

BlueTec 4/5 - "NOx sensor has communication fault" (MR 1 2804)

Topic number	GI14.40-N-046592
Version	2
Design group	14.40 Exhaust-gas Aftertreatment, AdBlue
Date	07-12-2010
Validity	Euro 4/5 vehicles with NOx sensor (code KD6)
Reason for change	Corrosion in cable set to NOx sensor
Reason for block	

Complaint:

The fault code 1 2804 "The NOx sensor has a communication fault" is read out of the engine control (MR) control unit using Star Diagnosis.

The MIL lamp in the Instrument lights up.

After 50 operating hours with current fault code, the torque reduction required by law comes into effect.

Cause:

1. Short circuit/open circuit in connector to SCR frame module caused by moisture and corrosion.
2. Short circuit/open circuit in the connector at the frame/catalytic converter connection point, frame side.
3. Short circuit/open circuit in the connector at the frame/catalytic converter connection point, NOx sensor side.
4. Short circuit/open circuit in the connector on the NOx sensor, caused by corrosion (see Attachment 1).
5. Defective NOx sensor

Remedy:

1. Open connector housing on the SCR frame module and check for corrosion; repair if necessary.
2. Open connector housing at the frame/catalytic converter connection point, frame side, and check for corrosion. Repair if necessary.
3. Open connector housing at the frame/catalytic converter connection point, NOx sensor side, and check for corrosion. Replace cable if necessary. Determine number via EPC.
4. Check connector on the NOx sensor electronics for corrosion. Replace cable if necessary. Determine number via EPC.
5. If, after repairing the electrical line and the ignition has been switched off and on, fault code 1 2804 is still present or if no fault was found with the cable set, exchange the NOx sensor.

Symptoms
Power generation / Engine management, display message / Engine management / Engine control MR shows fault code /

Control unit/fault code		
Control unit	Fault code	Fault text
MR engine control, MR engine control (PLD) (MRSKR) (Eco-nic,Actros 2,3,Atego II,Axor II)	2804	The NOx sensor has a communication fault.

Work units				
Op. no.	Operation text	Time	Damage code	Note
			14130	NOx sensor electrical line
			14429	NOx sensor
			53373	Exhaust aftertreatment electrical line - frame side