

# 911 TURBO 40 YEARS OF AN ICON

6 KAX

### BOXSTER vs 914 PORSCHE'S MID-ENGINED BRILLIANCE

RX6

RJ63 DDU





991 Turbo Supersport X-Pipe Exhaust



955 Cayenne Turbo Sport Catalytic Converters



981 Boxster/Cayman Sport Headers



997 Carrera Competition Intake System





### Handcrafted Performance

For over 20 years, Fabspeed Motorsport has been engineering and producing the highest-quality performance exhaust and intake systems for Porsche automobiles.

Fabspeed's unique Performance Packages provide proven performance increases; resulting in the ultimate performance driving experience. Fabspeed performance products are available for most Porsche models.

Experience the new website at www.fabspeed.com!



997 Carrera Supercup Exhaust System



970 Panamera Maxflo Performance Exhaust



997 Turbo Maxflo Performance Exhaust



Performance Suspensions, Brakes, Wheels, etc

I

INFO@FABSPEED.COM

# Ignition



Stuart Gallagher Editor Sestuartg917

t's taken a while, 12 years and 154 issues in fact, but this month we finally got behind the wheel of one of the rarest road cars Porsche has ever built. That it has RS in its name won't come as a big surprise but that the fact it's not a 911 might just be.

Only four 968 Turbo RSs were made, three of which were for a specific motorsport project and the fourth for a very lucky customer in South Africa. It's this car that contributor Wilhelm Lutjeharms tracked down and convinced the owner to not only let us photograph his incredibly rare car but to drive it, too. It's a fascinating car and the story behind its existence is equally enthralling. It also demonstrates just how blessed the 911 was at the time, in that every internal challenger that came to the surface was quietly put to bed so as not to tarnish or threaten the rear-engined car's reputation.

But survive the 911 did, and today it's serving up a selection of models to meet everyone's tastes and desires. This month provided two opportunities to

Issue 154 September 2014

sample two very different 911s that, on paper I'd normally consider interesting but hard to recommend.

In the new 911 Targa, however, Porsche has delivered a 911 that will appeal to a wide spectrum of drivers who enjoy the multifaceted capabilities the 991 offers with little or no compromise. As for the 991 Turbo S Cabriolet? It shouldn't work but it does. Hilariously so.

For all these two cars' uniqueness and performance, however, neither deliver on the same scale as the 968 Turbo RS. We're unlikely to see its like again from Stuttgart but with rumours of the forthcoming Cayman GT4 gathering pace (turbocharged engine, R-spec lightweight trim and aero) it looks like Porsche's engineers haven't been spending all their time making the new Cayenne greener, they've also found time to throw a few performance parts at some sports cars to see what happens. Just like the good old days.



# Suspension Science, Made Easy.

www.ElephantRacing.com

- High tech suspension systems and parts
- · Elephant Racing engineered, in Silicon Valley
- · Restoration to full-race
- · Easy to configure packages at ElephantRacing.com

The science of suspension is daunting. So many options and complex interactions. Choose complementing parts balanced as a system and your suspension will sing. Choose the wrong mix and the song falls flat.

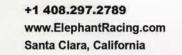
We are performance-obsessed Silicon Valley engineers who live for this challenge. We've done the hard work so you don't have to.

Using sophisticated development tools, modern materials, and innovation we've re-engineered every component of the suspension. We make it work as a balanced system. Better, faster, smarter.

#### Best of all, we make it easy.

We have packages to meet your objective - from restoration to full-race. Online tools let you choose and customize your suspension at www.ElephantRacing.com or call and we'll customize a solution for you.

#### How easy is that?



ELEPHANT

Fast Worldwide Shipping, Low Rates.

# *<i>Requiars*

008

News

- It's new Cayenne time and we've all the details of the face-lifted SUV. We've also news of a celebratory special edition 911 Turbo. 014 Porsche Shop If you're looking for new T-shirts, brake pads, scale models, ebooks, exhausts or air filters we've got the lot in this month's Porsche Shop. 018 Motorsport Month As the Porsche Mobil 1 Supercup heads off on its summer holidays we look back at the opening six rounds of the world's fastest one-make race series. 027 Porsche Thoughts Jethro Bovingdon has some advice for those looking to buy their first Porsche: don't listen to any advice. No, really, he does...
- 029 Just Looking In a year that looks like it is set to break all records when it comes to Porsche values, Peter Morgan looks back at his highlights of the first six months of 2014.
- 090 Market Place: 997.2 GT3 RS Valued at more than a new 991 GT3 the last Mezger engine GT3 RS is enjoying a sales surge at present, Philip Raby investigates why.

- 096 | Long Term Fleet Another new addition to the fleet this month in the shape of a lovely '86 Carrera Sport. Meanwhile, the rest of the fleet has been up to all kinds of long term fleet-like shenanigans but without the breakdowns.
- 110 The Invisible Touch A couple of months ago we had the freshly applied paint on our long term GT3 careful wrapped in Paintshield's latest paint protection film; here's how the company did it.
- 117 Buying a Porsche for £90,000 – £100,000 The budget gets bigger each month but so do the values of used Porsches and there's a few models in this month's selection we've already seen before in this series.
- 124 All You Need to Know: Dampers No matter the age of your car or the use you put it to, there's not a component more crucial than the dampers, as Jesse Crosse explains.
- Tech Guide: Roll-cages 126 Whether it's a full-on motorsport cage you need or something to protect you on a track day, this month's guide will fill you in on the essentials of installing a roll-cage.
- 162 Porsche Moments Colin Goodwin is in a reflective mood as he remembers a very special day with a very special individual's 993 GT2.



EDITOR Stuart Gallagher SUB EDITORS Christian Shelton, Rachael Willson SENIOR DESIGNER Aaron Batson DESIGNERS Kelly Rodgers, Dave Powney, Tom Jackson SENIOR RETOUCHER Laurence Green CONTRIBUTORS Matt Biggs, Jethro Bovingdon, Ben Bradley, Jesse Crosse, Jamie Fretwell, Andrew Frankel, Colin Goodwin, Wilhelm Lutjeharms, Peter Morgan, Philip Raby, Martin Spain, Adam Towler, Jack Wood, Steve Wright PHOTOGRAPHY Max Earey, Cus Gregory, Stephan Hall, Charles Russel, Porsche AG, Porsche AG Archive THANKS THIS ISSUE Andrew Mearns, Ann Wakeford, Tom Wakeford, Gmünd Cars, Paintshield, Shenginton Gliding Club

ADVERTISING SALES MANAGER Sarah Norwood PRODUCTION MANAGER Jo Claydon-Smith REPRO CONTROLLERS Gregg Foster, Marion Jenkins ACCOUNTS Helen Lawson, Claire Brown EXECUTIVE PA Sandra Baldock CHAIRMAN Dennis Taylor

EDITORIAL & ADVERTISING ENOURIES GT Purely Porsche, Unity Media plc, Becket House, Vestry Road, Sevenoaks, Kent, TN14 5EJ Tel: 01732 748000 Fax: 01732 748001 Website: www.gtpurelyporsche.com

Follow us on...

#### Email enquiries

Editorial: gtpurelyporsche@unity-media.com Advertising Sales: snorwood@unity-media.com Advertising Production: jclaydon-smith@unity-media.com Subscriptions: subs@unity-media.com

#### INDEPENDENCE

INDEPENDENCE GT Purely Porsche is published monthly by Unity Media plc for owners, drivers and enthusiasts of the Porsche marque. It is wholly independent of Dr Ing hc F Porsche AG, its subsidiaries, Official Porsche Centres and Porsche Club Great Britain. The word 'PORSCHE', the 'PORSCHE crest' and the 'PORSCHE script' are registered trademarks of Dr Ing hc F Porsche AG.

#### DISTRIBUTION:

@GTPorsche

DISTRIBUTION: If you have difficulty finding *GT Purely Porsche* in the shops, please contact: Seymour Tel: 020 7429 4000 PRINTED BY: William Gibbons & Sons Ltd

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any storage or retrieval system without the written consent of the publisher. Registered at Stationers Hall Copyright. Direct input by Unity Media pic. While every effort is made in compiling *GT Purely Possche*, the publisher. Cannot be held responsible for any errors or omissions. Readers are advised to pay by Credit Card when ordering goods off the page, as they are regulated under the Consumer Credit Act 1974, unlike debit or charge cards, which are not. GT Purely Porsche, established November 2001 (ISSN 1050 – 182X), is

published on the second Thursday of every month (12 times per year) by Unity Media plc and in North America by Unity Media Communication Ltd c/o USACAN Media Dist. Snc. Corp. at 26 Power Darn Way Suite 51-53, Plattsburgh, NY 12901. This issue is on sale 14 August 2014. The October 2014 issue will be on sale 11 September 2014

GT Purely Porsche is available for international licensing and syndication Email: hlawson@unity-media.com

#### SUBSCRIBE TODAY AND SAVE! T: +44 (0)1732 748084 E: subs@unity-media.com

W: www.gtpurelyporsche.com

DOWNLOAD DIGITAL EDITIONS DIRECT FROM:



unity ISSN 2050-182X © 2014 UNITY MEDIA PLC



Facebook.com/GTPorsche SUBSCRIBE AND SAVE AT www.gtpurelyporsche.com

# -eatures

- 030 991 Targa4 Could the new 911 Targa really be as good as we first thought? A 1500-mile European jaunt should hopefully give us the answer to the question.
- **038** 914 1.7 & Boxster 2.7 Porsche's commitment to midengined roadsters is commendable and reuniting an original 1.7-litre 914 with the latest 981 Boxster 2.7 highlighted just how good these Porsche's are.
- 050 930 & 991 Turbo 40 years separate the original and current 911 Turbo; we bring the two together to chart the progress of Porsche's most famous supercar.
- 060 991 Turbo S Cabriolet It's the most expensive 911 Turbo you can buy and also one of the most thrilling. We ask if the 911 Turbo S Cabriolet has finally made a case for itself?
- 066 968 Turbo RS Porsches don't come much rarer than this, the legendary 968 Turbo RS. We track down this special car in the hills of South Africa.
- 080 Pedro Rodrigiuez He may not have the Le Mans and Daytona victories to his name, but Andrew Frankel argues why Pedro Rodrigiuez was one of the best drivers to ever race for Porsche.







# the news



# PLUG-IN HYBRID LEADS NEW CAYENNE CHARGE

Crucial mid-life face-lift for Porsche's biggest seller



Porsche has released details of the 2015 model year Cayenne, a face-lift of the current version. The new lineup is available to order now, will make its public debut at the Paris Motor Show in October, with deliveries starting on 11th October.

As with the Panamera, which underwent its mid-life update last summer, the Cayenne has had a similar makeover with some gentle redesigning of the bumpers, new rear lights and a couple of new powertrains, chief among these being the new S E-Hybrid, the first luxury SUV with plug-in hybrid technology.

The S E-Hybrid is powered by a conventional supercharged 3.0-litre V6 petrol engine producing 333hp, which is connected to a new electric motor that produces 95hp, more than double the energy of its predecessor. The combined 416hp is produced at 5550rpm and is joined by 435lb ft of torque available from 1250rpm through to 4000rpm. Porsche's first plug-in hybrid SUV will crack 0-62mph in 5.9-seconds and reach 151mph, or if you're using purely electric power the top speed is 77mph. Stick with electric power alone, the Cayenne S E-Hybrid has an electric range of between 18-36km (11-22 miles).

As with the Panamera S E-Hybrid, the new hybrid Cayenne can be charged direct from the grid via a portable charging pack supplied with the car. The batteries will also be charged through energy recuperation whilst driving. The combination of the car's petrol engine and electric motor is said to return 83mpg on the combined fuel cycle, while the car emits just 79g/CO<sub>2</sub>.

Porsche's journey along the hybrid route isn't the only new model for the revised Cayenne. The revised SUV also pinches the Panamera's new 3.6litre biturbo petrol engine. Replacing the old 4.8-litre V8, the new blown-six will be fitted to the Cayenne S and produces 420hp (up 20hp) and 405lb ft of torque (up 36lb ft) and produces 117hp per litre (up from 83hp). Only available with the eightspeed Tiptronic S gearbox (as all new Cayennes will be), the new S sprints to 62mph in 5.5 seconds and tops 161mph – a half-second reduction and 1mph increase respectively. Of course, it's also cleaner and more efficient, with a claimed mpg of between 28.8-29.7mpg and CO<sub>2</sub> figure of between 223-229g/km depending on which wheel and tyre combination you order.

The rest of the new Cayenne range will be occupied by the two big sellers (in Europe at least) and the headline-grabber. The former are

### 2015 CAYENNE AT A GLANCE

Model	Engine	Power	Torque	Price
Diesel:	3.0 V6 turbo	262hp	427lb ft	£49,902
S	3.6 V6 biturbo	420hp	405lb ft	£60,218
S Diesel	4.2 V8 biturbo	385hp	627lb ft	£61,474
S E-Hybird	3.0 V6 supercharged	416hp	453lb ft	£61,474
Turbo	4.8-litre biturbo	520hp	531lb ft	£93,763



the pair of diesel-engined Cayennes, the V6 and V8 models. The entrylevel diesel still features a three-litre turbocharged engine, producing an additional 22hp over the outgoing model with peak power now 262hp, with 427lb ft of torque (up 22lb ft) arriving at a lowly 1750rpm. Economy is improved to a range of 41.5-42.8mpg and it will sprint to 62mph in 7.3 seconds before topping out at 137mph. The second diesel model in the range is the wondrous S Diesel, the best Cayenne Porsche has made. Its 4.2-litre, twin-turbo V8 produces an extra 3hp, now 385hp and its torque figure remains at 627lb ft, a figure only bettered by the 918 Spyder. The final model in the line-up is the range-topping Turbo, which retains its 4.8-litre twin-turbo V8 but

gains 20hp and 15lb ft of torque increasing its peaks to 520hp and 531lb ft respectively.

The external makeover for this second gen Cayenne is as mild as a chicken korma. There are new front bumpers, wings and bonnet skin and within the front bumper are new airblades that are designed to guide cooling air to the engine's radiators as efficiently as possible. There are also design tweaks to the tailgate, new rear lights and the lower rear valance has been redesigned to incorporate the new exhaust tailpipes. An automatically activated tailgate is now standard across the range.

Inside the changes are limited to a 918-inspired multi-function steering wheel with paddle-shift controls, which is standard on all models, and revised rear seating with an aim to improve comfort. For the first time rear seat ventilation will also be available.

With an all-new Cayenne due in 2018, expect this current face-lift lineup to be joined by at least one more model (possibly two). The GTS will return with its naturally aspirated 4.8-litre V8 and an entry-level, nonturbocharged V6 model will be made available in some markets, although Europe is unlikely to be one of them. There will also be a more powerful Turbo S model, too, for those who think near on 600hp in a two-tonne SUV is a good idea. All of which will allow the Cayenne to continue to swell Porsche's coffers as it builds on the near 600,000 examples of Cayennes that have been built since the model's introduction in 2002

The updates might be subtle but the big news for the new 2015 Cayenne is a plug-in hybrid drivetrain that could return up to 83mpg





### WEISSACH CONTINUES TO DEVELOP FOR THE FUTURE

Following the recent opening of its new design studio, wind tunnel and electronics integration centre, Porsche has confirmed it is to continue with the expansion of its Weissach development centre with the green light being given to a new drive system testing building.

The new unit will house 18 test benches to aid the development of new hybrid drive systems, new internal combustion engines and new electric motors. Expected to be completed in 2016, 600 employees will relocate to the new test building, bringing together the team under one roof for the first time.

This recent development is part of Porsche's bid to simplify the process in which the company's engineers have to work to in order to complete their tasks. When the new facility is open all test beds, workshops and associated offices will be situated under one roof and in the future all power units and gearboxes will be tested there too, without the need to use externally leased test centres and buildings. In building the new test centre Porsche will excavate 250,00 cubic metres of rubble to create the foundations, with much of this being crushed and used as backfill for the footings. The new seven-story building will cover 6000 square metres but provide 32,000 square metres of working space over its multiple floors. It will be built into the landscape with two floors situated below ground level.

### A 991 TURBO S WHAT EDITION?

Porsche Cars GB has announced details of a limited edition run of 911 Turbo S Coupés to commemorate the 911 Turbo's 40th anniversary.

Built by Porsche Exclusive at the company's Zuffenhausen factory, the 911 Turbo S GB Edition (*snappy name, eh?* ~ Ed) will only be available to customers in the UK and will retail for £159,054 (£10,000 more than a regular 991 Turbo S Coupé), just 40 examples will be built.

The car has been through the Porsche Exclusive brochure like a WAG in a boutique clothes shop with her other half's credit card at her disposal. As a result you'll find: 20-inch Sport Classic wheels painted in gloss black, the same finish that has been applied to the upper part of the rear spoiler, the SportDesign wing mirrors and exterior door handles; a Porsche logo script applied to the door sills; and privacy glass included.

Inside there's a Union Flag embossed on the centre console storage lid, the SportDesign steering wheel features Guards red stitching, as does the black leather interior and the carbon door sills are also finished in Guards red and read '911 Turbo S – Exclusive GB Edition'. It's a wonder it's not a long wheelbase version in order to fit that puff on it! To complete the bespoke package each car comes with a personalised indoor car cover, a unique photo book and a key pouch in leather with decorative Guards red stitching.

Mechanically the car is identical to a 991 Turbo S, which begs the question: why you would spend an additional £10,000 for something that is exclusive only by the fact it appears to have bypassed Porsche's usual stringent credibility and decency tests? Considering Porsche Exclusive gave us the wonderful 997 Sport Classic and cool Speedster models, and the factory came up with the brilliant 50th Anniversary Edition you have to ask if the Turbo S GB Edition was signed off in Germany with a monster post-World Cup victory party hangover?





# EVERY PARTFOR every PORSCHE

Call our Sales Team on +44 (0) 20 8500 8811 or Visit our Online Catalogue at www.design911.com

#### PARTS FOR: 356, 944, 928, 968, 964, 993, 912 & 911's from 1965 to 2012

#### NOT ONLY PARTS, BUT ALSO:

- BODY SHOP & FITTING FACILITIES
- SERVICE & FITTING CENTRE
- BODY STYLING & CONVERSIONS
- WHEEL & TYRE FITTING
- DAMAGE REPAIR & RESTORATION
- ENGINE & GEARBOX REBUILDS
- SUSPENSION & EXHAUST UPGRADES
- PARTS DEPARTMENT
- WORLDWIDE DELIVERIES
- PERFORMANCE UPGRADES





IN PERSON











UNIT 5 = BRACKEN INDUSTRIAL ESTATE 185 FOREST ROAD = HAINAULT = ESSEX IG6 3HX

## DESIGN 911 Centre for Porsche

# the news

### TECHART REVEALS MACAN UPGRADES...

Porsche tuner Techart has announced details of its first upgrades for the new Macan SUV. Available straightaway are four different Formula wheels designs – the Formula, II, III and IV – that will be available in sizes from 9.5x21 inches to 10.5x22 inches and finished in a range of colours.

The company is also working on a series of exterior styling accessories which will compromise of new front and rear bumpers and spoilers, a new roof spoiler and rear valance and wheel arch extensions. The company's Air Suspension Module Sport will also be available for the Macan, as will the company's sport spring kit which will lower the car's ride height. A series of engine

upgrades for all the Macan's six-cylinder engines are also currently under development along with a sports exhaust system. Techart will also be offering its full range of bespoke and off-the-shelf interior upgrade packages, from steering wheels and pedal sets to individual leather trims tailored to your own colour and taste.

To discuss your requirements further, contact Techart direct via www.techart.de or if you are in the UK, contact Tech9 on 0151 4255 911.





### ...AND SO DOES SPEEDART

German Porsche tuner Speedart is not only back from the dead – it went into administration in 2013 – but it has announced details of its tuning programme for the new Macan. As with any tuner worth its reputation, Speedart will be offering wheel, suspension, body and interior styling and engine upgrades for the Macan range.

Full details can be found on the company's website, which remains www.speedart.de



### RPM ANNOUNCE QUICKSILVER TIE-UP

Porsche specialist RPM Technik has been appointed an install partner and reseller for QuickSilver Sport Exhaust systems.

The Hertfordshire specialist will become a dealer for the full range of QuickSilver's titanium and sports exhaust components for key Porsche models. The collaboration between the two UK companies came from RPM's use of QuickSilver exhausts when it was developing its successful CSR range of Porsche cars.

To discuss your exhaust needs with RPM Technik call it on 01296 663824.



# Premium Quality Suspension Components

Nürburgring tested, Autobahn approved.

Components for more than 19,000 different models



**100% MADE IN** 

GERMANY









HARN 3

www.h-r.com / t.020 8782 2485 / e H&R distributed by Euro Car Parts / L0845 603 3636

uksales@h-r.com

# porsche shop\_





Carrera has launched a new range of 1/32 scale motorsport models for use with all leading slot car sets. There are four officially licenced cars – a 904 Carrera GTS, a 918 Spyder in the Martini livery, and two GT2 RSRs – the Team Falken endurance car and the Haribo Racing paint job. Each is incredibly detailed and works with all analogue slot sets plus they can be upgraded to be compatible with Carrera's digital range. **How much?** £29.99-£34.99 Where from? www.hobbyco.net

### CTEK MXS 3.8 BATTERY CHARGER

CTEK has launched the MXS 3.8 battery charger to replace the award-winning MXS 3.6. The smart charger has a seven-stage procedure to keep your car's power unit in top condition, while the LED display makes it easy to know which of the modes you're using. It's fully automatic, foolproof to connect, spark-proof and reverse-polarity protected, and there's no need to disconnect your battery to use it either. **How much?** E64.99 **Where from?** www.tek.com





DESIGN 911

### SCRATCHSHIELD BUCKET SET

Washing your Porsche yourself is a great way to appreciate its beauty, but it's all too easy to scratch the paint when doing so. ScratchShield is a guard which goes at the bottom of your bucket and stops your sponge picking up any grit, thus preventing you from scratching your car's paint with your sponge. The new seat lid set allows you to wash your car while sat on one of the buckets, and the combo package includes a lid, two 20-litre buckets and two grit guards. The lid can be purchased separately for £7.99. **How much?** £34.99 **Where from?** www.scratchshield.co.uk



## The Centre for Porsche

BODYSHOP CONVERSIONS SERVICE CENTRE ACCIDENT REPAIRS RESPRAYS RESTORATION

EVERY PART FOR Every Porsche



VISIT OUR NEW SHOWROOMS What better place to discuss your Porsche needs with knowledgable people while relaxing in comfortable chairs with a cup of quality coffee?



WWW.design911.com Centre for Porsche UNIT 5 · BRACKEN INDUSTRIAL ESTATE · FOREST ROAD · HAINAULT · ESSEX IG6 3HX

### PIONEER APPRADIOLIVE

If you've upgraded your Porsche's stereo to one of Pioneer's 24 AppRadio units, you may love having your phone's content on the big screen in your car, but get frustrated with having to use your phone to switch between apps. With this in mind, the aftermarket manufacturer has launched the free AppRadioLIVE app, which puts maps, live traffic info, music and your calendar into the same programme, and lets you switch between them using a single interface. **How much?** Free

Where from? Apple App Store

apps. With this inched the free ic info, music and lets you







### GT3 T-SHIRTS

With the new 991 GT3 still in the headlines now is the perfect time to celebrate this remarkable 911 with these GT3-inspired T-shirts. One design features the three generations of GT3 from 996 to 991, while the other celebrates the Mezger engine that saw service from the 996 3.6 through to the RS4.0. Available in an endless range of

Available in an endless range of colours and all sizes, the designs are also available on mugs, hoodies, caps... pretty much anything you can think of. **How much?** £16.99 **Where form?** www.shotdeadinthehead.com





### NORMFEST BOTTOM GUARD RECOAT

Normfest has released a new rust and corrosion protection product called Bottom Guard Recoat. The rubber based compound provides high abrasion resistance and dries within 60-90 minutes and is best suited where over-painting is required, providing improved adhesion where new water-based paint finishing systems are used.

Available from Euro Car Parts, the spray comes in 500ml or 1000ml cans. **How much?** TBC **Where from?** www.eurocarparts.co.uk



### MINICHAMPS 1976 PORSCHE 934

Bob Wollek, Porsche and Kremer, what's not to like about this diecast 1:43 scale model from Minichamps? The livery is from the 1976 round of the European GT Championship at the Norisring, where Wollek battled in 35 degree heat for the lead only to be thwarted by a broken gear linkage. **How much?** £54.99

Where from? www.diecastlegends.com (ref: P766496)



×

1

11

This detailed book follows the exploits of the works and customer Porsche 911 RSR cars racing across the world. It includes over 100 photographs, numerous videos, and there will be free updates released every month throughout the 2014 season, with the latest WEC and TUSC race detail. **How much?** £4.99 **Where from?** Apple iBookStore



### CODECLEAN ULTRA FINE POLISH

CodeClean's paint cleanser has been three years in the making, and it's ideal for restoring your Porsche's faded paint as it contains fine abrasives. You can use the cutting compound by hand or by machine to revive paintwork, and the formula doesn't have any waxes, silicones or filling oils to cover up any damage. **How much?** £10.50 (500ml) **Where from?** www.codeclean.co.uk



# porsche shop\_



### SPARK 1973 PORSCHE 917/10

The European Interseries Championship was one of the last playgrounds for Porsche's fearsome 917s to race in and this livid liveried 1:43 scale resin 917/10 model was piloted by Ernst Kraus, finishing third at the Hockeheim round. **How much?** £53.99 **Where from?** www.diecastlegends.com (ref: SPKSG012)



### EICHER BRAKE PADS

Euro Car Parts has released a new range of Eicher brake pads, exclusively manufactured for the firm by TMD Friction.

The new range of pads are R90 approved and will cover 479 different applications – 97 per cent of the UK market! The new range of pads join the recently launched range of brake discs under the same brand. **How much?** Depends on fitment **Where from?** www.eurocarparts.co.uk

### AWE TUNING 981 BOXSTER/CAYMAN S EXHAUST

American Porsche specialist AWE Tuning has released a performance exhaust system for the 981 Boxster and Cayman S models.

Designed and manufactured in-house by AWE the system uses all the OEM fittings and the

manufacturer claims that it won't trigger any engine warning lights. It will also provide up to an extra 13hp and 19ft lb of torque. **How much**? \$1895 **Where from?** www.awe-tuning.com





### K&N BOXSTER/CAYMAN HIGH-FLOW FILTER

K&N has released a new OE replacement high-flow air filter for the 981 2.7 and 3.4-litre Boxster and Cayman models, which fits within the standard air box. As with all K&N filters the manufacturer claims an increase in power and torque, they come with the million-mile warranty, are washable, reusable, pre-oil and ready for installation and their deep pleated cotton media offers low intake restriction and improved filtration. **How much?** £134.30 (pair) + VAT **Where from?** www.knfilters.co.uk

### HAWK PERFORMANCE STREET 5.0 COMPOUND BRAKE PADS

A brand-new range of ABS-compatible performance brake pads has been launched by Hawk Performance Brakes. Called the Street 5.0 Compound the pads are designed to work specifically with the ABS system so as not to trigger the system incorrectly (which is often a common fault with pads that have stronger friction properties than the OEM pads they have replaced). The Street 5.0 Compound pads are designed to work with a car's standard brake setup and are available for a selection of Porsche models. **How much?** Depends on fitment **Where from?** Cambridge Motorsport Parts (www.cambridgemotorsport.com, 01462 684300)





### Porsche Fixed Price Maintenance. The quality you'd expect, a price you wouldn't.

Whether it's a new set of brake pads or a replacement clutch, rest assured that with our new fixed price tariffs for a range of maintenance jobs on selected Boxster and 911 models\* it doesn't have to be a balancing act between quality and cost. Our Porsche accredited technicians are trained to the very highest standards and only use the precise tools and genuine parts required to do the job to the standard your car deserves.

Get the best of both worlds with fixed price maintenance from Porsche.

For more information visit www.porscheownerservices.co.uk



Porsche Centre Aberdeen 0845 5202165 /aberdeen

Porsche Centre Belfast 0845 5202166 /belfast

Porsche Centre Bolton 0845 5202167 /bolton

Porsche Centre Bournemouth 0845 5202168 /bournemouth

Porsche Centre Bristol 0845 5202169 /bristol

Porsche Service Centre Byfleet 0845 5202198 /byfleet

Porsche Centre Cambridge 0845 5202170 /cambridge Porsche Centre Cardiff 0845 5202171 /cardiff

Porsche Centre Chester 0845 5202172 /chester Porsche Centre Colchester 0845 5202173

/colchester Porsche Centre Dublin 00 353 1235 3375

www.porschedublin.ie **Porsche Centre East London** 0845 5202174 /eastlondon

Porsche Centre Edinburgh 0845 5202176 /edinburgh

Porsche Centre Exeter 0845 5202177 /exeter Porsche Centre Glasgow 0845 5202178 /glasgow

Porsche Centre Guildford 0845 5202179 /guildford

Porsche Centre Hatfield 0845 5202180 /hatfield

Porsche Centre Jersey 0845 5202175 /iersey

Porsche Centre Kendal 0845 5202181 /kendal

Porsche Centre Leeds 0845 5202182 /leeds

Porsche Centre Leicester 0845 5202183 /leicester Porsche Centre Mid-Sussex 0845 5202185 /midsussex

Porsche Centre Newcastle 0845 5202186 /newcastle

Porsche Centre Nottingham 0845 5202187 /nottingham

Porsche Centre Portsmouth 0845 5202188 /portsmouth

Porsche Centre Reading 0845 5202189 /reading

Porsche Centre Sheffield 0845 5202190 /sheffield

Porsche Centre Silverstone 0845 5202191 /silverstone Porsche Centre Solihull 0845 5202192 /solihull

Porsche Centre Sutton Coldfield 0845 5202193 /suttoncoldfield

Porsche Centre Swindon 0845 5202194 /swindon

Porsche Centre Tewkesbury 0845 5202296 /tewkesbury

Porsche Centre Tonbridge 0845 5202195 /tonbridge

Porsche Centre West London 0845 5202196 /westlondon

Porsche Centre Wilmslow 0845 5202197 /wilmslow

\*Participating centres only. Fixed price maintenance tariffs apply to Boxster Type 986 (1996-2004) and selected 911 Type 996 (1998-2005) models only. Fixed price maintenance tariffs may be withdrawn or varied at any time. Contact participating centres for full details, terms and conditions.

## motorsport month

# **GIERMAZIAK LEADS SUPERCUP** INTO SUMMER BREAK

Polish Porsche Mobil1 Supercup driver Kuba Giermaziak has raced to the top of the driver's championship thanks to three victories in the first six races of the season, two of which have come in the last four races, along with a second place, too.

The 2014 Supercup championship is shaping up to be a classic year, with an ultra-competitive field resulting in any number of drivers contesting the lead and fighting to be on the top step of the podium. After the sixth round at the Hungaroring Giermaziak took a nine-point lead into the summer break ahead of Porsche Scholarship driver Earl Bamber.

The last four rounds of the series have seen the drivers take to the track in Austria, Great Britain, Germany and

Hungry with three different drivers taking the four victories on offer and seven different drivers filling the top three spots across the four rounds.

Giermaziak's titles charge gathered momentum in Austria at the Red Bull Ring. After qualifying fifth the 23-yearold Pole took advantage of his rivals' misfortunes to secure his second victory of the season. The first to fall was pole sitter Philipp Eng who converted his pole position into a solid start and continued his early season promise with a blistering first two laps before he began to slow and was eventually passed by Porsche junior driver Sven Müller. By lap three Eng was out, his GT3 Cup suffering terminal mechanical failure.

Müller held the lead for a further





## motorsport month



nine laps until he spun all on his own dropping back to third and handing the lead to Jeffery Schmidt who had been chasing in second place. He was soon passed by the hard-charging Giermaziak with five laps to run, the Verva Lechner Racing Team driver continuing to the line to take the chequered flag.

The victory in Austria gave Giermaziak the championship lead and despite finishing sixth, Earl Bamber had climbed to second, from fourth, and was 11 points behind the leader, and ahead of Eng by a single point.

Round four saw the drivers line-up

driver completed a lights-to-flag victory to score his maiden Supercup victory. It was no straightforward race for Schmid with series leader Giermaziak spending th, and the entire race glued to the Walter Lechner Racing driver's rear bumper int. looking for any opportunity to pass. "I simply couldn't get past him," said the

at Silverstone and another new name

added to the list of Supercup winners

in 2014. Clemens Schmid had stirred

up the pack during qualifying for the

during tricky conditions. The Austrian

stealing pole position from

championship leader Giermaziak

British round of the Porsche Supercup,

Pole after the race, "but I knew that second place would also earn me valuable championship points." Schmid was, understandably, delighted with his race: "Right now I'm the happiest guy in the world. The pressure at the front was huge but I kept my head. I'll never forget this weekend."

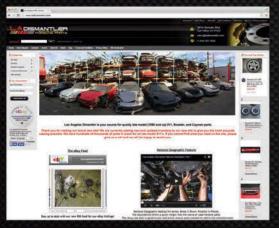
Giermaziak's frustration at not completing a hat-trick of wins (prior to victory in Austria the 23-year-old had also won in Monaco) was understandable following the performance of his closest rival for the title, Earl Bamber. Starting from eighth on the grid Bamber showed why he was Porsche's scholarship winner with a drive through the field that saw him latch onto the championship leader's tail to come home third. As the teams left Silverstone and headed to Germany's Hockenheim circuit Giermaziak had extended his lead by a further two points over Bamber who was still in second place, with Ben Barker and Sven Müller tied in third.

In the Hockenheim forest another driver took it upon himself to write some Supercup headlines. After snatching pole position on Saturday Danish driver Nicki Thiim drove a superb race to secure his first



Leading supplier of used OEM Engines, Wheels, Seats, Electronics, Chassis, Transmissions, Brakes and more.





Newly remodeled website!

Worldwide Shipping

sales@ladismantler.com ladismantler.com (1) 818 767-7243

### Take advantage of current exchange rates!

Promo Code: GTP2014 Free LED flashlight with any order!



## motorsport month



Supercup victory since clinching the 2013 title. Having initially lost the lead at the start to the hard-racing Keven Estre, within two laps the current champion was back in the lead and had a determined Earl Bamber to contend with, Bamber still looking to add to his solitary race win of 2014.

The pace of the front three was such that they had built a gap between them and the pack behind but their duelling was frantic and with two laps to go Estre dived up the inside of Bamber and Thiim but came out of the move in the same position he went into it in. Thiim was ecstatic on the podium: "Finally I'm back at the top of the podium. I'm going to enjoy my win today." Estre was in a more reflective mood: "I thought I could get past, but I ended up in third. It's a pity, but that how it goes sometimes."

Championship leader Kuba Giermaziak finished sixth, allowing rival Bamber to close the gap to just five points as they headed to the Hungaroring for round six.

After the disappointment of Hockenheim and dropping a chunk of points to Bamber, championship leader Kuba Giermaziak needed to put in the strongest performance of his season so far if he was to keep his title aspirations on track. With the teams heading into a four-week break after the Budapest race, Giermaziak was determined to head into the summer with the biggest points lead possible.

The young Pole's weekend got off to the perfect start as he clinched pole on Saturday and set the tone for the rest of the weekend. When the lights went out on Sunday morning Giermaziak drove like he was late for his holiday-bound plane as he bolted from the grid and never looked back, leaving the others to fight over the remaining positions.

Earl Bamber had qualified alongside his championship rival but was jumped at the start by Thiim. On the notoriously tight circuit overtaking is particularly tricky and Bamber couldn't find a way past Thiim. The rest of the field didn't have enough to reel the second and third place drivers in either. As Giermaziak took the chequered flag Thiim and Bamber locked out the second and third place podium positions, leaving Alex Riveras, Michael Ammermüller, Klaus Bachler and Christopher Zochling to cross the line nose-to-tail

For Bamber his third place keeps Giermaziak's championship lead to single fingers, but if the Pole continues the form he showed in Hungary when the teams return to action at Spa the Kiwi driver is going to need to start converting his solid podium finishes into victories if he his going to challenge Kuba Giermaziak all the way to the season's end for the title.







#### CHAMPIONSHIP STANDINGS AFTER SIX ROUNDS

Driver	Rnd 1	Rnd 2	Rnd 3	Rnd 4	Rnd 5	Rnd 6	Total
Kuba Giermaziak	8	20	20	18	10	20	96
Earl Bamber	20	7	10	16	18	16	87
Michael Ammermüller	0	16	12	12	12	12	64
Ben Barker	16	12	8	7	6	8	57
Philipp Eng	16	12	8	7	6	8	50
Christian Engelhart	14	8	14	3	9	2	50
Klaus Bachler	4	6	7	9	14	10	50
Sven Muller	6	10	16	10	5	0	47
Connor de Phillippi	5	14	0	14	8	3	44
Nicki Thiim	-	-	-	0	20	18	38
Alex Riberas	12	0	9	0	3	14	38
Clemens Schmid	7	0	6	20	2	0	35



## motorsport month





### PORSCHE MOTORSPORT GT PROGRAMME GETS NEW HEAD

Porsche has announced that Frank-Steffen Walliser is to become its new Vice President of Motorsport from 1 October, 2014.

In his new role Walliser will take control of Porsche's worldwide GT racing programme, replacing Hartmut Kristen who has carried out the role since 2004. Walliser will remain project manager for the 918 Spyder while Kristen will work alongside the Research and Development Board in an advisory role.

Kristen joined Porsche in 1983 and in 1994 was responsible for the company's customer racing activities and GT vehicles. In 2004 he took on the role of VP of Porsche Motorsport, responsible for projects such as the LMP2 RS Spyder, 911 GT3 R Hybrid. He also oversaw the 991 RSR's Le Mans 24-Hour victory in 2013. During his time as VP of Motorsport Kristen was the driving force behind Porsche's philosophy of nurturing and promoting young driver talent and created one of the most comprehensive youth development programmes in motorsport. Today, five former Porsche junior drivers make up the current Porsche Motorsport works line-up.

Walliser will be familiar with many of you who have followed the birth of the 918 Spyder, for the 44-year-old was responsible for bringing the hybrid supercar to production. Prior to this Walliser held the position of General Manager of Motorsport between 2003-2008.





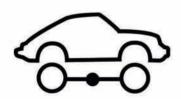
FOR SALES AND ENOURIES

0151 4255 911

Mon-Fri 8:30am - 5:30pm



### **RESTORATION**



Our Classic Porsche restoration, parts and vehicle sales department cater for all Classic Porsche models..

### PRESERVATION



Our factory trained engineers and passion for perfection enable us to service and repair any Porsche with the care and quality you deserve.

### **MODIFICATION**



We are TECHART UK, delivering bespoke options for your Porsche. We build aesthetic modifications as well as enhance the performance of your Porsche.

### www.tech9.ms





Telephone: +44 (0)151 4255 911 Email: sales@tech9.ms

Tech 9 Motorsport Ltd. Hale Garage, Hale Road, Hale, Liverpool, L24 5RB



# porsche thoughts

"He reported back with a video clip of it revving out to the limiter"



his magazine is often filled with superb advice on buying Porsches. In fact all car

magazines are filled with superb advice on buying used cars. You know the drill: make sure it has an impeccable service history - not just regular stamps but a thick wad of receipts. Call the specialist that looks after the car for a bit more background info. Don't necessarily be seduced by low mileage but buy on condition. Always buy the very best example you can afford because those cheaper cars will need thousands spent on them on remedial work... which might reveal hidden horrors... which might bankrupt you, with the very real possibility that your kids will then be taken into care, your wife will leave you and your parents will refuse to have anything more to do with you.

All of this is sound advice, but it does rather neglect a very large group of potential buyers out there. Those who've dreamt of owning, say, a 911 SC but can only just afford to get into one. Those who have to settle for a tatty 996 Turbo because they haven't got the requisite cash to buy a mint example that's laid up on a bed of ostrich feathers every night in a dehumidified chamber gently echoing to the sounds of calming whale song. We are real people, we often buy cars that we're not sure has been serviced every 120 miles, sometimes even over the phone... And we're not bad or stupid, we just want our dream car and realise that we'll have to invest in it over time. We go to bed sweating about our engine going pop, but that panic is outweighed by the joy of just possessing one of these cars. Here then is a one-year report of buying a cheap, tatty 996 Carrera with patchy provenance and a 'to do' list as long as Mr Tickle's arm...

My 996 is a magazine buying guide's nightmare. It has 140,000 miles on the clock, eight owners on the V5, it's had an engine rebuild but it was of the home-made variety (albeit, I think, with an Autofarm block - TBC at some point when I get around to it) and the body work is more track slut than pampered high-maintenance mistress. It is completely unoriginal thanks to the addition of an Aerokit (genuine parts at least, not a cheap fibreglass copy) and the Savannah interior was mercifully ripped out and replaced with a black one at some point in its murky past. It has loads of receipts in its history file but as many holes to match. It doesn't sound very desirable, does it? And yet, like a house that's not been decorated for years and still has an outside loo, when I saw the advert for it all I could see was potential.

It had a rebuilt engine of some description. It had Bilstein PSS10 suspension, GT3-style seats, an expensive full Cargraphic exhaust system. And it was Arena red, which I thought looked pretty amazing. Due to a family member's health I was away from home at the time and couldn't get to see it. However, it was local to my colleague Richard Meaden (letting geography come into buying a car! Oh the shame!), so I asked him to have a look... He reported back with a video clip of it revving out to the limiter on the B660 (good work) and said the engine "felt tough". Quite how he came to that conclusion is anyone's guess. I bought it over the phone the next day. My dad and brother collected it a week or so later and I saw it another week or two after that.

Since then I've done around 3000 miles, a couple of track days, I've spent money on new discs, pads, a service and slowly I'm getting through the 'to do' list. It's so unoriginal that I'm happy to make it truly mine. Next up? Rennline top mounts, Powerlex Black Series bushes, refurbed dampers. After that? Well, it desperately needs paint and general cosmetic tidying. I love the old Cup car's cooling slots in the front bumper so I might do that at the same time. The project is open-ended and that's what's so cool. It's going to be my hot rod and one day it will be perfect. I can make it so, little by little, even if I've got the inherent frustrations and expense of that process. Of course, in the end, I will have spent more than a low mileage, super-clean and factory original car would have cost to buy. However, I didn't have all of that money in one go, so it is kind of irrelevant.

I'm not saying you should buy the first 911 you see... or send a friend to see it for you. I'm not saying ignore the clever people like Phil Raby and Peter Morgan of this magazine. But I am saying that you shouldn't feel like your perfect Porsche is out of reach because vou can't afford one that's absolutely spotless... For every low mileage minter there's a dozen examples that might have been left on the street. given the odd track outing, maybe even modified a little bit, too. That doesn't make them bad or mean they're certain to explode within the first tank of fuel. These cars need embracing and saving for the future and you'll have a ball doing it. There might be the odd unexpected bill, maybe you'll be unlucky and have a catastrophic failure, but even the finest service history is no guarantee of future reliability. Live the dream. Just don't knock on my door if your new purchase goes pop. See you out there O



### THE ULTIMATE IN PERFORMANCE UPGRADES.

AT DMS AUTOMOTIVE WE'VE BEEN UNLEASHING AUTOMOTIVE PERFORMANCE FOR OVER 18 YEARS.



DMS 1M (EVO MARCH '12) "THERE'S A REAL RIP TO THE WAY THE REVS PILE ON ABOVE 4000RPM"

**DMS SL65 BLACK SERIES (EVO** OCTOBER '10) "IT FEELS LIKE THE LOVE CHILD OF AN SL65 AND A PORSCHE GT2"

DMS 135I (BMW CAR MAY '09) "THE STANDARD CAR IS GREAT BUT DMS HAVE SOMEHOW MANAGED TO TAKE IT TO THE NEXT LEVEL"

DMS 997 TURBO 3.6 (EVO SEPTEMBER '08) "IT'S EPIC, HILARIOUS AND ADDICTIVE IN EVERY GEAR, YET DOCILE WHEN CRUISING"

DMS 997 TURBO 3.8 PDK (EVO JUNE '11) "DELIVERY IS ALMOST UNCOMFORTABLY FORCEFUL"



BELOW IS A SMALL SELECTION OF OUR MORE POPULAR MODELS TO UPGRADE. WE ARE ABLE TO UNLEASH PERFORMANCE FROM SMALL FOUR CYCLINDER DIESEL ENGINES UP TO V12 SUPERCARS:

#### PORSCHE

997 TURBO/S 3.8 INC PDK >> 611 BHP 997 TURBO 3.6 » 625+ BHP 997 GT2 RS » 670+ BHP 996 TURBO/GT2 >> 600+ BHP 997 CARRERA S PDK » 400+ BHP 997 CARRERA S >> 376+ BHP 997 CARRERA PDK » 368 BHP 997 CARRERA GTS » 435 BHP 997 GT3 UP » 436 BHP BOXSTER 3.45 » 336+ BHP CAYMAN S » 342 BHP CAYENNE GTS » 440 BHP CAYENNE TURBO 4.5 » 565+ BHP CAYENNE TURBO 4.8 » 578+ BHP CAYENNE TURBO S 4.8 » 600+ BHP CAYENNE 4.2 DIESEL » 450+ BHP CAYENNE DIESEL >> 300+ BHP PANAMERA TURBO >> 600+ BHF PANAMERA DIESEL » 305+ BHP

#### MERCEDES-BENZ

'63' 5.5 Bi-TURBO ALL MODELS » 600+BHP '500' 4.7 Bi-TURBO ALL MODELS » 498+BHP SL65 BLACK >> 720+ BHP (+DELIMIT) SL65 AMG » 690 BHP (+DE-LIMIT) '55' AMG KOMPRESSOR » 580+BHP C63 AMG » 530+BHP (+DE-LIMIT) SL63 AMG » 560+BHP (+DE-LIMIT **RE-MAP & LOWER ABC SUSPENSION**) CL600 Bi-TURBO » 580+ BHP SLK55 AMG >> 389 BHP (+DELIMIT) SLK 350 >> 328 BHP 220 CDi ALL MODELS » 210+ BHP 250 CDi ALL MODELS » 259+ BHP 320 CDi V6 >> 274 BHP 350 CDi V6 » 312 BHP 420 /450 CDi V8 » 358 BHP

#### BMW

M5/M6 F10 » 620+ BHP M5 V10 » 548+ BHP (205 MPH) X5M / X6M » 618 BHP 1M » 411+ BHP M3 E90/92 >> 445 BHP (+DE-LIMIT) M3 E46 >> 370 BHP (+DE-LIMIT) F10 520D » 221 BHP F10 530D » 296 BHP F10 535D » 358 BHP 335i/135i/X6 » 370+ BHP (+DE-LIMIT) 123D » 252 BHP 330D E90 » 296+ BHP 320D E90 » 215 BHP 730D » 290+ BHP X5 4.0D / 740D » 370 BHP X5 3.0D >> 296 BHP X6 X50I 4.4 » 500+BHP 535D / 335D / X5 SD » 355+ BHP M135i Please call for more info

#### EXOTIC / MISC

FERRARI CALIFORNIA » 487 BHP FERRARI 599 » 647 BHP FERRARI 430 » 525 BHP GALLARDO » 546 BHP LP560 >> 600+BHP LP640 » 707 BHP MURCIELAGO LP640 » 707 BHP MASERATI GT/QPORT » 438 BHP MASERATI GT S / MC >> 479+ BHP ALL 2014 MASERATI'S Please call for more info AUDI RS6 4.0 T V8 Please call for more info AUDI RS6 V10 » 680+BHP +DE-LIMIT AUDI R8 V1 » 592+BHP AUDI RS4/R8 B7 >> 439 BHP + DE-LIMIT AUDI RS3 » 420+ BHP AUDI Q7/A8 4.2 TDi » 400+ BHP AUDI 3.0TDi (ALL MODELS) » 300+ BHP AUDI S3 / GOLF R » 317+ BHP ALL 2014 RANGE ROVERS AVAILABLE RANGE ROVER 4.4 TDV8 >> 395 BHP R ROVER SPORT 3.0D » 305 BHP EVOQUE 2.2 DIESEL » 240 BHP BENTLEY 4.0 T V8 >> 600+ BHP BENTLEY CGT / F-SPUR (INC 2013) » 660 BHP GT SPEED / SUPERSPORT >> 680+ BHP

### FOR ALL OTHER MAKES AND MODELS, PLEASE CALL US.

WORLDWIDE OFFICES AND INSTALLATION: UK » IRELAND » EUROPE USA » ASIA » AUSTRALIA » S.AFRICA



/DMSAUTOMOTIVE FOLLOW US FOR OUR LATEST NEWS!

WWW.DMSAUTOMOTIVE.COM

UK: 0845 850 1845 INT: +44 845 850 1845

MORE EGUALS LESS RPALS EQUALS MORE MPG





For many buyers, asset performance is now more important than driving performance



his year has seen one of the hottest trading runs ever for preowned Porsches. This has been

fuelled by strong sales of cars under ten years old, combined with a long overdue market correction for the classics that continues to bring values towards the levels of Ferrari and the other Italian exotica. The buoyant market has resulted in me driving a remarkable selection of Porsches over the past six months. I can't complain my job doesn't have its benefits!

The most active and exciting sector has been the classic Porsches – everything from the very first 911s and 912s through 944 Turbos and S2s to the blue chip 993 Turbo. Sadly though, as I flick through my road test impressions on these cars, I'm left with a feeling that for many buyers asset performance is now more important than driving performance.

The first Porsche that really brought this home was a 964 Turbo 3.6. The seller claimed the car was the best thing since sliced bread and priced it accordingly. The 964 Turbo is the best of the single turbo 911 Turbos, but at 1470kg it is a heavy car. That weight combined with the fierce power delivery adds up to a point-and-squirt machine – some way from the being the all-round performer that is the hallmark of a good 911.

That accolade would take some justifying on the 996 GT2 also. A few weeks back I was checking boost levels one fresh morning along a straight country road and I didn't spot some overhanging trees ahead, shading the asphalt. This beast doesn't have traction control and it duly served up a tank slapper as the tyres found what was left of the morning dew. I caught it, but the experience underlines why this car is not for the inexperienced.

964 RS values have gone into orbit and everybody is complaining they should have bought one years ago when they were £25,000. As a driver's car, the 964 RS is a cracker and deserves its value upswing. It's the driver's benchmark for any late, aircooled 911, being more edgy than the 993 version - another ingredient I love in a good 911. The great thing is that a standard 964 Carrera can provide some of the same thrills and experience for a fraction of the cost and, if you want to, it's easily upgraded to RS spec. I drove a 964 C that had been modified as such and it was a peach in terms of delivering pure driving fun for a fraction of RS prices.

While the top spec Porsches have

always grabbed the headlines, we tend to forget that the entry level 911s have always offered the ability to put a smile on their driver's faces. That applies to the 993 as much as a 964. Two '94 Carreras demonstrated the truth of the old adage that there's always a 911 better than the one you can afford, but that doesn't mean the more affordable cars are any less fun.

Another stand out was a very enjoyable run in a great 944 S2. I've always been a 944 Turbo fan and these two water pumpers may arguably lay claim to being the best built cars Porsche ever made. What the cars have in spades is fantastic cornering balance and a strong family of engines. Pointedly, somebody commented recently that perhaps 944 drivers are the only classic Porsche drivers who really enjoy driving their cars today (as many classic 911s are hooked up to cash generators and tucked away in cocoons). Is that controversial or what?

I've logged a long and enjoyable list of Boxsters, Caymans, 996s and 997s this year, but two specials were notable – a Cayman R, which delivered the same character as the old 968 Club Sport and surprisingly, has been somewhat neglected by the modern classic seekers because it still has a way to go on the depreciation curve. The other was a 2012 997 GTS, which using the 968 comparison, could be described as a 968 Sport with all the toys. The Powerkit's extra 23hp over the DFI-engined 997 Carrera S gives the car more flexibility to snap overtake, but you can't escape the firm ride.

But call me biased (as I have one), my overall benchmark for any 911 remains the 1972-'73 2.4 911S. In the past weeks I've driven three really brilliant 2.4s, the two Ss included an astonishing original and a French restored 'made as new' restoration. The third T was a mature restoration from the 1990s. What marked these cars out as undiluted driving machines was their combination of lightness, peaky power (for the S) and handling edginess that demands your full attention. They are also cars that take time and practice to drive well. Next to the S, the T isn't intimidating at all and showed that as with the basic 964 and 993s, the Cinderella models really earn their Porsche badge.

Today, we often launch straight into values when talking about collectible Porsches, but we shouldn't forget that the best driver's cars aren't necessarily the most expensive  $\bigcirc$ 



# Special One Can the new 911 Targa really be the pick of the 991 line

Can the new 911 Targa really be the pick of the 991 line-up? A week and 1500 miles should answer that question for us. Story: Stuart Gallagher Photography: Dean Smith

ortunate as we are to smoke around in all manner of new and old Porsche metal, no matter the location of its engine or the chosen cooling method of said powerplant, the questions from friends, family members

and passers-by are always along the same lines: How fast is it? How much power has it got? How much does it cost? Is it yours? Depending on whether it has a rear wing the size of an aircraft hanger attached to its engine cover or an interior dripping in luxury trinkets determines which question gets asked first and most frequently. A GT3 RS will make people knock on your front door to ask if they can push their noses up against the window, whereas a Panamera Turbo S is great at making members of the public play the game of trying to look at your car without you catching them doing so. Stop anywhere in a 991 Targa and there's only one thing on everyone's mind: that roof. From a car park on an industrial estate in the South East of England to outside a bar in mid-west France, during one week and 1500 miles, the Targa's new roof was as intriguing to the population of western Europe as Porsche type numbers are to you and I.

> We've always had a soft-spot for Porsche's water-cooled 911 Targas within this magazine. It was the first new model we reviewed in issue one back in 2001 and since then we've found plenty of opportunities to

borrow one when a road trip beckons as there really is no 911 better at hauling photographers' gear across Europe than Porsche's 911 hatchback. But as a 911, both the 996 and 997 Targas (the former only available with rearwheel drive, the latter only as a four-wheel drive model) were not the pinnacle of 911 dynamic excellence. More weight higher up in the car with a bodyshell closer to a Cabriolet's in torsional stiffness than that of a Coupés, at seven or eighttenths the first two 911 Targas were less about dangling over the edge of the dynamic envelope but more about driving up to said edge and admiring the view with that great big glass roof panel opening up to a panoramic vista.

In hindsight, the 996/7 Targas were just 911 Coupés with big old sliding sunroofs (you can add the 993 Targa to that, too). The opening rear window was convenient but really the last threegenerations of 911 Targas have been a bit 'so what?' when it comes to that intangible measurement called 'specialness'. The design that made the first Targas (from the original 1965 car through to, and including, the last of the 964s in 1993) stand out from the crowd and bring some uniqueness to the road had been wiped out with a designer's eraser and a desire to bring a uniformity to the 911 range. Whoever it was who stood up in the product planning meeting and suggested that the 991 Targa should have an exposed stainless steel finished roll bar and a curvaceous and vast rear window deserves a hearty pack on the back.

In Coupé or Cabriolet form the 991 is hardly a piece of inspirational design, the demand for more interior space has eroded the idiosyncrasies of the model's traditionally pinched-waist design. And while in the Targa the dimensions are identical to that of the Carrera 4 on which it is based, above the waistline the 991 now has visually alluring design details to give it a fighting chance of justifying its £86,281 asking price and restoring some of the appeal a few argue has been lost with the 991.

From the B-pillar forward it's a 991 as we have known since 2012 but aft of that it's unique. That roll bar is a work of genius, dissecting the car and making the 991 look smaller than it actually is. The large, frighteningly expensive-looking rear window replaces the square metres of rear bodywork that make the Coupé look a little on the large side. And the black retractable roof panel? You hardly notice it when it's in its closed position, not enough to think it jars with the car's design at least.

The roof, though, is rarely in place. At every opportunity you'll want the roof open, which can be as easily operated from the car's key as the switch on the centre console. And it's a process you'll get used to doing for a couple of reasons. First, because everyone will ask how it works and it's a process that's far easier to demonstrate than to describe. Second, unless the rain is falling at such a rate that it's threatening to fill the footwells, you'll find yourself driving this car everywhere with the roof open. We completed a 1000-mile, early morning run to Le Mans and a through-the-night run back with the roof panel stored neatly behind the rear seats. A feat only possible because, unlike a Coupé with a sunroof or a full-on Cabriolet, Porsche has worked a minor miracle when it comes to roof-open wind noise and buffeting. It is all due to a piece of plastic that probably cost less than the coffee bill of the engineers who were working out how to fit the roof under the rear window.

Positioned on the leading edge of the windscreen is a plastic wind deflector that runs the full width of the header rail. At low speed, below 50mph, you need it in its default highest position but as your pace increases you'll want to reach up and squeeze it until it locks in its down position for the best results. To be honest, there's not a great deal of difference to the noise and wind flow at high speeds, however if you leave the deflector in its lowest setting at low speeds the reverberating winds

911 Targa 4

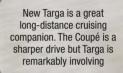
You'll find yourself driving this car everywhere with the roof open

### 2014 991 TARGA 4

Engine: 3436cc, six-cylinders, DFI Max power: 350hp @ 7400rpm Peak torque: 287lb ft @ 5600rpm Transmission: Seven-speed PDK, Porsche Traction Management all-wheel drive Weight: 1560kg Max Speed: 174mph 0-62mph: 5.2 seconds (4.8secs Sport Chrono Plus mode) CO<sub>2</sub>: 204g/km List Price: £86,281

#### **OPTIONS FITTED TO TEST CA**

Amaranth Red metallic paint	£801	
Seven-speed PDK gearbox	£2387	
LED headlights with PDLS	£1926	
Sports exhaust	£1772	
Sport Chrono package inc. Dynamic Engine Mounts	£1376	
Porsche crest on headrests	£138	
Heated seats	£320	
Park Assist front and rear	£243	
Bluetooth phone module	£558	
Auto dimming mirrors	£372	
Sport Seats Plus	£312	
Sport Design steering wheel inc. paddleshift	£283	
ISOFIX for front passenger seat	£121	
Total cost of test car	£96,890	



REIA KRZ





### 911 Targa 4

noise is on a par with when you open a rear window in a saloon car on the motorway. As a 911 the Targa is a very appealing package. Our test car was fitted with the 350hp 3.4-litre motor connected to the optional seven-speed PDK, making it one of the least performance-orientated 991s Porsche produces. Snick the PDK lever into manual mode though, select Sport for a crisper throttle map (or in this example the optional Sport Plus mode for an even sharper throttle response and quicker gearshifts) and if you are prepared to work for your mph the Targa 4 will get a move on. The extra 110kg this 991 carries over a

Carrera 4 Coupé does makes itself known across the performance spectrum. The acceleration never pushes you back in your seat, the mid-range can feel flat when you're looking for a little more surge to make progress past slower traffic and at motorway cruising speeds it doesn't take much of an incline to cause the PDK 'box to drop a ratio, sometimes two, to maintain momentum. After a couple of hundred miles it becomes somewhat irksome and you begin to yearn for the bigger lung capacity of the 3.8-litre motor from the S model; however a Targa 4 with a third pedal and seven gears to select manually should be avoided, PDK suits it best despite the compromises.

Dynamically the Targa 4 is sure-footed, responsive and engages like a 911 should. A Coupé is a sharper steer and a quicker-reacting 911 and it engages you more when you dive into its performance, but the Targa is closer to its Coupé cousin than it is its Cabriolet sister when it comes to how you feel from behind the wheel. In a Cabriolet you feel you are

September 2014 35

driving around a dynamic short coming, that is a chassis that carries extra bulk to mask the wobbliness that comes with chopping the roof off. And because of it you never really get to experience the full 911 sensations; the Cabriolet lets you enjoy more of the flat-six orchestra but the 911 has always been more than just its engine and once you've heard the boxer motor at full chat half a dozen times you soon yearn for a dynamically superior and more engaging 911. And this despite the 991 Cabriolet, the best 911 soft-top Porsche has produced.

With the Targa you get a mix of the Coupé and Cabriolet. Roof stowed away, sun fighting with the factor 20 on your face and a gentle breeze lapping at what follicles you are fortunate to have left up top you'll want for little more. But what of the 991 Coupé? Is it bettered by the 911's latest arrival? A 911 Coupé is still an incredibly special car. The 991 may require more effort from its driver to get the same rewards that its predecessor provided at a much lower threshold but it is still fundamentally one of the finest sports car to drive on this planet. In the Targa, although you sacrifice ultimate involvement you gain by knowing you are in a 911 that's special; a Porsche that highlights the individuality that only a 911 can ever offer. It may read like the Targa is the perfect machine for posing rather than performance but to think that would be missing the point. What the Targa actually is, is a great 911 for losing yourself in on those journeys that only a 911 can make special. Of course a Coupé can do the same journey, at a quicker pace and make you feel more of a direct part of the process but in the new Targa that journey will feel a little more unique, more of an occasions, more special. Aside from a Carrera 50th Anniversary Edition, the new Targa should be a 911 you consider above any other Carrera model O

# BEST SOLUTIONS FOR EVERY DEMAND



KW automotive UK Ltd Phone: 0870 990 7536 Fax: 0845 021 2548 eMail: info@KWautomotive.co.uk





vww.MediaTel.biz

www.KWautomotive.co.uk

# Finishing What They Started

44 years separates the 914 from the 981 Boxster, but Porsche's mid-engined sports cars still share the company's common DNA.

Story: Adam Towler Photography: Stephan Hall







he term 'entry-level Porsche' is often said with an unspoken but pregnant sneer, frequently joined in an ugly green-eyed lexicon by the phrase 'the Porsche for those who can't afford a 911'. I have never been able to understand why some feel aghast that Porsche should make a more financially accessible car. Cars should be assessed on their own merits, surely?

Today, with the development of a disparate range of cars within the Porsche family, such as the Macan, Cayenne and Panamera, the 911-andthen-everything-else mentality is fading away. So I use those same words 'entry-level Porsche' in the best possible spirit when we reflect on the two cars we have assembled here: during their respective lifetimes, they did, and do, mark the point where new Porsche sports car ownership begins.

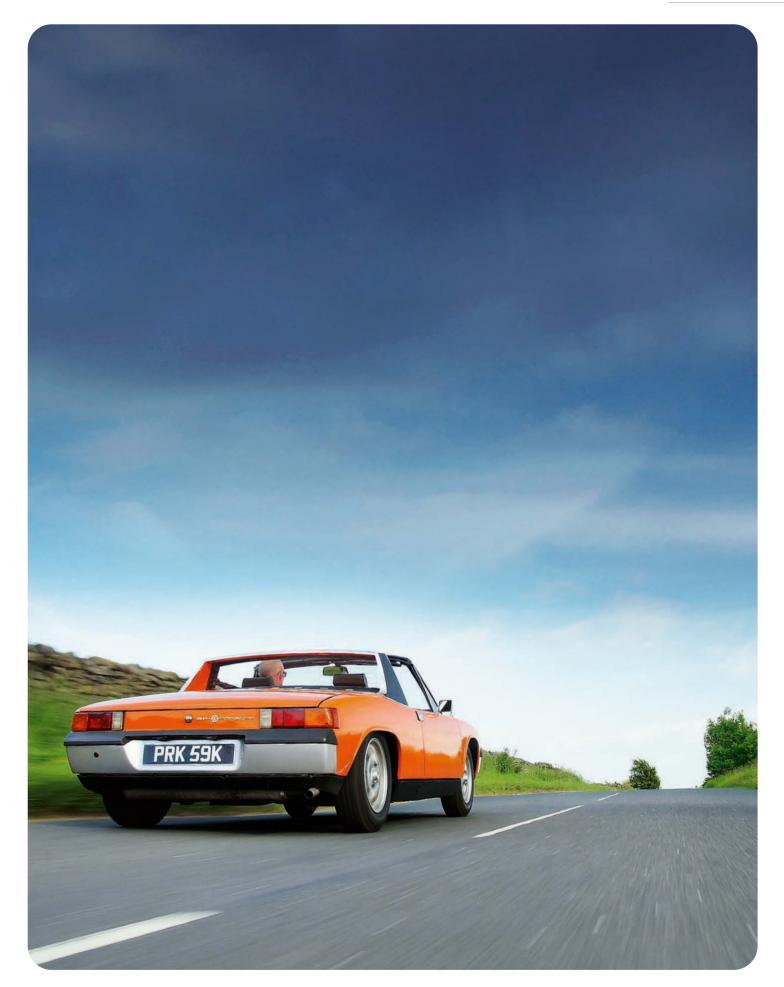
If you're thinking this pairing are engaged in some kind of competitive face-off then one blip of the 914's gravely four-cylinder engine makes any such comparison seem absurd: with just 80, rip-snorting horsepower, the 914 struggles to stay in the same county as the latest 2.7-litre Boxster let alone shadow it on a B-road. While this Mk3 Boxster may indeed be the range starting point it now musters a sturdy 265hp from its direct-injection flat-six, an engine so infectiously sweet in nature it feels happy to withstand hanging off the rev limiter for hour after hour at a time. Zero to sixty is dispatched in as little as 5.5 seconds: the 914 clocks in around 11-13 seconds for the same sprint, depending on source. You get the picture.

It's hard to think of the Boxster as a small, accessible sports car alongside the 914. The older car looks like a toy next to Porsche's latest roadster, a phenomenon created not just through age and the widespread growth in car dimensions, but because the latest Boxster has morphed into a grown-up sports car – in size and performance terms – with this latest incarnation. Genuine road presence is something that the ubiquitous Boxster hasn't always been able to boast of, 987 Spyder excluded. The 914 is also something of an unknown quantity on these shores. As such there's the indefinably mystical air of a cult car about its unusual, crisp form; few know what it is, or who made it. Then again, when you consider that over 100,000 of the 118,976 made went to the USA, and that there were officially just 100 (left-hand drive only) cars imported into the UK, that's hardly surprising.

This sports car project was born into the cosy working relationship that has often existed between Volkswagen and Porsche, based on history, expediency and consulting work, and even literally by marriage – VW boss Heinz Nordoff's youngest daughter Elizabeth married the eldest son of Anton and Louise Piech. In essence the plan was to build a simple VW sports car to replace the Type 3 Karmann Ghia, with a Porsche-powered six-cylinder version that represented Stuttgart interests to be sold alongside it. The car would be designed and developed by Porsche, naturally: Ferry Porsche was keen to broaden the firm's product range given the escalation in 911 prices at the time.

At first everything progressed relatively smoothly, and the mid-engined layout was right at the cutting edge of automotive design in the late 1960s. As the car had to be sold as both a VW and a Porsche, the design of the body couldn't really follow any previous marque styling themes, and the result, initiated by a product design firm and then carried on by Butzi Porsche in-house, was startlingly different and aimed squarely at the forthcoming decade, not the present. Powering this new sports car was an all-new air-cooled flat-four destined for VW's imminent 411 saloon. At 1679cc this pushrod unit, using Bosch electronic fuel injection, mustered 80hp at a decidedly low peak of 4900rpm and 98lb ft at 2700rpm, with drive taken through a repackaged version of the five-speed gearbox in the contemporary 911, complete with a dog-leg first gear layout.

So far, so good, but the 914 project was about to hit stormy seas. After a



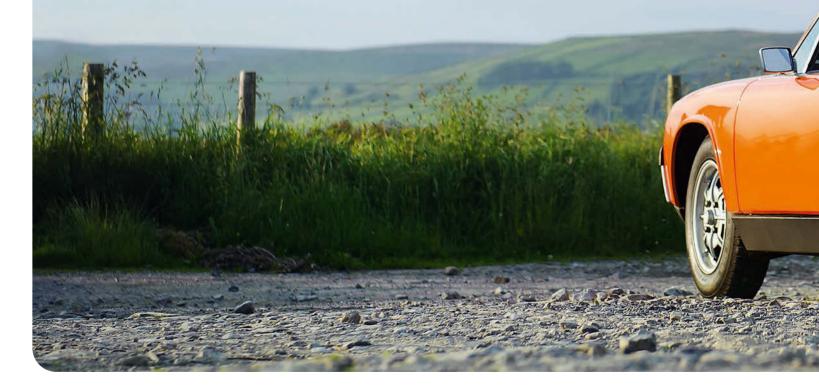
period of ill health Nordoff passed away in 1968, and his successor at VW – Kurt Lotz – was an altogether different type of manager. Gone was the amiable relationship between Heinz and Ferry, and in the contract between the two firms all it said in black and white was that Porsche would design and develop a sports car for VW. There was no mention of Porsche slotting in a six-pot motor and selling it as a Porsche, and it was the first Lotz had heard of such a plan...

After negotiations the issue was resolved, but the ramifications of these decisions would contribute greatly to the 914's troubled career. Porsche and VW set up a new company to sell the car in Europe: the VW-Porsche Vetriebsgesellschaft GmbH (VG), which had its headquarters just outside Stuttgart. In the USA, another new company was formed to sell not only all Porsches (inc the 914) but also to introduce the Audi marque to America, this firm being known as Porsche+Audi, the logo of which always makes me think of those outrageous CanAm 917s during the early 1970s.

All 914s were built by Karmann at Osnabruck: the 914 completely so, the 914/6 in terms of body and interior, but the 'Porsche' was then shipped to Zuffenhausen where the engine was installed and the car finished like any other 911. The key issue was how VW had done its sums over pricing the bodies to Porsche, which left the figure very high and immediately set the 914/6 at a tremendous disadvantage. As such, the car was nearly as expensive as a 911 2.2 T, compounding general 914 issues such as market acceptance of the watered down VW-Porsche image, and making it look very pricey for a car that still only mustered 110hp. In motorsport, the Group 4 914/6 GT had a mixed career, a high point being the remarkable sixth overall at Le Mans in 1970, and the proposed 916 (a road car version of the 914/6 GT with a solid coupé roof) was cancelled a fortnight before its debut. The exotic 916 was considerably more expensive than a 911 2.4 S – in some ways a forerunner to the Carrera GT – but Porsche got cold feet when doing the sums, a legacy of that VW invoicing and rising exchange rates.

History round-up completed for now, it's back to our little 1972 914 1.7. New owner Gary is collecting this example from Gmund Cars on the day of our photoshoot, and then off on a formidable road trip to his home in northern Italy. This rare UK car – Andrew Mearns of Gmund estimates there may only be ten UK cars left – lived in Scotland for many years, sharing barn space with various tractors. Although the last tax disc expired in 1981, it was in excellent condition body-wise, requiring only a repaint (to solve paint fade) and a general recommission to get it on the road for Gary. As Andrew says: "We're

"I've always been a huge fan of the 914; it's a well-engineered and well-balanced car"



#### 914 & 981





bringing a lot (of 914s) into the UK now. I've always been a huge fan of the 914; it's a well-engineered and well-balanced car. As the market moves we have to move with it, and these cars give the owner a lot of fun for not a great deal of money. We're getting lots of calls on them."

With the Yorkshire sun beating down on our backs and not a hint of the gruesome wintery weather that has affected many-a moors photoshoot, it's not surprising that the 914's broad Targa roof panel is stored away from the start. In many ways the 914 is a curious shape, but for many – me included – that only adds to its appeal. Pencil-thin front wings are devoid of the main lighting requirement, these being of the 'pop-up' variety cited in the main expanse of front bonnet. The glasshouse is almost oversized – predictably vision from inside is excellent, particularly so for a mid-engined car of the period – but the odd 'basket handle' B pillar gives the car a deliberately truncated roofline. Its flat, broad body surfaces are wilfully minimalist. It is unashamedly modern – a car that embraced the future with a happy heart, rather than one that looked back at traditional chrome and stringback driving gloves for inspiration. As owner Gary also opines, it's a classless car that's comfortable anywhere.

Inside, the same philosophy pervades. There are two, almost

hammock-like seats, positioned in a cabin devoid of the typically high transmission tunnel associated with many mid-engined cars. The resulting flat floor exaggerates the feeling of width and space, as does the thin and rather sparse dashboard. A wand-like gear lever sprouts from the floor in the period Porsche style and there's an unfamiliar badge on the steering wheel boss – that of the VW-Porsche VG, not a brand I feel an initial great warmth to if I'm honest – but otherwise there's not a great deal to look at. Better turn the key, then.

The motor churns into life with little sense of romance, but not for the first time today one's general mood depends on expectation. Come to the 914 with a mind full of howling flat-sixes and you'll be disappointed, but be realistic – and the 5600rpm war paint on the tacho is another nudge in this direction – and you'll focus instead on other aspects of the car.

The first challenge in the 914 is the gearbox. In fact, mastery of this mechanism is the key to swift – okay, let's not get ahead of ourselves here – progress. As mentioned, first is out and back towards the driver on a dogleg, but it's a long way across. One you've got an appreciation of where second is things start to make more sense, because the other gears are easier to mentally picture. Nevertheless, it's hardly a Ferrari open gate sort of gearshift, and *Motor Magazine* in its test of the time



described it as "horrible". I don't find this too bad once my experience of it accumulates, but it's clear that it dictates a lot of the 914 driving proposition at this stage of the relationship between car and driver.

Then there's the motor. It is an engine to do a job, but in this state of tune, there's not a lot more you can say about it. Although it doesn't rev out with any great exuberance you do need to work it hard if you're to make progress, at which point it emits a typical flat-four cacophony.

But it's soon apparent that the 914 has other attractions worth focusing on. It's a car that majors on delicacy of inputs and precision – the sort of car you drive with a light touch, conserving momentum and not going in search of unobtainable power oversteer. Driven thus I soon find myself enjoying the 914 a very great deal: the thick-set roll bar and snug cabin give a feeling of being protected from the elements, but even so it feels like an authentic open-top sports car experience. The 914 is flowing along nicely, the flat-four growling away just over my shoulder and the gearbox doing its best to throw an occasional curve ball at my still hesitant right hand. The brakes have a good feel to the pedal, but it's the steering and overall sense of balance that make the biggest impression: the latter is hardly surprising when we later pop the narrow engine lid that nestles right behind the passenger compartment. The engine block is clearly right up against the bulkhead, making for a decidedly mid-engined car, not a mid-rear engined car as many sports cars should more accurately be labelled.

After the simple enjoyment of the thrumming little 914, the new Boxster is a completely different experience. In fact, it may have well of just descended from a different planet. Its design is curvy but aggressive after the cerebral 914, and it's a big car now, too – a long way removed from those first, almost dainty, 986 models. Sat inside, and with the seat dropped low, you feel perfectly cocooned even with the roof down – which has just dropped with merely a single press of a button – the high door sides and transmission tunnel placing you within a sturdy feeling structure. This is exacerbated once we're on the move, as it's obvious the torsional rigidity of the 981 is much higher than in any previous Boxster. Bumps and ridges in the road that make the 914 clank and buck are calmly dealt with as if the car has a fixed roof.

Compared with certain modern performance cars, particularly those with turbochargers, the 2.7-litre 'six is an engine that needs to be revved right out if it's to give its best. There's not a great deal of torque at low revs, but with a gearbox as sweet as this – if only the 991's manual 'box was in the same league as this – that's no great chore, in fact, it's a real



#### 914 & 981



pleasure. In an age when highly strung naturally aspirated engines are thin on the ground, let alone in combination with a manual gearbox, the simple pleasures of working the Boxster's engine up and down the rev range, supplemented with the occasion blip of the throttle between gearchanges, is a pastime to cherish.

So they don't look alike, sound alike or even share quite the same badge, but there is a comparison to be made here and it's in their driving character. Like the 914, the latest Boxster is not a car to thuggishly haul around; it likes precise steering inputs, via a rack that's sadly lost a fair deal of its communication to the driver, but thankfully not its accuracy. You guide a Boxster into a fast curve and revel in getting the line just right, before making the most of what power you have available on the exit.

The 914 range was broadened with the advent of a 100hp 2.0-litre model for the 1973 model year, which also benefited from a shorter and more rigid gear linkage. It was, said some, the car the 914 should have

been all along. That year Porsche got close to its original sales forecast of 30,000 units per annum, but the writing was on the wall with the disbandment of the VG when Porsche bought out VW's share in 1974. The last few cars were sold in 1976, but VW – under new management once again – and Porsche were already cooperating on another new 'entry-level' sports car: the 924 was the future, now.

However, it wasn't really until the advent of the Boxster in 1996 that the 'entry-level' Porsche really found its feet, enough that is to form a dynasty that survived beyond the first and now second model generation to establish a clear bloodline. What the 914 started, the Boxster has more than finished. As for Gary, he and 'PRK' made it home in style. Maybe the 914's time has yet to come after all  $\bigcirc$ 

With thanks to 914 owner Gary and Gmund Cars (www.gmundcars.com 01423 797989) for their help with this feature.



## GT Porsche's newest advertiser would like to give a special gift to all of their new GT Porsche customers.

FREE Rennline RS Keychain

#### On all online orders Use Promo Code GTPRS



#### Catalytic Bypass and Pre Muffler 964

Superior quality polished 304 Stainless steel construction, equipped with mounting brackets to install your factory heat shields. Will add an estimated 12hp and give your car a more aggressive sound. This bypass looks and mounts just like a factory catalytic converter with-out the weight and flow restriction.



#### Folding Tow Hook

Rennline's stainless steel folding race hooks install in minutes on any Porsche with factory screw type removable tow hooks. Unlike the aluminum units on the market that are usually advertised as "for decorative purposes only", Rennline's stainless steel tow hooks are precision machined and will stand up to the extreme abuse seen in any race environment. These pulls have a 2" opening as required by most organized race events and screw directly into the factory bumper pull location. Each hook comes with a rubber bumper to be applied on the back side to insure your bumper cover will never get scratched from hook contact. Also included is one red tow sticker. Keep the corner workers and track officials happy by installing a set of hooks that are both highly visible and highly functional



#### Adjustable Control Arm Links

986/996/987/997

If you're serious about how your 993, 996, 997, Cayman, or Boxster handles, you should upgrade the rear suspension with adjustable control arm links. There are two major drawbacks to the factory links: 1) You can't lower your car and maintain proper suspension geometry. The factory links create too much toe-in, which cannot be adjusted out, creating handling problems and excessive tire wear. 2) The factory links have rubber bushings, which make handling imprecise, especially in performance driving when suspension loads are highest. Rennline adjustable control arm links solve both these problems. Manufactured from 6061 aluminum and feature a turnbuckle design that allows each arm to be lengthened or shortened as needed to restore proper suspension geometry on a lowered Porsche.

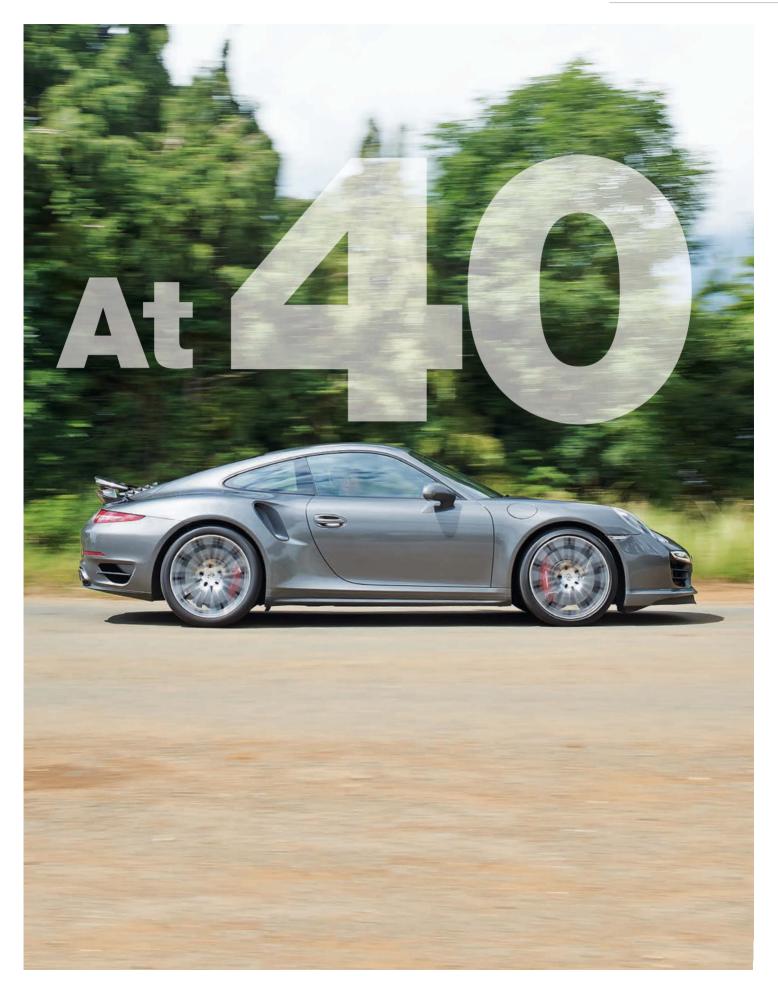




The original 911 poster boy turns 40 this year, so now is the perfect time to compare it with the car that has continued its legend today and take a look at Porsche's turbocharged future.

Story: Jesse Crosse Photography: Gus Gregory

#### 930 & 991 Turbo





The 930 is a rough diamond, an uncompromising sports car and one which it is unwise to take liberties with

oday, an image of a Type 930 posted on social media never fails to get a remarkable number of likes, retweets and shares across every platform you care to mention, and that's not surprising. The 930, its original design now 40 years old, still manages to look seductive and menacing at the same time and the reason for that is simple. Visually, it's a caricature of what most people imagine a sports car should look like. Those swollen rear arches are out of all proportion to the front and the same could be said for the width of the rear wheels. As for the tea-tray spoiler, well, no punches are pulled there either.

930 aficionados will have spotted the black example here is a later 3.3-litre car, the second

generation 911 Turbo that packed a genuine super car set of credentials, allowing for the 930s looks to finally be backed up by the performance they promised. 28 years ago, in 1986, when this car was new, 300hp was a lot and turbocharger technology was unrefined. Maximum power was at 5500rpm and maximum torque of 317lb ft at 4000rpm. Relative to modern technology, electronic engine control was backward in its sophistication and performance, there were no stability systems to save a driver who overstepped the mark, no torque vectoring and no ABS. Neither was there any traction control, active suspension or even power steering. The kerb weight was quite high, too, at 1335kg giving a power-to-weight ratio of

224.7hp/tonne. The 930 didn't even have many gears and until the last year of production in 1989 it was equipped with a strong and simple four-speed manual gearbox.

28 years on, things have changed and today's 911 Turbo Coupé is anything but backward. At 3.8-litres, the engine may only be half a litre bigger in capacity but this water-cooled unit has two turbos instead of the 930's one and are most sophisticated you will you find on any turbocharged petrol engine thanks to their variable turbine geometry that minimises lag without sacrificing power and torque outputs. Talking of which, today's 911 Turbo develops 520hp between 6000rpm and 6500rpm and 487lb ft between 1950rpm and 5000rpm. This



car has optional the Sport Chrono package fitted, which includes Sport Plus mode. With this mode selected, overboost pushes the torque up to 524lb ft between 2100 and 4250rpm.

Parked nose-to-nose, the 930 looks dainty compared to the 991 and the newer car is much bigger. The length has grown by 215mm, width by 228mm, the height by 24mm and the wheelbase is 228mm longer. But with superior crash structures, four-wheel drive and PDK transmission the 991 Turbo tips the scales at 1595kg, 260kg more than the 930. Although the power-to-weight ratio is a mighty 326hp/tonne.

This latest 911 Turbo is packed with advanced systems. There's Porsche Active Suspension Management (PASM) with electronic damper control, optional Porsche Dynamic Chassis Control (PDCC) that suppresses body roll, active front and rear spoilers and Porsche Torque Vectoring (PTV). Perhaps the most un-sports carlike feature is the active rear axle steering. This steers the opposite way to the front by up to 2.8 degrees below 31 mph and in the same direction by up to 1.5 degrees at over 50 mph. Finally, let's not forget Porsche Traction Management (PTM – a fancy name for all-wheel drive) and the PDK double-clutch seven-speed gearbox.

You might think this comparison is beginning to look like chalk and cheese and you'd be right. Even back in the day, nobody ever used words like 'refined' or 'high tech' for the 930 or any of the 911s for that matter and in contrast the 991 is both of these – up to a point. When the 930 was conceived as a 3.0-litre in 1974, before its engine was enlarged to 3.3-litres in 1978, the 911 already had a reputation as being 'out there' daunting and a challenge to drive on the limit.

Strapping on a new-fangled turbocharger was about as high tech as things got in the late 1970s. It was as if Porsche was looking for the next outrageous move, like the angry teenager coming home with a pink Mohican. It worked, the 930 grabbed the attention of a generation and its image soon adorned the wall of every teenage petrolhead's bedroom. The nearest modern equivalent is probably the GT3, still raw, still angry and still relying on the same shockand-awe tactics.

One of the appealing things about earlier 911s is the snug fit when you get in them. The pedals are well forward which means the A-pillar is in the way when you clamber in, but once you're there the view is great. The two pointy front wings make perfect markers defining the front corners, bobbing up and down in a comfortingly firm way as the car rides the bumps.

By 1986, the 911 had become a consummate GT car, great to sit in for long distances without fatigue thanks to the flat-six's torque, the engine's natural slow spinning nature that makes for a refined cruise, comfortable seats and a comfy, relaxed driving position. For those drivers who have grown up with power steering, the 930's manual rack and pinion steering must be a revelation. But it's not heavy because there's no engine sitting over the front axle and the wheels



are a sensible 16-inch in diameter with a relatively narrow 205-secton front tyre – compare that to the 991's 20-inch wheels and 295-section front tyres. There's little friction in the system and held lightly, the wheel kicks and wriggles gently in the hands.

In contrast, the 991 Turbo has the latest electric power steering, it filters that intimate feedback and though accurate, feels dull and lifeless by comparison. That's not to say the 991 is unresponsive to any steering inputs, quite the opposite. The weight of the rear-mounted engine and the chassis' natural tendency to understeer in slow and mid-range corners so prevalent in the 930 is completely absent in the 991. In those same corners and despite its additional weight and length the 991 Turbo is edgier, more pointy and more eager to change direction thanks to all of the systems mentioned above.

Where the two differ completely is that the 991 Turbo is designed to be all things to all men. Smooth, quiet and refined with the PDK left in full auto mode and Bose hi-fi turned up, today's Turbo is a luxury cruiser. In that guise, it's never bland, but disconcertingly ordinary, doing the job that any good sports saloon or coupé might do. Even in manual mode, upshifts happen automatically when the rev limit is reached.

The optional Sports Chrono package brings with it a built-in lap timer and a marked change in character. Active engine mounts further tie down the engine in hard driving and Sport and Sport Plus modes summon up more aggressive engine mapping. Sport Plus also firms up the dampers, leaves manual shifting entirely to the driver and enables another feature, Launch Control. With your left foot on the brake at a standstill, kicking down and holding the throttle will settle the revs at 5500rpm. At that point, sidestepping the brake pedal launches the 991 Turbo with a brutal, vertigo-inducing ferocity.

The 930's reliance on advanced technical systems is zero because it hasn't got any. Its reputation for catching the unwary comes from the fact that the early turbocharging strategy was back to front compared to today's cars. Rather than beefing up the low range, boost arrives late at around 3500rpm in conjunction with generous throttle application. The 930 has a single, old school, KKK turbo which by modern standards is at best sluggish.

With no knock sensors to wind off the boost at the onset of detonation, the 3.3-litre engine's compression ratio is set at a low 7:1.1 Because of this, the transition from big lazy naturally aspirated engine to full boost is rapid and best not arrived at halfway round a bend in the wet. In comparison, the newer car has a compression ratio of 9.8:1 and those two, smaller, variable geometry turbochargers which act at lower revs to give response akin to that of a naturally aspirated engine.

Under hard acceleration, the 991 Turbo cracks urgently through the gears with flicks of the paddle. In contrast, the 930 takes off with a longlegged whoosh and demands relatively slow,





The 991 has every active safety system known to man. The driver is still in control, but heavily supervised

deliberate gearshifts. At the 6700rpm redline the 930 reaches 90mph in second, 135mph in third before levelling out at 160mph in fourth. The 991 Turbo is obviously faster though, maxing out at 195mph in sixth gear, rather than top.

It's the same story with acceleration, the new car reaching 62mph in 3.2 seconds (in Sport Plus with overboost) easily outrunning the 930, which takes 5.4 seconds. Both are thirsty. The official combined fuel consumption for the 991 is 29.1mpg but select Sport Plus on a B-road and that can drop to under 14mpg. The 930 was quoted at 23.9mpg at a constant 75mph (one of the measures of the day) but driven on boost, that plummets too.

Braking is well matched to the performance in

both cases. Derived from the Porsche 917 Le Mans cars of the early 1970s, the 930's brakes were outstanding for their time and still are. Fourpot callipers with drilled and ventilated discs allround are strong but never touchy with a solid pedal feel. The 991 Turbo's brakes don't feel quite as solid and by comparison are designed to be safe for the average driver by being very sensitive.

Chalk and cheese? The 930 is a rough diamond by comparison to the 991, an uncompromising sports car and one which it is unwise to take liberties with. There's nothing between the driver and the road surface except four contact patches, so drive one and what happens next is entirely up to you. In contrast, the 991 has every active safety and stability system known to man, every human action monitored by computers before being relayed to the road through powertrain or brakes. The driver is still in control, but heavily supervised.

Both cars share one thing: Porsche DNA, character, bloodline call it what you like, that much is obvious. The new car is more powerful, more capable, more accomplished, better performing, safer, quieter when you want it and has heating and ventilation that works. The 930 is simple, the controls challenging, the steering feel delightful, the performance still remarkable and the experience of driving one, ecstatic. In the last 40 years the Porsche 911 Turbo may have come a long way in many respects, but in others not that far at all.





#### BOOSTING THE FUTURE

When Porsche first introduced turbocharging to the 911 product line it was with a clearly defined strategy of adding another tier of performance to its sports car model line. The 2.7 Carrera RS that had flown out of the showrooms the year before had demonstrated how far the engineers could go with a normally aspirated version of the car's flat-six motor, so to build on the success of the RS and create a link to the company's forthcoming motorsport ambitions with its road cars was the obvious next step.

Despite the 930's focus shifting from an RS-like model to GT-style 911, the original Turbo was a tamed beast, with its focus on performance with a serving of luxury offered too. And it's been the same with every 911 Turbo – any Porsche Turbo for that matter – for the last 40 years. With the 991, Panamera, Cayenne and the Macan, Porsche Turbo models are still focused on performance and refinement. But is that due to change?

Talk of Porsche producing a four-cylinder, turbocharged engine for the Boxster or a new, sub-Boxster entry-level model have been doing the rounds for a number of years. Those exclusive spy pictures and quotes from trusted sources you read online and in the weekly motoring press are fuelled by Porsche testing the reaction to such news through a series of leaks and suggestions of what the Weissach magicians are up to.

But at the same time Porsche has been teasing news editors it has also had one eye on the bigger picture, namely the down-sizing phenomenon that has been going on throughout the car industry. While big horsepower and mind bending performance is still accepted, it's how much energy that is consumed to achieve such numbers that is focussing the minds, and could lead to Porsche building cars that will only be powered by turbocharged engines in the future. Far fetched? If you buy a new BMW, no matter the fuel it burns, the engine will have at least one turbocharger, normally two and in some cases three, and other manufacturers – volume and prestige, sports and luxury – are following suit.

So what's caused this change and why is it happening? The simple answers are emissions and that technology has moved on at such a pace that turbocharging an engine is no longer seen as just a cheap and effective route to more power. It's allowing engine designers to build smaller capacity, lighter and more efficient engines with no drop off in headline power and torque figures, if anything it's enabling them to produce more powerful motors. Of course, the advancement in electronics and engine mapping has allowed the development of these incredibly precise pieces of hardware.

The first signs of a Porsche all-turbo future can be seen with the Macan, which is powered exclusively by four turbocharged engines: three petrol (one four-cylinder, two six-pots) and a single diesel. The spy pictures of the 991 going around with the centre exit exhaust hint at a lowpressure turbo application for the next generation of six-cylinder engines that will see the light of day in the new Carrera models around 2017, maybe sooner. Derivatives of these will, like the current normally aspirated flat-six, also filter into the Boxster and Cayman models. Away from the sports cars the new Cayenne will follow in the Panamera's wheel tracks and replace its normally-aspirated V8s for turbocharged sixes with no effect on performance and big improvements in efficiency.

With EVs and plug-in hybrids an exercise in looking to be green, it's the work the engineers are doing to prolong the life of the internal combustion engine through turbocharging that shows we are still a long way from finding a replacement for fossil fuels, but unlike the last oil crisis in 1974 that halted the birth of the turbocharger, this time around the industry is turning to the turbo to safeguard its future o *Stuart Gallagher* 

#### FINLAY GORHAM PORSCHE



Viewing by appointment only | Mobile: 07831 444100 Telephone: 01284 827427 | www.finlaygorham.com

### Independent PORSCHE Specialist www.whitleygarage.co.uk



# WHITE NOISE

#### 560hp, four-wheel drive, PDK and no roof, the new 991 Turbo S Cabriolet should be the anti-911 but it's not. Here's why.

Story: Stuart Gallagher Photography: Gus Gregory



#### Turbo S Cabriolet



eft foot on the brake. Sport Plus button depressed. PDK lever pulled back into Drive. With your right foot, squeeze the throttle pedal to its stop and watch as the tacho needle sweeps round to

5500rpm and stops, bouncing off an enforced limiter. Scan the horizon one last time then lift your left foot off the brake and make sure you're holding on. Tightly.

In under three seconds, probably closer to two-and-a-half, you'll be doing 60mph. Less than four seconds later you'll hit 100mph, another three and you'll be past 120mph. If you're brave enough (foolish?) to take your eyes off the road and look in the rear view mirror you'll see that the rear wing has reached its secondary extension to keep you planted firmly on the black stuff the correct way up. And, yes, in less than ten seconds the 991 Turbo S Cabriolet will unequivocally change your view of it from a boulevard cruiser to a drag strip bruiser.

Launch control is nothing new in Porsche circles – it came to be in 2006 with the 997 Turbo – but it still raises a dirty smile every time you use it. Do so with the roof down on the most expensive 991 you can currently buy and not only is your focus fixed on the rapidly approaching horizon but your ears are being entertained by a cacophony of noise that can only be produced by cars with power outputs that embarrass today's FIA GT cars.

Today's Turbo S is such a car. It may transmit all its 560hp and 516lb ft to each of the four 20-inch tyres but this doesn't mean they don't have a fight on their hands. The nano-second your left foot lifts off the brake the nose rises, the rear squats and those vast 305 section rear Pirellis lose their battle with the Tarmac and smear their asymmetrical tread pattern over the surface for a good 60 metres before eventually winning the grip battle. The gearbox, which Porsche waited 25 years for the electronics industry to catch-up with so its engineers could finish its development, forces gears home with more of a mechanical thump than an electronic smoothness, with each new ratio continuing where the previous one left off, hurling you at the vanishing point.

When your wits call time and your right foot jumps off the throttle and on to the brake the

deceleration is as ferocious, fast and every bit as impressive as the acceleration. But then Porsche does brakes, and when they are of the PCCB variety (standard on this ultimate spec Turbo) endless high-speed braking is only restricted by the number of times you can take trying to inflict a whiplash injury on yourself.

Hold on a moment. This all sounds a bit fast, furious and frantic for what is essentially the 911 for those who are more interested in letting it be known that they have the most expensive 911 you can buy, rather one of the fastest. In more recent years you'd be right, because neither the 996 nor the 997 Turbo S Cabriolets were the most evocative 911s in the showroom. A little bit too wobbly and more point and squirt than duck and dive, they were the 911 for those who wanted to be seen rather than entertained. The 991 Turbo is a very different 911 Turbo and in S guises here it's also a little bit feral, which is a good thing in our book.

As a coupé the new 991 Turbo S is one of Porsche's best, the longer wheelbase adds a higher level of refinement and comfort that gives the car its strongest set of GT credentials to date.







It's also the most well-rounded Turbo for quite sometime, too, since the 993 Turbo of 1998, in fact, which makes it a very fine car indeed. Having such a strong base to build on means the Turbo S Cabriolet is now a 911 that you no longer have to make excuses for. If you have the means this 911 is a magnificently indulgent supercar you could use every day of the week.

It's easy to be drawn into the Turbo S Cabriolet by its numbers. Those power and torque figures, the crazy acceleration times and the 197mph top speed. Oh, and the 1675kg kerb weight, making it the heaviest 911 by quite some margin. And yet, despite the bulk, the wide body, the folding roof and the automatic gearbox this 911 appeals to the devil's advocate in us. It shouldn't appeal at all, it should be the 911 we snear at and question the owner's motives as to why they didn't buy a Coupé. But, and some of you may struggle with this, for the first time the 911 Turbo S Cabriolet is able to cash the cheques it writes. Not only can you

laugh, snigger and giggle every time you execute a Launch Control start and reach naughty speeds quicker than you've probably managed in the past, but you can put this colossal performance to use. As with its 560hp Coupé sibling, the Cab can utilise the power and torque on offer with amazing clarity and purpose. You can pitch it at an apex and it won't flex and twist around its axis, but it will grip and flow and encourage you to get on the power early and summon up more of those ponies desperate to get in on the action. The steering column doesn't kick-back in your hands, the windscreen doesn't shudder with every degree of steering lock and the back of the car doesn't feel like it's trying to make a break for freedom - not in a heroic oversteer style but a break apart under the sheer force that a turbocharged, four-wheel drive 911 without a roof has at its disposal. With the Turbo S Cab you seek out the challenging route at every opportunity, which is a genuine first.

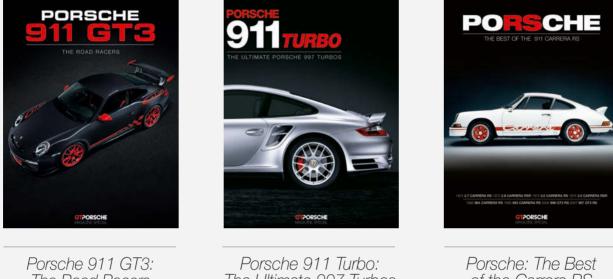
The 991 becomes a more intriguing 911 with

each new model added to the line-up. The Carrera 4 models are, in many people's eyes, the better option than the rear-drive Carrera models, the 3.4 Carrera is preferable over a Carrera S for some. The Carrera Cabriolet is the best soft-top 911 Porsche has ever produced but we'd take a Targa over a rag-top every day, week and month of the year. The GT3, the brief exposure we've had of it so far, has shown us that Porsche has evolved its most precious subbrand into yet another all-conquering hero and the 911 Turbo has grown in stature as a GT car, yet is more focused than it has ever been. And the Turbo S Cabriolet is one of those cars that gets under your skin, that you can't help return to for more of what it offers. Its performance is clearly a big factor as to why this is, speed is addictive after all, but it's the first time a 911 Turbo S Cabriolet has delivered on its promise and is a 911 you'd recommend without a caveat. Which is almost as astonishing a statement as Launch Control is an experience O

With the Turbo S Cab you seek out the challenging route at every opportunity

## **BUY ONE** great MagBook from the publishers of *GT Purely Porsche* **AND GET ANOTHER HALF PRICE**

That's two 164-page MagBooks for just £11.98\*



The Road Racers Was £8.99 Now £7.99



of the Carrera RS £7.99

To order your copy today call +44(0) 1732 748084 or email subs@unity-media.com

\*price excludes postage and packing

You wouldn't leave your Porsche out in the cold, so why leave your favourite Porsche magazine on the shelf?

> Order your GT Porsche binders today for just £11.50\*\*

GI GT

To order your hard-backed binder call

+44(0) 1732 748084 or email subs@unity-media.com

\*\*price includes postage and packing for UK delivery addresses only, please contact us for overseas courier costs.

# Special Reserve

Think of an RS and you immediately consider it the domain of the 911, but just once Porsche applied its RennSport philosophy to a car that wasn't rear-engined.

Story: Wilhelm Lutjeharms Photography: Charles Russell





orsche's RS products have grabbed headlines and the attention of motoring enthusiasts since the original's inception in 1973. In the past decade, collectors and owners of these machines have enjoyed a spectacular gain in the value of their cars. Rightly so, these are special Porsches from both a mechanical and driving point of view and, in most cases, also in terms of the production numbers; since the original 911 2.7 Carrera RS only the 964 RS was produced in higher volumes. But the RS moniker hasn't always been used to identify a 911 with racing pedigree, for there is one exception to the rule that few are aware of. During Porsche's troubled times in the early 1990s, the 968 was delivered to market to help keep the company afloat. But even this 'new' model struggled despite the likes of the Club Sport, Turbo and Turbo S. The latter, of which only ten were produced in 1993, was the basis for one of the rarest cars in Porsche's history, the 968 Turbo RS. As is the case with several lowvolume, driver-focused cars, the idea came about when a few engineers started developing an itch, followed by that inevitable: what if?

To get the full story behind this cloudy piece of Porsche history, I had to email Porsche and then the individual contacts that were suggested with each successive reply. Finally I was given the number of Gerd Schmid, a retired Porsche employee. However, Schmid isn't just any ex-Porsche employee, he's one of those guys with whom you want to share an afternoon and a few pilsners with. As the head of the customer motorsport department, he had an illustrious career, being part of some of the most successful historical racers. He was, to name a few, part of the team responsible for the 3.0 RSR, 934 and 935. In 1983, he started the customer programme for Group C followed by a similar setup for those in the fortunate position to find themselves with a GT1 in their race team's





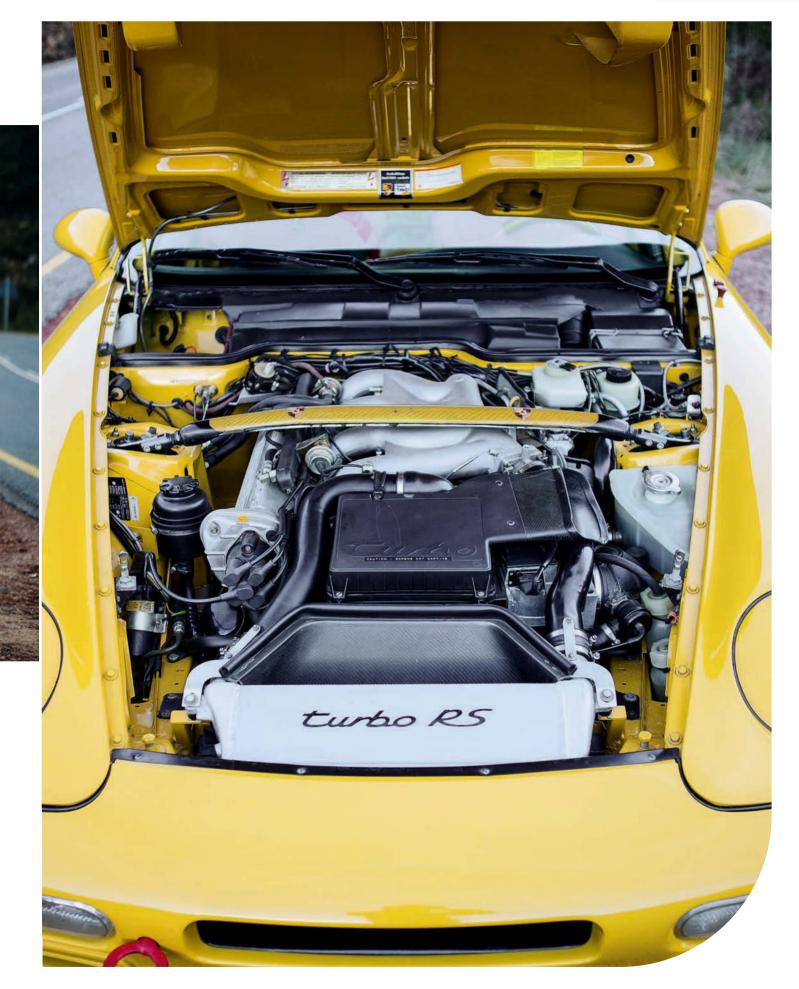
workshop. In the years leading up to his retirement, he was instrumental in launching the Carrera Cup in several countries and regions, including the Middle East, Asia, Japan and Australia. However, in the early 1990s, he headed up the 968 Turbo S and Turbo RS projects, and this is what he had to say about the latter: "We built three cars according to the regulations for the ADAC GT Cup at the time. There was a red, white and black example. Each of these cars were fitted with a 41-litre fuel cell for this 1000km race."

A fourth Turbo RS was also built for a customer. This was built with advanced modifications as this Speed yellow example was destined for racing in South Africa, outside the ADAC restricted limitations. The mechanical upgrades were a combination of the best parts Porsche had access to at the time. "The intake system and upper part of the engine was from a 944 Turbo while the lower part of the engine and the crankcase was from a 968. There were also a few parts especially designed for these cars. It is important to remember that these cars were sold by the racing department, and not the sales division," Schmid adds. This is the most significant fact when it comes to the history of this specific Speed yellow Turbo RS.

"The real Turbo RS was never homologated for the street. However, the Speed yellow example was one of the first of two 968 Turbo S cars converted to RS specification. There was a lot of design and bodywork development at the time with the tuning company TechArt. Porsche later homologated these modifications for the street cars.

"It was this single car that Porsche, TechArt and its first owner modified together. The other cars were standard 968 Turbo S models and then the three 968 Turbo RS race cars."

For all their uniqueness, these RS cars were short-lived. As Schmid pointed out, the car was extremely expensive at the time – a Turbo S cost DM175,000, nearly DM100,000 more than a 968 Club Sport; and secondly, the idea was to



"The Speed yellow example was one of the first of two 968 Turbo S cars converted to RS specification"





sell only a few. However, it was Schmid's final remark that possibly hits the nail on the head: "You must remember that during the early 1990s, when this project was born, Porsche was financially unstable. During this time we created several special production cars, otherwise we would probably never have created a Turbo S or Turbo RS. Everybody at Porsche loved the 911, but not the 968. But, actually the 968 Turbo S, as tuned by the factory, was much faster than the 911 Turbo."

This car's first owner, who was invited to the factory to see the car in production, immediately suggested a few tweaks. He wanted a wind deflector fitted at the bottom of the windscreen (hiding the windscreen wipers), which helped with the aerodynamic airflow over the car. Apart from the two standard Naca ducts in the bonnet, a new bonnet was developed with a special airflow duct to aid cooling for the radiator and limit heat building up in the engine bay.

He also suggested a water-spray system be installed for the intercooler (which is operated from the cabin). Later the headlights were removed and the lower lights were upgraded to offer dipped and high beam functions. Then there were those iconic, standard, three-piece Speedline wheels.

As this was not an official racing Turbo RS with the air restrictor, and with the additional

modifications in place, it is safe to assume that the engine now produces in excess of the 350hp of the Turbo RS. Bear in mind that the standard Turbo S delivered 305hp and 369lb ft and weighed just 1300kg.

The car is now part of the Apex Collection, which is housed in a Porsche museum at Weltevreden Estate outside Stellenbosch in South Africa. The car demands attention in a different way to a 964 RS or 993 RS. In a world that has gone 911-mad, the low stance of this race-ready, extremely rare 968 is surely more special than any 911 of its era. It is pure race car (it weights nearly 100kg less than the Turbo S) from every angle. The best view is undoubtedly

968 Turbo RS

"Actually the 968 Turbo S, as tuned by the factory, was much faster than the 911 Turbo"





when you open the rear hatch and see the fuel tank, pipework and thick crossmembers of the full road cage.

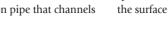
Entry is slightly trickier than most Porsche RS models with one of the roll bars running from the roof directly into the footwell, leaving the opening cut in two. However, I paid close attention when its owner manoeuvred himself into the driver's seat; you simply hold on to the roof and the top of the roll bar, lift your feet into the footwell and lean on the crossmember and slide into the bucket seat. Get it right, and it makes for a rapid and efficient ingress.

Once behind the wheel you feel as if you don't need the four-point harness – the seat hugs you from your thighs right up to your shoulders. With the harness clicked in, I take a moment to shift the gear lever through all the gates, impressed with the slick and solid feel. It would pay dividends later on.

There are very few civilian comforts in the interior such as the ventilation system, indicators and lights switches. To the left, above the steering wheel is a ventilation pipe that channels fresh air into the cabin. Look in your rear view mirror and your vision is filled with yellow metal bars. I chuckled as the photographer opened the glove compartment; it doesn't even have space for a pair of racing gloves, as the roll cage runs through there too.

Pulling away from standstill isn't this RS' forte. To master it you do need to give it more throttle than initially thought, and then off it goes. The immediate surprise is how tractable the engine is. Not wishing to disturb everyone before sunrise on this cold winter morning in RSA I short-shift between 2500 and 3000rpm, the 968 taking it in its stride. No tantrums, hissy fits or coughs and splutters. Pure Porsche efficiency still evident today in a 21-year-old car.

Stuttgart's engineers are regular visitors to the Franschhoek mountain pass for development work, contributor Richard Meaden was here in 2011 riding shotgun in the passenger seat with Porsche's engineers in the company's 991 test mules. There are good reasons for Porsche to spent much of its development time here. First, the surface is near-billiard smooth; second, it







offers two hairpins with a combination of faster corners; and then there is the perfect landscape – although I doubt the latter was on the test driver's agenda.

Away from resting locals I slowly squeeze the Turbo's throttle deeper into the footwell and the engine gradually gains momentum as the crank speed climbs to 3000rpm, its big capacity cylinders doing their job as the big, single turbo begins to wake... and then it clearly hits boost, the needle swings with a level of confidence I didn't expect to 6000rpm, at which point the gear indicator lights up. Another gear and the turbo onslaught continues. This car is fast, a point made in a very simple way.

The temperature is around ten degrees Celsius and the tyres simply spin in the first two gears, but as air and surface temperature increases so to do the grip levels. With a new level of confidence I go again. Approaching the first set of corners it's not the feedback from the steering that impresses the most, but what you feel from the entire chassis through the seat. A preconceived notion prepared me for some extreme tramlining (even on this smooth surface), but the car rides camber changes with relative ease and any directional changes are calmly controlled.

The roll-cage, stiffer and lower suspension (20mm lower than a 968 Clubsport) and race

seats result in a car that feels like a track-honed tool. You can hear every little stone thrown into the wheelarch, every single sand patch – it's similar to running wide on the track in a GT3 Cup car and wincing at the aural attack that goes on underneath the car.

Push on, and the gearbox comes to the party. It offers a short throw: once you are done with first to second, simply push the lever out of second, let the spring bring it in line with third gear and push it forward to select the next ratio. During the 1990s (and even today) people raved about Honda NSX's smooth and mechanical gearbox, but this Turbo RS's 'box is right up there with the best; and as a special touch, the car was delivered with a 962 gearshift knob. Now that's cool.

As this is a classic front-engined, rear-wheel drive setup, learning to push it harder and harder is easier than a 911 of the same vintage and representative specification. The weight transfer is more predictable than the immediacy of the transition of a 911 when the rear axle loses traction. Fortunately the limited-slip differential (offering up to 75 per cent lock) further helps to put all that torque down to the road.

Along with the 924 Carrera GT, the 968 Turbo RS is undoubtedly the most sought-after of Porsche's front-engined cars. During Gooding & Company's Amelia Island auction in 2012, a Turbo RS was sold for an impressive \$346,500; one of the highest, if not *the* highest ever bid for a front-engined Porsche. Had the number 58, 968 Turbo RS from Seikel Motorsport was not involved in a crash at the 1994 Le Mans endurance race, this auction price would have surely been higher.

When I asked Schmid about the speed of the 968 Turbo RS, his reply summed up the car and its sad demise: "Because it was faster than a 911 Turbo, the board decided to stop any further work on the 968 Turbo S/RS project. The technical side of this car was really impressive, but the pricing was simply too high."

Isn't this the same as Porsche's perfectly balanced, mid-engined Cayman? Although there might be a long-awaited Cayman GT4 on the way, it is nearly ten years after the launch of the original Cayman and only now Porsche is starting to develop its mid-engined marvel to its full potential.

No matter which way you look at it, the 968 Turbo RS deserves its famous moniker on its tail just as much as any 911 that has gone before or after. Despite the SUVs and saloon cars it builds today Porsche has always reserved the RS name for its very special road cars, and the 968 Turbo RS is certainly that  $\bigcirc$ 



## SPECIALIST CARS

**APPROVED MOTOR CARS** 



WANTED

356 Speedster 2.7 RS 2.8 RS 3.0 RS 3.2 Speedster 959 964 RS 964 Turbo 964 Cup Car 964 Speedster 993 Carrera 2 993 Carrera 4 993 Carrera S 993 Carrera 4S 993 Turbo 993 GT2 993 GT2 Evo 993 RS 993 Cup Car GT1 996 GT3 996 GT3 RS 996 Cup Car 996 RSR 996 GT3R 997 Cup Car 997 GT3 997 GT3 RS Carrera GT Le Mans cars

#### Any other interesting or rare Porsches RHD OR LHD

Telephone: 0844 7000 997 • 0844 7000 993 • 07794 911 911 (after hours) Fax: 0844 7000 959Visit our award winning site – www.specialistcarsltd.co.uk22 York Road Business Park, Malton Y017 6AXPart of Specialist Car Group of companies

# GIVE YOUR CAR THE BEST

5 minute

install

save

monev

### Designed to Improve Engine Power

Cotton – brought to you by Mother Nature and used for filtration by K&N, the leader in washable performance air filters. Cotton breathes easier than paper and that can help improve engine performance by reducing airflow restriction. Another natural feature of cotton is its durability. It can be washed again and again. That means a K&N stock replacement air filter can last for the life of your car reducing waste and saving money.



Lifetime Product

OVER 45 YEARS OF EXPERIENCE MILLION MILE LIMITED WARRANTY

WWW.KNFILTERS.CO.UK<sup>®</sup> TEL.: 01925 636 950



reusable

100%

more

power

HIGH



# Pedro

Porsche has employed some of the greatest race drivers in the world, but there is one man that, despite the lack of Blue Riband event victories is still considered to be one of its greatest.

Story: Andrew Frankel Photography: Porsche AG Archive

ho was the greatest driver ever to sit in a Porsche? Statistically you'd have to say it was Jacky Ickx – after all, among his many victories for Stuttgart you'll find four at Le Mans alone. Then again you could say as much for Derek Bell and he was the only driver employed by Porsche from the start to the finish of its most successful era in sports car racing, when it raced in Group C as a factory team from 1982-88. But you can pore through lists of Porsche's achievements at Le Mans for as long as you like and you'll not find Pedro Rodriguez on its top step even once. Which just goes to show you can prove anything you like with statistics.

I would contend that Ickx is the only Porsche driver with a claim to being as good in a Porsche as Pedro and had he lived to fulfil his potential, I think the world would now accept that as fact. Indeed, all the evidence from his last race for Porsche suggests that, at the age of 31, he was still getting better.

It is generally held that Pedro Rodriguez's performance at the 1000km of Brands Hatch in 1970 was not just his greatest drive but one of the greatest wet weather drives of all time by anyone whoever donned a helmet. And when you're black-flagged, rejoin the race in 12th place yet finish five laps clear of the field, you can see why.

But there is another race no-one talks about, probably because there are no clips of it on YouTube. It is the 1000km race held at the old Österreichring in Austria the following year. And I'd say Pedro's performance on a far more difficult track against even stiffer opposition was at least a match for what he achieved at Brands, possibly even better. What makes it impossibly poignant is that, unbeknownst to anyone there at the time, Pedro would never race a Porsche again.

Today the Österreichring is known as the Red Bull Ring and has been emasculated to the point of being unrecognisable as the circuit it once was.



But back when Pedro was doing his thing it was a track of quite extraordinary beauty and difficulty. Dauntingly fast in any car let alone a Porsche 917, with massive changes in gradient, blind crests and strange cambers it was like a compact version of the old Spa, and not much less scary.

By the time Pedro got to Austria he and team-mate Jackie Oliver had won the Daytona 24 hours and the 1000km races at both Monza and Spa. They were second in Buenos Aires and fourth at Sebring. Oliver then left the team to go CanAm racing so had there been a driver's championship, it would have been Pedro's to lose. In the absence of Oliver, Porsche recalled Richard Attwood to the team, but by then Porsche's first Le Mans winner was thinking more about staying alive until the end of the season when he planned to retire. So far that year he had done just two world championship races: the Targa Florio in a Lola and Le Mans with Porsche, coming third and second respectively. He needed time at the circuit and in the car but he did not have it and in the end was happy to qualify 2.5 seconds off Pedro's polesitting pace, particularly as Pedro's time was almost three seconds quicker than the other Gulf 917 driven by those well known slouches Jo Siffert and Derek Bell... "There used to be a corner just at the end of the pit straight," Attwood says, "where you'd turn-in blind over a crest. And lap after lap Pedro wasn't lifting at all. So when he came in I asked him, 'how do you go through there flat?' to which he replied, 'it's easy, you just go flat'." Attwood is not alone in believing Pedro was in a class of one that day.

But if Pedro was at the very top of his game that day, his car was too. Since its difficult and dangerous birth in 1969, the 917 had been developed at an astonishing rate so that by the time it got to Austria it had turned, says Attwood, "from the worst car I had ever raced, to the best". The fact that thanks to around

630hp from its five-litre engine and a five-speed gearbox it was now far faster than ever wasn't really the point; with its aerodynamics honed it was stable, allowing drivers to make the most of its potential. That year works-backed 917s entered nine world championship rounds and won seven of them.

So with Pedro on pole, in the best car in the race and a team-mate more than capable of fending off the opposition, what could possibly go wrong? Back in this era, almost anything, but of most immediate concern was the little red car parked next to the Porsche on the front row of the grid. It was a Ferrari 312P driven by F1 stars Jacky Ickx (remember him?) and Clay Regazzoni. Despite an engine displacing just three-litres, it had blitzed all the other 917s in qualifying and was within 0.6 seconds of Pedro's pole time. That wasn't the problem: the problem was that in this 1000km race likely to last over five hours it would need at least one and probably two fewer refuelling stops than the Porsche. To have even a hope of beating it, Pedro would need to drop the Ferrari at something like a second per lap, something he'd been unable to do even with a car in one-lap qualifying trim. Pedro's other advantage, his frankly superhuman ability to drive in wet weather was also negated. The race would be greasy, damp and slippery at times but that played to the strengths of the far lighter Ferrari and its star driver Ickx, the only man on the planet with a claim to being as good as Pedro when it rained. And all that before it went horribly, horribly wrong.

The race started conventionally enough. Pedro knew that on account of it being outlawed for 1972, this would be the 917K's last race in Europe and he rose magnificently to the occasion. Although Ickx chased him for all he was worth, lap after lap the Porsche lead grew, and by the requisite one-second each lap required for any chance of victory.

By lap 28 of a 170-lap race, Pedro was 25 seconds in the lead. But the next lap it was just

23 seconds and the lap after a misfiring Porsche was in the pit lane. Knowing there's a problem and knowing what the problem is are two very different things, another is then knowing what to do about it. It took John Wyer's crack JWA team six minutes and 30 seconds to work out that the engine was misfiring because it was getting insufficient fuel from the fuel pumps and that the fuel pumps were misbehaving because they were getting insufficient current from the battery. The battery was checked, found to be flat and changed, Wyer hoping the reason was nothing more sinister than Pedro making too much use of the 917's headlights.

The race was gone. That the Porsche was now in sixth place was the least of Pedro's worries. More relevant was the fact that he was almost three laps behind the Ferrari and even if that broke, there were two other 917s and three very fast Alfa 33s to deal with. What would you do? Chalk it up to experience and relax in the knowledge that you could park the car and Porsche would still win the World Sportscar Championship, the only prize up for grabs at the end of the season. Not Pedro, and not Porsche.

Pedro was a scrapper and at Brands the previous season had learned that when you have a healthy 917 at your disposal, it's never over until the flag falls. So he got his head down and went to work.

Back in the pits John Wyer and team manager David Yorke were doing the same. Their other 917 driven by Siffert and Bell had burned its clutch at the pit stop so all JWA's attention now turned to Pedro. And it soon became clear that two things were required for there to be any chance of emerging with even some dignity intact: a bullish interpretation of the rules, and the most colossal favour from Pedro.

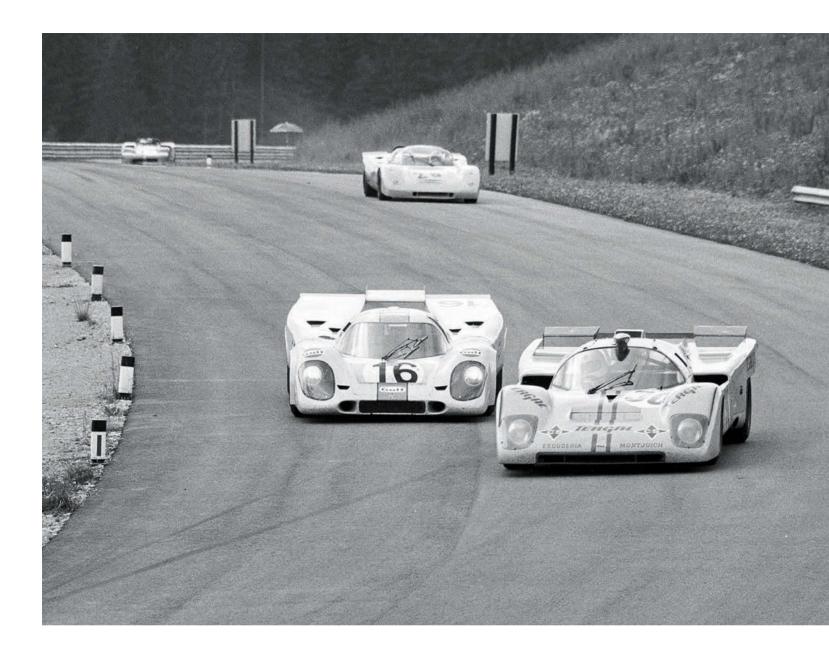
Over at Ferrari, team members must have been licking their lips. The 312P had gotten close to the 917s at times during 1971, even beating them to pole at Brands Hatch, but now they could almost taste victory. You have to remember that in sports car racing Ferrari had dominated the '60s until the middle of the decade, only to be smacked down first by Ford and its GT40 and then by the 917. It believed it had the car and drivers to do the job, all it needed was the good fortune too, and Pedro's battery seemed to have provided it. Remember, too, that the following year, with no 917 opposition, the very mildly modified 'B' version of the 312P entered ten rounds of an 11-round championship and won every single one of them. That was the calibre of opposition Pedro now faced.

Pedro was a scrapper and had learned that when you have a healthy 917 at your disposal, it's never over until the flag falls









The only mistake Ferrari made was to underestimate the determination of the opposition, both on the track and the pit wall. Out on the track, Pedro appeared to have been possessed by a force not of this earth. Attwood once told me he never expected Pedro to make it to old age and perhaps here you could see why: on a dangerous track in an unimaginably fast and flimsy car, he drove without a margin for anything. And in doing so, the 917 started lapping three seconds quicker than anything else on the track, faster, even, than his own pole time on qualifying settings and a whiff of fuel. In fact, his fastest lap was over a second faster than anyone had gone in a Formula One car at the last Austrian Grand Prix.

But Ferrari only really started to suspect it may yet have a race on its hands when Pedro first unlapped himself to bring the deficit down to a still vast two laps, and secondly when he came in for the second pit stop and instead of handing over to Attwood, sat resolute in the car. At the halfway mark a further half lap had been recovered, Pedro driving in the drizzle as only Pedro could.

Yet Ferrari could be forgiven for still not feeling concerned: the rules said no driver could drive for more than three-and-a-half hours and if he chose so to do, would then have to sit out the next hour of the race. But JWA knew that if they pulled Pedro in before that limit, he would require only a ten minute break. On lap 99 the 917 rumbled down the pit lane and, 32 seconds later, rumbled out again with Richard at the wheel. Instead of lying down in a darkened room as you might after such an effort, Pedro sat calmly on the pit-counter for precisely ten minutes before walking across to Wyer and saying, "I am ready now". On this rollercoaster circuit where the slightest lapse of concentration could prove fatal, Pedro was suggesting he drove 158 laps of a 170 lap race. In a 917.

It took Pedro a dozen laps to get the deficit back to just two laps and after some convenient incidents and accidents to other competitors soon found himself in second place. In a drive that Wyer rated ahead of his performance at Brands Hatch the year before, Pedro continued to carve vast chunks out of the Ferrari's lead. When Ickx came in on lap 132 his lead was one lap and 91secs but because of the need to change drivers, his stop took 55 seconds. When Pedro pitted three laps later, he was out again in just 15 seconds...

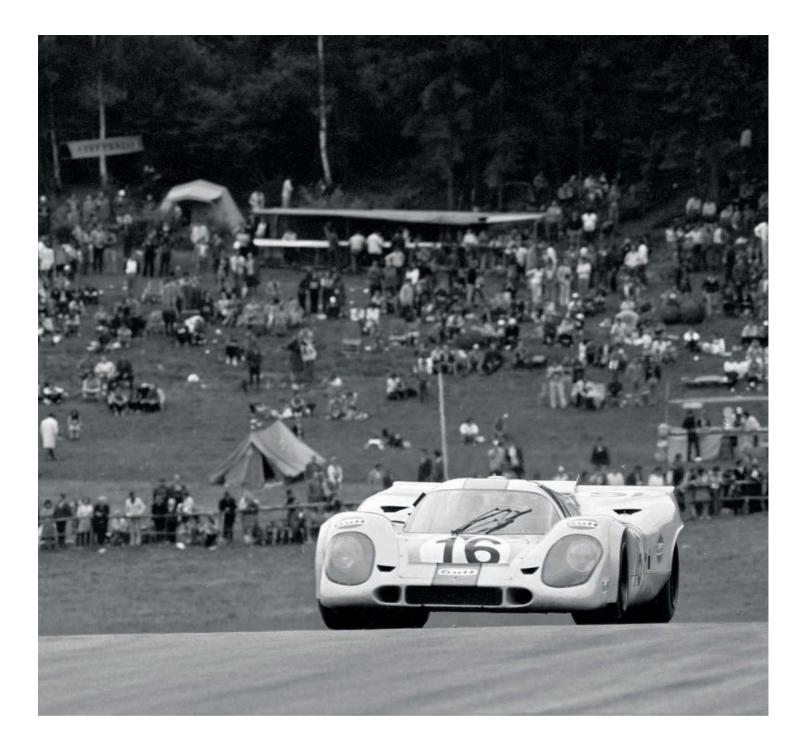
Driving faster and faster, Pedro desperately flashed slower traffic out of the way as JWA just as desperately showed him pit-boards begging him not to use the lights lest the new battery suffered the same fate as the last. On lap 145, Pedro overtook Regazzoni to finally put them on

### Pedro Rodriguez



The 917 started lapping three seconds quicker than anything else on the track





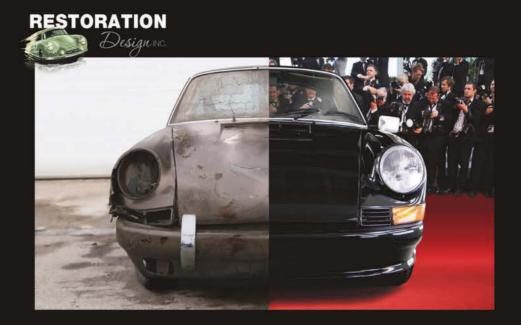
the same lap, albeit at opposite ends. Then it was just a question of maths: there were 25 laps to go and you didn't need anything more than a stopwatch to know now that the Porsche would catch the Ferrari before the finish.

Except it never happened. Three laps later something broke in the Ferrari and it smeared itself along the barriers, mercifully without injuring its occupant. In an instant Pedro dropped his pace by ten seconds a lap and still managed to finish two laps clear of the second and third placed Autodelta Alfas. Apparently, he stepped from the car unruffled and slightly miffed that Regazzoni's accident had spoiled his sport for the day. As for the great Swiss driver, years afterwards he admitted that Pedro would probably have caught him, but that passing was a very different thing...

Two weeks later and as part of his Formula One contract, Pedro was meant to race a new BRM sports car in an Interserie event at the Norisring. BRM's then designer Tony Southgate recalls ringing Pedro to apologise for blowing up its engine on the dyno so there'd be no car for him to race. "Don't worry," came Pedro's reply, "I've been offered £1500 to drive this Ferrari."

The Ferrari was a 512M owned by Swiss privateer Herbie Muller who, a little ironically, had a few weeks earlier finished second at Le Mans driving a JWA 917 with Richard Attwood as his team-mate. Despite being surrounded by wildly more powerful CanAm cars, Pedro qualified second and was leading when something – some say mechanical failure, others that he was baulked by a back marker – pitched Pedro into the barriers. By the time he was freed from the blazing wreck, nothing could be done to save him.

Was Pedro the greatest driver ever to sit in a Porsche? It is perhaps a spurious question, for how can you compare drivers from different eras with different equipment on different circuits? But I can tell you this: of all the spectacles in all of racing that I feel robbed not to have seen, the combination of Pedro Rodriguez in a JWA Gulf Porsche 917 tops the lot  $\bigcirc$ 



Want the best for your classic? Work with the best in the industry.



Save time and money on your restoration. Watch our Free YouTube "How To..." Video Series Now!

http://goo.gl/fU159



24 Hayes Avenue, Guelph ON•TEL: 519-836-3555 •FAX: 519-836-3577 www.Restoration-Design.com

## the market

## 997 GT3 RS

The 997 GT3 RS was the penultimate 911 GT3 to be built with a manual transmission and today is valued more than a new 991 GT3.

Photography: Andrew Morgan



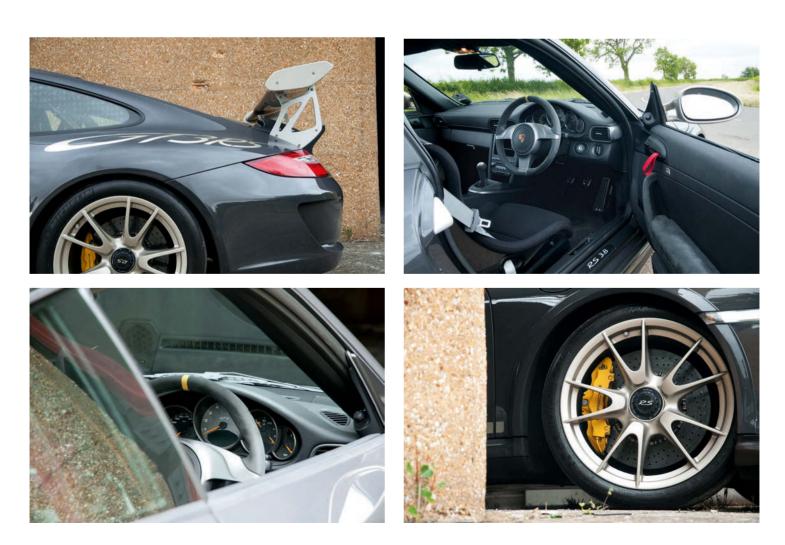
## the market

ack in 1995, Jeremy Clarkson upset the people of Luton by suggesting that the Vauxhall Vectra, which was built in the town, was rather dull and he struggled to say anything interesting about it on *Top Gear:* "It's like trying to road-test a microwave oven," he quipped. Look up the clip on YouTube – it's rather amusing, if only to see the fresh-faced presenter's hair. Vauxhall was so incensed that it complained to the BBC about it (the review, not the haircut) but Clarkson, sensibly, responded by saying that he doubted that the

opinion of a mere television programme would have any effect on the sales of a car. Since 1995, numerous car-related forums have sprung up and, today, we wonder if the opinions – and there are many – spouted forth on these platforms could possibly affect the sales – and values – of Porsches.

Venture on to any Porsche-related forum and you'll find plenty of comments about the latest generation 991 GT3. A lot of it not very complementary, the majority from people who haven't even driven the car in question: It doesn't have a proper GT3 engine. It only comes with an automatic gearbox. The steering is electric and dull. The engines catch fire. The last 'real' GT3, the pundits say, is the Gen 2 997 GT3 and, in particular, the RS variant. This isn't the place for us to join in the argument, so we'll just stick to the facts:

First, the Gen 2 997 GT3 was the last 911 to use the famed Mezger engine (named after engineer Hans Mezger who designed the original race engine over 40 years ago and which went on to be the basis for 996 and 997 Turbo, GT2 and GT3 engines up until 2012). Oddly, the name was littleknown until the GT3 and Turbo owners wanted to distance themselves from regular Carrera models and their M96 engine. And second? Today's 991 GT3 is only available with seven-speed PDK transmission, making the Gen 2 997 GT3 variants (of which there were five) the last to be sold with a manual gearbox. As drivetrains go, the one found in any 997 GT3 is one of Porsche's finest. Thirdly, like the rest of the 991 range, the new GT3 has electrically assisted power-steering,



rather than hydraulic assistance. This means there's no engine-driven pump, which helps with emissions but mutes the 911's famed steering feel; there's still a mechanical linkage from the steering wheel, through to the rack to the wheels, but it's just not the same.

And yes, Porsche did recall 785 examples of the 991 GT3 and replaced their engines after two cars caught fire when a bolt worked loose in the engine. Naturally, the *Daily Mail* took great glee in reporting that "hundreds of wealthy and celebrity owners have been told to stop driving their cars because of the blaze risk."

Those are the facts that have been argued about intensely, with the general conscientious being that the Gen 2 997 GT3 RS was the end of the line for the original GT3 and that the 991 is a new chapter. Has any of this effected the sales of the latter and the values of the former? Only Porsche, historically confidential about individual model sales can tell us if GT3 customers have been put off by the 991's fiery introduction (and it won't). As for the former, it's safe to say the combination of mechanical changes introduced with the latest GT3 and the market's insatiable appetite for anything remotely unique has had an effect here.

This has led to the bizarre situation in that you can buy a brand-new 991 GT3 (albeit not an RS, as that car's launch isn't expected until the Paris Motor Show in October) for £100,500 with late 997 GT3 RSs fetching over £120,000 – the car retailed for £104,841 when new launched in 2010. And that price is rising. We spotted a private seller marketing a 5000-mile example for an optimistic £149,000 as we closed for press.

One specialist that is seeing a steady stream of GT3 RSs through its door is JZ Machtech

(www.jzmporsche.com) and the last couple it's sold have each been priced at £123,000, but sales manager Russ Rosenthal makes a bold claim: "They will cost £150,000 before you know it. In fact, we have one coming in from Hong Kong with just 500 miles on it and we'll advertise it for that amount. It is exactly the same spec as a UK car apart for the fact it has

a kilometre speedometer in it."



Russ is enthusiastic about 997 GT3 RSs, calling them instant classics and, as well as pointing out the usual things about the Mezger engine and manual gearbox, he makes an interesting observation: "Leaving aside Caterhams and the like, you can't buy a trackorientated sports car with three pedals anymore. Porsches, Ferraris and Lamborghinis all have flappy paddles. The 997 GT3 RS was the last manual transmission car of its genre and, as such, marked the end of an era, not only for Porsche but for performance cars in general." It's a very good point and it means that if you prefer three

pedals to two, you have to buy second-hand and the nearest thing to a new car would be a Gen 2 997 GT3 RS – or a 4.0 RS, but that's another story for another time.

This all makes sense if you want a manual transmission car for track day use but, increasingly, people buying these 997s aren't going to be using them, but rather lay them down as an investment for the future. If the trend JZ Machtech is seeing is maintained, if you've recently bought a 997.2 GT3 RS, you could already sell it at a profit.

It seems crazy that Porsches less than five years old are already being

seen as investments. In recent times, any production car, no matter the badge it wore, would haemorrhage cash at an alarming rate within the first five years, before reaching a plateau for the next decade before slowly rising in value at a fraction of the pace it had dropped. However, with the classic 911 market still performing well, it makes sense that rare modern Porsches are going to follow suit, and it's obvious that these last-of-the-line Mezger cars are going to be top of the list. It's not just the later Gen 2 997 GT3 RS models that are going to be effected, either. Other 997 GT3s will

start to enjoy a hardening of values, which will have a knock-on effect with the 996 GT3 models, which will soon start to go in the same direction of their RS equivalent as discussed in issue 153.

With a GT3 RS4.0 costing upwards of £200,000 a 3.8 GT3 RS looks good value at £120,000. In turn the values of the later 3.8 RS cars will strengthen the position of all previous generation GT3 RS models that went before.

But we'll give the final word to Russ: "Porsche is never going to build cars like this again. It's the end of an era." *Follow me @rabyporsche* 

"The 997 GT3 RS was the last manual transmission car of its genre and, as such, marked the end of an era"





# Keep me driving.

Whatever model Porsche you own, modern or classic, we have the expertise, knowledge and experience to make sure you spend more time enjoying what your car was built for. Driving.



Independent servicing and repair specialists for classic and modern Porsche.

Call 020 8903 1118 or visit www.jazweb.co.uk Unit 1. The Mirage Centre, First Way, Wembley, Middlesex HA9 0JD







There's another new arrival on the fleet this month. We've also been to Le Mans, Spa and Zandvoort. And the supermarket...

#### 1986 911 3.2 Carrera

There's a 3.2 Carrera in my garage. No, I can't quite get my head around that statement either, but there you are, there is.

My last dalliance with the cars from Stuttgart was brief and painful (I suppose it could have been worse: it could have been lengthy and painful). I purchased a 944 S2 that I should have given a wide berth to. As in, I should have made sure there was at least 500 miles between my rampant enthusiasm for all things Porsche and even the faintest sniff of the keys. Sadly, I charged into it headfirst, despite the alarm bells clanging like an air raid horn mounted directly above my desk, and then paid the price, illustrated perfectly by a plant that had made its home in the offside sill. Actual foliage! That I managed to do a fair deal for parts and wriggle out of an awkward situation was the only mercy.

Suitably chastened I found myself mournfully reflecting the other day over some photos that had recorded the whole miserable 944 experience, and all the wonderful moments spent exploiting that beautifully balanced rear-drive chassis I never did enjoy. So it was hugely ironic that not very long afterwards at all, a chance conversation led to the prospect of running the 3.2 Carrera you see on these pages, in cohorts with a fellow Porsche-enthusiast friend.

Registered on 3 January 1986, this Grand Prix white Carrera with Sport Pack is deeply redolent of its era. It was a time when the 911 morphed from run-out

## long-term Fleet



'yesterday's news' to sales star, riding the wave of financial prosperity in the UK during the mid-1980s. Given that I was only just approaching double figures in age when this car was crafted together in Stuttgart, you'd assume rightly that it was very much part of my formative years.

In time-served, some might say cliché fashion, I was that young lad who latches on to the dream of a sports car and retains that passion for life. The Porsche 911, complete with whale tail, really is one of my earliest motoring memories, the sight of it powering past the family car as memorable now as the scent of hot car fabric in the days before air conditioning and the taste of warm orange juice from a small carton on day trips.

It's not easy to look back and remember that time now, not just because so many years have passed since, but also because Porsche as a manufacturer was so different then. Even at a young age, it was obvious to me that Porsches were exclusive cars; something very different to the norm, and bought by those who either had a lot of money, who were into their cars, or usually both. Now that Porsche is a mainstream mass-producer of cars, and a 911 is as common as a new Ford Mondeo (new Mondeos are surprisingly rare) that aura can never be recaptured. No one really bats an eye at a 996 Carrera, but – and there may be an element of rose-tinted glasses here – a 911, especially a new 3.2 Carrera in 1986, was a much more special car 'spot' in those days.

That's where I come from in all of this. The car? Well, it's a glorious thing. It's not perfect, but it has a lovely air of originality about it that can't be artificially manufactured. The car has sat for five years until recently, so was re-commissioned at Jaz Porsche before I collected it. The process now is to try and iron out any faults that remain, and chip away at the areas that could do with improvement. I feel sure that the car will benefit from being used, too: no car likes to sit for prolonged periods of time doing nothing.

As an early '86 model this car has the 915gearbox, not the more modern-in-feel G50. Opinion is split on which is ideal: the G50 is a much easier, faster gear change, but the 915 is lighter – both overall and in terms of gearbox internals – and the feel of the gear change is perhaps more in line with the overall experience of driving the car.

I'll go into more detail about the work that needs to be done in next month's report. For now, it's just a joy to hold the keys to an air-cooled 911. As millions of Porsche enthusiasts have found out over the years, there really is nothing quite like it.

> Adam Towler AdamTowler@





## long-term fleet



#### 1993 964 Carrera

I've been slightly perplexed over the last few months that the media, driven by the motor trade I suspect, have labelled the 964 a 'classic'. This conjures up images of car collections and 'matching numbers' and provenance and dehumidified storage facilities. It makes me think twice about the fact my Carrera is used in all weathers for all kinds of journeys, is a bit bashed and peeling and is used to its full potential as often as possible.

I didn't buy the 964 as an investment. At the time 964s were still relatively unloved, hence why I could afford one. No, I bought the 964 to experience the unique character of a 911. Where all other sports cars have something in common with each other, none in recent history are rear-engined (I'll gloss over the Alpine GTA) or have a flat-six. There was the challenge of mastering something different and the reputation for careering through hedges backwards that added a frisson of excitement. What I actually found was a fun and involving sports car that could be tailored to my style of driving as much as my driving needed to be tailored to its particular traits.

It's a shame the original press reports tarnished the 964's reputation with terminal understeer and flat footed handling, as a few geometry tweaks brings a handling balance and level of involvement more modern cars struggle to match.

This is what keeps me hooked on the 964, not the rising values or classic status but ultimately that it was designed to be driven for pleasure and not sat in a garage being polished. this month at Bedford Autodrome. Due to its flat nature it's not the most exciting facility although it does have some big commitment corners. It has become quite a social gathering too, with a few regulars enjoying a few hours exploring the limits of each other's cars.

Sometimes I wonder if I'm just contrary or everyone else is doing it wrong. For instance, twice I've elected to run the set of Michelin Pilot Cup tyres when perceived wisdom suggests the conditions would be too wet to safely enjoy the 964. In this instance it was forecast to be very wet at Bedford so I went with the track tyres that had most tread. Once the heavens opened and most people retreated to the pits I stayed out and had a soaking wet track to myself to practice driving to the extreme. At some points the wipers couldn't keep up with the deluge but I had no really scary moments. The steering was hyper active which kept me on my toes and braking for some of the slower corners can be described as interesting when the ABS decided a rotating wheel was better than a locked one extending my braking zone, but we always made the corner.

I know I often go on about tyre choice but I am a self-confessed tyre geek. I've come to conclusion that the Michelin Pilot Cups are an excellent road tyre with good feel, turn-in grip and still have some slip for fun, whether the conditions are wet or dry. I'm not so keen on their track behaviour though as they. once over that grip threshold they don't have a wide window of slip the R888s I sampled a couple of months ago did.

In hindsight I wish I'd gone with a high quality tyre from the outset of my ownership of DRO rather than fitting a mid-range tyre. My thinking was the midrange tyre would have less overall grip and I'd learn the 964's handling traits at lower speeds. What I've found on the whole is the higher quality tyres have a much wider grip threshold allowing me to work up to and over the limit much more confidently.

As reported last month the remaining silencer in the exhaust system was making all sorts of rattling and blowing noises with an associated rise in decibels that limited my access to tracks and had the potential to give me a headache on medium to long journeys. Thankfully RPM Technic came to the rescue, fitting a lightly used example just before another outing at Bedford Autodrome, insuring I wouldn't upset the noise meters. I can't tell you the new static decibel reading as unusually we weren't tested before going out on track but it is certainly a lot less than the 105+db measured previously.

> Ben Bradley @BenB\_7



## long-term fleet

#### 2002 996 Turbo

I've had the Turbo for a couple of months now, and I still get a kick out of opening the curtains in the morning and seeing it on my driveway. It's settled into its role as weekend wheels seamlessly, with only one modification necessary: a child seat. Bear with me here, I'll get to the exciting track day stuff later.

I'm sure that if you have children and are thinking of buying a 911, one of the main selling points when justifying your prospective purchase to your significant other is practicality. Young children can easily fit into the rear seats, making the 911 a viable car to take the family out for a day trip. It was a major advantage for me when I floated the idea of buying the Turbo to Mrs S, so after I collected the car, one of the first jobs was to find a child seat that'd fit into the rear seats.

I asked around on a couple of Porsche forums, and many people suggested the Porsche Prince child seat. It was the official Porsche seat for the 996 and though it's not available to buy directly from Porsche anymore, plenty of them are available for sale second-hand. I found a mint condition seat on eBay and after checking it over in person to ensure it had no crash damage, I bought it and installed it into the car.

So far, so good, but the final test was fitting my one-year-old son into the chair, and that didn't go so smoothly. The Prince doesn't have the traditional fivepoint harness, relying instead on a large lap section that is belted in place on top of the child's legs and chest. It's effective, but proved too uncomfortable for my son, as you can see from the photo!

Fortunately for me, *GT Porsche* contributor Philip Raby came to my rescue and recommended the Britax Two Way Elite seat as a better option. I duly ordered one and put the Prince seat back up for sale on eBay. Once I got the new seat secured, my son was fitted into it and fortunately seemed much happier and since then the Turbo has been racking up the miles as family transport at the weekend.

In fact, I've been finding just about any excuse to drive it. Even a short run to the supermarket is more interesting in the Turbo, and while my old Boxster had more boot space, you can fit a surprising amount of shopping in the 911. The mixture of local driving plus a few longer trips means I'm getting around 22mpg overall, which isn't as bad as I was expecting.

One of the surprises when I test-drove the car was the quality of the ride and this has been even more noticeable on my local roads, most of which aren't well maintained. Having driven a 997 with PASM on these roads, the contrast with the Turbo is marked. The 997 felt stiff, almost crashing over rough surfaces, whereas the Turbo seems to soften the worst of the bumps. I don't know if this is down to the passive suspension on the Turbo as compared to the PASMequipped 997, the 18" wheels allowing more compliance in the tyre sidewall, or even just that the suspension on my car is tired! Regardless, it's certainly a comfortable car in which to do a long journey. Child seats and shopping errands aside, I have managed to get the Turbo to its first track day at Bedford Autodrome. Given that I had only had the car for a few weeks and the last car I drove at Bedford was 250hp down on the Turbo, I resolved to take it very gently. Unlike the GT3, the track isn't the Turbo's natural environment and it's a heavy car at nearly 1600kg, so the tyres and brakes get a pretty big workout. That said, it's plenty quick enough even driven at 6/10ths and can certainly show a clean pair of heels to most cars along the straights, though I'm not yet confident enough to push hard in the corners and braking zones.

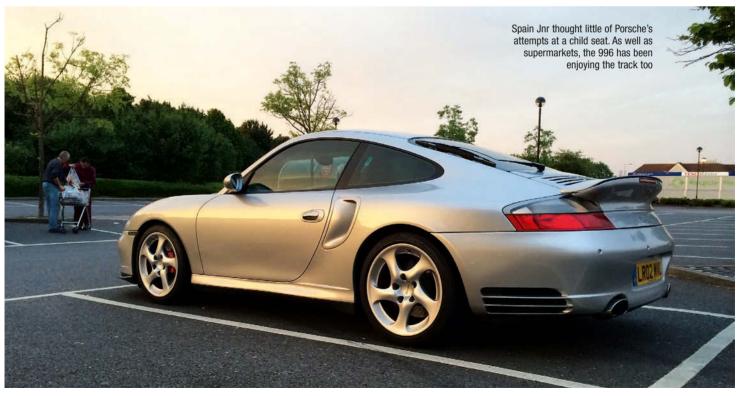
I settled on doing four lap runs with a full warm-up and cool-down lap, which helped look after the brakes and tyres. The Pilot Sport 2s fitted to the car offered plenty of grip, but the rears were quick to overheat unless I kept a close eye on the pressures. The brakes, much lauded in contemporary road tests for their power, actually didn't feel as powerful as I was expecting. They never faded on me, but they didn't seem to offer the sort of bite and stopping power you'd expect for a car with the performance that the Turbo has. However, they were recently refreshed just before I purchased the car, so this was probably the first heat cycle they'd been put through. I'll report back on how they perform at my next track day.

> Martin Spain @martinspain









## long-term fleet

#### 2004 996 GT3

A lot of rushing about this month. Or at least that's how it has felt. Straight after our little North Wales *GT Porsche* outing I was approached via Twitter by *evo* magazine asking if I would kindly allow it to use FAB in a track battle shootout-style video feature. With the offer of unlimited track time at a closed circuit, plus the option to try out a couple of other new Porsches, including the new Cayman GTS, it was impossible to turn down.

However, that meant getting the clonking gearbox mount sorted first. With only a day's notice I once again had to call in a huge favour from Mike at Sports and Classic. Having already replaced the mount on his own car he knew exactly what was needed and ordered me in a new 997 GT2 unit. Obviously designed to handle much more torque through the drivetrain it is far more robust than the standard 996 GT3 piece. With the old one off the car it was clear to see why it was making such a racket. The bonded one-piece design had become three pieces. The metal bushes that are supposed to be moulded to the support bracket had become completely detached, the rubber worn away, and the resultant metal-onmetal contact producing the cacophony emanating from the rear of the car.

I literally picked the car up (the guys had even taken the time to clean the new paintwork after its Wales trip) looking and feeling in rude health all ready for its five minutes of fame in front of the camera. And boy did it put on a show. If you visit www.evo.co.uk you can find the video there. Definitely worth the effort just to hear that motorsport-inspired flat-six screaming down the back straight at Blyton Park.

From there the car pretty much went straight back to the garage. After the first coolant pipe let go last month I decided I didn't fancy taking any more risks of being stranded with another bust pipe. The one that failed last time was by far the easiest to access and any subsequent failure wouldn't be half as easy to rectify. So with a trip to Spa Francorchamps and Zandvoort coming up, and not fancying spending two days sat in a recovery truck covering large chunks of continental Europe at 50mph, I took the plunge and did a full coolant system overhaul. New radiators, all three of them, and every hose that is accessible without dropping the engine was replaced. A couple of the trickier ones are behind the alternator, which needs to be removed in order to gain access, so the auxiliary pulley was replaced at the same time. It all cost money, but it's hard to put a price on peace of mind. At least it's another job off the list and one thing less to worry about.

Whilst it was in, Sports and Classics gave it a quick check on the Hunter geo machine. Corner weights were spot on but the rear toe had moved a bit on one side, so it was lucky we checked it before such a big trip to two very demanding circuits. With it fettled





and back together I put FAB back in the lock-up.

A little over a week later and we were rolling out at dawn heading for the Eurotunnel and onwards to Spa. I've been there quite a few times now, but the sheer scale of the place always seems to take my breath away when I enter the paddocks. It's easy to see why the F1 drivers hold it in such high regard. It's just such a magical place. But unfortunately that magic seems to extend to the weather as well. Paying for a premium date in the middle of July one would hope for some guarantee of at least half-decent weather, but that infamous Ardennes micro-climate was in full effect as the circuit went live on the first morning. Torrential rain soaked the entire circuit from La Source to Rivage with parts of the track looking more like a pond than a racing circuit. Laps were tentatively taken with the only comfort coming from the knowledge that the new Yokohama AD08Rs I had on the car were sporting a full 7mm of tread and more than adequate water clearing grooves in their structure. But regardless of

this, the conditions were still treacherous and the only grip to be had at all was way off the racing line.

By lunchtime the rain abated and the high ambient temperatures and the light winds meant that by early afternoon the circuit was completely dry. And what a difference that makes. With the chequered flag signalling the end of the day not falling until 6pm it meant everyone had the opportunity of some properly fast laps. In the dry the car felt right on the money. The Yokos not having quite the same grip levels as some of my colleagues' who were running Michelin Cups, but still a significant improvement over a set of PS2s. Especially when it came to handling the heat of some extended sessions towards the end of the day.

Two days later at Zandvoort in Holland they felt even better still. The rear end in particular feeling far more progressive and generally better nailed down. I do think they need quite a few heat cycles in them before they really come into their own but if you can work through that first nervous phase they start to repay you by the bucket load. By the end of the Zandvoort track session they were hugely confidenceinspiring despite some lengthy spells on track in temperatures that were in the high 20°Cs.

After six hours of lapping we packed our kit, loaded up the car, and high-tailed it back home. After 16 straight hours in the saddle, the car never missed a beat. All the 996 GT3s in our little flotilla arriving back where we started without so much as a murmur. A truly fantastic trip.

The only issue now is it needs cleaning. Again. At least I don't have to worry about the front half of the car. The PaintShield protective film means I can literally scrub off the bug splatter without fear of damaging the paint. The rest of it is not quite so easy and will require a more delicate approach if I'm to keep the black shiny and swirl free.

Oh how I've changed.

Jack Wood @jackkwood

## long-term fleet

#### 1981 911 SC

I'm still smiling every time I get to drive the SC. Not because it's a 911, but because it's a fantastic car. Despite all of its roughness and things that need sorting it's brilliant. A month or so into ownership and I still have no idea how I'm meant to drive it properly, but that really doesn't matter, I'm in the getting-toknow-it phase. I must get the car ready for track too, either at the *GT Porsche* evening at Brands Hatch in mid- August, or more likely, a trip to Bedford. The latter is the more likely as I know it far better and the run-off has run-off... and it's further in the future... and I want a proper crack at Brands in the 924 S.

When I agreed the deal for the car swap, in the back of my mind I was a concerned how much work I would be willing to take on myself, with this motoring icon. I have been happily spannering away on the 924 S knowing that it was bought broken and only cost me £400. But with the 911 there is more money at stake and the bills to correct my mistakes are potentially far greater. Still, I could handle the basics, so, something to ease myself in.

I know that the engine in the car had a minor rebuild around four years/4000 miles ago, when the broken head studs were replaced. Since then the car has been standing for long periods and used for short trips, to give it a run-out, it made sense to give the SC a minor service. I spent an age on the internet trying to find the best oil for the car, but it resulted in increasingly infuriating circles of pseudo-science and hearsay. I gave up and asked the experts, Autofarm (www.autofarm.co.uk), what it put in SCs – Castrol Magnatec, 10w40. I winced as I saw how much was required for the 911, but it had to be done so I ordered a few bottles, a replacement filter and sump washer. I decided I may as well renew the air filter and replace the distributor cap and rotor arm too.

With the volume of oil in play having two reservoirs, the engine and external reservoir (dry sump), meant it could be collected in two containers without any faffing around. Removing the oil filter was a chore resulting in me having to drive a screwdriver into it to make it turn; piercing through to the centre cone allowed me to loosen it and then tape up the hole to remove it fully without too much mess. The hoses for the [so-called] heating system made the air box cover a pain to remove and replace, but was straightforward enough and the filter slotted in easily, and I discovered that the pop-off valve has been fitted to the air box. That's one less job to do. The distributor cap clipped open and the rotor, once I figured out what to do, pulled off with a little force. There was not a marked improvement in performance but it was good to get done.

The car was making an odd noise from about

3000rpm on full throttle, which I could not identify, like rattling a nut in a tin can. Having learned my lesson regarding internet advice I drove the car to Autofarm for a professional opinion. I knew the company had an excellent reputation for air-cooled 911s, but was astonished by the number of old 911s that they had in. One of the mechanics, Matt, came out with me and we took a quick test drive. Typically I was struggling to get it to make any sort of an errant noise when he was in the car. When we returned to the farm Matt got his stethoscope out and checked over the exhaust, where he found a couple of obvious leaks but nothing else, which was a relief. From the history of the car the only other point he made was that when Autofarm replace broken head studs it gets the car back after a few hundred miles and re-torgues the nuts. I doubt that this was done with my car. Noted.

One element that had bothered me with the interior of the car was the passenger's seat, which had split between the base and the inside bolster. This caused me little inconvenience other than being able to see it. All the same, it needed sorting. I made some calls and ended up taking the car to Andy at AJ Trimming (www.ajtrimming.co.uk) just outside Bourne End. Inspecting the seat he told me he could probably stitch the panels back together but that this would pinch the foam in the bolster. To replace the bolter panel and repair the seat properly would cost me the same amount in time plus the cost for the material. I opted for the panel replacement and booked the seat in. Offering the material swatch books up to the seat we found a great match in both colour and graining.

A few weeks later I dropped the seat into Andy. Standard Porsche seats are remarkably easy to remove and it fitted neatly into the back of the 924. I was mildly apprehensive going to collect it as I was unsure how good the panel would look once installed. The job was excellent, unless there is direct light on to the new panel I find it hard to see that it is a replacement. The bill came to £140 for half a day's work and £40 for the material. Andy said his suppliers are not able to source the original Porsche material, but there is no issue with anyone wanting to source it themselves and supply their own trim. I'm very happy with the work he's done and have a few projects in the back of my mind that I am sure I'll be going back for. Fixing the tear was a minor point, but has really improved the appearance of the interior and has done so without spending a vast sum of money. It was also great to cross something off the list.

> Matt Biggs @pawnsacrifice













## long-term fleet

#### 1986 Porsche 924 S

I had a lot going on in June but, really, it was only ever about one thing: Le Mans. I had never been to the 24Hr race before and wasn't intending to go this year until a comment from our editor saying he was surprised I wasn't throwing a tent into the back of the 924 S and heading to see Porsche's return set me mulling the trip over. Thankfully Dan, of Slick Attire, put me in touch with Neil who runs Speed Chills, the UK's largest provider of private camping at the Le Mans 24 Hours (and Classic) and I managed to bag a space on the Beausejour campsite. Anne-Marie, in bookings, asked how long I wanted to stay and how I'd like to travel and then took care of the rest. Closer to the race a pack arrived with my tickets, itinerary and useful information about my trip and Le Mans in general.

The 924 received the standard check over days prior to my trip and Thursday before the race I woke early, packed the car with things for me and tools for the car and set off for Dover. While the Channel Tunnel is far quicker I rather enjoyed the ferry crossings, time to relax... and take out a few Euros, should there be any gendarmerie shenanigans.

Disembarking I followed a stream of other Britishregistered cars bound for Le Mans. At some point my route differed and I peeled off in another direction, my navigation having reset and was ignoring toll roads. The scenic route was enjoyable and despite the 924 S's meager 160hp the extra load of my living quarters provided only a mild performance penalty. When I did make it to the toll road (after binning the nav and following the road signs), my track-ready car, specifically the race seats, caused something of a delay at the toll barriers, even with a dash around the car, getting out and in proved challenging. Mercifully there were attendants on hand at some tolls.

Crawling through the busy traffic around the circuit

I longed for air conditioning: it was properly hot, but I was distracted by some quality traffic. On reaching the Speed Chills site, gated with 24-hour security, I was handed a bottle of water, which was a great welcome. Chatting with the chap who set me up at my pitch, he told me he'd met a retired racing driver that morning at Hotel de France, he was there as Speed Chills and the hotel jointly offer offsite camping. It transpired the retired driver was Derek Bell plus the hotel owner's 962 was also out and about. I should have arrived sooner.

After I set my tent up and had a quick bite to eat at the onsite restaurant I took the short walk to the Porsche Curves. It was quite evident Porsche's return to the top flight of Le Mans had a marked affect with 911s lining most of the walk to the track. As I arrived inside the circuit, I saw a 911 RSR come barrelling into view. I was astonished at the speed of it, and the



other GTE cars. The amazement lasted a few seconds until a LMP2 car arrived – the performance difference was incredible. Within the next pack, a Porsche 919, my first sight of an LMP1 car in the carbon fibre, the speed at which it changed direction redefined what fast really is.

I retired around midnight, popped my ear plugs in and didn't wake until a decent hour the following morning. Friday morning, I happened across to the Carrera Cup pit, which was open to the public. Porsche had also put out a few other cars to look at, including the 991 GT3 and 918, both staggering looking machines. From there I walked up to the WEC pits and was amazed at being able to stand in front of the pit boxes and watch the engineers working on the same cars that would be starting the race the following day!

From the end of the pit lane, up toward the Dunlop Bridge, Porsche had its previous Le Mans winning cars displayed in chronological order. It is fair to say Porsche threw everything at Le Mans, and, as a fan of the marque, it added so much to the occasion. I am curious to know what it would be like without Porsche, no current team did, or could, offer such history. The rest of the day was spent with friends in town. Walking back to the campsite I was glad I left the car at the tent – mad Friday carnage.

On race day I watched the Carrera Cup race from the start line and made my way to the Dunlop bridge for the first hour of the WEC race. From there I moved around for the day. I was told by LM veterans to see the race from Arnage at night so, at 2am, I freshened up and took the 50 minute walk to the slowest corner on the track. It was better than described. The cars slowed for Indianapolis before accelerating hard toward Arnage, where ferocious braking set them up for the slow 90-degree corner. The noise coupled with the sight of red hot brake discs and exhaust manifolds was phenomenal. The 911's traction out of the corner was immense.

I know Porsche was not [technically] at the event to win and that this year was a bedding-in experience, but it was disappointing to see them drop out of contention. I was at the pit straight for the end of the race and I swear there was as big a cheer for the repaired number 14 919 going out for the last lap as there was for the winning Audi.

Le Mans was an amazing experience from start to finish. As expected the 924 S worked without fault, if a little hot at times. I have to say a big thanks to Speed Chills – I really wasn't expecting much from camping but it was quite civilised, the benefit of their ten years of experience. If you're into WEC check Speed Chills (www.speedchills.com) – it has growing support for the FIA WEC, adding fly-away races to the Austin Texas and Bahrain as well as the European round at Spa to Le Mans.

If you have never seen a WEC race in person, do, it is mega! As good as TV coverage is, it really doesn't convey the speed differential or sheer grip of the LMP1 cars. Go watch Porsche win.

Matt Biggs @pawnsacrifice









# The she be a constant of the second s

Paint protection film used to suffer a poor reputation for not exactly enhancing your car's aesthetics. However, the latest generation of films now offer a completely invisible safety barrier...







The process begins with the film kit cut to size and shape in-house on a graphics plotter

Every panel is cleaned and prepared so no blemishes are trapped before film application



Each individual piece of film requires a slip and fix solution to bond to the car's panels



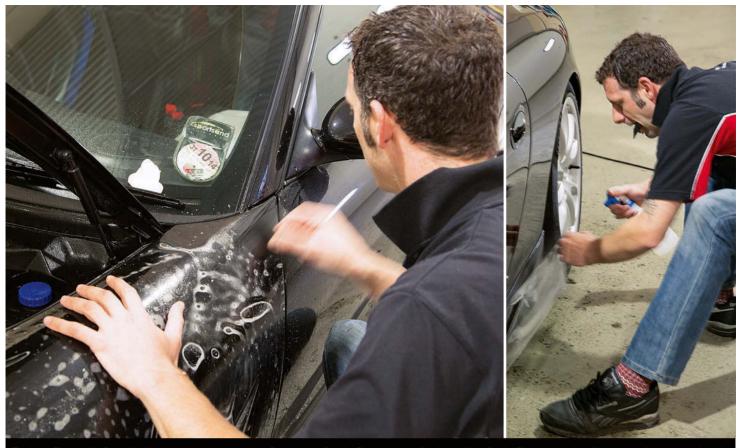
A slip solution allows the fitter to position the film precisely on the panel before it's fixed



The fix solution reacts to the adhesive which then bonds the film to the body panel



Excess solution is pushed out and a small amount of excess film is folded over the panel



The latest film used by Paintshield has 100% clarity and with the fitters able to fold the film over a panel's edge it allows for the film to appear invisible once applied to the car's body

egular readers who follow the trials and tribulations of our long term fleet will be aware that contributor Jack Wood had a rather embarrassing end to last year's track day season when his beloved 996 GT3 had a French kiss with the Armco.

Over half-a-year later (genuine 996 GT3 panels aren't the easiest things to track down, it transpires) GT03 FAB has now been restored back to its former glory and returned to Jack looking better than new. This gave our track day junkie a bit of a dilemma as to how to keep the 996's freshly repaired panels and paint looking as good as they did the day they left the paintshop. Rather helpfully some of us suggested bubble wrap (we're full of good ideas here), others one of those awful car-bra things. Jack (wisely) ignored us all and booked his car in for paint protection film to be applied.

Fitted in June by Paintshield, the car has since been subjected to a trio of track days, home and abroad, and has covered a couple of thousand miles in the process. And, as reported in the couple of *Long Term Fleet* reports published since its application, FAB still looks as fresh as it did the day it arrived back from the bodyshop. The usually hard-to-impress Jack has been impressed by exactly how invisible the film is, with no unsightly edges, and with how easy it is to clean when he's back from a drive. So much so that this once fully paid-up member of the anti-car cleaning club has handed in his membership card and bought a handful of microfibre cloths and some quick detailer spray. "One wipe and every last bug and piece of dirt is gone and it looks like new," he enthused.

What, then, has Paintshield fitted? How has it done it? And how does it work? Well, the product fitted to the GT3 is what Paintshield calls a self-healing protective film. The company claims that it was the first to introduce it to the market. This second generation of film is a big step on from the original, with the biggest difference being its clarity. It's so clear it's impossible to detect once fitted to the car. A criticism of early protection films was that they had a tendency to create an orange peel effect in the adhesive. While orange peel is an unfortunate outcome of the shift to water-based paints, many people spend hundreds, if not thousands having the effect polished out of their car's paintwork only for the unsightly defect to reappear when a protective film was applied as the adhesive would spread unevenly between the film and the panel causing the peel effect. The second generation of film as used by Paintshield is now 100 per cent clear and has eliminated this problem. The finish is so good Paintshield employees find it almost impossible to know which cars have been protected.

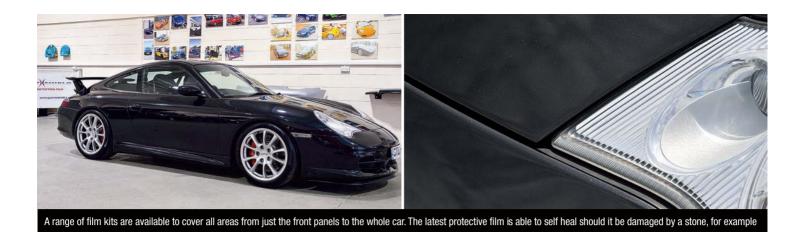
In order to remove this peel effect the latest

clear films incorporate an automotive clear coat in the topcoat of the film that provides the extreme clarity and extra depth to the car's paint. It's the equivalent of applying another layer of clear coat paint directly onto the bodywork.

But no matter how good the product is, it still requires a level of skill during the fitment stage to enable it to work to its full potential. Paintshield's quest to maintain the high standards it sets itself is covered by three core elements. The first of these is to get the design of each kit 100 per cent perfect. "The only way you can get a perfect fit is if the sections of film you are applying are made to exactly the same dimensions as the panel they are being applied to," explained Paintshield's managing director Tom Wakeford. "Each section of film we apply is cut off the car before being fitted and the fitting process is carried out by an installer who has had at least 12 months of training, if not more." Paintshield advised that when shopping around for a protective film, if any of the companies say that they cut the film once it's on the car, then politely hang up or walk away.

The final element is to use the very latest and best raw materials. "The film manufacturers are very competitive and are always improving on their products, which is great for us as it allows to offer an even better product to the customer," Tom told us.

Installation is a well drilled process. When



Jack booked the GT3 in a number of details were taken, such as age of the vehicle, if any of the bodywork has been modified from standard and if any of the paint is new. "It allows us to provide the customer with a clear indication of what the job will involve and how long it will take," explained Tom. On arrival the car is inspected once again and the design for the kit to be fitted is matched to the car. Each panel of film is then individually produced in house using a graphics plotter cutter and each individual shape is cut using a precise template. The next stage is where the skill comes into it. Using a mix of baby shampoo, water and isopropyl alcohol the film is applied panel by panel.

The shampoo and water mix is what is known as the 'slip solution' and allows the installer to move the panels around the car to ensure the perfect fit and positioning; the alcohol is the 'fix solution' which drives out the slip and activates the adhesive. Excess fluids are squeezed out from under the film by pressure being applied from the top side of the film. Each design also has an element of excess film designed into it, this is then carefully stretched when aligning the kit to the body panels and allows the installer to wrap the film into the panel gap or over the edge of the panel and out of sight to provide the invisible finish. If it's not possible for the installer to wrap the film over the edge of a panel, Paintshield is able to dissemble the panel to ensure an invisible fit. Depending on the size of the car and the kit ordered the installation process takes at least a day. The standard kit protects the areas of the car that are most prone to stone chips, namely the front bumper, halfway up the bonnet, the wings and mirrors. The full frontal kit covers the bumper, the whole bonnet, both front wings, the mirrors and all forwardfacing areas on the car. A full body kit covers the whole car. Once applied the film is not only invisible but has other remarkable properties, such as being able to self-heal. This is where any imperfections in the film caused by strong solvents or stone chips will, over the course of between five and ten days, return to its original state due to the chemical makeup of the film allowing for a degree of flexibility despite it being fixed solidly to the car.

In terms of day-to-day care, the film is also resilient to insect marks, bird droppings and tree sap; as Jack testifies, a quick wipe with a microfibre with a some water or detailing solution cleans all manner of nasty stuff off it. These latest generation of protective films can also be cleaned with a high-end carnauba wax to provide a deep shine and gloss thanks to the clear coat finish that is applied to them, a criticism that many levelled at the previous generation of films that hid all your hard work with the polishes and potions.

At Paintshield, once fitted each application comes with a four-year warranty to cover against yellowing, lifting, cracking, peeling and it also guarantees not to harm the manufacturer's paint when removed (ask someone who has had their car cheaply wrapped about what damage poor quality films and adhesives can cause). Should the film fail, any affected panels are also replaced free of charge.

Previously a paint protection film offered a secure barrier between your car's paintwork and the elements trying to attack it but it came at the cost of being a visible barrier. Today, not only does it offer even better protection than ever before but you'll never know it's been fitted, which makes it a no-brainer if you value your Porsche's bodywork  $\bigcirc$ 





#### **Protect yourself from the Asteriod Belt**

Generation 2 Self Healing Protection has Arrived.

Having brought the first Generation of Self Healing Film to the UK two years ago, our Technicians have added the latest Second Generation self healing Protective technology to our Inventory.

In your intergalactic travels protecting yourself from those micro meteor impacts has never been more important. We all know respraying your ship in some far off location is a bit of a pain, much better to not have to. Best of all though wear and tear from scratches picked up in your travels is very disconcerting to the Locals; abductions go much easier when you have a scratch free shiny ship when visiting Earth.

For the best paint protection in the Galaxy drop in to planet earth and contact our specialists on 01733 390777, or fire up the Intergalactic net and warp to www.paintshield.co.uk and they will get you protected and on your way in next to no time (theory of relativity applies).

stone chip protection combat swirl marks self-healing technologies protect from -

- stone chips
- swirl marks
- · bird lime
- brake fluid & oil resistant

concours winning finish best in class for durability

## t 01733 390777 f: 01733 390778

e: info@paintshield.co.uk w: www.paintshield.co.uk



Paintshield Ltd - Unit 4 - Morley Court - Morley Way - Peterborough - Cambridgeshire - PE2 7BW t: 01733 390777 · f; 01733 390778 · web: www.paintshield.co.uk · e: info@paintshield.co.uk



#### At JMG we are dedicated to helping you get the best experience from your Porsche.

We service, diagnose, repair and improve Porsche Vehicles in our **South of England** workshops.

JMG Porsche are a family run business built on a foundation of three generations of Porsche experience stretching back to the early 1970's.

"We have moved" Our new address is now: JMG Porsche 98 Cobham Road, Ferndown Ind Est. Wimborne Dorset BH21 7RE

> Tel: 01202 488800 or 07000 996911 Email: service@jmgarage.co.uk mailorder@jmgarage.co.uk WWW.jmgarage.co.uk

#### NORTHWAY PORSCHE LIMITED Independent Porsche Specialists



Repairing and servicing of Porsches for over 20 years

USED PORSCHES IN STOCK AND WANTED FOR OUTRIGHT PURCHASE

Telephone: 0118 9714333 Mobile: 07831 424911 Email: Info@northway.co.uk www.northway.co.uk



PORSCHE SERVICING WITH A PERSONAL TOUCH

#### • FIXED PRICE SERVICING • • ALL WORK GUARANTEED •



OVER 32 YEARS EXPERIENCE Unit 7 Middlebrook Ind Park, Hoe Lane, Nazeing, EN9 2RJ WWW.carreraengineering.co.uk

#### PERFORMANCE AND SERVICE THAT DOESN'T COST THE EARTH!

- Boxster / Cayman / Cayenne / all 911 Models (1984 – present)
- 944 Turbo / 944 S2 Specialists
- Fixed Price Servicing
- Main Dealer Equivalent Diagnostics
- Courtesy Cars Available
- Very Competitive Labour Rates,
- Exceptional Service, fast Turnaround
- Large Spares Inventor
- Comprehensive 3D Alignment and Geometry Facilities
- Bilstein and KW Suspension Kits
- 15 minutes from Milton Keynes



ProMAX Motorsport Ltd, The Warehouse, Sunnyhill Farm, Little Horwood Road, Great Horwood, Bucks. MK17 0NZ. Tel: 01296 714856 service@promaxmotorsport.com • parts@promaxmotorsport.com



H3TAK

# Buying a Porsche for £90,000 to £100,000

Even with a hefty budget of £90,000 to £100,000 we still managed to find a fake Porsche among some appealing classic and modern genuine examples. Story by Philip Raby here's no getting the way from the fact that £90,000 to £100,000 is a lot of money. If you make that much a year you're in the top two per cent of UK earners and bringing in almost four times

the average salary. You'll also probably be able to afford the monthly payments on a Porsche of that value – around £1200 a month over 36 months after putting down a £20,000 deposit. Some people, of course, earn far in excess of this amount but, even for a millionaire, £90,000 to £100,000 are certainly not figures to be taken lightly, and are a hefty amount to spend on a car, Porsche or otherwise.

Yet, increasingly so, this is a typical price bracket for a classic or modern Porsche, as we shall see in this month's overview.

Let's start with classics. Since we started this series, it seems that we've been chasing air-cooled 911 prices; in particular the 993 Turbo, whose rise in value as been astonishing. Indeed, less than a year back, only Turbos with the rare X50 Powerkit would fetch anything like  $\pm$ 100,000. Today, though, we've found no less than six standard 993 Turbos priced between  $\pm$ 90,000 and £100,000. They're not even super-low mileage cars, either, all having covered around 50,000 miles. We're being asked if these Turbo values are sustainable and, to be honest, we don't know. As great as the 993 Turbo is, it's not that rare a car; we found 21 for sale in the UK at the time of writing. Let's see if this column again catches up with prices in a few months time...

Even that is half the number of nearly-new 991s we found in the UK marketplace priced from £90,000 to £100,000. These are mainly Carrera S or 4S examples from 2013 to 2014 and a fair few are Cabriolets, a surprising number of which are finished in white (a shade that a few years ago was unsellable on a 911). Factor in the cost of options and one of these near-new 911s are a sensible buy.

However, if you do feel the urge to buy a fresh out-of-the-box 911, this month's budget will get you a new Carrera S Cabriolet at £92,204, or if you want to add four-wheel drive in to the mix, that'll be an extra £4856, please. If you prefer the retro-cool looks of the new 911 Targa 4S, that will cost you £96,413. Of course, all these prices are plus options which will soon push them outside our budget, in which case you need to start with a

We'd skip the multitude of 991s and opt for a Gen 2 997 GT3 – they're more fun to drive and, we suspect, a better investment, too





#### £90-£100,000 Buying Guide



This month's budget offers a real mix of 911s to pick from, including the sublime 997 GT3 RS (below), 997.2 GT3 (left) and the very latest 991 Carrera 4S (above). We'd go for the GT3 RS



# THE TOP FIVE £90,000 to £100,000 BUYS

#### 3.2 Speedster

**3.2 Speedster** Spend up to £100,000 on a 3.2 Carrera? Not quite. The Speedster is a bona-fide collector's car, built in low numbers and with unique components (i.e a roof that's neither practical nor that easy to use) and still looks like a pin-up today. Just 171 narrow body Speedsters were built in 1989 and a further 2103 turbo-look cars built from 1989-'90. The latter are more popular and are often mistaken as the only 3.2 Speedster, but if you can find a narrow-body car you'll be buying a very rare and unique 911.

**Gen 2 997 GT3** For all the GT3s that have gone before and after we'd struggle to put any above the Gen 2 997 GT3. Porsche knew this would be the last GT3 built to the original blueprint for the genre and maximised many of the early generation's components, not least the fabled Mezger engine. Increased to 3.8 litres it's the last GT3 to be offered with a manual gearbox and this side of a RS4.0 we struggle to think of a better Porsche drivetrain. Even then we're not sure the RS4.0 is twice the car – plus change – of the standard car. Buy wise and your purchase could appreciate in value too.

#### Gen 1 997 GT3 RS

Gen 1 997 GT3 RS Two GT3s in the top three? Predictable and unoriginal to some, but both are very special cars. The Gen 1 997 GT3 RS set the blueprint for today's RS models, with its wider rear body and more aggressive aero kit over the standard GT3 making it stand out from the regular narrow body car – especially when painted in Porsche's 21st century interpretations of Signal orange or Viper green. Mechanically this RS was identical to the GT3 on which it was based, but it was 20kg lighter despite its Carrera 4 shell and featured items such as plexi-glass rear windows and carbon fibre wings and mirrors. Inside were bucket seats, plastic doorcards and dash and Alcantara trim. At the time, people couldn't get enough of this RS, and they still can't today.

#### 356

The original Porsche and at this healthy price point a 356 that you can spend more time enjoying than restoring. Such is the vast range of the 356 your choice boils down to buying the best for your budget rather than trying to nail down that long lusted for 356A Coupé. Up to six-figures will get you a very sound 356A in right-hand drive (they are becoming increasingly rare) or a later, though less original but still very good condition, 356C from overseas (left-hand drive). For those looking at values, we'd always go with the standard car, but the 356 was ripe for tuning when it was new so don't be put off by an example that features a few go-faster goodies.

**993 Turbo** The 993 Turbo is a bit of an anomaly. Speak to the trade and while they are always looking for good examples and have a steady flow of enquires for such cars they are not Porsche they would actively go out and source. And yet, since this series began and the budget reached £50,000, 993 Turbos have been just outside our reach. At this price point there are plenty of examples and they are not all garage queens which suggests the market enjoys a 993 Turbo and is prepared to pay the entry price.



#### We were pleased to find two 356s priced at the top end of our price range

lesser 991 (prices begin at £73,509) and then once you tick a few boxes on the options list you'll easily be within budget.

And if you think that's hard to do, we took a standard 991 Carrera and added metallic paint, 20-inch wheels, fully electric heated seats, rear wiper (yes, it's still an option), ParkAssist, autodim mirrors, sunroof, Sport Chrono, cruise control, floor mats, Bose sound pack and Bluetooth phone link, and we were well over the £90,000 threshold. We don't think that's an extravagant set of options, either, for a modern 911 – if you wished you could touch £100,000 with a standard Carrera. Which is why choosing a nearlynew car in preference to a brand-new one makes great financial sense, as the cost of options doesn't carry over to the second-hand value.

If it were us, though, we'd skip the multitude of 991s and opt for a Gen 2 997 GT3 or Gen 1 997 GT3 RS, of which we found several within our price range. They're more fun to drive than a standard 991 and, we suspect, a better investment, too.

While on the subject of modern Porsches, our budget will also buy a late (2013 to 2014) top-ofthe-range Panamera Turbo or Cayenne Turbo but we can't help feel that you'd be better off putting your money into a slightly older example which will save you a hit in depreciation. Even with modern technology such as hybrids, diesels and direct-injection, big saloon cars and 4x4s don't hold their value at all well.

The active movers at the moment are classic Porsches and between £90,000 to £100,000 is what you will pay for a variety of early beauties. We were pleased to find two 356s priced at the top end of our price range. One is a fairly run-of-the-mill (but right-hand drive which is rare and so adds value) 356A coupé from 1959. Finished in grey with a red leather interior, it doesn't get much more classic Porsche than that. The other 356 at the same price was a 1965 356C that had been heavily modified in the USA for racing. A bit of a wild card as an investment in our books, but depending on its provenance it could turn out to be a good buy.

Even more of a wild card was a 550 Spyder at  $\pounds$ 100,000. Yes, that got us excited too for a moment until we realised it wasn't a genuine Spyder but rather a replica. A lot cheaper than the real thing (assuming you can find one) but a lot of money for a fake, albeit a good one.

In fact, if we were putting our own £100,000 into a silver, two-seater, open-top Porsche we'd opt for the genuine 1989 3.2 Speedster we found for sale within budget. Top money for a 1989 Speedster? Yes, but this one had covered just 16,300 miles from new. The only slight downside was hidden away in the description – 'maroon leather'. Maybe that's why the advert didn't include any photographs of the interior! Even so, this gorgeous and rare beast would be our first choice of Porsche priced at between £90,000 and £100,000, and a sensible investment, too  $\bigcirc$ *Follow me @rabyporsche* 

# EXCLUSIVE BRANDS HATCH PORSCHE TRACK EVENING ONLY £129!

# 20 AUGUST - BOOK TODAY

- PORSCHE-ONLY EVENT
- 20 AUGUST 2014
- SIGN-ON 15:30
- TRACK OPENS 17:30
- OPEN PIT LANE
- 92dB(A) DRIVE-BY
- TRACK CLOSES 20:00
- TUITION AVAILABLE

## LAST FEW SPACES AVAILABLE BOOK YOUR PLACE TODAY!

www.msvtrackdays.com/bhporsche 0843 453 3000

## PARAGON

#### The Natural Choice for Porsche



356B Roadster (4-Speed) Jet Black • Red Leather Seats • 15" Wheels with Chrome Hubcaps • Fully Restored • Matching Numbers Example • 1960 £169 995



911 Carrera 4 GTS (997 GEN II PDK) Carrara White • Black Half Leather Sport Seats 19° Centre Lock Wheels • Touchscreen Satellite Navigation • 10,665 miles • 2012 (62) £65,995



911 Carrera 2 S (997 GEN II, PDK) Meteor Grey • Black Leather Seats • 19" Carrera Sport Wheels • Touchscreen Satellite Navigation 49,836 miles • 2010 (10) f-47 995



356A Coupe (4-Speed) Fashion Grey • Red Leather Seats • 15" Wheels with Chrome Hubcaps • Original Right Hand Drive UK Supplied • 1959



911 Turbo (997, 6-Speed) Meteor Grey • Black Leather Seats • Touchscreen Satellite Navigation • Sport Chrono Pack Plus 28,676 miles • 2009 (09) 657 005



Cayenne Diesel (Tiptronic S) Basalt Black • Black Leather Seats • 19" Cayenne Turbo Wheels • Touchscreen Satellite Navigation 55,233 miles • 2010 (10) 630,905



911 Turbo (993, 6-Speed) Polar Silver • Black Leather Sport Seats • Electric Sunroof • Air Conditioning • 55,549 miles 1996 (N)





911 Turbo (997, Tiptronic S) Basalt Black • Black Leather Adaptive Sport Seats Satellite Navigation • Sport Chrono Pack Plus 24,193 miles • 2008 (08) £55 005



911 Carrera 4 S (997, Tiptronic S) Basalt Black • Black Leather Seats • 19" Sport Design Wheels • Satellite Navigation • 40,774 miles • 2006 (56) £34,995



911 Carrera 2 S (991 7-Speed PDK) Carrara White • Black Leather Sport Seats 20° Carrera S III Wheels • Sport Chrono Pack 7,507 miles • 2012 (12) 669 995



911 Turbo (997, Tiptronic S) Ruby Red • Sand Beige Leather Seats • Satellite Navigation • Sport Pack • BOSE Sound System 28,712 miles • 2008 (08) ¢52 995



Boxster S (987 GEN II, 6-Speed) Carrara White • Black Leather Seats • 19" Carrera S II wheels • Touchscreen Satellite Navigation 11,556 miles • 2010 (60) £2.9,995

#### The Natural Choice for Porsche Service, Repairs & Upgrades



Why Choose Paragon?

We've been offering expert Porsche Servicing since 1993 and our vastly experienced technicians provide real value without compromise.

With transparent fixed pricing, clear communication, free courtesy cars and free local collection and delivery, we are the natural choice for Porsche service.



Capabilities & Experience

With a full range of facilities onsite including MOT testing and a tyre bay, we have everything for your Porsche under one roof.

We have 'Dealer level' diagnostic equipment and special tools, and our Porsche trained technicians have vast experience across all <u>models</u> and ages of Porsche.



Beyond the Conventional

We offer a wide range of enhanced services ranging from engine and gearbox rebuilds, performance tuning, upgrades and modifications through to track day preparation and support - even race car building.

Our successful racing heritage means we are experts in laser four wheel alignment and corner weighting - offering settings from standard road to fast track.



The Natural Choice

We have thrived because of our focus on building long term relationships with our customers.

Our ability to offer independent advice and high quality parts choices sets us apart - as does our commitment to offering value and exemplary customer service.

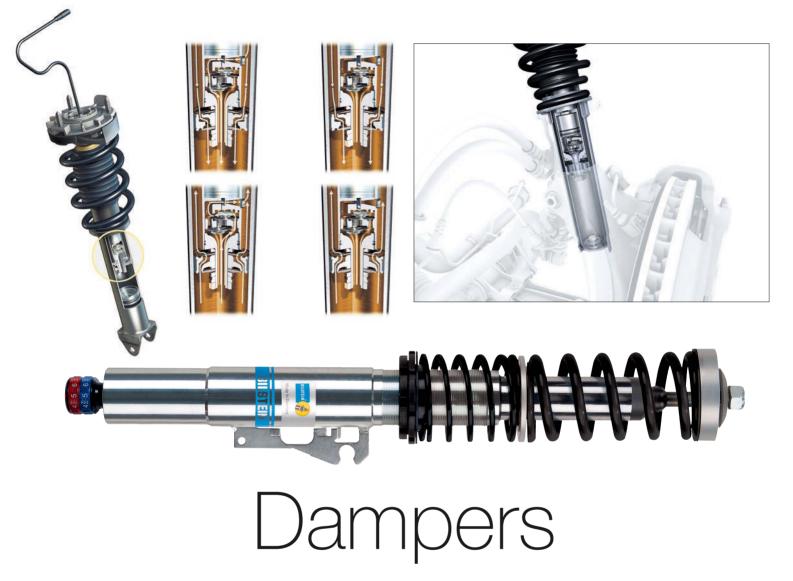
The next time your Porsche needs attention, call us on 01825 830424 - we will be delighted to help you.

At Paragon, we have superb in-house service and preparation facilities, and each car is supplied with a new MOT, a 12-month/12,000-mile comprehensive parts and labour warranty, and we also include the next due service.

### See more of our current stock at www.paragongb.com 01825 830424

PARAGON GB LTD FIVE ASHES EAST SUSSEX TN20 6HY

# all you need



Manufacturers spend millions on chassis development and even then they don't always get it right. Often problems can be traced back to the damper, as Jesse Crosse explains.

side, to the black art of suspension dampers – something that even some major OEMs fail to do well. But first let's clear one thing up: are they dampers or shock absorbers? Well, both terms are right but we'll stick to the former here as it elegantly reflects the way in which these components damp the acceleration of moving objects, namely the body and wheel assemblies.

elcome to the dark

Damping can be hard to get right because it's so easy to get wrong. Even today, the effect of dampers is still subjective to some extent and ultimately, the exact specification for each will come down to experience, judgement and subjective feel rather than just computer simulation.

For example, anyone can make a stiff, flat-cornering car with great highspeed handling but not everyone can combine that with the supple, pleasant ride any road car should have. In motorsport, damper settings are the subject of exhaustive testing by anyone who can afford to do it and the rougher the surfaces, the more complicated it gets.

In general, you could separate dampers into three categories: passive;

active; and adjustable. The last of these are what you might use when tuning an older Porsche for fast road or competition use. Passive and active dampers are what you'd find on the later cars, the first being bog-standard, non-adjustable dampers and the second being PASM.

In suspension terms, a car can be split into two parts: sprung masses and unsprung masses. That may sound horribly technical but actually it's simple. Sprung mass is anything supported (suspended) by the road springs while unsprung mass (tyres, wheels, brakes, hubs and suspension uprights) is not.

Imagine the car driving along the road, squatting and diving under acceleration and braking, rolling in corners and riding sharp bumps and gentle undulations. The unsprung bits and sprung bits are moving independently of one another. The springs and dampers are sandwiched between the two and while all this is going on, two crucial things happen. First, the springs generate forces to resist the movement between the unsprung and the sprung. Springs are rated by inch of movement, so a 200lb spring when squashed twoinches will impart a force of 400lb; whatever the speed of reaction, the

#### Jesse Crosse





force generated is the same.

The damper works differently, reacting not to the amount of movement, but the speed of it. Try and push one together with your hands and you may just succeed, but try to compress it faster and you won't make much progress.

These are the basics, and in simple terms a damper resembles a sealed bicycle pump with hydraulic fluid in it, or a combination of both fluid and gas. As the damper moves, a piston moves inside a tube; the piston has valves in it to allow the fluid to pass through, otherwise the piston would be unable to move. The valves, together with the viscosity of the fluid, depend how much force the damper exerts and how the force builds up compared to the speed of movement.

A damper works in both directions: bump as the road wheel and body move towards each other and rebound as they move apart. If that is happening due to acceleration, braking, cornering or undulations, the movement is relatively slow and, not surprisingly, is called low-speed bump or rebound. If it's fast due to a poor road surface or sudden cornering or braking, yes, you've got it, that's highspeed bump or rebound.

Whatever the speed, rebound damping should usually exert a stronger force than bump.

A standard passive damper will be set in the factory to give the best performance for the car's use, spring rates and weight. Uprated retro-fit dampers for road or track use are often adjustable and typically may have one adjuster which controls both bump and rebound settings, although a more sophisticated adjustable damper will have separate adjustment for bump and rebound, but the most sophisticated of all are three-way adjustable.

Three-way adjustable dampers are generally very expensive (£3500 and upwards for four corners) and allow for individual adjustment of low and high speed bump, and rebound. These are the most sophisticated of all but it's obviously fairly crucial that anyone using them at least has a basic feel for what the effects of adjusting each setting will be.

Which brings us to active systems such as Porsche Active Suspension Management (PASM). PASM is a fancy name dreamed up in the marketing department at Stuttgart for dampers that can vary stiffness on the fly. PASM is active all the time, adapting to driving style and conditions but can be set to a softer (normal) range or harder (sport) range. Sport mode is achieved by closing valves so it's harder for the fluid to pass through and the valves are electrically and continuously regulated to adapt the damper force in response to sensors.

A more sophisticated approach which, unlike rival Ferrari, has not yet been adapted by Porsche for dampers involves a technology called magnetorheological (MR). In an MR damper, a special fluid contains tiny ferrous particles that always remain in suspension, without sinking to the bottom. The internal damper piston has an electrical coil attached that becomes an electromagnet when switched on. The magnetic field it generates makes the particles near the piston clump together, making it harder for the fluid to pass through the valves and when the magnet is switched on and off at high speed (in milliseconds) creates an adaptive damper. Mechanically, it's quite simple even if the science behind it isn't. Although not adopted for dampers, Porsche does use the same technology elsewhere, such as its dynamic engine mounts. The engine mounts work in exactly the same way, by stiffening up to better secure the engine when driving hard and softening for improved refinement when not.

Damping is one of those weird things where the concept is simple but the execution of it is not. It's one of the most important factors when it comes to making a car handle well. Get it right and you may not notice it but get it wrong and you definitely will, on several levels. That's probably why damping is thought of as the black art of engineering.

# tech guide



# Roll-cages

There is more to a roll-cage than a collection of pipes arranged haphazardly behind the front seats of your Porsche.

any kind of motorsport, a rollcage is a must, not only to meet safety requirements but to improve torsional rigidity, too. There is also nothing to stop the use of one in road cars, either. Of all the bolt-on (or in this case sometimes, 'weld-in') goodies available on the market, roll-cages probably look the simplest as all they consist of is a few lengths of bent tube. That's not really the case, however, as there's much more to a roll-cage than that.

or anyone considering doing

They are highly technical, precision engineered components, with different designs to meet different technical regulations. They can be made from a variety of materials and are fitted by either being bolted-in or welded-in position. They can also provide more or less 'coverage' inside the car, with a choice of rear cage only for road use or a full cage as required for competition use.

A basic rear cage for road use generally comprises a main roll hoop in the centre of the car running up the B-pillars and across the roof skin, usually braced by further tubes to the rear-wheel arches and on better cages, a diagonal bar too.

Even a simple roll-cage will provide more strength to any car and can also add stiffness; how much depends on the age of the car. A full weld-in rollcage in any car from the 1960s or 1970s will make a tremendous difference to stiffness. This is less true in a modern car where torsional stiffness of the shell will already be comparatively high.

Full cages will include a hoop across the top of the windscreen attached to tubes running from the main centre hoop down the 'A'-pillars to the floor. Bolt-in cages have feet that are literally bolted to the floor using reinforcement plates. The basic shell needs to be in good condition and fitting a cage to a car with rot in those areas is futile.

The various spans of the cage bolt together too, with clamps welded to the end of the tubes. Any handy DIY mechanic can fit a bolt-in cage for road or track day use but weld-in cages have to be fitted in situ by a fabricator experienced in fitting them. Weld-in cages come as kits or can be custom made if necessary.

A full motorsport cage can be a complex structure, with cross bars on the doors and diagonal cross braces. They can be bolt-in or weld-in depending on the use, your budget, and the regulations under which the car is being used. Extreme examples of weld-in cages may run right through front firewalls to brace the suspension turrets (depending on the car and type of suspension fitted). A full weld-in cage of this type makes the shell extremely rigid and strong, offering not just crash protection but improving suspension performance and protecting the shell in the event of front-end shunts.

Needless to say, roll-cages are not made from just any old tube. They're steel for a start, but the tube must be of a certain type. Simple steel tube is made from a rolled strip of steel welded along its length. This is called ERW (electrically resistance welded) tube and is no good for roll-cages as it could split in a crash. Cages are usually made in CDS (cold drawn seamless carbon steel) or the more expensive. lighter and stronger, T45. The tensile strength of T45 is twice that of CDS so the wall thickness of the tube can be of a thinner gauge and the cage lighter. According to Safety Devices (which has been in the business for many years) the weight saving of T45 compared to CDS is around 0.5kg per metre – a lot in other words

Roll-cages should also be padded where the occupants' bodies can come into contact with it and the right sort of impact absorbing and fire resistant impact cladding is available from the roll-cage manufacturers. The foam used for cladding hot water pipes you find in the local DIY store, for example, is not suitable.

Roll-cages eligible for motorsport, especially weld-in cages, will come with a certificate issued by the manufacturer which scrutineers will want to see at each event. The regulations governing the design and fitment of cages for UK competition are detailed in the RAC Motorsports Association Blue Book under Section K: competitor safety. The FIA governs international events and the regulations can be found in FIA Appendix J and K – all of this can be accessed online.

Some well-known cage manufacturers of MSA- and FIAapproved cages in the UK are Safety Devices, Rollcentre and Custom Cages. Full motorsport cages are not cheap, a full welded cage kit costs in the region of £800 plus installation but predictably, bolt-in cages work out cheaper.

Useful contacts: Custom Cages www.customcages.co.uk +44(0)1327 872 855

Rollcentre Racing www.rollcentre.com +44(0)1480 464052

Safety Devices www.safetydevices.com +44(0)1638 713606



innovative tailored protection

# THE ULTIMATE IN CAR COVER PROTECTION.

INDOOR & OUTDOOR CUSTOM MADE CAR COVERS DESIGNED BY YOU.



DISCOUNT CODE : PWM-2014



We carry out a full range of Porsche servicing and Porsche repair projects on all popular and classic models including diagnostics and body repair work. Based in Uxbridge and serving the entire West London area, Porsche Torque are able to undertake all types of mechanical, cosmetic and restoration work to your complete satisfaction

Fully equipped Porsche workshop Bodywork and restorations Diagnostics and Porsche tuning Free estimates

SERVICE CENTRE

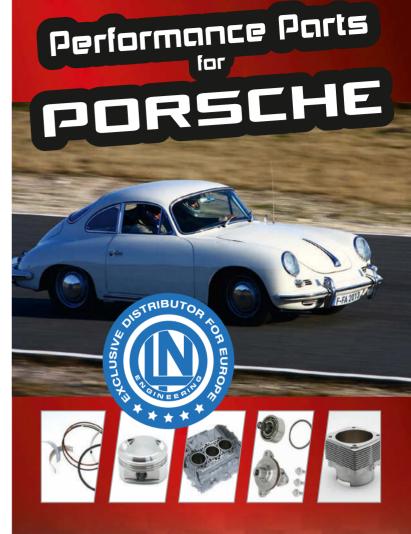
FOLLOW US

Engine & gearbox rebuild specialists Collection & delivery service Pop in for a free mechanical assessment Audio & alarm fitting

50 YEARS COMBINED EXPERIENCE FROM EX OPC MASTER TECHNICIANS (AFN, HATFIELD)







fast forward automotive provides a programme comprising of engine components and technical solutions to increase the vehicle performance for all Porsche models from 1955 to today.



New in our online shop: Piston Rings, Con Rods, Pistons, Cylinder Liners, Cylinders, Cam Shafts, Engine Bearings, Piston Pins, Crank Shafts from LN Engineering, Nickies and fast forward automotive.



fast forward automotive KG | Luisenstr. 39 | D-51399 Burscheid Phone/Fax: + 49 2174 6639699 | info@fastforward-automotive.com

#### www.fastforward-automotive.com

# UK readers subscribe to GTPORSCHE AND SAVE OVER £30\*!

#### **CHOOSE THE SUBSCRIPTION THAT'S BEST FOR YOU...**

### **PAY JUST £3.15 PER ISSUE** WHEN YOU SUBSCRIBE BY DIRECT DEBIT

- 3 month subscription £9.45 SAVE £4.05!
- 6 month subscription £18.90 SAVE £8.10!
- 12 month subscription £37.80 SAVE £16.20!
- 24 month subscription £75.60 SAVE £32.40!
- NEVER MISS AN ISSUE FREE FIRST CLASS DELIVERY •



#### THREE EASY WAYS TO SUBSCRIBE

- 1. Online @ www.gtpurelyporsche.com/subscribe.asp
- 2. Telephone 01732 748084
- 3. Post: GT Porsche, Freepost TN3443, Sevenoaks, Kent TN14 5BR

#### PAYING BY CHEQUE OR CREDIT CARD?

12 month subscription only £43.20 - SAVE 20% 24 month subscription only £77.76 - SAVE 28%

CALL TODAY 01732 748084



\* Saving applicable when you subscribe for 24 months paying by direct debit

SUBSCRIBE TODAY



## FREE FIRST CLASS DELIVERY SAVE OVER £30\* WHEN YOU SUBSCRIBE AND PAY BY DIRECT DEBIT PAY JUST £3.15

PER ISSUE!

# SUBSCRIPTION FORM

Yes, I would like to subscribe to *GT Purely Porsche* for 3 months for £9.45
 Yes, I would like to subscribe to *GT Purely Porsche* for 6 months for £18.90
 Yes, I would like to subscribe to *GT Purely Porsche* for 12 months for £37.80
 Yes, I would like to subscribe to *GT Purely Porsche* for 24 months for £75.60

PAYING BY CHEQUE OR CREDIT CARD?

**Yes, I** would like to subscribe to *GT Purely Porsche* for 12 months for £43.20 **Yes, I** would like to subscribe to *GT Purely Porsche* for 24 months for £77.76

I enclose a cheque made payable to	o Unity Media Plc for: £	
Please debit my credit card: £		
Card number		
Name on Card		
Security number	Expiry date	
YOUR DETAILS		
Title First name	Surname	
Address		
County	Postcode	
•		
	Date of birth	
	Date of birth	
_		

#### □ Is this a gift subscription?

RECIPIENT'S DETAILS (FOR G	GIFT SUBSCRIBERS ONLY)
Title First name	Surname
Address	

#### County

Your details will be processed by Unity Media Plc (publishers of *GT Purely Porsche*) and our suppliers in full accordance with the UK data protection legislation. Unity Media Plc and *GT Purely Porsche* may contact you with information about our other products and services. Plcase tick if you prefer NOT to receive such information by post, email, phone, mobile phone messaging  $\Box$  Unity Media Plc and *GT Purely. Porsche* occasionally share data, on a secure basis, with other reputable companies who wish to contact you with information about their products and services. Please tick if you prefer NOT to receive such information by post or phone.  $\Box$  Please tick if you DO wish to receive such information by email and mobile phone messaging.  $\Box$  Please tick here if the recipient of this subscription is under 18.  $\Box$  Unity Media plc reserves the right to limit offers of this kind to one per household and withdraw the offer at any time.

\_ Postcode



#### RETURN YOUR COMPLETED FORM TO: GT PORSCHE, FREEPOST TN3443, SEVENOAKS, KENT, TN14 5BR

**GTPORSCHE** is also available to buy in digital format, visit www.gtpurelyporsche.com to find out more

# CALL: 01732 748084 VISIT: www.gtpurelyporsche.com

#### PAY BY DIRECT DEBIT

Instruction to your bank or building society to pay by direct debit Please complete and send to: *GT Purely Porsche* Subscriptions, Freepost TN3443, Sevenoaks, Kent, TN14 5BR Name and full postal address of your bank or building society

		Orig	inato	r's	Ident	ificat	ion N	umber
To the manager: Bank name		8		<u>)</u>	9	1	4	3
Address		Refe	erence	e	Ū			
Autos								
Postcode		build Plea debi this assu I und	derstai	ocie / Un n th ctior / the nd t	ety ity Me e acc n subj e Dire hat th	edia Pl ount d ject to ct Deb is inst	c dire etaileo safeg it Gua ructio	l in uards rantee. 1 may
Account in the name(s) of		deta		l be	pass	ed ele		l, if so, ally to
Branch sort code	Signature(s)							
Bank/building society account number	Date							
	Banks and building societ				ept di	rect d	ebit	

#### The Direct Debit Guarantee

This Guarantee is offered by all banks and building societies that accept instructions to pay direct debits If there are any changes to the amount, date or frequency of your direct debit to Unity Media Ple we will notify you 10 working days in advance of your account being debited or as otherwise agreed. If you request Unity Media Ple to collect a payment, confirmation of the amount and date will be given to you at the time of the request. If an error is made in the payment of your direct debit by Unity Media Ple or your bank or building society, you are entitled to a full and immediate refund of the amount paid from your bank or building society. If you receive a refund you are not entitled to, you must pay it back when instructed to do so by Unity Media Plc. You can cancel a direct debit at any time by simply contacting your bank or building society. Written confirmation may be required. Please also notify us.



# SUBSCRIBE AND SAVE ALL OVER THE WORLD!



Subscribe to *GT Porsche* anywhere in the world and not only will you receive your favourite Porsche magazine by post directly from the printers but you could save over £30!\*



#### SELECT THE BEST SUBSCRIPTION FOR YOU...

Subscription term	
12 months	24 months
£62 – save 20%!	£111.60 - Save £30.24
£78 – save 20%!	£140.40 - Save £30.24
\$99	\$198
	12 months £62 - save 20%! £78 - save 20%!

COMBINED PRINT & DIGITAL SUBSCRIPTIONS ALSO AVAILABLE

To order your subscription today visit: www.gtpurelyporsche.com/subscribe.asp \*£30 saving on UK cover price applies to readers subscribing for 24 months.





## The Natural Choice for Porsche Service



Fixed Price Porsche Servicing On Site Tyre Fitting & MOT Testing The Latest Diagnostic Tools Laser Wheel Alignment Engine & Gearbox Rebuilds Free Courtesy Car Service Complete Bodywork Repair Service Wheel Refurbishment Part & Full Porsche Restoration Performance Enhancements

# 01825 830424

service@paragon.gb.com www.paragongb.com

# READ YOUR DIGITAL COPY OF GTPORSCHE anywhere in the world, at anytime, on any device

#### Join the digital revolution and download your copy of *GT Porsche* today from just £2.99 per issue!

*GT Porsche* is the market leader when it comes to digital Porsche magazines. Not only can you download the latest issue direct to your desktop, tablet or smartphone device, but you can also buy back issues of the world's biggest Porsche magazine too!

Available on PC, Mac, iPad, Andriod devices, Kindle Fire, Windows 8 devices and BlackBerry Playbook you'll never be without your favourite Porsche magazine.

#### Download your copy of *GT Porsche* now via www.pocketmags.com/gtporsche

Subscription term	Subscription Cost	You Pay
12 issues	£28.99 – save 19%	£2.41 per issue!
6 issues	£14.99 – save 16%	£2.49 per issue!
Single issue		£2.99 per issue!









## COMBINED PRINT AND DIGITAL SUBSCRIPTIONS NOW AVAILABLE

You can now subscribe to *GT Porsche* and receive a printed copy of the magazine every month along with a digital version to download and save nearly £40!

Location	Subscription term	Cost (inc P&P)	Save
United Kingdom	12 issues	£49.99	£39.89
European Union	12 issues	£69.99	£27.89
Rest of World (inc USA)	12 issues	£84.99	£21.89

#### Order your digital subscription today www.pocketmags.com/gtporsche

Now available on:



www.pocketmags.com/gtporsche



#### PORSCHTEK IS AN INDEPENDENT PORSCHE SPECIALIST CENTRE IN LEEDS.

WE HAVE THE HIGHEST GRADED PORSCHE TECHNICIANS FROM WITHIN THE PORSCHE NETWORK OFFERING MAIN DEALER QUALITY AT COMPETITIVE PRICES.

#### FREE SAFETY INSPECTION FOR ALL NEW CUSTOMERS



EMAIL: INFO@PORSCHTEK.CO.UK CALL TONY OR PHIL ON

Unit 11, Enterprise Park, Moorhouse Avenue, Old Lane, Leeds LS11 8HA

FL:011327



#### GMÜND COUPÉ/356: 1948 – 1964

<text><text><text><text><text><text>



#### 356

Dimensions: Wheelbase (mm): 2100 - Length (mm): between 3850 (1950) and 4010 (1959). Width (mm): 1660

1948 to 1949: Gmünd Coupés:- the 356's predecessor was first produced in July 1948. The aluminium-bodied Gmünd Coupés used virtually all VW mechanicals from a four-speed gearbox to torsion bar suspension, and, of course, the Beetle-derived 40hp flat-four engine complete with twin Solex down-draught carburettors and 7.0:1 compression ratio. Drum brakes were fitted all-round. 1950: 'Pre-A' 356:- Following the move to Stuttgart, the 356's integral body was made of steel and the design given a higher waistline than Gmünd Coupés, with the distinctive V-shaped roof to accommodate its split-screen. The 1.1-litre engine now produced 40hp and, along with the other engines offered after 1952, was mated with Porsche's own four-speed gearbox. 1951: 1300cc and 1500cc (60hp) engines introduced. **1952:** Split-screen front windscreen replaced with single piece window; bumpers mounted higher and further forward from body; rectangular rear taillights replaced with circular items. 1500cc engine loses 5hp but is more refined and was the first engine to feature the 'Alfinger' crankshaft. 1500 S (70hp) engine introduced. Fully synchronised gearbox fitted across the range. 1955: 356A:- New engines and suspension altered. New curved 'V-screen' does away with the need to split the screen, vinyl replaces cloth inside. New dash, combined ignition/starter. New gearbox in 1957. Four Cam Carreras launched at the 1955 Frankfurt Motor Show, these engines were directly derived from racing technology, with GT-denoted models aimed specifically at motorsport. They were dry sumped, had reduced compression ratios and revved much higher. The bodies around them were lightweight, making them very potent on the road for their day. 1959: 356B:- 90hp 1600 introduced for Super 90 which gets 'compensating rear springs' to improve handling. Changes to bumper position, headlamps and numerous interior details. 1961: Larger rear window and engine cover with twin air intakes introduced, electric sliding roof optional; 1600 S engine gets four-ring pistons, S-90 gets modified flywheel. 130hp Carrera 2 announced (introduced in 1962), featuring Porsche-designed disc brakes. 1963: 356C:- Reworked engines, clutch from Super fitted to 75 and 95hp models, disc brakes introduced all-round, rear compensating spring special order only, no external changes but there was a rethink of the interior details. 1964: Porsche takes control of Reutter and 356 C introduced, Roadster dropped from the line-up.

MODEL	MODEL YEAR	WEIGHT	ENGINE cc	Нр	TORQUE (lb ft)	0-62	TOP SPEED (mph)
Gmünd Coupés	1948 to '50	605	1086	35-40	50	23.0	80
'Pre-A' 356							
1100	1950 to '54	745	1086	40	51	23.5	87
1300	1951 to '54	810	1286	44	59	22.0	90
1300A	1954	830	1286	44	51	22.0	90
1300S	1953 to '54	830	1290	60	64	17.0	99
1500	1951 to '52	830	1488	60	75	15.5	105
1500	1953 to '55	830	1488	55	77	16.5	96
1500S	1952 to '55	830	1488	70	80	13.5	108
356A							
1300	1955 to '57	860	1290	44	60	22.0	90
1300S	1955 to '57	900	1290	60	65	17.0	99
1500GS Carrera	1955 to '58	835	1498	100	88	12.0	124
1600	1955 to '59	835	1582	60	81	16.5	99
1600S	1955 to '59	835	1582	75	86	14.5	108
1600GS Carrera	1958 to '59	835	1587	105	89	11.0	124
356B							
1600	1959 to '63	905	1582	60	81	16.5	96
1600S	1959 to '62	925	1582	75	86	15.0	108
1600S	1960 to '63	925	1582	90	89	13.5	112
1600S	1961 to '63	935	1582	75	86	15.0	108
1600GS Carrera GT	1959 to '61	890	1588	115	99	10.5	124
Carrera 2	1962 to '64	890	1966	155	144	9.0	124
356C							
1600C	1963 to '65	935	1582	75	89	14	109
1600SC	1963 to '65	935	1582	95	90	13	116
2000GS	1962 to '64	935	1966	130	119	9.0	124

#### ALL PORSCHE MODELS REPAIRED & SERVICED

FULLY FACTORY TRAINED & CERTIFICATED TECHNICIAN INCLUDING PORSCHE DIESEL SPECIALIST

EXTENSIVE EXPERIENCE WITH ALL MODELS INCLUDING 991, PANAMERA AND CAYENNE



#### pure data

#### 911(1964 - 1989)

(Zero) 0-Series - 1963 to 1966: '64 to '66 Model Year - Wheelbase (mm): 2211 Length/Width (mm): 4163/1610 – Sianificant developments: 911 (verv briefly 901) first shown at 1963 Frankfurt Motorshow, went on sale in 1964 with six-cylinder 2.0-litre engine. Targa announced in 1965 and goes on sale 12 months later. Weighs 50 kilos more than coupé

MODEL	MODEL YEAR	WEIGHT(kg)	ENGINE (cc)	Нр	TORQUE (lb ft)	0-60*	MPH
901	1963	1080	1991	130	119	8.5*	131
911	1964	1040	1991	130	120	8.3*	130
911	1965 to '67	1080	1991	130	128	8.3*	130
A Corios	1066 to 1060, 100	7 Madel Vo	ar Cianifi	ant do	valanmanta.	CObp 0110	introduced

A-Series - 1966 to 1968: 1967 Model Year - Significant developments: 160hp 911S introduced, as are 5.5-in tyres. 911L had vented discs taken from 911S. Four-speed Sportmatic introduced in 1967. All models available as Targa, glass window replaces plastic item from 1968.

MODEL	TRACK (f/r mm)	WEIGHT kg	ENGINE	Hp	TORQUE (lb ft)	0-62 0-60*	TOP SPEED (mph)
911L	1353/1321	1075	1991	130	130	10.6*	131
911T	1353/1321	1080	1991	110	116	8.3	124
911	1353/1321	1080	1991	130	128	9.1	130
911S	1353/1321	1080	1991	160	132	8.0*	137

A-Series - 1967 to 1969: 1968/69 Model Year - Significant developments: Wheelbase extended by 57mm to enhance handling, single battery replaced with twin 35amp alternatives in front luggage compartment to keep front end more securely planted and enhance handling. S and E both have mechanical Bosch fuel injection, 911T introduced, 'E' model replaces 'L'.

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)	0-60*	(mph)
911T	1353/1321	1075	1991	110	115	8.3	124
911E	1353/1321	1020	1991	140	129	8.4	134
911S	1353/1321	995	1991	170	135	8.0*	137

C-Series - 1969 to 1970: 1970 Model Year - Significant developments: Increase in bore from 80 to 84mm raises engine capacity to 2.2-litres. Aluminium crankcase replaces magnesium alloy item. 225mm clutch introduced. Sportmatic no longer an option on 911S. Front upper strut attachment points moved forward 14mm.

D-Series - 1970 to 1971: 1971 Model Year - Significant developments: PVC-coated, galvanised underfloor areas introduced. Tweaks to injection and ignition required to meet new European emission laws

MODEL	TRACK (f/r mm)	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62 0-60*	TOP SPEED (mph)	
911T	1362/1343	1020	2195	125	131	9.5	127	
911E	1372/1354	1020	2195	155	141	7.6*	137	
911S	1372/1354	1020	2195	180	147	7.0	138	
E-Series - 1971	<b>E-Series – 1971 to 1972:</b> 1972 Model Year – <b>Significant developments</b> : Engine stroke increased							

to 70.4mm giving 2.4-litre capacity. Compression ratio dropped to allow use of regular petrol. Gearbox uprated to cope with increased torque. External oil filler cap located between door and rear wheel. All models supplied with Fuchs wheels.

F-Series - 1972 to 1973: 1973 Model Year - Wheelbase (mm): 2271 Length/Width (mm): 4127 (RS 4147)/1610 - Significant developments: External oil filler removed due to customer confusion at the petrol pumps. Chin spoiler introduced on S to reduce front end lift (option on T and E) and greater variance in standard wheels. 2.7 Carrera RS is first to be fitted with duck-tail rear wing.

p TORQUE 0-62 TOP SPEED (lb ft) 0-60* (mph)
30 144 8.1 127
55 151 7.9 138
0 158 6.6 144
10 188 5.8 152
2

G-Series - 1973 to 1974: 1974 Model Year - Wheelbase (mm): 2271 Length/Width (mm): 4291/1610 (Carrera 1652) - Significant developments: Shock absorbing bumpers introduced as a result of US legislation. Range-topping Carrera model came with 'black look' trim and 210hp. H-Series - 1974 to 1975: 1975 Model Year - Significant developments: Turbo introduced early 75 with four-speed gearbox and higher spec. Duck-tail replaced by whale-tail on Carrera models. Silver Anniversarv model launched, 1063 sold.

MODEL:	TRACK (f/r mm)	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62 0-60*	TOP SPEED (mph)
911	1360/1342	1075	2687	150	173	7.9*	131
	,						-
911 S	1360/1342	1075	2687	175	188	6.1*	142
911 Carrera	1372/1354	1120	2687	210	188	6.3	150
930 Turbo	1432/1500	1140	2993	260	253	6.0*	155



#### 911: 1963 - 1989

<text><text><text><text><text><text>

# www.Porsche911Hire.co.uk

— the affordable way to experience the world's greatest sports cars

#### pure data



customers with its first  $\overset{\circ}{RS}$  road car, Porsche unveiled its concept for a new, more powerful, luxury-orientated version of the 911 at the 1974 Paris Motor Show – the

911 Turbo. With a 3.0-litre flat-six motor and a single KKK turbocharger the new model produced 260hp delivered to the rear wheels via a four-speed manual gearbox. With a 0-62mph time of just 5.5 seconds and a 155mph maximum speed it was the fastest, most powerful Porsche road car to date, and its arrival coincided with the oil crisis. With its flared rear-wheel arches, deeper front and whale-tail rear spoiler it was far from subtle, but Porsche's customers loved it and nearly 3000 were built. In 1978 it gained a bigger, 3.3-litre engine and more power (now 300hp), could crack 160mph and would continue in production until 1989. Porsche also offered as a 911 Turbo Cabriolet and Targa model from 1987-88, as well as the 330hp 'slant-nose' coupé from 1983 through to 1989. And if you wanted the show without the go you could order Turbo-look Coupés, Cabriolets, Targas and Speedsters. Has there ever been a more blatant example of the excesses of the '80s?



During the 1980s Porsche hit upon a winning formula for its rear-engined sports cars, despite the best attempts by various management boards to try and kill it off. As engine capacity rose from 2.2-, through 2.4-, 2.7-, 3.0- and finally 3.2-litres, so did the power and performance of the numerous models and variants introduced. The first 911 Cabriolet arrived on the scene in 1983, and before this a whole of host models had come and gone: the 2.4S became the Carrera in 1974 with 2.7-litres and 210hp, and the 3.0 Carrera in '76 with 200hp (US emissions laws had strangled the flat-six a bit). The 3.0 SC arrived in 1978 with a feeble 180hp but redeemed itself in 1981 with the new 3.0 SC arriving with 204hp. In 1984 Porsche delivered its latest 911: the 3.2 Carrera. With 231hp, a 6.1 second 0-62mph and a 151mph maximum speed the 915 transmission was replaced with a slick Getrag G50 'box and this generation 911 saw out its final years able to hold its head high and compete with the more youthful opposition.

I-Series - 1975 to 1976: 1976MY - Significant developments: Bodies now zinc-coated, galvanised steel. Bosch K-Jetronic fitted to all models. Sportmatic now only three-speed, not four. J-Series – 1976 to 1977:1977MY – Wheelbase (mm): 2271, Length/Width (mm): 4291 (Turbo 4318)/1610 (Carrera 3.0 1652, Turbo 1829) – Significant developments: Sportmatic cars get brake servo assistance. 'Black-look' trim standard on Targas.

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)	0-60*	(mph)
911	1360/1342	1120	2687	165	176	7.8	135
Carrera 3.0	1372/1354	1075	2994	200	188	6.3	150
930 Turbo	1432/1500	1195	2993	260	253	6.0*	155

K and L-Series (the SC) – 1977 to 1979: '78 to '79MY – Significant developments: Super Carrera combined old 911 and Carrera with 3.0-litre engine, all had servo-assisted brakes. Turbo 3.3-litre engine equipped with intercooler and tea-tray spoiler replaces whale-tail. SC (New A-Series) - 1979 to 1980: 1980MY - Significant developments: Revised ignition and camshaft timina results in 188hb SC model. Turbo gets twin-exit exhaust.

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
MODEL	(f/r mm)	kg	CC	ПÞ	(lb ft)	0-60*	(mph)
911 SC	1369/1379	1210	2994	188	188	7.0	141
930 Turbo	1432/1500	1300	3299	300	304	5.1*	162

SC (New B-Series) - 1980 to 1981: 1981MY - Significant developments: First year of 17-digit international chassis number. SC now runs on 98RON fuel. SC (New C-Series) - 1981 to 1982: 1982MY – Significant developments: Limited edition 'Ferry Porsche' model goes on sale. Tea-tray spoiler option available for SC. SC (New D-Series) - 1982 to 1983: 1983MY - Significant developments: Cabrio rushed into production and launched following successful design study. MODEL TRACK WEIGHT ENGINE Нр TORQUE 0-62 TOP SPEED

	(f/r mm)	kg	CC		(lb ft)	0-60*	(mph)		
911 SC	1369/1379	1210	2994	204	189	5.7*	146		
930 Turbo	1432/1500	1300	3299	300	304	5.1*	162		
Carrera (New E-Series) – 1983 to 1984: 1984MY – Wheelbase (mm): 2271 Length/Width									

(mm): 4291 (Turbo 4318)/1610 (Turbo) Significant developments: Carrera replaces SC. Engine capacity climbs to 3164cc, Digital Motor Electronic engine management introduced as was the engine oil-fed chain tensioner. Turbo-look option ads 50 kilos and increases drag.

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)	0-60*	(mph)
911 Carrera	1398/1405	1210	3164	231	209	5.6*	152
911 SC RS	1398/1405	960	2994	255	184	5.0	159
930 Turbo	1432/1500	1300	3299	300	319	5.1*	162
			100510/	C' '''		1 6	111

**Carrera New F-Series – 1984 to 1985:** 1985MY – Sianificant developments: Carrera available with catalytic converter. Four-spoke steering wheel standard. Carrera New G-Series - 1985 to 1986: 1986MY - Significant developments: Sport seats now a no-cost option. Turbo-look track 1434mm front/1526mm rear.

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)	0-60*	(mph)
911 Carrera	1398/1405	1210	3164	231	209	5.6*	152
930 Turbo	1432/1500	1300	3299	300	319	5.1*	162
				ai ::::			1011

Carrera New H-Series - 1986 to 1987: 1987MY - Significant developments: Targa and Cabrio models available with Turbo engine. Slant-nose becomes an option. 915 transmission replaced by Getrag-built G50. Power hood standard on Cabrio. Carrera New J-Series - 1987 to 1988: 1988MY – Significant developments: Celebration anniversary model available. Club Sport model weighed 50 kilos less, blueprinted engine pushed power to around 241hp. Carrera New K-Series - 1988 to 1989: 1989MY - Significant developments: 16-inch wheels now standard. Speedster introduced and available with either Turbo-look or flat-nose bodies

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)	0-60*	(mph)
911 Carrera	1398/1405	1210	3164	231	209	5.6*	152
Club Sport	1398/1405	1160	3164	231	209	5.6*	156
930 Turbo	1434/1526	1300	3299	300	319	5.1*	162

#### 964(1989 - 1993)

1988 to 1989: 1989MY – Wheelbase (mm): 2271 Length/Width (mm): 4250/1651 – Significant developments: Launched in January 1989 with a new flat-six engine, suspension, brakes and numerous body parts, Porsche claim only 13 per cent carry over parts from predecessor. Carrera 4 split torque 31/69 front to rear. All wheel ABS and power steering standard, catalyst introduced. 1989 to 1990: 1990MY - Significant developments: All pre-964 models now deleted. Carrera 2 introduced, Targa





#### BUYING YOUR FIRST USED PORSCHE... MAKE SURE IT'S AN RPM APPROVED PORSCHE

Buy with confidence from one of the UK's leading Porsche independent specialists.



All cars undergo a comprehensive 110 point inspection & digital paint depth analysis



ECU interrogation, including rev ranges checked



Boroscope  $\diagup$  loss tested engines for full and total peace of mind



Comprehensive in-house warranty

Come in for a coffee and see if we can help you find your perfect Porsche!





(C) / 'Speedster S'

Every option imaginable, call to find out.

## **NINEMEISTER** Call +44 (0)1925 242342

Ninemeister, Units 21 - 26, Bank Quay Trading Estate, Warrington, Cheshire WA1 1PJ www.ninemeister.com | ask@ninemeister.com | www.cloud9m.com



#### <u> (964): 1989 – 1993</u>

911 (964): 1989 – 1993
Two-door, two-two Coupé, Convertible and Targa. Rearmounted six-cylinder air-cooled 'boxer' engine, rear and four-wheel drive. For a company that had very little left in the piggy bank and suffering from an economic and sales downtum, Porsche's engineers pulled off a remarkable achievement when developing the 964-series 911.
This latest 911 was '87 per cent new' over the model it replaced, and the big news surrounding the 964 was the increased capacity flat-six and the introduction of a fourwheel drive transmission. This resulted in the gearbox and rear final drive having two electronically-controlled wet clutches, limiting slip in both the centre and rear differentials. A torque tube connected the centre and front diffs. The torque split was 31:60 front-to-rear.
Joining the new C4 was a Carrera 2 Coupé, Cabriolet and Targa models, three Turbo variants: 320hp 3.3-litre, 360hp 3.6-litre, and a limited run 381hp Turbo S. The stripped-out 964 RS and limited run 3.8 RS were available from 1992.
Dverlooked by many, the 964 offers an affordable entry into classic 911 ownership, although they require regular maintenance and some TLC.



911 (993): 1993 – 1996
Two-door, two-two Coupé, Convertible and Targa. Rearmounted six-cylinder air-cooled 'boxer' engine, rear- and four-wheel drive. Argued by many to be the most beautiful 911 design of all, the 993-series cars are also the best engineered, and for many purists the pinnacle of the model's achievement.
The last of the air-cooled 911s had it all – pace, grace and, for once, a bit of space. The entry-level Carrera 2 was all you ever really needed, but who could resist the appeal of the Carrera RS or, for the first time, the all-wheel drive, two the Carrera RS or, for the Seriously brave there was the GT2 and those after the Turbo look without the go could always opt for the Carrera 2S and 4S.
The 993 also saw the introduction of VarioRam (in 1996). This controlled the length of the engine's induction fracts, and at low and medium engine speeds longer tracts would provide a fuller torque curve, while at higher engine speeds the shorter induction length delivered higher peak power outputs.

and Cabrio available for both Carrera 2 and Carrera 4 models. Tiptronic available on C2. Both Cabrio and Targa 50 kilos heavier than coupé equivalents. 1990 to 1991: 1991MY – Significant developments: Rear drive, 3.3-litre 320hp 964 Turbo introduced complete with 'Cup' design mirrors. 1991 to 1992: 1992MY - Significant developments: Stripped-out Carrera 2 RS launched - the first RS since 2.7 Carrera RS in 1973 – and proves a hit for those who like their 911s raw. 381hp Turbo S model available to order (80 built). 1992 to 1993: 1993MY - Significant developments: Speedster introduced, rear-wheel drive only and based on Cabriolet for US market. 3.6 Turbo production begins in Jan 1993.

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)		(mph)
Carrera 2/4	1379/1374	1350/1450	3600	250	228	5.7	162
Carrera 2 RS	1379/1380	1250	3600	260	240	5.3	162
Turbo	1442/1448	1470	3299	320	332	5.0	168
3.8 RS	1440/1481	1210	3746	300	266	4.9	168
Turbo 3.6	1442/1448	1470	3600	360	383	4.8	175

#### 993 (1993 – 1998)

1993 to 1994: 1994 Model Year – Wheelbase (mm): 2272 Length/Width (mm): 4245/1735 (Carrera 4S and Turbo 1795mm) – Significant developments: 993 production begins in Jan 1994. Internal engine upgrades increase power and torque. Multi-link rear suspension is one of the biggest developments in the 911's history and transforms 993 into a more driver friendly sports cars. Fourpiston brake callipers standard front and rear. Two- and four-wheel drive offered across the range in either Coupé or Cabriolet quise. **1994 to 1995:** 1995MY – Significant developments: Carrera RS introduced as is redesigned, all-wheel drive system for Carrera and Tiptronic S with steering wheelmounted shift controls for automatic gearbox. New 408hp four-wheel drive, twin-turbocharged 911 Turbo is launched and includes a six-speed gearbox and hollow spoked alloy wheels.

MODEL	TRACK	WEIGHT	ENGINE	Hp	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)		(mph)
Carrera 2/4	1405/1444	1370/1420	3600	272	243	5.6/5.3	168/162
Carrera RS	1413/1452	1270	3746	300	262	5.0	172
Turbo	1411/1504	1500	3600	408	398	4.5	180

1995 to 1996: 1996MY - Significant developments: VarioCam engines announced and up both power and torque; revolutionary sliding glass-roofed Targa introduced. Lightweight, 430hp, rearwheel drive, homologation special GT2 launched. It's the most powerful and fastest 911 production road car ever built. 1996 to 1997: 1997MY - Significant developments: 430hp Turbo S offered as run-out model with 450hp factory engine upgrade also available. Turbo-bodied Carrera 2S built alongside Carrera 4S, but two-wheel drive obviously. It's the last rear-wheel drive, air-cooled 911. 1997 to 1998: 1998MY - Significant developments: An end of an era. Production of the all-wheel drive Carrera 4 and Turbo continues until July 1998 but when the last car finally rolls off the production line (a Carrera 4S) it marks the end of air-cooled 911 production after 35 years. The purists aren't happy, but it signifies a new dawn for Porsche.

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)		(mph)
Carrera 2/4	1405/1444	1370/1420	3600	285	251	5.2	172
Carrera 2S/4S	1411/1504	1450	3600	285	251	5.2	172
Turbo	1411/1504	1500	3600	408	398	4.5	180
GT2	1475/1550	1290	3600	430	398	4.0	184
Turbo S	1411/1504	1500	3600	430	398	4.3	185

#### 996(1997 - 2004)

1997 to 1998: 1998 Model Year – Wheelbase (mm): 2350 Length/Width (mm): 4430 (Turbo & GT2 4435)/1765 (Turbo & GT2 1830) - Significant developments: All-new water-cooled, 3.4-litre VarioCam six-cylinder 'boxer' engines. Rear-wheel drive, six-speed manual transmission or five-speed Tiptronic S at extra cost. Traction control also available. Four-wheel drive Carrera 4 introduced at the end of the year along with Porsche Stability Management (PSM). 1998 to 1999: 1999MY stripped-out, 360hp GT3 introduced. GT1-based engine helps create most focused 996 to date. Additional cooling for radiator, gearbox and engine account for extra weight over standard Carrera 2. Available in 'Comfort' or 'Club Sport' trim, breaks Nürburgring Nordschleife lap record for a production car (8mins 03sec). 1999 to 2000: 2000MY - the new 911 Turbo arrives. Twinturbocharged, water-cooled flat-six with VarioCam Plus develops 416hp through four-wheel drive chassis. First 911 Turbo available with Tiptronic S. 996 - 2000 to 2001: 2001MY - GT2 returns with 462hp, rear-wheel drive, Porsche Ceramic Composite Brakes and no PSM! Breaks production car lap record at the Nordschleife (7min 46sec).

MODEL	TRACK	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)	0-60*	(mph)
Carrera 2/4	1455/1500	1320/1430	3387	300	258	5.2	174

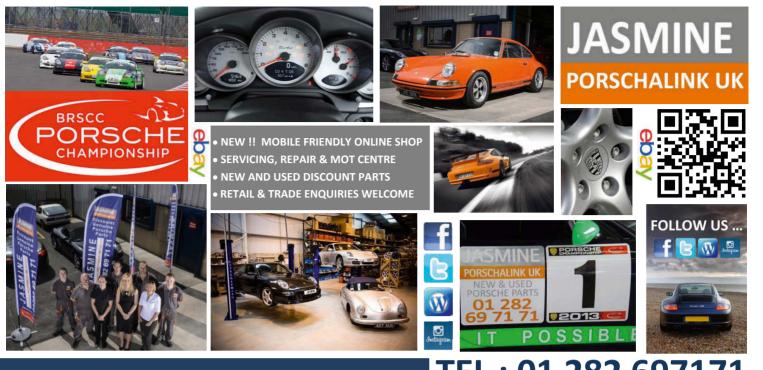
#### Cayman engine repair specialists 986 996 987 997 &

• Sales • Service • Repairs

- Monthly paid maintenance package
- Re-con suspension parts



Tel: 01204 302809 Web: www.hartech.org Email: auto@hartech.org



#### JASMINE PORSCHALINK UK TEL: 01 282 697171 INDEPENDENT PORSCHE SPECIALIST

The Porscha Centre 3A Pendleside Lomeshaye Industrial Estate NELSON Lancashire BB9 6RY T: 01282 69 71 71 F: 01282 691 911 E: jasmine.motorsport@virgin.net W: www.jasmine-porschalink.co.uk PORSCHE SERVICING PARTS MOT SPARES REPAIR RACE & TRACK PREPARATION



# From £600 to 600 hp, we are here for you



Founded in 1961, our mission is to enhance the Porsche-owning experience of our membership, now in excess of 12,000 enthusiasts. We do this by embracing all models of the marque, from the earliest 356 to the very latest supercar. Whether it's £600 or 600 hp, Porsche Club Great Britain is here for you. **Patron: Dr Wolfgang Porsche** 

#### **Porsche Club GB benefits**

Porsche certificate of authenticity High quality monthly magazine Comprehensive events calendar Club insurance scheme Members' discounts Regions & Registers Race Championship Valuation service Factory visits Trackdays

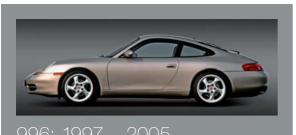
#### Join us

We are proud to be the only officially Porsche AG recognised Porsche Club in the UK and we'd love to welcome you as a member. For a free, no obligation enquiry pack visit **www.porscheclubgb.com** or call Cornbury House on **01608 652911** 





#### pure data



996: 1997 – 2005 Wo-door, two-two Coupé, Cabriolet and Targa. Rear-mounted six-cylinder water-cooled 'boxer' engine. A water-cooled engine in a 911! Whatever next? Once the purists had calmed down, beneath the 996's slightly frumpy looks is one of the greatest cars of our time. Carrera 2 is all you ever actually need, but the four-wheel drive Carrera 4 and Carrera 4S are unstoppable. The latter, with its Turbo sourced brakes, suspension and bodywork is possibly the best value 911 Porsche has ever built. The 416hp, four-wheel drive Turbo is a contender for the greatest supercar ever built, and swept aside all in its way during its time on the price list. The 462hp GT2 was deemed a tad excessive for most on the road, and didn't enjoy the kudos of its predecessor, nor that of the 911 GT3. This stripped-out 911 was as close to a 911 RS you could grewarding 911s when it was new, it's still a favourite amongst the purists but subsequent evolutions are better still. GT3 RS was further honed for the track, compromised for the road. The Targa featured the now traditional opening erar glass hatch, while the Cabriolet was perfectly at home in Miami.



997: 2004 – 2008 Two-door, two-two Coupé, Cabriolet and Targa. Rear-mounted 3.6- and 3.8-litre six-cylinder, water-cooled 'boxer' engine. More evolution than revolution, the second-generation water-cooled 911 has a hint of 993 look about it and was available with two engine options. 997 ownership began with the 321hp 3.6-litre Carrera, with the majority of customers opting for the more powerful 355hp Carrera S. Porsche Active Suspension Management (PASM) was standard on the Carrera S and allowed the car to play at continental GT cruiser one minute and Nordschleife slayer the next. Interior quality improved over 996. Turbo and GTS models were even better than their predecessors, with the Turbo introducing Variable Turbine Geometry and Porsche traction Management, while the GT3 got traction control! When Porsche combined these two models' philosophies the GT2 was built. At 530hp and 204mph it is the most powerful and fastest Porsche 911 to date. The Targa offered hatchback practicality – and four-wheel drive – and a big glass roof at the expense of ultimate driver involvement.



911: 2008 - 2012 Two-door, two+two Coupé, Cabriolet and Targa. Rearmounted 3.6- and 3.8-litre six-cylinder, water-cooled engine with Direct Fuel Injection and VarioCam Plus; normally

GT3	1475/1495	1350	3600	360	273	4.8	188
Turbo	1465/1522	1549	3600	416	413	4.2	190
GT2	1485/1520	1440	3600	462	457	41	197

New 996 – 2001 to date: 2002MY – Significant developments: Second-generation 996 introduced. Engine capacity grows to 3.6-litres, power increase to 316hp. Turbo's trip computer standard across range, as are Turbo headlights. Cup holders fitted for first time. New Carrera 4S introduced with Turbo brakes, suspension and wide-body. 996 Targa model launched with retractable sliding glass roof. 996 2003 to 2004: 2003MY - Significant developments: GT3 returns with 381hp while the GT3 RS has the same power but weighs 20 kilos less thanks to carbon fibre body panels and a plastic rear window. Turbo and Carrera 4S launched as a Cabriolet models, GT2 gets power hike to 483hp. 0-62mph time drops to 4.0 seconds, top speed climbs to 198mph. 996 -2005: 2005MY - Significant developments: The 911 Turbo S makes a return and signals the beginning of the end for the 996. 450hp and PCCB come as standard.

MODEL	TRACK (f/r mm)	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62	TOP SPEED (mph)
Carrera 2/4	1465/1500	1345/1405	3596	316	273	5.0	178
Targa	1465/1500	1415	3596	316	273	5.2	177
Carrera 4S	1472/1528	1470	3596	316	273	5.1	173
Turbo	1472/1528	1540	3600	414	413	4.2	190
Turbo S	1472/1528	1549	3600	450	457	4.1	190
GT3	1485/1495	1380	3600	381	284	4.5	191
GT3 RS	1485/1495	1360	3600	381	284	4.4	190
GT2	1495/1520	1420	3600	483	457	4.0	198

#### 997(2004 - 2008)

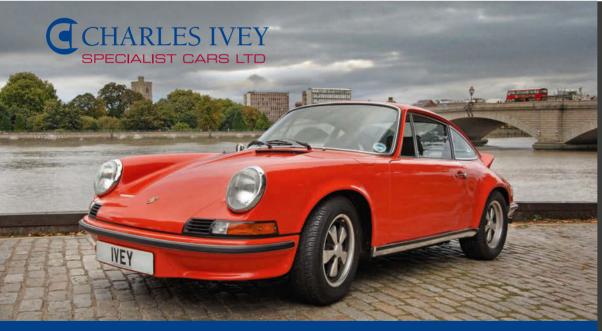
**2004:** 2005 Model Year – Wheelbase (mm): 2350; Length/Width (mm): 4427/1808; Height (mm) 1310/1300 (Carrera/Carrera S) - Significant developments: 3.6-litre 321hp, and 3.8-litre 355hp, water-cooled flat-six engines for Carrera and Carrera S respectively. New six-speed manual gearbox standard on both models, Porsche Active Suspension Management (PASM) standard on Carrera S lowers car by 10mm, cost-option on Carrera. 19-inch alloy wheels standard for Carrera S. 2005: 2005MY – Carrera 4 and Carrera 4S launched. Engines as Carrera and Carrera S respectively, rear body widened by 44mm, PSM now equipped with 'pre-filling' brake system to quicken responses. 2006: 911 Turbo and GT3 launched. The former features Variable Turbine Geometry, Porsche Traction Management and 480hp. The third-generation GT3 is the best all-rounder yet. PASM fitted as standard, as is a 415hp 3.6-litre flat-six engine and traction control. 911 Targa 4 and 4S launched based on the wider Carrera 4/4S shell and feature the full length glass sliding roof. GT3 RS launched. Same power as a GT3 but 20 kilos lighter and unique aero pack. 2007: 997 Turbo Cabriolet launched, followed by the new 911 GT2 with 530hp, rear-wheel drive, traction and stability control, and launch control. 204mph claimed maximum.

MODEL	TRÁCK	WEIGHT	ENGINE	Нр	TORQUE	0-60	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)		(mph)
Carrera	1486/1529	1395	3596	321	273	5.0	177
Carrera S (Pkit)	1486/1511	1420	3824	355	295	4.4 (4.4)	182
Carrera 4	1488/1548	1450	3596	321	273	5.1	174
Carrera 4S (Pkit)	1488/1548	1475	3824	355	295	4.8 (4.7)	179
Targa 4	1488/1548	1510	3596	321	273	5.3	174
Targa 4S	1488/1548	1535	3824	355	295	4.9	179
GT3	1486/1511	1395	3600	415	298	4.3	192
Turbo	1490/1548	1585	3600	480	457-501	3.6	192
GT3 RS	1497/1558	1375	3600	415	298	4.2	192
GT2	1515/1550	1440	3600	530	501	3.7	204

#### 997 aen-2 (2008 – 2012)

2008: 2008MY – Wheelbase (mm): 2350; Length/Width (mm): 4435/1808; Height (mm) 1310/1300 (Carrera/Carrera S) - Significant developments: All new 3.6-litre 345hp and 3.8-litre 385hp, water-cooled flat-six engines for Carrera and Carrera S now fitted with Direct Fuel Injection. Six-speed manual gearbox standard on both models and new seven-speed PDK available as option. Porsche Active Suspension Management (PASM) standard on Carrera S, cost-option on Carrera. 19inch alloy wheels standard fitment for Carrera S. Minor styling changes to lights and bumpers. New PCM3, Bluetooth and steering wheels. Carrera 4 and 4S model get reflective light strip across tail and identical updates to two-wheel drive models. Cabriolet models of all variants go on sale with coupés. PDK-equipped cars two-tenths quicker to 60mph, but 1mph slower on the top speed. 2009: 2010 MY - Eagerly awaited Generation-two 997 GT3 is launched with larger capacity 3.8-litre, normally aspirated flat-six. New 911 Turbo quickly follows with all-new 3.8-litre, Direct Fuel Injection, twin VTG turbocharged engine, it's the first all-new engine for the 911 Turbo in 35 years. PDK replaces Tiptronic and Porsche offer optional steering wheel mounted paddle-shift controls for the first time. Limited run of 250 Sport Classic models mix Carrera 4 wide body looks with rear-wheel drive and a 408hp 3.8litre Powerkit engine. Built by Porsche Exclusive it also features a double-domed roof, ducktail rear spoiler and the return of Porsche's famous Fuchs wheels and PCCB as standard. A bespoke leather interior also fitted. 911 GT3 RS is announced alongside Sport Classic at Frankfurt Motor Show. New RS comes with a wider front track, a new aero-pack that doubles downforce, a more powerful version of the Mezger 3.8 litre flat-six and a 25kg drop in kerb weight over a regular GT3. Air-con, PCM and leather all options. 2010: 2010MY - 530hp Turbo S available as coupé or cabriolet. PDK with paddleshift, PCCB, dynamic engine mounts, Sport Chrono Package Turbo and Torque Vectoring are all standard. Interior features a dual tone leather trim and adaptive sport seats. The 620hp 911 GT2 RS is the most powerful production Porsche the company has ever built. Based on the GT3 RS it features further aero dynamic tweaks and recalibrated PASM, Traction and Stability control systems. 3.6-litre engine is the final swan song for the Hans Mezger flat-six, and is fitted with a single-mass flywheel and a revised charge air intercooler. It's the first Porsche to feature different N-rated tyres on the front





For over 40 years, London's leading specialist for PORSCHE

#### Sales Service Parts

Fixed Price Servicing Air conditioning repairs Bodywork Fully computerised wheel alignment Free collection & delivery/loan car

#### . Storage

Total engine/gearbox rebuilds In-house MOTs Prepurchase inspections Latest diagnostic equipment



997 Turbo L/H/D Coupe Tiptronic £53,995 Metallic Grey 2008 16,000 miles



993 Carrera 4 Coupe £25,995 Adventura 1994 91,000 miles



996 Carrera 4S Manual £18,995 Metallic Silver 2003 66,000 miles

#### pure data

spirated and turbocharged. Six-speed manual gearbox fitted a standard, seven-speed PDK, double-clutch gearbox optional. Porsche shows its green credentials by introducing the leanest car to-date, claiming a 3.6 Carrera fitted with a DK gearbox will return over 29mpg. This heavily revised flat-six engine should prove more reliable now the intermediate shaft is no longer needed, but some of the soul has gone AWOL when it comes to the flat-six's voice. PDK is a revelation, despite some complaining about the up/down buttons being the wrong way round. Although this is easily rectified with the optional addle-shift controls. The 911 line-up expanded like no other series under the 97. Along with the regular Carrera, Targa, Turbo and GT models – CT2 RS, GT3 RS4.0, Sport Classic and Speedster. The second-generation 997 Series was Porsche's most expansive line-up of the 911 in the car's history with 22 'basic' models having been introduced. Of the 22 models only four aren't available with PDK (Sport Classic, GT3, GT3 RS, GT2 RS and GT3 RS4.0) and two models are only available with the seven-speed double-clutch unit (Turbo S and Speedster). Only five models are offered with a narrow body (Carrera and Carrera S – coupé and cabriolets – and the GT3) with the rest of the range all use the wider body first introduced with the four-wheel drive models. 12 coupés, seven cabriolets, two Targas and a Speedster body are available. Three different size of brakes are fitted, one of which is made from ceramic composite material, two suspension systems are available (passive and active – pASM), with five different front and rear track widths also used. Four different engines are offered.



<text><text><text>

and rear axles. Carbon-fibre bonnet - and front wings if you wish - help shed the kilos as do the plastic rear and rear quarter windows. Only 500 built, and all sold out within three-months. To mark its 25th Anniversary Porsche Exclusive builds 356 911 Speedsters. As with the Sport Classic it features the Carrera 4 body with rear-wheel drive running gear and the 408hp Powerkit 3.8-litre motor. PDK only transmission available, PCCB standard and Pure blue paint or white the only colours. Windscreen is 72mm lower than standard and roof is a manual-electric mix that hides under a traditional Speedster double bubble engine cover. First Porsche Speedster for 16 years. The final 997 series 911 could possibly be the best. Carrera GTS is available as either coupé of cabriolet and again mixes the Carrera 4 body with rear-drive running gear; again the 408hp 3.8-litre Powerkit engine does all the work. Six-speed manual or seven-speed PDK are both available, and PCCB is optional. 19-inch RS Spyder design wheels are standard and the GTs also features a SportDesign front bumper and deeper side sills. Inside is a mix of leather and Alcantara with a new SportDesign steering wheel also standard. Rear-seats are optional. 2011: Just when we thought Porsche was done with the 997 along came one more derivative. A 500hp, normally aspirated 4.0-litre flat-six engine with a crank lifted straight from a GT3 R. The car weighed 1360kg and had aero dynamic add-ons designed specifically for the Nürburgring. Everything about the 4.0RS was extreme. It cherry picked the very best bits from every 997 that had gone before it to produce the ultimate in rearengined driving thrills. It's unlikely we'll see anything of its kind again. 2012: Porsche had time for one last 997 swansong: the Carrera 4GTS. As its name suggests it was a four-wheel drive version of the Carrera GTS. This really was the last 997.

MODEL	TRÁCK	WEIGHT	ENGINE	Нр	TORQUE	0-62*	TOP SPEED
	(f/r mm)	kg	CC		(lb ft)	6sp/7sp	(mph)
Carrera	1486/1530	1415	3614	345	285	5.1*/4.2	179
Carrera S	1486/1516	1425	3800	385	310	4.3*/4.1	187
Carrera 4	1488/1548	1470	3614	345	285	5.0*	177
Carrera 4S	1488/1548	1480	3800	385	310	4.7*	184
Carrera GTS	1488/1548	1420	3800	408	310	4.6/4.2	190/189
Carrera 4GTS	1488/1548	1480	3800	408	310	4.6	188
Targa 4	1488/1548	1530	3614	345	285	5.2*	176
Targa 4S	1488/1548	1540	3800	385	310	4.9*	184
GT3	1497/1524	1395	3797	435	317	4.0*	194
GT3 RS	1509/1554	1370	3797	450	317	3.8*	193
GT3 RS4.0	1509/1554	1360	3996	500	339	3.9	193
Turbo	1490/1548	1570	3800	500	479	3.6* (3.2**)	194
Turbo S	1490/1548	1585	3800	530	516	2.9**	195
GT2 RS	1509/1558	1370	3600	620	516	3.5	205
Sport Classic	1492/1550	1425	3800	408	310	4.6	187
Speedster	1492/1550	1540	3800	408	310	4.4	190
+ 0 00 1 64	1		1 40	k C., I			LODK

\* 0-60mph: cars fitted with six-speed manual gearbox; \*\* cars fitted with Sports Chrono Plus and PDK

#### 991 (2012 -)

**2012:** 2012 Model Year – Wheelbase (mm): 2450; Length/Width (mm): 4491/1808; Height (mm) 1303/1295 (Carrera/Carrera S) - Significant developments: All new 911s featuring a longer wheelbase, a lighter body and more technology than a 911 has every seen. The direct fuel injection engines are carried over from the 997 generation of cars, so to is the seven-speed PDK gearbox. However, a new seven-speed manual gearbox – based on the PDK – was introduced to replace the slick-shifting six-speed manual. Other mechanical highlights include the option of Porsche Dynamic Chassis Control (PDCC) on a 911 for the first time, dynamic engine mounts and torque vectoring. Electric power steering replaced the previous car's hydraulic setup; not one of Porsche's most popular decisions. There was also a new look both inside and out, the new interior reagining the air of quality that some felt had been lacking in more recent 911 generations. The Carrera coupé and cabriolet models were fitted with a 355hp, 3.4-litre engine, the Carrera S models with a 400hp 3.8litre motor. 2013: The Carrera 4 and 4S coupé and cabriolet (width: 1852mm) joined the line-up at the end of 2012 as 2013 model year cars. Available with the same engine and gearboxes as the Carrera models, the four-wheel drive variants were equipped with a multi-plate, electronically controlled version of Porsche Traction Management. As with previous Carrera 4 models, the rear of the car was 44mm wider than the two-wheel drive derivatives. At the Geneva Motor Show in March Porsche revealed the new 911 GT3. Those who thought the 991 was a controversial 911 could barely speak when the specification of the new GT3 was announced. Out went the Hans Mezger 3.6-litre engine and in came a 475hp, 3.8-litre direct injection engine based loosely on the Carrera S's motor. This was just the beginning. No manual gearbox would be offered, instead only a heavily revised PDK unit would be fitted. There was also active rear-wheel steering, electric power steering and, for the first time the GT3 was no longer a narrow bodied car, its shell now taken from the wider Carrera 4. Soon after the GT3's announcement came the details for the new 911 Turbo. Well, two actually. The 991 will be available as either a 520hp Turbo or 560hp Turbo S, both fitted with a PDK gearbox only. Active rear-wheel steering, torque vectoring, PDDC, dynamic engine mounts are all available and, for the first time, the 911 Turbo features active aerodynamics for both the front and rear spoilers. The 911 Turbo's body is also 28mm wider than the Carrera 4 at 1880mm.

MODEL	MODEL YEAR	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62	TOP SPEED (mph)
Carrera	2012	1380	3436	350	287	4.8	179
Carrera 4	2012	1430	3436	350	287	4.9	175
Carrera S	2012	1395	3800	400	325	4.5	188
Carrera 4S	2012	1445	3800	400	325	4.5	185
GT3	2014	1430	3799	475	325	3.5	196
Turbo	2014	1595	3800	520	486	3.4	195
Turbo S	2014	1605	3800	550	516	3.1	197

Classic, bespoke and performance Porsche specialist established 20 years

PAUL STEPHENS

# The only name you need to know, the only place you need to go.

Buying and selling the finest Porsche
Specialist servicing for your Porsche
Restoration and upgrades for your Porsche
Bespoke hand built Porsche

www.paul-stephens.com

01440 714 884

email@paul-stephens.com

Halstead, Essex, CO9 2SE



#### pure data



#### 912: 1965 - 1969; 1975

912: 1965 – 1969; 1975 Two-door Coupé and Targa, rear-engined four-cylinder air-cooled 'boxer' engine. 'The poor man's Porsche' was actually quite expensive, not that this stopped it from building a strong following, especially in the States. Sharing the 911's body, the 912 was fitted with a 2.0-litre, four-cylinder engine and came with a spartan interior that saw many of the 911's luxuries ditched. Developed on a yearly basis, the 912 closely followed the 911 in terms of new technology and very soon outsold its more expensive brother, with over 30,000 delivered during its first production run. Re-introduce in 1975, a further 2000 examples were built including a Targa Variant.



914: 1970 – 1976 Two-door Coupé with mid-mounted four- and six-cylinder air-cooled 'boxer' engines. Built by Karmann, Porsche's original mid-engined roadster was praised for its unrivalled dynamics, although its boxy looks and awkward gearbox were often criticised. The four-cylinder engines were sourced from VW, and the later six-cylinder Porsche units offered significant performance advantages – and even more of a challenge for the 'entertaining' dynamics. Sales were poor throughout the model's six-year lifespan.



#### 924: 1977 – <u>1988</u>

924: 1977 – 1988 Two-door, two+two Coupé, front-engined, four-cylinder water-cooled engine, rear-wheel drive, five-speed gearbox. The 924 was Porsche's first front-engined sports car and production car fitted with a water-cooled engine. Originally conceived, designed and developed for Volkswagen, it was eventually launched as a Porsche, albeit still powered by a VW/Audi sourced engine. Performance wasn't earth-shattering, but its transaxle configuration provided the balance and handling worthy of the badge. Continual development saw the 924 improve in the performance stakes, especially so when it received the 2.5-litre engine from the 944. Peak performance, however, came with the Turbo models, which delivered the much needed performance gain, ultimately reaching its peak with the Carrera GT, a homologation requirement in order for Porsche to race the car at Le Mans. A handful of more extreme, lighter Carrera GTS models were also built. Sadly for the 924, with every evolution came a price increase and the coupé quickly went from the affordable entry level Porsche it set out to be, to becoming an expensive, out-dated car.

#### 912 (1965 - 1969; 1975)

**912 –** Wheelbase (mm): 2211 (1969 – 2268 , 1976 – 2272) Length/Width (mm): 4163 (1976 – 4293)/1610. Significant developments: 356C four-cylinder engine, four- or five-speed gearbox, disc brakes, MacPherson front and semi-trailing rear suspension, low-spec interior. 1969: Larger wheelbase and 911 body introduced before production ends for six years. 1975: Re-introduced using the 914's VW 2.0-litre. Heavier than its predecessor, five-speed gearbox fitted as standard.

MODEL	MODEL	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	YEAR	kg	CC		(lb ft)		(mph)
912	1965 to '69	950	1582	90	86	11.6	115
912E	1975	1132	1971	90	98	13.0	110

#### 914 (1970 - 1976)

914 - Wheelbase (mm): 2459 - Length/Width (mm): 4050/1650 Significant developments: 1.7litre VW four-cylinder and de-tuned 911T 2.0-litre six-cylinder engines offered, MacPherson front and rear trailing link suspension, disc brakes all-round, five-speed gearbox and low-spec interior. 1972 -914-6 dropped due to poor sales. 1973 – 2.0-litre engine becomes an option. 1974 – Bore increase raises displacement to 1795cc

MODEL	MODEL YEAR	WEIGHT kg	ENGINE cc	HP	TORQUE (lb ft)	0-62	TOP SPEED (mph)
914 1.7	1970 to '73	970	1679	76	96	13	108
914 1.8	1974 to '76	970	1795	72	99	12	110
914 2.0	1973 to '76	970	1971	95	105	10.5	115
914/6	1970 to '72	940	1991	110	115	8.2	119

#### 924(1977 - 1988)

924 Wheelbase (mm): 2400; Length/Width (mm): 4213/1676; Track front/rear (mm) 1418/1372; Significant developments: Four-cylinder engine, four-speed transaxle gearbox, front MacPherson struts and rear semi-trailing arm suspension, four-stud 5.5x14-inch steel wheels and floating callipers. VW/Audi three-speed auto assembly but with ratios specific to the 924; 1977: Getrag five-speed dog-leg gearbox optional. Rubbing strips added. Martini 924 SE launched; 1978: Bodyshell now hotdipped zinc-coated. Oval tailpipe introduced; 1979: Separate air blowers improve ventilation; 1980: Five-speed Audi-derived gearbox introduced. Fuel tank capacity raised to 66-litres, second fuel pump fitted. Le Mans SE model offered; 1981: Carrera GT introduced. Kurzhals fuel pump introduced. 50th Jubilee SE model offered; 1982: Carrera GTS introduced. Limited-slip diff an option. Torque converter uprated on auto 'box. Ventilation system upgraded. 911 three-spoke steering wheel now standard; 1983: Turbo's spoiler becomes standard. Front anti-roll bar uprated to 21mm; 1984: 924 gets 944 tilt-slide roof mechanism; 1985: 924 replaced by 924S; 1986: 924S arrives in UK. 2.5-litre engine shared with 944 (as are gearbox, brakes and suspension) but de-tuned; 1987: Rear axle strengthened; 1988: 924 gets 944 engines. Power steering standard. Le Mans SE launched.

MODEL	MODEL	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	YEAR	kg	CC		(lb ft)		(mph)
924	1976 to '78	1080	1984	125	122	9.9	125
924	1979 to '85	1130	1984	125	122	9.9	125
924 Turbo	1979 to '81	1180	1984	170	181	7.8	140
924 Turbo	1982 to '84	1180	1984	177	185	7.7	140
Carrera GT	1981	1180	1984	210	203	6.9	150
Carrera GTS	1982	1121	1984	245	247	6.2	155
924S	1986 to '87	1190	2479	150	144	8.5	134
924S	1988	1195	2479	160	158	8.2	137

#### 928 (1978 – 1995)

928 Wheelbase (mm): 2500; Length/Width (mm): 4524/1835; Track front/rear (mm): 1551mm –1552/1530 –1529mm. Significant developments: 1978: 90° V8, five-speed, rear-wheel drive, independent A arms at front, trailing arms at rear, discs all-round, automatic available, luxury interior 1983: Regular 928 and 'S' models replaced with by 928 S2 model; 1987: S4 introduced with 5.0-litre V8 and 316hp; 1989: 928GT loses 44 kilos and gains 14hp. 0-60mph drops below 6.0 seconds; 1993: Final 928 GTS sees V8's capacity grow to 5.4-litres and 350hp.

MODEL	MODEL	WEIGHT	ENGINE	Нр	TORQUE	0-62	TOP SPEED
	YEAR	kg	CC		(lb ft)	0-60*	(mph)
928	1978 to '82	1490	4474	240	268	7.5*	142
928 S	1980 to '82	1530	4664	300	284	6.8	146
928 S2	1983 to '86	1589	4664	310	295	6.5*	155
928 S4	1987 to '92	1600	4957	316	317	6.0	165
928 GT	1989 to '91	1566	4957	330	317	5.6	165
928 GTS	1992 to '95	1600	5397	350	362	5.2	169

#### 944(1983 - 1991)

944 Wheelbase (mm): 2400, Length/Width (mm): 4213/1735. Track front/rear (mm): 1472/1451; Significant developments: Body based on the 924 Turbo, as was suspension, but used 2497cc engine. Brakes from the 924 Carrera GT; 1985: New dash, power steering becomes standard. RHD models have left parking wipers. Transmission casing revised. Cast alloy lower wishbones and semitrailing rear arms standard; 1986: Turbo launched with 2.5-litre engine, gas-filled shocks, anti-roll bars and four-pot brakes. Power steering standard, redesigned interior; 1987: LSD revised, ABS, driver and passenger airbags optional. 944 S 16-valve used gearbox and driveshafts from Turbo; 1988: Turbo SE offered with uprated engine, 7- and 9x16-inch alloys. 944's engine capacity increased to 2.7-litres with larger bore, new block. Celebration SE offered; 1989: 944 gets ABS as standard, discontinued at end of model year. Turbo gets Turbo S engine and new rear spoiler. S2



## SPECIALIST CARS





356 Speedster 2.7 RS 2.8 RS 3.0 RS 3.2 Speedster 959 964 RS 964 Turbo 964 Cup Car 964 Speedster 993 Carrera 2 993 Carrera 4 993 Carrera 5 993 Carrera 4S 993 Turbo 993 GT2 993 GT2 Evo 993 GT2 Evo 993 RS 993 Cup Car GT1 996 GT3 996 GT3 RS 996 Cup Car 996 RSR 996 GT3R 997 Cup Car 997 GT3 997 GT3 RS Carrera GT Le Mans cars

#### Any other interesting or rare Porsches RHD OR LHD

Telephone: 0844 7000 997 • 0844 7000 993 • 07794 911 911 (after hours) Fax: 0844 7000 959Visit our award winning site – www.specialistcarsltd.co.uk22 York Road Business Park, Malton Y017 6AXPart of Specialist Car Group of companies

#### pure data



928: 1978 — 1995 Two-door, two+two Coupé, front-engined, water-cooled V8. Built to succeed the 911, 928 went head-to-head with Jaguar's XJS and Mercedes' SL. V8 engine offered stonking performance and grew to a mighty 5.4-litres and a heady 360hp before stepping aside to allow the 911 to continue its success story. Auto 'box most popular choice, although a manual is the one to go for, and both choices offer intergalactic cruising ability. Dynamically as sharp as any Porsche, the 928's popularity is not without foundation.



#### 944: 1983 - 1991

944: 1983 – 1991 Two-door, two+two Coupé and Convertible, front-engined, water-cooled. NA and turbocharged. The 944 was an unprecedented success, breaking all sales records and keeping Porsche afloat during the 1980s. The 924's body and turbo suspension formed the basis, but the 944 felt better. Turbo models offer good combination of performance and ability, although the last of the line 16-valve S2 models are probably the better option. If your budget doesn't stretch that far a good 2.7 will do. Cabriolet had sleek looks with Coupé's performance, though loss of rigidity takes shine off the driving experience. Considered to be the perfect introduction to Porsche ownership.



#### 959: 1988

YOY. 1900 Two-door, two+two Coupé, flat-six, twin-turbocharged water/air-cooled flat-six. 197mph, 4WD, supercar. Based (lightly) around the 911, the 959 was Porsche's homologation special for Group B rallying. A technical *tour de force* for its time, the 959 boasted all-wheel drive with active torque split-drive, selectable traction settings (dry, wet and snow conditions), electronically-adjustable ride height and damper control, water-cooled cylinder heads and multi-stage turbocharging, and a 911 evolved composite body providing 'zero-lift'. All 283 959s built cost Porsche more than double the price the customer was as asked to pay than double the price the customer was as asked to pay



968: 1992 – 1995 Two-door, two+two Coupé and Cabriolet, front-engined, water-cooled. Porsche's last attempt at a front-engined Coupé resulted in its best effort to date. What the 944 derived 3.0-litre four-cylinder engine lacked in character, its chassis – especially in Club Sport spec – soon made up for. Regular car not as sharp as bare-to-the-bone Club Sport or semi-stripped Sport, but all offer one of the best front-engined/rear-drive experiences. Convertible lacks dynamics and looks a little frumpy, while limited edition Turbo S offer 911 levels of performance. Comparatively cheap to buy and run, 968 is one the safest Porsche ownership experiences.

production begins in Jan 1989, Cab in July; 1990: S2 Cabrio launched (70kg heavier than Coupé); 1991: Turbo Cab launched, airbags standard on European Turbo models.

MODEL	MODEL YEAR	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62	TOP SPEED (mph)
944	1982 to '87	1180	2497	163	151	8.4	131
944	1988 to '89	1260	2681	165	166	8.4	136
944 S	1987 to '88	1280	2497	190	170	7.9	142
944 S2	1989 to '91	1310	2990	211	207	6.9	149
944 Turbo	1985 to '88	1350	2497	220	243	6.3	152
944 Turbo	1989 to '91	1350	2497	250	258	5.9	162
944 Turbo S	1988	1350	2497	250	258	5.7	162

#### 959 (1988)

959 - Wheelbase (mm): 2272 - Length/Width (mm): 4260/1840 - Significant developments: Air-cooled six-cylinder engine, liquid-cooled heads, four-valves per cylinder, twin turbocharged. Allwheel drive, six-speed gearbox, active split-driver, double wishbone suspension front and rear with adjustable ride height. Aluminium and composite body panels, four shocks per 17-inch wheel, 322 and 308mm discs front/rear. Adjustable ride height and dampers. Μ

MODEL	MODEL	WEIGHT	ENGINE	Hp	TORQUE	0-62	TOP SPEED
	YEAR	kg	CC		(lb ft)		(mph)
959	1988	1451	2847	450	370	3.7	197

#### 968(1992 - 1995)

**968 –** Wheelbase (mm): 2400, Length/Width (mm): 4320/1735, Track front/rear (mm): 1477/1451 (1457/1445 with 17" wheels)- Significant developments: 3.0-litre four-cylinder S2derived engine, S2 suspension, four-pot fixed callipers, ABS and 7- and 8x16-inch alloys; 1993: Lower spec and stripped down Club Sport launched with 7.5x17-inch alloys (front) and 9x17-inch (rear), no driver's airbag and all 'unnecessary' equipment (electric windows, sunroof etc) removed. Turbo S launched with 8-valve Turbo head and 305hp. Similar spec to CS; 1994: 968 Sport introduced with same chassis tweaks as Club Sport but with a number of creature comforts (and weight) reinstated. Standard 968 dropped from line-up, Sport and Club Sport continue for further 12 months

MODEL	MODEL YEAR	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62	TOP SPEED (mph)
968	1992 - 1994	1370	2990	240	225	6.5	156
968 Sport	1994 - 1995	1400	2990	240	225	6.5	156
968 Club Sport	1993 –1995	1320	2990	240	225	6.3	160
968 Turbo S	1993 -1994	1300	2990	305	369	5.0	175

Boxster 986 (1997 - 2004); 987 (2005 - 2009;

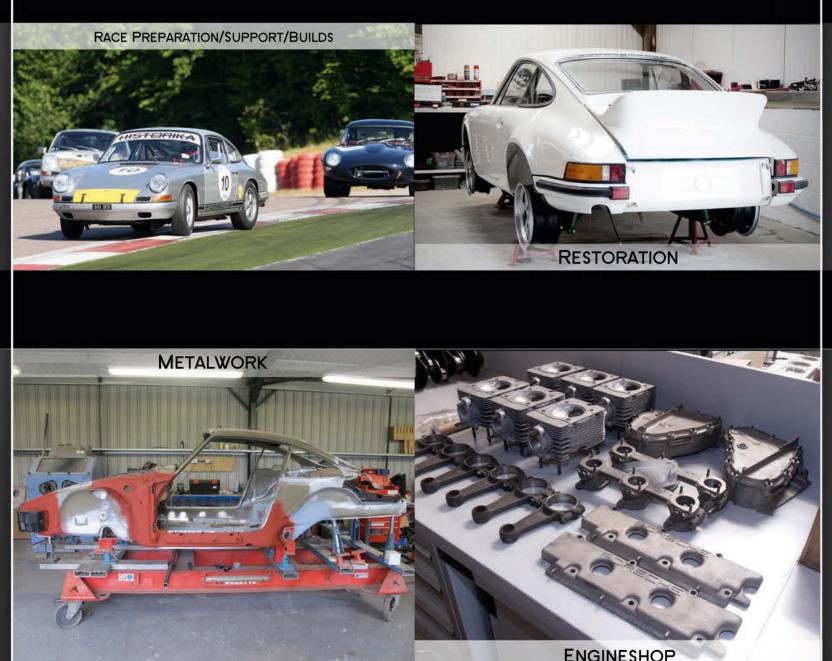
#### 2009 - 2013); 981 (2013 - )

BOXSTER – Wheelbase (mm): 2400, Length/Width (mm): 4133/1740 Track front/rear (mm): 1465/1528 ('96-'03), 1455/1514 (03-04) - Significant developments: Introduced in 1997 with 2.5 'boxer' engine, five-speed manual transmission, four-pot callipers front and rear, ABS, dual and side airbags; **1999:** Boxster S launched with 3.2-litre version of boxer engine and six-speed gearbox. White dials, titanium-trimmed windows and twin-centre exit exhaust pipes and larger 17-inch alloy wheels only exterior change to distinguish 'S' from standard model. Entry-level Boxster's engine capacity raised from 2.5- to 2.7-litres. resulting in healthy power hike to 220hp. Both models available with five-speed Tiptronic gearbox; 2003: Boxster's first face-lift. Both 2.7 and 3.2S models gain extra 8hp, raising power to 228hp and 252 respectively. S's torque also up by 3lb ft. Front and rear bumpers are new, and the air intakes are improved for both aerodynamics and cooling. New retractable rear spoiler also fitted. Clear indicators, upgraded interiors (cup holders), sportier exhaust note and lighter alloy wheels help differentiate the new from the old.

MODEL YEAR	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62	TOP SPEED (mph)
1997 to '99	1260	2480	205	180	7.0	155
1999 to '02	1260	2687	220	192	6.6	156
1999 to '02	1295	3197	252	225	5.9	161
2003 to '04	1275	2687	228	192	6.4	157
2003 to '04	1295	3179	260	228	5.7	164
	YEAR 1997 to '99 1999 to '02 1999 to '02 2003 to '04 2003 to '04	YEAR         kg           1997 to '99         1260           1999 to '02         1260           1999 to '02         1295           2003 to '04         1275           2003 to '04         1295	YEAR         kg         cc           1997 to '99         1260         2480           1999 to '02         1260         2687           1999 to '02         1295         3197           2003 to '04         1275         2687           2003 to '04         1295         3179	YEAR         kg         cc           1997 to '99         1260         2480         205           1999 to '02         1260         2687         220           1999 to '02         1295         3197         252           2003 to '04         1275         2687         228           2003 to '04         1295         3179         260	YEAR         kg         cc         (lb ft)           1997 to '99         1260         2480         205         180           1999 to '02         1260         2687         220         192           1999 to '02         1295         3197         252         225           2003 to '04         1275         2687         228         192           2003 to '04         1295         3179         260         228	YEAR         kg         cc         (lb ft)           1997 to '99         1260         2480         205         180         7.0           1999 to '02         1260         2687         220         192         6.6           1999 to '02         1295         3197         252         225         5.9           2003 to '04         1275         2687         228         192         6.4

BOXSTER 987 (2005MY -) Wheelbase (mm): 2415, Length/Width (mm): 4315/1780. Track front/rear (mm): 1490/1534 (2.7), 1486/1528 (3.2S) - Significant developments: 2005: 2.7 and S launched with subtly revamped exterior and new interior. 2.7 gains 12hp over old model, while 3.2-litre ups power by 20hp. Torque is also increased in both cars. PCCB, PASM and Sport Chrono pack are optional extras, variable ratio steering rack standard; 2006: 2007 Model Year – VarioCam Plus engines from the Cayman and Cayman S replace existing engines; power up to 245hp and 295hp respectively, revised Tiptronic S software; 2009: 2009 Model Year – All-new flat-six engines: 255hp 2.9-litre is new entry model, 310hp 3.4-litre motor with direct-fuel injection for the S. Sixspeed manual gearbox standard, seven-speed PDK optional. Limited-slip differential, touchscreen sat-nav and Bluetooth phone are all optional extras. Both models get new front and rear bumpers. 2010: The lightest production Porsche money can buy goes on-sale in the form of the Boxster Spyder. Electric folding roof is replaced with a Lotus Elise style canvas rag, there's a new engine cover, aluminium doors and front luggage compartment lid and the radio, sat-nav and air-con have all been ditched. The standard seats are hip hugging sport bucket items and the doorcards and door pulls are inspired by the 911 GT3 RS. There is even a set of lighter alloy wheels and the ECU map from the Cayman S to extract a further 10hp from the 3.4-litre motor. Six-speed manual is standard, PDK optional with Sport Chrono Plus and Launch Control Porsche claim a 4.8-second 0-62mph time.





At Historika we Pride ourselves on the Total Passion all our staff have for all things Porsche. It is this Enthusiasm & Knowledge that helps us to go that extra mile and it shows through on our completed Projects if it be just an Engine Rebuild, a Sympathetic Recommisioning or one of our State of the Art Race cars.

Visit www.historika.com for stock, parts and restoration

f Facebook

Mobile: 07836 384 999 Mobile: 07717 212 911 Email: info@historika.com



#### pure data



#### BOXSTER (986): 1997 – 2004: BOXSTER (987): 2005 – 2012

BOASTER (980): 1997 – 2004; BOASTER (987): 2005 – 2012
Wordor, mid-engined, six-cylinder convertible. The saviour of Porsche after the recession-hit '90s, the Boxster offered true entry-level Porsche ownership. 911-esque looks drew criticism form press (and 911 owners!), but sublime chassis and instant responses more than made up for this. Early straight-line performance worries of original cars now totally forgotten form press (and 911 owners!), but sublime chassis and instant responses more than made up for this. Early straight-line performance worries of original cars now totally forgotten for the only Porsche you'll ever need. Superb chassis dual to the only Porsche you'll ever need. Superb chassis dual stop are to for some than current 911s. Image not baster arrived. Both the 2.7 and 3.2 S feature slightly inproved straight-line performance and a new exterior, but are al step forward is in cabin quality, which now mimics on the old Boxster still at the top of the roadster pack, boxter arrived. Both the 2.7 and 3.2 S feature slightly inproved straight-line performance and a new exterior, but are also provides.
With the old Boxster still at the top of the roadster pack, boxter arrived and quality.
Dische has achieved the impossible and made an almost perfect care even greater. S receives Cayman S's 3.4 engine, are top solve.
Dia with the infortion of the lightest Porsche road carr boxter Spyder. Weighing 80k less than the Boxster S on which it is based if's been on a exterme diet. The elighter. The Boxster was already a dynamic masterpiece, but the Spyder takes things to the next level. Replacing the ingingter. The Boxster was already a dynamic masterpiece but the Spyder takes things to the next level. Replacing the original Boxster was never going to be an easy task, but in the 381 it appears Porsche managed to do just that.



BOXSTER 981: 2012 – Two-door, two-seat, mid-engined roadster. 2.7 or 3.4-litre water-cooled flat-six, rear-wheel drive, six-speed manual gearbox fitted as standard, seven-speed PDK double-clutch gearbox available as an option. How do you improve on perfection? In the Boxster's case we're not sure how but we're sure glad they had a go. What, on paper at least, looks like a collection of individual improvements and upgrades amount to a finished product that is one of Porsche's very best road cars. The Boxster has always been inherently right and in the 981 Porsche improved on its mid-engined dynamics further stifl allowing you to maximise the performance on offer honed and aggressive, has a far greater quality interior and now comes equipped as standard with those little bits of kit tat should have always been so, makes for one of the best ports car packages you can buy. The 2.7 needs enthusiasm to extract the most from it and if it was our money we'd go for a 3.4S straight-out-the-box with only a slippy diff the essential extra to take full advantage of the car's sublime chassis.

MODEL	MODEL YEAR	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62 0-60*	TOP SPEED (mph)
Boxster 2.7	2005 to '07	1295	2687	240	200	6.2	160
Boxster 3.2S	2005 to '07	1345	3179	280	237	5.5	168
Boxster 2.7	2007 to '09	1295	2687	245	201	6.1	160
Boxster 3.4S	2007 to '09	1345	3386	295	251	5.4	169
Boxster 2.9	2009 to '12	1335	2893	255	214	5.9	163
Boxster 3.4S	2009 to '12	1355	3436	310	265	5.3	170
Boxster Spyder	2010 to '12	1275	3436	320	273	5.1	166

BOXSTER 981 (2012MY -) Wheelbase (mm): 2475, Length/Width (mm): 4374/1801. Track front/rear (mm): 1526/1536 (2.7), 1526/1540 (3.4S) - Significant developments: 2012: Just like the 911 the Boxster came in for a major overhaul in 2012, its first since the original was launched in 1996. A longer wheelbase, lighter, wider track and cleaner, more efficient engines the Boxster had grown into a true thoroughbred. The range now started with a 265hp 2.7-litre engined Boxster, fitted with a six-speed manual as standard or available with the optional seven-speed PDK (which adds 30kg to the kerbweight). The Boxster came with the same transmission options but was powered by a 315hp 3.4-litre engine. PASM is optional on both models, so too are dynamic engine mounts and Porsche Torque Vectoring which also includes a mechanical locking differential. Electromechanical power steering is standard. Wheels sizes range from 18 through to 20s, and the brakes are more powerful, the S borrowing its discs and callipers from the 991 Carrera. An electric parking brake is now standard, PCB still optional. The 981 wears a completely new body and new roof and the interior takes its styling cues from the 991.

MODEL	MODEL	WEIGHT kg	ENGINE cc	Нр	TORQUE (lb ft)	0-62	TOP SPEED (mph)
Boxster 2.7	2012 -	1310	2706	265	206	5.8	164
Boxster 3.4S	2012 -	1320	3436	315	265	5.1	173

#### Cayman 987 (2005 - 2009; 2009 - 2013),

#### 981 (2013 -

Cayman S – Wheelbase (mm): 2415, Length/Width (mm): 4315/1801, Track front/rear (mm): 1490/1534 (Cayman), 1486/1528 (Cayman S); 2006 – 3.4-litre water-cooled flat-six is enlarged Boxster S engine with 997 Carrera 2 internals producing 15hp and 14lb ft of torque over the midengined roadster. Six-speed manual gearbox is standard with first and second ratios shorter than those found in the Boxster S. Tiptronic S optional, variable rate steering also carried over from Boxster and Carrera models. Boxster S brakes standard fitment, but PCCB optional as is Porsche Active Suspension Management (PASM) and Sports Chrono pack. Body is 100 per cent stiffer than Boxster S, and is as stiff as a 997 Carrera 2 Coupé, Porsche Stability Management (PSM) comes as standard; 2006: 2007 Model Year – Entry-level Porsche coupé receives 2.7-litre flat-six engine fitted with VarioCam Plus technology. Five-speed manual gearbox standard, six-speed manual and fivespeed Tiptronic S available as option. Steel springs and gas dampers standard, PASM optional; 2009: 2009 Model Year – All-new flat-six engines with 265hp 2.9 replacing 2.7 engine, with a new 320hp 3.4-litre motor for the S, which also comes with direct-fuel injection as standard. Six-speed manual gearbox standard with seven-speed double clutch PDK an option. Optional limited-slip differential turns it into a genuine 911 alternative. Mild redesign includes new bumpers and head and tail-lamps. PCM3 is available with touchscreen sat-nav and Bluetooth phone capability. 2011: 2011 Model Year – Cayman R introduced; lighter more powerful version of Cayman S with 330hp and 1295kg kerb weight. Aluminium doors and front bonnet, 19-inch wheels and an Alcantara sport interior. First R model in 43 years. Series production car.

MODEL	MODEL YEAR	WEIGHT (kg)	ENGINE (cc)	BHP	TORQUE (lb ft)	0-62	MAX MPH
Cayman S	2005 – '09	1340	3386	295	251	5.4	171
Cayman 2.7	2007 – '09	1300	2687	245	201	6.1	162
Cayman 2.9	2009 - '12	1330	2893	265	221	5.8	164
Cayman S	2009 - '12	1350	3436	320	273	4.9	171
Cayman R	2011 –'12	1295	3436	330	273	5.0*	175
*manufacturor's	daim						

<sup>e</sup>manufacturer's claim

Cayman 981 – Wheelbase (mm): 2475, Length/Width (mm): 4380/1801, Track front/rear (mm): 1526/1536 (Cayman), 1526/1540 (Cayman S); 2013 – 275hp, 2.7-litre and 325hp 3.4-litre DFI flat-six engines. Six-speed manual gearbox standard, seven-speed PDK optional (adds 30kg). New, lighter body and longer wheelbase; electromechanical power steering standard. PASM, Porsche Torque Vectoring and mechanical locking diff all optional as is the Sport Chrono pack and launch control and a sports exhaust. 18-20-inch wheels available, brakes carried over from the Boxster, including 991 Carrera stoppers for the Cayman S, PCCB optional. New interior as per 981 Boxster making the Cayman a serious alternative to a 911. As with all modern Porsches it is very spec sensitive and in our experience less always amounts to more.

MODEL	MODEL YEAR	WEIGHT (kg)	ENGINE (cc)	BHP	TORQUE (lb ft)	0-62*	MAX MPH
Cayman 2.7	2013 -	1310	2706	275	213	5.7	165
Cayman 3.4S	2013 -	1320	3436	325	272	5.0	175
*manufacturer's d	claim						

Cayenne (2003 – 2007; 2007 – 2010; 2010-)

Cayenne – Wheelbase (mm): 2855, length/width (mm): 4782 (4786 Turbo)/1928, track front/rear (mm): 1655 - 1641/1670 - 1656 (17-20-inch wheels); Introduced in 2003 with choice of normallyaspirated or twin-turbocharged 4.5-litre V8. Six-speed manual gearbox for five- and six-speed Tiptronic S for Turbo (optional on S). Porsche Active Suspension Management (PASM), adjustable ride height, electronic damper control, differential locks, six-pot callipers, 18-inch alloys standard, 19and 20-inch optional. Porsche Traction Management, PSM, ABS, ABD and ASR all standard; 2004: Entry-level Cayenne is the first Porsche to sport V6 power. 24-valve engine produces 250hp and 228lb ft, transmitted through a six-speed manual transmission. Steel springs standard, PASM and air

call now 0121 55 77 911

www.ramusporscha.com

# independent centre for RAMUS PORSCHE

Porsche Advanced Fault Diagnosis High Definition Digital Imaging Wheels Alignment

Alloy Wheels and Tyre Fitting Suspension Package Upgrades

Performance Exhaust Upgrades Brake Upgrades inc. Ceramics

Full Body Repair Shop Chassis Alignment Centre

## All Porsche & OEM Parts Supplied 1000's Genuine Parts already in stock

911 TT



Fixed Price Menu Servicing for all Models PERFORMANCE STYLING SERVICE PARTS



Two-door, mid-engined, six-cylinder coupé. Its near perfect weight distribution and mid-engined dynamic stability make the Cayman one of the finest drivers' cars ever made. This is something Porsche is acutely aware of, hence the model is not available with a limited-slip differential and, until further notice, we will only see smaller-engined variants of the Cayman to avoid any deflection for the company's headline sports car.

At the end of 2010 Porsche announced the Cayman R at the LA Auto Show. Following a similar development programme as the Boxster Spyder, the Cayman R is a lighter, more powerful version of the Cayman S. Power is up 10hp to 330hp, and the kerb weight drops 55kg to 1295kg. Aluminium for the bonnet and doors and a stripped interior and a smaller fuel tank are all contributing factors to the weight loss.



#### CAYMAN 981: 2013

CAYVAN 981: 2013 Two-door, mid-engined, six-cylinder coupé. Like its Boxster sibling the Cayman underwent a thorough overhaul in 2012, which must have been a thankless task for the engineers as the outgoing 987 was deemed one of the best sports cars money could buy. Once again, though, Porsche's engineers came up trumps and produced a truly sensational car. Still sharing much with the Boxster – wheelbase, enginee, gearbox, suspension and allowed to show us just what it is capable of. Alert, precise, involving and dynamically astute, the 981 Cayman is one of the purest drivers cars and greatest sports cars to have come out of Stuttgart. It really is that good. The 2.7-litre car needs working hard to maximise its performance, but the 3.4S is honey sweet providing the perfect blend of performance with precision to make it one of the quickest cross-country cars you can buy. The manual is still the slick six-speed car carried over from the 987 and is still the default option. Even the electric power steering doesn't seem to effect the Cayman like it does the Boxster and Carrera models. Porsche perfection? Possibly.



#### CAYENNE: 2003 - 2010; 2010 – TO DATE

Five-door, front-engined SUV. A Porsche SUV? Yes, Stuttgart's finest leaps off-road with the V8-engined Cayenne. Mid-level S model is the best all-rounder, the twin-turbocharged Turbo models are plain silly. Six-speed manual and six-speed Tiptronic S gearboxes available. Sophisticated air suspension is standard fitment on Turbo models, optional on S and V6, and allows driver to control ride height and damper settings. Off-road ability is impressive, but not as impressive as how the Cayenne manages to hide its near

suspension optional. V6 is also fitted with smaller brakes; **2006:** 2006 Model Year – Cayenne Turbo S gains an extra 72hp, 0-62mph in 5.2 seconds, 167mph and 2355 kilos; 2007: 2007 Model Year -Second generation Cayenne: V6, V8 S and Turbo all get direct fuel injection engines to improve performance, economy and emissions, while face-lift improves the looks. Porsche Dynamic Chassis Control active anti-roll bars available on cars with PASM; 2007: 2008 Model Year - GTS model introduced. Combines Turbo looks with V8 S running gear. Shorter ratios in both manual and Tiptronic gearbox fitted. Turbo brakes standard. New Turbo S model announced. Power up to 550hp, torque to 553lb ft, 174mph and a 0-60mph in 4.3 seconds; 2009: 2009 Model Year - Porsche does the dirty and introduces a Cavenne diesel. Three-litre Audi sourced V6 is available in entry-level trim only but comes with six-speed Tiptronic S as standard. 100-litre fuel tank capacity provides over 600 mile range and 30mpg. 2010 Cayenne - Wheelbase (mm): 2895, length/width (mm): 4846/1939, track front/rear: 1655 (1643 Turbo)/1669 (1657 Turbo); Introduced in 2010 this is the first all-new Cayenne since the original. Bigger in every dimension the new Cayenne's design does an amazing job of disquising the car's larger dimensions and its natural bulk. Engine range is carried over from the previous model but now includes Porsche's very first Hybrid powered vehicle with the Hybrid Drive model which sees a 3.0 supercharged V6 working in parallel with a 47hp electric motor. All but the entry level Cayenne V6 petrol are equipped with a new eight-speed Tiptronic automatic gearbox (the V6 gets a six-speed manual as standard). Porsche has also done away with the original Cayenne's heavy duty four-wheel drive system, replacing the low ratio gearbox with the latest development of Porsche Traction Management with the enhanced electronics of the new Tiptronic S transmission. Diesel and Hybrid models get permanent all-wheel drive, while the others get an active system. PASM, PDCC and PCCB are all optional extra. All Cayenne's also get a new interior based on the design first seen in the Panamera and provides a higher level of quality and refinement that was missing in the outgoing model. 2012: The line-up grows with the introduction of the GTS. Fitted with the same 4.8-litre V8 as the Cayenne S, the GTS engine receives a host of modifications and upgrade that push power to 420hp and torque to 380lb (up 20hp and 11lb ft respectively). Eight-speed Tiptronic S is the only gearbox fitted and the chassis combines steel springs with PASM. Air suspension is an option. The GTS rides 24mm lower than an S, has a wider front and rear track and 20-inch wheels are standard. Front bumper and lights are from the Cayenne Turbo, there is a new lower lip spoiler, side skirts and a bi-plane rear wing. The windows are framed with a black gloss trim. Leather and Alcantara trims the interior. 2013: Two new Cayenne's for the 2013 model year: the S Diesel and the Turbo S. The latter is a bell-and whistles Turbo with the boost wound up and the power increased 50hp to 550hp. Two-tone leather options are standard as is a host of standard equipment that is optional on the Turbo. The S Diesel takes a twin-turbo charged 4.8-litre Audi V8 diesel and creates the best Cayenne we've sampled. The spec is the same as the petrol engined S, but with enough torgue to tear-up the book of torgue cliches.

MODEL	MODEL YEAR	WEIGHT (kg)	'	BHP	TORQUE (lb ft)	0-62/60*	MAX MPH
Cayenne S	2003 to '06	2245	4511	340	310	7.2	150
Cayenne Turbo	2003 to '06	2355	4511	450	457	5.6	165
Cayenne	2004 to '06	2160	3189	250	228	9.1	133
Cayenne Turbo S	2006 to '07	2355	4511	521	531	5.2	167
Cayenne	2007 to '10	2160	3598	290	283	8.1	141
Cayenne S	2007 to '10	2225	4806	385	369	6.5*	156
Cayenne Turbo	2007 to '10	2355	4806	500	516	5.0*	171
Cayenne GTS	2007 to '10	2225	4806	405	369	6.1	157
Cayenne Turbo S	2008 to '10	2355	4806	550	553	4.0	174
Cayenne Diesel	2009 to '10	2240	2967	240	405	8.3	133
Cayenne	2010 -	1995	3598	300	295	7.5	143
Cayenne Diesel	2010 -	2100	2967	240	405	7.8	135
Cayenne S	2010 -	2065	4806	400	369	5.9	160
Cayenne S Hybrid	2010 -	2240	2995	380 <sup>1</sup>	427 <sup>1</sup>	6.5	150
Cayenne Turbo	2010 -	2170	4806	500	516	4.7	172
Cayenne GTS	2012 -	2085	4806	420	379	5.7	162
Cayenne Turbo S	2013 -	2215	4806	550	553	4.5	175
Cayenne S Diesel	2013 -	2195	4134	382	627	5.7	156
1 when combined with electric motor	333bhp and 324lb ft witho	ut * 0-60 mph time					

#### Porsche Carrera GT (2003 – 2006)

Carrera GT – Wheelbase (mm): 2730, Length/Width (mm): 4613/1921, Track front/rear (mm): 1612/1587 Significant developments: All alloy, 40-valve V10 with titanium conrods, nickel/silicone liners, dry sump lubrication and VarioCam, revving to 8400rpm. Rear-wheel drive with six-speed manual gearbox. Carbon fibre monocoque with steel crash structures and carbon fibre bodywork. Double wishbone pushrod axles from and rear, 19-inch magnesium alloy wheels, 380mm ceramic composite discs front and rear with six-pot callipers. Built at Leipzig plant in Berlin, in left-hand drive only, over 1260 examples were built between November 2003 and May 2006.

MODEL	MODEL YEAR	WEIGHT (kg)	) ENGINE (cc)	BHP	TORQUE (lb ft)	0-62	MAX MPH
Carrera GT	2003 to '06	1380	5733	612	435	3.9	205

#### Panamera: 2009 – 2013: 2014 – To Date

Panamera S, 4S, Turbo – Wheelbase (mm): 2920, Length/Width/Height (mm): 4970/1931/1418, Track front/rear (mm): 1658/1662 (1656/1646 Turbo); 2009 - 2010MY 400hp 4.8-litre watercooled eight-cylinder engine or 500hp 4.8-litre water-cooled twin-turbocharged eight-cylinder engine, both engines feature Direct Fuel Injection (DFI) and VarioCam Plus one-sided variable camshaft management with adjustable valve lift, both engines meet EuroV emissions; six-speed manual gearbox and rear-wheel drive for S model, seven-speed PDK optional; 4S and Turbo models feature electronically controlled four-wheel drive transmission with Porsche Traction Management and PDK fitted as standard along with Auto Stop-Start. Engines are adapted from Cayenne SUV, but PDK transmission is unique to Panamera and differs from the unit in the company's sports cars. Doublewishbone front suspension, multi-link at the rear with Porsche Active Suspension Management (PASM) standard on all models, self-levelling adaptive air-suspension standard on Turbo. Porsche



# 911virgin.com 01895 255222



Our stock of around 40 used cars including high quality photos of each vehicle. Updated several times daily. There are also tips on buying a Porsche which could save you money.

Selling a car



Things to consider if you are thinking about selling a car, in particular, scams and potential pitfalls to avoid. Five minutes spent reading this could save you from disaster.



Useful contacts - if you are looking for somewhere to get your car serviced, repaired or insured. There is even a section where you can read about our racing antics and general news.

#### Cars wanted for immediate outright purchase



Professional quality CCTV for self installation

www.cctv42.co.uk

2.5-ton bulk and drive like a well-sorted saloon car. The face-lifted Cayenne arrived in 2007 with DFI engines and improved looks. 2008 marked the arrival of the GTS which combined the Turbo's looks with the normally aspirated V8 engine of the S model hooked up to a gearbox packed with shorter ratios. It went on to be the most popular model in the range, along with the first Porsche diesel production car which arrived in 2009; quickly followed (in more ways than one) by the 550hp Turbo S. The all-new Cayenne arrived in 2010 with a new look and an improved interior design and is the first Porsche production car to offer Hybrid Drive. New eight-speed Tiptronic S gearbox and improved Porsche Traction Management replace heavy low-ratio transfer box. The new Cayenne is lighter, more efficient, better looking, equipped and built than its predecessor. 2013 saw the Cayenne range expand with a new petrol-engined V8 GTS model and an even more powerful Turbo S variant. The best of the bunch, however, was the new S Diesel. Using a twin-turbo-charged, 4.8-litre turbo diesel engine in some eyes it renders ever other Cayenne model redundant with its mix of fuel sipping economy and mighty power and torque – on paper it's as quick as the GTS, on the road it's a similar story too.



#### CARRERA GT: 2003 – 2006

Two-door, mid-engined, V10 Roadster. Still born Le Mans racer evolves into the greatest supercar every built. Carbon-fibre tub, 612hp V10, 205mph maximum and a birch wood gear knob. Perfection!



PANAMERA: 2009 – 2013
Five-door, front-engined, rear-and four-wheel drive saloon-foupé; normally aspirate, turbocharged and supercharged 6 and V8 petrol, diesel and hybrid engines, six-speed manual and seven-speed PDK transmission. The last new forsche to be launched while Dr. Wendelin Weideking was indig the company, the Panamera is Porsche's fourth model line and, according to the company, a car that reates a new class. Powered by either a normally aspirated 4.8-litre V8 or a twin-turbo charged version of the same engine, Panamera is available in rear-wheel drive 'S' guise with a six-speed manual gearbox, or an all-wheel drive 4'S or tubo (both only available with the 7-speed PDK gearbox, usc).
Sol-litre V6 engine added to the line-up in 2010 with rear and four-wheel drive options. Rear-drive model gets six-speed manual as standard, Panamera 4 the seven-speed PDK and PASM suspension. V6 offer all the luxury and comfort of the V8 models. Only a four-seater, the Panamera's interior is the most striking Porsche has designed for decades, and as you'd expect of such a car there is very little in terms of luxury or convenience that has been omitted from the specification or options list.
Thammera range is extended further with the cracking disele model in 2011, along with the S Hybrid and slightly bonkers Turbo S. The former two are rear-wheel drive only and come with the conventional eight-speed Tiptronic S garbox. In early 2012 the range is topped off with the GTS – a breathed on Panamera 4S with more power, a turbo look and sport inspired interior. It's no GT3 but it's a great way to hustle nearly two-toms.

Stability Management comes as standard featuring: ABS brakes; ASR anti-slip control; MSR engine drag force control; ABD automatic brake differential; Brake Assistant; and a pre-filling of the brake system, Porsche Dynamic Chassis Control (PDCC) and Porsche Ceramic Composite Brakes (PCCB) optional on all models. 18-inch wheels standard on S and 4S, 19-inch on Turbo; Variable rate steering standard, speed sensitive Servotronic steering optional. All models feature adaptive aerodynamics, with the S and 4S models utilising a two-way spoiler and the Turbo a four-way item. 4S and Turbo get 100-litre fuel tanks, the S has a 80-litre tank. Four individual seats for interior. Eight airbags fitted as standard; bi-xenon headlights standard across the range, adaptive light function for Turbo. Radar-based distance cruise control, four-zone air-conditioning, Porsche Entry & Drive (standard on Turbo) and Burmester High-End Sound system all feature on the options list. Sports Chrono Package Plus also optional and when combined with PDK offers Launch Control function. 2010 – 2010MY The first non-V8 engined Panamera arrives in the form of the 3.6-litre V6 petrol model. Panamera V6, is available a rear or four-wheel drive, the former available with either a sixspeed manual or optional seven-speed PDK, the later is PDK only. Engine produced 300hp and 295 Ib ft of torque. Standard specification is the same as a V8 engined S model, except for a tyre pressure monitoring system and a PASM suspension, which are optional. 2011 - 2012MY The Panamera many were waiting for (well, in Europe at least) arrived in time for the 2012 model year in the shape of the Panamera Diesel. The 3.0-litre V6 turbocharged engine is donated by Audi and produces 250hp and 405lb ft of torgue through an eight-speed Tiptronic S gearbox and with drive only to the rear wheels. The specification is on par with a V6 petrol engined Panamera with steel springs and gas dampers standard, PASM and air both optional. An 80 litre fuel tank is standard, providing a 745-mile range, the optional 100-litre tank providing 894-miles before refills. Along with the Diesel Porsche also added another fuel miser to the Panamera range in the quise of the S Hybrid. Following the path of the Cayenne S Hybrid, it's fitted with a 3.0-litre supercharged petrol V6 engine that produces 333hp and 324lb ft of torque, this is then connected to a 47hp, 221lb ft electric motor. Energy for the electric motor is storied in batteries fitted under the boot floor and these are charged via the engine and regenerative sources such as braking. Drive is to the rearwheels only and via the eight-speed Tiptronic S gearbox. Standard spec is someway between an S and a Turbo model with both PASM and air-suspension both standard equipment; 19-inch wheels are standard. Full electric range is 1.2-miles and the electric motors have a 46mph maximum speed. The anecdote to Porsche two fuel sipping, CO2 friendly Panameras came in the form of the Turbo S – a Panamera Turbo would up to 11. The pair of turbo-chargers get lighter vanes made from a mix of titanium and aluminium allowing for a 30 percent reduction in spool-up time and the ECU has been remapped. Peak power climbs 50hp to 550hp and torque to 553lb ft in standard trim, or 590lb ft in Sport Plus mode via the standard Sport Chrono Package. 20 inch wheels are standard and the front and rear wheels are half and one inch wider. PDCC (Porsche Dynamic Chassis Control) and PTV+ (Porsche Torque Vectoring plus) are standard as is a electronic locking differential. Side skirts and a painted rear spoiler are standard and Agate grey exterior paint is exclusive to the model. Inside 14-way adjustable seats are standard. 2012 – 2012MY Take a Panamera 4S, fit a Porsche Exclusive bodykit and allow the engineers time with its 4.8-litre V8 on a dyno and you get the GTS. Active air intakes, reprofiled camshafts and a revised ECU extract a further 30hp from the bent-eight and an additional 15lb ft of torque. Turbo brakes are standard, as is air suspension and PASM which is reprogrammed to be tauter. Porsche Sport Chrono Plus is also standard as is the Turbo's four-piece rear spoiler and the 19-inch alloy wheels. The chassis is 10mm lower and there 5mm spacers fitted to the rear axle. 18-way adjustable front seats and a sports steering with paddles are also standard. Four-wheel drive is the only configuration along with the seven-speed PDK.

MODEL	MODEL YEAR	WEIGHT (kg)	ENGINE (co	c) BHP	TORQUE (lb ft)	0-62	MAX MPH
Panamera	2010 - 2013	1730	3605	300	295	6.8	162
Panamera 4	2010 - 2013	1820	3605	300	295	6.1	159
Panamera S	2009 - 2013	1770	4806	400	369	5.0	175
Panamera 4S	2009 - 2013	1860	4806	400	369	4.4	175
Panamera Turbo	2009 - 2013	1970	4806	500	516*	3.5**	188
Panamera Diesel	2011 - 2013	1880	2967	250	405	6.8	150
Panamera GTS	2012 - 2013	1920	4806	430	383	4.5	178
Panamera S Hybrid	2012 – 2013	1980	2995	380	427	6.0	167
Panamera Turbo S	2012 - 2013	1995	4806	550	553	3.8	190
	a . al		- 1		1 44 1 1 1		

\* 567lb ft when in Sport Plus Mode when Sport Chrono Package Plus fitted. \*\* 0-60mph time 2013 – 2014MY The gen-2 Panamera gets a new front and rear bumper, new lights and side sills and a range of new engines. The interior is untouched. Out goes the 4.8-litre normally aspirated V8 for the S and 4S models and in comes a 3.0-litre biturbo V6 that's more powerful than the V8 it repalces. The big V8 stays for the GTS and the Turbo, and the 3.6-litre petrol V6 stil Iprops up the range along with the 3.0-litre turbo diesel. The big change is to the hybrid model. Now called the S E-Hybrid, it mates the 3.0-litre supercharged V6 with an electric motor that's twice as powerful and battery pack that can store five times the energy. And if that's not enough, the E-HYbrid is also a plug-in hyrbid which means you can charge the car while you're at work, asleep or being dragged around the shops. Other mechanical changes include the dropping of the six-speed manual - it's PDK for all the models bar the Diesel and S E-hybrid, which get the Cayenne's eight-speed Tiptronic.

MODEL	MODEL YEAR	WEIGHT (kg)	ENGINE (cc)	BHP	TORQUE (lb ft)	0-62	MAX MPH
Panamera Diesel	2013 -	1880	2967	250	405	6.8	151
Panamera	2013 -	1770	3605	310	295	6.3	160
Panamera 4	2013 -	1820	3605	300	295	6.1	159
Panamera S	2013 -	1810	2997	420	383	5.1	178
Panamera 4S	2013 -	1870	2997	420	383	4.8	177
Panamera S E-Hybrid	1 2013 -	2095	2995	416	435	5.5	167
Panamera GTS	2013 -	1925	4806	440	383	4.4	178
Panamera Turbo	2013 -	1970	4806	520	516	4.1	189
Panamera Turbo S	2013 -	1995	4806	570	553	3.8	192

# Brands Hatch Festival of Porsche

Porsche Club GB's National Event 2014

- Packed programme of races
- On track demos and parades
- Iconic machinery on display
- Club stands
- Family entertainment
- Children 12 & under FREE

# Brands Hatch Sunday 21 September

The world famous Brands Hatch race track will be firmly in the spotlight, as the Kent circuit hosts a Festival of Porsche and Porsche Club GB's 2014 National event on Sunday 21 September. Classic and contemporary models from the brand's history - from both road and race backgrounds - will be seen on and off the track!

#### SPECIAL PORSCHE OWNERS' DISCOUNT\*

MAIN EVENT DAY (Sunday) **£20 online** (save £5 off general advance)

Saturday – £7 online (save £1 off general advance)

Weekend – £25 online (save £5 off general advance)

Enter promo code: porscheowner \*discount only available online through the website













**918 SPYDER: 2014** – Two-door, mid-engined, petrol-electic plug-in hybrid. The supercar has evolved into the hypercar, one that combines the thoroughbred engine from an LMP2 race car with the pioneering engineering of electric motors and lightweight(ish) batteries. The 918 signals the beginning of a new dawn for Porsche, one that provides the company with a halo product on which to hang its Cayenne, Panamera, Macan and, potentially 911 hybrids from. To help the 918 along the way its launch coincides with Porsche's return to top flight sports car racing, including Le Mans, with an all-new LMP1 race car. A petrol-electric hybrid race car. The 918 has a lot to deliver, but on the eve of its launch it made an impressive debut with a sensational 6 minute 57 second lap of the Nürburgring Nordschleife.



#### MACAN 2014 -

MACAN 2014 –
Five-door, front engined, permanent four-wheel drive compact SUV, six-cylinder turbocharged petrol and diesel engines; seven-speed PDK transmission. Built to fullfill Porsche's ambitions to build 200,000 cars by 2018 the Macan is the company's answer to Land Rover's Evoque, BMW's X3 and Mercedes GLA in the premium compact SUV sector. Porsche forcasts to build 50,000 Macans a year and will add to the range with another diesel engine – a four-cylinder this time – a petrol-hybrid and a four-cylinder turbo. The former is available with either a twinturbocharged V6 petrol engine or single-turbo diesel V6. The former is available with either a twinturbocharged V6 petrol engine or single-turbo diesel V6. The Turbo is fitted with a 3.6-litre twin-turbocharged engine. A Turbo S and GTS trim-line is expected to join the line-up, along with a more basic trim level to sit below the S models; expect this to be offered with a four-cylinder shorter, both petrol and diesel.
Mitting below the Cayenne in Porsche's SUV line-up, the Macan is lighter by over 100kgs, 16cm shorter in overal length, eight centimetres lower in height and sits on a wheelbase eight centimetres shorter than the Cayennes. The Macan is usefully quicker than its big brother, too, with the petrol S model faster to 62mph than the quickest normally aspirated Cayenne, the GTS. The Macan Turbo's spinting prowess sits neatly between the Cayenne Turbo and Turbo S. The smaller SUV is also usefully more fuel efficient and cleaner than its big brother, too.
Porsche's decision to build the Macan is not just to piggy back into an established growing market, it is serious about its latest addition to the model range. How so? Rather than share production resources with other VW Group brands also building similar cars for the same market, the Macan will be built exclusivly at Porsche's Leipzig factory, which has also bed to the recruitement of 1000 new staff at the home of the Cayenne and Panamera. The Macan is here for the long term an

#### 918 Spyder (2014 –)

**918 Spyder** – Wheelbase (mm): 2730, Length/Width (mm): 4643/1940, Track front/rear (mm): 1664/1612 Significant developments: 2013 - 2014MY Where to start with the most technologically advanced car Porsche has ever made? The engine is a 4.6-litre V8 that traces its routes back to the 2007 LMP2 RS Spyder race car, this alone develops 608hp and runs through a seven-speed PDK gearbox with drive to the rear axle. Then there is a 286hp electric motor fitted to the front axle complete with its own transmission. The 918 can be driven by the petrol engine, the electric motor or a combinaitn of the two, which results in a maximum power output of 887hp and 944lb ft of torque (the V8 produces 676lb ft on its own). The V8 screams to 9150rpm and produces 132hp/litre. There are five driving modes: E-Power, Hybrid, Sport-Hybrid, Race-Hybrid and Hot Lap, each mode determines which power source is required. The chassis is a carbon-fibre monocoque with the body made from the same material and includea a two-piece Targa roof. PCCB brakes are standard, there are 20-inch wheels at the front, 21s at the rear with Michelin Pilot Sport Cup 2 tyres. Avaialble in two trim levels, Spyder and Weissach Package, the latter reduces the car's weight by 41kqs – the magnesium wheels account for a 14 kilo saving. Other weight saving measures include ceramic wheels bearings, titanium chassis bolts and brake pad supporting plates. Other upgrades include additional aero parts includeing aeroblades positioned behind the rear wheels, thinner paint and exposed carbon-fibre body parts. All this tech, lightweight construction and 887hp results in a very quick Porsche indeed: 0-62mph on 2.6 seconds, 0-124mph in 7.3 (7.2 if you order the Weissach pack), 0-186mph in 20.9 (19.9 with the full Weissach) and a maximum speed of 214mph. Then there is that lap time of the Nürburarina - 6 minutes 57 seconds.

MODEL	MODEL YEAR	WEIGHT (kg)	ENGINE (c	c) BHP	TORQUE (lb ft)	0-62	MAX MPH
918 Spyder	2014	1674	4593	608/286	676/944	2.6	214
918 Spyder Weissach	n 2014	1634	4593	608/286	676/944	2.6	214

#### Macan (2014 -)

Macan – Wheelbase (mm): 2807; Length/Width (mm): 4681 (Turbo 4699mm)/1923; Track front/rear (mm): 1655/1651; Weight: 1865kg (S), 1880kg (S Diesel), 1925kg (Turbo) Significant developments: 2013 – 2014MY Built at Leipzig, the Macan is Porsche's first attempt at a Compact SUV and shares much of its running gear with Audi's Q5 on which it is loosely based and slots in below the Cayenne in Porsche's SUV line-up. The two petrol V6 engines are donated by the VW Group, as is the 4-cylinder, turbocharged petrol engine, so to is the V6 diesel although we've seen this before as it's the same unit that is used in the Cayenne. Macan S gets 340hp three-litre bitutbo V6, 157mph top speed and 5.4-seconds 0-62mph time; Turbo is equipped with 400hp, 3.6-litre biturbo V6, reaches 165mph and cracks 0-62mph in 4.8 seconds. S Diesel fitted with 3.0-litre single turbo V6 diesel engine reaches a 142mph maximum and 0-62mph in 6.3 seconds. All Macans feature the latest Porsche Traction Management (PTM) four wheel drive running gear, and the drivetrain is essentially rear-wheel drive, sending the required torque load to the front axle when it's required, which is similar to how the 991 Carrera 4's PTM system works. Porsche's seven-speed PDK transmission is standard across the range – there is no manual option – and an 'Off-road mode' can be selcted from the cockpit at speeds of up to 80kmh, this shortens the gear ratios to aid traction. Auto Start/Stop is standard on all models. The S model is fitted with a 65-litre fuel tank, S Diesel a 60-litre tank and the Turbo a 75-litre one. Both S models are available to order with a optional 75litre tank. Depending on tyres fitted, the S returns between 31 - 32mpg on the combined cycle, the Turbo 30.7 – 31.7mpg and th S Diesel 44.8 – 46.3mpg. Emmissions for the three range from 150 – 157g/km for the S Diesel, 171 – 179g/km for the S and 176 – 184g/km for the Turbo. Steel springs and fixed rate dampers are standard on the S models, the Turbo comes with PASM as standard. All variants are avaialble with air-suspension with PASM at extra cost, providing an additional 40mm of ground clearance when driving off-road. A Sport button is fitted as standard – sharper throttle response, higher rev-limit, quicker PDK shift times – PTV Plus (Porsche Torque Vectoring Plus)is optional, as is Sport Chrono. S models fitted with 350mm front brake discs, the Turbo 360mm, rears are 330mm and 356mm respectively. Porsche Ceramic Composite Brakes were not offered at the time of the Macan's launch. All Macan models are fitted with different size tyres front-to-rear. the S models are fitted with 8x18s on the front axle with a 235/60R tyre and 9x18s on the rear with a 255/55R tyre; the Turbo has the same width wheel and tyre but a larger 19-inch diamter and runs a 55R and 50R profile front-to-rear. The narrower front tyres are to provide greater steering feel, the wider rear tyres for optimum grip. Six wheel designs measuring up to 21 inchs are available. All Macans are fitted with electromechanical power steering. Porsche Communication Management is fitted as standard (sat-nav is standard on UK models) and the three-dial instrument layout includes a TFT display. Bose and Bürmester sounds systems are optional and your Macan can be monitored using Aha Radio App. Porsche Car Connect (PCC) is also avaialble and allows you to access vehicle information and control certain functions via a smartphone. Other features avaialble include a lane departure warning and Automatic Cruise Control (ACC). Turbo is fitted with biexnon headlights as standard, S models fitted with halogens. Porsche Dynamic Light System (PDLS) optional on all models, PDLS Plus offers high beam assist and a wider light spread at junctions. Interior is a further evolution of the design first seen in the Panamera with a transmission tunnel rising up to meet the centre console. The three-spoke multi-function steering wheel, which comes as standard with paddle shift controls for the gearbox, is a variaiton on the design used in the 918 Spyder. Full length panoramic glass sunroof available at extra cost and S models are trimmed in partial leather and alcantara, with a full leather interior a cost option. Macan offers 500 litres of luggage capacity (with the rear seats in their upright position and up to 1500 litres depending on the configuration in use).

MODEL	MODEL YEAR	WEIGHT (kg)	ENGINE (CC)	BHP	TORQUE (Ib ft)	0-62	MAX MPH
Macan	2014	1770	1984	237	258	6.9	138
Macan S	2014	1865	2997	340	339	5.4	157
Macan S Diesel	2014	1880	2967	258	427	6.3	142
Macan Turbo	2014	1925	3604	400	405	4.8	165

## next month



**Plus:** 

RS Spyder: The full story behind Porsche's dominant LMP2 racer Macan road trip: 2000 miles in Porsche's new bestseller Ultimate Guide: 993 Carrera to GT2

> ONLY IN THE OCTOBER 2014 ISSUE OF GT PORSCHE IN THE SHOPS FROM 11 SEPTEMBER 2014 (Contents subject to change)

www.gtpurelyporsche.com

Available to download from www.gtpurelyporsche.com from 08 September 2014

Available on Pocketmags	Available on Google play	App Store Available on Windows 8 Available on Blackberry
BUILD TUREO 911 TUREO 90 VEARS OF AN ICON	If you can't always find a copy of this magazine, help is at hand! Complete this form, hand it in at your local store, and they will arrange for a copy of each issue to be reserved for you. Some stores may even be able to arrange for it to be delivered to your home. Just ask!* <b>*Subject to availability</b>	
	lf ye	ou don't want to miss an issue of GT Purely Porsche

International readers and stockists please contact Seymour International Ltd on +44 (0)20 7429 4000 or email: info@seymour.co.uk



OPEN Mon - Fri 8am-6pm Sat 8am-5pm

GUILDFORD 01483 533 584

**REDDITCH 01527 528 090** 

LICHFIELD 01543 253 675

www.tyrecity.co.uk

02476 220 731 / 457 118

:: LOW PRICES • FAST FITTING ::

WOLVERHAMPTON 01902 313 393

**KIDDERMINSTER 01562 829 753** 

ALIGNMENT

BRANCHES at:

EDGWARE 0208 952 8088 LUTON 01582 561 389 COULSDON 0208 645 2700

156 www.gtpurelyporsche.com

## new car data

MODEL BOXSTER	PRICE	ENGINE	POWER	TORQUE	0-62MPH	TOP SPEED	WEIGHT
Boxster 2.7	£38,810	6cyl/2706cc	265hp	206lb ft	5.8secs	164mph	1330kg
Boxster S	£47,035	6cyl/3436cc	315hp	269lb ft	5.1 secs	173mph	1340kg
Boxster GTS	£52,879	6cyl/3436cc	330hp	276lb ft	5.0secs	174mph	1345kg
CAYMAN							
Cayman 2.7	£39,694	6cyl/2706cc	275hp	213lb ft	5.7secs	165mph	1330kg
Cayman S	£48,783	6cyl/3436cc	325hp	272lb ft	5.0secs	175mph	1340kg
Cayman GTS	£55,397	6cyl/3436cc	340hp	2721b ft	4.9secs	177mph	1345kg
911 COUPÉ (991)		C 1/7 47 C	750	2071 0	1.0	170	1700
911 Carrera	£71,449	6cyl/3436cc	350hp	287lb ft	4.8secs	179mph	1380kg
911 Carrera S	£81,242	6cyl/3800cc	400hp	325lb ft	4.5secs	188mph	1395kg
911 Carrera 4	£77,924	6cyl/3436cc	350hp	287lb ft	4.9secs	175mph	1430kg
911 Targa 4	£86,377	6cyl/3436cc	350hp	287lb ft	5.2secs	173mph	1540kg
911 Carrera 4S	£87,959	6cyl/3800cc	400hp	325lb ft	4.5secs	185mph	1445kg
911 Targa 4S	£96,413	6cyl/3800cc	400hp	325lb ft	4.8secs	182mph	1555kg
911 GT3	£100,540	6cyl/3799cc	475hp	325lb ft	3.5secs	196mph	1430kg
911 Turbo	£118,349	6cyl/3800cc	520hp	486lb ft	3.4secs	195mph	1595kg
911 Turbo S	£140,852	6cyl/3800cc	560hp	516lb ft	3.1secs	197mph	1605kg
911 CABRIOLET (991)							
911 Carrera	£79,947	6cyl/3436cc	350hp	287lb ft	5.0secs	177mph	1470kg
911 Carrera S	£89,740	6cyl/3800cc	400hp	325lb ft	4.7secs	187mph	1465kg
911 Carrera 4	£86,583	6cyl/3436cc	350hp	287lb ft	5.1 secs	175mph	1500kg
911 Carrera 4S	£96,619	6cyl/3800cc	400hp	325lb ft	4.7secs	183mph	1515kg
911 Turbo	£126,689	6cyl/3800cc	520hp	486lb ft	3.5secs	195mph	1665kg
911 Turbo S	£149,511	6cyl/3800cc	560hp	516lb ft	3.2secs	197mph	1675kg
CAYENNE							
Cayenne	£44,397	6cyl/3598cc	290hp	283lb ft	8.1 secs	141mph	1995kg
Cayenne Diesel	£47,390	6cyl/2967cc	240hp	405lb ft	8.3secs	133mph	2100kg
Cayenne S	£57,515	8cyl/4806cc	400hp	369lb ft	5.9secs	160mph	2065kg
Cayenne S Diesel	£59,053	8cyl/4134cc	382hp	627lb ft	5.7secs	156mph	2195kg
Cayenne S Hybrid	£61,882	6cyl/2995cc	380hp	427lb ft	6.5secs	150mph	2240kg
Cayenne GTS		8cyl/4806cc	420hp	379lb ft	5.7secs	162mph	2085kg
	£00.11/						
Cavenne iurbo	£68,117 £89,324						
	£89,324 £107,784	8cyl/4806cc 8cyl/4806cc 8cyl/4806cc	500hp 550hp	516lb ft 553lb ft	5.1 secs 4.5 secs	171mph 175mph	
Cayenne Turbo S	£89,324	8cyl/4806cc	500hp	516lb ft	5.1 secs	171mph	2170kg
Cayenne Turbo S PANAMERA	£89,324 £107,784	8cyl/4806cc 8cyl/4806cc	500hp 550hp	516lb ft 553lb ft	5.1secs 4.5secs	171mph 175mph	2170kg 2215kg
Cayenne Turbo S PANAMERA Panamera Diesel	£89,324 £107,784 £65,289	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc	500hp 550hp 300hp	516lb ft 553lb ft 479lb ft	5.1secs 4.5secs 6.0secs	171mph 175mph 160mph	2170kg 2215kg 1880kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera	£89,324 £107,784 £65,289 £63,913	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cvl/3605cc	500hp 550hp 300hp 310hp	516lb ft 553lb ft 479lb ft 295lb ft	5.1secs 4.5secs 6.0secs 6.3secs	171mph 175mph 160mph 160mph	2170kg 2215kg 1880kg 1770kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera Panamera 4	£89,324 £107,784 £65,289 £63,913 £67,454	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cvl/3605cc 6cyl/3605cc	500hp 550hp 300hp 310hp 310hp	516lb ft 553lb ft 479lb ft 295lb ft 295lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs	171mph 175mph 160mph 160mph 159mph	2170kg 2215kg 1880kg 1770kg 1820kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera Panamera 4 Panamera S V6	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cvl/3605cc 6cyl/3605cc 6cyl/2997cc	500hp 550hp 300hp 310hp 310hp 420hp	516lb ft 553lb ft 479lb ft 295lb ft 295lb ft 383lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs	171mph 175mph 160mph 160mph 159mph 178mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera Panamera 4 Panamera 5 V6 Panamera 4S V6	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc	500hp 550hp 300hp 310hp 310hp 420hp 420hp	516lb ft 553lb ft 479lb ft 295lb ft 295lb ft 383lb ft 383lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs 4.8secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera Panamera 4 Panamera 5 V6 Panamera 4S V6 Panamera 5 E-Hybrid	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2995cc	500hp 550hp 300hp 310hp 310hp 420hp 420hp 416hp	516lb ft 553lb ft 479lb ft 295lb ft 295lb ft 383lb ft 383lb ft 435lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs 4.8secs 5.5secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph 167mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 V6 Panamera 4S V6 Panamera 4S V6 Panamera 5 E-Hybrid Panamera GTS	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/2995cc	500hp 550hp 310hp 310hp 420hp 420hp 416hp 440hp	516lb ft 553lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs 4.8secs 5.5secs 4.4secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph 167mph 178mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg 1925kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 Panamera 5 V6 Panamera 45 V6 Panamera 5 E-Hybrid Panamera GTS Panamera Turbo	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391 £108,006	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/2995cc 8cyl/4806cc	500hp 550hp 310hp 310hp 420hp 420hp 416hp 440hp 520hp	516lb ft 553lb ft 295lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft 383lb ft 516lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs 4.8secs 5.5secs 4.4secs 4.1secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph 167mph 178mph 189mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg 1925kg 1970kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 Panamera 5 V6 Panamera 45 V6 Panamera 5 E-Hybrid Panamera GTS Panamera Turbo	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/2995cc	500hp 550hp 310hp 310hp 420hp 420hp 416hp 440hp	516lb ft 553lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs 4.8secs 5.5secs 4.4secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph 167mph 178mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg 1925kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 Panamera 5 V6 Panamera 4S V6 Panamera S E-Hybrid Panamera GTS Panamera Turbo Panamera Turbo S	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391 £108,006 £131,152	8cyl/4806cc 8cyl/2967cc 6cyl/2967cc 6cyl/3605cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2995cc 8cyl/4806cc 8cyl/4806cc	500hp 550hp 310hp 310hp 420hp 420hp 416hp 440hp 520hp 570hp	516b ft 553lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft 516lb ft 553lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs 4.8secs 5.5secs 4.4secs 4.1secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph 167mph 178mph 189mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg 1925kg 1970kg 1995kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera P Panamera 4 Panamera 5 V6 Panamera 4S V6 Panamera 4S V6 Panamera GTS Panamera Turbo Panamera Turbo Panamera Turbo S Macan	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391 £108,006	8cyl/4806cc 8cyl/2967cc 6cyl/3605cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/2995cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc	500hp 550hp 310hp 310hp 420hp 420hp 416hp 440hp 520hp 570hp 237hp	516b ft 553b ft 295b ft 295b ft 295b ft 383b ft 383b ft 383b ft 383b ft 516b ft 553b ft 258b ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs 4.8secs 5.5secs 4.4secs 4.1secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph 167mph 189mph 192mph 138mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg 1925kg 1970kg 1995kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 Panamera 4S V6 Panamera 4S V6 Panamera 5 E-Hybrid Panamera GTS Panamera Turbo Panamera Turbo S Macan Macan S	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391 £108,006 £131,152	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc	500hp 550hp 310hp 310hp 420hp 420hp 416hp 440hp 520hp 570hp	516lb ft 553lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft 383lb ft 516lb ft 553lb ft 258lb ft 339lb ft	5.1secs 4.5secs 6.0secs 6.3secs 6.1secs 5.1secs 4.8secs 5.5secs 4.4secs 4.1secs 3.8secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph 167mph 178mph 189mph 192mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg 1925kg 1970kg 1995kg 1770kg 1865kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 Panamera 4S V6 Panamera 4S V6 Panamera 5 E-Hybrid Panamera GTS Panamera Turbo Panamera Turbo S Macan Macan Macan S	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391 £108,006 £131,152 £40,276	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc	500hp 550hp 310hp 310hp 420hp 420hp 416hp 440hp 520hp 570hp 237hp	516lb ft 553lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft 516lb ft 553lb ft 258lb ft 339lb ft 427lb ft	5.1secs 4.5secs 6.0secs 6.3secs 5.1secs 4.8secs 5.5secs 4.4secs 4.1secs 3.8secs 6.9secs	171mph 175mph 160mph 160mph 159mph 178mph 177mph 167mph 189mph 192mph 138mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg 1925kg 1970kg 1995kg 1770kg 1865kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 V6 Panamera 4S V6 Panamera 4S V6 Panamera 5 E-Hybrid Panamera Turbo Panamera Turbo Panamera Turbo S Macan Macan Macan S Macan S Diesel	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391 £108,006 £131,152 £40,276 £43,300	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc	500hp 550hp 310hp 310hp 420hp 420hp 420hp 416hp 440hp 520hp 570hp 570hp 2237hp 340hp	516lb ft 553lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft 516lb ft 553lb ft 258lb ft 3339lb ft	5.1secs 4.5secs 6.0secs 6.3secs 5.1secs 4.8secs 5.5secs 4.4secs 4.1secs 3.8secs 6.9secs 5.4secs	171mph 175mph 160mph 159mph 178mph 177mph 167mph 189mph 192mph 138mph 157mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 2095kg 1925kg 1970kg 1995kg
Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 Panamera 4 Panamera 4 Panamera 4 Panamera 5 V6 Panamera 5 E-Hybrid Panamera Turbo Panamera Turbo Panamera Turbo S Macan Macan S Macan S Diesel Macan Turbo	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391 £108,006 £131,152 £40,276 £43,300 £43,300	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc	500hp 550hp 310hp 310hp 420hp 420hp 420hp 416hp 440hp 520hp 570hp 237hp 340hp 258hp	516lb ft 553lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft 516lb ft 553lb ft 258lb ft 339lb ft 427lb ft	5.1secs 4.5secs 6.0secs 6.3secs 5.1secs 5.1secs 4.8secs 5.5secs 4.4secs 4.1secs 3.8secs 6.9secs 5.4secs 6.3secs	171mph 175mph 160mph 159mph 178mph 177mph 167mph 178mph 189mph 192mph 192mph 138mph 157mph 142mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 1925kg 1970kg 1995kg 1770kg 1865kg 1880kg
Cayenne Turbo Cayenne Turbo S PANAMERA Panamera Diesel Panamera 4 Panamera 4 Panamera 4 Panamera 4 V6 Panamera 4 V6 Panamera 5 V6 Panamera GTS Panamera Turbo Panamera Turbo S Macan Macan S Macan S Macan S Diesel Macan Turbo 918 Spyder 918 Spyder	£89,324 £107,784 £65,289 £63,913 £67,454 £82,439 £86,080 £89,377 £93,391 £108,006 £131,152 £40,276 £43,300 £43,300	8cyl/4806cc 8cyl/4806cc 6cyl/2967cc 6cyl/3605cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 8cyl/4806cc 6cyl/2997cc 6cyl/2997cc 6cyl/2997cc	500hp 550hp 310hp 310hp 420hp 420hp 420hp 416hp 440hp 520hp 570hp 237hp 340hp 258hp	516lb ft 553lb ft 295lb ft 295lb ft 383lb ft 383lb ft 383lb ft 383lb ft 516lb ft 553lb ft 258lb ft 339lb ft 427lb ft	5.1secs 4.5secs 6.0secs 6.3secs 5.1secs 5.1secs 4.8secs 5.5secs 4.4secs 4.1secs 3.8secs 6.9secs 5.4secs 6.3secs	171mph 175mph 160mph 159mph 178mph 177mph 167mph 178mph 189mph 192mph 192mph 138mph 157mph 142mph	2170kg 2215kg 1880kg 1770kg 1820kg 1810kg 1870kg 1925kg 1970kg 1995kg 1770kg 1865kg 1880kg



call now 0121 55 77 911

independent centre for

ì;

F

www.ramusporscha.com

All Porsche & OEM parts supplied, 1000s of Genuine parts already in stock

RAMUS PORSO

PERFORMANCE STYLING SERVICE PARTS

## specialist directory

											Manufacturers & Tuners					
	arts										Tur		bo			
	Accessories & Parts										S.		Sales & Servicing			es
	es és	S						_			Irer	ilia	elVi		10	Tyr
	orie	dor		ē	sqr		sts	tior	JCe	rs	actı	rab	Š	Jsic	lays	s S
	sess	Bodyshops	Brakes	Car Care	Car Clubs	Engine	Exhausts	nspection	Insurance	Interiors	nuf	Memorabilia	es é	Suspension	Track days	Wheels & Tyres
	Acc	Boo	Bra	Car	Car	Eng	EXT	Insp	Insi	Inte	Ma	Me	Sal	Sus	Trac	μW
Addspeed Performance Cars Tel: 01403 255616 www.addspeed.co.uk													$\checkmark$			
Adrian Flux Tel: 0800 081 8989 www.adrianflux.co.uk									$\checkmark$							
AmD Tel: 01869 323205 www.amdtechnik.com											$\checkmark$					
Ashley Insurance Tel: 01785 214444 www.ashleyinsurance.co.uk									$\checkmark$							
Autofarm Tel: 01865 331234 www.autofarm.co.uk	$\checkmark$	$\checkmark$				$\checkmark$		$\checkmark$			$\checkmark$		~			
Autostrasse Tel: 01376 562922													$\checkmark$			
Berlyn Services Tel: 01271 866818 www.berlyn-services.co.uk	$\checkmark$															
Belgravia Garage Tel: 0207 2359900 www.belgraviagarage.com													$\checkmark$			
Bilstein www.bilstein.com													-	$\checkmark$		
Blackboots Tel: 01494 797820 www.blackboots.co.uk							$\checkmark$									$\checkmark$
Bodytechnics Tel: 01753 505911 www.bodytechnics.co.uk		./														
The bodyshop for prestige vehicles. Porsche Centre approved body repairer		<u> </u>														
Brian Miller Motors Tel: 0131 443 7806													~			
Cameron Sportscars Tel: 01220 892244						_		_					$\checkmark$	_		
Carrera Engineering Tel: 01992 892333 www.carreraengineering.co.uk			$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$						$\checkmark$		,
Cargraphic Tel: 0049 634 188 088 (D) 01293 537911 (UK) www.cargraphic.com	$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$
Charles Ivey Specialist Cars Tel: 020 77313612 www.charlesivey.com													$\checkmark$			
Classic Additions Tel: 01938 561717 www.classicadditions.com	$\checkmark$															
Club Auto Sport Ltd Tel: 01384 410879 www.clubautosport.co.uk	$\checkmark$					$\checkmark$								$\checkmark$		
Dansk Tel: 07000 911993							~									/
Design 911 Tel: 0208 500 881 www.design911.com	$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$		$\checkmark$
Direct Line Tel: 0845 246 8386 www.directline.com									~							
DMS Automotive Tel: 01264 729016 www.dmsautomotive.com											V					
Dodo Juice Tel: 07990 518430 www.dodojuice.com				V										_		
Douglas Valley Tel: 01257 472866 www.douglasvalley.co.uk	$\checkmark$															
DS Motorwerks Tel: 07002 911356 www.dsdmotorwerks.co.uk						V							~	_		
EBC Brakes Tel: 01604 583344 www.ebcbrakes.com			V													
EBS Racing Tel: 001 800 462 3774 www.ebsracing.com						_					V					
Eibach Suspension Tech Tel: 01455 286524														V		
Elephant Racing Tel: +1 408 297 2789 www.elephantracing.com						_								~		
Elite Consulting & Co Ltd. Tel: 07768 894324 porscheinspections@gmail.com								V								/
Elite Direct Tel: 01708 525577 www.elitedirect.com						_								V		V
Engine Builders Supply Co Tel: +1 775 6731300	$\checkmark$															
Finlay Gorham Tel: 01284 827427 www.finlaygorham.com														_		
Flat-6 Coachworks Tel: 01686 440323 Email: flat-6@hotmail.com		V											V			
Gantspeed Engineering Tel: 01507 568474 www.gantspeed.co.uk																
Gmund Cars Tel: 01423 797989 www.gmundcars.com												./	V			
Gmund Collection Tel: 0870 2020911 www.gmundcollection.com												V				
Green Flag Tel: 0845 246 2130 www.greenflag.com GT One Ltd Tel: 01932 569911/944 www.gt-one.co.uk									V				1			
Hartech Tel: 01204 302809 www.hartech.org Firewood Works, Firwood Ind. Est, Thicket Ford Road, Bolton, BL2 3TR						<b>√</b>					<b>√</b>		<b>√</b>			
Historika Classica Porsche 07836 384999 www.historika.com								$\checkmark$					$\checkmark$			
HP Motorsports Tel: 020 8500 2510 www.hpmotorsports.co.uk													$\checkmark$			
Jasmine Porschalink UK Tel: 01282 697171 www.jasmine-motorsport.co.uk	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
Jaz Tel: 020 8903 1118 www.jazweb.co.uk	1		1			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
John Drake Zymöl Detailer Tel: 01590 645623 www.johnsmodelcars.co.uk				~								$\checkmark$				





LECHART

0151 4255 911

911 www.tech9.ms

Servicing Car Sales Restoration Parts TECHART



# ServiceRepairMOTAir conditioningFull dealer level diagnostics

01242 530 666 Linick@cheltenhamporsche.co.uk www.cheltenhamporsche.co.uk Unit 26 Neptune Business Centre, Cheltenham GL51 9FB

#### 

- SPECIALI
- over 20 years' experience
  sales, servicing and parts
- sales, servicing and par
- fully equipped workshop
   specialists in all Porsche models
- accident repairs
- MoT testing
- dealer-level diagnostics
- member of Porsche parts programme
- friendly, professional advice
- servicing on all new vehicles without
- compromising manufacturer's warrantycourtesy car available
- (by appointment)
- pre-purchase inspections
- menu pricing no hidden costs
- enthusiast owned and run (Porsche is our passion)
- german-speaking reception

#### Thorpe Road, Longthorpe, nr Peterborough PE3 6LU (on A1) Sales & Workshop T:01733 332911 F:01733 264460

## **GTPORSCHE**

To advertise in GT Porsche Magazine please call Sarah Norwood on 01732 748075

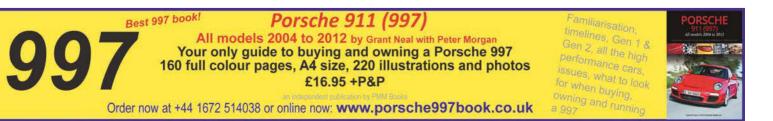
### BRIAN MILLER MOTORS

SPECIALIST IN PORSCHE AND GERMAN MARQUES

- SERVICE TUNING FUEL INJECTION ELECTRICS
  - PRE-PURCHASE INSPECTIONS
    - 40 YEARS EXPERIENCE
  - OPEN MONDAY TO SATURDAY

0131 443 7806 2 LANARK ROAD EDINBURGH EH14 1TQ

	Accessories & Parts	Bodyshops	Brakes	Car Care	Car Clubs	Engine	Exhausts	Inspection	Insurance	Interiors	Manufacturers & Tuners	Memorabilia	Sales & Servicing	Suspension	Track days	Wheels & Tyres
	Ac	ă	B	Ü	Ü	Ē	Û	5	<u> </u>	5		Σ		SI	Ē	3
JZ Machtech Tel: 07000 100911 www.jzmachtech.com K&N Tel: 01925 636950 www.knfilters.com	V	V	V			V	V	V			~		$\checkmark$	V	V	V
LN Engineering Tel: +1 815 472 2939 www.lnengineering.com																
Loe Bank Motors Tel: 01706 826060 www.loebankmotors.co.uk						•							$\checkmark$			
Meguiar's Tel: 0870 2416696 www.meguiars.co.uk				$\checkmark$												
Milltek Sport Tel: 0115 944 0044 www.millteksport.co.uk							$\checkmark$									
Ninemeister Tel: 01925 242342 www.ninemeister.com	$\checkmark$	V	$\checkmark$			$\checkmark$	$\checkmark$				~		~	~	~	$\checkmark$
No 5 Garage Tel: 020 8993 7318 www.no5garage.com																
Northway Porsche Specialists Tel: 0118 971 4333 www.northway.co.uk	$\checkmark$					$\checkmark$					$\checkmark$		V V			_
Parr Motorsport Tel: 01293 537911 www.parr-uk.co.uk				V				V		V	V V	_	1	1	V	V
Paragon Tel: 01825 830424 www.paragon.gb.com Paul Stephens Specialist Cars Tel: 01440 714884 www.paul-stephens.com	V	V	V			V	V				1		5	v		V
PCT Cars Ltd www.pctcars.co.uk Tel: 02476 407770														1		
Peart Insurance Tel: 0800 954 0037 www.peart.co.uk									$\checkmark$							
Performance Direct Tel: 0844 5733594 www.performancedirect.co.uk									$\checkmark$							
Performance Marque Tel: 0800 954 0037 www.performancemarque.com									$\checkmark$							
Peter Morgan Consulting Tel: 01672 514038 www.petermorgan.org.uk								$\checkmark$								
Porsch-Apart Ltd Tel: 01706 824053 www.porsch-apart.co.uk	$\checkmark$															
Porsche Cars GB Tel: 0845 7 911 911 www.porsche.co.uk											~	_				
Porsche Club GB Tel: 01608 652911 www.porscheclubgb.com					$\checkmark$						/	$\checkmark$	/			
Porscheworx Tel: 020 7916 6911		V									$\checkmark$		~			
PortiaCraft Tel: 020 8959 1604													~			
911 Virgin Tel: 01895 255222 www.911virgin.com													$\checkmark$			
Pro 9 Tel: 01527 591992 www.pro-9.com.uk	$\checkmark$		V								$\checkmark$	_	$\checkmark$	v	_	
Promax Motorsport Tel: 01296 714856 www.promaxmotorsport.com PR Services Tel: 01277 630099 www.prs356.com	V	1									V					
Ramus Porscha Tel: 0121 55 77 911 www.ramusporscha.com	$\checkmark$	5			5	5			5		$\checkmark$			1		1
Regal Autosport Tel: 02380 558636 www.regal-auto.co.uk											$\checkmark$					•
<b>Redline Racing</b> Tel: 01642 751911											$\checkmark$					
<b>RGA Porsche</b> Tel: 0207 7931447		$\checkmark$				$\checkmark$							$\checkmark$			$\checkmark$
RPM Independent Porsche Specialists Ltd Tel: 01296 661881 www.rpmtechnik.co.uk	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		~	$\checkmark$	$\checkmark$	$\checkmark$
RPM Specialist Cars Ltd Tel: 01423 865602 www.rpmspecialistcars.co.uk													$\checkmark$			
RPR626 Tel: 01388 811024/07836 330065 www.rpr626.com													~			
RSJ Sports Cars Tel: 01753 553969 www.rsjsportscars.co.uk													$\checkmark$			
Roger Bray Restoration Tel: 01404 822005 www.rogerbrayrestoration.com		1											1			
parts@rogerbrayrestoration.com; Milestone Business Park, London Road, Whimple, Exeter																
Shirleys Garage Tel: 01676 522242 www.shirleys-garage.co.uk	$\checkmark$												V			
Specialised Car Covers Tel: 01943 864646 www.carcoversuk.com Specialist Cars of Malton Tel: 07000 911993 www.specialistcarsltd.co.uk	$\checkmark$	$\checkmark$	$\checkmark$		1	1	1			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	1		1
SpeedArt Tel: 0870 757 5911 www.speedart.de	v	v	v			v	•			•	1					v
Spit & Polish Tel: 01732 367771 www.spitandpolish.co.uk																1
Swissvax UK Tel: 0423 860022 www.swissvax.co.uk				$\checkmark$												
Team Parker Racing Tel: 01455 822686 www.teamparkerracing.com						$\checkmark$							$\checkmark$		$\checkmark$	
Tech9 Motorsport Tel: 0151 4255 911 www.tech9.ms	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$		~	$\checkmark$	1	$\checkmark$
TechArt Tel: +49 7152 933939 www.techart.de											$\checkmark$					
The Independent Porsche Enthusiasts' Club Tel: 0845 602 0052 www.tipec.net					$\checkmark$											
Tognola Engineering Tel: 01753 545053						V					$\checkmark$					
TWG Motorsport Tel: 01733 332911													V			
The Wheel Restorer Tel: 01978 352980 sales@thewheelrestorer.co.uk																1
Unit F7, Bersham Enterprise Centre, Rhostyllen, Wrexham LL14 4EG																1
Yorkshire Classic Porsche Tel: 08434 996 911 www.yorkshireclassicporsche.co.uk										W		W	W			



# GT Porsche Back Issues



#### SEPTEMBER 2013

**Cover Story:** Ten years of the Carrera GT. **Inside:** 911 at 50 – The five greatest racing 911s. Rennsport Australia report. Goodwood Festival of Speed review. 911 at 50: Porsche Museum exhibition. *Me & My Porsche:* Mark Sumpter and his 356 Speedster. *The Market Place:* Gen 1 Cayenne.



#### JANUARY 2014

**Cover Story:** 996 Carrera Ultimate Guide. **Inside:** Macan revealed. 991 Carrera v Carrera 4. Le Mans Legends – 917, 936, 956, GT1. 911 2.4S S/T replica. VAD 997 Turbo RSR. Vic Elford interview. Panamera Turbo and Diesel first drives. Buying a Porsche for £10,000. *The Market Place*: 944. *How Does That Work?* Aerodynamics.



#### MAY 2014 Cover Story: 919 Hybrid

**Inside:** 550 Spyder. 911 50th Anniversary Edition. 911 SC R. Panamera S E-Hybrid. Parr Motorsport 997 Turbo. René Metge. First look: Boxster & Cayman GTS. Porsche and Le Mans, The Return: Part 2.



#### OCTOBER 2013

**Cover Story:** 991 GT3 first drive. **Inside:** 996 Carrera v 991 Carrera. 911 at 50 – Our favourite 911s from the past 50 years. Silverstone Classic review. Carrera GT drive story. 924 Carrera GT. *The Market View:* 356. Michelin Pilot Sport Cup 2 track test. *How Does That work?* PDK.



#### FEBRUARY 2014

**Cover Story:** 997.2 GT3 v 997.2 GT3 RS. **Inside:** 918 Spyder first drive. Porsche hyper cars: 959, GT1 and Carrera GT. Your Ultimate Guide: 996 GT3, Turbo and GT2. 964 Anniversary driven. 912 revisted. *The Market Place:* 968. Tony Hatter interview. Magnus Walker 911. *How Does That Work?* Turbocharding.



#### JUNE 2014 Cover Story: 911 2.4S Barn Find Inside: StudioTorino Moncenisio. First drive: 991 Targa. 911 Carrera 2.7 Targa. 981 Cayman 2.7. 997 Carrera. Ultimate Guide: The four-cylinder coupés. Porsche and Le Mans, The Return: Part 3.



#### NOVEMBER 2013

**Cover Story:** The launch of the 918. **Inside:** 991 Turbo S first drive. 997 Turbo S European road trip. 911 Turbo: The first 40 years. 930 SE Cabriolet driven. Classics at the Castle report. *The Market Place:* 996 Turbo. *How Does That Work?* Four-wheel drive. Tech Guide: Polybushes.



#### MARCH 2014

**Cover Story:** PS Bespoke Speedster. **Inside:** 981 Boxster v Cayman S. 911 3.0 RSR replica. 964 Carrera 'RS'. 997.2 GT3 v 997.3 GT3 RS track test. 964 Carrera 3.8. 911 SC Lightweight. 991 Targa first details. Porsche & I: Rolf Nilsson. *Market Place:* 997 Turbo Coupé. Buying a Porsche for £30,000.



#### JULY 2014

Cover Story: Ultimate Guide: 987 Boxster Inside: 997 Speedster v 991 Turbo Cabriolet. First drive: Boxster & Cayman GTS. UK first drive: Macan Turbo. 996 Carrera 4S. Front-engined Porsches: the V8s. 956 1982 WEC debut.

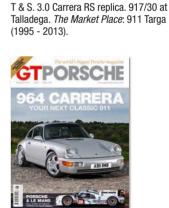


#### DECEMBER 2013

**Cover Story:** 911 S/T drive story. **Inside:** 2.0-litre SWB 911 driven. 991 suspension test. How to hire a classic 911. Spa Six Hour report. 991 Turbo first drive. *The Market Place:* 993 Carrera and Carrera 4. *Me & My Porsche:* Martin Stretton's 2.7 Carrera RS Replica.



#### APRIL 2014 Cover Story: 968 Club Sport Inside: Macan first drive. Panamera 4S UK first drive. 991 Turbo S UK first drive. SVP Cayman SV driven. Porsche and Le Mans, The Return: Part 1. *Ultimate Guide*: 911 E,



#### AUGUST 2014

**Cover Story:** 964 25th Anniversary **Inside:** Porsche at Le Mans, its return. 987 Cayman Ultimate Guide. 911 2.4 S Targa. 991 Carrera4 25th Anniversary. Derek Bell and the 962. *The Market Place*. 996 GT3 RS. *Tech Guide*: Strut braces.

#### To order your back issue call +44 (0)1732 748084 TODAY! Or visit www.gtpurelyporsche.com or email subs@unity-media.com

\* £5 per back issue includes free P&P to any UK Mainland postal address. For all other delivery options please enquire by calling +44 (0)1732 748084

## porsche moments

# For some bizarre reason I chose to drive the GT2 without the seatbelts fastened



riting about watching 993 GT2s racing at Le Mans in 1995 last month reminded of the road version of the car. I was at Car magazine when one of the 25 road-going GT2s was put on the test fleet for hacks to drive, but unfortunately my card wasn't pulled from the hat when the job of driving it was handed out. Georg Kacher, Car's 6ft 8in European editor got the gig and like everybody else I had to make do with reading about the car in the magazine. If I remember correctly Georg didn't think much of the 450hp monster. Georg wasn't really into racing and I don't think he quite grasped the sexiness of the GT2 and the thrill of a car that was really a first cousin once removed from the race car.

Miss driving a car like that when it's new and it's down to pot luck as to whether you ever get behind the wheel. I missed out on the Carrera GT when it was launched but then a few years later Porsche's cringingly pretentious *Christophorus* magazine asked me to have a go in the GT and write about it. But it still looked like the GT2 was a gonner and my day would never come, then I had a bit of luck. I'm not sure if Porsche still does this, and I've certainly not been asked to attend, but every year a group of journalists would be invited to Weissach to drive that year's Carrera Cup race car. Obviously this was a pretty desirable gig and I was more than somewhat excited to be asked to go.

Visiting Weissach in itself is a bit of a treat because it has played such a big part in Porsche's history, but another attraction of the trip was the chance to spend a bit of time with Roland Kussmaul, ex-test driver and motorsport head honcho. If you want to see a photo of someone as cool as Steve McQueen at the wheel of a Porsche then Google Roland Kussmaul and look for a snap of a bloke with a Zapata moustache poking his head out of the window of a red 911.

One of the things that I love about Porsche, or certainly the company in the 1980s and '90s, is that it doesn't try too hard to be cool. A dramatic contrast to Ferrari, which in the last decade has turned itself into a showbiz outfit that is so tacky you can forget that it still makes great cars. It's partly our fault. For example, when the press started to take an interest in test driver Dario Benuzzi, Ferrari got carried away and tried to turn him into a celebrity with the result that Benuzzi himself started to believe it.

No such problem with Kussmaul. He was great value on that Carrera Cup launch. Down to earth, immensely knowledgeable and friendly with it. He also arrived for the event in his company car, which happened to be a red 993 GT2. Seizing what could have been the last chance (actually it turned out not to be the last opportunity to drive a GT2 because pal Chris Harris bought one years later) I asked Roland if I could have a go in it around Weissach. Although it was my first visit to Weissach a few laps in the Cup car were enough to give me an idea where it went.

"Be very careful," said Kussmaul, "it has twice the torque of the Cup Car." One of the issues with Weissach is that it's overlooked by offices so there's a good chance that if you do something stupid you'll have an audience. For some bizarre reason I chose to drive the GT2 without the seatbelts fastened in the theory that if I did spank it embarrassment would be the last of my worries.

I was careful, however, and Roland got his car back in one piece. I haven't been back to Weissach since, but I bet business there is still carried out in a similarly relaxed yet functional way without the cast of thousands that you get at any event at Ferrari's Fiorano track. Any Ferrari event is usually accompanied by hordes of marketing, communications and branding people. At Weissach, certainly back then, you just got blokes with spanners. I hope it's the same today  $\bigcirc$ 

## Porsche experts world-wide count on us for world-class service.

## THE REASON: Porsche Parts Exclusively

For assistance we encourage you to contact our expert staff toll-free at 800-462-3774 Monday – Friday 8 am – 5 pm pst, or send us an email through our website at EBSracing.com.

We look forward to hearing from you!

## Engine Development Program

#### Current Projects

- 911 2.7-2.8 conversion
- 911 3.2-3.4 conversion
- 911 3.2-3.6 conversion
- Check our website for updates.

#### Fuel Injection Service

#### Diagnostics and rebuilds

- Fuel pumps
- Fuel distributors
- Fuel injectors
- Electronic control units

## **Guaranteed Used Parts**

- 356 to 996 GT3
- Pistons & cylinders
- Engine cases
- Crankshafts
- Cylinder heads
- Transmission Parts

#### **Engine Rebuild Kits**

- 356 to 996 GT3 Basic & master rebuild kits
- High-performance & racing Machine shop service available
- Tool rentals for EBS customers

#### **Machine Shop Services**

- Crankshaft race prep
- Engine case upgrades
- Connecting rod rebuilds
- High performance valve jobs
- Competition camshafts

## Porsche Pistons & Cylinders

- 356 to 996 GT3

#### **Engine Coatings**

- Thermal barrier coatings
- Drive film lubricants
- Thermal dispersants
- Oil Shed coatings
- Coated bearings in stock

### Transmission Rebuilds

- 901 to 996
- Diagnostics & rebuilds
- Racing upgrades
- Special gear ratios
- Limited slip differentials
- **Gift Items**
- Books & literature
- DVDs & accessories
- Gift items starting at \$20
- Gift certificates available
- Brey Krause safety equipment
- Sport & racing seats

Visit our website for: Secure Online Catalog Ordering **Bolt-on Performance Parts Porsche News and Updates** 



t Up | Get a O ing Linz. | 4058 South NoCernet Blvd. Unit B | Reno, Nevede 8050 : 775-673-1300 | Toll Free: 1-600-463-3774 | Fex: 775-673-3069 Ht & 2006 ERS Earlos Inc. Al S

PORSCHE PARTS EXCLUSIVELY

800-462-3774 | EBSracing.com 4068 S. McCarran Blvd. Unit B, Reno, NV 89502 International 775-673-1300 fax 775-673-2088

- Mahle Motorsports • JE Lightweight Forged Pistons LN Engineering Nickies
- Perfect Bore Pistons & Liners Reconditioned Mahle Cylinders



#### Perfection as standard.

Honest customer service, affordable prices and the highest standards.

OCD Porsche Specialists are based in The Wirral just by the Wallasey tunnel. We repair, service, restore and modify Porsche models. Our motto is 'Perfection as Standard' because we see no reason to be average and pride ourselves in delivering affordable and professional care for your beloved Porsche.

OCD Porsche Specialists can also price match any written quotation from a reputable Porsche specialist. We cover the entire North West, including; Liverpool, Wallasey, Cheshire, Chester, Merseyside, Lancashire and Greater Manchester. We service all Porsche models and repair all Porsche models. We also conduct pre-purchase inspections, offer a range of detailing services for all luxury vehicles within the North West as well as modify Porsche models with visual enhancements.

#### Free air conditioning disinfection with every service!



#### **OCD Porsche Specialists**

Unit 6 & 7 BMB Business Park Dock Link Wallasey CH44 3EQ

Tel: +44 (0)151 6388 911 Web: www.ocdporsche.com Email: info@ocdporsche.com