

September 2013 Technical Service

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		

#### SITUATION

The Service Engine Soon lamp and Engine Malfunction warning are illuminated, and the vehicle has reduced power output. Various faults related to VANOS operation are stored in the DME. While performing the test plan, the results may appear to be inconclusive because the fault will not clear from DME fault memory.

### CAUSE

This is due to a programming error associated with ISTA/P 2.49 and lower. The error is corrected with ISTA/P 2.50.2 or higher.

#### PROCEDURE

Perform a vehicle test.

- 1. Follow the applicable test plan for the faults stored using only ISTA/D 2.38 and higher. If the applicable test plan is inconclusive or the test plan cannot be started, go to step 2.
- 2. Reprogram the vehicle ISTA/P 2.50.2 or higher. The improved DME software was introduced with the following integration levels:

E89X-13-07-503 for the E Series

F010-13-07-504 for the F10

F020-13-07-503 for the F3x

F025-13-07-503 for the F25

3. After programming, perform the VANOS function test, which can be found using the following path: Select "Function Structure / 01 Engine / Engine Electronics MEVD / Valve Gear / Inlet Camshaft or Exhaust Camshaft / VANOS Solenoid Valve Inlet or Outlet Test Plan." In the test plan, it will ask a series of questions; select "Continue" until the function test is displayed. If the vehicle completes the function test without any errors, the car is repaired.

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.

The BMW Certified Pre-Owned Limited Warranty applies to BMW CPO vehicles that are still within the BMW Certified Pre-Owned Limited Warranty, but beyond Emissions Warranty coverage that applies.

Defect Code:	11 36 01 96 00	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults)
and if necessary, also		
61 21 528	Refer to KSD2	Charging battery
NEW and as necessary		
61 00 006	WT	Performing vehicle diagnosis – test module.

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.

NEW Even though work time labor operation code 61 00 006 ends in "006," it is not considered a Main labor

operation.

**NEW** Work time (WT) labor operation 61 00 006 requires an individual punch time.

and

## **E84 and E89**

Labor Operation:	Labor Allowance:	Description:	
61 00 710	Refer to KSD2	Programming / encoding control unit(s) (not including CAS)	
or			
61 00 720	Refer to KSD2	Programming / encoding control unit(s) (with CAS)	

or

# F10, F25, F30, F31 and F34

Labor Operation:	Labor Allowance:	Description:	
61 00 730	Refer to KSD2	Programming/encoding control unit(s)	

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.

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