

Feelgood Freelander

A Td4 makes even BMW's fine 2.0-litre turbodiesel work hard but **Victor Harman** knows how to improve things



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Rolling road tests confirmed engine outputs were well above the factory figures



Fitting the neat tuning module to the Freelander is simple and takes a matter of minutes

The superbly refined BMW four-cylinder, common-rail 2.0-litre engine appears in a number of guises, from its mildest state of tune in Land Rover's 112bhp Td4 Freelander, to its most piquant 150bhp form in BMW's own 3 Series. It has to work its hardest in the Freelander, with some 1.6 tonnes of off-roader to lug around, and the inevitable added transmission power losses of four-wheel-drive.

With its excellent on-road handling, the admirable Freelander can still show a clean pair of heels to many a saloon, but even though John Patterson felt his Freelander was a particularly lively example he still yearned for more performance. Which is what brought him to Bromley's Tuning

in Chorley, Lancashire. John's Land Rover, with 15,000 miles of lively motoring under its belt, was in uncommonly fine fettle. And the dynamometer confirmed this, showing 121bhp and 260 lb ft of torque compared with the factory's quoted 112bhp and 192 lb ft.

John, of Caistor, Lincolnshire, was, understandably, far from unhappy with his Freelander – "One of the best machines I have ever owned." – but nevertheless felt that a little more oomph would make his motoring even more enjoyable. Unlike many parking-lot poseurs, John also takes his machine off-road quite often – and still returns mpg figures in the mid to high 30s.

Fitting Bromley's Tuning Unit into the engine-compartment ECU control box was a matter of off moments, and we were soon off, four-up, to the Bosch FLA 206 four-track dynamometer (rolling road) at the nearby Blackburn College Centre of Excellence. Dynamometers capable of testing 4x4s are a rare species, and this is one of only two such Bosch installations in Britain. It will handle up to 400bhp, road speeds of 160mph, and has seen action recently on behalf of the Johnny

Herbert Racing Team, and Alan Cowell, diagnostic lecturer in motor vehicle studies, is justifiably proud of this sophisticated piece of kit.

There was much debate in advance of the test run as to what the standard lump was producing, and while John Patterson was unsurprised by the 121bhp power figure, the 30% above-standard torque figure was something of a stunner. Would the Tuning Unit be able to produce significant further gains?

True to past form, the Bromley's modification came up with the goods, in the form of a 23% hike in peak power, to 149bhp at 3,100rpm. Torque rose by 14%, taking this up to an amazing 300 lb ft at 2,050rpm – 55% above the official figure, and right up with the factory claims for the 3.0-litre BMW X5.

Both these elevated outputs were produced at engine speeds virtually identical to those of the unmodified engine, meaning that the essential punchy character of the power unit was considerably enhanced without unwelcome side effects, such as high-rev temperament or inflexibility. Further evidence of the more potent punch was the 280 lb ft,

produced at 2,650rpm, 55 lb ft, or 27% up on the standard engine.

These figures would probably translate into a 0-60mph time of around 10 seconds, and drop the fourth and fifth gear 30-50mph and 50-70mph figures to near six and 10 seconds respectively. That sort of performance is in line with the figures for a very fit 110bhp Volkswagen Golf TDI, which, although superseded by 130 and 150bhp PD variants, was hardly considered a slouch in its time.

Although he felt there was a noticeable boost in performance, John's initial reaction was a little subdued, but it must be remembered that three bulky males, weighing in at a total of 500lb plus, were adding 15% to the normal one-up weight of the Freelander. When we caught up with him a few days later, and he'd sampled the performance over a more extended period with a normal load, John was clearly smitten. He reported he was storming up hills around 10mph faster than usual. On a pounds-per-horsepower return, John reckons the £400 plus VAT Tuning Unit is unbeatable value.

Contact Bromley's Tuning on **01257 274100** or visit its website at **www.bromleystuning.com**.

Land Rover Freelander Td4	
1,994cc, 4-cyl, DI turbo-intercooled	
Max power:	149bhp (112 bhp std)
Max torque:	300 lb ft (192 lb ft std)
Test fuel consumption:	n/a
CO₂ emissions (tax band):	135g/km(A)
0-60mph:	10 secs (approx)
30-50mph (4th gear):	6 secs (approx)
Max speed:	n/a