

Ford Fiesta won't start over one small detail

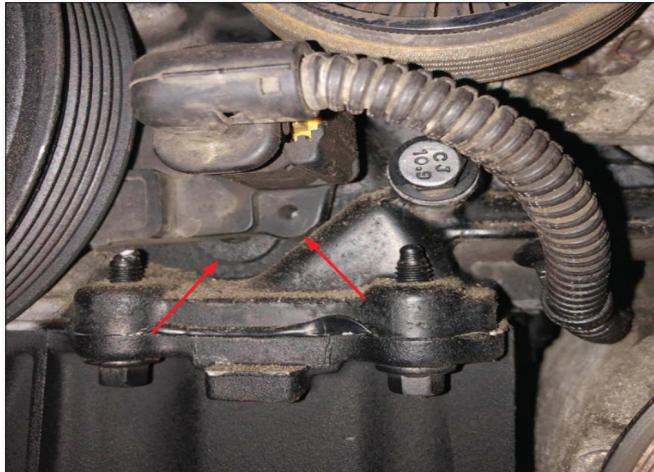
A recent technical call to the Autobiz Technical Helpline was regarding a non-start for a Ford Fiesta, fitted with an M1JH EcoBoost engine.

The task of replacing a complete engine was given to the young apprentice to complete on his own. A bare, used engine was supplied, and the apprentice was left alone to complete the task.

Once completed, the first attempt to start the vehicle was unsuccessful. It was cranking as expected, and it was sounding completely normal and healthy.

A fault code scan was performed, but no codes were present. This was the point that the helpline member came to us for help.

We asked them to check live data, to see what was the fuel pressure on cranking, and also that the engine speed signal was good. It was quickly found that there was no engine speed data displayed. We went on to check the signals at the Powertrain Control Module (PCM) with a Picoscope.



The crankshaft sensor data was delivered to the PCM at 3 terminals:

- 5 Volt reference (pin B3)
- Ground (pin B54)
- Crankshaft Position Signal (B49)

The signal was not present at the PCM, so an investigation of the crank position sensor was done next. One look at the crankshaft



Tim Stock,
Autobiz Helpline

sensor was all that was needed to spot the problem. The sensor was not properly mounted and aligned, and it was not able to sense the rotation of the crank pulley.

A valuable lesson learned by the apprentice. We have all been there, and we will never forget what we did, once. But it is also a reminder that the simplest of details can put you into a spin.

Technical **AUTOBIZ**
Helpline

Call now to join **01-905-9500**