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RAISING THE ROOF...

OPEN-TOP MOTORING is billed as being an exotic pursuit no matter the make or model of car you happen to be in charge of, but few al fresco driving experiences produce as much excitement and glamour as piloting a Porsche with a folded-down retractable roof. Not everyone is a fan of Cabriolet body styling, however, which is why it's great to be able to pick a Targa from the Porsche product range, thereby ensuring a maintained coupe silhouette with the advantage of being able to feel the wind in your hair (or so I'm told!).

In this special issue of *Ultimate Porsche*. we take a look at a variety of soft-tops from Stuttgart, including Piers Riching's 964 Targa. A perfect blend of classic 911 aesthetic and more modern automotive technology, his beautiful blue Carrera 2 represents the last line of air-cooled classics to adopt the traditional Targa roof design before the introduction of the 'greenhouse' system seen on the 993.

For those who like their Porsches to be fully roofless, we've brought together two different flavours of transaxle in the form of 944 and 968 Cabriolets. The 944 is the more commonly available and less expensive of the two, but does that make it any less impressive than the later car?

The 944 was the biggest selling Porsche product prior to the arrival of the Boxster. There's no denying the impact the mid-engined sensation had when released in 1996, both in terms of improving the manufacturer's fortunes and defining a new era of car culture. When pulling together

this issue of the magazine, I couldn't help but feel it was only right we paid tribute to the 986, an oft-dismissed roadster which is arguably the cheapest and easiest route into Porsche ownership. With this in mind, we've worked with our friends at Revolution Porsche Specialists to bring you a guide outlining what you need to be aware of when shopping for a 986 to call your own.

Including early Boxsters in our list of cars covered isn't the only change to Ultimate Porsche. Following feedback from our loyal readers and advertisers, we're changing the frequency of the magazine to bi-monthly. We'll also be introducing standalone bookazines focusing on specific models. While this means you'll have to wait longer for your regular dose of "the rebel Porsche mag", we're confident the title will be even stronger as a consequence of the altered schedule.

Kicking off the proceedings is the Ruf CTR2. Rated as the world's fastest production sports car at the point of its release, the "ballistic" 993-based brute featured across the following pages is yours for the taking. It'll cost you a couple of quid more than a Boxster 986, though...



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DIAMOND INHERUR

Arguably the world's most underrated sports car, the Ruf CTR2 is a mega-rare powerhouse of performance

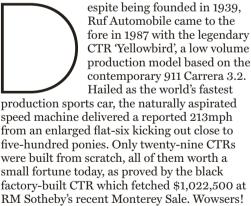
WORDS Dan Furr PHOTOGRAPHY Dan Sherwood





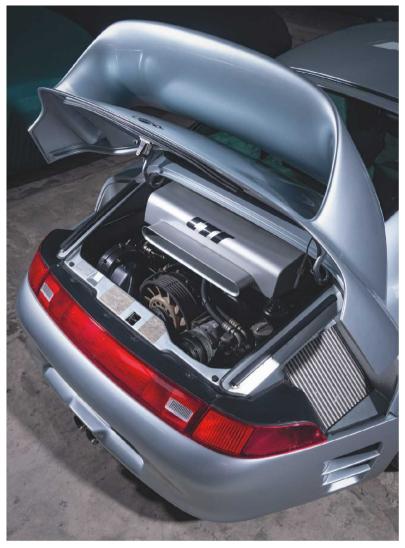






Ruf customers already in possession of a Carrera 3.2 were able to request a CTR conversion, but by the time of the 993 Turbo's release, Ruf main man, Alois Ruf Jr, decided the time had come to revisit the concept of an ultra-high performance offering for his company's product line. Thus, the evolution of the original CTR was realised in the form of 1995's 993-based CTR2.

Even rarer than its predecessor, only sixteen CTR2s were assembled at Ruf's headquarters



in Germany. Available in rear-wheel drive or all-wheel drive configuration, the model represented another milestone in the supercar story thanks to a 0-69mph dash of just 3.5 seconds and a top speed of more than 220mph. Priced at \$315,000, the CTR2 put Ruf back on top form; like the CTR before it, the CTR2 was crowned the fastest production sports car in the world, outperforming anything Ferrari, Jaguar or Japanese manufacturers had to offer. It was a title Ruf held until the last-of-the-line McLaren F1 – a car costing a million dollars – broke the CTR2's top speed record in 1998, making the Porsche-based, twin-turbocharged terror the second fastest production car of the 1990s.

Ruf's official status as a manufacturer (as opposed to a tuner) is due to the fact it acquires unmarked Porsche bodies which are used to build entirely new cars. Free of Porsche chassis numbers, Rufs are assembled using the Pfaffenhausen concern's own parts and materials. The CTR2 is no exception, boasting carbon-Kevlar bodywork, bespoke suspension and a 3.6-litre flat-six based on the powerplant used to propel Porsche's 962 Group C Le Mans machine to motorsport glory. Delivering

Ruf trade

Pfaffenhausen is a small Swabian village in the Allgau region near Mindelheim, west of Munich. It's the home of Ruf Automobile GmbH, a small manufacturer of sports cars which has solidified its place in the history books by producing a healthy line of groundbreaking speed machines based on 'white body' Porsche chassis. Founded in 1939 by Alois Ruf Sr as an automotive repair shop, the firm went on to become a BMW retailer before Alois' son, Alois Jr, built his first 911. It was a three-litre Carrera modified to bespoke specification. The raucous ride attracted mainstream media attention and paved the way for the first official Ruf sports car, 1983's 3.4-litre BTR.



580bhp (early CTR2s are rated at 520bhp) and 506lb/ft torque with a power-to-weight ratio of 427bhp per metric tonne at 5900rpm, there can be no doubt about the CTR2's extraordinary performance credentials!

PEAK PERFORMANCE

To publicise the new arrival's capabilities, Alois entered a brace of wide-bodied CTR2s with Sport designation into the 1997 Pikes Peak International Hill Climb. Built to match FIA regulations, both cars were tuned for the competition, but remained road legal. This enabled Alois to generate even more publicity by ensuring the new Rufs were driven to and from the event, highlighting the CTR2's flexibility as a fast-road car capable of tearing up the track.

Loaded with more than 700bhp a piece, the Sports finished in second and fourth position after the first of the two qualified ahead of the pack. The same CTR2 then went on to win the Virginia City Hill Climb three times on the bounce before achieving a further twenty victories in various competitions, galvanising the CTR2's status as the most important non-Porsche 911 of the decade.

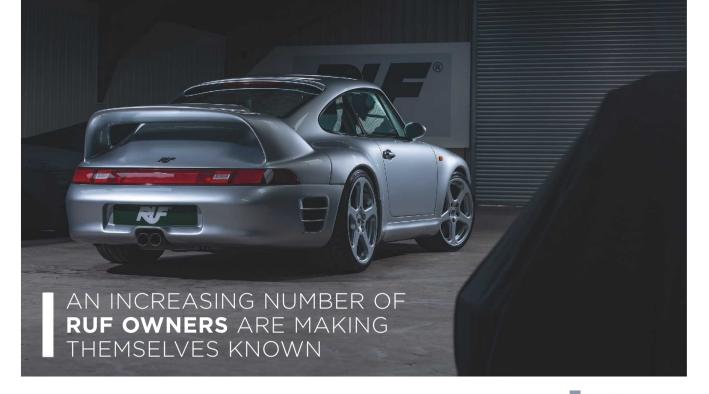
Only twelve Sports were assembled, but a CTR2 of any description is an uncommon sight. That is, of course, unless you're lucky enough to visit Ruf's UK outpost in East Sussex, where one of the sixteen standard cars produced is currently waiting for a new owner.

"This particular CTR2 was built in 1997," explains Ruf Automobile UK boss, Richard Sekula. "The car has covered only 49,000 miles from new and is finished in Arctic Silver Metallic with contrasting green leather and carpets. Aggressive Koenig seats add to the sporting nature of what is a phenomenal and truly collectible air-cooled classic boasting utterly ballistic performance!"

He's not wrong. Despite being more than two decades old, the CTR2 is more than a match for most modern-day supercars. Furthermore, the silver stunner he's offering boasts centre-exit twin-tailpipes, a six-speed gearbox, an integrated roll cage, coilovers, nineteen-inch alloys, big brakes, large front and rear spoilers, sporty door mirrors and tidy interior trim, including colour-coded dash dials and floor mats. All parts are designed and built to exacting Ruf specification.

Above Like or loathe it, there's no getting away from the fact you're looking at an impressively finished interior

Facing page Unlike earlier CTR2s, this 1997 all-wheel drive example is producing 580bhp from its force-fed flat-six



An increasing number of Ruf owners are making themselves known in Blighty following Richard's appointment as custodian of the brand in Britain. "We established Ruf Automobile UK in 2016," he tells us. "Prior to that time, Ruf customers this side of the English Channel had the inconvenience of having to deal with head office in Germany or conduct their affairs through a third-party dealer. Neither scenario was ideal. Since announcing the arrival of a dedicated point of contact for British owners and prospective buyers, however, we've seen a strong number of Ruf enthusiasts come forward to let us know about the amazing cars they're in possession of and how we can satisfy their requirements as far as storage, maintenance and spare parts are concerned."

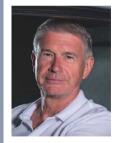
Perhaps unsurprisingly, there has never been a requirement for Ruf customers to register their cars. "We don't always know about the existence of factory or backdated Rufs in Britain until an owner contacts us with an enquiry," explains Richard. "Thankfully, a steadily increasing number of them are getting in touch, which is enabling us to pull together a series of UK-based, Ruf-themed events for 2019 safe in the knowledge we have a good number of owners to invite!"

Those same custodians of supercar cool have made known their appreciation for having an official Ruf supplier in the country they live in. "It's helpful to have a localised phone number to call when you want to ask a question or find out more about the history of your car," continues Richard. "Travelling to Germany or dealing with someone whose native tongue isn't the same as your own simply isn't convenient for most people." Indeed, it's useful for existing and prospective owners to be able to visit an official Ruf centre in their homeland, a site able to offer factory knowledge and competence, and where these exotic cars can be seen in the metal.

GREEN WITH ENVY

There's no hiding the excitement experienced by any petrolhead lucky enough to get close to a CTR2. W10BD0 (as labelled on its VIN plate) is a left-hooker which doesn't fail to impress, even if its lashings of green leather might be something of an acquired taste. Let's be honest, though. You'd be happy to own a factory-built Ruf regardless of its colour or specification, and though it might live in the shadow of its CTR-badged forefather, the CTR2 is an astonishingly capable sports car. Best of all, if your pockets are deep enough, this one could be yours.





RICHARD SEKULA First Porsche 1981 911 SC Targa

Favourite Porsche The 993 Turbo never fails to pull at my heartstrings!

Best thing about this Ruf CTR2

The understated styling hides the true nature of the beast

Worst thing about this Ruf CTR2 It's not mine!





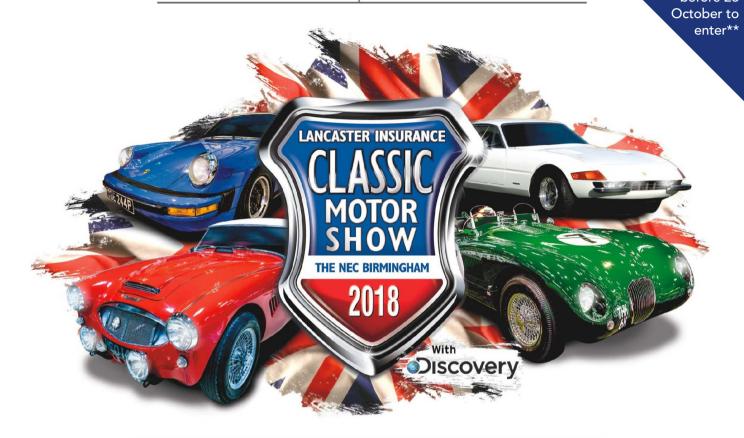
Above This super-rare Ruf CTR2 is yours in exchange for a cool £625,000

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Charles Ivey site given blue plaque

English Heritage celebrates Cooper works

harles Ivey (Specialist Cars) Limited has been selling and servicing Porsches in London since 1970. Based in Fulham's Hurlingham Road for more than four decades, the company has grown to become one of the best-known independent Porsche specialists in the United Kingdom. All eyes were pointing at the firm's Surbiton site a few weeks ago, however, when a special event took place to mark the unveiling of an English Heritage blue plague at what used to be Cooper Car Company's headquarters.

London's famous blue plaques link the people of the past with the buildings of the present. It's a scheme which started in 1866 and is thought to be the oldest of its kind anywhere in the world. Across the capital, more than 900 plaques have been

unveiled on buildings both humble and grand, linking bricks and mortar with the notable men and women who have worked close by.

Arguably best known for its association with competition Minis, Cooper Car Company became famous for its Formula One success - winning the 1959 and 1960 F1 championships with unique, rear-engined singleseaters - after Charles Cooper established the firm when Britain was trying to get back on its financial feet following the second World War. Later, John Cooper (Charles' son) took the helm, conceiving the Mini Cooper as a racing development of the classic compact car. The Mini Cooper's success in rallying - especially when in the hands of superstar driver, Paddy Hopkirk - is the stuff of legend, so much so that Cooper-marked Minis continue to be marketed today.

Cooper Car Company's workshop originally comprised a series of sheds

The former works of the COOPER CAR COMPANY
Winners of the Formula One World Championships in 1959 and 1960



before the building currently occupied by Charles Ivey (Specialist Cars) Limited was erected in the late 1950s, allowing rapid development of sports car design which would change the face of Formula racing forever. Charles and John Cooper's offices were in the centre of the building on the first floor, with the drawing office on the right occupied by Owen Maddock, the famous race car designer. The building was designed by Maddock's architect father, Richard. It has been claimed the unusual curved façade was an intentional reference by Richard to the curved car chassis designed by his talented son.

"We regularly receive visitors who want to see where the Cooper magic took place!" smiles Charles Ivey (Specialist Cars) Limited company director, Alvaro Crego. "It's





great meeting people who want to come and pay tribute to technical innovation and tradition. As a Porsche specialist, these are characteristics we share with Cooper Car Company. We're thrilled to have acquired such an important building, a site of historical significance which we've sympathetically renovated, ensuring many original features are left for Cooper enthusiasts to enjoy. The end result is a place Porsche owners can bring their cars safe in the knowledge our facilities and expertise will deliver a service second to none."

Alvaro's enthusiasm and English Heritage's recognition of such an important building have enabled Charles Ivey (Specialist Cars) Limited to breathe new life into the Cooper legacy. Long may it continue!



Rockingham Motor Speedway to be repurposed as vehicle storage facility

After months of speculation, it has been announced Rockingham Motor Speedway will cease to be a venue for racing activity following the sale of the site to an investment company keen to repurpose "Europe's fastest racing circuit" as a storage centre for fleet and auction vehicles. The move comes after the British Touring Car Championship (Rockingham's biggest draw) announced it was cancelling its visit to the Corby-based circuit for 2019 The BTCC's move follows the

site's massive grandstands being condemned on health and safety grounds following the discovery of subsidence. The 300-acre plot was once hailed as bringing a new dawn to British motorsport, but lack of profits in the years following the opening of the circuit in 2001 mean massive debts have forced the site's owners to sell up. We're told all events scheduled until the end of the year will remain unaffected by the change. A sad end for a venue which offered great potential.



Gunther Werks 400R Touring

Each Gunther Werks 400R (read about this amazing reimagining of the 993 by grabbing a copy of the December 2017 edition of Ultimate Porsche at bit.ly/issuesup) begins life as a raw, carbonfibre exoskeleton. After receiving questions from customers regarding the make-up of the mega-lightweight monocoque, Gunther Werks CEO, Peter Nam, decided to display an exposed 400R shell at the Quail Motorsports Gathering last month. Not only that, but one of only twenty-five 400Rs to be built was displayed alongside the bare shell. The completed car's gorgeous grey paintwork enhanced the 430bhp, four-litre, naturallyaspirated two-door's curvaceous carbon bodywork, which forms part of a 400R billed as the first example to make use of the highly anticipated Gunther Werks Sport Touring package. For more information visit guntherwerks.com

See you there...

THE PORSCHE SALE

Join us at the stunning Dallas Burston Polo Club in Warwickshire on 28th September when some of the finest Porsches in the country go under the hammer for the fourth Porsche-dedicated sale held by our friends at Silverstone Auctions. Porsche Club GB members enjoy discounted entry to this calendar highlight, with viewing of lots taking place from 1pm 27th September. Visit bit.ly/silvsale for the all the details and a catalogue of cars up for grabs.

TRAX SILVERSTONE
Marketed as "the ultimate performance car event", TRAX returns to the mighty Silverstone on Sunday 7th October for a high-octane celebration of multi-marque motoring. Cars ranging from classic 911s to brand new Mustangs will be on display, with club stands and on-track action promising to entertain throughout the day. Liberty Walk is sponsoring the show's supercar paddock, while the British Drift Championship will be providing full-throttle demonstrations You'll also be able to participate in the Turbosmart sprint test, a new show feature for 2018. Advance tickets include entry, a free t-shirt, a magazine and an optional hoodie. Book at traxshows.co.uk

CHARITY DAY AT GOODWOOD

Meet with likeminded Porsche enthusiasts and help raise much-needed funds for Chestnut Tree House children's hospice. Operated in association with Porsche Club GB and Vroomphoto, pre-registration is now available for the get-together, taking place on Saturday October. Visit bit.ly/porschecharity



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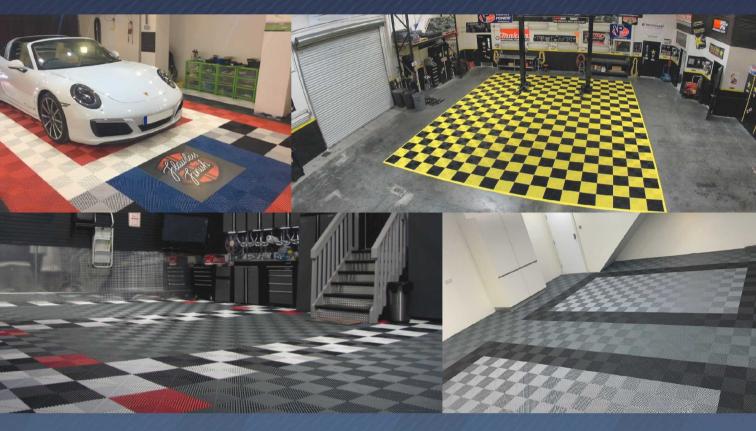
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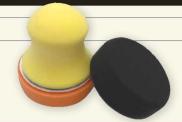
Manufactured in Europe using Total petroleum, Ribtrax features a hidden joint design and is available in nineteen different colours. The product can even be produced with a custom finish, including a depiction of the Porsche crest! With the ability to withstand static weight loads of twenty tonnes per square metre (thirty-five tonnes rollover), Ribtrax is arguably the strongest flooring solution of its kind. Great news for those operating jacks and lifting equipment.

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RONAL R50 AERO WHEELS

Certain wheel designs never seem to date. The Ronal R50 Aero is a case in point, but don't resign yourself to having to make do with traditional finishes; the R50 Aero is now available as a 'ball polished' version in four and five-stud fitments with offsets, diameters and PCDs to suit almost every modern and classic car! The R50 Aero's lineage can be traced back to a Ronal split rim used in Group 5 racing. The road-going version (R10 Turbo) was released in 1983 and featured the same clever spoke design channelling air towards brakes whilst shielding them from dirt and dust. The latest take on the R50 Aero looks fantastic thanks to its high-quality polished surface, although diamond cut and tough-looking black finishes are also available to order.

Price: Varies

ronal-wheels.com or call 0115 956 5555

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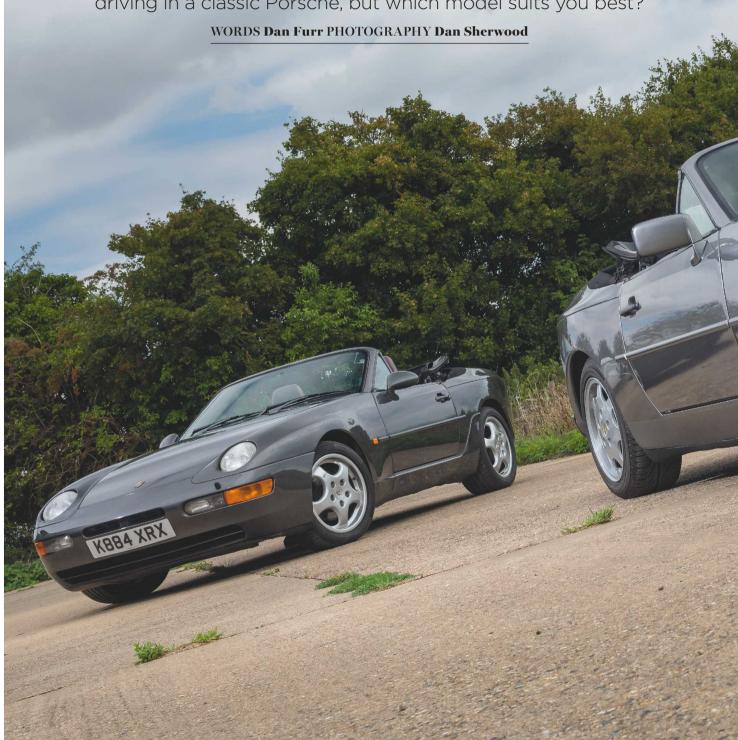






MAXAND MATCH

Front-engined cabriolets are a low-cost way to experience drop-top driving in a classic Porsche, but which model suits you best?









here's a lazy school of thought suggesting any other configuration than rear-engined and air-cooled doesn't make for a 'proper' Porsche, but to adopt this attitude is to deny yourself the pleasures of the manufacturer's transaxle range, a collection widely regarded as spawning some of the best sports cars in the years leading up to the turn of the millennium. As you can tell by scanning the following pages, other than the Stuttgart crest attached to the nose of the 924, 928 and 944, there's little coherence between the look of these cars and similarly aged 911s, but after factory designer, Harm Lagaay, returned to the Porsche nest as the 1980s drew to a close, the 944 was reborn as the 968, another fourcylinder transaxle, but one exhibiting looks shared with the then-nearly-new 964 and the updated 928. Finally, Porsche had a consistent visual identity across its family of cars.

Even in asphalt-attacking Club Sport guise, however, the three-litre, Variocam-enabled transaxle shared enough of its overall shape with the two-decade-old 924 for naysayers to stick to their guns. Furthermore, the 968's interior

furniture borrowed heavily from the outgoing 944, a move partly dictated by the limited budget Lagaay was afforded for the development of the new model. He claimed it carried just twenty-percent of its predecessor's componentry, but other than spotting the elimination of popup headlights, dismissive owners of air-cooled Porsches weren't convinced they were looking at anything other than a facelifted 944. Bah!

EXPERT OPINION

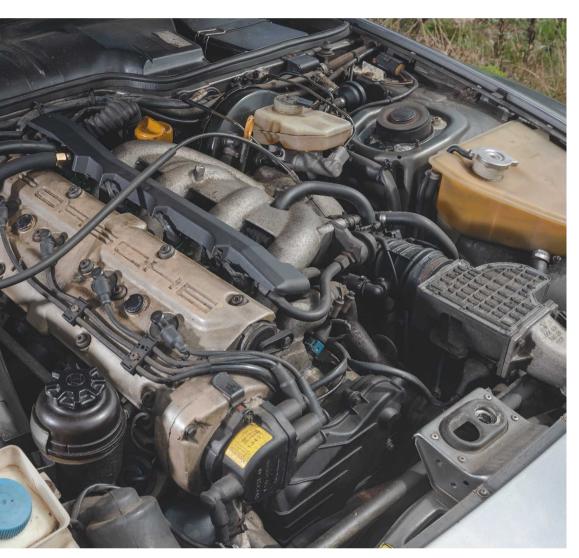
"The 944 and 968 are similar in many ways, but at the same time, they're quite different cars," says Chris Lansbury, managing director at independent Porsche specialist, PIE Performance (pieperformance.co.uk), and custodian of the pair of transaxle drop-tops we've come to check out at the company's Suffolk base. "One thing's for sure," he continues. "I've lost track of the number of my 911-owning customers who have hopped out of their air-cooled Porsches and been gobsmacked after taking a 944 or 968 for a spin. These cars handle brilliantly!"

Porsche's goal with the transaxle layout was to achieve as close to 50:50 weight distribution front to back as possible. A





TRANSAXLE CABRIOLETS / ULTIMATE PORSCHE



Left 944 engines came in a range of displacements, from 2.5-litres up to the pre-968 three-litre unit seen here

Below Pop-up headlights disappeared from the transaxle range when factory designer, Harm Lagaay, introduced a common aesthetic across all Porsche products











water-cooled engine at the nose, a long bonnet, a short front overhang and a long roof were matched to an overhang at the rear designed to accommodate the transmission behind the axle, thereby perfectly balancing weight. The result? Advanced, sharp and superresponsive handling, especially when compared to the behaviour of the tail-happy 911.

DECISIONS, DECISIONS

This is all well and good, but how do you determine which of the later two four-cylinder transaxle cars is best suited to you? Surely, if Lagaay's claim that eighty percent of the 944's DNA was either significantly modified or completely replaced when engineering the 968, there's far more to the decision making process than concluding which car you prefer to look at. "It goes back to what I said about the 944 and 968 possessing different characteristics," says Chris. "The 968's strengthened body makes for a more sure-footed ride, and the Variocam system introduced to the straight-four produces more torque in the lower rev range. It's a brilliant cruising car, especially with the optional four-speed Tiptronic transmission in place,

whereas the 944 is lighter and nimbler, making it the perfect choice for those who like to drive aggressively," he adds.

The chassis upgrades applied to the 968 feel even more pronounced when it comes to comparing the Cabriolet variants of each car. "Without a hard-top, the 968 is easier to live with as a daily driver than the same-styled 944 thanks to the newer car's stiffer body delivering radically reduced scuttle shake," says Chris. "As far as maintenance and common faults are concerned, though, there's not a lot between either model regardless of whether they're presented in either coupé or cabriolet formats. The 944 and 968 are exceptionally well-built and reliable Porsches."

There's not much difference in price, either. 944 values have crept up in recent years, moving squarely towards the cost of the 968, once a more expensive model. In part, the high premium paid for a 968 was due to perceived exclusivity as a consequence of the model's comparatively low volume production (there were approximately ten times the number of 944s assembled), and while it's not exactly difficult to track down a canvas-roofed 968 for

Above Tiptronic transmission makes this 968 Cabriolet much more of a lazy cruiser than the 944, but put your foot down and the newer car can shift!

Facing page While the 968 is regarded by casual observers as being little more than a facelifted 944, the later model features a claimed eighty percent new or modified parts









PIE in the sky

Established almost a decade ago, PIE Performance was created by the father and son team of John and Chris Lansbury to offer a viable quality alternative to main dealer servicing for classic and modern Porsche cars. The Lansbury's Suffolk workshop has all the specialist equipment required to take car of your Porsche, and to avoid any nasty surprises, the PIE team is completely transparent with its pricing structure, offering fixed-price servicing and estimating on all jobs before work is carried out. Additionally, PIE always has a great selection of Porsches available to buy. Visit the company website pieperformance.co.uk

sale today, it's safe to say you can be more choosy when it comes to waiting for a 944 Cabriolet in your preferred colour and specification.

"When deciding whether to buy a 944 or a 968, most interested parties will make a decision based on which car suits their driving style and which body design they prefer the look of. Availability is, of course, also a contributing factor," smiles Chris, safe in the knowledge he has an example of each transaxle available for purchase at PIE Performance.

SWINGING SIXTY

At first glance, the pair in Chris's possession are clearly related – a trait amusingly emphasised by similar colour schemes – yet as alluded to earlier, they're very different cars. The 968, for example, is equipped with the aforementioned Tiptronic transmission. "I bought the 968 from a guy approaching eighty years of age," he recalls. "He'd owned it since his sixtieth birthday, but was finding it increasingly difficult to get in and out of such a low vehicle. It hasn't covered too many miles, but it has been treated to a Promax ECU chip, which alters fuelling and boosts power by an extra few ponies."





Galloping horses are released through an aftermarket stainless steel exhaust system. The car also benefits from a Club Sport steering wheel, a new colour-coded soft-top and grey leather with red piping. In contrast, the 944 features a retrim in cream leather with grey piping. "The 944 is a mechanically standard 1990 S2 one of my customers bought to take with him to his new home in Jersey. Unfortunately, he discovered chargeable import tax was sky high, making the car's move to the Channel Islands prohibitively expensive!" gasps Chris. Previous to his client's regrettable discovery, the car had covered just 83k miles. Both transaxles are now at PIE Performance and are looking for new owners keen to add to the low numbers displayed on their odometers.

The differences between the 944 and 968 are far less conspicuous than between the 924

and the 944 (the latter being a purely Porsche project after the joint VW-Porsche parentage of the 924), but there are clearly contrasting characteristics which should be taken into consideration when deciding which of the newer cars to opt for. Thankfully, Porsche engineering has always been exceptional, meaning a transaxle which boasts mega miles should run just as efficiently as one which hasn't covered much ground. Obviously, you'll need to ensure service history includes supporting evidence of proper maintenance and regular fluid changes in accordance with manufacturer instructions, but don't be put off by a high mileage vehicle. The number you should be concerned with is the price tag; be sure to get in on the action before values applied to transaxles rise any further. Bargains like those at PIE Performance UP won't hang around forever!

Above and below The 944 and 968 are both gorgeous cars in Cabriolet format, but which of these modern classics produces the drive and 'wow factor' to suit your tastes?!







PIEPERFORMANCE.

The Porsche 911 type 964 is now, in all guises, the best part of thirty years old.

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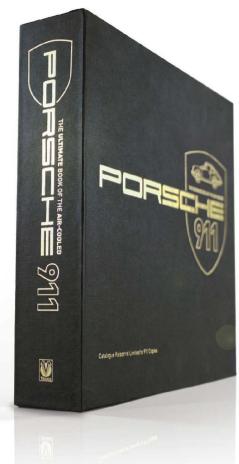
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Torque Driver



Calum Lockie

With a few straightforward upgrades, a four-cylinder transaxle can be just as enjoyable to drive on the track as the latest RS, argues three-time British Endurance Championship winner, Calum Lockie...

've been lucky enough to drive a variety of Porsches in various motorsport events over the years. My first competitive experience behind the wheel of a Stuttgart-crested car was in 1998, when I campaigned a privateer 993 GT2 in the British GT Championship.

The following year, I was lucky enough to race a year-old, factory-built GT2 in the same series. The model's twin-turbocharged flat-six propelled me down straights like a bullet out of a gun. Brilliant fun!

Later, I raced a 996 GT3 in the 24 Hours of Silverstone. This newer 911 may have been lesser-powered than the 993 I'd driven beforehand, but its naturally aspirated engine delivered a smoother torque curve. It was a lovely car to be in charge of, even if I felt I was beating the crap out of it in order to climb in the direction of the performances I was able to deliver by closely stroking the 993!

A 997 Cup ferried me around three successive 24 Hours of Nürburgring. Lap times of well under nine minutes (around an extended circuit taking in the Nordschleife and GP sections) and being fully airborne at regular intervals – no matter the weather – made the driving the car a thrilling affair, but don't be fooled into thinking I'm only interested in racing 911s. Porsche has much more in its back catalogue than Neunelfers!

Take my 968 Club Sport, for example. It's a rare right-hand drive example I've owned and hammered at the track for many years. Originally specified in white and without a sunroof, it's a transaxle I've developed through the appointment of bolt-on upgrades; Turbo brakes, M030 anti-roll bars, GAZ dampers and a lightweight single-mass flywheel contribute to significant performance advantages bolstered by a ride height drop of two-inches and wider-track encouraged by 235-profile Dunlop rubber.

One of the biggest improvements to the car's behaviour is the installation of a Quaife limited-slip differential. I'm no mechanic, but even I can fit one of the company's ATB units in half a day (providing I don't get too distracted by the



kettle!). The part is lubricated by gearbox fluid and requires zero maintenance, which is ideal for anyone who wants to punish their Porsche without worrying about the effect of aggressive driving on hardworking transmission upgrades.

Feeling torque transfer across my 968's rear axle when one of the driven wheels begins to lose traction is a reassuring sensation, and one which ensures the oversteer I'd previously experienced from the car is all but eliminated. Truth be told, I've got no fewer than four 968s (including a second Club Sport) and my experience with an ATB differential has proved to me that Porsches with or without the famous factory MO30 handling package benefit greatly from the addition of Quaife kit. As if to prove the point, my Clubsport can now match the pace of a Gen 2 991 GT3 RS in corners. See, I told you there was more to racing Porsches than 911s!

Above Calum owns four 968s, including two Club Sports

Twitter @CalumLockie www.calumlockie.com



Being fully airborne at regular intervals made driving the car a thrilling affair







Torque Enthusiast



Vinny Mann

It might not currently hold the same iconic status as some of Porsche's older drop-tops, but the 986 is a brilliant everyday car and one of the most cost-efficient ways to own one of the manufacturer's models...

onsidering how much I love my 2.7-litre 986, you can imagine how pleased I was to hear *Ultimate Porsche* was including the first-gen Boxster in its excellent line-up of cars covered. The 986 is a seriously underrated drop-top, offering supreme build quality, an amazing drive and pokey performance at low cost.

I've owned a number of cabriolets from different manufacturers over the years. Highlights include Mk1 VW Golf and Audi TT soft-tops. You could argue that entering Porsche ownership after sampling the delights of these brands was a logical progression, yet a Boxster wasn't the first Porsche I hankered after; unfamiliar with the 986, I focused my attention on trying to secure a tidy 944 or 968 Cabriolet.

It was while searching classifieds I was made aware of the similar price point between naturally aspirated open-top transaxles and early Boxsters. Intrigued, I began to read reviews concerning the mid-engined model. YouTube videos also helped to shed light on the brilliance of the two-seater roadster.

Frustrated at not being able to pin down a 944 or 968 in the condition I was looking for, I switched my attention to the high number of 986s being offered for sale. The car I ended up buying has proved to be a real head turner, not only because of its stunning paintwork, but because a previous owner decided to colour its wheels in a shade intended to complement the tan interior! As a fan of factory specification, I remember thinking it was an unusual update and one I planned to undo, but having lived with the way the car looks since I bought it a year ago, and having enjoyed the endless stream of positive feedback it gets whenever I'm out and about, I'm pleased to have a 986 which stands out in a crowd.

Porsches are known for being overengineered, and the Boxster 986 is no exception. The build quality of the model is outstanding. You certainly don't feel as though you're sitting



in a cheap motor! It's a great-looking Porsche too, and one not exactly short on power thanks to a flat-six producing ponies in a range of displacements, from 2.5-litres all the way up to 3.2-litres. Despite only having two seats, it's a surprisingly practical car, offering a fair bit of luggage space and ease of parking. Put it this way, I hardly ever use my BMW 5 Series due to the 986 meeting the vast majority of my driving requirements. Besides, it's infinitely more fun than the Bimmer!

If you're looking for a reasonably priced Porsche, but want something newer than a transaxle, then I'd urge you to consider a 986. There's a huge community of owners waiting to welcome to you to the fold, and if my experience is anything to go by, you'll be smiling ear to ear every time you head out for a drive. Well, what are you waiting for?!

Above The wheels on Vinny's Boxster 986 were painted by a previous owner who wanted them to complement the colour of the car's interior



If you're looking for a reasonably priced Porsche, but want something newer than a transaxle, then consider a 986













Torque Specialist



Antony Kingham

You might be wondering where to store your classic Porsche now that the year's warm weather is drawing to a close. Run by enthusiasts for enthusiasts, Ecurie 137 may well be the solution you're looking for...

ne of the biggest problems facing owners of classic cars (or any cherished vehicle) is knowing where to store them. A home garage isn't always available, and more often than not, businesses offering space specifically for the purposes of keeping your pride and joy tucked up in the dry tend to provide an impersonal service not at all in

This was certainly what my brother, David, and I experienced when we tried to secure storage for our collection of classic Porsches. The services being promoted by some of the companies we were made aware of amounted to tight, dusty and expensive warehousing with an inability to access cars when required. "By appointment only" was a common theme, a condition we found to be wholly unacceptable. After all, I might want to hit the road today while the sun is shining, not in forty-eight hours when it's raining!

keeping with the ideals of an enthusiast.

David and I have owned Porsches for more than twenty-five years. We dote on our cars, and it was frustrating to think we might be forced into handing their care over to a business lacking our passion. Worse still, we didn't want to be treated like a nuisance simply for wanting to visit our cars! We decided the solution to our problem was to occupy our own storage facility near where we live on the Suffolk-Essex border. Doing so has enabled us to treat our four-wheeled friends with the love and care we know they need to look their best and maintain excellent driving condition at all times.

The characterful premises we have keys to is much larger than our collection of cars can fill. This welcome space got us thinking about extending the offer of personal, discreet and accessible storage to our fellow petrolheads. Our own experience proved there's clearly a need for this kind of service! Finding ourselves in the position of being able to offer the room and standard of care we expect for our own cars, our business, Ecurie 137, was born.



Owners of the vehicles we store – all makes and models are welcome – are invited to call us whenever they like. We pride ourselves on quick access. Furthermore, unlike those in charge of many other car storage companies, we recognise each owner has bespoke requirements and priorities, which is why we've devised a range of options to suit every individual, be it a need for logistics and transport, maintenance programmes or special treatments over and above undercover storage.

Close monitoring, battery trickle charging, tyre rolling and use of a soft cover is included with each of our secure storage packages. We keep prices low (starting at £25 per week per vehicle at the time of writing). Satisfyingly, Ecurie 137 has been a great way for David and I to meet fellow enthusiasts, and we're thrilled to be able to help those who find themselves in the same difficult position we were in. Sound familiar? Don't hesitate to get in touch!

Above 924 Carrera GT is one of the cars the Kingham boys needed to store securely

Twitter @ecurie137 www.ecurie137.co.u



Unlike those in charge of many other car storage companies, we recognise each owner has bespoke requirements





THE MAGIC OF GOLD

Porsche Classic's take on a 911 restomod has resulted in this 450bhp track-friendly 993

ith an ever-growing number of independent Porsche specialists jumping on the restomod bandwagon, it seemed almost inevitable the

manufacturer's Porsche Classic division would stamp its authority on the proceedings. This is exactly what it has done with the just-released Project Gold, a track-focused 993 Turbo built to showcase the comprehensive skillset of Porsche Classic technicians, such as those at Porsche Classic Partner Centres in Hatfield, Leeds, Swindon and Glasgow.

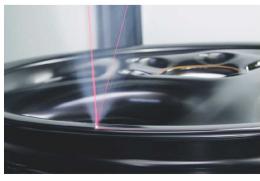
Project Gold represents Porsche Classic's contribution to the manufacturer's seventieth birthday celebrations. Based on an original 993 body shell, the car is finished in Golden Yellow Metallic, referencing 2018's 991 Turbo S Exclusiv (a more modern 911 birthday build!). Black wheels are decorated with yellow accents, while the car's seats and interior trim are finished in the same twin-tone colour scheme.

The exterior features the 993 Turbo S's iconic rear quarter air intakes (offered as a cost option for the standard 993 Turbo in 1998). Feeding a flat-six producing 450bhp, they form part of an exciting Porsche package due to be exhibited at Raceway Laguna Seca's Rennsport Renunion between 27th September and 1st October. Following its appearance at the event, the car will be auctioned by RM Sotheby's at the Porsche Experience Centre in Atlanta at the end of October. Proceeds from the sale will be donated to the Ferry Porsche Foundation, a recently established non-profit organisation.

Porsche Classic bosses decided working with



















a 993 body shell to construct a completely new vehicle would demonstrate Porsche's commitment to tradition and innovation whilst highlighting the availability of over 6,500 genuine parts currently offered exclusively through the Porsche Classic service for the 993. In total, Porsche Classic stocks more than 52,000 parts for legacy models, including those in the transaxle range. These parts are available from all Porsche Classic Partner Centres (including the four UK sites already mentioned) as well as many other Porsche Centres around the globe, enabling professional restorers and homebuild heroes the opportunity to breathe new life into their fourwheeled friends using genuine componentry.

Construction of Project Gold took eighteen months. The car's shell was treated to acid-based corrosion protection before the application of modern paint at Porsche Classic HQ in Stuttgart. A brand new 3.6-litre twin-turbocharged flat-six was then installed alongside a manual gearbox mated to all-wheel drive transmission. All parts were sourced through the Porsche Classic service.

Cabin furniture was made in conjunction with technicians in the famous Porsche Exclusive department, a division of the business formerly known as Sonderwunsch (Special Wishes) and dedicated to delivering bespoke solutions for clientele with serious money to spend. Custom colour gradients and various other unique aesthetic qualities were then introduced to this extraordinary

993, which has been assembled using the same techniques deployed for the aforementioned 991 Turbo S Exclusive, a Porsche limited to a production run of just five hundred units.

Being the last of the air-cooled 911s, the 993 is regarded by many as the ultimate incarnation of the original 911 concept, not least of all due to sophisticated construction, advanced electronics and steadfast reliability. Moreover, the 993 was the first 911 to feature an aluminium chassis, boasting exceptional agility and superior anticorrosion qualities.

The 993 Turbo was the first 911 to feature a twin-turbocharged flat-six. The force-fed powerplant was the world's lowest emission standard automotive engine in 1995. Add to this the aerodynamic qualities of the 993's low-slung nose (enabled thanks to a switch from round to ellipsoidal headlights) and it's easy to see why the model continues to be held in such high regard today. This is especially true of the 993 Turbo S, a rare 911 limited to 345 units, and one you can read about by ordering a copy of the March 2018 edition of *Ultimate Porsche*. Check it out at *bit.ly/issuesup*.

We'll be sure to report back on Project Gold's 'under the hammer' figure in our next issue. It'll be interesting to see how high prospective buyers are prepared to bid for a unique 993 Porsche Classic representatives tell us is limited to track use. Will this restriction have a negative impact on what's tipped to be a lofty sale price? Do the boys at Singer Vehicle Design have anything to worry about? Watch this space!





In this edition of Tech Talk, we wax lyrical about limited-slip differentials, how they work and why so many successful race teams and tuners choose Quaife's ATB offering...

Making a difference



any Porsche cars came with the option of a limited-slip differential from the factory (hello to all you M030 owners out there!), but what exactly is a differential, what are the different types of differential and what makes Quaife Engineering's ATB limited-slip

differential the pick of the bunch?

We took time out to chat to the British company's talented team in order to find out the answers to each of these questions. After all, Quaife is a firm respected the world over for the development and manufacturing of OEM and race-winning performance gear sets, gearboxes, differentials and driveline componentry, so who better to talk to about transmission technology?!

Read on to discover our findings and to view a list of Quaife's current line of Porsche products (including differentials, steering racks and sequential gearboxes) catering for cars of all ages.

QUAIFE AS A COMPANY

Before we examine different types of differentials and how they operate, let's take a look at Quaife's rich and colourful history of producing performance parts.

R.T. Quaife Engineering Ltd was founded in 1965 by Rodney Quaife. The business quickly established a name for itself manufacturing motorcycle gear sets. including five-speeds for Triumph and Norton. The company's output was soon being used to achieve victories at Davtona International Speedway and on the legendary Isle of Man TT, but it wasn't until the 1980s that the underlying design for the **Quaife ATB differential** was first introduced to the world. Maserati adopted the technology (commonly referred to as the 'Ranger' differential) for its Biturbo and second-gen Ghibli. A Quaife differential was also used in Gerhard Berger's Benetton F1 car, an immense track weapon which won the 1986 Mexico Grand Prix.

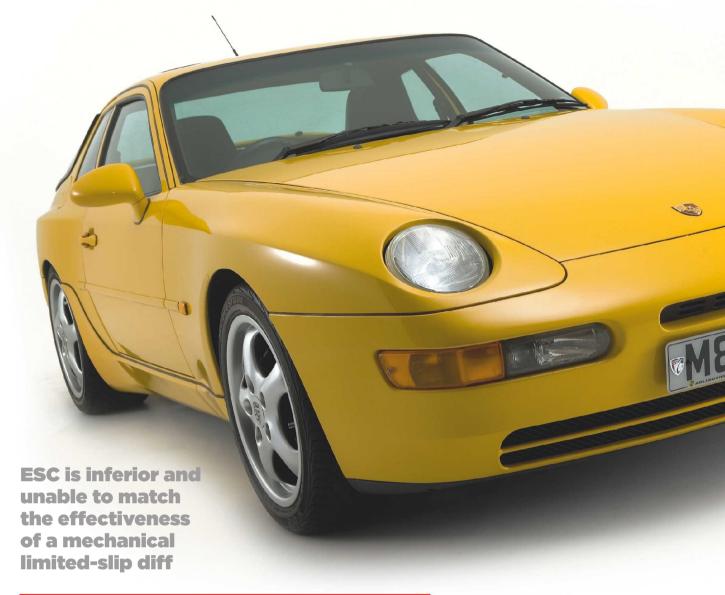
Today, Quaife is managed and operated from its headquarters in Sevenoaks by Michael and Sharon, Rodney's son and daughter. The firm boasts two manufacturing facilities, one being at the Sevenoaks site, and another in nearby Gillingham. The company's products continue to dominate the motorsport scene, but it's



not just differentials Quaife can count on: its gear sets and full transmissions (including synchromesh, dog engagement and sequential systems) are used to great effect worldwide, not least of all in Radical, Ginetta and Caterham cars as OEM equipment. Additionally, **Morgan Motor Company** takes advantage of the availability of Quaife driveline components (such as its range of steering racks), as do a massive number of professional tuners and DIY modifiers, including those in charge of classic Porsches.

Michael and Sharon's team prides itself on developing and investing in the latest technologies, ensuring the company caters for all types of vehicle, be they a Le Mansstyle closed-cockpit racing machine, a Tesla or your favourite petrol-powered fast-road sports car from our friends in Stuttgart!





HOW DOES A DIFFERENTIAL WORK?

When a car travels around a corner, its inside and outside wheels need to travel at different speeds. In essence, a differential allows power to continue to be sent to each driven wheel at the same time as accounting for the discrepancy of speed between each wheel.

When an engine is treated to more power (or when grip reduces), torque from the engine follows the path of least resistance. Typically, this will be the unloaded wheel (or the wheel with the least grip), resulting in useless wheel spin. There are various mechanical solutions available to prevent this from happening. Fluidfilled viscous couplings and torque biasing differentials - like ATB units made by Quaife - are popular manufacturer-adopted bits of kit. The advantage of the helical gear design of ATB differentials is that they never lock and have less negative impact

on turn-in behaviour than viscous or plated diffs. Importantly, the design of a Quaife ATB differential ensures the part won't wear easily.

Car makers looking to cut costs often see equipment like limited-slip differentials as being an expense they can do without, hence the popularity of electronic stability control program systems (usually referred to as ESC or ESP), which are designed to detect the presence of an unloaded wheel getting ready to spin. The idea is to nip the brake and quickly divert torque through the standard open diff. Sometimes branded as 'torque vectoring E-diffs', these systems are seen as cost-effective substitutes for a mechanical limited-slip differential. Ask anyone with experience of both technologies, though, and they'll tell you ESC is inferior and unable to match the effectiveness of a mechanical limited-slip diff.







WHAT IS AN OPEN DIFFERENTIAL?

Standard (often referred to as 'open') differentials are designed to allow the two wheels on a single axle to spin at different speeds. The majority of vehicles on the road – in other words, cars not fitted with traction-enhancing limited-slip differentials or torque-biasing differentials – feature open diffs. Cheaper for manufacturers of mass-produced vehicles to produce, open diffs are dependable, but aren't ideal for sports cars or drivers who want to modify and maximise the performance of their chosen chariots. For example, if one of your classic

Porsche's driven wheels loses grip and spins, you're experiencing lost power. A torque-biasing limited-slip differential enables this otherwise wasted power to be transferred to the driven wheel at the other side of the car, thereby promoting continued grip.

It might seem quirky to today's audience, but in 1937, a short film produced by Chevrolet explained how an open differential works. The underlying principles are still relevant today, so fire up YouTube and have a search for Around the Corner.

Alternatively, visit bit.ly/quaifecorner





WHAT IS A QUAIFE ATB LIMITED-SLIP DIFFERENTIAL?

If you're after serious grip and enhanced performance on the road or at the track, you're the kind of driver who should be investing in a Quaife ATB limited-slip differential. ATB - which stands for Automatic Torque Biasing - diffs have been in continuous production since the 1980s. The ATB product range caters for hundreds of applications, spanning makes and models of car from Alfa Romeo to Volvo! Trusted by Ford for three generations of Focus RS and the new Fiesta ST, BMW for the Mini JCW Challenge, General Motors, Chrysler, Lotus and many other manufacturers as essential **OEM** equipment for high performance model lines, the parts are renowned worldwide for their effectiveness, quality of construction and reliability.

The ATB unit works by biasing torque to the driven wheel with the most grip. It's a gear-loaded differential,

meaning it's extremely strong and is smooth in operation. When one wheel starts to slip. the helical gears inside the differential begin to rotate with speed proportional to the torque of the wheels. Excess torque is then reduced on the wheel which is slipping at the same time as being increased on the wheel with the most grip. The effect of this activity is that unwanted wheel slip is vastly reduced, resulting in low levels of understeer, more controlled oversteer and improved acceleration.

Due to the design of a Quaife ATB differential, there's no friction, meaning there are no parts susceptible to wear. This makes the product a true 'fit and forget' solution for your Porsche. Besides, you can take comfort from the fact there's a lifetime warranty supplied with each Quaife diff, even if you're using the part for track days or professional motorsport!









Due to the design of a Quaife ATB limited-slip differential, there's no friction, meaning there are no parts susceptible to wear

WHAT IS A PLATED DIFFERENTIAL?

Instead of featuring gears, a plate-type limited-slip differential uses multiple plates within its design. For example, a Tran-X unit features two ramp blocks sandwiching two carrier pins which sit in the radius between the leading and trailing ramp angle. As torque is applied to the differential's input, the pins ride up their respective leading ramps, pushing the blocks apart and increasing the transfer of torque across the axle.

The angle of the ramp determines how quickly the transfer of torque occurs within the differential. An angle of thirty-five degrees allows the blocks to be pushed apart more readily than a fifty-five degree setting, resulting in a more aggressive differential locking action. The preload setting dictates the contact friction between the plates themselves. The higher the preload, the more rapidly friction increases between the plates, behavioiur which creates a more aggressive locking action. Combined with the ramp angles, the preload allows subtle adjustments to the torque transfer characteristics, allowing users to alter the dynamic balance of their car as they see fit.

A plate-type differential's locking

characteristics means it's a product popular with those involved in the tough world of off-road rallying. In this motorsport environment, when the driven wheels regularly lose contact with the ground, or when traction is lost when travelling across loose surfaces, the plated differential allows the continuation of drive.

As you might expect, this type of differential is far harsher in operation than a Quaife ATB differential. Furthermore, plated diffs require regular maintenance and feature parts prone to wear through regular use.



QUAIFE ENGINEERING AND THE WONDERFUL WORLD OF PORSCHE

Quaife ATB differentials have been helping to propel Porsche pilots to victory on the track for many years, but the company's products are also engineered to enhance the performance of your road car. In fact, as you'll see in forthcoming issues of *Ultimate Porsche*, we're about to fit a Quaife ATB limited-slipper to our project 944 Turbo! That's right, Quaife products aren't just for the latest cars in Porsche's product portfolio; the British firm's offerings cover Porsches dating back almost as old as Quaife itself. The company is always looking to design and develop new Porsche products, so don't hesitate to get in touch with Michael's team if you don't spot what you're looking for in the following list.

Quaife ATB differentials (£855 plus VAT)	
Part no.	Application
QDF5Q	911 with 901 gearbox / 914 ('69-'74)
QDF1Q	911 with 915 gearbox / 924 Turbo
QDF2Q	911 with G50 gearbox / 996 / 930 ('89) / 964 / 968 / 993
QDF4Q	944 ('86 onwards, including Turbo)
QDF10Q	968 Club Sport
QDF6Q	986 Boxster 2.5 ('97-'99)
QDF9Q	993 Tiptronic / 964 Tiptronic
QDF7Q	986 Boxster S 3.2 ('00-'04) / 987 3.2 ('05-'06) / 996 six-speed (open diff replacement)
QDF14Q	996 Turbo / GT2, GT3 ('00-'04)
QDF13Q	997
QDF16Q	Cayman 2.7 / 986, 987 Boxster 2.7 with five- speed
QDF12Q	Cayman S 3.4 / 987 Boxster S 3.4 ('07 onwards)
QDF15Q	Cayman Tiptronic / Cayman S Tiptronic / Boxster 986, 987 Tiptronic
Transmissi	on (£POA from Parr Motorsport)
Part no.	Application
QBE85G.	996, 997 six-speed sequential transaxle gearbox
2.5-turn loc	k-to-lock quick steering racks (£175 plus VAT)
Part no.	Application
QSF3Q001	911 (1974-1989) / 914



Contact

R.T. Quaife Engineering Ltd

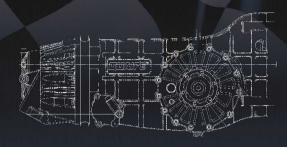
Vestry Road, Otford, Sevenoaks, Kent, TN14 5EL T: 01732 741144 F: 01732 471555 www.quaife.co.uk Email: info@quaife.co.uk Twitter: @QuaifeEng Instagram: QuaifeEng Facebook: QuaifeEngineering

Automotive engineering from design to production



Power into motion...

...developing and manufacturing precision engineered ATB differentials, sequential transmissions and steering racks every year for the Porsche vehicle scene.







Piers Richings is currently enjoying his second stint in charge of this gorgeous 1990 964 Carrera 2 Targa

WORDS Dan Furr PHOTOGRAPHY Dan Sherwood

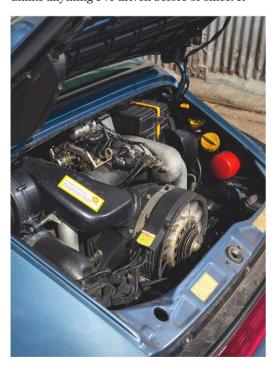


iers Richings recalls the moment his love of Porsche blossomed. "I was sixteen years old and was faced with a ten-mile wander home from where I'd spent the day," he recalls. "Less than enthusiastic about the prospect of tackling the long walk back to my place of residence on foot, I decided to try and thumb a lift. Eventually, a guy in a classic 911S pulled up. I hopped inside, he planted the throttle and I found myself enjoying an exhilarating passenger ride in a seriously quick car!"

Bowled over by the experience, the young petrolhead started to wonder what life would be like in the pilot's seat of an air-cooled Porsche. It didn't take long for him to find out. "I used to earn pocket money mowing the lawn around the house owned by one of my dad's mates. The guy was in possession of a 1976 912E. He'd go out, leaving me to cut the grass. When the coast was clear, I'd fire up his Porsche and drive it back and forth along the lengthy driveway leading to the property. He had no idea!" roars Piers, a man known to many as the founder of automotive accessories giant, Richbrook (*richbrook.co.uk*).

AMBITION FULFILLED

His short-lived joyriding career was followed by the purchase of his first Porsche in 1987. "It was a 1962 356 B Super 90 hard-top," he confirms. I'd subscribed to America's *Road & Track* magazine, which exposed me to images of air-cooled classics in glamourous Californian locations. Inspired by what I saw and drawing on my earlier experiences, I was determined to buy a Porsche to call my own. I loved spending time driving the 356 I managed to lay my hands on, a car I ended up selling for just six grand! Much later, I bought a 964 Carrera 4 and a 993, the latter being totally unlike anything I've driven before or since. It









was other-worldly!" he gasps, before telling us about high-speed action he enjoyed around the Nürburgring, Spa and many of the UK's best-loved racing circuits from behind the wheel of the RS-badged beast.

Nine years ago, however, an altogether more civilised 911 arrived at the Richings residence. It's the car we've come to see where Piers lives in the idyllic environs of North Norfolk today, although he's quick to point out this isn't his first time in charge of the Targa-topped 964. "I owned the car for three years before selling it in 2012," he tells us. "A previous owner carried out an extensive restoration, which included commissioning Southbound Trimmers to reupholster the interior. A respray, a top end engine rebuild, restoration of the staggered D90 wheels and a refresh of the Targa hoop were just some of the expensive jobs lavished on the car before my name first appeared on its logbook. In every respect, it was a Carrera 2 in mint condition. It wanted for nothing, and I took great pride in using it as my daily driver for the three years which followed my initial encounter with the car."



Travel in style

In addition to his role as Richbrook's chief, Piers is also the founder of Richings Greetham, a company specialising in the design and production of high quality leather wallets and travel accessories aimed at owners of classic cars. Focusing on elegant design, function and longevity, the company has gone from strength to strength thanks to the popularity of its travel pouches, iPhone cases, passport holders, headphone cable tidies, laptop sleeves, zip wallets, glasses cases, keyrings and card holders, each available in navy, tan or black leather with teal, orange and yellow options due shortly. Visit the website at richingsgreetham.co.uk



Spirited drives along the fabulous East Anglian A149 coast road formed part of the pretty Porsche's regular activities, but when Mr Richings had an itching for a Prancing Horse, the beautiful blue Targa made way for a black Ferrari F430. "I knew the Ferrari wasn't going to be a 'forever car', which is why I asked the guy buying my 964 to get in touch if he ever wanted to part with it. Three years later, that's exactly what happened!" he laughs.

Considering the near-perfect condition of the car when Piers last saw it, he was less than impressed with what was being returned to him. "You wouldn't say it had been treated like a cherished vehicle," he sighs. "The brake discs were running low, wiring faults had crept in, there were lots of little niggles, including plenty of rattles from cabin trim." On the plus side, the accompanying history file was bulging due to the seller's inquisitive nature ("he was employed as a research scientist") encouraging him to contact every one of the car's previous owners with questions about its time in their custody.

Piers welcomed the tidy Targa back to the Richings fold and quickly set about righting

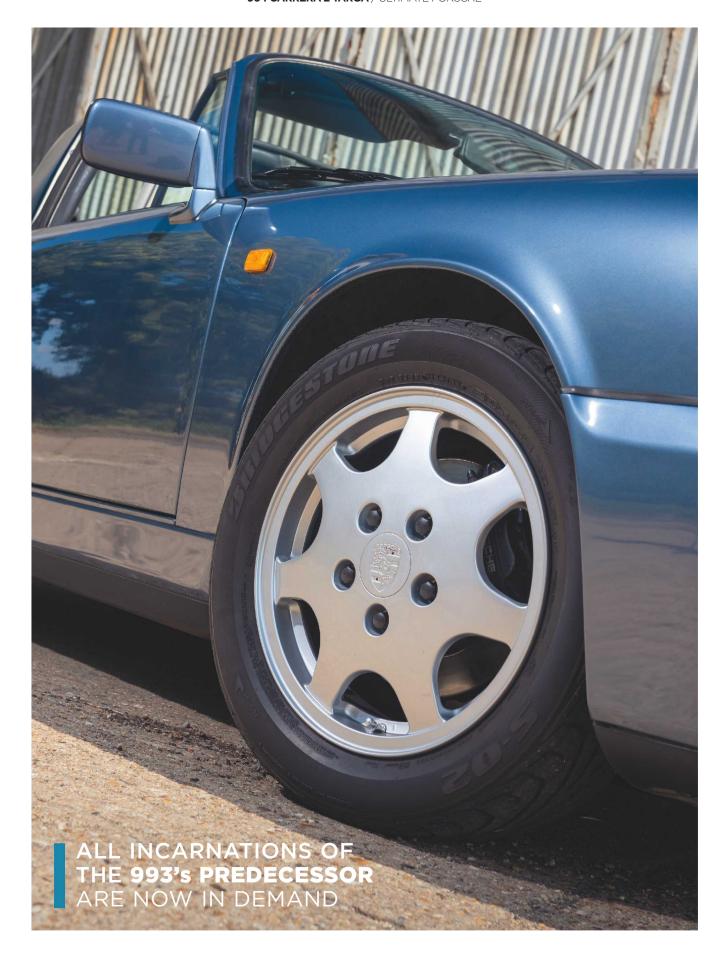
Aside from the addition of a colour-coded

wrongs, work which involved fitting replacement dampers supplied direct from Porsche. Despite his apparent fussiness, he's keen to stress he's not in charge of a garage queen. "When it comes to keeping on top of automotive maintenance, I'm fastidious, but I also like to drive my cars hard. I'm not afraid to pile on the miles. I'm a firm believer four-wheelers of all ages are meant to be driven," he says.

PURE AND SIMPLE

Clubsport three-spoke steering wheel, an uprated security system and aftermarket audio equipment - which we're told seldom gets used due to Piers understandably preferring the sound of the 3.6-litre flat-six roaring behind him - this is a 964 more or less how it rolled off the production line. Regular pedal-to-themetal has highlighted where improvements might be made, but Piers is keen to keep the car's beating heart in a standard state of tune. "I'm considering the purchase of a Bilstein suspension package," he reveals. "It'll drop the car's ride height and deliver firmer

Above Leatherwork is joined by colour-coded Clubsport steering wheel and was carried out by Southbound Trimmers many moons ago









PIERS RICHINGS

First Porsche 1962 356 B Super 90

Favourite Porsche 911 Carrera RS 2.7

Best thing about your 964 Targa The semi open-top design is nothing short of brilliant

Worst thing about your 964 Targa In my experience, a classic 911 is a car which requires constant spend!

damping, enabling quicker cornering, but
I'll be leaving the engine and transmission
exactly as they were produced by Porsche."

As we approach the 964's thirtieth birthday, renewed interest in the model has seen the motoring media reappraise what was once regarded as the unloved 911. Prices are on the rise, and all incarnations of the 993's predecessor are now in demand from those wanting to own a Stuttgart-crested modern classic. Piers is in the fortunate position of being able to compare both Carrera 4 and Carrera 2 driving experiences, and it comes as little surprise to discover which configuration he prefers. "After spending time owning four-wheel drive and rear-wheel drive 964s, I'd say the Carrera 2 is more fun to be in control of. It's lighter, it's less thirsty and it feels faster, even if the Carrera 4 launches off the line quicker. Put it this way, for early morning and late evening fun runs along the stretches of twisty coastal road

near to where I live, I'm more than happy with the way my two-wheel drive Targa performs," he admits, reflecting sentiment expressed by the various 964 owners we've spoken to who have toyed with the idea of converting their all-pawed Porsche to rear-wheel drive due to complaints the Carrera 4 produces what Piers refers to as "ridiculous understeer."

BOXES TICKED

He may not be the world's biggest Carrera 4 fan, but he is an admirer of the 964's Targa body option. "I'm uncomfortable with how exposed I feel when sitting in a full drop-top regardless of the make of car I'm driving. To my mind, complete with their beautifully shaped rear windows and attractive rollover bars, Targas represent the perfect marrying of open-air motoring and classic coupe looks," he reasons. Is his 964 a Porsche which offers the best of both worlds? You betcha!





Far left Targa roof neatly stowed away at the nose

Left Richings Greetham automotive lifestyle accessories are the perfect match for this beautiful 964



SICILIAN SUPERIORITY

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

WORDS Richard Gooding PHOTOGRAPHY Various





ne of Porsche's most revered nameplates, Targa, has its origins in a fearsome endurance race initiated by a well-to-do car enthusiast who went by the name of Count Vincenzo Florio. Established in 1906, the challenging event spanned ninety-two miles of unrelenting street circuit scything its way through the Madonie Mountaines east of Palermo in Sicily. The sinuous snake of asphalt almost immediately gained notoriety due to its dangerous high speed straights and almost 900 punishing corners, but breathtaking scenery and superb spectator viewing ensured the Targa Florio became motorsport nectar to racers the world over.

Fast cars and the picturesque views of Cerda and Collesano proved irresistible to racing's glitterati. Ferociously close-to-spectator danger also proved difficult to ignore, and though Porsche's official involvement as a works team began in 1956, the Austro-Daimler Sascha designed by Ferdinand

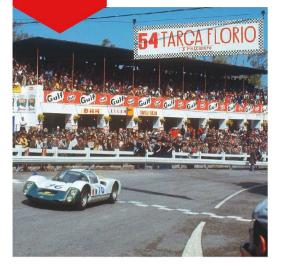
Porsche won the 1,110cc class in 1922. Similarly, Mercedes' overall victory in 1924 wouldn't have been possible without the input of our man, Ferdinand.

A privately entered 356 Cabriolet provided a taste of things to come when it left the start line in 1953, but it wasn't until Porsche motorsport director, Fritz Huschke von Hanstein. shared driving duties with Italian Formula One ace, Umberto Maglioli, in a 1.5-litre 550 A RS Spyder that the manufacturer announced its arrival as a works team at the Targa Florio three years later. Maglioli ended up driving the most of the race extending to more than 350 miles through multiple laps – solo, an effort which resulted in Porsche's first Targa Florio win (an achievement which also doubled up as the sports car maker's first endurance racing victory). It marked the beginning of a run of first-place finishes which have engrained themselves into Porsche legend, not least of all because Maglioli's drive signalled the first time a driver in the 'less than two-litre' class managed to beat cars boasting larger displacement.

















Jean Behra and Giorgio Scarlatti's second place finish from behind the wheel of the 718 RSK in 1958 was followed by a win for Edgar Barth and Wolfgang Siedel in the same model a year later. Jo Bonnier and Hans Hermann took a 718 RS 60 to the top spot in 196 – achieving a six-minute lead over Wolfgang von Tripp's Ferrari Dino 246 S – but it wasn't just wheelmen from mainland Europe who played a part in Porsche's magical Targa Florio story; in 1961, F1 stalwart and 1955 Targa Florio winner, Stirling Moss, was signed-up alongside a young Graham Hill in a move many considered to be a sure-fire recipe for success. Moss built an early lead of almost two minutes, but Hill's unfamiliarity with the course saw the pair drop back down the field. Moss stormed through the pack again, taking the lead as he did so, but a blown differential near the finish line put paid to a third Porsche Targa Florio win on the bounce.

Nino Vaccarella and Bonnier's third place finish in 1962 amounted to a class win for the 718 GTR, and winning ways returned for 1963; despite fierce competition from a triumvirate of Dinos, the 718 GTR of Bonnier and Carlo Abate reigned supreme, winning by 11.9 seconds. As if this wasn't impressive enough, Porsche was able to celebrate Herbert Linge's class victory and overall third place in a spectacular Fuhrmann-engined 356 B 2000 GS Carrera GT *Dreikantshaber* (Wedge Blade).

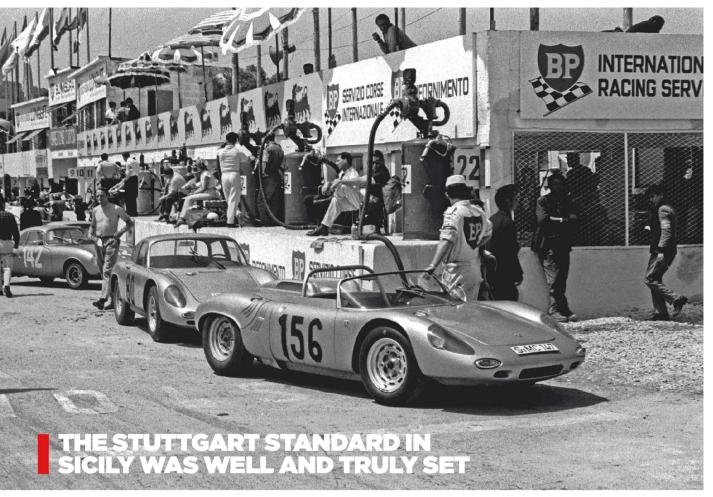
TAKE FIVE

For 1964, the boys from Zuffenhausen achieved their fifth Florio flourish with the beautiful 904 Carrera GTS. Porsche had spent much of the previous year dabbling in F1, but the 904's success at the hands and feet of Brit, Colin Davis, and his Italian co-driver, Antonio Pucci, beat rivals into submission by rising above the efforts of eight other 904s, including the sixth-place eight-cylinder prototype driven by Barth, Maglioli and Bonnier.

Once again, success in Sicily was earned by the speed demons from Stuttgart in 1966. The new, bubble-cockpitted 906 Carrera 6 was sired from the 904 and designed under the watch of new Porsche research and development chief, Ferdinand Piëch. Unlike the ladder-framed, plastic-bodied 904, the 906's unstressed fibreglass shell hid a tubular spaceframe, more often than not allied to a 220bhp six-cylinder

Above The 906 at the 1970 Targa Florio, the 917 KH Coupe at the same event, the 908/02 Spyder KH 'Flunder' close behind and the 1973 911 RSR

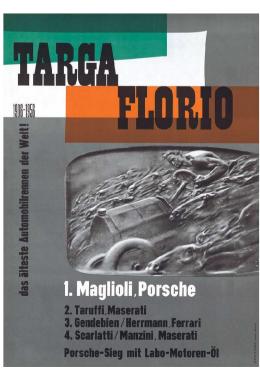




901/20 engine. Built for the 1966 World Championship of Makes, the privateer Swiss Ecurie Filipinette 906 piloted by Willy Mairesse and Hubert Muller screamed across the finish before any of Porsche's factory cars!

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

By this point in time, the Stuttgart standard in Sicily was well and truly set. Even so, 'Quick Vic' could only manage a second place finish in the 908/02 in 1969, but the same model campaigned by Gerhard Mitter and Udo Schutz claimed the spoils with a time of 6:07:45s, setting a new course record. Furthermore, there were no fewer than four Porsche cars in the top ten, including a 908/02 in first, second, third and fourth place. Amazing!



Above The 718 preparing for action at the 1963 Targa Florio



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

Siffert and Redman's 908/03 was engulfed in flames following an accident in the 1971 Targa Florio. The car was a total loss as a consequence of severe fire damage. The pair's bad luck was compounded by Rodriguez suffering a crash in Porsche's second car. Gerard Larrousse and Elford completed the race, although their thirtyninth place finish was less than desirable.

Feeling hard done by, Porsche didn't field cars for the overall win in 1972, although a staggering twenty-seven Stuttgart-crested cars were entered by privateers – nineteen 911s and a duo of angry 914/6s!





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

NEXT GENERATION

Thanks to its instantly recognisable spoiler, the 315bhp Nobert Singer-engineered RSR was visually similar to the 911 Carrera RS production car, but wider wings, a much bigger track width, 917 suspension and matching brakes armed the *Neunelfer* in readiness for its triumphant win. Interestingly, one key difference between the parts applied to bodywork for road and race was the RSR's 'Mary Stuart' rubber wing extensions, items which extended the ducktail over the rear wheel arches. Rounded and upright, the nickname referenced the sixteenth-century Scottish queen's collars!

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







Although a historic Targa Florio is staged today, the 1977 event was the last official Targa Florio. In retrospect, it's easy to see why: taking place on public roads with practically no safety features - unless you count straw bales at some of the turns as adequate protection for unruly spectators positioning themselves directly in the line of drivers travelling at high speed - the event attracted evermore powerful cars posing constantly increasing risk to life. That said, it's amazing to think only nine people (including spectators) died at the Targa Florio during its 71-year history. This pales when compared to the Mille Miglia, where fifty-six people lost their lives over a thirty year period.

When it comes to achievements in motorsport, despite being most commonly associated with its record-breaking number of

wins at Le Mans, Porsche remains the Targa Florio's most successful manufacturer thanks to eleven overall victories. It's a race which inspired the name of a perennially popular automotive body style (read all about it by checking out our article examining the history of Targa Porsches in the July 2017 issue of Ultimate Porsche, which can be ordered at bit.ly/issuesup), and one which continues to mesmerise thanks to eye-popping footage regularly being unearthed and finding its way onto YouTube. Go fire up t'internet and marvel at the Targa Florio!

PORSCHE'S **ELEVEN OVFRALL** TARGA FLORIO **VICTORIES**

550 A RS Spyder Umberto Maglioli

1959

718 RSK Spyder Edgar Barth and Wolfgang Seidel

718 RS 60 Spyder Joakim Bonnier and

1963

718 GTR Joakim Bonnier and Carlo Abate

1964

904 Carrera GTS

1966 906 Carrera 6 Willy Mairesse/ Herbert Müller

1967

910/8

Vic Elford/Umberto Maglioli

1969 908/02 Spyder Gerhard Mitter and Udo Schutz

1970

908/03 Jo Siffert and Brian Redman

911 Carrera RSR



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SEEING RED

Retro Restorer treats the *Ultimate Porsche* 944 Turbo to a fresh coat of colour

WORDS & PHOTOGRAPHY Dan Furr

et me guess. You're wondering if the gorgeous Guards Red 944 Turbo on the pages before you can really be the same tired transaxle I dragged out of a hedge little more than a year ago. Well, dear reader, I'm delighted to confirm you're looking at the very same car, even though at first glance it's difficult to believe the glossy red Porsche which rolled out of the paint booth of 924, 944, 968 and 928 maintenance, restoration and modification specialist, Retro Restorer, is the same Turbo I first saw covered in green muck (and subsequently showcased in the October 2017 edition of *Ultimate Porsche*) after it was abandoned in its previous owner's garden for many years. Sheesh!

CUTTING CREW

In my last project update, I reported on the ol' girl's time being prepared for paint following extensive metalwork. After I left the Retro Restorer workshop, the car was subjected to three layers of base colour and four coats of lacquer before careful flatting, with 3M sanding discs and cutting compounds ranging from 1200 all the way up to 6000 grit used to achieve a mirror-like shine. I was promptly invited back to Retro Restorer's Banbury base for the big reveal, whereupon the company's head honcho, Nash Hunter, pulled back the protective sheet covering the reborn shell.

I was astounded. The depth of colour and stunning gloss of the finish left me

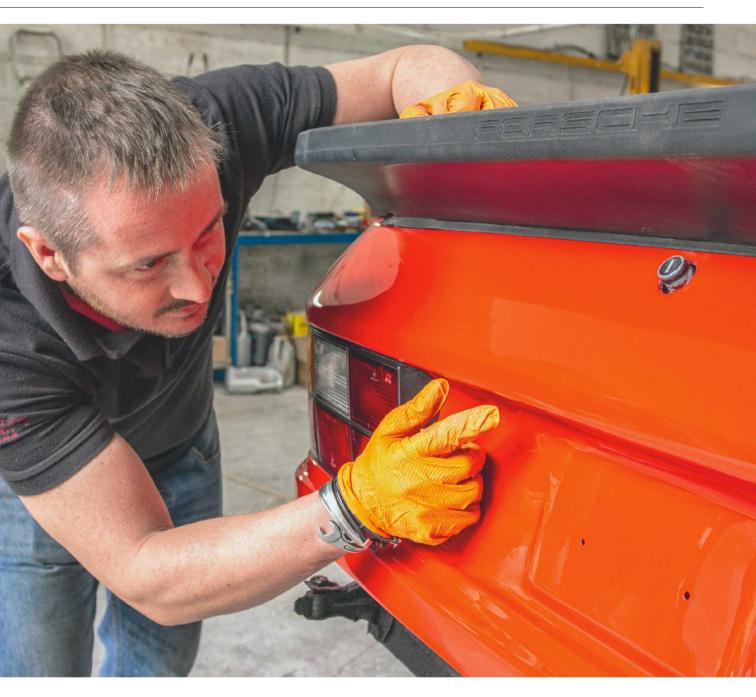


















Above Nash points out just one of the many areas of the car's body which has been replaced with fresh metal





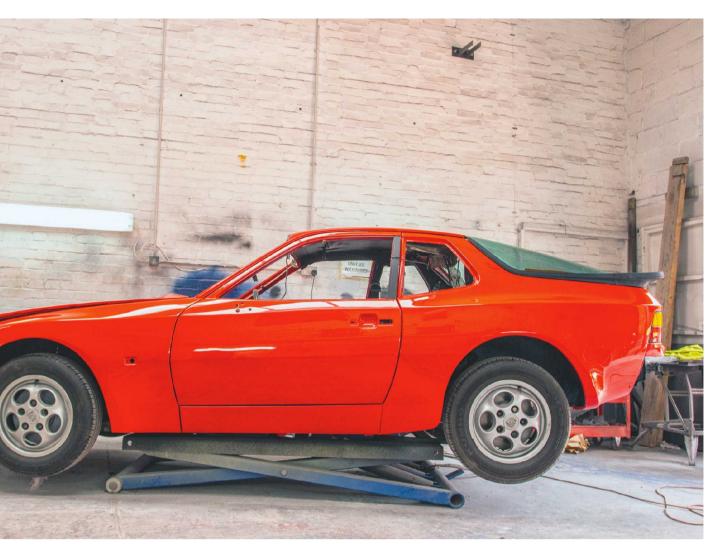






Left middle Original Turbo badge will continue to be used

Left Stripped interior is due to be filled with a MOMO steering wheel and a retrim carried out by the guys at Awesome



awestruck, and that's before final stages of polishing, underseal and paint protection has taken place! The Retro Restorer team has done a fantastic job. Put it this way, I'm pleased to have been able to document every stage of the project in these pages because there's little chance interested parties will be able to comprehend just how bad the condition of the car was after they catch sight of the fantastically finished exterior without prior knowledge of the huge effort which has gone into achieving it!

STRAIGHT AND NARROW

There is, of course, still work to be done elsewhere on the car. A new windscreen, GAZ GHA coilovers, Powerflex polyurethane bushes, a Quaife limited-slip differential and various engine components still need to be installed. Replacement body trim and window seals will be applied, plus the car needs to be fitted with its Toyo-wrapped sixteen-inch staggered Teledials (as restored by the guys at The



Left Nash in full 'you'd never know this bit was rotten' mode at Retro Restorer's workshop





Wheel Genie in Huntingdon). The rims you see attached to the water-cooled wonder in the pictures displayed here are thin fifteen-inch Teledials borrowed from a 924 in order for my car to be wheeled around the Retro Restorer workshop. Yep, they don't 'alf look daft tucked inside the muscular quarters of a 944!

You may remember the difficulty I had in removing the car's wheels prior to their restoration. Badly damaged Tesco-spec wheel nuts refused to play ball. Recognising the need for new nuts (ooh, matron!), I contacted independent Porsche parts specialist, Design 911, with a request for a fresh set complete with locking nuts. They arrived just as we were about to go to print, which is precisely when automotive interior restoration outfit, Awesome, started work on revitalising the car's dashboard in advance of it being delivered to Nash for installation. Thereafter, the car will be taken to Awesome's Cambridgeshire workshop for a full retrim. More about the interior work will follow in a forthcoming project update. Suffice to **UP** say, exciting times lay ahead!









THANKS

Retro Restorer

01295 477108 www.retrorestorer.co.uk Instagram: retro_restorer

Design 911

01277 283443 www.design911.co.uk Instagram: design911uk

Wheel Genie

01480 414905 www.wheelgenie.co.uk Instagram: thewheelgenie

Awesome

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Above Restored staggered Teledials and their Toyo tyres wait patiently to be fitted

Left New wheels nuts from Design 911 replace chewed up and mismatched parts

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LOOK, DON'T TOUCH!

Equipped with Sportomatic transmission and a soft-window Targa roof, Alan Grant's 1968 911S tells part of the Porsche story in a new exhibition



rushed steel sparks its nude, flattered shine, hooping high over gentle curves of Bahama Yellow butterscotch. Down below, dashes of rubber and filigree chrome slice the body sharp, while an intriguing black vinyl bump oozes out towards the rear arches. Polished Fuchs alloys punctuate the corners. Here at the world-famous Petersen Automotive Museum in Los Angeles, there are rear-engined haunches, foot-wide slicks and iconic race liveries everywhere you care to look, but this is the car we've come to see: a 1968 911S soft-window Targa with a Sportomatic transmission.

The Porsche Effect is the name of the exhibition being hosted at the automotive heaven petrolheads everywhere should visit at least once in their life. Set to drop jaws until

April 2019, the display explores the mythos and history of the Porsche brand through fifty vehicles and countless historical documents, some never before seen in public. Quality characterises the collection, which begins with a 1939 Type 64 and a facsimile of the first production 356 before ranging through everything from a Paris-Dakar 959 and the 928 H50 shooting brake concept. Exploring the manufacturer's interaction with international markets, the 1968 Targa pictured here crowns the exciting 'Zuffenhausen and Beyond' section of the exhibit.

"The car is unique," says Brittanie Kinch, the Petersen's guest curator. "To the best of my knowledge, it's one of two which exists in this exact specification, but the only one of the pair in working order. It was the most difficult vehicle for us to find for the exhibition!"









After months of searching, Brittanie's team liaised with Porsche Club of America to publicise their hunt. Feedback was instant, with dozens of enthusiasts offering their 911s for display in the exhibition, yet not one of the cars presented had the desired combination of 160bhp S-spec engine, Targa roof, soft rear window and Sportomatic transmission. Then, one morning, a surprise email arrived in Brittanie's inbox. The sender had heard about her search for an early, semi-automatic Targa and, by chance, knew of a car which exactly matched what she was looking for. The car's location? Los Angeles. "I know, right?!" she laughs. "We search all over the world and the 911 we're after is right under our noses!"

A short while later, Brittanie was speaking with the car's owner. The voice on the other end of the telephone was architect, Alan Grant. Over the years, he's owned a wide range of classic, including two MGs, a Jaguar E-Type and a 1967 Ford Mustang fastback, but it's the 911 that's stolen his heart; before acquiring the Targa, the passionate home restorer rebuilt a poorly 1979 911T. He's currently in the middle of a 1973 911S restoration. "It wasn't until I got into Porsche I realised how different these cars are to the output of all other manufacturers," he smiles.

When asked about his initial encounter with the Petersen, he tells us he thought he was on the receiving end of a wind-up. "I knew my car was unusual, but I didn't know it was as rare as it is. As soon as I was convinced of the legitimacy of the invitation to include the car as part of *The Porsche Effect*, I told the museum



to keep the car for as long as required." Luckily, Alan is every bit as passionate about automotive museums as he is about classic Porsches. Indeed, his firm designed the LeMay in Arizona and recently drafted a potential extension to the Barber Motorsport Museum in Alabama.

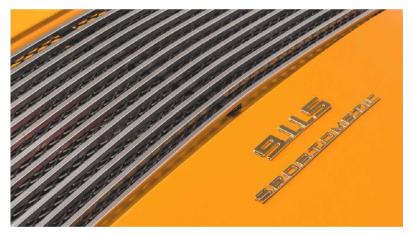
MARITAL BLISS

"There are certain cars I think should be stored as items of historical interest," he muses. "My 911S is one of those cars. I'd love to find a museum which would be prepared to take it for the long term." Four years ago, however, his intentions were very different. "It's a funny story," he laughs. "I enjoy going crazy on these cars, but my wife, Lisa, has always thought it an odd habit. In 2014, as a guy's way of getting his wife involved, I asked her what she'd like to drive and promptly started the search for a Porsche to match her answer."

Lisa requested a convertible with automatic transmission. Cunningly, Alan decided to find



Left The Targa name was first used by Porsche in 1966 and remains one of the company's registered trademarks



a 911 drop-top built in the year of her birth. A Canadian acquaintance soon uncovered a suitable candidate. Stuffed in the back of a filthy garage, housing a family of rats and suffering from years of neglect, the air-cooled classic sounded far from perfect, but Alan was intrigued enough to make an appointment to see the rear-engined import for himself.

"This wasn't what you'd think of as being a romantic barn find," he smirks. "The car was in a place not too dissimilar from the locations seen in the film, *Deliverance*!" Thanks to prior experience with Porsches in need of restoration, he swiftly verified the neglected 911's serial number and located the soft-top attachment points beneath the late-spec glass roof. Satisfied of the overall specification, he bought the car and shipped it home.



Contact sport

triggers a pneumatic valve, pushing the clutch out for the duration of the shift. The gear then changes selection, The clutch is re-engaged when he or she lets go of the lever. Much like a traditional automatic gearbox, the system also features a not helped by the accidental brushing of the gear lever causing many Sportomatic Porsches found themselves being coverted to run a manual gearbox. Today, however, interest in the of enthusiasts to actively retrofit the kit to their classic

When the restoration began, he fast became acquainted with the car's peculiarities. "As a 911 for the 1968 model year, it sits in the transition between the very early cars and the long-wheelbase 911 introduced in 1969. A huge amount was changed after 1967. Even the door panels are unique to the 1968 model!"

The challenge was compounded by the car's early history; unsure whether the 160bhp flat-six would pass newly instituted American emissions testing laws, Porsche refrained from selling the 1968 911S in the USA. "I remember looking for parts and people would tell me I was mistaken in thinking I owned a 1968 car. The hardest part, however, was trying to source spares for the Sportomatic transmission. They were nowhere to be found!"

At the rear, Alan's Targa displays another quirk of its early European life. Delivered new to Italy, the car features almost clear taillights, a striking attempt to comply with proposed safety regulation update unique to the Mediterranean nation. Unsurprisingly, in twenty-first century California, he struggled to find like-for-like replacements. "Nobody seems to sell them. In the end, I found a specialist who could take a completely clear lens and match the tone of the red section with the original Italian units."

The engine and transmission also required lateral thinking to achieve perfection. Porsche itself provided schematics for the camshafts,



which are unique to the semi-automatic S. The supply of this information allowed Alan to get replacements fabricated locally. "They work perfectly," he beams. "It cost \$2,500 for both cams, but they're zeroed out exactly." Parts for the Sportomatic 'box presented a greater challenge; Alan bought a selection of different vacuum hoses in order to identify one which contained a rubber linkage strong enough to create an effective seal and resolve frustrating gear shifting issues. It was a chance find in Germany which delivered the goods, saving him from a \$20,000 bill to have hoses custom made.

This close attention to detail characterises every corner of the car. The body benefits from a bare metal respray in its original colour, while the electrics were entirely replaced and matched to the factory wiring codes. The optional Webasto heater was rebuilt and replated. "I even did the bits you can't see, but then reasoned I wasn't happy with my handiwork, ripped everything out and started over," sighs Alan. "On the plus side, this kind of therapy is a lot cheaper than going to a shrink!"

TEASED OUT

Just one week before the car was due to land at the Petersen, the restoration was complete. Alan reveals he got the opportunity to drive his beautiful 911 once around the block before it was being ferried away for its starring role in The Porsche Effect. He's visited the exhibition several times and is impressed with what he's seen. "The organisers have done a brilliant job of not catering entirely to the Porsche gearhead. It's a diverse collection of cars which will appeal to those who don't consider themselves to be marque enthusiasts." Brittanie is equally impressed. "It's a fantastic collection, and we're thrilled to have Alan's Targa on display. In many respects, it's the perfect Porsche for American driving, especially if you're lucky enough to spend time motoring along the Pacific Coast Highway or Mulholland Drive. This Bahama Yellow 911 is automotive nirvana!"



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- 1975 911 2.7 Carrera, LHD, viper green met
- 1975 911 Rally car, LHD, white
- 1976 911 3.0 Turbo, LHd, bronze / tan
- 1987 911 3.2 Carrera Targa, RHD, Maurve met
- 1994 964 3.6 Turbo, LHD, blue / black



FOR SALE

- 1958 Porsche Junior Tractor, mid, red / rust
- 1959 Porsche Junior Tractor, mid, red / rust
- 1961 Porsche Junior Tractor, mid, red / rust
- 1965 912 Coupe, LHD, white / black

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ENGINE REPAIR SPECIALISTS





Baz Hart



Who are you and what do you do?

I'm Barry 'Baz' Hart, managing director at independent Porsche specialist, Hartech.

When was the company established?

The business started trading in 1984. I'd forged a reputation for designing and manufacturing motorcycle racing engines, gearboxes and complete bikes. Some of these machines achieved great things, including being fastest through the speed trap in the 500cc class of the Isle of Man TT, winning the 350cc and 750cc TT sidecar classes and the North West 200 (Britain's fastest road race). These accolades led me to design and build the famous sports bike from the 1980 movie, Silver Dream Racer, starring David Essex and Beau Bridges. I then joined Armstrong Motorcycles as the director of engine development. During this time, I was part of a team responsible for building the first carbonfibre framed racer. We competed at MotoGP level and won several championships.

What was the secret to your winning ways?

I understood once you spread the number of gears and gear ratios between the minimum and maximum speeds a racing bike is likely to cover, the fastest engine will be the one which develops the maximum torque between the revs you change to in each gear (as opposed to the maximum bhp you can achieve at higher revs).

What prompted you to make the switch from two wheels to four?

When I became disenchanted with corporate

Above The Hartech team's engines enjoy regular success at the racing circuit

Top right Baz with the *Silver Dream Racer* bike he built and the film's stars, Cristina Raines and David Essex

management, I chose to establish Hartech as a specialist sports car business, making full use of the principles of engine design and tuning



which served me so well when I was working with performance motorbikes.

Why focus on Porsche cars?

I bought an MOT-failed 356 in 1969 and a 911T a few years later. I've always admired Porsche engineering and design, but it was clear to me there was a requirement for a reliable, competitively priced and highly qualified independent Porsche engine specialist.

How did you establish Hartech as an industry leading M96/7 engine tuner?

We were the first to introduce an attractive monthly-paid maintenance plan. This was almost two decades ago, when we started to see a high number of customers with failed Boxster and 996 engines visiting our workshop. We were able to repair and modify these powerplants at sensible cost using technical engineering similar to what I'd deployed when building successful racing bikes. For example, we replaced troublesome cylinder bores with Nikasil-plated alloy cylinders similar to two-stroke racing cylinders. From our precision machine shop, my team rebuilds an average of four engines a week and has fitted more than 3,000 Nikasil-plated cylinders without report of failure. By developing 3.7-litre versions of the 3.2-litre Boxster S and 3.4-litre 996 engines, and by increasing displacement of the 3.6-litre 996/7, 3.8-litre 997 and 3.4-litre Cayman S engines to 3.9-litres, we've recently re-kindled the theory that a wider spread of torque is more beneficial than raising revs and peak bhp!

Tell us about your recent racing success.

Hartech engines have achieved three Class 1 victories in the Porsche Club Championship (including the last two Class 1 title battles) and a Class 2 win. Pleasingly, the top three in this year's competition were all making use of Hartech powerplants! Our engines have also raced to the top spot in the BRSCC Porsche Championship.

What's next for Hartech?

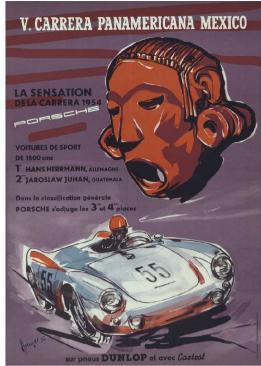
Raising the 3.6-litre Gen 2 997 9A1 to four-litres.

Can we follow your adventures online?

Ultimate Porsche readers are invited to visit the Hartech Facebook page and view our website, which can be found at *hartech.org*

Thanks for your time, Baz. It's appreciated!





ARTOF SPEED

Porsche poster designer, Erich Strenger, proved commercial art could be hugely creative without compromising brand identity

> ill climbing, endurance racing, Formula One, Spa, Daytona, Sebring and Le Mans. No matter the series, no matter the venue, Porsche success formed the bread and butter of Erich Strenger's work. As a freelance graphic designer, he produced sales catalogues, automotive handbooks, advertisements and many other printed materials for our favourite manufacturer, shaping the image of Porsche for four decades from his first commission for the company back in 1951. His output was prolific, yet it was the posters he designed commemorating Porsche's motorsport success which he enjoyed producing the most.

Large, colourful and with modern typographic elements, each poster portrayed Porsche's important triumphs at the track. In the early days of the company, racing success was the main contributor to the development of the brand. Sportiness, speed and reliability. These were qualities Porsche had every intention of promoting, and since televisions were not yet commonplace, not to mention the fact Porsche had little money to spend on advertising, the young company had to look at other ways to tell the world about its motoring prowess.

It was decided that after each important victory, Porsche's communications director, Richard von Frankenberg, would commission a new Strenger poster design. These now valuable works of art were displayed in Porsche showrooms and workshops, and soon found their way onto the bedroom walls of young petrolheads. In line with the classic motorsport motto of "a win on Sunday means a sale on Monday", however, the posters had to be imagined, designed, printed and distributed quickly. Indeed, less than twenty-four hours

Above Erich Strenger is credited with shaping the appearance of Porsche in print for almost four decades



PORSCHE

MELDET NEUE ERFOLGE

USA

Palm Beach - Küstenrennen Seriensportwagen bis 1500 ccm

1. Cunningham
mit Porsche 356 Cabriolet

MAROKKO

Internationales Rundstrecken-Rennen von Agadir Klasse 1100 - 2000 ccm

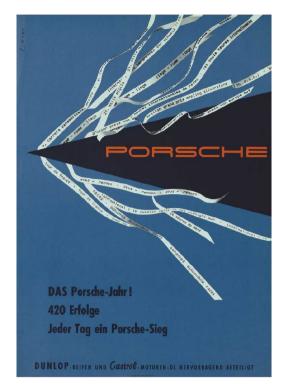
1. Picard (Nizza) auf Porsche 356 Coupé

Ein Sieg gegen ein internationales Feld von 2-Liter-Wagen dank der hervorragenden Straßenlage





PORSCHE STUTTGART-ZUFFENHAUSEN





was afforded to the young Strenger after each race win. Even in today's age of digital printing and distribution, good preparation is key to meeting tight deadlines, so you can imagine the enormous pressure Strenger was under to deliver on time every time.

CUNNING PLAN

In the early days of the young designer's work for Porsche, a common poster template was used time after time to announce the manufacturer's wins. For example, Strenger's first commission for Porsche depicted a 356 coupe with the number 46 down its side. This was the number assigned to one of Porsche's three silver Le Mans cars. The same image (albeit painted red) was used in a second poster promoting the brand's September 1951 world speed record, while a third poster used the same red car with the strapline, Porsche meldet neue erfolge (Porsche reports new successes), alongside a list of more recent results topped by a win for Briggs Cunningham in the 1500cc class at the December 1951 Palm Beach Road Race.

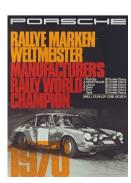


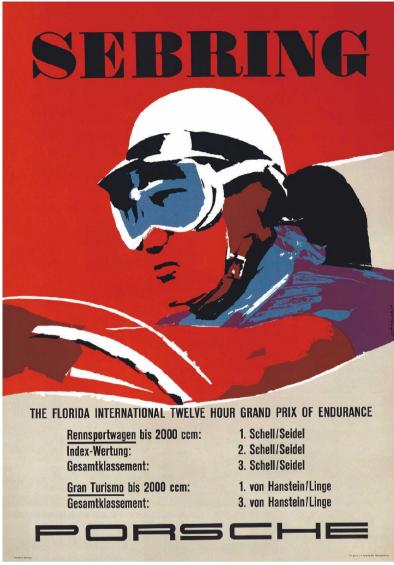




Facing page In 1958, Strenger experimented with bold poster design featuring unnamed drivers instead of depicting pictures of Porsche cars

As time went by, Strenger would produce as much of each poster as he could before the end of the corresponding race. He'd then agree on a draft with von Frankenberg in advance of adding the winning driver and car as soon as the result was known. If there was no archive image of the triumphant Porsche available, a photographer would have a long night pointing, clicking and then preparing slides which had to be ready for viewing the following morning in order for Strenger to finalise and print his powerful posters. From the beginning, he pursued his unmistakable, highly modern style,



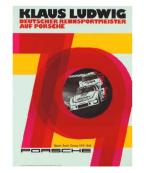


characterised by timeless design language. He often incorporated a country's colours and flags into his posters, playing with shapes, colours and symbols whilst simultaneously trying to find new and innovative ways to use typography to convey message and tone of voice. Strenger also drew his own motifs and often took his camera to the Porsche factory in order to build a rich archive of model photography he could draw upon whenever needed.

Eventually, Strenger's inexhaustible creativity, his meticulous craftsmanship and his love of Porsche led to an appointment as the company's art director, a move which enabled him to co-create the famous customer magazine, *Christophorous*. The title continues to be produced by Porsche to this day, and established Strenger's reputation as a master of corporate publishing.

Away from his desk, he was just as passionate about Porsche as he was when designing one of his striking posters. He bought a red 356 (what else?!) in 1951, and it was this close connection to the brand which







encouraged Member of the Executive Board for Porsche Sales and Marketing, Lars Schmidt, to say "one of the main challenges when working with a graphic designer or creative agency is for the supplier to understand what drives us as a company. We simply don't have this problem with Strenger, who clearly shares our love of Porsche products!"

MODERN CLASSICS

As printing technology evolved, so did Strenger's style and approach to producing posters. In 1958, for example, he chose not to depict a car, but a close-up of a nameless helmeted driver against a sharp red background. Later, as the 1960s drew to a close, his hand-painted pictures made way for an increasing number of photographs taken at the track.

When a management and strategy shakeup was necessary to ensure Porsche's survival towards the end of the 1980s, it was decided that new blood was required to provide a new take on Porsche's appearance in print. Strenger's time at the company came to an end. A new look for the brand's promotional materials and vehicle handbooks was soon underway, affording Strenger the opportunity to retire with his wife to Spain, where the prolific producer of posters could spend the rest of his days painting.

Sadly, Erich Strenger passed away in 1993 at seventy-one years of age. His legacy, however, lives on. Today, he's rightly regarded as the man responsible for influencing and shaping the corporate image of Porsche as we know it. Perhaps more importantly, as the producer of a huge body of print work highly sought after by collectors and fans of exciting and innovative design, his long-lasting legacy shows no sign of losing its popularity.



Porsche people



FESTIVAL OF PORSCHE

The Porsche community landed at Brands Hatch for one of the summer's most eagerly anticipated shows

WORDS Dan Furr PHOTOGRAPHY Rich Pearce













housands of you descended upon a sun-soaked Kent on Sunday 2nd
September to join in the fun at the 2018 Festival of Porsche, which returned to Brands Hatch to coincide with the manufacturer's ongoing seventieth birthday celebrations. Cars ranging from early 356s to the 919 Evolution dazzled, while those of you feeling adventurous took to the world-renowned circuit in Stuttgart-crested machinery spanning pretty much every age and flavour of what Porsche has to offer, from mild to wild. Bravo!

Organised by Porsche Club Great Britain in conjunction with Brands Hatch owner, MotorSport Vision, the gathering presented an extensive collection of vehicles and served to demonstrate the evolution of Porsche's output over the course of the past seven decades, yet there was much more to gawp at than static exhibits documenting the company's history. For a start, crowd-pleasing on-track racing was delivered by the bucketload, not least of all by another round of Porsche Cars Great Britain's fantastic Porsche Classic Restoracing Competition, a series which put Porsche Centres across the UK in charge of their own 986 Boxster S models for restoration in advance of high octane action.

To ensure a level playing field, all cars are built to the same specification, allowing Centre technicians doubling up as drivers to go head-to-head in the fairest way possible regardless of the level of prior experience that may or may not have behind the wheel of a competitive race car. Those who were in attendance

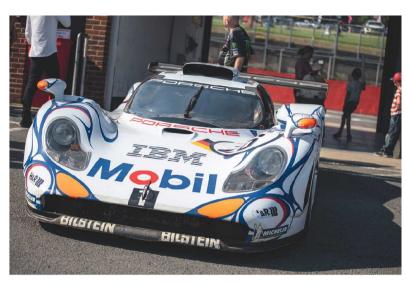
Facing page The 919 Evolution proved to be one of the day's biggest draws, with works driver, Nick Tandy, using the car to smash Brands Hatch's long-standing speed record

Above Porsche brand ambassador and Le Mans hero, Derek Bell, performed many demonstration laps at the event



Porsche people





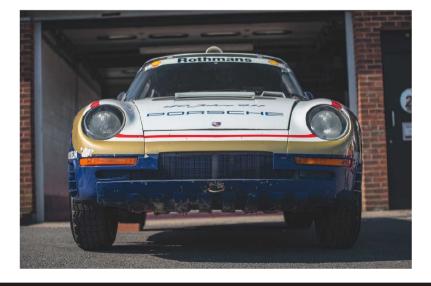




on the sunny summer day will know just how exciting the racing proved to be, with outlandishly liveried 986s bringing a smile to the face of anyone lucky enough to see them hammering their way around the legendary track, which is itself gearing up for seventieth anniversary festivities.

As if Boxsters swapping paint wasn't eyepopping enough, Porsche left spectators in awe with its multiple demonstrations, including runouts for the aforementioned 919 Evolution (driven by Le Mans winner, Nick Tandy), the Carrera GT and the all-conquering Rothmansdecorated 956. The latter was reunited with former Porsche works driver, Derek Bell, a fivetime winner of the 24 Hours of Le Mans.

Bell's wasn't the only famous face spotted in and around the paddock. Fresh off a flight from his adopted hometown of Los Angeles,







Sheffield-born Porschephile and self-styled Urban Outlaw, Magnus Walker, could be seen doing the rounds and taking time out for the trillion selfie snaps he was asked to appear in. At one point, he was even asked to pose for a quickly-penned portrait! There could be no doubt, however, the true stars of the day were the cars, as demonstrated by crowds flocking to see a restored pre-A 356 in race trim and the immaculately presented 718 RS60, the car that brought Porsche a hard-fought win at the 1960 12 Hours of Sebring with factory pilot, Hans Herrmann, at the helm.

SHOW AND SHINE

At every turn, famous Porsches were waiting to be greeted. 924 GTP 002 (read all about this water-cooled 1980 Le Mans chariot by ordering a back issue copy of the August 2017 edition of *Ultimate Porsche* at *bit.ly/issuesup*) was competing for audience attention with the Paris-Dakar 959 originally driven by Jacky Ickx. The Porsche Museum's 911 GT1 (the very car which took outright victory at Le Mans in 1998) and the iconic Salzburg 917K drew a constant stream of admirers, but that's not to say showgoers only had eyes for motorsport metal; the huge number of air-cooled and transaxle road cars brought to Brands Hatch by their proud owners didn't fail to impress.

Above From water-cooled 911s to Boxster 986s, there was no shortage of quick Porsches racing at Brands Hatch

Facing page Magnus Walker was on hand for selfies and, erm, portraits

Even the venue's public car park featured a more impressive collection of sports cars than most event organisers can wish for!

As the big yellow thing in the sky began to set after a day of thrills, it was announced Tandy had smashed the short circuit's record speed by passing Paddock Hill bend at 190mph. An incredible achievement considering the limitations of demonstration tyres, and a fitting end to a brilliant day. See you at the next fabulous Festival of Porsche!









Porsche people

Hitting the track in your classic Porsche can be great fun, but make sure the car's tyres are in good condition. You can, of course, drive your pride and joy on a circuit with regular road tyres, but they won't be designed for your intended application, plus they'll wear far quicker than track-oriented rubber. Tyres from budget manufacturers may not have enough tread left to safety carry you home! Of course, you could invest in a second set of wheels that can be called upon exclusively for track days. Doing this will allow you to explore different tyre compounds and designs for road and circuit use without one application having a negative impact on the other. Most of you will be driving to and from the track, meaning you'll need roadlegal, circuit-friendly tyres. Fortunately, Nankang offers three fantastic options:

NS-2R

Nankang's first road-legal track tyre, designed to perform just as well on the road as it does at the track (regardless of weather conditions). At the time of the NS-2R's launch, most road-legal track tyres were designed for sprinting and speed. The NS-2R filled a gap in the market by giving track day enthusiasts a tyre that offers grip and consistency, plus the ability to get the driver home if it starts hammering down! Subsequently, the NS-2R has been used as a control tyre in a high number of professional racing series, as well as being used in open tyre competitions. Sizes available range from 13-inches to 20-inches.

AR-1

The latest track tyre from Nankang. Proving to be one of the top performing tyres in the marketplace (and aimed at circuit-dwellers who insist on maximum grip and consistency), the AR-1 has proved its worth by achieving multiple podiums across RWD and FWD platforms in various championships, as well as being a control tyre for the BMW M3 Cup. 2018 has been the AR-1's biggest year yet, with many new series (including the 750 Motor Club's 330 Challenge and VW Classic Cup) using the tyre as a control option. Additonally, multiple drivers use the AR-1 in open tyre competitions. Sizes available range from 13-inches to 20-inches.

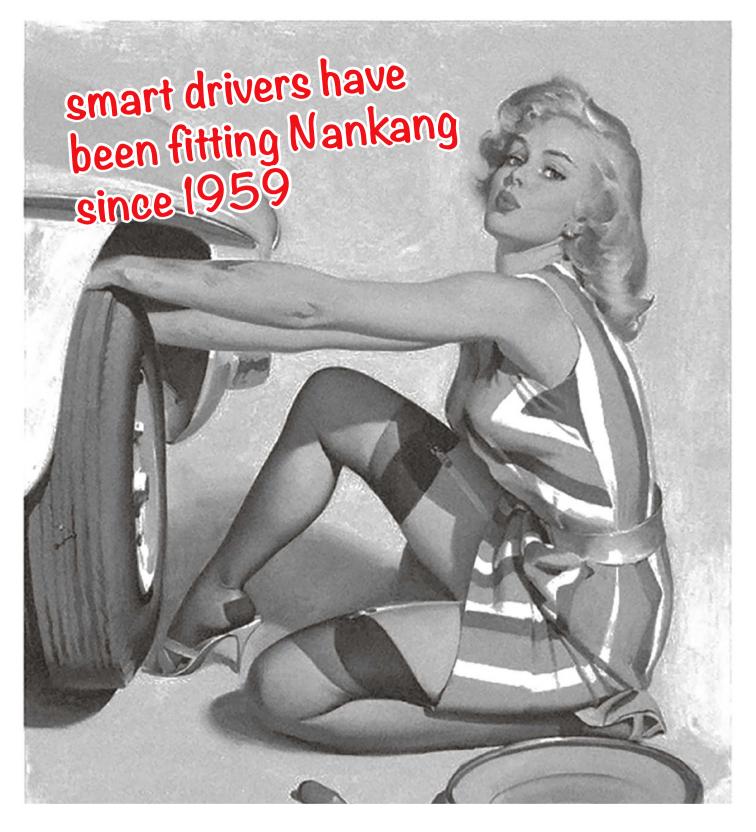
AS-2+

Nankang's latest performance road pattern. Boasting A-rated wet grip, TUV/SUD approval and a rapidly growing size range. With an asymmetric tread design, the AS-2+ offers optimum grip and confidence on the road through varying weather conditions. Sizes range from 16-inches to 22-inches.









Established in 1959, Nankang produce tyres for every season and terrain that come in a truly comprehensive size range that represent exceptional value for money.



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Wendelin Wiedeking

The man many consider responsible for Porsche's survival

WORDS Janet Smith PHOTOGRAPHY Various

endelin Wiedeking. Hero or villain? The answer to that question will probably depend on your view of Porsche's status as a brand held as part of the Volkswagen Group, but the truth is Porsche's current financial fluidity is largely down Weideking's efforts when he served as President and CEO of our favourite car maker from 1993 until his abrupt departure in the summer of 2009.

His professional career started as an assistant in the **Production and Materials** Management department of Porsche back in 1983. The Ahlen-born mechanical engineer was thirty-one years of age and had the bit between his teeth; his famously relentless drive resulted in an invitation to join automotive parts manufacturer, Glyco, before he returned to Porsche as head of production in 1991. By this point in time, the company was in the familiar territory of facing bankruptcy. Yikes!

Sensing the opportunity to implement drastic



In 2005, voices behind closed doors began to mutter; inspired by Porsche's healthy coffers, many in Stuttgart felt the time had come to mount an aggressive takeover of Volkswagwen. With Porsche's controlling Porsche and Piëch families giving the green light, Wiedeking executed a seemingly bulletproof plan of action, but there was a serious and somewhat unexpected problem to contend with: the head of VW's supervisory board, Ferdinand Piech, was worried Wiedeking was becoming too powerful. Consequently, negotiations

His youthful enthusiasm and uncompromising work ethic soon proved his appointment to be a shrewd move

changes designed to turn Porsche's fortunes around, Wiedeking pitched his ideas to the board and was given the prestigious role as the company's CEO in 1993. He was just forty years old, but his youthful enthusiasm and uncompromising work ethic soon proved his appointment to be a shrewd move. He discontinued the

ageing transaxle family of cars, oversaw the arrival of the Boxster and Cayenne, negotiated new deals with trade unions and drastically modernised Porsche's manufacturing facilities. Employment at the Leipzig plant increased, as did Porsche profits.

Helped by the overhaul of the 911 (resulting in the 996 and its successor, the 997), Porsche's stock value rose 1,739 percent. The company was saved in dramatic style! Indeed, in each of his full years as CEO, Wiedeking announced record profits. An amazing achievement considering the fact Porsche showed a loss of 450,000,000 deutschmarks prior to the man with the trademark moustache taking the company's top job!

between the two companies were disastrous, leading VW to mount a counterattack, resulting in the Wolfsburg concern scuppering Wiedeking's financing plans. The end result? Porsche becoming a VW brand and the Porsche Holding Company left carrying the can for ten-billion dollars of debt. Ouch.

Red-faced, Wiedeking was given his marching orders, although a \$50million severance package and his non-fixed salary (paid as 0.9% of Porsche's total earnings) during an extraordinary seventeen-year stint at the top probably softened the blow! He continues to live near Stuttgart with his wife and two children, Isabel and Wendelin Junior.





Buying Boxster 986

Replacing the 924 as the 'go to' entry point to Porsche ownership, the first-gen Boxster can be yours for less than you might think...

WORDS Dan Furr PHOTOGRAPHY John Colley

ntroduced at the back end of 1996, the Boxster 986 started life as a 2.5-litre fun machine powered by a flat-six which gained displacement throughout the model's lengthy eight-year production run; entry level 986s were given a boost to 2.7-litres at the turn of the century, while the Boxster S arrived with its range-topping 3.2-litre beating heart around the same time.

It's unrealistic to expect a car of the 986's vintage will be without niggles, but the good news is the model was built to Porsche's high standards, resulting in a super-reliable roadster. "It's a model with an MOT pass rate of more than 78%, which

is well above average for a car of its age," says 986 expert and Revolution Porsche Specialists boss, Russ Stanley. "Moreover, the most common reasons for test failure are headlamp defects and worn tyres!"

As you may have already guessed, the Boxster name is derived from the words *boxer* and *roadster*, the former referencing the type of engine Porsche decided to install in the 986. It's a solid powerplant, but as you're about to find out, there are still areas of concern to be mindful of when it comes to

your prospective

A comprehensive pre-purchase inspection at Revolution Porsche Specialist's Brighouse workshop will give you a detailed assessment of the car you're thinking about buying, not to mention the cost of any imminent work, but it's sensible to be armed with the knowledge provided across the following pages before you head out to test drive any used Boxster 986.





MILEAGE

Contrary to popular belief, high mileage isn't necessarily cause for complaint when it comes to Boxsters. Providing the car has been properly maintained, there's every chance a 986 that's covered plenty of miles will be in better condition than one which has what you might consider to be an attractively low number displayed on its odometer!

As with most modern cars, coil packs can fail after years of use. Symptoms will present themselves in the form of hesitation or misfiring under load. This is a simple fix and parts are readily available. A faulty mass airflow sensor (MAF) may also result in poor running. In many cases, all that's required is a clean of the sensor (oil and dirt can affect its performance, leading to reduced power). If the part is done for, a replacement will be required. Consult with Revolution Porsche Specialists, though; a number of different MAFs were used during the 986's time in production, and it's essential the right part is installed.







body parts and engine

HISTORY

Porsche's methods of production have always been respected, but with the oldest 986 now getting close to a quarter-century old, it's vital you check to make sure the car you're looking at has been well maintained. Ask to see all documentation supporting claims of servicing, repair work and replacement parts. As is the case with all the classic Porsches we write guides about, ensure all fluids and filters have been changed in accordance with the manufacturer's instructions. Ask what grade and content of oil has been used.

Be wary of unexplained periods of the car being off the road. If in doubt, have a full inspection carried out by an expert, such as those at Revolution Porsche Specialists. Enter the car's details into the DVLA's online vehicle enquiry service. This will result in an MOT

history (including all passes, fails and advisories) as far back as electronic records are stored, as well as proof of mileage at the point of each test.

Invest a couple of quid in an online vehicle history check from mycarcheck.com or similar. You'll get instant confirmation of any outstanding finance, accident history, changes of registration and the number of previous keepers. You'll also be able to tell if the Porsche you're looking at has ever been stolen or had a change of colour.

"Ideally, the Boxster you're looking at will have been maintained by Official Porsche Centres or reputable independent Porsche specialists," says Russ. "If services have been skipped or non-specialist garages have been tasked with jobs, then this may be a sign the car hasn't been properly looked after."



Buying guide

TRANSMISSION

The 986's manual and Tiptronic semi-automatic gearboxes are solid bits of kit, but due to the age of the first-generation Boxster, plus the potential for a high number of miles travelled, you might need to factor in the cost of replacing transmission fluid. Stiff shifting from first to second gear and a heavy clutch are signs of a problem, as is a clicking noise from the rear of the car or a clunking sound when you turn the engine off. Porsche gearbox problems generally go unnoticed until the fault presents itself as serious failure! Prevention is the best form of protection, so check the car's paperwork to determine when a fluid change was last carried out.

"Listen for a deep hum or a hollow sounding echo from the rear of the car during a test drive," requests Russ. "If present, the problem will probably present itself above 40mph. This is a clear indication of rear wheel bearing failure, which is rare on a 986, but not unheard of."



BRAKES

Porsche brakes have a reputation for being some of the best on the market at the time of the host vehicle's original point of sale. Boxster brakes are no exception, and will provide you with effective stopping power, especially when loaded with fresh discs and pads. Cheap braking components won't perform as well as genuine Porsche parts or those offered by respected aftermarket manufacturers, such as EBC Brakes (bit.ly/ebcbrakes). Check to see what items are fitted and whether they'll need replacing any time soon. After all, the 986 is a quick car. You need to be absolutely certain the example you're thinking about buying has adequate stopping distances!

Factory rubber brake hoses deteriorate with age, resulting in a 'spongy' pedal feel. Braided hoses from Goodridge (bit.ly/goodridgeuk) will restore braking efficiency by refusing to flex under load. Pleasingly, thanks to a wide choice of finishes and colours, Goodridge braided brake hoses can be colour-coded to match the look of your car!





ENGINE

All 986s make use of the M96 water-cooled flat-six. This was the first time Porsche had used a water-cooled engine away from the nose of its cars. If you've been looking at online club forums to read up on known issues with early Boxsters, you'll no doubt have read horror stories about cracked liner bores. "The problem is nowhere near as common as scare stories suggest, but unfortunate owners who have experienced this hardship tend to shout loudly because the complaint can lead to catastrophic engine failure and a large repair bill," confirms Russ.

The issue is most commonly associated with pre-2001 986s and can be difficult to spot. The obvious early sign of a problem is emulsified oil, but the engine is tricky to access, meaning the complaint tends to go unnoticed until the car starts to overheat. The only sure-fire way of checking to make sure the Boxster you're thinking about buying remains unaffected is to ask a specialist to carry out a borescope inspection. Doing so may save you more money than the seller's asking price!

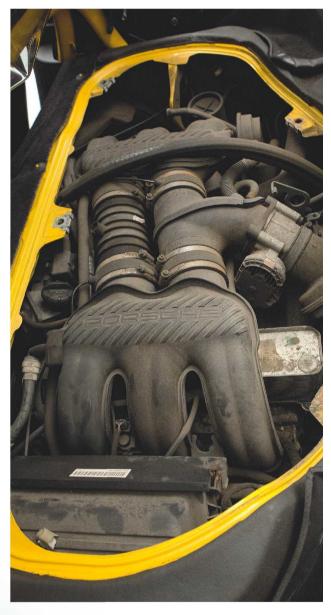
"Another potentially serious issue is worn guides on the VarioCam timing chain tensioner," continues Russ. "Over time, friction from the chain can scrape material from the surface of the guide rails.

Debris then gets into the engine oil and gathers in the filter, reducing lubrication of vital components," he adds, before stressing this is mainly a concern for pre-2002 986s.

The guides are lubricated by engine oil, so it's vital regular servicing is carried out in accordance with manufacturer instruction. The fault isn't something you're likely to detect on a test drive in a car you're unfamiliar with, but an experienced technician should be able to spot the problem during an inspection.

It's sensible to have the chain and tensioners replaced at the same time as one another. Porsche changed the design of the M96's tensioners to a more robust design in 2000. If you're looking at an earlier car, find out if a previous owner has had the tensioners upgraded. If not, factor in the cost of replacement to the price you're prepared to pay for the car being offered.

The rear main oil seal (RMS) is prone to failure on 986 Boxsters, resulting in a slight oil leak. Although a new seal costs just a few pounds, labour charges may be high due to the need to remove the car's gearbox for access. RMS failure is usually restricted to a minor oil leak, so our advice would be to wait until the car needs transmission repair or a replacement clutch before having the work carried out.





COOLING

"One of the 986's design flaws is the placement of its coolant radiators and air-conditioning condensers," sighs Russ. "Not only are these parts susceptible to stone chips, they corrode if the front air intakes get blocked with rotting leaves and dirt. Ensure the ducts are cleaned regularly," he says.

The front bumper has to be removed in order for the radiator to be reached. In truth, few owners can be bothered to carry out the job, which is a shame because enough time passes between service intervals for corrosion to set in. Damaged or corroded radiators and condensers can't be repaired and must be replaced, so be sure to look for evidence of rotting leaves in the front air intakes of the car you're examining, else you may be faced with an expensive fix.







WHEELS & TYRES

Kerbed wheels and worn tyres are a concern when it comes to any car of the 986's age. Fortunately, help is at hand from professional wheel restoration companies, including Wheel Genie (*wheelgenie.co.uk*). As for the black circles, a wide range of tyres to suit all budgets and driving environments are available from Nankang, Falken, Yokohama and Toyo, but we stress this isn't an area you should be scrimping on. Tyres are the only part of your car in contact with the road. Don't take risks by fitting poor quality rubber.

If the tyres on what you hope will be your new car are past their best, look to see if there's uneven wear on the inside edges. It might be difficult to spot, but this condition could be a sign of badly affected alignment. Fresh alignment and laser geometry is the recommended fix, and something we'd recommend after suspension upgrades. Consider the cost on top of new tyres before parting with your hard-earned dosh.

In 2004, the 550 Spyder
Anniversary Edition was released with a limited run of just 1,953 cars. Based on the 986 and painted silver, each of the special Boxsters featured a brown interior, special paint, BOSE audio, 18-inch wheels, M030 suspension and a sports exhaust.

SUSPENSION

Even those of you unfamiliar with the 986 should be able to detect the presence of worn steering components. Listen out for knocks when you travel over bumps, unresponsive steering and a desire for the car to pull to the side out the road without your input.

Suspension work is 'bread and butter' stuff for most Porsche specialists. They'll have seen their fair share of 986s in for replacement or upgraded bushes or dampers. Parts are available from a wide range of OEM and aftermarket suppliers, affording you the opportunity to take advantage of today's technology, but with the potential for additional expense just after you've forked out for your new motor, factor the remedial work for suspected suspension complaints into the agreed sale price.

"Broken coil springs are a common problem, leading to an uneven stance and knocking noises," says Russ. In addition to genuine Porsche parts, you can take advantage of performance suspension upgrades from companies including Eibach, GAZ Shocks, Bilstein, KW Automotive and celebrated polyurethane bush manufacturer, Powerflex. Visit each manufacturer in for further information regarding the availability and choice of specification of parts for Porsches.

revolution

PORSCHE SPECIALISTS

BODY

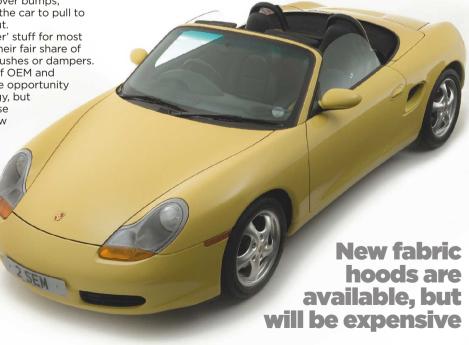
You'll rarely find a Boxster showing signs of bodywork corrosion, but if you are looking at a car displaying nasty rust, consider the likelihood you're looking at a Porsche highlighting poorly repaired accident damage. "Ask for an explanation and check through the vehicle's paperwork for evidence of cosmetic repair," says Russ. "If the car has had multiple owners, the seller might not know the details, but if he or she acknowledges the damage, ask to see invoices outlining the repair work."

Boxsters received a facelift in 2002. The plastic rear window was replaced with glass. A new electromechanical hood and an updated boot lid release mechanism (with an electronic emergency release button located in the glove box) also came into play. Additionally, amber indicators made way for clear parts, while the rear lights ditched orange plastic for smoked lenses. Outside of North America, the same change was applied to the 986's side repeaters and the bumper design was updated.



Make sure you check the condition and operation of the roof. Retract it fully. Problems are usually quick and easy to fix, but can be annoying if you've only discovered them at the point you want to experience al fresco driving! More importantly, look for signs of leaking rainwater around the back seats; the rear roof drains get blocked by leaves and dirt and can cause overflowing muck to settle in the rear cabin.

Replacement hoods are available, but they're expensive. Specialists can repair hood wear and tear, but you'll be surprised at the improvement you can make to faded fabric by applying low-cost restoration treatment products from aftermarket manufacturers, including the canvas experts at Renovo (bit.ly/renovokit).





Buying guide



INTERIOR

986 seats are hard-wearing, but driver's bolsters can show damage on higher-mileage vehicles. Check to make sure the claimed mileage of the car ties in with the condition of its upholstery. Examine carpets, door cards, side panels, the centre console and foot wells for evidence of water ingress. There should be nothing to worry about here, but it's better to be safe than sorry.

Leather repair work has come on leaps and bounds in recent years, meaning that nicks and tears that would have previously required a retrim can now be restored to a high standard without attracting massive cost. You'll still have to empty your purse for a few quid, however, so try to knock a bit of the asking price if you're faced with corrective interior work. Speak to the guys at Cambridgeshire-based automotive upholstery specialist, Awesome (awesome.eu.com), for help with all your interior repair, retrim or restoration requirements.

Press buttons! It's the best way to make sure all electrically-controlled gadgetry works correctly. If in doubt, ask the boys at Revolution Porsche Specialists to have a look as part of a worthwhile pre-purchase inspection.



PRICE

Much like the 924 before it, the 986 Boxster has become arguably the lowest cost route into Porsche ownership. One of the reasons the model is so cheap to buy on the used car market is due to a perceived lack of exclusivity; eclipsing the super-high production volume of the 944, the 986 was the most successful Porsche product from 1996 until the arrival of the Cayenne in 2003. In other words, 986 parts are readily available and there's no shortage of cars to choose from, so don't feel pressured into a purchase. Rest assured, there are plenty of Boxsters waiting for you to take them for a spin! Here's a selection of what we found advertised online:

1997 2.5 TIPTRONIC

Green, black hood, black leather, 108k miles, new radiators and condensers, new fluids and filters, reversing camera, aftermarket wing

£2,750

2002 2.7 MANUAL

Silver, black hood, replacement black leather, new RMS seal, new IMS bearing, new clutch, new belts and water pump, refurbished wheels

£5,250

2001 3.2 MANUAL

Black, black hood, immaculate black leather, one owner from new, full main dealer service history, aftermarket stereo, refurbished wheels

£5.750

CONTACTS

Revolution Porsche Specialists is one of the UK's leading independent specialists in the field of Porsche servicing, maintenance, repair, restoration and modification. Furthermore, the company offers a pre-purchase inspection service to those thinking about buying a used Porsche. Don't hesitate to contact the team using the details below:

Revolution Porsche Specialists Brighouse

Unit 1, Prince of Wales Business Park, Brighouse, HD6 1LQ 01484 717342

Revolution Porsche Specialists Leeds

136 Leeds Road, Birstall, West Yorkshire, WF17 OHH 0113 468 6020

Twitter: @revolution_911 revolution-porsche.co.uk



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on online forums, on the telephone or over email giving sound advice, hints and tips to owning and servicing all Porsche models.

A large percentage of our customers come from far and wide based on word of mouth alone or indeed based on previous enjoyable visits.

- We use the latest Porsche diagnostic equipment.
- We use Porsche recommended oils and OEM parts.
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UpgradesGeometryBodyShop

Join the Revolution call...0113 468 6020 or visit...revolution-porsche.co.uk

Leeds: 136 Leeds Rd, Birstall, West Yorkshire WF17 OHH

Brighouse: Unit 1, Prince of Wales Business Park, Birds Royd Lane, Brighouse, HD6 1LQ



Under the hammer

Hammer time!

From bargains to budget-busters, here's a snapshot of what's been happening in the world's auction rooms since the last issue of *Ultimate Porsche* went to print...

WORDS Dan Furr PHOTOGRAPHY Your mother wouldn't like him



1987 959 KOMFORT

Many of you will consider the realisation of the 959 as being Porsche's finest hour, so you can imagine how upset the owner of this Komfort model was when his super-rare supercar was involved in an unlucky accident on its way to the recent RM Sotheby's Monterey Auction. In short, the trailer carrying the car to market detached from its tow



hitch and made its way for the nearest tree. The force of impact caused the pretty Porsche to break free of its stabilising straps. The car then smacked into the offending tree, resulting in major front end damage. Sheesh! Undeterred, the seller agreed to let his poorly 959 continue to auction as planned, albeit with a vastly reduced asking price. Seeing the potential to own an '80s icon which has covered less than four thousand miles, bidders got busy. Indeed, someone saw potential in the wreck being offered and bagged this smashed-up supercar for far less than the cost of what you'd expect to pay for one in working order. Spanners at the ready?!



1970 911E 2.2

The first of countless upgrades to the original 911 came with the arrival of the more powerful 911S before the launch of the 911T, an entry level *Neunelfer* designed to take the place of the outgoing (and immensely popular) 912. In 1969, the E arrived (a 'middle model' sitting between the S and T), as did the option of Porsche's semi-automatic Sportomatic transmission. The restored 1970 2.2-litre E seen here is a rare right-hand drive example complete with its original Sportomatic gearbox, a bit of kit many owners replaced with a manual cog cruncher. Beautifully presented as part of the eclectic Wayne Pitt Collection offered by Coys at the beginning of the month, the car was pitched with an estimate of £100-120k. Too high?









1963 356 CARRERA 2 GS COUPE

This rare two-litre 356 Carrera 2 GS hard-top is one of the star attractions at the forthcoming Silverstone Auctions Porsche Sale. One of only six right-hand drive examples of the model built, the car has been well used by its former owners – the Bali Blue beauty's odometer shows more than 85k miles covered – and has been meticulously maintained in recent years by marque specialist, Maxed-Page. An engine rebuild was carried out in 2006. Complete with original handbooks and silverware collected at 2012's Salon Privé, the car is offered with an estimate of £550k.





1988 9245

In 1984, VW stopped manufacturing the engine blocks Porsche had been making use of in the 924, leaving the boys in Stuttgart with a dilemma. Dropping the model would remove the presence of an entry level Porsche from the company's product portfolio. The solution was to fit a detuned 2.5-litre 944 lump, resulting in the 924S. The F-reg example presented at Anglia Car Auctions last month is a tad rough around the edges and has seen plenty of action (almost 150k miles covered), but with a good history file and a final sale price of a shade over two and half grand, this Teledial-wearing modern classic was an irresistable bargain for one lucky bidder.





Under the hammer



1989 944 TURBO

Described by auction house, Gooding & Company, as a "time capsule example of Porsche's remarkable 944 Turbo", this tip-top transaxle is highly original thanks to less than 8,400 miles from new. According to the car's paperwork, the original buyer was Muhittin Atil, a chap who placed his order with Manhattan Porsche of Rockville on May 30th 1989. The car was dutifully maintained thereafter, as evidenced by proof of ten services by the time 6,416 miles was reached in June 1995! There's no doubt this is a fantastic classic Porsche, plus it's true to say interest in turbocharged transaxles has seen values rocket in recent years, hence more than seventy large ones being reached before the hammer fell.



1993 964 CARRERA 2 CABRIOLET

Originally owned by Porsche Cars GB, this former manufacturer promotional car was subsequently bought by *Top Gear* and *Grand Tour* presenter, James May, who decided to restyle the interior to an odd combination of pale blue and beige leather. After passing through several hands, the open-topped 964 was sold by Porsche Centre Hatfield in 2012 to the vendor, a 964 nut who fitted OZ Racing wheels and refurbished the car's dark blue canvas hood. A stacked history file verifies the car has been well looked after, although the final sale price at Anglia Car Auctions was far less than many in the room were expecting.







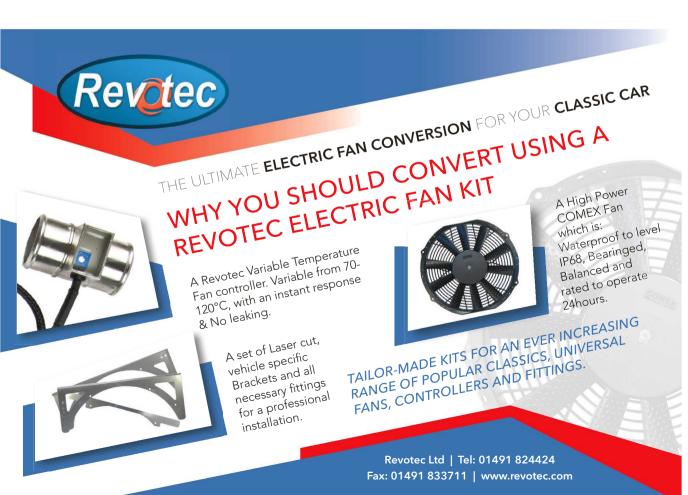


1998 RUF TURBO R LIMITED

We're big fans of RUF cars. Built from unmarked Porsche chassis, they're models to be celebrated in their own right, hence RUF's status as an independent manufacturer (as opposed to being classed as a high-end tuner). The 1987 RUF CTR 'Yellowbird' is well-known as a car which fetches serious money at auction, yet the same is true of less recoginsed RUFs, such as this

993-based Turbo R. Manufactured after the discontinuation of the 580bhp CTR2 (as featured in this issue), the Turbo R became RUF's top shelf supercar offering during a low volume production run lasting just one year. The Irish Green Turbo R Limited offered at RM Sotheby's recent Monterey Auction didn't fail to live up to expectation, with bids edging squarely towards the million mark.





NEXT ISSUE On sale Friday 23rd November



CALIFORNIA GLEAMING

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Plus

- ONE MAN AND HIS TRANSAXLES
- THE PORSCHE SALE 2018
- RUF AND READY 911 CARRERA 3.2
- THE LATEST 944 TURBO PROJECT NEWS

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