

**tunit** *dieselperformance*

# FLYING FOCUS

by Tunit



Some of the most useful devices come in the smallest of packages

If you want a new Focus diesel that really flies, the starting price is a fairly hefty £16,745 for the five-door Zetec Climate 2.0 TDCi 135, which is nevertheless pretty competitive when arch-rival Volkswagen's 140bhp three-door Golf GT TDI 3-door costs £17,320 – although admittedly with a few more goodies in the package.

But, if you're in the market for a modestly priced, fast Focus, or you've already got a 1.6 TDCi that wants to go faster – they usually do! – you can have TDCi 135 performance in a more modest LX trim level for just £14,645 for a 1.6 TDCi 109, plus the £500 odd cost of a Tunit conversion package. Interested? Well read on!

Probably you wonder how it's possible to get two-litre performance from the 1.6 TDCi. Well, bear in mind that the 1.6 TDCi is an engine of much later, and cutting-edge design, than the

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2.0 TDCi, and the fruit of heavy development cooperation between two giants in the diesel world, Ford and Peugeot-Citroën. It's also acknowledged as being somewhat sweeter than the two-litre engine, and along with that it's more economical to the tune of around 8mpg in the EC combined economy figure. So how do they do it? Well I went along to Tunit's Chorley HQ to see just exactly how this promise of two-litre performance from 1.6 litres would be fulfilled, with an almost brand new Focus 1.6TDCi available for the day on which to

play some hopefully lively tunes. First thing was to establish the engine's output in standard form, and with only a few miles on the clock we weren't necessarily expecting it to deliver full factory figures. That was surprise number one! A few runs on the Tunit rolling road dynamometer to get the car warmed up and then to establish the base line for the tuning exercise produced the remarkable figures of 118bhp at 3,950rpm, with its peak torque of 206 lb ft being recorded at 2,300rpm. That was some eight per cent over





specification, and a very promising start to a day when the Tunit technicians had the 135bhp of the 2.0 TDCi as their primary target.

#### MEASURE BY MEASURE

Following this, the Tunit boys' next task was to install the Tunit in the engine bay of the Focus, where the vital connections to the engine's ECU are located. In fact the vital multi-pin connection is just a touch inaccessible towards the back of the engine on the nearside, but nothing that a bit of manual dexterity could not

pretty amazing power boosts in their time. So the modest 1.6 engine had exceeded the factory power figures for the 2.0 TDCi by some 14bhp, and in terms of power output for a 1.6 diesel engine these may well be something of a record – particularly when you think that we raise our eyebrows at the 160bhp output of a 1.9 TDI PD in a SEAT Leon Cupra. It's also within spitting distance of the 163bhp output of the very latest two-litre BMW turbo diesel engine in the 1-Series and the new 3-Series. There's no doubt that a 1.6 TDCi with the Tunit

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quickly overcome. Having separated the standard connections it was then all simplicity, in terms of connecting the Tunit harness into the system and finding a suitable location in which to firmly fix the Tunit box itself, yet leave it easily accessible for future access, or removal. With the job all done in little more than 30 minutes, we were ready and eager to see what happened on the rolling road. One of the key virtues of the Tunit compared with other electronic tuning systems is its adjustability. That means that every Tunit can be individually matched to an engine to achieve optimum results, and this was the process that the Tunit technicians tackled next. First run on the dynamometer with the Tunit at its basic settings produced a figure of 130bhp, which looked promising indeed. A few more runs had the figures climbing higher and, before very long, the 135bhp of the two-litre TDCi engine was no longer a target, but a conquest. At no time during the tuning exercise was there any suggestion of black exhaust smoke evident, and the engine spun willingly to 4,000rpm and beyond, although its best work was done by the time that 3,900rpm was reached.

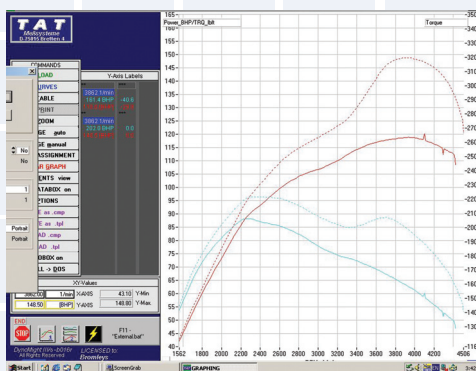
#### FIGURES IN FOCUS

So you're dying to know the final figures, which were 148bhp at 3,900rpm, and 223 lb ft at 2,400rpm. Pretty astonishing results, even to the Tunit technicians who have seen some



**THIS Focus is now a wolf in a sheep-like Ford's clothing.**

treatment will be quite a flying machine, and the same electronic tonic will work equally well on the many models that share the same basic 1.6 TDCi/HDI engine. That means the 1.6 TDCi Fiesta Zetec, for a start – what a little bomb that would be, with pretty much the same sort of power output as the 2.0 Petrol ST, but a lot (over fifty per cent!) more torque! Then there are all the Citroëns – C4, Picasso, and C5, Peugeots – 206 GTi, 307, and 407s, which would all benefit similarly from the Tunit boost. If it comes down to justifying the cost, on the Focus payback is probably just 30K miles of motoring at around 46-48mpg – and that's eight miles per gallon better than the 38-40mpg that a 2.0 TDCi gives – to recoup your £500 odd investment. That's based on the honest experience of many owners of Tunit-



modified cars, who have found that their average economy is little changed from that of a previously standard car – and quite frequently even a little bit better!

#### THANKS ALL ROUND

Our thanks go finally to Andrew Billington at Merseyside in Chorley, for the loan of a brand new Focus for a few hours. No, his clients won't be flying around in the Focus that received the Tunit treatment! That car flew off in a cloud of gravel, after its owner had paid £470 inclusive for the conversion, and we were left to beg Andrew for a car for photography purposes! And very smart it looks too, in its light blue metallic "Tonic" paintwork. Maybe that's the car that we should have tuned, with such an appropriate coachwork colour, rather than the understated plain red car that actually got the Tunit tonic!