

# A BMW Wheel Speed Sensor fault after a Botched Wiring Repair

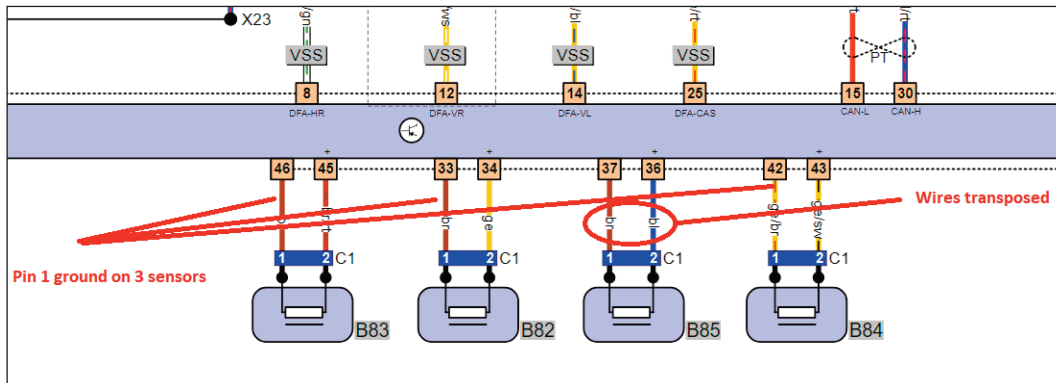
The Helpline was recently contacted by a garage that was having a problem with a BMW E90 that had a left rear wheel speed sensor fault.

The technician noticed the sensor had contacted the reluctor ring, so he replaced the driveshaft and the sensor, as this is a known issue with corrosion under the reluctor, causing damage to the sensor. After this work, the fault still was present.

A signal supply of 11.7 volts was present at all sensors, and the ground at each sensor was proven to be good. A replacement sensor from a OE supplier was fitted, but the fault did not clear.

It was then decided to send the Dynamic Stability Control (DSC) module for bench testing, but it came back fault free.

The Helpline was contacted, and with our help, the technician went through a pin by pin check of the DSC module. The technician



**The signal and ground wires to the left rear wheel speed sensor had been transposed by the car's owner while attempting a wiring repair under the seat**

found that the circuit to the sensor was reversed somewhere in the wiring loom. After opening up the loom, he found a poor repair attempt to wiring under the seat. The circuit wiring had been crossed during a failed attempt to repair damaged wiring. After repairing the loom and putting the circuit back to the correct orientation, all codes and faults were cleared.

It is worth noting, not only is it to make certain correct wiring colours and voltages are present, correct pin configuration is also important.

The garage later found out that the customer had attempted a repair to the wiring, but did come forward with this vital piece of information until the diagnostic work had been done.