

SB-10053326-5813

SI B12 14 12
Engine Electrical Systems

August 2013
Technical Service

This Service Information bulletin supersedes SI B12 14 12 **dated July 2013.**

NEW designates changes to this revision

SUBJECT

N51, N52K, N52T and N55 Engine: Various Faults Stored in DME Related to VANOS and Camshaft Position

MODEL

NEW E89 produced from 2/2010 to 12/2010

E70 produced from 2/2010 to 12/2010

E71 produced from 2/2010 to 12/2010

E82 and E88 produced from 2/2010 to 12/2010

E90, E91, E92 and E93 produced from 2/2010 to 12/2010

F07 535i produced from 2/2010 to 12/2010

F10 535i produced from 2/2010 to 12/2010

F12 and F13 produced from 2/2010 to 12/2010

F25 produced from 2/2010 to 12/2010

SITUATION

A rattling noise can be heard from the engine compartment; the engine exhibits a loss of power; and the Service Engine Soon lamp is illuminated. One, or more of the following faults may be stored.

E70, E71, E82, E88, E90, E92 and E93:

NEW 2A7C - VANOS, inlet, cold start

NEW 2A82 - VANOS, intake, variable cam control test

NEW 2A7A - VANOS, exhaust, cold start

NEW 2A87 - VANOS, intake: control fault, camshaft sticking

2D5A - VANOS, intake: control fault, camshaft sticking

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

2D54 - VANOS, exhaust, cold start: not controllable

2D55 - VANOS, intake, cold start: not controllable

2D60 - VANOS, exhaust: control fault, camshaft sticking

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

2D9F - Camshaft input sensor: signal implausible

2DA1 - Camshaft exhaust sensor: signal implausible

300C - Camshaft input sensor: signal high

300D - Camshaft input sensor: signal low

300E - Camshaft exhaust sensor: signal high

300F - Camshaft exhaust sensor: signal low

F07, F10, F12, F13 and F25:

130104 - VANOS, intake: control fault, camshaft sticking

130108 - VANOS, intake: control fault, position not reached

130304 - VANOS, exhaust: control fault, camshaft sticking

130308 - VANOS, exhaust: control fault, position not reached

130E11 - Camshaft input sensor: signal implausible

130F11 - Camshaft exhaust sensor: signal implausible

164020 - Camshaft input sensor: signal high

164021 - Camshaft input sensor: signal low

164030 - Camshaft exhaust sensor: signal high

164031 - Camshaft exhaust sensor: signal low

CAUSE

One, or both (intake and/or exhaust) of the VANOS gear assemblies have failed; the attaching bolts may have also loosened and/or broken.

PROCEDURE

1. Replace **both** VANOS gear assemblies. Refer to Repair Instruction 11 36 046, "Removing and installing or replacing intake and exhaust camshaft units."

2. If the bolts have been found broken, the missing portions of the bolts will need to be retrieved from the engine before the final repairs are made. This additional work may include removing the engine oil pan, and a close examination of the timing chain drive to retrieve the missing parts. Refer to the applicable repair instructions for oil pan removal procedures.

NEW IMPORTANT! Replacement of the parts described below in the bulletin does not require TeileClearing authorization.

PARTS INFORMATION

Part Number	Description	Quantity
11 36 7 583 207	Adjustment unit inlet camshaft (VANOS)	1
11 36 7 583 208	Adjustment unit outlet camshaft (VANOS)	1

Refer to ETK for additional bolts and gaskets.

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 37 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
and		
11 36 546	Refer to KSD	Removing and installing or replacing intake and exhaust valve adjustment units (VANOS)

NEW 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.

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.

Other Repairs

As outlined in the Procedure section, if **other** eligible and covered consequential work is required, claim this work under the defect code listed above with the applicable labor operations listed in KSD2.

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