## Red, Black and Bluefinned!

The Superchips demo Mk 6 GTI comes with an unusual colour scheme, and an extra 44 bhp under the bonnet...



HERE IN THE UK, it's no real surprise that Superchips was among the first tuning specialists with an engine management software upgrade for the Mk 6 GTI. The Buckingham-based company has been at the forefront of the electronic tuning industry for a great many years, since 1977 in fact, and has kept its finger on the pulse of the automotive market ever since.

Being a multi-marque software specialist rather than an exclusive Volkswagen Group tuning company means that it has a broader picture of the software systems in use throughout the industry and can often use this experience to good effect.

For instance, its current Bluefin system was first pioneered on the Ford model range some years ago, and has since been applied to many other marques, including - of course - most of the current

Volkswagen Group models. In fact, there are plans afoot to retro-engineer it to suit the older models like the 1.8T and earlier TDI engines, both of which are engines for which Superchips already has extensive files of conventional software upgrades.

We've featured Bluefin several times before in Volkswagen Driver, but - for the benefit of any new readers - it's not so much a software upgrade in itself but a method of allowing the customer to download the high-performance software to their car themselves. It also has the ability to switch back to the standard software if and whenever required.

Rather than having to remove the ECU, for the standard chip to be reprogrammed on the workbench, as was always traditionally the case, or needing a specialist to download the software upgrade from a laptop using the on-board diagnostic (OBD) port, as has more recently been the case, the customer has a handheld module with which to make the download themselves.

Initially, the customer purchases the complete Bluefin package, comprising the module and a CD-based software and instructional guide. The module is plugged into the car using the OBD port connector, located in the driver's side of the dashboard.

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underneath, and the standard engine management software code is copied and relayed back to Superchips using an internet connection. The Superchips engineers check the particular map for that car and either return the most appropriate high-performance software from its extensive archives, or they copy and custom-modify it to suit. Within a short space of time, usually 24 hours, but often quicker, the customer has a Bluefin module loaded with two complete engine management maps for his car, one totally standard and one high-performance upgrade.

From here the customer can decide which map to run; either upload the high-performance map and enjoy full-time high-performance motoring, only reverting to standard for routine servicing and maintenance, or run the car as standard and only load the high-performance map for special occasions, like track days or those special solo drives on well-known country roads on quiet Sunday mornings...

The transfer process only take 15-20 minutes, following the simple instructions given on the Bluefin screen, and is easily carried out on the driveway or even in a layby. Just about long enough to let the engine cool and settle and then check the oil level, for good measure, before hopping back in and setting off for the rest of your journey with a substantial improvement in performance...

So, after picking up the Superchips Mk 6 GTI from its base in Buckingham, our first priority was a test drive of the car in standard form, just to reaquaint ourselves with its normal performance. After commuting for a couple of weeks in an elderly Audi 80 TDI capable of 55 mpg but with only a 90 PS 1.9 TDI under the bonnet, even the standard 210 PS of the 2.0-litre TSI in the Mk 6 GTI was a revelation at first.

But there may be more to this than meets the eye. Interestingly, in all the dyno testing that Superchips has carried out on the standard Mk 6 GTI, they've found the actual figures to be substantially higher than the factory claims. This particular car clocked no less than 249 bhp at 6651 rpm and 307 Nm at 5167 rpm. For a car which is rated at 210 PS (207 bhp) and 280 Nm, according to the official factory figures, that's already pretty healthy. But there's a lot more still to come...

Re-mapped, the Superchips GTI produces very similar power and torque curves, retaining the long linear climb of the power



graph and the broad wide range of the torque curve, all the way from 2000 rpm to well past 5000, but transposed to much higher figures throughout the range, almost as if the curves have just been shunted higher up on the graph at the same engine speeds. It's exactly what you want to see for a road car, 'more of the same' throughout the rev range rather than the peaky 'all or nothing' conversions that old-fashioned tuning techniques so often produced.

With its software upgrade applied by Bluefin, taking only 15 minutes in a layby, the Superchipped GTI now tops out at 274 bhp at 6170 rpm and 372 Nm at 4651 rpm, improvements of 44 bhp and 73 Nm respectively. Even more significant is



## 'THE SUPERCHIPPED GTI NOW TOPS OUT AT 274 BHP AT 6170 RPM AND 372 NM AT 4651 RPM, IMPROVEMENTS OF 44 BHP AND 73 NM RESPECTIVELY...'

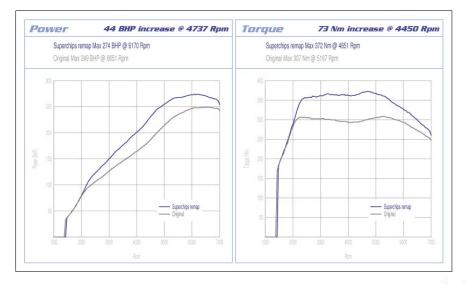
the fact that both the power and torque increases are at slightly lower engine speeds, meaning that the car is not only more powerful and punchy but it also comes on strongly at lower engine speeds, characteristics which could translate into improved fuel economy as well, provided it is driven conservatively.

Sadly, although bright, the chilly, damp and slippery road conditions on the day of our visit to Superchips prohibited any meaningful performance testing, other than the subjective comparison which any owner will be able to feel and marvel at. In standard form, the new GTI feels fast but slightly flat, whereas with the enhanced software it feels not only faster but much more alive, full of zest and eager to forge ahead – summed up in a single word, it feels much more 'enthusiastic' – some journalists might make the comparison between a wife and a mistress!

But most intriguing of all is that Superchips calls this conversion for the Mk 6 GTI its 'Stage 1' upgrade, which seems to suggest that there will be more to come. Worth waiting for? No, our advice would be to get Stage 1, to enjoy now, and leave Stage 2 as a bonus for the future, something more to look forward to...

No-one can fail to notice the rather unusual colour scheme of the Superchips demo car; its combination of matt black 'paintwork' and bright red mirror housings, door handles, spoiler and grille surround is certainly not to be found in any official brochure.

In fact, it's achieved by a vinyl wrap, a highly flexible self-adhesive vinyl coating which is applied on top of the original paintwork, with the ability to peel it off again in the future. In many cases used to apply high-tech graphics to car bodywork, without damaging the underlying paint or requiring highly skilled airbush artists, it certainly produces an unusual effect, and it can always be taken off again...



'WITH THE ENHANCED SOFTWARE IT FEELS NOT ONLY FASTER BUT MUCH MORE ALIVE...'

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