NR

## Part 573 Safety Recall Report

Manufacturer Name :BMW of North America, LLCSubmission Date :OCT 20, 2023NHTSA Recall No. :23V-707Manufacturer Recall No. :NR

### Manufacturer Information :

Manufacturer Name : BMW of North America, LLC Address : P.O. Box 1227 Westwood NJ 07675-1227 Company phone : 18005257417

### Vehicle Information :

Vehicle 1:	2010-2012 BMW 5 Series
Vehicle Type :	LIGHT VEHICLES
Body Style :	4-DOOR
Power Train :	GAS
Descriptive Information :	Approximately TBD 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 :	JAN 01, 2010 - DEC 31, 2022
VIN Range 1:	Begin :NREnd :NRNot sequential

The information contained in this report was submitted pursuant to 49 CFR §573



Number of potentially involved :

Estimated percentage with defect : 1%

**Population :** 

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venicie 2:	2010-2012	BMW 3 Series		
Vehicle Type :	LIGHT VEHI	CLES		
Body Style : Power Train :	4-DOOR			
Descriptive Information :	Approximat of the variat camshafts w	ely TBD vehicles ble camshaft time hich, over time,	were manufactured with ing (VANOS) adjustment u could loosen and eventua	aluminum bolts for the housir unit on the intake and exhaust Illy break.
	Basis for rec Vehicles wh	call population d ich were include	etermination: d in the 2014 extended w	varranty program.
	Recall comp VANOS hous	onent difference sing bolt materia	e to non-recall component l and treatment.	::
Production Dates :	JAN 01, 201	0 - DEC 31, 2012		
VIN Range 1:	Begin :	NR	End: NR	Not sequentia
Vehicle 3 : Vehicle Type : Body Style : Power Train : Descriptive Information :	2010-2012 I LIGHT VEHI 2-DOOR GAS Approximat of the variab	BMW 1 Series CLES ely TBD vehicles ble camshaft time	were manufactured with ing (VANOS) adjustment t	aluminum bolts for the housin unit on the intake and exhaust
	camshafts w Basis for rec Vehicles wh	call population d ich were include	could loosen and eventua etermination: ed in the 2014 extended w	arranty program.
	Recall comp VANOS hous	onent difference sing bolt materia	e to non-recall component l and treatment.	:
Production Dates :	JAN 01, 201	0 - DEC 31, 2012		
VIN Range 1:	Begin :	NR	End: NR	Not sequentia

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Descriptive Information :					
	of the variable	y TBD vehicles w e camshaft timing ich, over time, co	vere man g (VANO) uld loos	ufactured with 5) adjustment u en and eventua	aluminum bolts for the housin init on the intake and exhaust lly break.
	Basis for recal Vehicles which	l population detended in the second sec	erminati in the 20	on: )14 extended w	arranty program.
	Recall compor VANOS housir	nent difference to ng bolt material a	o non-re and treat	call component ment.	:
Production Dates :	JAN 01, 2010 -	- DEC 31, 2012			
VIN Range 1:1	Begin :	NR	End :	NR	Not sequentia
Vehicle 5:	2010-2012 BN	AW 5 Series Grar	n Turism	0	
Vehicle Type : Rody Style :	LIGHT VEHICI	LES			
Power Train :	GAS	rUIN			
Descriptive Information :	Approximately of the variable camshafts whi	y TBD vehicles w e camshaft timing ich, over time, co	vere man g (VANO uld loos	ufactured with S) adjustment u en and eventua	aluminum bolts for the housi init on the intake and exhaust lly break.
	Basis for recal Vehicles whicl	l population dete h were included i	erminati in the 20	on: 14 extended w	arranty program.
	Recall compor VANOS housir	nent difference to ng bolt material a	o non-re and treat	call component ment.	:
Production Dates :	JAN 01, 2010 -	- DEC 31, 2012			
VIN Range 1:	Begin :	NR	End :	NR	Not sequentia

Vehicle 6:	2010-2012 BM	1W X3			
Vehicle Type :	LIGHT VEHICL	.ES			
Body Style :	SUV				
Power Train :	GAS	TDD history			
Descriptive information :	of the variable camshafts whi	camshaft timing ch, over time, co	g (VANO uld loos	S) adjustment unit on t en and eventually brea	he intake and exhaust k.
	Basis for recall Vehicles which	l population detention deten	erminati in the 2(	on: )14 extended warranty	program.
	Recall compon VANOS housin	ent difference to g bolt material a	o non-re ind treat	call component: ment.	
Production Dates :	JAN 01, 2010 -	DEC 31, 2012			
VIN Range 1:	Begin :	NR	End :	NR	Not sequential
Vehicle 7 : Vehicle Type : Body Style :	2010-2012 BM LIGHT VEHICL SUV	IW X5 .ES			
Descriptive Information :	Approximately of the variable camshafts whi	7 TBD vehicles w camshaft timing ch, over time, co	vere mar g (VANO uld loos	nufactured with alumin S) adjustment unit on t en and eventually brea	um bolts for the housin he intake and exhaust k.
	Basis for recal Vehicles which	l population detension detens	erminati in the 2(	on: )14 extended warranty	program.
	Recall compon VANOS housin	ent difference to g bolt material a	o non-re ind treat	call component: ment.	
Production Dates :	JAN 01, 2010 -	DEC 31, 2012			
VIN Range 1:	Begin :	NR	End :	NR	Not sequential

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Vehicle 8:	2010-2012 BN	AW X6			
Vehicle Type :	LIGHT VEHICI	LES			
Body Style : Power Train :	SUV GAS				
Descriptive Information :	Approximately of the variable camshafts wh	y TBD vehicles w e camshaft timing ich, over time, co	vere man g (VANO puld loos	ufactured with al S) adjustment uni en and eventually	uminum bolts for the housi t on the intake and exhaust break.
	Basis for recal Vehicles whic	ll population dete h were included i	erminati in the 20	on: 014 extended war	ranty program.
	Recall compor VANOS housir	nent difference to ng bolt material a	o non-re and treat	call component: ment.	
Production Dates :	JAN 01, 2010 -	-DEC 31, 2012			
VIN Range 1:	Begin :	NR	End :	NR	Not sequentia
Vehicle 9:	2010-2012 BN	AW Z4			
Vehicle Type :	LIGHT VEHICI	LES			
Body Style :	2-DOOR				
Power Train :	GAS				·····
Descriptive mormation.	of the variable camshafts wh	e camshaft timing ich, over time, co	g (VANO ould loos	S) adjustment uni en and eventually	t on the intake and exhaust break.
	Basis for recal Vehicles whic	ll population dete h were included i	erminati in the 20	on: 014 extended war	ranty program.
	Recall compor VANOS housir	nent difference to ng bolt material a	o non-re ind treat	call component: ment.	
	JAN 01, 2010	-DEC 31, 2012			
Production Dates :	0111 01, 2010			ND	

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### **Description of Defect :**

FMVSS 1 : FMVSS 2 :NR FMVSS 2 :Description of the Safety Risk : Description of the Cause :In very rare cases, the engine could stall during operation which could lead a crash.Description of the Cause : that can Occur :NRIdentification 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	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 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. 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 2 :NRDescription of the Safety Risk :In very rare cases, the engine could stall during operation which could lead a crash.Description of the Cause :NRIdentification 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	FMVSS 1 :	NR
Description of the Safety Risk : Description of the Cause : 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	FMVSS 2 :	NR
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cases, the engine cannot be started after switching off.	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 GmbHAddress :Weberstrasse 17Nuertingen Foreign States 72622Country :Germany

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#### **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.

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 Recall component: VANOS Bolt– part number: 8602263 from Recalled Component :

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

#### **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

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