



SIB 11 07 23

2023-11-28

**VOLUNTARY EMISSION RECALL 23E-A05: REPLACE SWITCHABLE
ROCKER ARM**

<input type="checkbox"/>	THIS REPAIR IS MOBILE FRIENDLY
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Please perform the procedure outlined in this Service Information on all affected vehicles before customer delivery. In the event the customer has already taken delivery of the vehicle, please perform the procedure the next time the vehicle is in the shop.

This Service Information Bulletin (Revision 4) replaces SI B11 07 23 **dated October 2023**.

What's New:

- Procedure updated
- Parts list updated
- Claim Information section updated

MODEL

E-Series	Model Description	Production Date
G05	X5 Sports Activity Vehicle	May 8, 2023 – June 17, 2023
G06	X6 Sports Activity Coupe	May 8, 2023 – June 17, 2023
G07	X7 Sports Activity Vehicle	May 9, 2023 – June 14, 2023
G70	7 Series Sedan	April 19, 2023 – June 20, 2023

AFFECTED VEHICLES

- Vehicles which require this campaign to be completed will show it as “Open” when checked either in AIR, AWP, Campaign Summary, or Warranty Vehicle Inquiry.
- Please make sure you check your dealer inventory as soon as possible. You can see a list of affected vehicles in Inventory Campaign Details (ICD) under ROSS.

SITUATION

The return springs on the exhaust camshaft followers may break.

PROCEDURE

Read this entire Bulletin before starting any repairs.

Check the vehicle history for engine or cylinder head replacement. If the engine or cylinder has been replaced, then the campaign can be cleared. Refer to the Claim Information section.

If the vehicle history does not show any of the above repairs, replace the exhaust camshaft followers. Refer to Repair Instruction 11 33 055 “Remove and install/replace switchable cam follower on the exhaust side.”

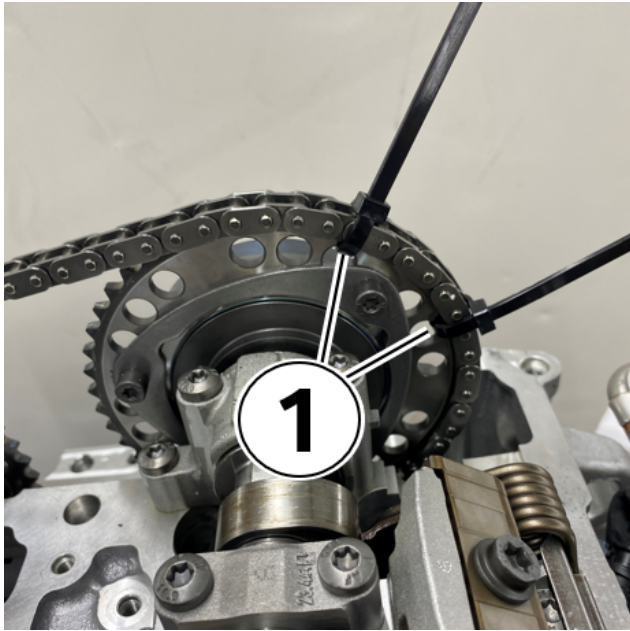
The steps to remove and install the cylinder head cover may be missing from Repair Instruction 11 33 055. If so, refer Repair Instruction 11 12 001 Replace Cylinder Head cover for the additional information.

Important ISTA Repair Instruction Supplements:

1. The current repair instructions may state to remove the engine assembly from the vehicle, this is an inaccurate instruction step. Proceed to the steps for removing the cylinder head cover while the engine is still in the vehicle. Do not remove the engine from the vehicle to perform any repairs described in this Service Information Bulletin.

2. The current repair instructions may also state to replace the VANOS gears. Disregard. This is an inaccurate statement, and it will be corrected in a future ISTA release.

3. When removing the ignition coils and the fuel injectors from the engine, number them with the cylinder in which they came from and reinstall them back in the same location.



4. After the cylinder head cover is removed and before removing the exhaust camshaft place 2 wire ties (1) on the intake VANOS gear to hold the timing chain in place.

5. In step 13 of the ISTA repair instruction it states to remove the VANOS central bolt for the exhaust camshaft phaser (VANOS gear). **Do not remove this bolt.**

6. In step 14 it states to remove the exhaust camshaft adjuster, **do not remove the adjuster.** Using a small paint marker mark the VANOS gear and the adjacent chain link, this will make reassembly much easier.

7. Remove the exhaust camshaft, VANOS central bolt and VANOS adjuster as an assembly. With the timing chain tensioner removed, it will almost provide enough slack to gently lift the chain off the exhaust VANOS gear.

Additionally, you will need to pick up the exhaust camshaft and roll it towards the intake camshaft to increase the slack in the chain, pick up the chain and remove it from the gear. Once removed-

- Place it in a clean location on a shop towel
- Continue with the applicable ISTA repair instruction

8. In step 20 you will reinstall the exhaust camshaft with the VANOS central bolt and exhaust VANOS gear as an assembly.

- Start with the exhaust camshaft near the intake camshaft and then roll it along the chain and into place
- Align the paint mark on the VANOS gear to the marked chain link
- Reinstall the camshaft bearing caps and check the cam timing with the appropriate tools

Because the exhaust VANOS central bolt was never released, it will be very clear if the exhaust camshaft is in time or not. If needed, you will have to adjust the position of the timing chain (one tooth back or forth) on the VANOS gear and recheck your work. Once the correct timing is verified, continue with the applicable repair instructions, and

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9. If you used the paint marker method, use solvent on a shop towel to remove the paint marks from both the VANOS gear and the timing chain before reassembling the engine.

10. Before reinstalling the cylinder head cover, check the camshaft timing using the applicable tools and repair instructions.

The crankshaft must be pinned/locked with special tool 2 288 380.

Both camshaft adjusters (VANOS gears) must be locked with special tool 5 A53 587.

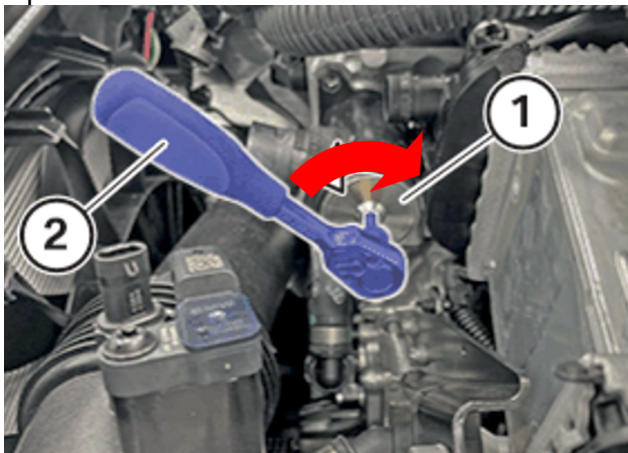
The timing chain must be pretensioned using special tool 2 455 654 to ensure the timing chain is installed correctly. Refer to Repair Instruction 11 31 005 "Adjusting the timing of the camshafts", see step 8. This center button the special tool will identify if the chain is correctly tensioned, over-slackened or over-tensioned.

Check the camshaft position using the test gauge special tool 5 A7A 5B9 and basic carrier special tool 5 A4D A16.

If the cylinder head cover gasket is not damaged, it can be reused.

If the high pressure pump gasket is not damaged, it can be reused.

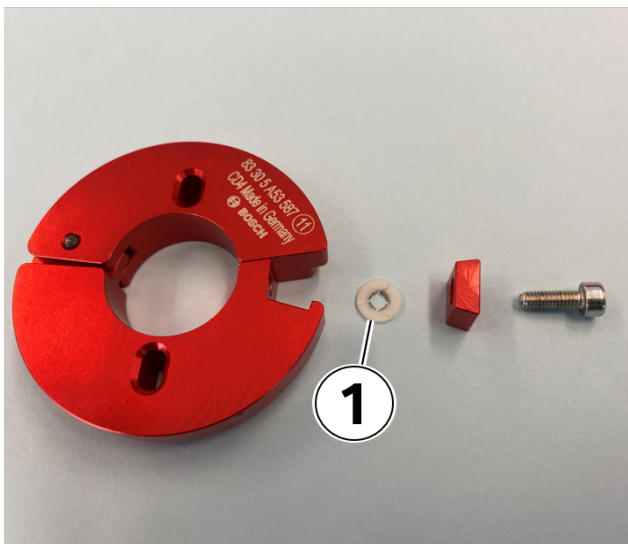
Repair and Tool Hints:



Cylinder 1 intermediate lever may interfere when trying to install the intake camshaft timing tools.

Place the VVT motor in minimum lift before installing the camshaft timing tools.

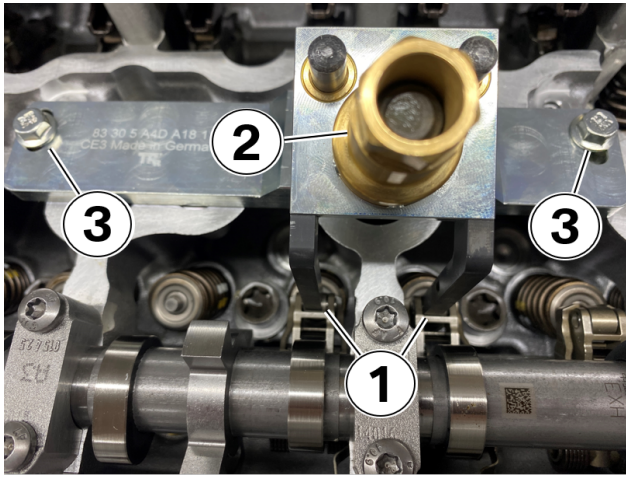
Use a 4mm Allen socket (1) and a ratchet (2) to turn the VVT motor clockwise until it stops at the minimum lift end stop.



Tool 83 30 5 A53 587 may bind when removing it from both of the VANOS adjusters, the plastic washer (1) may be binding the tool and will not allow it to collapse when the screw is loosened.

Using a fine metal file, reduce the outside diameter of the plastic washer by approximately 1 mm to avoid this interference.

Removing the washer entirely could result in the screw and wedge falling into the engine, the washer avoids loosening the screw too much.



Special tool 83 30 5 A4D A18 must be aligned properly with the rollers (1).

Turn the brass nut (2) to make contact with the rollers.

Tighten the screws on the base plate of the tool (3).

Finish compressing the springs with the brass nut (2).

The tool must remain installed during the entire camshaft removal and installation procedure.

If any broken or missing parts are identified in the valvetrain, please create a TSARA TC case before continuing with this bulletin.

LABEL INSTRUCTIONS

After the vehicle has been checked and corrected, obtain a label (SD 92-435) and with the indelible marker provided, legibly print the Recall name, recall number, and dealer code (5 digits) on the "Emissions Recall Campaign Completed Label" (see illustration). Peel the label from its backing and affix it to the right (passenger) rear side of the hood in the engine compartment, close to windshield.

For California centers only: It is required by the California Code of Regulations that an executed orange "Vehicle Emission Recall - Proof of Correction" certificate (SD92-084, see illustration) be provided to each customer (for vehicles registered in the state of California), once the Recall on his or her vehicle has been completed.

PARTS INFORMATION

Refer to the Parts Matrix for the most up to date ordering information.

Use and invoice the applicable part numbers listed below.

G05, G06 and G07 Parts List:

Part Number	Description	Quantity
11 33 9 452 677	Switchable rocker arm	12
11 31 9 845 293	Sealing sleeve	1
13 53 8 661 716	Hexagon bolt	12
13 53 8 661 715	Hexagon bolt	8
11 12 9 847 198	Profile seal	1
13 51 7 632 572	Torx socket with washer	2
07 11 9 909 926	O-ring	1
13 53 9 847 174	Sealing ring	6
18 30 9 909 376	Hexagon bolt	2
11 12 1 023 249	Cylinder head cover seal set	1 (only if damaged)

G70 Parts List:

Part Number	Description	Quantity
11 33 9 452 677	Switchable rocker arm	12
11 31 9 845 293	Sealing sleeve	1

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13 53 8 661 716	Hexagon bolt	12
13 53 8 661 715	Hexagon bolt	8
11 12 9 847 198	Profile seal	1
13 51 7 632 572	Torx socket with washer	2
07 14 9 390 155	Hexagon screw with washer	2
07 14 5 A67 B87	Hexagon nut	1
07 11 9 906 089	Collar nut	4
07 14 7 483 888	Hexagon bolt	4
07 14 7 283 812	Speed nut	8
07 14 8 837 399	ASA bolt	4
31 11 6 899 302	Multi-purpose bolt	12
07 14 9 231 837	Hexagon screw with washer	4
11 12 1 023 249	Cylinder head cover seal set	1 (only if damaged)

Additionally, other materials and small parts that are not specified above, such as fluids, lubricants, one-time use screws, nuts, and seals, which must be replaced or installed according to the ISTA repair instructions/ETK, must be selected from the Electronic Parts Catalog, or other approved BMW resources, according to the respective vehicle type. Invoiced these items separately under the Repair Code listed in this bulletin.

Refer to [SI B10 02 15](#) for label ordering information.

Part Number	Description	Quantity
01 00 2 411 755	Generic Emissions Recall Label (92-435/ Roll of 50)	1
Or:		
01 00 2 411 754	Emissions Recall/Proof of Correction (92-084/ Pad of 100)	1

CLAIM INFORMATION

Reimbursement for this Action will be via normal claim entry utilizing the applicable work package information below, and when applicable, the part numbers listed above that apply.

Plusposition (+)	Completion before the first vehicle delivery to a customer or the vehicle is already in the workshop
Main work	The vehicle arrives at your center and this Action shows open (No other Main work will be performed or claimed during this workshop visit)

Repair Code:	0011460700	G0x G70 Replacing switchable rocker arm exhaust
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Below are the special flat rate labor operation code choices for this action.

Completion before the first vehicle delivery to a customer or the vehicle is already in the workshop

Work Pkg	Labor Operation	Description (Plusposition work)	Labor Allowance
# 1	00 74 988	Replace exhaust switchable rocker arm	As applicable
Or:			
# 2	00 75 594	Checking the vehicle claim history (WVI), this issue was addressed through a prior repair	1 FRU

The vehicle arrives at your center and this Emission Recall shows open (No other Main work will be performed or claimed during this workshop visit)

Work Pkg	Labor Operation	Description (Main work)	Labor Allowance
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Or:			
# 4	00 75 073	Checking the vehicle claim history (WVI), this issue was addressed through a prior repair	1 FRU

Only one Main work flat rate labor operation code can be claimed per workshop visit.

Claim Repair Comments

Only reference the SIB number and the work package (Pkg) number performed in the RO technician notes and the claim comments (For example: B11 07 23 WP 1), unless otherwise required by State law.

Sublet – Bulk Materials (RO and Claim Comments Required)

Sublet Code 4	Up to \$50.00	Reimbursement for the repair-related bulk materials (Do not use the BMW part numbers for claim submission)
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Sublet reimbursement calculation for claiming the applicable repair-related bulk materials (BMW part numbers) is at the dealer net price amount for the proportional quantities used plus your center’s handling.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

BMW Group’s AIR Application Resource for Flat Rate Labor Operation Codes

To obtain the corresponding flat rate unit (FRU) allowance information from the BMW Group AIR application resource, start by entering the Chassis Number (the last seven (7) characters of the VIN, select the applicable Model if two or more vehicle choices show), or enter the full VIN (17 characters), click on the “Search” button. Next, click on the “Flat Rate Units” button and enter the flat rate labor operation code in the field to the right, click “Search” to display the Flat Rate Unit Group detail choices.

Consequential Repair (RO and Claim Comments Required)

When additional or other replacement work, and/or parts (cylinder head or engine assembly) are required as a direct result of addressing the issue outlined in this Service Information bulletin, claim these items under the special Repair Code listed above together with the corresponding labor operation codes, including the diagnosis that applies.

Please explain the reason for this consequential repair work (the why and the what) on the repair order and in the claim comments section.

Alternative Mobility Solution (AMS) for Vehicle Owners (RO and Claim Comments Required)

This Action repair qualifies for Alternative Mobility Solution (AMS) expense reimbursement, claim this item under the Defect Code noted above as follows:

- Sublet Code 2 - Itemize the AMS sublet amount on the repair order and in the claim comment section.

Please refer to [SI B01 29 16](#) for additional information.

FEEDBACK REGARDING THIS BULLETIN

Technical Feedback	To submit feedback for the technical topic of this bulletin: Submit your feedback in the rating box at the top of this bulletin
Warranty Feedback	To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal

Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department
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