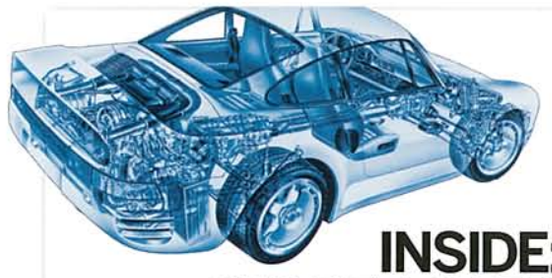
Total 911

THE PORSCHE



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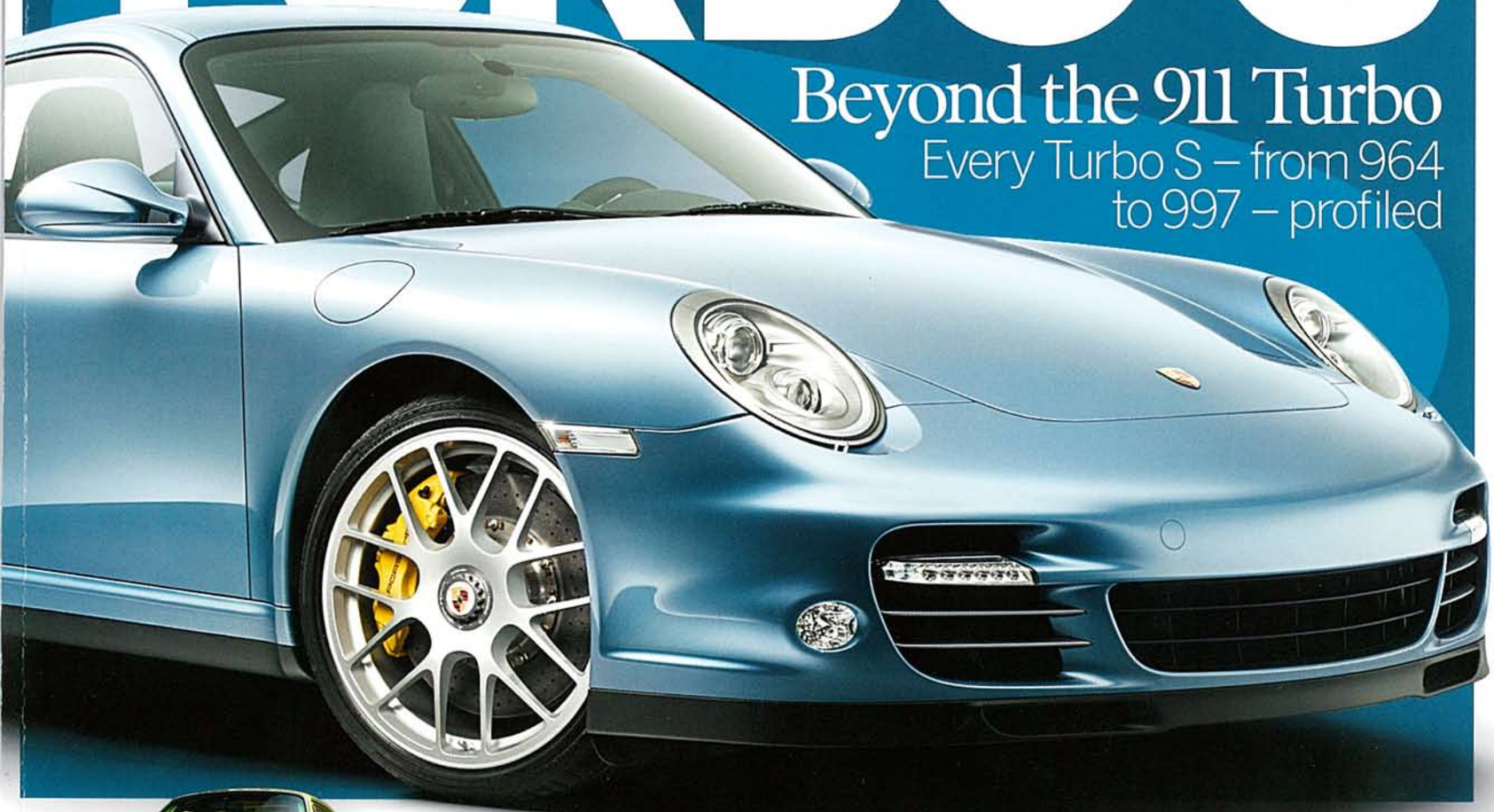

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beyond perfection

Written and photographed by **Ian Kuah**

Improving the latest 911 Turbo sounds a tough call – but SpeedArt has risen to the challenge with this astonishing 650bhp creation

Grey is a controversial colour for a supercar. While it looks sharp and technical in bright sunshine, its stealthy character does not deliver the 'I am coming through, move over!' message so vital for autobahn stormers.

That apart, Porsche's Meteor Grey metallic hue really suits SpeedArt's take on the second-generation 997 Turbo, which comes complete with the mind-numbing 'BTR-II 650 EVO' badge on its engine cover.

After a brief walk around, I conclude that even if the end result may not be to everyone's taste, the red paint Björn Striening's team has applied to the wheels' outer rims, front air splitter and rear wing perfectly highlight the new parts.

The big side intake ducts in the new front bumper incorporate daytime running lights and a pair of driving lights. A refreshingly new design motif is the matt black frame that visually complements the larger central air intake. In practical terms these big intakes could do with mesh grilles to prevent flying stones delivering a knockout blow to the vulnerable water radiators behind them.

The deeply sculpted sideskirts are designed to channel airflow upwards past the big rear wheels to reduce turbulence in that area. Aft of this, the new rear wing perched on the new engine cover has a pair of ram intakes to boost flow to the airbox. The final body styling additions are a small rooftop spoiler and a valance extension below the factory rear bumper that continues the lowest line of the sideskirts.

The eye-catching red theme continues in the cabin with colour-coded instrument faces and the unusual red carbonfibre trim on the centre console and doors.

Further detail work from SpeedArt's trim shop includes red edging for the black carpet mats, and red stitching on the anthracite leather of the steering wheel airbag, seats, door trims and dashboard top roll. When I look more closely at the stitching on the centre console, I discover a delightful detail that was borne from a rather happy coincidence.

"It would not have made sense to unstitch the factory silver-grey thread, so my master upholsterer suggested interweaving this with thicker red stitching," Björn explains. The end result is a classy looking and intricate pattern of grey and red stitching.

SpeedArt's bespoke paddleshift steering wheel is the finishing touch for the enthusiastic ➲

driver who doesn't have Porsche's optional PDK paddleshifter wheel. This comes with a thicker-contoured rim and is a straight swap for the Tiptronic and PDK factory steering wheels on all Boxster, Cayman and 911 models.

Even in standard form, the brand-new 500bhp Turbo engine is a gem. Sweet from idle to cut-out, it is everything the old GT1-blocked engine was not, and delivers a 16 per cent improvement in fuel consumption as well.

One of the first tuners to offer an upgrade programme for this new engine, SpeedArt offers both a modest 580bhp Powerkit, and a much wilder 650bhp version. The former uses a freer-flowing sports air filter, sports exhaust with sound switch, 200-cell catalytic converters, and four 90mm diameter outlet pipes. The ECU is remapped to increase boost pressure and alter the fuelling and ignition curves to suit.

Even the latest standard VTG turbochargers are on their flow limit at 580bhp, so the 650bhp Powerkit IV conversion involves replacing them with a pair of larger turbochargers and also larger intercoolers.

"We use the GT2 turbocharger units as these have a higher flow rate to start with, and then our engineers further optimise them for higher output levels," explains Björn. "The housings are machined out to increase the internal scroll size for greater airflow, and we carefully match the turbines to achieve good low-end response. Our special high-efficiency intercoolers drop the intake temperature by over 20 degrees Celsius so we can run higher boost pressures."

This kit uses the same SpeedArt intake and exhaust as the 580bhp version, but as it now produces 650bhp and 860Nm of torque, an uprated clutch is required for the manual car. The PDK transmission requires some internal parts to be uprated, too.

> "In standard form the new 500bhp Turbo engine is a gem"

The second-generation Turbo's suspension is very good out of the box, but as the factory car has to cope with legal niceties such as snow chains in winter, its ride height is a bit higher than the tuner's art prefers.

SpeedArt's H&R-made lowering springs take 25mm out of the standard ride height. Tuned to work perfectly with the factory PASM dampers, these springs are about ten per cent firmer, and retain the front to rear balance of the standard car while delivering even better body control at speed.

"Most of our customers use their cars on the road rather than on trackdays, so we placed a lot of emphasis on retaining reasonable ride comfort," Björn explains. "The off-the-shelf H&R springs for the Turbo are biased more towards trackdays, so are uncomfortable for daily road use. This is why we developed our own specific springs."

SpeedArt's LSC lightweight forged alloys offer a one-inch diameter increase over the largest factory wheel. "We use 8.5J and 12.0J x 20-inch wheels with 245/30ZR20 and 325/25ZR20 tyres," says Björn. "Our ultra-light forged wheels more than make up for the extra inch of diameter, resulting in a relatively low unsprung weight."

Available in three sizes – 8.5J, 11.0J and 12.0J – these wheels look even larger than they actually are thanks to an optical trick with the design and colouring of their spokes. You see, the five double spokes overlap the outer rim, so they are as long as they would be on a 22-inch wheel. In addition, their centres are slightly concave, which makes them look deeper, enhancing the Turbo's purposeful stance.

"The concave centres are very hard to machine, and we had to negotiate with several companies before we found one who could do this for reasonable money," Björn tells me. The resulting look is unique in the industry, and gives SpeedArt the signature design that is so very important to the identity of a brand.

Björn takes great pains to emphasise just how careful his team was not to upset the much improved balance of the latest Turbo. "The factory corrected all the problems of the original car, which made things even harder for us to improve," he admits.

Customers go to a company like SpeedArt for more power, a bit more grip and handling, along with distinctive looks, and that is exactly what the BTR-II 650 EVO delivers.

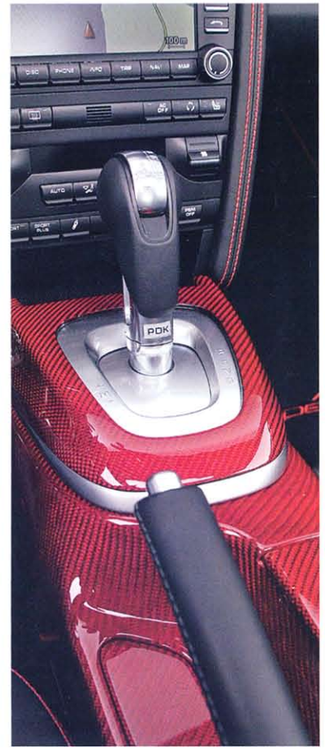
Driving through the town away from SpeedArt's headquarters, the extra ride stiffness is immediately apparent. It feels more like 20 per cent stiffer than standard, but retains a relatively good secondary ride. Firm but never jarring is the best description.

The big output engine, on the other hand, feels every bit as tractable as standard, which is exactly how you want things in a daily driver. It was only when the vital fluids were properly warmed through on a fast open ➲

Red details abound, including red thread woven into the original stitching (top), red carbonfibre (far left) and red-faced dials (left)

Engine (below left) is endowed with 650bhp and SpeedArt branding

Chunky steering wheel (above) features paddleshifters (top right)



The art of speed

Stuttgart-based SpeedArt was started in 1999 by Björn Striening, and initially sold just wheels and tyres. Björn made himself a bit of money and bought a Porsche Boxster and, before long, he was developing body parts for this. "One of the most popular products was a 'Turbo-Look' front bumper for the Boxster and 996," he recalls.

Soon, the company was offering a range of bodykits for Porsches, but Björn wanted to go further. "My aim was to make Porsches look sportier but also faster. So I began to develop power upgrades, in particular, sport exhaust systems and engine tuning, not to mention uprated suspension. We still hold the lap record on Nürburgring with a street-legal SpeedArt-tuned 997 Turbo and also the fastest 997 Turbo Cabriolet on the Hockenheimring."

road en route to the Malmsheim test track, that I light up the afterburners and experience the darker side of this monster Porsche.

Because the big turbochargers have been so finely fettled and the electronics so well remapped, the SpeedArt Turbo picks up speed progressively and with deceptive ease. While its push in the back is noticeably more aggressive than standard, there is none of the lag, and then an all or nothing shove you might expect from an engine that matches the output of, say, a Nineties Le Mans Porsche 962C Group C race car.

The effect might well be more dramatic if you row your own gears, but Porsche's PDK transmission does a hugely effective job of delivering each ratio with seamless perfection. All you feel is one long, hard blast of acceleration, and on these fast country roads, the scenery and other traffic turns into a blur rather quickly.

In the first part of my exploratory foray, I was upshifting at 5,500rpm, some way short of peak power. After quickly gaining familiarity with the car's capabilities, I take the engine to 6,500rpm wherever there's the space to do so. Then my take on this car's acceleration goes from very fast to simply awesome.

The good thing is that the brakes and suspension are well up to the big challenge thrown down by the engine. As the Turbo is over-braked out of the box, the extra power is not a big issue unless you are doing track work, in which case the PCCB ceramic brakes will do the job perfectly. This demo car is fitted with the standard Turbo steel brakes, which prove perfectly adequate on the road.

Wheel rims feature spokes that extend right to the edge to give the impression that the wheel is even larger than it actually is

"My take on this car's acceleration goes from very fast to simply awesome"

The lower ride height, stiffer springs and wider rubber give the car gravity-defying cornering powers. Despite being on normal rather than Cup rubber, it feels like it could easily generate 1.1g in steady state cornering. The factory's recalibration of the power distribution between front and rear is much more consistent now and no unpleasant surprises lie in wait when you reach deep into the car's handling and grip capabilities.

I was pondering SpeedArt's choice of just 8.5J wheels in front, but this works very well as wider wheels would create bump steer problems on some road surfaces, especially those with odd cambers. Also, given the recalibration of Porsche's four-wheel-drive system to direct more power to the rear, this front/rear wheel size differential makes a lot of sense.

Just as Björn promised, the relatively narrow front wheels and optimised geometry keep bump steer off the menu on country roads, and the car doesn't misbehave on suburban roads whose surfaces have suffered considerably from this year's long, hard winter.

While I have to think at least twice every time I try to recall its BTR-II 650 EVO designation, this 997 Turbo-based car impresses deeply with its distinctive looks and well-sorted dynamics.

www.speedart.de