



# SUBARU LEGACY 2.0 DIESEL

by Tunit

“Quietest, smoothest diesel yet”; “an absolute peach”; “awesome” – just some of the words used by the motoring press to describe Subaru’s very first diesel engine, the new flat four “boxer”. It powers the Japanese manufacturer’s utilitarian Legacy and Forester models, which are soon to be joined by the rally-bred Impreza – so we can hardly wait! The engine’s attributes come from the inherent rigidity and balance of two horizontally opposed pairs of cylinders, which require no heavy and costly balancer shaft system, and the engine’s low centre of gravity gives the car excellent handling and tremendous stability. The thought of a hot Legacy was more than enough to whet our appetite for a trip to Chorley, Lancashire, albeit at risk of being belted with a black pudding in this renowned hot-spot of the ancient martial art of “Ecky Thump”, practised by fanatical Lancastrians in flat tweed caps and braces-suspended trousers! Mind you, these days you’re far more at risk of getting a speeding ticket in the camera-bound region, which is the unlikely home of a hoard of speed freaks, including fast diesel enthusiasts and electronic tuners Tunit UK. Staff at the high-tech firm were dying to get their hands on the new diesel Legacy to see what kind of power and torque boost they could achieve from this impressive and individual piece of diesel engine design. Legacy owner, Stuart Turner, told us that he had long fancied a Subaru, although it had been quite a wait. Early last year, he

managed to get a great deal on a new Legacy Sports Tourer diesel estate, and also beat an imminent price increase, which made him a very happy man. Stuart has really fallen for the car, too, having clocked-up over 30,000 miles already. The Legacy is no slouch – it’s willing and refined – and unless Stuart feels heavy-footed, he gets real-life fuel economy in the 40-45mpg region, which is not to be sniffed at from a four-wheel-drive car weighing over 1,500kg. But as a local man with Tunit headquarters on his doorstep, Stuart couldn’t resist the temptation of an electronic conversion that would put an extra bit of muscle under the bonnet, so we spent the day with him when his Legacy underwent its conversion and dynamometer testing. Unlike more conventional in-line units, the Subaru’s horizontally opposed engine layout, with its transverse inlet manifold and horizontal intercooler, makes life difficult for DIY enthusiast mechanics. It’s by no means beyond a fairly competent engineer, with a good set of tools, but not quite the almost instant plug-and-play DIY package that most of Tunit’s range of conversions represents. On a cold engine, it’s probably only a 30 minute job, but it took almost an hour for the Tunit technicians to convert Stuart’s hot engine, plus carefully and tidily mounting the unit itself to the offside wheelarch area, as pictured. Next we took a short drive in the Legacy to a friendly firm’s four-wheel-drive dynamometer, (Tunit’s own machine is very advanced, but

only compatible with front or rear-wheel-drive vehicles) for some full-power test runs to evaluate the success of the conversion. The Legacy breezed through and the engine was soon galloping through the rev range while we plotted graphs from the data collected. The standard Subaru Legacy diesel engine kicked out 148bhp at 3,600rpm, and 258lb ft of torque at 1,800rpm according to our readout. After our technicians had worked their magic and fitted the Tunit, we recorded impressive figures of 183.2bhp at 3,800rpm and torque of 329lb ft at 2,235rpm – very healthy boosts of around 25 per cent. Post-tuning, we rode shotgun with Stuart on his test run of the Legacy with its power and torque upgrade. While the stuffy roads around Chorley weren’t the ideal location to get a true inkling of the extra grunt, Stuart had noticed the difference within a few hundred yards: “I can feel the improved responses even now – and it seems smoother, too.” A short stretch of motorway allowed Stuart to properly flex the Legacy’s pumped-up new muscles: “This is really impressive, there’s a huge difference. I can feel the stronger pick-up, particularly in the lower gears, yet it’s

more flexible in the higher gears.” The grin on Stuart’s face suggested that we’d done a decent job, as did his assurance that he would be behind the wheel again later, on the hunt for some challenging B-roads to really stretch the Legacy’s longer legs. Before we parted company we asked Stuart what he thought of his muscular new engine conversion: “It well exceeded my expectations.” He told us. What more can you ask for from a performance upgrade?

