



**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                      |

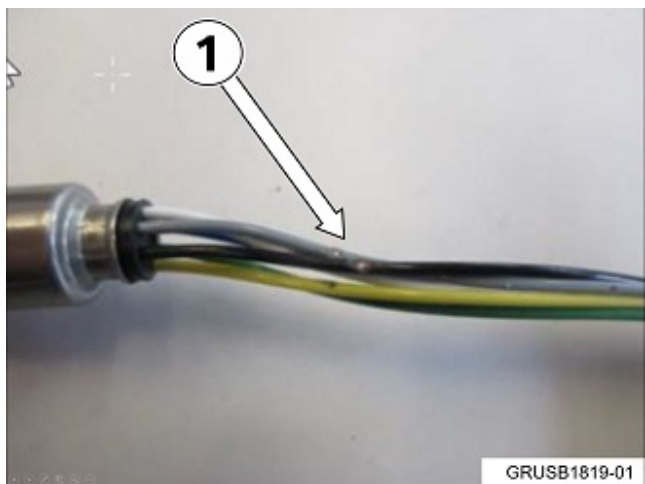
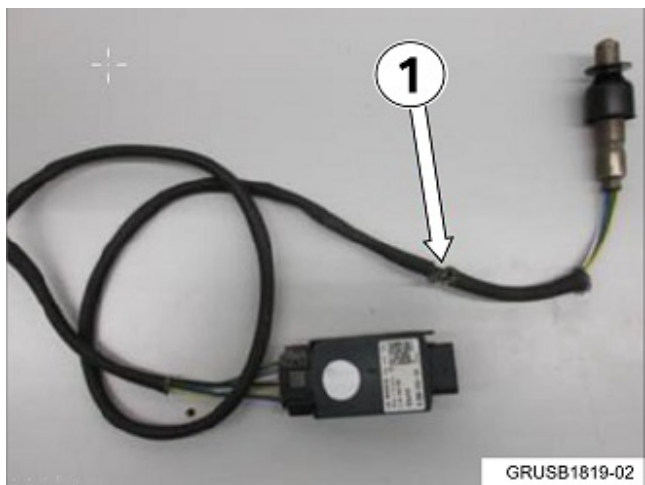
**Cause**

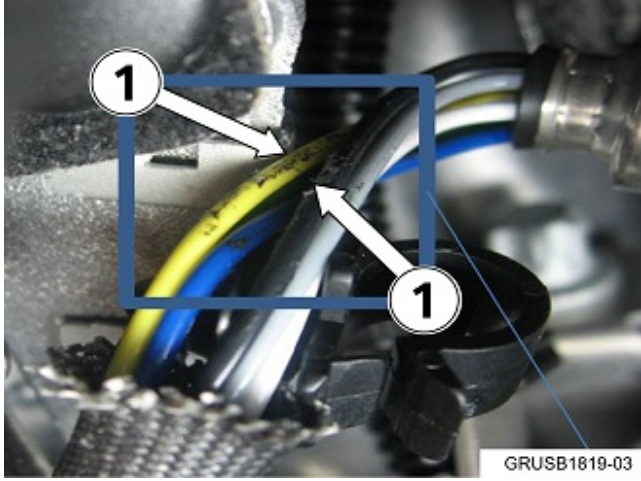
Faulty routing of the nitrogen oxide sensor (NOx) wire. The wire can chafe against the underbody paneling.

**Correction**

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

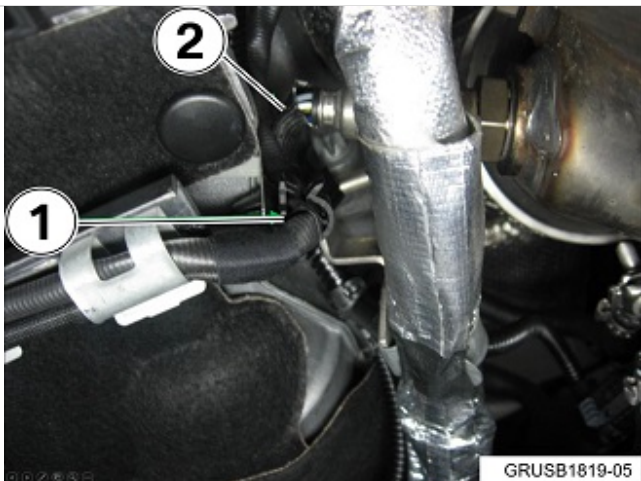
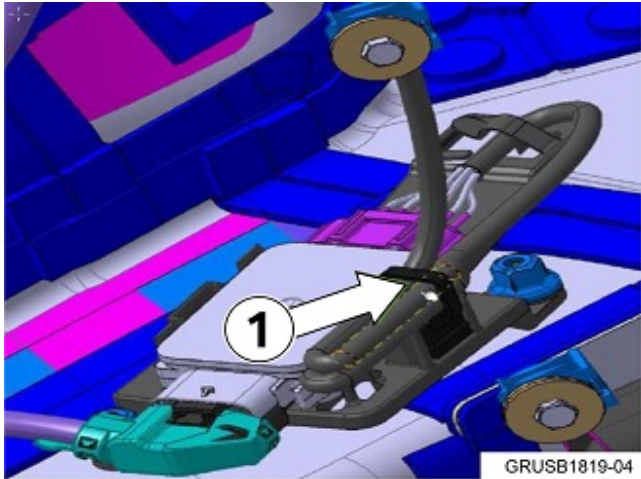
**Procedure**

|  |  |
|--|--|
|  <p>GRUSB1819-01</p> | <p>Check for chafing on the harness near the sensor element (1).</p> |
|  <p>GRUSB1819-02</p> | <p>Check for chafing on the harness through the insulation (1).</p>  |
|  | <p>The harness is not properly routed, causing the chafing (1).</p>  |



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.

|                         |                         |  |
|-------------------------|-------------------------|--|
| <b>Defect Code:</b>     | <b>11 78 07 15 00</b>   | <b>Nitrogen oxide sensor permanent malfunction</b>       |
| <b>Labor Operation:</b> | <b>Labor Allowance:</b> | <b>Description:</b>                                      |
| 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.

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