



UPGRADE: We put engine tuning to the test

VW Passat TDi 140 – by Superchips

Order it online, plug it in and bingo: an instant overtaking machine. By Chris Chilton

THE MAKEOVER

WHO? | Superchips

MUSCLE |

POWER

Standard 152bhp*
Superchips 184bhp

*output of our car tested on Superchips rolling road

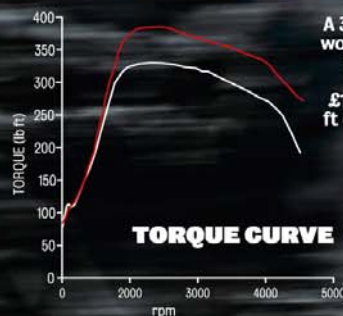
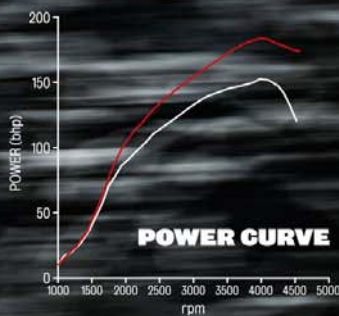
TORQUE

Standard 245lb ft
Superchips 284lb ft

COST | £445

WARRANTY | 1 year (providing car has one year manu left). Add a second year for £50

FITTING TIME | Just a couple of minutes!



A 32bhp hike works out at £13.90 per bhp (and £11.41 per lb ft of torque)



LIKE HOOVER, THERMOS and iPod, the name of Buckingham-based Superchips has become a generic term. Superchips, a pioneer of remapping, has been in the tuning game for 30 years and really became well known during the heyday of the Sierra Cosworth. But these days its customers are as likely to be middle-aged businessmen with premium German turbodiesels than boy racers wanting maximum power from an Impreza.

In the old days, chipping meant exactly that – soldering a new microchip into the ECU board with the new map installed. But most current cars are remapped using the diagnostic port, which is where Superchips' Bluefin comes

in. The idea was developed in the US, where it wasn't always practical for customers to travel to a dealer to have their ECUs recoded. What was needed was a way for the customer to perform the upgrade themselves.

Order on the Superchips website and you'll receive something through the post that looks like a TV remote. Plug it into the OBD port under the dash and the new programme containing revised fuel and ignition settings is uploaded in just a couple of minutes. You can also return it to standard just as quickly – not that you'd want to. It transforms a Passat 2.0 TDi 140 into an overtaking machine.

For an £880 premium VW will sell you a 170 2.0 TDi with

168bhp – but you can remap your 140 to produce even more power for half that. The Bluefin boosts the standard car to 184bhp and lifts torque from 245lbft to 284lb ft.

Drive it like a nun and you'll never notice the difference. It's as smooth and well-mannered as the standard car. But start to explore the performance and the difference is dramatic. Boost comes in fractionally sooner than standard and by 2000rpm the Superchips car feels like an entirely different animal and hot hatch quick through the gears: 1.5sec quicker than stock to 60mph and more than 6sec to 100mph. In the wet you can feel that there's more of a struggle for traction, but the ESP can mop it up subtly.

Now overtaking becomes a cinch – it even tugs hard in the tall sixth gear, which feels so flat in the stock car. And rather than dying out at 4000rpm, the remapped engine swings happily round to the 5k redline. Superchips can also upgrade a 170bhp car to around 200bhp, but that doesn't detract from the chipped 140. If you're driving any VW Group car with this engine, it's a no-brainer.

VERDICT | Amazing result for the money

HOW MUCH FASTER?



BENCHMARKS

| | STD | TUNED |
|----------|----------|----------|
| 0-60mph | 10.0 sec | 8.6 sec |
| 0-100mph | 28.8 sec | 22.5 sec |
| 30-70mph | 9.3 sec | 7.1 sec |



IN-GEAR TIMES

| | STD | TUNED |
|------------------|---------|---------|
| 30-50 (3rd gear) | 4.1 sec | 3.2 sec |
| 50-70 (5th gear) | 7.4 sec | 5.9 sec |