
DTC 2822 - Engine shut-off time

Topic number	LI54.21-N-035897
Version	1
Design group	54.21 Control modules/modules
Date	09-16-2005
Validity	Sprinter MY04-05 with OM647
Reason for change	

Complaint:

Engine won't start.

Engine control module has unknown DTC '2822'.

Cause:

DTC 2822 refers to 'Engine shut-off time', which is needed with regard to OBD requirements. It is used to calculate the engine cool down progress. The ignition being in off position triggers a counter in the instrument cluster. The counter counts the minutes up to 4095. When the ignition is in run position the IC sends a repeating signal on the CAN with the counter's status. For starting the engine, the ECM expects that signal. If the signal is missing or not between zero and 4095 the DTC 2822 will be set. As soon as the engine runs, the counter will be reset.

Remedy:

Diagnose and replace defective part, which might be:

- the oil, coolant or ambient temperature sensor, that makes the 'Engine shut -off time' value look not plausible
- the CAN BUS, that doesn't transmit the value properly
- the instrument cluster, that doesn't provide the correct value
- the engine control module, that doesn't process the 'Engine shut -off time' correctly

If further information are needed contact Jeremy Brown, who fixed a Sprinter with such a complaint by replacing the instrument cluster.

Symptoms
Power generation / Engine management / Engine start / Does not start