TURBO EVOLUTION

How Porsche's first Turbo 911s have upheld an iconic status



www.total911.com

THE PORSCHE MAGAZINE

991 PERFECTION

Touring California in SharkWerks' beautiful Tech Art Carrera S





Higher servicing standards. Lower servicing costs.

All 911 (Type 996^*) and Boxster (Type 986) drivers benefit from fixed price servicing from Porsche at £265 for a minor service and £395 for a major service.

Porsche trained technicians guarantee workmanship, genuine parts, the latest diagnostic equipment and, crucially, your complete peace of mind that your Porsche is in the hands of the genuine experts.

Having your Porsche serviced by us means you also get a complimentary courtesy car** as well as a collection and delivery option.**

Why take your Porsche anywhere else?

Contact your local Porsche Centre to book your service or call **08457 911 911**.

Visit porsche.co.uk/centrename



Porsche Centre Belfast

/aberdeen

/bolton

02890 389 999 /belfast

Porsche Centre Bolton 01204 559 911

Porsche Centre Bournemouth 0845 126 8982

Porsche Centre Bristol 0845 2020 924

/bristol

Porsche Service Centre Byfleet
01483 421 911
/byfleet

Porsche Centre Cambridge 01223 872 872 /cambridge Porsche Centre Cardiff 02920 350 911

02920 350 911 /cardiff

Porsche Centre Chester 0845 845 4911

/chester

Porsche Centre Colchester
01206 855 500

/colchester

Porsche Centre Dublin

00 353 1235 3375 www.porschedublin.ie **Porsche Centre East London**

0208 519 9999 /eastlondon Porsche Centre Edinburgh

/edinburgh

Porsche Centre Exeter
01392 822 800
/exeter

0131 475 5000

Porsche Centre Glasgow 0141 8856 911

Porsche Centre Guildford 01483 408 800

/glasgow

/guildford **Porsche Centre Hatfield**01707 277 911

/hatfield

Porsche Centre Jersey

01534 497777 /jersey Porsche Centre Kendal

01539 724 331 /kendal

Porsche Centre Leeds 0844 8150 108 /leeds

Porsche Centre Leicester 01162 764 488 /leicester Porsche Centre Mid-Sussex

01444 242 911 /midsussex

Porsche Centre Newcastle 0191 295 1234 /newcastle

Porsche Centre Nottingham 0115 986 0911 /nottingham

Porsche Centre Reading 0118 930 3911

Porsche Centre Sheffield 0844 8150 120 /sheffield

Porsche Centre Silverstone 01327 355 911 /silverstone

Porsche Centre Solihull 01564 771 155 /solihull Porsche Centre Sutton Coldfield

0121 378 5800 /suttoncoldfield

Porsche Centre Swindon 01793 615 888

PORSCHE

/swindon

Porsche Centre Tonbridge

01732 361222 /tonbridge

Porsche Centre West London 0208 742 7000

Porsche Centre Wilmslow 01625 522222 /wilmslow

^{*}Excluding Turbo/GT2/GT3/GT3 RS models.

^{**}Subject to availability.



ur celebration of the 9ll has certainly taken in some miles this month. While the world patiently awaits the new Turbo – speculated to be unveiled before the Frankfurt motorshow in the autumn – we've been taking in the South African summer as part of a throwback to each of Porsche's first three marques of air-cooled, forced induction 9lls, exemplified by one extremely lucky collector. Early Turbo models are still a universally popular choice for the 9ll driving connoisseur, and continue to provide beautifully unfettered fun even on our modern roads of today. It's a waiting game to find out if the 99l Turbo will uphold the legacy of its ancestors in years to come.

In stark contrast to the South African summer, the temperatures at our rather aptly named Below Zero ice drive on a frozen Swedish lake made for chillier climes with Tuthill Porsche's esteemed collection of naturally aspirated, rally prepared greats. Such a chance to excel at the wheel of a purpose-built classic in beautifully remote and wintry settings made for one of my most memorable driving experiences yet.

Back to warmer but equally pleasant surroundings, the stunning Californian backdrop provided the perfect location for our drive in the TechArt-kitted 991 Carrera S by SharkWerks, a wonderfully crafted 911 that should warm the cockles of even the most astute Stuttgart purists.

"A chance to excel in a beautifully remote setting made for one of my most memorable driving experiences"

Elsewhere in the **Total 911** community, there is much debate to be had as you join us in embracing what is now 50 years of Stuttgart's finest creation. Do get involved via the information along the bottom of the page.



lu libley

LEE SIBLEY • Deputy Editor

E: lee.sibley@imagine-publishing.co.uk

T: 01202 586291

Join the community

Facebook
/total911magazine





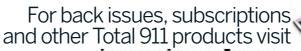




Contents

16 TechArt 991 Carrera S
"The upgrades add more functionality while giving nothing away in terms of driving pleasure or value"





www.imagineshop.co.ul



08 **Update**News and product reviews

12 **Views** Your letters, emails and tweets

Opinion
Chris Dearden discusses winter tyres

62 **UK subscriptions**Latest deals for UK fans of **T911**

81 USA subscriptions
Our special offer for US readers

84 **Living the legend**Kris, Ross, Ben and Chris chronicle another month in the life of a Porsche

112 Coming soon A sneak peak at next month

114 Great roads T911 returns to Wales for yet another epic route

Features

16 TechArt 991 Carrera S We return to SharkWerks for a look at this modified 911

24 Air-cooled Turbo test
Ahead of the release of the new 911
Turbo, we sample three past greats

32 Classic Ice Drive
In search of the ultimate driving thrill,
we head to the glaciers of Sweden for a
spot of ice driving

42 Official Porsche Centre Portsmouth
T911 goes behind the scenes at the UK's latest Porsche centre

48 3.2 Carrera Clubsport
Why this overlooked 911 has
now entered the money stakes

M96 Engine Tech
Diagnosing the common issues with the M96 and how to resolve them

64 RSR Porsche
How this humble RSR became the envy of the neighbourhood

70 Interview:
Sabine Schmitz
Up close and personal with the
Nürburgring favourite

76 993 RSR

Behold the car that proves the effort crowns the glory

















The latest news, updates, products and gadgets from the world of Porsche and beyond

In brief

Dodo Iuice

Car care experts Dodo Juice have released their new Total Wipe Out All Purpose Cleaner, the newest addition to their one-litre Pro Pack range intended for use by multi-car enthusiasts and professional detailers. . The cleaner is ideal for doing away with tough dirt on wheel arches as well as degreasing your engine bay www.dodojuice.com

Hold It All

Porsche inspiration meets traditional Italian handywork with this beautiful British bag

aracalla 1947, a UK-based company that deals in leather goods inspired by motorsport, is currently showcasing this Nero Monza handcrafted holdall.

Made from nero opaco (matte black) leather with a lighter, biscuit-coloured lining inside, the bag makes for a nostalgic nod to Porsche's early racing days with the #37 roundel featured prominently on the side. You can also



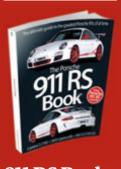


Your possessions will look at home inside the Nero Monza holdall

custom order this holdall with matte grey leather and contrasting brown leather straps, depending on your favoured aesthetic. No matter which colour you choose, you will also receive a lifetime guarantee that covers stitching, zippers and fittings. The bag features solid metal feet to help protect the bottom, along with internal zippered pockets and a cloth

dust cover to keep it safe when not in use. Best of all, most airlines accept this holdall as hand luggage, keeping your leather safe from the perils of an aircraft's underbody.

www.caracalla1947.com/p97/ Porsche-Inspired-%2337-Nero-Monza-weekend-holdall/product_ info.html



911 RS Book

Discover all there is to know about the greatest Porsches ever made with this guide from the makers of Total 911. From classic road tests to full-on restoration, this book covers all manner of RS models, from the 2.7 all the way to the GT3 4.0. Packaged with stunning photography and indepth articles written by our 911 experts, simply visit the Imagine Shop to order a copy. www.imagineshop.

www.imaginesnop. co.uk/the-porsche-911-rs-book.html



Free for both Android and iOS

For those who want the most up to date traffic information, download INRIX Traffic for Android or iOS. Utilising the largest traffic network in the world, INRIX provides real-time updates that include accident delays, roadworks and local events. The app also has a forecasting feature that can help you plan up to 12 hours in advance. Crowd sourcing comes into play as well; users of the app can report traffic incidents to help out other users.

www.inrixtraffic.com/features



GoPro's heroic new video recorder

£359.99

The GoPro series of miniature HD cameras has been enhanced with the introduction of the Hero3: Black Edition. The first thing you will notice is the 30 per cent decrease in size on previous models, while the Hero3: Black Edition weighs merely 2.6 ounces, marking a 25 per cent decrease in weight. For slow-motion video, the camera will now shoot 1080p video at 60 fps (frames per second) and 720p at 120fps. If ultra-high resolution is your preference, it will shoot 4K ultra-HD video at 15fps. There's also an iOS app for Wi-Fi enabled units that allow for full camera control and a live scene preview.

gopro.com/cameras/hd-hero3-black-edition

Keep up to

Log on to www.total911.com to get the latest news and more

- Competitions
- Subscription offers Backissues
- Features

Share your views on all things 911 and Porsche related. Send your thoughts to:

Email: editorial@total911.co.uk

Write to us:

Total 911, Imagine Publishing Ltd, Richmond House, 33 Richmond Hill, Bournemouth, BH26EZ, UK

Join the debate:

Twitter: @total911 Facebook:

www.facebook.com/ total911magazine





A timeless look of style

Night Vision

€3,250 (£2,691) Model: P'6340

Porsche Design's P'6340 Flat6 Black/Red Caoutchouc is one of their more customisable watches. The baton indices and hands are coated with a luminous material to aid reading in lowlight conditions. The strap can be had in either caotchouc (unvulcanised rubber) with a folding clasp, or with a stainless steel bracelet and corresponding folding clasp.

onlineshop.porschedesign.com/en/products/ detail/cat/chronographs/ product/p6340-flat6blackred-caoutchouc.html

Easy Visibility

€4,580 (£3,793)

Model: P'6620

This Titan Black watch gives a modern chronograph feel that focuses on a dynamic, clear design. Featuring a new 44mm case, the Titan Black's purist face presents easily readable Arabic styled numbers to guarantee an unobstructed view. Coming from the P'6600 Dashboard series, these watches evoke the same styling as the 911's very own dashboard.

onlineshop.porschedesign.com/en/products/ detail/cat/chronographs/ product/p6620-titanblack.html

Boxer Inspiration

€4,390 (£3,635)

Model: P'6360

Porsche Design brings flat-six inspiration to timekeeping with this Flat6 Chronograph Automatic. Featuring a mostly steel design incorporating both the bracelet and the face of the watch itself, the numbers are of the same design you'd find on your 911. The face of the watch is a carbon fibre design, with black and white dials that help add to the visibility of the chronograph.

onlineshop.porsche-design. com/en/products/detail/ cat/chronographs/product/ p6360-flat6-chronographautomatic.html

An air of Martini

£70

Martini Racing has produced one of the most memorable liveries of all time, and now you too can own the timeless red, white and blue aesthetic in rugby shirt form. Direct from the Porsche Design store, their rugby shirt is decorated with the Porsche logo and Martini Racing stripe on the front, with various racing labels on either side. The shoulders also carry decorative contrast stitching along with a white collar. Made from 100 per cent cotton in a rich dark blue hue, this shirt is available in sizes ranging from S to 3XL.

shop1.porsche.com/uk/men/shirts/ wap772xxx0b/rugby-shirt-martini-racing.pdds

Get the centrelock look

Prices vary by supplier

OZ Racing has expanded their i-TECH range of wheels with their new Formula HLT alloy wheel. With the design inspiration coming straight out of Formula 1, this new series is a track-inspired wheel meant for serious performance. Featuring a ten-spoke monoblock design that focuses on minimising weight, the Formula HLT is available in diameters from 17 to 20 inches. You can also give your five-lug 911 the centrelock look by way of an optional centre cap design. Like every other OZ Racing wheel, the Formula HLT comes with a ten-year warranty, TÜV and PLUS certifications.



Keeping Cool

From £20

Heat-management obsessives can rejoice thanks to Zircotec's series of flexible ceramicbacked heatshields aimed at helping your 911 stay as cool as possible. Weighing just 0.46kg/ m2 and measuring a mere 0.25mm in thickness, just a single layer of Zircoflex can reduce surface you're looking to protect fuel lines, batteries or temperatures by 64 per cent in the engine bay, with double and triple layers dropping the heat by 77 and 85 per cent respectively. Whether



fibreglass bodywork, ZircoFlex can be cut, bent and folded to fit nearly anywhere.

www.zircotecshop.com

Motorsport



Brand new FIA GT series announced for 2013

Following months of discussion with the FIA and GT teams, SRO Motorsports Group and the FIA have announced details for a brand new FIA GT Series that will start in 2013, maintaining the competitive format of the former GT1 World Championship while bringing together the best GT teams and drivers from various corners of the globe. The 2013 season, featuring Prospeed Competition from Belgium representing Porsche, will be a shorter affair due to the economic hardship in Europe, containing just six key events. Only one of those races will be held outside Europe. Ten two-car teams have already confirmed their participation, with others to sign on between now and the first race at Nogaro, France on 1 April.

Tandy takes tenth for Porsche this year

Nick Tandy, the 28-year-old Briton with experience in a number of racing series from Formula 3 to Carrera Cup GB, has won a contract to become the tenth Porsche Works driver for the 2013 season. Tandy joins Jörg Bergmeister, Wolf Henzler, Marco Holzer and others in what is currently the highest-

prestige accomplishment of



his career thus far. Tandy made his factory driver debut in the Daytona 24 Hours in the US on 26-27 January.

Racing updates

Latest news from racing series' around the globe

GT3 Cup Challenge GB



ith 12 races in six weekends covering Britain's bestloved tracks, the calendar for the 2013 Porsche GT3 Cup Challenge GB is looking superb.

The season starts at Donington Park in mid-April, just a week before the Carrera Cup GB races at the East Midlands track on the BTCC schedule. Double-headers at Snetterton (May), Croft (July) and Rockingham (August) follow through spring and summer before an all-action finish to the season in September with dates at Brands Hatch and then at Silverstone for the BTCC weekend.

Carrera Cup GB

Daniel Lloyd and Team Parker Racing will team up for a title challenge in the Porsche Carrera Cup GB. After being selected for a second season as the Carrera Cup Scholarship



driver, Lloyd will try to become the first to win the title as a scholar. He is renewing his partnership with Team Parker Racing, and says the knowledge he gained in his debut season last year will serve him well. Lloyd scored a fantastic victory at Thruxton in April, but also suffered some ups and downs across the balance of the season as he raced to sixth place in the final standings.

American Le Mans Series

The countdown to the new American Le Mans season is underway, with glimpses of what we can expect to see on show at the annual Sebring Winter Test. Scheduled for 5-8 February at Sebring International Raceway, ALMS cars are on-track 7-8 February, with IMSA's three development series running the two days prior.

World Endurance Championship

The coveted Royal Automobile Club Tourist Trophy will be awarded to the winning drivers in the British round of the FIA World Endurance Championship at Silverstone. The Championship also visits Belgium, France, Brazil, USA, Japan, China and Bahrain. Porsche will field two 'works' LMGTE-Pro cars in the Championship which, of course, includes the 24 Hours of Le Mans.

Porsche Club Championship

The Porsche Club Championship has announced a provisional schedule for 2013 and opened entries to the series, which will be held over seven races. Six of the meetings will be double headers, and as has become the norm in recent seasons, the final rounds will be the second visit of the season to the Silverstone Grand Prix circuit with three races to close the championship in style. The first race is at Donington Park on 6 April.

Total 911 extras

All About Space

All About Space, our exciting new sister publication, which aims to explore and explain the wonders of the universe in all its glory, is available to purchase right now from all good retailers.

Porsche 911 Turbo: The Ultimate Guide now on sale

Porsche 911 Turbo contains the best of Total 911 remixed into a glorious book. It's a great addition to your Porsche library. It is available to buy from www.imagineshop.co.uk

Total911.com

For the latest Porsche news, videos, comment, photographs, interviews and features, go to www.total911.com or subscribe to our RSS feeds.

Twitter and Facebook

You can follow **Total 911** on Twitter (@Total911) for an extra dose of all things Porsche, and our **Total 911** Facebook page (www.facebook.com/total911magazine) also provides a great way to interact with the rest of the 911 community.

Get Total 911 wherever you go

Total 911 is now available for all smartphones and tablets at our amazing new digital download site www.greatdigitalmags. com. As well as giving you access to back issues and the latest editions, visitors can purchase or subscribe to any Imagine magazine. And the best part? It's suitable for every device, from Android to BlackBerry to iPad and iPhone. The great new site also enables users to read Total 911 on a Mac or PC, so you need never be without the world's best Porsche magazine again



Porsche Parts 911, Boxster, Cayman, Cayenne

LARGEST INVENTORY OF HARD TO FIND PORSCHE PARTS



Engines, Transmissions, Brakes, Wheels,
 Seats, Bodies, etc...
 Over 400 Porsches in Inventory
 We Ship Worldwide!

phone 818.767.7243 fax 818.768.0911 9819 Glenoaks Blvd • Sun Valley CA 91352 info@ladismantler.com

www.ladismantler.com

"Olide this ad for a 50% discounting of the state of the

V1EVVS Your letters, emails and tweets

Letter of the month

The sender of the Letter of the Month receives a **Porsche 911: Celebration Of A Legend** bookazine!

Porsche 911: Celebration Of A Legend bookazine



A fine collection



I am a British guy living in Southern California. I'm a member of the Porsche San Diego club, and am a subscriber to Total 911 both in print and digitally. I think your magazine is without doubt the finest out there!

I thought you might like to see my two German children: Lown a 2011 GT3RS and a 2010 Turbo. I have attached several photos of them at my home after buying them both new.

I noticed you have owner reports in your magazine, and would like you to know that I would be happy to give any feedback on my cars should you wish to receive any. I bought the 911 Turbo in January 2010, and it has been superb! I bought the GT3RS in February 2011. Words don't adequately describe the GT3RS. I don't drive it; I strap it on and it becomes a part of me. I could not choose one above the other, as they are both simply intoxicating and provide me with equal joy, and I try to alternate between driving both so as to not favour one above the other.





"I could not choose one above the other, as they are both simply intoxicating and provide me with equal joy"

I have had four Porsches: a 2008 Cayman S, a 2009 C4S and now these. I believe I have two of the finest, and am very fortunate to have them.

Again, I truly enjoy your magazine, and being a Brit in Southern California your magazine makes me proud to be British with, of course, German cars.

Enjoy the photos and feel free to contact me any time.

Warmest regards,

Tony McGuiness, California

Thanks for the kind words, Tony. What a fine brace of 911s at your disposal! In owning and driving both the Turbo and GT3RS, it's nice to see a driver who appreciates the finer characteristics of both, rather than plumping for one and staying put! On your point of owner reports, we are looking to add to our Living the Legend collection at the rear of the magazine, so we'll keep your details on file. Enjoy your 911s - one at a time, of course!

Log on to www.total911.com and experience 911 heaven online

•Latest news updates •911 Face-Off ·Subscription offers

•911blog •Twitterfeeds Backissues



A winter wonder

Who says we Porsche drivers lock our 911s away at winter? This is perfect for me!

Johan Balck, via Twitter

Well Johan, you're certainly brave! However, if you lived somewhat further north of the equator, you might not be so forthcoming to adverse conditions. We're not fans of regular wintry weather in the UK!

996 or 997 Turbo? Pt 1

To answer the online debate. I think the 996 Turbo has a more attractive interior, while the 996 T exterior is more appealing. In some respects, the performance of the 996 is better, too. Yes, the suspension is not adjustable, and some might claim it's a bit harsh, but I disagree. We are not driving touring cars here.

Carlos, via total911.com



911 in motorsport

May I just say how enthralling your motorsports coverage has been. I thoroughly enjoyed the read on grassroots racing from Issue 95, and the 911 in rallying from Issue 96 was particularly enthralling. I look forward to future articles on 'real world' sporting environments.

Sincerely,

Cameron Wilson, via email

Contact us...

Share your views on all things 911 and Porsche related. Send your thoughts to:

Email: editorial@total911.co.uk

Write to us:

Total 911, Imagine Publishing Ltd, Richmond House, 33 Richmond Hill, Bournemouth, BH26EZ, UK

Join the debate:

Chat to us about all things Porsche-related by following us on our Twitter page:

@total911





996 or 997 Turbo? Pt 2

The 996 Turbo is the supercar bargain. You can get 550bhp without much fuss, and add Turbo S suspension to improve handling. To my mind, it also looks better.

For £26,000, plus another £7,500, you have something that can't be beaten, unless you are spending £120,000+.

Henry Boxer, via total911.com

There are some very interesting opinions developing at our online thread for the 996 vs 997 Turbo, with just two examples highlighted here in our letters page. We have to agree with Henry that the 996 is an undoubted supercar bargain at present, offering an exceptional car for your money. Many prefer the looks of the 997, but the 996 does hold an added value appeal.

atotal911

One of our most popular discussions on Twitter this month followed our question:

'What do you consider to be the most underrated 911?

Someone has to say it so here goes: the 996, especially the facelift 3.6

@andrewmckay99uk

Targa 993, 996 and 997s. Marked down as too heavy, rubbish they are great cars to drive.

@Immortal_Genes

911 SC + 996, both a lot of bang for the bucks!

@WardUrlings

More of your tweets

We LOVE the new 991 GT3 Cup car! Can't wait to see it ripping up tracks across the globe!

@SuncoastParts

993rd tweet so would be rude not to... @ChrisV6255



The whereabouts of #300 055

Dear Sir.

Although Total 911 is not available in Luxembourg, I managed to purchase a copy of Issue 92 during a recent trip to Spain.

On reading the 'Lazarus revisited' article concerning the 1965 Rallye Monte Carlo homage, the writer states that #300 055 is at the Porsche Museum or "...it has been lost, dead and buried".

Surprisingly, #300 055 seems to be for sale in Monte Carlo (see attached picture).

Does the writer have any further statements whether to confirm or not the piece in Issue 92?

Best regards,

Mario Laguna, Luxembourg

Thanks for the find, Mario. We contacted the Monte tribute's owner,



who confirmed the car for sale is in fact the genuine Monte rally car. The seller, Claudio Roddaro, is behind Scuderia Classic, and is a long time racer and collector of first-class Porsche racing cars. The factory sold the car to a French racer in 1966,



where it saw more action until it was stored for about 30 years. The seller has indicated that it has now been sold, believed to be in Europe.

If anybody else has any additional information on the '64 Monte Carlo, we'd love to hear from you.





Imagine Publishing Ltd Richmond House 33 Richmond Hill Bournemouth, Dorset, BH2 6EZ **☎** +44 (0) 1202 586200 www.imagine-publishing.co.uk www.total911.com www.greatdigitalmags.com

Magazine team

Deputy Editor Lee Sibley

ree.sibley@imagine-publishing

101202586291

Art Editor Katie Peat Sub Editor Steve Wright Head of Publishing Aaron Asadi Head of Design Ross Andrews

Contributors

Alisdair Cusick, Chris Dearden, Kieron Fennelly, John Glynn, Ross Kirkman, James Lipman, Willhelm Lutjeharms, Danie Nel, Joel Newman, Laurens Parsons, Ben Przekop, Daniel Pullen, Gina Purcell, Phil Royle, Phil Steinhardt, Maurice van den Tillaard, Chris Wallbank

Cover image

James Lipman

Advertising

Digital or printed media packs are available on request

Head of Sales Hang Deretz

☐ 01202 586442
hang.deretz@imagine-publishing.co.uk

Account Manager Gary Pearce

101202 586412

12 gary.pearce@imagine-publishing.co.uk

International

Total 911 is available for licensing. Contact the International department to discuss partnership opportunities

Head of International Licensing Cathy Blackman **7** +44 (0) 1202 586401

licensing@imagine-publishing.co.uk

Subscriptions

Head of Subscriptions Lucy Nash subscriptions@imagine-publishing.co.uk

For all Subscription Enquiries

UK: 0844 249 0463 Overseas: **a** +441795414886

13 Issue subscription UK – £52.65 13 Issue subscription Europe – £60.00

13 Issue subscription ROW - £70.00

Circulation

Head of Circulation Darren Pearce ☎ 01202 586200

Production

Production Director Jane Hawkins

☎ 01202 586200

Founders

Group Managing Director

Damian Butt

Group Finance & Commercial Director

Group Creative Director

Printing & Distribution

Printed by Wyndeham Heron Ltd, Bentalls Complex Colchester Road, Heybridge, Maldon, CM9 4NW. Tel: 01621 877777

Distributed in the UK & Eire by: **Seymour Distribution** 2 East Poultry Avenue, London, EC1A 9PT. Tel 0207 429 4000

Distributed in Australia by: **Gordon & Gotch**, Equinox Centre 18 Rodborough Road, Frenchs Forest, NSW 2086. Tel + 612 9972 8800

Distributed in the Rest of the World by: **Marketforce**, Blue Fin Building, 110 Southwark Street, London, SE1 OSU Tel 0203148 8105

Disclaimer

DISCIAITNET
The publisher cannot accept responsibility for any unsolicited material lost or damaged in the post. Total 91 is independent of Porsche AG. All text and layout is the copyright of Imagine Publishing Ltd. All text and layout is the copyright of Imagine Publishing Ltd. without the written permission of the publisher. All copyrights are recognised and used specifically for the purpose of criticism and review. Although the magazine has endeavoured to ensure all information is correct at time of print, prices and availability may change. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.



© Imagine Publishing Ltd 2013 ISSN 1746-6130



A cold conundrum



With the worst of the weather not yet behind us, Chris Dearden puts forward the irrevocable argument for using winter tyres

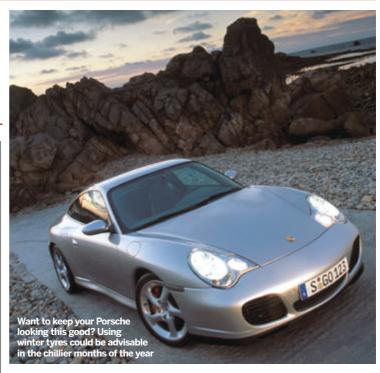
here are a whole variety of things that guarantee my full attention, but high on that list is my wife

announcing that she thinks there is something wrong with the car. I try to keep my voice calm as I casually ask her which one, and I totally fail to hide my relief when I discover it is her Golf, rather than my 911, that's giving her cause for concern.

Our Golf is a very nice, low mileage, 170bhp turbo diesel, which my wife wanted because it will more than hold its own on the autobahn when she visits relatives, while still delivering over 50 miles to each gallon of the unpleasant-smelling stuff it runs on. Consider it a thinking woman's pocket rocket, in fact. I bought the car early last year and it had been totally reliable - up to now. Going round a roundabout one morning, it suddenly decided it was going to go straight on, though miraculously there was no damage to the car or driver. It had then apparently put itself right for the cautious journey home, prompting my first thoughts to be of black ice. However, the temperature outside was still above freezing. Perhaps a truck had spread some of its diesel on the road surface? Driving off to investigate, I got no further than the first roundabout before exactly the same thing happened again. As I slid, I had just enough time to try to guess how much a smashed near side alloy was going to cost before the car finally stopped safely, just short of the barrier.

I drove to my local independent VW specialist, who gave the steering a 30-second check before asking how fast I had been going. I admitted that I had been driving quite enthusiastically, but certainly not excessively fast, and he laughed. The problem, it seems, came down to the tyres and the turbocharger. To extract 170bhp from their plodding oil burner, VW had bolted on a whopping turbo that resulted in turbo-lag reminiscent of the first Saab Turbos – back then you planted your right foot and still had time to say a couple of Hail Mary's before a massive hand shoved you up the road, or off it if you were unlucky. The technician guessed that when I was negotiating the roundabout I had put my foot down with a little too much enthusiasm, and when the power kicked in it simply spun the driving wheels, leaving me with no grip and a car that was determined to leave the roundabout via the shortest possible route. I asked why had I never experienced this before, and he pointed to the tyres and the thermometer on the wall reading two degrees Celsius. "That tyre gives fabulous grip when it is in its designated temperature range, and rubbish grip when it's not. Today, it's outside that range." Just to rub it in, he added, "That's why it's called a summer tyre." He was enjoying my discomfort a bit too much.

This reminded me of a trip in my 911 to visit my petrolhead brother-inlaw in Austria early last spring. Which brand of winter tyres had I got fitted. he asked? When I told him I still had my usual Continentals on, and that we Brits didn't really do winter tyres, he gave me that look of disbelief he normally reserves for people who tell him they don't like apple strudel with double cream. Fitting winter tyres is the law in Austria, he told me, but even if it wasn't, only someone who had been hitting the Schnapps far too hard and for far too long would even consider driving in winter without them. Every main dealer has a large storage facility where their regular customers store the set of wheels not in use, and each spring and autumn



they take their car in to have them swapped – for a fee, of course.

It is tempting to be cynical and dismiss this as mere marketing, selling us something we could probably do without, but recent research makes this a difficult argument to accept. A sports Coupe was tested on a snowy surface similar to the roads many of us have had to face in the UK in recent winters. It was fitted in turn with Bridgestone Blizzak winter tyres, Continental all-seasons and finally Pirelli PZero summer tyres. From 30mph the winter tyres stopped in 74 feet, the all-seasons in 135 feet and the Pirellis, probably similar to the tyres on your 911 today, in 332 feet. By the time the Pirelli-shod car reached the distance at which the winter tyres had totally stopped, it had only managed to lose 4mph. In the extra 258 feet it travelled, the ABS suffered critical brake fade, with the pedal dropping to the floor. By then,

the car had no grip and no brakes. And just in case anybody thinks the safest compromise might be to use winter tyres all year round, they repeated the tests in the summer and predictably got the opposite results, with the winter tyres needing far longer to stop than the summer set.

So where did this leave me and my wife's Golf? Well, instead of the one alloy wheel I feared I was going to have to replace, I am now going to have to find four. Even if I can find a suitable set, I will have no change from £1,000 by the time they are wearing a set of winter rubber. Then, of course, there's the trickier question of my 911. Porsche tell me it should be wearing winter boots as soon as the temperature drops below seven degrees celsius, and my OPC will sell me a package for around £4,000. Maybe those who tuck their 911s away in the garage over winter know what they are doing after all...

"The summer tyres travelled 258 feet further than winter tyres, suffering brake fade"



Win an exhaust for your 911

QuickSilver Exhausts has teamed up with Total 911 to present you with a chance to win up to £1,500 off a new system for your Porsche

uickSilver Exhausts are a company that appear almost synonymous with performance enhancement and refinement. Trading since 1973, they share a unique birthday with the 91l's very own Rennsport models, laying claim to 40 glorious years of existence. Throughout those four decades, QuickSilver has developed premium exhaust systems for enthusiasts using Stainless Steel, Titanium and Inconel.

In the early days of the Seventies and Eighties, QuickSilver made a name for themselves producing performance systems for the 356 Carrera, 904 and 906 before their popularity spread to the wider motoring community. Despite such polarised appeal, there has nearly always been a Porsche in the QuickSilver garage, owing to much more than mere coincidence. "It is an untold law of motoring that a 911 is considered the pinnacle of sportscar ownership. It is for this reason a 911 and QuickSilver go together so well," says managing director Paul Goddard.

QuickSilver's goal is to produce alternative exhausts that allow the driver to personalise their car's sound and, in many cases, provide a significant weight reduction, alleviating performance. As a case in point, their 997 GT3 system saves 23 kilos from the rear axle of the car. As time-honoured supporters of QuickSilver, **Total 911** is delighted to offer one lucky reader £1,500 credit towards any of QuickSilver's handbuilt Porsche exhaust systems. This would cover

the complete cost of a cat-back 'Sports' exhaust for 993, 996 and 997 models, and go some way toward the full cost of the majority of Porsche systems in the range.

To be in with a chance of winning, just answer the following question:

What's the oldest 911 model that QuickSilver manufacture an exhaust system for?
Clue: See the QuickSilver website.

Send your answer together with your name and address to competitions@total911.com with 'QuickSilver' in the subject line before the closing date of 1 March 2013. See the full QuickSilver range at www.quicksilverexhausts.com

Terms and conditions: This competition is open to residents of the United Kingdom and Ireland. QuickSilver Exhausts has the right to substitute the prize for a similar item of equal or higher value. Employees of Imagine Publishing (including freelancers), their relatives or any agents are not eligible to enter. The editor's decision is final and no correspondence will be entered into. Prizes cannot be exchanged for cash. Full terms and conditions are available upon request. From time to time Imagine Publishing or its agents may send you related material or special offers. If you do not want to receive this, state it on your entry.

On the USA's West Coast, we sample a flawless personal take on the latest 911 with the TechArt Aerokitted Carrera S

perfection





icking over on the SharkWerks driveway, the TechArt aerokitted grey 991 thrums dutifully, awaiting my presence. I won't deny, this is an exciting moment: other tuning companies around the globe have released their take on Porsche's latest 911, but few have stirred me to fly 6,000 miles to California to take a look at one.

The reviews I've read so far for the new 991 have all been positive, as they should be, given the amount of money Porsche threw at it. Now made mostly of aluminium, the 991 has a wider front track, longer wheelbase and a bigger rear end, all of which are obvious alongside a 997 GT3 RS in the workshop. A first glance of a 991 conjures up echoing notes made by other automotive journalists: "Some of the old 911's intimacy is lost, but road noise drops considerably inside, and functionality and comfort both rise." However, this is exactly why I'm here: I'm savouring my first experience in a 991, and am keen to see what added spice this SharkWerks/TechArt project has come up with.

If you like centre consoles, you'll love this car. A desk-like hunk sprouts from the dashboard and runs through the seats to the back. Right in the centre at the front is a big silver PDK knob.

Automatic 9lls have always been a challenge: putting a fluid-filled torque converter between the flywheel and the rear wheels was never the way forward. PDK loses the oil drum and instead uses a pair of wet clutches like on a bike. One clutch runs the active gear while another preselects the next, shooting it into play almost imperceptibly. PDK on the 997 didn't convince me, but Porsche says this one is better than ever. We're about to find out.

Pulling out onto the idyllic Californian boulevards, first gear lasts for a few seconds before second arrives, and then third. I'd still be a gear lower in manual, maybe two, so it's obvious how PDK saves fuel. Stopping at some traffic lights to make a left turn, I'm third in line. To my right is an 18-wheeler, also turning left. I want to get to the apex ahead of him so I don't get squeezed out.

The lights change and the other cars get away quickly. Like its Panamera sibling, this PDK 991 needs a good prod of throttle to get moving. In the second or two it took me to realise this, the truck gets ahead and starts his turn. The trailer approaches the side of my car, before the Porsche finds some punch and we're suddenly out in front. That split-second manoeuvre puts an instant smile on my face: this is a car of surprises.

We're heading for Dumbarton Bridge, one of eight bridges spanning San Francisco Bay. Located on the edge of a wildlife preserve, Dumbarton offers quiet link roads and a bay view to die for. Linking Fremont to the bridge is a short squirt of freeway: something this 991 had better get used to. "The owner's used us before, so knows our work well," says my passenger, SharkWerks' boss Alex Ross of this rather special Agate grey 911. "This one's his daily driver, but he wanted to make it a





"The Agate grey

Carrera S TechArt was the first TechArt conversion in North America"









little more personal: hence the TechArt parts. The car was delivered to our local dealer, and we fitted the extras before he'd even driven it."

Porsche enthusiasts aren't usually known for their openness to tuners. With the exception of figurehead specialists like Alois Ruf and Olaf Manthey, tuners get a heavy rap from the 'keep it stock' majority, often due to a lack of education.

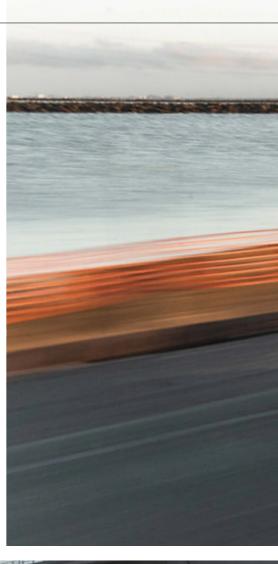
Established in 1987 near Weissach, TechArt has been a recognised vehicle manufacturer for many years, and its tuning products follow principles of high quality design, engineering and construction.

"SharkWerks offers two aero choices: factory or TechArt," says Alex. "We don't bother with much else, as most of it's made out of cardboard or worse. TechArt parts are high quality and functional: brake ducts and aero parts really work."

This steering wheel is a great example. As this is the part that drives home the complete experience, there's no sense in skimping on quality here, and TechArt rather pleasingly hasn't. A close inspection shows hand finishing on the flat-bottomed wheel by someone who really knew their stuff. TechArt parts cover every Porsche model. Aero parts are developed in the wind tunnel, and proven to work before going on sale. Once satisfied, the body components are manufactured in polyurethane RIM, ensuring perfect reproduction















and a durable product that maintains the integrity of the original part. These high standards mean TechArt is ISO 9001 certified and TÜV approved.

TechArt quality left only one choice for this customer. The Agate Grey Carrera S was the first TechArt conversion in North America and features a full Aerokit I conversion, including the Type II rear wing, the forged Type III wheels, that steering wheel and a spring kit.

TechArt's Aerokit promo proclaims: "Aerokit I underlines the sportive attitude of the 911 from every angle. Typically TechArt, its subtle distinction is unmistakable. At the same time, it decently maintains the inimitable 911 design line." I can't disagree: at rest, the car looks spectacular.

The two-part front spoiler with integral splitter swoops seamlessly into the surrounding front apron. TechArt says its composition "optically reduces the distance between the car and the tarmac, emphasising self-confidence and strength." Aerowings in the front air intakes showcase a twin-duct front-end approach, and colour-matched headlight rims, washer caps and mirror trims complete the facelift.

Down each flank is a side skirt in PU-RIM. These bolt directly to the chassis with factory-style hardware and an extra lower support piece, giving a more aggressive look. Wind tunnel testing played its part: the new sill trims show reduced turbulence along the sides. The rear bumper also gets aero help, with a colour-matched central diffuser.

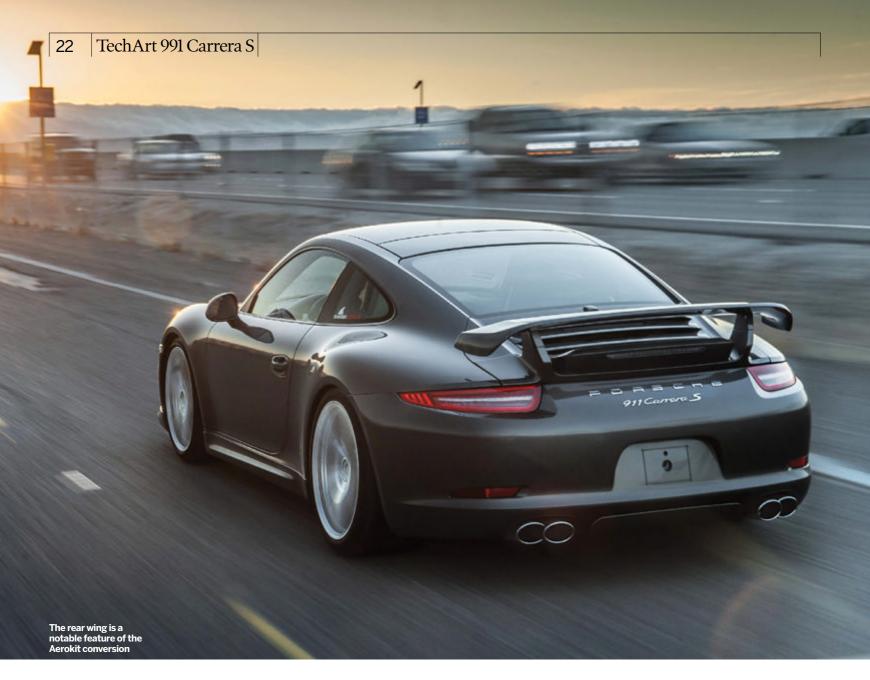
A quick look at that TechArt Type II rear spoiler with its integrated trailing edge suggests more

downforce should be available. Indeed, this is the case. Working in tandem with the front aero, the package generates an additional 17.5kg of downforce at highway speeds. As you go faster, the forces increase: TechArt claims an additional 76kg of overall downforce at the 99l's top speed.

"We've been TechArt distributors in California for years, so we know their products work," declares Alex. "At highway speeds, you can feel the difference from the stock car to this one. Fitting correctly is key, and the reward is quality. We take our time to get these cars done right.

"The front grille inserts give the car a really nice attitude, but there's a fair amount of modification that needs to be done. Also up front is a multilayered Type I lip: a complex assembly when being fitted for the first time. The Type II rear wing sports a good few parts before it's affixed. You can run it in two positions: high and low. After fitting the base, you choose the riser height and relocate the third brake light. Then the diffuser goes on, and those TechArt exhaust tips.

"The 991 suspension is quite different to the outgoing 997.2 that we're so familiar with, but the new springs are relatively easy to fit. They don't change the excellent ride quality, but they do improve and lower the centre of gravity. Once the suspension was done, we fitted the forged Type II wheels, with factory TPMS installed. A weight saving of 2kg per corner up front and almost 3kg per corner in the rear from the wheels reduces unsprung weight, which is so important for handling."



Inside, all that was changed were the pedals and steering wheel. I'm liking this flat-bottomed Alcantara TechArt wheel. Not having driven a standard 991 yet, my focus is all on splitting the feel of the wheel from what's coming through it.

After passing that truck, the lunchtime traffic throughout San Francisco is well spaced out. Our highway on-ramp's ahead to the right, so I quickly switch lanes for the slip road. No tuner has yet managed to communicate with the ECU, so the engine mapping is unaltered, but the engine delivers eagerly through this sharper PDK.

Though California has some rough roads, the 991 shrugs it all off. Pirelli PZero is the tyre of choice: 245/35 R20 up front and 295/30 R20 behind. The widened front track shows in easier straight-line tracking, even with 20-inch wheels. A 997 with the same wheel setup would be more challenging.

"The lightweight 20-inch Formula III wheel is the same setup we ran on our 2009 997S PDK development car," says Alex. "They work really well on the 99l. The wheels come in 19 to 22-inch sizes, with a choice of four finishes: this one is the Sterling Silver, and options are bi-colour turned Anthracite, burnished gloss or body colour. They also do a centrelock wheel for cars appropriately equipped."

The 20-inch wheels fit the 996 Turbo and GT2, all 997s and the 991. Later, an Instagram commenter who derided the "pointless rapper bling wheels" was soon silenced when the forged manufacture and lower unsprung weight was pointed out.

After slogging through traffic past pool lanes and potholes, the 991 proves itself honourably. As a daily driver with the baby seat in the back, it's a good one. Ride is great, the cabin is quiet and the car asks little of its driver. Small wonder it's bringing so many first-time 911 owners to SharkWerks' enquiry line.

As our photographer, Jamie, shoots his final images, the sun sets behind the hills and we head for Porsche Fremont to drop off the car. It has only done 700 miles, but already has two recalls outstanding. As it rolls onto the tiled service forecourt surrounded by Panameras, it's suddenly put deep into context. Dark grey paint and big wheels fit, and the car looks all of its purchase price. Alex hands the keys in, we jump in my rental and head out for sushi.

Up to our day with the 991 Carrera S, I wasn't that bothered about the newest addition to the 911 lineup. The 991 might be lighter, faster and sharper, but the marketing was all about comfort and quietness, aiming for increased production. No one ever sold

more ice cream by adding extra spice: the big seller is vanilla, and adding vanilla is not my idea of best 911 practice.

Maybe the 991 in standard form is a bit more 'vanilla' if you will, with fewer of those trademark 911 strange tendencies mooted earlier. But, as a loyal fan of those tendencies, I want them left in. The thing is, no matter how highly purists and hot rodders value those traits, they are all part of history now. Our favourite 911s have been built, and perhaps we're just not the market for this one.

Porsche needs to sell more 91ls, so it has to get simpler to live with. By and large, it has, and this stunning Carrera S exemplifies the fact. The beautifully engineered TechArt upgrades add more individuality while giving nothing away in terms of driving pleasure or future value that the 991 already carries in abundance. TechArt have tweaked what needed tweaking, and left what didn't. If you want one built, you know where to come.

Contact

- SharkWerks: www.SharkWerks.com
- TechArt: www.techart.de



PERFORMANCE DRIVEN ENGINEERING FOR ALL LATE MODEL PORSCHE AUTOMOBILES





RSS COMPETITION SERIES Harness Bars and Roll Bars

- Available in Multiple Styles Including Left and Right Hand Drive Versions
- Applications for Street and Track
- Flawless Fit to Interior Profile
- Provides Safety, Harness Mounting Points and Motorsport Looks
- Available in a Variety of Powder Coated Colors

RSS TARMAC SERIES Suspension Components

Adjustable Rear Link Kit

- Ideal for Lowered Vehicles
- Minimizes Premature Tire Wear
- Greatly Improves Handling and Feedback
- Eliminates Rubber Bushing Deflection

Adjustable Front & Rear Toe Steer Kit

- Ideal for Lowered Vehicles
- Allows for Bump Steer Adjustment
- Allows for Additional Toe Adjustments Over Factory
- Eliminates Rubber Bushing Deflection

2-Piece Lower Control Arm Kit

- Unmatched Performance, Quality and Strength
- Precision Handling, Feedback and Control
- Allows for Roll Center Adjustment
- Caster Adjustment Available
- Solid Monoball Control Arm Ends

RSS X-PIPE CENTER EXHAUST Fits All 997 GT3/GT3RS Models

- Crossover Design Promotes Improved Exhaust Gas Scavenging Effects
- Aggressive Motorsport Exhaust Tone
- Handmade Stainless Steel Construction
- Large Dual Tailpipes Available in Straight or Angle Cut
- Ceramic Coated Satin Black Finish
- Weighs Only 8 Pounds

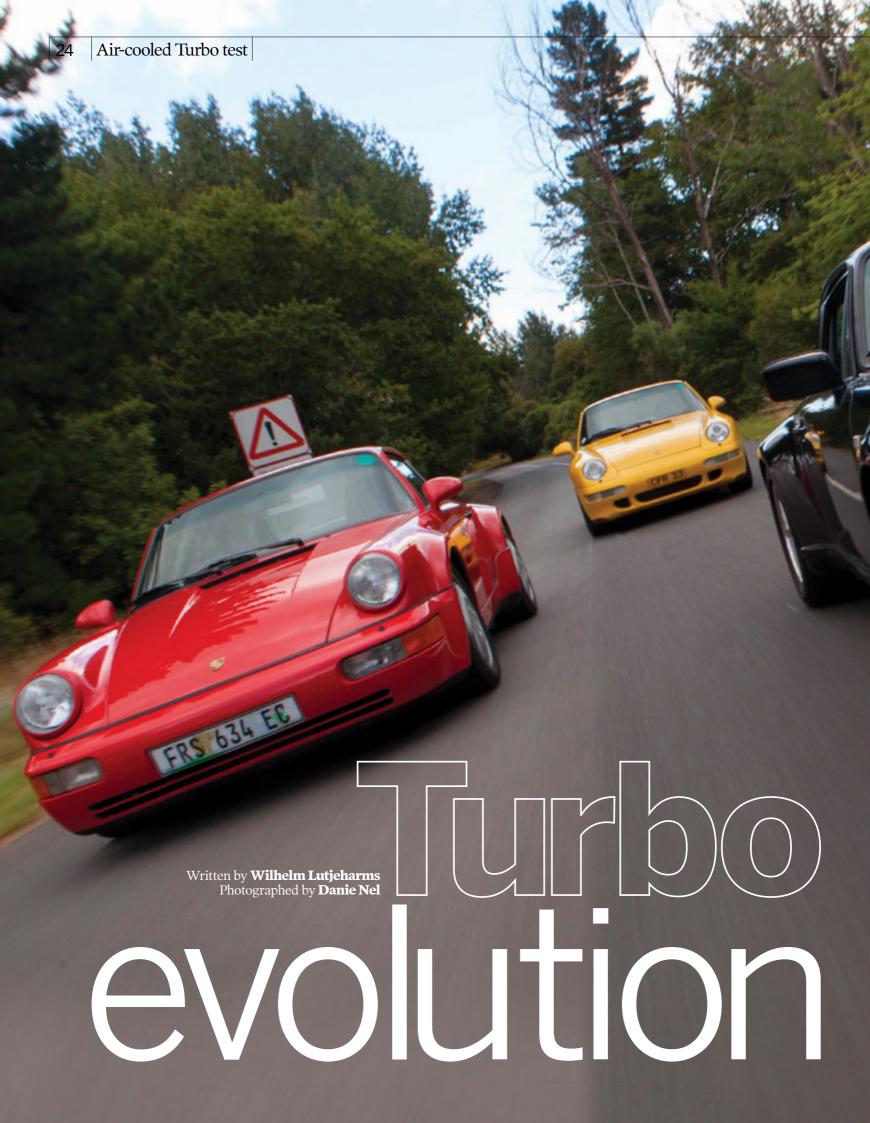


RSS USA | ROAD SPORT SUPPLY
714.545.1046 | sales@roadsportsupply.com
www.roadsportsupply.com

MADE IN CALIFORNIA, USA • CONTACT US FOR AN AUTHORIZED RSS DEALER NEAR YOU AVAILABLE WORLDWIDE









In a year when Porsche is bracing to deliver the new 991 Turbo, Total 911 climbs behind the wheel to chart the progression of the very first forced induction models that paved the way for the marque's now immovable status as a true driving great...

ehold the unmistakeable sight of widened arches, bigger Fuchs wheels and an iconic whaletail that make for well-known characteristics on the original 9ll Turbo, released nearly 40 years ago in 1975. Aside from these now traditional cosmetic upgrades compared to the standard 9ll, the Turbo set a new benchmark in terms of performance, not only in the 9ll range but in the automotive industry as a whole in the mid Seventies. A new dawn for everyday performance was born with the introduction of the Type 930, while the Turbo gained a loyal following as Porsche's quickest production car for the foreseeable future. The later forced induction 9lls may have gained in power and gadgetry, but the air-cooled Turbos carry a reputation of being largely unmatched in terms of sheer driver experience.

As we gathered three stunning examples for a test drive in the winelands region of South Africa, the evolution presented by each new model only enhances that reputation further. It seems the legacy of the 991 Turbo has a lot to live up to in years to come...

When the first deliveries of the 930 Turbo started in the spring of 1975, the automotive industry was enduring a challenging time. It was only a year after the OAPEC oil crisis, which added to the misery in the stock markets who were in the midst of a two-year crash cycle. Regardless, the world still took notice when Porsche unveiled the impressive 930 Turbo at the 1974 Paris Motor Show. The first forced induction 911 attracted international attention as one of the fastest cars of the time, and moreover, it was undoubtedly one of Porsche's most luxurious cars to date. The idea in 1974 was to produce a limited run of only 1,000 Turbo units, but demand surpassed Porsche's rather timid expectations, and instead 2,876 of the first 3.0-litre units were sold.

It is often written that the Turbo technology was implemented in the 911 range as a result of the turbocharged flat-12 cylinder Type 917 engine's success in the 1972 and 1973 Can-Am championships. However, this doesn't tell the full story, and if anything it only scratches the surface. Porsche had already fettled with turbocharging on the Type 901 2.0-litre engine in 1969, but found it premature and delayed any further experimenting. After some more development in later years, the 3.0-litre turbocharged engine derived from the Carrera RS 3.0-litre was fitted to the 911.

This black 930 dates from the later 3.3-litre generation, which started production in late 1977. It is remarkable how the 930's interior has withstood the test of time – although there are several rattles coming from the cabin, it still feels solid for a car of its age. Luxury items at the time included electric windows, an electric sunroof, air conditioning and a stereo cassette player. You can also appreciate the iconic flat dashboard with lower step, an interior characteristic that has changed little across the 20-year timespan of the three air-cooled Turbo models.

If you consider that this particular car was produced in 1980, it still feels incredibly quick by modern standards. Weighing 135kg less than the 964 Turbo, 100km/h is reached in a very respectable 5.4 seconds. Owing to the four-speed gearbox on this specific model, each gear is longer than those in the 964 and 993.

As can be expected, the 930 has a significant amount of turbo lag. The wrong timing on exiting a corner - in terms of throttle input and timing - can catch you out, as even the owner here only grudgingly, but with a smile, confirms by referring to his previous night's drive. You have to anticipate the boost from the single turbocharger, and it's part of a game you will need to play in order to master the car and its rather eccentric acceleration. The rawness of such acceleration once on boost more than makes up for the much-talked-about lag, however, and the 930 throws up a physical driving experience that modern cars just can't touch. With no such driver aids as enjoyed by later models, the rawness of the 930 means it's the iconic Turbo model, warts and all.









930

Engine

Capacity: 3,299cc

Compression ratio: 7.0:1

Maximum power: 300bhp

Maximum torque: 440Nm

at 4,400rpm

Transmission:

Four speed manual, rearwheel drive

Suspension

Front: Independent MacPherson struts, longitudinal torsion bars, antiroll bar and telescopic dampers

Rear: Independent semitrailing arms, transverse torsion bars and doubleacting telescopic dampers

Wheels & tyres

Front: 205/50 VR16 Rear: 225/50 VR16

Rear: 225/50 VR16

Dimensions

Length: 4,491mm **Width:** 1,775mm

Weight: 1,335kg Performance

0-60mph: 5.4 seconds

Top speed: 162 mph







Porsche reintroduced the Turbo - under Type 964 guise - in December 1990. Featuring a 930-esque wide bodied version of the standard 964, Porsche at first opted to tweak the Type 930/68 unit with a larger intercooler rather than develop a new engine, which upped the powertrain slightly to 320bhp. However, the engine size increased to 3.6 litres in the Turbo II, with most parts based on the new M64/01 engine being used in the rest of the 911 range. The turbocharged M64/50 engine used new pistons, and boost pressure was increased from 0.82 to 0.92 bar by simply placing a stronger spring in the wastegate. In the process Porsche was able to bump the power up from 320bhp in the 3.3-litre to 360bhp, and as such the 964 doesn't suffer from quite as much turbo lag as the 930.

The first noticeable mechanical difference as you pull away is the slick and direct shifting G50 five-speed gearbox. Gone is the loose and vague shift sensation from the 930. The seats are electronically adjustable too, and with little effort I am able to move into the perfect driving position. With a lower seating position, you will immediately feel more in control of the car than in the 930.

Of the three cars present, the 964 actually offered the most support. Maybe it was because of their age, but the driver sinks far enough into the seats, while the side bolsters protrude more than in the other two cars. The upright window gives you a good view, while as was the case with the 930, the iconic headlights help the driver direct the car perfectly through corners. It is the middle child, but it does feel that bit more modern than the pioneering 930. Moreover, the steering wheel feeds the driver a good level of information from the road, while turn in is good, but not as crisp as that of the 993. Make no mistake, it makes for a similarly challenging drive as the 930, and the continued rear-wheel drive nature of the car means if you really want to push one of these, you had better be handy at the wheel.

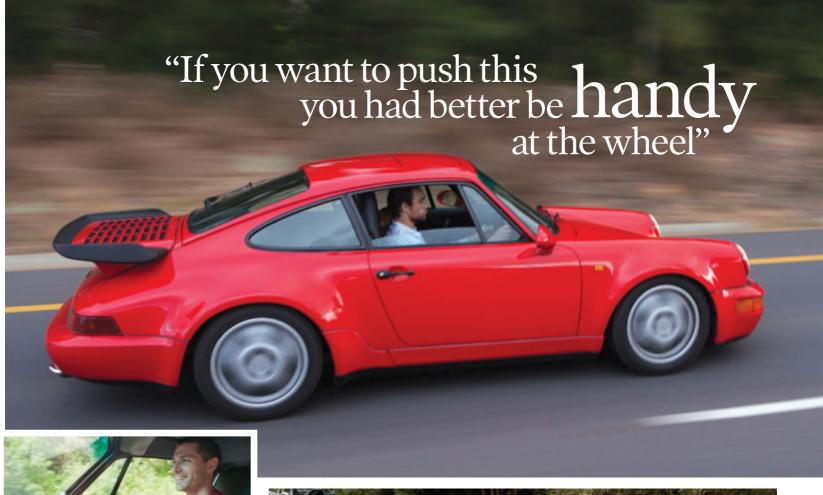
NEW 991 TURBO: WHAT TO EXPECT

The internet has been abuzz with details about the upcoming 911 Turbo. Early guinea pigs were spotted more than a year ago undergoing testing in South Africa, a current hotspot for engineers at Porsche.

Rumour has it that the engine – likely to be 3.8 litres again – could feature three turbochargers, while Porsche will also implement four-wheel steering. Then, take the 65kg weight drop Porsche managed with the Carrera 4, and the new Turbo will also be lighter than the outgoing 997. With the addition of the PDK transmission (a manual gearbox should still be the standard option), Sport Plus and around 550bhp, the dash to 60mph is likely to be below the magic 3.0 seconds mark, which will pit the Turbo at supercars with a price tag double or triple its retail price. If that is not enough, a year or two after the likely summer debut of the 991 Turbo, Porsche will unveil an even more powerful S version.

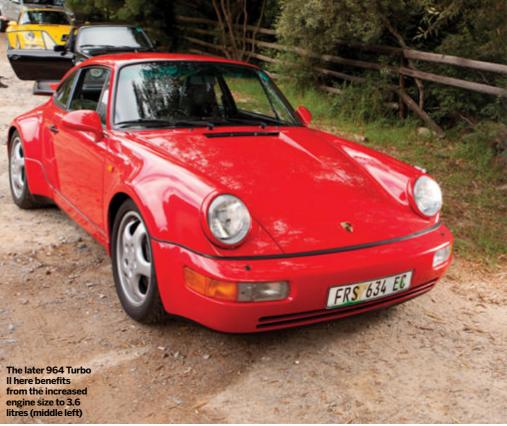












The 993 Turbo was a game changer; a technological conqueror. Shown at the 1996 Geneva Motor Show, this model introduced four-wheel drive to the 911 Turbo range for the first time, a drivetrain we experience in the 911 Turbo to this day. Purists might dismiss this characteristic as spoiling the spirit of the Turbo, but it undoubtedly improves the roadholding. Implementing twin low-inertia turbos for the first time, the 993's M64/60 engine gained 48bhp over the 964, and in the process of sending torque to the front axle the Turbo became a true all-weather supercar.

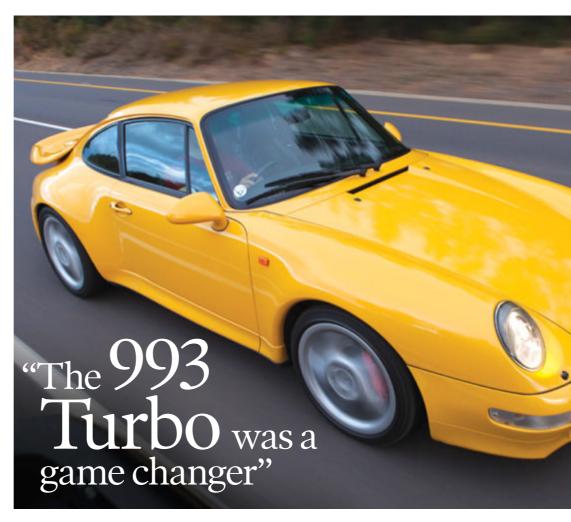
The yellow car in this collection is a relatively unique model. Powered by the more vigorous 450bhp engine (as can be found in the 993 GT2, but called the Le Mans spec on the 993), it also features stiffer suspension and the 993 GT2's exhaust system. It has noticeably wider exhaust tips and a harsh, rough metallic sound as you go through the rev range. This increase in power over the standard 408bhp engine includes, to name a few, bigger intercoolers and turbos, while the engine management system has also been altered.

The more modern 997 and even 996 Turbos are known for their more analogue-like feeling from behind the wheel, but from behind the 993's four-spoke steering wheel that feeling is amplified. Firstly, the six-speed gearbox has a similar action to the 964. It slots perfectly into each gear, and does so quickly. In first gear the rev needle swings around the dial with speed. In second gear I actually made sure that I watched the needle as it touched 7,000rpm. This upgraded engine makes sheer performance felt in almost every gear. With so little turbo-lag, you quickly realise there's no need to wait for the kick from the engine, as it is available almost immediately – an impressive feat for an 18-year-old car!

As rain begins to fall among the beautiful winelands region, the four-wheel-drive 993 should be the better and safer choice, or so I thought. After 20 minutes of driving and marvelling at how the rear wing is melted over those fat hips in the sideview mirror, I pulled away from the traffic lights with haste. I eased through first gear and used the best part of 6,000rpm through second gear before I hooked into third. For a brief moment, all four wheels spun before I lifted a little off the throttle. The moral here is that despite the aid of four-wheeldrive, the 993 Turbo can still be lethal in the wrong hands. Like its 964 and 930 predecessors, utmost care must be exercised when behind the wheel.

It shows that in an age where most cars have several electronic devices – some of them for safety – and where PDK is increasingly seen as the obvious choice, these cars can't be further removed from today's highly advanced 911s.

It is sometimes difficult to evaluate each of these cars in isolation. But drive them back to back, and you quickly realise that they form one continuous interlocking narrative – one that will see the 911 Turbo's next plot unfold later this year...





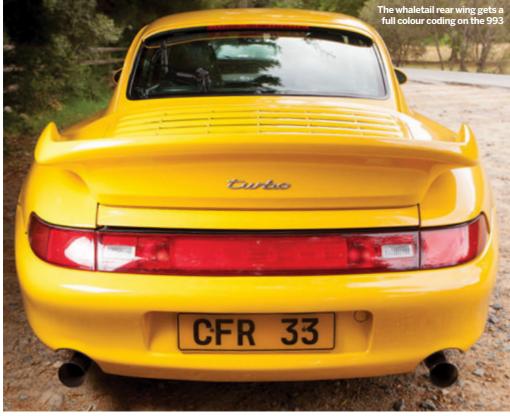


USED 911 TURBOS: WHAT TO PAY

Porsche's naturally aspirated 911s have enjoyed the best investment potential over the past decade. However, if you talk to industry folk and analyse the classifieds, then the Turbo just might be the next safe bet. A first generation 3.0-litre 930 Turbo was recently advertised for the sum of £75,000.

What should you pay for an average 3.3-litre 930, 964 or 993 Turbo? After some research, we discovered that the average 930 currently trades at between £33,000 and £55,000; 964s for between £30,000 and £35,000, and a 993 tops the list from £40,000 up to £60,000. This obviously depends on mileage and service records, while the S models of the latter two can easily be traded up to double the price of a standard model, but only if you can find one.













n the modern world, the Porsche enthusiast is blessed with many a driving experience in which to indulge. While 91ls and even sports cars in general continue to evoke wonder as they evolve, equally impressive man-made creations push the boundaries of driver ecstasy behind the wheel. Take in the Stelvio Pass, California's Highway 1, Japan's Touge roads of Mount Fuji, France's Millau Bridge and the Col de Turini as a case or two in point. There's plenty of roads out there to get your kicks from, and that falls neatly to the point. They're all roads: public highways constrained by traffic and national laws. None of them are places on which to exert yourself in your exotic car.

Nevertheless, escapism for the zealous petrolhead is assured, with a host of packages

available offering 911-specific driving experiences, trackdays and road trips, or even car loans for those still in the 'aspire to own' category of 911 courtship.

However, car loans prohibit trackday use, and in your own 911 there's a mighty risk to be taken in an innocent thrash around the Nürburgring or Spa Francorchamps – not to mention the insurance minefield that such a trip presents.

World class though these roads and track experiences are, perhaps one of the best offerings of pure, unadulterated motorsporting fun is, in fact, hidden away in the blissfully remote winter wonderland of northern Sweden, where you'll find the Below Zero Ice Driving experience organised by rallying greats Tuthill Porsche.

On a frozen lake far from stuffy public roads is an incredibly raw experience with an iconic and



RICHARD TUTHILL



Richard claimed his first honours in the 1996 British Junior Rally Championship, before finishing second in the 1999

Production Cup of the British Rally Championship. A move to the US followed, where he achieved two international rally wins. A landmark success with Porsche came in 2003 when he finished the East African Safari Rally for historic cars in third. Now retired as a professional, Richard orchestrates large parts of the Tuthill business, including Below Zero Ice Driving, and is already masterminding another safari challenge later in 2013: "One never loses a will to win, so I'd like to do it again," he says. Such enthusiasm is a testament to Richard's winning mentality.





purposely spec'd fleet of classic rally 911s, abreast of any time limitations on useage and where you can learn and even hone skills in a surreal world of snow and splendour.

Tarmac is swapped for beautifully prepared courses atop a frozen Åre lake, lined with cushioned snow banks among a backdrop of tranquil, wintry woodland. Such a setting is only rivalled by an opportunity to drive an air-cooled 1978 3.0-litre SC to the absolute limit, encouraged by a team with an outstanding pedigree in international rallying.

A flight to Trondheim and a short drive over the border brought us to the stunning 8km expanse, where we were greeted by Richard Tuthill and his Below Zero team. A former motorsporting professional himself, Richard forms part of the Tuthill family, who have been on the world rallying stage since the heady days of the Seventies. It was he who shed some light on the humble beginnings of such an illustrious operation as we headed to a charming chalet for a quick coffee and discussion.

Running between January and March each year, the Below Zero project was originally set up seven years ago by Tuthill in neighbouring Norway with driver training in mind, but has since developed into a unique adventure for those daring to push the boundaries of their ultimate driving experience.

To give you an idea of the pedigree of the landscape on offer, the Below Zero base is adjacent to a route used by the Citroen, Ford and VW teams in the warm up to WRC Sweden. These tight, twisty roads with plenty of changes in camber may be suitable for only the very top 911 drivers, but the neighbouring 8km-wide lake – assured of total

ichard's personal project 912 accompanies the quartet of SCs at the Below Zero base in Sweden. The original four-cylinder engine was replaced by a six-cylinder, 2.2-litre unit from a 911 with Weber carburettors, meaning the pre-impact bumper car produces 140bhp. It has been given a similar specified treatment to its stripped SC counterparts, benefitting from a bolt in half cage, plus Tuthill seats and belts.





Specification

1978 911 SC

(Blue)

Engine

Capacity: 2,994cc

PMO carburettors, single plug electronic ignition, twin

fuel pumps

Maximum power: 250bhp Maximum torque: 280Nm

Suspension

Bilstein's front & rear

Wheels & tyres

Original Fuchs forged aluminium wheels 7x15-inch

Brakes

Homologated standard calipers all round

Bodyshell and roll cage

Full spec FIA roll cage, with HANS bars. 150 hrs challenge specification seam welding and strengthening

Interior

Tuthill seats, lifeline plumbed in extinguisher, Tuthill belts, Brantz trip meter



1978 911 SC

(Dark grey and red)

Engine

Specification

Capacity: 2,994cc

PMO carburettors, twin plug electronic ignition

Maximum power: 290bhp Maximum torque: 315Nm

Suspension

Bilstein's front & rear

Wheels & tyres

Original Fuchs forged aluminium wheels 7x15-inch

Brakes

Homologated standard calipers all round

Bodyshell and roll cage

Full spec FIA roll cage. with HANS bars. 300 hrs full specification inc seam welding. Wide body wheel arch extensions as per period Monte Carlo rally winning car driven by Jean Pierre Nicholas

Interior

Tuthill seats, lifeline plumbed in extinguisher, Tuthill belts, Brantz trip meter

1978 911 SC Specification

(Light silver)

Engine

Capacity: 2,994cc

PMO carburettors, single plug electronic ignition, twin fuel pumps

Maximum power: 250bhp Maximum torque: 280Nm

Suspension

Bilstein's front & rear

Wheels & tyres

Original Fuchs forged aluminium wheels 7x15-inch

Brakes

Homologated standard calipers all round

Bodyshell and roll cage

Full spec FIA roll cage, with HANS bars. 150 hours challenge specification seam welding and strengthening

Interior

Tuthill seats, lifeline plumbed in extinguisher, Tuthill belts, Brantz trip meter

1978 911 SC

(Orange)

Engine

Specification

Capacity: 2,994cc

PMO carburetors, single plug electronic ignition, twin fuel pumps

Maximum power: 250bhp Maximum torque: 280Nm

Suspension

Bilstein's front & rear

Wheels & tyres

Original Fuchs forged aluminium wheels 7x15-inch

Brakes

Homologated standard calipers all round

Bodyshell and roll cage

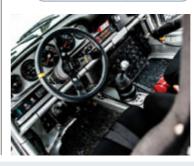
Full spec FIA roll cage, with HANS bars. 150 hrs challenge specification seam welding and strengthening

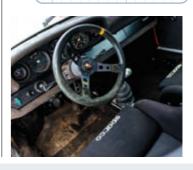
Interior

Tuthill seats, lifeline plumbed in extinguisher, Tuthill belts, Brantz trip meter









exclusivity for Tuthill – is perfect for a Seventies 911 with a tail-happy tendency.

For those who are more accustomed to the modernity of a water-cooled 911, the SCs provide a chance to reach the very heart of the traditional model, with their stripped back and oh-so raw nature providing a timely reminder of the true spirit of the 911, now hidden among all the safety technology in new variants. Classic 911 enthusiasts will tell you the drive in these is physical and raw, and that – refreshingly – you must drive rather than be driven. The sentiment is echoed appropriately in Richard's advice for driving the SC on ice: "You have to tell the car what to do in no uncertain terms. If you tell a classic 911 politely, you're then being driven, and you become reactive. Particularly in a classic such as these, you need to be proactive."

The fun begins immediately as we climb into our weapon of choice for the warm up slalom: an orange 3.0-litre SC on button-studded tyres. Choice of tyre is the overriding factor at any one time in Åre, not least because of the anti-traction environment, but also because of the similar characteristics of each classic 911. All SCs here feature the same 3.0-litre engine with PMO carburettors, plus a motorsport-specified differential and gearbox.

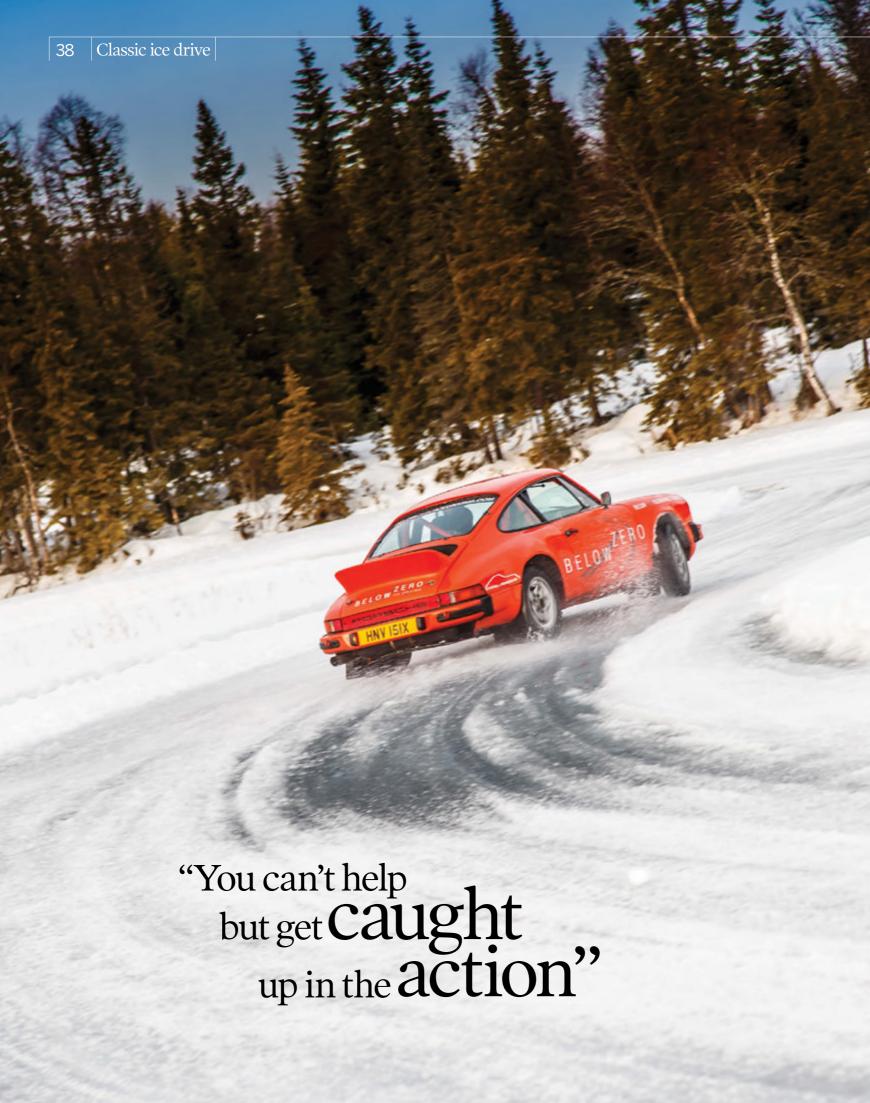
Back to the action, and simmering anticipation makes way for a full injection of adrenaline as the SC fires into life and the flat six engine gently vibrates through the petite, reinforced shell of the stripped 911.

The slalom provides a chance to get familiarised with the levels of grip available, or rather the lack of it. With only small button studs on the nevertheless

tacky Pirelli tyres, this 911 slips beautifully through the slalom, each pole disappearing past alternating front wings. A spin out occurs when too much throttle is applied while shimmying the car at an angle, but such is the style of the whole experience, driver anomalies are embraced in order to find the absolute limit of both car and person.

As a case in point, Richard sits beside me in the cockpit of the orange SC for around ten minutes while offering advice on managing the inertia of the car, before hopping out and encouraging me to continue by myself. "It's important you really go for it, to find out where the boundaries of the car are," he says. Below Zero are aware that a driver alone at the wheel often encompasses the most gratifying driving experiences, where focus is on impressing yourself, not others. A natural step up







in performance is duly witnessed on the ice, and it's here that an insight is provided into the extra fabrication of the rally honed SC. At least 150 man hours have been ploughed into bringing each car up to appropriate challenge specification, including full seam welding and strengthening. The FIA-spec roll cage adds to the incredible stiffness of the 911, with virtually no body flex noticed as the car is shifted from side to side between poles.

With the slalom course perfected, a choice of three differing flat tracks await further along the lake, which enjoys at least a 30cm-deep top layer of frozen ice. Here, the snow banks and tight, bendy corners make for a challenging drive – multiplied by the characteristics of the early 91l's clutch, which is expectantly heavy.

Insightful advice from Richard is again absorbed from the driver's seat, before we're off on our own once more. Although still minimal, grip is improved by around 50 per cent over the button-studded Pirellis thanks to the wider DMACK tyres, although last year's WRC-spec rubber has effectively been de-tuned for the ice by Tuthill, who've reduced both the size and number of studs protruding the surface.

While the familiar rasping sound of the 3.0-litre engine in full swing propels us for the first icy corner, a hard kick of the brakes and sharp turn in brings the front end back down and promptly slides the rear outwards. The trick, then, is to concentrate on the steer of the 911, coming off the pedals until eventually the longer-looping corners merit the revs to continually bounce between 5-6,000rpm to maintain a consistent slide. Then, a firm push back on the accelerator pedal as the Porsche lines up with the corner's exit brings the car back into line, by which time you're already making a dash for the next turn. The fast-paced nature of the course and car is mesmerising, and quicker, constant reactions to pedals and steering is naturally honed as you can't help but get caught up in the action.

The more laps you do, the faster you find yourself flying into each corner, confidence oozing as the limits of man (not car!) are gradually discovered. It is here on the edge that bizarrely you feel most in control and connected with the soul of a 911. Magic happens; grip is found when there shouldn't be any, and the rear comes round willingly on narrow bends. The thrill is intoxicating.

The final 911 is rather special in that it's a 912 - or at least the shell of one. Richard's personal project is equipped with a 2.2-litre, six-pot 911 engine. The shorter wheelbase and narrow Michelin tyres make for a fascinating drive, and grip levels are harder to break thanks to the many long, ice-penetrating studs. More work is needed to reach the constant state of drift that came in the longer wheelbase SCs, but once found the experience becomes sensational. It leaves you engulfed in the legacy of the classic 911, and you can begin to empathise with Richard's level of affliction to the car that has prominently starred throughout his automotive lifetime. "It's all about the mental challenge a 911 presents," he says. "I love to disprove the myth that a 911 is a tricky car to drive. I love to drive them - they're a simple, strong, reliable car. Even by today's standards they're right up there for driving experience."

Our own experience draws to a fitting close with a passenger ride from Richard on the WRC route discovered in the morning, though you can book a whole day on the course for yourself if you'd like to test yourself on the same stage as current rallying masters, quite literally.





CARRERA / S / 4S / GTS

STAGE | EXHAUST: +12

STAGE II TUNED: +24

GT3 / GT3RS

STAGE | EXHAUST: +5

STAGE II TUNED: +17

3.9L UPGRADE: +85

TURBO

STAGE I TUNED: +60

STAGE II EXHAUST: +85

HORSE POWER Gains

SHRRICUERICS.com







Some products may not be street legal in all regions. For off-road use where prohibited.

info@sharkwerks.com

+ 1 [510] - 651 - 0300





s far as Official Porsche Centres go, the latest addition in Portsmouth is truly one to behold. A flagship OPC that has been trading for six months, the lavish new premises provide the perfect setting for part one of our investigation into one of the most common debates in Porschedom: where should you take your 911 for servicing and maintenance, your nearest OPC or an independent Porsche specialist?

The focus here of both the OPCs and independent Porsche specialists at large is on the care of 91ls that are at least two years old and fall outside of Porsche's Approved Warranty scheme. This applies to 91ls of any age, including the original air-cooled 91l right up to and including the Type 997.

On the day of my visit, I arrived early and pulled into the spacious car park. First impressions, as you would expect, were nothing short of exceptional. The showroom, being no more than a few hundred days old, was in immaculate condition and scattered with new Porsches, including 91ls, neatly wrapped up in bows for the festive season. The atmosphere was professional, and with an introduction and a hello from sales manager Philip Brine, I was led in the direction of a comfy sofa.

Sitting alongside me was a middle-aged gentleman, and soon we were deep in conversation, where I was able to find out his circumstance for visiting the OPC.

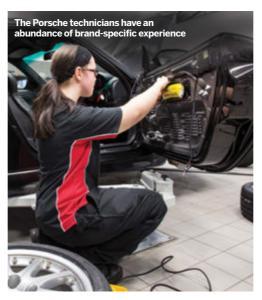
It transpired that he needed two new rear tyres for his much-loved 997, a late birthday present to himself a few years back. He explained that following visits to two local Porsche independents, he called this OPC at Portsmouth and asked them if they could match his best quote which, it turns out, is pretty much what they did.

AN UNBIASED VIEWPOINT



The writer assigned by **Total 911** to investigate both sides in the OPC vs independent Porsche specialists servicing discussion. Joel Newman is a 911 owner himself and has a Type 996 – a model that falls some way outside of Porsche's Approved

Warranty scheme. Before even being handed a brief for the assignment, Joel had declared himself neutral in the great Porsche servicing debate, and with a service for his own 911 imminent, a wide-eyed, open-minded and genuinely interested viewpoint in both OPCs and independent specialists was assured. As ever, we'd love to hear what you think. Contact the editorial team with details of your experiences on editorial@total911.co.uk.





"Every aspect of the business is on show, and such







transparencies enrich the aura of professional wisdom"

The chap continued that the quote from Portsmouth OPC also included a full valet for his 911, which is around £70 from a local garage, with the offer to lend him a courtesy car or provide a pick up/drop off service if he wished to leave the car with them and rush off. As it turned out, the final quote was only £20 more than the cheapest independent, so we agreed that it seemed like good value – plus, he was quick to point out, he likes to visit an OPC!

It seems, then, that in the competitive world of aftermarket servicing and with legislation now lending a helping hand to independents, OPCs such as this do have some flexibility. Porsche naturally want to be competitive, and provide added value to prove it.

With the photographer on site, we were offered a guided tour of the entire building. Highlights included an immaculate new car sales floor, an inhouse car lift straight out of Q's lab, a configuration room for those stepping into new 911 ownership, and an array of glass-lined offices. Every aspect of the business is very much on show for a Porsche customer to witness, and such transparencies only enrich the aura of professional wisdom.

Upstairs, a used car sales floor was neatly arranged, with a beautiful Guards red 3.2 Carrera taking pride of place on a display overlooking the reception area below. The car actually belongs to a customer who uses the branch and who was allowed to store his vehicle free of charge over the winter in this dry, warm, car heaven. Now that's customer service.

The air of transparency at Portsmouth's OPC was further enforced as Mr Brine took me back downstairs toward the Direct Diagnostic Bay, an area that besides a wedge of glass is very much a part of the showroom, and serves a very clear and ingenious purpose.

Mr Brine divulges, "The Direct Diagnostic Bay is our way of highlighting our level of commitment to customers and the service we offer. This bay is

the first port of call for customers experiencing any issue with their Porsche. Here, we inspect and highlight the issues we find that need attention. There are no cloaks and daggers; we have made a concerted effort to be clear, quite literally. The customer is no more than a few feet away, and we actively encourage them to see for themselves where the issue lies. There is no fee for this service, and that's a commitment in terms of our time that we feel should be a normal part of servicing any prestige vehicle."

I was then led into the main service room. As you'd expect it was, again, immaculate – almost surgically clean. I'm told there are three full-time technicians each with over 15 years experience in Porsche, plus an apprentice permanently on site. What I also find encouraging is the ongoing nature of training, and Porsche's continued support and development of its staff – either physically at the Porsche Cars GB headquarters in Reading or via online. It's aimed at bringing staff members



"It is clear from the outset that the OPC provides its







staff with unparalleled access to the finest equipment"

constantly up to speed on ever-increasing service standards set by Porsche themselves.

One obvious benefit of using a genuine OPC, then, is the insistence on the very latest and officially approved diagnostic and service apparatus, such as Porsche PIWIS testers, the latest Hunter alignment hardware, continued software and hardware developments and a host of specific Porsche tools that make light work of even the most fiddly or awkward jobs. What is clear from the outset is that an OPC provides its staff with unparalleled access to the finest equipment, which I have no doubt is reflected in the standard of work.

As you'd expect, there is space for a huge number of cars in here, with eight spacious bays complete with lifts. At the time of our visit there were six Porsches of various marques, three of them 91ls.

The high standard of bespoke equipment and immaculacy is typical of Porsche customer service. However, the main argument found on forums time and again suggests that OPCs are much more expensive than independent Porsche specialists. Furthermore, when you own an older 911, it apparently doesn't make mathematical sense to use an OPC – or so many people think.

Our visit to the Portsmouth premises reveals the welcome truth that servicing an older 911 at an OPC is a lot, lot cheaper than you might expect – and I would go so far as to say that it's competitive in any field of play. For starters, an MoT here is competitively priced and includes a wash and vacuum, free courtesy car and a free visual health

check. Like all garages, any issues are noted, listed and then reported back by technicians, who will explain what they have found and what needs to be done about it.

In terms of the scheduled servicing of older 91ls (up to the 996), Portsmouth OPC charge a very respectable fee for a minor service. Even the more hardcore 91ls such as the Turbo or GT2 are considerably more cost friendly than you may have been lead to believe. Having done some digging, I was able to find an alternative price on a 993 Turbo for 20 per cent less, but it certainly wasn't through Porsche, and there were no frills included in that price – or a prized OPC Porsche stamp in your service book.

The 997 is more expensive to deal with, although there have been similar cuts in the pricing menu. Moreover, the costs of 997 servicing highlight just how competitive the pre-2005 911 service pricing actually is.

If you don't need a service and something instead goes wrong with your 911, the labour rates are again surprisingly digestible, with refreshingly slimmer rates for 91ls over four years old. You can see where that hourly rate goes, too, what with the modern, accurate equipment, plus the training and the arsenal of new and ingenious tools that make fixing and servicing your 91l easy and efficient. You can also be sure that your car will be looked after in an immaculate environment, and by technicians with a reputation to uphold and who take real pride in their work.

I asked Mr Brine why he feels a customer should opt for an OPC instead of an independent, and his response further reinforces my concluding thoughts: "The service and menu pricing for cars older than four years has come down by a huge margin. We provide a level of service that can't be beaten. Our staff are well trained and have access to the best tools and hardware on the market, which enables them to spot and fix issues more quickly. People who love their Porsche want to treat it with respect, and we provide class service, genuine parts and you know you're dealing with a company who has a huge reputation. You must also factor in the resale value of our customers' cars. Any 911 with a full service history from Porsche will command more money and sell faster, and I think it's only fair for an owner to consider that when it comes to servicing an older Porsche."

An OPC like Portsmouth has never provided a more attractive servicing and maintenance offer for owners of 91ls. In part two next issue, we'll hear the voice of the independent specialists, but the message to take away here is this: a visit to your local OPC may well be worth your while.

Contact your OPC

• Thanks to the Portsmouth Official Porsche Centre for granting Total 911 full access to their first-rate facilities. To contact Portsmouth OPC, call 0845 126 8980 or find your local OPC at www.porsche.com/uk.

forgotten lightweight 0112

Kieron FennellyPhotographed by **Laurens Parsons**

Today, the Carrera Clubsport can sell for three to four times more than the stock 3.2. We chart the rise

of the once unloved Eighties Porsche

s tastes change, it is fascinating how values of certain items that have been previously discarded can go up. Those simple die-cast Dinky trucks and cars you – or perhaps your dad – used to play with are worth a small fortune today, especially if they are still in their original boxes. Racing cars 40 or 50 years ago used to be broken up at the end of the season, yet today if an F1 Vanwall ever came on to the market, you would need several million pounds at least to buy it. The definitive pre-war sports car, the BMW 328, could be found languishing at the back of garages for a few hundred pounds in the Sixties, yet today it is worth a cool £250,000. These were all much appreciated when new, but in time – a year in the case of F1 cars – lost their usefulness and their value, only to be rediscovered decades later. However unusual to the history of the 911 at large, the Carrera 3.2 Clubsport was singularly unappreciated when it was launched, failing to register with the buying public of the late Eighties. Over two years only 340 examples were built. Yet, a quarter of a century later, this is another limited run 911 you might well wish you had sunk your money into when it was a lot cheaper.

How was it that a 911 could miss the boat so comprehensively? In retrospect, Porsche's communiqué, announcing the Clubsport in 1987, seems to lack the usual confidence:



"A a result of the series fitting of additional equipment such as electric window lifts, in recent years the Carrera 911 has become a comfortable as well as a classic sports car. We know there is a significant group of interested parties who would like to do without certain comfort elements – and their associated weight – in favour of greater sportiness."

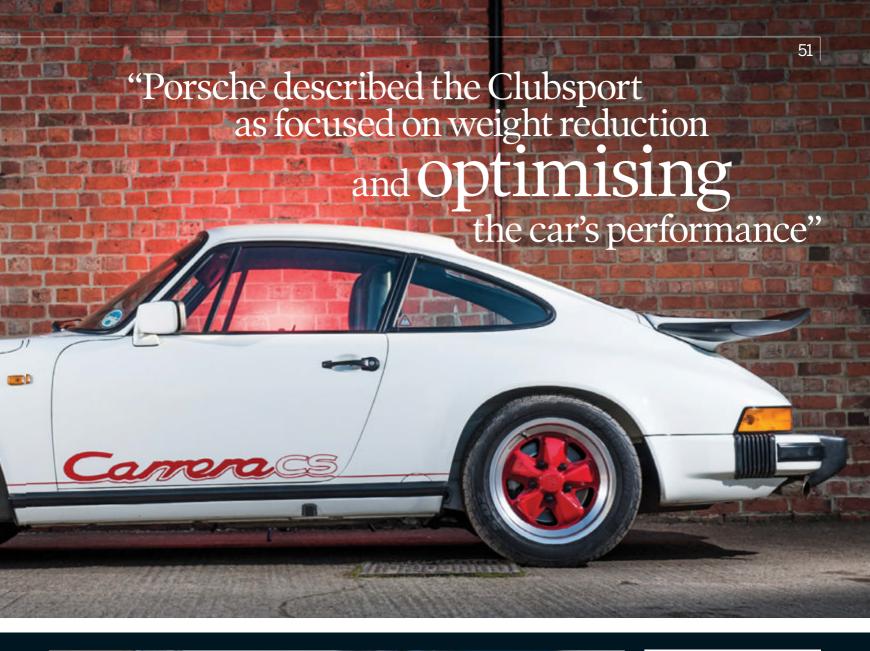
This, the release went on, was the reason for the lighter Clubsport. It was awkward for Porsche to have to admit that the 911 was developing middle aged spread, especially if such levels of equipment and comfort that made it so were what buyers now expected, and perhaps this inhibited the marketing department from demanding a more radical model. A true lightweight would probably have also required expensive type approval (which is why the US could not import the RS 2.7, the 964 RS or the 959), so it is possible to see it from Porsche's side: Zuffenhausen wanted to introduce a lightened 911 in the RS tradition, but was constrained by circumstances.

As it was, the Clubsport did without the aforementioned electric windows, as well as the heavy electrical adjustment of the seats, which were finished in pinstripe cloth (no leather option), and there was no sunroof or provision for air conditioning. Remote central locking disappeared, too, and with less current to transmit, the electric loom was simplified and lighter; there was no radio, speakers or rear wiper, and the spare wheel was in (lighter) aluminium. Still carpeted, the cabin had no rear seats, and the heating system was reduced to a simple blower. For good measure, Porsche also decided to delete a few frankly insignificant details such as the passenger's sun visor, coat hooks and lids on storage boxes and boot and engine room lights. Oddly, the heavy electrically adjustable mirrors survived the cull. Some sound deadening was removed, as was underseal (a l0kg saving), though many buyers specified body protection, as without it Porsche's ten-year corrosion warranty was reduced to two.

The flat six was essentially the standard 23lbhp 3.2-litre unit. In theory, these were production engines straight off the line, but it is likely they were 'blueprinted', ie chosen for their close tolerances, and Porsche technicians opened them in the factory to replace the solid production inlet valves with a sodium filled variety usually reserved for competition work. The ECU was also remapped to extend the rev limit by 300rpm to 6,840rpm. The gearbox was the standard G50 recently introduced on the Carrera 3.2, but the shift was short throw and a 40 per cent LSD was standard. Stiffer dampers and engine mounts were fitted, and the wheels shod by seven-inch alloy Fuchs rims at the front and eight inches at the rear.









2.7 RS



The inspiration for the 3.2 Carrera Clubsport, the Carrera 2.7RS, was a homologation special built to qualify the 911 for Group 3 competition. The 975kg 'lightweight' RS was an unexpected success, and Porsche hastily extended production from the original 500 by another 1,090 cars in order to meet demand. Not all of these were true lightweights some crossed the scales at closer to 1,050kg – but it mattered little. At a time when emissions regulations were emasculating performance cars, including the 911, the agility and zest of the RS was a revelation, and once they disappeared from competition values started to rise. Prices have virtually doubled since 2000, and so many cars are in collections that the chance of seeing a real RS - as opposed to a convincing replica - is extremely slim

Externally, the Clubsports, which almost all came in Grand Prix white with their Fuchs centres in red, were all but indistinguishable from the stock 3.2. A CS logo on the bonnet and the absence of front foglights gave the game away unless the doors had the optional 'Clubsport CS' mural in the style of the Carrera RS, in which case no one was in any doubt. The body was standard: no thin steel or glass fibre went into its construction, or thinner window glass, for that matter, which would have increased production costs, and a turbo body option would have negated all the weight savings. As it was, Porsche claimed that the Clubsport weighed 1,160kg. If you quantify the weight of seven or eight electric motors, radio with speakers, assorted plugs and wiring, the lighter spare wheel and a large pot of bitumen, a 50kg reduction sounds plausible.

As would later occur with the 964 RS, contemporary road testers did not quite know what to make of the Clubsport, discovering no great performance advantage over the stock 3.2. *Motor* achieved the best acceleration, recording 0-60 in 5.1 seconds, making the CS the quickest non turbo Porsche it had sampled to date and reaching 152mph; Auto, *Motor & Sport* clocked a more leisurely 5.6 seconds, but reached 154mph. The German testers thought the CS was very loud, and recommended ear protectors for sustained cruising at 120mph (very German); American assessors had more trouble with the Clubsport's specification, or rather the lack of it. *Car & Driver* commented that "this is the nicest 911 we have ever driven... an interesting experiment, but it pales under the harsh light of common sense. When you reach for the a/c, it's not there, when you want to open the sunroof, it's not there, when you want some music, it's not there. Only an insideout nutball would pony up the price of a Carrera for a 911 lacking major comfort items."

Given such a reception, it was no surprise that North America, Porsche's largest market, took only 20 Clubsports. Timing had much to do with it; the collapse of the dollar had halved Porsche's US market in the year prior to the Clubsport's launch. Had PCNA been able to introduce the CS in 1985 and pitch it for \$10,000 less than the Carrera 3.2 as it would with 964 RS America in 1993, perhaps sales might have been nearer the 700 units of the RS America. Lower pricing, too, might have enhanced sales in Germany, which took 200 Clubsports priced the same as the 3.2 Carrera. In Britain, the Clubsport was positioned £3,000 below the stock 3.2, and found itself a niche market. Today, virtually all 53 cars imported are accounted for by the club register.

Clearly, tastes were very different in the Eighties, and Porsche was discovering a new arriviste clientele among bankers and city types keen to impress. Having something to

3.2 CS: WHO OWNS IT NOW?

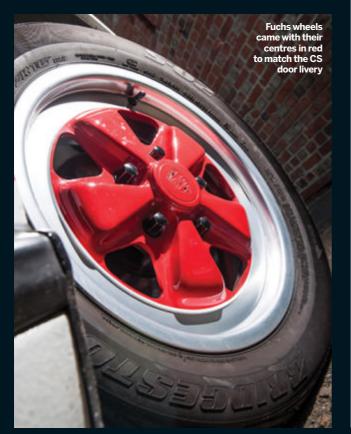
Owner of this 3.2 CS, Gordon Wingrove, has done a lot in his time. Racing mechanic and driver, electronics engineer and author, he's also played the guitar in an early sixties group which got a record into the charts! As an engineering apprentice, he wandered into John Wyer Automotive's showroom on Slough Trading Estate to be offered a job immediately on the premise that "he'd be out on his ear if he wasn't any good!"

Gordon evidently made the grade, as did JW Automotive because it became the unofficial Porsche works team, and Gordon spent two unforgettable seasons as a 917 mechanic. Then, because of the overwhelming dominance of the 917, the FIA banned the 5.0-litre cars, and Gordon left John Wyer for the electronics career he had always intended, which he also hoped would fund his racing habit. He progressed from Lotus Sevens to 911s and in the Eighties raced a pair of 3.2s he modified himself. In 1999, Gordon bought a slightly damaged 3.2 Clubsport from Autofarm and meticulously rebuilt it, and since then he has used E262 WWD only occasionally, covering fewer than 5,000 miles in 13 years of ownership. In retirement and in addition to many Porsche press articles, he has written two definitive Porsche books, the Ultimate Guide to the Carrera 3.2 and the Inside Story of the 917, available in bookshops now









show for your money mattered, and the austere Clubsport would not have registered with these buyers. It was *Autocar* who came the closest to capturing the essence of the CS when it said: "The classic 911 shape, almost Spartan interior, and shattering performance endow it with a pretty high rating on the charisma scale." This hints at the Clubsport's real qualities, which would not, however, be fully appreciated for another ten years.

Porsche described the Clubsport's specification as focused on weight reduction and optimising the car's mechanical and handling performance. As you climb in, first impressions are distinctly favourable: the simplified cockpit looks businesslike and the flat six fires instantly with a rasp and an immediacy which suggests that the sound deadening deletion was from the rear of the cabin. Our test car, one of the 53 right-hand-drive Clubsports, has a very low mileage even by Clubsport standards, with only 27,000 miles indicated, and it feels very much how the 3.2 must have felt when it was new. The gearchange is precise, the short throw quite noticeable compared with the standard shift and the gearknob, like the steering wheel, exhibits none of the wear usual on a car this old. The clutch bites smoothly and the unassisted steering lightens once on the move, providing a subtlety of feedback inevitably lost on the later hydraulically assisted 91ls.

This is a particularly well-maintained Clubsport (see owner profile), and with no slop or any discernible extraneous movement anywhere, the sheer pleasure of these torsion bar 91ls is undiluted. Once warmed up, the flat six responds enthusiastically to the throttle, and characteristic of the 3.2, it really comes to life after 4,000rpm. The higher rev limit endows the Clubsport with a wonderful top end, and once unleashed it will fairly race to 6,840, which is 900rpm above peak power. Indeed, the 3.2 sounds as if it could go a lot further than this limit and its zest recalls the pre impact bumper (and pre fuel injection) 91lS of almost 20 years earlier.

The Clubsport performs rather differently from the earlier lightweight RS. In 1987-8, several magazines did side by side comparisons of the Clubsport with an RS 2.7, and concluded that not only did the newer model offer better acceleration with its Bosch fuel injection, it was also less temperamental than the carburetted RS, as well as achieving

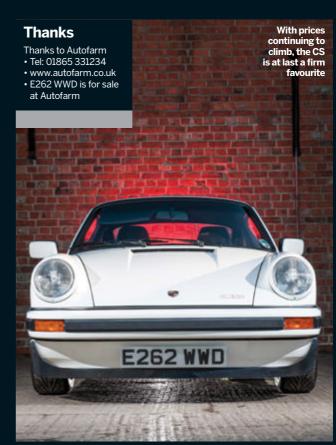


24mpg compared with the 18mpg of the earlier 911. Its handling was also far more forgiving, demonstrating the result of 15 years of chassis improvements. Indeed, today, the CS offers a comfortable if firm ride, and though the odd pothole can catch out the suspension which binds with a thump, the overriding impression is one of a beautifully damped set up which like the irrepressible flat six, cries out to be driven.

There is a school of thought that claims the 3.2 Clubsport is overrated. Josh Sadler of Autofarm does not agree. He can look back on 40 years of racing, developing and selling air-cooled 91ls, and has no doubts about the Clubsport, as he puts it into context:

"If you forget the SC RS – of which only 20 were built – this is the only production lightweight 911 of the Eighties, so it's an important model... the engines feel better... and the small reduction in weight means you really can feel the extra power. It was all about getting back to Porsche's original values."

An article in the Porsche press in early 1999 was probably the first time the car magazines had revisited the Clubsport since its introduction. Writer Chris Horton was full of admiration, and thought a ten-year-old CS was good value at a little over £20,000, a price then comparable with a good Carrera 3.2. Horton's advice was 'buy now'. In 2005, when $\textbf{Total\,911}$ investigated the Clubsport phenomenon, the Eighties lightweight had been 'discovered' by the trackday fraternity, and values had passed £30,000. Eight years on, the prospective CS buyer will not find much change from twice that figure, which puts the 25-year-old Clubsport into perspective. In that bracket you could have an almost new 911 or a 'recreation' built by the likes of Autofarm or Paul Stephens. The latter would certainly afford you more fun at real world speeds than the last of the 997s, but would never quite give the satisfaction of owning an original 911, and neither might the recreation offer the investment potential. As prices took off in 1994, 2.7 RSs were going for £50,000. Two decades later, the best can sell for five times more; 1,590 2.7 RSs were built (and countless replicas) against a mere 340 for the Clubsport. Less uncompromising and offering more accessible performance and handling than a 2.7 RS, the well heeled 911 fan who likes to drive his Porsches rather than cocoon them might well find the brilliantly sorted Clubsport to be a very satisfying investment indeed.



Finally some curves worth discussing. With over 50 years of experience we have proved that the most exhilarating line for every car enthusiast is a curve. It also shows what a suspension is really capable of. It's no

With over 50 years of experience we have proved that the most exhilarating line for every car enthusiast is a curve. It also shows what a suspension is really capable of. It's no wonder that many renowned automotive brands and successful racing drivers rely on BILSTEIN shock absorbers and suspensions. For all suspension requirements from universal spare parts to tuning, or motor sports; with BILSTEIN you can experience both technology and quality – every time you drive. **BILSTEIN – The Driving Experience.**

www.bilstein.com • 0116 247 8930



DEFENDING THE M96 ENGINE

The M96 may suffer from bad press on the internet, but they need not ruin your enjoyment of an early 996. Here's how to tackle the more common running issues...

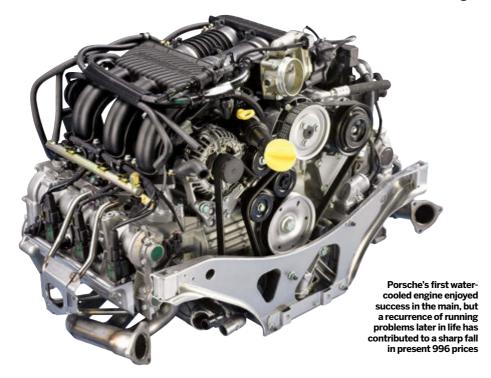
Written by Joel Newman Photography courtesy of Hartech

here has been much debate over the perceived failure rate of Porsche's first water-cooled 911 engine, the M96, with many observing the 3.4-litre unit to be fundamentally and intrinsically weak. Others have even gone as far to say on forums that they would never dream of purchasing one of these 'problem' 911s, claiming they are a time bomb destined to fail.

Having enlisted the help of Hartech, one of the UK's leading specialist rebuilders of failed Porsche engines, we decided to dissect the myths for good. Is there any truth to these horror stories, and should all early 996s be avoided – or is it all a load of hot air and cracked cylinder linings?

In the main, most 996s, including the 3.4-litre and 3.6-litre, perform perfectly well. Many have since recorded high mileages, but a noticeable engine failure rate approaching five per cent has pointed to weak spots in the first water-cooled Porsche lump. The M96 has since gained an unwanted reputation as a potentially unreliable engine that, due to the revised engine design to save costs, can prove expensive to fix or even access.

However, Hartech's technical director, a former GP engine designer of international repute, spent many months researching the M96 (and even later M97 engines found on the early 997s) and discovered that the problems don't necessarily mean a catastrophic ending for car and owner.





"The M96 has gained an unwanted reputation as a potentially unreliable engine that, due to the revised engine design, can prove expensive to fix or access"



IMS failure

The new engine design of the 996 meant there were fewer machining operations and parts to make, transport and assemble, which was all part of Porsche's efforts to streamline finances. But in common with mass produced modern products, their design would make repairs more expensive.

One of the most reported issues for any 996 owner is the possible failure of the intermediate shaft, a chain drive system that provides a camshaft speed reduction without needing huge sprockets on the camshaft ends. It runs at two thirds of the crankshaft speed, which is ideal to drive an oil pump – which it is also connected to.

One end is a solid ground steel shaft running in a hole in the aluminium casing, and is trouble free. The other end has a grease-filled ball bearing that has seals on both sides, which provides heavy interference and makes some bearings run tighter than others. Although the design spec of the bearing is adequate, minute particles of metal are rubbed off the bearing's internals when running, and have nowhere to escape, save for mixing with the grease itself to form a fine grinding paste.

With no flow of cooling oil, the bearing runs hot and expands. If the clearances are too tight, this strains the casing until it fractures through metal



The original, weaker spindle on the left is replaced with the Hartech version on the right, doing away with the stress-inducing groove

fatigue – or it can wear down the balls until they crack the cage and destroy the bearing, after which debris circulates through the engine and can score bores, damage a cam chain and bend valves.

Furthermore, the spindle has a groove machined into an already small diameter, creating a stress raiser that can easily snap. Previous issues of **Total 911** will tell you that Porsche noted and swiftly dealt with the issue in later models, changing the bearings from a double row to a bigger single row. The problem was the spindle remained the same for the duration, retaining those problem seals.

However, Hartech have a preventative measure to stop IMS bearing failure by removing the problem seal and fitting a new bearing and a bigger, stronger spindle. Although it's an expensive job for merely a preventative tactic, replacing the bearing during a flywheel or clutch change can make for an attractive proposition to take into account when shopping for a cheap 996.



Before: Typical IMS failure results in loose debris circulating through the engine



After: Hartech can both fix and prevent IMS failure by using a stronger spindle and replacing the bearing

Cylinder linings and head cracks

Another forum favourite of the M96 is the perceived lack of strength of the cylinder, which is susceptible to cracks.

The M96 (and even M97) engines uses Lokasil, a metal matrix composite preform cast into the crankcase block, as a cylinder bore material. Lokasil would be great if the surrounding material was strong enough to retain its shape and the cylinder block was adequately cooled. Unfortunately, because it is weaker and

unsupported, the bore can

creep into an oval shape

until it either seizes (because the increased blow overheats the piston to cylinder bore interface) or cracks (when the shape exceeds the elastic limit of the material). Incidentally, the 2.5, 2.7 Boxster and the 3.2 Boxster S had thicker supporting walls than the 996 (which was effectively the Boxster S casting bored out another 3mm in diameter), resulting in the M96 being more prone to failures, usually from upwards of around 60,000 miles of use.

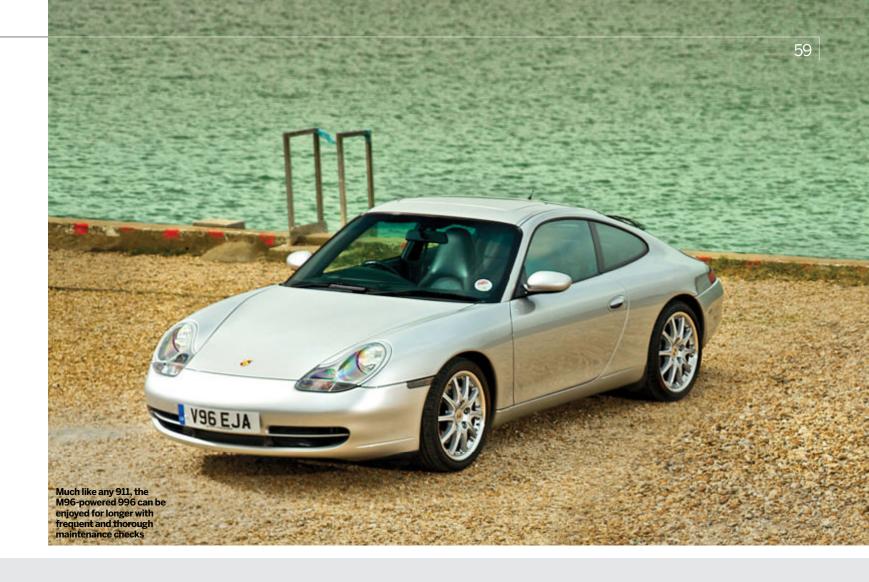
The chance of this happening to your 996 is undoubtedly slim, but if you do suffer a cracked or seized cylinder, Hartech can reform them again by fitting restraining rings that not only prevent future movement and cracks, but also stabilise the whole liner by converting it to a closed deck design (as used in Turbos, GT3s and Gen2 engines).

Aside from cylinder bores warping or cracking, there are also reported issues with cylinder heads cracking. When a cylinder head is cast, the thickness of the aluminium between the outside and the inside of it is governed by the design of the casting. For some reason, on both the M96 and M97 engines there is an area in which the wall suddenly gets quite thin, right near the spark plug location.





A dissection of the cylinder head (left picture) shows the weak areas susceptible to cracking (top left). This is largely due to manufacturing, highlighted (right picture) by the block casting from a Boxster S on the right hand side, while the left shows the same casting bored out for the Type 996 911, resulting in thinner and weaker cylinder walls



As the engine starts to warm up, the inside of the cylinder head expands first, then the coolant and finally the outside faces. This results in differential expansion rate that puts a strain on the parts – eventually leading to the formation of a fatigue crack. According to Hartech, it always appears between the oil gallery under oil pressure and the coolant gallery inside (under less pressure). Subsequently, the oil flows into the coolant under pressure, creating a horrible mixture of sludge that is eventually forced out from the overflow, leading to local

overheating inside the engine and a potential piston seizure.

Refreshingly, the main preventative behaviour to uphold here concerns driving style: cars that have been driven too quickly before they have warmed up and those that have been used for short trips will have a shorter life. Those warmed up steadily and driven for long journeys at constant speed will last the longest. Proper maintenance should steer you clear of this danger but, of course, cylinder heads can be repaired or replaced – for a price.

"The M96's cylinder is perceived to lack strength, thus making it particularly susceptible to cracking"







Hartech deal with the problem by boring out a cracked or seized liner (left) and installing a new cylinder (middle). Restraining rings can also be fitted in the top (right) to stabilise the Lokasil bores when re-rounding has been carried out

Bore scoring and piston seizure

s engines have become bigger or produce more torque, there is an increasing incidence of early piston seizures, usually on one face of the piston on the '456/bank 2' side.

The usual causes are the combination of a Lokasil bore material with too high a cylinder temperature, or oil degradation caused when the coolant feed to the cylinder bank has been altered to enable a common head gasket to replace the two-handed ones that balanced the coolant flow better.

Unusually, only around ten per cent of the coolant is directed into the cylinder block, with 90 per cent or more passing directly into the cylinder head, leaving the block coolant speed low and the temperature rise high. This means in bank two, the piston thrust face is hotter, hence the problem.

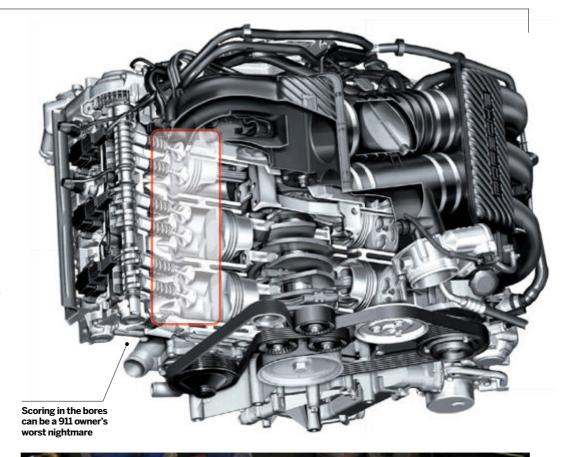
Lokasil has hard silicon particles embedded in the matrix, and can damage pistons if the oil film is too thin or hot. It seems the Lokasil matrix can't retain the silicon crystals as well as Alusil, and as they detach they can damage the surface and expose new, sharper crystals to the piston face.

Early pistons had a ferrous coating that lasted, but was unpopular due to cost and environmental issues. Later pistons were changed to a screen-printed coating that does not last as long before flaking off or wearing through. Once this happens, the Lokasil silicon crystals tear into the piston. Future development of better screen-printed coatings seems unlikely, as in the future cylinder blocks will not require piston coating.

Interestingly, Porsche fitted more powerful GT and Turbo versions with Nikasil plating on aluminium cylinders, while the less problematic Gen2 engines have gone back to Alusil, which resists surface crystal loss better.

Hartech have developed a solution, enlarging the coolant channels and providing a lower temperature thermostat. Once damaged, bores are replaced and the other Lokasil bores re-rounded and supported – although a long term solution is to replace the cylinders with Nikasil-plated ones

With the margin between survival and bore scoring being so close, anything that lowers the running temperature and increase oil viscosity will help the pistons survive longer.





Conclusion

o what does this all mean for current and prospective owners of the early 996? Firstly, we can all breathe a collective sigh of relief. Many of the quoted claimed failure rates on forums are far higher than reality, and with a reasonable estimation of five per cent failure rate throughout the lifetime of an engine (up to 150,000 miles), you will see that Porsche's early water-cooled engines are no more or less efficient than other

manufacturers. Remember, we're comparing these engines to the over engineered and costly powerhouses found in many early Porsches that were almost indestructible, but which nearly ended Porsche's existence and halted the development of new cars.

With 996 prices currently at an all time low, there has never been a cheaper time to purchase and own a 911 and, even factoring in the slim possibility

something may go wrong, a sub-£10,000 car is an awful lot of 911 for your money. As long as it's not IMS bearing failure, the chances are it won't cost a lot to fix, and the fact that you can retrospectively ensure the IMS won't fail for £800 takes a lot of the head scratching away. Does that make the 996 the best performance car for your money on the planet? I think it does, and I have just bought a 1999 3.4 with 90,000 miles on the clock to prove it!

Fastlane's paint and body service starts from the moment you contact us and ends when we return your car, looking like new. Contact Fastlane and we'll do the rest. 'For your peace of mind' All Porsche repairs come with a unique **Fastlane 20 year guarantee**

PORSCHE GB Bodyshop of the year 2011 Commended







YES I would like to subscribe to Total 911 YOUR DETAILS

	First name
Address	
Postcode	Country
Telephone number_	
Mobile number	
Email address	ress to receive news and special offers from us

DIRECT DEBIT PAYMENT

UK Direct Debit Payment

Pay £18.90 every six issues (Save 30%)

I M A CINE	• • •	your Bank or ay by Direct Debit Dept, 800 Guillat Avenue, Kent Science Park, Sittingbourne	DIRECT ME9 8GU
Name and full postal address of your Ba	ank or Building Society	Originator's Identification Number	
To: The Manager	Bank/Building Society	5 0 1 8 8 4	
Address		Reference Number	
	I		
Postcode		Instructions to your Bank or Building Society Please pay Imagine Publishing Limited Direct Debits from the this instruction subject to the safeguards assured by the Dire	account detailed in
Name(s) of account holder(s)		understand that this instruction may remain with Imagine Put so, details will be passed on electronically to my Bank/Buildin	olishing Limited and, if
		Signature(s)	
Branch sort code		3-6(-)	
Bank/Building Society account number			
		Date	
	lanks and Building Societies may not accept D	irect Debit instructions for some types of account	A6 instruction form

PAYMENT DETAILS YOUR EXCLUSIVE READER PRICE, ONE YEAR (13 ISSUES) ☐ UK: £52.65 (Save 10%) ☐ Europe: £60.00 ☐ World: £70.00
Cheque
I enclose a cheque for \pounds (made payable to Imagine Publishing Ltd)
Credit/Debit Card ☐ Visa ☐ MasterCard ☐ Amex ☐ Maestr
Card number Expiry date
Security number (last three digits on the strip at the back of the card)
Issue number (if Maestro)
Signed
Date
Code: PAG097 Tick this box if you do not wish to receive any promotional material from Imagine Publishing Ltd

Tick this box if you do not wish to receive promotional material from other companies. Terms & Conditions apply. We publish 13 issues a year, your subscription will start from the next available issue unless otherwise indicated. Direct Debit guarantee details available on request. This offer expires without notice.

I would like my subscription to start from issue:

Return this order form to:

Total 911 Subscriptions Department, 800 Guillat Avenue, Kent Science Park, Sittingbourne, ME9 8GU or email it to 911subs@servicehelpline.co.uk

You will be able to view your subscription details online at www.imaginesubs.co.uk



Start a Direct Debit today and for just £18.90 get the next six issues – saving over £17 a year

- Pay only £3.15 for every future issue - a 30% saving on the store price
- Free UK delivery to your door
- Never miss an issue
- Money-back guarantee

US READERS

Get the next 13 issues for \$78 and SAVE 40% - that's just \$6 an issue. Dial tollfree on 1-800-428-3003 or subscribe online at www.imsnews.

com/total911 and quote code IMST97







IMAGINESUBS.CO.UK FOR ANDROID, MAC, PC, **iPHONE & iPAD**

THREE EASY WAYS TO SUBSCRIBE

1. Online

www.imaginesubs.co.uk/t9e And enter PAG097

2. Telephone

844 249 0463

And quote PAG097

3. Post or email

Please complete and post the form to

Total 911 Subscriptions Department

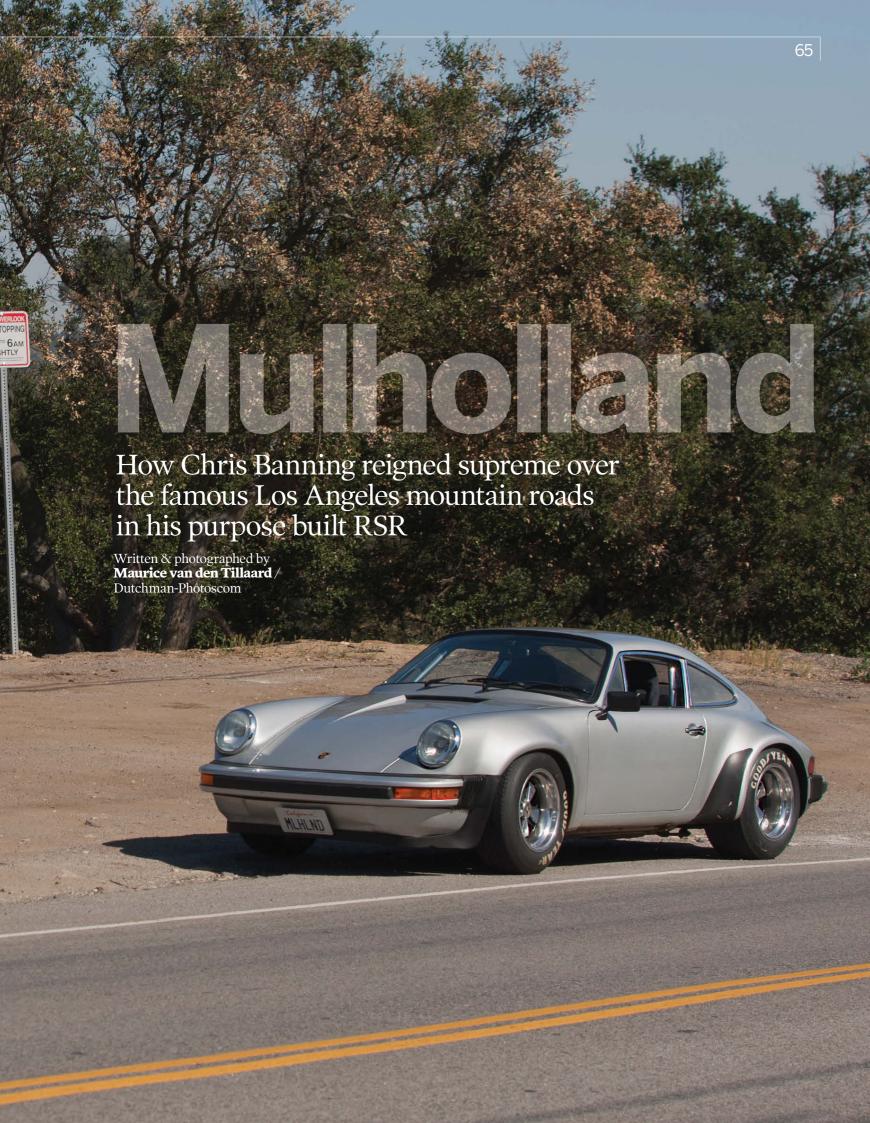
800 Guillat Avenue **Kent Science Park**

Sittingbourne **ME9 8GU**

Or alternatively, you can scan and email the form to

911subs@servicehelpline.co.uk





t's 7am, and while the city of Los Angeles is slowly waking up, I'm parked at an overlook on one of America's most famous roads, Mulholland Drive. Sat next to me is Chris Banning, better known as the King of Mulholland, who's made a name for himself conquering the famous road course dividing west LA from the San Fernando Valley in his equally well-known RSR.

Chris's association with Mulholland spans a lifetime, beginning with his first drive at just 1l years of age, right up to today, where his house overlooks a large section of the old Mulholland racetrack.

Indeed, the 'King' had grown up with the famous road next to his own back yard, and admits that after watching many heroes of the early Seventies hone their racing skills in front of him, his own ascension on to the Mulholland tarmac was filled with a sense of destiny. "I began doing practice runs on Mulholland during college and learned how everything worked regarding the street races. My first car was a little Fiat, but I fell in love with Porsches through working at an official Porsche shop in Santa Monica, and eventually bought a one-year-old 911S," Chris says.

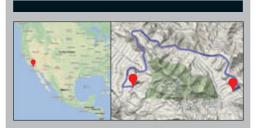
Racers would begin to recognise the silver Banning 911S on Mulholland, but after practically living and breathing Porsches, Chris craved a car that was a cut above the rest, and decided to build an RSR specifically for his great home road – the very car we're sitting in this morning.

In 1976, Chris sold his 911S and with help from his friend Arnie Verbiesen, began putting together his purpose-built RSR, an amalgamation of many vehicles using a 1972 IROC racecar body.

They started by dipping the body in acid to remove excess weight before seam welding the entire chassis. Once the suspension was roughly assembled and the car could be rolled around, Chris decided to modify the roofline. As you may have guessed, it has been lowered by around three inches, while keeping the stock windshield.



MULHOLLAND DRIVE, LA



Mario Andretti once described Mulholland as one of the most dangerous road courses he had faced. He once raced it at top speed for a motion picture sequence.

But not only these Hollywood type stars would show up on Mulholland. A group of racing locals were inspired by the professional racers who tested their cars on Mulholland in the sixties, and they formed a club named the Mulholland Racing Association (MRA).

By taking a few inches out of the rear window posts, the slanting angle of the windshield was enhanced to give the car a more streamlined appearance. Driprails were removed at the same time, and the plexiglass rear window was brought flush with the roofline.

For the roll cage, John enlisted the experience of John Mason of Mason Engineering, a highly skilled fabricator who worked on experimental aircraft for the Air Force. He manufactured a 14-point, full roll cage from T6 aluminium that extends all the way from the front to the rear of the car and is twice as strong as steel in compression strength, but only a fraction of the weight – making it perfect for that coveted mountain dash.

In homage to his 911S, John had the car painted two stage Porsche silver by an acquaintance from Bob's Automotive Paint in Santa Monica. Affection for the '76 look also explains the addition of impact bumpers installed on the RSR.













For stopping power, four-piston Carrera 6 brake calipers were installed all round, combined with cross drilled, vented rotors. Chris also started to upgrade and extensively modify the suspension to accommodate the demands of Mulholland. Top of the line Koni dual adjustable racing shocks were installed, on which compression and rebound can be adjusted. Furthermore, every control arm was magnafluxed to check for cracks, and then coated with epoxy. All stock rubber bushings were replaced with Delrin and Teflon items, and the torsion bars were upgraded to 1974 RSR specs, such was the meticulous nature of the build. "When taking corners, the car was now going exactly in the direction where Dr Porsche would have wanted it to go," laughs Chris.

The car went to John once again for the installation of strut braces, and a further array of special modifications were made to the car's chassis

and suspension, such as the gusseting of every control arm. The big-capped fuel tank from a VW bus is one of many extra, intrinsic touches added to the 911, meaning in this instance that Chris didn't have to cold start back in those days, instead merely scooping a few cups of gasoline out of the tank and squirting it into the velocity stacks to make the car start easier.

Powering the car is a high compression, twin plug, mechanically injected RSR spec'd motor with 2.8 litres of displacement. It was built by Bozzani in Monrovia, based on a 2.2-litre case with a forged steel crankshaft which was fully counter weighted and equipped with eight main bearings. The camshafts are, like the brakes, Carrera 6 parts. Mechanical injection on this RSR is a low butterfly type with an R3Y fuel injection pump, while factory headers lead the exhaust gasses into a custom, early Mustang muffler. The engine develops

approximately 300 horsepower at 7,500rpm, delivering its power to a 915 gearbox with a finned magnesium case, fitted with an 85 per cent LSD and Riverside gears (in the factory manuals, every gearset has its own name). Chris was familiar with racing on Riverside, and he knew that these gears would be perfect. Happily, these gears were good for all round street use, in testament to John's insistence on using the car as frequently as possible.

John's bespokery continues inside the RSR mock up. The dashboard is equipped with a full set of RSR gauges, and there's no glovebox door, armrests or radio. Seats are Scheel buckets, made from flame-retardant Nomex. Chris even put them through his own acetylene torch test first! Everything was set up just like a real Carrera RSR racecar would be.

On his first drive in the cross-breed RSR, Chris immediately knew he had exceeded even his expectations in building a car to conquer









Mulholland. Such was the capacity for the car to perform, limits would only be governed by driver bravery, as Chris recalls: "I quickly found out the only thing determining my speed up the mountain was myself, and how confident I was feeling."

After what felt like an eternity constructing the car, Chris began building his experience behind the wheel of his machine, constantly testing the car along Mulholland. He got to know it better and better, and learned what his 911 was capable of doing. The car was geared for fast acceleration at low speeds, and Chris designed the suspension to suck up bumps as well as possible. It was the ultimate car for Mulholland, and after a lot of preparation, and with some trial and error here and there, it was ready to go.

What followed was a romantic period for Chris on Mulholland, where himself and his RSR achieved unrivalled cult status among petrolheads of the era.

The car was eventually retired in the early Eighties, where it remained in the Banning garage until only weeks before its reappearance on Mulholland in front of the **Total 911** cameras. The engine had enjoyed an appropriate refresh, and Chris even found a set of new Goodyear tires mimicking the ones he used nearly 30 years ago.

After adjusting the tyres to the right pressure, we were about to set off from our meeting location on Mulholland. I was about to experience a shotgun ride in the King of Mulholland's 2,160-pound weighted, 300 horsepower RSR.

As Chris fired up the 2.8 in front of me, a subtle humming filled the air, until a quick blip of the throttle turned the hum turned into a full on growl.

Five minutes later and we were leaving the driveway and turning onto LA's most famous strip of blacktop, Mulholland Drive. Chris had to take it easy as the fuel tank was almost on empty, but

I was already impressed by the car's handling. It still delivered an enormously stiff ride, and after fuelling up it looked like Chris was ready to tear Mulholland's pavement apart all over again. We were blasting through turns, trying to fight the Goodyear Blue Streaks, which refused to slip and slide. The car clung to the road like a train on a track, exactly as Chris had described. The car had unparalleled pace, with the accelerator being extremely responsive to the instructions of John's inviting right foot. It made for the ultimate roller coaster ride, and we'd hedge a good bet that the car would hold its own in today's world of competitive, road-refined sports cars.

The roads are occupied by tourists these days, but it was a beautiful experience nonetheless, and we can only shudder to think of its performance if given a similar clear run as it enjoyed when conquering Mulholland 30 years ago.





KW coilover:

Coilover strut housing in stainless steel Individual height adjustable Adjustable: Rebound - 16 clicks Compression - 12 clicks



KW 2-way Clubsport:

Optimum performance on the race track and road, optional with adjustable top mounts Separately and independent adjustable compression and rebound damping



KW 3-way Clubsport:

Optimum performance on the race track and road, with adjustable top mounts Separately and independent damping force adjustment for rebound and compression damping in low and high-speed.



Official supplier and technical partner of







The Queen of racing

The face of the Nürburgring and unlikely celebrity heroine Sabine Schmitz talks exclusively to Total 911 about her life on the iconic Nordschleife

> Written by **Phil Royle** Photography by Frikadelli Racing

abine Schmitz, known to many as 'Speedbee' or 'the 'Ring Queen', is a motorsporting heroine. A respected race ace and TV celebrity with a passion for Porsche and the Nürburgring, the former 'Ring Taxi' driver has certainly earned her cult Nordschleife racer status, and enjoys a loyal fan base.

The charming, charismatic and energetic 43-year-old - who's forever smiling, laughing or giggling in interview - was born in the pretty Eifel town of Adenau, with the infamous Nürburgring Nordschleife wrapped closely around her.

Now, Sabine is synonymous with Nürburgring folklore, taking in more than 30,000 laps of the famous circuit, most recently with her Frikadelli Racing 911 GT3 R in the VLN championship. But what else can we learn from one of the greatest ambassadors of the iconic 13-mile course? Phil Royle caught up with the lady herself to find out...

Your association with the Nürburgring Nordschleife goes back to your childhood. Can you explain your early associations with the 'Ring?

My family ran the now infamous 'Steak on a hot stone, please' Hotel am Tiergarten in Nürburg village, within earshot of the Döttinger-Höhe straight. It was so great to meet all the Fl, racing and motorcycle stars in our house and restaurant. I went to school in Adenau, and every evening there was always loads of work to do in the kitchen or behind the bar... some days I fell asleep in school!

SABINE SCHMITZ

- **Height:** 5'7
- · Place of birth: Adenau, Germany
- · Hobbies & interests: Painting, cooking and tending to her pig farm
- Most memorable racing moment: Beating VW to a second 24-hour race win
- Racing hero: Jack Brabham
- · First race car: Volkswagen Polo
- Favourite circuit: Nürburgring
 Current racing team: Frikadelli Racing
- Current racing car: 2013 GT3 R

What persuaded you to have a go on the track for yourself?

Well, after being exposed to all these great motorsport people and their stories, I couldn't wait for a driving license to get out on the Nordschleife. Eventually I took my mum's BMW to do some laps without a license! It was amazing, and I decided to get into motorsports from that very moment. Plus, my grandma was always pushing me to the supermarket and hairdresser via the Nordschleife.

What was your first race on the circuit?

It was with my first car, a Volkswagen Polo. I even won the race in my class!

Your break in racing came at the start of the Nineties...

Yes, from 1990 to 1992 I raced in the Ford Fiesta Mixed Cup and came third in my first year and second in my second season, before winning the championship in season three. From 1993 to 1999, I was a BMW works driver, and in 1996 and 1997 we were overall winners of the famous 24-hour event at the Nürburgring. In 1998 I was winner of the VLN championship with the Scheid Motorsport BMW









M3. In total I have had 50 wins and nine overall championship victories on the Nordschleife. Since 2005, I have been racing with my boyfriend, Klaus Abbelen, in a Porsche (Cup, RSR, R) for the VLN Championship, and we came third overall in the 24-hour race in 2008.

Speaking of Porsche, when did you first race a 911?

It was in 2005. I was in a Carrera Cup car and came 4th overall in the VLN. It was fabulous.

Your love of Porsche 911s is well documented. Explain your affection behind them.

It's their drive on the rear wheels. There is nothing like it. Porsche has never really changed the 911: it's such an authentic race car. To get the best from a 911 race car, you have to drive it with a little understeer into the corner and then release full throttle before the apex to fly out of the corner. It is not like most other race cars. The older 911s were bad to race; if you pushed them out of the corner, the weight went to the rear and the car started bumping a lot. Now they are settled, stiffer and, of course, a lot faster.

You raced in a 911 for 2012...

I race with Klaus as part of Team Frikadelli in a 2012 GT3 R. Last year in VLN, we had two pole positions, came second twice and third twice. It was not a



SCHMITZ ON...

"I love my jobs, but also my ranch with horses, pigs and chickens, and I like painting and cooking."

The cars in her garage

"I have a Ford Ranger Wildtrak pickup truck, a Porsche GT3 RS and a John Deere tractor! And, of course, the GT3R race car in the workshop.'

What's in store for 2013

'The main plan is to build the log house in our garden. And, of course, to race and do more TV."

Being labelled as The Stig

"Well, I've got the suit...

Her racing and media life to date

"I'm very lucky to do so much media work, but I want to do even more!

great season because of tyre problems, but we were the best Porsche in the 24-hour race, finishing 6th. We will race the new 2013 GT3 R next year, in the VLN Championship and Nürburgring 24 Hour, of course. The 997 was big fun to drive, I loved it! But hopefully the downforce is a little better on the new car... I'd like more of this.

But you got the fastest lap time of 8:08 in the car during a VLN race!

Yes! But the car can still be improved.

You have a 997 GT3 RS. Is it your favourite 911 for the road?

Yes, it doesn't break down and is well balanced. Although the Turbos are very fast in a straight line, the rear is too soft, so it doesn't handle as nicely.

Going back to the Nürburgring, you came 3rd overall in the 24-hour race of 2008. What was that like?

It was the first big victory with Klaus in our own car. It was so great, and we had a big party with our team and our friends after that.

What is the secret of racing in the 24-Hour?

You have to stay cool and try not to crash! If you make a mistake - choosing the wrong tyres, for example – don't put yourself under pressure. For







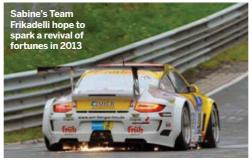
shorter races it's the same, with just a little more risk allowed.

What does the 'Green Hell' (Jackie Stewart's nickname for the Nürburgring) mean to you?

It's the most dangerous fun you can get. You either love it or you hate it; there is nothing in between. I have some great memories from the course; some good and some not so good. One of the best was the second 24-hour race win – it was a big fight over hours with the VW works team. I finally made it on rain tyres in sunny and thunderstorm conditions. The worst was my crash after a broken part on the left rear in 2011. It can be scary out there, like when you drive on slicks into the rain. I once span off at 200km/h in a very brave corner, luckily without any damage. I do really like the fast sections of the course, though, like Schwedenkreuz and Fuchsröhre.

What advice can you pass on to other enthusiasts of the Nürburgring?

In the wet, stay off the racing line, but not everywhere. Drive softly, not aggressively, and take wide lines. And in the dry, think at least three corners in front in order to get the speed on the long straights. If you're just starting, then take the slowest car you can in order to have sufficient time to look at the track and learn it.



It takes 50 laps to start to learn the track and, in the wet, maybe 500.

You were also famous for running the BMW 'Ring Taxi'. What was that like?

I ran this for BMW from 1993 to 2011. It was so very funny – to meet different people from countries around the world was great. I actually let one of my own racing heroes, Jack Brabham, drive the BMW Ring Taxi, but not a lot of people know that!

What has it been like being a fast lady in a predominantly man's world?

It doesn't matter in the race, but on the podium the guys can get a bit upset! A professional driver once said, "I'll drive on my roof into the pits before Sabine overtakes me," but I promise you he didn't!

How do you think you are viewed by others in the motorsport world?

I don't think about it. I'm just doing my job.

Your love affair with racing has led you to a great TV career in Germany and the UK...

I've done some documentaries about myself, including my horses, my pigs and racing. I just did *Fifth Gear* with Tiff Needell at Cadwell Park. I'm also with the live shows of *Top Gear* in GB, South Africa and Australia, and I was a Mentor at Silverstone working for Nissan together with [German rapper] Smudo and Formula One racer Nick Heidfeld. Very random!

Away from racing and the television cameras, how do you pass the time?

Well I run a 'sportcar hotel' (the Frikadelli Racing Barweiler, Horse Hotel & Guesthouse) with Klaus, and we're currently in Canada creating a log house for our ranch back home in Germany. It will be a new guest house. I'm also a trained pilot, so I enjoy flying my helicopter of course.

What racing goals would you like to achieve in the future?

I would simply love to win the 24-hour race for a third time, as it's at my home. We will have to wait and see if I can do it!

Easy being





Introducing the neon-hued 993 RSR track toy that after five years in the making has proved to be the ultimate labour of DIY love

Written by **Andrew Krok** Photographed by **Jeremy Cliff**

oe Magalotti has spent the last few years of his life building one seriously mean 993 RSR. The result of an incredible amount of work, Joe's tireless dedication to the craft has given him a stout race car that screams performance at every angle. However, the 911's journey has been anything but a plain sailing

Developing an interest in racing through gokarts as a boy, it wasn't until 15 years ago that Joe's foray into the world of Porsche began. After finishing university with a BA in Electrical Engineering followed by a Master's in Electrical Engineering and Business, an admiration of Porsches was rekindled, prompting him to buy a 1989 Carrera C4. "It was a great car, and after doing one high-performance driving school I was hooked," Joe remembers fondly.

After a couple of years, the C4 was sold and replaced with a 1982 930 race car - where, after only a few hours into the first drive, Joe decided on a big maintenance project. "The rebuild I did on the 930's motor was my first leap into car maintenance that was more than just an oil change," he says. Fate would intervene only one year later though, as Joe put the back end of the car into a track wall. Never deterred, the accident signalled the start rather than the end of the car, where key reparations included a fibreglass body and weld in cage to replace its current bolt in one. Joe merely applied his knowledge of engineering to the 930, even going so far as to run a finite element model of the cage to figure out which bars and features made it the stiffest and safest. "It amazed me to see



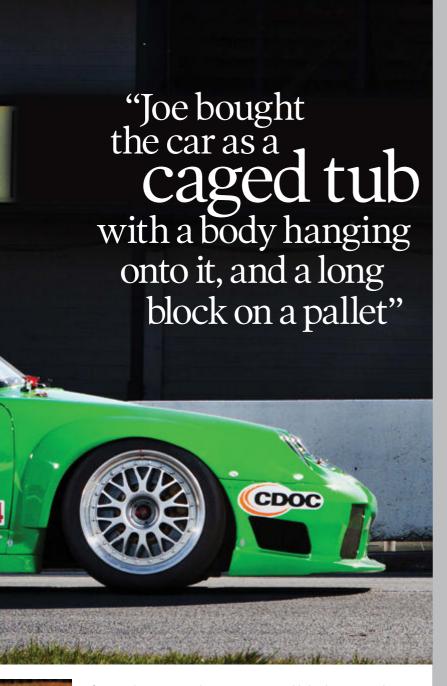
just how much I could do with even simple software," he recalls of his first racing 911. However, it was while replacing the entire body with fibreglass that Joe stumbled upon the car that would take him on an unprecedented adventure lasting over five years.

"I was browsing eBay one day when I found half a car being sold by a former race steward," Joe explains of the first time he saw the 993 RSR body. This car wasn't a turn-key operation; rather, Joe referred to it as "a caged tub with a body hanging on it and a long block on a pallet." It was at that point that he decided to take on an entirely new project at the cost of his current one, and Joe duly collected the car from Florida.

As with the 930, the intention was to take on the majority of the work from home – and with the previous owner having already removed the tub's undercoating, Joe turned his attention to the cage. "I took that finite element model from the 930 and translated it to the 993 cage to look for improvement areas," Joe recalls. "However, the modifications to the cage, along with the installation of the air jacks tubes, were done by McMahan Autosport in Akron, Ohio." This would become one of only three jobs not done by Joe himself during the initial construction, the other two being paint and transmission work.

After countless hours piecing the car together, the 993 was ready for its first startup. "The biggest source of pride in the construction of the vehicle came from building the engine myself," Joe confesses, "I was happy when the car turned over and tried to start on its very





first crank." However, that excitement would slowly wane, as the engine proved to be a source of many issues to plague Joe through two complete rebuilds of the motor.

The first time the engine went under the knife, the issue presented itself with a clunking sound on the dyno. Joe knew the man to help him out: "I called Mike Garriga, who's essentially a Porsche doctor, and he helped me tear into the motor to find the source of the issue." After removing the oil filter and finding chunks of bearing material, they opened up the motor fully. What they found was not for the faint of heart: a galley plug had come loose from the crankshaft. After cleaning out all that bearing material, the first rebuild began, and only weeks later Joe was able to head for the track to break the RSR in.

"After a few sessions we saw smoke coming from the right rear tailpipe," Joe says with a wince, "and what we found was even worse than the first time the motor failed." A third party had tuned the 993's freshly rebuilt engine, resulting in two busted pistons which completely ruined two cylinders. Incredibly, Joe decided to rebuild the motor one last time – a landmark decision that thankfully marked a turnaround in his luck.

While on the hunt for replacement parts, Joe turned to Joel Reiser, a former owner of the Reiser-Callas ALMS racing team and the current 993 tech advisor for the Porsche Club of America, for help. After installing a GT3 oil pump, Joe went about fixing the damaged

NASA GTS

NASA, short for the National Auto Sport Association, is an American group that promotes road racing and high-performance driver's classes. Divided into regional chapters, each NASA region has its own championship series, as well as a National Championship at the end of the season. They offer competitive racing in a variety of classes, including GTS, Spec 944 and American Iron.

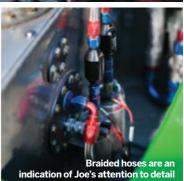
Joe races in GTS (German Touring Series). It is comprised of six classes, organised by power to weight ratio. This allows for an incredible variety, as some will opt for power while others focus on

weight reduction. Most cars are Porsche or BMW, but the series is open to cars of all German marquees. Engine swaps are common, so long as the engine is from a <u>different vehicle</u> in the same marquee.

GTS-4, the class in which the 993 RSR is placed, has a maximum power to weight ratio of either 8.5 (for streetlegal tyres) or 9.0 (racing tyres). In 2011, Joe finished with three podiums at the mid-Ohio circuit (the place we're photographing the car). In 2012, Joe changed to a stiffer setup, though he still managed to get three podium finishes – including a win in April.









"For the last year, I found 15 to 20 hours per week to devote to the car"





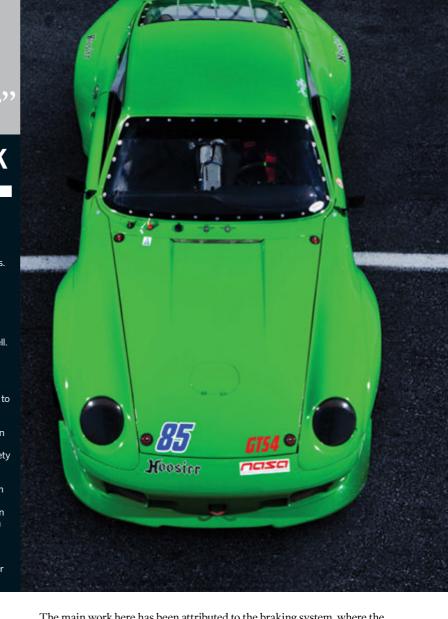


THE TRACK

The Mid-Ohio Sports Car Course is located in the middle of Ohio, smack bang in the Midwestern portion of the United States. Opening in 1962, Mid-Ohio originally featured a single track layout in a 15-turn, 2.4-mile configuration that runs clockwise. In 1990, a renovation added a 13-turn variant of the course, as well The course's grandstands are good for 10,000 seats, with hills and surrounding grassy areas bringing the total spectator capacity up to almost 80.000

Every April through
November, the track is open
for a variety of public and
private events. A large variety
of racing events take place
here, from children's driver
education courses to full-on
CART events. The current
record holder on the 13-turn
course is Dario Franchitti, a
CART driver who finished a
single lap in 1:05.347.

With certain race cars, the back straight is good for almost 180mph!



heads while replacing the clutch and flywheel – all during a sustained period of inaction.

The increased timescale was justified; the Porsche Motorsports flywheel requires a special long sensor switch, typically \$1,000 new from Porsche. Instead, Joe took about a year to find a used sensor on the internet: "The sensor came off some guy's street car. I can't believe he ran that on the street... these clutches are on/off switches, so it would have made a miserable drive."

With the engine rebuilt, Joe decided to take his RSR to a new location for tuning. He towed it to Rick DeMan's shop in New York, where RaceTek Engineering owner and Motec guru Geoffrey Ring helped tune the car and nail down all the variables. Compared to his previous experiences, Joe witnessed a smooth tuning process with minimal issue. "Since then, we've done small adjustments to the tune via remote datalogging and nothing more," he says.

During those five years, this addictive rebuilding hobby has accumulated a rather steep price tag. After spending roughly \$20,000 on the caged RSR tub and a truckload of initial parts, Joe estimates the components value at approximately \$100,000 new. "I've also spent a lot of time working on this car," he continues. "For the last year alone, I've managed to find about 15 to 20 hours per week to devote to the project on top of my day job."

The main work here has been attributed to the braking system, where the front rotors are a whopping 380mm taken from a 996 GT3R, and the rears are bulky in their own right at 322mm. In addition, a secretive ABS system is a favourite part, which Joe enthusiastically refers to as "Competition ABS".

Next season doesn't hold much in the way of upgrades, as Joe has learnt to build his car as thoroughly as possible so he doesn't need to buy the same part twice. Instead, the journey will culminate in a change of fuel cell bladder as per NASA racing regulations – expensive in its own right at almost \$3,000.

Despite the setbacks, the RSR has given Joe experiences to remember forever, both in the garage and now on the racetrack, considered a familiar hunting ground for himself and the car: "In my first season out, I won GTS-4, my racing class, twice," he says. "I also remember racing with a good friend of mine, nose-to-tail style down the straight. That was a fun day."

Joe's the first to admit he's learned a lot along the way. Unlike most racing addicts, though, recidivism is not present here. "It was an incredible experience that taught me a lot about both racing and myself, but I wouldn't do it again," Joe rightly says. However, no matter where this labour of DIY love ends, the project stands as a testament to doing it yourself, believing that nothing is out of reach and that setbacks are merely obstacles over which to push. Although granted, it's easier said than done!

CALLING ALL USA READERS Pay just \$6 an issue

If you are reading **Total 911** in the USA, we've got a special offer just for you! Take out a subscription today and pay just \$78 for 13 issues – that's a saving of 40% on the in-store price



Offer available to Canadian residents too - just \$76 for 13 issues



TOLL FREE 1-800-428-3003



ORDER ONLINE

www.imsnews.com/total911

OUOTE CODE IMST97

ENTER CODE IMST97

Total 911's magazine subscriptions are now handled in North America by IMS News. Call at local rates, in your hours and pay in US/Canadian dollars.

You're only seconds away from your favourite magazine

GreatDigitalMags.com

Over 900 magazines and bookazines, for every device, from one great website





1 Visit the website GreatDigitalMags.com



2 Filter titles by your favourite store











Waterstones

Choose a digital magazine or book

4 Purchase in-store, download & enjoy!



Legend Living the Living the Legend Legend Legend

Each month, we get to know our band of reporters as they share their real-life experiences with their 911s

Kris Clewell • Minneapolis, USA

1972 911 T

Date acquired:
November 2012
Last report:
Issue 94
Total miles:
1,200 to home
Costs:
Money isn't
everything!

he Porsche world is just as much of a fashion show and social circus as any other hobby in life. From remote control boats to baking competitions, our hobbies define who we are, and furthermore, our tastes and how we present what we love to others are a defining part of how we are perceived within the hobbying and collecting culture around us. Social approval may not be a primary goal for everybody's hobby, but when it's missing, we often feel dejected, and question if we're doing something wrong.

The internet itself has changed how car owners interact irrevocably. Gone are the days where building something in your garage with a small group of friends was the extent of your daily reach. Going to shows used to be the primary way of showing what you've built to others. The scene has become revolutionised. You can now instantly share your work with others, thus immediately garnishing prompt feedback. Peer approval is more important than ever before; shameless self promotion has supplanted humble ascendence. Now, it could be argued that being a legend is more about forum clicks and less about what you've built.

People struggle to be unique in a world where value is often based on factory original cars and matching serial numbers. The Porsche world is not immune to owners with bad taste; the hot rodding movement has gone from being a few guys doing unique things with their cars to a full-blown niche culture in itself. Where do you draw the line of 'gone too far'? Are you the guy who resprayed over a beautiful vintage coloured 911? Did you slap cheap driving lights on it? Perhaps you thought a ducktail, some bumpers and a few Carrera RS stickers on a narrow body T would impress your local or internet car club friends? Did you sin even worse than that? If that's you, then you are the previous owner of my new 1972 911T.

When I first started looking for a 911, and before I bought the white SC you may have seen in previous updates, I wanted an early car, but would have taken almost any 911. At

This month:
Introducing
the new 911 –
and assessing
the work load



the time my budget was around \$10-15,000. Unfortunately for me, the year was not 2006, when longhood 911s were reasonably priced. What was a \$15,000 car ten years ago is now worth \$75,000. I can't think of anywhere in any market where I've put my money that has witnessed appreciation in such a way. At the time, I saw the prices of classic 911s, laughed, and resigned myself to getting an SC.

My Grand Prix white '83 911 SC was a good car. I learned a lot working on and driving it. In the end, however, the car was too nice for me. Dirty thoughts about cams, pistons, and carburettors kept me tossing and turning at night. I just wanted a little bit more, yet I wasn't sure what 'more' was. It was probably a mix of more power and more individuality. I felt lost in a sea of stock 911 SCs. I thus decided to sell the car to someone who would sleep well at night knowing that they had their ideal car in the garage.



My taste had evolved; I went from wanting almost any nice 911 that had a roof to being embroiled in a longhood lust that my wife would probably compare to some sort of compulsive disorder. Once the seed has been planted in my mind that I want something new, I can't fight it off. With the SC sold, I started looking for a longhood to be alone in.

It started with wanting something with an original patina. I couldn't find something that didn't need a complete restoration. I moved



on to finding a hot rod in good condition. I couldn't care less about chassis and case numbers; I just wanted to drive the car.

I found a 1972 911T that looked like bad taste vomited on and in the car. A misguided owner had made the decision to take a 911T and put Carrera RS stickers and bumpers on the car. I'm not sure who they were trying to impress, but it certainly wasn't me, and anyone who knows what a Carrera RS is would know it wasn't one. While tribute cars are generally done well, with an overall theme cohesive to what it's attributed to, this car was

a mess. I decided to take on the task of bringing the car back. After being passed around from owner to owner many times, I decided to save it, and finally give it the attention it deserved. I flew out to Alexandria, VA, and bought the car from a nice gentleman there. To avoid embarrassment during the 17-hour and 1,200 mile drive home, I removed the fog lights and peeled off the stickers that depicted the car as a Carrera RS. Maybe 'NOTANRS' would be a decent vanity plate.

Anyway, after owning the car for a month or so, I am still not sure of the direction I need to take

with the 911. It needs new bumpers, wheels, seats, a steering wheel, bushings and horn grilles, less stickers and, of course, new paint. It also needs front pan work. It was hit in the front, and I presume that's when the car was resprayed to Midnight Blue over the original, and beautiful Albert Blue. I've managed to relinquish the rather hideous ducktailed decklid so far, and in the end I hope to build a car that's a good compromise to originality, with a little hot rod flair. It may take some time. Stay tuned over the winter and early spring for what I hope may be a couple of big updates...

Ross Kirkman

Oxfordshire. UK

2000 996 Carrera 4

Date acquired: January 2012 Last report: Issue 90 **Total miles:** 103.000 Costs:

£7,000

or those reading Total 911 for the first time, I bought the 996 Carrera 4 last year as a daily driver, taking a little pressure of regular use off the 3.2 Cabriolet. That said, although it was put into the garage to escape the elements, the 3.2 is still brought out and used as often as possible.

For the first seven or eight months I had a fantastic honeymoon with the 996, enjoying plenty of trouble-free driving throughout the UK. Some of you may remember that the car was running a little hot in traffic, prompting Simon Hope at Hillcrest to spot a defective fan switch by the radiator. Whether or not this contributed to a certain fateful day last summer I do not know, but after not using the car for a while, I decided to make a rather inconspicuous 40-minute drive to London.

While on the motorway and pressing hard, it wasn't long before I noticed that the temperature was rising quicker than normal. I had been advised in the past by another friend and 911 enthusiast that when the temperature needle reaches 80 degrees, you should keep an eye on it. If it rises to 100 degrees, raise an eyebrow. Beyond that, get ready to speed dial the bank manager!

With the red warning light on, I immediately pulled off the motorway and, after letting the engine cool sufficiently, poured two litres of Evian (it's all I could get!) into the coolant and returned home.

The following day I again checked the levels and, although it didn't require as much water as the day before, I noticed the grim tell-tale signs of either a cracked head or gasket. A light brown 'mayonnaise' had formed on the inside of the coolant bottle, meaning water was mixing with the oil somewhere

With the levels topped up again, I got the

starting, but after only a few turns it fired up without even a puff of smoke or steam. It even ran smoothly and quietly, giving me false hope that maybe the situation wasn't so bad as first feared.

This month:

The engine rebuild is complete

After leaving the car with Hillcrest, Simon soon diagnosed either a cracked head or head gasket, a somewhat fitting tribute to the M96 tech guide on page 56 of this issue!

> The only way of knowing was to drop the engine from the car and remove the heads. Once removed, both heads were crack tested and results showed that the head from bank two (right hand side looking at the engine) had a hairline crack behind the inlet port, cylinder five. While the block was left to drain itself of sludge over the floor at Hillcrest, a new head was ordered.

This being the first and hopefully

last time the engine will be removed from the car, I decided to address any possible future problems. The cylinders looked in good condition, with no scoring or cracking, especially the notorious cylinder six. However, the air/oil separator and both the RMS and IMS were replaced. The oil/ air separator is an often overlooked part, considering the problems and damage it can cause, from bending a con rod to cracking a head. There wasn't any obvious sign of its failure, but for £70 plus a couple of hours labour, it's something else I can now forget about. Likewise, as the engine was now out and separated from the transmission, this presented the opportunity to look at the IMS and RMS, and although there were no obvious signs of either of their failure, I decided on 'fit and forget' upgrades.

On further inspection, the water pump also seemed a little too noisy for comfort,









This month's

updates from our Living the Legend contributors



Martin Dalziel

Date acquired: October 2009 Total miles: 69,114

Costs this month: Fuel

Lowlights: Happy to report that there are currently no lowlights whatsoever! The cost of fuel. however, isn't as pleasant...

Highlights: I'm really enjoying the drive in the 996 at the moment. Since my wheel refurb (see issue 96), the car looks great, too.



Maxie Islam

Date acquired: August 2010 Total miles: 36,260

Costs this month: £80, fuel

Lowlights: Being called insane by a neighbour who witnessed me cleaning the Carrera 4S in the rain

Highlights: The cleaning waxing session I completed in December after such a long time. Now, the car looks amazing.



Tim Hughes

Date acquired: May 2011 **Total miles:** 103,879

Costs this month: £200

Lowlights: The old girl had a split muffler, and I couldn't drive her without accepting that I would be breathing in lungfuls of poison.

Highlights: Washed, waxed, polished and took her to Powerspeed, who welded up the muffler and centred the tips.



Gina Purcell

Date acquired: December 2012 Total miles: 118, 320

Costs this month: £100, fuel

Lowlights: Knowing it will be many months before Wolfi can have his long-awaited body and paint work. Is it July yet?

Highlights: Enjoying the friendship buzz of my fellow Porsche enthusiasts, both face to face and via wonderful social networks



Engine troubles represent a great opportunity to get your whole

Joel Newman

Costs this month: £340

Lowlights: Discovering that both my rear, six-month old Pirelli Zeros are on the limit! That will teach me to turn the traction control off!

Highlights: I've had some Eibach spacers fitted and a oil and filter change. Car running wonderfully and hasn't missed a beat.



Maurice Tillaard

72 911T RS Hot Rod

Date acquired: February 2012 Total miles: 0

Costs this month: £133

Lowlights: The 911 is currently in storage and hasn't been driven for a number of weeks thanks to the long Dutch winter, Roll on summer.

Highlights: I'm currently on another Porsche-filled work trip to the States. Where? Well, Los Angeles, to be exact..



Richard Good

Date acquired: May 2011 Total miles: 52,656

Costs this month: £50, fuel

Lowlights: I've been far too busy at work preparing for the annual Autosport International show to be able to drive the car.

Highlights: The Turbo has been in with Forge Motorsport to get the intercoolers checked out. More on this next issue.

and considering the car had recently overheated, it made sense to replace it along with the three front radiators, as they too weren't in the greatest condition. I perhaps could have got away with replacing just one or two, but considering the work carried out so far, there seemed little point in cutting corners. I also asked Simon to fit aftermarket grilles for the front air intakes. The amount of crud that can get sucked up and carried in there and rot the radiators is incredible: leaves, stones, crisp packets and even the odd drinks can have all been known to find a way in.

Finally, with the engine reassembled and reinstalled, it was driven and flushed regularly. It did start to leak from the coolant tank, but this isn't an uncommon problem with 996s and Boxsters, so I do wonder if this is down to the fact that with a new water pump and radiators it was now under a

greater, correct pressure, which instigated a failure on the old tank.

As you would expect, the car is running perfectly and is back into daily service. I hope this doesn't frighten 996 owners too much or dissuade anyone from buying a 996. Although localised overheating can be a common problem with the model, any water-cooled engine can overheat.

It's worth pointing out that when buying the car, it came with a full OPC service history and none of the above was picked up in a PPI, but then, they wouldn't necessarily be. In this case, whether it was down to my negligence in not checking levels regularly or the way it has been driven (not just in my ownership) I will never be sure. I'm just glad to have the car back at last, and just in time, too. The snow and ice is here, so my 3.2 has been stored away while I recoup some road-going fun with the Carrera 4.

Ben Przekop

• Georgia, USA

2007 911 GT3

Date acquired:
July 2012
Last report:
Issue 95
Total miles:
50,061
Costs:

£3,500

t's every Porsche owner's nightmare: having an accident on a trackday. Like a lot of people, I had come to believe that it would never happen to me. I was wrong.

The December PCA Driver's Event at Barber Motorsports Park in Alabama started quite normally and uneventfully, except for the darkening skies which threatened rain despite earlier forecasts for a dry weekend. After the early morning driver and instructor meetings, I met with my student for the week, Randy Johnson, and went out with him in his 2011 Cayman for his first Group One track session. Randy was new to Barber, so we concentrated on learning the proper line for each section of the track while driving at a comfortable speed. About halfway through his session a light drizzle started to fall, so I cautioned him about adjusting his braking distances, making doubly sure he did all his braking in a straight line and got off the brakes well before turning. Driving cautiously in this manner, we found that he had good traction with his street tyres, which boded well for what was shaping up to be an unexpectedly wet weekend.

Taking place immediately after was my Group Four session, where I would be driving my own car solo, so I hustled through the paddock to my GT3 and headed over to join the group, who were already on the track. On the initial lap I was particularly interested to see what kind of traction I would have with my track-biased Pirelli Corsa tyres in the light rain, and I was glad to find that I had rather good traction as long as I drove smoothly and at an 8/10ths pace. This was welcome news, as I had never driven on a racetrack in the rain, especially with this type of tyre, and I had really been looking forward to doing this weekend at Barber. Even with the rain, which had now started to fall more heavily, this was going to be fun.

The first two laps went well, and so I was gradually picking up my speed and pushing a bit harder on each corner. As I started my third lap, I was simply enjoying the experience of doing something I loved: flying along without a care in the world, revelling in that wonderful 'connected' feeling of a GT3 when driven at speed. As I approached the end of the straight that preceded the sharp downhill right/left/right curve they call 'the corkscrew' in homage to Laguna Seca's famous turn, a slower car signalled me to pass offline on the right, which according





to the rules of DE events I would have to do before the corner. This would put me on a tighter line into the corner, which is normally approached by braking on the far left before turning right, thereby making it less sharp. I had done countless inside passes like this at far higher speeds involving late braking and a sharper turning radius without so much as a tyre squeal. On instinct I simply accelerated and braked hard before turning right to enter the tricky downhill corner.

Due to my tighter line, I was now turning right at the same time that I was cresting the hill. As I did so, I felt the rear swerve to the left, so I quickly tried an opposite lock correction – but that just put the car into a counter-clockwise spin. I was now going downhill through the turn backwards. Gravity

and physics were in charge, and I was merely the passenger. The GT3 was hydroplaning on the wet downhill roadway, and although I was pushing on the brakes for all I was worth, I had virtually no traction. I felt the car leave the paved surface and start sliding down the grassy verge between the track and the Armco, and I was wondering whether my Porsche was going to keep sliding or hit something when suddenly the Armco was outside my window, followed by a loud bang. The left side of the car hit the Armco as my helmet swiped the side of the roof, and the car came to a sickening and very silent stop.

All of this occurred in less than five seconds
– that's how quickly things happen on a
racetrack. As I sat in the now very still and
very quiet stalled car, I could see the corner



worker on the hill above frantically waving his yellow flag. Physically I was fine, but emotionally I was shocked, disappointed and angry at myself for having done something so stupid. I felt the need to at least partially redeem myself and try to start the car and see if it was drivable and get back to the paddock without a tow truck coming out to get me, which would cut short everyone else's session. It finally started after about three cranks, and I cautiously and slowly drove back onto the track and finished the lap. Amazingly, it seemed to drive okay, despite the fact that the steering wheel was obviously about a quarter turn off centre, so I drove slowly along the edge of the track with hazard lights flashing and made it back to the paddock without seeing another car.

Once parked there, a quick look at the car confirmed that the extent of the damage meant my weekend of driving was definitely over: both left-hand-side wheels had sustained serious damage, and the left rear wheel's camber indicated a bent or broken suspension. Later on Saturday, a flatbed showed up to tow my car back to Atlanta, but I stayed through the rest of the weekend to continue to instruct my student and do a few check rides.

With the weekend racing finally over, I promptly took the car to Performance Auto Collision, where I discussed the damage to the GT3 with Ian Morris. In my next update, I'll have a prognosis from the bodyshop, and will be mulling over the many lessons learned, as well as the joys of trackday insurance...

Ben had to discuss remedial action for his damaged passenger-side wheels and wings





2005 997 S Cabriolet

Date acquired: November 2012 Last report: Issue 96 Total miles: 22,858 Costs: £60 – fuel

his month it was time to make a start on one of my long-time plans for the 997 S: a full colour change to gloss white in the form of a 3M vinyl wrap! I've always loved white cars since my first ever car (a white '83 Gen1 Golf GTi) and more to the point, I've always loved white Porsches – it's such an iconic colour! Unfortunately, there were no white 997s in my price bracket, as people here in the UK didn't really start ordering new cars in Carrera white until around 2007/8, so the next best option was to a buy a black car as a base for the wrap.

Getting the car wrapped was something a couple of my friends that own Porsches quite rightly questioned, but after explaining the benefits they quickly warmed to the idea. The main benefit is, of course, that it will actually protect my immaculate, original paint from scratches, scuffs, oxidisation and tree sap, and the vinyl can always be removed with ease if I ever get fed up of it. Some people worry about wraps lifting lacquer, but providing the car has original factory paint or that any panels have previously been painted



"I've always loved white cars, and I've always loved white Porsches – it's such an iconic colour!"

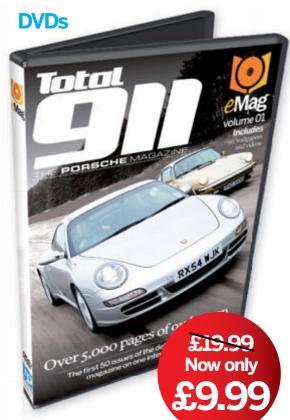
correctly, the 3M wrap can be removed, leaving the paint untouched.

After deciding to go ahead with the wrap, I contacted Lee at www.L-J-S.co.uk, who is based local to me in Leeds, and is also a good friend who I've known since studying graphic design at college. After seeing some of his recent work on a 996 Carrera 4S and a Ferrari 458, there was no doubt in my mind

that he was the man for the job, as his detail in the finish is outstanding. I discussed what I wanted with Lee, who offered me a very reasonable quote on a full wrap including door shuts and other niggly areas. A few days later, he came to my garage (yes, a fromhome service!) and started prepping the car for application of the wrap. See the full results of the colour change next month...

Drive your passion...

...with Total 911 back issues, bookazines and DVDs. The ultimate 911 resource.



Total 911 eMag Vol. 1

5,000 pages of 911 heaven on one DVD-ROM. The first 50 issues of Total 911 available to view on a Mac or PC, or transfer to an iPad. The disc includes 911 wallpapers and videos.

Back issues











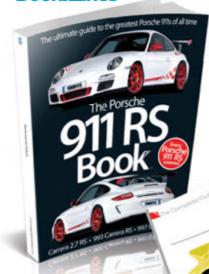




Discount code
Get back issues from £3 with the code...

SPEED

Bookazines



The Porsche 911 RS Book

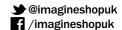
Discover all there is to know about the greatest Porsches ever made. Including in-depth articles on classic, rare, and modern RS models.

£9.99



Become an ImagineShop customer and leave reviews of your favourite products.

Order online imagineshop.co.uk



MAGAZINES BOOKS DVDS DOWNLOADS GIFTS

_earn to inspire

www.dphotographer.com



ON SALE NOW

> Improve portraits > Master HDR > Animals in action > New kit











BUY YOUR ISSUE TODAY

Print edition available at www.imagineshop.co.uk Digital edition available at www.greatdigitalmags.com







Everything you need for your 911



the section, we've colour-coded the sections (right).









Shop for quality magazines, books and DVDs from Imagine Publishing



imagine**shop**.co.uk

MAGAZINES BOOKS
DVDS DOWNLOADS



RSJ SPORTS CARS

Specialising in Porsche Cars www.rsjsportscars.com





GT Silver with ocean blue leather, Sat Nav, 23k miles£60,000



Cobalt blue with stone leather, Sat Nav, 28k miles£47,000



997 Turbo 3.6 (2006 - 06)
Cobalt blue with black leather, Sat Nav, 45k
miles£44,000



997 "4S" 3.8 (2008 - 57)
Slate grey with black leather, Sat Nav, 39k
miles£39,000





997 "4\$" 3.8 (2006 - 06)

Basalt black with black leather, Sat Nav,
29k miles£34,000



996 Turbo 3.6 (2004 - 04)

Silver with black leather, Sat Nav, 39k miles
......£34,000



996 Turbo "X50" 3.6 Tip (2002 - 02)Silver with black leather, Sat Nav, 38k miles
......£32,000



997 "2\$" 3.8 (2005 - 55)Atlas grey with black leather, Sat Nav, 44k miles£29,000



997 "2S" 3.8 (2005 - 55)Lapis blue with black leather, Sat Nav, 43k miles£28,000



997 "2\$" 3.8 (2005 - 05)
Silver with ocean blue leather, Sat Nav, 46k
miles£27,000



997 "2S" 3.8 (2004 - 54)
Midnight blue with stone leather, Sat Nav,
44k miles£26,000





996 "4\$" 3.6 (2004 - 54)
Basalt black with black leather, Sat Nav,
51k miles£23,000



996 "4\$" Cab 3.6 (2003 - 53)
Seal grey with black leather, Sat Nav, 59k
miles£23,000

SERVICE DEPT

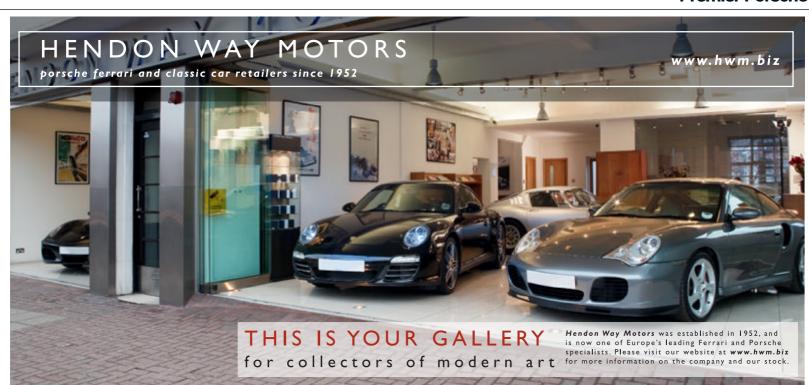
All Porsches serviced from 924s to 997s.

All work performed by factory trained technicians using Mobil oil and Porsche PIWIS diagnostics

ALL CARS SOLD WITH 1 YEAR IN-HOUSE RSJ WARRANTY

> STS HOUSE, BRISTOL WAY, SLOUGH, BERKSHIRE, SL1 3QA

T: 01753 553 969



PORSCHE PANAMERA TURBO

2009 - PANAMERA TURBO TIPTRONIC (CARBON GREY) 12,000 Miles Luxor Beige Full Leather Interior, Brass Aluminium Interior Look, PDK 7 Speed Automatic Gearbox, Sport Mode, Sport Plus, PASM, PSM, Burmester Upgraded Soundsystem, Full Climate Control (4-zone), Keyless Entry, Keyless Go, Porsche Crested Headrests, Sat Nav (Touch Screen), PCM Module, Turbo Exhaust, 19" Turbo Porsche Alloys.

PORSCHE 997 - TURBO, C4S, C2S, C2

2008 - 997 TURBO COUPE TIP (MACADAMIA BRONZE) 28,000 Miles Full Savannah Beige Leather Interior, Black Leather Dashboard, TPC, PASM, PSM, PCM, Sat Nav, BOSE, White Dials, Xenon Headlights, Tracker, 19" Turbo Alloy Wheels, Only 1 Previous Owner, Full Porsche Service History.

2007 - TURBO COUPE MANUAL (COBALT BLUE) 35,000 Miles
Metropole Blue Leather Interior, PSM, PCM, Sat Nav, PASM, Telephone, Heated
Electric Memory Sports Seats, BOSE, DVD, CD Player, Carbon Ceramic Brakes,
White Dials, Xenon Headlights, Sport Chrono Plus, iPod Connection, Sunroof, 19°
Turbo Alloy Wheels, Full Porsche Service History.

2009 - 997 C4S CABRIOLET PDK (GEN II) (BLACK) 26,000 Miles Full Black Leather Interior, PDK 7 Speed Double Clutch Transmission (Porscl Doppelkupplung), PCM, Sat Nav, BOSE, iPod and USB Connections, Xenon Headlights, 19" Porsche Sport Design Alloys, Full Porsche Service History.

2008 - 997 C2 CABRIOLET PDK (GEN II) (CREAM WHITE) 14,000 Miles Full Black Leather Interior, PDK 7 Speed Double Clutch Transmission (Porsche Doppelkupplung), PSM, PCM, Sat Nav, iPod and USB Connections, Xenon Headlights, 18* Porsche Carrera Sport Alloy Wheels with Colour Crested Centres, Full Porsche Service History.

2009 - 997 C2S COUPE PDK (GEN II) (BASALT BLACK) 31,900 Miles Full Grey Leather Interior, Touch Screen Sat Nav, PDK 7 Speed Gearbox, PASM, PSM, PCM, Heated Seats, IPod Connection (Universal Audio Interface), 19" Sport Design Alloy Wheels, Full Service History With Recent Service.

2008 - 997 C4S CABRIOLET MANUAL (BASALT BLACK) 10,000 Miles Full Savannah Leather Interior, Sport Chrono, Sports Exhaust, PSM, PCM, BOSE, Full Savannah Leather Interior, Sport Chrono, Sports Exhaust, PSM, PCM, BOSI CD Changer, Sat Nav, White Diala, Xenon Headlights, 19" Porsche Sport Design Alloy Wheels with Colour Crested Wheel Centres, Full Porsche Service History.

Full Black Leather Interior, PDK 7 Speed Dual Clutch Gearbox, BOSE Upgraded Soundsystem, iPod Connector (Universal Audio Interface), Heated Seats, Sports Chrono with Sports Exhaust, PASM, PSM, PCM with Touch Screen Sat Nav, White Dials, Fully Electric Memory Seats, 19"5 Spoke Porsche Alloys with New Tyres and Coloured Crested Wheel Centres, One Owner From New, Full Porsche Service History. 2009 - 997 C2S COUPE PDK (GEN II) (ARCTIC SILVER) 29,000 Miles Full Black Leather Interior, PDK 7 Speed Dual Clutch Gearbox, BOSE Upgrade

2008 - 997 C2S CABRIOLET TIPTRONIC (BASALT BLACK) 40,000 Miles Full Black Leather Interior, Sport Chrono, PCM, PSM, PASM, 6 CD Changer, Xenor Headlights, 19" Porsche Sport Design Alloy Wheels, Full Porsche Centre Service

2006 - 997 C2S CABRIOLET MANUAL (SLATE GREY) 30,000 Miles Full Black Leather Interior, Sport Chrono, Sports Exhaust, PASM, PCM, Sat Nav, Bluetooth, BOSE, Porsche Crested Headrests, 19" Carrera Alloy Wheels, Full Porsche Service History.

2006 - 997 C2S CABRIOLET MANUAL (BASALT BLACK) 35,000 Miles Black Leather Interior, PSM, PCM, Sat Nav, White Dials, CD Changer, Heated Sports Seats, 19" Carrera Alloys, Full Porsche Main Dealer Service History.

2005 - 997 C2 CABRIOLET TIPTRONIC (BASALT BLACK) 34,000 Miles Full Black Leather Interior, PSM, PCM, Sat Nav, Red Dials, Porsche Crested Seats Extended Leather Package, Xenon Headlights, 19" Carrera Alloy Wheels, Only 1 Previous Owner, Full Porsche Service History.

2007 - 997 C2 COUPE MANUAL (SEAL GREY) 37,000 Miles Full Black Leather Interior, PSM, PCM, Sat Nav, CD Changer, White Dials, Tracker, Colour Crested Wheel Centre Caps, 19" Carrera Alloy Wheels, Only 2 Previous Owners, Full Porsche Service History.

PORSCHE CAYMAN

2007 - CAYMAN TIP S (BASALT BLACK) 66,000 Miles
Full Leather Interior, PSM, PASM, PCM, Sat Nav, Heated Seats, Climate Control,
Porsche Crested Seats, CD Changer, Rear Parking Sensors, Xenon Headlights,
18" Porsche Alloys with Coloured Crests, Only 1 Previous Owner, Full Official
Porsche Centre Service History.

PORSCHE 996 - GT2, GT3, TURBO, C4S

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

Full Black Leather Interior, Electric Windows, Climate Control, Rear Roll Cage, Porsche Radio with CD Player, 18" GT3 Alloy Wheels, Full Service History.

2004 - 996 GT3 (ATLAS GREY) 29,000 Miles Comfort Specification, Full Black Leather Interior, Porsche Crested Sport Bucket Seats, 18" GT3 Alloy Wheels, On-Board Computer, Original GT3 Rear Spoiler and Front Spitter, Only 2 Owners From New, Recently Fitted Tyres, Full Porsche

2004/54 - 996 TURBO 'S' MANUAL (BASALT BLACK) 19,000 Miles Full Black Leather Interior, Standard Porsche Equipment Cage, Billstein PSS10 Lowered Suspension, Performance Friction 350mm Brakes, Porsche GT3 Nomes Bucket Seats with 5 Point Seat Belts By Willems, Full Engine Rebuild, Standard K24 Turbos, Standard Fly Wheel with Updated Clutch, Very Low Mileage, Only 1 Previous Owner.

2003 - 996 TURBO COUPE MANUAL (BASALT BLACK) 42,000 Miles Black Leather Interior, PSM, PCM, Sat Nav, Telephone, On-Board Computer, BOSE, CD Changer, Cruise Control, Heated Sports Seats, Alcantara Headlining Sunroof, Xenon Headlights, Rear Wiper, Rain Sensor, Full Porsche Service Hist

2003 - 996 TURBO COUPE TIPTRONIC (COBALT BLUE) 33,000 Miles Stone Grey Leather Interior, PSM, PCM, Sat Nav, BOSE, Porsche Aerokit Rear Spoller, Xenon Headlights, Only 2 Previous Owners, Full Porsche Service History.

2002 - 996 TURBO COUPE MANUAL (MERIDIAN SILVER) 44,000 Miles Mid Grey Leather Interior, PCM, PSM, Sat Nav, BOSE, Sunroof, White Diats, Computer, Climate Control, Xenon Headlights, 18" Turbo Alloys, OPC Service History.

2002 - 996 C4S COUPE (MIDNIGHT BLUE) 48,500 Miles
Full Black Leather Interior, Fully Electric Memory Seats, Bose Sound System,
Climate Control, PSM, PCM, Sat Nav, Telephone, Full Service History.

PORSCHE 993 - TURBO, C2S, C2, TARGA

1998 - 993 TURBO S COUPE MANUAL (SPEED YELLOW) 60,000 Mile Black Leather/Carbon Fibre Interior, Electric Sports Seats, Porsche Radio and CD Changer, Yellow Dials, Seat Belts and Callipers, Sunroof, Litronic Headlights, 18' Turbo S Alloy Wheels, Full Service History.

1998 - 993 TURBO COUPE MANUAL (FOREST GREEN) 34,000 Miles Cashmere Beige Leather Interior, Only 1 Owner, Porsche Exclusive Carbon an Aluminium Pack, White Dials, Sport Seats, Turbo Crests On Back Seats, Alpin Upgraded Stereo, AC, Sport Classic 18" Wheels, Full Porsche Service History.

1995 - 993 TURBO COUPE MANUAL (ARENA RED) 31,000 Miles Grey Leather Interior, Wood Package, Cruise Control, Uprated Becker CD Player Bluetooth, Speakers, Sat Nav Compatibility, Climate Control, 18" Turbo Alloys, Official Porsche Centre Service History.

1998 - 993 C2S COUPE TIPTRONIC (ARCTIC SILVER) 59,000 Miles Full Grey Leather Interior, Original Porsche CD Player & Radio, Original Carrera S Engine Lid, 18" Carrera Alloy Wheels, Full Main Dealer Service History (Just Been Serviced at an Official Porsche Centre).

1997 - 993 CARRERA 4 COUPE (MIDNIGHT BLUE) 75,500 Miles Comprehensive Service History (Spare Key, Old MOTs and Tax Discovery). Permanent 4 Wheel Drive, Uprated Alpine Soundsystem (Original Steroe Also Included), MP3/CD and External Audio Connector, 17" Carrera Cup Alloy Wheels, New Tyres Fitted, Full and Extremely Comprehensive Service History (Spare Key, Old MOTs and Tax Discs, Original Manuals, etc).

1996 - 993 C2 COUPE TIPTRONIC "VARIORAM" (IRIS BLUE) 73,000 Miles Black Leather Interior, On-Board Computer, Upgraded Stereo and Changer, Climate Control, 16" Carrera Alloy Wheels, OPC and Specialist School History.

1996 - 993 C2 TARGA TIPTRONIC (TURQUOISE) 83,000 Miles Marble Grey Leather Interior, Varioram, Electric Glass Targa Roof, Porsche Stereo, On-Board Computer, 17" Targa Alloy Wheels, Full Specialist Service History.

1995 - 993 C2 COUPE TIPTRONIC (SLATE GREY) 81,000 Miles Black Leather Interior, On-Board Computer, Climate Control, 18" Porsche Turbo Alloy Wheels, OPC and Specialist Service History.

1995 - 993 C2 COUPE TIPTRONIC (MIDNIGHT BLUE) 55,000 Miles Marble Grey Leather Interior, Varioram, Sony Stereo Player, AC, Rear Wiper, 17" Porsche Cup II Alloy Wheels, Full Service History, Recently Serviced.

1994 - 993 C2 COUPE MANUAL (IRIS BLUE) 101,000 Miles
Marble Grey Leather Interior, IPod Connection, Pioneer Upgraded Stereo, Xenon
Headlights, 17" Porsche Cup II Alloy Wheels, Comprehensive Porsche Specialist
Service History.

1989 - 911 CARRERA 3.2 CABRIOLET (G50 GEARBOX) 124,000 Miles Iris Blue Metallic, Full Beige Interior, Manual, Matching Numbers Example, Matching Dark Blue Hood, Fully Electric Soft Top, Pendo Correct Fuchs Alloy Wheels, Comprehensive Service History, 10 Years With The Same Owner.

FERRARI - MODELS FROM 1967 +

1998 - F550 MARANELLO COUPE MANUAL (SILVER) 49,000 Miles Navy Leather Interior, Sat Nav, ASR Sports Mode, Upgraded Radio and 6 CD Changer, Ferrari Service History.

1998 - F550 MARANELLO COUPE MANUAL (SILVER) 53,000 Miles Navy Leather Interior, Sat Nav with DVD, ASR Sports Mode, Electric Seats, Upgraded Radio and 6 CD Changer, Climate Control, Ferrari Service History.

1997 - F550 MARANELLO COUPE MANUAL (ROSSO RED) 37,000 Miles Magnolia Leather Interior, ASR Sports Mode, Electric Seats, Upgraded Radio, 6 CD Changer, Climate Control, Ferrair Service History.

1973 - DAYTONA 365 GTB 4 RHD (ROSSO RED) 38,000 Miles

1973 - DAYTONA 365 GTB 4 RHD (ROSSO RED) 38,000 Miles

1973 - DAYTONA 365 GTB 4 RHD (ROSSO RED) 38,000 Miles

1967 - 275 GTB 4 MANUAL LHD (ARGENTO SILVER) 59,000 Miles Full Black Leather Interior, Detailed Restoration History, Full History, Original Build Sheets, Sales Invoice, Tool Kit, Wallet, Hand Books, Numerous Concourse and Awards Winner, Engine Rebuilt By Ferrari 26,000 KMS Ago, Comprehensive Photos Showing The Repaint and Work Done By Ferrari.

CLASSICS - AC, PORSCHE, JAGUAR, BENTLEY

1991 - AC COBRA LIGHTWEIGHT (BLACK METALLIC) 5,000 Miles
1 of 26 RHD Lightweights, Black Leather, Black Metallic Coachwork with White
Stripes, Full Black Leather Interior, Full Weather Equipment, Absolutely Stunning
Condition.

1978 - PORSCHE 911 TURBO 3.3L (GUARDS RED) Approx. 50,000 Miles Full Black Leather Interior, Original Blaupunkt Stereo, Original 16" Fuchs Alloys and Toolkit, Original Turbo Spoiler, Comprehensive Service History.

1962 - JAGUAR 3.8 MARK II AUTOMATIC LHD (BLACK) 16,478 Miles Black Coachwork. Red Leather Interior. Power Assisted Steering, Wire Wheels, Black Coachwork, Red Leather Interior, Power Assis Recent Restoration To Virtually Concours Standard.

1936 - BENTLEY 4 1/4 PILLARLESS COUPE (MIDNIGHT BLUE) Gurney Nutting Coachwork, 40 Years Extensive History, A True Classic, Original Throughout, Exhibited At Louis Vuitton Concours D'Elegance in Paris 2003. Full Mid-Grey Leather Interior, Sunroof.

1935 - BENTLEY DERBY 3.8L SALOON

A true classic. Completely original throughout and with a very well documented history, 3792cc, Petrol, 2-Axie Rigid Body, Chassis Frame no: 851EJ, Engine no: P3BP, Date of First Registration: 30.08.1935, Had a Bare Chassis Restoration, rebuilt to the highest standard, taking over 5 years.

1992 - PORSCHE 964 RS Lightweight 10,000 KM
Original Rubystone Red With White Vinyl Wrap (Removable), Matching Numbers
3.6! RS Engine (260BHP) and G50 Gearbox, Racing Seats, Red Racing
Harnesses, Full Roll Cage, 964 RS Momo Steering Wheel, 964 RS Magnesium
Wheels Painted Black, 964 RS Suspension, One of Only 2282 Ever Made, Recent
Major Service

1964 - PORSCHE 356 SC COUPE LHD (SIGNAL RED) 1600cc Signal Red Coachwork, Soft Beige Leather Interior, 4 Speed Manual, Recent Restoration To Concours Standard, Eligible For Many European Events.

2010 - PGO BUGGY BR - 500 RCN PGO BUGRACER (WHITE) 700 Miles Original PGO Buggy, Powered by a 500cc Motorbike Engine, Steel Tube Frame, Right Hand Drive, Road Legal, LCD Dashboard, Locking Differential, Hand Brake Reverse.









- menu servicing
- cost-effective repair MOT testing station
- · 4 wheel alignment
- full diagnos





www.brauntonengineering.co.uk 01271 814144



Porsche Specialist



DEVON





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

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)





01895 814446 / 07507 623997

www.porschespecialistsheathrow.co.uk

Unit C2, Arun Buildings, Arundel Road, Uxbridge, UB8 2RP













ENGINE REBUILDS - ALL MODELS GENERAL REPAIRS & SERVICING





AIR CONDITIONING



DISC RE-FACING



TYRE SUPPLY & FITTING WHEEL ALIGNMENT

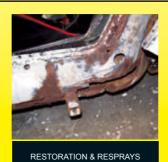


RGA

LONDON'S MAJOR PORSCHE SPECIALIST

UNITS 32-34 MILES ST, VAUXHALL SW8 1RY WWW.RGAPORSCHELONDON.CO.UK

EMAIL BOB@RGAPORSCHE.CO.UK ALL WORK TO THE HIGHEST STANDARD AND CARRIED OUT IN HOUSE MON-FRI 7AM-7PM, SAT 9AM-6PM, SUN - CALL Tel: 0207 793 1447 - ASK FOR BOB FOR BOOKING ADVICE





DAMAGE REPAIR INCLUDING



WHEEL BALANCING, WHEEL STRAIGHTENING & RE-FURBISHMENT



TORQUE TUBE OVERHAUL 924,944,968,928



JIG REPAIRS





We cater for all marques

PERFORMANCE IS OUR PASSION

- TOUCHLESS TYRE MACHINES
 - NITROGEN TYRE INFLATION
 - ANTIVIBRATION SYSTEMS
- **DYNAMIC WHEEL BALANCING** •

The centre of excellence for chassis dynamics,tracking, alignment, ride height and race car set up

33 Chess Business Park, Moor Road, Chesham, Bucks

us now on 01494 797820







We Stock:

- New and used parts
- Accessories
- Gifts

Got a car to sell?

We buy accident damaged and non-runners

Save £££ on used, genuine OE parts



Visit our website: www.cotswoldporschespecialists.co.uk Email us: info@cotswoldporschespecialists.co.uk Call us: 01242 620 180

Quality guaranteed Mail order or collection Workshop fitting service

Unit 4 Alpha, Orchard Trading Estate, Toddington, Gloucestershire, GL54 5EB



PORSCHESHOP.co.uk

Tel: 0121 585 6088

Choose by Model >

Classic 911

993 996

997

924

944

968

928

Boxster

Cayman

Cayenne

Panamera

SECURE SHOPPING

Carband

Multiple

WORLD LEADERS IN PARTS DIRECT

SPECIALIST

Web/Mail Order

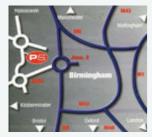
Accessories & Gifts **Body & Trim Parts Body Styling** Books & DVDs Car Care & Touring Clothing & Shoes **Interior Trim Mechanical Parts Motorsport Related** Performance Parts Pre 74 Classics Parts Seats & Belts **Sports Exhausts** Steering Wheels Wheels & Accessories

Onsite Services

Zymol Products

Porsche Car Sales Retail Shop **Workshop Services**

Map



Address

Unit 4 Block 2. Shenstone Trading Est, Halesowen, West Mids, B63 3XB, UK

Phone Number

0121 585 6088 +44 (0) 121 585 6088

Opening Hours

Mon-Fri:9-5:30pm Sat: 10-2pm

INDEPENDENT SPECIALIST RETAIL CENTRE









WORKSHOP SERVICES

- Porsche trained
 Free vehicle diagnostics
- Specialist independent servicing does not affect your manufacturer warranty
- Full menu pricing of all Porsche models (e.g. Boxster/911 10,000 service £185+VAT)



INTERIOR & BODY STYLING

- Carbon fibre trim
- 997 Aero & Gen2 LED & DRL updates • Alloy wheels & tyres
- Full fitting service
- Competitive pricing
- Mesh grills
- Aero/GT3 kits
- Exhausts & tailpipes
- Spoilers & skirts



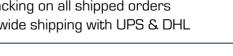
PERFORMANCE & TUNING

- Free fitting on complete exhaust systems
- EuroCup GT tuning & remapping
- Track day & fast road preparation
- Suspension, geometry & wheel alignments
- Carbon intake kits & cold air intakes



WEBSITE & MAIL ORDER

- All parts for all models from 1965 to the present day • 15,000 lines in stock
- Sage Pay secure online payment system
- Full tracking on all shipped orders
- Worldwide shipping with UPS & DHL



















LIGHTS



odmerd 🕝













































VIDEO DEMONSTRATION/EXPLANATION of all PRODUCTS at FABSPEED.com



In-house dyno testing available on Fabspeed's **AWD Dynojet** ee, Hear, & Fee the Fabspeed Difference!

2012+ 991 Carrera Maxflo Performance Package



970 Turbo/S/V6 **Panamera**



981/987.2/987/986

Boxster/Cavman

Maxflo Muffler System

Maxflo Products Also Available for: Ferrari Lamborghini McLaren Bentley Maserati BMW





Fabspeed.com

Deluxe Quad-Outlet Tips

3.5"/88.9mm T304L stainless steel rolled edge.

Maxflo Mufflers

C.N.C. mandrel bent T304L stainless steel.

Primary Muffler Bypass

2.25"/57.2mm F1/Indy Car X-Pipe Merge Collector with two resonators.

Sport Headers

German imported HJS 200 cell sportcats. NO CEL!!

Competition Air Intake

Dual-conical carbon fiber intake system. Worls with OEM sound symposer.







HP MOTORSPORT

SPECIALISTS IN EVERYTHING PORSCHE

HP Motorsports are an Essex/East London based company specialising solely in Porsche cars. We have all diagnostics to cater for later models as well as early test equipment for 924, 944, 968 and 928's.

We offer full engine/ gearbox rebuilds for all models from air cooled (our favourite) up to 997 as well as servicing and routine maintenance. Having worked on all sorts of Porsches since 1983 we bring many years of experience to our customers.





- Full Engine Rebuilds
- Gearbox Rebuilds
- Porsche Servicing
- Routine Maintenance
- Fixed Price ServicingBrake Replacement
- Clutch Replacement
- All Electrical Repairs Air Conditioning Repairs
- Pre-MOT Checks

We've moved to a new address! COME SEE US AT:

HP Motorsports, Unit 1, Bracken Industrial Estate, 185 Forest Road, Essex IG6 3HX

Tel: 020 8500 2510 www.hpmotorsport.co.uk





LN ENGINEERING

Aircooled Precision Performance



Nickies[™] The Original & Genuine Solid Aluminium CNC Billet NSC-



66% Stronger & Twice the Cooling - 80-105mm Lifetime Warranty on Plating • 356, 911 & 914 PRICES STARTING AT \$4199 6CYL \$2999 4 CYL INC. FORGED JE PISTONS ALL MODELS 1948-1998





Nickies™ for 986/987 & 996/997 models \$4299 INC. FSR ULTRA-LIGHT JE PISTONS STOCK OR BIG BORE SIZES UP TO 4.0 LITERS UPGRADE TO TRIPLE CERAMIC IMS BEARING \$995 9A1 DFI | CAYENNE VB | 924/944/968 ALSO AVAILABLE



IMS Retrofit™
MY97-05 M96 MODELS
CERAMIC BEARING
STRONGER DESIGN
SINGLE & DUAL ROW \$650
IMS PRO TOOLKIT \$250
IMS SOLUTION \$1400



R&R Pro Connecting Rods Manufactured exclusively for LN Engineering CRYO-TREATED BILLET 4340 CHROMOLY MOST SIZES IN-STOCK THRU 997 MODEL 6 CYL \$1699 | 100% MADE IN THE USA



MY97-13 M96/M97/9A1 UPGRADES

Improve your engine's reliability and longevity
Low-Temp Thermostat \$99+
Spin-On Filter Adapter \$150
Magnetic Drain Plug \$25.75
Oil Change Bundles Available
Billet Racing Oil Filter \$250
.5 & 2 qt Deep Sump \$349+
HPDE Accusump \$1400

"X51" Dual Oil Scavenge Pump Kits \$2000+ Power Steering Cooler Kit \$250 External Oil Cooler Adapter (Heat Exchanger Delete) \$300 Billet Tensioner Paddle \$300 Chromoly Oil Pump Drive \$25 ARP Rod Bolts \$250 ARP Carrier Bolts \$250















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
- Mahle Motorsports
- JE Lightweight Forged Pistons
- LN Engineering Nickies
- Perfect Bore Pistons & Liners
- Reconditioned Mahle Cylinders

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**



800-462-3774 | EBSracing.com 4068 S. McCarran Blvd. Unit B, Reno, NV 89502 International **775-673-1300** fax 775-673-2088



call now 0121 5577 911

www.ramusporscha.com

independent centre for

RAMUS PORSCHE

Porsche Advanced Fault Diagnosis

High Definition Digital Imaging Wheel Alignment

Performance Exhaust Upgrades Brake Upgrades inc. Ceramics

T: 01477 534499 F: 01477 544399

jason@jmh.co www.jmh.co

Alloy Wheels and Tyre Fitting

Suspension Package Upgrades

UNIT 3B, HOLMES CHAPEL BUSINESS PARK,

MANOR LANE, HOLMES CHAPEL, CHESHIRE CW4 8AF

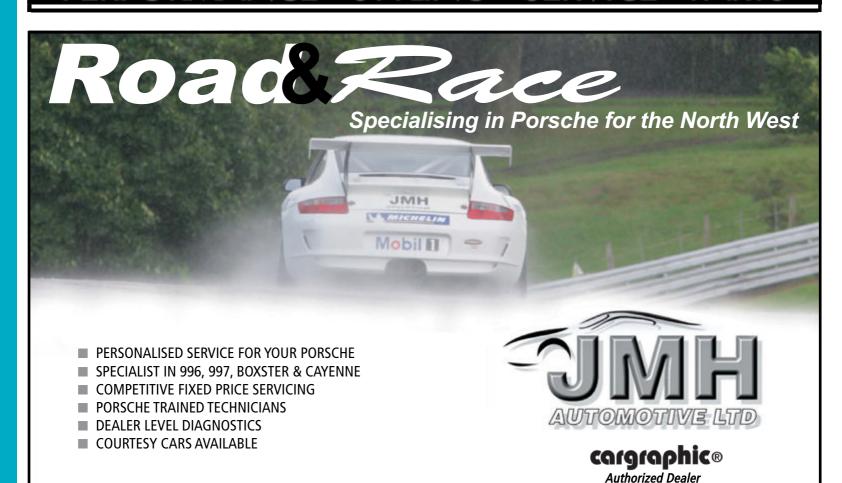
ONLY 5 MINUTES FROM THE M6 J18, LESS THAN 30 MINS FROM MANCHESTER & CHESTER

Full Body Repair Shop

Chassis Alignment Centre



Fixed Price Menu Servicing for all Models
PERFORMANCE STYLING SERVICE PARTS



ELEPHANT RACING™

www.elephantracing.com

Curve-Straightening Kits

For suspension performance, visit www.elephantracing.com



From 911 to 997, Boxster/Cayman Suspension

Von Shocks™

Coilover Kits and Conversions

GT3 Control Arms

QuickChange™ Spring Plates

ASP™ Spring Plates

935 Spring Plates

QuickChange™ Torsion Bars

PolyBronze™ Bearings

Rubber Bushings

De-Cambered Ball Joints

Weather Sealed Monoballs

QuickChange™ Camber plates

Hollow Sway Bars

Bump Steer Correction Kits

QuickChange™ Strut Brace kits

Turbo Tie Rod Kits

Low Friction Control Arm Mounts and More

Everything for your suspension!

Sphericals[™] Control Arm Bearings

Splitter Better

Better Ride
Better Grip
Better Performance

- Three-axis freedom of movement
- Free-floating to relieve chassis flex
- Never binds
- Superior performance
- Maintenance free, squeak free
- For 68-89 911 / 912 / 930 / 914

Go online to see
Sphericals floating action!

Fast shipping worldwide Low international shipping rates 24 x 7 web ordering and information

www.elephantracing.com +1 408-297-2789













Independent Garage Services is an independent garage specialising in VW, Audi Group, Chrysler Jeep and Porsche. Based in Southampton, we undertake all aspects of maintenance.

Porsche Servicing — With the acquisition of the latest Porsche diagnostic equipment, we can offer menu servicing to factory specifications. Whether you own the latest 911 Turbo, Boxster or Cayenne, we offer a real alternative to main dealers. With considerable experience gained from racing our 996 GT3 in endurance racing we are comprehensively equipped to cater for all.

With little choice in the Southampton area and main dealers over an hour away, give Jim a ring today to discuss your requirements and find out how competitive we can be.

For more details on the services we offer and our pricing range – please visit our website. **www.independentgarageservices.co.uk**

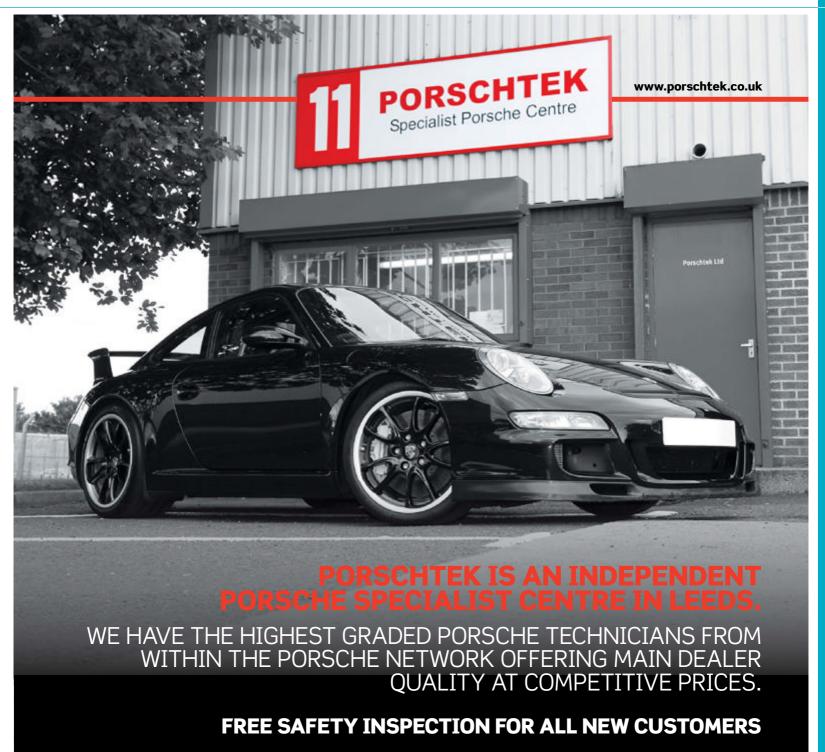
Unit 5, Stanstead Road, Boyatt Wood Industrial Estate, Eastleigh, Southampton, SO50 4RZ Tel: 02380 629606 Fax: 02380 629329













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

TEL: 0113 277 3220

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





BUCKET LIST:

Walk my granddaughter down the aisle Attend the 24 hour Le Mans

Drive along the Amalfi Coast

Visit all seven continents

Drive the Nürburgring

Attend Pebble Beach Concours

Make my Porsche flawless

What's on your list?

Everything for the Porsche Enthusiast

road scholars

restorations | sales | service www.road-scholars.com Award-Winning Restoration Services | Sales | Service Concours Prep | Transportation | Special Car Location

- 9 Top PCA Concours Finishes
- 2 Top 356 Club Concours Finishes Gmund Achievement Award
- 4 Zuffenhausen Awards

high performance porschemistrance













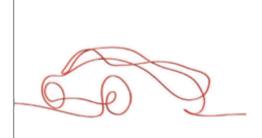




Underwritten by U K Insurance Limited Direct Line Together. Our new way of rewarding customers.

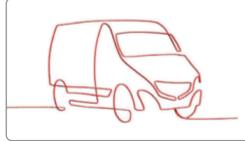
With Direct Line Together, we'll reward you, or anyone else in your household, for taking more than one product with us - with an extra 10% off each additional product you take out. And that's on top of any other offer that's running, including the ones below.

(Excludes Single Trip Travel Insurance, Discoverer Travel Insurance, Home Response 24 and SELECT. Only applied to Breakdown Cover when purchased by phone. Direct Line Together saving not applicable to Breakdown Cover only customers when purchasing Car Insurance or Van Insurance. Discounts applied consecutively.)



Get 10% off your first car, plus 10% off every additional car with our new multi-car discount.

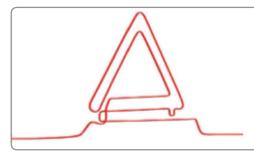
Call 0845 246 3769 or visit directline.com



Get 20% off your Van Insurance and a free MOT.

(Introductory offer valid until 01.04.13.)

Call 0845 605 9323 or visit directline.com



5 Star rating Breakdown Cover from just £25 a year online.

(10% of online Rescue Cover customers achieve this price or lower.)

Call 0845 246 0007 or visit directline.com

Home Insurance 0845 246 3997

Travel Insurance 0845 246 3393

Small Business Insurance 0845 301 5096

Pet Insurance 0845 300 7859 Landlord Insurance 0845 604 2287

In partnership with GreenFlag 🎾



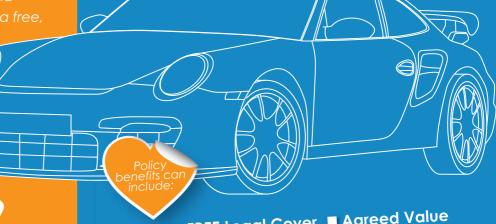
Specialist Car Insurance

Adrian Flux know how much you love to finding you a great policy tailored



0800 081 8989 adrianflux.co.uk

YOUR PRIDE AND JOY



- FREE Legal Cover Agreed Value ■ Modified Cover ■ Limited Mileage
- Plus Much More... ■ Club Discounts



The Benefits

Flagship Magazine • International, National and Regional Club Events • Registers Factory Visits • Motorsport Division (inc. Track Days) • Cars and Parts For Sale Technical Support • Member Discounts • Club Shop • Website and Forum

Join Us

The ONLY officially recognised Porsche Club in the UK - with approx 13,000 members

Membership from £60 pa*





* Individual UK Resident's Membership (plus initial £10 joining fee).

Porsche ownership not required! Prices correct at time of going to press.











Essential info

Bala, Gwynedd **LATITUDE** 52 9121 - 3 595



LENGTH OF DRIVE 17 miles POINTS OF INTEREST

- Electric Mountain, Llanberis Rav Hind Mountain Guide Ffestiniog & Welsh Highland Railways Snowdonia
 - Portmeirion • Land Rover Experience driving centre, Bala

FOOD AND ACCOMMODATION

Old Mill Farmhouse, Trawsfynydd www. oldmillfarmhouse.co.uk Pale Hall, Bala

www.palehall.co.uk The White Lion, Bala www. thewhiteliaonbala.com

Traversing along the Welsh valleys provides many a great route for driving a 911, and this month we explore yet another of Cymru's most celebrated carriageways

t's well documented in automotive circles that Wales generally provides an illustrious plethora of spectacular driving roads. In particular, Mid Wales has cropped up in discussion time and time again, and despite previous 'Great Roads' entries highlighting the area, I've mentioned almost casually that other nearby routes are worth exploring too. Having looked at the popular ones – the 'evo Triangle' or the B4518 most recently - I thought it worth running through another stretch to add to the collection. You'll soon see that with a map, a highlighter pen and ten spare minutes, you can string a number together, forming your own loops or jointhe-dot routes from A to B.

We're not far from the 'Triangle' this month, and also within a tootle from the B4407 or any number of other minor roads between Bala, Ffestiniog and Trawsfynydd. You could argue that, broadly speaking, there is a larger

triangle slowly building up between those three, but this month we'll focus on the A4212, which connects Bala in the east with Trawsfynydd in the west.

It's an 'A' classified road, which means it will typically be busy. Being as keen as we are, we're already aware of making a start before the traffic of the day begins to build so as to get a clear run. Don't expect it to be empty at midday during the week; I'd wager then that you'll see many the rear of an articulated lorry for the duration of the route.

The A4212 has a draw, which comes in the form of its good surface quality, wonderful altitude changes - as is typical for this part of the world - and its nice, regular bends. These factors blend to offer enough features to work against, without the need to frequently change down to first or second gear or experience wince-inducing surface imperfections. It's somewhere you can either roll leisurely along in fifth or press on in third as your mood takes

you, losing yourself in setting up for the next apex.

There's only one slower 40mph section, with the rest being national speed limit, but you feel like you're making so much progress on it that there's no need for anything more which, I suppose, is the main reason for including this road; you definitely get a sense that you're travelling to somewhere rather than weaving off the beaten track.

So if you're looking to make a bit of a day, or even a weekend of it, this is definitely one to include. Get out that map, highlighter pen - and back issues of your favourite Porsche 911 magazine – and sketch out a tour to suit yourself. Take in the A4212 and freely join up the highly rewarding and spectacularly engaging roads as you go. As you're in Wales, don't just take in our chosen route this month; the minor roads surrounding are worth exploring, too. But you know that by now, right?

THE PERFECT PARTNERSHIP FOR YOUR PORSCHE



WITH OVER 25 YEARS EXPERIENCE,
PARR IS NOW ONE OF THE UK'S LEADING PORSCHE
SPECIALISTS. AS THE OFFICIAL IMPORTER OF CARGRAPHIC
TUNING PRODUCTS, WE CONTINUE TO OFFER THE BEST
POSSIBLE SERVICE TO OUR VALUED CUSTOMERS.



cargraphic

T: 01293 537 911

T: +49 63 41 968 911-0



Made in Germany / www.fvd.net Porsche® Tuning / Parts / Service









No matter if you need parts for your aircooled or watercooled, we have everything you need. Simply visit us at www.fvd.net and discover why more enthusiasts choose to put our passion into their Porsche®

fvd Germany phone: +49-7665-98990 fax: +49-7665-989920 www.fvd.net **fvd** North America phone: +1-954-571-2050 fax: +1-954-571-2060 www.fvd.net