

Running Report: 1991 Ford Sierra Ghia, 2295cc - Mileage: 186,500 By Jim Christie



Those of you sharp-minded people may be sitting here reading the above line thinking "Hold the phone a second - they didn't make any Sierra's with the old Peugeot 2.3 diesel in after they moved to the Ford 1.8 TD unit in 1990.....did they?"

No, as far as I'm aware, they didn't. But I'm not talking about a diesel Sierra. Since I last wrote a running report for the club magazine, "Ghia of Fear" has been undergoing a bit of open heart surgery all in the name of experimentation - and has what is believed to be the first hybrid 2.3 8-valve DOHC engine in the country, certainly in a Sierra.

Formed from a melding of a Ford Scorpio 2.3 16v DOHC bottom end and Sierra 2.0 DOHC cylinder head, the 2.3 8v twin-cam hybrid coughed into life on 11th November 2006 to high expectation. Actually, I thought it would just blow up on the spot, or simply (and singularly unspectacularly) not start at all. But no - to say I was pleasantly surprised would definitely be an understatement!

The engine features a Janspeed 4-branch exhaust manifold, K&N filter and a powerchip - which is the beauty of it: by retaining the Sierra 8v DOHC cylinder head, the Sierra manifolds and all the sensors plug straight in making installation a pretty much "plug and play" affair - 2.0 engine comes out and 2.3 goes straight in - to all intents and purposes looks like a standard 2.0 twin-cam too.

But it's not - there are subtle differences. Bosch 250cc injectors take care of the increased fuelling requirements of the additional capacity though at the moment it's running reduced fuel pressure until the mixture can be accurately analysed across the rev-range to prevent bore wash.

Having had new bearings, rings and a few other bits besides, I was forced to take it easy for the first 500-miles or so, and running in proved a trial from the outset as even trundling along at barely more than a mere idle, there were hints to the amount of torque the engine could provide over a standard 2.0.

As with any twin-cam that has been to bits, oil leakage can be "a bit" of an issue. In the first week, oil seeped out at such a rate that it dropped the level in the sump from maximum to minimum in the course of 80 miles, which equated to a drip about every six inches if the state of my drive was anything to go by. Talk about scary stuff!

That very next weekend and 180-miles later saw a hasty oil change to remove any bits that had been ground off the engine internals, flush and change the coolant - and seal the oil leak, which was due to the modification that must be made to the 2.3 cylinder block in order to remove the 2.3's rather curious sump-mounted balancer shafts not sealing properly.

That done, the car drove faultlessly for the next 600 or so miles, though I had to remove the powerchip I'd been running in the ECU as I discovered very quickly that although it made the 2.3 go very fast, it did curious and rather peculiar things to the reliability, such as causing the engine to stall out when coming to a halt.

That in itself doesn't sound too bad, if somewhat a little annoying, but it would refuse to restart until the ignition was turned off and back on again, ruling out a quick "bump" start before all the momentum was lost. Again, that doesn't sound too bad, but with the 2.3 running much higher compression than a standard 2.0 twin-cam, re-starting it when hot could be a very hit-and-miss affair due to the standard 440-amp battery

not being big enough to produce the power necessary to overcome the 19-bar compression at starter speed, and if it didn't catch on the first turn of the key the engine would simply refuse to turn over at all. Not good when you're in traffic at a very busy roundabout!

That problem was solved, more or less, through the kind loan of a "charge and start" device. I recently gave in and went and purchased a heavy-duty battery after the recent snows when for a week, the thing would refuse to start at all without assistance thanks to the cold sapping a battery that was already far too small for the application it found itself in.

And so it continued on through December before developing another oil leak - this time from the cam cover. I'd thought the gasket I'd used was less than perfect when I fitted it, but continued on anyway as the plan had been to change the camshafts at some point once running in was completed for some piper engineering 285-degree "ultimate road" specification items so it would be replaced in due course and didn't matter. Only thing was the gasket abandoned ship before I was ready to do the camshafts - and I finished up driving around for the whole of January and much of February with the car smelling like the piper alpha oil platform, such was the stench of hot oil leaking out and finding its way onto the exhaust manifold where it would burn off, stinking the place out in the process.

But two weeks ago, I finally had the time (and ever-so-slightly warmer weather!) to sort the top end out - and the standard 2.0 camshafts came out to be replaced with the piper items, the cam cover gasket was changed, and I hunted down and replaced two faulty tappets that had been persistently percussive. The net result is that the performance camshafts have made the car go even quicker. But it's not all gain - the massive low-end torque I'd had initially has gone - it now feels more like a standard 2.0 from idle. Given that the car started

out as a 2.0, that isn't too bad - at least it doesn't feel like I'm trying to drive a 1.6 - and it doesn't make slow speed stop-start town driving a chore like I'd heard it could have done.

Poke the engine up into the mid- and high ranges and it's so much stronger and eager to go than it was before - even without the powerchip - though I will put that back in to see what effect it has in conjunction with the camshafts when I get a "spare moment". Unfortunately pretty much at the same time as I'd decided to fit the camshafts, the engine took to blowing a puff of oil smoke out of the exhaust when starting from hot or moving off from idle, and it's something that's getting slowly but progressively worse as the miles are stacking up suggesting it will need attention with the spanners at some point in the near future. It may be nothing more than a blocked or failed crankcase breather, but it could be more serious and should I have to refit the 2.0 as an interim measure to keep the car and myself mobile, I will be intensely disappointed as I'm looking forward with great enthusiasm to taking it around Silverstone at Ford Fair under 2.3 power this year.

Future plans for the 2.3 involve the much-lauded Megasquirt engine management system - primarily so I can tune the engine management settings to match the 2.3 perfectly (the 2.0 engine management systems are not quite suited to the increased capacity of the 2.3 though they work sufficiently well enough) not least so I can drive the Ford EDIS system and move over to running coilpacks.

This will enable me to remove the standard distributor, and fit the alloy cam cover and front plate found on later 8-valve DOHC Granada's and some Transits - that at least will mean there will be no more leaks from the wretched plastic cam cover!

