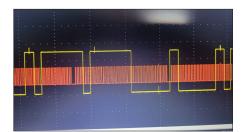
Opel Corsa timing chain mishap

any new customers come with a number of issues. Whether it is the obvious stress of having a broken down vehicle, a distrust of the trade due to previous encounters with those in for the quick buck, a perception that we are too dear because we are charging excessive amounts for "just plugging in my car", or sometimes an unrealistic expectation of what we are going to do for them. These are just some of the problems that you encounter with new customers and it can take some time to show them what you do, why you do it and build up their trust in you.

A recent example will highlight that not all garages/technicians think like this. A fairly big repair was carried out by another garage, and they never rectified a fault they created. In fact, they charged for unnecessary parts/labour and ultimately handed the car back and said "see you later".

An Opel Corsa D, with a three cylinder petrol engine went into another garage complaining of a rattling noise on start up. There were no fault lights on. Unsurprisingly, the timing chain kit and tensioner were replaced. After assembly and start up, the car now had an EML on, indicating a fault with the cam sensor. The customer agreed on a part replacement. The garage even said that



Bad Cam and Crank signals from customer's car

sometimes these sensors get hit during the process and it was what it was! And after changing the cam sensor, guess what.....no difference.

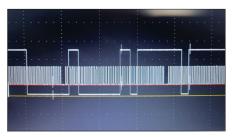
What was the next thing to do? Load up the parts cannon and fire: spark plugs, crank sensor, oil switch, oil and filter. Still no success.

So what next? The customer was told to "drive it and see if it comes right. If it doesn't, it is probably an ECU problem!"



A setting tool is needed to correctly position the Cam Phase Disc

When the Corsa came to us, we questioned the customer and assured them that we would carry out some tests to establish the issue, report back to them with our findings, and go from there. Firstly, we confirmed the fault: the EML was on, a cam code was stored, no rattles on start up or running, car driving



A known good Cam and Crank signal



Keith Shanahan, Shanahan Auto Services

pretty well on road. Knowing it's history, we decided to carry out some scoping of the cam and crank sensors to establish if we had a good signal, and if the timing was in fact correct. When compared to a known good signal, we could see that the timing was incorrect.

Further inspection was required. We stripped down the rocker cover exposing the cam and sprockets. The chain was tight and the cams and crankshaft when checked with timing tools, and they were correctly timed. The other garage, however, had overlooked one essential part of the process. They had fitted the camshaft and crankshaft in the correct positions, but they hadn't checked the position of the camshaft phase disc. This disc is where the cam sensor picks up its reference. In the timing tool kit for this vehicle, there is also a setting clamp for this disc. We corrected the position of the disc, re-torqued the sprocket, reassembled and confirmed no more faults in the vehicle

When you do a job, do it right. Things sometimes will go wrong, but that's why you check over your work or retrace your steps if you have an issue. Don't jump to the conclusions, like this garage did. That's what sets you apart and keeps your customer happy.