SMART Car - Unusual ABS Symptoms

This 2007 Smart Fortwo was in our workshop because the owner was complaining of a power loss problem. He informed us that the power loss was accompanied by a warning light on the dash. The problem occurred at 55 MPH, when the engine would suddenly loose power. Everything could be put back to normal by pulling over to the side of the road and turning off the ignition, and then restarting the engine. The Smart car would then drive normally, until 55 MPH was reached.

The old corroded reluctor ring was replaced with a new one curing the problem

From the owner's description, we made the incorrect assumption that it was the Check Engine light that illuminated when the power was lost. Finding no fault codes in the engine management system, we decided that the best way to work out the problem was to take the little motor out and get it up to 55 MPH to experience the problem for ourselves.

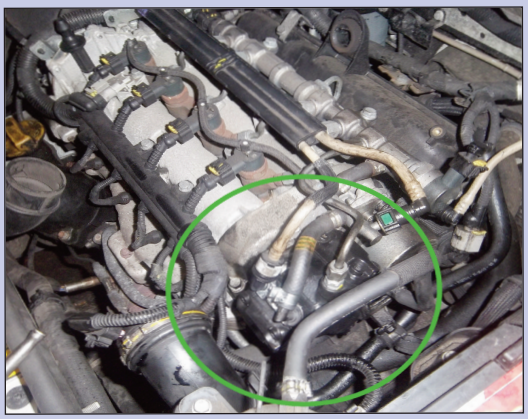
Sure enough, when the magic speed of 55 MPH was reached the motor immediately cut power and a dash light illuminated. This was not the Check Engine as we had been expecting, it was the ABS light.

Back at the workshop, we read the ABS codes and found that the left rear ABS sensor was showing as faulty. A physical check of the sensor proved it was not the sensor, but the reluctor ring was faulty. The ring had corroded through and cracked, allowing it to begin to spin at the magic 55 MPH. This was sending the traction control into a tizzy, causing the power to the engine to be cut as the car was thinking it was going out of control.

Fiat Fiorino - Ever Decreasing Power

The driver of this local delivery van was aware that his Fiat was getting slower as the day went on. The power had definitely dropped off and he reported the issue to his boss. Not wanting the deliveries to suffer, his boss organised another van for the driver to use and got the Fiorino over to our workshop.

Although the van did reach our doors under its own power, by this time, things had progressed and the engine was barely able to propel the van along. A quick look with the diagnostic scanner revealed low pressure at the injectors and after a close inspection, fuel was seen escaping from the high pressure pump.



The job of replacing the high pressure fuel pump is not a difficult one

The pump is easily accessible and after letting the motor sit for a short while, to allow the remaining pressure in the system to dissipate, we set about removing the old unit. Fitting a new fuel filter in the system, along with the new high pressure pump, we then bled out the low pressure side and fired up the engine.

Checking that the new unit had no leaks, we were then able to road test the van and confirm that the power had been restored.

ROVER 25 - More than Just Heater Problems

The sludge in the expansion tank was the cause of the heater not working.

Very often, the original phone call from the owner does not reveal the true problem with the vehicle. This was very much the case when the owner of this 2004 Rover 25 complained his heater was failing to work.

He had read on the internet that the problem may be with the heater control valve in the engine bay, but he had no idea where or what that was. For this reason, he was booking in the Rover for us to replace the illusive valve, which he had managed to purchase second hand.

Turning up at the workshop with the valve and the vehicle, we decided to make our own diagnosis before continuing with the replacement. Our diagnosis didn't take too long. As soon as we had removed the expansion tank cap, we were certain that replacing the heater valve and bleeding out the system was not going to effect a repair.

The coolant expansion bottle was full of a thick, brown, emulsified liquid. This is not uncommon to see in the K series engine, and certainly the result of engine oil mixing with the coolant due to a failure of the silicon track in the head gasket.

The thick fluid that was now inhabiting the cooling system was not allowing coolant movement through the heater, hence the lack of heat in the vehicle.

The owner had not checked his levels for some time and was unaware of the problem, until he received our phone call.