SI B12 26 14
Engine Electrical Systems

September 2014
Technical Service

SB-10056719-9278

SUBJECT

VANOS Faults Stored in DME (Bosch)

MODEL

All models with the following engines and Bosch DME:

N20, N26, N55, N63T, S55, and S63T

Produced to 7/2014

SITUATION

The Service Engine Soon (MIL) is on and the engine could go into a reduced power mode with the "Drivetrain Malfunction" message displayed.

One or more of the VANOS faults listed in the attachment are stored in the DME, although the engine is mechanically sound and no unusual noises can be heard from the VANOS area.

These control faults relate to implausible camshaft position (intake or exhaust), the camshaft stuck situation, or the camshaft angle offset to crankshaft outside the tolerance range.

CAUSE

Due to unfavorable Engine Position Management (EPM) parameters in the DME software, various VANOS control faults could be set.

CORRECTION

Perform the recommended test plans using the latest version of ISTA/D. Correct any VANOS hardware issues found, as indicated by the test plan.

After performing necessary repairs, or in case the ISTA test plan is inconclusive, program the vehicle using the latest version of ISTA/P.

F01, F02, F07	Target integration level: **F001-14-07-503** or higher
F06, F10, F12, F13	Target integration level: **F010-14-07-503** or higher
F22, F30, F31, F32, F33, F34, F36, F80, F82, F83	Target integration level: **F020-14-07-502** or higher
F15, F25, F26	Target integration level: **F025-14-07-502** or higher
E84, E89	Target integration level: **E89X-14-07-500** or higher
E70, E71	**Program with ISTA/P 3.54.0 (November 2014)**

	Target integration level: **E070-14-11-500** or higher

Note that ISTA/P will automatically reprogram and code all programmable control modules that do not have the latest software.

Always connect a BMW approved battery charger/power supply (SI B04 23 10)**.**

For information on programming and coding with ISTA/P, refer to Centernet / Aftersales Portal / Service / Workshop Technology / Vehicle Programming.

Note:

If VANOS control faults continue to set with the improved DME software, further diagnosis will be necessary in order to identify the cause and make the correct repair.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle/SAV Limited Warranty or the BMW Certified Pre-Owned Limited Warranty.

This repair is also covered by the terms of the Federal and/or State-specific Emissions Warranty (dependent on vehicle model year and state of registration) that applies to the BMW models listed.

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

Defect Code:	**10 42 31 59 00**	
Labor Operation:	**Labor Allowance:**	**Description:**
00 00 006	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults)
And:		
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD 2 as Charging battery)
And, as necessary:		
61 00 006	Work time (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.

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.

And:

F Series Vehicles

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

Or:

E Series Vehicles

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)

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

Repairs to address control modules and/or components with pre-existing conditions are not eligible to be claimed under the defect code listed in this bulletin.

Other Repairs

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

ATTACHMENTS
View PDF attachment **B122614_VANOS_Faults**.