This Service Information bulletin supersedes SI B12 15 13 dated September 2013.

**NEW** designates changes to this revision

**SUBJECT**
N20 and N26 Engine: Various VANOS System Faults Stored in DME

**MODEL**
E84
E89
F10
F25
F30
F31
F34

**NEW** **SITUATION**
The Service Engine Soon lamp and Engine Malfunction warning are illuminated, and the vehicle has reduced power output. This situation can occur as a customer complaint, or after performing repairs to the engine valve train assembly. One or more of the following faults is stored in the DME.

**F10, F25, F30, F31 and F34:**

131401 VANOS, exhaust, starting from cold: Non-adjustable
131501 VANOS, intake, starting from cold: Non-adjustable
131808 VANOS, exhaust, starting from cold: Position not reached
131908 VANOS, intake, starting from cold: Position not reached
130104 VANOS, intake, control fault, camshaft jammed
130304 VANOS, exhaust, control fault, camshaft jammed
130308 VANOS, exhaust, control fault, position not reached
130108 VANOS, intake, control fault, position not reached
**E84 and E89:**

2D54 VANOS, exhaust, starting from cold: Non-adjustable

2D55 VANOS, intake, starting from cold: Non-adjustable

2D56 VANOS, exhaust, starting from cold: Position not reached

2D57 VANOS, intake, starting from cold: Position not reached

2D60 VANOS, exhaust, control fault, camshaft jammed

2D5A VANOS, intake, control fault, camshaft jammed

2D5B VANOS, intake, control fault, position not reached

2D61 VANOS, exhaust, control fault, position not reached

If one of the applicable faults listed above is not stored in the DME fault memory then continue troubleshooting with the applicable test plan for the fault(s) stored.

**CAUSE**

This is due to a diagnostic programming error in the DME.

**PROCEDURE**

If one of the applicable faults listed above is stored in the DME then continue with the procedure outlined below.

Do not replace any parts.

Perform a vehicle test.

**F10, F25, F30, F31 and F34:**

Reprogram the vehicle ISTA/P 2.50.4 or higher. The improved DME software was introduced with the following integration levels:

- F010-13-07-506 for the F10
- F020-13-07-506 for the F3x
- F025-13-07-506 for the F25

**E84 and E89:**

Reprogram the vehicle ISTA/P 2.51.0 or higher. The improved DME software was introduced with the following integration levels:

- E89X-13-11-505 for the E84 and E89
Note that ISTA/P will automatically reprogram and code all programmable control modules that do not have the latest software. For information on programming and coding with ISTA/P, refer to CenterNet / Aftersales Portal / Service / Workshop Technology / Vehicle Programming.

**Note:** When the ISTA system message displays: Battery voltage only “XX.XX” V. Please connect charger. Please note the displayed battery voltage reading in the repair order comments section. This documentation is not necessary when part of an approved Technical Service repair procedure; the battery charger is required to be attached before performing the Vehicle Test.

**WARRANTY INFORMATION**
Covered under the terms of the BMW New Car/SAV Limited Warranty or the BMW Certified Pre-Owned Program.

Specific eligible repairs **may** also be covered by the terms of the Federal, State or BMW Emissions Warranty.

To determine if any **applicable** Federal, State or BMW Emissions Warranty coverage applies prior to performing repairs, please see SI B01 02 11 for “Emissions Warranty Coverage” and refer to the “Glossary of Emission Coverage” attachment for more information.

**NEW** The BMW Certified Pre-Owned Limited Warranty applies to BMW CPO vehicles that are still within the BMW Certified Pre-Owned Limited Warranty and this coverage extends beyond the Emissions Warranty coverage that applies.

<table>
<thead>
<tr>
<th>Defect Code:</th>
<th>11 36 01 96 00</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labor Operation:</strong></td>
<td><strong>Labor Allowance:</strong></td>
</tr>
<tr>
<td>00 00 006</td>
<td>Refer to KSD2</td>
</tr>
<tr>
<td>and if necessary, also</td>
<td></td>
</tr>
<tr>
<td>61 21 528</td>
<td>Refer to KSD2</td>
</tr>
<tr>
<td>and as necessary</td>
<td></td>
</tr>
<tr>
<td>61 00 006</td>
<td>WT</td>
</tr>
</tbody>
</table>

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

Even though work time labor operation code 61 00 006 ends in “006,” “it is not considered a Main labor operation.

Work time (WT) labor operation 61 00 006 requires an individual punch time.
E84 and E89

<table>
<thead>
<tr>
<th>Labor Operation:</th>
<th>Labor Allowance:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>61 00 710</td>
<td>Refer to KSD2</td>
<td>Programming / encoding control unit(s) (not including CAS)</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61 00 720</td>
<td>Refer to KSD2</td>
<td>Programming / encoding control unit(s) (with CAS)</td>
</tr>
</tbody>
</table>

or

F10, F25, F30, F31 and F34

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<thead>
<tr>
<th>Labor Operation:</th>
<th>Labor Allowance:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>61 00 730</td>
<td>Refer to KSD2</td>
<td>Programming/encoding control unit(s)</td>
</tr>
</tbody>
</table>

Refer to KSD2 for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the “Search” button, and then enter the applicable flat rate labor operation in the FR code field.

If a control module was working properly and/or had no related faults stored prior to vehicle programming and it fails to program correctly or requires initialization, this additional work must be claimed with separate labor operations under the defect code listed above; refer to KSD2.

NEW Other Repairs

NEW If performing other ISTA diagnostics and related test plans results with eligible and covered work, claim this work with the applicable defect code and labor operations listed in KSD2.

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