



Dunsfold Diaries

By Philip Bashall



What's the best Land Rover engine ever made? Not surprisingly, Philip has his own views on the subject

KEEP IT SIMPLE

SO, THE best Defender engine is the Td5, according to the article in last month's LRM. Having worked on pretty much every kind of Land Rover ever made – and quite a few that weren't, beyond the prototype stage – I beg to differ. Then again, I'm something of a traditionalist and, like most LRM readers I suspect, I prefer engines that can be mended at the side of the road rather than in a workshop full of diagnostic gear.

For me, the Td5 is far from perfect. There have been issues with crankshaft pulleys coming loose, and even the oil pump drive shearing. If that happens, the engine seizes within 30 seconds and you can wave goodbye to your turbo, crankshaft bearings, the whole lot. It was a good engine when it was new but I shudder now if I see one coming in for repair.

To be fair, the LRM feature only looked at the engines that were fitted from the Ninety and One Ten onwards, whereas most of my daily work at the Dunsfold Collection concerns much older vehicles. So, I thought it might be timely to offer my two-penn'orth about the various types of engine used right through from 1948 onwards.

You might expect me to be a fan of the Series I engine – but I'm not! If they're in perfect condition, they can run very sweetly, but most of them are ratty to some extent, not least because it's impossible to set the valve clearances properly

when the pads on the cam followers are worn. That said, we have an 80in for sale at the moment with the nicest Series I engine I've ever heard – it just purrs. That's an ex-MoD reconditioned unit, which explains why it's so good; in the old days, MoD exchange engines were superbly put together. It's a very different story now and I would steer well clear of anything ex-Ministry.

Of the three types of Series I petrol engine – 1600cc, early 2.0-litre with siamesed bores and later 2.0-litre with more evenly spaced bores – the last version is the best all-rounder. A really good 1600cc can pull like a train but the 2.0-litres are noticeably more powerful, and of course parts for the 1600s are now getting very scarce, particularly bearing shells. The earliest type of 1600 had a block with side plates covering the water jacket, and even a scrap block for reconditioning can make £800-1000. In fact, to rebuild a Series I engine professionally, you're now looking at the thick end of £4000, because parts are so expensive.

One tip if you have a 1600 or early 2.0-litre is not to take it wading; there's a scroll-type oil thrower at the back of the crank rather than a modern oil seal, so if water gets into your flywheel housing, the oil thrower will simply suck it straight into the crankcase. One of my dad's friends drove his Series I down a slipway into the Thames and left it idling – big mistake!

The OHV 2286cc introduced in the Series II, usually



called the two-and-a-quarter, was a big improvement. At the moment we're restoring a 1956 Series I Station Wagon for the Collection that was used as the test bed for this engine. This is an 86in and you can tell from the bumps and dents in the front axle casing exactly why the engineers realised they needed to lengthen the wheelbase to 88! The engine number is 2.25-45, indicating that it's number 45 of the prototype units. When finished, this Series I will be the vehicle I use for longer trips, in place of the Dunsfold 107 mentioned last month.

The best petrol Land Rover engine ever, for me, has to be the two-and-a-quarter fitted to the Series III. It's smooth and simple and was made in big numbers, so there are masses of parts still around. I think this engine will be with us forever. Then again, we used to say that about the Series I... Some say that the five-bearing version introduced in 1981 is a bit more refined but I don't think there's much in it.

As for the Defender 2.5 petrol engines, one of their main drawbacks was that Land Rover initially fitted diesel camshafts in them to improve emissions, but at the expense of performance. In the 1980s, my old man would slip a Series III camshaft into early Defender engines to make them go a bit better. An even easier performance mod for the 3.5-litre V8 used in the Stage I was to remove the restrictors from the inlet manifold.

Once the carbs were off, we would pull the restrictors straight out using a modified slide hammer, which improved the airflow dramatically. Refit the carburettors, set them up and the truck would go a lot better.

Other petrol engines? The Rover straight-six was good in a car but not well suited to a Land Rover, where they tended to get thrashed, although lots of 109s were sold with them in North America. There was, however, a Santana-designed straight-six which was basically a two-and-a-quarter with an extra cylinder at each end, and that was a lovely thing. It used the same internals as the four-pot and had a capacity of, I think, 3.0 litres. It was a gorgeous engine.

There was one other petrol unit fitted in period, of course, the Rolls-Royce B40. While it was beautifully engineered, it would have been hopeless as a production engine. It was very heavy and it had a massive flywheel, which meant you had to wait ages for the revs to drop when changing up. And, of course, it was extremely thirsty. The Austin Champ engine was a military version of the B40 and, despite its deficiencies, people fitted them because you could pick them up for 75 quid back in the day – I ran a Series II 109 for a while that had a Champ engine in it.

As for diesels, well, the older ones are little better than boat anchors. I have something of a love-hate relationship with the Series I diesel, which was quite sophisticated in its day but becomes a pain in the butt when it's old and can then suffer from a cracked cylinder head, difficult starting and, of course, smokiness. While I've known a couple of absolute corkers, they are very rare – and the parts

Left and below:

Philip's favourite engines are the 200Tdi diesel and 2.25-litre petrol – the latter seen in prototype form in Dunsfold's Series I 86in, pictured opposite



situation for these early diesels is absolutely dire.

The two-and-a-quarter diesel, which was introduced with the Series IIA in 1962, is a better bet but I still wouldn't dare sell one to a customer; it would only come back and bite me. The later five-bearing type was also fitted to London

taxis, and the cabbies hated it with a passion! One thing it does have in its favour is the abundance of spares that are still around. As I write, I have several boxes of +.40 diesel piston rings cluttering up the aisles of the Dunsfold stores, and no one wants them. Sadly, they may well end up being skipped.

The 2.5 diesels found in the Ninety and One Ten were OK and were widely used by the military –

although the rubber timing belts were a weakness if servicing schedules weren't adhered to. But the engine that really turned me onto diesels was the 200Tdi. It starts easily – no more waiting ages for the glowplugs to warm up – and it goes well. It's also economical and easy to work on. The 300Tdi is slightly more refined but at the cost of a more complicated timing belt; even so, it's still better in my mind than any Td5 or Puma.

Where I draw the line with the 200Tdi is putting it into a Series vehicle, especially a Series I. In years to come, such vehicles will surely be devalued, but I was recently appalled to see in another Land Rover mag some nice restorations with inappropriate diesel conversions. Some truly awful diesels have been put into Land Rovers in the past: the Perkins 4203, the BMC 2.2 – I even knew of one chap who fitted a 7-litre Gardner 5LW bus engine into one. My advice is simple. If you can't afford the fuel, buy a car and not a Land Rover!

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Dunsfold Collection

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