



G30 (B570 DIESEL ENGINE) NITROGEN OXIDE SENSOR FAULTS

MODEL

G30 (540d xDrive Sedan)

SITUATION

The Service Engine Soon (MIL) is illuminated, and one or more of the following fault codes are stored in the DDE:

Fault code	Text
25B700	NOx-sensor upstream DeNOx catalytic converter, signal NOx, binary lambda probe, linear lambda probe or heating: Interruption
25B800	NOx-sensor upstream DeNOx catalytic converter, signal NOx, binary lambda probe, linear lambda probe or heating: Short circuit
26ED00	Nitrogen oxide sensor upstream of DeNOx catalytic converter, NOx plausibility: NOx signal offset too low

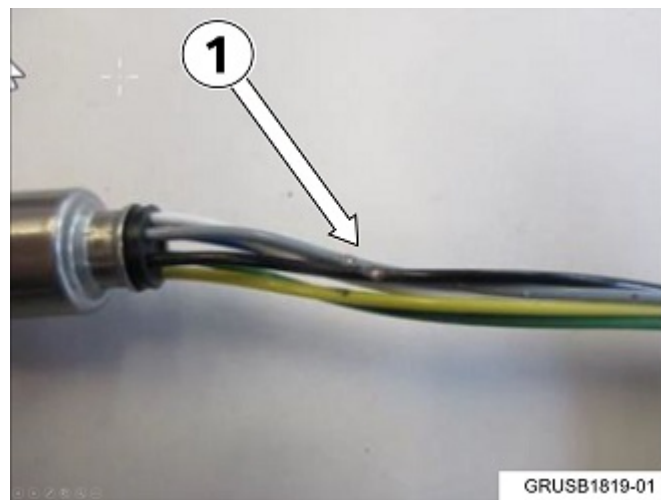
CAUSE

Faulty routing of the nitrogen oxide sensor (NOx) wire. The wire can chafe against the underbody paneling.

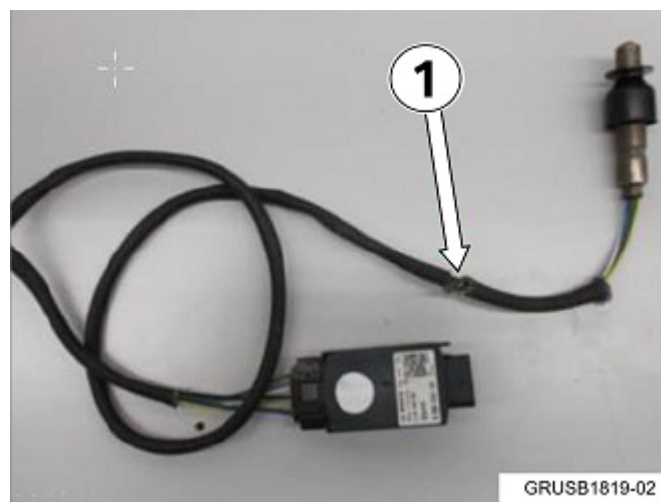
CORRECTION

Check the wiring for the NOx sensor at the sensor element and at the sensor control unit.

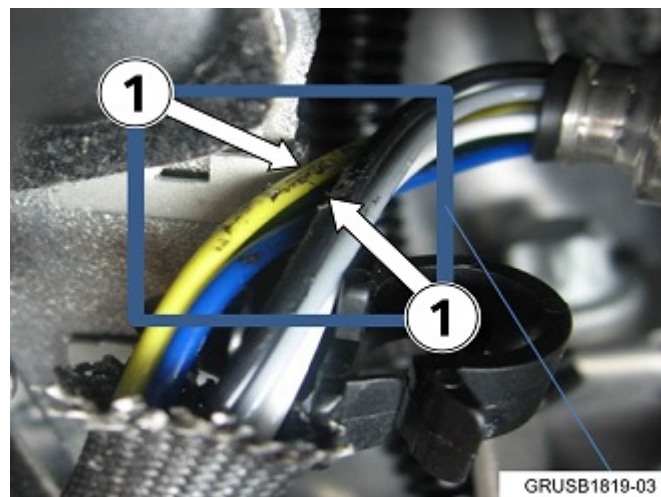
PROCEDURE



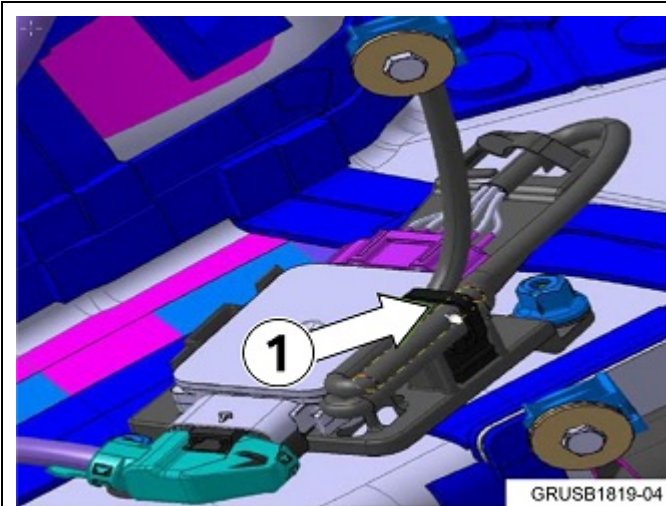
Check for chafing on the harness near the sensor element (1).



Check for chafing on the harness through the insulation (1).

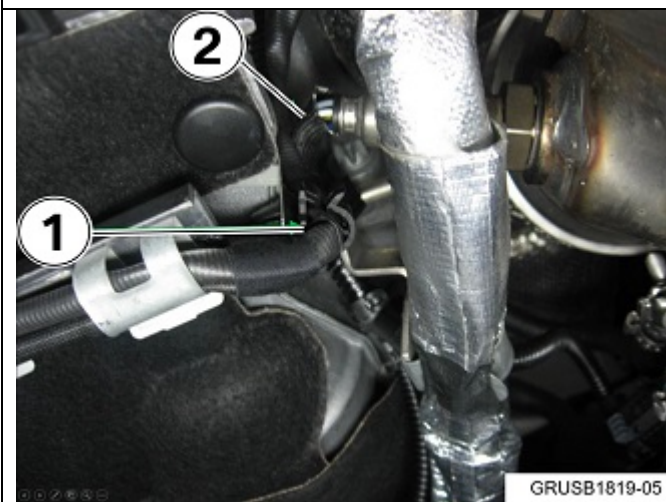


The harness is not properly routed, causing the chafing (1).



Install the new sensor and route the wiring at the sensor control unit as shown.

Install clip P/N 61 13 7 562 742 (1) to hold the wiring in place.



- Route the wiring as shown
- Use clip P/N 27 10 3 449 008 (1; if not already installed) to hold the wiring
- Have the wiring at the sensor routed as shown (2)

PARTS INFORMATION

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in ETK/AIR which takes into account specific equipment and/or options.

Part Number	Description	Quantity
13 62 8 591 639	NOx Sensor	1
61 13 7 562 742	Clip	1
27 10 3 449 008	Clip	1

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks including Emissions when determined applicable or the BMW Certified Pre-Owned Program.

Defect Code:	11 78 07 15 00	Nitrogen oxide sensor permanent malfunction
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to AIR	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)
00 00 556	Refer to AIR	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)

And:		
61 21 528	Refer to AIR	Connect an approved battery charger/power supply (indicated in AIR as Charging battery)
And, as necessary:		
13 00 003	Work time (WT)	Check the routing/condition of the wiring for the NOx sensor at the sensor element and at the sensor control unit
And		
13 62 620	Refer to AIR	Replace nitrogen oxide sensor ahead of SCR catalytic converter (properly clip and route the wiring) (after vehicle diagnosis)

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006.

Refer to AIR for the corresponding flat rate unit (FRU) allowances.

Work time labor operation code 13 00 003 is not considered a Main labor operation; however, it does require an individual punch time and an explanation on the repair order and in the claim comments section.