

996 911 TURBO BUYING GUIDE

The 911 Turbo is sensational. There's really no other way to describe it – it's quite possibly one of the best all-round supercars that money can buy and today, you really don't need a lot of that to get your hands on one. Performance bargain of the century? Quite possibly.

The 911 Turbo has undergone quite a transformation since it first appeared in the Porsche line up in 930-form back in 1974. Wide arches and a whaletail rear spoiler distinguished it from lesser models while the three-litre turbocharged six gave 260hp, transferred to the road via a four-speed gearbox. As the 911 evolved into the 964 and then the 993, the Turbo got bigger, heavier, more advanced and far more powerful, making the transition from sports car to genuine supercar with the 408hp 993 Turbo.

This was the first mass production Porsche to feature twin-turbos and permanent four-wheel

drive, which earned it the oft-used nickname of the all-weather supercar. The ultimate incarnation of the 993 Turbo was the limited production S model, which featured a number of subtle exterior modifications and an additional 24hp at which point people must have questioned where the next generation Turbo could possibly take things.

It was 2000 when Porsche unveiled the new 996 Turbo, two years after the 996 had been launched, and it took the 911 Turbo to a whole new level in terms of performance and handling. Visually, the Turbo was a world away from the regular 911 though compared to earlier Turbos, the 996 was a slightly more restrained

affair, a conscious decision made by designer Pinky Lai who didn't want the car to shout about its power.

At the front, the car sported a pair of gaping air intakes, which flanked a central air intake for a third radiator and between them they fed a combined radiator area over 50 per cent larger than that of the standard car. A black front splitter jutted out purposefully from beneath the front bumper, which helped to increase downforce, while the air leaving the central radiator was also channelled to help with downforce and air from the two larger





911 Turbo doesn't shout about its power but still looks more substantial than the regular Carrera. Rear spoiler elevates automatically at speeds over 75mph, the cross-drilled, vented discs all round mean superb stopping power

bumper vents was used to help cool the brakes. The Turbo also featured new headlights, a variation on the 'fried-egg' design first seen on the 996. At the rear, the conventional ducktail spoiler featured an integrated spoiler section which elevated at speeds over 75mph in order to further increase downforce. The rear arches were widened by 6.6cm in order to accommodate the vast 11-inch wide rear wheels and tyres while the side skirts were redesigned slightly in order to improve airflow along the side of the car.

The wheels themselves were designed specifically for the Turbo, measuring 18-inches across with five hollow spokes to reduce weight. The wider rear arches also accommodated a pair of air intakes designed to feed the car's twin intercoolers but head aerodynamicist Michael Preiss found that air tended to travel past the intakes rather than through them. The solution was to fit a pair of vents at either side of the rear bumper which created a vacuum, pulling air through the arch-mounted vents. Despite the numerous air intakes, the 996 Turbo's drag coefficient was an entirely respectable 0.31Cd, just 0.1 higher than that of the non-Turbo models.

The star of the show was undeniably the engine, a 3.6-litre unit flanked by a pair of KKK turbochargers, with each of the Type K17 units featuring an integrated wastegate. A team led by Peter Zickwolf developed a new version of the VarioCam variable valve timing system, christened VarioCam Plus, which could switch between high or low lift and early and late timing to boost engine response, improve fuel economy and reduce emissions. The 996 Turbo ran lower boost pressure than the 993 but the compression ratio was 18 per cent higher at 9.4:1. At full throttle, peak boost of 11.2psi was achieved at 2700rpm and as engine speeds rose the boost decreased to a maximum of 9.2psi. The result of all this technology meant a massive 420hp produced at 6000rpm but even more impressive was the 413lb ft of torque the Turbo was endowed with, which peaked at 2700rpm and stayed constant all the way to 4600rpm, which meant phenomenal mid-range response.

A six-speed manual gearbox was fitted as standard, essentially an improved version of the 993's gearbox and identical apart from slightly longer gearing in fifth and sixth. For the first time, a Tiptronic transmission was also offered as an option, though it only had five ratios and actually finding a suitable gearbox for the Turbo proved something of a challenge for Porsche's engineers. Walter Kirschner was in charge of this part of the project and in the end he turned to Mercedes-Benz, which had supplied the automatic transmission for the 928, in order to find something that could handle the Turbo's torque output.

Braking was taken care of by 330mm cross-drilled and vented discs front and rear, clamped

by four-piston calipers all round, which offered incredible retardation. As sensational as they were, Porsche also offered the Turbo with the option of ceramic brakes, which made their first appearance on the Porsche options list with the 996. First introduced on the GT2, Porsche Carbon Composite Brakes (PCCB) were made of silicon carbide reinforced with carbon fibre. Measuring 350mm in diameter, the discs were clamped by yellow calipers, a hue that remains exclusive to PCCB, with six-piston items mounted at the front, while the four-piston items were retained at the rear. There were a number of advantages with carbon ceramic brakes over traditional cast iron discs – firstly, they are much lighter, reducing the weight of the Turbo by 18.6kg and they last longer, with Porsche stating that while a hard-driven Turbo with standard brakes would need new discs every 25,000 miles, PCCB discs could endure around 150,000 miles before they needed replacing. In addition to this, they offered improved braking performance as well as a more sensitive brake pedal and less effort was required to slow the car.

As for the Turbo's suspension, this was based on that of the Carrera 4 and adapted to suit the Turbo's needs by Gerd Seifert. The 996 platform was a good base, as the car boasted a 49 per cent increase in torsional stiffness and an 82 per cent increase in twisting stiffness over the 993 Turbo. Longer rear hub control arms were taken from the GT3, which lowered the car by 10mm, while the spring, damper and anti-roll bar rates were very similar to the 996's optional Sports suspension.

While the Turbo's phenomenal performance was more than adequate, you really can't have too much of a good thing and Porsche agreed, launching the X50 power kit in 2002. This consisted of uprated turbos, modified intercoolers and a revised ECU which took power to 450hp while torque swelled to 457lb ft, though this peak was no longer spread quite as generously across the rev range as in the standard car, now lasting from 3500-4400rpm. The general consensus is that while it was and remains undeniably a quicker car, cracking the 60mph sprint in a scant 4.1seconds and not stopping until you hit 191mph, it lacks some of the standard car's flexibility and eagerness, illustrated in part by the more powerful car's 0.1 slower sprint from 50-75mph in fifth gear of 4.9seconds.

In 2004, sun worshippers had plenty to be happy about as the Turbo Cabriolet went on sale. The rather neat folding roof added some weight, 120kg in manual form and 115kg as a Tiptronic, increased the price and took away some of the hardtop's agility and performance. That's not to say that it was slow or handled badly, because it didn't and it was still a fantastic car but when compared to the coupé, it just wasn't as good, making it one for dedicated convertible fans only.



When the traffic thins and the road opens up, you can almost feel the car tense as it prepares to unleash its full potential



The final incarnation of the Turbo was the mighty Turbo S, also launched in 2004, which continued to be sold alongside the C4S when the 997 was launched at the end of that year. The Turbo S came fitted with the X50 pack as standard and added PCCB along with cruise control, PCM, a CD changer, GT silver painted alloys and reverse-painted aluminium-faced instrument dials, along with the option of Olive green paintwork – exclusive to the S. While the asking price of £99,300 was rather steep for what was essentially an obsolete model, spec'ing a Turbo up to the same level would have set you back £104,424, making the S seem like something of a bargain. The press loved it, heaping praise upon its incredible performance and equally incredible brakes and while it wasn't any faster than the X50-equipped cars, it was a better all round package and gave you a lot more for your money as well as being the ultimate incarnation of the 996 Turbo.

Although the Turbo was only around for four years, it underwent a number of changes over this time to keep it in line with the rest of the 996 range. In 2001, the bonnet and engine cover release was changed to an electronic system with new switches inside the car and on the keyfob. In 2002, the 996's rigidity and crash protection

were both enhanced while the interior quality was improved and finally in 2003 there was a minor facelift.

While Porsche may not be the most generous of manufacturers when it comes to standard equipment, the boat was well and truly pushed out for the Turbo and it was very well equipped. Bi-xenon headlamps were standard as was metallic paint, there was a full leather interior complete with electrically adjustable memory seats while Sports seats, which didn't have full electric adjustment or the memory function, were a no cost option as was the electric sunroof and finally the top of the range stereo was also fitted as standard. In fact the only options that you actually had to pay for was the Porsche Communications Management with sat nav, the CD changer, the Tiptronic gearbox and the parking sensors. In 2002, the stereo was changed to a Bose system and an auto dimming rear view mirror with rain sensor was fitted as standard and in 2004 the sat nav, now part of the upgraded PCM2, was added to the standard equipment.

DRIVING ONE TODAY

Seven years on and the 996 Turbo remains one of the fastest cars money can buy and you really don't need a lot of money to buy one in the first

place. The car you can see in the picture was borrowed from Paragon and at £39,995, it sits at the bottom end of the Turbo price range and is exactly the sort of car that has inspired this buying guide. This W-reg example is one of the very first Turbos and has covered just over 68,000 miles, though you'd be hard pressed to tell from looking at it or indeed driving it. The exterior is in superb condition, the Arctic silver paint virtually unmarked and the attractive wheels are immaculate. You won't find private cars for much less than this and they won't come with a 12 month warranty nor will they have been freshly serviced – Paragon knows how to look after its customers.

Pull open the light door and drop into the Sports seats – whether the extra bolstering is worth losing the full electrical adjustment and memory function for depends on whether or not you're the only person who drives the car and if you're the sort of person who likes their cars to come with electric everything. The door closes with a light thump and you find yourself nicely ensconced in what isn't the nicest of interiors. While the Turbo didn't suffer from the same quality issues as the early 996s it's not exactly no holds barred luxury, with a few cheap switches and surfaces letting the side down. Still, this

particular car has worn its 68,000 miles incredibly well, with only minimal wear on the driver's seat and steering wheel while everything else is fully functioning and blemish-free.

A twist of the key and the flat-six settles into a quiet, bassy idle which sounds about a million miles away from what you'd expect a 420hp supercar to sound like. The clutch is light and so is the gearchange, almost too light and you'll be taken aback by the long throw and the horrible, plasticky and cheap feel of the gearstick itself – it's like a budget computer joystick. All is forgiven, however, the minute you move off – the Turbo has lost none of its appeal. The steering is weighty and full of feel and the Turbo responds keenly to inputs, while the ride is firm without being uncomfortable though the stiff suspension and 18-inch wheels do mean that the front end can be a bit busy over uneven surfaces. The Sports seats lack some of the padding of the standard items and as a result you are more aware of bumps and ruts in the road but they hold you in place so well and still remain comfortable.

What makes the 911 Turbo so wonderful is that it's just so easy to drive – the engine is extremely tractable allowing you to short shift up through the gears and use the car's vast



torque reserves to potter along. It's not just easy to drive, it's easy to drive slowly, with no nasty driveline shunt or snatchy brakes, just light controls that make it perfectly at home with city driving. Despite all that power, it never intrudes in the driving experience unless you want it to.

Of course, you don't buy a 911 Turbo to go slowly and when the traffic thins and the road opens up, you can almost feel the car tense as it prepares to unleash its full potential. Such is the sheer accelerative force of the 996 Turbo that you need to readjust your perception of what a car can do. Drop down into third, bury the throttle and hang on as the Turbo just launches itself headfirst at the horizon, gathering speed at such a pace that it's almost uncomfortable, almost a little too much to take in and with each subsequent gearchange the acceleration continues with barely reduced ferocity. It's absolutely relentless and simply awesome, delivering real kidney-crushing acceleration and yet there's absolutely no drama, no fuss – you don't have to work the car hard to make it go obscenely fast, it just does it. Even at full throttle it's quiet for something so fast and as a result you need to keep an eye on the speedo in order to stop yourself from reaching silly speeds.

It doesn't just go in a straight line either, scything through corners with great enthusiasm, with grip and traction levels far beyond the limits of mere mortals, allowing you to attack back roads at a barely believable pace. The four-wheel drive system is superb and gives you the confidence to use all of the

power all of the time and the Turbo doesn't waste any of it. The brakes are incredible, delivering stopping power far beyond that of most other road cars and far beyond the needs of the car itself, meaning that as quickly as you hit indecent speeds you're always safe in the knowledge that you can just as easily slow everything right down and rejoin the normal motoring world.

Of course, there is one major problem with the 911 Turbo. It's so good that unless you have the money to buy one, don't even think of going to see one. To drive it is to want it. If you have to hand the keys back and walk away you'll go home feeling genuinely sad that you don't own a 911 Turbo and it's a horrible, empty feeling. What makes it even worse is that it's not a £100,000 dream machine – it's £40,000, which makes it seem genuinely affordable. It's the kind of car that does everything well and makes you question why you'd ever need to spend more money on a car or why, for that matter, you'd ever want to buy anything other than a 911 Turbo.

BUYING ONE

We spoke to Mark Sumpter and Mick Clare at Paragon to see what they think of the 996 Turbo and what potential buyers need to be aware of. Both of them had nothing but praise for the model and it would seem that as an ownership prospect you really can't go wrong as the cars are virtually bulletproof. There are a few problems that you should look out for though: the joint between the cam carrier and the head can leak which requires the engine to be removed and stripped in order to cure the problem. Cars can also suffer from a boost problem caused by the

wastegate spindle in the turbo seizing up which in turn causes the boost to increase, which makes the car a lot faster but doesn't do much for reliability, but luckily it's not a big job to rectify. The lower suspension arms can wear out, with outer ball joints and inner bushes also susceptible to wear while the radiators are likely to need replacing as the car ages. An antifreeze smell from the front of the car is a sign of radiator failure but luckily you can replace each of the three radiators separately. The engine and gearbox are both extremely tough as are the turbos and Paragon has never had to replace a turbo on a 996 yet. While the interior was better quality than that of the first 996s, the PCM and sat nav are known to play up.

When it comes to actual running costs, the Turbos aren't that much more expensive than any other 996 – Mark and Mick reckon you should expect running costs to be between 20 and 25 per cent higher for a 996 Turbo. At Paragon's prices, a 12,000 mile service works out at £290 plus VAT while the 24,000 mile service is £595 plus VAT – a non-turbo 996 would only be £40 and £100 cheaper respectively. The brakes themselves are approximately £1500 including labour and VAT to change pads and discs all round. In terms of tyres, with that much power and four-wheel drive on average you should be able to get about 10,000 miles out of the rears – any more and you're doing very well, any less and the car is being driven hard. Mick tells us that he can't believe how many Turbo owners scrimp on tyres and recommends changing the rubber when it gets down to the 3mm mark – any less than that and the handling will start to suffer and you

should always buy good N-rated tyres. If you're looking at a car that has mixed tyres or non-rated rubber than be wary. One area where the 996 Turbo excels is fuel economy – you'll struggle to get less than 20mpg and on a gentle cruise you'll easily hit mid-20s with 30mpg feasible, making the Turbo a great long distance companion.

In terms of what kind of spec to go for, Mark says that there's really no need to spend too much money – as he points out, a £40,000 996 Turbo will suffer less depreciation than a £50,000 car and as they are so well built, you shouldn't worry too much about buying a cheaper car. You should buy a car on condition rather than price or mileage – a full service history is important but so are invoices as then you can see that an owner has been spending money on a car rather than just going through the motions and scrimping when it comes to servicing.

There are a lot of examples out there to choose

SPECIFICATION 911 TURBO

Engine: 3600cc, twin-turbo, intercooled

Power: 420hp @ 6000rpm (Turbo S 450 @ 6000rpm)

Torque: 413lb ft @ 2700-4600rpm (Turbo S 457lb ft @ 3500-4400rpm)

Dimensions (mm L/W/H): 4435/1830/1295

Track F/R (mm): 1472/1528

Weight manual/Tiptronic: 1540kg/ 1585kg (Cabriolet 1660kg/1700kg)

Brakes F/R: 330mm all round, drilled/ventilated, four-pot calipers (Turbo S 350mm ceramic all round, drilled/ventilated, six-pot calipers front, four-pot rear)

Gearbox: Six-speed manual or five-speed Tiptronic

Wheels F/R: 8x18-inch, 225/40 ZR18/11x18-inch, 295/30 ZR18

0-62mph manual/Tiptronic: 4.2secs/4.9secs

Top speed manual/Tiptronic: 189mph/185mph





LIVING WITH A 996 TURBO – SCOTT CAMERON

I've had my turbo for 18 months and it's been everything Porsche promised. I'd moved from a couple of Subarus to a 996 Carrera 2 and although it was great it just missed a few points for me. The first was that the front was very light and 'bobbed' about a bit so I didn't have as much confidence as I'd have liked. The second was that I missed the torque of a turbo engine. The Turbo has rectified these points and more. It's the ideal car as I'm from the north of Scotland and because it rains a lot I needed a car that could be used safely in wet weather if I was going to get the most use out of it.

The handling's great, it seems to sit on the road a lot better than my Carrera and it still isn't too firm but is still sporty enough for 'progressive' driving. The engine's the most impressive part, no problems around town, not too thirsty compared to cars of a similar performance (anything between 18-30mpg), and with a huge mid-range second/third gear is usually enough to convince most people that it's fast enough. A lot of the forums and magazines say that the engine's too quiet but I think it's just about right. It doesn't sound as good as my old Carrera or have quite the same nearly instant throttle response but I can easily live with it because of the mid-range shove.

The only minor points I can pick fault with are that the tyre noise can be a bit loud at times and like my other Porsche, there's a few more rattles than I would have thought from inside, but they are both cured by turning the Bose stereo up! The running costs for me have been very reasonable, only amounting to the warranty renewal and the service and MoT (spark plugs and annual service for £700), and I hope this will be even less next year as the spark plugs pushed the service price up by about £450. The warranty for me is a no-brainer, as at £825 it seems very cheap for what's covered compared to similar schemes from the likes of BMW with large excesses. Insurance for me is approximately £700 for a 28-year-old with full NCB and two other named drivers but I assume a lot of it's down to my postcode in the sticks.

Overall the car's been fantastic and the biggest problem I've had was finding a car that met my standards. My car was the 13th turbo I'd looked at after 1500 miles and none of the others came close and I was surprised how many had missed services on what was a £100,000 car when new. The only other problem I can foresee is what to replace it with. Lamborghinis and Ferraris are in a different league for servicing with restricted warranties; if you can get one, and 997 Turbos are too expensive for the small increase in ability and speed so I might keep this one for a while!

from and Mark says that you really shouldn't be too picky when it comes to spec as it's more important to buy a good car. Most Turbos are painted in a safe colour like black, grey or silver and these are the ones to go for if you're conscious of maintaining the car's resale value. Blues and reds are not uncommon but aren't best suited to the car and anything wilder should be avoided, unless you really do love a particular colour. As we mentioned, there weren't really that many options to choose from so all cars will have good spec levels anyway. Sat nav is a popular choice, commanding a £1000 premium, and it's much easier to sell a car with navigation, but the system itself is actually pretty poor with outdated mapping and the latest disc you can get for the system is from 2003. Mark even says that quite a few of Paragon's sat nav-equipped Turbo customers have bought themselves cheap aftermarket sat nav units.

You're bound to come across a few cars

sporting the optional Aero kit, especially X50 and S models, though whether or not it's to your taste is another matter and it's certainly not something that's worth going out of your way to track down. X50 pack-equipped cars command around a £3000 premium, which is a lot less than what the pack cost new, but it's poor value when you consider what you can get from someone like Revo. For £2000 plus VAT, Paragon will sell you a Revo map that will unleash another 70-80bhp, which is phenomenal value for money and you can have a couple of maps that you can switch between. Mick says that if you're not completely happy with the results, they'll give you a full refund, but he adds that he's never had that happen. If that's still not enough, Paragon will give you a free trial of the Revo software, which gives you five engine running hours at 500hp to make up your mind.

Turbo S models are hard to come by and expensive – Paragon has never sold one in fact,



with the cheapest one we could see up for £67,990. While it's not worth paying over the odds for the power part of the package, the PCCB might well swing it for you – though you might be able to find a regular Turbo that's been specced with PCCB. On the subject of track days, Mark says that despite the phenomenal brakes and awesome four-wheel drive system not to mention the power, the Turbo isn't an ideal track day car as the chassis is designed to understeer so it can be a frustrating experience. He adds that the Cabriolets are good value, costing just over 10 per cent more than the hard-top and the Tiptronic is also a popular choice, as well as being a bulletproof 'box and while it might not be the best choice for the Turbo, both the guys reckon that it's much better suited to the turbo than it is to the Carrera.

WHAT TO LOOK FOR

Exterior

All 996s came with a ten-year anti-corrosion warranty so in the unlikely event that there are any signs of rust on the car, expect a bodged repair – any genuine rust you'd get repaired under warranty, surely?

The front of the car and the front wings are prone to stone chips so don't be surprised if you see a few but avoid cars with poor quality paint repairs. The front splitter is also vulnerable so check it for signs of cracking, as replacements aren't cheap.

On Cabriolets, check the roof carefully for any rips or tears. Make sure the roof folds and raises smoothly and listen out for any excessive wind noise on a test drive.

Suspension

A common issue is misaligned geometry which can be caused by badly kerbing a wheel or even

hitting something like a large stone is enough to knock the geometry out of alignment and it's not cheap to put right.

The Turbo sits 10mm lower than the Carrera, and as a result the ride is a little on the firm side but if there is any excessive body roll, there might be something amiss.

Brakes, wheels and tyres

To check the condition of the rear tyres you need to get right under the car as the Turbo sits very low and you won't be able to properly see or feel the condition of the rear tyres' inner edge without getting down on your hands and knees.

The wheels are relatively easy to kerb, so give them all a good going over and use any damage as a bargaining tool.

Check that the tyres are a) a good performance brand and b) N-rated. If a previous owner has been stingy when it came to spending money on rubber then you've got to ask yourself where else they've cut corners.

The brakes tend to wear well but check the cross-drilled holes as they can become blocked over time, limiting their effectiveness.

Interior

The Turbo has a better interior than the earlier cars so there shouldn't be any squeaks and rattles – expect a few on higher mileage cars but newer examples should be pretty much silent.

It might sound silly, but check that all the electrics work – don't take anyone's word for it and have a good play with all the switches, windows and don't forget the cigarette lighter. Make sure the air con works properly too.

The gear knob can scratch easily but don't be put off by wear, as it's easy enough to replace. Check the interior for any particularly bad scuffing and any

excessive wear on the seats and steering wheel, again simple, but necessary.

WHAT'S OUT THERE?

On a budget

2001 Tiptronic, 45,500 miles, Lapis blue metallic, sat nav, full Porsche service history, black heated leather seats, OBC, MoT and tax. £37,995ono.

Money no object

2005 05 Turbo S, manual, 30,000 miles, GT silver, black leather, Sports seats, full Aero body kit, telephone, sunroof, full Porsche service history, warranty until 2009, Porsche director's own car. £69,995.

The tempting prospect

2002, manual, 31,000 miles, silver, 550bhp DMS power upgrade, full Aero kit, sat nav, Bose stereo, black leather electric memory seats, 11 months MoT, 12 months Porsche warranty. £50,995ovno.

Best buy

2001, manual, 12,000 miles, Basalt black metallic, black leather electric seats, carbon pack, Sony CD head unit, full service history, sunroof. £49,995 ●

Thanks to Paragon for the loan of the car – if you're interested in this particular Turbo, please call 01825 830424.