

Poorly running Hilux **with fuel delivery problem**

The initial code scan on the 2017 Toyota Hilux returned 2 hard faults, P1608 (ECM internal processing) and P1229 (Fuel system overpressure).

The Denso system on these Toyotas utilizes a volume control valve that controls the fuel entering the high-pressure pump. These valves are known to fail, and are often referred to as a suction control valve (SCV). There are 2 versions of SCV fitted to Denso systems. In one version, the SCV is Normally Open, and the other it is Normally Closed.

It is worth noting that there are 2 versions of these valves. The short SCV is older and prone to wear. A longer SCV is an upgraded version, and it is more durable.

Common issues include sticking or worn valves, which can cause both the recorded faults on this vehicle.

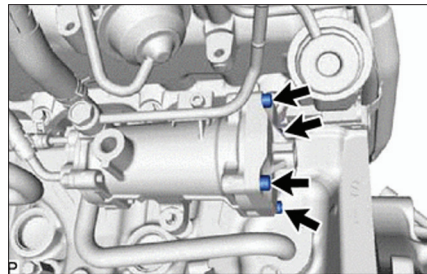
The valve was removed for inspection, but no contamination was found, so a replacement was fitted. When fitting a SCV, you must reset pump adaptations.

Replacing and adapting this valve did

not improve the fuel pressure issue. A new main fuel filter was also fitted at the same time. The rail pressure was still higher than specified, despite the wiring and signals to the SCV being good.

After some research, it was found that a second fuel filter is fitted on the return fuel circuit of these models. It is often overlooked during routine maintenance. Due to the location, it is sometimes missed during routine inspections. This filter is located on the engine assembly, on the left side of the engine block. It is accessible through the left wheel arch liner.

Once the filter was replaced, and the adaptations repeated, the vehicle ran well with no fault codes returning, and fuel pressure remained very stable.



The Return Line Filter is located on the left side of the engine block and is accessed through the left arch liner

We would like to thank Alan and Peter from Kennedy's Garage, Portlaw, Waterford for working with the Autobiz helpline to solve this problem.