



This Service Information bulletin supersedes SI B12 14 12 **dated August 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 (Z4) produced from 2/2010 to 12/2010

E70 (X5) produced from 2/2010 to 12/2010

E71 (X6) produced from 2/2010 to 12/2010

E82 (1 Series Coupe) produced from 2/2010 to 12/2010

E88 (1 Series Convertible) produced from 2/2010 to 12/2010

E90 (3 Series Sedan) produced from 2/2010 to 12/2010

E91 (3 Series Sports Wagon) produced from 2/2010 to 12/2010

E92 (3 Series Coupe) produced from 2/2010 to 12/2010

E93 (3 Series Convertible) produced from 2/2010 to 12/2010

F07 (5 Series Gran Turismo) produced from 2/2010 to 12/2010

F10 (5 Series Sedan) produced from 2/2010 to 12/2010

F12 (6 Series Convertible) produced from 2/2010 to 12/2010

F13 (6 Series Coupe) produced from 2/2010 to 12/2010

F25 produced (X3) from 2/2010 to 12/2010

SITUATION

NEW A rattling noise can be heard from the engine compartment; the engine loses 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:

2A7C - VANOS, inlet, cold start

2A82 - VANOS, intake, variable cam control test

2A7A - VANOS, exhaust, cold start

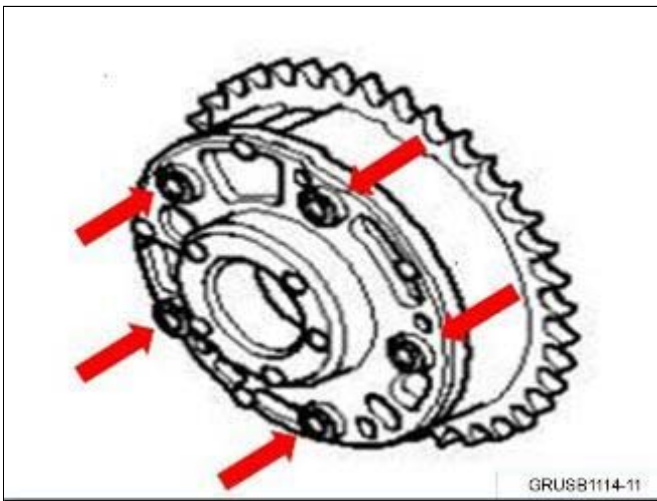
2A87 - VANOS, intake: control fault, camshaft sticking
2D5A - VANOS, intake: control fault, camshaft sticking
2D5B - VANOS, intake: control fault, position not reached
2D54 - VANOS, exhaust, cold start: not controllable
2D55 - VANOS, intake, cold start: not controllable
2D60 - VANOS, exhaust: control 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

NEW CAUSE

One or both (intake and/or exhaust) of the VANOS gear assemblies have faulty assembly bolts. One or more of the five assembly bolts have loosened or broken. The location of these bolts is shown in the illustration below:



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 VANOS gear assemblies described in this bulletin does not require TeileClearing authorization if the model and production of the vehicle are listed above and the vehicle has the condition described in this document.

Vehicles that are not within this production period and/or do not have the condition described in this bulletin require TeileClearing authorization when replacing the VANOS gear assemblies.

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.

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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)

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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