

Classic  
**PORSCHE**

ISSUE No.83 MARCH 2022 £5.50

# Classic **PORSCHE**

## **GREAT PRETENDER**

**CARRERA 3.2 BECOMES RS 2.7 EVOCATION**

**VERN  
SCHUPPAN**  
LE MANS LEGEND  
EXCLUSIVE  
INTERVIEW



911 ST TRIBUTE ● 356 IN ANTARCTICA ● JEAN BEHRA  
EBERHARD MAHLE ● BORDER REIVERS RALLYING  
PORSCHÉ AT DAIMLER ● RESTORED CARRERA 3.2





**Race Exhaust System 911 F Model  
Dual Inlet & Outlet Muffler**

Part #: FVD 111 911 16



**Sport Brake Service Kit Front  
911 (1969-83)**

Part #: FVD BSK 351 91102S



**Adjustable Spring Plate Set Rear  
911 (69-86), 912 (69), 930 (78-88)**

Part #: 150 910 159

Since 1984, FVD Brombacher has been setting the standard for Porsche restoration, engine building and tuning in Germany. Our online shop has a vast assortment of performance, spare parts and accessories for the entire range of Porsche models. No matter if you need service or parts for your aircooled or watercooled, we have everything you need and we also ship worldwide.

Simply visit us at ***www.fvd.net*** and discover why more enthusiasts choose to put our passion into their Porsche.

**fvd** Germany

tel: +49-7665-98990

fax: +49-7665-989920

email: [info@fvd.net](mailto:info@fvd.net)

**fvd** North America

tel: +1-954-571-2050

fax: +1-954-571-2060

email: [sales@fvd.net](mailto:sales@fvd.net)





# Classic PORSCHE

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

## EDITORIAL

Editor: Dan Furr, [dan.furr@kelsey.co.uk](mailto:dan.furr@kelsey.co.uk)

Art Editor: Peter Simpson

Contributors: Shane O'Donoghue, Karl Ludvigsen, Peter Dumbreck, Dan Sherwood, Sharon Horsley, Robb Pritchard, Stephan Szantai, Adrian Brannan, Johnny Tipler, Emma Woodcock, Richard Holdsworth, Andy Prill, Robert Smith, Valkyrie Racing, REVS Media Archive

## ADVERTISING

Group Advertising Manager:

James Stainer 01959 543515 or 07948 802130

[james.stainer@kelsey.co.uk](mailto:james.stainer@kelsey.co.uk)

## MANAGEMENT

Chief Executive: Steve Wright

Chief Operating Officer: Phil Weeden

Managing Director: Kevin McCormick

Subscription Marketing Director: Gill Lambert

Retail Director: Steve Brown

Print Production Manager: Georgina Harris

Print Production Controllers: Kelly Orriss and Hayley Brown

Subscriptions Marketing Executives: Dave Sage and Claire Aspinall

Affiliate Marketing Manager: Kate Chamberlain

Publisher: Gareth Beesley

## SUBSCRIPTIONS

Ten issues of *Classic Porsche* are published per annum

UK annual subscription price: £49.50

Europe annual subscription price: £59.00

Rest of World annual subscription price: £64.00

UK subscription and back issue orderline: 0845 241 5159

Overseas subscription order line: +44 (0)1959 543 747

Toll free USA subscription order line: 1-888-777-0275

UK customer service team: 01959 543 747

Find current subscription offers at: [www.bit.ly/subscp](http://www.bit.ly/subscp)

Already a subscriber? Manage your account at:

[shop.kelsey.co.uk/myaccount](http://shop.kelsey.co.uk/myaccount)

## CONTACT US

For customer service support, please visit:

[help.kelsey.co.uk](mailto:help.kelsey.co.uk)

Customer service and subscription postal address:

Classic Porsche Customer Service Team,  
Kelsey Publishing Ltd, The Granary, Downs Court, Yalding Hill, Yalding,  
Kent, ME18 6AL, United Kingdom

## CLASSIFIEDS

Tel: 0906 802 0279 (premium rate line, operated by Talk Media Sales on behalf of Kelsey Publishing Ltd. Calls cost 65p per minute from a BT landline. Other networks and mobiles may vary. Lines open Monday-Friday, 10am-4pm)

Classifieds email address:

[cars@kelseyclassifieds.co.uk](mailto:cars@kelseyclassifieds.co.uk)

View and upload classifieds at: [motorfreeds.co.uk](http://motorfreeds.co.uk)

## DISTRIBUTION

Distribution in Great Britain  
Marketforce (UK), 3rd Floor, 161 Marshall Wall, London, E14 9AP  
Tel: 0330 390 6555

Distribution in Northern Ireland and the Republic of Ireland

Newspread Tel: +353 23 886 3850

## PRINTING

Precision Colour Printing, Telford

Kelsey Media 2022 © 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: articles submitted for consideration by the editor must be the 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 magazine are not necessarily those of the Editor or the Publisher. Kelsey Publishing Ltd accepts no liability for products and services offered by third parties. Kelsey Media takes your personal data very seriously. For more information of our privacy policy, please visit [KelseyMedia.com](http://KelseyMedia.com) takes your personal data very seriously. For more information of our privacy policy, please visit [kelsey.co.uk/privacy-policy](http://kelsey.co.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@kelsey.co.uk](mailto:dpo@kelsey.co.uk). *Classic Porsche* is entirely independent of Dr. Ing. h.c. F. Porsche AG. Contents may not be reproduced in any form or stored on any electronic system without written permission. No responsibility accepted for any unsolicited material. *Classic Porsche* recognises and abides by copyright laws and attempts to correctly credit all material used. If we have used or credited some of your work incorrectly, please contact us and we will do our best to fix the error.

**K KELSEY**media

**NEXT ISSUE ON SALE**  
**FRIDAY 18<sup>TH</sup> MARCH**



## DOWN UNDER PRESSURE



Back in June 1928, the gathered masses at Circuit de la Sarthe marvelled at the thundering Bentley screaming across the Le Mans finish line in first place. The car's drivers were Bentley director, Woolf Barnato, and his fellow 'Bentley Boys' thrill seeker, Bernard Rubin, who would end the race as the first Australian to win the daylong French enduro, which, in 1928, was enjoying its sixth staging. Amazingly, it would take a further fifty-five years for another Aussie to clinch top honours at Le Mans. I am, of course, referring to Vern Schuppan.

Vern's victory very nearly didn't happen. An overheating engine threatened to allow the no.3 Rothmans 956 (co-driven by Hurley Haywood and Al Holbert) to be overtaken by one of the sister 956s entered by the factory squad. It was a nail-biting finale, the Schuppan-Holbert-Haywood machine bellowing smoke as Derek Bell approached fast from the rear, bit between his teeth at the closing stages of his final stint in

a seat he'd been sharing with Jacky Ickx for the previous twenty-four hours.

Hopping out of the cockpit in order for Holbert to complete no.3's last laps, Schuppan advised the American of the toasty temperatures causing interrupted airflow to the left-hand radiator. With the engine complaining of drastically overheating cylinder heads, finishing the race was considered something of a miracle, let alone the impressive feat of the no.3 car crossing the line seventeen seconds ahead of a frustrated Bell. The faulty engine, having made it to the end of an especially challenging race, immediately gave up the ghost.

The events of that day are as clear in Vern's mind now as they were then. Beyond Le Mans in 1983, however, his career has been long and varied, taking in many different series, winning many different races and bagging many different championships. Of course, Porsche permeates his work like the name of a seaside resort runs through a stick of rock. Needless to say, we were delighted to get the rare opportunity to sit down with the man himself at his home in Adelaide and quiz him about the events leading up to his selection as a factory driver, as well as the goings-on surrounding that extraordinary win at Le Mans almost forty years ago. Enjoy the interview. Catch you next month.



**Dan Furr** Editor  
[@DanFurr](https://twitter.com/DanFurr)

## GET IN TOUCH

Visit the *Classic Porsche* Facebook page at [facebook.com/classicporschemag](https://facebook.com/classicporschemag)  
View the latest *Classic Porsche* subscription offers at [shop.kelsey.co.uk](http://shop.kelsey.co.uk)





CLASSIC PORSCHE SPECIALIST

SALES - SERVICE - RESTORATION - RACING - STORAGE



web: [www.export56.com](http://www.export56.com) facebook: /Export56Porsche instagram: /Export\_56



GEARED TO WINNING

- High quality KlingelInberg crown wheel and pinions
- We can produce special ratios
- Crown wheel and pinions for Porsche 356 (7:31), 901 (7:31) and 915 (8:35) available from stock
- More than 65 years experience in the production of high quality gearing for automotive, aerospace, military and industrial applications

### Tandler Precision Limited

29 Ross Road Business Centre  
Northampton NN5 5AX

Tel: 01604 588 056 Fax: 01604 588 064

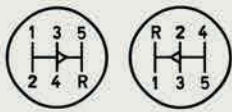
Email: [sales@tandler.co.uk](mailto:sales@tandler.co.uk)

[www.tandler.co.uk](http://www.tandler.co.uk)



# PARADIGM SHIFTER

## 917 EDITION



For all  
901/911/915s  
to 1986



STOMSKI RACING at long last introduces the newest version of its revolutionary PARADIGM SHIFTER- the 917 EDITION. A hand-crafted, wood laminate shift knob in the style of the 917 tops off the PARADIGM SHIFTER for a classic look and feel, yet a massively improved shifting experience. Precisely engineered, customizable, and NOW available with either a gloss or matte finished wood knob for the 901/911/915 transmissions.

**\$830**

SR150s-917



[www.STOMSKIRACING.com](http://www.STOMSKIRACING.com) +011(410)571-9779



## FEATURES

**08** **IMITATION GAME**  
Carrera 3.2 channels its inner RS 2.7.

**32** **ICE, ICE BABY**  
Valkyrie Racing's 356 A tackles Antarctica.

**42** **TOP DRIVER FROM DOWN UNDER**  
An exclusive interview with Vern Schuppan.

**52** **TIME TRAVELLER**  
Immaculately restored Carrera 3.2.

**60** **WAR CHEST: PART 2**  
Ferdinand Porsche's career at Daimler.

**68** **BORDER CONTROLS**  
Preparing a 356 A for historic rallying.

**76** **SPECIALIST VISIT: JAZ**  
Passion for Porsche in St Albans.

**84** **SHOCK TACTICS**  
Suspension advice from the experts.

**92** **DISCOUNTED SUBSCRIPTIONS**  
*Classic Porsche* delivered to your door.

**94** **PERSONAL PORSCHE**  
The unique 718-based Porsche-Behra.

**104** **SIGNAL TO NOISE**  
Zesty TRE-assembled 911 ST tribute.

SUBSCRIBE TO  
*Classic*  
**PORSCHE**  
SEE PAGE 92  
FOR DETAILS

68

08



16



104



84



60





## REGULARS

**16** **LIVEWIRE**  
Eberhard Mahle and Singer project news.

**20** **PORSCHE PRODUCTS**  
New gear for you and your Porsche.

**28** **GUEST SPEAKERS**  
Alex Manos and Andy Prill wax lyrical.

**114** **NEXT ISSUE PREVIEW**  
Ex-Jimmy McRae 964 hits the Dakar rally.





# IMITATION GAME

**Mike Flannery's Carrera RS 2.7 evocation makes use of Carrera 3.2 mechanicals and a raft of wide-ranging improvements to be even better than the real thing...**

Words **Emma Woodcock** Photography **Dan Sherwood**



If imitation is the most sincere form of flattery, the Carrera RS 2.7 must be blushing. A Porsche icon lauded for launching the Rennsport philosophy to the road-car public in the early 1970s, the Group 4 sports car homologation special keeps backdate builders coming back for more. The debut model for the ducktail spoiler has plenty to savour, combining lightweight construction with wider rear wheels, sharpened suspension and a bored-out 2,687cc flat-six producing near 210bhp to create early air-cooled perfection. Is there room for improvement, though? Enter Mike Flannery and his faster, lighter Carrera RS 2.7 tribute.

The raw figures make compelling reading. Peak power

reaches 255bhp and kerb weight is down to an estimated 1,050kg, giving a power-to-weight ratio of 243bhp/tonne. An original Carrera RS 2.7 can't get close. Even the two hundred M471 specification Lightweight variants – adding fibreglass wings and thin glass while subtracting the rear seats, radio and glovebox door – each tip the scales at 975kg to produce 215bhp/tonne. Swap to the more habitable, more common M472 Touring specification and the figures get even further apart: 1,075kg renders the Touring heavier than Mike's car and drops power-to-weight down to 195bhp/tonne.

All this goes to show the importance of choosing the right foundations. Built across three years at the behest of an enthusiast in possession of a genuine Carrera









RS 2.7 Lightweight – an owner who wanted a similar machine he could enjoy on the public roads without worrying about preserving originality crucial to the £750k-and-rising valuation of his iconic Porsche – the replica seen here is based on a 1986 Carrera 3.2, pairing period-accurate RS 2.7 features with an easy, convenient ownership experience. Torsion bar suspension and a 915 five-speed transmission evoke the real deal, but the fully galvanised bodyshell, servo-assisted brakes and Bosch Motronic electric fuel management offer advances the original does without.

### TORQUE OF THE DEVIL

Behind the rear wheels is where fourteen years of development really tell. Performance comes from a 3,164cc 930/20 flat-six producing 231bhp with effortless delivery. Power peaks at 5,900rpm and the 209lb-ft of available torque arrives by 4,800rpm, giving more force at lower revs than the highly tuned RS 2.7 unit can muster. Mike's car features a selection of choice alterations to liberate more urge, with a Dansk full exhaust for extra airflow and a Steve Wong performance ECU chip pushing the engine electronics into a 24bhp upswing. SSI heat exchangers are also at play. The noise is sublime.

As far as the engine and transmission are concerned, these are the only modifications, though it's true to say time and age had wearied the flat-six in its earlier life, problems compounded by an earlier failed renovation, prompting the previous owner to entrust a complete overhaul to Stockton-located marque specialist, Redline

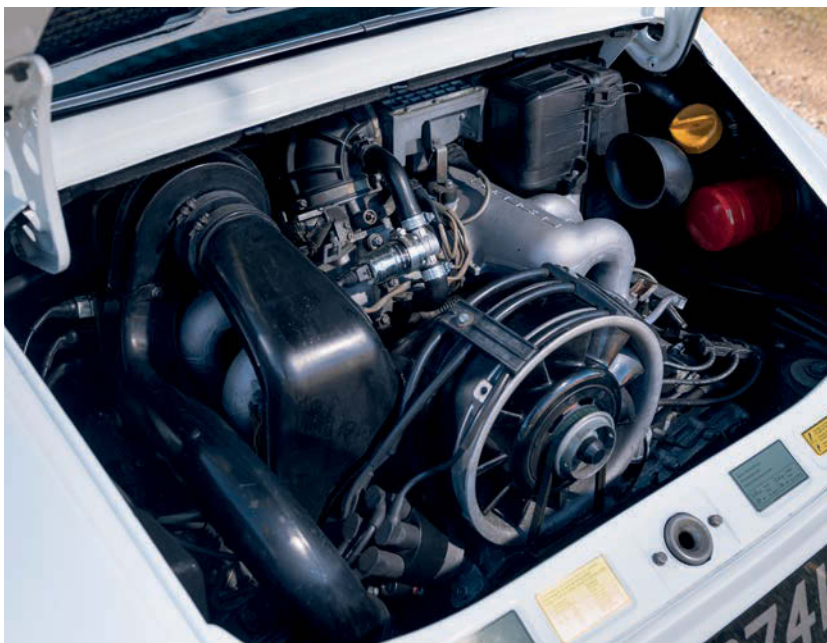
Racing. The six-time Porsche Carrera Cup Great Britain champions worked to perfecting standards. After initial testing exposed multiple major leaks, the company stripped the engine down to its core components before checking and cleaning each item. Regrinding and polishing the crankshaft followed.

Copious new components came next, imbuing the six-cylinder boxer with fresh life. Replacement crankshaft bearings and valve springs, cam carriers and piston springs, rocker arms and shafts all feature, supporting the new pistons and barrels forming the heart of the

**Above** Underpinnings from a Carrera 3.2 combine with the classic RS aesthetic to give this 911 a split personality







**Above** Restoration has been carried out with no expense spared, as demonstrated by receipts for twenty grand's worth of engine work

refreshed powerplant. Constructed with no expense spared, total receipted expenditure with Redline Racing exceeds £20,000. From the moment Mike set eyes on the finished build he knew wouldn't find a Carrera RS 2.7 better – replica or otherwise.

"It was like brand-new car," he marvels. Sparkling with the fruits of its multi-year construction, the car was offered for sale by historic sports car aficionado, Robert Barrie.

The exchange of money for Porsche was quickly agreed. "He was acting on behalf of the owner," Mike continues. "Robert couldn't have been more friendly, helpful, knowledgeable or personable." Discerning, too, as closer inspection revealed. "Often, a done-up Porsche looks less than perfect in one or two places, but it doesn't matter where

I peer with this RS replica. The underside, the engine bay, and the interior are all pristine."

Mike isn't an easy enthusiast to impress. Buying an SC Targa when the semi-open-top 911 was nearly new sparked his love of Porsche and he's been a dedicated owner of air-cooled Stuttgart sports cars ever since.

Highlights of his near four-decade ownership history include an early two-litre 911 S and a Maritime Blue 964 Turbo 3.6 with a factory Powerkit. He's also been the owner of a 964 30

## EVERY PANEL OF HIS 964 RS 3.6 LIGHTWEIGHT STAYED UNTOUCHED AND UNDAMAGED FOR THE DURATION OF HIS OWNERSHIP

Jahre Anniversary (often referred to simply as a *Jubi*), a limited-run special edition launched in 1993 and carrying a Turbo-look body, four-wheel drive and available only with Viola, Polar Silver or Amethyst paintwork. His association with our magazine stretches back as far – we've featured Mike's cars in our past issues and the







Carrera 3.2 Speedster he ordered new starred on the cover of the Winter 1990 issue of our sister title, *911 & Porsche World*.

Check the colour chart and a theme emerges, tying the Carrera RS 2.7 replica you see here to the Speedster, the SC Targa and a stripped-out 1977 machine with 3.2-litre power and RSR evocation bodywork, not to mention the 964 Carrera RS 3.6 Lightweight he owned until mid-2021: Mike likes his Porsches finished in Grand Prix White. Original paintwork, however, can be, well, too pristine — every panel of his 3.6 Lightweight stayed untouched and undamaged for the duration of his quarter-century ownership. With prices of air-cooled 911s rocketing during that time, especially so for rare special editions, the all-original, 49k-mile stunner simply became far too valuable to use as Porsche intended.

### USE NOT LOSE

"I really looked after my Lightweight, but every single drive became a worry," he explains. "If someone was to run in to the back of the car, even gently, then it would lose its complete originality and would never be the same again." He parted with the collector-quality classic Porsche for a market-topping price and abdicated himself of the responsibility. "I wanted to swap back to an air-cooled 911 I could actually use!" he laughs. His Porsche-mad grandson spotted the RS 2.7 replica in classifieds and Mike was soon happily behind the wheel.

Measuring up to one of the most hardcore and track-

oriented models in air-cooled history is a tough ask, but upgraded suspension gives this Carrera 2.7 lookalike the bite it needs to make an impression. Up-rated shock absorbers and polybushes sharpen the chassis, an SW Engineering strut brace firms the front end and custom geometry keeps handling predictable. "A 964 feels more modern, but my RS replica provides an old-fashioned and really enjoyable drive. I only use it to whizz around on sunny afternoons, but even then, I can tell this is a very sharp 911."

**Above** The exquisite finish was precisely what encouraged Mike to buy the car after selling his 964 RS







**Above and below** Interior is sublime, but look closely and you'll spot giveaways betraying the car's true identity as a Carrera 3.2

Period-style Avon CR6ZZ street-legal historic motorsport rubber (supplied by Birmingham Motor Tyres) gives the backdated machine a distinct advantage when the roads run rough. The rubber measures 185/70/15 over the front axle and 215/70/15 at the rear, with generous sidewalls creating the rounded comfort which sets classic sports car apart from their modern counterparts. "The ride is just beautiful and so much more comfortable than my 964 Carrera RS 3.6 Lightweight ever felt over bumpy asphalt." Genuine fifteen-inch Fuchs alloys benefit from £1,000 in recent refurbishment.

Mike is more taken by the MOMO Prototipo steering wheel, the crowning glory in a cabin echoing its inspiration without slavishly following the original. An 180mph RS speedometer, simplified door cards,

fabric door pulls and a stereo system delete with a Porscheshop-supplied radio blanking plate conform to Carrera RS 2.7 specification, but the three-spoke rim and Cobra Classic bucket seats (complete with headrests and custom houndstooth trim) offer a fresh,

visually arresting interpretation of the era. "I've never owned a car equipped with a MOMO Prototipo before. It's a very attractive thing to use and feels very

comfortable — the perfect antidote to modern, chrome, switch-laden devices."

The installation of a WEVO 915 shifter brings matching pleasure to every gearchange. "The shift is so tight and far shorter than the 915 norm. It isn't quite a 964-generation transmission, of course, but it really does help to make this 911 feel like a new car." Cutting lever

## GOOD LOOKS ARE MATCHED WITH AN INTERIOR WEIGHT SAVING REGIME JUNKING THE MASS OF REDUNDANT ELECTRONICS







travel by almost a third and introducing dual-sided spring loading adding reassuring weight and guiding the lever into the centre of the gate (not to mention the integrated reverse gear lockout), the kit transforms the imprecise Porsche original into a robust system encouraging enthusiastic driving.

Good looks are matched with an interior weight saving regime junking the mass of redundant electronics and the heavy, leather-laden original Porsche seats in an effort to slim down from the 1,160kg of a standard Carrera 3.2. Body panels from Redditch-based independent marque specialist, Pro-9, drive the other half of the onslaught, swapping the steel bonnet, engine lid and bulky bumpers for lightweight fibreglass items. That the substitute pieces create the shape of the Carrera RS 2.7 doesn't hurt either — one element no backdate can improve upon is the early Rennsport's evocative shape.

### HORN OF PLENTY

A jigsaw of smaller alterations add to the exterior illusion, not least the pair of new pre-impact bumper front wings sent straight from Porsche, giving the front end an accurate stance. The removal of the oh-so-eighties rubber sill finishers and the substitution of black Carrera 3.2 metalwork in favour of aluminium window surrounds and matching mirrors create the filigree delicacy of an early 911, with horn vents and the kink of the Dansk exhaust finisher completing the job. "The previous owner spent a fortune chasing absolute perfection," says Mike. "He achieved it," he adds, showing us the Autofarm-sourced Durant door mirrors and new

headlights ordered direct from Porsche Classic. The manufacturer-owned brand also supplied the car's new fuel cell.

This immaculate Carrera RS 2.7 replica is externally indistinguishable from the real thing, yet the concours-ready bodywork hides a mechanical specification which — whisper it — is even better. "Of course, I'd swap this car for the real thing if anyone offered," Mike reasons, "but then I'd be right back where I started — unable to drive my Porsche!" Far better to enjoy this fabulous replica for every one of its enhanced talents. Who needs the real thing, anyway?! CP

**Above** There are worse cars to hop into after time in charge of a 964 Carrera RS 3.6 Lightweight







**NEW!** Early 1966 through 1967 Window washer fluid bottle. Finally an accurate reproduction, in the correct size with the correct logo. Not the same as others offered elsewhere, ours exclusively! \$125



**H1 HEADLIGHTS ARE NOW IN STOCK!**  
Over 3 years in development. All the correct details you come to expect from our products. Includes bulbs, seals, and attachment screws. \$685 per pair



**NEW!** 1964 to very early 1966 Window washer fluid bag. Perfectly accurate right down to the internal hose strainer color! \$145



1965 to 1967 parking brake boot. No slits and no side tabs, all original molding details are correct. \$24



Rear bumper endcaps for the 65-68 cars is back in stock! Correct satin brushed finish, and the hardware is included as well. \$80 for the pair



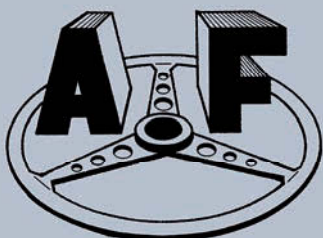
New "128" Lamps now available with the correct amber reflector! Perfect chrome, correct raised lettering, 12V bulb included (6V available). Pairs with amber reflector. \$560 per pair



Exact new re-production of the original SWF wipers for 1965 to 1967, painted in correct silver finish. Wiper blades and arms available as a package or separately. Silver arms and blades. \$80 for a full set



1967S, 1968S and 1968L correct "wide" rubber bumper insert, another one of those "unobtainable" parts to complete your restoration. \$360



# Auto-Foreign Services

Tel: +1-206-321-2960 E: [autoforeign@gmail.com](mailto:autoforeign@gmail.com)

[www.autoforeignservices.com](http://www.autoforeignservices.com)

Eric Linden, 29 year PCA member, 29 year 356 Registry member, also writing in the Early S Registry as "Soterik". All parts manufactured exclusively for us from NOS originals, and guaranteed to fit. Many more items to come!



# LIVEWIRE

Our look at what's happening in the wonderful world of air-cooled classics...

COMPLETE YOUR  
COLLECTION OF  
*Classic*  
**PORSCHE**  
ORDER BACK ISSUES AT  
[bit.ly/issuescp](http://bit.ly/issuescp)

## FIRST ROAD-GOING TURBOCHARGED 911 REIMAGINED BY SINGER BREAKS COVER

Singer, the California-based company famous for its modern interpretations of air-cooled 911s, has revealed details of its Turbo Study, a response to requests from clients for restoration services incorporating turbocharging. More than seventy 911 owners have already reserved bespoke builds enabled by the project.

This next generation of Singer product encompasses the iconic classic 911 Turbo body, 'whale tail' spoiler and 'shark fin', each reimagined to suit the specific balance of luxury and sporting character individual owners want from their cars. Imbued with highly capable performance, vehicles to be produced from the Turbo Study represent Singer's first road-going offering to feature forced induction. As you can imagine, company founder, Rob Dickinson, is more than a little excited. "I recall being eleven years old and left dry-mouthed and speechless by the black 930 with red tartan seats I was travelling in. Forty-five years on from that life-changing moment, I'm excited to present the results of our study, which aims to capture the awesome thrill of Porsche's first supercar, while reimagining its performance and refinement, taking both to new heights. I believe this is a fitting tribute to a model which changed my life, as well as the lives of many others."

### WOLF IN WOLF'S CLOTHING

The Wolf Blue Turbo Study presented here has been specified by its commissioning owner to reflect a personal vision of lightweight carbon-fibre bodywork, a 3.8-litre twin-turbocharged and intercooled flat-six (producing more than 450bhp), a six-speed manual transmission, rear-wheel drive, touring-focused suspension, carbon-ceramic brakes and an interior characterised by Malibu Sand leather, wood accents, electrically adjustable heated seats, air-conditioning and a matching luggage set. As is the case with all 911s reimagined by Singer, each Turbo Study restoration takes an owner's 964 as its starting point.

"We more than doubled sales of our services between 2020 and 2021,



and our new, much larger, consolidated facility in Torrance, California, enables us to expand the Singer team, respond to demand and welcome owners in comfort. Meanwhile, in the UK, our team is carefully executing each of the restorations enabled by our recent Dynamics and Lightweighting Study," says Mazen Fawaz, Singer's Chief Executive Officer. "The response to the Turbo Study has been incredible and we look forward to working with owners as their restorations progress."

"We began with naturally aspirated cars back in 2009, and now the Turbo Study allows us to celebrate the 911's equally iconic turbocharged DNA," Dickinson adds, confirming forced induction has firmly become one of his company's core capabilities.

For those keen to see and hear the results of the Turbo Study in person, the car will be running at the Goodwood Festival of Speed from 23rd June, before making its way to the Monterey Peninsula in Northern California for Car Week, which kicks off on August 15th. We'll bring you more details in forthcoming issues of *Classic Porsche*.





## FORTHCOMING AMELIA ISLAND SALE PRESENTS RARE AIR-COOLED PORSCHES AS EVENT'S STAR ATTRACTIONS

Gooding & Company is returning to Florida with a powerful line-up of star cars set to wow at the auction firm's twelfth annual Amelia Island sale, which takes place Friday 4th March. A 1959 718 RSK ranks high among the Porsches ready to go under the hammer, but there's a fine selection of other special sports cars from Zuffenhausen due to make an appearance, including a 2005 Carrera GT and a 1993 964 Carrera RS 3.8. A 1998 RUF Turbo R Limited is also sure to generate interest at the event, scheduled a day ahead of the weekend's Amelia Island Concours d'Elegance.

"Over the past decade, Gooding & Company has sold many significant Porsches at our Amelia Island Auction and we are excited to continue this tradition into 2022," said Gooding & Company Senior Specialist, David Brynan. "This particular 718 RSK has been in single family ownership for decades," he added, referring to chassis 718-018, purchased new by California privateer racer and Porsche-Volkswagen dealer, Emile Pardee, who campaigned the car successfully in various SCCA events. Demonstrating speed and ability, Pardee won his class in ten races with the car from 1959 to 1961, racking up three overall wins.

718-018 eventually made its way to the East Coast after being purchased by the consignor's father from a physician in South Carolina back in 1970. The car remained in static storage until 2014, when it underwent a painstakingly complete, photo-documented restoration over the course of four years at the hands of Porsche four-cam specialist, Ray Morgan, head of Vintage Motorcar Restorations in Jasper, Georgia. The restoration was meticulous in its attention to detail, and the car was even painted in nitrocellulose lacquer, as originally presented by Porsche.

## A SLATE OF EXTREMELY DESIRABLE PORSCHES AT THE GOODING & COMPANY AUCTION

Antique spray guns were used in the name of ultimate authenticity. The lower estimate is set at \$2.5m, with the upper estimate a million more.

Porsche manufactured only fifty-five examples of the 964 Carrera RS 3.8. Of these, only eleven were Clubsports. This specification made these cars as close as a customer could get to buying a road-going 911 RSR 3.8. As the most highly optioned RS 3.8 assembled, the car set to stun at Amelia Island was a factory one-off built by special request for Tobias Hagenmeyer, CEO of transmission giant, Getrag. Presented in black with yellow accents, the air-cooled rarity features seven wholly unique characteristics not found on any other RS 3.8 and is offered with a well-documented history file, including factory notes confirming the special build details. As the lowest-mileage, most original 3.8 Clubsport extant, and arguably the finest RS of its kind, this 911 has never before been publicly exhibited or offered for sale, making the auction opportunity second to none. The iconic 964's lower estimate is a cool \$1.8m.

The same figure is applied the Carrera GT up for grabs. The sole US example finished in paint-to-sample Polar Silver, this Porsche is very highly optioned — Dark Grey leather and more than \$27k in factory extras make for one of the most unique and highly optioned Carrera GTs ever offered for public sale, joining a slate of extremely desirable Porsches at the Gooding & Company auction, plus the aforementioned RUF Turbo R. Introduced in 2016, only seven examples of the 993-based Turbo R Limited were built, all in tribute to the original Turbo R, launched in 1998. The Limited makes use of the same twin-turbo 3.6-litre flat-six as the Turbo R, but with power increased to almost 620bhp and 553lb-ft torque. A true collector car. Visit [goodingco.com](http://goodingco.com) for further details.





## FIFTY YEARS OF PORSCHE DESIGN TO BE CELEBRATED IN NEW EXHIBITION

The Porsche Museum in Stuttgart is honouring Porsche Design's fiftieth anniversary with a special exhibition. Running until 10th July 2022, the event affords visitors the opportunity to immerse themselves in the most important, interesting and extraordinary Porsche Design products, with a wealth of interactive presentations available to help visitors understand how the prestigious brand became the success it is today.

Ferdinand Alexander 'Butzi' Porsche, the celebrated designer of the 911 and the eldest son of Ferry Porsche, founded Porsche Design together with his younger brother, Hans-Peter, in 1972. Porsche Design has long since become an internationally renowned lifestyle brand, known for functional and durable products with a purist aesthetic. Alongside displays exploring the life and work of Butzi, his design philosophy and his great creative influence over Porsche as a whole, key artefacts from five decades of Porsche Design will be explored in detail.

Butzi's objective was to take Porsche design principles beyond the realm of the automobile. He outlined his design standard as "the pursuit of the perfect symbiosis of form and function" and succeeded in impressive fashion with Porsche Design's very first product, the Chronograph 1 wristwatch, a precision timepiece produced as a gift to Porsche employees.

Drawing inspiration from the anti-glare displays in the cockpit of a sports car, the Chronograph 1 — a limited-volume production piece manufactured in 1972 and therefore representing the very beginnings of Porsche Design — features a matte black dial, a red stopwatch second hand, luminescent hour indices and high-quality anti-glare crystal for optimum readability. Revolutionary at the time, the Chronograph 1 is today regarded as a perfect combination of design know-how and engineering excellence. It became a fashion and technical icon, even making an appearance on the wrist of Tom

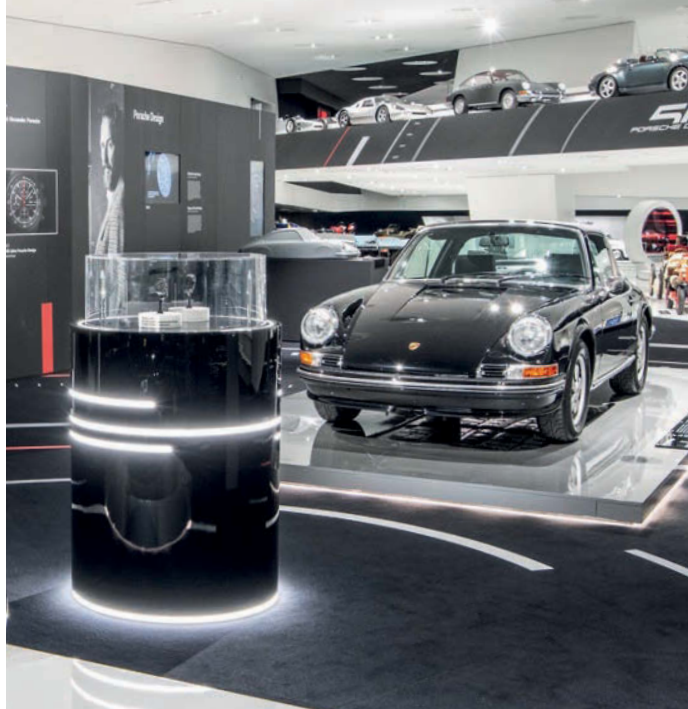
## STYLE-DEFINING PORSCHE SPORTS CARS FROM BUTZI'S DRAWING BOARD

Cruise in the blockbuster film, *Top Gun*. And, just like the Cruise flick, Butzi's wristwatch spawned a sequel: the lengthily named (and strictly limited) Chronograph 1 911 Edition 50Y Porsche Design Edition, released in time for the Porsche Museum's celebratory exhibition this month.

Other Porsche Design classics — some of which have won multiple awards — on display for visitors to experience digitally and interactively include the P'8478 aviator sunglasses, the P'9521 mobile telephone, the P'3613 tobacco pipe and the Monobloc Actuator watch series, featuring fully integrated stopwatch pushers. The anniversary exhibition also includes style-defining Porsche sports cars from Butzi's drawing board, as well as those loaned to the Porsche Museum from his private collection. These include a 904 Carrera GTS (known to be his favourite Porsche) and a 993 Speedster. A gloss black 911 S 2.4 Targa from Porsche Design's founding year and recently restored by Porsche Classic as part of the Porsche Museum's special request programme will also be on display, as will a new 992 special edition labelled as the 911 Edition 50Y Porsche Design. Yes, the new wristwatch is a promotional tie-in for the semi-open-top 911.

With locations in Zell am See, Berlin, Ludwigsburg, Los Angeles and Shanghai, Porsche Design also caters for an ever increasing number of international third-party clients, designing first-class consumer goods, household appliances and industrial products for brands including Elan, KEF, LaCie, Morita and Japanese electronics giant, Panasonic.

The Porsche Museum is open each week from Tuesday to Sunday, 9am to 6pm. For ticket prices and booking information, visit [porsche.com](https://www.porsche.com).





## TRIBUTES POUR IN FOR EBERHARD MAHLE

Eberhard Mahle was European Hill Climb Championship victor in 1966 and the first driver to take an international title in a 911. He had previously achieved success with other brands, including Alfa Romeo in the 1957 German GT Championship and Volvo in the 1959 German Hill Climb Championship, and also served as a works driver for Abarth, Borgward and Porsche's Stuttgart rivals, Mercedes-Benz.

In 1959, Mahle finished second in the Targa Florio at the wheel of a 550 Spyder and, the following year, he won the Solitude Rally in a 356 Super 90. "We are greatly saddened by the news of his death. Our thoughts are with his wife, Karin, his family and the clubs in which Ebs was active into his old age," says Achim Stejskal, Head of Porsche Heritage. "We would like to thank him for his successful racing endeavours and the numerous assignments he undertook for Porsche in recent years."

Mahle, who was born on 7th January 1933, had petrol in his blood. His father, Ernst, founded engine component manufacturer, Mahle GmbH, and, fittingly, the first Mahle high-performance pistons were tested in a 356 in the early 1950s. From then on, the Mahle company became an original equipment manufacturer for Porsche.

### A GREAT SOLITUDE

Mahle the Younger began riding motorcycles and driving cars as a teenager. In 1954, he began his racing career with a DKW 3=6 at the Solitude Rally, where he won his class. He bought his first Porsche that same year and, despite its 1,100cc boxer engine offering a rather modest forty horsepower, he finished sixth in the Achalm hill climb near Reutlingen the following year.

By 1963, Mahle had competed in close to 210 races and rallies, driving to six overall wins and more than 150 class victories. After a serious accident with a go-kart through no fault of his own in 1964, he spent eighteen months in

hospital, but, by 1966, had recovered to such an extent "that I wanted to have another go," as he put it. He would go on to not only win a trophy, but also top honours in the 'GT class without engine capacity limitation' at the European Hill Climb Championship. "That was just right for me," he later recalled.

Even so, when Mahle wanted to try out a 911, Porsche racing manager, Fritz Huschke von Hanstein, was sceptical. He only had rally cars available and told the eager Swabian "you can never win if Ferrari and Ford are competing with over 300bhp". Mahle, however, was not to be deterred and, through his friend, Gerhard Mitter, bought a year-old two-litre 911 with output boosted to more than 160bhp. The high-horsepower Prancing Horses and Blue Ovals dominated at the championship's first event at Rossfeld (a well-built track with fast straights), but Mahle still managed to finish in third place.

The other tracks that season suited both driver and vehicle much better: lots of bends, lots of heavy braking, lots of acceleration. Everything was *just right* for the agile 911. "And a good driver can compensate for any performance deficit on such tracks," Mahle said, defiantly.

Indeed, he proved himself to be the best by winning all the other races in the GT class, with the exception of the finale on the Gaisberg, where he collided with a guardrail before getting out and surveying the damage. He had only dented the 911's wing, but decided to abandon the race due to valuable time lost inspecting the car. No drama — he already had an unassailable lead in the competition before the regrettable smack put paid to proceedings.

This one DNF didn't diminish his pride in winning the European Hill Climb Championship. "It was my greatest success," he reflected in later life, "especially because all the so-called experts told me I could never win the way I did!"

Mahle passed away at eighty-eight years of age not long before this issue of *Classic Porsche* went to print. Our condolences go out to his family.



# YOUR PORSCHE INSURANCE

01480 484 839

SHARING YOUR PASSION FOR OVER 35 YEARS



# PRODUCTS

Hot new products for you and the classic Porsche in your life...

SUBSCRIBE TO  
*Classic*  
**PORSCHE**  
SEE PAGE 92  
FOR DETAILS

## CSF PERFORMANCE OIL COOLER FOR CLASSIC 911/930/CARRERA 3.2

After more than eighteen months of development work and \$20k+ investment into creating the perfect oil cooling tube and fin combination, fluid transfer and engine cooling specialist, CSF, has answered the call of Porsche enthusiasts around the world with the introduction of this state-of-the-art right fender oil cooler, suitable for all 911s built between 1965 and 1973 without an oil cooler, as well as G-series cars making use of a tubular oil cooler (a CSF adapter kit is available to suit). For the Carrera 3.2, the CSF upgrade presents a straight swap with the factory part.

CSF's new oil cooler maintains a classic design to suit the most discerning, concours-focused restoration buff, but comes packed with innovative modern technologies to meet the demands of high horsepower builds with bigger engines, larger turbochargers and standalone ECU management systems. Featuring a 50mm core, fifteen rows of turbulated tubes, sixteen rows of cooling fins, no increase in pressure drop, close to ten percent better performance (extensively wind tunnel tested) and CSF's innovative square-fin design (stronger and less prone to clogging), each oil cooler offers fifty percent greater flow capacity for heightened performance.

Pressure tested at 8bar (116psi) and fully TIG welded, this fantastic oil cooler is machined in-house at CSF's Californian headquarters and includes a temperature sender combination mounting boss with three fittings (a threaded plug for use without a fan, an M14x1.5P adaptor for use with the OEM fan and an 3/8-18 NPTF adaptor for use with a modern fan, such as those manufactured by SPAL). M3x1.5 high-flow fittings and M22x1.5 inlet and outlet connections are designed with an internal radius for maximum flow, with copper crush washers for increased strength and durability over the standard-use mild steel.

Supplied with fitting instructions and slotted mounting holes for easy installation, each CSF performance oil cooler carries an individual serial number for quality control and authenticity and is available to order direct from the company's website. For further information and technical details, visit the CSF website today..

**Price: \$899**

**csfrace.com or call +1 800 827 1991**



## HÉRITAGE D'UNE PASSION COMIC BOOK

Kick back and follow the adventures of Alice Courtois in her quest for the classic Porsche stolen from her late father. Authored by Gilles Desvallois, head of Classic Passion (the popular French air-cooled 911 marketplace and enthusiast community) and illustrated by graphic novel artist, François Tallon, this full-colour paperback sees Courtois delve into the history of the 356, early 911, 912, 914, 964 and 993 as she furthers her knowledge of Porsches in a bid to help her trace the whereabouts of the missing air-cooled classic. Completed after twelve months of development work, the book — comprising fifty-two A4 pages printed on 100% organic paper — draws on Desvallois' personal Porsche ownership experiences and is available to order from the title's dedicated website, Amazon or from all major bookstores in France. Though only a French-language edition is currently available, the striking illustrations tell their own story, regardless of your mother tongue.

**Price: €22**

**classic911comic.com**





**1993 PORSCHE 964****CARRERA RS 3.8 CLUBSPORT**

The Most Unique and Highly Optioned of Only 55 Examples | Built to Order for Tobias Hagenmeyer, CEO of Getrag Group

**2005 PORSCHE CARRERA GT**

Highly Optioned Example Finished in Paint-to-Sample Polar Silver  
Less than 2,500 Miles from New

**2004 PORSCHE 911****40TH ANNIVERSARY EDITION**

Less than 15,000 Miles from New  
Without Reserve

**1998 RUF TURBO R LIMITED**

One of Only Seven Examples Built  
The Sole Example in Riviera Blue

**1959 PORSCHE 718 RSK**

Offered from over 50 Years of Single Family Ownership | Delivered New to Privateer Racer and Porsche Dealer Emil Pardee | Raced by Emil Pardee to 10 First in Class Finishes, Including Three Overall Wins  
Underwent Full Photo-Documented Restoration by Porsche Specialist from 2014 to 2018

# Amelia Island Auction

FRIDAY MARCH 4 AT 11AM EDT

ONLINE BIDDING AVAILABLE  
VIEW AUCTION PREVIEW &  
REGISTER TO BID

NOW INVITING CONSIGNMENTS  
CONTACT A SPECIALIST  
TODAY TO LEARN MORE

quality is our style™ 



## STUTTGART CLASSICA DIMPLED WOODEN GEAR KNOBS

Air-cooled Porsche parts and restoration specialist, Stuttgart Classica, has released an update to its range of hugely popular wooden gear knobs. Taking the form of a dimpled gearstick topper, each wooden knob is lovingly crafted from recycled skateboard decks, resulting in unique finishes, which have been protected against wear by a coating of clear varnish. Knob diameter (ooer!) is 48mm, with adaptors available to enable seamless integration with the cabin of any 901, 915, G50, Wevo or 944 shifter-equipped Porsche. Shipping is free to mainland UK addresses, with worldwide delivery available as an option when placing an order at the Stuttgart Classica online store, where you can also view the company's latest 911 restoration progress reports.

**Price: £138**

**[stuttgart-classica.co.uk](http://stuttgart-classica.co.uk)  
or call 01386 701953**

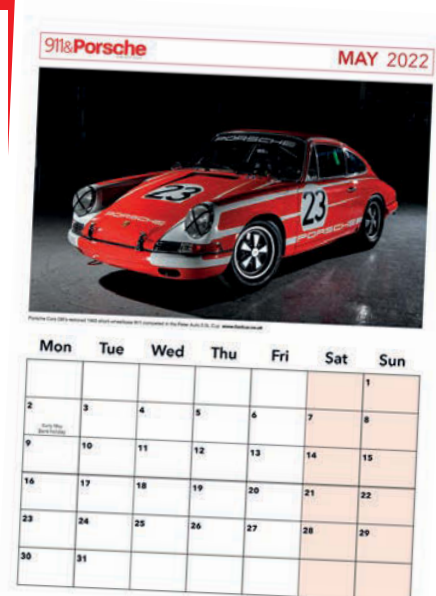
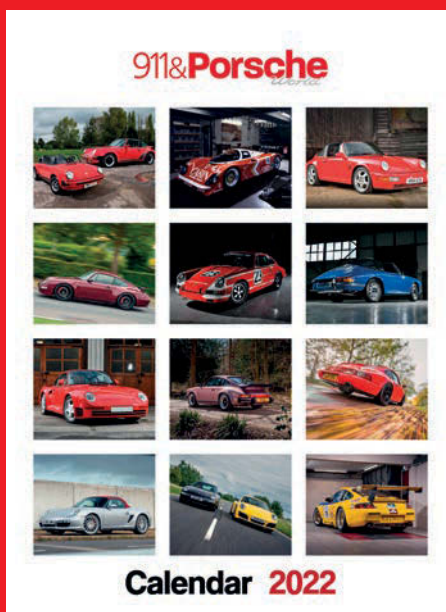


## 2022 PORSCHE CALENDAR

Featuring stunning images lifted from the pages of *Classic Porsche* and its sister title, *911 & Porsche World*, this A3-sized wall-hanging calendar proudly displays cars as diverse as a 911 Junior, a 959 and RLR 962-200, one of the most historically significant Group C prototypes to ever wear the Porsche crest. Each day is represented with enough space for you to make notes — perhaps listing key enthusiast events, vehicle maintenance schedules or your car's annual date with an MOT tester?! Displaying fantastic photography throughout, this superb calendar is a must for any Porsche fan and is offered with free delivery to all UK addresses. Low-cost overseas shipping is also offered at the point of purchase from the Kelsey Publishing online store.

**Price: £8.99**

**[shop.kelsey.co.uk/911CAL](http://shop.kelsey.co.uk/911CAL)  
or call 01959 543747**



## 964 RACE SYSTEMS STAINLESS STEEL EXHAUST SYSTEM FOR 993 CARRERA S/CARRERA 4S/RS

In collaboration with Reef Performance Exhausts, 964 Race Systems has launched a bespoke stainless steel exhaust system for the 993 (Carrera S, Carrera 4S and Carrera RS models). Fully hand fabricated from 304-grade stainless steel and featuring integrated 200-cell race catalysts/heat exchangers, this high-flow pipework makes use of tuned and purged equal-length manifolds with side-mounted silencers and custom oval tailpipes. Noise tested at 4,500rpm and registering 100db with absolutely no drone, this top-quality exhaust is the result of jigged fabrication guaranteeing millimetre-perfect fit. Exclusively available through 964 Race Systems, this nifty 993 performance package is ready for immediate despatch.

**Price: £5,520 plus shipping**

**[964racesystemsLtd.com](http://964racesystemsLtd.com) or call 07748 653853**





# BEVERLY HILLS CAR CLUB

SPECIALIZED DEALER OF EUROPEAN AND AMERICAN CLASSIC CARS



Stock#14613 CALL NOW (310) 975-0272



## 1989 Porsche 930 Turbo stock #14613

The 930 Turbo is an utterly unique supercar with the 1989 models featuring the highly desirable Getrag G50 five-speed manual transmission. Our Porsche 930 Turbo has only 31,332 miles on the odometer. It comes in its factory color code #550 Linen Grey Metallic with a linen interior. It has a clean Carfax, Flat 6 Cylinder 3.3-liter engine, air conditioning, rare Cibie Pallas driving lights, Locking differential 40%, power windows, sunroof, 4-wheel disc brakes, Fuchs wheels, jack, spare tire, and tool kit. Included are service documents and receipts totaling over \$16,000. This is truly an investment grade 930 that will make a strong addition to any classic car collection. A mechanically sound supercar. **For \$295,000**



### 1952 Porsche 356 Pre-A 1500S Reutter Cabriolet #14567

Presenting this extremely sought-after 1952 Porsche 356 Pre-A 1500S Reutter Cabriolet that is available in this gorgeous color combination of Strawberry Red with a sand beige interior. The vehicle comes equipped with a 4-speed manual transmission, 1953 Flat 4 Cylinder 1500 engine, dual carburetors, Telefunken radio, soft top, bent-windshield, steel wheels, and chrome hub caps. Also included is a copy of the Certificate of Authenticity and Kardex. An excellent opportunity to acquire such a rare and hard-to-find early low production air-cooled 356 Porsche that is mechanically sound. **For \$325,000**



### 1965 Porsche 356SC Coupe #13311

Presenting this exciting 1965 Porsche 356SC Coupe featured with matching numbers (Kardex copy included) and is available in its factory color code #550 Linen Grey Metallic with a linen interior. It has a clean Carfax, Flat 6 Cylinder 1600SC engine, rear luggage rack, dual carburetors, steel wheels, Porsche hub caps, and spare tire. A gorgeous color combination original West Coast car that had the same owner since 1976 and is mechanically sound. **For \$108,500**



### 1964 Porsche 356C Factory Sunroof Coupe #13555

Here is a rare 1964 Porsche 356C Factory Sunroof Coupe featured with matching numbers (Kardex copy included). Available in its factory color code #540 Signal Red with a black interior. The vehicle comes equipped with a 4-speed manual transmission, 1600cc engine, dual carburetors, sunroof, matching numbers hood/decklid, chrome wheels, and 4-wheel disc brakes. An excellent 356C Coupe that is ready to be driven and enjoyed. This extremely sought-after Porsche had the same owner since 2000 and is mechanically sound. **For \$119,950**



### 1973 Porsche 911E Targa #12666

Here is a recently discovered 1973 Porsche 911E Targa featured here with matching numbers is available in its factory color code #117 Light Yellow with a black interior. It comes equipped with a 5-speed manual transmission, 4-wheel disc brakes, G28 Group option: S trim, heated rear glass, sway bars, S instrument, air conditioning, and Fuchs wheels. This is an extremely original Porsche 911E (please review paint meter reading photos). A very sought-after original blue plate California car that is an excellent addition to any Porsche enthusiast. Don't miss your chance to acquire this original 911 that is mechanically sound. **For \$108,500**



### 1998 Porsche 993 Carrera S Coupe #13650

Here is an original 1998 Porsche 993 Carrera S Coupe that is available in its (special order) factory color code #L3AX Zenith Blue with a sand beige interior. The vehicle comes with a clean Carfax and is equipped with a 5-speed manual transmission, Flat 6 Cylinder 3.6-liter engine, automatic speed control, sport suspension, engine sound package, LSD Limited Slip Differential with 40% lock, ABS Automatic Braking Differential (Traction control), Board computer, Cassette-radio Becker Porsche CR-210, 6-disc CD changer Becker Porsche DCC-3, air conditioning, sport seats with height electrically adjustable (left & right), leather front seats, power mirrors, power windows, power steering, sunroof, Dark Rootwood shifter, Dark Rootwood parking brake lever, Stainless steel tailpipes (oval), 4-wheel disc brakes, 16" Technology wheels (lightweight hollow spokes), jack, tool kit, and air compressor. Also included are paint meter reading photos as well as receipts totaling over \$15,000. An excellent vehicle that is ready to be driven and enjoyed. Do not miss your chance to jump into the ownership of this well-equipped air-cooled sports car that is mechanically sound. **For \$167,500**



### 1985 Porsche Carrera Coupe Turbo Look M491 #14637

This rare limited production 1985 Porsche Carrera Coupe Turbo Look M491 featured with matching numbers and 29,182 miles on the odometer is available in its factory color code #700 black with a black interior. The vehicle comes equipped with a 5-speed manual transmission, Flat 6 Cylinder 3.2-liter engine, air conditioning, automatic speed control, limited-slip differential, central locking system, steering wheel with raised hub, sports seats, power windows, sunroof, 4-wheel disc brakes, Fuchs wheels, and spare tire. Also included are receipts copies totaling over \$3,000 which included a major service done on September 2, 2021, at a cost of \$2,695. An excellent opportunity to jump into the ownership of this original California car. An extremely collectible and well-equipped factory Turbo Look Porsche that is mechanically sound. **For \$135,000**



### 1990 Porsche 964 Carrera 4 Coupe #12689

Here is a beautiful original paint 1990 Porsche 964 Carrera 4 Coupe featured with 33,589 on the odometer and is available in its factory color code #700 black with a black interior. It comes with a clean Carfax and is equipped with a 5-speed manual transmission, Flat 6 Cylinder 3.6-liter engine, air conditioning, automatic speed control, power windows, power steering, jack, 4-wheel disc brakes, D90 wheels, and jack. Both the color code and options sticker are still in place under the hood. Also included with this vehicle are paint meter reading photos. An extremely desirable low mileage 964 Coupe that is mechanically sound. **For \$125,000**



### 1988 Porsche Carrera Coupe #13994

Presenting this pristine special ordered 1988 Porsche Carrera Coupe featured with matching numbers and is available in its (special order) color code #98P Venetian Blue Metallic with a blue interior. Equipped with a 5-speed G50 manual transmission, spoiler (front & rear), automatic speed control, air conditioning, steering wheel with elevated hub, power windows, locking differential, automatic heating control, sunroof, 4-wheel disc brakes, Fuchs wheels, spare tire, tool kit, air compressor, and jack. Both the color code and options sticker are still in place under the hood. Also included with this vehicle are paint meter reading photos as well as service records dating back from 1987 to 2019 documenting the vehicle's history and totaling over \$16,000. An excellent and original air-cooled Porsche that is ready to be driven and enjoyed. Do not miss your chance to own such a beautiful sports car that is mechanically sound. **For \$108,500**



### 1977 Porsche 930 Turbo Sunroof Delete Coupe #14262

Presenting this matching numbers 1977 Porsche 930 Turbo Sunroof Delete Coupe that is available in its factory color code #944 Platinum Metallic with a brown interior. The 930 comes equipped with a 4-speed manual transmission, air conditioning, salvage title, power windows, 4-wheel disc brakes, Fuchs wheels, and spare tire. A highly collectible air-cooled 930 Turbo that is mechanically sound. **For \$98,500**



### 1987 Porsche Carrera Targa #13747

Here is a stunning 1987 Porsche Carrera Targa featured with matching numbers and 60,290 miles on the odometer is available in its factory color code #700 black with a sand beige. The vehicle comes equipped with a 5-speed G50 manual transmission, Flat 6 Cylinder 3.2-liter engine, air conditioning, automatic speed control, sport seats, central locking system, front/rear spoiler, power windows, 4-wheel disc brakes, 16" Fuchs forged alloy wheels, jack, and tool kit. Also included with this vehicle are paint meter reading photos and receipts totaling over \$17,000. A well-equipped and maintained Carrera Targa that is mechanically sound. **For \$86,500**



### 1992 Porsche America Roadster #13884

Presenting this exciting 1992 Porsche America Roadster that is available in its factory color code #80K Guards Red with a sand beige interior. The vehicle comes with a clean Carfax and is equipped with a 5-speed manual transmission, Flat 6 Cylinder 3.6-liter engine, automatic speed control, air conditioning, power windows, power steering, rear seat delete, soft top, boot, 4-wheel disc brakes, spare tire, and 5-spoke wheels. Both the color code and options sticker are still in place under the hood. A very sought-after car that is an excellent addition to any Porsche enthusiast. Don't miss your chance to acquire this original limited-production Porsche America Roadster that is mechanically sound. **For \$125,000**



### 1987 Porsche Carrera Sunroof Delete Coupe #14444

This well-equipped 1987 Porsche Carrera Coupe featured with matching numbers and is available in its factory color code #35V Marine Blue Metallic with a linen interior. The vehicle comes equipped with a 5-speed G50 manual transmission, Flat 6 Cylinder 3.2-liter engine, air conditioning, steering wheel with elevated hub, central locking system, sports seats, power windows, 4-wheel disc brakes, jack, spare tire, and tool kit. Both the color code and options sticker are still in place under the hood. A desirable color combination air-cooled Porsche that had the same owner since 2004 and is mechanically sound. **For \$86,500**

## LOOKING FOR CLASSIC OR LUXURY SPORTSCARS?

• We Buy and pick up from any USA location • Worldwide Shipping



Please check our website as we have cars being delivered daily

Alex Manos, BEVERLY HILLS CAR CLUB 4576 1/2 Worth St., Los Angeles, CA 90063

T: (310) 975-0272 <http://www.BeverlyHillsCarClub.com> E: [sales@beverlyhillscarclub.com](mailto:sales@beverlyhillscarclub.com)





## PORSCHE: EXCELLENCE WAS EXPECTED

Karl Ludvigsen's masterwork, *Porsche: Excellence Was Expected*, is the unrivalled history of the Porsche company, its products and the firm's motor racing heritage, from the first Gmünd coupe in 1948, through its sixty years as an independent manufacturer, to its success under the auspices of the Volkswagen Group. Make no mistake, this is the ultimate reference library for all things Porsche.

Over four decades ago, the first edition of *Porsche: Excellence Was Expected* was hailed as the definitive archetypal marque history. Updates in 2003 and 2008 continued to enhance the title's enviable reputation. For this latest edition, Ludvigsen — a regular contributor to *Classic Porsche* — reviewed newly available Porsche archival material, conducted many in-depth interviews and unearthed fresh facts, allowing new and surprising interpretations of many aspects of the Porsche company and its cars, as well as appraisal of the brand's work in the field of automotive electrification. Now totalling four volumes, 2,834 pages and close to 3,000 photos and illustrations, every page has been revised and redesigned — new text, images, tables, graphs and illustrations feature throughout.

The first volume, *Surpassing Expectations*, covers the period 1948-1971. Comprising forty-two chapters, it documents Porsche's origins, the design and development of the 356, four-cam cars, Porsche in F1, the birth of the 911 and contesting the big races. Book two, *Hitting the Apex*, features thirty chapters covering 1967-1989. The 914, 917, Le Mans victories, return of the Carrera nameplate, experiments in turbocharging, front-engined models, V8s and Group C racing are all examined in detail.

The third volume, *Comeback*, includes twenty-nine chapters spanning the years 1982-2008. The 944's huge-volume production,



the arrival of the 959, Porsche's return to F1 (as an engine supplier), the end of the air-cooled era, Boxster development, Cayenne product lines and the Carrera GT are all scrutinised, while the collection's fourth and final hardback, *21st Century*, presents a further thirty-one chapters looking at Porsche history between 2002 and the present. RS Spyders in LMP2, water-cooled 911s, the four-door Panamera, 981, Macan market success, the 919 E-Hybrid's domination of endurance racing, the all-electric Taycan and Porsche's intentions for future product development are all laid bare.

Widely regarded as the gold standard of automotive books, *Porsche: Excellence Was Expected* is the essential element in every Porscheophile's reference library. The complete collection weighs in at almost fourteen kilos, highlighting just how much has been packed into every volume of this beautifully presented quartet of 27x36x30cm hardbacks from celebrated automotive publishing house, Bentley Publishers. We won't pretend the cost is chump change, but the reward is priceless.

**Price: \$524.95**  
**(Currently on offer at Amazon UK for £298.49)**  
**Order direct from [bentleypublishers.com](http://bentleypublishers.com)**



## MITTELMOTOR LEATHER STEERING WHEEL FOR CLASSIC 911/912/914

The 911 has undeniably grown in size over the years, and though many look back on the diminutive early Porsche flagship with fondness, drivers more than six feet tall certainly know the problems of squeezing into a classic 911, 912 or 914, primarily because the factory steering wheel in Porsches built before the G-series 911 were very large, often forcing acts of contortion. For tall drivers who want to sit, shift and steer sensibly in their retro ride, Mittelmotor has commissioned fresh production of these steering wheels meeting all requirements for originality, driving comfort and sportiness, but with a 380mm diameter. Upholstered in the finest leather and padded thicker than the steering wheels they replace, Mittelmotor's offerings are suitable for all 911s (and their same-age 912s and 914s) prior to the G-series generation of cars, with further versions available for the 964 and 993. Each Mittelmotor steering wheel can be bought with a 30mm raised hub, 40mm bowl, a combination of raised hub and 70mm bowl and, of course, with the all-important horn button.

**Price: €399**  
**[mittelmotor.de](http://mittelmotor.de) or call +49 234 935 1414**





**TRE** MOTORSPORTS

911 SOLUTIONS

**Suppliers of Sports  
Purpose replica parts**

**Mechanical  
fuel injection,  
ignition distributors,  
from R to RSR  
body kits,  
seats, and  
much  
more**



15854 Strathern St, Van Nuys, California, USA 91406 • Tel 818 909 9220 • [tremotorsports@gmail.com](mailto:tremotorsports@gmail.com)  
[www.tremotorsports.com](http://www.tremotorsports.com)

**MITTELMOTOR™** EVERYDAY RACING

**PORSCHE PARTS SERVICE MOTORSPORT**

f @MITTELMOTOR  
i @MITTELMOTOR.DE  
v @MITTELMOTORGMBH

BOCHUM / GERMANY  
T +49 234 935 14-14  
INFO@MITTELMOTOR.COM



SERVICE AND REPAIR OF ALL  
PORSCHE MODELS



DAILY WORLDWIDE SHIPPING  
OF ORIGINAL, AFTERMARKET  
AND RACE PARTS

**MITTEL  
MOTOR  
.COM**



**PayPal**



ORIGINAL AND RACE ENGINE  
BUILDING



## EBC BRAKES RACING TRACK PACK

Braking power being one of the most crucial aspects of vehicle performance goes without saying, especially when it comes to high-speed track toys. EBC Brakes Racing's new Track Pack is a fantastic way to monitor braking system temperatures, thereby helping you to maintain your Porsche's stopping power. Each kit comprises a variety of useful heat management solutions. First up is a one-litre bottle of the company's BF307+ ultra-high performance Super DOT4 brake fluid, ideal for hard-working braking systems subject to extreme temperatures. Also in the kit are ten self-adhesive temperature strips, enabling quick and easy real-time reading of each caliper's temperature without the need to remove wheels. Three quick-dry disc heat paints (designed to melt away at designated temperatures, with accuracy to within one percent) are included, each a different colour: green, orange/red and yellow, rated at 427°, 538° and 649° respectively. Three bottles of temperature paint thinners also form part of each Track Pack, as do EBC Brakes Racing stickers, which don't do anything to help with performance, but everyone loves stickers, right?! The EBC Brakes Racing Track Pack is available with immediate effect from your local EBC Brakes stockist or by ordering online. Search for part number TP001.

**Price: £178.80**

**[ebcbrakesdirect.com](http://ebcbrakesdirect.com) or call 01604 286028**



## STABILANT 22 ELECTRONIC CONTACT ENHANCER

Of particular interest to owners of older Porsches, Stabilant 22 is a product used to improve the conductivity, reliability and performance of electronic connectors and contacts, ensuring a long-term, cost-effective and easy to use solution for intermittent problems causing connector failure. Taking the form of a liquid semiconductor providing the effect of a soldered joint without having a physical bond, Stabilant 22 is a niche product saving automotive electricians and owners of affected vehicles time and money. This product has been sold to rave reviews in Canada and the USA for more than twenty-five years, helping owners repairing, refurbishing and reassembling their classic and modern-classic Porsches to great effect. The advantage is not to make new contacts better, but to keep old contacts operating as if they were new, in spite of the ravages of time and adverse operating environments. Exhibiting excellent lubricating properties, no creep, low vapour pressure, exceptional stability and environmentally sound ingredients, this handy, low-price product is a fantastic addition to any home mechanic or automotive electronic specialist's toolbox, substantially improving the reliability of sensor contacts and computer-based module connectors, as well as audio equipment, alarms and security systems, wiring harnesses, instrument clusters, powered interior mirrors and windows, sunroof, drop-tops, GPS systems and a wealth of other electronic components, including diagnostic equipment. Stabilant is available as a 5ml field kit.

**Price: £49.99**

**[morethanpolish.com](http://morethanpolish.com) or call 01780 749449**



## PATRICK MOTORSPORTS BILLET 911 & 930 FLYWHEELS WITH DME TIMING

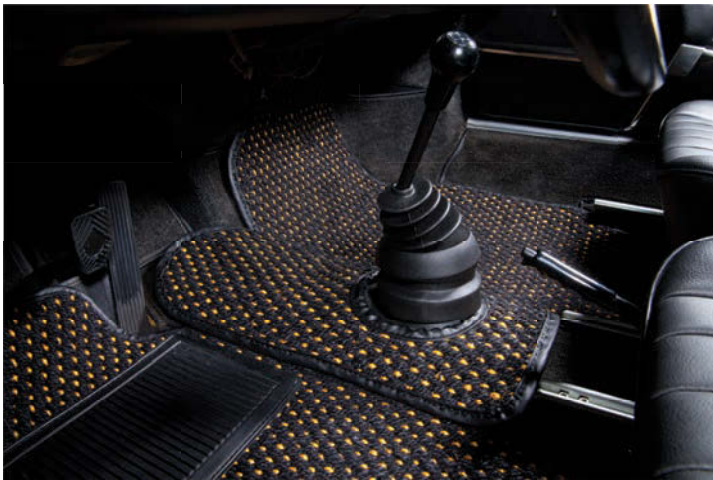
Arizona-based Porsche parts and tuning specialist, Patrick Motorsports, provides replacement OE flywheels for every 911 model, as well as lightweight flywheels for seriously high-power Porsche boxers, including the flat-six propelling the mighty 997 GT2. Proving particularly popular is the Patrick Motorsports line of flywheels for air-cooled engine conversions (more specifically, the company's products designed for 914 and early 911 models converted to 993 DME flat-sixes). With this in mind, the company now has released a series of flywheels compatible with all early 911 and 911 Turbo (930) models, but featuring a 60-2 tooth timing reference. This is required by modern engine management systems, such as MoTeC, and is essential for owners looking to introduce throttle bodies from the likes of AT Power, Rasant Products and Jenvey Dynamics, the latter having recently launched its Porsche Heritage IDA3 kit. Manufactured in the USA, Patrick Motorsports flywheels with DME 60-2 timing reference are available in both 225mm and 240mm six-bolt and nine-bolt configurations in lightweight billet steel. Certified precision balancing is provided free of charge with every new purchase.

**Price: \$595 for 225mm, \$695 for 240mm**

**[patrickmotorsports.com](http://patrickmotorsports.com) or call +1 602 244 0911**







First introduced for the newly developed 356, Coco Mats were the original factory accessory mat. New and improved, Coco Mats are the only period correct auto mat that will complement any classic Porsche®. Available for 356's to 991's.

**PALM FIBRE**  
**COCO MATS**  
The Original Auto Mat.

[www.cocomats.com](http://www.cocomats.com) 001.803.548.4809



# ALEX MANOS

Inspired by what Porsche was achieving with forced induction at the race circuit, the classic 911 Turbo proved to be one of the world's most important sports cars and was a huge success for Porsche, not only from a sales perspective, but also in the way it influenced the direction of the brand's later production models...

Alex Manos is owner of Beverly Hills Car Club, sourcing and selling some of the world's most beautiful and unique vintage automobiles, including a wide range of air-cooled Porsches. View the firm's inventory at [beverlyhillscarclub.com](http://beverlyhillscarclub.com)



**T**he way the Porsche motor company has developed over the decades is something which has always fascinated me. I'm particularly interested in the arrival of the 911 Turbo. At the 1974 Paris Motor Show, Porsche presented the prototype, which was also a way to showcase the 911's then new G-series platform. Ultimately, the 911 Turbo would be on the market until 1989, standing tall as the brand's top-of-the-range 911 for its entire production duration. When introduced in the mid-1970s, the turbocharged 911 was also the fastest production car available in its home country, Germany. Porsche badged the vehicle simply as *Turbo*. The car was very well received and its commercial launch was immediately — and correctly — deemed a success.

The 2.7-litre flat-six had been realigned. Displacement was increased to three litres and, from July 1975, the 911 Carrera was also given a three-

In fourth gear, the turbo is only signalled above 111mph. In order to process this greater power in the most practical manner, Porsche widened track by six centimetres at the front and twelve centimetres at the rear. Consequently, the necessary fender flares provide the 911 with an even more pugnacious appearance, an impression augmented by the 'whale tail' rear spoiler and assorted aerodynamic appendage.

Of course, Porsche still manufactures a 911 Turbo model, but, in 1978, engineers in Zuffenhausen made their first and most significant changes to the 930 when engine bore was enlarged by two millimetres for a total displacement of 3,299cc. An air-to-air intercooler was also added, while the brakes were upgraded to specification similar to what had been put to good use on the legendary Le Mans-winning 917 race car.

These alterations increased the weight of the 911 Turbo, contributing to substantial changes in the handling of the vehicle when compared to



litre engine. A number of parts were taken from the Carrera RS 3.0 and a new cylinder head was designed to lower compression ratio, which was necessary for the use of a turbocharger.

Porsche was experimenting with turbocharging technology in the late 1960s and, in 1972, began development of a turbocharged version of the 911, taking inspiration from lessons learned at the track. The first force-fed production cars to emerge from the programme were offered under the name *911 Turbo* from spring 1975, while the factory designation was Type 930. These vehicles sold much faster than expected — the first four hundred examples found buyers by the end of the year. The thousand-sale mark was reached on May 5th, 1976.

With this success under its belt, Porsche decided to keep the 911 Turbo in its product line-up for the long term.

The car even had a top speed of 155mph, rivalling the Ferrari 308. No doubt, this was the source of the 911 Turbo's 'widowmaker' sobriquet. You just had to be careful not to engage the turbocharger in error, when handling the car would become positively juicy and wild.

The gearbox, which was originally a four-speed unit, pulls very long. It allows for almost 50mph in first gear and not far from 125mph in third.

the earlier three-litre model. Then, in 1980, updated emissions regulations in Japan and the United States forced Porsche to withdraw the 911 Turbo from those markets. It remained on sale available in Canada, but Porsche discontinued the 930 altogether after the 1989 model year, when the 911's underlying G-series platform was replaced by that of the 964.

Those 1989 911 Turbos were the first and last versions of the model to feature the Getrag G50 five-speed manual transmission, which had already been a feature of the Carrera 3.2 since 1987. A turbocharged variant of the 964, complete with a modified version of the 3.3-litre flat-six engine and a five-speed transmission, officially succeeded the 930 in 1991.

The nimble and powerful 911 Turbo in its earliest form, however, is much sought after by enthusiasts, who consider it to be the purest and most enjoyable of this long-lived series of air-cooled

classics. Indeed, first-year 911 Turbos represent both the dawn of a crucial era in Porsche production history and one of the automaker's all-time most significant — and, it has to be said, most influential — achievements. Almost five decades later, we continue to celebrate the original 911 Turbo's magnificence, just as visitors to the Paris Motor Show did in 1974.

## IN 1978, ENGINEERS IN ZUFFENHAUSEN MADE THEIR FIRST AND MOST SIGNIFICANT CHANGES TO THE 930





#### 911 GT3 (991 GEN II)

Carrera White Metallic • Black Half-Leather 918 Bucket Seats • PDK Gearbox 20" GT3 Centre Lock Wheels • Porsche Ceramic Composite Brakes • Clubsport Package • 4,392 miles • 2017 (67)

**£145,995**



#### 911 Carrera 2 S (992)

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

**£104,995**



#### 911 GT3 (996)

Arctic Silver • Black Leather Bucket Seats • 18" GT3 Wheels • Rear Roll Cage Guards Red Seat Belts • Bi-Xenon Headlights • Previously Sold & Serviced by Paragon • 50,727 miles • 2003 (53)

**£82,995**



#### 911 GT3 (996)

Arctic Silver • Black Leather Bucket Seats 18" GT3 Split Rim Wheels • Rear Roll Cage • Air Conditioning • Previously Sold & Serviced by Paragon • 67,632 miles • 1999 (V)

**£79,995**



#### Boxster GTS (981)

Dark Blue Metallic • Luxor Beige Leather Sports Seats • Manual Gearbox • 20" Carrera Classic Wheels • Switchable Sports Exhaust • Full Leather Interior Sport Chrono • 29,538 miles • 2015 (15)

**£54,995**



#### Cayman T (718)

Jet Black Metallic • Black Half-Leather Bucket Seats • PDK Gearbox • 20" Carrera S Wheels • Switchable Sports Exhaust • Sport Chrono • 6,252 miles 2019 (19)

**£52,995**



#### Boxster S (718)

Jet Black Metallic • Black Leather Sports Seats • PDK Gearbox • Touchscreen Satellite Navigation • 20" Black Carrera S Wheels • Switchable Sports Exhaust 16,671 miles • 2017 (17)

**£52,995**



#### 911 Turbo (996)

Basalt Black • Black Soft Ruffled Leather Seats • Tiptronic S Gearbox • 18" Turbo II Wheels • Satellite Navigation • Factory Hardtop • Previously Sold & Serviced by Paragon • 59,273 miles • 2003 (53)

**£49,995**



#### Boxster (718)

Jet Black • Black Leather Sports Seats PDK Gearbox • 20" Carrera S Wheels Switchable Sports Exhaust • Heated Seats & Steering Wheel • 6,965 miles 2018 (18)

**£49,995**



#### Boxster S (718)

Lava Orange • Black Leather Sports Seats • 20" Black Carrera S Wheels PDK Gearbox • Touchscreen Satellite Navigation • Sport Chrono • Switchable Sports Exhaust • 12,247 miles • 2016 (16)

**£49,995**



#### 911 Carrera 2 (997 GEN II)

Arctic Silver • Black Leather Seats Manual Gearbox • 19" Turbo Wheels Touchscreen Satellite Navigation Previously Sold & Serviced by Paragon 51,657 miles • 2009 (59)

**£44,995**



#### 911 Carrera 4 S (996)

Seal Grey • Dark Blue Leather Seats Manual Gearbox • 18" Turbo II Wheels Electric sunroof • Electric Memory Seats Previously Sold & Serviced by Paragon 64,416 miles • 2003 (03)

**£35,995**

01825 830424

[sales@paragongb.com](mailto:sales@paragongb.com)

[www.paragongb.com](http://www.paragongb.com)

We have superb in-house workshop and preparation facilities. Each car is supplied fully serviced with a new MOT and our 12-month/unlimited mileage comprehensive parts and labour warranty. See more of our current stock at [paragongb.com](http://paragongb.com)

PARAGON GB LTD

FIVE ASHES

EAST SUSSEX

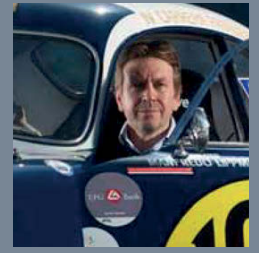
TN20 6HY



# ANDY PRILL

**Porsche has built some of the most outstanding race cars of any manufacturer. With nineteen overall wins at the 24 Hours of Le Mans, not to mention a class win on the Stuttgart brand's debut at Sarthe in 1951, Porsche competition cars are also the most successful. They're tough, too, with many surviving decades of action...**

Andy Prill is a qualified mechanical engineer with a love of Porsche stretching back to the restoration of a 912 in the early 1990s. Today, he heads up respected marque specialist, Prill Porsche Classics. Find the company online at [prillporscheclassics.com](http://prillporscheclassics.com)



**E**ver since Porsche distributor, Auguste Veillet, persuaded Ferdinand Porsche and his son, Ferry, to participate in the 24 Hours of Le Mans, the company bearing the family name has fielded modified versions of its production cars in almost every class and discipline. Sadly, Ferdinand passed away five months before four Gmünd 356s were modified into SLs for the daylong enduro in 1951, meaning he missed seeing one of them roar to a class win in the hardest test in world motorsport.

The lead up to the race wasn't easy, with three of the cars being crashed before the start of the event, leaving all hope of victory on just one 356.

when Porsche's dedicated motorsport development facility in Weissach was established, complete with its own test track. A new generation of engineers carried on the tradition, with successors in the form of Norbert Singer and Roland Kussmaul reinforcing the foundation on which the company's racing dominance had been forged.

Like the majority of Porsche enthusiasts, I was disappointed when the 919 Hybrid programme came to an end. Thankfully, Porsche GT cars have continued the winning tradition. We also now have the all-new Porsche LMDh prototype being readied for action. I look forward to seeing the car take on all comers for victory at Le Mans in 2024. In the meantime,



After that first win, however, the die was cast and it soon became a trend for Porsche's production models to do well in races and rallies all over the world, scoring numerable GT class and overall wins along the way.

It didn't take long for Porsche to recognise the link between success in competition and success in dealer showrooms. A spin-off was when technical developments required to win races found their way into Porsche road cars, thereby creating a perfect circle of success. Of course, this is easy to say. In practice, it was much harder to achieve, requiring a high level of commitment and investment. Identifying the best engineers was essential from the beginning.

Komenda, Reimspiess and Fuhrmann were among the prominent figures creating a legacy continuing to this day. Purpose-built facilities followed

the brand's production-based GT cars will continue to fly the flag and undoubtedly take their share of more wins and more championship titles.

Incidentally, Porsche's first Le Mans class-winning car still exists. It has led an interesting life, including having its roof removed soon after it arrived on the USA's West Coast in the late 1950s. Now restored to its original Le Mans specification, the car will be a star attraction as part of the Le Mans centenary celebrations we can expect to witness in 2023.

We've lost a few important race cars over the years, but many have survived and are now enjoying a fresh round of success in the realm of historic motorsport. My company, Prill Porsche Classics, has had the privilege to work on some of Porsche's best GT production race cars and we will shortly complete the restoration of another, which you can expect to see in these pages soon.

## IT HAS LED AN INTERESTING LIFE, INCLUDING HAVING ITS ROOF REMOVED SOON AFTER IT ARRIVED IN THE USA

P R I L L  
PORSCHE CLASSICS

[www.prillporscheclassics.com](http://www.prillporscheclassics.com)

01787 476338



# AUTOMOTION

New parts for your Porsche

THE  
BIG  
COME  
BACK

automotion.com offers new parts  
for any Porsche models from 1950 !!

356, 911, 912, 914 , 924, 928, 930, 944, 964, 965, 968, 986,  
987, 993, 996, 997, boxster, cayenne, panamera...

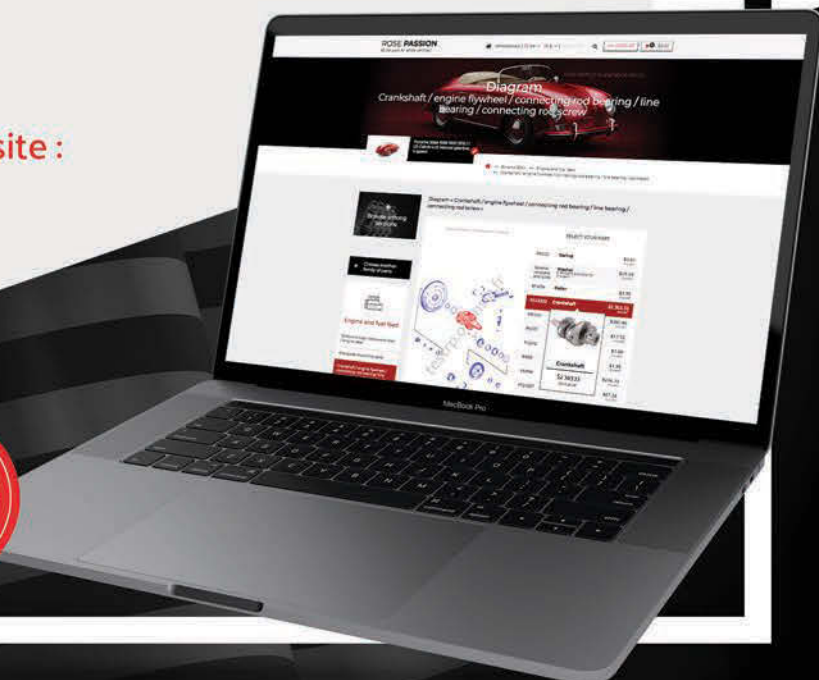
**FOR AN ORDER,**

Select it directly on our website :

[www.automotion.com](http://www.automotion.com)

[www.rosepassion.com](http://www.rosepassion.com)

We  
ship all  
over the  
world



**AUTOMOTION**

Website : [www.automotion.com](http://www.automotion.com)  
Mail : [contact@automotion.com](mailto:contact@automotion.com)

**ROSEPASSION**



# ICE, ICE BABY

Just before this issue of *Classic Porsche* went to print, Renée Brinkerhoff took her beloved 356 A to new extremes by completing a long-held ambition of covering 356 miles across the Antarctic. Here's how her extraordinary trip unfolded...

Words Robb Pritchard Photography Valkyrie Racing











In the previous issue of *Classic Porsche*, we looked at the past few years of Renée Brinkerhoff's exceptional odyssey, which has seen her compete in a 356 A across all terrains on almost every continent. There was just one more to conquer, but the frozen wastes of Antarctica pose a challenge like no other, as is evident from the images you see here, depicting the diminutive Porsche equipped with continuous tracks and steerable skis. With Brinkerhoff's level of preparedness and determination, there was little doubt she would achieve her goal of travelling 356 miles across the frozen continent, but as we're about to discover, the task ahead of her was far from easy.

Most people in Antarctica — the least populated continent, with only a thousand inhabitants during winter — are scientists operating state-run research laboratories. The only private facility is Union Glacier Camp, the mustering point for any tourists who can afford their passage to this special place. Brinkerhoff's journey to what's recognised as one of the world's coldest and driest locations didn't start too smoothly, however, a result of Chilean quarantine laws forcing the logistics company preparing the 356's course to suffer a three-week delay.

Her original plan had been to drive a 180-mile route (featuring a pre-dropped fuel container) in the direction of the South Pole from base camp and back again, but due to particularly unaccommodating weather, a quickly arranged alternative was needed. Brinkerhoff wasn't

content to simply drive in circles totting up 356 miles around the camp, which is why a challenge deemed worthy of her trek-across-all-continents project took the form of multiple routes over four local glaciers. Together, these loops would add up to the target of 356 miles and would also have the advantage of bringing the car back to Union Glacier Camp for a service and refuel at the end of each day.

The small team of Polar and Porsche experts touched down on December 7th 2021. Chief mechanic, Simon Redhead (of famed Porsche rally car preparation outfit,

**Above and below** This well travelled 356 has been put through its paces on some of the world's toughest rallies







**Our Exclusive  
Rubber Floor Mat Sets  
For 356A through Early 911**

**Made in Europe  
Correct Molding & Texture**  
NLA-551-101-00-400  
Tan 356A shown



# **Stoddard.**

**Your Trusted Parts Source — Since 1957.**



## **Windshields & Side Glass**

With Correct Markings  
for 356 and 911  
644-542-101-11  
644-543-101-01  
644-542-105-11  
Shown, Coupe – Tinted



## **Turn Signal Stalk Knob**

Red SWF for  
356 Pre-A  
NLA-62-RED



## **356B/C Bumpers**

Our exclusive  
production from  
Factory blueprints  
NLA-505-010-05 front  
NLA-505-020-05 rear



## **Complete Floor Pan Kits**

NLA-501-050-00  
356 Pre-A Shown



## **356 Bumper Guards**

Our Production  
Chrome Plated  
or Polished  
See Website for  
All Variations!



## **Optional Vent Wings**

Set of Two  
For 356 up to T1  
NLA-542-105-01-SET



## **Inner Door Pull Handle**

New Exclusive  
Production  
Fits 356 1958  
through 1963  
NLA-531-621-00



## **GT Steering Wheel Wood Rim**

For 356B T6  
and 356C  
644-347-084-05



## **6-Volt Starter**

New From  
WOS Performance  
High Torque /  
Gear Reduction  
NLA-1107-6V-LMS

**Stoddard.com**

Highland Heights, Ohio 44143 USA 800 342 1414

**Stoddard**

**NLAParts.com**

Reno, Nevada 89431 USA 800 438 8119





Tuthill Porsche), has configured Brinkerhoff's 356 for each of the rallies it has tackled around the world, but he had a rather different job when it came to the Antarctica expedition. His first challenge, for example, was to get the car's air-cooled boxer to fire up — after being parked on ice for three weeks in temperatures of around -20°C, the engine was reluctant to start. Secondly, the tracks had to be fitted. The system had been intricately designed by Kieron Bradley, whose day job is Chief Chassis Designer for Lotus, but such a radical design on a unique platform needed a thorough test.

This was, of course, Redhead's plan, but a huge storm grounded the team for three days. In fact, weather was so severe, it brought record amounts of snowfall, which, when we're talking about Antarctica, is really saying something. The 356's skis and tracks would make light work of the fallout from this episode, but the business of testing was seriously compromised, so much so that with the window of opportunity vanishing, the first systems check had to be the conducted on the first day of Brinkerhoff's drive.

### THAT'S SNOW BUSINESS

With multiple Arctic and Antarctic world-record holder, Jason de Carteret, at her side, she couldn't have had anyone more capable or qualified to assist her in the navigator's seat, but the going was far from easy. From behind the wheel, wrapped up in many layers of thick clothing, she describes what she saw through the

windscreen. "The glacial ice cover of Antarctica is made up of 'blue ice', which while beautiful to look at, is a non-forgiving surface as slippery as glass and hard as rock. It's actually the ice's texture which is most difficult to deal with. Miles upon miles of concave 'cups' coupled with raised sharp edges of varying depths and sizes. It really tested us."

Antarctica is sometimes referred to as 'the white desert' on account of it often being too cold and too dry for snow and for the ice to be blown into ridges (much

**Above** Continuous tracks and skis put extra stress on the car's steering components







**Top** The car's adventurous pilots, Jason de Carteret and Renée Brinkerhoff

**Above** Seriously low temperatures played havoc with the car's fuel system and air intake, requiring fixes on the fly in extreme conditions

**Below** Covering 356 miles across the Antarctic was far easier said than done

like the way sand is blown in a 'normal' desert), which are known by their Russian name, *sastrugi*. Some of these ridges are golf ball-sized ripples, but they can also reach the height of a house. On softer snow, the ski-shod Porsche flew along happily. At one point, it was covering ground at speed closing in on 40mph, a tad faster than the 25mph Kieron had advised as top speed when travelling on the tracks! The big Ford support vans rolling on balloon tyres were left far behind, but quite soon, the large plumes of snow and ice kicked up by the 356 started to cause problems.

The cause of a loss of power was easy to diagnose, chiefly because the air filter looked like an overflowing Slush Puppy. A couple of minutes at the end of a blow torch soon sorted the problem, but freezing carburettors provided a bigger problem. Blow torching the air intake

was fine, if not exactly recommended in Porsche servicing manuals, but defrosting the butterflies and delicate nozzles in the fuel system in this way wasn't advisable for obvious reasons. The throttle linkage seizing also compounded issues, but on a varied

assortment of cylinders (rather than the usual complement of four), the plucky Porsche managed to keep going... until one of the steering kingpin bolts sheared off the

hub. Brinkerhoff needed to keep the original steering and suspension components as a condition of classification for a speed record attempt she wanted to complete, but because using a pair of skis is a little beyond the design remit of a sixty-year-old Porsche steering rack, the team had the good idea of carrying four spare bolts. Despite these issues, there was much to celebrate: the 356 had

## THE VENERABLE 356 MANAGED A FURTHER TEN SPLUTTERING MILES BEFORE ANOTHER KINGPIN BOLT SNAPPED







managed to cover 140 miles on day one. Later that night, the car was kitted out with custom skirts designed to keep snow spray away from the engine, but, a consequence of bitterly cold air, the very same problems were experienced the next day. Having planned ahead following forecasts of a storm with winds of more than 80mph, Redhead, travelling close to the 356 in a chase truck, swapped the right-hand carburettor with one he'd been keeping warm. Needing dexterity, he had to work without gloves. Brinkerhoff was worried about the very real threat of extraordinarily low temperatures and added wind chill causing his hands to suffer frostbite. Then again, Tuthill has a well-deserved reputation for servicing Porsches anywhere, anyhow, and, true to form, Redhead got the job done.

## PAPER CHASE

Those high winds whipped up loose snow to make the ground indistinguishable from the sky, resulting in the region's characteristic 'white-out'. 356 navigator, de Carteret, describes it as "driving into a blank piece of paper". With visibility down to mere metres, Brinkerhoff had to drive to the GPS trail, rather than what she could see through the modified Porsche's windscreen, but it wasn't an accurate, pre-plotted track they were following and the waypoints were miles apart. It's at this point in our story we need to remind you of the importance of the huge protruding lip at the front of the 356 they were travelling in. The part was described in last month's issue of *Classic Porsche* and installed as anything but fancy decoration. It serves the rather vital purpose of

making the car *longer* and therefore less likely to fall nose first down a crevasse in the ice, a permanent risk on a constantly — albeit slowly — moving glacier. Put it this way, the surface of the ice can be almost a mile above the bedrock, meaning these cracks can be many hundreds of feet deep.

"There are specific routes across the ice that have been covered by ground penetrating, crevasse-detecting radar. These are deemed safe to traverse," Brinkerhoff tells us. "Of course, you shouldn't deviate from these areas, but not even these places are totally safe. I couldn't see beyond the front of the car, and not

**Below** Redhead carried out fixes with his bare hands in temperatures of around -20°C, risking frostbite as he worked







**Above** The support team were delayed by three weeks, and with poor weather thwarting testing, it all came down to the morning Brinkerhoff's 356 was due to start its trek

knowing if we were travelling on a safe route, de Carteret and I began to get a little concerned. Ultimately, we decided to turn around and attempt to follow our tracks back down the glacier."

The trip (and Brinkerhoff's wider multi-continent rally project) serves as an awareness and fund-raising exercise to help eradicate the societal blight of child trafficking. Indeed, prior to starting the project, Brinkerhoff was trained by law enforcement agencies to go undercover and engage traffickers by posing as a client, all the time wired with recording equipment. The evidence she gathered was then given to local police in order to secure prosecutions. With these dealings in mind, when she says she was concerned about the direction her 356 was travelling,

## THE BRIGHT BLOBS OF THE UNION GLACIER CAMP PODS WERE GETTING CLOSER UNTIL, FINALLY, THE 356 ROLLED HOME

it's safe to assume us mere mortals would have been absolutely terrified!

Retracing the Porsche's steps, the venerable 356 managed a further ten spluttering miles before another kingpin bolt snapped, forcing Redhead to launch out of the support truck to work in the midst of the storm.

Again. Then, while limping back, in sight of the camp, the air-cooled engine began losing oil. When Redhead was able to have a proper look, the prognosis was that of terminal failure.

"We had water, fuel and

other fluids in places you just don't want to see in an engine," Brinkerhoff shrugs. Even so, with another 140 miles completed across the barren landscape, she only had another seventy-six miles to complete her mission. If the team thought those last miles were going to be easy, however, they were very much mistaken. A combination







of even worse weather, the engine on its last legs and very tough ground conditions made for nerve-rackingly, slow-going travel. With not enough power to get out of second gear, the 356 crawled along, managing to add just thirty miles on one day, twenty on another. "We were close, but there was never certainty we would finish the challenge."

## SPORT OF KINGS

Somehow, the Porsche kept going. Well, until another kingpin bolt snapped sixteen miles ahead of the target distance. A nervous wait followed while Redhead applied the repair, but mile by mile, the bright blobs of the Union Glacier Camp pods were getting closer until, finally, the 356 rolled home. The previous challenges conquered 30,000 hard miles in the classic Porsche, but Brinkerhoff assures us those in the Antarctic were tougher than the rest put together.

In the end, with the engine only intermittently running on the full complement of cylinders, it wasn't worth attempting the speed record. It didn't matter, though, and it didn't take Brinkerhoff long to start thinking about what comes next. She confirms the skis will be staying on the car in light of another sub-zero challenge she has in mind. More news on this exciting development will follow in these pages shortly.

Brinkerhoff's team, Valkyrie Racing, is sponsored by Parsons Xtreme Golf (the famous golf equipment manufacturer) and covers all of the costs of the events it

take part in. All of the money raised goes to the projects she has personally vetted and pledged to support. Thus far, her efforts have raised more than \$500,000 for frontline NGOs across the globe, but her aim is to double that sum. We wish her and Valkyrie Racing every success in this pursuit (you can make a donation at [valkyrieracing.com](http://valkyrieracing.com)) and, of course, we'll be covering the continuation of her amazing adventures in *Classic Porsche* as they unfold. **CP**

**Above** Brinkerhoff's speed world record attempt will have to wait, though she tells us her 356's next adventure is already in the planning stages





# RESTORATION

*Design* EUROPE



## QUALITY PORSCHE AUTOMOBILE PANELS

**[www.restoration-design.eu](http://www.restoration-design.eu)**

A. Plesmanlaan 22, 9615TH Kolham, Netherlands

Tel: 0031 (0)50-5490085 | Fax: 0031 (0)50-5490087 | Mob: 0031 (0)6-53945104

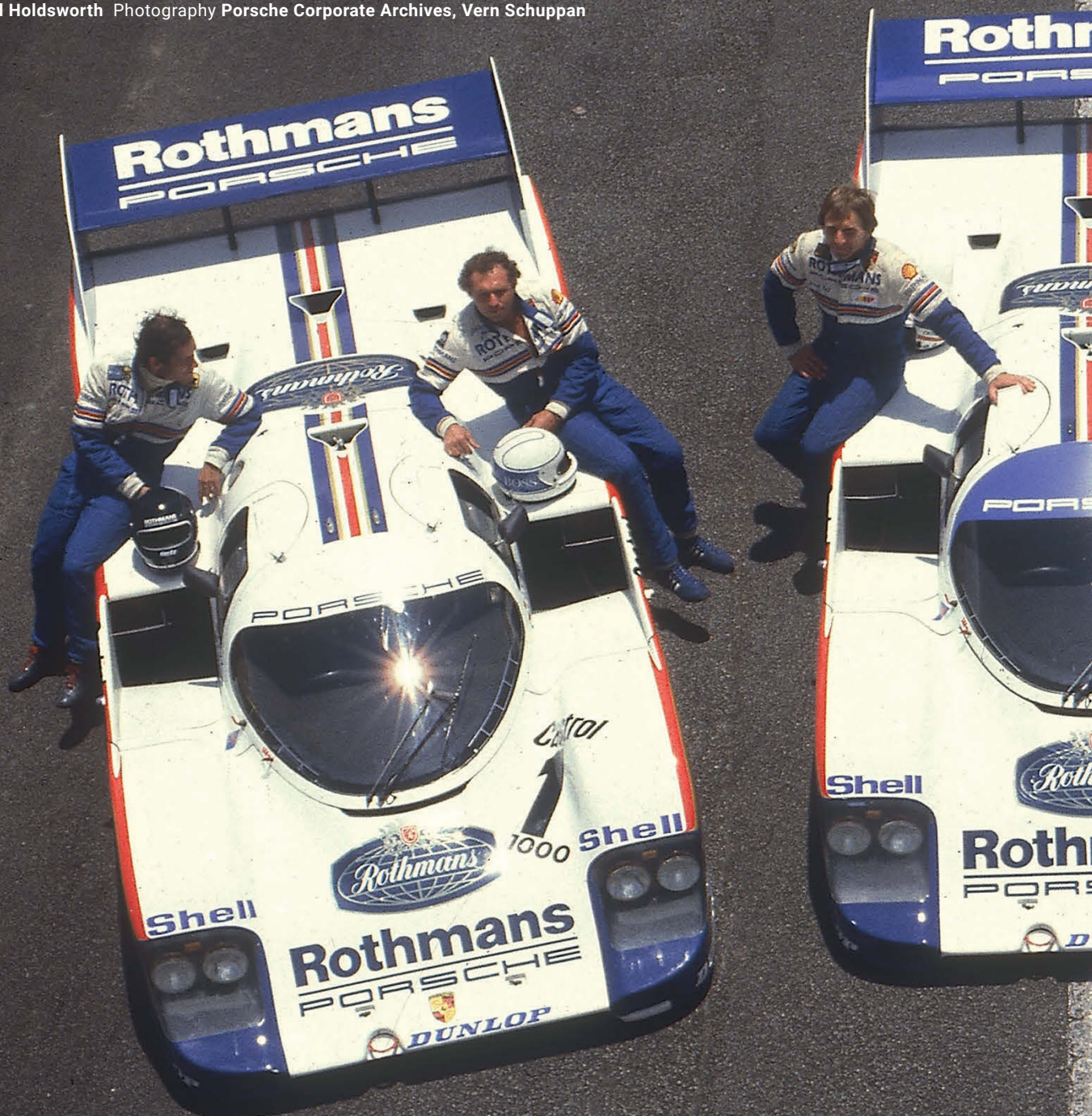
Email: [info@rescue-911.nl](mailto:info@rescue-911.nl)



# TOP DRIVER FROM DOWN UNDER

Vern Schuppan is one of the most successful Porsche racing drivers of all time, a fact confirmed by his win for the works team at Le Mans, a competition he has contested no fewer than sixteen times, including many outings in Porsche prototypes, prompting him to develop a street-legal evolution of the 962. In this exclusive interview for *Classic Porsche*, however, Richard Holdsworth discovers there's much more to this awesome Aussie's racing career than spells at Sarthe...

Words Richard Holdsworth Photography Porsche Corporate Archives, Vern Schuppan

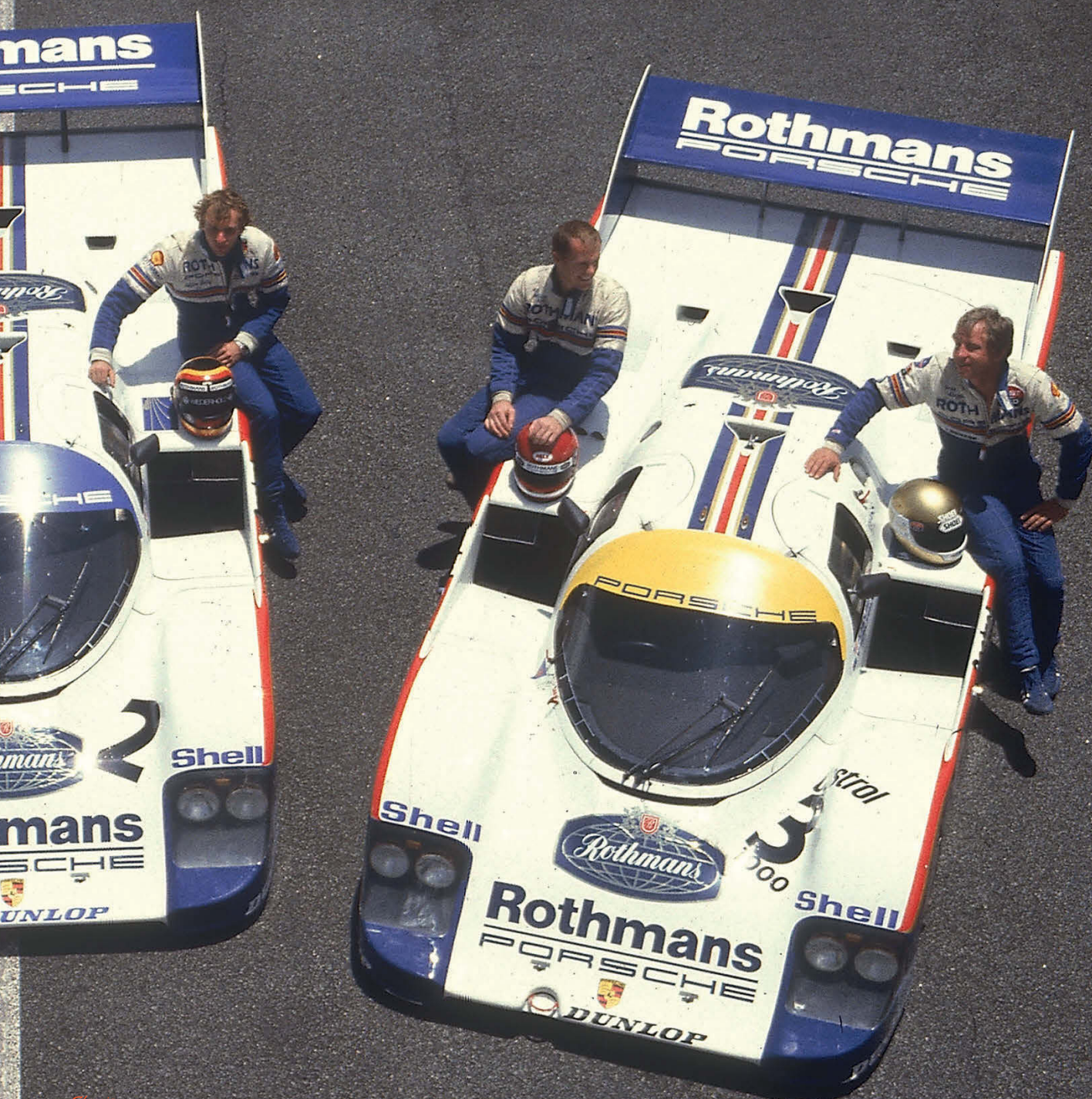




**M**y wife, Heather, and I are with Vern and Jennifer Schuppan in their impressive pad overlooking the green parklands of Adelaide and the street circuit which played host to the Australian Grand Prix between 1985 and 1995. Vern, fast approaching his seventy-ninth birthday, was instrumental in ensuring the race became part of the Formula One World Championship, but as we thumb through the many articles I've penned for *Classic Porsche* over the years, we focus on races he has excelled in as a driver. Unsurprisingly, they are too numerous for this issue's available column inches to accommodate, which is why we concentrate on some of the most compelling Schuppan outings readers ask us about.

It should be noted, I've known of Vern for many years.

Being married to an Aussie for more than half a century and being obsessed with all forms of motor racing since I was a kid – going on to having my own fun in a 356 Speedster Down Under in the 1960s – I would be a fool not to know of this man's immense ability. Yet, I suspect the name of this quiet and unassuming Porsche personality from the Booleroo Centre of South Australia isn't the first to trip off the tongue of motorsport enthusiasts, Porschephiles or otherwise. Newsflash: a book about Vern's time behind the wheel of Porsches would make for an especially thick tome, spanning a career tracing its roots back beyond the time his father bought him a kart in the hope it would quench a desire for a career in motor racing. It didn't, of course. In fact, in 1967, Vern bought an old Ford Thames van and fitted it out with the basic equipment he needed to sustain life in the paddock while learning his craft as an unknown







racer. With his savings and support from Jennifer — the pair then newly married — he soon set sail for the UK to climb to the top of the motorsport ladder.

The detail of Vern's journey from zero to hero is a story in its own right and certainly beyond the scope of what we'll be asking him about today — we've touched down in Adelaide to find out about his invitation to join Porsche as an official factory driver and what came thereafter. Make no mistake, it's an invitation which doesn't come easily. How, then, did the call come about and what was it like driving for such a great team building such extraordinary cars? And — the specific purpose of our interview — what was it like to be on the 'inside', the man behind the wheel, the man who saw the action closer than all but a handful of other humans while the rest of us were watching from afar? Let's find out.

### How did you come to drive for the Porsche factory team?

Several days after my third-place finish in the 1981 Indy 500 and the long drive home to Scottsdale from Indianapolis, I received a number of messages telling me to contact then Porsche team manager, Manfred Jantke, without delay. In short, Rick Mears had been hired by Porsche to co-drive with Jochen Mass at Le Mans, but was unable to do so after receiving burns during a pitstop refuelling accident at Indy. The messages from Porsche failed to reach me in time and Hurley Haywood was hired instead. Fortunately, I was eventually able to connect with Manfred, leading him to add me to what became a three-driver effort, which I was very happy about — I liked and admired both Jochen and Hurley.

### How much involvement did you have with the development of the works race cars?

Jacky Ickx, Derek Bell and Porsche factory test driver,

Roland Kussmaul, carried out testing at Weissach and, to my knowledge, there was very little sorting to do. I was, however, involved during testing and racing of the 956 with the first Bosch MP1.2 electronic fuel management system and, later, with the PDK gearbox, which Al Holbert and I tested during practice for the 1983 World Sportscar Championship 1,000km race at Kyalami and again for the 1,000km event at Brands Hatch. Following previous reliability issues, this was the first race finish with PDK.

### Did you spend much time at the factory?

During preparation of the 956 for the 24 Hours of Le Mans in 1983, I tested my car on the Weissach test track, but on most occasions, I simply turned up at Le Mans on the Wednesday prior to the race in time for scrutineering.

### Where were you and Jennifer living during those years?

In 1975, we left the UK for America in order for me to

**Previous spread** Driving during practice with 956 no.3 at Kyalami in 1983, Vern ran an early PDK transmission

**Above and below** Schuppan shared 936 driving duties with Jochen Mass and Hurley Haywood at the 1981 24 Hours of Le Mans, finishing twelfth overall, despite running as high as second

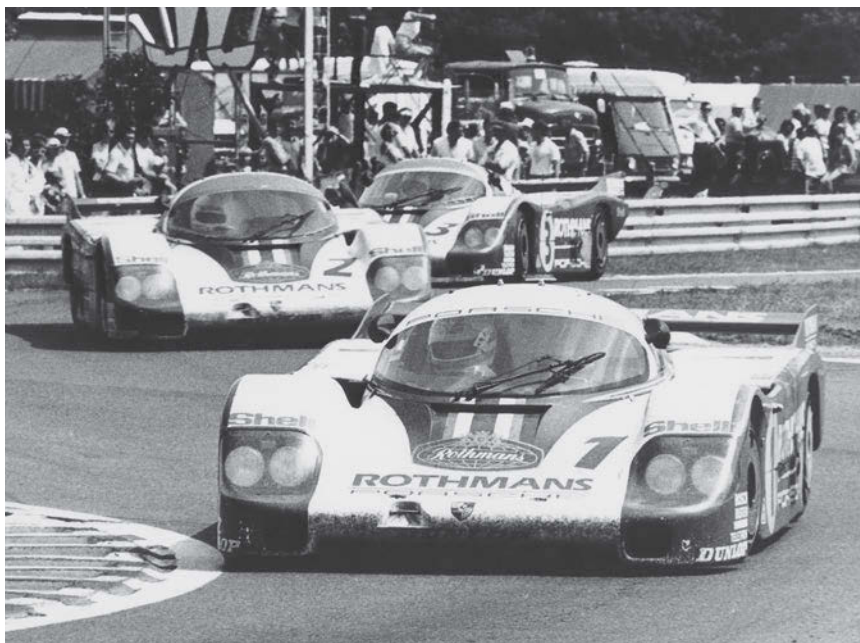






**Above** The 956 locked out the podium on its first outing at Le Mans, signalling a taste of things to come for then new prototype (and its successor, the 962) for the next decade

**Below** Vern breaks open the bubbly after taking top honours at Le Mans in 1983



drive for Dan Gurney. We bought a house near Mount Barker, South Australia, a year later. This is where we spent off seasons. Our children, son Kerrin and daughter Paige, were part schooled in Mount Barker, with Jennifer home schooling the kids during our travels. From 1977 until 1981, we were based in Scottsdale, Arizona, then, in 1982, we moved back to the UK and bought a house on Temple Mill Island, an idyllic gated community near Marlow on the River Thames. Also living there was our friend, Pauline Hailwood, who we had known as far back as 1973, when Mike Hailwood and I co-drove one of the John Wyer Gulf Mirages at Le Mans and during the World Sports Car Championship's 1,000km races. As the 1980s drew to a close, Jennifer and I moved the family to Pinkneys Green, about five miles down the road. We bought a country house there, which we restored, before returning to the USA in 1996, when we established and

managed an Indy Lights team for Stefan Johansson. We ran Guy Smith, Ben Collins and Scott Dixon as drivers, signing Scott on a ten-year driver management deal with Stefan.

## WHEN PETER SCHUTZ, FIRST VISITED THE RACE SHOP, HE ASKED WHAT CHANCE THE TEAM HAD OF WINNING LE MANS

**Michael Schumacher is famous for bringing a new dimension into the fitness regime of racing drivers. What preparation did you do for Le Mans?**

None! I did no preparation before Le Mans and never worked out, an impossibility for

professional drivers today. I would say today's drivers have the toughest training regime of pretty much any sport, but during the early years of my racing career, any serious training or diet was a rarity. I suppose, because I was testing and racing in a variety of cars so often, the job itself kept me fit. Incidentally, I never slept during the 24 Hours of Le Mans — there was too much commotion and noise from the French announcers!

**Before driving the 956 at Le Mans, your first outing at Sarthe for the Porsche factory team was piloting the long-tailed 936. How did you find the car on track?**

When I climbed into the 936 for the first time, I was astonished at the alloy tube frame welding. It looked horrible. Nevertheless, although Manfred Jantke told me to drive five easy laps, the car's handling was so good I felt instantly at home. A fact endorsed by my lap times, the 936 was better than any sports car I'd driven previously.

**As a final development of the 936, the car featured a new 2.65-litre turbo engine now most often associated with the 956 and Group C, but**







**the trio of you, Haywood and Mass ended the race twelfth overall. What problems did you experience?**

We were in charge of one of two factory 936s, the other driven by Derek Bell and Jacky Ickx. When Porsche CEO, Peter Schutz, first visited the race shop, he asked what chance the team had of winning Le Mans. The unexpected answer was, *"Herr Schutz, we don't have a car that can win the race, but we're preparing a 924 capable of winning its class."* Schutz promptly requested a plan to win the event outright and, two days later, he was told — by Norbert Singer, if my memory is correct — if we took the two Martini 936s from the Porsche Museum and equipped them with the 2.65-litre turbo engine developed to run at Indianapolis, we could win at Le Mans. On the very first lap, however, Jochen returned to the pits after our 936 developed a misfire. After what seemed an eternity, the plugs were changed and he re-joined the field, but did so in last place. After this incident, we battled hard through the pack, climbing from the back of the field to second. Things were going well until the gearbox thrust bearing failed. We lost a huge amount of time due to the necessary repair work, but we put in a strong effort to regain second position once again. Unfortunately, the transmission wasn't the last of our problems that day.

**Ouch. Do go on.**

As I drove through the circuit's famous Porsche Curves, the engine died. Extracting myself from the car and doing a balancing act to remove the tail, there appeared nothing visually amiss with the force-fed flat-six beneath. It was against the rules to receive outside physical

assistance, which is why Porsche sent mechanic, Valentin Schaffer, to stand behind the barrier and yell instructions for me to check various components. When I suggested removing the tube between the turbocharger to the plenum chamber, although not exactly enthusiastic about the idea, he agreed. After doing so, I jumped back into the car. Lo and behold, the engine started! With some difficulty, I managed to refit the tail and, to the surprise of the entire team, I arrived back at our pitbox. Although it took an hour for the fuel injection system to be removed and replaced, we at least finished the race, albeit in twelfth place.

**Bell and Ickx took a convincing win in the sister 936, bagging a fourteen-lap lead.**

Correct. During celebrations at the team dinner that night, following Jacky and Derek's victory, Helmuth Bott

**Above** Smoke billows from the left-hand exhaust of the 956 engine as it seizes the moment the car crosses the finishing line after 370 laps of Circuit de la Sarthe

**Below** It takes a cool head to put in several laps of Le Mans at full speed after your car's door has worked free





# Suspension and Brake Packages

Build yours at ElephantRacing.com 3 clicks... Done!

The screenshot shows the Elephant Racing website's Package Builder interface. At the top, there's a navigation bar with links for Car Builds, Tech, Instructions, Newsletter, and Shopping Cart. A banner indicates 'ORDERS OVER \$250 SHIP FREE WORLDWIDE'. The main header features the Elephant Racing logo and a search bar. Below the header, a dropdown menu shows various car models (911, 964, 993, 996/997, 991, Boxster/Cayman, 914, 944, 356). The 'Package Builder' section is divided into three steps: 1. Select Year & Model (Year: 2004, Model: 996/997/986/987), 2. Select Your Package (Street Performance 2), and 3. Customize Package (Add, update, or remove parts using the tables below). The 'Suspension' and 'Brakes' sections display grids of parts. A 'PACKAGE CHARACTERISTICS' table shows 'RIDE COMFORT' at 41 and 'PERFORMANCE' at 63. An 'Add To Cart' button is at the bottom.

**1 Select Year & Model**

Year: 2004  
Model: 996/997/986/987

**2 Select Your Package**

Street Performance 2

**3 Customize Package**

Add, update, or remove parts using the tables below

**Add To Cart**

**Suspension**

**Brakes**

**PACKAGE CHARACTERISTICS**

PACKAGE CHARACTERISTICS	
RIDE COMFORT	41
PERFORMANCE	63

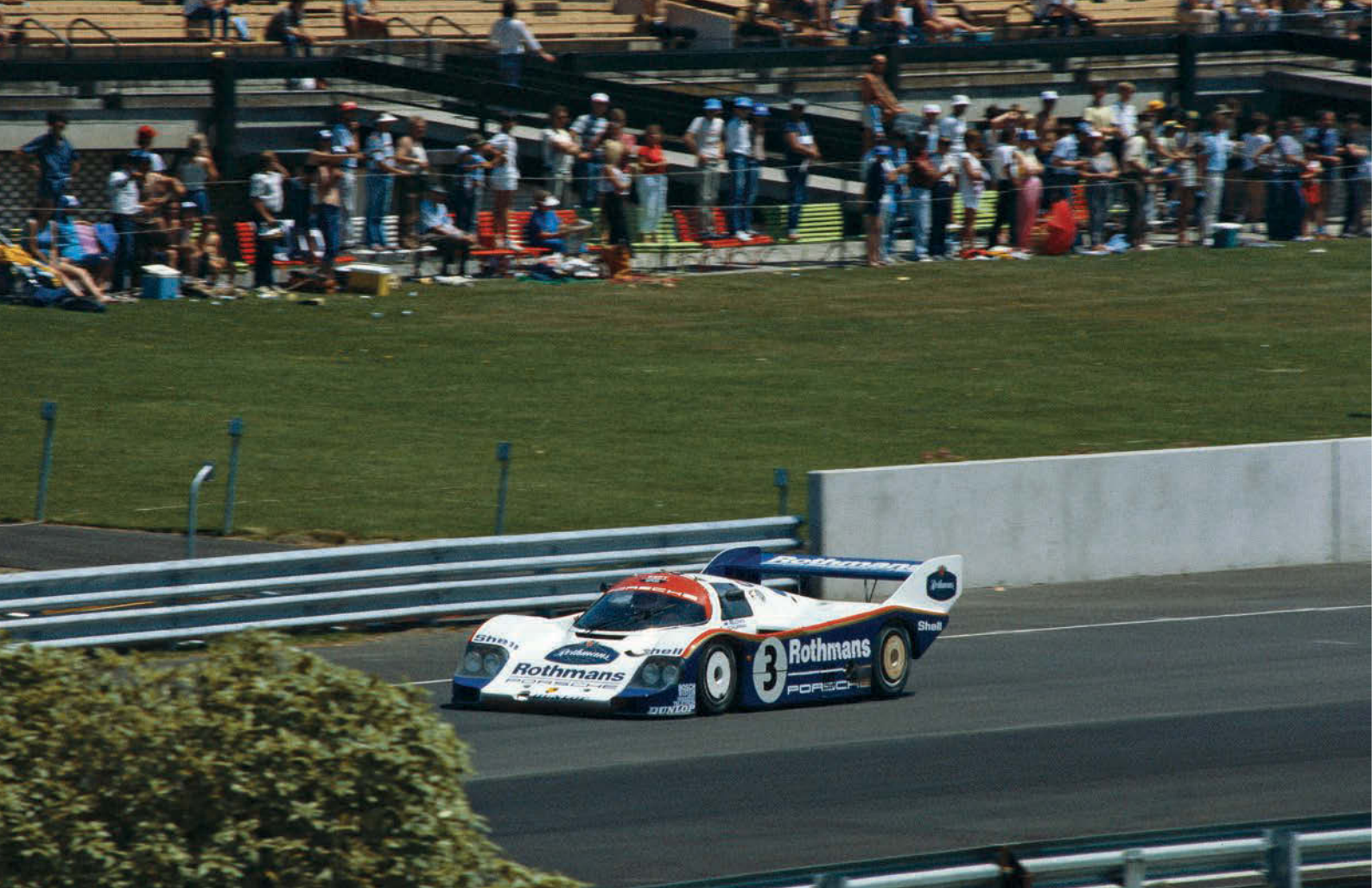
## Suspension • Brakes

Free Shipping Worldwide

+1 408.297.2789  
ElephantRacing.com  
California, USA







spoke with me to say that Porsche's mechanics had named me the "der fastest mechanican in der veld"! He also asked me if I'd like to drive for Porsche in 1982, the debut season for the 956. Returning back to Le Mans that year, myself and Jochen shared driving duties and finished in second place overall, with the 956 taking all three podium places. It was a dream result for the factory team and a perfect start for the new car.

**1983 was the big one. Your victory at Le Mans captured headlines around the world, not only for your performance behind the wheel, but also the 956's engine seizing as the car took the chequered flag just yards in front of your racing rivals. Many observers have suggested the problem was down to the radiators being blocked with debris. Care to set the record straight?**

I was at full chat down the Mulsanne Straight when the left-hand door blew off. It was like an explosion in the cockpit! Knowing there was no spare door waiting for me in the pits, and to afford the team enough time to organise a replacement part, I decided to stay out until I was black flagged. When I eventually swept into the pits, the door was riveted in place in seconds. Off I went! A race official visited the pitlane, however, telling the team the car no longer complied with regulations – the door had to be fixed in such a way the driver could open it and escape in the event of accident. Back in again, the door was re-fitted, this time with a leather strap and buckle. Although this satisfied the officials, the ill-fitting door affected airflow to the neighbouring radiator, which, in turn caused the engine to overheat. With thirty minutes left to run, I handed over to Al Holbert for the last few

laps, explaining to him the temperature on the left-hand bank was running hot. As he crossed the finish line, the engine seized completely.

**There are many things that make a great victory, but the two obvious contributors are a quick car and a fast driver. Luck can also play its part. Stirling Moss always said his lucky number was seven. Do you have a favourite racing number?**

Number one, which meant you'd won a championship! I also like eleven, my number when I won the 1971 Formula Atlantic Championship. Winning that competition earned me number one for the 1972 season. Numbers three and thirty-three became special for

**Above** In 1984, a trip to Sandown, Melbourne, for the eleventh and last round of the World Sportscar Championship was blighted by engine misfire

**Below** Vern (left) with Al Holbert at the 24 Hours of Le Mans in 1983







**Above** Just some of the Porsche prototypes Vern drove in endurance championships around the world following his historic win at Le Mans in 1983

**Below** For Le Mans in 1986, Vern's no.3 956 was fitted with PDK, which failed after just forty laps, leading him to be transferred to the no.2 Bob Wollek/Jochen Mass car, which subsequently succumbed to piston failure caused by faulty fuel

different reasons. For example, for the Indy 500 in those days, sometimes eighty or more drivers attempted to qualify for the thirty-three available places on the grid. In 1981, my personally owned McLaren M24 was number thirty-three in a field of thirty-three and I finished third!

### **You owned a McLaren M24?**

Yes. In 1980, while I was practising in Tom Sneva's back-up M24, he crashed his new ground effects Phoenix and needed the McLaren. Starting at the back in thirty-third position, he drove through the field to lead, finally finishing second. The handling I experienced in practice driving Tom's M24 so impressed me, I decided to buy the McLaren team's remaining M24 and run it in the 1981 Indy 500. My podium finish no doubt resulted in the start of my longstanding relationship with

## **IT WOULD BE EXTREMELY RARE FOR PORSCHE TO MAKE CHANGES TO ITS CARS FROM DRIVER RECOMMENDATION**

Porsche. Incidentally, when I won at Le Mans with the factory team in 1983, our 956 was liveried as car number three and, amazingly, the chassis number was 003. Being nuts about numbers is nutty stuff!

**When you started with Porsche, did the team have the technology to talk to the driver? Was there any discussion about bringing the car in at Le Mans in 1983, for example?**

We could communicate from the car to the pits, but they could not communicate with us out on track.

**In your long-distance races, with two or more drivers, who took first stint or the longest?**

During the night, one or two of the drivers might do three stints. On one occasion, when I had my own team,







one of my drivers was slow in the dark, resulting in him doing just one night stint. Even then, he ended up in a gravel trap! Unless something goes wrong with the car, adjustments are rarely necessary.

**Then back to the factory and a sit down with engineers for a debrief on how the car performed? Do you remember if you had any recommendations before the next round of the World Sports Car Championship?**

Drivers don't go back to the factory. It would be extremely rare for Porsche to make changes to its cars from driver recommendation. When the right rear tyre exploded at almost 225mph on the Mulsanne Straight during practice in the 936, it not only destroyed the rear bodywork, but the radiator pipes were also torn off. When I asked Dr Bott if the team would re-route the pipes, he told me that no further changes would be made following the work carried out at Weissach.

**By then, you had shown you could drive a Porsche to victory in many races of different lengths and around different tracks. In 1983, when the All Japan Sports Prototype Championship was launched, it was natural participating teams should seek your services.**

Nova Engineering and aftermarket tuning component specialist, Trust, persuaded Porsche to sell them 956 chassis number 118. They also wanted a factory driver and Dr Bott asked if I'd like the job. Obviously, I jumped at the chance and went on to win five out of the competition's six races. In the final event, sharing

the car with Hans Stuck in the World Championship for Makes 1,000km race, we finished third behind the two works Rothmans 956s. The results were enough for us to win the inaugural championship, when I was paired with Japanese co-driver Naohiro Fujita. The same was achieved in 1984, when I drove with Yoshimi Katayama. I have to say, winning my first race at Suzuka, one of my all-time favourite tracks, was a standout moment in my career and one of the very good memories I'll carry with me forever.

**Judging by your bulging trophy cabinet, we're sure you've got plenty more awe-inspiring memories to cherish, too! Thanks for your time, Vern. It's appreciated. CP**

**Above** Vern in Schuppan Porsche no.55 at Suzuka in 1989 as part of the All Japan Sports Prototype Championship

**Below** Vern with Jennifer, Kerrin and Paige at Buckingham Palace on 24th July 1985, when the Aussie speed merchant was made a Member of the Order of Australia (AM) by the Queen







# Border Reivers

Classic, Race and Sports Cars



**BORDER REIVERS URGENTLY WANT YOUR CLASSIC PORSCHE**

*"We only buy cars we would love to own"*

Viewing by appointment only

General Enquiries: +44(0)1360870103 or +44(0)7591112581

Web: [www.borderreivers.co](http://www.borderreivers.co)

Credit brokers / Worldwide shipping specialists



# TIME TRAVELLER

**With bomb-proof build quality, the Carrera 3.2 represents the bedrock of 911 history, combining classic looks and driving traits with a relatively straightforward maintenance regime. Now, three decades on, even the best examples need restorative measures. Who better to demonstrate than a leading conservator of the breed?!**

Words Johnny Tipler Photography Dan Sherwood



**T**he Carrera 3.2 was introduced late in 1983 for the 1984 model year, replacing the 911 SC, whilst inheriting the older Porsche's body-chassis unit and gaining a number of detail improvements. The new model was available in Coupé, Targa and Cabriolet format, with Slant-nose, Speedster, Club Sport and Super Sport intriguing ad hoc spin-offs. You thus had a choice of configurations in which to enjoy the experience, open to the elements or not.

The small increase in capacity to 3,164cc lifted horsepower from 204bhp to 231bhp, providing a torquier response in the process. What's become evident — and appreciated — more recently is how the Carrera 3.2 range was better built than the foregoing SC and the subsequent 964, manifest in solidity of componentry and controls, and reflected in rates of deterioration.

The Carrera 3.2 model line-up comprises straightforward cars, unpretentious, and yet thoroughly involving to drive, even today when the youngest of them is thirty-three years old. Yet, while some folk may baulk at the notion of running a classic 911 as a daily drive, the reality is that the Carrera 3.2 is well up to the job. A decade or so ago I did it myself, tackling an eighty-miles-a-day cross country school run (there and back), accomplished in short order with two kids belted into the rear seats. The Tipler squad completed several trips to our Portugal gaff in the Porsche, too, though with ungainly top-box mounted to the gutters. In addition to Portugal runs, I travelled across France and Spain with the top-box attached, and although the engine runs a bit hotter due to airflow over the roof being disrupted, you can stow a lot of kit up top and still have plenty of luggage capacity under the front lid.





Carrera 3.2 specification evolved continuously, becoming more sophisticated mechanically and internally with each passing year. Immediate improvements on the SC included hydraulic timing chain tensioners and a Bosch Motronic ECU, plus bigger brakes. In 1985, Boge dampers became standard, the radio aerial was integrated in the windscreen, a new four-spoke steering wheel was fitted, as were electric seats with taller backrests, a shorter-throw gearshift and active carbon filters in the breather system. The following year, the model received fatter anti-roll bars, bigger rear torsion bars, a revised dash with larger air vents, seats twenty millimetres lower, new sun visors and a handy cabin temperature sensor.

In 1987, the Getrag-made G50 gearbox replaced the Porsche-built 915 unit, together with a hydraulic clutch, new rear torsion bar housings, two rear foglamps

integrated in the rear panel and lights in the door handles for nocturnal identification. For 1988, Fuchs wheels became standard, replacing 'teledial' alloys. Headlight washers and central locking were also standard equipment. Finally, in 1989, the alarm system became linked to the central locking. Production ended in September that year, marking a total of 80,684 units built.

The Carrera 3.2 clan divides into cars produced between 1984 and 1986, and from 1986 to 1989. The fundamental divide is the aforementioned change of gearbox. It's not crucial, but it certainly does merit consideration if you're out shopping for one of these cars. Introduced by Porsche because it was cheaper than the 915 (which needed its own oil cooler), the G50 is often touted as the be-all and end-all of classic 911 transmissions, but that ain't necessarily so. While the 915 feels like a piece of vintage kit, relatively slow to





engage, yet more akin to the fabled 'knife-through-butter' epithet (more like ladle-through-trifle?), the G50 shift is rubbery and indefinite, although it is a swifter operation traversing the gate from notch to notch. The benefits of the later unit lie in its robustness and, hence, willingness to accept missed shifts — synchros don't wear out at the rate they seem to succumb in the 915, although once replaced, the older transmission's synchros hold up well enough. What will come as a surprise to anyone familiar with the 915 when they come to use a G50 unit is the location of reverse on the newer shift pattern. It's to the left and up, just where you're accustomed to finding first in the old 'box.

The dials didn't vary much throughout the production lifespan, although there are updates in the fascia. There's a device for lowering or raising headlamp height in later editions, and switchgear presents as slightly more modern, flush-faced and rounded. Heater controls have evolved and the lower dash panel is of a tacky plastic. If you carry passengers in the rear, it's worth noting later cars had lap-and-diagonal belts.

When contemplating Carrera 3.2 ownership, you first have to decide whether you want the Coupé, Cabriolet or halfway-house Targa. As an everyday or trackday car, a Coupé makes most sense. You can always opt for one with a sunroof if you crave fresh air. The Cabriolet chassis is not prone to scuttle shake and flexing like some open sports cars. Its top is of high-quality construction, lined, fits well and enjoys a reputation for being leak-proof (unless the rubber seals have perished).

Within these three broad choices of style there are several sub-species of Carrera 3.2. The flat- or slant-nose Coupé (based on the look of the 935 racers from the late 1970s and early 1980s) featured pop-up headlights and Turbo rear arches. Between 1985 and 1987, the factory's restoration workshop produced just nine slant-nose Carrera 3.2s and, from 1988, it became a Turbo production option.

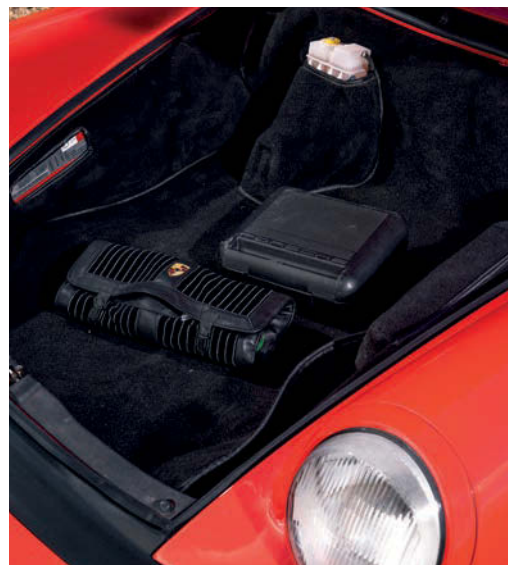
The Club Sport Coupé of 1987 was a stripped-down

trackday special, conceived in the spirit of the legendary 1973 icon. Only 340 examples were built, almost all painted Grand Prix White with red Carrera graphics, with fifty-three configured for right-hand drive.

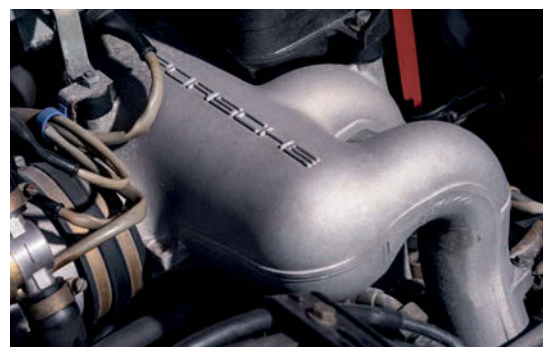
For obvious reasons, these cars are far beyond the price ceiling of top-condition 'regular' Carrera 3.2s. Similarly, the open-top Speedster of 1989 (2,065 units built) was a variation on the Cabrio theme and featured a slanted windscreen and low-line hood. In 1988, Porsche released a short run (875 units) of the Anniversary model, available in all three main body styles and finished in Marine Blue, commemorating twenty-five years of 911 production. Only fifty Anniversary builds came to the UK, the rest divided between the USA and Germany.

Here's the thing. Unless it's sat in a collector's air-conditioned bubble for decades, almost every Carrera 3.2 will have needed refurbishment or restoration, mechanically as well as bodily. This despite Porsches being made from hot-dip galvanised steel from 1976 and

**Above** A vision of the poster adorning many a bedroom and office wall in the 1980s







**Above** Sam has worked his way through every aspect of this truly stunning Carrera 3.2

carrying a six-year anti-corrosion warranty, and Carrera 3.2s allocated a ten-year perforation warranty from 1986. Bubbling around the B-post, door locks or the base of the sills is a warning rust has taken hold and the car should best be avoided. The corrosion points to look at first are the front and rear bumpers, which are aluminium, and oxidation shows mostly at the corners where the bumper meets the rubber concertina. Unless the car has already been repainted, they are likely to be showing minor signs of blistering paint.

#### HIDDEN DEPTHS

The sills are usually fine, but don't confuse the outer panel with the actual sill, which is hidden away inside it. It's worth checking the door bottoms and the inner door-shut panel for signs of corrosion and, while you're at it, look under the headlights. There's a dirt trap there and rust can get a grip if it's not kept clean.

One little oddity in the car's construction is the tiny gaps between the rear valance and the sills behind the rear wheels. The doors shouldn't show any signs of having dropped on their hinges and the metal retaining straps should be in place. Keep in mind the driver's door will clunk shut in a different way to the less-used passenger door. Hydraulic supports for front lid and engine cover hinges may well not be up to their task anymore, although the engine lid bearing the Sport wing is at a weight disadvantage.

Underneath the front lid there's a sticker identifying the car's VIN and chassis number — a quick reference in conjunction with the aluminium chassis plate riveted on the inside of the right-hand wing. You'll also find a separate washer bottle in the top left of the luggage bay on post-'87 cars. Although the Carrera 3.2 left the assembly line with a perfectly serviceable alarm

installed (activated by a secondary key in a lock located mysteriously in the door closure panel), this didn't satisfy insurance companies, who demanded an aftermarket Thatcham-approved security system.

The suspension is tough as they come. The torsion bars don't need any attention, though if the dampers are old, the car may start to wallow. A new set of legs will cure the issue. The rear anti-roll bar mounting brackets were a potential weak point on early Carrera 3.2s and are prone to breaking, but these were strengthened on later models. As is the case with all cars, bushes wear: the front anti-roll bar rubbers give up the ghost before those at the rear.

Most Carrera 3.2s supplied new in the UK came with fifteen- or sixteen-inch Fuchs alloys with body-colour-coded wheel centres, though, as mentioned earlier,

'teledials' were fitted to early cars. It's worth noting, rubber-band low-profile tyres don't belong on a Carrera 3.2. This 911 needs to be shod with tall,

## ALL CARRERA 3.2s ARE HUGELY INVOLVING TO DRIVE, NOWHERE MORE SO THAN TWISTY BACK ROADS

old-fashioned balloon tyres like the originals, delivering a more accommodating ride with no tramlining or juddering at every pimple. Tyre pressures are important, too. Pump to 2.0bar at the front, 2.5 at the back.

To find out about a pukka restoration, I spoke to marque specialist, Sam Corke, who, as you'll see from the pictures on these pages, has recently finished restoring his own Carrera 3.2. Sam owns Impact Bodywork, sister company to Porsche indie, Precision, based at Uckfield, Sussex, and excels at mending and restoring 911s. He has a powerful penchant for the Carrera 3.2 and bought this example four years ago. "I've owned several Carrera 3.2s and plenty of other 911s," he reveals, before telling us one of the plus points of the 3.2-litre model is its simplicity, especially when





compared to the later 964 or 993. He also confirms he hadn't originally planned on restoring the car. "I simply wanted to own and drive a late Carrera 3.2, complete with factory-fitted 964 front and rear screens, as well as 964 front wings." As he puts it, "there are a few little changes on the late Carrera 3.2, which wore these 964 parts," referencing Porsche's habit of installing new-generation parts on runout examples of its outgoing models. For this reason and more, he wanted a tidy example of a 1989 Carrera 3.2. How did the restoration come about, then?

"In November 2020, just before I put the car away for winter storage, I detected a little brake bind. I decided to send the calipers away to be refurbished," says the man who restores 911s for a living and is retained by RUF's UK outpost to attend to any repairs.

"My thirteen-year-old daughter, who races motorbikes at weekends, was with me in the garage helping to remove the parts. She kept pointing at various chassis and body components, asking if I was going to fix those, too! Obviously, this is a three-decade-old-plus Porsche, but even with it being an all-original, low-mileage Carrera 3.2, time had taken its toll on the suspension and running gear." A fortnight later, the car was stripped right down. "It's easy to get carried away!" he laughs, citing six-hundred hours and close to £30,000 invested in what he modestly now refers to as "a really nice 911."

We're talking all new parts and a bare metal respray here. "We regularly see Porsches subjected to bodywork and paint on the cheap and the work almost always needs doing again," Sam continues, confirming he sourced much of the new componentry required for his car's rebuild from independent parts supplier, Design 911. "What's nice about air-cooled Porsches is how you can buy all the bits for them. To this end, anything

starting to deteriorate was replaced. I bought new driveshafts, all new suspension, a new petrol tank and the accompanying fuel lines. In short, parts were either restored and powdercoated, plated or completely replaced."

I wanted to clarify the point about the galvanized coating, which you remove when taking a shell back to bare metal. "This is true, but once a body is reduced to bare metal, we apply an electrophoretic coating. We actually wet paint the coating and then the shell is fully protected. If the job is done with a mechanical sander, the process can take the galvanizing off, but if you do it with paint stripper in a plastic spreader and take your time, usually a whole week, you won't lose any of the galvanizing. In other words, my Carrera 3.2's body is still galvanized, though it's this laborious work which makes

**Above** Every component used during reassembly was either refurbished, restored or replaced with a new part







**Above** Gorgeous interior benefits from a Blaupunkt Bremen SQR 46 DAB head unit, retaining the look of the classic Bremen, but increasing usability for modern-day driving

you realise just how many parts weren't treated to anti-corrosion measures at the factory."

"You have to remember, even as late as Carrera 3.2 production, air-cooled 911s were effectively hand-made sports cars. This means you can expect to find a few imperfections, in the scuttle especially, perhaps where a technician at the factory had been across there with a sander, just before the car was painted, resulting in buzzed-off patches of galvanizing." Sam sounds disparaging, but he is being realistic when he says, unflinchingly, "air-cooled 911s attract rust, the same as every other old car. The problem with 911s is that they don't have enough under-body protection. Dirt sits up in the wheel arches and easily gets through the galvanizing, encouraging corrosion to set in. A 911 like mine is all box sections. The 996 was so much better in this regard. For a start, the 996 doesn't have a scuttle panel, which was a serious Achilles heel for these air-cooled 911s."

Having worked for Porsche specialists as a teenager, he recalls seeing Carrera 3.2s day in, day out, which is why he feels this particular breed of 911 is his specialty. "I know exactly what nut and bolt goes where and I know all the little tricks of how these cars go together," he smiles, before telling us his personal Porsche build was finished at the end of summer 2021 and has since gone on to ferry him and his wife on hundreds of miles of leisure drives. "It feels like we have rewound time," he beams. "This Porsche is going to stay with me forever."

Now, if you're encouraged by his words of wisdom and are thinking of living with a Carrera 3.2, here comes the reality check. Not only can you download the contents of a Waitrose shopping trolley into the front luggage compartment — with, perhaps, a bit of overspill into the cabin interior — you can also accommodate

extraordinary amounts of cargo within the cabin. When performing with The Corruptors (a local beat combo) I found I could fit my whole five-piece drum kit in my Carrera 3.2. Toms and snare on the back seats, the cymbals behind one of the front seats, the bass drum occupying the passenger seat and the stands under the bonnet. That is to exclude any passengers, although I have achieved the same with a child buried under the smaller drums.

What does the Carrera 3.2 drive like? From the moment the clutch bites and you're in motion, it's direct. Pulling out of a parking space, there's no power assisted steering, so a certain amount of muscle power is required. Why waste time at the gym? A crucial factor about driving the Carrera 3.2 is your proximity to

the steering wheel. Better to be closer than might at first seem natural, then the gear lever falls neatly to hand and the bend in your knees is bearable. More importantly,

you can steer more easily this way than with the straight-arm technique. As for those floor-hinged pedals, your right heel may be on the deck feathering, nay, pressuring the throttle, but your left will be dancing in mid-air dealing with the heavy clutch and un-servo'd brake pedal.

On the move, all your senses come into play. The absence of power steering means everything is full-on and sensitive. Feedback is instantaneous — you feel exactly what the suspension is doing and where the car is going. Your own reactions are honed to match. It's not that you don't get this with power assistance, you just experience things more directly without.

Left- or right-hooker, all Carrera 3.2s are hugely involving to drive, nowhere more so than twisty back roads. Docile as a donkey in a line of A-road cars, the flat-six responds right on cue to a spot of right-

## YOU CAN RUMBLE OVER POTHOLES ON A FARM TRACK AND THE CARRERA 3.2 WON'T BAT AN EYELID





foot pressure and arm twirling on the fairground-ride back-doubles. On a poorly surfaced B-road, the front wheels bubble over every undulation as they feel out the topography. It's alive, a creature working out which passage to take for best effect, and you're controlling it by light movements of the wheel as it bucks slightly in your hands with each and every passing bump. As you go faster, the steering progressively loads up and the more physically demanding it becomes.

The Carrera 3.2 features relatively long gearing, both in 915 and G50 transmission formats, which matches with the slow and deliberate nature of the gearshift. You go from one notch to another quite deliberately — you can't just bang it through. It's not ponderous, because you have to be precise about where you move the lever. Bring a 915 'box from fifth to fourth and you have to be calculated about your movement or you'll quickly graunch into reverse. Of course, it's second nature before long. Put your foot down in fifth and you can be sure it will deliver the power, although it's not devastating. Better to drop a cog in an overtaking situation to be safe. Equally, you notice how strongly the 3.2 pulls when you get up the legal speed limit. It really delivers between 4,000rpm and 6,000rpm.

### PICK UP THE PACE

Third gear overtaking on A-roads is stunningly fast, accompanied by that raucous flat-six bellowing as the revs scream towards 6,000rpm. The power builds relentlessly until you run out of road or come up on a backmarker. Conversely, the Carrera 3.2 will pull inexorably from 1,500rpm in top. You need to get your braking done first, ideally trail-braking up to a corner, although the anchors are so powerful that an occasional stab on the pedal will take off speed if you are going a tad too fast approaching a bend.

Talking of which, you drive the Carrera 3.2 through the corners. Get the lock on early and steer it through, lock off, a bit of oversteer induced with the wheel, perhaps, but most likely by use of the throttle: off to make the front end tuck in or on to drift out.

On back roads, you can drive the 3.2 by the seat of

your pants, attacking rather than defensive, positive rather than passive. On a sweeping A-road, you'd better be sure you know what the limits are, both of the road and the car, to ensure you're ready for the unexpected and you've got time to pull up or take avoiding action. On greasy rural lanes bearing a patina of tractor muck, you can feel the car sliding and you teeter round bends on the point of it breaking away. The thing is, it's so sensitive you can feel this happening and be confident that the Porsche will carry on going without despatching you into a nearby hedge. Make no mistake, this is a strong Porsche and the suspension equally robust, meaning you can rumble over potholes on a farm track and the car won't bat an eyelid.

Although it may not be the quickest vintage car point-to-point, the Carrera 3.2 is fun and rewarding to own and drive. It's no more expensive to run and maintain than a ten-year-old family saloon, and as we've seen over the past decade, values have gone through the roof. If you want a classic 911 you can depend on as an everyday drive, and if you relish a challenge, then as Sam is only too keen to impress upon us, the Carrera 3.2 is likely the classic Porsche you've been looking for. **CP**

**Above** Well, what would you expect from a man who spends his days making classic Porsches look good?!





# DESIGN911

Centre for Porsche

 design911.co.uk  
 design911uk  
 design911uk

## EVERY PART FOR EVERY PORSCHE



**SUPPLIER TO**  
PORSCHE SPECIALIST  
GARAGES & WORKSHOPS



**1** BRAND  
PORSCHE



**1995**  
ESTABLISHED



**598**  
SUPPLIERS



**151,000**  
SKU'S



**118,000**  
CUSTOMERS



**1.6M**  
PARTS



**180**  
DELIVERY  
COUNTRIES

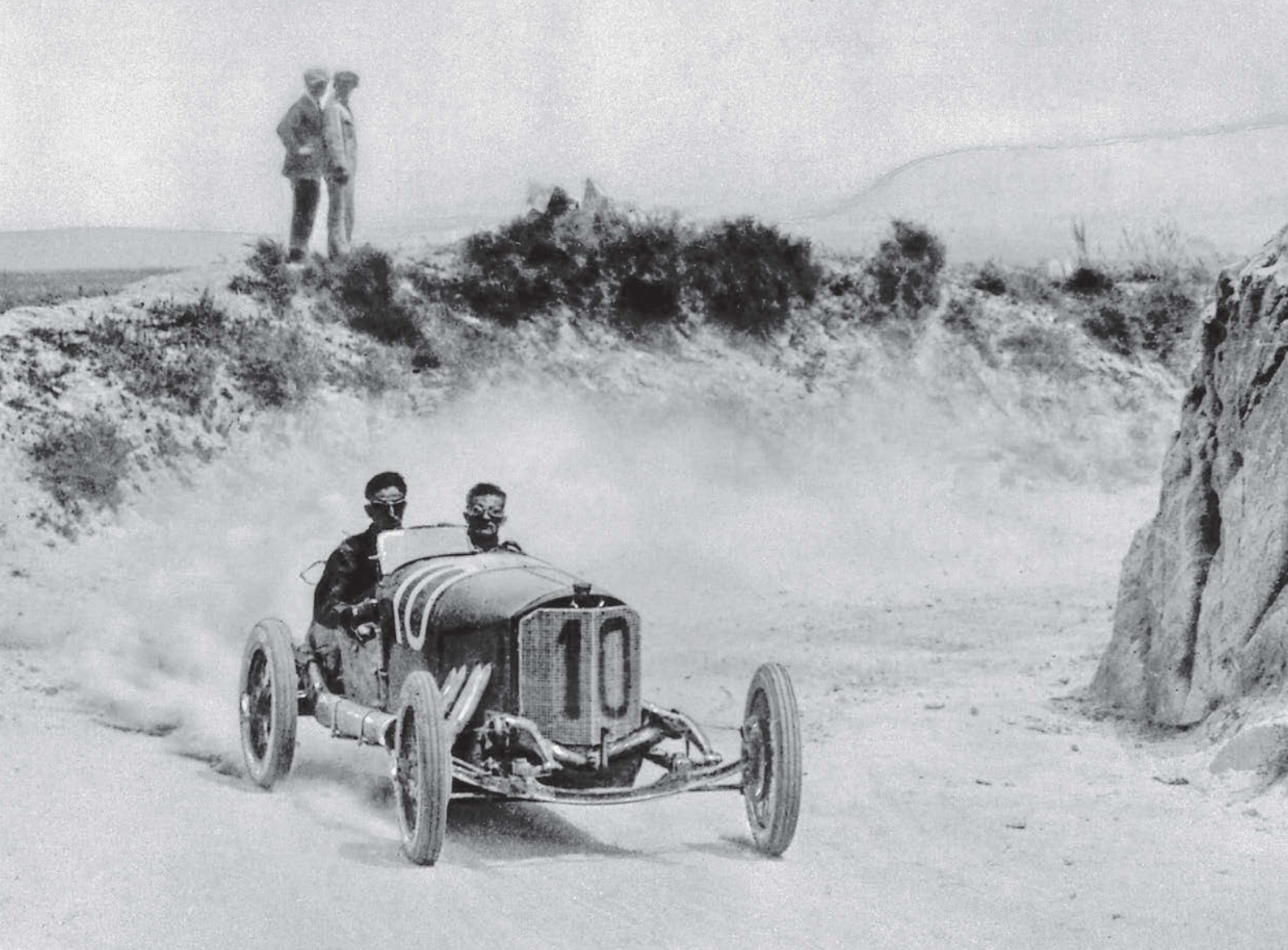


**NEW EUROPEAN DISTRIBUTION CENTRE**  
**OPENING Q1 2022**

+44 (0) 20 8500 8811  
sales@design911.com

DESIGN911.COM





# THINK TANK

**In the second part of our look back at the early days of Ferdinand Porsche's illustrious engineering career, we chart his time working at Daimler...**

Words **Shane O'Donoghue** Photography **Porsche AG, Daimler AG**

In last month's issue of *Classic Porsche*, we delved deep into the Porsche archives to learn about Ferdinand Porsche's early career, specifically his work on wartime engineering. In 1906, he joined Austro Daimler as chief engineer and, during his time with the company, oversaw design and development of a huge number of innovative vehicles. His genius shone through from the start and, importantly, some of his creations had huge impact on the events of the first World War. We now take up the story in 1923.

Mirroring the circumstances of 1906, when Paul Daimler's departure from Austro Daimler created a Ferdinand Porsche-shaped hole in the company's management structure, Daimler-Motoren-Gesellschaft and Paul Daimler parted ways in 1923. Porsche was subsequently head-hunted for the top engineering

position. Accompanied by some of his trusted colleagues from Austro Daimler, he started his new job early that year.

Unlike the weaponry designs we highlighted last month, one of Porsche's first big projects in his new role had nothing to do with military hardware — he took over Paul Daimler's work on supercharged Mercedes race cars. Consequently, Porsche gained an even greater degree of respect from his new employer when he oversaw redevelopment of cars designed for the Indianapolis 500 and readied them for the 1924 Targa Florio. Powered by an inline four-cylinder engine of 1,989cc swept capacity, the driver could connect a supercharger at high speed, raising peak power from 67bhp to 111bhp at 4,500rpm.

When Porsche was finished with the car, it produced as much as 147bhp and featured modifications to suit

**Above** For campaigning the Targa Florio open road race in 1924, Ferdinand Porsche's redeveloped version of the Mercedes Indy 500 race car was painted red to trick locals into thinking they were looking at a local entry





**Above** The 1924 Targa Florio winning team, Ferdinand Porsche pictured front left

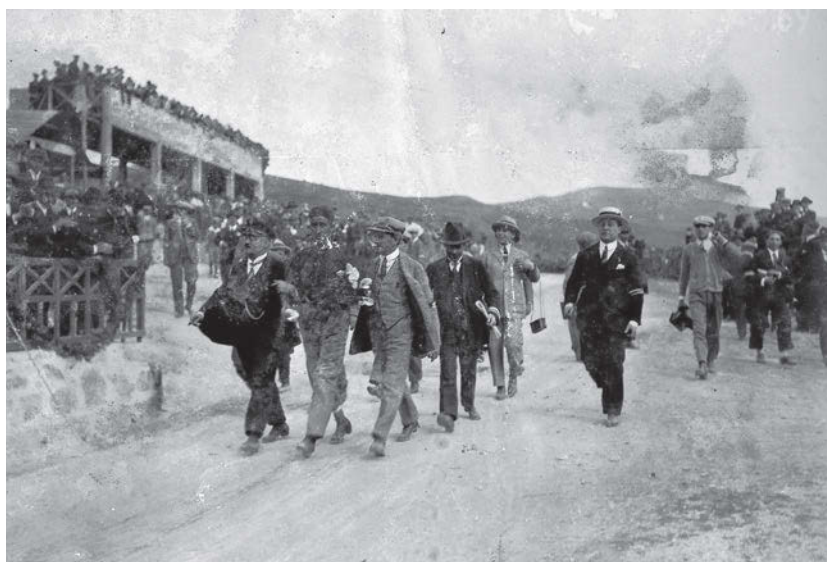
**Below** Winning driver, Christian Werner, makes his way back to the paddock flanked by Ferdinand Porsche on his left

**Bottom right** Ferdinand Porsche's profile pic following his appointment at Daimler

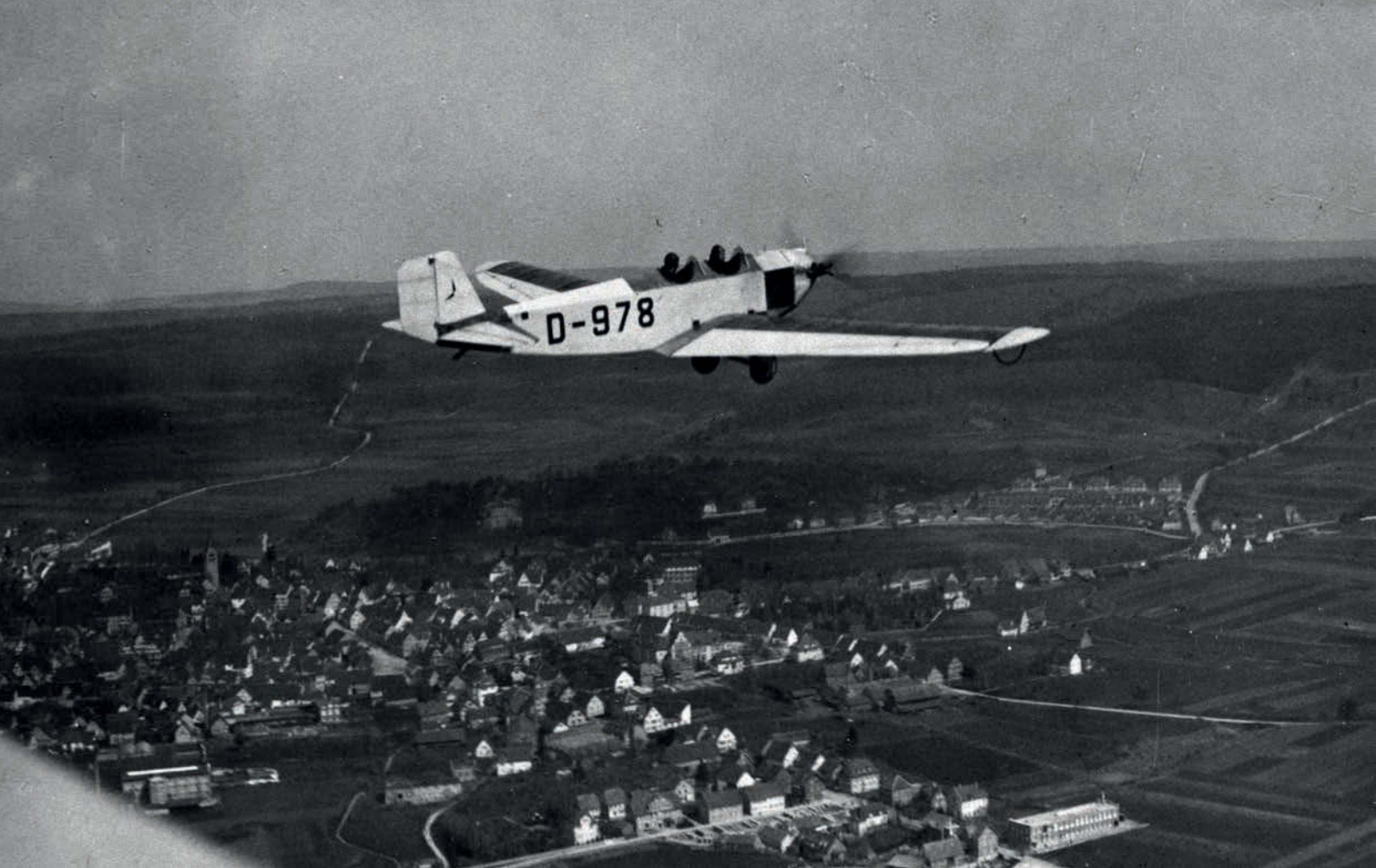
Sicily's tight and twisty roads. For example, he had the car's track widened to enhance its handling, while the rear was redesigned to accommodate spare wheels. A small windscreen was also added to protect the driver from stones thrown up by cars ahead. The finishing touch was to paint the racers red instead of the usual white Mercedes racing livery. Why? To fool locals into thinking it was an Italian car. In doing so, Porsche reasoned, they wouldn't hinder its progress. Three examples of the car were entered and all three finished the gruelling race. The quickest, driven by Christian Werner, ran a total of 335 miles in 8:17:1.4 hours for outright victory. It was a resounding success for Daimler's Mercedes brand and, of course, for Ferdinand

Porsche, the engineer hailed as more than a little responsible for the win.

Porsche soon became heavily involved in the development of passenger cars at Daimler, and his influence in the same continued long past his departure a few years later. Nonetheless, it wasn't long before the firm — its technical engineering led by Porsche — once again participated in the creation of war machines. It's worth remembering, as per the Treaty of Versailles, the German army was under severe restrictions limiting not only its quota of personnel and training, but also the manufacture and importation of military vehicles. Even so, history demonstrates how Germany still managed to enhance its military capabilities despite these restrictions.







Hans von Seeckt (born Johannes Friedrich Leopold von Seeckt) was one of the German military officers at the forefront of this retaliation against the country's constraints. Among his extensive efforts to reinforce and strengthen German armed forces for future battle was a focus on mobilisation of troops. Loopholes in the restrictions were found to allow Germany to hold onto — and order more of — Daimler-produced armoured vehicles, which extended to Porsche's time at the firm, though he had minimal input into their development. Seeckt also looked into using car-based vehicles to mobilise the army's officers.

Porsche had already overseen the development of the Mercedes-Benz Typ Stuttgart 200 road car, and this was modified for use by the army in an open configuration. It was only suitable for regular road use, however, with two-wheel drive, modest ground clearance and average wheel articulation.

A more significant development was the army's decision to try out six-wheeled vehicles, capable of traversing rougher territory. In 1924, it commissioned prototypes from three different manufacturers, including Daimler, disguising the fact the order was from the military by putting paperwork through the transport ministry instead. Porsche led a team at Daimler to create the G 1 (presumably, the G stood for *gelande*, translated into English as *terrain*). As per the army's brief, this was an open-topped vehicle with six wheels and the ability to carry up to six people. Both rear axles were driven and featured double wheels to spread the load. The first examples, built in 1926, were powered by a 3.1-litre six-cylinder engine making 50bhp for a top speed of under 40mph. Though the vehicle used a truck-like chassis, it looked more like an extended car. Porsche oversaw

further development, resulting in the G 3 in 1929, which very much looked like a truck. Under its bodywork was a 60bhp 3.5-litre six-cylinder engine and semi-elliptical leaf spring rear suspension to allow decent wheel articulation over rough ground.

### HANDING OVER THE REINS

None of these vehicles went beyond the prototype stage, but they undoubtedly led to the development of the Mercedes G 4 of 1934. This retained the six-wheeled layout with four-wheel drive, but its design was more in keeping with a Mercedes luxury car. In any event, the G 4 was used more as an impressive way for German military leaders to address their troops on parade, rather than for any serious off-roading.

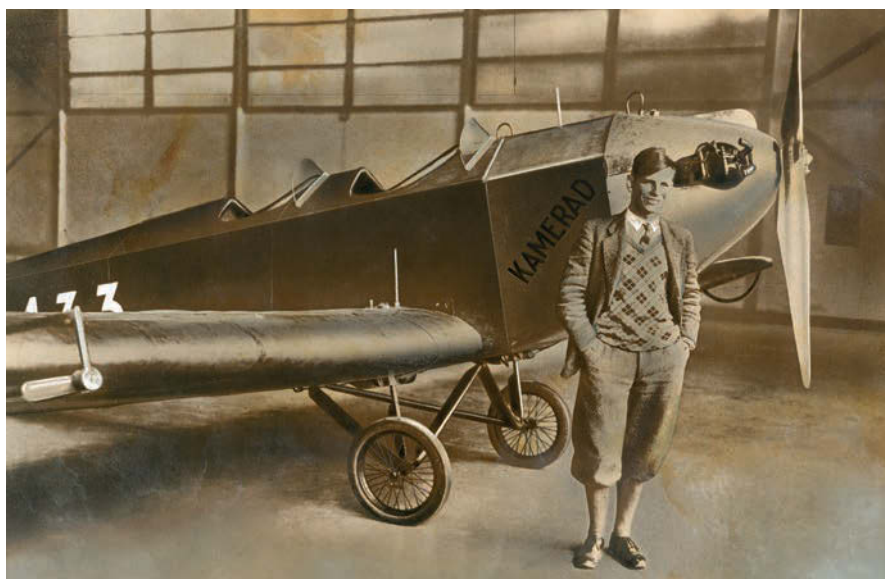
Through the period of restrictions on the production of military vehicles, Daimler continued to develop

**Above** An L 20 flying high above the Daimler plant at Sindelfingen — an F 7502 engine keeps the aircraft aloft

**Below** Hanns Klemm, aircraft designer, pictured with an L 20 in the mid-1920s







**Above** Baron von Koenig-Warthaussen and his Klemm-Daimler L 20, which he flew around the world, winning the 1928 Hindenburg Trophy for his leg from Berlin to Tehran via Moscow

**Top right** Test rig for the L 20 engine at Daimler

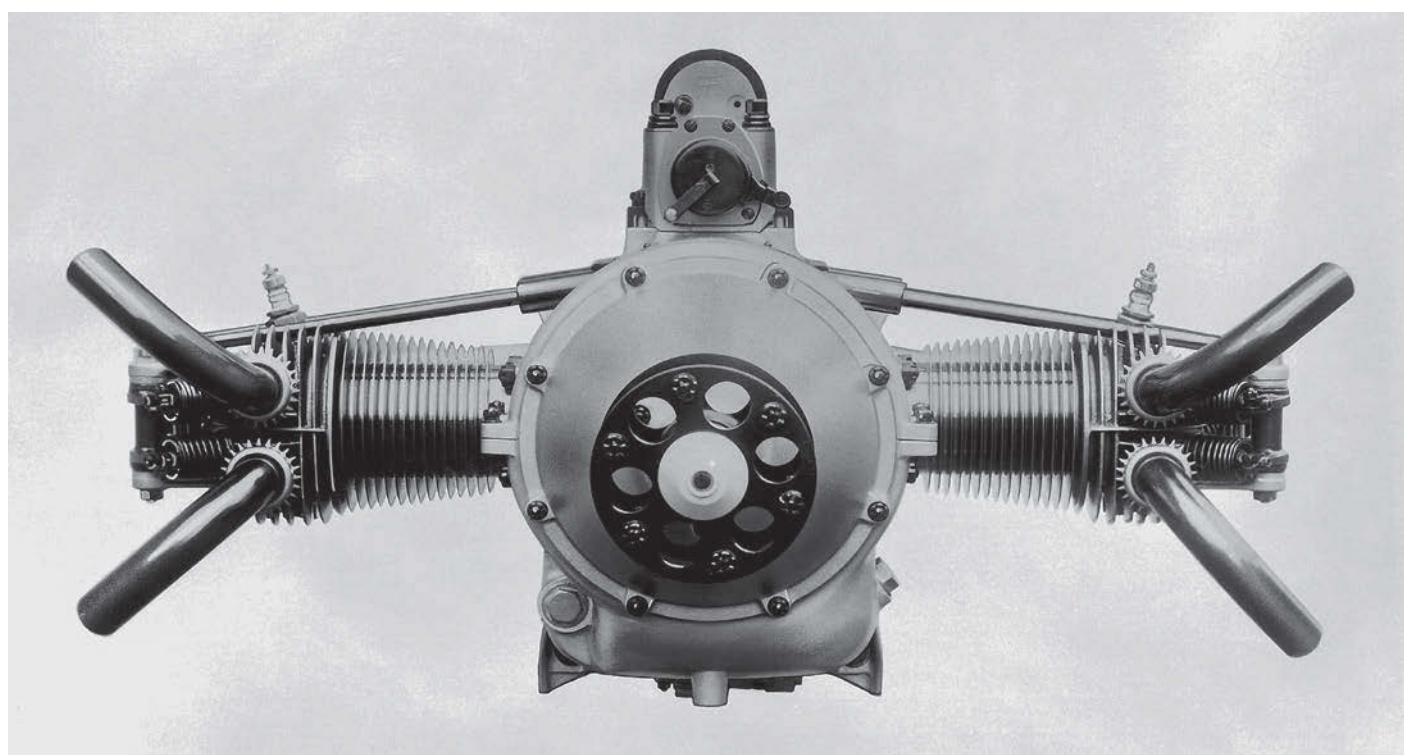
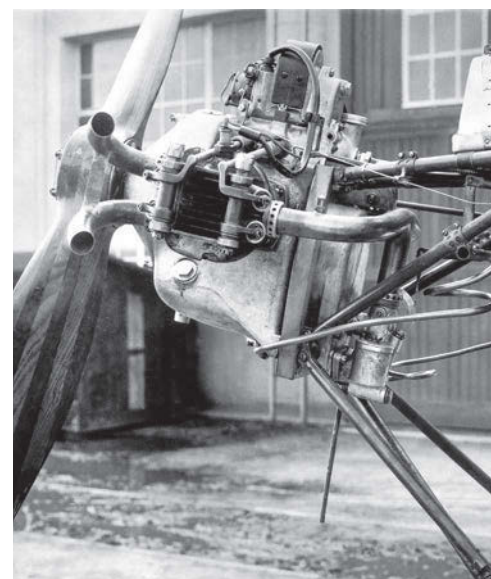
**Below** F 7502 Daimler light aero-engine in all its glory

and produce small engines for light aircraft, which was permitted — Paul Daimler had created the Type F7502 engine and Porsche took over its development. Weighing just forty-eight kilograms, this tiny, air-cooled unit featured two horizontally opposed cylinders for total displacement of 884 cubic centimetres. It was rated at 20bhp at 3,000rpm, though a reduction gear brought the propeller speed down to 1,000rpm. The F7502's most famous use was for a round-the-world trip in a Klemm L 20 light aircraft. Aviation pioneer, Hanns Klemm, became chief designer of aircraft construction at Daimler-Motoren-Gesellschaft in 1918, but frustrated by limitations placed on the company and its focus on ground-based vehicles, he departed in 1926 to form his own aviation firm, Klemm Leichtflugzeugbau (Light aircraft construction) GmbH. Nonetheless, he massively valued Daimler engines and used the F7502 unit for his

L 20, designed to give the public “simple, cheap, easy to fly and handle individual means of air travel,” according to the sales brochure. He namechecked Porsche in the same publication, stating the L 20 was powered by a “matching lightweight aircraft engine by Dr Ing Ferdinand Porsche, director and chief constructor of Daimler-Motoren-Gesellschaft.” This wasn't Porsche's first experience with aviation engines, but that's a story for another day.

### BACK TO BATTLE

Full-on military vehicles were once again on the drawing board following the withdrawal of the Allied disarmament committee from Germany in January 1927, even if initial development was carried out in secret due to being strictly against the Treaty of Versailles agreement. In competition with two other firms, Daimler







signed up to create two examples of a new prototype vehicle, the MannschaftTransportWagen (Crew Transport Wagon), more commonly referred to as the MTW. The requirements were for an agile reconnaissance vehicle which could travel at speeds of more than 40mph forwards or backwards, cope with steep inclines and cross trenches with a width of 1.5 metres. Porsche's solution, the MTW 1, was a sleek-looking conveyance with eight wheels, all driven. Daimler took out a patent on the fiendishly clever steering system, which mechanically steered the two pairs of axles as individual bogeys and then the wheels on the outer two axles for more steering angle. There was a steering wheel at both ends of the vehicle and a 'range-

## IT WAS IMPOSSIBLE FOR PORSCHE TO TROUBLESHOOT DURING TESTING WHILE HE WAS IN ANOTHER COUNTRY

change' transmission with five gears to enable travel at full speed in either direction.

Mercedes tells us the M 36 engine — a 7.8-litre six-cylinder unit developing up to 99bhp at just 2,000rpm

— was at play, and that the vehicle weighed some 9.5 tonnes.

This considerable weight was due to the half-inch-thick steel monocoque shell, forming the body and frame of the vehicle and

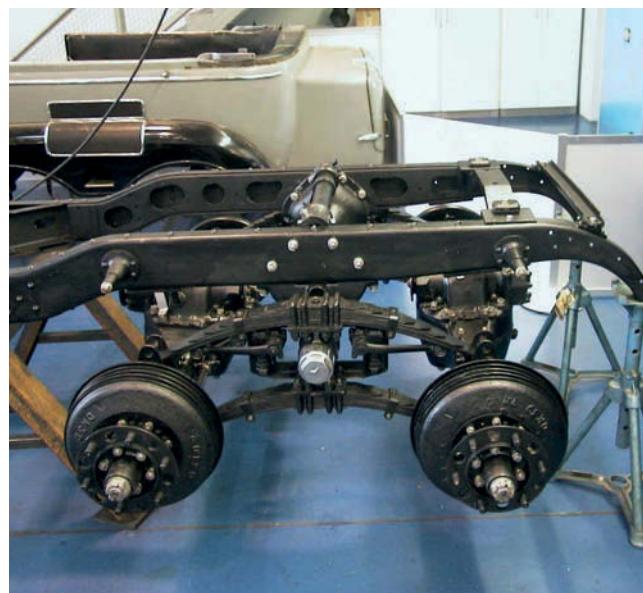
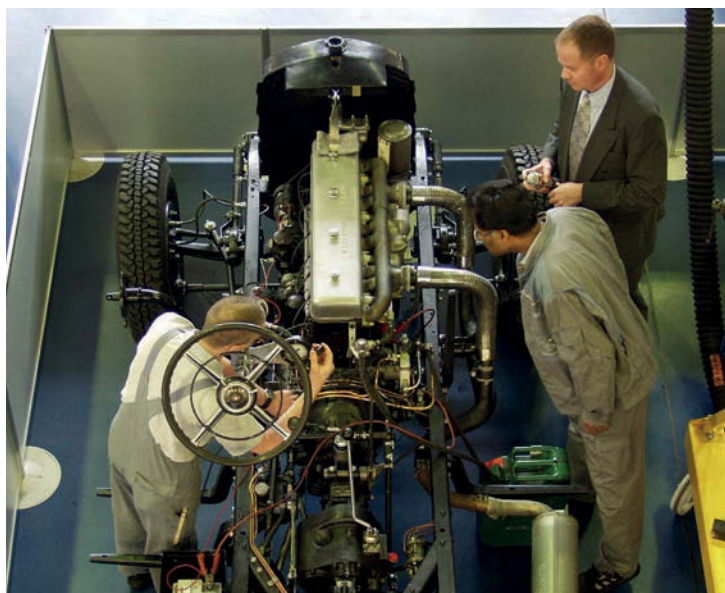
offering modest protection against small arms. Porsche used a manufacturer of underground storage tanks to produce the unique-looking body.

There was also talk of amphibious capability, though this was dropped as a requirement from the army. Nonetheless, Porsche tested the MTW with cork applied

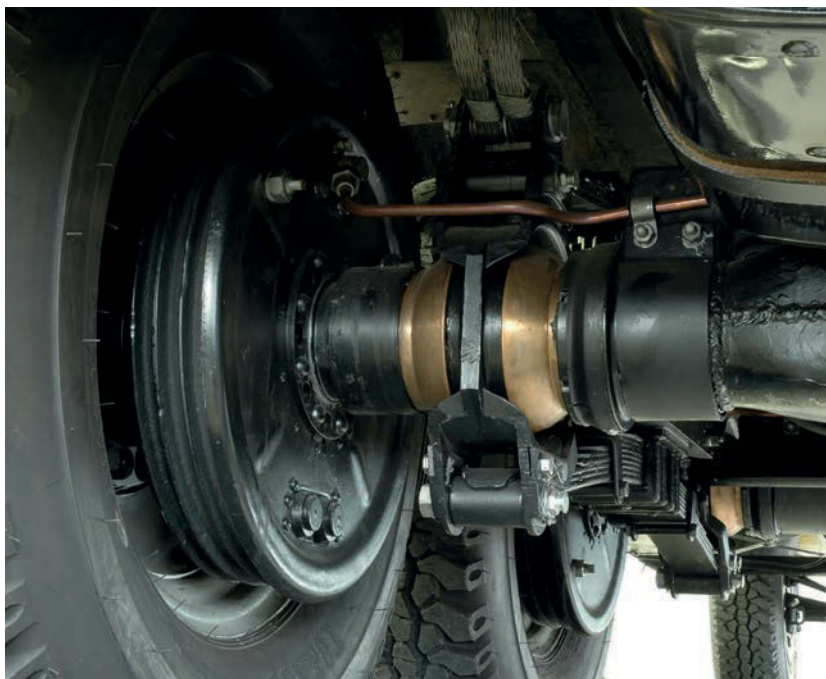
**Above** A rare surviving G 4 off-roader, used as luxury carriage for German military commanders in period

**Bottom left** The G 4 chassis when viewed from above

**Below** G 4 rear axles laid bare







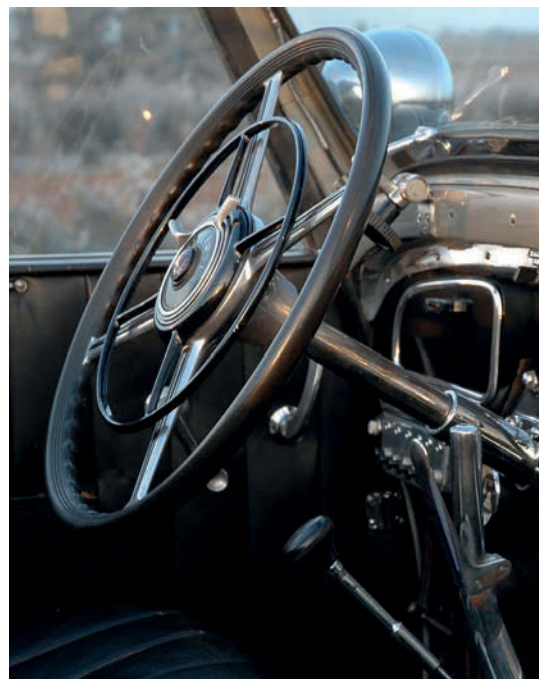
**Above** G 4 rear axle in its natural habitat, with vehicle steering wheel exhibiting what we now consider classic Mercedes cabin design

**Below** G 4 as seen from its nearside front three-quarter

to the body and undersides for buoyancy and even added an engine-driven propeller. The regular steering wheels allowed for manoeuvring when in water. As fascinating a vehicle as the MTW 1 was, however, it didn't go any further than prototype and testing stages. The project was wound up in 1931. Porsche's time wasn't only spent on MTW work during those years, though – in early 1927, Daimler had also signed an agreement to design and build a totally new battlefield tank under the rather misleading working title of *Grosstraktor* (GT 1), meaning *Big Tractor*. Despite all his engineering experience with vehicles big and small, this was to be Porsche's first tank, and was a monumental undertaking.

### STARTING OVER

Daimler had previously designed and built a tank, towards the end of the first World War, but other than experience it provided to its personnel, the design was of little use to Porsche. He started again with a



clean sheet design. Initial requirements included full amphibian capability, weight of nineteen tons, a top speed of 25mph, the ability to span a 2.4-metre trench and, importantly, gearing to allow the tank to move comfortably at just 1.9mph. The GT 1 was powered by its own 31.2-litre engine, putting out 260bhp at 1,450rpm. A suitably impressive transmission was bolted to the back, allowing a total of six forward gears and two in reverse, depending on the positions of the control levers in the cockpit, including one which sent electrical signals to the gearbox's hydraulic system. Steering on land was achieved by changing the relative speed between the left and right caterpillar tracks, while cleverly packaged propeller assemblies were designed to allow propulsion and steering when in water. Drive from the engine was diverted to the propellers via a driver-operated lever.

The GT 1 was shipped off to Russia for secret testing, but this was arguably its downfall. After all, it was all but impossible for Porsche to troubleshoot and address any issues arising during testing while he was stationed in another country.

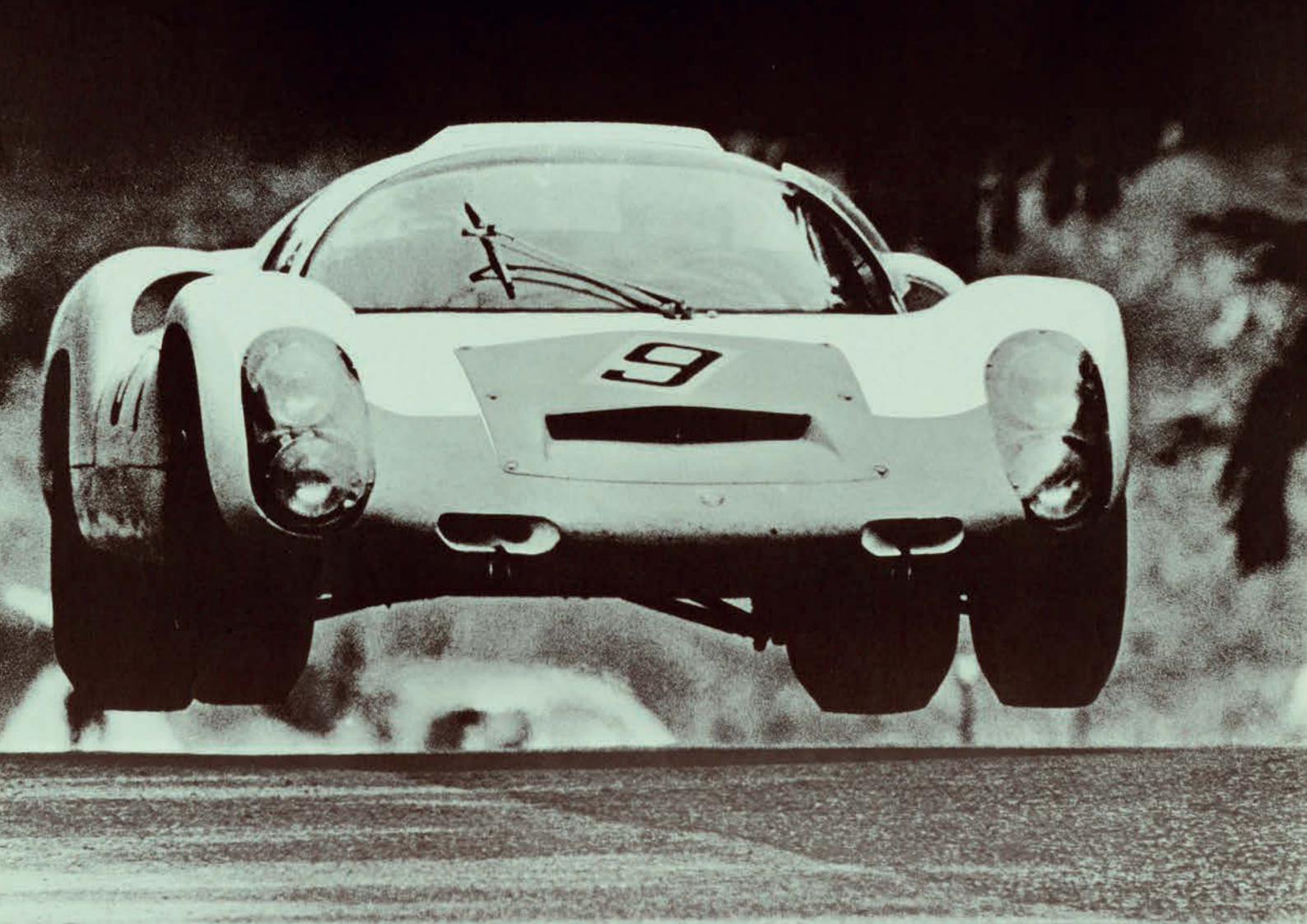
Ultimately, only two GT 1s were ever built and neither was used in battle, but as we shall come to in later issues of this magazine, the experience Porsche gained was undoubtedly put to effective use later on.

Another reason development and improvement of the GT 1 tank stalled was because Porsche fell out with his employers at the end of 1928. Their differences could not be reconciled, and Ferdinand Porsche departed under a cloud. In the next chapter of his career, he came tantalisingly close to the creation of the Porsche company as we know it, but not before he made considerable contributions to the German war effort. More next month. **CP**

**For further reading, we highly recommend Karl Ludvigsen's book, *Professor Porsche's Wars – The Secret Life Of Ferdinand Porsche, The Legendary Engineer Who Armed Two Belligerents Through Four Decades*.**







SHELL/DUNLOP/BOSCH

# 1000 KILOMETER NURBURGRING

1. SCHUTZ/BUZZETTA	PROTOTYP	2 LITR.
2. HAWKINS KOCH	PROTOTYP	2 LITR.
3. NEERPASCH/ELFORD	PROTOTYP	2 LITR.
4. MITTER/BIANCHI	PROTOTYP	2,2 LITR.

SPORTWAGEN	
1. DECHENT/HUHN	CARRERA 6
GRAN TURISMO	
1. NEUHAUS/KELLEERS	911S

# PORSCHE





copyright: James Lipman

# Longstone CLASSIC TYRES

You have a Porsche; we have a comprehensive range of the correct Porsche tyres

[www.longstone.com](http://www.longstone.com)

+44(0)1302711123

**PIRELLI**  
CINTURATO™





# WHAT IS AVAXHOME?



# AVAXHOME-

the biggest Internet portal,  
providing you various content:  
brand new books, trending movies,  
fresh magazines, hot games,  
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



# AVXLIVE ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>



# BORDER CONTROLS

**Tom Fitzsimmons and his immaculately prepped 356 A are set to join the pilots of many classic motorsport machines on the 2022 Monte Carlo Rallye Historique...**

Words **Johnny Tipler** Photography **Adrian Brannan**



**W**hat persuades more than three hundred rally crews — ten percent of them in Porsches — to brave the winter elements, covering three thousand kilometres cross continental Europe? To catch a couple of days' Mediterranean sunshine, that's what! Actually, there's more to it than that (lots more, in fact), but, essentially, this is why Rallye Monte Carlo was established, to provide northern European motoring enthusiasts with an opportunity to thaw themselves out

for a few days. The event was launched more than a century ago, and, along with many top-line competitions, the most unpredictable WRC rally of the year has a historical shadow, taking the form of Rallye Monte-Carlo Historique, introduced in 1998 and running almost exactly in the studded tyre tracks of the FIA event. Operated in consort with the Historique is the Rallye Classique, a gentler affair, which takes a different route over the Alps and doesn't incorporate the daunting final ascent culminating in the Col de Turini stage.

Invariably held in late January through early February,





2022's Historique has attracted more than 260 entries with four start cities: Reims, Bad Homburg, Milan and Monaco itself. Competitors head from their adopted start city on the so-called concentration leg, making for Valence beside the Rhone in the south-eastern Drome district, serving as springboard for three days' incursion into the Ardèche and Vercors to a dozen special stages. The final day sees the retinue drive much of the spectacular Route Napoleon via Alpine passes down to the Mediterranean at La Turbie for a last rendezvous prior to arriving in Monaco's harbourside parc fermé. The final

night's challenge up the incessant hairpins to Turini and back depends very much on the prevailing weather, as far as success — or elimination — is concerned.

This year's Porsche-mounted deities include Weissach stalwart, Roland Kussmaul, and Greek shipping tycoon, Peter Livanos, in a 911, but we're paying closer attention to Scotsman, Tom Fitzsimmons, and his 356 A. This will be Tom's third stab at the Historique, and it's fair to say he's looking to achieve a better result than his earlier forays in France. Before we delve deep, here's a brief history lesson.





Tom has been in the Porsche end of the motor trade for thirty-five years, operating his Border Reivers vehicle sales business for much of the last decade from the bonny banks of Loch Lomond. Aside from the gorgeous lakeside surroundings, other benefits of this location include immediate access to wonderful local B-roads, such as Duke's Pass in the Trossachs Hills. And, of course, Border Reivers presents none of the headaches of an inner-city showroom.

Tom's version of a showroom is a modern barn, a veritable Aladdin's cave packed with exotic Porsches and handful of rare or significant classic cars from other marques, several of these vehicles boasting competition history. In 2010, he adopted the iconic Scottish moniker famously gracing Jim Clark's Aston Martin DBR/1 at the 1959 24 Hours of Le Mans and turned it into a thriving Porsche sales business. "I've been doing this all my life. I left school and became a coachbuilder and panel-beater and operated out of a workshop in Glasgow." The local Porsche Centre approached him and asked if he'd take care of their bodywork requirements. "They gave up doing it in-house, and we became the Porsche-approved repairer for Glasgow and the south of Scotland. The business expanded and ended up with sixty-five members of staff, making us the biggest Porsche-sanctioned repairer in Europe. We even had training facilities which Porsche used to hold their own workshops. Trainees came from the north of England, from the Orkneys and Shetland Islands. Everybody came to us!" he laughs.

In 1999, Tom sold up and started collecting cars. "I'd been travelling up and down the UK looking at classic vehicles for years, but I became disappointed and disillusioned with increasingly inaccurate descriptions of prospective purchases. I didn't see why I shouldn't

prepare and offer cars for sale myself, leading to the formation of Border Reivers." We try to guess what the most amazing car that has passed through his hands might be. "Twelve years ago, my brother and I bought the makings of a 550 Spyder in boxes. We paid £150,000. He's a Porsche-trained panel-beater, so I left him to put the car back together and we subsequently sold it for just under £400,000. In the present, those cars are now fetching £3.5 million!"

Standing in his treasure house, you're confronted with a broad cross-section of Porsches ranging from immaculate 356 Speedsters via Carrera 3.2, 964 and 993-generation 911s to Turbos of the 996 and 997 variety. Bizarrely, Thailand is Border Reivers' biggest market outside the UK — Tom tells us he sends as many as fifteen cars a year to the Southeast Asian country,

**Above** Another fantastic example of a seriously old Porsche being more than up to the rigours of road rallies and endurance driving today







**Above** Rebuilt flat-four is producing 127bhp thanks to a tune-up from Anthony Seddon



which represents a small but lucrative market, especially for the sale of low-mileage 964s and 993s. It's clear to us, however, there are more 356s than any other Porsche at Border Reivers. Six at the time of writing, a mix of Coupés, Cabriolet and Speedster, and, of course, our subject car, which has already been prepped for rallying. "We do alright with 356s," avers Tom. "We mostly sell right-hand drive examples. In fact, all but one 356 I've got at the moment is right-hand drive." Early Porsches are, it seems, his specialty. "We bought a lovely 356 from a client in Canada," he continues. "It was a left-hand drive car. One of our UK-based customers was sufficiently impressed to ask us to build him a 356 just like it, but in right-hand drive. We call it a Reivers Edition. It's very similar to the left-hand drive car, but better quality."

## TEN CREWS ARE LEAVING FROM THE UNITED KINGDOM, MAKING THE TRIP FEEL LIKE MORE OF A BIG TEAM OUTING

As for that Border Reivers nomenclature, Tom doesn't come across as the kind of guy who'd get involved in pillaging and sheep rustling, as the Reivers did in days of yore. His ancestors' nefarious activities, however, do give him an entitlement to the name. "My family name is Armstrong," he reveals. "The Armstrongs were the original Border Reivers. That's where the connection

comes from.

I also wanted a tie-in with a Scottish race team. The old Border Reivers motorsport outfit of Ian Scott-Watson, who ran

Jim Clark in his 356 at Charterhall, gave us the racing connection and encouraged us to revive the name," he adds, before announcing Border Reivers sponsors many motorsport-related enterprises in the Borders, including the Jim Clark Memorial Room, a museum housing the legendary racer's trophy collection in Duns.



### HEAD FOR THE HILLS

The conversation turns to the prospect of the forthcoming Historique. "You've got to think carefully about which car to do it in," he says. "Let's say your 356 is worth £165,000 and you're hustling it through the woods on tracks. When you start worrying about the value of the car, you're not concentrating on the rally, which means you're not enjoying it. On the other hand, the classic SAAB I competed with last time around is a stage rally car, worth about twenty grand. As long as we're free of injury, if the Swede rolled down the side of a mountain, we can walk away and not worry too much about the loss." There's an ex-Colin McRae Mk2 Ford Escort in his showroom and I recognise a Mk1 Escort from the Historic Monte. This is a Blue Oval formerly belonging to Xerxes Matten and now part of Border Reivers' inventory. "It's set up to do the Monte, but I don't





want to destroy it. I'd rather just keep the thing and use it as a stage rally car. In any case, I drove it here from the body shop in Glasgow and used almost a tank of fuel in the process!"

Tom has owned his wonderful right-hand drive 1956 356 A for three years. The car was already prepared as a rally weapon by the time his name appeared on its logbook. The accompanying paperwork confirms the Porsche was completely rebuilt in a 'no expense spared' restoration by Robert Gant at Lincolnshire-based marque specialist, Gantspeed Engineering, at the instruction of a previous owner. Rallying kit installed at the time included a long-range fuel tank, a 356 Carrera louvered boot lid, Carrera brake drums, sump guard, Speedster seats, a full roll cage and sports steering wheel. The cost of the work was well in excess of £100,000. "More like £150,000," laughs Tom. The document file also includes an old insurance valuation record quoting a figure of £42,500, though given the value of 356s in general, notwithstanding the restoration and rally prep witnessed here, that figure seems at least a third of what you might imagine this potent Porsche to be worth today.

## WORLD PARTY

"The previous owner threw loads of cash at the car, but when it was valued, it was still only worth a fraction of what he'd spent. Clearly, money wasn't an issue, he just wanted the right 356." This being said, we're looking at a well-travelled Porsche. "It was prepared for the Liege-Rome-Liege rally twice, the Monte Carlo Historic twice, The Italian Job, London to Lisbon, a 356 meeting in Holland back in 2001, the Rallye des Alpes, the Marathon Rally, The Winter Rally and many more similar events," Tom says. He's carried out a lot of work, too. "Because we're travelling across France at night, it's really

important we've got a decent-sized fuel tank. With this in mind, we've extended the fuel cell and we've brought the filler neck through the bonnet to ensure we don't need to open it at night and move underneath. I've cut the bonnet open the way the 356 Carreras were configured."

He goes on to confirm the air-cooled classic came to him without bumpers. "I thought it best to reinstate them for the rally, which is why the car now wears bumpers complete with Carrera steel mouldings, basically through the car. I also changed the seats from the Speedster uprights to more comfortable recliners with headrests." There's a race-spec engine, too. "It's producing 127bhp. Anthony Seddon is my engine guy. He tuned the car's punchy boxer. He's based at Oulton Park Circuit. I thought about handing the mechanical work to Porsche Centre Glasgow, which is an official Porsche Classic

**Above** Previous owner commissioned Gantspeed to carry out a comprehensive restoration and prepare the car for entry into many European rallies







**Above** Tom's pretty Porsche will be put to the test from his chosen starting point in Reims all the way to parc fermé in Monaco

Partner Centre, but in the end, I decided Border Reivers could take care of it in-house."

Most of the spares required for preparing the car for its impending outing came from independent marque specialists, Roger Bray Restoration and Design 911. The car rolls on Nokian Hakkapeliitta snow tyres, but no chains. "We don't have room to carry spares," Tom shrugs. "We're not taking a backup service crew. If I can't fix something on the road, then it can't be done." He's obviously determined to participate in the rally the way entrants originally campaigned at Monte Carlo all those years ago. "Just me and a navigator with a spares package," he smiles. His co-driver is David Brown, a veteran of hard-fought rallies and the man who joined Tom on his last Historique.

Talk of which reminds Tom of his 2014 foray with a Volvo PV444. "2014's effort was with a total novice navigator, a friend, and it was his ambition to participate, but he never put in

any work on the maps. We entered a stage in the wrong order and got disqualified! After we protested, the event organisers allowed us to continue, but they wouldn't give us our position back, which is why we had to start last. Nevertheless, we enjoyed ourselves because after this incident we weren't under any pressure to compete."

The second time he entered the event was with the SAAB. "On the third day, the gearbox failed. We couldn't shift into second and third was slipping out. Our aim was simply to finish the rally, which we managed to do. This time, it will be a similar story insofar as we want to compete, but being realistic, if we can simply finish the event, we'll be delighted. It's a hard campaign for any old car." Indeed, it's amazing how a sixty-year-old Porsche will take on the challenge, but as we've seen elsewhere in this issue of *Classic Porsche*, 356s don't mind taking

on less than easy-going pursuits. "People say there are certain regularity stages where they'll be travelling between thirty and forty miles per hour," Tom muses. "That's fine, but there are plenty of transit sections where you're at all but max power. In between stages, you're running about like crazy, so from start to finish, it's almost flat-out all the way, for five days. It's exciting, but the pace shocked me the first time I participated. I really had no idea what was involved."

What aspect of the 2022 Rallye Historique is he looking forward to the most? "The whole adventure, really. My first outing was frustrating because my partner hadn't done his homework. The second time, the gearbox broke and we were under pressure to actually finish the event. This time, I'm looking forward to just enjoying the

trip. It's a week of an entrant's life they'll remember forever. If you get on with your co-driver, you'll make a friend for life, too. Additionally, rather than just compete, I'm going to take plenty

## ALPINE PASSES ALMOST INVARIABLY SHROUDED TO SOME DEGREE IN ICE AND THE WHITE STUFF

of photographs. I want to savour the experience, make time for people. There's no one particular stage I'm looking forward to more than any other. I just want to get down safely from Col de Turini on the last night and drive this little Porsche into parc fermé in Monaco."

He's running his 356 A as a member of the International Rally Drivers Club (IDRC). "Ten crews are leaving from the UK, making the trip feel like more of a big team outing. Sadly, there's no British city to set off from following announcement the Glasgow start has been cancelled, which is why I'll be starting the event in Reims. Of course, one of the things you don't know until you get to your destination is whether any of the stages are covered in snow, hence the chunky tyres. I trialled studs on a past Historique, but they weren't particularly effective and event organisers are clamping down on





their future use anyway." In any case, it's very difficult for a 356 driver to prepare for all eventualities due to being limited on luggage room in such a small car. Add a long-range fuel tank, a spare wheel and the tubework of a full roll cage to the mix and it quickly becomes apparent space is a serious concern. "We're going to have to put everything in the rear of the cabin. All our spares, clothing, everything. We're really limited on what we can take."

### TEST OF ENDURANCE

I've followed Rallye Historique on several occasions from the confines of Porsches shod variously with Nokian and Vredestein snow tyres. These products hardly degrade, even over the distances and surfaces involved. That said, I wasn't subjecting them to the rigours of rallying. Will this 356's Nokians last the distance? "Absolutely," Tom stresses. "We used a similar set on the SAAB. It was a reasonably dry event, not much in the way of snow and ice. We were riding hard and the tyres were absolutely fine when we got home."

Nowhere is tyre choice more crucial than a long-distance rally of this nature, where much of it is conducted on snow-free roads, especially where the legendary Route Napoleon nears Nice.

The toughest drives, however, are the special stages on the Ardèche backroads and over Alpine passes almost invariably shrouded to some degree in ice and the white stuff. How much varies from year to year — the special stages certainly won't have been snowploughed or gritted. On the basis you'd be nuts to venture into freezing temperatures without thermals, similarly, you wouldn't drive on snow and ice without winter tyres.

In case you're wondering, the difference between regular rubber and winter boots is that winter tyres are made of a softer compound than summer (or 'all weather') black circles and feature a greater proportion of rubber ingredient to ensure they stay more malleable

at sub-zero temperatures. The tread pattern is much more complex than that of standard tyres, wicking away snow and slush more efficiently. Conversely, if you run winter tyres into the warmer summer months, you'll find yourself involuntarily sliding as the rubber overheats. Tread carefully.

As we wave Tom and David off on the first leg of their run to Monte Carlo, we've got our fingers tightly crossed they don't stack up too many penalties on the regularity stages. We also hope they finish in the top fifty, as intended. With many Historique regulars out there who know the terrain well, ranking in the top half of the table come event end would be a fair result.

This 127bhp 356 A is powerful enough, and one has to consider the fact the Historique is won largely through handling and consistency, rather than out-and-out pace. Perfect for an old Porsche, then?! After meeting up with Tom in parc fermé, we'll publish his account of the event in the next issue of *Classic Porsche*. Don't miss it. **CP**

**Above** We can't wait to find out how Tom's 356 fares on the Historique, its master's third entry to the event

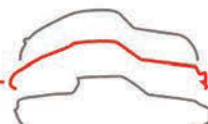




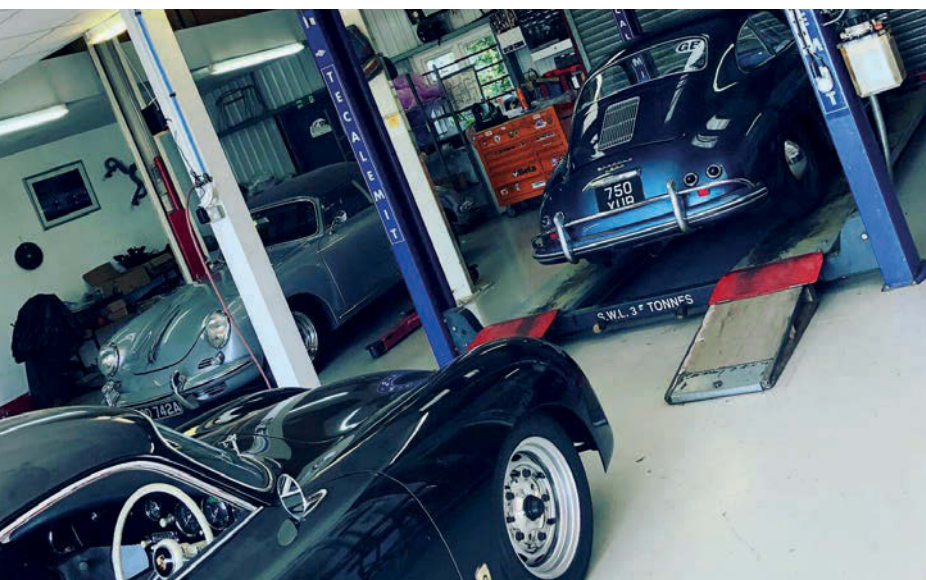


gaswerksgarage.com | 833-320-9470 | @gaswerksgarage

**ROGER BRAY**  
RESTORATION



CLASSIC PORSCHE  
PARTS AND SERVICE



Roger Bray Restorations is a small business with a big reputation specialising in supplying parts and the restoration of classic Porsches 356, 911, 912 and 914. We have been around classic Porsche cars since 1985 and have a large amount of knowledge from dealing and working on these cars daily.

Not sure which part – speak to one of our parts advisers

**SHOP ONLINE AND GET 20% OFF SELECTED PARTS  
ON THE WEBSITE**

Call: +44 (0)1404 822005 E: [parts@rogerbrayrestoration.com](mailto:parts@rogerbrayrestoration.com) [www.rogerbrayrestoration.com](http://www.rogerbrayrestoration.com)  
Milestone Business Park, London Road, Whimpey, Exeter EX5 2QB



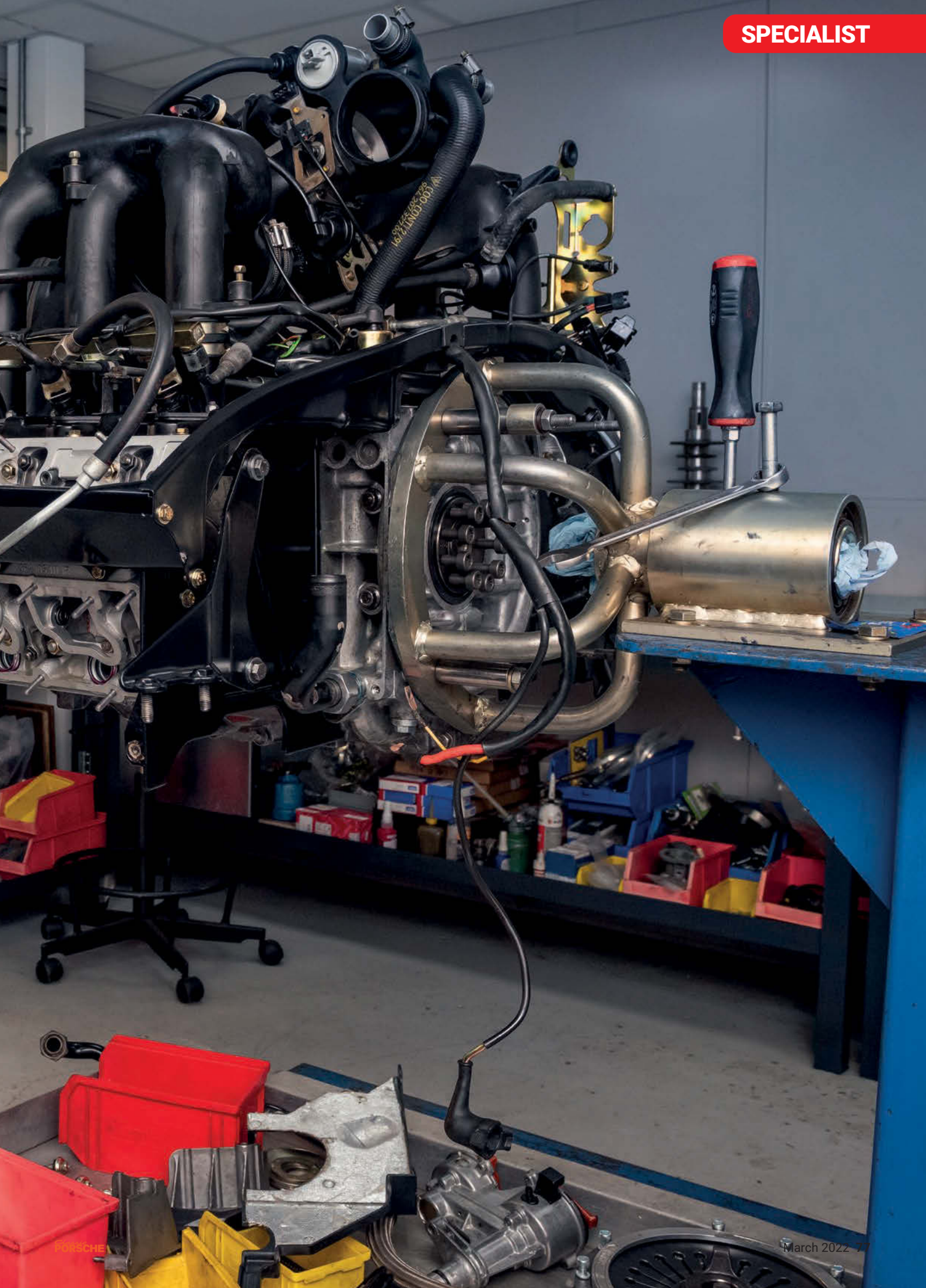


# ALL THAT JAZ

Three decades young and based in the cathedral city of St Albans, Jaz matches the biggest ambitions with the smallest details...

Words Emma Woodcock Photography Dan Sherwood









**D**etail delights at Jaz. The multi-era Porsche specialist concentrates on perfecting the tiny points others might miss, from replicating period production techniques to fixing (at no extra cost) the nagging imperfections on every car entering the company's service bays. Quality control is the mission of Managing Director, Steve Winter, who personally inspects ninety percent of the cars visiting Jaz's 6,500ft<sup>2</sup> facility in St Albans. "If a bulb fails, the screenwash jets need adjusting or a door pocket is hanging off, we'll just go ahead and fix the problem," he explains. "It's the little things that make Porsche ownership better."

He'd know, having spent more than four decades working around Porsches of every description. In that time, he's built an enviable reputation for working with 356s and historic race cars, but Jaz welcomes everything from pre-A coupés to the latest Cayennes, Boxsters and the newest generation of 911. And all this from a man who grew up with very different passions. "As a kid, I was primarily interested in sailing and ships. By chance, I ended up working at a Porsche garage not long after my sixteenth birthday. I've been in love with the manufacturer's products ever since." Currently looking back on more than thirty years of Jaz trading, he co-founded the company in 1991 and took sole ownership of the business five years later.

Jaz is a respected fixture of the Porsche scene – the company has kept its longest standing customers for

decades. "Many of the Porsche owners who have walked through our workshop doors have become good friends," he smiles. "Some have brought the same car to us for decades, others regularly change models. There are also Porsches which keep returning, even after they pass into new ownership." We wonder if Steve knows who his longest-standing customer is. "A lovely woman named Josephine," he replies, instantly. "She's been bringing her treasured 911 SC to Jaz for more than twenty-five years."

Communication and transparency are key to the Jaz approach. Steve's wife, Claire, works hard with company secretary, Joanne, to ensure Porsche owners are kept fully informed at every step of a service, rebuild or restoration. "We'll send photos when we find something amiss and we try to respond immediately to customer feedback," says Steve. "We want people to know what's

happening at every stage of every process." To this end, Jaz encourages owners to talk with the mechanics who work on their cars, especially if they want to explore the finer technical points of

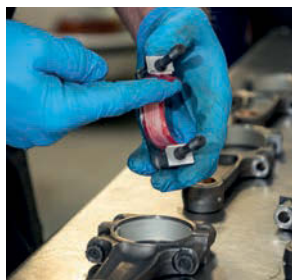
Porsche design. The workshop is open to visitors, too.

"Our roots are firmly grounded in air-cooled cars, experience which gives the entire Jaz team an understanding of the brand's engineering," he continues. "This deep-rooted knowledge also enables us to work effectively on modern Porsches. After all, the DNA for every one of the company's products can be traced back to the 356. When you explore this history, especially from an engineering, design and technical perspective, you can understand the culture of Porsche as a company

## JAZ TWO-LITRE FLAT-SIXES ARE RATED AT 200BHP AFTER CLIMBING FROM AN ALREADY RESPECTABLE 165BHP

**Above and facing page**  
From basic servicing to  
extensive engine builds and  
restorations, the Jaz team  
has you covered





**Top right** Along with wife and business partner, Claire, Steve is enjoying Jaz's continued growth following three decades of trading

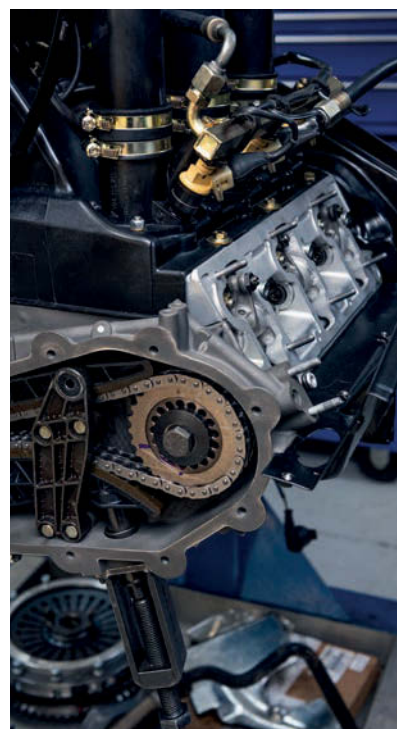
and how its engineers have approached projects across more than seven decades of sports car development." Several members of the Jaz team have been working with the business for fifteen years or more, and five of the eight-strong crew drive Porsches. Steve and Claire share a particularly impressive collection, including a 356 pre-A Coupé, a fantastic 914-6 and a right-hand-drive 911 assembled in 1965.

### IN THE BLOOD

A passion for motorsport also runs through Jaz. Engine builder, Rob, loves to get behind the wheel, workshop technician, Gary, boasts extensive experience in race car preparation, and Steve has been a constant pitlane presence since 1984. "I've been a mechanic or team manager at every level, from campaigning 924s in one-make series to stints in Carrera Cup and daylong races at Silverstone," he says. "I started racing in 1994 and

I'm pleased to say Jaz currently races its own two-litre 911s." He bought his first short-wheelbase 911 with friends in an attempt to secure entry to the Le Mans Classic. Sadly, their application proved unsuccessful, but the car has since raced in Tour Britannia (the UK's leading race and rally event for historic and classic cars) and the 6 Hours of Spa.

Jaz channels its vast knowledge of configuring competition Porsches into supporting customer racing programmes, tackling every category, from rallying to circuit racing. The team is currently building a pair of 997 Gen II Turbos for the Targa Tasmania closed-road rally (a competition outlined in previous issues of *Classic Porsche*), having previously helped clients successfully participate in the 1000 Miglia (including a Jaz customer piloting a 356 pre-A Coupé), as well race a factory original 914-6 GT at the Le Mans Classic. Needless to say, engine preparation for motorsport







applications is another speciality. "We've built multiple engines for two-litre 911s since we started racing them. We're constantly pushing development boundaries to increase performance and reliability." To prove the point, Steve references the enhanced output of Jaz two-litre flat-sixes, rated at 200bhp after climbing from an already respectable 165bhp.

Engine and transmission rebuilds are an evergreen part of the business, encompassing standard road car refreshes and customisation programmes alike. Keeping Rob busy, Steve tells us Jaz overhauls twenty-five engines and even more transmissions each year. He constructs each gearbox himself and, he's keen to stress, everything but machine work is completed in-house. Current contracts include a commission to refurbish twelve 356 A split-case transaxles, as well as a partnership with Swiss 356 and 912 precision engine parts specialist, JPS Aircooled, to create a 150bhp flat-four. "JPS has developed the engine design, we're taking care of the assembly, dyno testing and fitting," Steve explains. Jaz is also rebuilding a 964 Carrera RS driveline for Henry at 911virgin, a Porsche sales firm starring in an ongoing YouTube series.

### ARRESTED DEVELOPMENT

Any opportunity to exercise attention to detail really excites Steve, which is why he can't wait to tell us about the highly tuned 3.4-litre air-cooled engines Jaz is currently developing. They're destined for a pair of 911 SC chassis and the team is currently in the process of maximising performance. "We're designing our own cam profiles and developing unique pistons for these special cars," he grins. "I've been consulting with a premium exhaust expert to ensure we get the pipe sizes and angles exactly right." Individual throttle bodies and

electronic engine management systems will add to a remarkable project, but it's important to recognise how the Jaz team approaches general servicing with the same zeal. "Our guys pride themselves on diagnostics and fault finding, especially with slightly older cars, and joining Rob, our additional engine whizz, Chris, carries out all our M96 and M97 996 and 997-generation 911 flat-six rebuilds." And there are many — Jaz is well known for its capabilities with air-cooled powerplants, but nine out of every ten cars entering the workshop are newer water-cooled models. Not only does this include the aforementioned Boxsters, Caymans and all recent 911s, but also Cayennes, Panameras, Macans, diesel-powered Porsches, products from the brand's transaxle family of

**Above** Former and future Classic Porsche feature cars are a staple of the Jaz workshop in St Albans





Jaz|30 YEARS  
1991-2021

# PASSION. EXPERTISE. QUALITY.



[www.jazweb.co.uk](http://www.jazweb.co.uk) • St Albans • 01727 866075



INDEPENDENT SERVICING, REPAIR AND RESTORATION SPECIALISTS FOR CLASSIC & MODERN PORSCHE

**Right** From the earliest Porsche products to the very latest 911s, Jaz caters for Stuttgart cars of all ages

vehicles (Jaz recently rebuilt the suspension of a one-owner 924 S which had covered only 40k miles from new) and any other Stuttgart-crested speed machine you care to think of. Even so, the company boss has a firm favourite. "The 356 is undoubtedly my personal passion, but we never turn our noses up at any Porsche," he continues. "Claire drives a 987 Boxster S as her daily hack and I make use of a first-generation Boxster 2.7. It would be daft to dismiss these Porsches, not only because they're excellent sports cars, but also because their popularity helped saved the brand."

Business is set to expand further when Jaz opens its eagerly awaited parts department. The new initiative aims to capitalise on the stockpile of Porsche items Steve and his team have accumulated over more than three decades, giving customers access to rare classic components difficult to source elsewhere. A dedicated ninth employee — himself an ex-Porsche mechanic — will operate the division.

"People already ask whether we've got no-longer-serviced and rare componentry in stock. Just last week, we supplied a driveshaft joint for a short-wheelbase 911 from our ex-racing parts pile. It's one of those items you just can't find easily or without great expense," says Steve. "Jaz enjoys three deliveries a day from suppliers, plus another from Porsche. Our aim is to provide everything a customer could need."

Thanks to continued (and growing) interest in the 964, 993 and now 996-generation 911s, light restorations and

recommissioning projects are another developing side to the Jaz Porsche portfolio. These modern classics rarely need engine or bodywork rectification — Jaz focuses its attention on improving brakes and suspension instead. "Renovating those systems alone makes a huge difference to how a 911 drives. These are the dream cars of their owners and we get fantastic customer feedback following completion of the work."







The Jaz team starts by removing the running gear and examining each component for corrosion and wear. Redeemable parts are vapour blasted and re-plated, while everything else is swapped for new. Unsurprisingly, shock absorbers, wheel bearings and brake calipers are common candidates for replacement. The scheme replicates the meticulous attitude the Jaz workshop employs for its largest renovation projects — taking regular advice from Classics at the Castle founder and foremost early Porsche expert, Fred Hampton, Steve strives to ensure his restorations are factory correct in every detail, an attitude extending far beyond what most enthusiasts will ever see. He even writes the final four VIN digits in yellow chalk under the dash pad and signs the dashboard of every repainted pre-1973 911,

replicating period Porsche practice. Additionally, every bolt is catalogued for its maker's mark, ensuring any replacements are exactly the same as the originals.

A recent 1972-built Carrera RS 2.7 Lightweight restoration employs another little-known feature, one Steve is quick to highlight. "Porsche placed a small orange sticker on the front of the later Carrera RS 2.7 to identify each chassis coming down the production line. It's hidden beneath the bonnet badge and no-one would ever know it was there unless they were told to look for it," he says. "The car we've just completed wears the most accurate replica sticker I could find. It's the details that make a restoration perfect." That's the Jaz philosophy — Steve and his team always sweat the small stuff. Here's to the next thirty-plus years of trading! **CP**

**Above and below** All manner of Porsche road and race cars are looked after by the team at Jaz's Hertfordshire HQ







## The original Fuchsfelge® **Evolution**

New production with weight reduction

**Surface variant:** Star black or anodized

**Dealer enquiries are welcome**



### 15"-Fuchsfelge

6J x 15   ET 36	461,34 €
7J x 15   ET 23,3	478,15 €
8J x 15   ET 10,6	486,55 €
9J x 15   ET 3	528,57 €

### 16"-Fuchsfelge

6J x 16   ET 36	536,97 €
7J x 16   ET 23,3	494,96 €
8J x 16   ET 10,6	520,17 €
9J x 16   ET 15	536,97 €

## Steel wheel

**Design:** OE look steel - colour: silver

**Dealer enquiries are welcome**

### 15"- Steel rim

4,5 x 15   ET 42	227,00 €
5,5 x 15   ET 42	239,90 €
6,0 x 15   ET 36	259,00 €

all steel wheels with ECE number



## Steel wheel

**Design:** OE look steel - colour: silver

**Dealer enquiries are welcome**

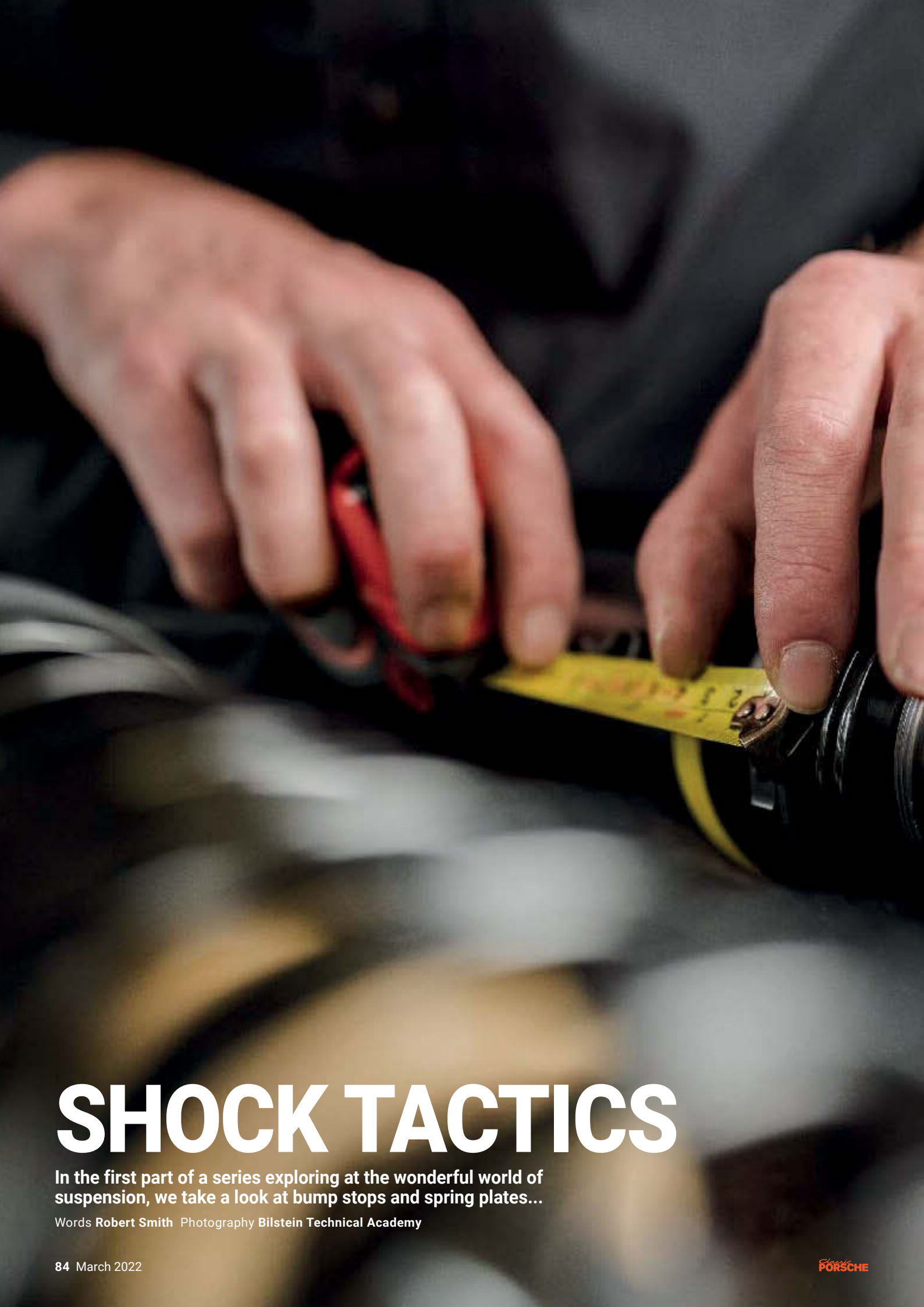
### 16"- Steel rim

5,5 x 16   ET 15	259,00 €
------------------	----------

all steel wheels with ECE number







# SHOCK TACTICS

In the first part of a series exploring at the wonderful world of suspension, we take a look at bump stops and spring plates...

Words Robert Smith Photography Bilstein Technical Academy









**B**ump stops. Not so much pressure buffers, but rather the components many aftermarket tuning companies offer for retrofitting. On forums — and often on the websites of parts manufacturers — it is often incorrectly claimed these items protect your Porsche's suspension and body during the damper compression process. Rainer Popiol, head of Bilstein's celebrated training academy in Germany, puts the facts straight. "Aftermarket bump stops can take away the necessary spring travel from your car, resulting in the shock absorber not being able to absorb vibrations as effectively as it should." An undesirable outcome from the appointment of these parts, particularly on lowered vehicles, is when the shock absorber rests on the bump stop, producing a hard or 'bumpy' ride. In other words, the opposite of forum claims is more likely to be true. "The bump stops don't prevent suspension parts or the body of your Porsche from suffering damage. They can, in fact, encourage suspension items to become overstressed, resulting in a much quicker rate of wear," Popiol frowns.

Regardless of misconceived advantages, aftermarket bump stops are mainly used in the following case: where the host vehicle was lowered and then equipped with a wider wheel and tyre combination featuring

an unsuitable offset. Owners tend to introduce bump stops to prevent the tyres from grinding on the edges of the wheel arches and surrounding bodywork, but more often than not, the modification delivers suboptimal results. "For reasons of safety and performance, a fast vehicle should always have sufficient spring deflection," explains Popiol. "Only in this way can the shock absorber do its job well and reduce vibrations the way the manufacturer intended."

The main reason for fitting wider wheels is to use wider tyres offering greater grip through a bigger contact patch with the road. Contrary to popular belief, rim width is measured from inside lip to inside

lip (as opposed to the overall outside dimensions of the wheel) in order to take the thickness of kerb lip out of the equation. It's not uncommon to see modern SUV alloys with a kerb lip

of over twenty millimetres thick, making the outside measurement of an eight-inch rim appear to be more like nine inches. It isn't always the case wider wheels are the best choice for a car, though. For example, wheels with twelve inches of width may work well at the back end of a 911 due to the amount of weight over the rear axle and the amount of downforce generated by the car's aerodynamics, but the same size wheels at the back of a Honda Civic? There simply isn't enough weight at the back of a typical hot hatch to warrant

## CHANGING TO A DIFFERENT OFFSET CAN HAVE A HUGE IMPACT ON THE WAY A CAR LOOKS AND HANDLES

**Above** Standard shock absorber bump stops and an accompanying dust cover

**Facing page** Examples of improvised bump stops and a wheel arch liner damaged through the installation of incorrect equipment





**Above** After fitting aftermarket suspension equipment, it's important to ensure the products are configured to suit your car, driving style and the road (or tracks) you intend to enjoy

fitting them. Without weight spread across the tyre, it won't generate enough heat to work properly.

Offset, meanwhile, is often referred to as ET (an abbreviation of *Einpresstiefe*, the German word for 'insertion depth'). The offset of a wheel not only dictates whether it will fit a particular application, but it also influences the handling abilities of the host vehicle. Offset measurements can easily confuse people, so let's try to explain them here.

## GAME, SET AND MATCH

The easiest way to understand offset is to draw an imaginary line directly down the centreline width (side-on view) of the wheel. If the hub mounting face is directly on this line, the wheel has an ET of zero. If the mounting face is nearer the outside face of the wheel, the ET is positive. If the mounting face is nearer the inside edge of the wheel, the ET is negative. Changing

to a different offset can have a huge impact on the way a car looks and handles, as demonstrated by most modifiers opting for a wider offset to increase overall track width, as well as for the aesthetic appeal of wheels to fill the car's wheel arches. Many wheel manufacturers, however, suggest you keep offset as close to OEM specification as possible, especially when playing with a road car. Standard wheels will have been developed in accordance with factory geometry settings and will have been extensively tested and developed to eradicate any unwanted characteristics, such as bump steer, under steer or torque steer. By changing the offset of your wheels, you may unwittingly compromise the way your car handles. Of course, you can apply aftermarket equipment or visit a specialist to correct the change, but in the ideal world, you would look to increase wheel width equally either side of the centreline in order to ensure the offset remains







**Above** No prizes for guessing which is the new damper

unaltered. This is not always possible when you're doing battle with brake caliper clearance, damper positioning or uncompromising wheel arch cavities. In these instances, the changes you make are a compromise between the width of your replacement wheels and the choice of offsets available to you. If in doubt, speak to a specialist in the field of chassis tuning, such as Center Gravity, Suspension Secrets or Tuned UK, before shelling out for parts you might later regret buying.

### **HARD PUSHED**

There is another myth in the tuning world we think well worth flagging. It's the claim from many so-called

experts that the harder the suspension, the more your Porsche feels like a true sports car. Does this thesis really stand up to closer scrutiny? "The often quoted rule of thumb simplifies far too much and can therefore be considered wrong," Popiol continues. "The fact of the matter is that even a sports suspension setup must be properly balanced. Extremes are often counterproductive. If aftermarket suspension components delivering a firmer ride are balanced with a range of considered supporting changes, however, there is a way to bring merit to the argument," he adds, acknowledging a dropped ride height can bring advantages for driving dynamics. It is indeed correct to suggest doing so lowers your Porsche's centre of gravity, but those keen to personalise their Porsche need to make sure they are pairing the resulting reduction in body roll with the maximum possible residual spring travel, thereby actually improving driving dynamics. When using sports springs (preferably in conjunction with suitable high-performance shock absorbers), for example, a technically reasonable measure must always be taken into account: a forty millimetre drop in ride height means forty millimetres less spring deflection travel at the axle. Sufficient residual spring travel should always remain available.

On the subject of lowering your Porsche, the quality and configuration of the components used is also decisive. If, for example, the dampers are tuned too hard, this can have a negative effect on tyre traction. In other words, not every car boasting super-sporty looks necessarily lives up to this promise in terms of handling. Bottom line, make sure you consider chassis upgrades carefully. Consult a specialist to ensure the parts you're thinking about fitting are truly suitable for your car. Moreover, make sure you treat your pride and





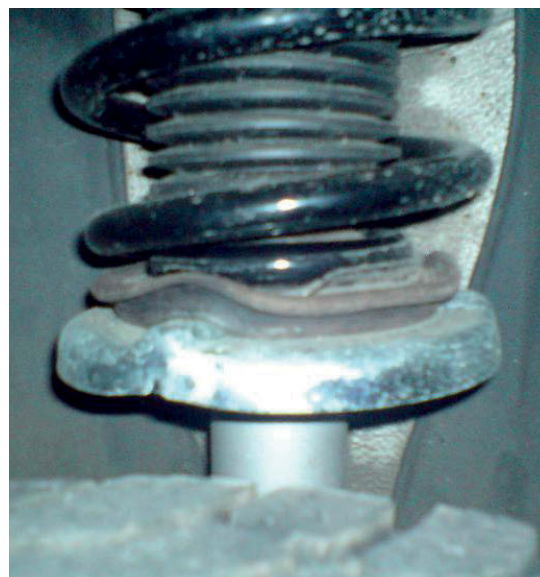
**Right** Incorrectly installed spring damper plate

joy to a chassis tuning session and a geometry check as soon as new aftermarket suspension parts have been installed.

### SERVED ON A PLATE

"One of the queries we are regularly presented with concerns the adjustment grooves for the snap-ring of a car's suspension spring plate," Popiol reveals. "This feature can be found on standard shock absorbers, as well as many popular Bilstein products, including the non-adjustable B4, B6 and B8 dampers." Long story short, most series-production vehicles come in different levels of trim, which means one model variant might have different features to the next, even though they both use the same base as their starting point. Different axle loads, for example, are a common difference between the entry-level and top-end versions of a particular car. Different grooves are therefore needed to be able to 'set' the correct body height with the variable spring plate.

"During installation, spring plate heights and the correct position of the snap ring, as well as the spring plate itself, must be set exactly according to the functional dimensions of the OEM part being replaced," explains Popiol's colleague, Alexander Kranz. "The grooves are therefore not used for height adjustment. In simple terms, the new snap ring must be fitted to the new shock absorber exactly where the snap ring was positioned on the removed shock absorber. If this is not observed, deviations in the spring plate height can lead to problems with pretension, which is what determines if the spring plate is too low or too high." During compression, there is risk of the spring going into block or of the support bearings being destroyed.

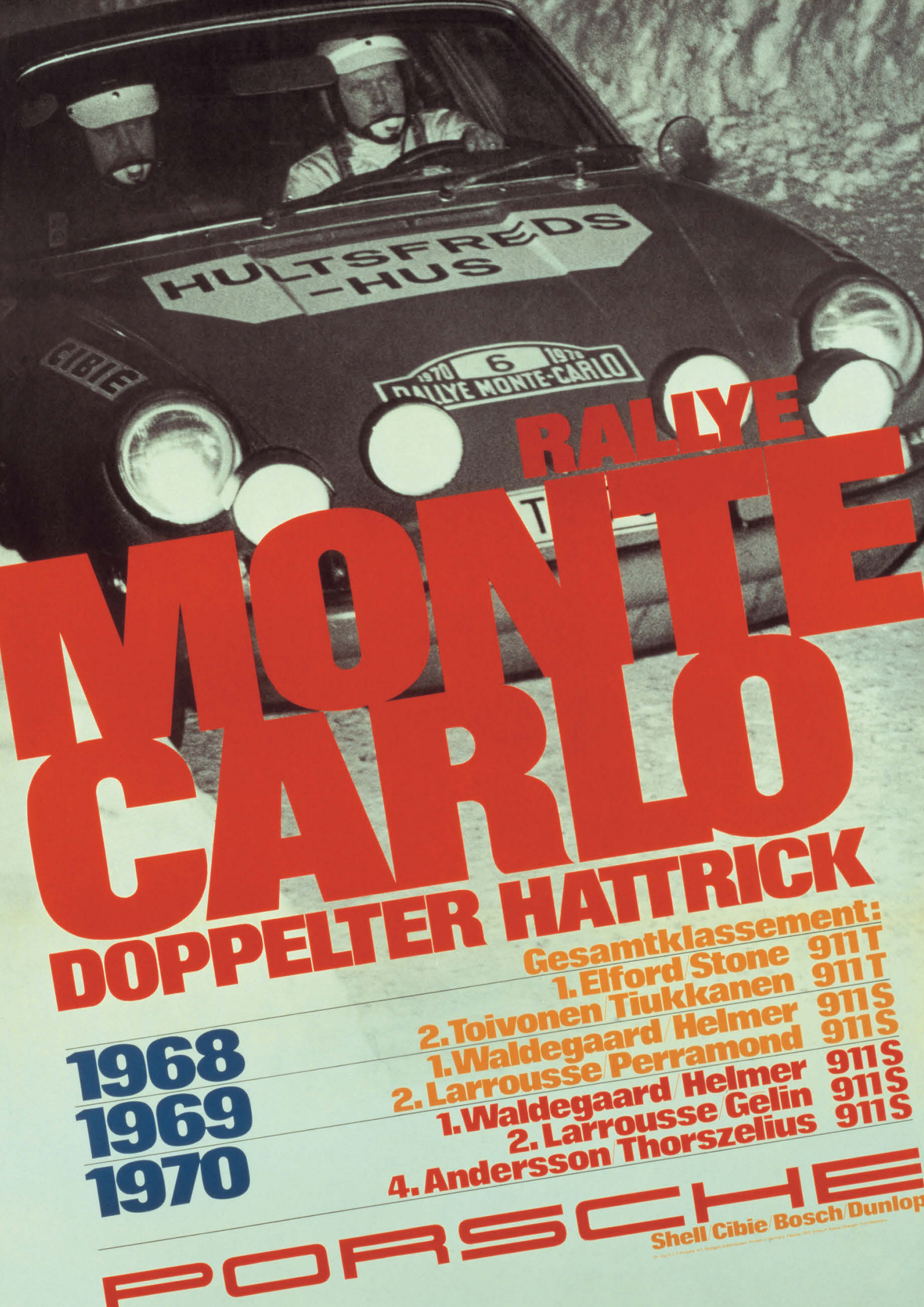


"When the spring is released, the locking assembly, piston rod, support bearings and vehicle dome can become damaged if installation has not been correctly observed," he adds.

Poipol echoes Kranz's words. "During fitting of new dampers, it's important to make sure the snap ring is in the right place and mounted correctly. You also need to make sure the snap ring is properly seated in the groove and, importantly, you must ensure the correct position and orientation of the spring plate. If the snap ring is not properly seated, the entire spring plate will slide down. Oh, and try not to get the top and bottom plates confused with one another," he laughs. We'll bring you more suspension tech tales in the next issue of *Classic Porsche*. **CP**







# RALLYE MONTE CARLO

## DOPPELTER HATTRICK

**1968**  
**1969**  
**1970**

**Gesamtklassement:**

- |                          |      |
|--------------------------|------|
| 1. Elford/Stone          | 911T |
| 2. Toivonen/Tiukkanen    | 911T |
| 1. Waldegaard/Helmer     | 911S |
| 2. Larrousse/Perramond   | 911S |
| 1. Waldegaard/Helmer     | 911S |
| 2. Larrousse/Gelin       | 911S |
| 4. Andersson/Thorszelius | 911S |

# PORSCHE

Shell/Cibie/Bosch/Dunlop  
Dr. Ing. h.c. F. Porsche AG, Stuttgart, Deutschland. Porsche AG, Germany. Porsche AG, France. Porsche AG, Spain. Porsche AG, Italy.



# GoClassic

## Gear Knobs

The craftsmanship of hand-crafted extraordinary woodworking:



Walnut tree wood with Canadian maple with the result of a complex but harmonious game of contrast between color and materials.

Crown jewel of this shift knob is the patinated silver top, with the stamped "Porsche 911" sign.

Base connection: stainless steel  
The short and spherical body of gear knob fits perfectly an open palm grip, for a full and soft control of the gear shift.

Available Gear Knob fits all manual 356 and 911's from 1948 up to 2013.

[www.goclassic.eu/en](http://www.goclassic.eu/en)



A CLASSIC PORSCHE PARTS STORY  
your partner for: Porsche 356, 911/912, 964, 993



JOMAPARTS.COM  
porsche classic parts

Gefusilleerdenlaan 29 - 9600 Ronse, Belgium  
T +32 55 21 30 13 - F +32 55 20 70 69  
[info@jomaparts.be](mailto:info@jomaparts.be) - [www.jomaparts.be](http://www.jomaparts.be)

Nederlands Français English Deutsch Italiano Português

*Group4wheels*

**"No, I am your father!"**

Heritage HF 15 x 6 ET36

Available May '22.

Published in the Porsche customer magazine Christophorus,  
No. 378 // and [newsroom.porsche.com](http://newsroom.porsche.com)  
Photo by Axel Struwe

[group4wheels](https://www.facebook.com/group4wheels)

[group4wheels](https://www.instagram.com/group4wheels)

[group4wheels.com](http://group4wheels.com)



## HOW TO BUY YOUR SUBSCRIPTION

OFFER 1. DIGITAL EDITION: [shop.kelsey.co.uk/CPO](http://shop.kelsey.co.uk/CPO)

OFFER 2. PRINT EDITION: COMPLETE THE ORDER FORM BELOW

☒ YES! I WOULD LIKE TO SUBSCRIBE TO CLASSIC PORSCHE MAGAZINE

### YOUR DETAILS

Mrs/Ms/Miss/Mr ..... Forename .....

Surname .....

Address .....

..... Post / Zip code .....

Country .....

Daytime phone ..... Mobile .....

Email .....

IF DELIVERY IS TO A DIFFERENT ADDRESS, COMPLETE BELOW

Mrs/Ms/Miss/Mr ..... Forename .....

Surname .....

Address .....

..... Post / Zip code .....

Country .....

Daytime 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 ☐ Phone ☐ Text Message.  
We will not pass your details onto third party companies.

### BEST UK DEAL SAVE 21%

☐ I WISH TO SUBSCRIBE BY DIRECT DEBIT PAYMENTS OF £34.99 EVERY YEAR.

Your subscription will then continue at the low rate of £34.99 every 12 months

Instructions to your Bank or Building Society to pay by Direct Debit

Name of Bank ..... Address .....

..... Postcode .....

Account name .....

Sort code ..... Account number .....

Signature ..... Date .....

Originator's Id number

**8 3 7 3 8 3**

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 9 issues at £40.10

☐ EU 9 issues at £48.60

☐ NA 9 issues at £48.60

☐ REST OF WORLD 9 issues at £53.10

☐ I enclose a cheque made payable to Kelsey Publishing Limited (Drawn from a UK bank account)

☐ Please debit my ☐ Visa ☐ Visa Debit ☐ MasterCard

Card number

Security number

Valid from ..... / ..... Expiry date ..... / .....

Signature ..... Date .....

PLEASE SEND COMPLETED FORM TO:

Subscriptions, Kelsey Media, The Granary, Downs Court, Yalding Hill,  
Yalding, 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

Here at Kelsey Publishing we take your privacy seriously and will only use your personal information to administer your account and to provide the products and services you have requested from us. We will only contact you about our special offers via the preferences you have indicated above and you can update these at any time by emailing us at [subs@kelsey.co.uk](mailto:subs@kelsey.co.uk) or by calling us on 01959 543 74

CPO2020

# Classic PORSCHE

## 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

# 1 YEAR FOR **£32.99**

VIA DIRECT DEBIT



TO SUBSCRIBE DIGITALLY VISIT  
[shop.kelsey.co.uk/CPO](http://shop.kelsey.co.uk/CPO)



# SUBSCRIBE TODAY

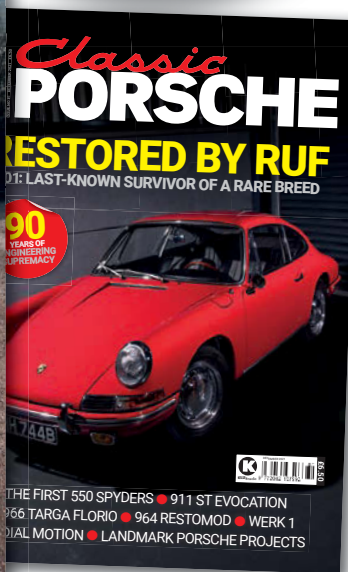
## ON THESE SPECIAL OFFERS

OFFER 2. **UK PRINT EDITION**

# 1 YEAR FOR **£34.99**

VIA DIRECT DEBIT

OR JUST **£39.99**  
EVERY 9 ISSUES  
VIA DIRECT DEBIT  
FOR BOTH PRINT  
& DIGITAL  
EDITIONS



# TO SUBSCRIBE TODAY

Simply visit [shop.kelsey.co.uk/CP02020](http://shop.kelsey.co.uk/CP02020)

Or call our team on 01959 543 747 & quote offer code CP02020

Calls will be charged at your standard network rate.

Hotline open: Mon - Fri 8.30am - 5.30pm.

\*Direct Debit Print offer only 9 issues for £34.99



# PERSONAL PORSCHE

For the burgeoning Formula Two category for 1.5-litre cars, French star driver, Jean Behra, built his bespoke race car using Porsche components. In 1959, it showed its class by beating the factory Porsches in the championship's biggest battle...

Words Karl Ludvigsen Photography Porsche, Ludvigsen Partners, REVS Media Archive





**B**uilt in Modena, Italy, in 1959 for French racing champion, Jean Behra, the Porsche-Behra was a more handsome and, in its time, a more successful car than Porsche's own first open-wheeled effort. "I like Porsches very much, above all because I had such great success with them last year," said Behra, explaining why Ferrari's number one driver would take the trouble to build his own car using a rival manufacturer's parts. "I'd like to try out a few things I've thought of on the basis of my racing experience in recent years. This Formula Two project is tremendous fun!"

At a time when Formula One cars used 2.5-litre engines, Formula Two was nicely placed at 1.5 litres. Introduced in 1957, the series quickly picked up speed thanks to the wide availability of suitable powerplants from the likes of Coventry Climax, Alfa Romeo, Borgward and, of course, Porsche. Interest in Formula Two spiked further when it became known, in advance of the 1961 season, the mandated engine size for Formula One would be dropped to 1.5 litres.

The basis of Behra's Formula Two car was a set of 718 RSK components obtained on very favourable terms from Ferry Porsche. The RSK was advanced enough in its suspension, especially at the rear, to be suitable in this role. This is the most credible account, although some reports suggest the use of a complete RSK, 718-016, as the basis for the Porsche-Behra. Recent restoration and thorough examination of the car, however, make a convincing argument for this not being the case. Furthermore, somewhat mysteriously, the car's chassis plate is that of a 550.

Behra took his RSK parts to Valerio Colotti, a young engineer who had left Maserati to set up his own design office in Modena at the end of 1958. This was the Studio Tecnica Meccanica, known as Tec-Mec for short. One of the firm's first projects was the Tec-Mec Formula One car, which is more successful in historic racing today than it was when new, but Colotti was perhaps best known as a maker of racing transaxles.

Following Behra's suggestions, Colotti prepared drawings of a new frame to unite the Porsche running gear and a body to clothe the result, which its initiator







named — you guessed it — the Porsche-Behra. Though taking the form of a tubular lattice design like that of the RSK, the new frame was a unique Colotti creation. Inevitably the Colotti design had some attributes in common with the Porsche works single-seater, especially the tubular structure of the front bay between the suspension and the dash, and the RSK's 82.6-inch wheelbase was kept. The front torsion bars and their carrying tubes were shortened by about five inches to reduce the front track to 46.9 inches.

### STRAIGHT AND NARROW

At the back, the Porsche-Behra's track was reduced by two inches to 47.6 inches. Rear suspension remained the original RSK design, with low-pivot swing axles located by Watt linkages. Although these were heavier, bulkier and harder to adapt to an open-wheeled auto than the semi-trailing wishbones at the rear of the single-seater Porsche was building, Colotti made a good fist of it. In fact, he put the coil/damper mounting platforms outside the frame instead of inside so that the main tubular structure could be narrower for strength and better body lines.

Colotti and Behra gave their improvisation the look of a thoroughbred with an oil-cooler inlet in its pointed nose, a distinctive sharp peak line ahead of the windscreen, shapely bulges above its carburettors and screened air inlets in the tail. The shell was hammered out of aluminium by one of Modena's many artisans, while an ex-Maserati mechanic rebuilt the chassis. The workshop of another former Maserati man, Giorgio Neri, was the site of the car's final assembly, supported by Behra's personal mechanic, Auguste Stocklin.

Behra's aim was to have the car ready for a Formula Two race at Pau on 18th May 1959. The build was coming along well enough, he decided, to enter it into the

Monaco Grand Prix eight days earlier. This event was for Formula One cars, but Formula Two entries were allowed to participate. They had to qualify among the sixteenth fastest cars, though, this being the maximum number of cars allowed to compete on the twisty two-mile circuit in period. There was no time to paint the Porsche-Behra before the race. It missed Thursday practice and arrived on Friday to be driven in qualifying by Behra's choice, Maria-Teresa de Filippis, a relative newcomer to Grand Prix racing, although a driver with experience of the Monaco circuit from a qualifying attempt the year before. Getting under 1:45 was the bogey. At first, she could not improve on 1:49. A handicap was the RSK gearbox, with only four synchronised ratios and 'crash' engagement of low gear, which was needed on the tightest corners.

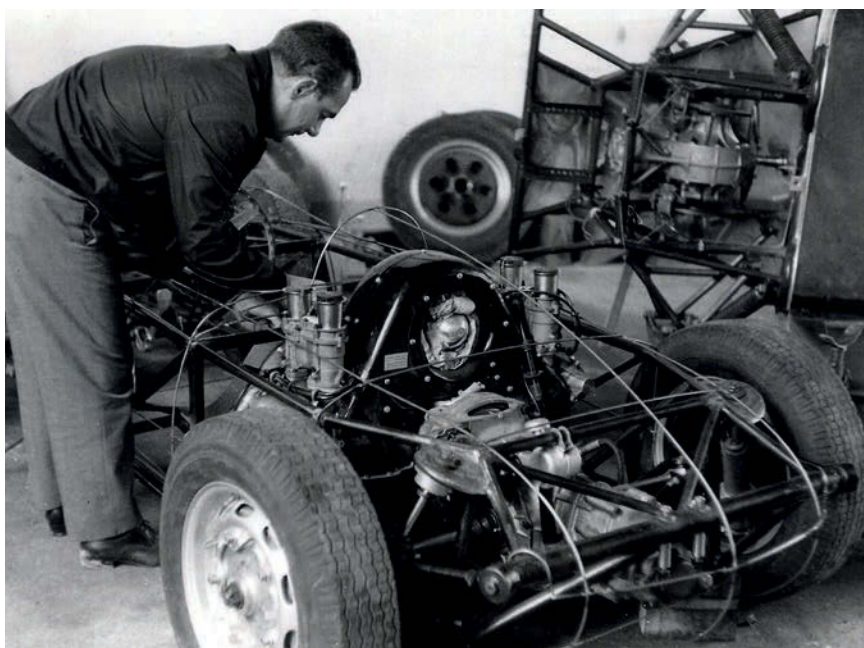
Eventually, de Filippis reduced her time to 1:47.8, which didn't threaten the man on the bubble's 1:44.8. It was her last attempt at Grand Prix qualification. Behra, who was on the front row and driving the fastest Ferrari

**Above** Behra driving 718 RSK Spyder no.29 at close of the 24 Hours of Le Mans in 1958, when he was partnered with Hans Herrmann and finished third overall, followed by Edgar Barth and Paul Frere in the no.31 works RSK entry

**Below** In 1958, Colotti established his own design company, Studio Tecnica Meccanica (known as Tec-Mec) and created this bespoke tubular space frame for Behra's new race car







**Top** Jean Behra (left) and Valerio Colotti enjoy a laugh in Modena, Italy, which was Colotti's base during his engineering stints with Ferrari and, later, Maserati

**Above** Behra trying the new car out for size

**Top right** Porsche's Type 547/3 four-cam 1.5-litre engine (giving 155bhp at best) was tightly tucked into the rear of Behra's car, which made use of a five-speed gearbox, rather than Porsche's six-speed transmission

**Below** At the rear, the Porsche-Behra used the 718's low-pivot swing-axle suspension, while the large cross tube was demountable at its centre to ease installation of the transaxle

qualifier for the race, offered his bespoke Formula Two car's cockpit to Porsche's hill-climb star, Edgar Barth, but as a newcomer to the circuit, he was unable to better the time set by de Filippis. Consequently, the Porsche-Behra sat out the race while its owner retired his Ferrari at quarter-distance.

Pau was destined to be one of only two races in which this great French driver personally piloted the Porsche-Behra. "Much to Behra's continual regret," wrote *Motor Sport* contributor, Denis Jenkinson, "Enzo Ferrari would not give him permission to drive the Porsche in Formula Two races. While he could not stop Behra running the car and lending it to people, the whole project was not received with enthusiasm at Maranello." With his own Formula Two car having been wrecked at Monaco a week earlier, along with the first works Porsche single-seater, Enzo Ferrari nonetheless granted Behra

permission to race the Porsche-based build on Pau's twisty street circuit. Only a tenth of a second in arrears of the fastest practice time, he put the car in the middle of the front row for the start. On the fourth lap, he took the lead, only to spin and bend a wheel on the wet track. Behra spent a frantic five minutes in the pits searching for a replacement, then set the race's fastest lap while

pressing hard — too hard — to get back in the running. He spun and bent two rims, but kept going to finish fifth in spite of the delays.

The Pau performance proved

that with a world-class driver at its wheel, the Porsche-Behra was a seriously fast Formula Two car. The best outing enjoyed by the rakish-looking French-blue machine was in the championship's biggest race of the year, held at Reims on 5th July 1959. Staged after the French Grand Prix, the event welcomed twenty-three cars to start a race seen by many as a preview of the machinery likely to line-up in Formula One when the 1.5-litre Grand Prix Formula took effect in 1961. The Porsche-Behra was driven by Germany's Hans Herrmann, to whom Behra said, "you drive it, Hans. You'll get more out of it." His was not the decisive voice, however, for Porsche's head of motorsport, Fritz Huschke von Hanstein, also had a say in the selection. This could well have been the result of a likely deal between Behra and Porsche to cover the cost of a fresh drivetrain for the demanding and important French race.

Huschke von Hanstein had lined up Briton, Colin Davis, when Herrmann — a notorious oversleeper — was delayed in getting to practice. Whoever was fastest in training, the Porsche man said, would race the car. The canny Herrmann arranged for a friend to time the laps and stand in advance of the pits, where he was to lift the front of his red sweater if Herrmann was faster. "Then,

## BEHRA AND FERRARI PARTED COMPANY, ALLOWING THE FRENCHMAN TO DRIVE CARS OF HIS CHOOSING







when I roared by after a few laps," he said, "he'd taken it off completely and was waving it in the air!"

Herrmann gave the car one hell of a ride. He set practice times faster than the works single-seater Porsches. In broiling heat, he fought hard for the lead in the race with Stirling Moss's Cooper-Borgward. "On lap four," wrote Jenkinson, "Herrmann and Moss were side by side, where they stayed for the next eight laps in a typical Reims circuit dice, Moss being quicker around the back part of the circuit, but the Porsche gaining on maximum speed and slowing, in spite of its old-fashioned drum brakes. On this very fast circuit, its performance was a tribute to the aerodynamic ideas of Colotti and Behra."

## STOPPING DISTANCE

"The battle for the lead finished when Herrmann took the escape road at Thillois," added Jenkinson, "which left Moss unchallenged in first place." A front brake had finally seized and thrown Herrmann into a skid. The Porsche-Behra finished 12.6 seconds behind in the 129-mile race, but almost a minute ahead of Jo Bonnier in the Porsche factory's Formula Two car.

At Rouen on 12th July, Herrmann drove the Porsche-Behra once more in a Formula Two race. "I still remember a scene typical of my friend, Jean," he said in later years. "Before the start, I indicated the car's mirrors needed adjusting. He told me, with gestures, how he'd rather take them off the car altogether. He then told me to simply look forward and win!" Starting from pole position, Herrmann was contending for third place when a seized gearbox forced him to retire.

Already strained, Behra's relationship with Ferrari was

less than improved by the way the Porsche-Behra had handily defeated Maranello's latest Formula Two car at Reims. At Ferrari, said team driver Phil Hill, "Behra had never been happy. He resented Tony Brooks for challenging his position as number one driver, he was uncomfortable at the performance of a newcomer like Dan Gurney and complained about always being given the slowest car, which simply wasn't true. He also lost his temper more often than the Italians, which is going some!" The upshot was that Behra and Ferrari parted company before month end, allowing the Frenchman to drive cars of his choosing.

On 26th July 1959, Behra drove his blue Porsche-Behra in the Auvergne Grand Prix at Clermont-Ferrand

**Above** Liveried as it was for its battle with Stirling Moss at Reims in 1959, the Porsche-Behra retired in restored and running condition in the Collier Collection in Florida

**Below** Madame Behra checked her husband had what he needed for the Auvergne Grand Prix at Clermont-Ferrand and, though delayed by a fuel-line repair, he went on to swap fastest laps with Stirling Moss







**01489 877744**



**FOR ALL THINGS CLASSIC  
ENGINE AND GEARBOX REBUILDS,  
SERVICING AND RESTORATION WITH  
ATTENTION TO DETAIL AND ORIGINALITY**

**rsrporsche.com**

**FOLLOW OUR PROJECTS ON FACEBOOK AND INSTAGRAM @rsrporsche**

**Location: Hampshire SO32 3QY**



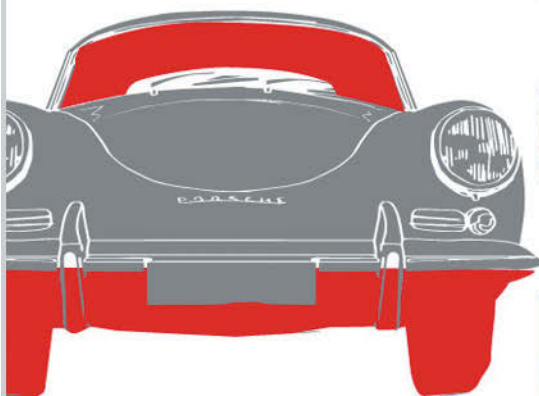
**PORSCHE SEATS SPECIALIST**



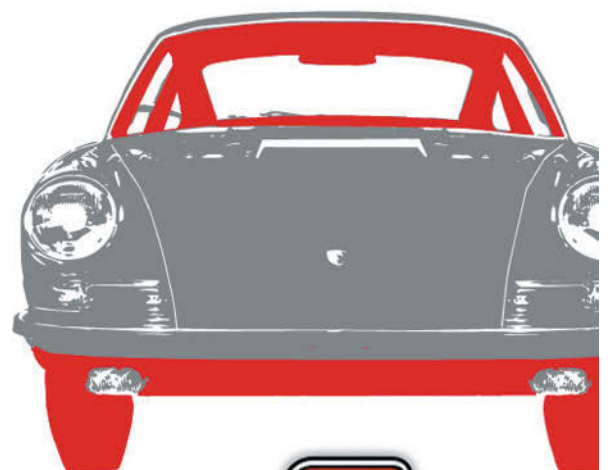
ALL OUR SEATS ARE PERFECT REPLICAS, WE CAN CUSTOMIZE ANY COLOR AND MATERIAL ENSURING THE HIGHEST QUALITY. WE ALSO PRODUCE TILTING BRACKETS, FIXING BRACKETS AND SET SLIDERS FOR A QUICK AND EASY INSTALLATION. WE SHIP WORLDWIDE

**www.deser.it**

**UNLOCK  
YOUR  
PORSCHE'S**



**PERFORMANCE**



**POTENTIAL**

**BENTONPERFORMANCE.COM**

**+1-714-630-5025**

**Classic  
PORSCHE**





**Above** The rear view of the Porsche-Behra — often faster than its silver counterparts from Stuttgart — showed how tightly Colotti shaped the body around the car's mechanical components

(also known as Circuit de Charade), essentially a mini-Nürburgring in the heart of France. In the curtain-raising two-hour race for sports cars of up to two litres in engine capacity, he dominated the field in his personal Porsche RSK, setting fastest lap. An incipient fault caused a brief pit stop, however, culminating in a broken cam follower with ten minutes to go. The fault dropped him to second place at the finish.

With his Porsche-Behra in row two at the start of the twenty-six-lap Formula Two race, Behra established himself in clear second place behind the dominant Cooper-Borgward of Moss. "On lap sixteen," reported Jenkinson, "Behra stopped out on the circuit when a petrol pipe to his left-hand carburettor split. He had to watch the whole field go by while he made a temporary repair with a piece of plastic tubing from a breather pipe." The subsequent pit stop for a permanent repair set him well back, and though a less than satisfactory twelfth at the finish, he duelled with Moss for fastest-lap honours, losing narrowly.

#### **DARK DAY**

Behra and Stocklin prepared, impeccably as usual, both Behra's RSK and his bespoke single-seater for the German Grand Prix at the Avus in Berlin on 2nd August. Tragically, Behra was killed in the race serving as warm-up for the Formula One event, for which he had practiced among several outclassed but plucky Formula Two entries. The popular Behra's death at only thirty-eight years of age spread gloom across the weekend. His car was withdrawn from the Grand Prix, together with the lone works Formula Two Porsche, the latter dismissal a sign of respect for one of Zuffenhausen's most successful drivers.

The story doesn't end there, though. Acquired by the American Camoradi team formed by Lloyd 'Lucky' Casner, the Porsche-Behra was entered into the Argentine Grand Prix on 7th February 1960. Although the race, on the city's shade-free municipal Autodromo, started at 4:30pm, ground temperature reached 100°F. Drivers happily slowed at the tightest corner to have buckets of water poured over them.

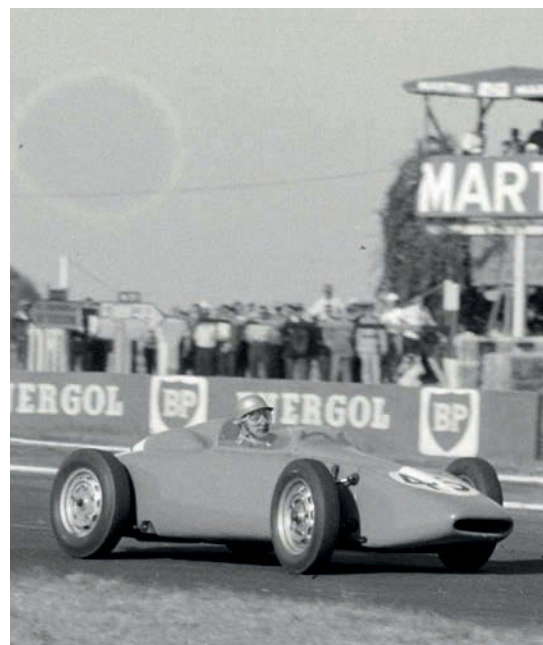
Starting the unique race car from sixteenth on the grid, thrusting American, Masten Gregory, made a pit stop to change his right rear wheel, his team using an air wrench to speed up the process. The Porsche-Behra placed twelfth among fourteen finishers, respectable for its 1.5 litres against the 2.5-litre Grand Prix cars.

The teams were invited to stay on for the Ciudad

**Below** With Behra racing for Ferrari at Monaco in 1959, Maria-Teresa de Fillipis drove his bespoke race car on its debut, but neither she nor Edgar Barth could reach desired qualifying times







**Above and right** It what was the Porsche-Behra's greatest race, Hans Herrmann dived with Stirling Moss and his Cooper-Borgward in early laps at Reims in 1959, finally placing second only 12.6 seconds behind the Brit

**Below** For the 129-mile F2 race at Reims, Herrmann had to win his ride by outqualifying Colin Davis, both trying their best to impress in the Porsche-Behra

Buenos Aires Grand Prix, a Formula Libre event strangely held in a park at Cordoba, 430 miles upcountry from the city in the 158-mile race's baptismal name. "When we saw the circuit, we just couldn't believe our eyes," said one entrant. "The route worked its way around city boulevards, with trees at the kerbside and a huge statue slap in the middle of the road at one point. We asked a

guide which side the cars were meant to travel around. He just grinned and told us either would do, then laughed and stated in broken English

how the decision was down to each individual driver!"

While the Walker, Ferrari and Centro Sud teams declined the privilege of participation, eighteen cars mustered for practice at Cordoba. Among them was the Camoradi Porsche-Behra, which attracted a

distinguished driver. Although he had retired from the sport a year and a half earlier, Juan Manuel Fangio was eager to try the little Porsche special on the streets of Cordoba to see what these new-fangled mid-engined cars were all about.

Wearing an unfamiliar white helmet, he took a number of practice laps and was credited with a time of 1:30.0.

This was six-tenths of a second less than Masten Gregory recorded in official practice to be ranked thirteenth for the start. A chaotic race in heat even worse than in Buenos Aires, however,

saw only two cars complete the full seventy-five laps and just five ranked as finishers. Numerous retirements included the Porsche-Behra, which bowed out after a tough seventeen laps.

The car rested until the German Grand Prix in July of

## THIS UNIQUE CAR LANGUISHED OUTSIDE THE CUSTOMER SERVICE DEPARTMENT AT WERK 1 IN ZUFFENHAUSEN







1960, which was run on the Nürburgring's South Loop for Formula Two cars. Both Herrmann and Olivier Gendebien tried the Behra build during training, but chose other cars for an important event in which the blue racer really should have participated. For Behra's sleek, Porsche-based racer, the 1960 season ended in September with a Camoradi entry in the Italian Grand Prix, the last race in Europe for 2.5-litre Formula One cars. Run over the combined road and banked-oval circuits, the race was boycotted by British teams complaining about the state of the bumpy track. Consequently, race organizers were desperate for entries.

### TROUBLE IN PARADISE

Driven by America's Fred Gamble, the Porsche-Behra was running in eighth place as the first non-works entry when it slowed to a stop at Monza's South Turn, the fuel pumps ticking impotently. Although the appointed preparation outfit had assured Camoradi the car carried enough fuel to finish the race without stopping, the team had added a precautionary churn at a splash-and-dash pit stop. The fuel system, however, didn't pick it up. Running back to the pits, Gamble collected enough fuel to get going just in time to be awarded tenth and last place, albeit nine laps in arrears.

After brief ownership by a young American, Ray Colet, who had loaned the Behra-Porsche back to Camoradi for the Italian Grand Prix, this unique car languished outside the customer service department at Werk 1 in Zuffenhausen. In retrospect, it was surprising the Porsche-Behra, which had shown such commendable pace in 1959 and 1960, wasn't picked

up by an enterprising team or individual for the new 1.5-litre Formula One championship in 1961. With some development, including a gearbox like those in the works car, plus good preparation, the Porsche-Behra would have made a more-than-decent account of itself. In 1961, however, it was shipped to America and purchased by Vic Meinhardt of Merrick, Long Island. Meinhardt raced the car successfully, winning the SCCA Formula Libre Championship in 1963. He then sold up to Dick Souan, from whom it was bought by Philip Sadler in 1969. A later owner, restorer and racer of the Porsche-Behra was Murray Smith. The beautiful blue car now rests in Florida's Collier Collection in impeccably restored condition, liveried as it was when Herrmann showed furious pace at Reims. It is a fitting tribute to Behra, one of the greatest drivers of the era. **CP**

**Above** In America, the versatile Porsche-Behra had careers in Formula Libre and historic motorsport

**Below** When owned by the American Camoradi team, the Porsche-Behra had the honour of laps in the hands of Fangio before a race at Córdoba in February 1960





# Karmann Konnection

Passion ~ Quality



All toolkits & jacks



KK Exclusive Puck



KK Sebring exhaust



KK headrest kits



Hundreds of KK Exclusive products in stock!



The #lightest 911 lever is finished. Keep an eye out for it at upcoming meets!



KK Exclusive wheels & lots of original in stock



911 Ali rear guards



Correct 64-68 headlights



Speedster seat



Body panels

We can also supply repair panels for 911, 912 & 914

Fully equipped workshop ~ Servicing, fitting & rustproofing. See Website for more products, special offers & cars for sale!

www.karmannkonnection.com  
info@karmannkonnection.com

01702 340613



# PATRICK MOTORSPORTS

PORSCHE® & MID-ENGINE PERFORMANCE SPECIALISTS SINCE 1989

## FLYWHEEL & CLUTCH PACKAGES

- OEM / RS / RSR Lightweight / Conversions
- Precision Computer Balancing Standard with all packages!



## YOUR CONVERSION EXPERTS!



602-244-0911 patrickmotorsports.com

Phoenix, AZ USA - Daily Worldwide Shipping

©2020: All Rights Reserved : JE Patrick Motorsports, LTD. - SSN.0910 | PORSCHE® is a registered trademark of Dr. Ing. h.c. F. Porsche AG. These products are not officially approved by PORSCHE®.



Trevor's Hammerworks, Inc.

www.356panels.com

440-953-0501 440-602-9885 Fax

# Advanced Ignition Technology

Introducing the 6th Generation  
OEM look with brand new technology  
Exclusive Nanopulse Discharge Ignition  
Over 45 years of Porsche 911 History and Experience



631.909.1011  
www.permatune.com  
lonnie@permatune.com



# SIGNAL TO NOISE

Rob Abbott's lifelong dream of owning an air-cooled 911 assembled to his personal specification was finally realised with this zesty TRE-built 911 ST tribute...

Words and photography **Stephan Szantai**





What's the most beautiful 911? Ask the question to a hundred enthusiasts and you'll get a long and eclectic list of replies. Indeed, there is a world of difference between a tame-looking — some might even say *stark* — 1965 coupé riding on steel wheels and, say, the more brash Carrera RS 2.7 or classic 911 Turbo. Beauty, as they say, is in the eye of the beholder. You can, however, bet many of those quizzed will put the track-oriented 911 ST near the top of their list. Porsche truly nailed this particular air-cooled car's design, although it should be acknowledged stylists

based alterations on function rather than form. Even so, the ST manages to exhibit a certain masculinity, with its large tyres lodging under moderately wide wings and rear haunches, while the lack of tail adornment allows the body to retain flowing, undisturbed lines.

Rob Abbott, a dentist living in Maryland, fell in love with the ST as soon as he saw photographs of the model as a youngster, hence it served as inspiration for his road-legal hot rod, built with help from TRE Motorsports in California. His interest for the marque stems from his father, who purchased a new 911 S in 1969. "When I was five years old and living in Germany, he brought home a showroom-fresh Irish Green Targa," Rob recalls.







Years later, he heard the story behind the new arrival. "My father was a member of the armed forces stationed in Nuremberg and, at the time, drove an Austin Healey 3000. One day, he found himself racing a 911 along the autobahn. The Porsche whipped the Healey's ass so badly, he drove straight to the nearest main dealer and traded up to a 911 S!"

At the time, it didn't occur to Rob the car was something special. Perhaps every child's father drove one of these exotic sports cars in Germany? "I was enlightened when I casually mentioned my father's purchase to my classmates. My words were met with considerable disbelief, but we lived right next to the school, allowing me to show the car to my friends during recess. I witnessed their amazement and immediately realised these cars must be special."

### LASTING IMPRESSION

The word 'imprinted' would best describe his relationship with Porsches today. "After the Targa joined the Abbott household, a 911 was the only car I wanted for myself", Rob tells us. The pages of *Car & Driver* and *Motor Trend* showcasing Zuffenhausen's latest offerings gave him plenty to dream about, further inspiring him to own a 911 at some point in his life. As we discover during the course of conversation, he's gone a step further and has had the good fortune of experiencing several classic Porsches over the years.

"There's been 356s of the A, B and C variety, a Speedster, a Roadster and, of course, a handful of special 911s," he reminisces, before revealing how, in 2007, he was driving a 964 RS America converted to European 964 Carrera RS specification. He used the car in a variety of local driving events, but hankered for the "early 911 experience". Consequently, he went on the hunt and

stumbled on a suitable candidate via an advertisement placed on an East Coast internet forum. The car he was looking at proved to be precisely what he had in mind: a track-prepped 1971 911 T painted Signal Orange and fitted with a quartet of Cibie Pallas spot lamps.

Rob had been using the coupé for rally and trackday outings for a couple of years before learning about the existence of TRE Motorsports, a Southern Californian Porsche tuning and restoration specialist with a reputation for performing interesting alterations on early 911s. Some of you may know TRE from the company profile we published a few issues back. The firm has been a staple of the North American Porsche scene for more than half a century, starting in 1971 as Toad Racing Enterprises (hence TRE) by 911 nut, Dave Bouzaglou, and two of his friends. Three years later, the company was

**Previous spread** TRE's Dave Bouzaglou with Rob's 911, transformed from a basic 911 T to the ST-inspired canyon carver it is today





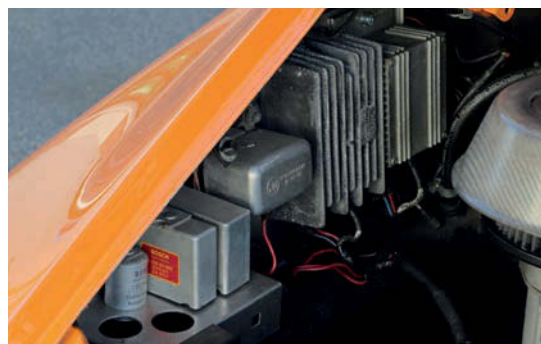


**Above** Flat-six has been enlarged to 3.4 litres, but makes use of carburetors instead of fuel injection

reduced to just Dave, who made a name for himself by successfully competing in a variety of race series hosted by the Porsche Owners Club, Sports Car Club of America, Porsche Club of America and many others. He was also influential in the creation of the Tribute to Le Mans endurance race, along with the Cup Race series.

"I gave Dave a call and discussed sending my 911 to him for a fresh paint job," Rob explains. "The plan was to leave the car at TRE for a year, then fly out to California and participate in a few SoCal driving events before driving home to Maryland."

Though you might see the occasional 914 and 928 in Dave's expansive and always-busy workshop, Rob had indeed found the right place to realise his vision of an Outlaw-styled transformation for the 911 he held dear. Perusing the company's website also played a key role



in his decision to contact Dave. "I noted a set of steel ST fender flares, back when Carrera RS 2.7 conversions were commonplace," Rob continues. "I wanted my 911 to be different to every other hot rod I was seeing and was thrilled to see Dave had commissioned correct ST stamping. I was in love. I immediately spoke to him, was quoted a very reasonable price and down the rabbit

hole I went."

The plan called for all-steel TRE wings, bumpers and doors, along with a fibreglass decklid and a balsa wood-reinforced

## A TRE-MITTELMOTOR DISTRIBUTOR, WHICH REPLICATES THE UNIT FOUND ON THE 906 AND 911 RSR RACE CARS

fibreglass 'frunk', just like the original STs. True to the Outlaw concept, the car had to integrate various era-correct alterations, such as the external oil filler flap typical of 1972 911s. This is coupled with a period-correct oil tank. The fuel filler poking through the bonnet is a nod to the factory supported STs and, while you're eyeballing this personalised Porsche, note the lack of front lip spoiler typically associated with model.

Thankfully, the coupé's body was in great shape, making it the perfect canvas for Rob's hot rod ambitions. Dave delivered the bare-metal shell to Kundensport in Camarillo, California, with an instruction to perform most of the above-mentioned metal modifications.

The Kundensport team carefully butt-welded the four steel ST flares, before customising a front bumper to match the new wing and bumper curves. The rear bumper was also modified, receiving reshaped corners for the same reason.

Although Porsche offered a rich and eclectic selection of colours during the pre-1974 911 years, Rob saw fit to retain Signal Orange, the car's original hue. Kundensport flawlessly handled the paintwork — punctuated by off-white stripes — before delivering the body back to TRE, where Dave began the process of reassembly. The sport-







purpose theme explains the bladed oil and fuel caps, rubber bonnet and decklid rubber hold-downs, drilled door handles, plus lightened hinges front and back. Talbot mirrors have been Porsche owner favourites for decades and Rob selected a pair of 300-series models accordingly.

### ENGINE ROOM

Being a hot rod, the mechanicals have been subjected to many changes. The current powerplant, based on a 1985 Carrera 3.2 case, displaces 3.4 litres thanks to Mahle cylinders and a factory Porsche cross-drilled crank with chamfered oil holes. The Carrera 3.2 heads were set for a compression ratio of 10.4-to-1, while a second spark plug equips each combustion chamber following thorough machining. The twin-plug setup called for dual coils, dual ignition CD boxes, and a TRE-Mittelmotor distributor, which replicates the Magneti-Marelli unit found on the 906 and 911 RSR race cars.

Many Porsche owners swear by fuel injection, a setup especially efficient when travelling up and down mountains, allowing the engine will purr happily whatever the altitude. Rob and Dave agreed to go old-school by making use of carburettors. Not any ol' carbs, mind you, but some of the best on the market: new and improved 46mm PMOs sitting atop RSR-style tall manifolds. For folks unfamiliar with PMO, check out *Classic Porsche* issue no.60, which features a visit to the well-known SoCal-located company. Once burned, the air/fuel mixture travels through SSI heat exchangers and a TRE-modified stock muffler, equipped with an additional outlet on the left side, as seen on many rally-ready

classic 911s. How about that plastic canister in the back of the engine compartment, held in place with a custom strap? It turns out to be a 911 window washer bottle converted into an oil breather for the engine case!

Dave personally assembled the 300bhp powerhouse, finishing it with a TRE clear fan shroud, an RSR flywheel and a Sachs clutch. The unit bolts to a 915 gearbox with a stock 8:31 final ratio and factory limited-slip differential. He then continued work on the Rob's ride's chassis, adding Bilstein dampers, Weltmeister adjustable front and rear anti-roll bars, accompanied by 26mm rear torsion bars. Yes, the car handles beautifully, but also stops on a dime courtesy of cleverly picked components:

**Above** Finish of bodywork and paint is flawless thanks to the skills of Kundensport







**Above** Thin carpets, a Wevo short shifter, lap timers and a pair of figure-hugging buckets give the car a sportier cabin

at the front reside aluminium 911 S calipers, while 'M' callipers with Porterfield R4-S pads live at the back. The four discs hide behind fifteen-inch Fuchs rims measuring nine inches in width and the nose and ten at the rear, each wheel wrapped in with sticky Michelin TB rubber.

As you might expect, the cockpit has a trace of racer's edge, starting with the TRE aluminium roll bar and a back seat delete.

A custom TRE storage box takes up space previously occupied by the rear pews. Look closely and you'll note the front seats differ from one another.

"One is the deeper *driver type*," Dave confirms. "The passenger side is known as a *navigator* seat. These were essentially the first generation of sports-purpose seats Porsche offered." He handled the vinyl upholstery, which extends to the side panels and headliner, and is

complemented by the installation of rough-grain vinyl floor covers. The 356 Super 90 GS/GT inspired the latter — Porsche used thin vinyl instead of carpet in order to save weight.

The Outlaw theme continues with the Abarth steering wheel, competition footrest and lightweight door panels covered with German basket-weave vinyl and VW Type 3

door release handles. 356 door pulls and armrests also feature. Rob keeps his hands busy with a Wevo Classic short shifter (note the powder-coated housing) while monitoring

## THE ORIGINAL 911 T BADGE STAYS ON THE GLOVEBOX, A PERMANENT REMINDER OF THE CAR'S HUMBLE ORIGINS

instrumentation overhauled by North Hollywood Speedometer. Moving the analogue clock to the far left and consolidating the oil level, temperature and pressure gauges freed an opening on the right, which now houses a fresh air vent.

The tachometer doubles as the fuel gauge. And notice the pair of stopwatches in the middle of the dash and, below, what used to be the ashtray. The flap now folds all the way back to display a Custom Autosound head unit, which feeds tunes to speakers hidden behind the rear side panels under a layer of perforated vinyl. The original 911 T badge stays on the glovebox, a permanent reminder of the car's humble origins.

Though his original plan was to ship the car to the East Coast after enjoying it for a while in California, Rob has decided to keep his stunning Porsche stored in Los Angeles for a while longer. You see, this sensational ST tribute has allowed him to meet many SoCal-based Porsche enthusiasts, with firm friendships being made along the way, not least with Dave.

"Outings with likeminded folks while driving a 300bhp 911 weighing only nine hundred kilos have given me unforgettable life experiences," Rob smiles. What a terrific way to enjoy the 911 he always promised himself. **CP**





# MOTOR **FREE ADS**

TO ADVERTISE VISIT

**WWW.MOTORFREEADS.CO.UK**

**PARTS  
RESTORATION  
SERVICE**

New  
web  
shop!

**PORSCHE 356 PARTS**


WWW.PRS356.COM

## CARS FOR SALE

### PORSCHE 911



**2011, 24000 miles, £84,995.** 3.8 Turbo S PDK. Two door coupe, automatic, petrol, 3800cc, black with black leather interior. Please call 01189 714333, South East. (T) 108547

### PORSCHE 911



**2005, 53000 miles, £26,995.** 911 Cabriolet. Dark blue with black leather interior and manual gearbox. Three owners from new. MoT until April 2022. Please call 07766 826258, Greater London. 109091

### PORSCHE 911



**1973, 53700 miles, POA.** Meticulously maintained and always garaged. completely restored in California in 2014 covering around 1500 miles since. Finished in its original colour combination of classic Aubergine with beautiful Tan interior. Please call 01765 609798, Yorkshire and the Humber. (T) 109632

### PORSCHE 911



**1975, £52,995.** 2.7 original engine is in very good order having had a recent top end rebuild. Please call 01944 758000, Yorkshire and the Humber. (T) 110060

### PORSCHE 911



**£99,840.** Previously supplied by ourselves in 2019 to the current keeper, this is a GT3 we know well and adore. The comfort spec cars are just so easy to live with and are just as happy on the dual carriageway as they are on track. This example was specified with Axle Lifting system making for a GT3 you really could drive round a city centre. Please call 01229 486315, North West. 112557

### PORSCHE 911



**2001, 76326 miles, £20,995.** Porsche 996 Carrera 4 Cabriolet. Lapis Blue, with Savannah trim. With factory hardtop. 15 Service stamps with recent service work carried out by Porsche specialists, Zentrum. Please call 01636812700, East Midlands. (T) 109445

### PORSCHE 911



**2003, £69,950.** The vehicle has a service record full of stamps from both Porsche Main Agents and independents. The vehicle will be re-serviced and inspected at Jasmine Porsche prior to delivery to the lucky new keeper. The car has just sailed through an MOT with no problems at all. Please call 01229 486315, North West. 112558

### PORSCHE 911



**2008, 60000 miles, £26,995.** An outstanding Porsche Carrera. The body having recently benefited from a ceramic coating by PPK. Porsche Dynamic Driving Pack. Porsche Media Pack. Please call 01274 585803, Yorkshire and the Humber. (T) 109630



## PORSCHE 912

**Sales  
Service  
Spares**

**revival-cars.com**

**07768 791802**

**WEST LONDON**

### PORSCHE 911



**1972, £119,995.** The Viper Green paint is first class, the chrome work exceptional and the interior is outstanding and incredibly sharp. Please call 01944 758000, Yorkshire and the Humber. (T)

110061

### PORSCHE 911



**£107,950.** This car has just been released from the private collection of one of our very best clients and friend of the business. The car must be viewed in order to fully appreciate. The history file is just enormous and contains receipts for recent works carried out by our client totalling £40,000. As such, this is a turn key operation, nothing to sort, nothing to do but just drive and enjoy. The driving experience is superb to this day. Please call 01229 486315, North West.

112561

## We buy Porsche parts and Historic Porsche



**We** buy all **Porsche competition parts** dating from 1950 to 1998. Body, engine, mechanical parts, etc. We buy **Porsche needing restoration or incomplete cars**: Models : 356 Gmund - 356 Carrera - 550 - 911 (1964) - 911 R - ST - 2.7RS - 2.8RSR - 3.0RS - 3.0RSR - 904 - 906 - 907 - 908 - 909 - 910 - 917.

**Please contact us by email :**

**contact@raceparts9.com or contact@racecars9.com**

### PORSCHE 928



**110000 miles, £29,999.** coupe (pre-S- model). auto, a very desirable car light blue metallic with royal blue leather, full-service history, Porsche UK authentication certificate. Please call 01452 731289, South West.

110220

### PORSCHE 928



**1986, 83000 miles, £24,000.** 928 S2. Finished in Silver Metallic (936) paintwork with contrasting dark blue/white pinstripe velour and leather seats. Please call 07577 575770, South East. (T)

109634

## RELATED REGISTRATIONS

KT 911	991 PD	930 FF	CAR232A	918 MHH
35 SYX	964 GC	911 FJX	XXX 911C	S918 POR
987 MD	POR 911N	911 MPY	REG 911E	S80 XAR
987 EOE	POR 911Y	911 MSD	OWY 911K	BX02 TER
997 AHT	RUF 911T	911 MXD	DJA 911R	N321 GTS
997 CSS	X911 RUF	911 PYT	VOP 911S	GT03 AWH
997 RGW	993 RUF	911 RWS	A911 DPG	GT03 SPJ
POR 997T	993 POR	911 SCR	D911 POR	OO05 CAY
TON 997X	P993 POR	911 WVS	J911 GTN	GT68 RSR
944 HPK	A993 XXX	TIL 911	P911 SCH	RS68 POR
E944 POR	RSR 911X	VNZ 911	S911 LER	RS68 RSR
WAG 944S	B911 RSR			

**TEL: 07555 911993**

**E-MAIL: RELATED.REGMARKS@AOL.COM PCGB MEMBER**

### PORSCHE 944



**1989, £13,950.** 944 S2 Cabriolet. Lovely Looking Appreciating Classic in Black over Cream Leather Interior. Newly Restored, MOT'd until August 2022. Please call 07835 877345, South West.

110586

### PORSCHE 944



**1986, 137000 miles, 944 Turbo.** Coupe / White / Petrol / Manual / 2496cc. Early 944 turbo. This is an online timed auction. Physical viewing at our auction centre from 9:00am to 6:00pm from Mon 25th to Wed 27th and Thurs 28th from 9:00am. Please call 01233506266, South East. (T)

110200

TO ADVERTISE VISIT:

**WWW.MOTORFREEADS.CO.UK**





# MOTOR FREE ADS



**Classic Porsche**  
Free ads



**classic911market.com/en**



**MFI – Mechanical Fuel Injection**



**QUALITY MADE IN GERMANY**

- Functional check
- Overhaul
- Sale

**Contact us**

Dealer inquiries welcome!

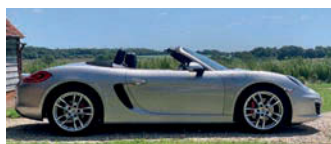
**+49 (0) 681 – 959 0 911 • EISENBRANDT.EU**

## PORSCHE 944



**1991, 16999 miles, £16,999.** 944 3.0 Cabriolet S2. 5 speed manual, 92k miles, service history, 4 keepers, fully specification, Baltic bleu metallic pain with linen coloured interior, new blue mohair soft top. a remarkable car in beautiful well-maintained condition. Please call 01452 731289, South West.  
110219

## PORSCHE BOXSTER



**2012, 66000 miles, £34,495.** This Porsche Boxster S 981 series is fitted with the desirable PDK 7 speed gearbox. Finished in Rhodium Silver metallic paintwork with a contrasting black leather interior, this Boxster S presents in superb order throughout. Appointed with a high level of standard equipment this 981 Boxster will offer its lucky new owner a specification of electrically adjustable and heated seats for driver and passenger. Please call 07577 575770, South East. (T)  
110065

## PORSCHE 968



**1994, 170000 miles, £20,000.** 1994 Porsche 968 Sport C16 Clubsport Chassis car originally supplied with the CS Lux Pack and since reversed to Club Sport Spec. Only offered to the UK market and just 306 produced, this is a superb example of the now rare 968 Sport. Owned and maintained by Hartech with comprehensive engine works carried out by EMC at 156k miles. Please call 07851694637, North West.  
112441

## PORSCHE BOXSTER



**2001, 93631 miles, Auction.** Porsche / Boxster S / Convertible / Silver / Petrol / Manual / 3179cc. Current registered owner since 2012, intermediate service carried out at 92,000 miles in 2019. To bid online please create an account on the Hobbs Parker website. This is an online timed auction. Physical viewing at our auction centre from 9:00am to 6:00pm from Mon 25th to Wed 27th and Thurs 28th from 9:00am. Please call 01233506266, South East. (T)  
110643

## PORSCHE BOXSTER



**2006, 39000 miles, £15,995.** Boxster 987 2.7 manual. Finished in immaculate midnight blue unmarked with metropole blue leather. Only one lady owner from new. Please call 01485 541526, East of England. (T)  
109462

## PARTS & ACCESSORIES

### PORSCHE ALL



**£239.** Porsche Durametric Diagnostic Software - AS NEW Only one use! £239 ono. A couple of months old, enables ECU details to be read, service reset and multitude of vehicle error codes etc to be cleared, the list goes on...covers all Porsche models 911 (997),Boxster, Please call 07470683479, East of England.  
110199

## ADVERTISING INDEX

356 Panels	103	Mittelmotor	25
Art Wheels	113	Paragon GB	29
Auto Foreign Services	15	Patrick Motorsports	103
Automation	31	Perma-Tune	103
Benton Performance	99	Prill Porsche Classics	30
Beverly Hills Car Club	23	Reap Automotive Design	113
Border Reivers	51	Restoration Design Europe	41
Car Bone	113	Roger Bray Restoration	75
Coco Mats	27	RSR Independent	99
D'Eser Vintage Sports	99	Sportwagen Eckert	83
Dansk	116	Stoddard Parts	35
Design 911	59	Stomski Racing	5
Early 911S Registry	113	Tandler Precision	4
Elephant Racing	47	TRE Motorsports	25
Export 56	4		
FVD Brombacher	2		
Gaswerks Garage	75		
Go Classic	91		
Gooding & Co	21		
Group 4 Wheels	91		
Joma-Parts	91		
Karmann Konnection	103		
Kelsey Classic Magazines Offer	115		
Lancaster Insurance	19		
Longstone Tyres	67		
		<b>Classifieds</b>	
		Classic Passion 911	
		Eisenbrandt	
		PR Services	
		Related Registrations	
		Revival Cars	
		Rose Passion	





Restoration of Fuchs rims and repair of all rims in our workshop by a team of specialized craftsmen



www.art-wheels.eu - Tél. +33 (0) 981 961 992

**CarBone**

**UNIQUE PERSONAL INTERIOR SETS**

**WWW.CAR-BONE.PL**  
OFFICE@CAR-BONE.PL +48429422115



## Early 911S Registry

The Early 911S Registry is dedicated to the appreciation of Porsche 911S cars and all Early 911s built during the years 1963 through 1973.



Join the  
Early 911S Registry  
and you will receive  
**ESSES**  
our quarterly  
publication.

For online membership:  
**www.early911sregistry.org**



Colour coded gauges for Porsche 911 to 997 and Boxster, Cayman and Cayenne. All colours available including Custom matching. Our product is the best available and was OEM on UK spec 993's. Full fitting service on site now available by appointment only. Restoration and repair are also available. Flaking 964 gauges are restored to OEM specification.



**WWW.REAPAUTOMOTIVEDESIGN.COM**

**NEW  
WEB SITE**

**TEL: 020 8863 2305**



# ORDER OUR NEXT ISSUE TODAY AND ENJOY FREE DELIVERY\*

APR 2022 ISSUE  
**ON SALE**  
FRIDAY 18<sup>TH</sup>  
MARCH

**DON'T  
MISS OUT!**

GET THE MAGAZINE  
DELIVERED DIRECT TO YOUR  
DOOR AT NO EXTRA COST\*

**ORDER  
TODAY!**



## DAKAR RALLY DESERT STORMER COMPETING IN SAUDI ARABIA WITH EX-JIMMY MCRAE 964 CARRERA 4

ORDER ONLINE AT **SHOP.KELSEY.CO.UK/CP84**  
CALL NOW ON **+44 (0)1959 543747\*\***

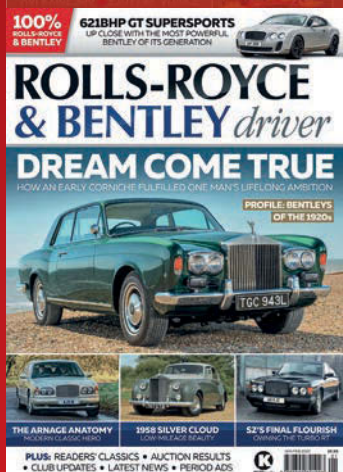
Terms and conditions apply. \*Delivery is included in the cover price for UK customers only. An additional £1 will be added to any overseas addresses.  
\*\*Lines open Mon-Fri 8.30am-5.30pm (GMT). Calls charged at your standard network rate. Image for illustration purposes and subject to change.



# NEW YEAR, NEW CAR MAGAZINE

## GET THREE ISSUES FOR JUST £5

CHOOSE ANY OF THE BELOW TITLES AND GET YOUR FIRST 3 ISSUES FOR ONLY £5



TO SEE MORE DETAILS AND VIEW ALL OUR CLASSIC CAR OFFERS  
VISIT **SHOP.KELSEY.CO.UK/CMNY22H**  
OR CALL: **01959 543 747** AND QUOTE **CMNY22H**

HOTLINES OPEN MONDAY – FRIDAY 8.30AM – 5.30PM.  
CALLS ARE CHARGED AT YOUR STANDARD NETWORK RATE

Terms & conditions Trial offer is for UK Direct Debit customers only. You'll pay £5 for your first 3 issues and then continue to pay every 6 months (monthly titles) or 12 months (bi-monthly titles) – please visit link for details. Offer ends 14/04/2022. Your subscription will start with the next available. Prices correct at time of print and are subject to change. For full terms and conditions visit [shop.kelsey.co.uk/terms](http://shop.kelsey.co.uk/terms). Data protection: We take great care in handling your personal details, these will only ever be used as set out in our privacy policy which can be viewed at [shop.kelsey.co.uk/privacy-policy](http://shop.kelsey.co.uk/privacy-policy). You may unsubscribe at any time.



# ◆ Dansk ORIGINAL



*Dansk has developed the Speedster seat bucket  
for the iconic 356 Speedster as a restoration part for the car.*

*Seat bucket, steel, 356 Speedster  
Porsche 356 /A/B/C (1.1-1.6) 01/50-12/65*



**SPEEDSTER SEAT BUCKET**

**DANSK SPEEDSTER CHAIR**



*Our new Classic chair is available in two designs, conference/dining chair  
and a relaxed chair for man caves and other cozy environments.*

*Please contact your Dansk dealer for further information*

[www.jpgroupclassic.com](http://www.jpgroupclassic.com)