Opel Mokka needed a hard reset

This Opel Mokka X, with a 1.4 litre turbocharged engine, was suffering a water leak from the water pump. While changing the water pump, it was noticed that the thermostat had cracked. The dealership thermostat was on a long back-order, so an aftermarket part was fitted.

An engine management warning light came on after completing the work, while the engine was rising to operating temperature. A scan revealed the fault code P0171 (System Too Lean (Bank 1)) had been logged. The fault code for the lean condition would not erase, and the lambda signals remained low, indicating a lean condition.

At the same time, the temperature at the radiator outlet was showing low. While the engine temperature stayed at 95 degrees C, the radiator outlet was a low 26 degrees.

Lastly, the radio display had become pixelated, and the station memories kept changing. The problems with the radio display were not present when the vehicle was originally checked in.

None of these faults were present when



Replacing the thermostat in this Mokka proved to be more difficult than expected

the vehicle was booked in for the water leak.

This thermostat is an electrically heated mapped unit, controlled by the ECM.
Suspecting the non-OE thermostat was the issue, a genuine component was located and fitted, but the issues persisted.

All the engine parameter resets were performed, but there was no changes in the data or error code.

The power supply to the thermostat was checked, and the controlled ground back to the



Tim Stock, Autobiz Helpline

ECM was tested. All passed with no issues.

Feeling at a loss, the technician opted to remove the battery for 15 minutes, to perform a hard reset. To everyone's disbelief, the lean code cleared, engine temperature came up to 105 degrees, radiator outlet temperature was a stable 90 degrees, and the radio display cleared the pixelations, and the station memories returned.

Since this odd event, the workshop has had a further 2 Mokka's in for cracked thermostats. Each time, the same unusual lean code and temperature readings were present, after repairs have been carried out. And as soon as a hard reset has been performed, both vehicles returned to normal.

