

Star quality

Text by Chris Horton; photography by Antony Fraser

For many years the RS derivative was viewed as just another 964-model Carrera: a worthy trackday car, perhaps, but nothing really *that* special. Suddenly, though, the penny dropped, and now the really good ones are beginning to fetch serious money. This buyers' guide will help you find one before it's too late

Sometimes you just know that you're seeing history in the making. The 1966 World Cup final; the first moon landings in 1969; the 1982 Falklands war; the funeral of the Princess of Wales in 1997; even the original 1985 Live Aid concert. All were not only significant and highly memorable in their own right, but also moments that genuinely and unequivocally defined an entire era.

On other occasions events that turn out to be significant slip by almost unnoticed. Like the 1991 launch of the 964-model 911 Carrera RS. With hindsight it's tempting to suggest that it wouldn't – or shouldn't – have taken a genius to spot its huge potential. But the plain truth is that most of us missed the boat, big time.

Back then many of us had more pressing matters on our minds, of course. Like – here in Britain, anyway – mortgage rates heading for 15 per cent, and the kind of associated recession that made owning a brand-new Porsche of any description – and certainly a stripped-out neo-racer that cost considerably more than the

standard Carrera 2 or Carrera 4 – seem an insanely extravagant indulgence.

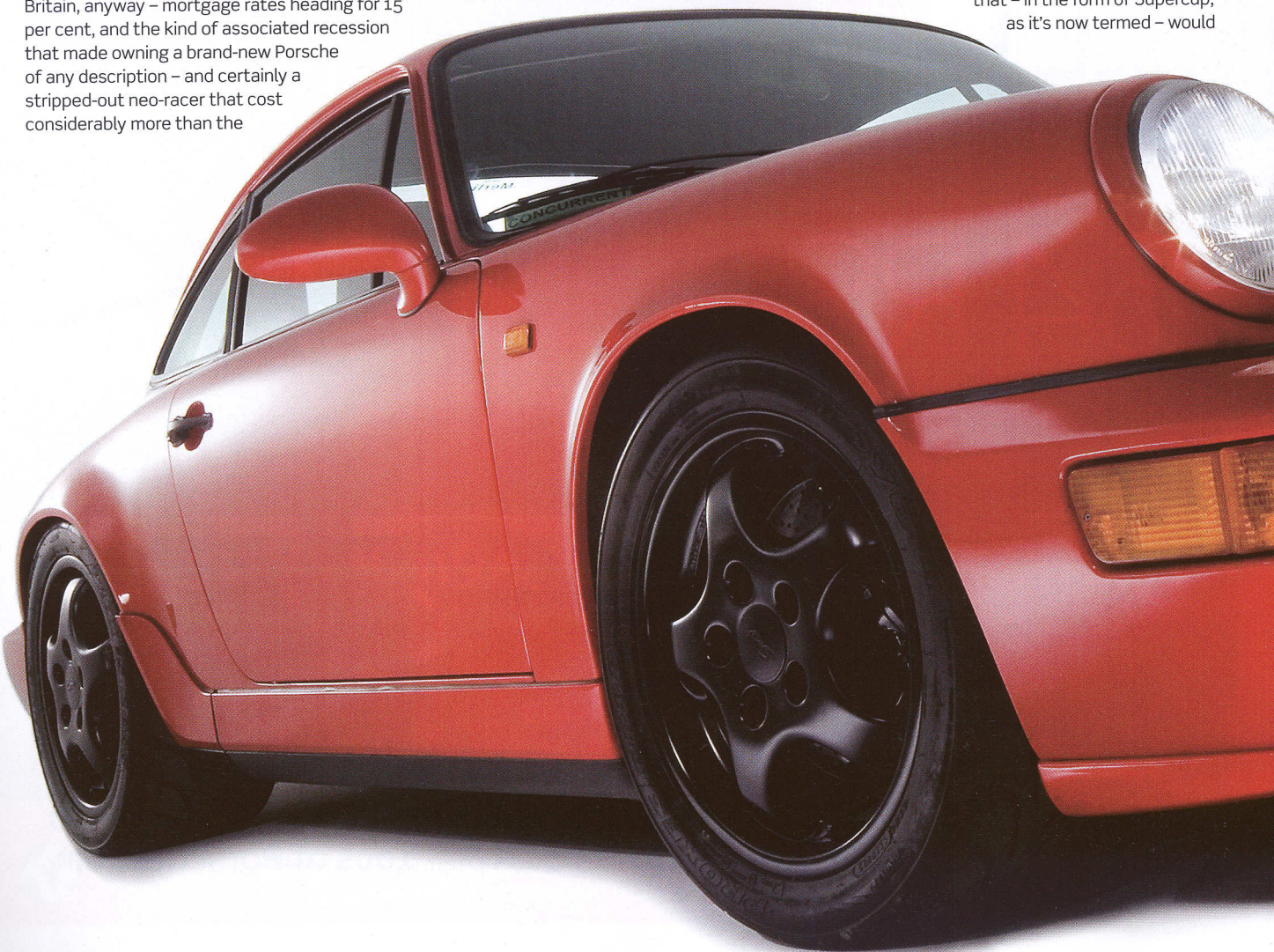
Rather less understandably, though, we resolutely continued to miss the boat until well into the new millennium. Ten years ago this writer, as the then newish editor of this title, seriously considered buying a left-hand-drive 964 RS Sport for around £20,000. It would have represented a huge investment for me, I would have worried about the thing every time I parked it somewhere, and I would have had to sell it when the house needed a new central-heating system. But it would have been possible. Just.

Today, though, having foregone that opportunity, I might as well set my sights on a Carrera GT. The same RS that I was offered back in 1997, wherever it might be, is now worth probably £35,000. And the equivalent right-

hand-drive car, that back then I might well have bought for around £23,000, is today almost certainly well into the £40K bracket.

You might think that we're overstating the case, but Robert Lancaster-Gaye, the fortunate owner of the car shown here, has recently – and very sensibly, we think, because he would then be denied what has finally come to be regarded as one of the purest driving experiences known to man – turned down £50,000 for it. Twice. It's not difficult to see why the notion of time travel should remain such an enduringly popular theme throughout science fiction.

The 964 RS was, of course, a homologation special. It can trace its origins back as far as 1986, when Porsche launched a racing series known as the 944 Turbo Cup. In fact, it was the start of a single-model Porsche racing series that – in the form of Supercup, as it's now termed – would



last right up to the present day.

By 1990 the series' name had changed to Carrera Cup, and the car from a specialised 944 Turbo to a no less specialised competition version of the then new 964-model 911 Carrera 3.6. The first batch of Carrera Cup 911s, as they were known at the time, was built in early 1990. But the series was to be production-based, and so the Porsche engineers' primary objective was simply to lighten the by now relatively heavy Carrera 2, at the same time retaining as much as possible of the standard engine and gearbox.

Indeed, the 3.6-litre flat-six was unmodified, beyond the use of a lightweight flywheel instead of the production car's ingenious but at that time increasingly troublesome dual-mass affair. Even so, careful selection of engines from the production line at Zuffenhausen typically gave a maximum power of 270bhp, a good 20bhp up on the standard 911 Carrera 2. The five-speed G50 gearbox was essentially the same as the production car's, too, albeit with a limited-slip differential as standard.

In order to lighten the car, meanwhile, Porsche removed many of the usual fixtures from inside it; even the wiring loom was pared by a claimed 6kg. The doors were lightweight aluminium items, and there was both thinner glass (3.0mm thick rather than the standard 4.7mm) and an aluminium lid for the front compartment. The driver sat in a Recaro race seat, and was secured by a Schroth four-point harness. There was no sound-deadening material or interior trim. The bodies themselves were seam-welded, and had integral aluminium roll-cages by Matter.

The suspension bushes were stiffened, and the ride height was lowered by 60mm, this requiring the wheelarch edges to be 'rolled', as it's termed, to prevent the tyres touching the metal. The stiffness of the coil springs was increased, and the cars ran on harder Bilstein dampers. The anti-roll bars were stiffer, too.

Porsche had been working with Italian brake manufacturer Brembo for many years, and the Carrera Cup 964s adopted that company's four-piston light-alloy calipers front and rear (the standard Carrera 2 followed suit for 1992). And instead of the production Carreras' conventional vacuum servo the Cup cars used a hydraulically boosted braking system.

Using these 911s in the Carrera Cup proved to be a big success, with many drivers from outside the series seeking a version they could use in the wider motorsport arena. Porsche was quick to respond, and a limited-edition Carrera RS, as it was known, appeared at the Geneva motor show in March 1991, with deliveries of 1992-model production cars beginning the following autumn. And immediately no fewer than four different versions were offered.

The starting point was the Sport model, marketed as the Lightweight by Porsche Cars GB, and so generally known thus here in Britain. It was designed for both road use and club competition. The only departures from the original Cup specification were lightweight carpets, and a pair of only slightly more comfortable Recaro front seats. Ride height was also more conservative, at 40mm lower than the standard Carrera 2. But just about everything else about it was as unforgiving as in the racing car, and it retains a reputation –



Did ever a 964-model 911 Carrera look this good? Lowered suspension and fat, Cup Design 91 magnesium wheels - themselves worth perhaps £5000 per set of four - give the RS Sport the unmistakable stance of a genuine track car. Note 'teardrop' mirrors - manually operated, of course - and after-market intake ducts to help cool the front brakes

NAME, RANK AND NUMBER

One of the best ways of distinguishing a genuine RS from either a 'standard' 964 or a lookalike (or even a deliberate fake) is to check its Vehicle Identification Number.

This should in all cases be stamped on an aluminium plate riveted to the right-hand inner wing inside the front compartment. It should also be printed on the registration document(s). Likewise the engine number, on the right-hand side of the cooling fan's mounting pillar, and once again on the registration document. Be suspicious if there are any discrepancies, or signs of the plate and/or stamped-on number being altered.

Essentially you're looking for a figure '9' as the 13th character of the VIN – and also the letter 'N' as the 10th character, this showing that the car was built for the 1992 model year. The equivalent Carrera 2 would have the letter 'N' as the 10th character (for 1992 again), but also the figure '0' as both the 13th character of the VIN and the fourth character of the engine number. A typical RS chassis number might thus be WPOZZZ96ZNS490071, with the engine number starting 62N8 (and followed by a further four digits). As far as the engine number is concerned it's that figure '8' that's the important bit.

But the VIN alone will not reveal the precise specification to which a given RS was built. This will be indicated only by the option code found on the Vehicle Identification Label stuck to the underside of the front lid. M002 will show it to be a rarer Touring model (by far the majority of RSs were Sports, also known colloquially as Lightweights), and M003 (see below) the now rarer still Competition or Club Sport model.

The M001 option code was for the race-specification Carrera Cup cars that were homologated by the subsequent construction of the road-legal Sport, Touring and Club Sport. The first batch was built for the 1991 season with chassis numbers in the range WPOZZZ96ZMS0900 to 09120, and engine numbers in the range from 62M20001 to 62M20120. The second batch followed for the 1992 season, with VINs in the range from WPOZZZ96ZNS498001 to 498113.

The RS America, meanwhile (see page 91), has a completely different style of VIN. Here the crucial elements are first the letters and number ('AB2') in the place of the familiar 'ZZZ' of the RoW cars, and then the letter 'P' as the ninth character and thus the model-year identifier (1993, and this in spite of the fact that a number of RS Americas were built and sold during the 1992 model year...). RS America engines, the same as in the common-or-garden Carrera 2 and C4, are numbered in the same way as those standard cars' power units: from 62N (for that first batch of 1992/93 cars), and then from 62P (for the 1993-model cars proper).

The small number of 1993-model 3.8 RS cars built (page 91 again) have VINs in the range from WPOZZZ96PS497001 to 497129, and engines from 62P85001 onward.



not entirely justified, we would suggest today – for being only just about usable on the road.

Power was claimed to be 260bhp, 10bhp up on the standard Carrera 2 or 4, thanks to a new engine-management system. Many experts consider this to be a conservative figure, though, and the majority of engines are believed comfortably to have exceeded that figure. Either way, the RS Sport was claimed to be capable of 162mph, with the yardstick 0–62mph sprint taking just 5.4 seconds.

There were three further variations on the basic Carrera RS. The first, the M001 option in factory terminology, was a full-race version aimed at the 1991 season's Carrera Cup series. It differed from the standard RS in having no internal trim apart from a single Recaro Kevlar racing seat, the addition of specific safety equipment, and various other competition-orientated details. At 1185kg its kerb weight was about 45kg less than the Sport's.

The Touring (option M002) was aimed at those who wanted the performance and handling of the Lightweight, but with a little more comfort. It came with standard Carrera 2 sports seats, air-conditioning, and electric window lifters. It also had a dual-mass flywheel (eliminating the G50 transmission's well-known transmission chatter), and more sound insulation.

The M003, meanwhile, was another full-race version built for the European GT (N-GT) Championship. This car (known as the Club Sport

in the UK, but otherwise as the Competition, or simply the N-GT), was much the same as the M001, but with additional features such as a sintered metal clutch and a welded-in roll-cage. Club Sport engines were fitted with titanium valve-seat inserts and a lighter flywheel. Many cars were registered for road use, though.

It is thought that from August 1991 to July 1992 a total of 1990 Carrera RSs (Sport and Touring) were built, plus a small number of pre-production cars. The vast majority were to Sport specification. Around 112 Carrera Cup race cars (M001) were built, and the records suggest that 290 M003 N-GTs or Club Sports were produced, all with left-hand drive, reflecting the relatively high number that were bought for road use. That makes a total of around 2392 units.

The subsequent rise and rise of the 964 RS is due to a number of subtly related factors. High among them must be the no less meteoric ascent of the trackday, for which the 964 RS – as that stripped-out neo-racer – is so eminently suitable. And there is obviously a finite and actually quite small number of cars available, with both the aforementioned trackdays and canny collectors – who saw but perhaps missed out on what happened to the 1973 Carrera 2.7 RS – slowly but steadily taking their toll.

Fashion and our seemingly ever-increasing affluence have played major roles, too, and even at the RS's current level many people can today justify what amounts to a not entirely

practicable automotive plaything on the basis that it's better than money in the bank – and a lot more fun than real estate. Mostly, though, it must be the realisation that here is a genuinely classic Porsche the like of which we shall never see again. It's air-cooled, for a start, and even without some of the comforts of the standard 964-model Carrera 2 or 4 is also remarkably modern in both outlook and overall feel.

And the 964 RS is simply fantastic to drive; way up there in the same category (if not some distance above it) as the iconic, the legendary, the classic 2.7 RS that appeared 20 years before it, and which long ago went stratospheric in terms of availability and affordability.

Of the two mainstream models, the Sport and the rather less sparsely equipped Touring, the former is undeniably close to the limit of what you would want to put up with for regular road use, but the latter is little or no harsher than a 968 Club Sport, itself no less comfortable than many a modern BMW 3-series coupe. Either makes a formidable track car, whether for your own amusement or for genuine competition such as hillclimbing and sprinting, and guarantees you membership of what amounts to an extraordinarily exclusive unofficial club.

We have said it before of a 911, and doubtless we shall say it again. But you really do owe it to yourself to own one of these extraordinary machines one day very soon. Or, like this writer, you may kick yourself for ever afterwards.

IS IT THE REAL THING? FIND OUT BEFORE YOU BUY!

Such is the rarity and rising value of even a rough-to-average 964 RS these days – and they do exist in that state, believe it or not – that there is an ever-increasing risk of being offered a fake. The problem is compounded by the growing number of RS lookalikes that are being built by genuine enthusiasts in homage to the real thing, and which, even if assembled with the very best of intentions, may subsequently pass into other, rather less scrupulous hands.

But provided you first do some basic homework (which you've begun by reading this buyers' guide), and keep your wits about you when looking at specific cars – not getting carried away in the heat of the moment, basically – it's not difficult to differentiate the wheat from the chaff. There are also a number of genuine experts – not least *g11 & Porsche World's* own editor-at-large, Peter Morgan – who for a modest fee will inspect a given car for both its structural and mechanical integrity and its pedigree, and we suggest this is a must for a vehicle as contentious as this. Peter's details are on page 95.

First, though, you should assess what you know of the car's history (see page 8g for guidance on chassis numbers) and then not least its current owner. Its provenance, if you like. These are by any standards rare and unusual cars, and thanks to the speed and immediacy of modern communication there are few totally 'unknown' genuine examples out there – although as with anything else that you might find on the Internet it's well worth taking any 'evidence' with a pinch of salt, unless you know it to be from the very best of sources.

The genuine RS also incorporates a number of features that, although not impossible to replicate, would certainly tax the ingenuity of all but the most determined fraudster. Any RS Sport showing evidence of ever having had four-wheel drive and a sunroof is, therefore, to be treated with great caution (although the Touring was in theory available with a sunroof; and there was also an ultra-rare Carrera 4 RS...). Other encouraging signs include the use of thinner glass (3.0mm instead of the usual 4.7), a 92-litre plastic fuel tank instead of the standard 964's 75-litre steel tank, and perhaps best of all, 17-inch wheels in ultra-lightweight magnesium alloy rather than aluminium. More on these on page 94.



VARIATIONS ON A THEME

1991 Carrera 4 RS

The rarest, perhaps the most interesting, and in some senses the oddest 964 RS is the 1991-model Carrera 4. It was (like the 3.8 RS; see far right) built at Weissach, in this case primarily for European rallying, and pre-dated the basic 964 RS Sport by about a year. It's certainly a rarity. Some experts suggest that around 20 cars were built, all with left-hand drive, but since none appears in the factory's own records it's possible that many more (or even many fewer) were assembled.

It was based on a 1991-season Carrera Cup 964, and featured not only an aluminium front lid and doors, but also an engine cover in the same material. A full Matter aluminium roll-cage was fitted, and the side windows were in lightweight plastic. The engine was the standard 260bhp flat-six from the 'ordinary' 964 RS, and this was mated to a Paris-Dakar-specification four-wheel-drive transmission system (which was not, of course, the same as in the road-going Carrera 4). This combination gave a maximum speed of only around 120mph – as you would expect of a rally car – but, again as you might expect, a 0–62mph time of less than four seconds.

Brand-new, the Carrera 4 RS sold for around Dm285,000 (then about £100,000) and today, given its extraordinary rarity, is worth possibly double that. Who can tell? If you'd like to read more about it we told the full story in the March 2002 issue of *g11 & Porsche World* (*White fantastic*; pages 69–75).

1992–93 Carrera 2 RS America

The RS America was built for the 1993 model year (although a few cars were sold as 1992 models), and for the US and Canada only, where the Rest of the World 964 RS would have fallen foul of legal requirements – and was a far cry from what might be termed the real thing. Where that was a stripped-out homologation special with performance very much in mind, the RS America was little more than a low-specification version of the standard car. The 'real' RS sold for the equivalent of about US\$20,000 more than the basic Carrera 2, the RS America for around \$10,000 less.

This was achieved by deleting the standard C2's air-conditioning, power steering, electric sunroof and rear seats. A fixed whaletail-style rear wing replaced the electrically operated device found on both the standard C2 and the RoW RS. Inside, the RS America had both European 964 RS-specification lightweight door cards and lightweight carpeting, and a limited amount of sound-deadening material was removed, but the relatively heavy electric window lifters remained. It even retained both driver and passenger airbags.

Mechanically the RS America had both the standard 250bhp engine of the Carrera 2 and that car's aluminium-alloy wheels (7.0J x 17 inches and 8.0J x 17 inches at front and rear, respectively), but a sports suspension package (the same M030 set-up that was available as an extra-cost option for the Carrera 2). It was, as a result, both a little lighter than a basic

RoW C2 and a fraction quicker (0–62mph in 5.4 seconds, and a maximum of 162mph), but that apart it wasn't really an RS at all, and as a result of that commands neither the respect nor the price of the genuine article. All, not surprisingly, have left-hand steering.

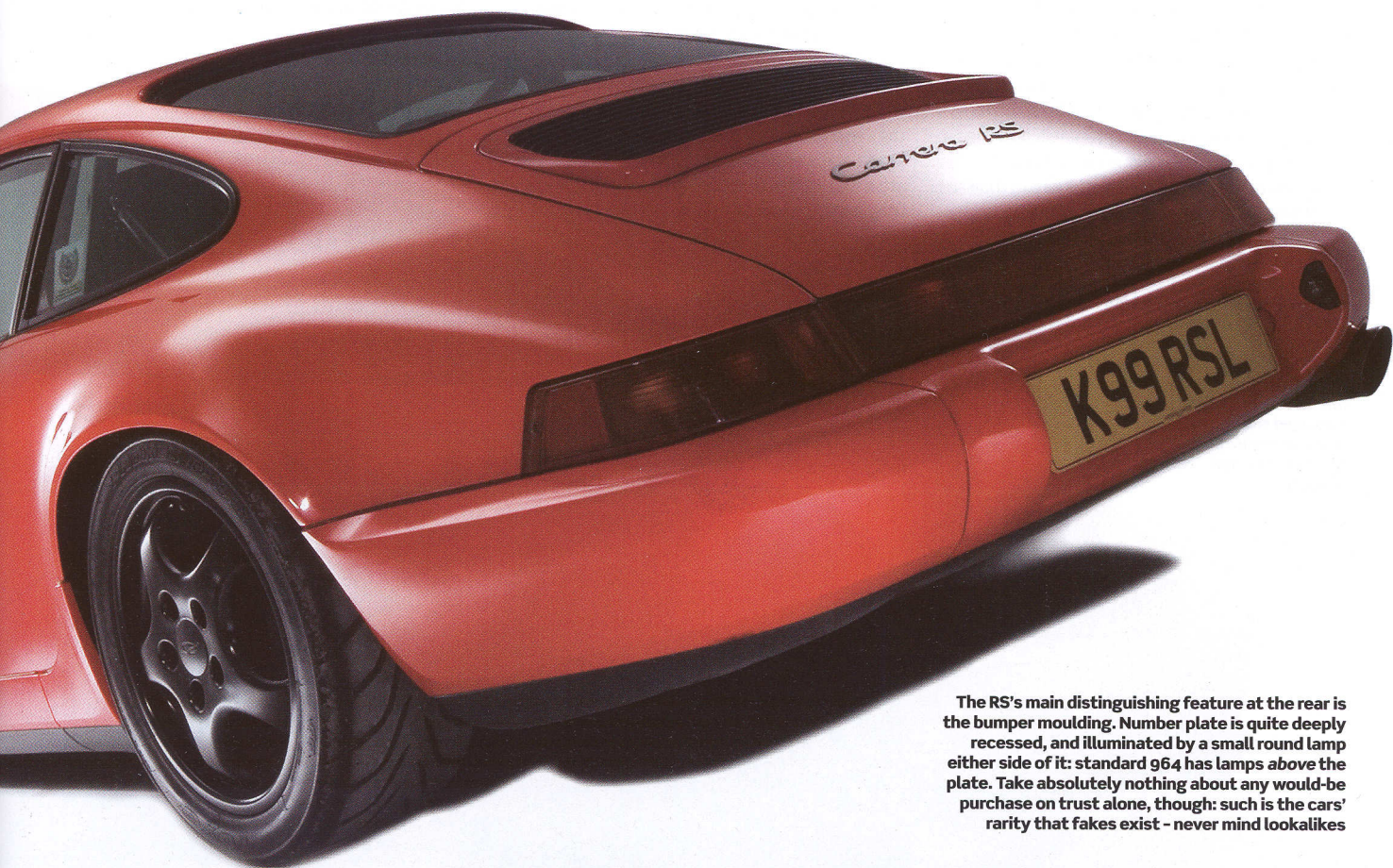
1993 Carrera 3.8 RS/RSR

Around 100 3.8-litre 964-style RS models were built for road use, primarily in order to qualify the bigger engine for GT-category racing during 1993 (and in which discipline the car was known as the 3.8 RSR).

The left-hand-drive-only 3.8 RS was – and remains – instantly recognisable by virtue of its wide Turbo-style body shell and adjustable biplane rear wing, and not least its massive Speedline split-rim wheels: 9.0J x 18 inches at the front, and 11.0J x 18 at the rear.

It was powered by a new naturally aspirated 3746cc engine (the M64/04 unit), and developed 300bhp at 6500rpm, and 360Nm at 5250rpm. This, combined with a reduction in weight to 1210kg (1140kg without fuel), allowed 0–62mph in just 4.9 seconds, and a maximum speed of 170mph.

Even so, the 3.8 isn't necessarily the pinnacle of achievement it might seem. It was heavier than the N-GT or Club Sport version of the 1992 3.6 RS, which limited its agility, and its wider body had an effect on both high-speed acceleration and top speed. Indeed, it was perhaps most famous at the time as the car on which Porsche first used its now distinctive Speed Yellow paint colour.



The RS's main distinguishing feature at the rear is the bumper moulding. Number plate is quite deeply recessed, and illuminated by a small round lamp either side of it: standard 964 has lamps above the plate. Take absolutely nothing about any would-be purchase on trust alone, though: such is the cars' rarity that fakes exist - never mind lookalikes

CHECKPOINTS

Body structure

Despite their similarities there are also a number of crucial differences between an RS body and a standard 964's. Both received the same zinc-dip corrosion-proofing treatment, but the 964 RS (in all its forms) came without an additional coat of heavy under-body sealant. Because of this Porsche reduced its normal anti-corrosion warranty from 10 years to just three for the RS, and as a result it is vitally important to inspect the entire under-body area for signs of rust – although in practice this is unlikely to be much of an issue, if only because the absence of the sealant tends to allow water to drain away from the metalwork more quickly.

In fact, it's accident damage that is by far the biggest potential problem these days, whether from an incident on the road or – obviously rather more likely in the case of a car like this – the circuit (and which can be no less serious for that). A significant number of vehicles will have been used for at least one or two trackdays during their now 15-year lives, quite possibly in the hands of less than expert drivers, and it's absolutely crucial to check for evidence of replacement panelwork – or better still to have a genuine expert do it for you.

At the front, then, look closely inside the luggage compartment for creases in the inner wings or the front wall, behind the bumper. Be suspicious of internal paintwork that looks too smart – the standard finish was never that good in this hidden area – and certainly of large amounts of seam-sealer. Again the RS shell, which in all variants was seam-welded throughout for added strength, only ever had this in limited quantities. At the rear – and bearing in mind that many cars may have slid off the track backwards – open the engine cover and inspect the chassis longitudinals and the inner wings. Both the engine cover and the (aluminium) front lid should be square in their apertures, with modest, consistent panel gaps.

Other warning signs include filled or wavy wheelarch edges – all four should also be 'rolled' to allow extra clearance for the tyres; the absence of this distinctive feature could suggest either a replacement panel or even that the car isn't an RS at all – and poorly fitting front and rear 'bumpers'. These are vulnerable to impact damage, and the rear moulding, with small round number-plate lamps either side of the plate, is unique to the RS. Be suspicious, then, of a standard 964 moulding, with the lamp above the registration plate. At the front many owners will have fitted after-market brake-cooling ducts in place of the original driving lamps, but this is nothing to be too alarmed about; it goes with the territory.

You need to have a good look at the car's nether regions, too. The RS stands nominally 40mm lower on its suspension than a standard 964, and this can make traffic-calming humps (and even pot-holes) a real hazard, especially to the underside of the low-slung front apron. Even a minor trackday 'off' can take out either or both of the two front jacking points, for instance, and properly repairing damage like this can be very expensive. (And without it you may not be able to use the car's own emergency jack.)

Look for signs of scuffing or even major dents on the floorpan, bent or scraped suspension arms, the distinctive pea-shaped gravel from circuit run-off areas lodged in crevices or on ledges, and damaged or poorly fitting plastic sill trims. To be fair, these rarely fit that well on any 964 these days – even on a car that has never been near a circuit – and often the black rubber gaskets look a real mess, but this should alert you to the possibility of repairs (or the need for further attention) to the metalwork beneath.

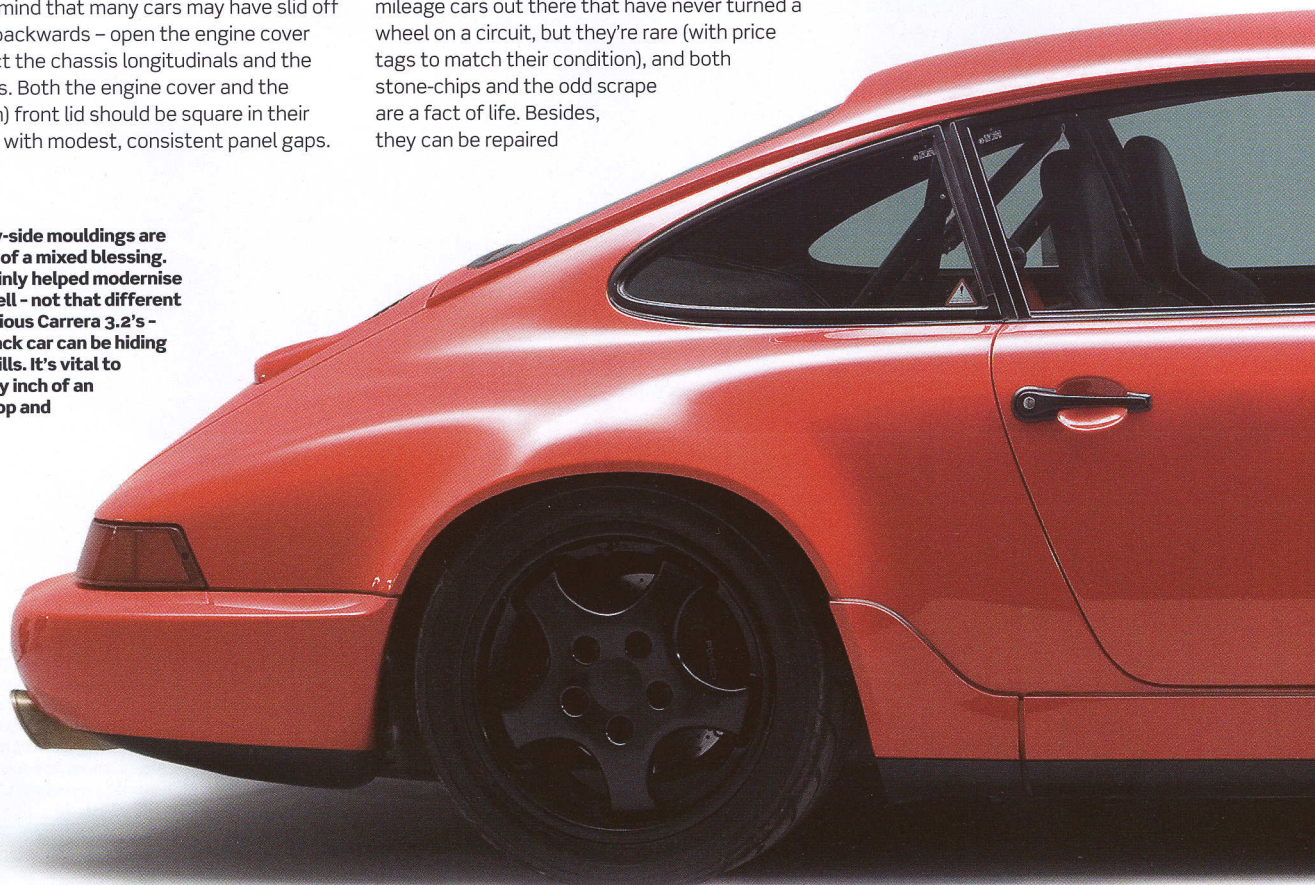
As far as paintwork is concerned you'll have to be pragmatic. There are still some low-mileage cars out there that have never turned a wheel on a circuit, but they're rare (with price tags to match their condition), and both stone-chips and the odd scrape are a fact of life. Besides, they can be repaired

far more easily than major body damage (or rust). In theory most of the standard and special-order 1992 colours were available, but in practice (and not entirely surprisingly) many cars came in the more lurid of those shades – Signal Green and Rubystone Red, for instance; that's lime green and a sort of pink in plain English – and again you may need to put your own preferences to one side if the car's condition and provenance warrant it.

But whatever may seem to be the structural condition of an RS body shell, however 'straight' and rust-free it may appear, it comes with the added complication that as a trackday car *par excellence* that may well be the environment in which it has spent the majority of its life. That in itself isn't a major problem – that's what it was designed and built for – but even a seam-welded Porsche body shell will eventually start to protest at routinely cornering close to the limit of the tyres' adhesion, of being bounced off kerbs (whether by design or accident), and of the general wear and tear that comes from life in the (very) fast lane.

That might not seem too important now – and especially if you plan to add significantly to those track miles – but those who've driven and owned a number of RSs are adamant that you can tell within seconds of first driving a given car how 'tired' the shell is. And that may be crucially important when you come to sell. Put it this way: a 964 RS will always feel harsher, less refined, than a bog-standard Carrera 4. But it doesn't have to rattle and shake like a full-on race car. If it does, it will be almost impossible to restore it to the way it would have felt when it was new, and you will as a result be missing a large part of the essential RS 'experience'.

Lower body-side mouldings are something of a mixed blessing. They certainly helped modernise the 964 shell – not that different to the previous Carrera 3.2's – but on a track car can be hiding damaged sills. It's vital to check every inch of an RS – both top and bottom



Engine and transmission

Perhaps surprisingly the RS engine is not that different to the standard 964 unit – the additional 10bhp, taking it to a maximum of 266bhp, came from a rechip, although it was also said to use both weight- and size-matched pistons and barrels – and as a result it has much the same strengths and weaknesses as the standard motor, with the obvious complication that it will most likely have been driven pretty hard for much or even all of its life.

Don't assume the worst, though, if it sounds a lot harsher than a standard 964 motor. The mounts, unlike a comparable Carrera 2's or Carrera 4's, are solid rubber, and it also has a one-piece flywheel which can generate a worryingly loud rattle from the transmission at idle. (But which, unlike the dual-mass flywheel in most run-of-the-mill 964s, should under normal circumstances last the life of the car.) Your prospective purchase may also have been fitted with an after-market exhaust, of course, but this must obviously not be so loud as to affect either its road or circuit worthiness.

Don't be too alarmed, either, by a hint of white (oil) smoke in the exhaust when you first start the engine. This may be an indication of worn cylinders and/or piston rings, particularly if the exhaust continues to smoke, but the engine's 'boxer' configuration will more readily allow traces of lubricant to pool in the combustion chambers while it's standing idle. Valve guides wear, too, as they tend to in most air-cooled 911 engines, and this too can lead to increased oil consumption. Either way a rebuild, although not cheap, is by no means impossible, and by potentially solving at a stroke a number of issues could be a sound investment. A cylinder-leakage test, carried out by a specialist, should help pinpoint the cause and extent of the problem before you hand over any cash.

Probably the most serious specific problem

you'll find in any 964 engine, RS or otherwise, is oil leakage from the sealing washers at the ends of the crankcase through-bolts, and the only answer is to have the motor stripped and rebuilt, at a cost of probably at least £3500 (and which will obviously address any other problems at the same time). Corroded and broken cylinder-head studs are an ongoing issue, too (they're the infamous Dilivar items), but again this can be solved by a rebuild with plastic-coated steel studs from the 993 Turbo. You may also see leaks from the lower camshaft-cover gaskets,

breakage of the belt (earlier models were recalled for this to be retro-fitted), and it's unlikely any RSs were built without this pipe – and the integrity of the belt – is something that's worth checking either before you buy, or certainly before you start driving the car hard. At circuit speeds it doesn't take long to burn a piston. (And you should in any case routinely use fuel with a minimum octane rating of 98.)

The transmission is the G50 five-speed manual unit from the standard Carrera 2, albeit

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and sometimes from corroded oil pipes, and while these are no less messy they're a lot cheaper to have fixed. Either way, assess the situation before you buy by getting the car up in the air and taking off the engine undertray.

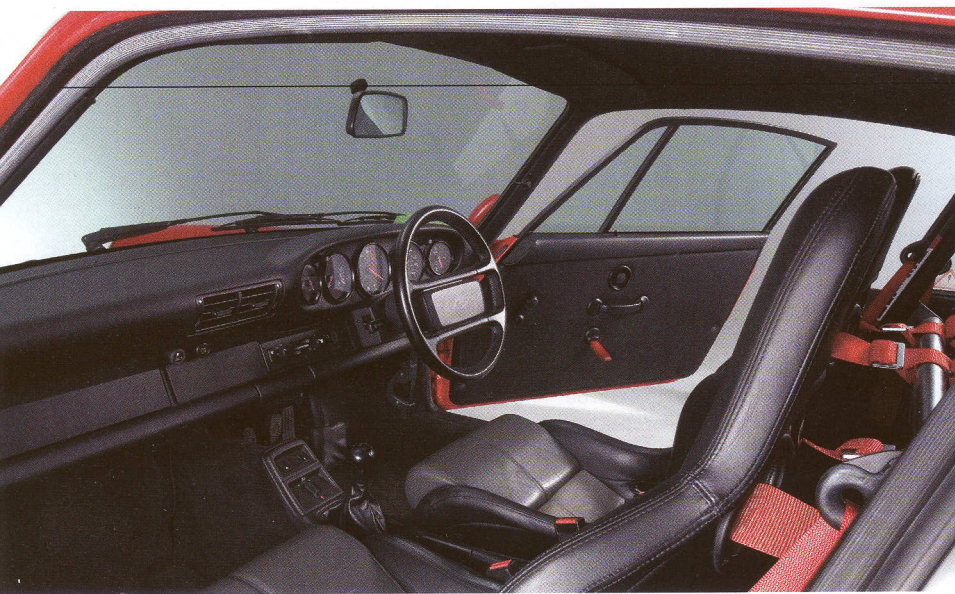
The only other really big issue – again shared with the lesser 964s – is the dual distributor system that was required by the fitment of twin spark plugs per cylinder. Normally this works reliably and efficiently, but the secondary distributor is driven by a small toothed rubber belt from the primary unit, and like all such items it can break. In itself this is nowhere near as catastrophic as, say, a camshaft belt breaking, because the engine will continue to run. If, however, the secondary rotor arm happens to stop next to a spark-plug contact it will cause the secondary plug in the relevant combustion chamber to fire continuously, and this can soon (very soon, actually) destroy the piston.

Porsche addressed the problem by fitting later cars with a small plastic pipe to allow the escape from inside the distributor caps of the ionised air that was thought to accelerate the

with slightly revised ratios and a limited-slip differential, and should feel smooth and precise, particularly when the oil is at normal operating temperature. There should be no excessive bearing or gear noise – although the fact is that second and third gears in particular lead a hard life, and may be showing signs of wear. The clutch action should be light and smooth, with no sticking as the pedal is released, and no evidence of either slipping or juddering.

Check the limited-slip diff by raising one rear wheel clear of the ground and attempting to turn it. If it rotates – even with difficulty – the chances are that the friction plates need replacement, although with care the car can continue to be driven. The LSD also has a number of phosphor-bronze bushes in it, and these, too, can wear out. Check by reversing the car through a 90-degree corner and listening for a clonking sound – although noises of this nature can always be caused by nothing more serious than a worn-out drive-shaft joint, itself possibly the result of a split rubber cover. Neither of these is expensive to replace.





Best buys – and how much to pay

The 964 RS is not the bargain it was a decade ago, when a left-hand-drive Sport was available for £20,000 or perhaps less.

Right now, here in the UK, you'll pay probably £30,000 for an average-to-mediocre right-hand-drive car, £35,000–£40,000 for a good one without too many circuit miles under its belt, and perhaps up to £50K for one that has never been raced, rallied or used in anger. (That's for private sales, too; expect dealers to charge a little more.) But even the car shown here, campaigned by its owner, Robert Lancaster-Gaye, in the Porsche Club GB's hillclimb championship, is attracting serious offers of £50,000 (although it's not for sale!), so maybe it's a case of act now or live to regret it.

You'll save perhaps £4,000–£5,000 by sitting on the left to drive – which in our opinion has to make that the obvious best buy. This will deny you the power-assisted steering of the right-hand-drive cars, but even the manual system isn't exactly heavy, and some suggest that since the car was originally designed for left-hand steering this is undoubtedly the purer driving experience. We're inclined to agree, but in truth your choice will be dictated by what's available. (And bear in mind that increasing numbers of left-hand-drive Porsches of all descriptions are heading back across the Channel, with an obvious effect on prices here.)

The Touring, its rarity value balanced by its extra equipment and thus weight, is generally worth around the same as the equivalent Sport, and it is undeniably more comfortable for longer-term road use than the latter. But you can't really afford to be dogmatic about your search. Better to fit slightly softer springs and dampers to a Sport, we'd suggest. The Club Sport, although road-legal, is far too specialised to be anything other than a track car, and to our way of thinking isn't worth the additional £10,000–£15,000 premium that you will probably pay for the privilege of owning one.

Both Carrera Cup cars and 3.8 RSs turn up occasionally, but so specialised is the market for them – and particularly the former – that it's almost impossible to suggest what either might be worth, although you're probably looking at £75,000 apiece depending on condition and racing history. It depends how badly you want one. RS America? Well, the only place you're likely to find one is America, in which case you'll be talking dollars rather than pounds – and perhaps only \$25,000 at that – but the simple advice would be not to bother. It's not really an RS at all.

Brakes, wheels and tyres

The standard RS Sport has front brakes from the 964-model 911 Turbo (with aluminium front hubs instead of the more usual steel), and rear brakes from the Carrera Cup cars, although such is the nature of the beast that you may find either other Porsche components or even a complete after-market braking system.

Either way, the car should stop smoothly and confidently from high speed (the 'servo' is actually an engine-driven hydraulic booster), and with no sign of juddering through either the pedal or the steering. Squealing brakes suggest a build-up of surface rust on the discs, perhaps because of light or infrequent use. The pads should have a reasonable amount of 'meat' left on them (they're visible through the wheel spokes), and while the discs will usually be showing some signs of wear they shouldn't be cracked, blued, or seriously grooved.

Pulling to one side or the other under braking (or even just pulling generally) may be due to the pads binding in one or more of the calipers, and this is usually caused by corrosion of the caliper body under the stainless-steel plates that are designed to spread the load of the pads against the soft aluminium. It's a common problem in Porsches of the period, and can usually be solved by (albeit rather laboriously) stripping the affected caliper(s), scraping away the oxidised aluminium, and then refitting the stainless-steel plates with new special screws.

ABS was fitted as standard, and this too should have an obvious effect when you stand hard on the pedal. ABS faults (which should also illuminate a warning light on the instrument panel) can have a number of causes – faulty wheel-speed sensors, a poor electrical connection, or most seriously a faulty control unit – and will require the attention of a specialist with the right diagnostic equipment, but provided the vendor is prepared to negotiate this shouldn't put you off an otherwise good car.

All 964 RSs were supplied new with magnesium-alloy wheels to the so-called Cup 91 design, and it's absolutely essential that these are either on the car at literally the moment you hand over your banker's draft, or else come separately as part of the deal – and are also in perfect or near-perfect condition. (Refurbishment of minor damage is often possible, but this will tend to cost a lot more than for a comparable aluminium wheel.)

The fact is that genuine RS wheels are currently worth around £4,000–£5,000 per set of

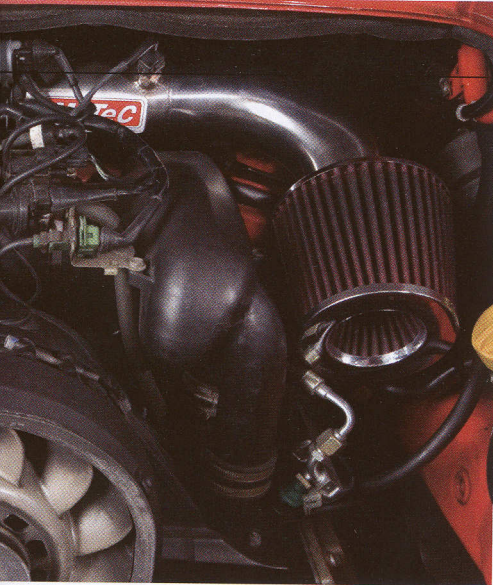
four – so you can probably excuse any owner not wanting to risk them in daily use, whether on the road or the circuit – and obviously any RS without them is worth at least £4,000–£5,000 less than it would otherwise be. (The problem is compounded by the fact that many canny owners – and even speculators – have amassed several sets.) The magnesium wheels can be identified easily enough, though. The fronts are 7.5J x 17 inches, the rears 9.0J x 17 inches, and all should have the word 'Magnesium' cast into the outside of each rim. Needless to say, locking wheel nuts are a must for road use...

Tyres were originally by Bridgestone or Yokohama – 205/50ZR17 and 255/40ZR17 at front and rear, respectively – but these days you'll find all manner of different makes and types. Both Michelin and Pirelli have justifiably become popular fitments, and the latter's most recent P Zero in particular offers an extraordinary combination of on-the-limit grip and on-road refinement that, given the RS's rather uncompromising nature, could make it that much more usable and forgiving. Either way, look for at least some degree of consistency of tyre make and type around the car, as well as enough tread – at all four corners – to do at least a few thousand miles.

Suspension and steering

Like any 964, the RS is tough and reliable in this department, although consistent track use will inevitably tend to accelerate the normal process of wear and tear. The only significant differences between an RS and a standard Carrera – and thus useful identifying features – are the solid Uniball mountings for the tops of the two front suspension struts, which look quite different from the encased rubber mounts of the C2 and C4, and the presence of an adjustable strut brace. The RS is also 40mm lower than the standard car, of course.

Look for leaking dampers and possibly broken springs (the rear dampers soften quite quickly due to their proximity to the hot exhaust), and make sure neither the front wishbones nor the rear trailing arms are bent or otherwise damaged from contact with circuit kerbs. Even a minor impact can have a serious effect on wheel alignment, and thus the car's handling precision, although this too may be caused by nothing more than wear of the rubber bushes at the front of the cast-aluminium control arms/wishbones at the sharp end of the car. (And this will almost certainly be the cause of an



annoying clonk as it passes over bumps in the road.) The normal solution is a complete replacement arm, but the original arms can now be fitted with uprated after-market bushes.

Be wary, too, of cars that have been lowered still further than the usual 40mm compared to the standard Carrera 2. There's no real need for it (even the strongly competition-orientated Club Sport or N-GT model was only a few millimetres lower still than the Sport, although the Carrera Cup cars were 60mm down), and running for a long period on its bump-stops will have done nothing for the body shell's integrity.

Steering is by conventional g64-style rack and pinion, and should feel direct and accurate, with the car tracking straight and true when you (momentarily) take your hands off the wheel. Right-hand-drive cars have power-assisted steering (look for high-pressure fluid leaks), left-hookers a non-assisted system, and with the latter claimed by some to offer a purer and more rewarding driving experience, but in practice neither offers any real advantage over the other. And there's no reason why, given the necessary parts, you couldn't convert either system – although that would, of course, detract from what may be the car's all-important originality.

Interior and trim

Probably the most important aspect of this area of the car is not simply its condition – which should in any case be obvious enough given how sparsely it is usually furnished – but more its specification. Knowing what cars should have which items, basically.

The Sport – the most numerous – has what might best be termed a half-way-house cabin, midway between the Touring (which retains many of the comforts found in the standard g64) and the stripped-out Club Sport (which despite its door trims has not a scrap of carpet as standard). Thus the Sport carpet is in black velour, and the front seats (no RS has rear seats) are lightweight leather-trimmed Recaros. The door trims are trimmed in black vinyl, and feature both manual window winders and a simple handle to pull them shut from the inside. There's also an equally simple fabric strap that you pull to open the door from the inside. The Sport came without a sunroof, air-conditioning or a radio, although today you might well find that someone has fitted a stereo unit of some sort. Likewise it would always have had a non-airbag steering wheel.

Certain elements of the Sport interior – the

seat-belts, the fabric straps on the doors, and not least the 'Carrera RS' logo on the carpeted rear bulkhead – are highlighted in a colour (Ruby Red, Guards Red or Maritime Blue) either to contrast with or to match the exterior colour, and this extends to a two-tone treatment to the centre panels of the seats. (The car shown here has been fitted with Touring seats for added comfort on the road.)

The Touring, on the other hand, has full door trims with electric window switches, and also electrically adjustable leather-trimmed sports seats with a two-tone treatment similar to that in the Sport. The seat-belts, too, are colour-coded like the Sport's. There are no rear seats, as such, in the Touring, although it has a one-piece upholstered 'backrest' on the bulkhead that could allow it to be used as a seat of sorts for short distances. Like the Sport, the Touring came with a black headlining.

The Club Sport has, as we've said, no carpet at all (although the doors have Sport-style inner trims), an ultra-light Kevlar-shelled Recaro seat trimmed in a fire-retardant velour-style fabric in plain black, and a four-point Schroth harness

Engine may be largely the same as a standard g64's (albeit here with an after-market air filter), but cabin – here with a so-called 'half' roll-cage – is quite definitely that of a thoroughbred competition car. Tacho (above) is angled so that the near-7000rpm red-line is at the easy-to-see 12 o'clock position

(often bright-red). There should also be a fully integrated Matter roll-cage – and no headlining.

Straightforward wear and tear, as you've probably guessed, isn't the headache it can be in more luxuriously equipped cars, but seats, carpets and even headlinings can all become dirty, ripped and generally pretty scruffy over time, especially when the car is regularly used for trackdays or competitive events such as hillclimbs and sprints. A badly fitted roll-cage is always going to be a bargaining point, and for the same reason it pays to check carefully for signs of a previously fitted cage that has been removed, particularly where the car is claimed never to have been raced. Look for bolt holes at the base of each door post (maybe filled with weld), and for evidence that the trim, such as it is, may have been cut about. You might even see tell-tale marks on the headlining. **▶**

Further information and contacts

There are a number of back issues of *g11 & Porsche World* itself that you ought to see if you're thinking of buying a g64 RS. All are available, for £4.95 per copy including postage to UK addresses, at www.chpltd.com/shop, or else by calling 020 8655 6400.

The most recent full g64 RS buyers' guide we ran was in the March 2005 issue (*Live now, pay later*; pages 54–65). That same issue additionally featured a rare and highly original Club Sport model, also known as the Competition or N-GT (*Light steed*; pages 78–82) and, no less relevant, Keith Calder's beautifully crafted RS Sport lookalike (*Grand design*; pages 34–43). That story in particular offers a pretty good overview of the increasingly important replica market.

No less relevant is the April 2006 issue, which not only dissected the entire RS range of Porsches, but also contains an analysis of the g64 engine in its various forms (pages 104–109). The June 2006 issue contains a generic g64 buyers' guide, and that too is well worth a look (see pages 78–86) for additional background.

Books? Try Peter Morgan's *Original Porsche g11* (£24.99 plus postage from the CHP shop at the web address above), and likewise the *Ultimate Buyers' Guide* that Morgan – who is also editor-at-large of this magazine, of course – published in 2003. Once again this covers the entire g64 range, but at the same time offers some useful detail on the RS derivatives.

As far as specialists are concerned we have no hesitation in recommending Autofarm in Oxfordshire, and which company sourced the superb Sport model shown here (01865 331234; www.autofarm.co.uk). Likewise Russell Lewis at RSR Engineering in Grayshott, Surrey. He's on 01428 602911. Both Autofarm and RSR offer independent pre-purchase inspections (depending on location), and this service is also available from Peter Morgan. Call him on 01672 514038, or else go to www.petermorgan.org.uk.

Other reputable independents include JZ Machtech in Kings Langley, Hertfordshire (01923 269788; www.jzmachtech.com), Tognola Engineering in Datchet near Slough (01753 545053), and finally, for most of the spare parts you're likely to need, Porscheshop in Halesowen in the West Midlands (0121-585 6088; www.porscheshop.co.uk).