

Part 573 Safety Recall Report

23V-707

Manufacturer Name : BMW of North America, LLC

Submission Date : NOV 13, 2023

NHTSA Recall No. : 23V-707

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : BMW of North America, LLC

Address : P.O. Box 1227

Westwood NJ 07675-1227

Company phone : 18005257417

Population :

Number of potentially involved : 155,627

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2010-2012 BMW 1 Series Coupe (128i)

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : Approximately 4,595 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : SEP 03, 2009 - AUG 15, 2011

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 2 : 2010-2012 BMW 1 Series Convertible (128i)

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : Approximately 4,684 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : SEP 04, 2009 - AUG 16, 2011

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 3 : 2010-2012 BMW 3 Series Sedan (328i, 328xi)

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Approximately 72,764 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : SEP 04, 2009 - DEC 06, 2011

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 4 : 2010-2011 BMW 3 Series Sportswagon (328i, 328xi)

Vehicle Type : LIGHT VEHICLES

Body Style : STATIONWAGON

Power Train : GAS

Descriptive Information : Approximately 2,077 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : OCT 01, 2009 - AUG 04, 2011

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 5 : 2010-2011 BMW Z4 sDrive30i

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : Approximately 2,567 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : SEP 03, 2009 - AUG 05, 2011

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 6 : 2010-2012 BMW 3 Series Convertible (328i)

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : Approximately 10,623 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : SEP 04, 2009 - APR 19, 2012

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 7 : 2010-2011 BMW 5 Series Sedan (528i, 528xi)

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Approximately 24,272 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : SEP 03, 2009 - AUG 03, 2011

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 8 : 2010-2011 BMW X3 xDrive28i, X3 xDrive30i

Vehicle Type : LIGHT VEHICLES

Body Style : SUV

Power Train : GAS

Descriptive Information : Approximately 16,837 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : SEP 03, 2009 - SEP 16, 2011

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 9 : 2010-2011 BMW X5 xDrive30i

Vehicle Type : LIGHT VEHICLES

Body Style : SUV

Power Train : GAS

Descriptive Information : Approximately 6,644 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : OCT 01, 2009 - MAR 18, 2010

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 10 : 2010-2011 BMW 3 Series Coupe (328i, 328xi)

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : Approximately 10,568 vehicles were manufactured with aluminum bolts for the housing of the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts which, over time, could loosen and eventually break.

Basis for recall population determination:
Vehicles which were included in the 2014 extended warranty program.

Recall component difference to non-recall component:
VANOS housing bolt material and treatment.

Production Dates : SEP 02, 2009 - AUG 05, 2011

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Description of Defect :

Description of the Defect : Please refer to BMW's April 9, 2014 Part 573 report assigned NHTSA Recall ID 14V-176. Recall 14V-176 involved the bolts for the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts. The VANOS adjustment unit is assembled with four aluminum bolts. Due to a quality fault, the aluminum bolts can loosen over time and under certain circumstances the bolt heads may break. The VANOS assembly is controlled electrically by valves actuated via engine oil pressure. If the bolt heads loosen or break, the VANOS may leak internally, resulting in the affected camshaft not being adjusted correctly anymore. Since the camshaft position is monitored by the engine electronics, it will be recognized that the camshaft position is deviating from the target position. As a result, the reduced engine power Limp-Home mode will be activated.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : In very rare cases, the engine could stall during operation which could lead to a crash.

Description of the Cause : NR

Identification of Any Warning that can Occur : The driver will be notified by the Check Engine (or Service Engine Soon) warning light and a Check Control message that the reduced engine power Limp-Home mode is activated either immediately or at startup of the next driving cycle. The driver will notice a distinct change in engine running condition, reduced engine power, and hear increased engine noise. In rare cases, the engine cannot be started after switching off.

Involved Components :

Component Name 1 : VANOS Bolt

Component Description : VANOS Bolt

Component Part Number : 8602263

Supplier Identification :**Component Manufacturer**

Name : Hilite Germany GmbH

Address : Weberstrasse 17
Nuertingen Foreign States 72622

Country : Germany

Chronology :

Please refer to BMW's April 9, 2014 Part 573 report assigned NHTSA Recall ID 14V-176. In addition to 14V-176, other Model Year 2010-2012 BMW vehicles equipped with the in-line 6-cylinder engine were included in an Extended Warranty Program with terms of 10 years / unlimited mileage.

Subsequent to the implementation of the 2014 safety recall and the extended warranty program, the field continued to be monitored. As vehicles within the extended warranty program "aged-out", it became apparent that some of those vehicles also started to experience the issue. As monitoring continued, an increasing number of vehicles were found to exhibit various symptoms.

In early April 2023, an engineering investigation was initiated. Engineering and technical development information, as well as, field data was collected.

Between May and August, the information was analyzed, but it was not yet clear which vehicles may have experienced a no-start condition, an engine emergency-mode condition, and/or a stalling condition. Further in-depth analyses were necessary.

In September, the focus of the in-depth analyses consisted of a detailed review of the warranty claims and associated technician and customer comments to assess specific failure modes.

In October, the analyses concluded that an unwanted number of vehicles may have experienced a stalling condition. Approximately 620 warranty claims were processed during the extended warranty period (starting in approximately 2014), which included technician and/or customer comments with a reference to stalling.

Vehicle assembly information and the extended warranty program details were reviewed to determine the number, and production dates, of potentially affected vehicles.

On October 13, 2023, BMW decided to conduct a voluntary safety recall.

BMW has not received any reports, nor is BMW otherwise aware, of any accidents or injuries related to this issue.

Description of Remedy :

Description of Remedy Program : The four VANOS bolts will be replaced.

Owners will be notified by First Class mail advising them of the recall and to schedule an appointment with an authorized BMW dealer to have the remedy performed for free. Owners who have had this remedy performed at their own expense prior to the recall notification, may be eligible for reimbursement according to BMW Group's reimbursement plan in accordance with 49 CFR 573.13 and 49 CFR 577.11.

How Remedy Component Differs from Recalled Component : Recall component: VANOS Bolt- part number: 8602263

Identify How/When Recall Condition was Corrected in Production : NR

Recall Schedule :

Description of Recall Schedule : Dealer notification is expected to begin and end on October 27, 2023.

Owner notification is expected to begin and end on December 12, 2023.

Planned Dealer Notification Date : OCT 27, 2023 - OCT 27, 2023

Planned Owner Notification Date : DEC 12, 2023 - DEC 12, 2023

* NR - Not Reported

14V-176
Model Year 2010-2012
BMW 1 Series, 3 Series, 5 Series, 5 Series Gran Turismo, 6 Series, Z4
BMW X3 SAV, X5 SAV, X6 SAV
(Models with inline 6-cylinder engine)
VANOS Recall

Q1. Which models are affected by this recall?

Affected are certain Model Year 2010-2012 BMW 1 Series, 3 Series, 5 Series, 5 Series Gran Turismo, 6 Series, X3 SAV, X5 SAV, X6 SAV and Z4 models equipped with the inline 6-cylinder engine as follows:

<u>Model Year / Model</u>	<u>Inclusive Dates of Manufacture</u>
2010-12 / 1 Series	January 2010 - August 2011
2010-12 / 3 Series	September 2009 – February 2012
2011 / 5 Series	February 2010 – August 2011
2010-12 / 5 Series Gran Turismo	September 2009 – November 2011
2012 / 6 Series	May 2011 - October 2011
2010-11 / X3 SAV	January 2010 - September 2011
2010-12 / X5 SAV	November 2009 - October 2011
2011-12 / X6 SAV	February 2010 - October 2011
2010-11 / Z4	January 2010 - August 2011

Q2. How many vehicles in the US are affected by this recall?

The number of BMW vehicles in the US affected is approximately 156,137 as follows:

<u>Model Year / Model</u>	<u>Number of Units Affected</u>
2010-12 / 1 Series	8,983
2010-12 / 3 Series	58,165
2011 / 5 Series	37,443
2010-12 / 5 Series Gran Turismo	3,094
2012 / 6 Series	5
2010-11 / X3 SAV	8,483
2010-12 / X5 SAV	33,389
2011-12 / X6 SAV	5,420
2010-11 / Z4	1,155

Q2a. Why are other models not affected?

Other models have a VANOS unit with bolts produced to different specifications.

Q2b. Didn't BMW produce a lot more of these vehicles for the US in this time period? Why is the number of affected vehicles much lower?

Yes, BMW produced more of these inline 6-cylinder vehicles for the US in this time period. However, only certain vehicles within the production range are subject to the recall. In addition, approximately 170,158 vehicles are eligible for an extended

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BMW 1 Series, 3 Series, 5 Series, 5 Series Gran Turismo, 6 Series, Z4
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VANOS Recall

warranty (see separate Q&A). Nonetheless, the number of vehicles affected in total is less than the number of vehicles produced over this time period.

Q3. What is the nature of this recall?

This recall involves the housing bolts for the variable camshaft timing (VANOS) adjustment unit on the intake and exhaust camshafts. The housing of the VANOS adjustment unit is assembled with four aluminum bolts. The aluminum bolts may possibly loosen over time and, under certain circumstances, may break. As a result, the reduced engine power “safe mode” may be activated.

If this were to occur, you would be notified by the Check Engine (or Service Engine Soon) warning light and a Check Control message that the reduced engine power “safe mode” is activated either immediately or at startup of the next driving cycle. You would notice a distinct change in engine running condition and hear increased engine noise. In rare cases, the engine cannot be started after switching off. In very rare cases, the engine could stall during operation which could lead to a crash.

Q3a. Can you tell me more?

Yes. This issue has occurred in a small percentage of vehicles.

Q4. Can I become aware of this issue if it is occurring?

Yes. If this condition occurs, you would be notified by the Check Engine (or Service Engine Soon) warning light and a Check Control message that the reduced engine power “safe mode” is activated either immediately or at startup of the next driving cycle. You would notice a distinct change in engine running condition and hear increased engine noise. In rare cases, the engine cannot be started after switching off. In very rare cases, the engine could stall during operation which could lead to a crash.

Q5. Can I continue to drive my vehicle?

Yes.

However, if you observe a “Check Engine” or “Service Engine Soon” lamp and Check Control message warning, you should immediately contact the nearest authorized BMW center to arrange for inspection and service.

In the event of stalling, you should carefully move away from traffic and pull over to a safe location as soon as possible and stop the vehicle. You should contact BMW Roadside Assistance at 1-800-332-4269 to have your vehicle brought to the nearest authorized BMW center. You should not continue to drive the vehicle.

14V-176
Model Year 2010-2012
BMW 1 Series, 3 Series, 5 Series, 5 Series Gran Turismo, 6 Series, Z4
BMW X3 SAV, X5 SAV, X6 SAV
(Models with inline 6-cylinder engine)
VANOS Recall

If you are not the only driver of this vehicle, please advise all other drivers of this important information.

Q6. What should I do if this condition occurs while I am driving?

If you observe a “Check Engine” or “Service Engine Soon” lamp and Check Control message warning, you should immediately contact the nearest authorized BMW center to arrange for inspection and service.

In the event of stalling, you should carefully move away from traffic and pull over to a safe location as soon as possible and stop the vehicle. You should contact BMW Roadside Assistance at 1-800-332-4269 to have the vehicle brought to the nearest authorized BMW center. You should not continue to drive the vehicle.

If you are not the only driver of this vehicle, please advise all other drivers of this important information.

Q7. What corrective measures will be taken?

On affected vehicles, the VANOS attachment bolts will be replaced.

Q8. How did BMW become aware of the problem?

BMW became aware of the problem through its quality control procedures.

Q8a. I noticed in the media that this issue also occurred in China, and that the Chinese government was involved. Is that true? How was the Chinese government involved? Was the US government (NHTSA) involved?

Yes, this issue also affected vehicles in China. Discussions took place between BMW and the Chinese authorities. A similar recall has been released in China.

In the US, NHTSA has not been involved in discussions with BMW prior to this recall announcement.

Q9. Is BMW aware of any accidents or injuries associated with the recall?

No.

Q10. How will I be informed of the recall?

Owners and lessees of affected vehicles will receive a letter via First Class mail asking them to schedule an appointment with their authorized BMW center.

14V-176
Model Year 2010-2012
BMW 1 Series, 3 Series, 5 Series, 5 Series Gran Turismo, 6 Series, Z4
BMW X3 SAV, X5 SAV, X6 SAV
(Models with inline 6-cylinder engine)
VANOS Recall

Q11. When will I receive my owner notification letter?

You will receive an initial letter in June advising you of this issue, and then an additional letter when parts become available, requesting that you bring your vehicle to your authorized BMW center for service and repair. No action is required on your part when you receive the initial letter.

Q12. How will the recall be performed?

On affected vehicles, the VANOS attachment bolts will be replaced.

Q13. How long will the repair take?

This repair should take approximately 4 hours; however, additional time may be required depending upon your center's schedule. The repair will be performed free of charge by your authorized BMW center.

Q14. How many vehicles have experienced this problem?

The exact number is unknown at this time, but the rate is very low.

Q15. Do I have to wait for my recall letter in order to have my recall performed?

Yes. BMW is in the process of implementing the recall campaign to ensure that the necessary parts, tools, and procedures are at your authorized BMW center.

Q16. I see the "TREAD Act Customer Reimbursement Plan" attached to my letter. Can you explain what that is about? Am I eligible for reimbursement?

If you have already had this repair performed at your own expense, you may be eligible for reimbursement of certain expenses that you incurred. (Note to Cust. Rel.: Please review and refer to the "TREAD Act Customer Reimbursement Plan" when speaking with the customer.)