Eure!Car Tech Blog highlights

The Eure!Tech Blog covers a number of problems that mechanics are facing on a daily basis. The Blog can be read at www.euretechblog.ie, and is updated on a regular basis. Here are just a few of the problems and solutions posted recently.

Kia Sorento and Santa Fe Engine jerks or stops during driving.

(i) Tech Tips

A common failure in 2001-10 KIA Santa Fe 2.0 CRDi and Kia Sorento 2.5 CRDi is characterised by engine jerks and even engine stops. In this post we explain how to resolve it.

Symptoms

During acceleration, the engine responds with some unusual jerks, and may even stall completely and may be difficult to restart.

The engine light comes on and the following DTC may be stored in memory:

P1181 – Fuel pressure too low Some other code might also be displayed, but they are probably caused by the engine stopping

Diagnosis

- Check the condition of the fuel filter. In these vehicles the replacement period is 30,000 km.
- Check the pressure of the injection rail. Power, earth and signal of the injection rail pressure sensor when the engine is working properly is shown below:
 - PIN1: Ground
 - PIN2: Sensor signal (0.5 Volt on contact /



- 1.2 Volt with idling engine / 2.4 Volt with engine at 3,000 rpm)
- PIN3: 5 volt power supply.

Access the fuel gauge located under the rear seats. Check that there is no dirt or shavings inside the fuel tank. In these models, there is a problem with the paint that coats the inside of the fuel tank; its loosening causes the generation of waste, interfering with the fuel intake of the fuel pump.



Paint sludge inside the fuel pump assembly

Remedy

Clean the inside of the fuel tank, the gauge and the incorporated filter. Replace the fuel filter and also the pressure sensor within the fuel pump itself.

Difficulty or Delay in Warm Start-up in VAG Group Vehicles

This problem affects VAG group vehicles such as Audi, Seat, Volkswagen or Skoda with TDI technology, usually in BKD, BKC and 3.0 TDI engines.

Symptoms

With the engine warm, the vehicle takes too long to start.

Possible Causes The most probable causes are:

- The battery is not in good condition.
- The starter has lost power.
- Programming Error in the Electronic Control Unit of the engine.

Diagnosis

First of all, you have to ensure the correct functioning of the first two possible causes. In most of the cases, the reason for the problem is that the internal programming of the engine ECU has changed.

This programming is what authorises the engine to start at a certain rpm (approx. 230 RPNM depending on the engine). When this error occurs, the programming has changed and now it authorises the engine to start at another number of revolutions, for example at 300 rpm, and it will not allow the engine to start as it did before.

Remedy

You have to reprograme the ECU in order to restore the default settings. In this way, the vehicle will start again at the correct crankshaft revolutions specified by the manufacturer.

The affected engine control units are made by BOSCH and they belong to the EDC family: EDC16.U1, EDC16.U31 and EDC16.U34.



The ECU type can be read of the label

