

# Performance VW

**300bhp**  
NOS-injected  
Callaway  
turbo Jetta



**365bhp**  
Mk2 2.0-litre  
TFSI



Forget about the full-blown show cars for a second. What about the true performance Dubs that actually get used and abused?

# Take the Power Back

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REPORTS  
PLAYERS  
**WESTSIDE**  
WATERWERKS  
**BUG RUN**

**290bhp**  
Mk2 R32  
24v V6



**300bhp**  
Mk1 16v  
turbo

**200bhp**  
Lightweight  
Corrado

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Dec 2010  
£4.50





# The Ultimate Chequebook Car

Picking off supercars with consummate ease, The TT Shop's new TT RS demo car leaves exotica humbled by its very, very fast four-letter badge! Words: Neil Hunt Photos: John Coley





“You’d be surprised how little there was in it,” starts Vince Hickman. “On the way here, I had a bit of a ruck with a Gallardo. He saw me head the other way [who wouldn’t miss a Porsche Viper green TT RS with a white stripe?] and instead of turning off, he span around and came after me. We didn’t go mad, but he really had bitten off more than he could chew and was really screaming that Italian V10 in a desperate attempt to catch up...”

And that supercar-threatening performance is exactly why our ears pricked up when Dave Mahoney – boss of The TT Shop – told us he’d built the successor to the company’s previous orange Mk1 TT. That car put The TT Shop on the map, and following it was never going to be easy. Dave resisted the temptation to build a hugely powerful motor that would turn in impressive dyno and quarter numbers after sensibly asking himself how many customers would realistically be able to afford or live with a big boosting, highly strung engine. What Dave has done, instead,

is look at what the new age Audi driver wants and then delivered that and a whole lot more.

Vince has brought the TT RS for us today and tells us how the crazy project has been completed in less than three months. He starts: “The most important thing we wanted to achieve was to blend the very best aftermarket tuning and styling with what the factory does so well. The TT driver is very discerning, yet under that up-market appearance they still harbour a massive desire to go insanely fast. So, in April we started out creating a demo car that would appeal equally to both the old-school or hardcore Dubber, as well as the suited and booted city customer who wants the quality that Audi stands for.”

To create this look Dave spent months trawling pictures, paint codes and even bought model cars in colours he liked, for inspiration. But in the back of his mind there was only one hue: Porsche Viper green, from the GT3 that shared its RS badge with the new high performance TT model. But instead of buying a TT RS and painting it, Dave wanted to do it properly. So a call was put into the factory by the supplying dealer, Halesowen, and after a lengthy authorisation process, a brand-new shell was plucked from the production line and sent to the paint department of Audi’s specialist high performance division: Quattro GmbH.

The entire bare shell was given a unique Porsche paint scheme before production was allowed to be started. After ticking as many options as possible, 2 TTS was begun and it soon rolled on to the production line on its 19” optional Titanium five-spoke rims.

When the fresh TT RS arrived in the UK at The TT Shop, the team treated it to AutoGlym Lifeshine treatment inside and out. The guys also had Ventureshield stone chip protect film fitted to the entire front end to protect their new baby. Cheekily, with state-of-the-art wheel alignment in-house, the boys couldn’t resist checking Audi’s work from the factory. “Turns out even they aren’t perfect,” smiles Vince, “we had to tweak it for perfection!”

Dave already had a wish list of desirable tuning parts for the RS, starting with a full set of











## Dub Details

**ENGINE:** 2.5-litre five-cylinder engine with Revo Stage 2 software. Milltek Sport cat bypass non-resonated stainless steel exhaust system. Pipercross panel air filter. Modified de-cat downpipe. Forge front-mounted intercooler with custom green hose kit. Haldex Gen 4 performance controller with remote control switching. Custom painted rocker covers. Forge alloy coolant reservoir

**CHASSIS:** 9x19" Titanium option TT RS wheels with 255/35 Michelin Pilot tyres all round. Bilstein height/ride adjustable PSS10 coilovers. Full Super Pro poly bush kit front and rear. H&R uprated anti-roll bars (front: 24mm, rear: 22mm). Brembo one-piece six-pot calipers painted body colour. 380mm two-piece floating drilled discs. Custom drilled rear brakes

**OUTSIDE:** Custom factory paint in Porsche Viper green (2D8) with white/silver vinyl stripes. Ventureshield stone chip protection

**INSIDE:** Custom painted RS bucket seats with TT RS logo stitching (also on doorcards). Matte aluminium styling pack. Colour-coded dash and centre console inlays. Custom carbon fibre/leather steering wheel with green stitching. Defi gauges for boost, oil pressure and exhausts gas temperature. Black Alcantara headlining

**THANKS:** The TT Shop/TTS Roadsport (01234 853225 or [www.thettshop.com](http://www.thettshop.com))

Super Pro polybushes. "We used them on the Mk1 and really rate them," he says. "The head guys from SP Australia and the UK came along to help us develop the best handling from the TT – that close personal interaction makes for better results for our customers. A lot of people think polybushes are all the same, but that's not the case. SP has developed progressive bushes that stiffen under increasing load, for example. Thanks to those, we can now uprate every single bush in both the old and new TT."

TTS Roadsport (the in-house performance department and VAG specialist parent company of The TT Shop) then started by pressing out the brand-new factory bushes in the wishbones (front and rear, including console bushes) and replacing them with new polybushes, before moving on to the rear bushes, which offset the rear arm mounting point to increase caster angle, resulting in better handling. The rear lateral arm bushes were next, and then the camber adjustment bushes and trailing arms.

While the suspension was apart, it was time to call in the specialist in this field,

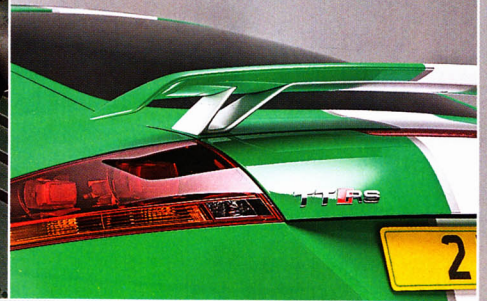
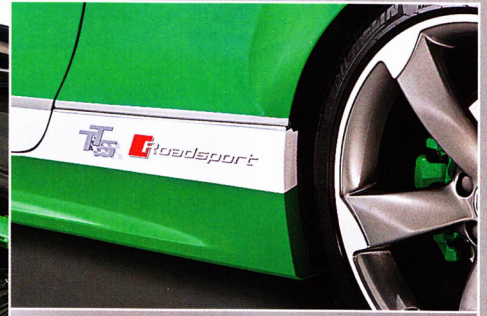
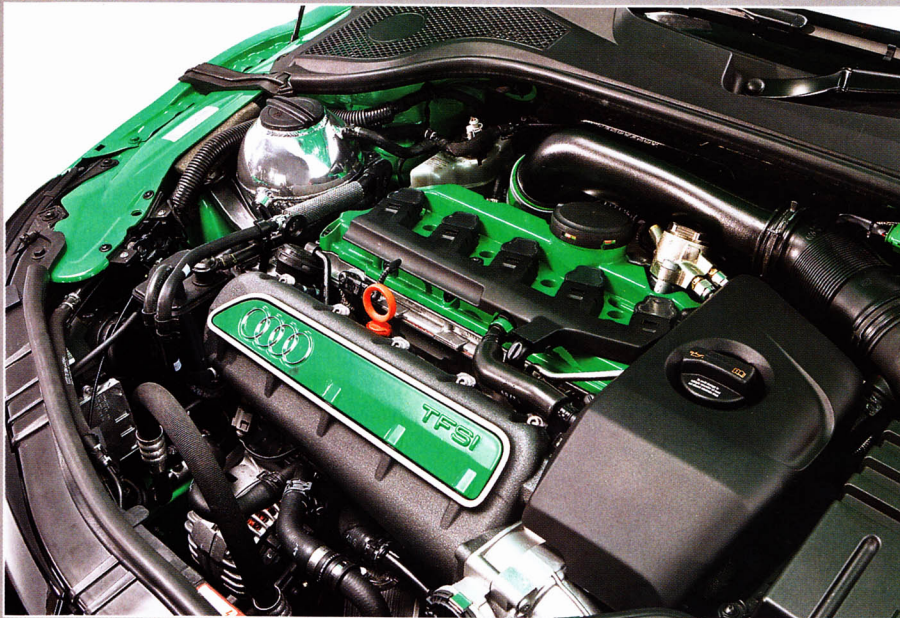
H&R, as Vince explains: "We uprated the factory anti-roll bars. They may look pretty beefy as standard, but for every millimetre you can increase the bar diameter, the torsional stiffness greatly increases. We replaced the front with a solid H&R bar that's nearly an inch in diameter, while a 22mm version was used at the rear. The results are impressive. We get much sharper turn in and reduced body roll, too."

Over the years, TTS Roadsport's workshop has developed enviable relationships with the leading tuning brands in Europe, one of which is Bilstein. "Dave had Bilstein coilovers on his RS6 and old TT and, to be honest, nothing can touch them," starts Vince. "They're developed and used on the track, yet unlike many high-end coilies, manage to keep plenty of road compliance for our top-end customers who demand refinement. No customer wants a bone-shaking ride in a TT; it's too well engineered for that; we'd hate to ruin Audi's hard work." The newest Bilstein PSS10 coilovers were a perfect choice: the highest quality German engineering bolted to a car sharing the same brand values.

Before they'd even been used in anger, the factory stoppers were sold on and only the best from Brembo would be good enough to take their place. The main constraint was the internal wheel diameter of the factory 19s, so the team measured up to ensure they'd house Brembo's biggest disc for this chassis. Dave specified sexy two-piece (alloy bell) floating 380mm diameter discs, clamped by one-piece monoblock six-pot calipers. While the diameter may only be 10mm up on standard, the increased performance is mostly down to the floating disc and the stiffness of a monoblock caliper versus a traditional two-piece setup. Vince tells us: "We work closely with Brembo and had an S3 kit to start with as it was close to what we wanted. As the only tuner pushing new age TT R&D, TTS Roadsport spent days tailoring the caliper and disc setup so it would clear the rim with only mils to spare." So, with the kit prototyped, it was then down to Brembo to produce the goods. And the end result? Well, dream stoppers for your TT, yes, but at just shy of four large you'd better get saving. And to tie everything together, Dave and the boys also colour-coded the calipers in Viper green.







Under the bonnet was never going to stay standard long either. Starting with the factory 340bhp, TTS Roadsport worked with another couple of its tuning partners: Revo and Forge Motorsport. "With no one having a car so fresh, it was up to us to do the development," starts Vince. "We kept the factory air box and exhaust at first and Revo used the car to bring on its Stage 1 ECU remap. Once it had completed that process, the car left the premises and headed to Gloucester for Forge to play with..."

The factory intercooler is obviously built with compromises of manufacturing cost as well as physical size and is built to handle factory levels of boost. But with more power in mind, Forge took the dimensions of the factory intercooler and worked out just how much more space a better 'cooler could occupy. "It's a very tight fit in there so the biggest area

for improvement was in the depth of the intercooler. Using the factory mounting points and pipe positions, Forge has managed to more than double the thickness of the intercooler that's now a sexy alloy unit you can just see through the bumper," says Vince.

While the intercooler was developed to be stronger and more efficient for the upcoming boost increase, even running





factory settings, the intercooler revealed exceptional gains. The TT leapt from 340 to 367bhp on the rollers with the new intercooler fitted, which just goes to show the inefficiencies of the factory design.

With the new improved TT RS back in TTS Roadsport's workshop, it was time to look at the exhaust system. Working with Milltek, the standard system was analysed and the team worked out just where improvements could be made. The factory system comes from the turbo, through the first cat in the downpipe, before splitting into two front pipes, each with its own cat. They then join back up at the rear of the system. So in order to really gain power, TTS and Milltek developed the two cat delete pipes and worked backwards from there on a more free-flowing exhaust system design. The decision was made to offer the system with or without a middle exhaust box, depending on the customer. For 2 TTS the choice was easy: straight through! The boys have been careful to retain the exhaust control valve, operated by the Sport mode switch in the car.

Having big power, however, is only useful if you can get great traction. With TTS Roadsport being the UK specialist for Haldex (the automated four-wheel drive system used on many VAG cars), the company fitted one of its uprated Haldex control units to the TT RS. The fourth-gen

performance controller is more enthusiastic when distributing torque to the rear wheels, making for a much more entertaining drive. It's also switchable by remote control with a choice of Eco, Standard and Race modes.

After extensive testing of induction kit and filters, it was found that the heat of the engine bay would not allow an open cone filter to produce better engine performance. The standard air box allowed such good flow and heat protection that the best results were gained by dropping in a Pipercross panel filter in the air box. With all the tuning work done, the last stage was to dyno the TT RS. The Stage 2 map had been developed to work with the exhaust, filter and intercooler and the numbers are impressive: 420bhp and even more torque at 435lb ft. Out on the road that meant the TT RS could still be docile and manageable around town, but with masses of traction from 255-section rubber and uprated Haldex 4WD, the minute you hammer down, there is enough power to make the TT almost untouchable to anything this side of a supercar. You've got all the practicality of a TT but with the handling, brakes and power of six-figure, high-end sports car. Just ask that Gallardo driver...

Inside the TT, the boys had already stripped out the Recaros and virtually all of the removable trim back in April, before all the intensive work started. While the car was away, the factory option RS Recaros were stripped down while the harness hole trims and seats backs were sent for paint to match the body. Check out the silver TT stitching on the seats, too. While the paint shop fired up its guns, the dash inlays, centre console trims and door handles (among a big box of bits) were all shot through in Porsche Viper green to match.

To contrast the green, The TT Shop boys have created carbon fibre highlights. Just look at that steering wheel airbag and rim covers. The weave and high gloss finish is set off by a cool body-coloured insert ring and green stitching. We're feeling the carbon shrouds for the three Defi gauges in the centre of the dash top, too.

With the car built in less than three months and showcasing the most cutting-edge tuning tech in the UK, 2 TTS hasn't just been nestled in a showroom; it's been hammered hard. When it's not being used to show customers what can be done, it's on the track proving the TTS Roadsport branding is stronger than ever. At GTI International recently, 2 TTS proved that it's not just a pretty Nu Age coupé. On its very first sprint test, and on standard road tyres it turned in a 3.55-second run to 60mph, going on to a quarter time that was dangerously close to breaking into the 11s. But tuning isn't stopping here. Dave and the team has already started the R&D for 2 TTS to push out over 500bhp but still keep the most important characteristic of being a practical daily. Supercars are about to get owned ●

