

NOBLE NOMAD

The Touareg were the noble wandering tribes of the Sahara, used to travelling vast distances over fearsome terrain, in search of their livelihood. Decades of suppression and war has seen them largely destroyed, but the name given by Volkswagen to their leviathan 4x4 is a fitting testament to the memory of these wild, independent, travellers. The range-topping Touareg follows recent trends by being diesel powered and not petrol, and at 313bhp and 4.9-litres, it shades the petrol V8 by 800cc and 3bhp. But where it literally tramples all over the V8 petrol's 303 lb ft of torque is with its figure of 553 lb ft. Plenty of motive force for anyone, you might think, but the Touareg's 2,500kg takes some shifting when hard acceleration is demanded, and you can never have enough of a good thing, as they say... So we took ourselves up to Tunit HQ in Lancashire when the boffins there told us that they had found some very useful gains in power and torque from tweaking a customer's V10's ECU, and making the Touareg's lucky Lancashire owner, a very happy man.

First job was to quantify the gains, and that meant a trip to nearby Blackburn, where the Blackburn College's Centre of Excellence Automotive Department's four-wheel drive Bosch rolling road dynamometer represents a rare and highly sophisticated piece of kit. There are very few of these 4x4 machines around, and also very few dynamometers of any type that can cope with the levels of torque produced by the massive VW V10...

We spent a good couple of hours taking successive dynamometer runs, and the main problem – if you can call it that – was getting full power laid down onto the dynamometer's rollers when the Touareg's Tiptronic auto 'box suggested that it wanted otherwise! That was by



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way of dropping into a different gear, just when peak power engine speed was being reached! But with various combinations of manual override the Tunit boys clocked some meaningful figures, although it was much easier to develop the full power of the engine on the dynamometer in its modified form than it was as standard.

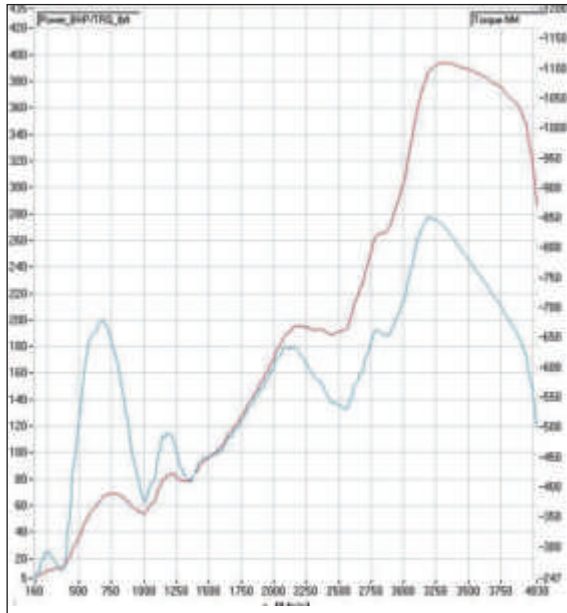
The figures speak for themselves, even if the rather ragged graph that results from the Tiptronic's foibles looks somewhat strange. Maximum power of 393bhp was clocked at just 3,250rpm, up by 80bhp and 25 per cent on specification – but we couldn't get a reliable enough comparable power figure for the unmodified engine. The graph clearly demonstrates a massive torque of 628 lb ft, at around 3,150rpm, 14 per cent up on specification, although both maximum power and torque were registered at engine speeds somewhat strangely well displaced from the published 'factory figures'! But as Tom Jones has been heard to utter, "It's Not Unusual!"

These outputs comfortably make the Touareg the punchiest diesel that's ever been featured in DC, and there are few



Few dynamometers are able to measure these huge levels of torque.

GETS A BOOST!



Torque upped to 628 lb ft makes the Touareg 'King Twister!' The strange peaks were caused by Tiptronic auto gearchanging.



really down to the impressions of its owner to convey the effects of the Tunit conversion, which, by the way, needs two of the usual Tunit black boxes, tucked away on the nearside of the engine bay, since the engine's ECU runs via split circuits to each bank of five cylinders in the V10.

Well, it was actually the owner's 11 year-old son (obviously a sprouting dieselhead!) who first declared that the car was "smoother and quieter", so his Dad says! That's been confirmed with more miles, and the (anonymous) owner feels that, "...right from cold start-up, the car is smoother, quieter, and more powerful. The power and torque comes in earlier, and hangs on for longer, giving devastatingly impressive mid-range acceleration, which is particularly evident around 60-70mph." 'Nuff said – but you can tell that he's more than satisfied! You have to remember that the Touareg weighs in at around two and a half tonnes, so it takes some moving from standstill. Others have tested the 0-60mph time at around 7.5 seconds, and the owner says that he feels that it's now down to around six-and-a-bit seconds! But it's the mid-range punch

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that really counts, and the firmly sub-four seconds 50-70mph in kick-down blasts gas-guzzling 4.4 litre petrol Range Rovers (five seconds plus) into the undergrowth. OK – so Porsche's lighter 444bhp Cayenne Turbo has a clear edge, but with hard-driven mpg figures down in the mid teens if you're lucky, and a £20K bigger price tag, you can see that we're not comparing eggs with eggs! The test Touareg has been clocking around 22mpg in standard tune, and the owner already knows that he's at least matching that figure – so there's no significant cost penalty in fuel usage, which is usually the case with Tunit conversions. So it's an altogether satisfying transformation of an already highly impressive machine, which has seen the owner already planning to have his wife's Mercedes C220 CDI given the Tunit treatment.

Aside from a full range of conversions for all diesels, and a new range of petrol tuning kits soon to be available, Tunit are also making inroads into the world of heavy haulage. There are huge potential cost savings to be made in improved fuel economy when such beasts are guzzling as much as 8-10mpg, and already Tunit are getting repeat orders from haulage fleet operators who are saving massive sums on their fleet costs after fitting Tunit conversions. The main benefit comes from being able to "pull" a higher gear in many situations when fully loaded, and it's all proof that such conversions actually improve engine efficiency, as well as adding to engine response and driver enjoyment.

The Touareg conversion cost £796 plus VAT, with typical fitting costs of around £60 inclusive. You can contact Tunit HQ on 01257 274100, find one of their local agents advertising in DC, or find full details of all available conversions on their tunit.co.uk website.



Twin Tunit boxes for the twin ECUs.

supercars that can match the power figures, and none, absolutely none, that come near to its torque. This figure utterly crucifies the best offerings of 400-480 lb ft from even the likes of Ferraris, Porsches, and Lamborghinis. Interestingly, it also represents about twice the power and torque to weight ratios of even the beefy 4.2-litre Landcruiser Amazon! Now, although a turn at the wheel leaves one utterly impressed, that's probably no more than you would expect from the standard article, with which I'm sadly not too familiar! So it's



Enough power to spin the Touareg's big, bad wheels through thick and thin.