Non-cranking Skoda Kodiaq with a **DSG transmission fault**

A 2017 Skoda Kodiaq was recovered to Peter Kennedy's Garage in Portlaw, Co. Waterford. The customer has reported that the DSG Gearbox on the Kodiaq was "acting up", and now it would not crank over or start.

Peter Kennedy, Kennedy's Garage.

The first step was to verify the customers complaint. With the key present, and with the transmission in park, it was not possible to start the engine. There were many warning lights on the dash when it would not crank. These faults included: Check Safelock, Stability Control, Hill Hold Assist, Front Assist Unavailable, Tyre Pressure Loss and Electronic Parking brake faults. Given the large number of faults that were present, it is sometimes difficult to decide where to begin.

With a long list of possible faults, a decision has to be made on which fault should be investigated first. Given that one of the warnings on the dash instructed the driver to make sure that the transmission was in Park or Neutral, before attempting to start the engine. It was decided to start here.

A scan tool was used to verify which faults were present within the ECU. There are many fault codes present, which included faults in the fuel rail and fuel system pressure being too low, lost communication with the Transmission Control Module (TCM), steering angle sensor no initialisation, Data bus message missing, TPMS Signal error, as well as a general gateway error.

Because the primary fault was a lack of cranking, the first fault to be examined was the lack of communication, or lost communication with the TCM. The numerous trouble codes were cleared, and another scan for trouble codes was conducted. These trouble codes were physically present at that very moment, and not any historic ones that could have been set at various points in the past.

I decided to concentrate on the lack of communication with the TCM. While the trouble code was present, it was obvious that there was some condition or fault that was preventing the Kodiaq from communicating with the transmission control module, and preventing power from being supplied to the starter.

The bonnet was lifted, and the wiring to the gearbox was examined. The Air Box, above the gearbox, was removed to facilitate a good view of the wiring that was connected to the gearbox. On visual examination, there was obvious corrosion on the insulation on the wiring connected to the gearbox. It was likely that some of the wiring to the gearbox was not in perfect condition.

When the wiring insulation was removed, a clear view of the wiring as possible. There was corrosion on some of the wires within the wiring bundle. I suspect that some of the corrosion had compromised one or more of the wires. When I moved some of the wiring, one of the wires broke without much movement at all.

The damaged section of the corroded wire was cut out, and a temporary section of wiring was put in its place. With this temporary replacement wire, the car did crank over and it did start.

A replacement wire was permanently installed along with the section of wiring that had been damaged. Care was taken to clean all of the corrosion out of the wiring bundle, and to ensure that the replacement wire was properly positioned and protected from future water intrusion with waterproof shrink tubing.

Once the wiring repair had been completed, all of the existing codes were cleared, and another scan was conducted. This time there were no remaining codes and the engine would crank and start normally.

What had started out as a seemingly long list of possible faults, was in fact caused by just one damaged section of wiring. In addition to a proper scan tool, the most important tool in this diagnosis was a basic understanding of what was most likely the cause of all of these faults, and a visual inspection.

You can watch this video on Kennedy's Garage YouTube channel by scanning this QR Code.
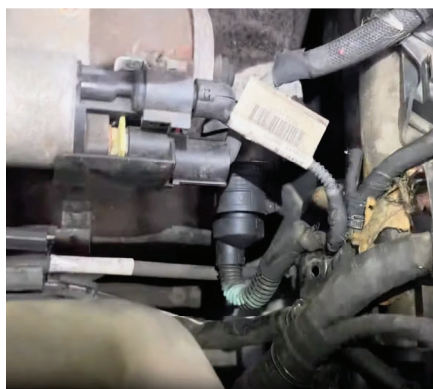
Corrosion was visible on wiring going to the gearbox

A closer view of the corrosion

The badly damaged wire (circled) was very obvious, and was easily repaired