



The Single Best Performance Upgrade for Late Model Porsches.



IPD Porsche Intake Plenums

- Power & Torque Gains up to 40 WHP
- Larger Throttle Body Plenums Available
- Tested, Challenged & PROVEN!!!

- Dimpled Surfacing for Improved Laminar Flow
- Increased Air Velocity with Patented Merge
- Decreased Temps with Improved Heat Dissipation







100% Money Back Guarantee



Visit: ipdplenums.com

17112 Palmdale Lane. Huntington Beach CA 92647 • Phone: 714-842-5000 • E-Mail: info@ipdplenums.com

BIG PICTURE

J

Q

6



944 TURBO CABRIOLET PAGE 66 GTPORSCHE

CONTENTS



FEATURES

10 TANGERINE DREAM

This soft-windowed 911 S Targa has been sympathetically rebuilt and boasts history as colourful as its zesty paint job.

30 SIX PACKED

Porsche buyers wanting a 718 with six-cylinder power, but not the track-ready chassis (or cost) of a Spyder or GT4, now have a very tempting proposition in the shape of the GTS 4.0 twins.

46 LIGHTNING SPEED

Arguably the most famous Porsche drop-top of all is the game-changing 356 Speedster.

52 TURBOCHARGER TECH

We take a look at the thirteen most common causes of turbocharger failure.

60 RAISING THE ROOF

Fifty-five years on from launch, Porsche's first al fresco 911 forged a path to creativity and innovation continuing to this day.

66 BACK TO THE FUTURE

The 944 Turbo Cabriolet is one of the rarest production Porsches built.

70 VERY CHERRY

A pub in rural Essex has become an unlikely home for a must-attend Porsche meet.

74 FLYING COLOURS

This immaculate 968 drop-top proves the model delivers as much 'show' as it does 'go'.

84 DON'T STOP ME NOW!

Porsche Driving Consultant, Neil Furber, reveals the secrets of trail braking.

88 SPEAK VOLUMES

We take time out to revisit the 2.5-litre turbocharged Cayman GTS.

96 SICILIAN SUPERIORITY

The Targa Florio gave Porsche a hefty number of race wins and an iconic model name.

102 911 SC TARGA BUYING GUIDE

Semi-open-top championed as one of the cheapest routes into air-cooled 911 ownership.















THE FLEET

108 944 TURBO

The turbocharged transaxle's badly damaged half-leather seats are stripped of their offending covers and treated to a retrim.

REGULARS

18 NEWS & PRODUCTS The latest from planet Porsche.

41 GUEST COLUMNS

Carrera Cup and BTCC hero, Tim Harvey, talks about life before his career as a professional racing driver.

45 FIVE MINUTES WITH... We take time out to chat with

We take time out to chat with Autoglym's chief marketing man.

81 IN PROFILE

Max Hoffman is credited with kickstarting Porsche's Stateside success.





CARS THIS ISSUE

- 46 356 SPEEDSTER30 718 BOXSTER GTS 4.0
- 88 718 CAYMAN GTS
- 38 718 CAYMAN GTS 4.0
- 97 718 WRS 99 906
- 99 908 97 910
 - 10 911 S TARGA
 - 102 911 SC TARGA
- 97 917 KH
- 21 924
- 108 944 TURBO
- 55 944 TURBO CABRIOLET
- 60 964 CARRERA 2 TARGA 74 968 CABRIOLET
- 54 991 CARRERA 4S
- 20 992 CARRERA 4S
- 8 992 TURBO S
- 2 996 GT3 RS



DESIGN911.com

- > BODY STYLING & CONVERSIONS
- > ENGINE & GEARBOX REBUILDS
- > SUSPENSION & EXHAUST UPGRADES
- > DAMAGE REPAIR PARTS
- > PERFORMANCE UPGRADES
- > RESTORATION PARTS
- > SERVICE PARTS
- > WHEEL & TYRE

WORLDWIDE DELIVERIES

5%

use online code

GTPORSCHE9

Parts for: 356, 924, 944, 914, 928, 968, 964, 993, 912 & 911's from 1965 onwards, Boxster, Cayman, Cayenne, Panamera & Macan.

We are stockists of major brands including:





+44 (0) 20 8500 8811 sales@design911.com DESIGN 911 Centre for Porsche

WELCOME

GTPORSCHE

Kelsey Publishing Ltd, The Granary, Downs Court, Yalding Hill, Yalding, Kent, ME18 6AL

EDITORIAL EDITORIAL Editor: Dan Furr Email: gtp.ed@kkesy.co.uk Twitter: @DanFurr Art Editor: Lee Caple Contributors: Dan Sherwood, Sharon Horsley, Neil Furber, Richard Gooding, Matt Woods, Shane O'Donoghue, Steve Hall, Mark Williams

ADVERTISING Talk Media Sales Managing Director: David Lerpiniere, 01732 445325 David Lerpiniere, 01/32 445325 david.lerpiniere@talkmediasales.co.uk Account Manager: Russell Bedford, 01732 920500 russell.bedford@talkmediasales.co.uk Advertising Production Executive: Elsa Deakin, 01732 447534 elsa.deakin@talkmediasales.co.uk

MANAGEMENT

MANAGEMENT Chief Operating Officer: Phil Weeden Chief Executive: Steve Wright Finance Director: Joyce Parker-Sarioglu Retail Director: Steve Brown Audience Development Manager: Andy Cotton Subs Marketing Manager: Debra Hagger Events Manager: Kat Chappell HR & Operations Manager: Charlotte Whittaker Senior Print Production Manager: Nicola Pollard Print Production Manager: Ceorgina Harris Print Production Controller: Kelly Orriss

SUBSCRIPTIONS

A total of thirteen issues of *GT* Porsche are published per annum UK annual subscription price: £71.50 Europe annual subscription price: £84 USA & Canada annual subscription price: £84 Rest of World annual subscription price: £89 Find current subscription offers at:

www.bit.lv/subscribeatp

Buy back issues at: www.bit.ly/issuesgtp

Already a subscriber? Manage your subscription online at shop.kelsey.co.uk/myaccount

UK subscription and back issue orderline: 01959 543747 Overseas subscription orderline: +44 (0) 1959 543747 Toll free USA subscription orderline: 1-888-777-0275 UK customer service to CONTACT US UK customer service team: 01959 543 747 Customer service email address: Customer service email address: subs@kelseyc.co.uk Customer service and subscription postal address: GT Porsche Customer Service Team, Kelsey Publishing Ltd, The Granary, Downs Court, Yalding Hill, Yalding, Kent, ME18 GAL

DISTRIBUTION Distribution in Great Britain Marketforce (UK), 2nd Floor, 5 Churchill Place, Canary Wharf, London, El4 5HU Tel: 020 3787 9001

Distribution in Northern Ireland and the Republic of Ireland Newspread Tel: +353 23 886 3850

PRINTING

William Gibbons & Sons Ltd

William Cibbons & Sons Ltd Kelsey Media 2020 © All rights reserved. Kelsey Media is a trading name of Kelsey Publishing Ltd. Reproduction in whole or in part is forbidden except with permission in writing from the publishers. Note to contributors and less original work of the author and not previously published. Where photographs are included, which are not the property of the contributor, permission to reproduce them must have been obtained from the owner of the copyright. The editor cannot guarantee a personal response to all letters and emails received. The views expressed in the madiane are less of the contribution in the properties of the products and services offered by third parties.

Kelsey Media takes your personal data seriously. For more information about our privacy policy, please visit kelseyco.uk/privacy-policy. If at any point you have any queries regarding Kelsey's data policy, you can email our Data Protection Officer at dpo@kelseyc.ouk.



che is part of the Fast Car Entertainment family and is e ident of Dr. Ing. h.c. F. Porsche AG. Contents may not be mission. No responsibility accepted for any unsolicited material e recognises and abides by copyright laws and attempts to edit all material used. If we have used or credited some of your rectly, please contact us and we will do our best to fix the error.

NEXT ISSUE ON SALE FRIDAY 1ST MAY



DELIVERING THE GOODS



'Unprecedented' is a strong word banded about with startling regularity. It's commonly used by iournalists to elicit extreme reactions from their audiences

when, in truth, the series of events being referenced can usually draw parallels with another. The current global public health crisis caused by the outbreak of COVID-19, however, really is unprecedented, affecting each and every one of us in a number of different ways, no matter who we are, where we live or what we do for a living. My hope is that you, our loyal readers, remain free from harm and that, before long, we'll be exchanging stories at rescheduled Porsche meets about our experiences of self-isolation or town-wide lockdown.

Just as I write this introductory piece, schools in the UK have been closed for an undefined period of time, a follow-on from the same activity occurring in countries all over the world. Clearly, parents of screaming kids bored out of their minds in the

GET IN TOUCH

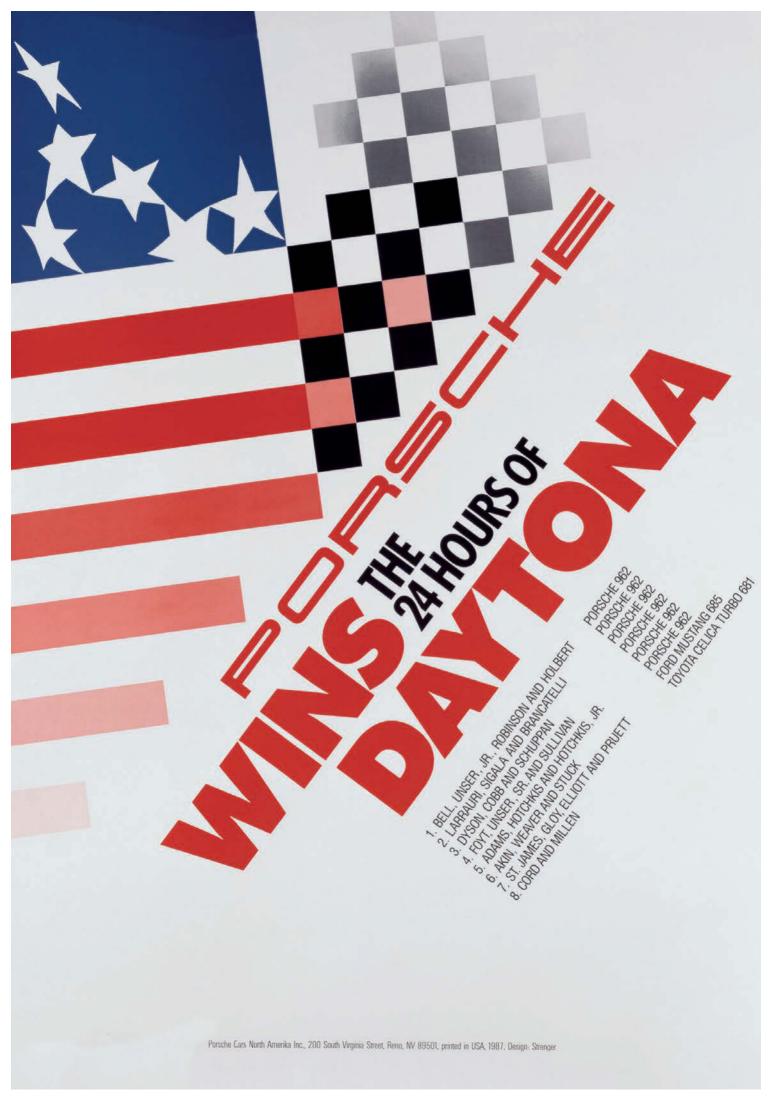
Email gtp.ed@kelsey.co.uk Twitter @GTPorsche Facebook GTPorscheMagazine Subscribe bit.ly/subscribegtp

coming weeks (months?!) are going to have a lot on their plate, not least getting their little ones to calm down just long enough to allow mum and dad to find the only roll of toilet paper (white gold) left unsold within a fifty mile radius of home. Every supermarket shop floor looks like the worst scenes from Black Friday right now. Let's hope things calm down and people become less terrified as this surreal period of social and economic disruption drags on.

You'll be pleased to know production of GT Porsche is planned to continue without interruption during this troubling time. Those of you querying how you're able to get hold of the magazine without leaving the house (or hitting a decidedly closed high street) need not fret - we're offering heavily discounted subscription deals with the promise of delivering each issue direct to your door. Point your browser at bit.ly/subscribegtp to place an order, or visit bit.ly/digitalgtp to get hold of digital copies of the magazine. You can also find us on Amazon.

Stay safe. Catch you next month.







When it comes to classic car insurance, Adrian Flux have got it covered.

Our classic car insurance policy benefits can include: Agreed value, owners club discounts, limited mileage discounts and much more.

Call us today for a free personalised quote **0800 085 5000** or visit **adrianflux.co.uk**

ADRIAN FLUX

Authorised & regulated by the Financial Conduct Authority

Classic FX Classic Porsche Trimming 356 - 911 - 912 - 914 - 928 - 964

Specializing in all things Porsche

- Targa Roof replacement/repairs
 Full or part interior trimming
 - Replacement seat foams
- OEM Vinyl, leathers & material suppliers

Based in Surrey

UK. Manufacture and supply of carpets, seat covers and door cards. A personal and detailed yet competitive service.

Call Garry on 0755 100 3000

instagram.com/classic_fx_porsche/ www.classicfx.net garry@classicfx.net

Genuine Weber 40IDA3C and 46IDA3C now back in stock

For the first time in over 30 years, Authentic Porsche 911 Weber 40IDA3C and 46IDA3C carburettors are once again being manufactured.

Superbly crafted in the Spanish Weber factory using 100% new tooling produced from original 1960's factory drawings, the new carburettors are of the very finest quality and are extremely competitively priced against non genuine and second hand products

For more details, please contact:

Webcon UK Ltd

Dolphin Road, Sunbury, Middlesex. TW16 7HE UK Tel: +44 (0) 1932 787100 Fax: +44 (0) 1932 782725 Email: sales@webcon.co.uk Web: www.webcon.co.uk facebook.com/webconuk

911 S TARGA

TANGERINE DREAM

This soft-windowed 911 S Targa has been sympathetically rebuilt and boasts history as colourful as its zesty paint job...

Words Dan Furr Photography Dan Sherwood

ALL CHANGE

The 911 S was introduced in 1967 as part of a model line-up overhaul, which saw the base 911 become the 130bhp 911 L, while a new entry level model arrived in the form of the 110bhp 911 T, the least powerful production 911 to date. The rangetopping S, in contrast, produced 160bhp and wore Fuchs 'five-leaf' alloy wheels, the first time the design was used. A development of the S's flat-six was tuned and used in the 904 and 906 race cars.





PX 663F

hat side of the fence are you? Preservation or restoration? When it comes to injecting new life into a classic Porsche, Chris Knowles is of the opinion provenance is king. It's his determination to retain as many original components as possible when resurrecting a poorly Porsche that's resulted in his amazingly complete 1972 911 S 2.4, an aircooled classic afforded a new lease of life in partnership with independent marque specialist, Autofarm. "Every fan of the brand wants old Porsches to be the very best they can be," he says, "but whenever possible, the rebuild of a car shouldn't come at the expense of its history. Often, it's the life an old Porsche has led that makes it so interesting, which is why, as you can probably guess, I'm firmly on the side of preservation over restoration."

Of course, he's not advocating leaving fatally compromised parts in place, but if it's possible to refurbish an item original to the car being worked on, he'd rather spend the time required to do so than the comparatively quick (and potentially cheaper) option of buying a new replacement part. "For a company working on the restoration of old Porsches, Chris is a dream client," smiles Mikey Wastie, co-owner of Autofarm and the 2.4's project lead. "Metal can be thrown away and replaced, but the cabin of a car is where you can get a real sense of its history. This is certainly true of Chris's 911 S, where the majority of its factory furniture has been retained. Carpets, seats, sun visors, headlining, the steering wheel and door cards are all original. The car smells of 1972, not 2017, which is when the build took place."

Chris has a long and fruitful history of piloting classic Porsches, but the route to his status as the owner of a fast fleet – his revitalised 911 S is kept alongside a low-mileage 993 Turbo, a 924 Carrera GT (formerly owned by a member of the famous McAlpine construction dynasty) and, until recently, a rare Carrera 3.2 Clubsport – was one which led him to a decisive fork in the proverbial road. "My first Porsche was a 911 E," he recalls. "The model promised fast-road fun, but its self-adjusting hydro-pneumatic suspension didn't suit

THE CAR'S ORIGINAL ASSEMBLY PLACES IT ON THE PRODUCTION LINE WHEN PLASTIC REAR WINDOWS WERE BEING FITTED TO TARGA-BADGED PORSCHE PRODUCTS





Above Later body parts and glass rear window did little to suggest the car started life as a soft-window Targa, while many engine and interior updates were fitted during its time racing in Canada

my driving style. I was also horrified by the hammering my bank balance took shortly after my name appeared on the car's logbook." He's referring to windscreen insurance costing three times the replacement of a 'regular' car's glass and the unfortunate instance of two kamikaze pheasants flying into his 911's front window at speed. The damage cost a fair wedge more than his cover provided for, spend compounded by the obscene amount he'd been forced to pay for new heat exchangers. Scared of what he saw as the spiralling cost of Porsche ownership, he sold up and bought a BMW.

RAY OF SUNSHINE

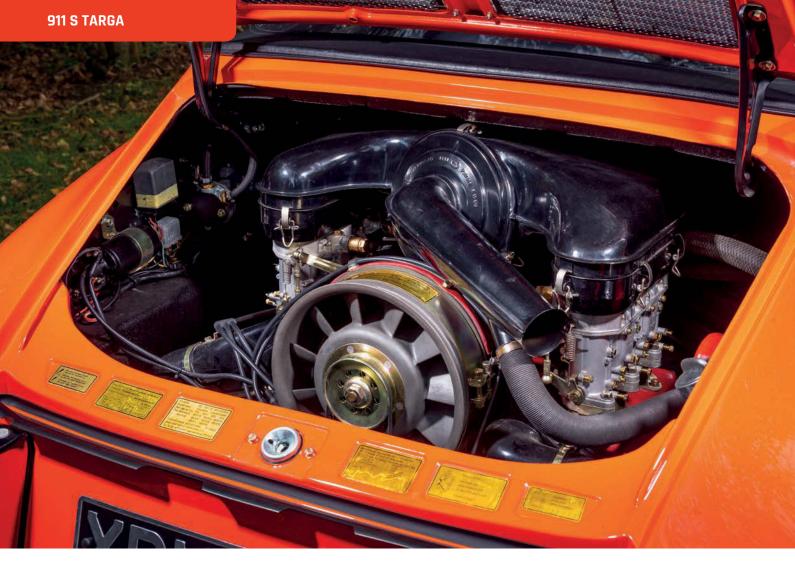
Time, as they say, is a great healer. Having licked the wounds inflicted upon his wallet, Chris dipped his toe back into the wonderful world of Porsche ownership during years he spent living in Dubai. A 993 Carrera 4 Cabriolet was his drop-top of choice, perfect for enjoying spirited driving in gloriously warm weather along the flat ribbons of open asphalt strewn across the region's deserts. Unlike the 911 E, the all-pawed 993 left a pleasingly positive impression on the former commercial airline pilot. "It was a great car, hugely helped by its four-wheel drive transmission. A few years later, I parted with my pretty Porsche and relocated to France. A Carrera 3.2 then found its way onto my driveway, before I moved back to the UK and bought the 993 Turbo I'm in possession of today."

Facing page Every available salvageable original component has been returned to 'as new' condition

With a collection of coupes in his garage, the return of an open-air Porsche to the Knowles line-up makes

perfect sense, though the 911 S Targa we've come to drool over at Autofarm's Boxengasse base wasn't originally intended to stick with Chris for the long term. "It was one of a selection of classic Porsches I imported to the UK from the USA as part of a business deal that went sour," he reveals. "The idea was to buy cars in need of work from across The Pond and bring them to England, where they would be thoroughly rebuilt and offered for sale in the best possible condition. Unfortunately, the party I'd entered into partnership with didn't keep up their end of the deal, which was to carry out the required remedial work. Not only did this leave me severely out of pocket, I found myself in the strange position of being the owner of a portfolio of poorly presented Porsches."

If there's a positive to be drawn from the situation, it's the recovery and subsequent transferring of the early Targa to Mikey's custody at Autofarm, where the car was transformed into the tangerine dream it is today. Considering it was crudely painted black, wearing "oil coolers that look they came off a tractor", badly fitted wide wheel arches, butchered bumpers, flimsy bucket seats, a replica MOMO steering wheel, quad-exit tailpipes, incorrect wheels, lights and other exterior furniture seemingly picked at random from air-cooled 911 history, it would have been easy to dismiss the car as nothing to get excited about. Completion of its original assembly on 14th August 1967, however, places it on the Porsche production line when retractable plastic rear windows were being fitted to the manufacturer's >>



Targa-badged products, prior to the introduction of the solid domed glass most of us think of when bringing to mind an image of an early Targa in the present.

Optional in 1968, the fixed rear glass window of Targa-topped Porsches became a standard fit the following year. "Our suspicion is the car was returned to a main dealer for retrofit rear glass soon after assembly," says Mikey. "The car certainly left the factory with a retractable rear hood, as evidenced by holes for tonneau fasteners discovered when the shell was stripped bare, its brazed wheel arches were removed and the remaining body was subject to a two-stage media blast." Immediately, Chris faced a compelling conundrum: should he keep the glass window the car had been wearing for the majority of its life, or should he return his tired Targa to being a 911 carrying a softwindow? "On balance, I thought it best to return to factory specification," he reasons. "It was a tough call, especially considering other aspects of the car wouldn't returning to their original state."

He's referring to the car's engine, which started life as a triple-carb two-litre lump before being enlarged to a 2.4 during time spent racing in Canada. Chris has traced his Targa's history from the time it left the production line (and was shipped overseas, before being sold by Erhard Motor Sales in Detroit, Michigan), to its later life in Toronto, where it remained until he brought the car to Britain in 2013. "I managed to get hold of a list of previous owners and was struck by the name William Hirst, chiefly because I discovered a receipt bearing the same name when car was stripped in readiness for the rebuild," he tells us. This lucky find, combined with information from Porsche Club of America and the Vintage Automobile Racing Association of Canada, helped join a series of dots, confirming the Targa was raced by Hirst, hence the presence of buckets, bigger wheels and engine modifications, including aftermarket ignition and airflow equipment. All of it was replaced with standard Porsche products as the project got underway, and though the flat-six has been

THE MANUFACTURER CHRIS IDENTIFIED AS BEING MOST LIKELY ABLE TO ASSIST HIM WAS BASED IN SAN DIEGO, OFFERING THE PART THROUGH A RETAILER IN ALBERTA



Facing page Two-litre flat-six was enlarged to 2.4, which Chris tells us delivers near 190bhp treated to a complete rebuild, Chris decided to keep it as a 2.4 (a conversion involving new barrels, pistons, connecting rods and crankshaft adjustments), a nod to the car's colourful history.

TO THE LAST DETAIL

The project began in earnest as 2017 got underway. Both Mikey and Chris were pleased to discover that, beneath those brazed arch bulges, the car was surprisingly solid. The blasting process (a water jet to remove heavy sealer, followed by a non-destructive media treatment), revealed surface rust hidden beneath factory underseal, but overall, the car was in excellent order. Fitting the shell to a jig "to ensure everything was solid and straight" followed, with careful attention paid to building the car back up to as close to a factory finish as possible. This effort extended to the new underseal, where Autofarm's technicians had to strike the delicate balance of using modern chassis protection products with the desire to achieve a period-perfect look. "The stoneguard used on 911s in the 1960s isn't as good as the sealer Porsche used at the start of the following decade," confirms Mikey. "The earlier stuff is a bit like bitumen. If there's a pin prick or a tear in it, moisture ingress can cause all manner of problems, which can remain hidden from view. Moreover, the finish offered by the different products Porsche was playing with can vary from year to year," he adds. Thankfully, by using a considered selection of today's automotive restoration processes and products, his team was able to achieve the same look produced by the sealer Porsche made use of in late 1967. Form and function were in perfect harmony.

The same approach was taken when it came to the car's new soft rear window. Getting hold of a replacement screen wasn't going to be easy, primarily because the aftermarket manufacturer Chris identified as being most likely able to assist him was based in San Diego, offering the part through a retailer in Alberta. Keen to avoid taking delivery of an expensive rear screen that, for all he knew, might not be fit for purpose, he was determined to ensure the part was true to the original Porsche design before parting with his hard-earned cash. To this end, he searched far and wide in the UK to find owners of soft-windowed Targas already equipped with the company's product. Eventually, he struck gold by reaching out to a Daventry-based owner of a 912 Targa fitted with the very part he was interested in buying. Delighted by what he saw during an inspection, he immediately placed an order.

New old-stock Targa roof handles and brackets were sourced, as were the required chrome and rubber trims for the new rear screen. Dave Nunn, owner of classic Porsche upholstery specialist, Southbound Trimmers, expertly sorted the car's retractable roof trim, while Garry Hall at Classic FX came to the rescue when Chris began to evaluate his 911's cabin space. "Former Autofarm owner, Josh Sadler, pointed me in the direction of someone who had a suitable set



Below Flephant

hide-effect vinyl covers each donor

seat's centres, matching the original door cards

and dash trim







of replacement seats for sale," Chris explains. "They were essentially 356 seats with modified uprights and centres covered in yellow cloth. For the 1968 model year, the 911 S was manufactured with an elephant hide-effect vinyl wrapped around the dashboard, door cards and seat centres. Porsche doesn't sell this material today, but, amazingly, Garry had some in stock, enabling him to trim the car's new seats to match its original specification."

SOUND AND VISION

At some point in the 1980s, holes for large aftermarket speakers were cut into the door cards. The grilles covering them looked peculiar to say the least, but again, referencing his desire to retain original parts wherever possible, Chris decided to invest in subtler grilles, thereby preserving more of the car's DNA. The same has been achieved with the black flooring. "There was a point when I questioned whether spending an age trying to clean and restore worn carpets was going to achieve the desired effect, but I'm glad we persevered," Mikey smiles. "With the replacement seats, the correct steering wheel and the retention of the majority of the car's stock cabin furniture, this Targa's character has been retained," he says, though he'd be the first to admit the car looks nothing like the bruised black semi-open-top he first encountered when Chris introduced him to the project four years ago.

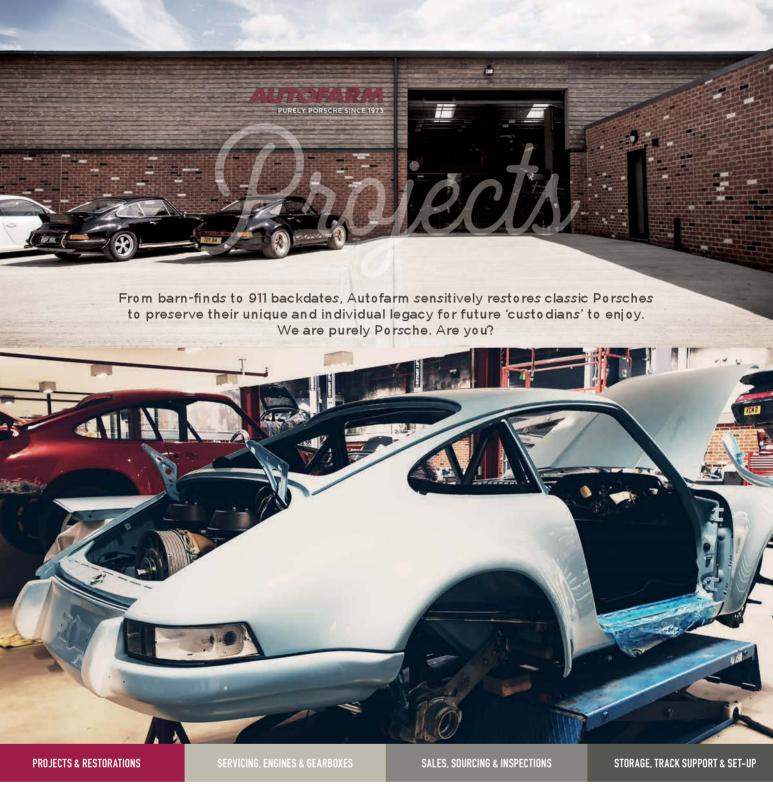
With a chassis and mechanical overhaul complete,

Below The finished article is a credit to the work carried out at Autofarm and Chris's determination to bring the car back to its very best



Chris's tip-top Targa was ready to return to the road at the back end of 2019. "It's been a complete joy to work on this 911," Mikey beams. "It's a classic Porsche with an interesting story, but also one lucky enough to be owned by someone who was prepared to exercise serious attention to detail in a bid to bring the car back to its best." Chris did whatever necessary to preserve his Targa's heritage through the often challenging, continued use of original parts, commissioning Autofarm to refurbish where possible and replacing what was beyond saving only with componentry sympathetic to original specification. Preservation over restoration? You'd better believe it!





Autofarm (1973) Ltd

If you are looking for a more personal Service for your Porsche; need the engine overhauling or have an idea for a restoration Project - we would love to hear from you. With over 45 years in the business, we are confident that Autofarm can assist you, whatever the need - whatever model of Porsche.

We are purely Porsche. Are you?

Whether you own a completely original Carrera RS, Sports Purpose 964 or modern GT model, we have the knowledge and know-how to ensure your car is looked after in the best possible way. Or maybe you need a service on your Boxster or Cayenne? No problem, just give us a call!

www.autofarm.co.uk

Call: +44 (0) 1865 331 234 LANGFORD LANE, WENDLEBURY, OXFORDSHIRE 0X25 2NS

FOLLOW: @AUTOFARM





NEWS

992 TURBO S BREAKS COVER

Amazing new flagship 911 lands in main dealer showrooms

nother month, another new Porsche to get excited about. Unlike the recent Carrera 4S Belgian Edition (largely a stying exercise paying tribute to Le Mans hero, Jacky Ickx), however, the latest powerhouse of performance to roll out of Stuttgart is a distinct model entry in the 992 line-up. In fact, it's the one we've all been waiting for the range-topping 911 Turbo S.

Porsche's plan to reveal the car to an expectant public at the 2020 Ceneva International Motor Show was scuppered when the event was cancelled due to the Swiss government's concerns regarding crowded places and the spread of COVID-19. Instead, an innovative online presentation hosted by Porsche brand ambassador and ex-FI ace, Mark Webber, showcased the new 911's qualities, which centre around a new 3.8-litre flat-six bolstered by two turbochargers delivering almost 70bhp more than the outgoing Turbo S. Torque is up to a whopping 590lb-ft.

The eight-speed Porsche Doppelkupplung (PDK) double-clutch automatic transmission has been custom-tailored to transfer the higher torque forces of the Turbo S. Overall, the yardstick sprint from 0-62 mph now takes just 2.7 seconds (a reduction of 0.2 seconds), while the top speed is unchanged at an licence-baiting 205mph.

Helping to plant that power to the road, the car's track is increased 42mm



wide at the front and 10mm at the rear. Furthermore, for the first time, the Turbo S transfers its power to the road with mixed wheels and tyres in two different sizes (twenty-inchers with unique 255/35 black circles at the front and 21-inch wheels with 315/30 rubber at the rear). The centrelock alloy wheels are a new design.

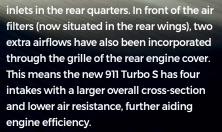
Adaptive electronics include cooling air flaps in the nose, with a larger rear wing generating higher levels of downforce and aerodynamic pressure than previously seen on the 911 – the pneumatically extendable front spoiler and the larger surface area of the rear wing deliver fifteen percent more downforce than the previous 911 Turbo S. But what of that engine? The completely new six-cylinder beating heart of the Turbo S is based on the unit powering the 992 Carrera range and boasts the largest leap in performance ever achieved in the history of turbocharged production 911s. Helping deliver this hike in power is a completely redesigned charge-air cooling system (radiators which water-cool air after it passes through the turbochargers before entering the engine), which features a larger chargeair cooler to improve efficiency.

LIVE AND BREATHE

The engine benefits from a new high-flow intake system. The previous routing of engine intake air and charge-air cooling was swapped around: part of the induction air now flows through the characteristic Turbo







New, larger turbochargers again deploy VTC (variable turbine geometry) to adjust intake boost according to engine speed and load. They're now mounted in a symmetrical layout, featuring compressor and turbine wheels rotating in opposite directions. The diameter of the turbine wheels has been increased by five millimetres to 55mm, while the 61mm compressor wheel is now three millimetres larger. The wastegate flaps are electrically controlled with stepper motors for faster responses and increased power. Together with rapid piezo fuel injectors delivering optimised combustion, this leads to significant improvements in the engine's responsiveness and revving ability, as well as power, torque, and emissions.

One demonstration of the engine's higher state of tune is the temporary overboost function being no longer required – maximum torque is permanently available in the rev range (2,500 - 4,500 rpm).

Porsche Ceramic Composite Brakes (PCCB) are fitted as standard, with tenpiston calipers on the front axle. Porsche Active Suspension Management (PASM) has also been updated with faster and more precisely controlled dampers.

The new 911 Turbo S can be ordered as either a coupé or drop-top. Both models are available to order from Porsche Centres in the UK and Ireland with immediate effect. The coupé is priced from £155,970 and the cabriolet is yours from £165,127.



PDRSCHE



PORSCHE REVEALS SUPER BOWL AD FILMING SECRETS

Museum vehicle manager offers peek behind the scenes

ost of you will have seen Porsche's recent *Heist* short film, set at the Porsche Museum in Stuttgart and played during the half-time show at last month's

dramatic Super Bowl standoff between Kansas City Chiefs and the mighty San Francisco 49ers. If you haven't yet seen this feast for the eyes, fire up YouTube with immediate effect and marvel at the work of what ended up being more than 150 people.

Shooting took place in and around Porsche's home in Zuffenhausen, Germany, at the end of November 2019. It's the second time in the company's history that it has produced a commercial for the Super Bowl half-time show. Taking centre stage is the all-new fully electric Taycan, which finds itself engaged in a fast-paced chase with nine of its most legendary stablemates. Visitors to the Porsche Museum will recognise some of the cars as site exhibits, though some were pulled directly from the collection's vaults, which meant preparation and handling of the rare and valuable cars during filming was a key part of the project.

"We have a huge amount of experience preparing historic vehicles for all kinds of operations, but driving a 917 through the centre of Stuttgart, at night, was a first even for us," explains Alexander Klein, Head of Vehicle Management and Heritage Experience at the Porsche Museum. "When we travelled to one of our filming locations in the Black Forest, the roads were covered in snow and stayed that way until the evening before the shoot. Fortunately, we took different tyre profiles and compounds with us, which proved necessary for the Porsche race cars we were filming. The whole experience was fantastic fun." He confirms Porsche and its production crew refrained from making any "technical changes" to the cars they were making use of.

After the opening scenes inside the Porsche Museum, viewers see a team of precision drivers steer the pretty



Porsches (ranging from a Porsche-Diesel tractor to a Taycan) around the famous Porsche roundabout in Zuffenhausen and along the inner city streets of Stuttgart, Heidelberg, Heppenheim and over the Schwarzenbachtalsperre dam. One of the talented drivers, Harald Müller, held the World Record for drifting, while Porsche factory driver, Lars Kern, was behind the wheel of the iconic 917 K.

The director was Wayne McClammy, who is internationally renowned for his commercials. At points during the shoot he was using four cameras at the same time, and a Cayenne was fitted with a roof-mounted camera crane known as a Russian Arm. A pair of drones — including one with a top speed of 99mph — picked up the aerial shots.





FRESH COVID-19 CONCERNS CANCEL GENEVA SHOW

The ninetieth edition of the Geneva International Motor Show, which was supposed to welcome the general public from 5th to 15th March 2020, was cancelled following a decision by the region's Federal Council on 28th February that no events with more than 1,000 people are allowed to take place until the spread of COVID-19 can be contained. The decision fell three days before the opening of the exhibition to the media. "We regret this situation, but the health of all participants is our and our exhibitors' top priority. This is a case of *force majeure* and a tremendous loss for manufacturers who have invested massively in their presence at this year's Geneva show. We are, however, convinced they will understand this difficult decision," said Maurice Turrettini, Chairman of the Geneva International Motor Show Foundation Board. The financial consequences for those involved are significant and will need be the subject of scrutiny over the coming weeks.

HISTORIC FIRST TAYCAN DELIVERY IN STUTTGART

It's the 26th February and Florian Böhme is on his way to the historic Werk 1 plant in Zuffenhausen. It's a very special day for him: not only is it the Porsche fan's 43rd birthday, but he is also collecting a Taycan 4S in Carmine Red. This makes Böhme the very first customer to grab the keys to a Taycan from the parent factory. "The colour looks even better than in the pictures," he grins, standing in front of the fully electric Porsche in the delivery hall. Ottomar Domnick must have had a similar experience. The doctor and arts patron picked up his 356 in Zuffenhausen almost seventy years ago, on 26th May 1950. Domnick was the first person in Porsche history to collect a new car from the factory. Since 2002, Porsche Leipzig has also offered collection from the plant. Approximately 3,000 cars are handed over there annually.









CLUB RACING SCENE MOURNS RYAN LOWRY

Seasoned Porsche pilot who co-founded new CALM series

yan Lowry, who has died aged 36, co-founded the CALM (Campaign Against Living Miserably) All Porsche Trophy after spending many years competing in the BRSCC Toyo Tires Porsche Championship from behind the wheel of his trusty red 924. Recognised for being quick in all driving conditions, his efforts, along with those of CALM series co-founder and Porsche Championship stalwart, Phil Waters, resulted in the merging of both competitions for the 2020 season and beyond, providing drivers from each contest with the opportunity to take advantage of two-driver races, bigger grids and exciting meetings held at iconic circuits, both in the UK and in mainland Europe, all the while supporting CALM through increasing the charity's profile and vital fundraising activities.

The organisation was close to Lowry's heart and assists young men going through difficult times by offering vital frontline services for those suffering from depression, anxiety, suicidal thoughts and other mental health difficulties.

Lowry had taken time out from racing to concentrate his efforts on being a foster parent and to develop the CALM tournament, his work proving as successful outside a 924 as it did when he was hammering around a track — anyone who competed against him knew he was a forced to be reckoned with, as demonstrated by the many race wins and podium finishes he achieved, not to mention a third-in-class finish in 2017's Porsche Championship, one of the competition's most tightly contested seasons.

In a statement paying tribute to their lost loved one, Lowry's family asked for contributions to CALM to be made in his memory. "So many people have asked if there is anything they can do at this time. We know Ryan would appreciate, should anyone wish to, any donations to CALM," they said.

Our thoughts and sympathies go out to Lowry's wife, Michelle, his parents, his siblings and his friends during this difficult time.



A PORSCHE AS PERSONAL AS YOUR FINGERPRINT

New printing technology enables unusual finish for the bonnet of your new 911

t's already the case that hardly any Porsche is the same as another, but from now on, the 911 can even be as unique as the papillary lines on a human fingertip. Yes, you read that correctly. Using an innovative direct printing method developed by Porsche, graphic elements of the highest visual quality can now be printed onto the painted body parts of a vehicle. Initially, customers who purchase a new 911 can have their new car's bonnet personalised with a design based on their own fingerprint. In the medium term, other customer-specific designs will become available as the technology is refined and Porsche's creative team think of new and innovative ways to deploy it.

"Individuality is very important for Porsche customers, and no design can be more personal than your own fingerprint," says Alexander Fabig, Vice President Individualization and Classic. "Porsche is a pioneer in personalisation and has developed the direct printing method together with its commercial partners. We're especially proud of having developed a completely new product offering based on brand new technology."

For the project, a so-called "technology cell" was set up in the paint shop of the Zuffenhausen training centre. It was here the new software and hardware, as well as the associated painting and manufacturing process, were developed and tested.

Direct printing makes it possible to produce designs not possible with conventional painting methods. The operating principle is similar to that of an inkjet printer: using a print head, paint is applied to three-dimensional components (a 911 body panel, for instance) automatically and without the risk of overspray. "The ability to control the nozzles individually permits targeted application of every paint droplet," explains Christian Will, Vice President Production Development. "The complexity is due to the necessity of harmonising robot technology (control, sensors, programming), application technology (print head, graphic handling) and paint technology (application process, paint)," he added.



HIKE IN PORSCHE CHARGING POINTS

Porsche is investing in establishing a global charging network. The Porsche Destination Charging programme includes a total of 1,035 AC charging stations in twenty countries. The installation of a further 900 charging points is planned by the end of this year. They'll be located at selected hotels, airports, museums, shopping malls, sports clubs and marinas. Porsche customers with a Taycan or plug-in hybrid models will be able to charge their vehicles for free at these sites. "We are adding popular locations to our charging network whilst also highlighting our claim to be a driver of the expansion of electric mobility," declares Martin Urschel, Vice President Smart Mobility Sales & Operations. "By the end of 2020, we aim to provide a total of 2,000 charging locations in all markets offering electric Porsche cars."

THE SILVER BULLET NBRAKING

EBC Brakes Racing's new track day and race pad material, RP-1™, offers extreme braking performance at a lower cost compared to other race pads on the market.

KEY FEATURES

- Superb modulation gives unprecedented control and feel throughout each braking event
- Extremely low wear rate with stable friction coefficient, even under the harshest on-track driving conditions
- Pads come thermally bedded, eliminating 'early-life' fade and minimising bed-in time
- Stainless-steel backing plates reduce heat conduction, lowering caliper operating temperatures

DP82029RP1 DM2955/1919

> EBC BRAKES FOR TRACK USE ONLY

LOVE IT OR RETURN IT

Made in UK

For a limited time only, every set of RP-1[™] pads is sold with a 'Love it or Return it' warranty. Tried these pads but don't like them? Return them to EBC for a full refund (T&Cs online).

EBC Brakes Racing
 @ebcbrakesracing
 @ebcbrakesuk
 EBC Brakes



For full product listings, visit our website: <u>www.ebcbrakes.com</u>

UNPARALLELED BRAKING PERFORMANCE

NEW GEAR

PORSCHE PRODUCTS

Each month, we present exciting parts and services designed to benefit you and your four-wheeled friend. From audio to engine upgrades, we've got you covered.



RENOVO SOFT-TOP ROOF CARE KITS

The warm weather is finally upon us, meaning many of you in charge of a Porsche cabriolet will be dropping the roof of your pride and joy in order to enjoy a spot of *al fresco* motoring. Keeping the canvas or vinyl drop-top of your car in good condition, however, can prove challenging, especially when dealing with older vehicles, where prolonged exposure to the elements can fade black fabric to dull grey. Fortunately, Renovo International is on hand with its portfolio of fabric and vinyl roof care kits.

The celebrated British company's range of fabric soft-top restoration and maintenance products includes a threestage cleaning, colouring and ultra-proofing package. The first part of the process involves cleaning the affected fabric with a specially formulated shampoo designed to remove loose contaminants, mould, mildew and previously applied waterproofing agents. A soft brush works brilliantly at helping to get rid of dirt before a rinse with clean water reveals a perfectly prepared surface ready for a fresh coat of colour.



As soon as the hood has dried, a plentiful supply of the kit's recolouring agent (available in Pantone-matched black, dark blue, dark red, dark green or dark brown shades) can be brushed onto the prepared fabric. The product ensures discoloured canvas is quickly afforded a new lease of life before the final stage of the restoration process, which involves the application of a durable waterproofing solution providing a protective barrier against adverse weather, the build up of mould, mildew and the effects of harmful ultraviolet light.

That's not all! Many convertible roofs (and those fitted to early 911 and 912 Targas) are fitted with a flexible plastic rear screen.



These windows are known to crease, producing an unsightly milky stain where folding of the roof causes stress across the plastic. Renovo has developed a drop-top window polish kit to help eliminate these white marks. Additionally, the company has produced a soft-top care kit designed specifically for vinyl roofs.

Rest assured, we've tested these waterbased products and they're every bit as good as we've made them sound. For further information, or to place an order, visit the Renovo website. Price From £10.95 per product renovointernational.com or call 01444 443277



OGT SPIRIT 1:18 1993 964 RSR MODEL

The Jack Leconte 964 Carrera RSR was driven to sixteenth place at the 1993 24 Hours of Le Mans by teammates, Jèsus Pareja (ES), Jack Leconte (FR) and Pierre de Thoisy (FR). The FAT-liveried 911 remains a firm favourite of Porsche racing enthusiasts, which is precisely the reason small-scale Porsche retailer, Racing Models, is offering this 1:18 resin depiction of the car from manufacturer, GT Spirit. Strictly limited to just 504 examples, the mini motorsport machine is yours for a smidge under ninety quid. **Price £89.95**

racingmodels.com or call 01908 225650



OHALTECH NEXUS R5 ECU

How many of you own a car with an aftermarket ECU, datalogger, wideband controller and power distributor as separate components? What if there was a solution combining all these elements into a single convenient package? Haltech has answered this very question with its award-winning Nexus R5. Featuring all of the above, coupled with high-speed WiFi and allowing programming of each feature from a single piece of software, this fully integrated vehicle management system features eighteen high-current injector drivers, twelve ignition drivers, twelve 8A outputs, four 25A outputs, twenty-three for AVI, ten for SPI, eight for DPO, twin knock control, three independent CAN bus systems, dual drive-by-wire (DBW) control and 1kHz 150-channel datalogging with 512MB of storage space. Advanced automatic transmission control is also included. A dual-channel O2 wideband controller capable of running LSU4.9 and NTK sensors forms part of the package, which, thanks to its integration of a power distribution module (PDM), is being hailed by professional race teams and tuners alike as a game changer in the field of aftermarket ECUs. **Price TBC (price due in April)** haltech.com or call 0121 285 6650

○GAZ GP COILOVERS FOR 996

One of the key differences between the standard 996 and its GT2 and GT3-badged lightweight siblings was the introduction of adjustable suspension to Porsche's GT cars. Now, thanks to performance damper manufacturer, GAZ, owners of less raucous 996s can also enjoy the benefits of configurable ride height and damper rates through installation of the firm's GP coilovers. Easily adjustable in situ and featuring a gas cell in the outer reservoir to prevent cavitation (foaming) in harsh use conditions, these cool coilovers are available to buy at an attractively low price and can be ordered with special springs produced to your specification or matched to the intended use. And for peace of mind, all GAZ products are individually tested at the factory and are covered by a two-year warranty.

Price £198 per damper gazshocks.com or call 01268 724585

○FOXWELL NT520 PRO PORSCHE FULL SYSTEMS DIAGNOSTIC SCANNER

This slimline handheld scanning tool for Porsche vehicles loaded with an OBD-II diagnostic port allows the user to read and clear ECU fault codes, reset oil and service lights, plus many more advanced features, including bidirectional component actuations and module coding, abilities usually reserved for

high-end professional diagnostic tools. The NT520 is more than just a code reader, though, as proved by its ability to show live engine data on any EOBD compliant cars (petrol 2001+, diesel 2004+). Quick and easy to use and housed in a rugged case, the NT520 is shipped with a 4GB Micro SDHC memory card, a user manual, a carry case, instructions, a lifetime of free software updates and a twelve-month warranty. Owners of second-gen 997s can even use this handheld hero to disable the active rear spoiler on their cars! Price Special offer £155 gendan.co.uk or call 01792 588002



O ÖHLINS 911 COILOVER KIT

Bring championship-winning tech to the road with this classic 911 performance suspension solution from Öhlins. The package includes a pair of RSR-style threaded 'upside down' front struts, complete with air bleeding system, filters and adjustment for bump and rebound. A duo of camber adjustable uniball top mounts are also



included, as are welded adjustable bump steer kits. Two extended upper spring perches (featuring adapters and torsion bearings) form part of the package, along with two sets of spring seats, lock rings and spring dividers. Öhlins linear main springs are joined by a pair of helper springs. It's more or less the same setup at the rear, the key difference being coilovers joined by shock tower strengthening plates and top mount sets with stainless adapters. Price £10,794

stuttgart-classica.co.uk or call 01386 701953



CRECOMMENDED READ THE PURSUIT OF DREAMS

Everyone has a story to reveal, but Barry Hart has a more extraordinary tale to tell than most. Outlining his progress, struggles and achievements as a young engineer trying to restore pride to British motorcycle engineering in the 1960s, to his time designing highly competitive, technically advanced racing machines, this 530-page tome charts his impressive career at the same time as explaining why, at the pinnacle of his craft, he left the industry he loved, never to return. Taking his secrets with him, he went on to establish Hartech, a leading light in the field of modern Porsche engines. Moreover, this interesting and entertaining book (supported by 250 photos, press cuttings, illustrations and graphs) includes technical information relating to what really makes engines and transmissions win races. Hart also discloses the previously untold story behind the build of the famous Silver Dream Racer motorcycle, as well as interesting facts relating to the development of the world's first carbon-fibre racing bikes. The first ten CT Porsche readers to order this brilliant book direct from the link below can take advantage of a huge 25% discount using the voucher code GTP-25OFF. **Price £24.99**

payhip.com/BarryHart or call 01204 302809



AUTOGLYM ODOUR ELIMINATOR

Letchworth-based detailing product manufacturer, Autoglym, has updated its trusted Odour Eliminator with what the company refers to as Fragrance Release Technology. Depositing encapsulated fragrance into your Porsche's interior fabrics, the ingenious tech reactivates the pleasant-smelling particles every time the affected fabric is sat upon, thereby releasing a fresh burst of wonderful waft, which we're told last for weeks. Capable of totally neutralising stale smells (as opposed to merely masking them), this new version of Autoglym's hugely popular product is sold in 500ml bottles and will eliminate nasty niffs caused by cigarette smoke, pets and fast food. Your nose won't know what's hit it! **Price £8.70**

autoglym.co.uk or call 01462 677766

Fuel and induction specialist, Webcon, has announced the introduction of a range of venturis to suit Weber 46IDA3C triple carburettors



SILSTA

as fitted to many air-cooled flat-sixes. With the 46IDA3C mainly used as a performance upgrade on tuned engines, maximum potential is to be reached. Manufactured in England, this new range of venturis is the largest and most comprehensive on the market, ranging from 35mm to 42mm with the added option of a blank. Price £30.59 each

webcon.co.uk or call 01932 787100

SUBSCRIBE!

Have each and every issue of GT Porsche delivered direct to your door (at no extra cost) by subscribing to the magazine. You'll get a big discount off cover price and you'll receive the mag before it hits newsstands. Plus, you'll be kept informed of our latest special offers and discounts. Well, what are you waiting for?! Price Special offer: £21.99 bit.ly/subscribegtp



MOMO GE NOB

Somewhat appropriate for this drop-top themed issue of GT Porsche is MOMO's new Targa Heritage gear knob. Mahogany and beechwood have been expertly combined and shaped into a



smooth sphere. The crown jewel of MOMO's offering is its vintage-effect tobacco coloured leather top, stamped with the Italian automotive styling giant's Heritage logo to ensure nobody can be in any doubt about the part's pedigree. rice £179.99

momo-uk.co.uk or call 01268 764411

DEI ONYX

We all know toasty engine bay temperatures can cause problems, but did you know your Porsche's starter motor is especially at risk particularly if it's



in use alongside a turbocharged powerplant? DEI's Onyx Starter Shield combines a reflective outer layer with a heat-resistant inner layer battling temperatures up to a whopping 730°C. Measuring 178x610mm, the easy-fit part is suitable for most starters, but can be trimmed if necessarv

designengineering.com or call +1 800 264 9472

ce £67.21 plus import to UK





NORTHWAY PORSCHE LIMITED Independent Porsche Specialists



Repairing and servicing of Porsches for over 20 years

USED PORSCHES IN STOCK AND WANTED FOR OUTRIGHT PURCHASE

TELEPHONE: 0118 9714333 MOBILE: 07831 424911 Email: info@northway.co.uk www.northway.co.uk



SPECIALIST IN ALL THINGS PORSCHE



- Fixed Price Servicing
- Engine & Transmission Rebuilds
- Restoration
- Full Diagnostic Facilities
- Pre-Purchase Inspection

Tel: 020 8500 2510 Email: info@hpporsche.co.uk www.hpporsche.co.uk 181 FOREST ROAD, HAINAULT, ESSEX IG6 3HZ

fO

Mobil 1



SPECIALIST PORSCHE SERVICING IN WEST SUSSEX

We specialise in service, diagnostics and repairs for Porsche & BMW vehicles

- Purpose built facility in Wisborough Green, West Sussex
- Main dealer trained technicians
- Porsche PIWIS & Autologic Diagnostics
- Courtesy Vehicles available
- Customer Waiting area

Visit our website for latest service offers and browse our carefully selected used cars for sale.

www.walkersautotech.co.uk









020 7229 3325 WWW.GCAPPERFORMANCE.CO.UK 6 POWIS MEWS, NOTTING HILL, LONDON, W11 1JN



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

AND AND I THREE



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



01895 255 222

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

Cars wanted for immediate outright purchase



Professional quality CCTV for self installation

www.cctv42.co.uk

GTS 4.0 TWINS

Porsche buyers wanting a 718 with six-cylinder power, but not

Porsche buyers wanting a 718 with six-cylinder power, but not the track-ready chassis (or cost) of a Spyder or GT4, now have a very tempting proposition in the shape of the GTS 4.0 twins...

Words Shane O'Donoghue Photography Porsche



ake to social media for a discussion about the four-cylinder boxer engines Porsche launched for its 982-generation 718 Boxster and Cayman and you're unlikely to hear the quiet voices of those that don't hate these powerplants. I'm not afraid to count myself among those in the minority, mostly because of the massive increase in torque available across the rev range, allowing you exploit the inherent goodness of the 718 chassis to the full. Don't get me wrong: like anyone with ears, I prefer the dulcet tones of a naturally aspirated flat-six over the blaring turbocharged menace of the four-pot, but unless you're being particularly churlish, the four-cylinder 718s can hardly be considered duds in the bloodline. Nonetheless, Porsche took widespread criticism to heart and set about looking at how it could return six-cylinder power to its mid-engined machines. The project culminated with the launch of the mighty 718 Spyder and CT4, which we dutifully tested to the full in the October issue of GT Porsche (order a copy online at bit.ly/issuesgtp). You're welcome.

Unquestionably, the 718 GT4 and Spyder are epically good cars. They're exciting to drive, they feature adjustable suspension making them suitable for serious track work, the new engine (more of which in a moment) is sublime and, well, they look sensational. These cars are not, however, perfect; I must confess, I couldn't live with the fiddly roof of the Spyder, so, unless I lived somewhere it never rained, it wouldn't be on my list of cars to own. Admittedly, I'd swap one of my kidneys for the 718 GT4, but I'd wonder if its apex-sniffing suspension and attention-grabbing aerodynamic upgrades would be too 'full on' for everyday use. Overriding all of those considerations, of course, is the small matter of pricing and availability. The base 718 Cayman – a fantastic car by any measure, remember – stands at £44,790 at the time of writing, while the GT4 (with a long waiting list) is £75,348. The Spyder, meanwhile, is about £27,000 more than the entry-level 718 Boxster, Yikes,

In fairness, those range-toppers get a lot more than just the new engine, which goes a long way to justifying

DARK DETAILING IS EVERYWHERE YOU LOOK, GIVING THE GTS MODELS A MORE MENACING APPEARANCE TO SET THEM APART FROM THE REGULAR AND S-BADGED 718s





Above Is there a better model than the Boxster GTS 4.0 in Porsche's current product line-up for fast fun in the sun? the pricing. Even so, I suspect there are more Porsche buyers out there that do want *just* that new engine in a version of the Cayman or Boxster they could use every day. And now, thanks to the launch of the 718 GTS 4.0 models, their wishes have been granted. That little 4.0 suffix is important here (and I'm sure Porsche's marketing people aren't unhappy about its vague link with the 997 Gen II GT3 RS 4.0 of 2011) due to the fact the 982 line-up already boasted a GTS, taking the forms of the 360bhp models powered by an upgraded version of the 2.5-litre flat-four.

LIGHTS ALIVE

Fans of the GTS specification in general won't be disappointed by what they find in the new 4.0 variants - the same theme of upgrades is carried over to the newer models. Dark detailing is everywhere you look, giving the GTS models a more menacing appearance to set them apart from the regular and S-badged 718s. The new mid-engined marvels don't get the all-new downforce-producing bodywork of the GT4 and Spyder, but there's a partially black Sport Design front apron featuring a modest aerodynamic lip and darkened surrounds for the standard bi-xenon headlights. The LED rear lights are given the same treatment, there's black 'GTS 4.0' script on the doors and black badging at the rear, while the standard alloy wheel is a ten-spoke twenty-inch design finished in Satin Gloss Black with red brake callipers peeking through from behind.

You'll note the massive fixed rear wing of the 718 GT4 is nowhere to be seen on the Cayman GTS 4.0, but the GT4 and Spyder's sports exhaust system has been carried over unchanged, meaning wide-spaced twin outlets in an angry black diffuser. Badging aside, this is the easiest way for us anoraks to tell a GTS 4.0 apart from the earlier, smaller engined GTS, which displayed its two exhaust tips together in the middle of the back bumper. The well-trodden GTS path continues inside the 4.0 cars, and that's no bad thing, because it means lots of luxurious Alcantara. In the Cavman. the suede-like material is found on the A-pillars and headlining, though both cars get the smooth stuff on the glorious steering wheel, the centre console, the gear lever, the armrests, door closing handles and partially upholstering the fabulous Sports Seats Plus. The headrests feature the GTS logo, which is also found on the door sills, prominent rev counter and on the start-up screen of the Porsche Communication Management (PCM) touchscreen. Combined, these elements make for a dark cabin as standard (despite lots of high-gloss silver trim), which is why it's worth investing in a few extras to finish the stitching, seatbelts and even the rev counter in red or grey. Have a play with the online configurator and you'll see there's a lot of customisation available.

Do that and you'll notice you can't have a PDK gearbox in the GTS 4.0 models... yet. Fret not! It's coming, but not until late this year at the very earliest. That means 'making do' with the six-speed manual cog swapper. Now, I'd take the manual every time,

Facing page Alcantara-trimmed

GTS 4.0 interior is far more hospitable than the GT4's cabin



3.8

-

unnun unnun

(()) Taner () Map

-

-

iiiiiiii

8 2

J.

10)

Marrie HI Acces

0 -00 ۲

1

#

0.7

M.St.

21

20

Ser

20

4

Na

13:14

1 -

-

3

Facing page Red double stitching and carbon trim add a touch of class but I wouldn't be doing my job if I didn't point out a few things about this particular gearbox for buyers to consider before placing an order. It has the same set of ratios as the GT4, which means you can hit 80mph in second gear. Sure, that helps the 0-62mph time, but if that's all that matters to you, then you should stick with turbocharged four-cylinder power in the old (and, awkwardly for Porsche, faster accelerating) GTS 2.5. The thing is, the manual gear shift is so deliciously weighted and the engine so responsive and melodic that you want an excuse to change gear as often as possible. No, it's not rational. And no, it doesn't help you go faster, but yes, it makes up a big part of the appeal of owning a powerful sports car. The GTS's gearing detracts from that when you're having fun on the public road because you simply don't need to change gears very often.

When you change down, you'll be met with the second issue we have with this transmission. It features Porsche's rev-matching system as standard, which, it must be said, is fabulously well-judged and rpm-perfect, but – and this is a big BUT for me – there's no simple way to switch it off (you have to disable the Porsche Stability Management (PSM) system). In other words, drivers keen to learn, perfect or just employ heel-andtoe down-shifts and throttle blips may find themselves a little frustrated. The forthcoming PDK option should at least alter the gearing for more changes, but a few minor tweaks to the manual gearbox would be all that's needed to make it the perfect companion to the engine. And this, surely, is why we're here. I know, the sound sound sublime), but Porsche's engineers went to a lot of trouble to bring this engine to life, so the least you can do is read a paragraph or so about their efforts. Officially, the story starts with the 992-generation 911's three-litre 9A2EVO unit, but without its duo of turbochargers. And a different bore and stroke, hence new pistons, connecting rods and cylinder heads. Plus, of course, the valves and crankshaft, not to mention the inlet manifolds. We're struggling to see what was kept, to be honest, and wonder if factory engineers somehow convinced Porsche's bean-counters all they were doing was tweaking the 911's engine to make it into the highrevving, naturally aspirated flat-six of a 718 buyer's dreams.

is pretty much all that matters to most (and it does

HOLD FIRE

Obviously, Porsche had to peg back GTS 4.0 power in a bid not to outshine the GT4 and Spyder, but only twenty ponies were dropped, resulting in output of 394bhp produced at 7,000rpm (instead of 7,600rpm), while the rev limiter is set 200rpm shy of the GT4's at 7,800rpm. Without doing a back-to-back drive, it would be a lie to say the GTS 4.0 feels appreciably slower or its engine any less rev-happy. In truth, the almost unaltered torque output is probably more important in regular driving, and it still tops out at 310lb-ft, between 5,000 and 6,500rpm (the GT4's engine holds that level for 300rpm longer). Number junkies will have spotted that the old GTS 2.5's engine has a little more torque (up

Below Ravishing in red, the GTS 4.0 is a belter of a Boxster













THE ELECTROMECHANICAL STEERING IS TEN PERCENT MORE DIRECT THAN THE 981'S RACK AND IS BASED ON THE SYSTEM INCLUDED WITH THE 991-GENERATION 911 TURBO

to 317lb-ft) available over a much wider band of revs (1,900-5,500rpm), meaning the older car should actually feel quicker most of the time, but, as we've already established, speed isn't everything – the new GTS is all about engagement with the driver.

To that end, though the GTS 4.0 models don't get the track-focused suspension set-up of their loftier siblings, they do benefit from several enhancements to help owners get the most out of each car in everyday use. Sports suspension with Porsche Active Suspension Management (PASM) is standard, bringing with it a twenty-millimetre drop in ride height (and hence centre of gravity), though it's worth noting buyers can opt for a more comfortable setup with half that drop if they so wish. As before, the electromechanical steering is ten percent more direct than the 981's rack and is based on the system included with the 991-generation 911 Turbo.

Porsche fits the Sport Chrono package as standard to the GTS 4.0 models, including the rotary switch on the steering wheel to allow quick selection of Normal, Sport, Sport Plus and Individual driving settings. These affect the throttle response, PASM, the sports exhaust, the stop-start system (which is linked with the engine's clever cylinder deactivation function to save fuel and reduce emissions) and even the retractable rear spoiler. Owners can also download the Track Precision smartphone app as part of the GTS 4.0 package, but perhaps the most important inclusion is Porsche Active Drive Mounts. These automatically soften or firm up, the theory being more comfort and less noise at one end of the spectrum and better control of the moving masses at the other end, which should help with a 'spirited' attack of bends.

The combination of the lower suspension and these mounts certainly makes for fast cornering. Not only that, but the CTS 4.0 feels malleable and playful while also gripping hard and keeping unwanted body movements to a minimum. At sane speeds, it's incredibly rewarding, the fast steering and inherent firmness of the suspension marrying with the rigid chassis structure to give the driver a highly enjoyable and fuss-free experience. The high grip levels don't mean it's inert,







Facing page Perfectly at home on the public road, the CTS 4.0 models are also happy to be used as weekend track toys

Below The GTS 4.0 twins offer a

better, more usable proposition for regular driving than

the Spyder or GT4

but, all the same, this car's chassis is forgiving at the limit, though you won't often broach it on the public road, at least not in the dry.

FEEL THE DIFFERENCE

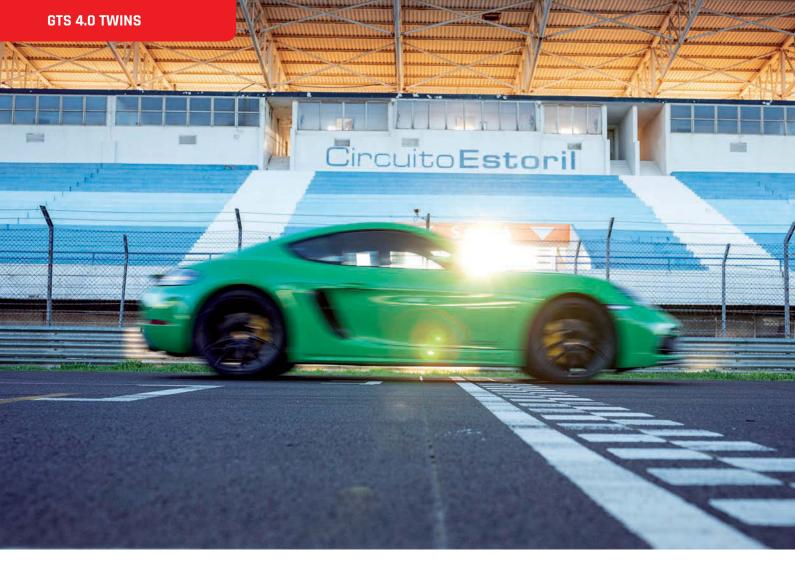
Aiding the CTS 4.0's ability to exit tight corners with all of its power going in the right direction is Porsche Torque Vectoring (PTV) and a mechanical limited-slip differential. The former adds braking pressure to the rear wheel at the inside of a corner (to help the car pivot into the bend), while the latter sends more torque to the outside wheel on application of the throttle. Very little of this are you aware of working, of course, but you'll notice that stability and traction control systems aren't called into action very often, even when you're pushing on. And for those skilled enough to take further liberties, the CTS 4.0 models come with a selectable PSM Sport mode. In the dry, there's no fear for your no-claims bonus when you push this, so biddable is this car's chassis.

All of the above could be said of both the Boxster and Cayman GTS 4.0. Take it from me, they're both exceptionally fun and accomplished cars to drive on the public highway. Furthermore, they're usefully cheaper and more practical than their Spyder and GT4 siblings and, perhaps unsurprisingly, better suited to regular road use. The Boxster does have the benefit of less material between your ears and the wail of the exhaust, of course, but, at the end of the day, coupe or roadster is a matter of personal choice. Whatever you do, don't take to social media to discuss the matter!









TRACK ATTACK

We hit the famous Estoril Circuit near Lisbon to find out what the 718 Cayman GTS 4.0 is really like to drive at the limit...

fter spending a day on the road, ascertaining that the new 718 Boxster GTS 4.0 is indeed a worthy alternative to the 718 Spyder for those that prioritise everyday usability over on-the-limit handling and grip, what did we do? We hit the track in the 718 Cayman GTS 4.0 to, er, assess its on-the-limit handling and grip. I guess the big question is: for those that can't afford, source or want the full-on 718 Cayman GT4, yet might want to go on track occasionally with their six-cylinder 718, will the GTS 4.0 make for an acceptable substitute?

Allow us some poetic licence here, as we've not yet had a chance to pit the GT4 and GTS 4.0 against each other on the same day on the same piece of road or race circuit. Saying that, the memory of pushing the GT4 around Knockhill Circuit in Scotland last year is one that won't fade in a hurry. Arguably, though, the GT4's advantage over the GTS should be emphasised at today's test venue, as we're at Circuito do Estoril in Portugal. Where Knockhill is all lumpy and bumpy and tight and twisty and somewhere you hold on tight for dear life, Estoril is an ex-FI track, with lots of high-speed corners, most bends on-camber and even a decent surface. It's somewhere that doesn't flatter regular road cars, as the track is wide, disguising speeds and exaggerating any softness in the setup, while it rewards high-pace stability, grip and smoothness.

NUMBER CRUNCHER

Here, the GT4's considerably enhanced aerodynamics, ultra-firm suspension (adjustable to suit, of course) and, crucially, its ultra-high-performance (UHP) tyres should give it huge advantage. I have no doubt the GT4 could lap usefully quicker than the GTS 4.0, but there's a theme running through this review that you've probably picked







CURVA 2 IS A FUN, JUST LESS-THAN NINETY-DEGREE RIGHT ON A DOWNHILL, WHICH ALLOWS THE CAYMAN SHOW OFF ITS FANTASTIC FRONT-END GRIP AND DEPENDABILITY

up, and that's the unimportance of bare numbers. Put simply, who cares if the GT4 can lap quicker? The GTS 4.0 is still a real giggle.

The naturally aspirated engine is perfectly at home on track, of course. You're at full throttle a lot of the time, regularly using the fizzy top end. Elevated speeds also mask our reservation with the ratios of the manual gearbox – there are plenty of opportunities to extend the engine and revel in the slick gearchange. And, given the main start-finish straight is over half a mile long, we even used fifth gear in anger!

It takes a few laps to realise you can rely on the brakes to haul the car down from such speeds, even leaving the heavy braking until quite late. Admittedly, our test car featured the costly Porsche Ceramic Composite Brake (PCCB) upgrade, which seems superfluous to requirements for road use and too expensive to be replacing regularly if you're a frequent track dweller. Regardless, the brake pedal modulation and feel are nigh on perfect, whether you're pushing it to the bulkhead for all you're worth or gently feathering it to get the weight of the car over the nose as you enter one of the fiendishly technical chicane-like S-bends.





Curva I (you don't need to be fluent in Portuguese to translate that) is a cinch once you manage to get enough speed off. Curva 2 is a fun, just less-than ninety-degree right on a downhill, which allows the Cayman show off its fantastic front-end grip and dependability. It's easy to let your confidence in the car's ability result in missing the braking point for the twisting-uphill Lamy, though even if you have to turn while braking, the car has your back, forgiving your ineptitude and bringing everything back on line without too much fuss. On the other hand, this uphill corner offers lots of space on exit, which is ideal for dismissing traction control and for practising your drifting. As ever, the Cayman obliges with perfect balance and quick reactions to throttle and steering inputs.

MINISTRY OF THE INTERIOR

Next up is Curva VIP, a big-radius hairpin with a vaguely off-camber exit. It's worth being patient with the throttle – the next section is super-fast, with a flat-out (with a bit of nerve) kink in the middle and the second big braking zone of the lap before you enter the wonderful Parabolica Interior. With just throttle, you can really alter the attitude and balance of the car through this section. Before you know it, it's time to get back on the middle pedal for another downhill braking zone, into the short, but technical Orelha.

From there until the final corner, the CTS 4.0 is in its element. The corners are tight and tricky, especially the Gancho chicane, which fully turns back on itself and allows you to mount the kerbs as if you're in a CT racer. The GTS 4.0 shrugs off what's happening and allows you to balance the car again using the accelerator pedal. The final corner is the seemingly never-ending Parabolica Ayrton Senna, which would be another ideal spot to try your hand at drifting if it weren't for the fact you were trying for a smooth lap. Obviously, the speed you slingshot out of this part of the track onto the main straight is directly proportional to your top speed at the end of that straight.

Sounds good, doesn't it? Would our description of the lap have been much different if at the wheel of the 718 Cayman GT4? Not hugely, though the GTS 4.0's Pirelli P Zero tyres went off much quicker than the GT4's Michelin Pilot Sport Cup 2 would likely have (and they were noisier in the process). In summary, the GT4 (and, pertinently, its UHP tyres) is better suited to long days of regular track work, perfecting your driving and lap times and allowing you configure the car to pretty much any given circuit, but the GTS 4.0 is still massive fun for the occasional foray on track. Need something in between? Why not invest in a set of light wheels and UHP tyres for the GTS 4.0? Job done!



ARAGON

The Natural Choice for Porsche

01825 830424



911 RS Touring

Jet Black • Black Seats • Manual Gearbox • Fully Restored • Matching Numbers • 1973 (L)

£549,995



911 Turbo S (997)

Basalt Black · Black/Cream Dual Tone Leather Seats • PDK Gearbox Porsche Ceramic Composite Brakes 45,318 miles • 2010 (10)

£72.995



Cayman GTS (981)

Agate Grey · Black Half Leather Sport Seats • PDK Gearbox • Switchable Sports Exhaust • 39,065 miles 2015 (15)

£47,995



911 GT3RS (996)

Carrara White • Black Nomex Bucket Seats • Manual Gearbox • Full Roll Cage • Air Conditioning • 20,694 miles 2004 (53)

£139.995



911 Carrera 2 GTS (997)

Carrara White • Black Half Leather Sport Seats • PDK Gearbox 19" Centre Lock Wheels 33,929 miles • 2010 (60) £59.995



Boxster S (718)

Guards Red • Black Leather Sport Seats • PDK Gearbox • Touchscreen Satellite Navigation • 20" Carrera S III Wheels • 17,138 miles • 2016 (16) £43.995



911 GT2 (996)

Polar Silver • Black Leather Sport Seats • Manual Gearbox • Porsche Ceramic Composite Brakes · Sports Exhaust • 21,725 miles • 2003 (03)

£124.995



911 Carrera 4 (993)

Arctic Silver · Classic Grey Leather Sport Seats · Manual Gearbox 17" Cup Wheels • Air Conditioning 61,259 miles • 1997 (P)

£59.995



911 Carrera 2 S (997)

Basalt Black • Black Leather Seats Tiptronic S Gearbox • Satellite Navigation • 19" Carrera S Wheels 54,263 miles • 2005 (55) £29.995



911 GT3 Clubsport (996)

Guards Red · Black Nomex Bucket Seats • Manual Gearbox • Rear Roll Cage • Porsche Ceramic Composite Brakes • 43,336 miles • 2004 (53)

£74.995



911 Carrera 2 (991)

GT Silver • Black Leather Seats Manual Gearbox • Touchscreen Satellite Navigation • 19" Carrera S Wheels • 13,167 miles • 2014 (64) £54.995



911 Carrera 2 S (997)

Arctic Silver • Black Leather Seats Tiptronic S Gearbox • Satellite Navigation • 19" Carrera S Wheels 55,853 miles • 2005 (55) £29.995

At Paragon, we have superb in-house workshop and preparation facilities. Each car is supplied fully serviced with a new MOT and our 12-month/12,000-mile comprehensive parts and labour warranty.

See more of our current stock at paragongb.com

TORQUE

DRIVER

TIM HARVEY

A long and fruitful career in professional motorsport, with roots in a childhood spent terrorising the neighbours...

erhaps the question I get asked most – second only to 'what car do you drive?' – is 'how did you get into motorsport?' The truth is, mechanical implements have featured in my life for as long as I can remember, largely due to the influence of my parents. Ironically, neither were professionally involved in either motorsport or the car industry. My father was a surveyor and my mother a business magazine editor, but that tells nothing of what I remember as a child.

My father absolutely loved cars and would be constantly tinkering in the garage. Just mowing the lawn would be an adventure! He insisted carburetors were cleaned, blades sharpened, plugs brushed and everything wiped and greased after use. The list of constantly changing vehicles in the Harvey household was also something to behold. Regular transport would include Lotus Cortinas, Mini Coopers, Jaguar E-Types and all manner of race cars. Both my parents competed in amateur club events throughout the 1960s, so most weekends were spent watching them compete in sprints, hill climbs or autocross. Mum would make huge picnics, which would be carried in the boot of the car, and off we'd go. Meeting up with family friends at these events meant there was always fun jobs for us kids to do. such as applying racing numbers, cleaning cars, using stop watches and generally getting into trouble with the other children my elder brother and I would find ourselves hanging around with. At the close of each day, numbers on the cars would be taped over, we'd load up and drive home, only to go to school in the same car come Monday morning!

My father had motoring connections. His best mate was Le Mans racer, Peter Sargeant, and he had many friends at Jaguar, largely due to being Chairman of the Jaguar Drivers Club. Dad never had any Porsche affiliations, but, equally, I have no real passion for Jaguars. He'd often 'exchange' his professional property services for the loan of cars, his most notable achievement being to procure the use of a GT40 for a year from one of his clients. He spent a winter rebuilding the Ford,

before the day to fire it up arrived during the Easter holidays. The twenty-one children living in our cul-de-sac gathered excitedly and, with no silencers fitted, the car sounded like a bomb going off. Most of the kids ran home crying, but I loved what I was hearing. This, the constant sound of running engines, go-karts flying around the estate and, as I got older, motorbikes, must have really endeared us to our neighbours! They didn't understand our love of petrol driven vehicles, even resorting to calling my parents during summer holidays to report my brother and I for driving around in the family cars. My excuse? I said was merely 'warming them up' when guizzed by my unconcerned father.

If Mum and Dad weren't off competing, I'd be checking the *DTHs* stored in the lock-up garages my father rented. These cars were labelled *Don't Tell Helga* – my mother's maiden name, cars she knew nothing about. They were either projects for restoration, cars stored for friends (who were also too scared to tell their wives what they'd bought) or motors we simply didn't have room for at home. I'm glad to say the practice continues as family tradition to this day – my wife, Ruth, is blissfully unaware of the various *DTR*s in existence around Oxfordshire...

My wonderful childhood and riding motorbikes encouraged my brother and I to progress to karts, whereupon our garage became the epicentre for race prep before a weekend away. We'd compete either locally or nationally out of the back of a Ford Transit van, which Dad ran as a company vehicle to carry his estate agency's 'for sale' boards, or so he said. I have to say, these were amongst my most pleasurable times in motorsport.

Whilst my graduation to Formula Ford 1600 and then the rest of my career, including winning the BTCC and Porsche Carrera Cup (twice), is well documented, I think my upbringing explains why I got into racing as a hobby before it ever became a serious job. Additionally, it serves to explain why I retain my passion for motoring to this day. I'm also sure I'll be the last driver to adopt a hybrid or electric vehicle. My dear father would turn in his grave!



Tim Harvey is best-known for being 1992 British Touring Car Champion and for being crowned Carrera Cup GB victor in 2008 and 2010. He's contested the 24 Hours of Le Mans four times, competed in British GT and currently serves as a presenter for ITV4's extensive BTCC coverage. He's also a driving consultant and brand ambassador for independent Porsche specialist, RPM Technik.

Twitter @timharvey7 Instagram @timbo_harvey

> DAD NEVER HAD ANY PORSCHE AFFILIATIONS, BUT, EQUALLY, I HAVE NO REAL PASSION FOR JAGUARS



- Porsche Fixed Price Servicing.
- Courtesy Cars.
- Repairs and MOTs.
- Engine and Transmission Rebuilds.
- Restorations.
- Pre-Purchase Inspections (PPI).
- Detailing and Aftercare.
- Alignment and Geometry.

• 9e Performance Packages.

- Exhausts.
- Suspension.
- Brakes.
- Tuning.
- Engine Builds.
- Parts.

SHOWROOM

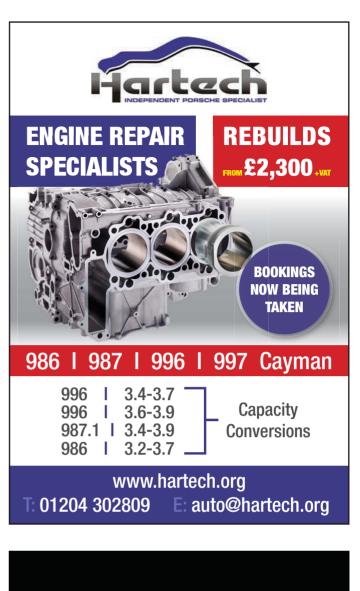
- Please check our website for current stock.
- We buy and sell all Porsche models.

All Porsche models covered.

Fully trained Porsche technicians.

Professional showroom and workshop. www.NineExcellence.com 01293 226 911







TORQUE

SPECIALIST

PHILIP RABY

Phil has learned to love the original 911 Targa, but is less convinced by today's version, and wonders why we embrace open-top Porsches during the wettest of winters...

ain. We've experienced a lot of it in the UK during the past few months. Almost every day has been wet to some extent or another. It's becoming a tad wearing. Not at all the weather for open-top Porsches, you may think. Guess again. Porsche Targas and Cabriolets are surprisingly weatherproof and durable for use in all (well, almost all) weather.

Many years ago, as a fresh-faced motoring journalist, I caused great offence by stating the 911 Targa was "ugly". Oh dear, what was I thinking? My argument was that the lift-out Targa (and we're talking pre-993 here) didn't have the 911 coupe's attractive swooping roofline. I stand by that today, though I've grown rather fond of the traditional Targa roof, both its looks and the joy of driving a semi-open-top 911 with its Targa top removed on a sunny day.

It seems I'm not the only one. A 911 Targa was once a more affordable alternative to a coupe, but times are changing. Indeed, prices of Targas have risen sharply as people have started to appreciate them more and coupes have become beyond the financial reach of many would-be buyers. I suspect another reason for renewed interest in classic Targas is Porsche's decision to introduce the 991 Targa with a similar appearance (but a totally different mechanism). Plus, owners of classic 911s now only tend to use their cars in good weather. In this context, a Targa makes a lot of sense and can provide huge fun.

On the other hand, classic 911 Cabriolets seem to have dropped out of favour, which is a shame because the folding roof is actually very sturdy, weathertight (if, like me, you grew up with old MCs and Triumphs, you'll have bad memories of leaky roofs!) and more practical than the lift-out Targa panel. Then again, and I'm once again putting my neck on the line here, an air-cooled Cabriolet's roof doesn't look great when open. It's quite a bulky pile on the rear of the car, though fine when closed. To my mind, the 911 Cabriolet only began to look smart, al fresco mode, when the 996 came along and when the open hood was stored neatly away under a solid panel, a concept continuing with the 997 and beyond.

While the Cabriolet roof has improved, I'm less convinced by the Targa. When the 991 Targa was announced, I just didn't get it. The original 911 Targa was a classic case of form following function - a roll bar was needed for crash protection and a lift-off panel allowed the roof to be removed and stored in the boot. Then followed the 993 Targa with its clever glass panel, sliding neatly under the rear window. Again, form followed function, which is a sensible design philosophy Porsche always worked to. With the 991, however, the company resurrected the side profile of the original Targa, but realising today's buyers wouldn't want to be fiddling around with a lift-off roof, came up with an overly complex mechanism whereby the rear window rises up and the roof drops down behind it. Function follows form! I await your hate mail.

Despite the inclement weather, we've sold a surprising number of open-top cars – 911 Cabriolets, Targas and Boxsters – in recent weeks. Why? I'm not sure. The obvious answer is people are getting ready for summer, but I don't think Porsches are often bought on such a whim. They're relatively expensive and, usually, a well-planned purchase. Maybe, as I mentioned earlier, enthusiasts are increasingly only using older Porsches in fine weather, and what's better than dropping the roof and cruising around in sunshine?!

Porsches don't need to be expensive purchases, though. Early 986 and 987 Boxsters can be surprisingly good value, so long as you find a good one. Buy a bad Boxster and the dream will soon turn sour. We recently took an early 986 in partexchange against a newer Boxster. The older car wasn't up to our usual showroom standards, so we sold it on at cost to a young friend of our sales director. Fast-forward a few months and the buyer is regularly telling me how much he loves his Porsche, driving it at every opportunity, proving that even the most modest Porsche purchase can make someone's dream come true.



Philip Raby has forged an enviable reputation as a trusted specialist Porsche dealer and marque consultant. With many years spent in the magazine business, he wrote hundreds of articles and several books about Porsches before establishing Philip Raby Specialist Cars, selling Porsches and other prestige vehicles.

Twitter @rabyporsche Website www.philipraby.co.uk

> THE 911 CABRIOLET ONLY BEGAN TO LOOK SMART, AL FRESCO MODE, WHEN THE 996 CAME ALONG

THICK CLINGY FOAM





The ultimate foaming gun, designed to work perfectly with the Polar Series



autoglym polar Q

TEAMWORK



FIVE MINUTES WITH DANNY RENI This month, we take time out to chat with the Marketing Director of prestigious premium car care product manufacturer, Autoglym.

When was the business established?

The company's first product, Superglym Polish, hit the market in 1965. Originally sold to dealerships for the purpose of keeping showroom cars in pristine condition, it's the forefather of today's Super Resin Polish. The product soon attracted interest from private owners and was joined by shampoos, waxes and wheel cleaners. By the late 1970s and into the 1980s, Autoglym's retail presence was becoming more pronounced and the company's product range was expanding at a rapid rate. Cleaning a car had become a Sunday morning ritual for many families, and Autoglym was leading the charge.

How has Autoglym changed since that time? We're now just as focused on promoting ease of use as we are the results of the brand's products. With today's huge portfolio of Autoglym car care chemicals and detailing equipment, it's important for us to impress upon buyers the fact there's nothing complicated about using any of the firm's offerings. We've even introduced a three-step cleaning guide for bodywork, wheels and interior, further simplifying matters.

When did you join the company?

Four years ago. I started as Customer Marketing Manager for retail, working with Halfords, B&Q, Wilco Motor Spares and international sales outlets, including Canadian Tire and Motonet in Finland. I no longer deal with international marketing, but I'm now responsible for Autoglym PR





and communications, heading a team with additional focus on digital marketing.

What are the latest Autoglym products?

We recently launched the Autoglym Polar Blaster foam gun, providing the speediest way to safely pre-wash, wash and protect your car. Designed to work in harmony with all products in our Polar Series range, including Polar Blast snowfoam, Polar Wash shampoo and our Polar Seal protective coating, it's proving to be a big hit, as is our Ultra High Definition (UHD) Ceramic Coating, the most durable paint protection product Autoglym has ever released, offering twelve months worth of protection and deeper depth of shine when compared to wax.

How much research and development goes into the design of an Autoglym product?

It's huge. Buyers of our products don't simply want a clean car – they want to enjoy the experience of detailing their pride and joy. There's an element of theatre to the process, and we need to think carefully about the multi-sensory experience when developing every Autoglym product. Smell, volume of suds, how the wash mitt or sponge glides over paintwork. We have an R&D Innovations Manager dedicated to this stuff. As a company, we take it very seriously.

Can we follow Autoglym's adventures online? CT Porsche readers are invited to visit autoglym.com and to find us on Instagram.

356 SPEEDSTER



Arguably the most famous Porsche drop-top of them all, the 356 Speedster is an aircooled classic regarded by a large number of Porschephiles as the perfect example of the brand's early determination to produce affordable race cars for the road...

EORSFRE

DROP **TOPS**



Left The very first 356 Speedster, pictured shortly after manufacture

s outlined in last month's issue of *CT Porsche*, 356 No.1, a compact, midengined, two-seater roadster set the blueprint for what was to follow after Ferry Porsche presented the car as the

first product of the fledgling company bearing his family name. The silver stunner underwent significant changes before it re-emerged as the first production Porsche in 1948 (if you can call a run of fifty-two cars consisting of a mix of coupe and cabriolet body styles a 'run'), but the original concept remained clear to see.

During a time when an automotive manufacturer's clients played an equally important role in the development of its cars as the engineers building them, the 356's evolution continued apace, with new model variants arriving annually to meet the demands and expectations of sales teams and Porsche's growing customer base. The 356 continued its developmental journey until the point of its replacement, the 911, but during those early, formative years, when new markets were opened and new models created to appease small, but discerning and important groups of customers, Porsche managed to keep control of its product development strategy. Engines received more power, disc brakes were introduced and suspension was tweaked in direct response to feedback from lucky buyers, who keenly relayed to Porsche their impressions regarding the 356 driving experience.

FIRM FEEDBACK

New York-based European sports car importer, Max Hoffman, was chief among those eager to let Ferry know what he was thinking and, recognising he needed a 356 designed specifically for the North American market, set a chain of events in motion resulting in the 356 Speedster, a Porsche designed to enjoy weekend circuit life before returning to daily driving duties Monday to Friday. You can read about Hoffman and his influence on the success of Porsche in overseas markets later in this issue of *CT Porsche*. Suffice to say, convincing Ferry to produce a lightweight production 356 for track action was a master stroke.

The car's proportions, including its low-rake windscreen, are from a time when crash testing was carried out by dangling a car from a crane and dropping it on its nose from a great height, when the need for impact-repelling structures and deformable bumpers were still an idea in the unborn cranium of a future officer of the fun police. Everything on the 356 has a function designed to aid you in the motion of driving and nothing else. If feels almost liberating to slide into the Speedster's small bucket-shaped driving seat and take in the amount of space you find yourself in when sat in the car's cockpit. There's no centre console, no transmission tunnel, no button-strewn dash to distract you, just a handful of knobs and switches beautifully weighted and engineered. The three chrome-bezeled dials are simple and clear, reporting back nothing more than road and engine speed, how 脧





much fuel you've got to play with and oil temperature. The dial faces have the kind of markings you expect only to see on antique timepieces.

SPEEDSTER ON SONG

The flat-four purrs into life the instant you twist the key, the tune it plays on tickover far removed from the clatter produced by the engine's donor, the Volkswagen Beetle. With 100bhp and just four ratios packed into its gearbox, performance at the point of manufacture was healthy: the 0-62mph dash was completed in twelve seconds and top speed was rated at 124mph. Any classic car requires today's drivers a few miles to acclimatise to their surroundings, however, and the Speedster is no different. The road beneath feels close, the dimensions of the car shrink around you. The non-servo drum brakes require driver confidence, inspiring prods to make you feel halfway comfortable dipping into the car's abilities. Everything feels analogue because, well, it is. The Speedster brings a new meaning to 'steering feel and communication' as those skinny tyres pound the surface beneath to extort every last detail of what lies ahead, passing feedback through the helm and into the thinly-padded seat. There's body roll no matter your pace through any turn, but it's a controlled movement, presenting itself early in the process, allowing the car to move with single, flowing actions.

Hoffman's vision of a stripped-back, more playful 356 resulted in a Porsche which delivered a unique driving experience, one proving immensely popular in the years following model introduction. The original Speedster has gone on to achieve immortality on the silver screen, with the period's Hollywood film stars regularly photographed in their Speedsters and, much later, films such as *Top Gun* keeping the dinky sports car's spirit alive for successive generations. It's clear how those who sampled the car's carefree character when new concluded they were driving a very special car. A car a breed apart from every other vehicle being produced in post-war Europe, and one just as desirable today as it ever was. Mr Hoffman, we salute you! **Below** Sleek curves and a lightweight chassis made for an irresistible Porsche prospect in 1954



Complete SuspensionPackagesBuild yours at ElephantRacing.com3 clicks... Done!



+1 408.297.2789 ElephantRacing.com Santa Clara, California, USA Fast Worldwide Shipping



NEXT ISSUE ON SALE FRIDAY 1ST MAY

SUBSCRIBE TO GT PORSCHE SEE PAGE 82 FOR DETAILS

RESCUED PORSCHE PRESS CAR



FIND YOUR NEAREST STOCKIST www.bit.ly/gtpstorefinder

BT-CA



swirl marks, stone chips, gravel rash, bug acids and for your Porsche paintwork, preventing unsightly XPEL ULTIMATE PLUSTM is a protective clear film more. Ask for it by name TODAY.

COMPLETE PROTECTION, UNSEEN

tint which is capable of blocking out up to 90% heat inside the cabin, all whilst protecting you Avaialble in multiple shades. Complete with a and your passengers from damaging UV rays. Our latest nano-ceramic automotive window liftime transferable warranty.

COMFORT & PERFORMANCE REDEFINED

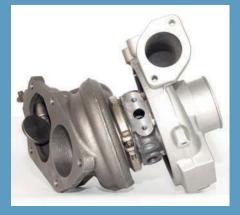




ROOT CAUSES OF CATASTROPHIC TURBO FAILURE

This month, we take a look at the most common causes of turbocharger failure and highlight what you can do to prevent it from happening...

urbochargers are the magical bhp boosters capable of spreading huge smiles from ear to ear, but treat these snail-shaped engine components with disrespect and they'll throw a hissy fit of diva-spec proportions. With this in mind, we thought it a good idea to identify the most widely reported causes of turbo failure and offer advice helping you to avoid frustrating (and expensive) repair work. As you'll discover, turbochargers are far from



the prissy prima donnas many people mistake them for. These performance enhancing components are actually tough pieces of hardware enduring some of the harshest operating conditions your Porsche's powerplant can muster. Looked after properly, they'll last the lifetime of your car, but they also require other engine components to be kept in tip-top condition. Read on and discover the thirteen most commonly reported turbocharger failures and what you can do to prevent them.

TURBO FAILURE

OIL STARVATION

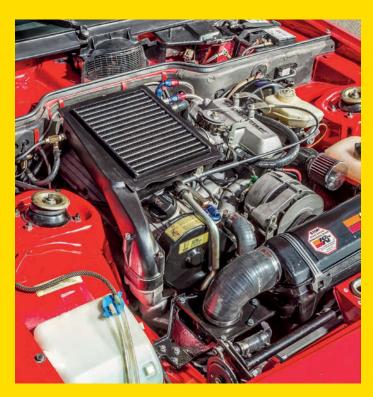
The most common cause of turbocharger failure is oil starvation. A turbocharger's turbine shaft runs at speeds of over 150,000rpm and at temperatures exceeding 900°C. It can do so almost endlessly, but only when lubricated with a constant flow (and pressure) of clean, good quality oil. This not only works to lubricate the thrust and journal bearings, but also helps stabilise the rotating shaft and journal bearings, as well as acting as a coolant. This requirement is intensified as the turbocharger speed and engine load increases. Even a small reduction in oil pressure can be enough to kill your turbo in seconds! The condition can be identified by either 'blueing' on the turbo shaft or seized bearings. The main causes of oil starvation range from oil pump failure, low oil levels and contaminated oil, to broken or blocked oil feed pipes, which can obstruct the flow of the oil to the turbo, even if your oil pressure gauge is registering normal readings. Be warned.

HOW TO PREVENT IT

Use a good quality oil, a good quality filter and don't be afraid to change them sooner than the manufacturer's recommended service intervals. Keep an eye on your oil pressure too — through either the factory gauge or, on older cars, an accurate aftermarket item reading directly from the oil feed union to the turbo — because any drop in pressure will quickly destroy a turbocharger.





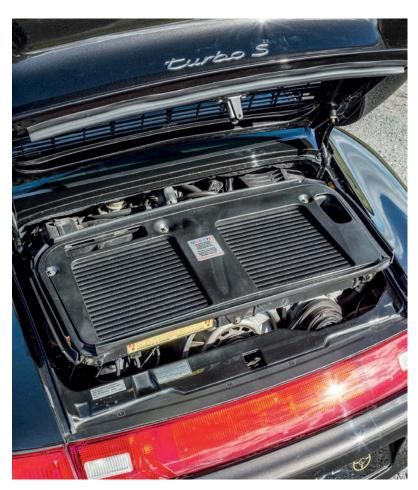


OIL CONTAMINATION

Many people wrongly assume if they run their engine on old, contaminated oil, the oil filter will remove any foreign matter before the dirty lubricant reaches the turbocharger. Just like having a low level of oil is seriously bad news for your car's internal organs, running with contaminated oil is also a sure fire way to kill off your turbo. This is because any particles of debris (ash, soot, the unburned heavy ends of fuel and water, tiny metal particles produced by the general wear and tear of an engine) will eventually pass the filter and find their way to the turbo, causing damage to the previously smooth surfaces of the bearings and shaft. It's not just particles getting past the oil filter that can cause damage, though. Engine problems allowing water or fuel to mix with the oil, even in small quantities, will prevent oil from working as it should, a condition which reduces its supportive, cooling and lubricating functions. And when this happens, the turbo fails first.

HOW TO PREVENT IT

Similar to before, a good quality oil and filter (changed well before the prescribed intervals) is essential, although adding an inline turbocharger pre-filter could also help catch any errant particles hell-bent on waging war on your turbo.



IMPACT DAMAGE

An air filter isn't just there to protect the engine from ingesting harmful debris (dust particles, small stones, dirt and leaves). It's also there to protect the turbocharger's compressor wheel and its delicate blades — almost any object that gets sucked in is going to cause major damage. Just a small chip in one of the compressor wheel blades will cause an imbalance that'll cause the bearings to fail, while greater impacts can snap off portions of the blades, perhaps even shattering the entire compressor wheel! More likely (and easier to prevent), impact damage can be inflicted upon the turbine wheel by debris taking up residence inside the combustion chamber. These foreign objects could be anything from lumps of carbon, injector tips or broken valve parts, to bits of weld or even rust from the manifold. Whatever the cause of complaint, any object hitting the turbine wheel will cause considerable amounts of damage.

HOW TO PREVENT IT

Always invest in a good quality air filter with good filtration and airflow properties. Also, make sure you clean or replace the filter regularly, as per manufacturer instruction. Be sure to check the turbo for loose connections and evidence of unwanted debris, especially if fitting a rebuilt or replacement turbo after a previous failure. If possible, check exhaust manifolds for signs of internal rust or loose weld spots.







BUILD QUALITY

Only quality assured materials are used in the construction of your Porsche. This includes its turbocharger (if applicable). With constant

quality checks on both the materials and workmanship adopted for manufacturing, it's easy to see why OEM parts can be expensive. A high-quality aftermarket turbo, built by a reputable specialist, will also have been subjected to strict quality control, testing and development procedures to ensure the part is fit for purpose. Problems arise when an owner tries to cut costs by purchasing a cheap turbo. These turbos are cheap for a reason, more often than not, a lack of quality control when it comes to materials used and workmanship during construction. This means that, although the resulting turbocharger may seem to operate without fault immediately after installation, its usable lifespan is radically reduced. The savings made on the purchase price are lost through having to buy twice.

HOW TO PREVENT IT

Always do your research! Only buy a replacement turbo from a reputable service provider or retailer to ensure you're getting a quality product tested and developed to deliver the results you need. Also, make sure the company can provide adequate technical support in case of query or a problem with the part you've purchased.

TURBO FAILURE

THRUST BEARING FAILURE As the compressor wheel spins, it's effectively trying to pull the shaft out of the front of the turbo. It's prevented from doing so by the turbo's thrust bearing, which holds the shaft in place and resists this axial force. When the turbocharger is designed, the thrust bearing is selected to deal with the standard boost pressure that the turbo is expected to experience. A 270° bearing is regularly used. Start increasing the boost by way of a remap, though, and the thrust bearing will struggle to cope with what's being asked of it. This can lead to a reduction in lubrication and a rapid increase in wear of the thrust bearing. which can be identified by in-and-out play in the shaft and smoke from the exhaust.

HOW TO PREVENT IT

If your car's turbo is past its best, it's a good idea to have it checked over before you throw more power at it. This could involve asking a specialist to fit new bearings (or even uprated bearings) and a general service of the unit in advance of asking it to work harder.





HOT STOPPING

A turbo spinning at up to 100,000rpm creates a excess heat in the shaft and bearings, much of which is dissipated by the flow of oil. When the turbocharger is allowed to slow down and cool over a reasonable period of time (don't go switching the engine off immediately after a blast along your favourite quarter-mile), this isn't a problem. By shutting off an engine immediately after it has been operating at full chat, however, the flow of oil is immediately halted and heat is trapped inside the turbo. These unchecked toasty temperatures can cause severe damage, including a warped shaft (due to turbine droop), carbonising oil and compromised bearings. At this stage, the failure of your car's turbocharger is imminent.

HOW TO PREVENT IT

It's recommended you end your journey at a more sedate pace or, once at your destination, simply leave the engine ticking over for a few minutes to allow the turbo to cool down. A turbo timer is a device that can be used to do just that and will allow the engine to run on for a set period of time after the ignition has been turned off and the key removed, but check to make sure your insurer will continue to provide cover if you're planning to fit one.

CLOGGED ENGINE BREATHER

The engine breather system is an important part of the engine. It's essentially a one-way valve allowing high-pressure blow-by gases from the crankcase to pass through without causing excessive pressure in the oil system. If the system becomes clogged, it'll allow excessive pressure to build up in the engine, which will then pressurise the turbo system, causing oil to force its way past the bearings. This can result in damage to the bearings themselves, as well as blue emitting from the exhaust.

HOW TO PREVENT IT

For most moderate stages of engine tune, the standard crankcase ventilation system should be able to cope with an increase in engine power whilst continuing to control the emissions from the crankcase. Even on a fairly new car, however, the system should be thoroughly checked and any suspect valves and hoses replaced. For motorsport applications or more radical stages of tune, the addition of a remote catch tank will vent excess pressure and collect any oil vapour.





CARBON BUILD UP

Not only can running your turbocharged car on old, dirty oil cause damage and wear to the bearings and shaft of the turbo, it can also lead to a gradual buildup of sludge, not just in the sump and the engine's oil galleries, but in the turbo's oil feed pipework and inner oilways. Just like arteries in your body, these crucial pathways for the flow of oil – some of the narrowest being as small as 1mm in diameter – are essential to keep your engine and turbocharger in top condition. Any restrictions or blockages due to carbon sludge deposits, therefore, can prove fatal for your turbo. Some cars seem to suffer from carbon build-up and excess sludge more than others due to inherent design flaws. In this instance, there's not much you can do to counter the problem other than keeping an eye on the condition of your car's engine oil when checking its level – thick black oil needs changing fast – and carrying out regular servicing.

HOW TO PREVENT IT

The use of good quality oil and fuel will help limit potential build up, as will regular oil and filter changes. Also, make sure to inspect the waste oil and filter for signs of build up when you replace them to get an insight onto what's going on inside the engine.







OVERBOOSTING

Also known as overspeeding, overboosting is where the turbocharger is operating well above its normal limits, and, like any component working harder than it was ever designed to do, this causes excess wear. This damage can effect everything from the bearings to the shaft and even the turbine and compressor wheels themselves, which can actually expand and rub on the turbo housing, causing damage to the blades, or even burst apart completely due to huge rotational forces. Overboosting can occur for various reason,s from incorrect ECU mapping to a faulty or undersized wastegate or actuator, but is more commonly associated with a simple air leak in the turbo system. There are numerous places that air can leak from, including broken gaskets, split hoses or punctured intercoolers, all of which force the turbo to work harder in a bid to reach the required boost pressure. This cycle continues until the turbo exceeds its prescribed tolerance and fails, often with dramatic results.

HOW TO PREVENT IT

Ensure all the turbocharger pipework, as well as the intercooler, is sound with no splits, cracks or leaking joints. If you're increasing boost on a car with old rubber hoses, consider uprating to silicone hoses, which won't perish over time and are capable of holding greater pressure. Also, ensure the wastegate and actuator are operating correctly and that they're rated to suitably vent enough airflow to maintain the desired level of boost.



BAD REMAPS

Remapping is a procedure where the fuelling, timing and boost parameters of your car's ECU are altered to provide more power from the engine. It's a very safe process when carried out by a professional, who will examine the engine for faults before beginning the process of updating the car's electronic brain with software tweaks designed to keep the turbo within its tolerances. Unfortunately, as well there being many unscrupulous 'cowboy' mappers out there, many cheap, poorly manufactured remaps are freely available. These programs often increase power by simply upping boost levels and nothing more, a change which can cause overboosting (among other potentially damaging issues) and damage your car's engine as a whole.

HOW TO PREVENT IT

When selecting a tuner to alter your Porsche's ECU, make sure you've researched and checked feedback from previous customers. Also try and speak with the tuner to see if they suggest any supporting modifications to achieve the best results. And remember, as well as a way to gain more power, a remap is fundamental to how well your car drives and how reliable it is, so don't be tempted to go with whoever offers the most gains for the least money. It's also worth giving your car a health check before booking it in for a remap – any faults will need to be fixed before a safe and suitable software update can be applied.

COMPRESSOR SURGE

Turbo cars make great noises, especially when they're tuned. It's all part of the fun! Some sounds, however, can signal problems. A 'flutter' or 'turkey gobble' sound (sometimes wrongly referred to as 'wastegate chatter') is a case in point. This noise is the sound of compressor surge, which happens when the turbo is delivering more air than the engine can inhale. Essentially, the air backs up in the system and eventually tries to force its way back through the turbo... the wrong way. The air then hits the still spinning compressor wheel blades, resulting in the noise. This may sound pretty cool to some, but the added pressure on your turbo will cause accelerated bearing wear. You have been warned!

HOW TO PREVENT IT

Eliminating compressor surge can be achieved by fitting a blow-off valve suited to the amount of additional boost that needs to be released. If you're still experiencing surge when the engine is at wide open throttle (WOT) – when any blow-off valve would be shut and not flowing any air– you need to consider other aspects of your Porsche's forced induction system, including turbo sizing, wastegate(s), mapping and actuator function.





TURBO FAILURE

LOOK FOR THE WARNINGS

CHECK ENGINE WARNING LIGHTS

On most modern cars, computer diagnostics will register turbo faults and the engine management light (EML) will illuminate. Of course, an EML doesn't only cover turbo failure, which is why you'll need to do carry out further checks to see what kind of engine problem your Porsche is experiencing.

BOOST GAUGE

Some turbocharged vehicles are fitted with a boost gauge, which lets you know how much boost your car's turbo is producing (you can fit an aftermarket boost gauge to an older car if desired). If boost levels aren't rising as high as they used to during normal driving conditions, there's is a good chance your turbo is in need of repair.

POWER LOSS

If you notice your turbocharged Porsche is accelerating more slowly than usual, or find it isn't capable of reaching the speeds it once could, this may be a sign its turbo is failing.

SMOKING EXHAUST

If the turbo housing has cracked, or the internal seals have blown, oil will start to leak into your exhaust system. As this burns off, it produces a distinctive bluegrey smoke, which will become more apparent as engine revs increase and when you pull away immediately after a period of idle.

WHINING

Often, a failing turbocharger will make a loud, distinctive noise when under boost. The sound is much like that of a dentist's drill (or police siren if the compressor wheel is damaged!). If you hear this sound, it's time to take action.

TURBO FAILURE



FITTING A DRY TURBO If you've had your car's turbocharger serviced or have bought a replacement or upgraded turbo, don't fit it unless the part is primed with oil. From the moment the engine fires up, the turbo will begin to spin very fast. If the oil feed pipe is empty and the turbo un-primed, it could take several seconds for vital lubrication to reach the turbo. A lack of lubrication during operation will easily cause damage to both the bearings and the shaft.

HOW TO PREVENT IT

Simply pouring oil through a straw into the turbo's oil inlet hole will get you going but, ideally, once the turbo is fitted, you want to stop the engine from firing up (by unplugging the ECU or a method achieving the same thing), only turning it over until the oil light goes out on your dashboard. You can then start your Porsche in the usual way. That said, it's recommended you leave the engine idling for around five minutes to allow the oil to warm up before you engage in a test drive.



EXCESSIVE EXHAUST GAS TEMPERATURES

Turbochargers are built to withstand the high temperatures generated during normal operation conditions, but excessively high exhaust temperatures can cause catastrophic damage. Typically, this damage is located around the turbocharger's turbine, cracking the housing, causing excessive erosion and corrosion, whilst causing collateral damage to other components, such as the wastegate.

HOW TO PREVENT IT

Excessive exhaust gas temperature (EGT) can be caused by various complaints, including poor quality oil, faults in the oil cooling system, incorrect mapping, poorly executed engine modifications and skimping on essential maintenance. To ensure your Porsche's EGT is staying within a safe range, fit an EGT sensor, ideally one that feeds back to the ECU. That way, if the temperatures dramatically increase beyond what's deemed safe, the engine can be shut down before any damage is done.





BATTLE STATIONS

If you notice any of the warning signs, then get your car's turbocharger checked as soon as possible. It isn't going to repair itself, and the longer you leave it, the worse (and more expensive) the problem will become. Essentially, you're looking for signs of oil, excessive movement, impact damage and contact between the compressor wheel and housing. Before you start the process, we recommend checking the air filter, exhaust system, breather system and fuel system on your vehicle are all working properly, primarily because these items can cause similar symptoms to turbo failure. Once satisfied, it's time to check the turbocharger.

First, examine the exterior, checking for any signs of oil or loose connections. Then, check the compressor wheel – it should be clean, without any dings, chips, or signs corrosive pitting. Look for evidence of excessive movement, ensuring the wheel can't touch the housing, and check to see whether the wheel is able to rotate freely. If you're feeling particularly ambitious, you can also check the exhaust side of the turbo. The turbine wheel should look clean, with no carbon build-up, scale or oil along the surface, and the blades should be free from cracks, wear and damage. Finally, check the turbo housing at the exhaust end for any cracks or leaks, which will have a detrimental impact on your Porsche's performance. If in doubt, seek the help of a forced induction specialist.

#1 ONLINE STORE FOR TURBOS & PERFORMANCE

THE BUT TOP TOP TOP

BorgWa

C 6 Month Money Back Shipping Free Customer Service



www.TurboZentrum.co.uk

10% OFF WITH FC10

THE VAULT

RAISING THE ROOF

Fifty-five years on from launch, Porsche's first *al fresco* 911 forged a path to creativity and innovation continuing to this day...

-7

G2I8 DT J

Words Richard Gooding and Dan Furr Photography Various

TARGA HISTORY

ollowing the success of the 356, the 911 had a lot to live up to. Unveiled with its 901 designation at the Frankfurt Motor Show in September 1963, the new Porsche was in the sports coupe mould of its predecessor, but unlike the older two-door, there was an immediate lack of cabriolet or roadster to get excited about. Chatter in Stuttgart had already started regarding the development of an open-top 911, but no satisfactory way of configuring the new model materialised. Besides, the 911's designer, Ferdinand 'Butzi' Porsche (son of Ferdinand 'Ferry' Porsche, grandson of Ferdinand Porsche), was sceptical of fastback soft-tops, preferring a coupe for Porsche's output. The location of the 911's flat-six didn't help matters – any convertible hood would need to be ungainly stowed on top of it.

Sales of the 356 Cabriolet in North America had been vitally important to Porsche's bottom line and the brand's visibility in a massively lucrative overseas territory, so much so that the USA quickly became Porsche's biggest sales market. Despite Butzi's reservations, it was clear Porsche needed something suitable to replace the open-topped 356. There was, however, an unexpected challenge to deal with: motoring hacks were circulating rumours regarding the US National Highway Traffic Safety Administration's apparent desire to outlaw sales of traditional drop-tops due to an increasing number of deaths caused by flipping convertibles. Needing a model suitable for both European and North American dealer showrooms, Porsche deemed a 'regular' cabriolet out of the question, a decision which gave rise to a different route to realising a fresh-air 911. And so, the Targa concept was born.

ROLL WITH IT

The star of Porsche's exhibition stand at the 1965 Frankfurt Motor Show, the Targa was a 911 equipped with a lift-out roof panel, a fixed rollover safety bar and a removable plastic rear window. While it wasn't a full open-top, it was the most exposed the 911 would be until the introduction of a full cabriolet variant of the model some seventeen years later.

911 Targa production started in 1966 ready for launch the following year. Although the model's DM22,30 starting price encouraged slow sales figures, the new arrival was soon accounting for a massive forty percent of all 911 sales in Germany. A total of 718 Targas were made in the first twelve months. Build numbers were then increased from seven cars a day (compared to fifty-five 911 coupes) to ten. A sales boom was underway, although issues concerning supply and demand meant British buyers had to wait until February 1973 for the 911 Targa to land in the United Kingdom's Porsche main dealer showrooms.

Porsche pitched its new design as "the world's first safety cabriolet." The Targa sported a distinctive appearance – the aforementioned roll bar had to remain in place in the interests of structural rigidity and what the manufacturer thought US legislators might bring to law, yet the Zuffenhausen design team managed to make the Targa's defining feature a thing of beauty by affording it a brushed metal finish with a model-specific badge at its base. A design element that would go on to become an important part of the 911's heritage, this stainless 'hoop' ensured the **>**



first open-to-the-elements 911 was instantly identifiable to even the most casual of car fans.

The Targa's rollover bar was updated with a trio of 'gills' in 1969, drawing further attention to the model's most distinctive feature, but despite Porsche's efforts in styling, there were detractors who thought the 911's beauty was actually inhibited by the roll bar, as though it spoiled the smooth lines of the model's flowing bodywork. In truth, a completely new body style was out of the question – interchangeable parts with the coupe reduced machining and tooling costs. Indeed, doors, wings and other exterior panels could be shared between the two body styles.

SWIFTY FIFTY

Despite the extra weight delivered by chassis rigidity enhancements, the 911 Targa tipped scales at just fifty kilograms more than its closed-top sibling. The Targa's removable rear window helped to lighten the load (at the same time as improving aerodynamics), but it didn't do much for the model's looks. In fact, when viewed side-on with the rear window removed, the car can be described as having an appearance similar to that of an Erdbeerkörbchen (strawberry basket). Consequently, though optional during 1968, a fixed, heated and beautifully curved glass rear screen became permanent in 1969. More practical and more elegant than its plastic (and often brittle) predecessor, the domed glass immediately banished the early 911 Targa's slightly awkward looks. Plus, because the new rear screen was bonded to the roll bar, structural integrity of the car as a whole increased. New seals made the Targa better protected from the elements, and when driven at high speed on the autobahn, the new rear glass retained its



Above The very first 911 Targa during testing in advance of launch for the 1967 model year

Previous spread Targa-topped 964s are considerably cheaper than their coupe siblings

Facing page In 2015, Deutsche Post released a stamp featuring the soft-windowed 911 Targa as part of its *German Classic Cars* stamp series

Left 911 SC Targa followed the same design cues as its predecessor





TARGA HISTORY









shape, unlike the earlier plastic screen, which suffered from unsightly ballooning. No longer would you have to worry about having to return from a visit to your hairdresser, only to have your new beehive barnet blown out of shape!

But why the Targa tag? Porsche marketing man, Harald Wagner, named the new 911 after the Targa Florio, a challenging endurance race which scythed its way through mountains on the island of Sicily. Porsche enjoyed eleven victories at the fearsome event – reason enough to mark the achievements with a 911 model nameplate – but in Italian, Targa translates as 'shield', which served to emphasise the protective nature of the Porsche's roll bar. This was the first time the Targa name was used to refer to a semi-convertible sports car. In fact, few people realise Porsche trademarked the Targa name after Wagner successfully presented it to the company's board of directors, so widespread is its use.

As time went by, Targas mirrored the trim level of hardtop 911s. That said, at launch, the 160bhp 911 S Targa's twolitre flat-six delivered 50 bhp less than the coupe equivalent, although both cars enjoyed the same sense of style. The 130bhp 911 L Targa sat somewhere between the two. Later, 1974 saw a radical revamp of the 911 concept, resulting in the 'impact bumper' G-series. The Carrera 2.7 enjoyed mechanical fuel injection and 210bhp, while the 200bhp Carrera 3.0 of 1976 gained a continuous injection system. In 1978, the 911 SC Targa was revealed, but even when rumours started circulating regarding the potential discontinuation of Porsche's flagship model at the start of the new >>

FAMILY TIES

Everyone knows about Porsche's success with the 911 Targa, but were you aware of the 2,500 912 Targas built? Produced between 1965 and 1969, the four-cylinder 912 Targa enjoyed the same styling as the semi-open-top 911, though it lacked the performance of its biggerengined stablemate. Available to buy at a much lower price than the 911 Targa, however, the 912 Targa 'Series 1' featured a zip-out plastic rear window, while the 'Series 2' 912 Targa of 1968 featured the domed rear glass most people associate with Targa-topped sports cars from Stuttgart. Interestingly, the 100,000th car to roll out of Zuffenhausen was a 912 Targa bought by the Baden Wuttemberg police force, the law enforcement agency patrolling Porsche's home state. The ability to remove the car's roof panels was seen as a big advantage by officers who would stand up (yes, really!) in their Targa-badged Porsches in order to manually signal to motorists. Japanese traffic cops were also taken with the 912 Targa's svelte body and quick pace, ordering a fleet of them before discontinuation and the arrival of the 914 in 1969.

TARGA HISTORY

decade, the 3.2 Carrera of 1983 ushered in a Targa variant packing a hefty 231bhp.

The first fully open-topped 911, the SC Cabriolet, debuted in 1982 as a 1983 model. Up until that point in time, Targabadged 911s had enjoyed success as a highlight of the 911 line-up. The Cabriolet's arrival, however, caused the Targa's shining light to dim. Not enough for Porsche to stop producing the model (the basic concept lived on until 1994 before being rebooted with the 991-generation 911), of course, but certainly enough to have a significant impact on 911 Targa sales figures.

A NEW TWIST

It's worth noting that from 1975, a satin black roll bar could be specified in place of the brushed metal part supplied as standard equipment, but by the time the 964 Targa pitched up in 1990, the darker finish was the only available option. Also, the most aggressive classic Targa is accepted as being the open-top version of the 1987 930 (911 Turbo). In production for only a single year and often thought not to exist, only 193 examples are thought to have left Zuffenhausen's workshop doors. It's a real 'Marmite' model, combining Targa style with the chunky looks of a whaletailed Turbo. Like it or loathe it, there's no denying it's a monster of a machine.

In 1995, Targa took on a new twist. By this time, the 993 was in production, the last generation of 911 to truly be able to trace its roots back to the 901/911 prototype. This last hurrah for air-cooled Porsches brought with it a radical new way of looking at the Targa concept – the 993 Targa made its debut in Frankfurt, thirty years after the original semiopen 911 was presented to the world. The "new Targa for a new generation" featured an electrically operated retracting glass roof panel which slid inside the host vehicle's rear Below A brilliant display of evolution in the underground garage of the Porsche Museum: (left to right) 911 Targa 2.0, SC Targa, 964 Carrera 2 Targa and 991 Targa 4S window at the push of a button. User convenience was the order of the day, but at what cost? There was no longer the need for a standalone roll bar, meaning in profile view, the new Targa was virtually indistinguishable from its coupe stablemate, the only notable difference being the way the rear side window sloped to where it met its neighbouring bodywork. There was no removable roof panel, no metal 'hoop'. Admittedly, the new panoramic view afforded to occupants when the glass panel was in place was a great idea, but to all intents and purposes, the 993 Targa was a hatchback coupe with a fancy sunroof.

The revised Targa concept continued with the 996 Targa of 2002 and the four-wheel drive 997 Targa of 2007. Thankfully, Porsche acknowledged the historical significance of the original Targa when a brushed metal roll bar was fitted to the 991 Targa 4 and 4S. Operation of the roof remained electric, but the domed rear window concept returned, Then, in 2015, the 424bhp GTS became the most powerful 911 Targa ever built. Big bhp and electrical trickery are, of course, all well and good, but if we're being honest, they're not wholly true to the original Targa concept. Modern versions (recent spy photos suggest the launch of a 992 Targa is imminent) may be fast, practical and convenient, but in terms of style and desirability, they can't hold a candle to the classics.

Porsche was clever enough to make its first open-air 911 distinctive and classy through a well-executed design. Fifty-five years on, we're pleased to see demand is once again high for this sexy, middle-aged model, especially considering classic Targas in excellent condition can be bought for a significantly lower purchase price than the equivalent coupe (hit the classifieds, people!). Oh, and that predicted ban on soft-tops in the USA? It never happened. Perhaps rumours aren't so bad after all?!



FORGELNE

CUSTOM BUILT, LIGHTWEIGHT, FORGED ALLOY WHEELS

#NEVER COMPRIMISE

When Betim Berisha from BBI Autosport built the **no compromise** 900 hp Hillclimb Monster there was never a question on what wheels it needed to have.

After 25 years of involvement with teams of virtually every sports car racing organizations in the world. We have learned what it takes to produce a racing wheel that can withstand the fierce conditions of the sport.

We put that level of commitment into every wheel we make.



AMERICAN DESIGNED AMERICAN MADE

800-886-0093 WWW.FORGELINE.COM





BACK TO THE FUTURE

3

TBD 944P

Fast approaching its thirtieth anniversary, the seldom seen 944 Turbo Cabriolet is one of the rarest production Porsches and can be considered a precursor to the 718 Boxster S...

Words Dan Furr Photography Dan Sherwood

here the 924 faced criticism from 'purists' upset at the fact that the popular Stuttgart-badged 2+2 was loaded with equipment highlighting the model's origins as a joint venture between Porsche and Volkswagen, the 944 that followed put paid to any whinging. Here was a Porsche launched with a robust 2.5-litre engine essentially a developed 928 V8 cylinder bank - from the manufacturer's own stable. The car boasted wide rear quarters (hello to the 924 Carrera GT fans among you), optimised handling and, in true Porsche fashion, was the subject of a continuous development programme that saw various tweaked and tuned coupé and open-top 944s go on sale with either naturally aspirated or forced induction powerplants during the course of a near tenyear production run.

In 1991, Porsche unveiled the 944 Turbo Cabriolet. By then, the boosted hard-top variant of the frontengined, rear-wheel drive supercar was chucking out 250bhp and had been treated to suspension, brake and transmission upgrades formerly the reserve of those taking advantage of main dealer cost options. The turbocharged 'al fresco' 944 inherited the very same kit from the off. Of the 625 examples made, none were imported Stateside and only a hundred were built with right-hand drive, shared between all applicable territories, making the model a rare sight on British roads (just sixty-two examples are listed at *howmanyleft.co.uk*, and half of those are declared SORN). Its scarcity has seen it become one of the most desirable Stuttgart drop-tops, a status that's a far cry from the 'not a proper Porsche' accusation often levelled at transaxles by those who have yet to experience the quality of engineering, performance and comfort these cars have to offer.

FAMILY TIES

Of course, air-cooled Porsches and their flat-six engines have been the driving force behind the surge in popularity (and price) of classic German metal in recent years, but you only have to take a look at the current product line-up from our favourite car maker to realise the 944 Turbo Cabriolet represents a formula that works just as well for Porsche today as it did more than a quarter-century ago. Yep, we're referring to the manufacturer's 718 Boxster S offering, a convertible powered by a turbocharged 2.5-litre four-cylinder engine. A step back to the future, or one designed to keep a respectable distance from the sixes? You be the judge, but there's no denying the newer car's following of a tried and tested path offering practicality, power, great handling and fuel efficiency as laid down by the similarly configured 944.

With a quoted maximum speed of 162mph and a 0-100km/h sprint of less than six seconds, the 944 Turbo Cabriolet promised performance in keeping with that of its fixed head sibling. The cab's chassis was stiffened in order to reduce the kind of body roll and flex so often associated with open-topped sports cars – rigidity was achieved by welding together two floor pans. The work was carried out by American

OF THE 625 EXAMPLES MADE, NONE WERE IMPORTED STATESIDE AND ONLY 100 WERE BUILT WITH RIGHT-HAND DRIVE, SHARED BETWEEN ALL APPLICABLE TERRITORIES









Sunroof Corporation (ASC) at its base near Stuttgart. In short, 944 coupés were wheeled into the Weinsbergbased facility before literally being cut down to size. A windscreen with a pronounced rake and a 60mm reduction in height was then added, along with a metal boot lid and an electrically operated, manual locking, twin-lined fabric hood.

With classic 911 prices regularly exceeding expectation, cars from Porsche's transaxle have been riding the same wave. As if to prove the point, the 944 Turbo Cabriolet on the pages before you

944 COUPES WERE WHEELED INTO WEINSBERG BEFORE LITERALLY BEING CUT DOWN TO SIZE

recently sold for almost forty grand, smashing its lower by a considerable margin. While this particular car's spectacular condition and low mileage were undoubtedly factors contributing towards the respectable sale price, the 924, 928, 944 and 968 are increasingly regarded as cost-effective routes to owning a classic Porsche, with prices starting from less than four grand for a presentable 924 with a fresh MOT.

The 944 Turbo Cabriolet was only in production for few months, but it remains one of the highlights of Porsche's transaxle back catalogue. The 'charged rag-top represents the pinnacle of the 944's dealer showroom specification, the final chapter in the evolution of the model before it made way for the fresh-faced 968. Even so, recognising the popularity of chopped 944s, Porsche was quick to release a similar incarnation of the 968, which you can also read about in this issue of *CT Porsche*. In terms of exclusivity, however, the 944 Turbo Cabriolet remains king of front-engined, water-cooled Porsche convertibles.

Below Force-fed 2.5-litre inline-four gives the 944 Turbo Cabriolet just the right level of kick for fun in the sun





Previous spread The open-top 944 Turbo was the ultimate dealer spec model variant



https://www.longstonetyres.co.uk/classic-car-tyres/porsche/944.html Early 944 with 15" wheels: XWX CN36 SMXXM3 P7 +44(0)1302 711123 www.longstone.com





OUT & ABOUT

VERY CHERRY

A pub in rural Essex has become an unlikely home for a must-attend Porsche meet...

Words and photography Steve Hall

ars and coffee. It's a phrase that easily rolls of the tongue, doesn't it? A moniker so familiar to the motoring community that we've even got a venue with a name resembling a poshed-up version of the phrase (yes, I'm talking about the epic Caffeine & Machine in Ettington). Nowadays, it's easy to find cars and coffee meets, but it wasn't always this way, with Lord March's Goodwood Breakfast Club (established in 2006) serving as inspiration for the many that followed.

It's a theme of event with origins firmly in the USA, where cars and coffee gatherings have been happening for decades. It's where Gary Downham, owner of Pie & Pint Inns, first encountered them in the early 2000s. Excited by what he was seeing in the balmy Florida sunshine, the Porschephile immediately recognised cars and coffee meets as perfect for an inveterate car enthusiast who just happens to be in charge of a chain of quality country pubs in the UK.

His first cars and coffee (and cakes) meet took place at The Hare in Roxwell, back in April 2010. The event was promoted through car clubs, specialist dealers and forums. And if a parking lot empty of all but a Ferrari 250 SWB at 9am didn't bode well, the ninety cars which arrived before midday proved the event a roaring success and worthy of being a firm fixture on every car nut's calendar. Fast-forward to the present day, and Gary's meets are even more successful, drawing around 120 cars per event, from valuable European classics to a selection of Japanese curios.

Having owned every flavour of Porsche CT car from the 996-gen 911 onwards, it didn't take long for Gary to decide to expand his schedule of meets to include single marque events, hence our invitation to the inaugural Porsche bash at The Cherry Tree in Stambridge. The lure of forty recent GT cars, not to mention a brace of special racing machines, a selection of classics, a bacon roll and endless cups of the brown stuff? Count us in!

ROAD AND RACE

Despite a dank start to the day, the pub's car park was littered with CT-badged 996s, 997s, 991s and ultra-rarities in shape of a 991 R, 991 Speedster and, threatening to steal the show, the stunning Replica 917 built by the guys at by Icon Engineering. The undoubted stars of the day, however, were the pair of race cars brought to Stambridge by Antony Kingham, co-owner of Suffolk-based premium car storage service, Ecurie 137. His Freisinger 996 GT3 RS finished seventh overall and second in class at the 2001 24 Hours of Le Mans, whilst the Dick Barbour car won its class in the 2000 American Le Mans series. Not just any old race cars, then?! And if these magnificent motorsport machines hadn't already generated a buzz, the 10am sound-off between them corralled everyone in an epic battle of screaming flat-sixes!

Though GT cars were given pride of place in the main car park, other Porsches could be found in the nearby overflow parking area. Caymans, Boxsters and even a 356 turned out for the occasion, as did a faithful 993 RS evocation. At its peak, the event hosted seventy Porsches, a number confirming its return in the not too distant future, though with plenty of space to play with, Cary has plans for a grander, more impressive get-together for Porsche aficionados next time around. Considering the fantastic venue, great setting and superb selection of cars at his first Porsche meet, we can't wait!

















Top Though the main car park was reserved primarily for Porsche GT cars, 911s of all ages and all states of tune muscled in

Left You're not going to miss this appearing in your rear-view mirror!



BILSTEIN

Above Gary's 991 GT3 RS flanked by the duo of 996 race cars brought to the pub by Ecurie 137's Antony Kingham

OUT & ABOUT

LE MANS C

GT

y.

THE CHERRY TREE

Wollek







AI GET





SUNDAY 4TH OCTOBER SILVERSTONE CIRCUIT

DEDICATED CLUB DISPLAY AREAS LIVE ACTION ENTERTAINMENT DRIFT DEMONSTRATIONS ALL DAY TRACK ACTION RETAIL VILLAGE



anieters

-

BOOK ONLINE NOW WWW.TRAXSHOWS.CO.UK

BMW

£2 booking fee applies. Under 18s must be accompanied by an adult. All attractions are subject to change. Advance public tickets sales close Midnight Saturday 3rd October 2020. Club booking deadline Friday 18th September 2020 or until space sells out. Warning motorsport can be dangerous.

968 CABRIOLET

FLYING COLOURS

Finished in rare Mint Green, this immaculate 968 drop-top proves the magnificent model delivers just as much 'show' as it does 'go'...

ds Dan Furr Photography Dan Sherwood

LGOT UEG



HIT THE ROAD

A 968 Roadster concept was produced in 1992 to evaluate the enticing prospect of a more glamorous open-top Porsche. Ditched in favour of the stunning Boxster concept of 1993, the Roadster was penned by Porsche design legend, Harm Lagaay. Fixed 993-style headlights, a lower windscreen rake and a widened rear deck marked the Roadster as something special. Speedlines borrowed from the 964 range, vivid Tahoe Blue paintwork and a colour-coded dash inlay were also added to the one-off rag-top.

12 -1

espite the colourful variety of hot hatches and sporty saloons car manufacturers have laid before us over the years, one body style manages to exude glamour like no other: the cabriolet. It's a simple idea remaining popular throughout automotive history, and it doesn't take much to bring to mind images of the rich and famous cruising about in exotic drop-tops while Joe Public pootles around in comparatively drab machinery.

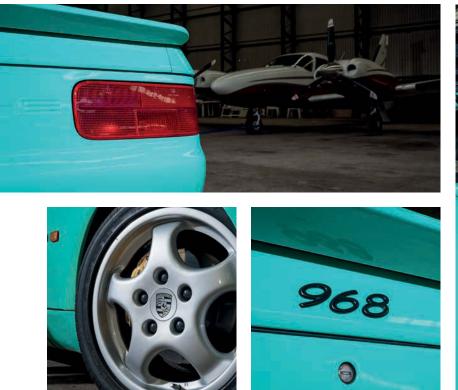
It's safe to assume Porsche is one of the marques most people will visualise when asked to picture a roofless sports car, but how many will tell you they've brought to mind the image of a 968? We'll wager the answer to that questions is "not very many", and even fewer will be thinking about a Mint Green open-air 968. The fact less than 4,500 968 Cabriolets rolled off the Porsche production line – more than half that number were exported to the USA – explains why the casual car fan might not be familiar with the model. Moreover, it won't take long for you to count the number of Mint Green examples built – just three of these distinctively styled 968s were sold in North America, and only one of the trio was a Cabriolet. It's a similar story in the UK, where just 218 968 Cabriolets landed on British shores.

The 944 enjoyed success as blistering as its sills, and after the release of the S2 in 1989, factory bosses made plans to further develop the model. The next-gen 944 was set to wear the S3 designation, but so extensive were the proposed changes, it became clear the resulting model would be verging on an entirely new Porsche. With CEO, Peter Schutz, out the door, Ulrich Bez stamped a new, randomly generated badge on the four-cylinder transaxle line's ultimate development. The 968 was born.

Launched in August 1991 for the 1992 model year, the new sports car from Zuffenhausen made use of a claimed eighty percent new parts and design when compared to its predecessor. Even so, lineage all the way back to the 924 of 1976 was clear to see - the basic profile from the 968's curvaceous wheel arches upwards, including the coupe's window silhouette, was clearly inherited from the first model to be listed in Porsche's transaxle range. Keen to forge a 'family resemblance' between its then available line of cars, however, chief designer, Harm Lagaay, introduced 928-style visible pop-up headlamps to the 968. The 944's wide rear quarters remained, though more integrated bumpers, smoother lines and gently curved corners joined them. Neat touches included revised wing junctions, as well as door handles and mirrors which debuted on the 968 before being fitted to the 993-generation 911. A Fuba 'bee sting' aerial was included, as was a subtle Porsche script between all-red rear light lenses. 968 badging was proudly displayed above them.

FINAL FLING

The new Porsche romped from 0-62mph in 6.5 seconds thanks to an upgraded version of the 944's four-cylinder sixteen-valve engine. Displacement was now 2,990cc with a power figure of 240bhp in a standard state of tune. A new exhaust and revised induction equipment ensured the more powerful engine could breathe easily, while updated engine management software and a dual-mass flywheel helped to enhance the basic package. Big news concerned the introduction of Porsche's new VarioCam variable valve timing (VVT) system. Debuting on the 968, the VVT arrangement would become a feature – some would say a defining one – of the last air-cooled 911. Applied to the 968's inline-four, VarioCam came on song between 1,500rpm and 5,500rpm, assisting the production of 225lb-ft torque at 4,100rpm. The last four-cylinder Porsche until 2016's 718





COMMERCIALLY, THE 968 WAS A FLOP, BUT DYNAMICALLY, IT REMAINS ONE OF THE KEENEST, MOST DRIVEABLE AND PREDICTABLE CARS PORSCHE HAS EVER BUILT

Above The 968 was Porsche's last new front-engined model until the introduction of the Cayenne in 2003

Facing page The 968's three-litre

lump can trace its roots back to the 944 S2, when the unit was heralded as the largest production inlinefour of its time Boxster, the 968 had both the power and the technology to match its streamlined appearance.

Here's where Porsche fans really get talking about the 968: name a Porsche convertible that's better looking than its coupe equivalent. Tricky one, eh?! Cranted, a 356 Speedster is pretty damn gorgeous from whichever angle you look at it, but if asked to pick from the modern crop of Stuttgart metal? You might be left scratching your head. Wind the clock back, however, and the 968 is, in the eyes of many Porschephiles, the exception to the rule. Commercially, of course, the car was a flop, hence the low production volume and hardly anyone outside Porsche circles knowing about it, but dynamically, it remains one of the keenest, most driveable and predictable cars Porsche has ever built. Autocar declared the 968 to be "the world's best-handling car." Car added its voice to the debate: "there has never been a better-balanced, front-engined, rear-drive car than the 944 Turbo, yet the 968 is just as good. Fast, sure-footed and manoeuvrable, it's thoroughly entertaining on winding roads." The deal was sealed. Porsche had done what seemed like the impossible; it had developed the 944 (the most successful product in the Stuttgart brand's back catalogue until the arrival of the 986 Boxster) into a model even more admired by the motoring press.

Adding to the appeal, this slice example of transaxle

excellence was available as a soft-top. Forged lightweight pistons and connecting rods, coupled with an increased compression ratio, allowed maximum power at a very credible 6,200rpm. With the high-revving four-pot seated up-front and VarioCam providing pronounced shove, the Cabriolet was capable of launching to 60mph from a standing start in 6.5 seconds, topping out at 165mph. A new six-speed gearbox was a ratio up on the outgoing 944's transmission. North American buyers less than thrilled at the prospect of stirring yet another Porsche 'stick shift' took comfort in the option of the then three-year-old 964-derived four-speed Tiptronic as a cost option, though the system makes the 968 feel heavy, almost agricultural, most unlike much later developments of the same transmission. Familiar equipment remained in the form of a chassis kit inherited from the 944 S2, one that could trace its roots back to the 944 Turbo. Like the force-fed model, the 968 included Brembo four-pot calipers, while extensive use of new aluminium suspension components kept weight down to 1,370kg.

In addition to new cast alloy control arms, stiffer antiroll bars and new dampers, the body shell was all new. Porsche's financial situation, however, was evident in the finished product: those polyurethane bumpers and large 'hockey stick' side skirts were attached to galvanised



steel panelwork, where large gaps were a result of using the 944's chassis tooling, strong reminders of the budget restraints placed upon Porsche's design team during a period when the company's future looked decidedly uncertain. On the plus side, with so few 968 Cabriolets built, the model is one of the rarest, most robust and underrated drop-tops ever manufactured. Above Interior is another 944 hangover, but looks fresh, even by most modern automotive design standards

The magnificent Mint Green example pictured on these pages was registered in May 1994, during the height of Britpop. Supplied new by Porsche Centre Cambridge, the car has remained in the East of England since that time. Pretty much standard specification throughout, it benefits from being owned by enthusiasts who have spared no expense to keep the rare retro ride in the very best condition possible. To that end, a recent transmission overhaul ensures slick shifting, while a wealth of new genuine Porsche parts supplied by Porsche Centre Hatfield includes a new gear knob, handbrake cover, gaiters, floor mats, cigar lighter and a rear luggage compartment carpet. The paintwork pops thanks to detailing work carried out by car care company, Cambridge Concours. Interestingly, this super-cooled Cabriolet was supplied to its first owner with wheels colour-matched to the bright bodywork. Now finished in subtle silver, they're wrapped around recently refurbished brake calipers powdercoated yellow.

WAGING WAR

The 944 Cabriolet and, consequently, the 968 Cabriolet, was largely a response to the threat posed by car makers from the Land of the Rising Sun to Porsche's dominance of the lucrative sports car sales sector. The front-engined, rear-wheel drive, four-cylinder Mazda MX-5 was selling like hot cakes (going on to become the most successful two-seater sports car in history) and Porsche recognised it needed to update its front-engined, rear-wheel drive, fourcylinder line-up with an open-air option. If you're thinking of jumping out of an MX-5 into a 968, however, be prepared for how heavy the Porsche feels by comparison. Of course, it's heading squarely towards double the Mazda's kerb weight, making for a lousy power to weight ratio, but that doesn't make it any less of a true driver's car.

The Porsche's near equal front-back weight distribution, for example, makes sure the heft being carried is supremely managed, as declared by two-time World Rally Championship victor, Walter Röhrl, shortly after model launch, when he famously announced the 968 as being the **Below** One of the only Porsches considered better looking than its coupe equivalent best-handling car Porsche had ever made. Praise indeed, though the 968 being such a well-balanced machine is what makes it so easy to live with, and why so many owners use their examples as daily drivers, even today.

Climbing into the minty marvel's figure-hugging 'tombstones', we're reminded of how good the oval-styled dash introduced to the 944 Turbo and carried over to S2 and 968 production is, though the jury's out on whether the inclusion of faux wood inserts for this particular car was a wise decision. No matter, for when the three-litre lump up front (the biggest four-cylinder powerplant fitted to a production car for many years) roars into life, the only thing you'll want to be concerned with is pushing forward and allowing VarioCam to do its thing.

This engine sounds as gruff as the car's significant footprint (more than 4.3 metres in length) might suggest, the noise all the more vibrant in a Porsche lacking a roof. It's a glorious din and one easily controlled by the excellent positioning of the 944-inherited pedals, stubby gearstick and steering wheel, further helping illustrate our point about how easy the 968 is to work with for drivers of all abilities, not to mention how ahead of the curve Porsche was when it came to cabin design back in the mid-1980s. The torque on tap urges the car onward, high speed reached quickly, superior grip providing ample confidence when tackling tight corners at significant pace. By period standards, it's a big sports car, but the chassis is sublime and the steering precise. Perhaps there's an argument for the 968 being too comfortable and, perhaps, too easy to control, but if you're after a less civilised 968 driving experience, there's always the option of buying the rangetopping Clubsport, but be mindful of the fact it's unlikely to be a car you'll want to live with every day and, of course, there's no Clubsport Cabriolet.

If there's a benefit to the wider world being unaware of the 968's existence, it's that prices on today's used car market are relatively low (expect change out of fifteen grand for a low-mileage Cabriolet). Considering parts availability is high, it's difficult to think of another retro Porsche offering quite so much bang for your buck. This really is one of the best equipped, best handling Porsches to date, with superb styling being a major part of the package. And if you hear anybody speaking to the contrary, simply show them pictures of this Mint Green 968 Cabriolet, one of Porsche's most attractive topless glamour models.



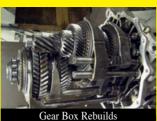


general repairs and servicing



Wheel Alignment





all models



Air Conditioning



Disc Re-facing



Wheel Balancing, Whe Straightening & Re-Furbishment



AND CARRIED OUT IN HOUSE.

Mon-Fri: 7am-7pm Sat: 9am-6pm Sun: please call. Ask Bob for booking & advice.

- RGA — LONDONS MAJOR PORSCHE SPECIALIST Units 32-34, Miles Street, Vauxhall, London SW8 1RY www.rgaindependentporsche.co.uk Tel: 0207 793 1447 Email: bob@rgaporsche.co.uk ALL WORK TO THE HIGHEST STANDARD

Restoration & Resprays



Damage Repair including for all insurance companies



Torque Tube Overhaul 924,944,968,928



DONINGTON PARK CIRCUIT



SATURDAY 18TH JULY 2020

DONINGTON SUNDAY 19TH JULY 2020

TICKETS **£38*** ENTRY TO BOTH SHOWS!

COMBO

RETAIL VILLAGE MAGAZINE PADDOCKS ALL DAY TRACK ACTION LIVE ACTION ENTERTAINMENT DEDICATED CLUB DISPLAY AREAS

BOOK ONLINE NOW WWW.FASTCAR.CO.UK/FCE EVENTS

CLUB DISCOUNTS AVAILABLE















*£2 booking fee applies. Club discounts subject to availability, limited tickets available at discounted price. Under 18s must be accompanied by an adult. All attractions are subject to change. Advance public tickets sales close Midnight of the day before the event. Club booking deadline Friday 3rd July 2020 or until we reach capacity. Warning motorsport can be dangerous.

IN PROFILE



MAX HOFFMAN

t the Paris Motor Show in 1950, a decisive meeting took place between Ferdinand 'Ferry' Porsche and US-based car importer. Maximilian Edwin Hoffman. a former European racing driver of Jewish ancestry who'd emigrated to America to avoid persecution from the Nazis. After deciding to become a Stateside dealer of luxury European sports cars, Hoffman established his own network of prestigious showrooms. Crucially, he had an acute sense of what the upper classes of post-war America were looking for when it came to fast fun on the road, which is why he was keen to



tell Ferry how impressed he was with the 356 when the two men met in France. Recognising the diminutive Porsche (the 356, not Ferry!) was the perfect offering for America's young petrolheads, Hoffman agreed to accept three cars in October 1950, on the understanding he could have at least fifteen more units delivered to his New York showroom every year thereafter.

As soon as the first despatch of 356s landed at his feet, Hoffman proved how good he was at marketing — in parallel with the Porsche presentation at his dealership in New York, he gave respected racing driver, Briggs Cunningham, a 356 to compete with at the track. The model immediately

became the car to beat, delivering victories having a hugely positive impact on Hoffman's showroom sales.

As if prospective purchasers needed any more convincing, stars of the silver screen (not least, James Dean) championed the 356. Even so, Hoffman quickly realised he'd need US-specific Porsches if he was to secure a lucrative market share of the total number of cars being sold in the territories his business operated in. With this in mind, he pressed Ferry for a lightweight, stripped-back 356 equipped with a lowraked windscreen, bucket seats and a detachable folding top.

Hoffman's desire was to present an affordable sports car that could be used for daily driving duties during the week, before being put to use as a track toy at weekends. His demands were met in the form of the 356 Speedster, a car available to buy in North America from 1954.

SWING STATES

With a price tag of \$3,000, the 356 Speedster became a big hit, with production peaking at 1,171 cars in 1957. Hoffman built on the model's success by growing the popularity of Porsche in America to such an extent that, by 1965, a staggering 74.6% of all the manufacturer's output was being exported to the USA. To this day, Uncle Sam's neck of the woods remains one of Porsche's most important target audiences, as evidenced by more than two hundred official main dealers within the country.

Hoffman's dealings outside of Porsche also achieved big success. He suggested the 'Gullwing' design for the Mercedes-Benz W198 300 SL, leading to an amazing eighty percent of the model's total production passing through his dealerships. He sold Volkswagens and Jaguars on the East Coast, and he was the sole distributor of BMW to North American buyers until the mid-1970s, persuading BMW management to produce the 507 roadster along the way. Another of his ingenious design suggestions resulted in the build of the Alfa Romeo Ciulietta Spider.

Hoffman passed away in August 1981. Much of his considerable fortune has since been used to establish various charitable foundations furthering education.



Irs/Ms/Miss/Mr	AVE SAVE HY SU • NEVER M • FREE DE TO YO • BE THE F
Post / Zip code mail PELVERY IS TO A DIFFERENT ADDRESS, COMPLETE BELOW trs:Ms/Miss/Mr Forename with the contact you regarding our special offers that we believe would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Post / Zip code With to contact you regarding our special offers that we believe would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Post / Plone We may wish to contact you regarding our special offers that we believe would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Post Plone New and wish to contact you regarding our special offers that we believe would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Post Plone New and no subscription will.commute at the same Low parte with te 21.99 New and you please the the preference of the set of the set of the set of the set of the account number Invise to Subscription will.commute at the same Low parte with te 21.99 Post Code Coount name Post Code Coount name Post Delet To Post Delet Pleit Ignature Date Ingrature Date Ingrature Date Ingrature Date Ingrature Stard by the brace Delet	HY SU • NEVER N • FREE DE TO YC • BE THE F
ountry	HY SU • NEVER I • FREE DE TO YC • BE THE I
avitme phone Mobile mail Forename it ModMiss/Mr Forename it ModMiss/Mr Forename it ModMiss/Mr Post / Zip code ountry aytime phone aytime phone Mobile We may wish to contact you regarding our special offers that we believe would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Destruct Destruct Destruct Phone Toxt Message. We will not pass your details onto third party companies. Destruct Destruct Destruct Concel my Subscription at any weiken Veerp wouth be prefer to hear from us Entructions to your Bank or Building Society to pay by Direct Debit Count name count name patture count name count name and of Bank address Postcode count name patter patter Bal 7 al Bal With 3 issues at £29.94 Lux 6 issue	HY SU • NEVER I • FREE DE TO YC • BE THE I
	HY SU • NEVER I • FREE DE TO YC • BE THE I
umame Post / Zip code ountry aytime phone Mobile We may wish to contact you regarding our special offers that we believe would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Email Post / Zip code If will not pass your details onto third party companies. If we will not pass your details onto third party companies. If wills to subscription will continue at the same Low Rate with E21.99 ESST UK DEAL • SAVE 33% • BEST UK DEAL • SAVE 33% If wills to subscription will continue at the same Low Rate with E21.99 If we way would continue at the same Low Rate with E21.99 If wills to subscription will continue at the same Low Rate with E21.99 If we way would continue at the same Low Rate with E21.99 If wills to subscription will continue at the same Low Rate with E21.99 If we way would continue at the same Low Rate with E21.99 If wills to subscription will continue at the same low Rate with E21.99 If we way would continue at the same low Rate with E21.99 If wills to subscription will continue at the same low Rate with E21.99 If we way would continue at the same low Rate with E21.99 If would contend to the same contend at this instruction may remains with ease we way the befere would be passed electronically to my Bark with ease we while the to contend at this instruction may remains where we wanted the the same electronically to my Bark with elece while we wanted the the same we wante at the table with thease we wante the the t	 NEVER I FREE DE TO YC BE THE I
Post / Zip code where the procession of the boxes to tell us all the ways you would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Email Post Phone Text Message. We will not pass your details onto third party companies. BEST UK DEAL SAVE 33% BEST 30% BEST	 NEVER I FREE DE TO YC BE THE I
Post / Zip code where the procession of the boxes to tell us all the ways you would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Email Post Phone Text Message. We will not pass your details onto third party companies. BEST UK DEAL SAVE 33% BEST 30% BEST	 NEVER I FREE DE TO YC BE THE I
We may wish to contact you regarding our special offers that we believe would be of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Email Post Phone Text Message. We will not pass your details onto third party companies.	 FREE DE TO YC BE THE I
of relevance to you. Please tick the boxes to tell us all the ways you would prefer to hear from us Email Post Phone Text Message. We will not pass your details onto third party companies. BEST UK DEAL ● SAVE 33% ● BEST UK DEAL ● SAVE 33% BEST UK DEAL ● SAVE 33% ● BEST UK DEAL ● SAVE 33% INISH TO SUBSCRIBE BY DIRECT DEBIT PAYMENTS OF £21.99 FOR MY FIRST 6 ISSUES, Wink 26%. MY SUBSCRIPTION WILL CONTINUE AT THE SAME LOW RATE WITH £21.99 KKEN EVERY 6 MONTHS. I UNDERSTAND THAT I CAN CANCEL MY SUBSCRIPTION AT ANY ME AND NO FURTHER PAYMENTS WILL BE TAKEN. structions to your Bank or Building Society to pay by Direct Debit @DEST ; are of Bank	TO YO BE THE I
We will not pass your details onto third party companies. BEST UK DEAL SAVE 33% BEST UK DEAL SAVE 34% BEST OF WORLD: 13 issues at £84 BEST OF WORLD: 13 issues at £89 I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	TO YO BE THE I
BEST UK DEAL SAVE 33% BEST UK DEAL SAVE 33% BEST UK DEAL SAVE 33% BEST UK DEAL SAVE 33% BEST UK DEAL SAVE 33% BEST UK DEAL SAVE 33% BEST UK DEAL SAVE 33% BEST UK DEAL SAVE 33% SET Best DEAL DEAL SAVE 33% Set Best DEAL DEAL SAVE 33% Set Best DEAL SAVE 33% Set Best DEAL Save 34 Set Best DEAL Save 34 Set Best DEAL Save 34 Best DEAL Save	
I WISH TO SUBSCRIBE BY DIRECT DEBIT PAYMENTS OF £21.99 FOR MY FIRST 6 ISSUES, ANIG 26%. MY SUBSCRIPTION WILL CONTINUE AT THE SAME LOW RATE WITH £21.99 KKEN EVERY 6 MONTHS. I UNDERSTAND THAT I CAN CANCEL MY SUBSCRIPTION AT ANY ME AND NO FURTHER PAYMENTS WILL BE TAKEN. structions to your Bank or Building Society to pay by Direct Debit ame of Bank	
AKEN EVERY 6 MONTHS. I UNDERSTAND THAT I CAN CANCEL MY SUBSCRIPTION AT ANY ME AND NO FURTHER PAYMENTS WILL BE TAKEN. structions to your Bank or Building Society to pay by Direct Debit ① ETTER ame of Bank address Coount name ort code Account number ignature Direct Debits from the account detailed in this instruction are subject to the safeguards assured by the Direct Debit guarantee. I understand that this instruction may remain with Kelsey Publishing Ltd. and, if so, details will be passed electronically to my Bank or Building Society. PAY BY CHEQUE / DEBIT / CREDIT CARD UK 6 issues at £29.94 UK 13 issues at £21.50 USA / EUROPE: 13 issues at £84 REST OF WORLD: 13 issues at £89 I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	
ME AND NO FURTHER PAYMENTS WILL BE TAKEN. structions to your Bank or Building Society to pay by Direct Debit CENT ame of Bank bdress Postcode count name pattern Date inter Debits from the account detailed in this instruction may remain with Ketesy Publishing Lit. and, if so, details will be passed electronically to my Bank or Building Society. PAY BY CHEQUE / DEBIT / CREDIT CARD UK 6 issues at £29.94 UK 6 issues at £29.94 UK 6 issues at £29.94 ILK 7 Sissues at £29.94 ILK 6 issues at £29.94 ILK 7 Sissues at £29.94 ILK 6 issues at £29.	
ame of Bank ddress count name count name ort code Account number ignature ignature Date agnature Direct Debits from the account detailed in this instruction are subject to the safeguards assued by the Direct Debit guarantee. I understand that this instruction may remain with Kelsey Publishing Ltd. and, if so, details will be passed electronically to my Bank or Building Society. PAY BY CHEQUE / DEBIT / CREDIT CARD UK 6 issues at £29.94 UK 13 issues at £71.50 USA / EUROPE: 13 issues at £84 REST OF WORLD: 13 issues at £89 I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	AVE MONE
ddress	
Postcode	-FER 1. D
ort code Account number in in in in in iteration in in in iteration ignature Date ignature Date ingnator's Id number Direct Debits from the account detailed in this instruction are subject to the safeguards assured by the Direct Debit guarantee. I understand that this instruction may remain with Kelsey Publishing Ltd. and, if so, details will be passed electronically to my Bank or Building Society. Image: PAY BY CHEQUE / DEBIT / CREDIT CARD Image: UK 13 issues at £29.94 Image: UK 13 issues at £271.50 Image: UK 13 issues at £284 Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE / DEBIT / CREDIT CARD Image: Pay By CHEQUE /	
ignature	
ignature	3 ISS
riginator's Id number 8 3 7 3 8 3 Direct Debits from the account detailed in this instruction are subject to the safeguards asured by the Direct Debit guarantee. I understand that this instruction may remain with Kelsey Publishing Ltd. and, if so, details will be passed electronically to my Bank or Building Society. PAY BY CHEQUE / DEBIT / CREDIT CARD UK 6 issues at £29.94 UK 13 issues at £71.50 USA / EUROPE: 13 issues at £84 REST OF WORLD: 13 issues at £89 I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	0
B 3 7 3 B 3 with Kelsey Publishing Ltd. and, if so, details will be passed electronically to my Bank or Building Society. PAY BY CHEQUE / DEBIT / CREDIT CARD UK 6 issues at £29.94 UK 13 issues at £71.50 USA / EUROPE: 13 issues at £84 REST OF WORLD: 13 issues at £89 I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	たい
Image: Pay by CHEQUE / DEBIT / CREDIT CARD Image: UK 6 issues at £29.94 Image: UK 13 issues at £271.50 Image: USA / EUROPE: 13 issues at £84 Image: REST OF WORLD: 13 issues at £89 Image: Herror	
UK 6 issues at £29.94 UK 13 issues at £71.50 USA / EUROPE: 13 issues at £84 REST OF WORLD: 13 issues at £89 I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	14.17
UK 13 issues at £71.50 USA / EUROPE: 13 issues at £84 REST OF WORLD: 13 issues at £89 I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	PORSCHE DROP-TOP
REST OF WORLD: 13 issues at £89 I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	The worki's peemier Porsche ma
I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)	TARGA GLA
	FUN IN THE SUN WITH OPEN T
	TWINS
ard number	
	SIE02159
alid from /	THE CARMAN GTS REVIENTED
ignature Date	
LEASE SEND COMPLETED FORM TO:	
ubscriptions, Kelsey Media, The Granary, Downs Court, Yalding Hill,	
alding, Maidstone, Kent, ME18 6AL, UK	
PHONE TOLL FREE FROM USA:1-888-777-0275 (7am-3pm EST)	
INTERNATIONAL ONLY PLEASE CALL: 0044 (0)1959 543 747	
fer closes on the 31st October 2020. Here at Kelsey Publishing we take your privacy riously and will only use your personal information to administer your account and to ovide the products and services you have requested from us. We will only contact you yout our special offers via the preferences you have indicated above and you can update set of or time humanification are therefore a 2010 for 510 710	TO SUBSCR

GTPORSCHE

SAVE MONEY

WHY SUBSCRIBE?

- NEVER MISS AN ISSUE
- FREE DELIVERY DIRECT TO YOUR DOOR
- BE THE FIRST TO READ NEW CONTENT
- SAVE MONEY ON SHOP PRICES

OFFER 1. DIGITAL EDITION

13 ISSUES FOR £37.99



TO SUBSCRIBE DIGITALLY VISIT

shop.kelsey.co.uk/gtp

SUBSCRIBE TODAY

ON THESE SPECIAL OFFERS

OFFER 2. UK PRINT EDITION

6 ISSUES FOR £21.99



CAVMAN GTS REVISITED

TO SUBSCRIBE TODAY

RAI9 VU

C IIIIIii

Simply visit shop.kelsey.co.uk/gtp

SECRETS OF TRAIL BRAKING

EW 911 TURBO

TARGA FLORI

WAYS TO SAVE YOUR TURBOCHARGER

Or call our team on **01959 543 747** & quote offer code GTP0120 Hotline open: Mon - Fri 8.30am - 5.30pm.

*UK Direct Debit print offer only. 6 ISSUES FOR £21.99



DON'T STOP ME NOW!

In this month's coaching article, Porsche Driving Consultant, Neil Furber, reveals the secrets of trail braking...

f you've been following this series of driver coaching articles, you'll have noticed I keep referencing trail braking. Finally, it's time to look at this subject in detail. At the simplest of levels, trail braking is the process of releasing the brake pedal as you turn in to a corner. It's an exchange from braking to steering, a complete contrast with the safe, stable cornering achieved by core technique, as outlined in the October 2019 issue of *GT Porsche* (order a copy at *bit.ly/issuesgtp*). Trail braking improves front end grip dynamically to improve car rotation and corner entry. Get it right and you'll enjoy many benefits. Get it wrong, however, and disaster awaits!

When it comes to performance driving, possibly the hardest thing to learn and get right is *how* to release the brake pedal, especially when blending with corner entry. Trail braking is an advanced technique – you aren't trail braking simply by releasing the brake pedal in a bend. To help understand what trail braking is, here's a couple of typical scenarios.



DRIVING FORCE

Neil Furber is *GT Porsche's* resident driving expert. With a background as a mechanical engineer in Formula One, he brings a unique technical insight to driver coaching. Splitting his time between the French Alps and the UK, Neil coaches drivers through his brand, Drive 7Tenths (*drive7tenths.com*) and is also a Porsche Driving Consultant at Porsche Experience Centre Silverstone. Have a question about coaching? Email him at *enquiries@drive7tenths.com*.

TRAIL BRAKING

AGILITY THROUGH INSTABILITY

We'll consider a keen beginner arriving at a bend a little fast. Perhaps they'll brake late, turn the steering wheel whilst still on the brake pedal (due to continued excess speed) and then, hopefully, get off the brake pedal somewhere early in the bend. If all goes well, our beginner can get back on the throttle with minimal gathering up midbend. It may feel fast, but we're talking drama rather than actual speed. Perhaps you can identify with this? Perhaps you're already working on planning your braking and your transition to the throttle ahead of the curve to maintain balance?

By contrast, let's analyse an expert navigating their way around the same bend. Perhaps they'll brake late, turn the steering wheel whilst still on the brake pedal and release the brake during the bend. Perhaps a quick adjustment at the wheel, back to the throttle pedal, and off up the next straight. No drama, real speed. But wait! This sounds similar to the beginner's efforts. Indeed it does. The difference is in the *way* everything has been done, as well as subtlety in timing and knowledge of what to expect.

During the first example, our beginner may have been lucky. If road conditions, entry speed, cornering line or exact driver inputs pushed any one of the car's tyres to the limit of grip (a topic covered in



the March 2020 issue of *GT Porsche*), there was potential for a loss of control, even if the driver makes a few adjustments or some electronics pull the car back in line. For heavy brake pressures the car may have run wider than desired — much of the front tyre grip is used for braking, leaving little for steering. A sudden brake release mid-bend, once speed is low enough to feel comfortable, can introduce a sudden rotation as the front tyres 'bite'. This could lead to the tail stepping out. We're talking corner entry understeer and mid-corner oversteer here. For lower brake pressures, the car may have felt more dynamic, more agile, or, perhaps, the tail may have stepped wide as the rear of the Porsche lost grip.

The closer you push towards tyre limits, the more sensitive your Porsche will be to your inputs. Mid-engined driving dynamics amplify this and reward you most when you get it right. This is much of the pleasure gained from driving a Boxster or Cayman. If there's one important lesson here, it's that turning into a corner whilst braking creates agility through instability. Make the car too agile and it can have significant consequences for your wallet!

FEELS LIKE FLOATING

Once you exceed car park and low road speeds, you're effectively driving a hovercraft. It may not feel like it, but this is the case, even from 30mph. As you approach circuit driving speeds the 'hovercraft' may become more apparent, at least as you reach tyre limits. It's no longer just a case of brakes being there to slow you down and the steering wheel enabling turning into corners. Think of it like this: the steering wheel introduces rotation – it's a destabilising device. The brake pedal is also a tool for weight-transfer and pitch control – it defines how much the chassis leans nose forward and how heavy the front of the car can become.

To make this clearer, and less technical, let's break down a corner into three sections: core technique would start with straightline braking (and downshift if required) to slow the car, followed by brake release and application of a steady (balanced) throttle and, finally, turning into the bend at steady speed. We'll forget the second half of the bend



for the moment. In this case, we've not used the controls for much more than their basic functions. Trail braking gives us a few more tools to play with. Rather than these three distinct phases up to mid-corner, the second is removed. Speed-reduction is blended with the turn-in. It's now that the brake pedal can be used to control weight transfer and pitch of the chassis for improved performance. The steering wheel behaves differently and can

become more or less responsive as a function of the brake. You may need much less hand movement to make the car follow the bend. Rather than release the extra brakinginduced vertical load from the nose of the car before the corner, the goal is to maintain at least some of this up to the point at which you'll start to steer. We mustn't forget that the front tyres are already stressed by braking and will receive further stress in cornering as you increase your steering wheel angle into the turn. To prevent them exceeding their limits, you'll need to ease off the brake pedal. This reduces the braking stress and should be done both progressively and marginally ahead of building new cornering stress as you steer. Concurrently, the bodyshell attitude will change, and though it's a passive reaction to your inputs, the dampers (and the tyres!) affect how quickly it can follow. You should aim to time your transition from brake to steering to suit the flow from nose-down (pitch) to side-down (roll).

TRAIL BRAKING



FLOW AND THE WING-BACKED CHAIR

We'll look at the intricacies between weight transfer and body pitch and roll in a future article, but, for now, let's consider them one and the same. As you create or change loads on the tyres through acceleration, braking and cornering, the static weight distribution of your Porsche will evolve into an evervariable dynamic weight distribution. As should be clear by now, braking shifts a portion of the rear weight's proportion to the front tyres, effectively making the front of the car heavier whilst tipping the nose forwards. It's the transition of this static distribution (to, respectively, frontheavy, side-heavy and then rear-heavy as you brake, corner and accelerate) which is important. Again, finesse and timing will

keep everything under control, even as you approach the top end of the 'spirited' scale. Try to think of your hand and feet motions as a 'flow' from heavy braking with no steering, through progressively reduced braking as you feed in steering to reach zero braking and all the steering angle required for the bend.

Congratulations — you've trail-braked beautifully into the bend! Now hop to the throttle pedal and get ready to squeeze on as you unwind for the next straight. You've improved your car's agility, unlocked on-track performance and reduced front tyre wear. Relax as you practise, as if you're sat in my figurative wing-backed chair. I'll see you for more coaching next month.



READER SPECIAL

SUBSCRIBE NOW AND GET 6 ISSUES FOR £15!

Petrol heads and classic enthusiasts – our range of car magazines are just for you. Try something new today!



DON'T MISS OUT ORDER TODAY AND SAVE UP TO 49%*

Simply visit shop.kelsey.co.uk/TRY15 or call 01959 543 457⁺ and quote ref TRY15

[†]Lines open Monday – Friday 8.30am-5.30pm. Calls are charged at your standard network rate

*Offer applies to UK direct debit subscribers only. Savings are based on full cover price of highest priced magazine. Your subscription will start with the next available issue. Prices correct at time print and subject to change. For full terms and conditions and overseas prices visit shop.kelsey.co.uk. After the first 6 issues payments will continue at the rate of £21.99 with payments taken every 6 months until you chose to cancel your subscription.

718 CAYMAN GTS

SPEAK SPEAK SOLUTION OF COMMENS

RKI9 FS

With excitement surrounding the launch of the 718 GTS 4.0 twins, we take time out to revisit the 2.5-litre turbocharged Cayman GTS...

Words Dan Furr Photography Dan Sherwood

PAST SUCCESS

When Porsche ditched sixcylinder engines from the Boxster-Cayman line-up, the 718 model name was introduced in reference to the Targa Florio-winning four-cylinder 718 race car. The idea was to promote Porsche's ability to produce small-displacement, lightweight sports cars able to beat bigger-engined, more powerful machines through superior manoeuvrability. ast month, we used the launch of the new 718 Spyder and GT4 as the catalyst for an issue of *GT Porsche* dedicated to mid-engined marvels, with the centrepiece of the magazine being a rundown of the top twenty Porsche products swinging from the hip. From 356 No.1 to the new trackfriendly six-cylinder twins, we charted the manufacturer's long and distinguished history of producing groundbreaking sports cars featuring an amidships engine room, highlighting how the layout has been just as important to Porsche on and off the track as its more famous adoption of a rear-mounted powerplant.

As you'll have already seen in this issue of GT Porsche, the 718 GTS 4.0 models are now roaming free in the wild, offering a more civilised ride when compared to the Spyder and GT4. Don't get us wrong, the new GTS models are perfectly capable of attacking the asphalt during track days at your favourite circuit, but they're loaded a wealth of creature comforts and a slightly softer chassis, making them far easier Porsches to live with in all driving environments than either the Spyder or GT4. Granted, the more hardcore of the new sixcylinder 718s are intended to be used by drivers engaged in long days of track action on a regular basis, but unless buying to score questionable scene points, we're struggling to see why those who spend the vast majority (or all) of their time on the public road would favour a GT4 over a GTS, especially when the latter is more than eleven grand cheaper than the former. It's lighter, too, by about fifteen kilograms.

Those determined to buy a GT4 regardless of the fact they're never going to hit a track are likely to be the same people guilty of dismissing the four-cylinder, turbocharged 718 Cayman GTS without ever driving one. "It has to a be a naturally aspirated flat-six," they'll say, citing rubbish about only a six-banger making for a purely Porsche sports car, failing miserably to acknowledge Porsche's use of four-pot power from day one, long before the arrival of the 911. Then they'll reference the noise. Ah yes, the noise, undoubtedly the most talked about aspect of the four-cylinder 718 lineup, serving to overshadow just how good these cars are. Granted, a two-litre, entry-level 718 Boxster isn't going to snarl like a cornered wolverine on a bad trip, but the 2.5-litre GTS? Revised airflow equipment delivers a beefier bark. Besides, if you're inconsolable over the fact a turbocharged four-pot doesn't sound like a naturally aspirated six-shooter, you could always upgrade the earlier GTS's exhaust with a newer aftermarket system from any one of a number of tuners well aware of the value in producing pipework radically changing the noise from the car's back end.

LOVE OR MONEY

Porsche making naturally aspirated, six-cylinder GTS models available is almost certainly going to have a detrimental impact on the value of the older, fourcylinder turbocharged GTSs at a time a flood of them are expected to hit the used car market, a result of owners coming to the end of their Porsche Personal













Above Remarkably quick with amazing handling thanks to optimised turbo, mid-engine layout and superb chassis

Facing page The turbocharged Porsche without a Turbo badge, unlike the manufacturer's all-electric Taycan, which, er, features a Turbo badge

Contract Plan (PCP) finance arrangements from when the earliest examples rolled out of dealer showrooms. This presents a fantastic opportunity to those of us who can appreciate the merits of a car beyond the noise it makes. Interested? You should be – the turbocharged 718 Cayman GTS offered outstanding value for money when compared to even the most basic 911 when new, delivering 360bhp (just five ponies less than the 991 Carrera), 317lb-ft torque, a top speed of 180mph and the dash to 62mph from rest in 4.3 seconds. That pace is on par with the entry-level 911, but would have relieved your purse for more than eighteen grand less, giving you plenty of spare change to plunder the Individual Equipment options list. In fact, you could have sent your boosted GTS for a trip to Porsche's Colour to Sample paint shop, added an Alcantara interior package, Porsche Ceramic Composite Brakes (PCCB), ParkAssist cameras, seat heating, a seven-speed PDK transmission, a 20mm drop in ride height, Porsche Dynamic Light System Plus (PDLS+), gloss black painted exterior trim, automatically dimming mirrors, cruise control, twinzone automatic climate control, ISOFIX kiddie seat mounting points, aluminium pedals, painted headlight washer jets, black badges and still be quids in. Yes, really. Perhaps you don't need rear seats after all?!

RKI9 FSP

This is exactly the specification of our test 718 Cayman CTS, unique insofar as it's finished in Maritime Blue, a colour made famous by the 944 S2 Cabriolet and 964

21

NEW ARRIVALS

19:57 Time 31.01.202 Date

IBS.

(P)

The 718 Boxster was introduced at the 2016 Geneva Motor Show, with the 718 Cayman revealed at the Beijing Motor Show four months later. Two-litre and 2.5-litre turbocharged flat-four engines were unveiled, the latter reserved for the Boxster/Cayman S and more powerful derivatives in later production, including the 718 GTS models, launched in October 2017.

Facing page Black leather, Alcantara and a smattering of carbon make for a luxury cabin with race car influence

Carrera RS. It's a beautifully built machine offering an exhilarating driving experience, enhanced by a raft of excellent standard features, including Porsche Active Suspension Management (PASM) and Porsche Torque Vectoring (PTV) accompanied by a mechanically locking rear differential. There's Sport Chrono, identified by the tell-tale dash-mounted stopwatch and coming with the nifty Porsche Track Precision App, allowing lap times to be measured via GPS, as well as recording driving data and allowing it to be managed via smartphone. Twentyinch 991 Carrera S wheels are stock items, as are fourpiston calipers clamping 330mm discs.

PERSONAL TOUCH

A handy dial fixed to the steering wheel allows you to select between Normal, Sport, Sport Plus and Individual driving modes, with buttons on the centre console allowing you to override aspects of each mode's settings, such as the annoying start-stop functionality or, as we suspect the majority of owners choose to do, keep the car's twin-tract sports exhaust system on full blare. Ah, we're back to that controversial sound again, aren't we? Well, contrary to popular belief, the noise the GTS makes as its hammering its way through the rev range, reaching peak power at 6,500rpm and making use of maximum torque between 2,100rpm and 5,000rpm, isn't all that bad. We accept the aural experience of sports car driving is part of the fun, but there's really not a lot to complain about when it comes to the turbocharged GTS. It's not

Below Seven-speed PDK gearbox is a cost option, with a manual six-speed being the default transmission choice

necessarily a 'worse' sound than a six-pot at full chat, it's

just... different. Besides, there's more than enough of a sensational driving experience to ensure you spend your time in a 2.5-litre GTS grinning from ear to ear regardless of the din it generates.

The mid-engined layout ensures the chassis reacts instantly to driver input. To that end, precise, sharp changes of direction are realised by the superb Electromechanical Direct steering (with variable ratio and steering pulse generator), which does a great job of making you feel like a key component of the host GTS. Too often in modern sports cars, there's a disconnect between the driver and what the car is doing, as though he or she is simply along for the ride, rather than dictating what's happening. Not so in a turbocharged 718 Cayman GTS. The car feels supremely agile, incredibly lively and desperate to please by observing every instruction with instantaneous execution. The dual-clutch PDK gearbox in our test car – standard kit is a six-speed manual – shifts as seamlessly and as sublimely as everyone you've ever spoken to about the system would have you believe, with only a change in engine note (stand down, flat-six fans) and an altered dash display indicating you're working your way through all seven cogs. Of course, being a semi-automatic, you can override what the car's doing by taking control of the paddle shifters attached to the chunky 360mm GT Sports steering wheel, which further emphasises the GTS's credentials as a Porsche just as at home on track days as it is commuting (helped massively by those large luggage areas located front and back). Alcantara >>



covering the car's glovebox, the centres of the two-way electric sports seats, centre arm rest, headlining and door handles achieves the same effect, giving furniture a luxurious, soft-touch feel, with a nod to the material's use in motorsport applications for more practical purposes, including anti-glare of dashboards, even though the GTS's top roll is finished in black leather. It would have been nice to see this wrapped in the suedelike material, especially considering the addition of an Alcantara upgrade to the cabin cost an extra £1,242 at the original point of sale.

SIGNAL BOOST

The mix of black leather (with Crayon double stitching) and dark Alcantara give the GTS's cockpit a suitably moody feel, which is carried over to the car's exterior thanks to the inclusion of black casing for the headlights and smoked rear clusters. There's black detailing on the reprofiled front and rear aprons, too. Less obvious alterations lurk within, including what Porsche describes as an "optimised" variable turbine technology (VTG) turbocharger, though it's worth noting that even in the 345bhp 718 Cayman S, the same 2.5-litre lump isn't exactly a slouch begging for extra punch. No matter, the GTS gets range-topping poke perfectly complementing the absolutely brilliant chassis, which feels super-light, but reassuringly planted, allowing you to hammer this 'baby 911' down any stretch of road you care to tackle,

Below Potent performance, perfect proportions, fabulous looks and generous luggage space both ends safe in the knowledge you're in full control of a powerful Porsche that'll instantly obey your every whim with class-leading precision.

The way this Cayman works its way towards the redline is also something to behold – the GTS is a fantastically quick car, its in-gear acceleration from 50mph to 75mph taking no more than 2.7 seconds. Its ability to dart out of a corner and immediately lunge forward, picking up speed at rapid pace, all the while remaining stuck like glue to the asphalt, should also be noted, not only for its potential for exciting B-road blasts, but for track day work in the hands of owners keen to use the aforementioned app to monitor lap times. Best of all, none of these outrageous, 911-challenging qualities come at the expense of how accessible the GTS is. Put it this way, a driver new to sports cars could hop into the Cayman you see on the pages before you and be delighted with how easy they were able to achieve plenty of smiles to the mile. Similarly, experienced Porsche pilots will be thrilled at how reachable the full potential of this car really is.

It would be discourteous of us to make light of the importance of Porsche's decision to reintroduce naturally aspirated six-cylinder engines to the 718 range, but to dismiss the plus points of the outgoing GTS would be equally churlish. We can't think of a single reason why we wouldn't buy one, and neither should you. Just don't get hung up about the noise.

RKI9 T

RANGE-TOPPING POKE PERFECTLY COMPLEMENTING THE ABSOLUTELY BRILLIANT CHASSIS, WHICH FEELS SUPER-LIGHT



A complete range of Porsche classic & modern day replacement exhaust and body panels



Manufacturers of high quality exhaust systems, catalysts, heat exchangers, body panels, chassis repair panels, oil pipes, engine heat shields, service products and lighting.



Retail & Trade enquiries welcome



51 TALLON ROAD | BRENTWOOD | ESSEX | CM13 1TG

+44 (0) 20 8500 8811 www.design911.com

VSK9

use online cod

THE VAULT

SICILIAN SUPERIORITY

While Le Mans is celebrated as the pinnacle of sports car racing, the Targa Florio gave Porsche a hefty number of wins and an iconic model name...

Words Richard Gooding Photography Various

ne of Porsche's most revered nameplates, Targa, has its origins in a fearsome endurance race initiated by a well-to-do car enthusiast who went by the name of Count Vincenzo Florio. Established

in 1906, the challenging event spanned ninety-two miles of unrelenting street circuit scything its way through the Madonie Mountaines east of Palermo in Sicily. The sinuous snake of asphalt almost immediately gained notoriety due to its dangerous high-speed straights and almost 900 punishing corners, but breathtaking scenery and superb spectator viewing ensured the Targa Florio became motorsport nectar to racers the world over.

Fast cars and the picturesque views of Cerda and Collesano proved irresistible to racing's glitterati. Ferociously close-to-spectator danger also proved difficult to ignore, and though Porsche's official involvement as a works team began in 1956, the Austro-Daimler Sascha designed by Ferdinand Porsche won the 1,110cc class in 1922. Similarly, Mercedes' overall victory in 1924 wouldn't have been possible without the input of our man, Dr Porsche, who spent time serving as Daimler Motor Group's chief race car designer and based the brutal Benz on the firm's 1923 Indianapolis car.

A privately entered 356 Cabriolet provided a taste of things to come when it left the start line in 1953, but it wasn't until Porsche motorsport director, Fritz Huschke von Hanstein, shared driving duties with Italian Formula One ace, Umberto Maglioli, in a 1.5-litre 550A RS Spyder that the manufacturer announced its arrival as a works team at the Targa Florio three years later. Maglioli ended up driving most of the race – extending to more than 350 Above The Targa Florio gave Porsche one of its best known model variant names

Right Etna Racing 910 (driven by Alfio Nicolosi and Angelo Bonacorssi) and the works 917 KH (driven by Vic Elford and Hans Herrmann), both driven at the 1970 Targa Florio race

Far right No. 156, the works 718 WRS, driven by Umberto Maglioli and Giancarlo Baghetti at the 1963 event



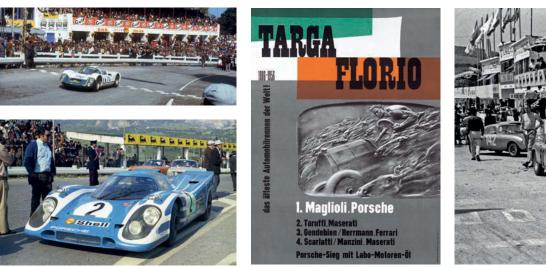
TARGA FLORIO

miles through repeat laps – solo, an effort which resulted in Porsche's first Targa Florio win. It was the Stuttgart sports car brand's first endurance racing victory and marked the beginning of the firm's story of success in Sicily, a string of wins which have since ingrained themselves into Porsche legend, not least because Maglioli's impressive victory signalled the first time a driver in the 'less than two-litre' class managed to beat cars powered by engines boasting larger displacement.

RUN FOR THE HILL

Jean Behra and Giorgio Scarlatti's second place finish from behind the wheel of the 718 RSK in 1958 was followed by a win for Edgar Barth and Wolfgang Siedel in the same model a year later. Jo Bonnier and Hans Hermann took a 718 RS 60 to the top spot in 1956, achieving a six-minute lead over Wolfgang von Tripp's Ferrari Dino 246 S, but it wasn't just wheelmen from mainland Europe who played a part in Porsche's magical Targa Florio story. In 1961, for example, Formula One stalwart and 1955 Targa Florio winner, Stirling Moss, was signed-up alongside a young Graham Hill in a move many considered to be a sure-fire recipe for success. Moss built an early lead of almost two minutes, but Hill's unfamiliarity with the course saw the pair drop back down the field. Moss stormed through the pack thereafter, taking the lead as he did so, but a blown differential near the finish line put paid to a third Porsche Targa Florio win on the bounce.

Nino Vaccarella and Bonnier's third place finish in 1962 amounted to a class win for the 718 GTR, and winning ways returned for 1963 – despite fierce competition from a triumvirate of Dinos, the 718 GTR of Bonnier and Carlo Abate reigned supreme, winning by 11.9 seconds. As if this wasn't impressive enough, Porsche was able to celebrate Herbert Linge's class victory and overall third place in a Fuhrmannengined 356 B 2000 CS Carrera GT *Dreikantshaber* (Wedge Blade). For 1964, the boys from Zuffenhausen achieved their fifth Florio flourish with the beautiful 904 Carrera GTS. Porsche had spent much of the previous year dabbling in Fl, but the 904's success at the hands and feet of Brit, Colin Davis, and his Italian co-driver, Antonio Pucci, beat rivals into submission by rising above the efforts of eight other





THE 908 WAS THE FIRST PORSCHE SPORTS CAR TO BE DESIGNED WITH THE MAXIMUM ENGINE SIZE PERMITTED FOR THE COMPETITION IT WAS BEING ENTERED INTO



Above Veteran works drivers, Gunter Steckkonig, Herbert Linge and Gijs van Lennep, back at the site of the Targa Florio with a superb selection of yesteryear's competing Porsches

Facing page The red 906 of Scuderia Pegaso, driven by Ferdiando Latteri and Nino Todaro, in action at the 1970 Targa Florio 904s, including the sixth-place eight-cylinder prototype driven by Barth, Maglioli and Bonnier.

Once again, success in Sicily was earned by the speed demons from Stuttgart in 1966. The new, bubble-cockpitted 906 Carrera 6 was sired from the 904 and designed under the watch of new Porsche research and development chief, the late Ferdinand Piëch. Unlike the ladder-framed, plastic-bodied 904, however, the 906's unstressed fibreglass shell hid an advanced tubular spaceframe, more often than not allied to a 220bhp six-cylinder 901/20 engine. Taking Porsche by surprise and built for the 1966 World Championship of Makes, the privateer Swiss Ecurie Filipinette 906 piloted by Willy Mairesse and Hubert Muller screamed across the finish before any of the factory cars.

SEVENTH HEAVEN

As outlined in last month's issue of *GT Porsche*, the 910 followed the 906. Paul Hawkins and Rolf Stommelen took Porsche's seventh Targa Florio win by hammering the 910/8 to the top of a Porsche 1-2-3 podium before the model was replaced by the 907 and driven by Vic Elford and Maglioli for 1968's event. In keeping with what had become recent tradition, the Porsche won. Moreover, Elford's efforts are seen as significant due to the fact he came from behind to win after losing eighteen minutes on the first lap due to



unexpected tyre failure. By this point in time, the Stuttgart standard in Sicily was well and truly set. Even so, 'Quick Vic' could only manage a second-place finish driving the 908/02 in 1969, but the same model campaigned by Gerhard Mitter and Udo Schutz claimed top honours with a time of 6:07:45s, setting a new course record. Furthermore, there were four Porsche cars in the top ten, including a 908/02 in first, second, third and fourth place.

With its 350bhp, air-cooled, eight-cylinder, three-litre lump, the 908 was the first Porsche sports car to be designed with the maximum engine size permitted for the competition it was being entered into. For 1970, the flyweight 500kg 908/03 driven by Jo Siffert and Brian Redman claimed the top spot. Pedro Rodriguez and Leo Kinnunnen's 908/03 was close behind, with the latter's blistering 33:36s lap time never beaten in the history of the Targa Florio. Gijs van Lennep and Hans Laine had a good go, but the best they could do was settle for a fourthplace finish, while the 908/03 of Le Mans hero, Richard Attwood, and rally sensation, Bjorn Waldegaard, finished fifth. Interestingly, Elford tested a still-in-development 917K during practice laps, but deemed it too much of a handful for the Florio's twisty circuit. He had to be lifted out of the car due to exhaustion!

Siffert and Redman's 908/03 was engulfed in fire and 📎

TARGA FLORIO

PORSCHE'S ELEVEN OVERALL VICTORIES AT THE TARGA FLORIO

1956 550 A RS Spyder Umberto Maglioli

1959 718 RSK Spyder Edgar Barth/Wolfgang Seidel

1960 718 RS 60 Spyder Joakim Bonnier/Hans Herrmann

1963 718 GTR Joakim Bonnier/Carlo Abate

1964 904 Carrera GTS Colin Davis/Antonio Pucci

1966 906 Carrera 6 Willy Mairesse/Herbert Müller

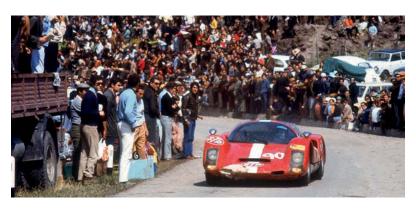
1967 910/8 Paul Hawkins/Rolf Stommelen

1968 907/8 Vic Elford/Umberto Maglioli

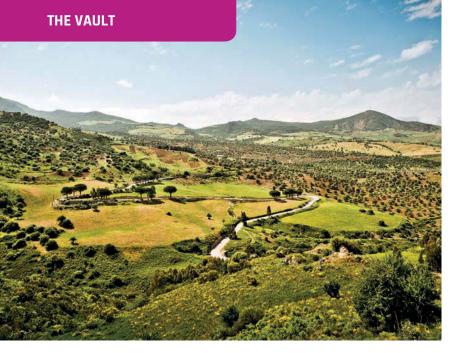
1969 908/02 Spyder Gerhard Mitter/Udo <u>Schutz</u>

1970 908/03 Jo Siffert/Brian Redman

1973 911 Carrera RSR Herbert Müller/Gijs van Lennep









rendered a total loss following an accident in the 1971 Targa Florio. The pair's bad luck was compounded by Rodriguez suffering a crash in Porsche's second car. Gerard Larrousse and Elford completed the race, although their thirty-ninthplace finish fell far short of Porsche's expectations. Feeling hard done by, the firm withheld from fielding cars for 1972's race, though a staggering twenty-seven Porsches were entered by privateers. Among the pack were nineteen 911s and a duo of 914/6s.

Even with a string of impressive wins behind it, the Porsche works team's most revered victory at the Targa Florio came in 1973, when the competition was staged as the final round of the World Sportscar Championship. Watching YouTube footage of the Martini-liveried 911 Carrera RSR prototype slithering around Circuito Piccolo delle Madonie's corners is bewitching. Seriously, go check it out! Van Lennep and Muller powered the ducktailed 911 to the lead by the close of the third lap, with the wide-arched silver hard-top crossing the line ahead of Jean-Claude Andruet and Sandro Munari's Marlboro-painted Lancia Stratos.

NEXT GENERATION

Thanks to its instantly recognisable spoiler, the 315bhp Nobert Singer-engineered RSR was visually similar to the 911 Carrera RS production car, but wider wings, heftier track width, 917 suspension and brakes from the same **Top** The Targa Florio race route carves its way through amazing Sicilian rural landscape

Right Celebratory

Porsche designer, Erich Strenger, to mark each year's

Targa Florio results

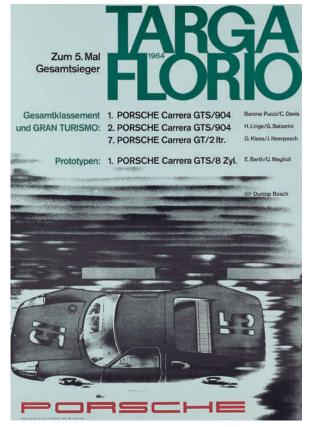
motorsport posters were created by

TARGA FLORIO

Le Mans racer bolstered the Neunelfer in readiness for its triumphant win. Interestingly, one key difference between the parts applied to bodywork for road and race was the RSR's 'Mary Stuart' rubber wing extensions, items which extended the ducktail over the rear wheel arches. Rounded and upright, the nickname referenced the sixteenthcentury Scottish queen's collars.

Although a historic Targa Florio is held today, the 1977 event was the last official staging of the competition. In retrospect, it's easy to see why the Italian government called time on the race; taking place on public roads with practically no safety features (unless you count straw bales at some of the turns as adequate protection for unruly spectators positioning themselves directly in the line of the world's fastest sports cars travelling at full chat), the event attracted evermore powerful race cars posing constantly increasing risk to life. That said, however tragic, it's amazing to think only nine people – a figure including ill-fated spectators – died at the Targa Florio during its 71year history. This pales when compared to the Mille Miglia, where fifty-six people lost their lives over a thirty-year period.

Porsche is the Targa Florio's most successful manufacturer thanks to eleven overall victories in Sicily. Additionally, the Stuttgart crew achieved nine second-place finishes, twelve in third place and racked up eight fastest laps. Moreover, the Targa Florio is a race which inspired the name of a perennially popular automotive body style (read all about it by checking out our article examining the history of Targa on page 60) and one which continues to mesmerise thanks to amazing footage regularly being unearthed and finding its way onto YouTube.





READY TO WEAR AND BESPOKE COVERS FOR ALL CAR MODELS

CarCoverShop.co.uk

www.carcovershop.co.uk | t.01780 654088



Hindsight **Restored Vision for Convertibles** Treat your screen before it splits Restores clarity by removing "Hindsight miraculously scuffs and opacities removes scratches Lubricates & protects and opacity, and is from frost environmentally friendly" Mercedes Gazette Avoids replacing rear screen Particularly effective on MX-5s "By far the best screen Restores milky acrylic

- Reduces risk of splitting
- .
- head/tail lights
- Renovo Fabric Hood restoration products also in stock
- cleaning product I've tried"
- Editor Classic & Sportscar
- Tel: 01780 749449 www.hindsightuk.com world-wide shipping

BUYING GUIDE

911 SC TARGA (**1978-1983**)

This semi-open-top stunner is championed as one of the cheapest routes into air-cooled 911 ownership...

Words Dan Furr Photography Matt Woods

ack in the late 1970s, Porsche sports car production had taken a decidedly different turn. The 911's basic design, largely inherited from the 356 before it, was seen by many as rapidly becoming long in the tooth. In response to these concerns, a new breed of Stuttgartcrested sports car was launched, starting with the front-engined, water-cooled 924, but headed by the V8-powered 928 grand tourer, the only sports car to win the coveted European Car of the Year Award.

In truth, the 928 project had been in the works for almost a decade. but shock disruption to the global oil supply chain caused Porsche to temporarily put development of its 4.5-litre gas guzzler on hold, a move which saw the two-litre 924 (originally a project with VW-Porsche joint parentage) launched first. All signs pointed towards the 911's discontinuation, not least because of concerns surrounding a suggested Stateside ban on rear-engined vehicles, but a new version of the air-cooled twodoor in 1978, not to mention the failure of the feared legislation to materialise, saw renewed interest in the model.

Badged as the SC (Super Carrera, nomenclature not seen since the 356), the new 911 featured an all-aluminum three-litre engine fed by Bosch K-Jetronic mechanical fuel injection, with power planted to the road by the five-speed 915 gearbox. Launch models were blessed with power close to 180bhp, though as has always been the case with Porsche sports cars, evolution throughout the model's five-year production run saw that figure rise past the 200bhp mark.

A Targa offering was a key part of the SC's appeal, which grew exponentially under the guidance of new Porsche CEO, Peter Schutz. In a move now enshrined in Porsche folklore, the American motor man visited the office of lead factory engineer and former works racing driver, Helmuth Bott, to discuss plans for upcoming models. "I noticed a chart hanging on his wall that depicted the ongoing development trends of our top three lines: 911, 928, and 944. With the latter options, the graph showed a steady rise in production for years to come, but for the 911, the line stopped in 1981. I grabbed a marker off Professor Bott's desk and extended the 911 line across the page, onto the wall, and out the door. When I came back. Bott stood there, grinning. 'Do we understand each other?' With a nod, we did."

Schutz's enthusiasm for continued 911 production saw SC sales total 58.914 units, a figure including many Targas. The huge number of SCs produced makes finding one available on today's used car market a cinch. Not only does this mean you have the freedom to walk away from an SC not meeting your expectations, but prices of the model remain comparatively low due to a perceived lack of exclusivity. Better still, Targas command an even lower price than coupes. We interviewed Chris Lansbury, head of independent Porsche specialist, PIE Performance, regarding what buyers should be aware of when buying a 911 SC Targa.

Right It's easy to see why a Guards Red G-series is one of the most popular 911s in Porsche enthusiast circles

Below Porsche succeeded in making the 911's Targa rollover bar (essentially a safety feature) a style icon

ROLE PLAY

Due to its immense popularity and massive production volume, the SC is not only credited with saving the 911, it's also regarded as a key model helping to save the brand as a whole.







SCHUTZ'S ENTHUSIASM FOR CONTINUED 911 PRODUCTION SAW SC SALES TOTAL 58,914 UNITS, A FIGURE INCLUDING MANY TARGAS

ENGINE

"The 911 SC's three-litre flat-six is a dependable, unstressed unit," Chris explains, "but with early examples now more than forty years old, it's safe to assume many will be in need of a top-end rebuild, especially if mileage is creeping north of 80k." Check the car's supporting paperwork to see if the job has already been done. If not, factor this in to the price you're prepared to pay.

The SC's Type 930 engine can be recognised by an elevenblade cooling fan and chunky air pipework routed across the top of the fan housing. Early 911 SCs feature an air injection pump, which was discontinued less than two years into production.

Snapped head studs are a common problem, with the fault

recognised as a sound similar to that of a blowing exhaust. Meanwhile, the exhaust itself can put a strain on your wallet if rust has caused damage. Elsewhere, the engine's mechanical fuel injection system is a reliable bit of kit, but can become lazy on cars with low mileage, or those left standing for long periods of time.

Carefully observed servicing is essential, with valve clearances set at regular intervals. Crankcases are known to weep oil on aircooled engines, but overall, the condition of any classic 911's powerplant is largely influenced by how well it has been treated by previous owners. "If in doubt, ask a specialist, such as PIE Performance, to carry out a thorough inspection," says Chris.





HISTORY

Make sure you paw through all documentation supporting claims of servicing and maintenance in accordance with Porsche's recommended intervals. Demand to see receipts or invoices proving the seller's suggestion of repair work and replacement parts. Be wary of any unexplained periods of the SC you're looking at being off the road. If in doubt, have a full inspection carried out by a margue specialist.

Enter the 911 in question's details into the DVLA's online vehicle enquiry service (visit *bit.ly/dvlaenquiry*). It's free to use and will give you key information about the Porsche you're looking at. Additionally, take a few minutes to view information held on the DVLA's excellent MOT history database (*bit.ly/dvlamot*). Another free service, it'll provide you with information relating to all passes, fails, advisories and mileage at the time of each test. Check to make sure the details match what's on the car's accompanying paperwork.

An SC's VIN can be found stamped into a plate attached to the offside inner wing and another under the carpet above the fuel tank. Make sure the numbers on both plates match.

FACTORY RUBBER BRAKE FLUID TRANSFER HOSES CAN COLLAPSE WITH AGE, A COMPLAINT WHICH CAN BE IDENTIFIED THROUGH LIMITED PEDAL TRAVEL

BODYWORK

Rust doesn't discriminate between coupes, cabriolets and Targas! Check everywhere for rot, especially along the A-posts and B-pillars. It's here Targas can suffer damage specific to the model, where water sitting at the base of the Targa hoop on each side of the car can penetrate metalwork.

"Targas are known to leak as a consequence of compromised roof seals," says Chris, "but even a Targa with a completely renewed set of seals can encourage water ingress in the cabin. Furthermore, the Targa roof framework is prone to cracking. Even a second-hand replacement can set you back a couple of grand, so check to make sure the roof can be removed and stowed without fault. Inspect every part of the system thoroughly."

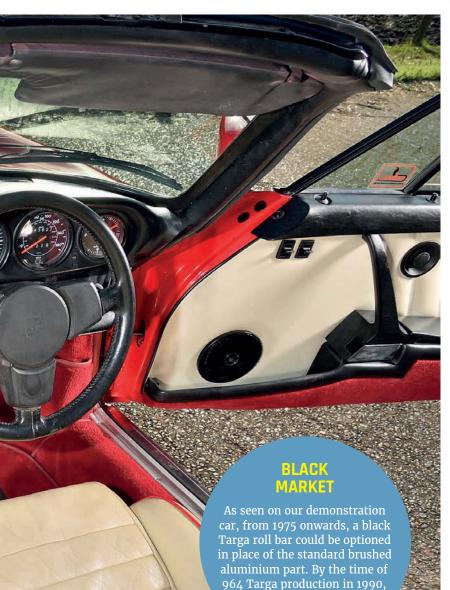
An inspection of the car's chassis will highlight any problems with its

sills, inner wings and kidney bowls. Corrosion of the latter (essentially rear quarter stiffening plates) is a common complaint of old 911s, but there's an easier way for the untrained eye to detect a problem than crawling around on the floor. "Take note of the panel gap between the doors and the rear quarter panels," Chris suggests. "If there's a noticeable difference from top to bottom, then assume the kidney bowls aren't doing their job and will need to be replaced."

Early Targas feature a soft rear window, which can become distorted, resulting in a 'milky' appearance. Plastic window refurbishment kits are available from aftermarket detailing product manufacturer, Renovo.

Check for differences in paintwork between panels. Evidence of this may suggest accident damage.





however, black was the

only choice available.

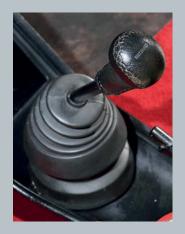
GEARBOX, BRAKES AND SUSPENSION

The SC's 915 gearbox is reliable, but many owners experience difficulty selecting second gear. This is a characteristic of the transmission, but unsympathetic shifting throughout an SC's time on the road can result in worn synchros compounding the problem. "Second gear can be hard to select when pulling away whilst the gearbox is cold," Chris confirms. "Check to see how easy it is to slip in and out of second and third from lower gears. In the worst case scenario, an expensive transmission overhaul will be needed."

Much like every other one of the SC's vital organs, the model's brakes are strong, dependable items, but cars tucked away for long periods can suffer from sticking calipers. Additionally, factory rubber fluid transfer hoses can collapse with age, a complaint which can be identified through hard brake pedal feel and limited pedal travel, a condition lowering braking efficiency and, in extreme circumstances, resulting in no braking power whatsoever. Replacing tired standard hoses with aftermarket braided pipework is a straightforward 'fit and forget' fix.

The SC's suspension system is robust, but dampers can leak, especially those in place for many years and fitted to higher mileage cars. "Get on the floor and check the torsion bar cover plates," advises Chris. "There shouldn't be any rust around them. Treat shiny new cover plates as suspicious. What is the seller trying to hide? Don't be afraid to ask questions and, if you're not convinced by the answers, ask a specialist to carry out an inspection. Doing so could save you thousands, because if rust has taken hold, the fix is a huge amount of work, involving a full suspension drop and removal of the engine."

As is the case with any older car, suspension supporting components suffer wear and tear. Bottom ball joints are known to fail, resulting in a knocking noise over bumps in the road. Standard rubber bushes can also fail, causing a bumpy ride. Fortunately, all standard 911 SC suspension parts are readily available to buy, as are aftermarket equivalents, including polyurethane bushes, which can be ordered

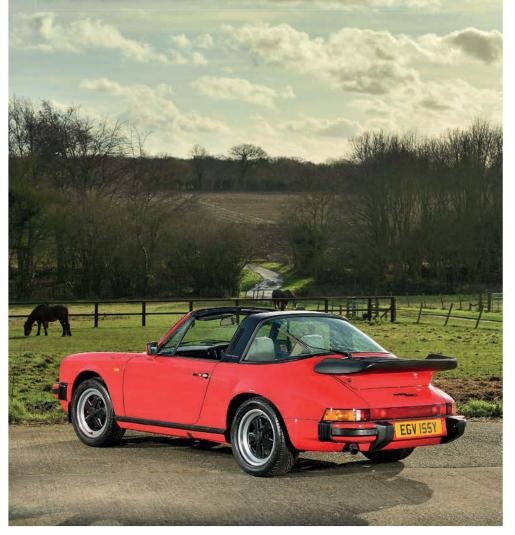


INTERIOR

As mentioned earlier, Targas are known for their enthusiastic allowing of rainwater to penetrate cabin space. Check carpets, door cards and the roof itself for signs of moisture ingress. Even if carpets seem dry, your concern should be whether underlay is holding moisture against the car's floor, so don't be afraid to look carefully. Be wary if the seller tries to hurry you.

As with every other one of the SC's components, cabin furniture is readily available from Porsche and aftermarket suppliers. Parts are well manufactured and won't break the bank. "Broken switchgear can be replaced cheaply," Chris confirms. Complete carpet sets are available from a variety of aftermarket suppliers, with the added bonus of many upholsterers specialising in classic Porsche retrims available to call upon for corrective fabric or seat leatherwork.

THE MODEL WAS PRODUCED IN SUCH HIGH NUMBERS, THERE'S NO SHORTAGE OF EXAMPLES TO CHOOSE FROM





ELECTRICS

Your biggest concern should be the standard of previous electrical repairs and the legacy of aftermarket security and audio systems fitted during the 1980s and 1990s. Check the car's fusebox to see if there are any irregularities, but also check the wiring harnesses travelling into each door from the front wings. Over time, these become brittle and can cause breaks in connections, most commonly detected by erratic electric window functionality.

If you are worried about the standard of the 911 SC you're looking at, walk away. The model was produced in such high numbers, there's no shortage of examples to choose from. When agreeing a price, think with your head, not your heart.

THANKS PIE Performance pieperformance.co.uk

Your Club



Porsche Club Great Britain is the only official Porsche Club in the UK and belongs to the worldwide community of Porsche Clubs recognised by Porsche AG.

Founded in 1961, the Club operates for the benefit of its 22,000 members and warmly embraces every model of Porsche.

Join online at porscheclubgb.com or call 01608 652911







THE FLEET

MAKEOVER TAKEOVER

The 944 Turbo's badly damaged half-leather seats are stripped of their offending covers and treated to a custom retrim...

DAN FURR

hen this issue of GT Porsche lands in your hands, my 944 Turbo will be on display at the NEC Classic Car & Restoration Show (unless the UK government intervenes and bans mass gatherings in an attempt to thwart the spread of COVID-19). A huge amount of work has been invested transforming the formerly dormant Guards Red road rocket into a showstopper from the rotten mess that'd spent many years languishing in a hedge. Come along to the event and see the turbocharged transaxle in the metal, but don't be fooled into thinking the car's star turn in Brum means we're done and dusted with GT Porsche project progress reports there's still much in the way of recent work to share with you, not to mention news of ongoing tweaks and, of course, details of the many adventures I intend to enjoy with the car when summer sunshine finally lights up the sky. In the meantime, let's pick up where last month's update left off, at Cambridgeshire-based premium automotive upholstery specialist, Awesome Classic & Custom.

The firm's head trimmer, Greg Ward, painstakingly covered the car's dashboard, centre console, glovebox lid and headlining in genuine Alcantara, giving what started life as drab beige and black plastic a thoroughly luxurious finish in keeping with the interiors of many modern Porsche sports cars. The inclusion of a bespoke metal dash-top heater vent recess insert demonstrated careful consideration for both function and form of the finished parts, which take years off the car's interior, much like the brilliantly named Kensington Black Wool deep-pile carpets, laid over lashings of Dynamat thermoacoustic sound deadening material and replacing the totally rotten original fabric previously felt underfoot.

But what of the classic Porsche 'tombstones'? Originally Linen halfleathers with striped fabric centres, the front and back seats were totally ruined by moisture ingress caused by a leaking sunroof seal attacking the interior over many years. The fabric was frayed, the seat frames badly corroded. As you can imagine, the thin foam located beneath the surface of each cover was destroyed. After stripping the manky seats bare, however, Greg was happy to report what he was left with was perfectly suitable for a custom retrim - the main foams were in excellent condition, though replacement frames would be required before refitting.

GOING SPARE

Nash Hunter, head honcho at 944 restoration specialist, Retro Restorer, confirmed the availability of donor seat frames at his Oxfordshire workshop. He also sent Greg replacement door cards (taken from the famous 944 Turbo Retro Restorer prepared and modified for a recent episode of Quest TV's *Coblin Works Garage*) and rear inner quarter panels to replace my car's original components, which were beyond





SCENE SETTING

944

In 1983, prior to the launch of the 944 Turbo, Porsche collaborated with US tuning company, Callaway, in the development of an IHI RHB6fed 944. The standard 2.5-litre engine required complete disassembly and heavy alteration of key components, resulting in 140bhp of extra power. Only twenty examples were built.







saving. We'll cover their condition and the magic Greg worked on Nash's donor parts in our next issue, but for now, let's concentrate our attention on the seats themselves.

Early on in the project, I met with Greg and his business partner (and younger brother) Glenn, and we discussed the appeal of developing a bespoke interior based on the original Porsche parts. I'm getting too old for buckets in anything but a race car, which is why we decided to stick with the classic 'tombstones', seats which would go on to form the heart of an interior intended to look as though it could have been an expensive Porsche cost option when the car was new.

THE FLEET





In other words, we drew up a plan of action intended to trick those less familiar with Porsche products into thinking they were looking at a factory fit. No fuss, OEM-plus!

It's important not to lose sight of the fact we're dealing with a car built in the mid-1980s (registered on the 17th April 1986, in case you were wondering), meaning the interior we would end up with needed to look as at home in the car today as it might have done when it rolled off the Neckarsulm assembly line. With red and black being the dominant colours, we immediately turned our attention to the oh-so-'80s accent of grey. More specifically, Glenn and Greg showed me a swatch of anthracite leather which promised to offer an extra aesthetic dimension to the finished seats. Far enough removed from the darker tone of Nero we'd decided upon as our starting point, the anthracite-coloured material would offer a subtle contrast, perhaps even encouraging those casting a quick glance into thinking the difference in shade was a trick of the light.

This fairer-shade hide was perforated before being used to cover each seat centre. It can also be seen



in the form of each seat's piping. The Nero materal was cut to shape and wrapped around seat outers and backs. This same combination and pattern of colours was carefully applied to the rear bench and uprights, with special attention paid to how each panel would be held together with the same red double stitching seen on the handbrake and gear gaiters revealed in my last update.

YOU'VE BEEN FRAMED

At the time of writing, the sensational seats are being fitted to their donor frames ready for introduction to a cabin oozing creature comfort. I'm completely over the moon with the interior's shift from zero to hero. It's incredible to think we're looking at the same furniture as that which occupied the cockpit when I first laid eyes on the car back in 2017 (26th April, to be precise), albeit with a facelift.





Previous spread Soft perforated anthracite leather looks fantastic and

contrasts nicely against the darker Nero hide used for the seat outers

Left Red double stitching is a nice touch and works well with the red and black theme of the car's bodywork



Far left Greg's awesome ratrod Beetle waits patiently for TLC

Greg – ably assisted by Awesome's very own workshop Stig, Phil – has done an amazing job, and though I dare say he's been provided with automotive interiors in far worse condition than the set I removed from my 'hedge find' and subsequently offloaded at his workstation, there's no denying how striking the aptly awesome metamorphosis from rot-ravaged half-leathers to simply stunning twin-tone 'tombstones' really is. I can't wait to see the seats take up residence inside the modified Porsche, though it's entirely plausible those of you visiting the NEC Classic Car & Restoration Show will have seen what I'm banging on about long before you've finished reading this sentence!

With the most prominent pieces of the puzzle completed, attention could be turned to revitalising the supporting hardware found inside the car. The heater vents, for example,





944 TURBO



were filthy, as were the door handles and other pieces of plastic trim, including the covers clipped onto the points where the seat bases meet their respective uprights. Dash and door switchgear was looking grubby, too. There was also the age-old problem of a digital clock with a compromised LCD screen to deal with. Details of this fix will follow in another of my forthcoming updates. Suffice to say I didn't order a ridiculously expensive new clock assembly from Porsche!

What I have ordered is a set of new door seals, sunroof seals and door window slot rubbers from Design 911. I've also bought an array of new interior trim, including black door card speaker grilles from the guys at Heritage Parts Centre. Additionally, I visited the Bella Volante webshop and bought a custom steering wheel horn push featuring a black outer ring and the Porsche crest embossed into its leather trimmed centre. The devil, as they say, is in the detail.

I may have also purchased a rare genuine RAID Turbo four-spoke steering wheel (finished in black leather with red stitching) from the same retailer after enjoying time gripping the identical part fitted to Steve Bennett's tuned Guards Red 964 Carrera 2, as featured in the July 2019 issue of *CT Porsche*. In fact, as I write this article, I can think of a steady stream of parts I've recently bought (or still need to buy!) for the car, all of which I'll reveal in coming updates.

HERE AND NOW

For the time being, however, I want to savour the opportunity to celebrate the astonishing retrim of my 944 Turbo's seats. I didn't ever doubt Awesome would do a fantastic job - I was first exposed to Greg's excellent work when spending time with a succession of classic Porsches kittedout with seats, dashboards, carpets, door cards, headlinings and parcel shelves that'd all been born from his sewing machine. 911s, 928s, 924s, 356s, 964s, 993s... restored or customised examples of all classic Porsches have benefited from Awesome's input, as have retro rides from Ferrari, VW, Jaguar, Rolls-Royce, Lancia, BMW, Mercedes, Bentley and Ford. Give the guys a call if your four-wheeled friend is in need of upholstery repair or a retrim. More to follow next month.

Top Donor door cards from the *Goblin Works Garage* 944 Turbo replace our car's water-damaged original parts

Above and right They may follow an OEM blueprint, but the difference between the car's seats now and when the project started is hugely different



THANKS

Awesome awesome.eu.com

Retro Restorer retrorestorer.co.uk







Servicing, restoration, engine builds and race prep.

Chelmsford, Essex Tel: 01376 583075 or 07774 854 418 www.dsdmotorwerks.co.uk



Independent Porsche Specialist

Servicing, MOTs, mechanical repairs/restorations, engine and gearbox re-builds, fourwheel alignment, performance upgrades. Special projects undertaken

Tel: 01892 652994 Email: info@octanegarage.co.uk Unit 6 Lexden Lodge Industrial Est. Crowborough, East Sussex, TN6 2NQ

www: octanegarage.co.uk





PORSCHE	RELATED CH	ERISHED	REGISTRATION	NUMBERS		
300 RS	991 PD	911 SCR	CAR 232A	918 MHH		
930 FF	964 MC	911 FEG	XXX 911C	S918 POR		
98 RSR	964 GC	911 FJX	REG 911E	BX02 TER		
35 SYX	987 MD	911 MPY	OWY 911K	GT03 AWH		
997 CSS	RUF 911T	911 MSD	DJA 911R	GT03 SPJ		
POR 997T	X911 RUF	911 MXD	VOP 911S	OO05 CAY		
TON 997X	993 RUF	911 PYT	CAB 911X	RS18 POR		
POR 911K	993 POR	911 RWS	A911 DPG	RS61 POR		
POR 911N	A993 XXX	911 WVS	D911 POR	RS68 POR		
POR 911Y	B911 RSR	TIL 911	J911 GTN	RS68 RSR		
E944 POR	RSR 911T	VNZ 911	P911 SCH	GT68 RSR		
WAG 944S	RSR 911X	WBZ 911	S911 LER			
PCGB MEMBER TEL: 07730 007694 EMAIL: erha300@aol.com						



356 911 912 914 928 964 993 TRIM & INTERIOR PARTS TO OEM SPECIFICATION

LAKEWELL PORSCHE INTERIORS KLEIN HEIDESTRAAT 71 B - 3370 BOUTERSEM WEB: WWW.LAKEWELL.COM EMAIL: INFO@LAKEWELL.COM PHONE: +32 (0) 475 53 56 22

PARTING SHOT

INSIDE STORY

PORSC

S=QY 911

H

From every angle, the new 911 Turbo S looks amazing, but step inside and you're treated to just as much Porsche perfection. The eighteen-way adjustable sports seats, for example, feature stitching paying tribute to the very first 911 Turbo (930), while standard equipment includes full leather and carbon-fibre trim with Light Silver accents. A GT sports steering wheel brings further focus to the cockpit. itte

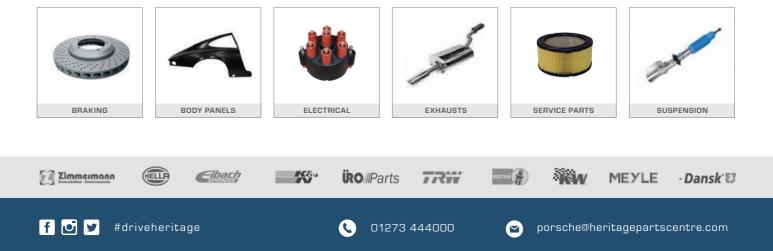


HERITAGEPARTSCENTRE.COM



3,000+ PARTS ONLINE FOR AIR & WATERCOOLED PORSCHES

EXPERT ADVICE • FAST GLOBAL DELIVERY • FREE UK SHIPPING OVER £50







PORSCHE RECOMMENDED REPAIRER

CHOSEN & APPROVED BY THE WORLD'S LEADING MOTOR MANUFACTURERS TO REPAIR YOUR PRESTIGE VEHICLE

WE BELIEVE A JOB WELL DONE GIVES YOU PRIDE, TAKING THE IMPOSSIBLE AND MAKING IT POSSIBLE DRIVES OUR NEED FOR SUCCESS. OUR CONTINUED INVESTMENT AND DELIVERY INTO EXCELLENCE PROVIDES A SERVICE LIKE NO OTHER.

WWW.CHARTWELLS.NET

CHARTWELL HOUSE, 1 BRUNEL PARKWAY, PRIDE PARK, DERBY, DE24 8HR 01332 340972