modern Classics





OWNING A 964 TURBO 3.6

- **Price new:** £72,294
- **Numbers built:** 1,437
- **Service intervals:** 1 year/12,000 miles
- **Service costs minor:** £358
- **Service costs major:** £528 (£900 with spark plug change)

(Figures are courtesy of Paragon Porsche)



"I'VE GOT ONE"

"I recently purchased a 964 Turbo 3.6 from New Zealand after falling in love with a photograph of what I believe to be the most beautiful 911 that Porsche made. The engine has been rebuilt and I have taken the liberty of lowering it ever so slightly as I feel that 964s sit a tad high. My journey is almost complete and I can't wait to enjoy my 'factory fresh' 964 Turbo, getting to experience that unbelievable rush of torque whilst sitting in a well-built engineering masterpiece, soaking up that proper 'old school' 911 leather smell. As you can imagine, excited doesn't quite cut it!"

Richard P

993 TURBO

993 Turbo

Get it for
£130,000-£170,000

Performance

★★★★★

Maintenance costs

★★★★☆

Rarity

★★★★☆

Value

★★★★☆



'Big red' brake calipers made a huge statement as to the Turbo's unwordly performance for the time

“
IT WOULD STAY IN
PRODUCTION UNTIL 1998,
AFTER THE WORLD HAD
BEEN INTRODUCED TO
WATER-COOLING
”

A turbocharged 911 is a special car indeed, and being the last of the air-cooled models, the 993 Turbo deserves a closer look as its value has soared

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



| | |
|---------------------------|--|
| Model | 993 Turbo |
| Year | (1996) |
| Engine | |
| Capacity | 3,600cc air-cooled flat six |
| Compression ratio | 8.0:1 |
| Maximum power | 408bhp @ 5,750rpm |
| Maximum torque | 540Nm @ 4,500rpm |
| Maximum torque | Six-speed manual; four-wheel drive |
| Suspension | |
| Front | MacPherson strut; coil springs; antiroll bar |
| Rear | Multi-link with telescopic dampers; coil springs; antiroll bar |
| Wheels & tyres | |
| Front | 8x18 inches, 225/40/ZR18 |
| Rear | 10x18 inches, 285/30/ZR18 |
| Dimensions | |
| Length | 4,245mm |
| Width | 1,795mm |
| Weight | 1,500kg |
| Performance | |
| 0-62mph | 4.3 secs |
| Top speed | 180mph |

In issue 110, we subjected the 993 Carrera to the Ultimate Guide spotlight, and it's worth briefly recapping that model's place in the 911 story. Launched in 1993 and styled by Tony Hatter, it would prove to be a big leap over the outgoing 964 generation.

This was not only due to its looks – which more closely reflected the classic 911 outline – but also the host of technical improvements it contained. Chief among them were a bodyshell that was claimed to be 80 per cent new and a lot stiffer (it also featured bonded front and rear screens and quirky, centrally pivoting wipers); a revised 3.6-litre engine that would host a new VarioRam intake system, and a new multi-link rear suspension layout that would finally lay to rest the ghost of tricky handling.

It was a model that would prove to be hugely popular, with more than 75,000 examples being sold. But since

first adopting the technology for their road cars back in 1975, the company found themselves without a turbocharged model in their line-up, the 964 Turbo having ended production in the early part of 1994. Step forward the new 993 Turbo, launched in 1995 for the 1996 model year, and a car that would stay in production until July 1998, after the world had been introduced to the idea of water-cooling courtesy of the divisive 996.

Only ever available with the Coupe body, from the outside it was instantly recognisable as being a bit special, perfectly blending the smooth new look of the 993 with a subtle helping of aggression. At the front was a unique front bumper and apron that was deeper and featured three substantial air intakes to feed the radiators and brakes. Small slats on the outer edge of the spoiler also contributed to the carefully tuned aerodynamics by smoothing the airflow around the front wheels.

Head to the back, and you'd be confronted with a whaletail-style fixed rear spoiler in place of the pop-up item – needed because of the intercoolers that sat beneath – and a deeper rear apron housing twin exhaust outlets. Sitting between the new extremities were curvaceous rear wings that added a couple of inches to the overall width, and a new design of sill cover that flared outwards as they approached the rear arches, giving the side profile a more purposeful and hunkered-down look. Further distinguishing the new car from its normally aspirated brethren was a body-colour moulding above the rear screen that housed the high-level brake light, which was standard on UK cars.

So Porsche's designers had nailed the looks, but what of the mechanicals? Starting with the engine, the M64/60 unit benefitted from many of the improvements applied to the 3.6-litre motor found in standard 993s. Revisions over the 964 model included lighter

TURBO TIMELINE

1974

The 3.0-litre 911 Turbo with 260bhp is revealed at the London Motor Show in October to huge acclaim

1977

Porsche announces a revised version, with 300bhp thanks to a 3.3-litre engine and intercooler

1979

Production of the 930 generation Turbo ends with over 21,000 sold, making way for the new 964

1990

The 964 Turbo is launched. Gen1 cars appear with 320bhp and a modified 3.3-litre engine

1995

The 993 Turbo arrives, with more power and now fitted with twin-turbochargers

2001

Power rises to 420bhp with the arrival of the 996, the first of the water-cooled Turbo engines

2006

The 997 Turbo introduced with 500bhp. It would later spawn an 'S' variant with more power and PDK

2013

Porsche announces the 991 Turbo with 520bhp and four-wheel steering as standard



SPECIALIST VIEW

"The 993 Turbo is a stunning car, one which the market has always loved, and I dare say will continue to. The curves of the modern classic 993 shape, but with a motor that packs a properly modern punch, means it appeals to a broad spectrum of customers. Being four-wheel drive, it is also a usable machine that, if desired, could be a daily driver as well as a weekend special. With production under 6,000 worldwide, there aren't many around, and if you are lucky enough to have bought a Turbo S a few years ago (only 345 were produced) then they are solid investments. The usual scary running costs can apply, and look out for cars that have been crash-damaged, but providing they have been maintained on time and with someone who knows their 993s, high-mileage cars can be a bargain. An inspection before you buy is a must with this one."

Greig Daly, RPM Technik



Five-spoke Turbo alloy wheels were hollow-spoked, while C4S items were solid



The reflective strip connecting the rear clusters also housed the reverse and fog lights, and wouldn't appear on a 911 again until the 996 C4S, 997.2 C4 and the new 991 C4



“

TOPPING THINGS OFF WAS A REVISED EXHAUST SYSTEM WITH A CATALYTIC CONVERTER FOR EACH BANK OF CYLINDERS AND FOUR OXYGEN SENSORS FEEDING BACK DATA

”

pistons and connecting rods, a stronger crankshaft, plus hydraulic valve adjusters operated by a single overhead camshaft per bank. There was also greater use of magnesium alloy and plastics for key components and a much-improved lubrication system, but Porsche would go further still for the new Turbo. The dual spark plugs were replaced with some single items, while out went the single KKK K27 blower, to be replaced by a pair of smaller K16 units with vacuum-controlled wastegates that improved response at low rpm, backed by a pair of intercoolers that sat on top of the flat six.

The cylinder heads were now forged rather than cast and with redesigned mountings (the cylinder barrels revised for improved cooling) and the pistons – Grafal-coated to reduce piston noise under high loads – travelled a further 5mm into the combustion chamber area, which helped minimise internal stresses. Stronger

connecting rods, a ceramic coating for the larger inlet and exhaust ports and sodium-filled exhaust valves completed the transformation. Also new was a revised Bosch Motronic 5.2 engine management system that incorporated OBDII on-board diagnostics, and a knock control system that not only upped the compression ratio from 7.5 to 8.0:1, but also enabled the new model to run on 95 or 98 RON fuel.

Topping things off was a revised exhaust system with a catalytic converter for each bank of cylinders and four oxygen sensors feeding back data. The result of all this technical wizardry was 408bhp, 540Nm of torque and headline performance figures that quoted a 0-60 sprint time of less than 4.5 seconds and a maximum speed of a cool 180mph.

Impressive numbers indeed, but that power needed to be deployed and, via a dual-mass flywheel, duties →



Although bereft of the carbon fibre trim bestowed on the 993 Turbo S, the cabin of the 408bhp 993 Turbo still made for an opulent environment with an array of leather. In terms of performance – and in classic Porsche fashion – the short-travel pedals are mounted close together, providing ample means for heel and toe under concerted driving. Transmission was six-speed manual



TURBO S

Should you have found yourself contemplating the purchase of a 993 Turbo but wishing that it was just a bit more powerful and, well, exclusive, then you were in luck. In 1998, Porsche chose to celebrate the end of air-cooled 911 production by introducing the Turbo S. Courtesy of a new exhaust and other tweaks, power was increased to 450bhp and torque to a slightly bonkers 585Nm, enough to reduce the 0-60 time to a fraction over four seconds with a maximum speed of 186mph. Externally, the Aerokit II brought new spoilers on the front and rear, there were air intakes ahead of the rear wheel arches and special script on the engine lid.

Additionally, the interior was smothered in leather and carbon fibre trim, and there was a lengthy list of standard kit – including bigger brakes – making this the most luxurious 911 yet. And the price, if you needed to ask, was in the region of £130,000.



The 993 Turbo came with luxurious Sports seats as standard equipment, ensuring the driver remained in a suitably fixed position even when committed through corners



were handed to a six-speed manual gearbox (the G64/51 unit – there was no Tiptronic option thanks to that torque) and the lightweight four-wheel drive system in the Carrera 4. It was a sophisticated setup that utilised a viscous coupling as its centre differential, as well as incorporating Porsche's 'Automatic Brake Differential' technology that braked a spinning wheel and diverted torque to the wheels that did have traction.

One notable addition to the driveline was a power-assisted clutch mechanism, the higher clamping pressure needed to cope with the power likely having made things uncomfortable for any driver unlucky enough to find themselves in a traffic jam. Porsche's answer was to use the power steering pump to charge an accumulator, the stored pressure being released to the clutch slave cylinder as required. The reduced effort and shorter pedal travel made things more manageable and less likely to result in bulging left leg muscles. Interestingly, the power steering (and associated clutch hydraulics) used a special mineral oil rather than the ATF found in most systems, a difference that had potentially expensive consequences for anyone who forgot.

Accurate rack and pinion steering was retained and the suspension essentially carried over from the standard 993, albeit with some strengthening of the ball joints and a degree of adjustability. There were MacPherson struts at the front and the new multi-link setup – the 'Lightweight-Stable-Agile' arrangement mounted on a cast alloy subframe – that impressed everyone when the 993 was launched. Unsurprisingly, where the Turbo did depart from standard was in the braking department, the system comprising larger 322mm cross-drilled and ventilated discs squeezed by four-piston alloy calipers, the latter notably dubbed 'big reds'. Bosch ABS was standard, and also new were a set of hollow-spoke 'Technologic' alloy rims that were friction-welded for strength and lightness, measuring 18 inches in diameter and wrapped in a choice of wide Pirelli P-Zero Asimmetrico or Bridgestone S-02 tyres.

Buyers opting for the Turbo were also treated to the full range of interior improvements Porsche had heaped on the 993, from an impressive solidity of construction to top-quality materials. The new and vastly improved electronically controlled climate control system with dust and pollen filters was standard, as was leather upholstery on just about every surface, while owners could choose from electrically adjustable seats or manual sports items. As befitting the new range-topper, there was plenty of standard kit, including electric windows and a sunroof, central locking, an integrated alarm system and a hi-fi, along with a trip computer that was home to a digital boost pressure gauge.

To remind owners of the money they'd spent, various 'Turbo' scripts were scattered around the cabin, including – in a nod to earlier Turbo models – being embroidered in the back of the left-hand rear seat. Moreover, it hardly needs adding that a raft of options were available to owners looking to personalise their car further, not to mention inflate a starting price that was over £90,000 when new, a substantial £20,000

BUYING TIPS

Impressive build quality was a 993 feature, but it's the engine that's the star here, and with this sort of power and performance on offer you should run a mile from anything that looks neglected.

- **Bodywork:** Few corrosion worries, but condition is everything, so it needs careful examination. Replacing Turbo-specific parts will be expensive, and accident damage is always a possibility.
- **Engines:** Bulletproof in normal use, but rebuild costs will be eye-watering. Expect a fat sheaf of servicing bills for peace of mind, and keep an eye out for oil leaks or worn turbos.
- **Transmission:** Like the engine, it's strong and reliable, but any odd noises should cause alarm bells to ring. Replacing the clutch is expensive, so watch for any slippage or signs that the hydraulic assistance is faltering.
- **Suspension/Brakes:** No particular vices, but hard use will eat pads and discs. Be sure to check the condition and budget accordingly if an overhaul is due.
- **Interior:** A well-cared for example should be pristine, but it's worth ensuring that everything works as intended, particularly the air conditioning.

“
 BUYERS OPTING FOR
 THE TURBO WERE ALSO
 TREATED TO THE FULL
 RANGE OF INTERIOR
 IMPROVEMENTS THAT
 PORSCHE HAD HEAPED ON
 THE 993
 ”



OWNING A 993 TURBO

- Price new: £91,950
 - Total numbers sold: 5,939
 - Service intervals: 1 year/12,000 miles
 - Service costs minor: £398
 - Service costs major: £888
- Figures courtesy of RPM Technik

or so more than the 964 Turbo it replaced, like the chance to tick the box for the expensive 'Litronic' gas discharge headlamps. Thankfully, given the monstrous pace on offer, Porsche had also equipped the 993 Turbo – indeed, all 993s – with plenty of safety kit, including driver and passenger airbags, as well as a bodyshell that had been strengthened in strategic areas.

Ultimately, the result of this fettling was a seriously impressive 911 that fully deserved its place in a line of turbocharged models stretching back 20 years. The 996 would move the game on once again, of course, but in the meantime the generation featured here is very much one to relish. **911**

"I'VE GOT ONE"

"I purchased this car from a customer in 2007 after he originally brought the car in for us to take a look at the hydraulic tappets. Since then, it's developed into an ever-evolving project: while the head was off, we decided to tear the engine and gearbox down to the last nut and bolt for a full rebuild. The Bilstein shocks were then serviced, the turbochargers reconditioned and the car treated to new tyres and brakes as part of the overhaul. The 993 Turbo is still quick by today's standards, and signals the end of an era – the best of the best of air-cooled – before it all changed with the 996."

Nick Fulljames, Redtek engine specialists



996 TURBO



The rear spoiler was unique to the Turbo and was raised hydraulically at 75mph, helpfully flagging your speed to law enforcement!

996 Turbo

Get it for
£40,000-£60,000

Performance
★★★★☆

Maintenance costs
★★★★☆

Rarity
★★☆☆☆

Value
★★★★☆

“
THERE WERE CHANGES
THAT INSTANTLY SET THE
TURBO APART FROM ITS
NORMALLY ASPIRATED
BRETHREN
”

The 996 had already caused waves in the 911 world thanks to its water-cooled engine, but was the Turbo the car to mollify the detractors?

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

Not everyone was a fan of the 'runny-egg' headlamps, although the Turbo was the first 996 to sport the improved 'facelift' lights



| | |
|---------------------------|--|
| Model Year | 996 Turbo (2002) |
| Engine Capacity | 3,600cc air-cooled flat six |
| Compression ratio | 9.4:1 |
| Maximum power | 420bhp @ 6,000rpm |
| Maximum torque | 560Nm @ 2,700-600rpm |
| Maximum torque | Six-speed manual or five-speed Tiptronic automatic, four-wheel drive |
| Suspension | |
| Front | MacPherson strut with coil springs; antiroll bar |
| Rear | Multi-link with telescopic dampers, coil springs; antiroll bar |
| Wheels & tyres | |
| Front | 8x18 inches, 225/40/ZR18 |
| Rear | 11x18 inches, 295/30/ZR18 |
| Dimensions | |
| Length | 4,435mm |
| Width | 1,830mm |
| Weight | 1,540kg |
| Performance | |
| 0-62mph | 4.2 secs |
| Top speed | 189mph |



The 996 was something of a revelation at launch, not least because it introduced 911 buyers to the world of water cooling. Needless to say, this development wasn't met with universal approval, despite being caused by legislative changes that Porsche had no control over. We've previously looked at the 996 as a buying proposition, but one model that did hit the mark was the Turbo that arrived in 2002.

In terms of style, the 996 embraced the familiar 911 DNA – even if Pinky Lai's design was somewhat smoother and less aggressive than previous iterations. But there were changes that instantly set the Turbo apart from its normally-aspirated brethren, most noticeably at the front and rear. The front bumper was now deeper and contained a trio of large air intakes that fed much-needed air to the three engine-cooling radiators and the air-conditioning condenser. Incidentally, Porsche claimed that those radiators offered a 50 per cent larger cooling area and ten per

cent improvement in overall cooling capacity compared to the outgoing and air-cooled 993 Turbo.

Cast your eyes towards the muscular rear wings – 66mm wider than a standard Carrera – and you'd come across intakes ahead of each rear wheel arch that force-fed air to the twin intercoolers, before arriving at a bumper unique to the Turbo with vents that helped draw air through those side intakes. Also new was the rear spoiler, the upper portion of which was lifted 2.4 inches by hydraulic rams when the speedometer hit 75mph. Overall, the 996's body was claimed to be 45 per cent stiffer than its predecessor – and lighter too – thanks to the greater use of Boron steel, high-strength steels and tailored blanks in key areas. It was also more aerodynamic than the 993, boasting a drag coefficient of 0.31 thanks to the smoother bodywork and extensive use of underbody panelling.

But the star of this particular show was to be found at the rear, hidden beneath various covers and bits of plastic trunking. So while the 3.6-litre unit didn't look

that dramatic when you peered in the engine bay, there was no doubting the depth and effectiveness of the engineering. Rather than the occasionally troublesome M96 motor found in other 996s, the engine was based on that found in the 993 Turbo, and it was one that benefitted from Porsche's obsessive attention to detail.

At its core was a light-alloy crankcase, Nikasil-coated cylinders, lightweight aluminium pistons and forged connecting rods, with chain-driven camshafts incorporating VarioCam Plus variable valve timing. A dry sump system took care of lubrication, while the boost was provided by a pair of KKK turbos sucking air through twin intercoolers. With a 9.4:1 compression ratio and Bosch's 7.8 Motronic management system keeping a tight rein on proceedings, the result was a storming 420bhp at 6,000rpm, 560Nm of torque and a power to weight ratio of 272bhp per ton. It was

TURBO TIMELINE

1974

The first 911 Turbo arrives with a 3.0-litre engine and single turbocharger, delivering 260bhp

1977

The revised version is announced, with 300bhp of power thanks to a 3.3-litre engine and intercooler

1989

Production of the 930 generation of Turbo models ends with over 21,000 examples sold

1990

964 Turbo appears with a version of the 930 3.3-litre engine and 320bhp, later a 3.6-litre engine is produced

1995

993 Turbo arrives with more power and fitted with twin turbochargers, plus four-wheel drive

2000

Power rose to 420bhp with the arrival of the 996, the first of the water-cooled Turbo engines

2006

The Gen1 997 Turbo is introduced with even more power, now 480bhp, and Variable Turbine Geometry

2009

Porsche release Gen2 997 Turbo with 500bhp plus a Turbo S with 530, before the arrival of the 991 Turbo



SPECIALIST VIEW

"The 996 Turbo has been an interesting car to track. We noted that values hit an all-time low around the £20,000 mark. Unfortunately, this meant some cars slipped into the hands of buyers that perhaps couldn't maintain what was once a £100,000 supercar, and as such these cars can be financially ruinous. The Turbos to get involved with are cars with excellent histories. Really, £26-27,000 is now the entry point. Manual Coupes are the car of choice, with X50-optioned cars commanding a premium and Turbo S variants leading the way on values. As the resurgence in 996 values has just begun, the 996 Turbo is becoming a modern classic, but one that can hold its own against more modern machinery. If current classic 911 prices are anything to go by, I would buy one now."

Greig Daly, RPM Technik



Purposeful dual exhaust tips were further unique additions, mounted in a redesigned apron that drew air through the wing-mounted intakes



The active rear wing on the 996 was a Turbo first, and is a trait embodied on the 911 with forced induction today



“

JUST FIVE PER CENT OF THE POWER WAS SENT TO THE FRONT AXLE IN NORMAL RUNNING, ALTHOUGH THE ELECTRONICS COULD INCREASE THAT TO UP TO 40 PER CENT AT MAXIMUM ATTACK

”

capable of firing the car to 60mph in 4.2 seconds and onto a shade under 190mph. Even those purists that bemoaned the lack of air cooling couldn't fail to be impressed by numbers like these, which are still more than respectable for a supercar today.

Responsibility for getting power to the road – and keeping your precious 996 separated from hedges and other road-side furniture – fell to a viscous-coupled four-wheel-drive system. Just five per cent of the power was sent to the front axle in normal running, although the electronics could increase that to up to 40 per cent at maximum attack, and it was backed by the full gamut of microprocessor-controlled safety systems, including Automatic Brake Differential, which braked a spinning wheel to restore grip, and PSM.

Buyers opting for six-speed manual transmission got a cable-operated shift that Porsche claimed reduced weight and vibration, while the gearbox featured redesigned internals for a quicker shift and greater longevity. A dual-mass flywheel was standard, as was a servo-assisted clutch mechanism similar to that seen on the 993 Turbo.

But if you wanted access to the performance to be a little easier to come by, you could now specify your Turbo with a five-speed Tiptronic automatic gearbox. Many owners did, and while outright performance suffered slightly – a 0.6-second drop in 0-60mph time and 4mph slower overall – the ability to perform easily repeatable full-bore starts without fluffing your lines was seen as ample compensation by many. Manual



Porsche didn't skimp on luxury kit for the Turbo, and most owners duly obliged by raiding the options list. Popular additions were an upgraded Bose hi-fi and the PCM system with satellite navigation and telephone, although the handset looks dated here in a world of smartphones and Bluetooth



X50 POWER

As always, Porsche was on hand to offer the discerning 996 Turbo buyer something extra – just as long as they were prepared to pay around £6,000 for the privilege. The X50 Power Kit offered from 2002 boosted power and torque to 450bhp and 620Nm respectively courtesy of tweaks to the turbochargers, intercooler and ECU. Some balked at the extra cost, but it was effective, the 0-60mph time being shaved by a couple of tenths, with the 100mph barrier broken in around nine seconds. In 2005 the Turbo S was to prove a fitting end to 996 production, even if the £99,300 price tag was a touch eye-watering (the Turbo S Cabriolet weighed in at an even loftier £105,000). However, you did get the

X50 modifications as standard along with the PCCB carbon-ceramic brakes, PCM with satellite navigation, the top-notch Bose hi-fi with CD changer and numerous other luxury accoutrements.



Although these weren't the most comfy seats to come out of Zuffenhausen, the leather trim was standard, and there was electric operation for them, too



BUYING TIPS

It will come as no surprise that a 911 with this magnitude of performance and ability needs proper looking after. An unimpeachable service record is also a must, as a neglected car could easily become a money pit.

- **Bodywork:** A history check will reveal any previous accidents, but keep an eye out for damage underneath caused by circuit 'offs'.
- **Engines:** Few inherent problems, but it's worth ensuring that the unit is leak-free and doesn't exhibit any electrical issues. They will take tuning, but ensure you're happy with what's been done before committing.
- **Cooling system:** The cooling radiators and air-con condenser can become clogged with debris, leading to corrosion. Check them thoroughly, as replacing the whole setup won't be cheap.
- **Transmission:** Expect some noise from the four-wheel drive system, but it shouldn't be excessive. Tiptronic automatic was popular and should be smooth, but check that the steering wheel switches work.
- **Suspension/Brakes:** A complete overhaul will be pricey, so don't skimp on the checks here. Given the eye-watering replacement costs, it's worth considering whether you really need the PCCB items.

“

AS YOU'D EXPECT, THE TURBO BENEFITTED FROM THE UPDATES THAT WERE APPLIED TO THE REST OF THE RANGE OVER THE ENSUING YEARS

”

shifts were managed by switches on the steering wheel, and while they were less handy than the now ubiquitous paddles, they worked well enough to do the job on the whole.

Porsche paid plenty of attention to the rest of the mechanicals too. 10mm lower and with extensive use of lightweight alloys, the front suspension was still a MacPherson strut arrangement, but new bearings for the control arms improved wheel location, while the shape of the steering knuckles was tweaked for optimum brake cooling.

At the rear was the same multi-link setup found on standard 996s that was mounted on a separate subframe, although the wider track demanded some changes, like the use of longer control arms. The deliciously accurate rack and pinion steering featured speed-sensitive hydraulic assistance. Make full use of the turbocharged shove, and you could reel in the horizon at a ferocious rate, so the attention Porsche had lavished on the brakes was more than welcome. The standard arrangement comprised 330mm steel discs that were cross-drilled and ventilated, and gripped by 'Big Red' four-piston calipers, backed by Bosch 5.7 ABS.

For those with track action in mind, you could specify your Turbo with PCCB carbon-ceramic stoppers. Claimed to offer a 50 per cent weight reduction over steel items, disc diameter grew to 350mm and the yellow calipers now contained six pistons. Fronting the anchors were 18-inch hollow-spoke 'Turbo II' alloy rims wrapped at launch with Pirelli P-Zero rubber. Not only did the new design contribute to a reduction in aerodynamic lift; they also helped draw hot air from the brakes and saved ten kilograms overall compared to the solid-spoke items. Those prone to such detail could tell them apart by checking the rear of each spoke – rounded when hollow rather than ribbed.

Head inside, and buyers enjoyed the extra room and strong build quality of all 996s, and there was plenty of standard kit too. Leather upholstery adorned the electrically adjustable seats, while climate control and an electric sunroof were included. You also got 'Litronic' bi-xenon headlamps and a top-quality hi-fi system, although it was easy to see the price approach six figures if you got carried away with the options. Most opted for the PCM communications system with satnav, while upgraded Bose sound and different interior finishes were temptations. There was also an extensive range of exterior colours, although most opted for the resale safety of darker hues, leaving Speed yellow for the more flamboyant buyer.

As you'd expect, the Turbo benefitted from the updates that were applied to the rest of the 911 range over the ensuing years. 2001 saw a series of minor tweaks, including electric releases for the front and rear lids, replacing the cables and aluminium levers fitted at launch, while a software update in that year improved the throttle response. Cabin upgrades for the 2002 MY were more extensive, including an opening glovebox lid, cup holders, improved ventilation and some softer-touch plastics. Rain-sensing wipers and an auto-dimming interior mirror were added, while the Bose

OWNING A 996 TURBO

- **Price new:** £86,000
 - **Total numbers sold:** Approx 22,000 (all variants)
 - **Service intervals:** 1 year/12,000 miles
 - **Service costs minor:** £301.40
 - **Service costs major:** £970.60 (manual gearbox)
- (Figures courtesy of RPM Technik)



stereo was standard. Crash safety and body stiffness also increased, and the arrival of the Convertible variant in 2003 meant you could enjoy some rapid hair ruffling if al fresco motoring was your bag.

The 996 wasn't always welcomed with open arms, but it proved that Porsche's turbocharging mojo was as strong as ever. Air cooling might have gone, but this iconic sports car remained in the rudest of health, and the 996 Turbo is now considered one of the best-value supercars on the used car market today. **911**

"I'VE GOT ONE"

"I remember the 996 Turbo's release fondly, a month or two before my 18th birthday. I saw it on *Top Gear*, and thought 'One day, one day.' Well, that day was yesterday! The surroundings are familiar next to the C4, but behind the wheel it feels totally different. The steering is a lot heavier, the chassis feels more planted, and there's less body roll. Power delivery is incredible, the torque is just stupendous, and it's very fast, even when you're just pootling through the gear. Its limits, at least at this point, seem to be moons ahead of mine, and I do find the car somewhat intimidating – which is the point, right?"

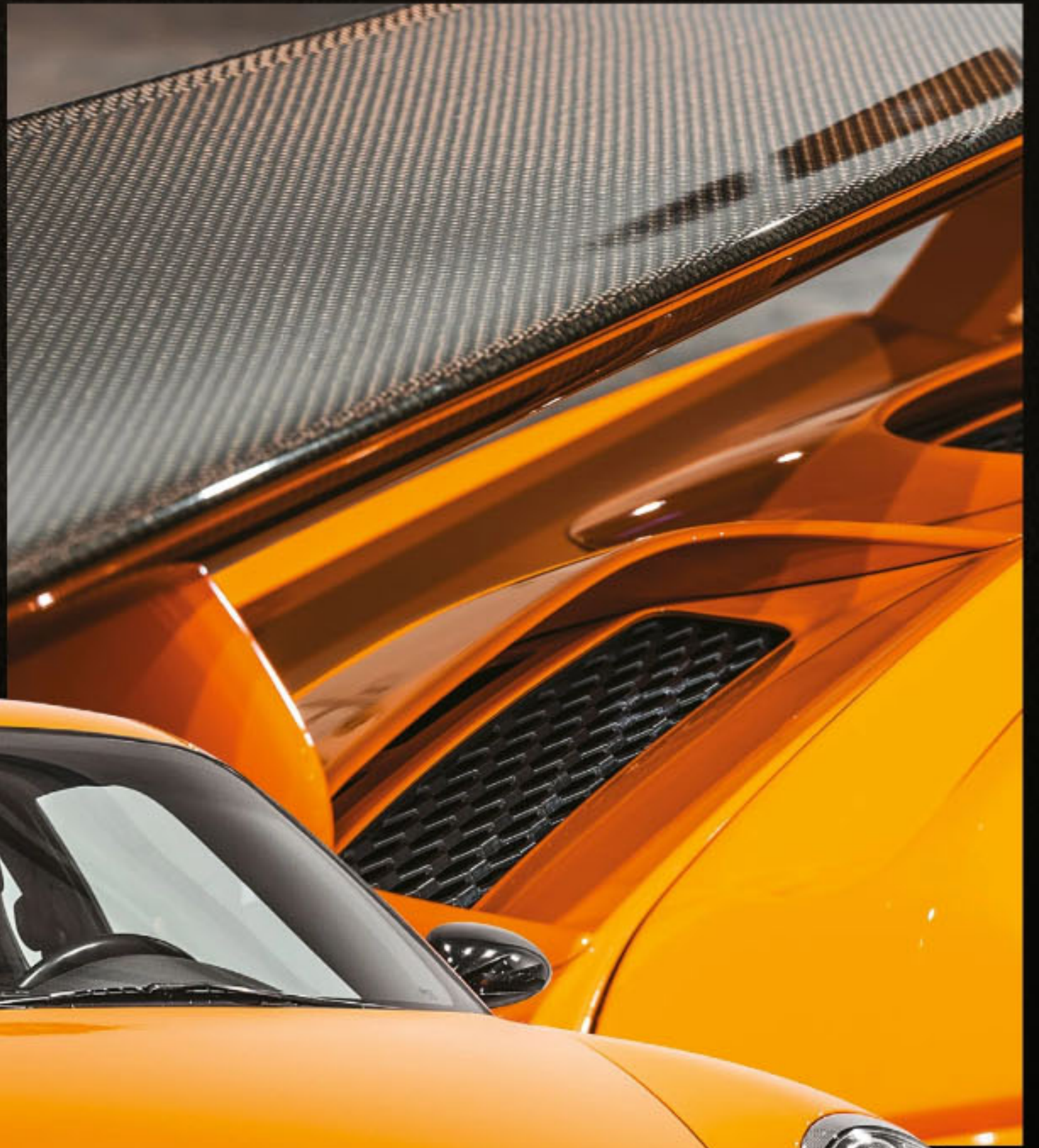
Joel Newman





RENNSPORT

| | |
|----------------|-----|
| 2.7 Carrera RS | 120 |
| 964 RS | 128 |
| 997.1 GT3 RS | 136 |



2.7 RS

Get it for
£300,000+

Performance

★★★★☆

Maintenance costs

★★★★☆

Rarity

★★★★☆

Value

★★★★☆



CARRERA RS 3.0

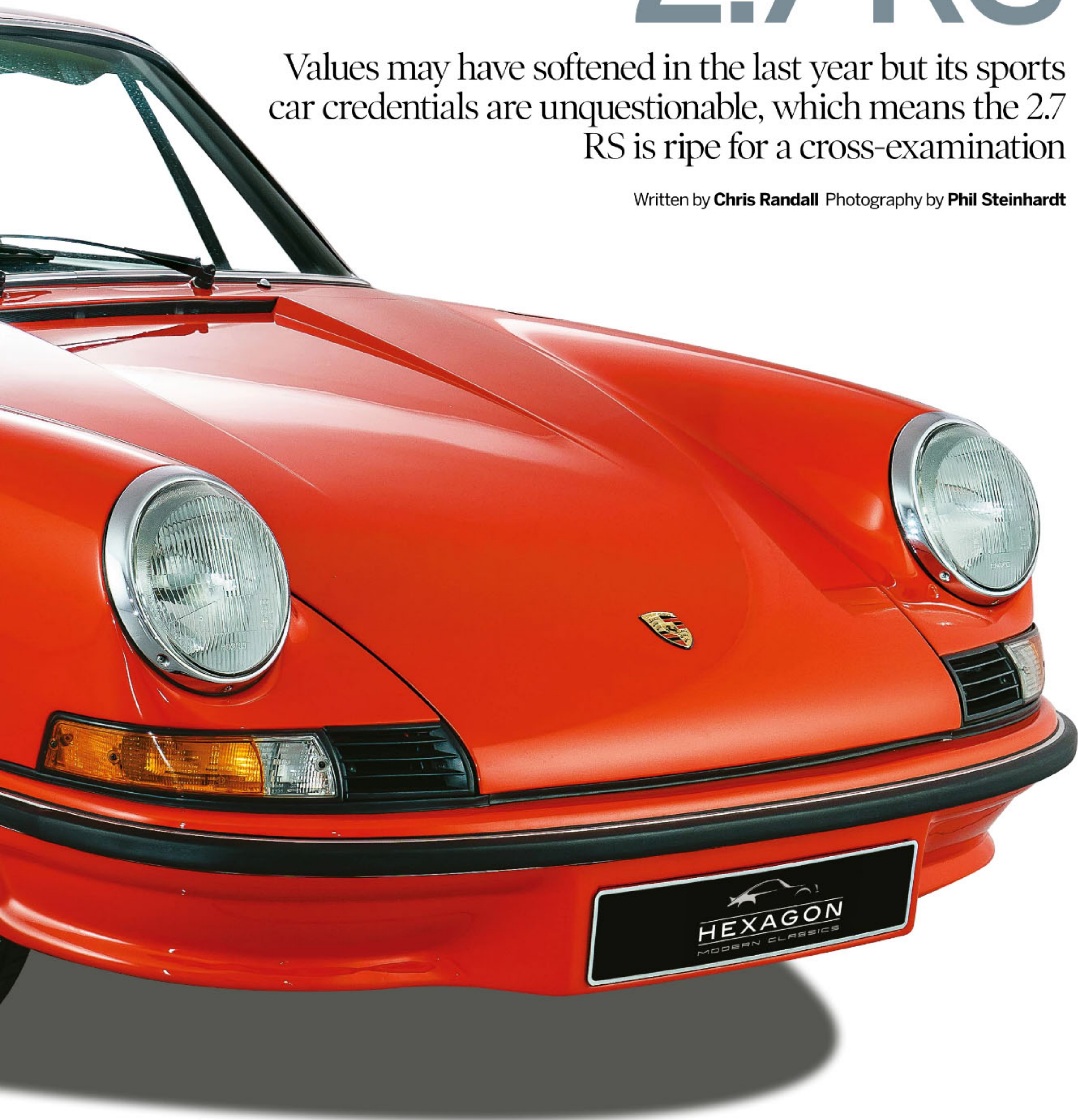
1974 would see a further development of the RS genre when Porsche introduced an even rarer model, so rare in fact that the right-hand-drive cars are identified by their colour alone. Just 109 3.0-litre RSs were made in total, and only six of those came with the steering wheel on the right – five came to the UK and one went to Australia. Externally, they were identified by their flared wheelarches, gaping air intake in the front air dam (with room for an oil cooler) and a Turbo-style rear spoiler. Lightweight construction featured once again, with thinner steel panels and a luggage cover, engine cover, and bumpers fashioned from fibreglass, the end result a 911 that weighed just 900kg. A bore increase to 95mm resulted in a 2,994cc motor boasting 230bhp and 275Nm of torque and that now featured an aluminium crankcase, while the transmission had its own oil cooler. The brakes were now 917-derived items with 300mm cross-drilled and ventilated discs, while the suspension featured revised mountings and geometry.



2.7 RS

Values may have softened in the last year but its sports car credentials are unquestionable, which means the 2.7 RS is ripe for a cross-examination

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



Take a look back through automotive history and there are only a handful of cars that have achieved truly legendary status. The 911 you see here – the 2.7 RS – is one of them. With 1,590 models produced and prices hitting the £500,000 mark, its position as an iconic 911 has been well and truly cemented in the minds of every enthusiast. So where to start? Well, its difficult gestation has been documented many times – the doubts of Porsche’s marketing department, the determination of then CEO Ernst Fuhrmann to drive the project through, the immediate sales success – so we won’t dwell on that any further here. Suffice to say, its reception at the 1972 Paris Salon and the subsequent clamour to snap up the first 500 cars fully vindicated Fuhrmann’s belief.

It was based on the 2.4S, and came in two distinct forms: the Sport, and the Touring (RST), designated M471 and M472 respectively. The former quickly became known as the ‘Lightweight’ (RSL). The number built has always been a matter of some debate, but 1,590 examples is generally accepted, comprising 1,390 of the better-equipped Touring and 200 Lightweights, although inevitably there have been conversions from one to the other over the years. But let’s not get bogged down with such arguments, because what really

fascinates admirers of this special 911 are the changes that Porsche made, and they begin with one of the strictest diets yet seen in motordom.

Firstly, the non-load bearing panels such as the roof, front and rear wings, and the front luggage compartment lid were formed from metal just 0.7mm thick when 1.0 to 1.25mm was the norm. And these were joined on Lightweight cars by bumpers formed from fibreglass, pleasingly unadorned items that lacked the gaping scoops and diffusers of today’s cars, with just a black trim strip and a recess for the number plate up front and delicate quarter sections at the rear. The RST got a steel rear bumper instead, although the engine cover and iconic ‘ducktail’ spoiler on all variants were also fashioned from fibreglass. That spoiler was claimed to reduce aerodynamic lift at the rear by 75 per cent, so it was certainly effective, although it wasn’t fitted to all RSs.

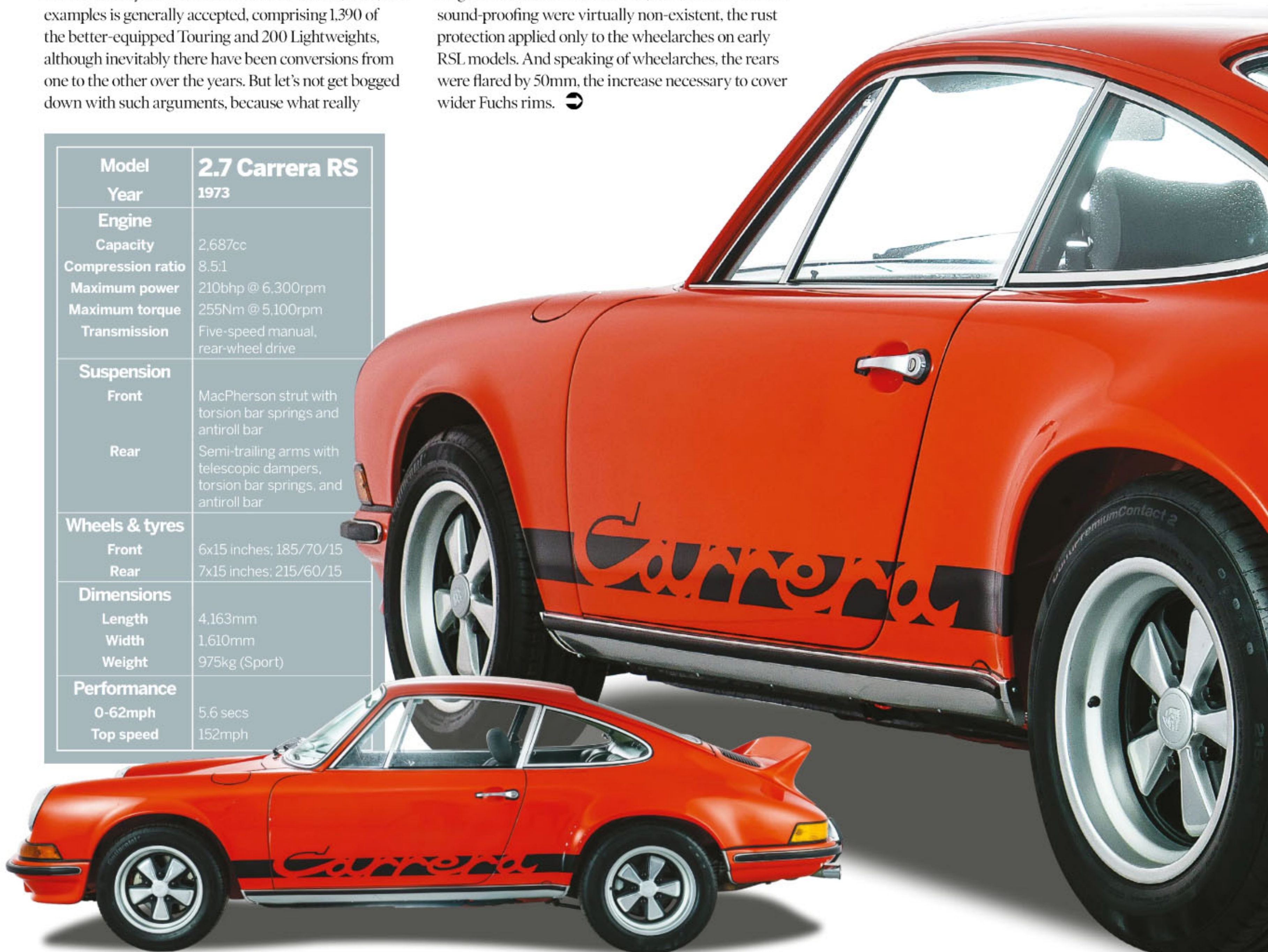
Weight saving on the first 911 Rennsport continued with the use of lighter, thinner glass courtesy of Belgian manufacturer Glaverbel, while underseal and sound-proofing were virtually non-existent, the rust protection applied only to the wheelarches on early RSL models. And speaking of wheelarches, the rears were flared by 50mm, the increase necessary to cover wider Fuchs rims. ➔

“

THE NUMBER BUILT HAS ALWAYS BEEN A MATTER OF SOME DEBATE, BUT WHAT REALLY FASCINATES ADMIRERS OF THIS SPECIAL 911 ARE THE CHANGES THAT PORSCHE MADE, AND THEY BEGIN WITH ONE OF THE STRICTEST DIETS YET SEEN IN MOTORDOM

”

| | |
|---------------------------|---|
| Model | 2.7 Carrera RS |
| Year | 1973 |
| Engine | |
| Capacity | 2,687cc |
| Compression ratio | 8.5:1 |
| Maximum power | 210bhp @ 6,300rpm |
| Maximum torque | 255Nm @ 5,100rpm |
| Transmission | Five-speed manual, rear-wheel drive |
| Suspension | |
| Front | MacPherson strut with torsion bar springs and antiroll bar |
| Rear | Semi-trailing arms with telescopic dampers, torsion bar springs, and antiroll bar |
| Wheels & tyres | |
| Front | 6x15 inches; 185/70/15 |
| Rear | 7x15 inches; 215/60/15 |
| Dimensions | |
| Length | 4,163mm |
| Width | 1,610mm |
| Weight | 975kg (Sport) |
| Performance | |
| 0-62mph | 5.6 secs |
| Top speed | 152mph |





From top right: ducktail spoiler is now a worldwide motoring icon; front vents were matte black with a matching decklid in line with 1973 MY; the RS got Fuchs that were one-inch wider at the rear than the 2.4S

THE RENNSPORT TIMELINE

- **1972**
The legendary 2.7 RS launches the breed, and is worth a fortune today. 210bhp doesn't sound much, but the reduced weight ensured stunning performance.
- **1984**
The SC RS was built to homologate the factory Rothmans team's rally effort. Had a Turbo body with fibreglass bumpers and aluminium doors.
- **1991**
Launched at the Geneva Show, the 964 revives the RS moniker with both 3.6 and rare 3.8-litre variants. Power is up by 10bhp in 3.6-litre form and weight is down.
- **1995**
Porsche reprise the RS theme with the 993, the 3.8-litre engine revised for a 300bhp output. It was rear-wheel drive only, and notable for its aggressive looks.
- **2004**
It was the 996's turn for the lightweight treatment, the GT3 making 381bhp and 280bhp per ton. Top speed is an epic 190mph.
- **2006**
The 997 RS was available in GT3, GT2, and rare GT3 4.0 forms. Power ranged from 415bhp to a slightly bonkers 620bhp in the GT2, the latter hitting 62mph in just 3.5 seconds.





Extra equipment in the Touring included a radio (blacked here), full carpet, and rear seats. The Lightweight was typically sparse, with even the glovebox lid and passenger sun visor removed. Door cards in the Lightweight had manual winders and a door strap rather than the handle and electric window mechanism found here in the Touring

There were plenty more weight-saving measures applied to the cabin and running gear, but the overall result was a car that in RSL form tipped the scales at little over 975 kilograms, with the Touring's extra equipment adding around 100 kilograms. To put that in perspective, an entry-level Lotus Elise – hardly the last word in sybaritic sporting comfort – weighs 876 kilograms and needs a high-tech bonded aluminium chassis to achieve that. Reputedly, the later cars made do with steel panels and standard glass, as Porsche had used up all the lovely lightweight bits – and there was the occasional oddity, with some Lightweights getting opening rear quarterlight windows from the Touring and others not – but whatever the truth, the RS was a seriously lithe car. It certainly explains why it made such good use of the singing flat six that Porsche had tucked beneath that pert spoiler.

The engine – codenamed 911/83 – was also 2.4 S-based, but it too had substantial changes, not least a 6mm growth in bore from 84 to 90mm for a capacity of

2,687cc and running an 8.5:1 compression ratio. Rather than risk any durability issues, Porsche employed Nikasil-coated cylinder liners rather than the usual 'Biral' construction of cast iron cylinders surrounded by aluminium cooling fins, although the valves, connecting rods, forged crankshaft and magnesium alloy crankcase were all carried over from the 'S' unchanged.

Fitted with Bosch mechanical fuel injection, the result was 210bhp and a healthy 255Nm of torque. The power was sent to the rear wheels via the '915' five-speed manual transmission, although the ratios for fourth and fifth were longer compared to the 2.4 S. Also, and unlike the muscle-bursting items in other sports cars, the clutch was a standard item that needed a stronger spring to cope with the higher output.

Of course, that low weight paid dividends elsewhere, not least in the braking department, where only modestly sized ventilated discs were required. Measuring 282mm and 290mm front and rear respectively, they seem small by today's dinner-plate

standards, but they were more than up to the job of slowing this featherweight Coupe. The suspension didn't depart too far from standard either, comprising the same setup as regular 911s with struts at the front, albeit with lighter alloy components and semi-trailing arms at the rear allied to torsion bar springs all round.

Along with firmer bushes, the antiroll bars received attention, growing in diameter to 18mm and 19mm at the front and rear respectively, while Bilstein dampers replaced the usual Koni items, saving a further 7.7 pounds in the process. The deliciously light and accurate rack and pinion steering remained, while the wheels were the familiar Fuchs design that for the first time on a 911 were wider at the rear at seven inches. The fronts were six-inch items, and the RS came with 185/70 front and 215/60 rear Pirelli CN36 rubber, although later cars would switch to Dunlops.

Porsche hadn't finished with the weight saving though, and once ensconced in the snug cabin of a Lightweight, you'd become aware of how



“
THERE WERE PLENTY MORE
WEIGHT-SAVING MEASURES
APPLIED TO THE CABIN AND
RUNNING GEAR, BUT THE
OVERALL RESULT WAS A CAR
THAT IN RSL FORM TIPPED THE
SCALES AT LITTLE OVER 975
KILOGRAMS

”



BUYING TIPS

The 2.7 Carrera RS is right up there at very top end of Porsche acquisitions at present. As such, we're heading into price tags with many zeros here, so the normal rules don't really apply. If you have the sort of bank balance that supports the idea of buying an RS, then it goes without saying that you'll be buying it from an expert source. Anything else would be madness. However, there are some obvious points still to be considered here:

- **Prices:** The biggest limiting factor when it comes to buying. They're increasing on a weekly basis, and you wouldn't bet against the £1 million 2.7 RS by the turn of next year.
- **Provenance and Originality:** Few things are more vital with an RS so expert advice is an absolute necessity. Be fastidious when checking its history, and remember that many will have been raced. Any repair work should be to a world-class standard.
- **Restoration:** It just has to be done right, but original parts are either impossible to find or incredibly expensive. With prices as they are, a detailed restoration will certainly make sense if you can afford it.
- **Replicas:** There are plenty around, some of them very good, so perhaps this is the way to go if you want to experience a more affordable taste of the RS legend. Regardless, ensure the base car is structurally sound or you'll still face a hefty bill.

spartan things had become. The seats were cloth-covered Recaro items that could be fitted with optional headrests, while underfoot you'd find thin felt instead of carpets, covered with plain rubber mats. The rear seats were noticeable only by their absence, and it wouldn't take long before you noticed that a few other pieces had also gone missing. You'd search in vain for any sign of a passenger sun visor, glovebox lid or clock, while the door trims were vinyl panels that had straps rather than proper handles and manual window winders. Even the coat hooks had disappeared.

Also gone were the counterbalance springs for the luggage compartment lid, beneath which you'd find a toolkit and a compressor. The single 12-volt battery was also located up front, although things differed here too, as the Touring was fitted with two six-volt items either side of the spare wheel. The more comfortable Rennsport variant also got back all of the kit so carefully pruned from the Lightweight, including full carpeting, rear seats, a radio and electric windows, but Porsche would happily add whatever options a buyer chose, even if such luxuries weren't exactly in the spirit of the original RS brief.

You'd pay another £1,000 for the extra comfort and luxuries, although at least you ended up paying less money for less equipment rather than the opposite. There were also choices to make when it came to colours, with the option to pick from a standard palette that included period hues such as Tangerine and Emerald green or to go for the Grand Prix white that has become so synonymous with the model. And with that decision made, it was just a matter of choosing the colour of the 'Carrera' side decals that were available in red, black, blue or green, along with colour-coded wheel centres. Or, if you preferred to draw slightly less attention to your choice of 911, you could forego the script altogether. In fact, it was something of a rare feature on the darker painted cars.

Whichever specification you chose, the fact remains you were buying into a very special 911, one that might not have arrived at all were it not for the unshakeable belief and hard-headed approach of the talented Dr Fuhrmann. Indeed, it's easy to argue the RS underpins the very legend of the 911, and the only shame is that with prices continuing to head for the stratosphere, only a select few will ever get to experience it. **911**

“

IF YOU PREFERRED TO DRAW SLIGHTLY LESS ATTENTION TO YOUR CHOICE OF 911, YOU COULD FOREGO THE SCRIPT ALTOGETHER

”

SPECIALIST VIEW

"In some ways it's hard to summarise the 2.7 RS, as the normal 911 rules aren't relevant. The one thing that is clear, though, is these cars are selling for astonishing sums of money compared to a couple of years ago, and that includes our Touring model. With a global market for cars like these, as long as the details and history are spot on then people are willing to pay a premium, and I really can't see that ending any time soon."

Jonathan Franklin, Hexagon





OWNING A 2.7 CARRERA RS

- **Price new:** £6,112 (Sport)
- **Total numbers sold:** 1,590
- **Service intervals:** 1 years/12,000 miles
- **Service costs minor:** £256.08
- **Service costs major:** £609.72
(Figures are courtesy of RPM Technik)



"I'VE GOT ONE"



"I've had my 2.7 RS for approximately two years, having bought it from a specialist dealer after an extensive search - and lots of patience.

It has been everything I wished for. In my opinion, it is the best car I've ever driven for sheer driving thrills and experience. So many things in life are a disappointment after a long wait, but this definitely isn't. My personal collection also includes a Ferrari 246 Dino, and the RS is definitely the sharper tool of the iconic pairing. To drive, it's a car you need to work with to get the most from, but when you master it, it is so rewarding to drive. Precise, exciting - it is the perfect car."

Jonathan Aucott

964 RS

Get it for
£150,000-£230,000

Performance

★★★★☆

Maintenance costs

★★★★☆

Rarity

★★★★☆

Value

★★★★☆



3.8-LITRE: THE WIDEBODY 964 RS

Porsche has always been adept at going that one step further. Just when you thought a model had reached its zenith, the company would launch something that little bit more special, and that's the case with the 3.8-litre RS version of the 964. Around 100 examples were built for 1993 so Porsche could mix it with larger-capacity GT racers, and that meant fitting a 3,746cc flat six, dubbed M64/04. The increase was courtesy of a 2mm-wider bore, and it was accompanied by a variety of engine modifications that included lighter pistons and an exhaust with less back pressure. The result was a storming 300bhp and 360Nm of torque, enough to punch the RS to 62mph in 4.9 seconds and on to 170mph. Those figures might have been higher still if it wasn't for the wide body that blunted the aerodynamics, although there is no doubting the effectiveness of the adjustable bi-plane rear wing. Completing the transformation were a set of impressively large Speedline alloys, a split-rim design

that measured 9x18 inches at the front and 11x18 inches at the rear. The 3.8 also marked the first appearance of 'Speed yellow' paint, although more subtle colours were available for those wishing to make less of a statement.

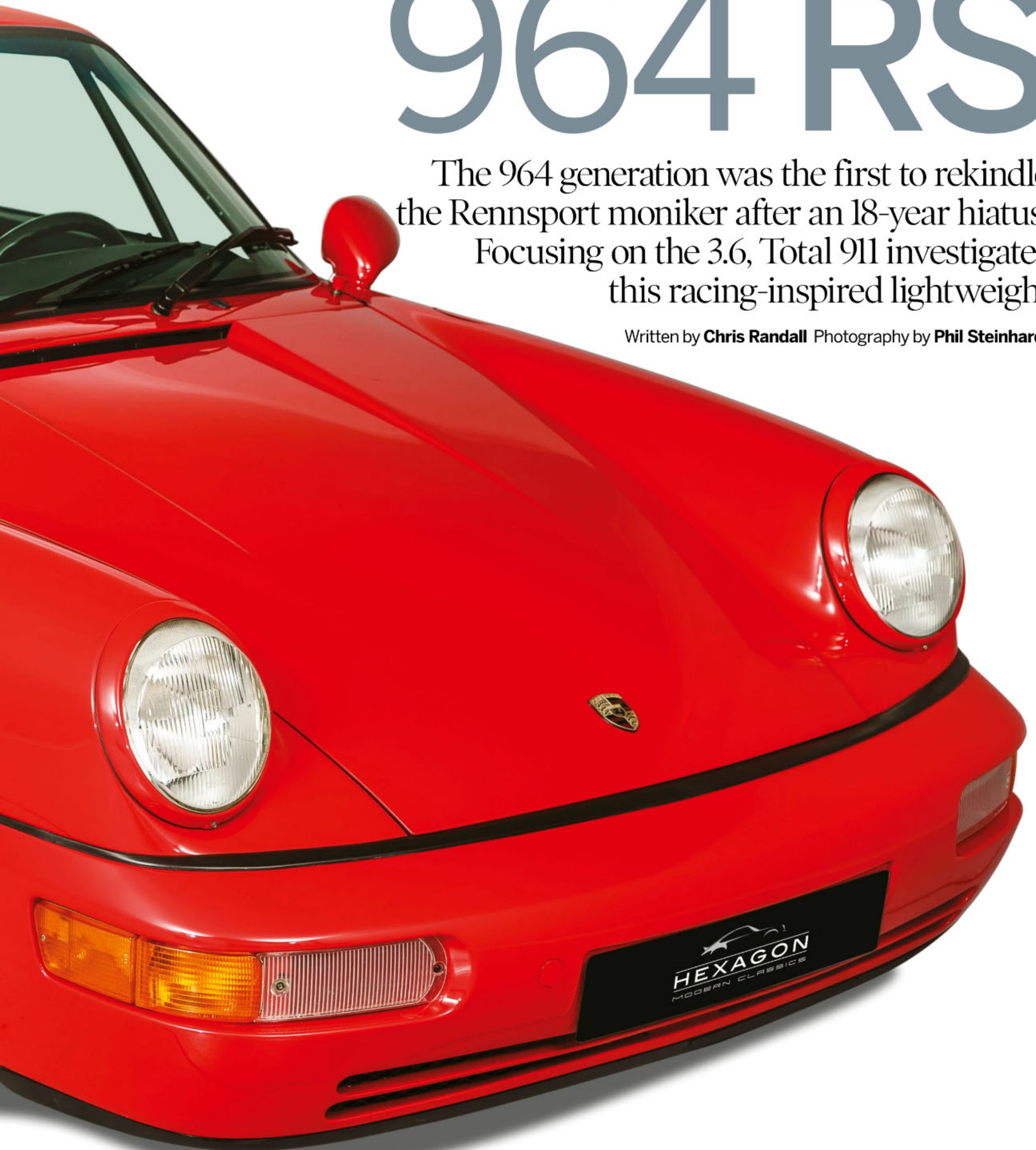




964 RS

The 964 generation was the first to rekindle the Rennsport moniker after an 18-year hiatus. Focusing on the 3.6, Total 911 investigates this racing-inspired lightweight

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



The last 964 to be subjected to the Ultimate Guide treatment was the Carrera 4, but this time we're focusing on a very special incarnation of the penultimate air-cooled 911.

Before we get to the meat of what the RS is all about, however, it's worth taking a moment for a broader reminder of the 964's pivotal role in the model's evolution. Essentially, it stood as a bridge between the old guard that was the 3.2 Carrera and the 911s we admire today, introducing modernities such as power steering, anti-lock brakes and coil-sprung rather than torsion-bar suspension. Four-wheel drive and Tiptronic gearboxes also made their first appearance, and the 964 was both stiffer and more aerodynamic than its predecessor, while we'd also marvel at the electric rear spoiler and modern heating system that was no longer unfathomable. This was the march of 911 progress, and the range would grow to encompass some very special cars, perhaps none more so than this one.

Like many Porsche 911s before and since, the 964 RS was born from the need to go racing, in this case acting as a homologation model for the Carrera Cup series. The RS was launched at the 1991 Geneva Motor

Show, and went on sale later that year as a 1992 model, with total sales reckoned to be in the region of 2,400. Production would be split between four key variants – the majority of which (just under 2,000) would be in 'Sport' or 'Touring' specification, with the remainder in 'M001' and 'M003' form – and it's worth exploring those in more detail before going any further. The Sport model was marketed as 'Lightweight' in the UK, and was designed both as a road car and club racer, making it uncompromising as a choice for the daily commute. Closer to the race cars in reality, there were no luxuries inside, although you did at least get a smattering of carpet – albeit a very thin one.

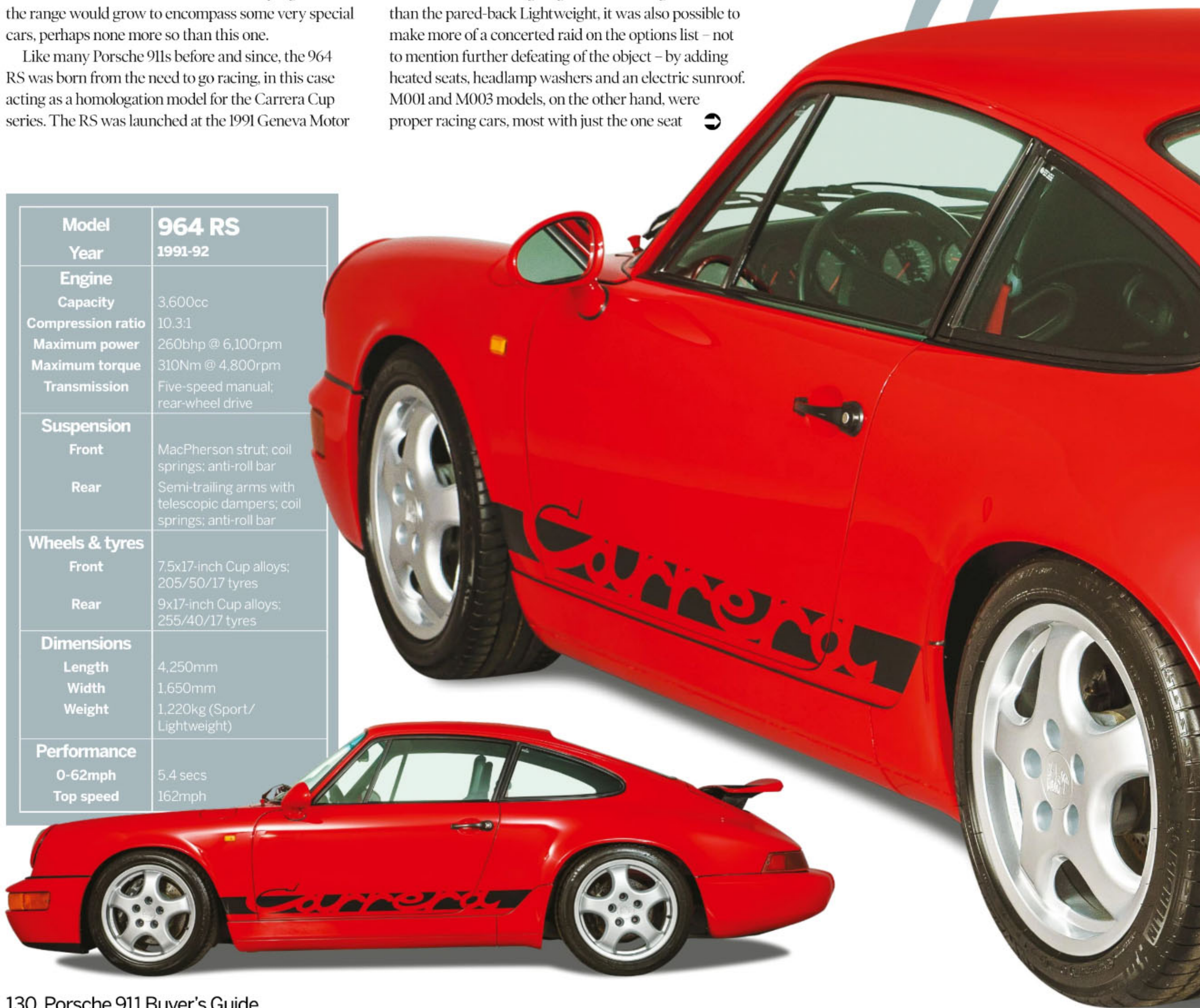
As the name suggests, Touring models were a little more comfortable, gaining leather-clad seats from the Carrera 2 and niceties such as a stereo, electric windows, central locking, air conditioning and more sound insulation. Weighing around 70 kilograms more than the pared-back Lightweight, it was also possible to make more of a concerted raid on the options list – not to mention further defeating of the object – by adding heated seats, headlamp washers and an electric sunroof. M001 and M003 models, on the other hand, were proper racing cars, most with just the one seat ➔

“

AS THE NAME SUGGESTS, TOURING MODELS WERE A LITTLE MORE COMFORTABLE, GAINING LEATHER-CLAD SEATS FROM THE CARRERA 2 AND NICETIES SUCH AS A STEREO, ELECTRIC WINDOWS, CENTRAL LOCKING, AIR CONDITIONING AND MORE SOUND INSULATION

”

| | |
|---------------------------|---|
| Model | 964 RS |
| Year | 1991-92 |
| Engine | |
| Capacity | 3,600cc |
| Compression ratio | 10.3:1 |
| Maximum power | 260bhp @ 6,100rpm |
| Maximum torque | 310Nm @ 4,800rpm |
| Transmission | Five-speed manual; rear-wheel drive |
| Suspension | |
| Front | MacPherson strut; coil springs; anti-roll bar |
| Rear | Semi-trailing arms with telescopic dampers; coil springs; anti-roll bar |
| Wheels & tyres | |
| Front | 7.5x17-inch Cup alloys; 205/50/17 tyres |
| Rear | 9x17-inch Cup alloys; 255/40/17 tyres |
| Dimensions | |
| Length | 4,250mm |
| Width | 1,650mm |
| Weight | 1,220kg (Sport/Lightweight) |
| Performance | |
| 0-62mph | 5.4 secs |
| Top speed | 162mph |





In true racing style, the 964 RS had internal and external engine cut-off switches, with a brace linking the front suspension struts, aiding rigidity



RS TIMELINE



1972

The legendary 2.7 RS launches the breed, and is worth a fortune today. 210bhp doesn't sound like much, but the reduced weight ensured a stunning level of performance.

1991

Launched at the Geneva Show, the 964 revives the RS moniker with both 3.6 and rare 3.8-litre variants. Power is up by 10bhp in 3.6-litre form, and weight is down compared to a Carrera.

1995

Porsche reprise the RS theme with the 993, the 3.8-litre engine revised for a 300bhp output. It was rear-wheel drive only, and notable for its aggressive looks.

2005

It was the 996's turn for the lightweight treatment, the GT3 making 381bhp. Top speed is an epic 190mph, but thankfully PCCB brakes are standard.

2006

The 997 RS was available in GT3, GT2 and rare GT3 4.0 forms. Power ranged from 415bhp to a slightly bonkers 620bhp in the GT2, the latter, of course, being turbocharged.

2015

The latest 991 is likely to arrive in GT3 RS form in 2015. Expect an output of around 500bhp and PDK gearbox as standard.



The interior of the 964 RS followed the Rennsport tradition of paring back on niceties to save weight. Notice the blanking plate in place of the radio/cassette player, plus the minimalist door cards with grab handles

and strictly for track sorties. The M003 – built for the European GT championship and known as the ‘N-GT’ – was re-named ‘Clubsport’ for the UK, and boasted a Recaro seat that was shelled in kevlar and covered in fire-retardant cloth, as well as a four-point Schroth harness and Matter roll cage. This was very much the business end of the 964 RS.

Less complicated than the model range was the bodywork, the outline of which deviated little from the standard 964 – save for a handful of RS-specific tweaks. All versions featured a stronger seam-welded shell to withstand the battering from circuit curbs, and although it was zinc-coated as standard, the Lightweight models lacked the layer of underseal. These cars therefore got a three-year anti-corrosion warranty rather than the usual ten years. The Turbo-style teardrop mirrors were lighter and more aerodynamic, and there was a new rear bumper identified by numberplate lights positioned at the side rather than above.

Further weight-saving measures included a luggage

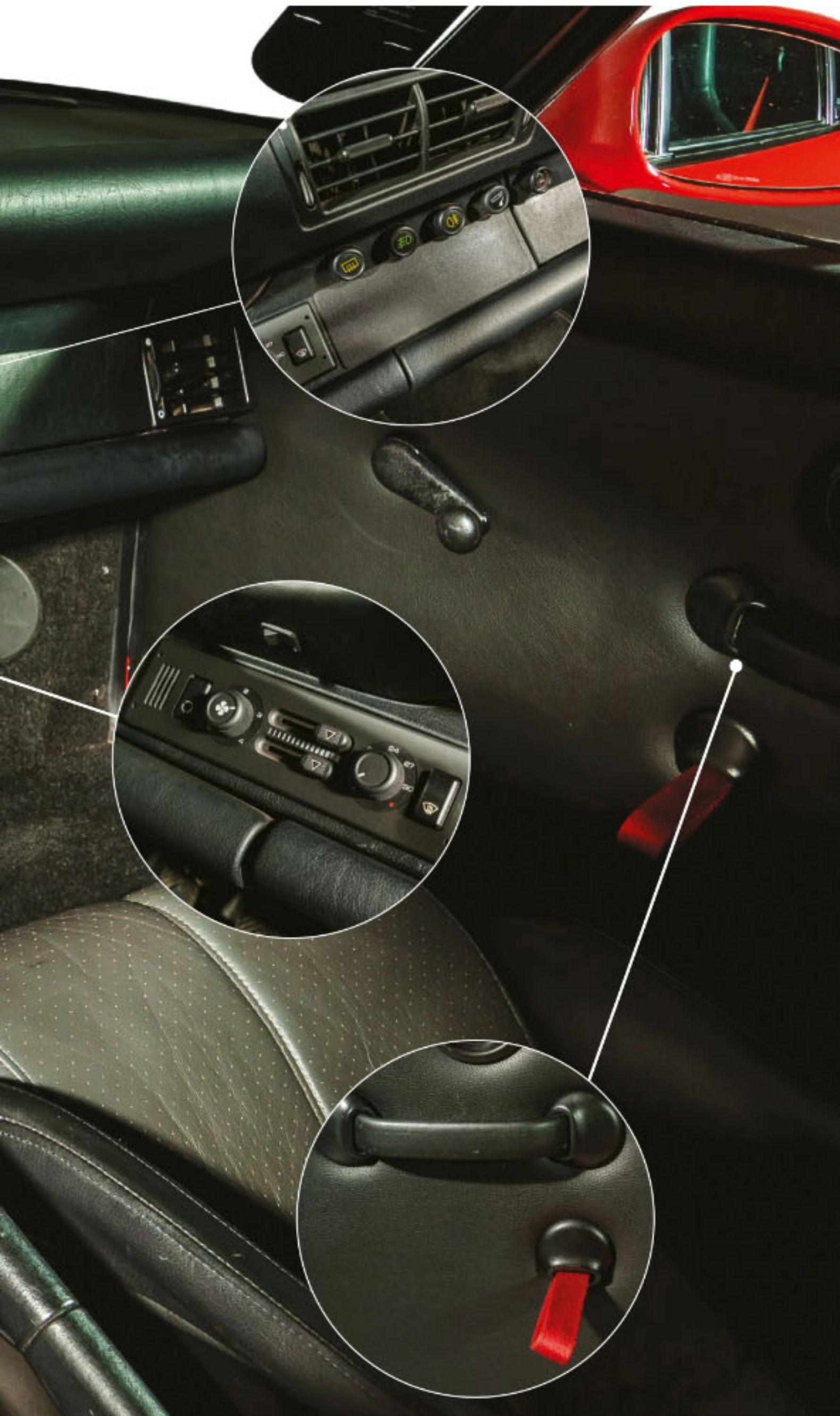
compartment lid that was fashioned from aluminium, side and rear glass that was now just 3mm thick instead of 4.7mm, and a larger 92-litre plastic fuel tank in the nose in place of the standard car’s 75-litre steel item. Porsche had done just what you might have expected with this special model, and approached the whole business with their usual laser-sharp focus and obsessive attention to detail. There were no half measures here, and the 964 RS was all the better for it.

However, in a far cry from the stratospheric power outputs we are used to today, things were to remain fairly standard in the engine room. Power for the 3.6-litre M64/03 unit was officially increased by just 10bhp courtesy of a revised ECU (although it was likely to be a little higher in reality), and a single or dual-mass flywheel was included depending on the model. The catalytic converters were retained, along with dual-distributor ignition and Bosch DME engine management, and although Porsche were cagey about other engine changes, it is reasonable to assume that

greater attention was paid to the weight and assembly of the internals.

Apart from the very rare Carrera 4 Lightweight, drive was sent to the rear wheels via a Carrera 2 gearbox with revised ratios and stronger synchromesh, and there was a limited-slip differential. But with track action very much in mind, one area that did come in for attention were the brakes, those at the front being donated by the 964 Turbo with Carrera Cup items. That meant that there were cross-drilled and ventilated discs, in addition to four-piston calipers at each corner with ABS and the standard hydraulic booster.

Given the modest power increase and lower weight, the RS was arguably over-endowed in the stopping department, but the changes would have been reassuring – especially if fast-approaching Armco barriers were involved. Hydraulically assisted rack and pinion steering was retained, while the suspension gained uni-ball top mountings for the front struts, along with a strut brace, and there were cast-



“

LESS COMPLICATED THAN THE MODEL RANGE WAS THE BODYWORK, THE OUTLINE OF WHICH DEVIATED LITTLE FROM THE STANDARD 964 – SAVE FOR A HANDFUL OF RS-SPECIFIC TWEAKS

”



BUYING TIPS

A 911 of this type needs to be in nothing short of perfect condition, and signs that it might not have received anything approaching fastidious care should have you running a mile. The cost of sorting a bad one is likely to prove stratospheric, so you have been warned.

- **History:** Provenance is everything with an RS, so be extra thorough with the background checks. Fakes do exist, so be wary.
- **Bodywork:** The rising values keep many off the race circuit, but not all of them. Evidence of previous accident repairs will need investigation and assurance that all is now well.
- **Engine and Transmission:** A specialist inspection is best for peace of mind. Needless to say, any signs of smoke, oil leaks or nasty noises are a no-no if big bills are to be avoided.
- **Suspension/Brakes:** That specialist inspection will more than likely identify any issues here. Everything needs to be spot-on in order for an RS to give its best, and there's no reason to accept an unloved example.
- **Interior:** With a variety of choices, it's up to you exactly how stripped-back you choose to go, but just make sure you can live with the more uncompromising versions. Condition should be perfect, though.

aluminium components present at the rear. The RS also sat 40mm lower than regular 964s, which provided a nicely purposeful stance, as well as ensuring that the 17-inch magnesium alloy 'Cup 91' wheels filled the wheel arches. Most road-going cars came fitted with Yokohama or Bridgestone rubber when new, and with 205/50s at the front and 255/40s at the rear, you'd need to be tackling public roads at an insane speed to run out of grip in the dry.

Jump inside, and what faced you depended on the level of weight-saving you'd chosen, although it was still recognisably a 964 cabin. Setting aside the true race cars, most opted for the next closest thing in the form of the Lightweight (or Sport) model, in which case you were in for a pretty Spartan experience. It goes without saying that air-conditioning and a stereo were off the standard menu, although you could add the latter at no extra cost, even if the likelihood of being able to enjoy those early Nineties chart hits was questionable given the limited soundproofing. You'd also find manual window winders attached to vinyl door trims that sported straps rather than proper handles, a lighter wiring harness, a thin carpet, and a pair of colour-coded seat belts. Also included were some subtle reminders of this car's potential in the form of an RS

logo in the centre of the four-spoke steering wheel and RS script in the carpeted area – where the rear seats once resided.

If you still liked the idea of a 911 for the track, there was always the sanctuary of the Touring's more comfortable interior. The extra luxuries are detailed earlier on, but a fair few owners found this more to their liking. Most would also have been happy with the colour choices, which generally reflected the palette available to other 964 buyers. There was the usual selection of silver, black, Guards red, and blue, as well as the fetching Amethyst Metallic and the more exotic Rubystone red. Subtle it wasn't, with 'bright pink' probably the most accurate way to best describe this striking hue.

As recent values and auction prices have shown, there's no question that the 964 RS deserves to be taken seriously. Such purity of purpose hadn't been seen since the 2.7 RS first appeared some 20 years previously, and in our eyes that makes this model something to be cherished. As for the fact that the car you see in these pictures was driven by Walter Rohrl himself in its role as development car for suspension experts Bilstein – well, that's just the icing on the cake. **911**

“

THE RS SAT 40MM LOWER THAN REGULAR 964S, ENSURING THE 17-INCH MAGNESIUM ALLOY 'CUP 91' WHEELS FILLED THE WHEEL ARCHES

”

SPECIALIST VIEW

“Chassis number 491254 was originally supplied to Bilstein and driven by Walter Röhrl in the development of world-leading suspensions. The RS subsequently came to England in 2008, covering just 7,000km in the hands of one private owner since. On acquisition, Hexagon Classics embarked upon a sympathetic refurbishment programme that included a complete repaint in the original factory Guards Red with a total mechanical overhaul carried out by renowned marque specialists, BS Motorsport.”

Jonathan Franklin, Hexagon





OWNING A 964 CARRERA RS

- **Price new:** £64,500
- **Total numbers sold:** 2,400 (all variants)
- **Service intervals:** 1 year/12,000 miles
- **Service costs minor:** £605.78
- **Service costs major:** £787.22
(Figures courtesy of RPM Technik)



"I'VE GOT ONE"



"For me it is the prettiest 911 ever made, and the sound (wow, the sound) is the purest. There's no press this, press that marketing rubbish here! It's the feel it gives you and how it rewards you that's most alluring; it's not about the 0-60 time, it's how it can carry the speed. If you can play a tune, this car can dance to it like no other."

Christian Ayres

997.1 GT3 RS

Get it for
£120,000-£160,000

Performance

★★★★☆

Maintenance costs

★★★★☆

Rarity

★★★★☆

Value

★★★★☆



**THE SECOND-GEN
997 RENNSPORT**

Given the desirability of the car you see here, it's no real surprise that the second-generation 997 range would include a GT3 RS. It was no mild refresh though, as the new model would receive some substantial changes, not least of which was a 3.8-litre motor that sat on active engine mounts. With power and torque both increased – to 450hp and 430Nm respectively – the 0-62mph time was cut by 0.2 seconds to 4.0 seconds dead, and both response and mid-range shove were boosted. VarioCam Plus and a higher 8,500rpm redline also featured. Further revisions included gorgeous new centre-lock wheels and suspension that featured stiffer spring rates and tweaks to the anti-roll bars. Externally, the new model boasted various subtle changes, including redesigned air intakes, and there was a new aero package to improve downforce. 1,500 examples were produced before the 997 disappeared in 2012.





997.1 GT3 RS

Just in case the standard GT3 wasn't quite enough, Porsche added the fabled Rennsport tag to this special 911. When it comes to buying one, Total 911 is on hand to advise

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



WATER-COOLED RS TIMELINE

2004

The 996 GT3 is the first water-cooled Neunelfer to get the RS treatment. The 3.6-litre engine produces 381bhp, enough to despatch the 0-62mph sprint in just 4.4 seconds. 682 produced

2006

Porsche follow up with the 997 GT3 RS, with essentially the same engine as the 996. Power is raised to 415bhp though, and a weight-saving regime saves 20kg. 1,106 produced

2009

It's the turn of the Gen 2 997, this time the RS getting a larger 3.8-litre engine with 450bhp that cuts the 0-62mph time to just 4.0 seconds. Aero tweaks and dynamic engine mounts feature. 1,500 produced

2010

A sure-fire future classic arrives in the shape of the 997 GT3 RS 4.0. Boasting a stunning 500bhp, it's the quickest RS yet. 600 produced

2010

It's the 997 GT2 that gets the RS treatment. There's 620bhp from the 3.6-litre engine, a 205mph top speed, and plenty of tasty carbon fibre bits. 500 produced

2015

Huge road presence marks out the RS in 991 GT3 form. Substantially lighter than Turbo variants, the 4.0-litre engine makes 500bhp. 42 sold in the UK last year

You have to head back a little over a decade, to 2004 in fact, to find the first GT3 to benefit from the legendary RS suffix. Then, it was attached to the rump of the 996 with around 680 lucky buyers getting to experience the delights of a 381bhp flat six allied to a useful weight reduction.

It would hardly come as a surprise, then, when Porsche announced that the 997 GT3 would also get the Rennsport treatment, although this time both models would arrive together in August 2006. 996 buyers had to wait five years or so for the same development. Even with an eye-watering £94,280 price tag, this new generation would prove immediately popular, so much so that 1,106 examples would leave the production line before the Gen2 version arrived

three years later. Like the 996 incarnation, the first 997 GT3 RS was all about weight saving. The first-generation GT3 RS featured the wider rear bodyshell of the Carrera 4 and Porsche shaved a healthy 20kg off the weight of the Gen1 GT3.

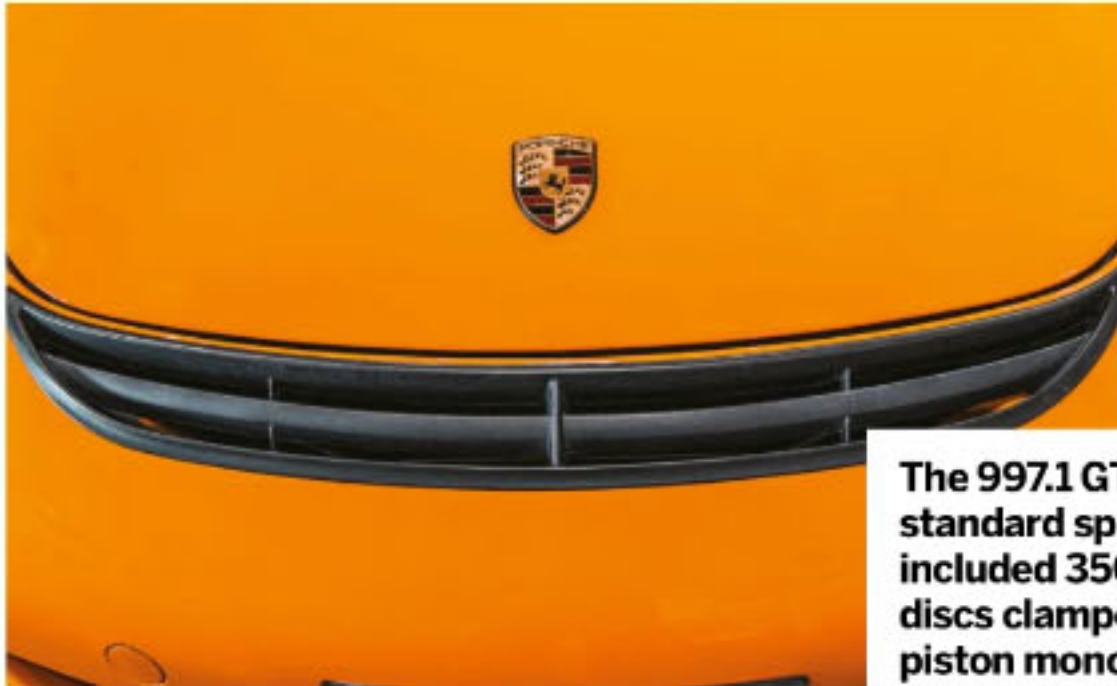
The diet was assisted by using carbon fibre for the adjustable rear wing and engine cover, and plastic instead of glass for the rear screen (saving almost 3kg) and, given the cost, it's worth ensuring parts are undamaged on the example you're looking at. At a gulp-inducing £5,900 for the rear wing, the need for care is obvious. The ten year anti-corrosion warranty means that rust shouldn't be a concern, but it's worth checking whether a previous owner has added paint protection film to the front end as the nose is susceptible to stone chips. If not, ask whether there has been any paint rectification work to the panels.

Far more important, though, is whether an RS has seen action on the track and while soaring values make it a little less likely today, that wasn't always the case. Aside from the fact that pounding over kerbs can prematurely age the bodyshell – listen out for unusual creaks – there's the risk that trips through the gravel trap has resulted in damage to the underside panelling. A specialist will check for this, of course, but otherwise it's worth a thorough examination of the undertrays for grazing. It goes without saying you need to be sure of the car's history, looking for any evidence of accident repair. It's also worth mentioning that the RS was available in some pretty extrovert colours, so you might want to consider whether you'd be happier with black or silver rather than the Orange or Viper green! That said, it seems buyers are happy to pay a small premium for their RS to stand out. ➔

“It certainly looked the part, but it's what was hidden beneath that composite engine cover that really captured the imagination”

| | |
|---------------------------|---|
| Model | 997.1 GT3 RS |
| Year | 2006-2007 |
| Engine | |
| Capacity | 3,600cc |
| Compression ratio | 12.0:1 |
| Maximum power | 415bhp @ 7,600rpm |
| Maximum torque | 405Nm @ 5,500rpm |
| Transmission | Six-speed manual, rear-wheel drive |
| Suspension | |
| Front | MacPherson struts with coil springs and anti-roll bar |
| Rear | Multi-link with telescopic dampers; coil springs; anti-roll bar |
| Wheels & tyres | |
| Front | 8.5x19-inch; 235/35/R19 |
| Rear | 12x19-inch; 305/30/R19 |
| Dimensions | |
| Length | 4,460mm |
| Width | 1,808mm |
| Weight | 1,375kg |
| Performance | |
| 0-62mph | 4.2 secs |
| Top speed | 194mph |





The 997.1 GT3 RS standard specification included 350mm steel discs clamped by six piston monoblock aluminium calipers at the front, and four piston items at the rear. Customary front bonnet vents and carbon rear wing aids downforce



PARTS PRICE CHECK

- Front bumper £4,458.70
- Rear wing blade (carbon) £5,921.53
- Exhaust system (exc. Cats) £5,712.16
- Front damper £480.60
- Brake disc set (steel) £1,179.24
- Front wheel £1,835.57

Prices are inclusive of VAT and come courtesy of Paragon Porsche

997.1 RS VALUES

As mentioned, prices for the RS have slowed recently, marking an end to a period of strong growth for the model. That's not to say they aren't going to rise in the future, of course (as they almost certainly will), but it's likely to be slower this time around. Left-hand-drive examples are worth a little less than the values quoted here.

- Project £140,000
- Good £150,000+
- Concours £190,000





“An over-rev check is an important indicator of past use and especially vital on track-focused 911s”

It certainly looked the part, then, but it's what was hidden beneath that composite engine cover that really captured the imagination. A revised version of the unit found in the 996 GT3, the 3.6-litre engine produced 415bhp at 7,600rpm and 405Nm of torque at 5,500rpm, and could safely rev to a stratospheric 8,400rpm. Featuring VarioCam variable inlet valve timing, titanium connecting rods, and a revised dry sump lubrication system, it shoved the RS from 0-62mph in 4.2 seconds and on to 194mph. The good news for buyers is a depth of engineering that rendered it bulletproof in the eyes of most specialists, although it pays to undertake some careful checks before taking the plunge. Oil and filter changes were at 12,000 miles, and while particularly careful owners

may well have shortened the interval, you certainly don't want to find any gaps in the service history. And, while regular maintenance is slightly higher than for the GT3, it's not by a great deal, so budget around £370 and £800 for a minor and major check respectively at a specialists such as RPM Technik.

More crucial, though, is an over-rev check, something that a reputable specialist will already have done. It's an important indicator of past use – and especially vital on track-focused 911s – as you'll want to know how often the motor has nudged that lofty redline. A cylinder leakage test will provide further reassurance that nothing serious is awry within the flat six. Otherwise, it's just a case of examining the unit for any signs of oil leaks from the cam chain

covers and between the engine and transmission, the latter indicating a weeping Rear Main Seal; expect to pay around £1,100 to have this rectified at a specialist such as Parr Motorsports.

The RS used a single mass flywheel, so that's one less thing to worry about, but expect to reach around 30,000 miles before the clutch requires replacement, an engine-out job that will cost in the region of £1,300. A noticeably high biting point is a sign that renewal isn't far away, so haggle accordingly. The six-speed transmission is strong, though, benefitting from beefier internals and an additional oil cooler, and it would take particularly ham-fisted track use to cause any issues. Likewise for the limited-slip differential, although an obstructive gearshift or any odd noises from either unit would need further investigation as replacement is extremely costly.

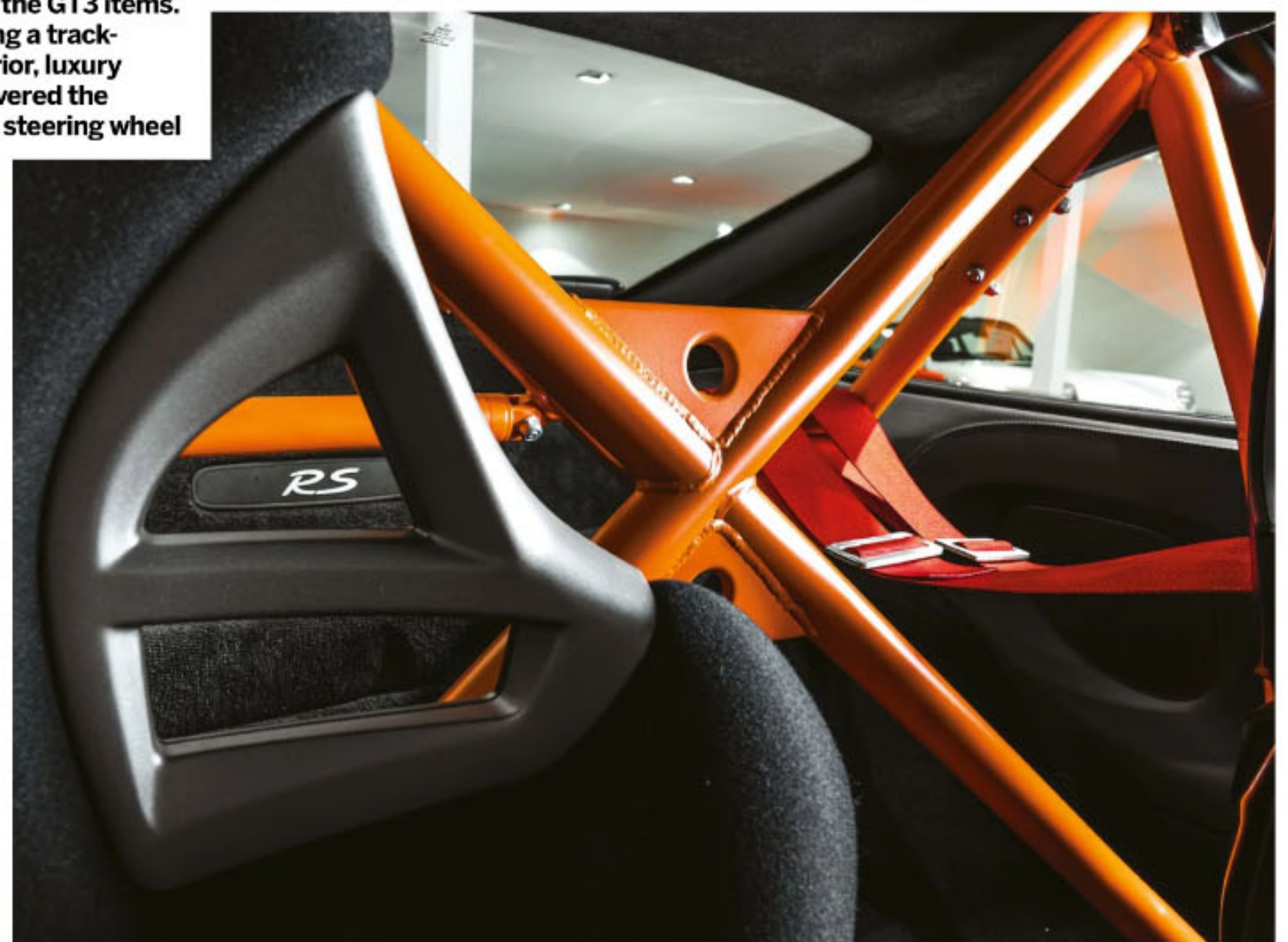
You certainly shouldn't have any problems hauling the RS down from speed, though, thanks to the impressively powerful brakes. The standard



Lightweight carbon-shelled seats in flame retardant fabric came as standard and saved around 10kg compared to the GT3 items. Despite having a track-focused interior, luxury Alcantara covered the surfaces and steering wheel

specification was 350mm steel discs clamped by six piston monoblock aluminium calipers at the front and four piston items at the rear, and they are more than adequate for road use. Any problems are likely to be a result of overheating, so examine the discs for any sign of cracks appearing around the cross-drilling. A replacement set costs around £1,200 but a previous owner may have gone down the aftermarket route for replacements, so check what's fitted. The alternative option was the PCCB carbon items, identified by yellow calipers. While they might have saved a substantial amount in unsprung weight – they were around 50 per cent lighter according to Porsche – replacing them costs in excess of £10,000. As we've said before in these guides, think long and hard about whether you really need them.

Suspension-wise, Porsche Active Suspension Management (PASM) was standard and the RS benefitted from a five-millimetre increase in wheelbase and the fitment of split rear wishbones to allow greater camber adjustability. Owners



BUYING TIPS

With the earliest examples barely seven years old, it's reasonable to expect that any car you find should be in good shape, both bodily and mechanically. There are no guarantees, of course, so tread carefully, but strong build quality ensures that this is one of the easier 911s to inspect.

- **History:** A track-focused nature means that extra care is needed. Diligence is crucial to ensure you're not looking at a tired or crashed trackday warrior.
- **Bodywork:** Corrosion isn't a concern, so spend time examining the panels for any sign of previous repair or replacement. Ensure there's no damage to the RS-specific carbon fibre parts, and look for evidence of damage to the undertrays, which points to circuit-offs.
- **Engines:** If it's been religiously maintained, there's little to worry about. Check for oil leaks and make sure you see the results of a recent over-rev check.
- **Transmission:** The gearbox is tough and shouldn't be suffering from weak synchromesh unless abused. More likely is clutch wear, so check the history to see if it's already been done as it's not a cheap job.
- **Brakes/suspension:** Hard use will take its toll on the brakes, so be sure to check their condition carefully; extensive cracking around the cross-drillings indicate a hard life and imminent replacement. Adjustable suspension may have been fiddled with, so an alignment check is advisable.
- **Interiors:** Aside from being sure you can live with the Clubsport arrangement, the interior wears well. Just look for scuffed trim and overly-smooth Alcantara.

could also make changes to the ride height, toe angle, and anti-roll bar settings, but inexpert tinkering could have resulted in a less than optimum setup. Any doubts about how the car feels on the road, or evidence of uneven tyre wear, points to the need for a specialist alignment check; RPM Technik charges £264 for this, so it's an inexpensive way of ensuring all is well. There are no issues with the hydraulically-assisted steering, but do check the condition of the 19-inch wheels. Refurbishment isn't too pricey, but replacing them is around £1,800 for a front one.

Head inside and you're left in no doubt about where this 911 was intended to spend time. The RS came with the Clubsport package as standard, which bought a roll cage in the rear, fire extinguisher prep, a six-point harness, and wiring for a battery master switch. Also standard were a pair of lightweight, carbon-shelled seats that saved around 10kg compared to the GT3 items and they were covered in flame-retardant fabric. It's a pretty hardcore arrangement for regular use, so you'll want to be sure you can live with it before committing. Despite the track-focused

specification, there was luxury on offer, too, with plenty of Alcantara covering the surfaces and steering wheel (which got a straight ahead marker at the top of the rim). Significant wear isn't very common but it's worth checking that a clumsy previous owner hasn't scuffed the seat or door cards. Porsche didn't skimp on the standard kit with the RS, and there was a lengthy options list to dip into, so make sure you establish the specification of the example you're looking at, although everything should work. Also, ensure the air-conditioning is blowing cold as corrosion could attack the nose-mounted condensers, although the system could be deleted entirely which saved a further 20kg.

Ultimately, the 997 generation is renowned for its usable, reliable nature and the GT3 RS does nothing to dispel that view. Yes, it was designed for the ultimate in thrills on road or track but the quality of its construction means there's little to worry about if you're considering buying one today. Find one that has been maintained regardless of cost and it'll prove an immensely rewarding experience. **911**

SPECIALIST VIEW

"Any 911 with an RS badge is highly sought after, and the same definitely applies to the 997.1 GT3 RS. They've got a strong following, which is to be expected given their ability and the fact that they are reliable, too. Prices have settled a bit of late, which given their meteoric rise in the past three years is no surprise. Ultimately, an RS like this one will still represent a really good purchase as a machine to get in and enjoy, as well as its investment potential."

Greig Daly,
RPM Technik





OWNING A 997.1 GT3 RS

- **Price new:** £94,280
- **Total numbers sold:** 1,106
- **Service intervals:** One-year/12,000 miles
- **Service costs minor:** £368.49
- **Service costs major:** £798.64
(Figures are courtesy of RPM Technik)



SUBSCRIBE AND SAVE UP TO 74%

Every issue of your subscription, delivered direct to your door. Print & digital editions available.

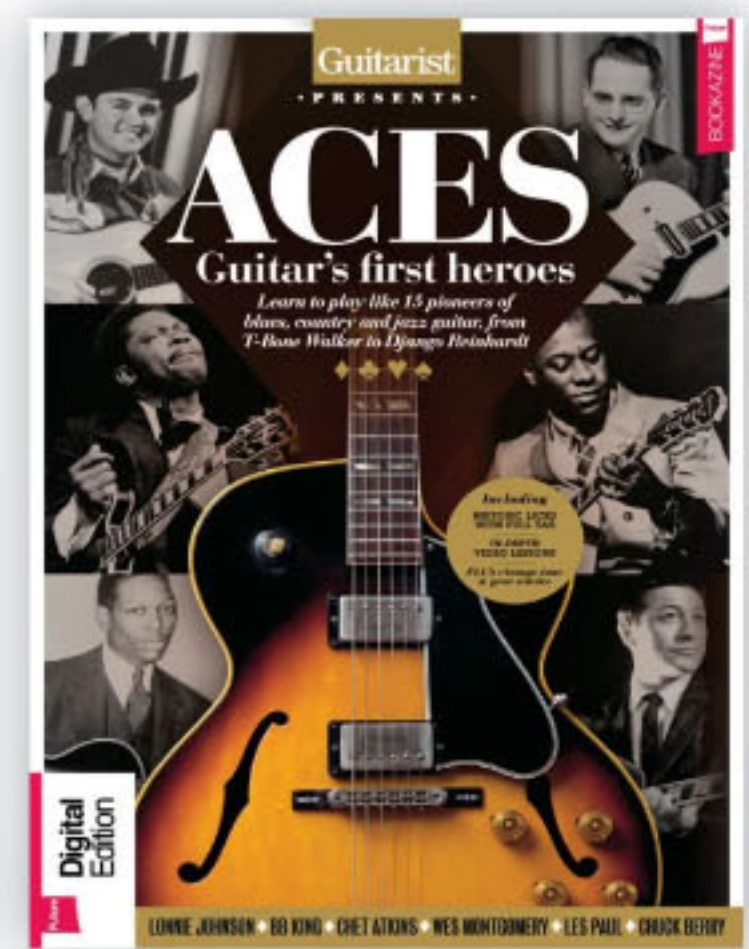
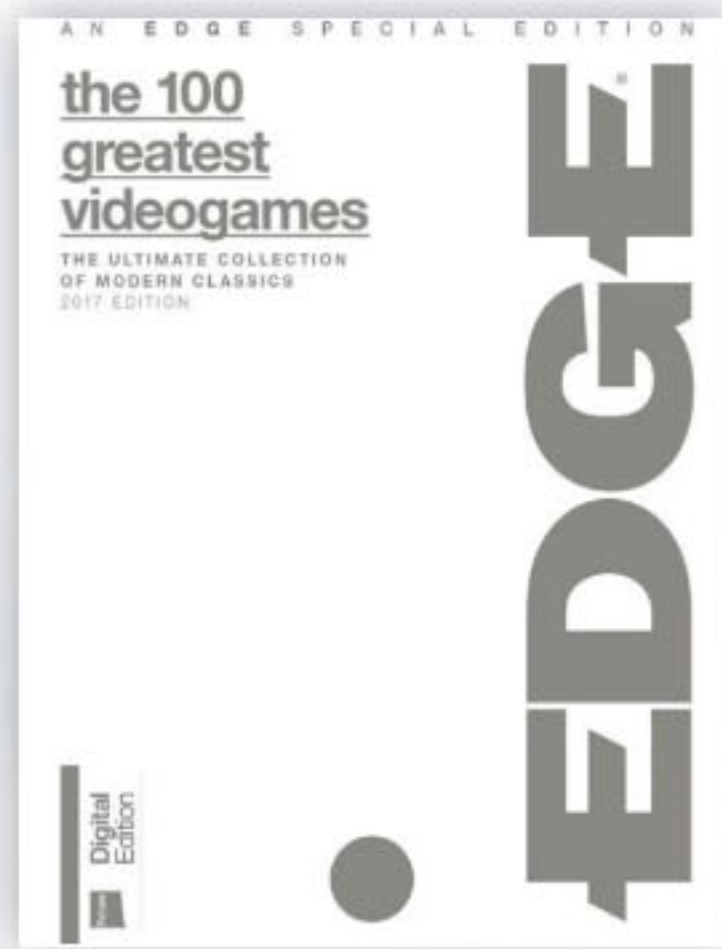


NEAT STORAGE

Store up to 13 issues of your magazine subscription in a coordinating slip case or ring binder.

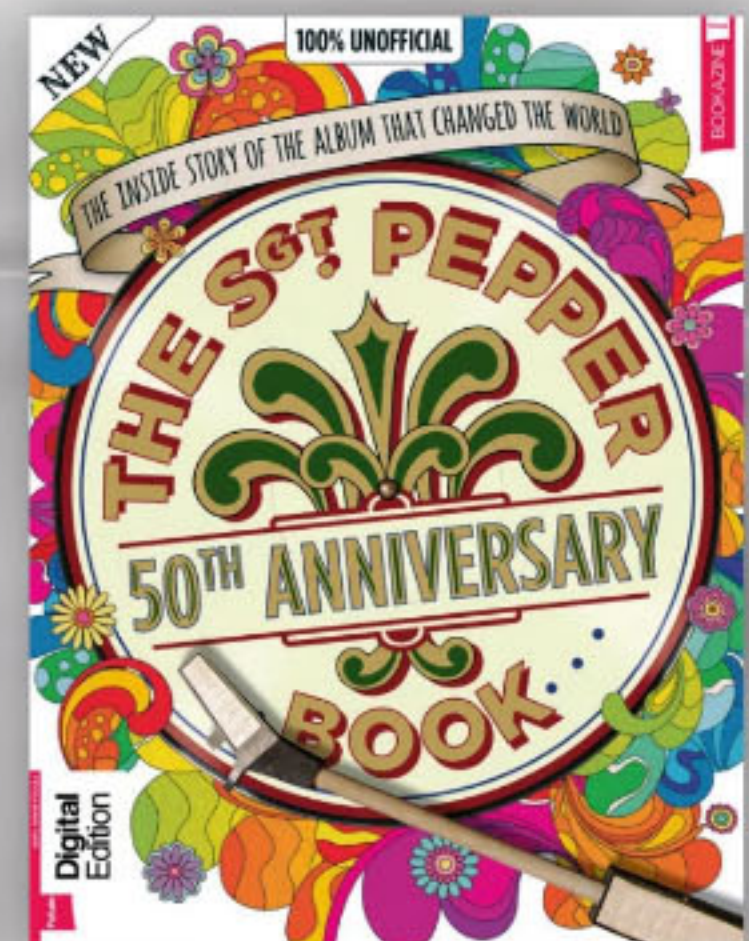
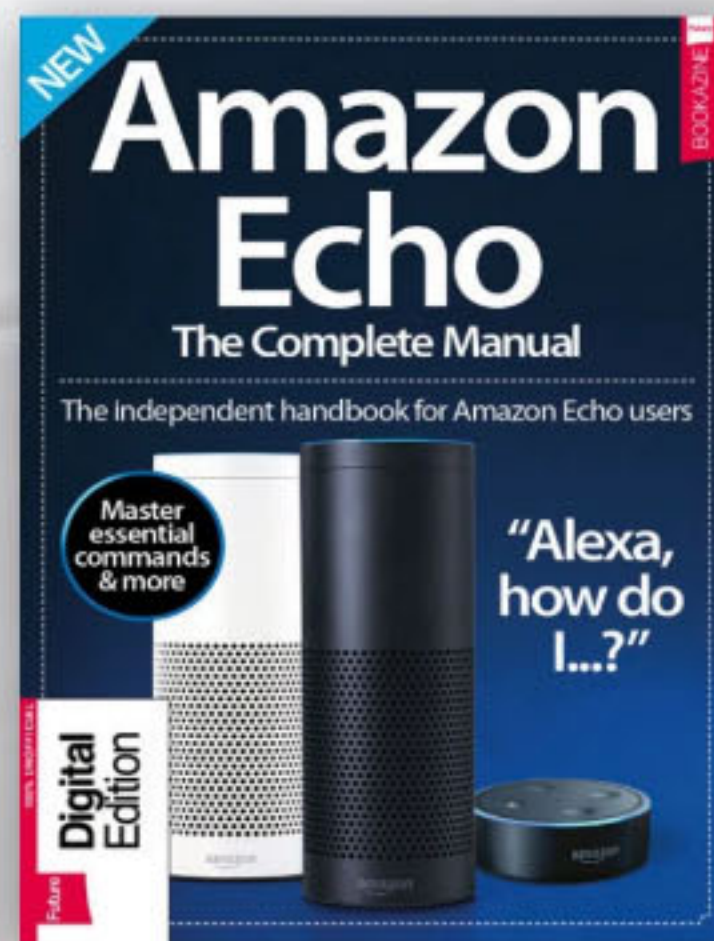
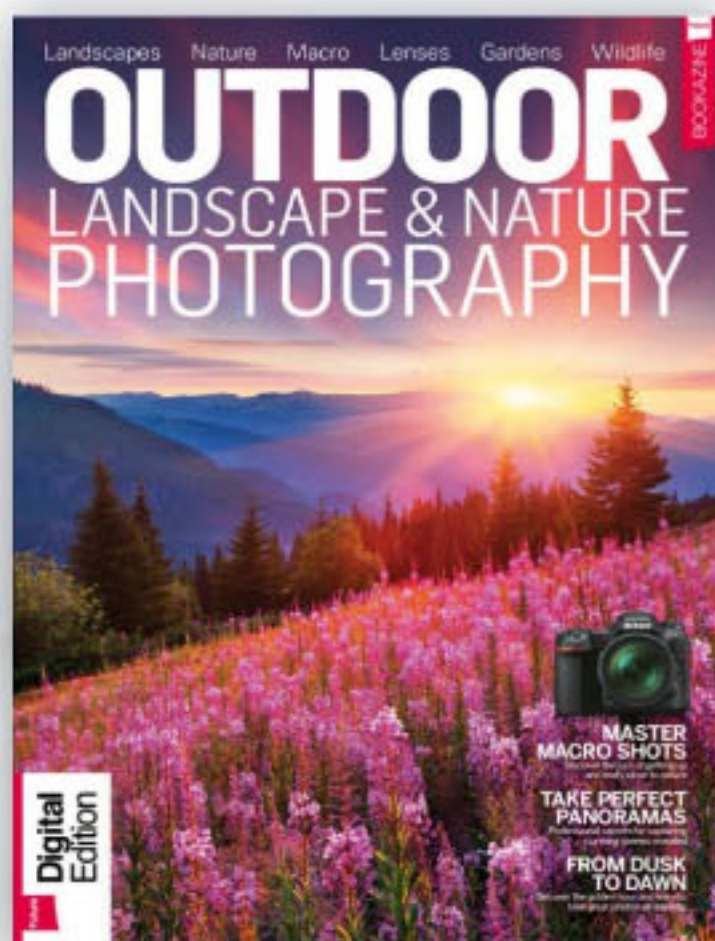


myfavouritemagazines.co.uk



DISCOVER MORE GREAT GUIDES & SPECIALS

From photography to music and technology to field sports, there's something for everyone.



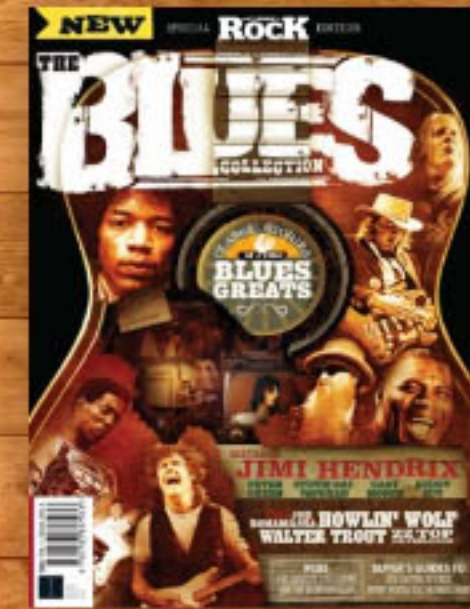
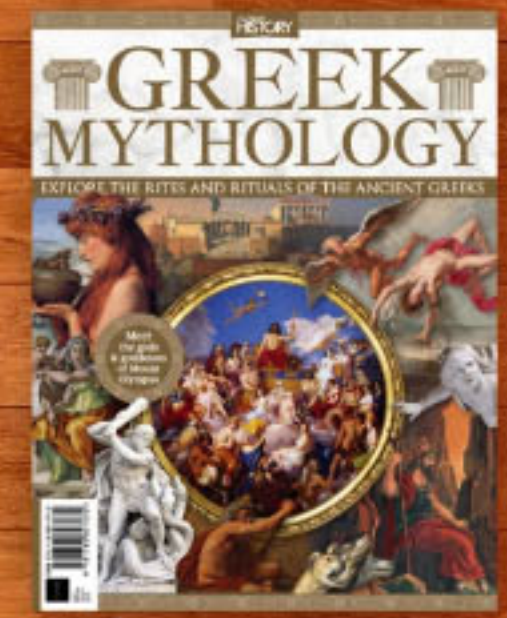
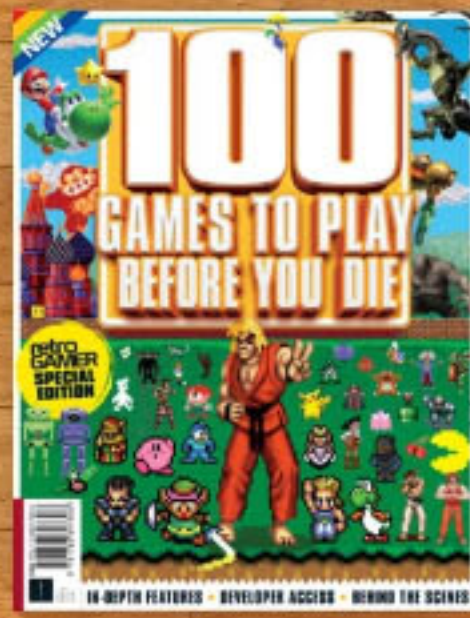
Our magazines and binders make perfect gifts too. And don't worry if you're not quite sure which titles they'll enjoy the most because we have a great choice of gift vouchers available to buy.



✓ No hidden costs 🚚 Shipping included in all prices 🌐 We deliver to over 100 countries 🔒 Secure online payment

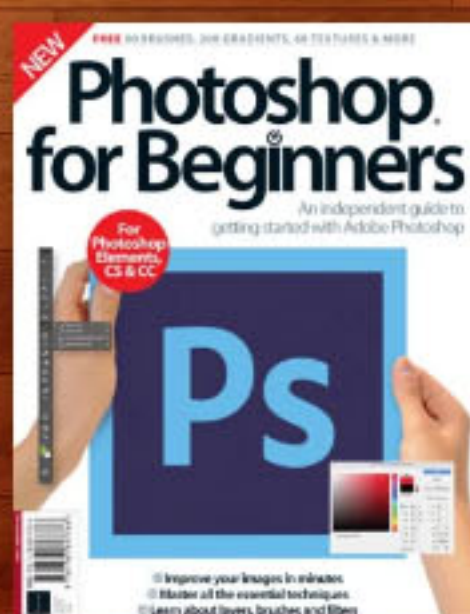
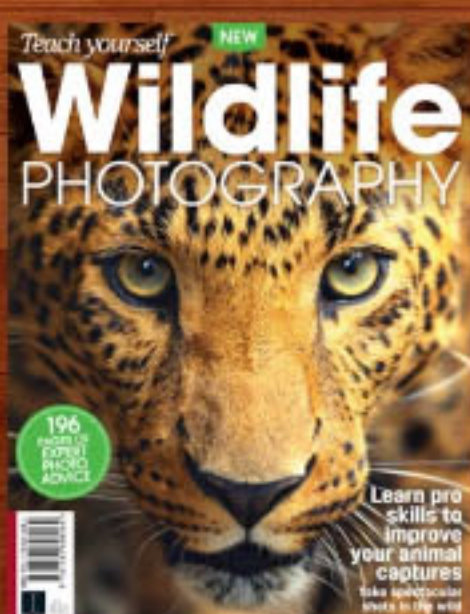
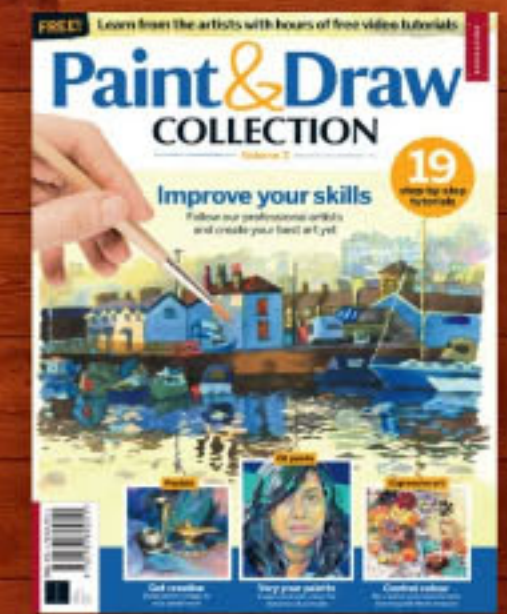
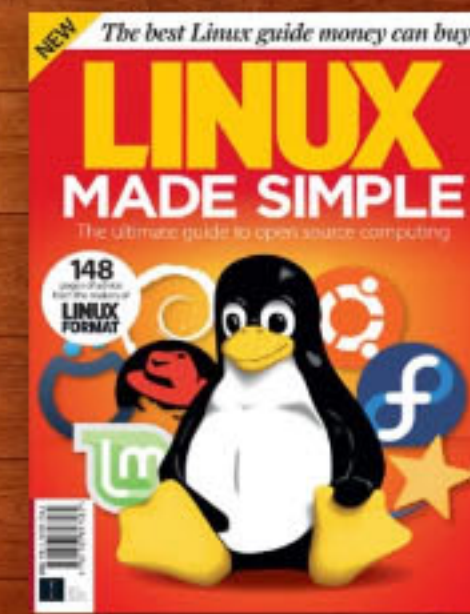
FUTURE myfavouritemagazines
Official Magazine Subscription Store

myfavouritemagazines.co.uk



Discover another of our great bookazines

From science and history to technology and crafts, there are dozens of Future bookazines to suit all tastes



Get great savings when you buy direct from us



1000s of great titles, many not available anywhere else



World-wide delivery and super-safe ordering

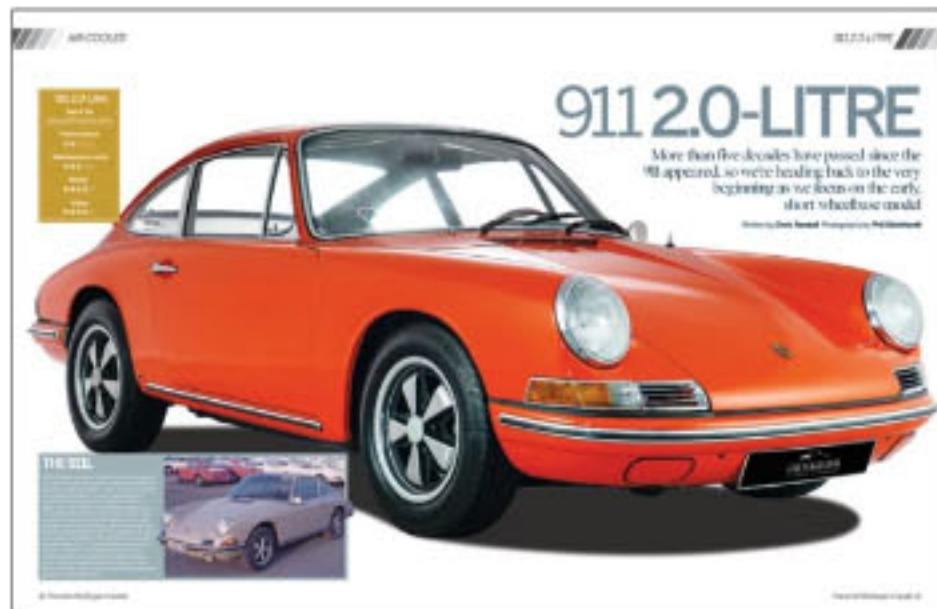


www.myfavouritemagazines.co.uk

Magazines, back issues & bookazines.

PORSCHE 911 BUYER'S GUIDE

YOUR ULTIMATE GUIDE TO THE GREATEST PORSCHE 911S OF ALL TIME



EARLY MASTERS

Learn about the early 911s that helped shape the legend



AIR-COOLED GREATS

What to look for when buying a classic Porsche



WATER-COOLED ICONS

In-depth guides to the 911s with water-cooled flat sixes



TURBO HEROES

All you need to know about the 911s with turbochargers



RS LEGENDS

Every stat uncovered for these lightweight specials

