OMB Control No.: 2127-0004

Part 573 Safety Recall Report

20V-283

Manufacturer Name: BMW of North America, LLC

NHTSA Recall No.: 20V-283

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: 76 Estimated percentage with defect: 1 %

Vehicle Information:

Vehicle 1: 2020-2020 BMW X1 xDrive28i, X1 sDrive28i

Vehicle Type: LIGHT VEHICLES

Body Style: SUV Power Train: GAS

Descriptive Information: Approximately 13 vehicles are equipped with an air bag control unit containing a

rollover sensor which may not have been produced to supplier specifications.

Basis for recall population determination: Vehicle assembly and supplier production records were reviewed to determine the production range of potentially suspect parts and, via parts traceability, the production range of potentially affected vehicles.

Recall component difference to non-recall component: The air bag control unit contains a rollover sensor which may not have been produced to supplier

specifications.

Production Dates: MAR 18, 2020 - MAR 19, 2020

Vehicle 2:	2020-2020 BMW X2 xDrive28i, X2 sDrive28i						
Vehicle Type :	LIGHT VEHICLE	ES					
Body Style :	4-DOOR						
Power Train :	GAS						
Descriptive Information :	Approximately 5 vehicles are equipped with an air bag control unit containing a rollover sensor which may not have been produced to supplier specifications.						
	Basis for recall population determination: Vehicle assembly and supplier production records were reviewed to determine the production range of potentially suspect parts and, via parts traceability, the production range of potentially affected vehicles.						
	Recall component difference to non-recall component: The air bag control unit contains a rollover sensor which may not have been produced to supplier specifications.						
Decident Determine	MAD 10 0000	MAD 10 9090					
Production Dates:		MAR 19, 2020 NR	End: NR	□ Not cognontial			
VIN Range 1:	begin.	INIK	Elia . Ivk	☐ Not sequential			
Vehicle 3:	2021-2021 MIN	II Hardtop 2 D	oor (Cooper, Coopei	S, John Cooper Works)			
	LIGHT VEHICLES						
Body Style :							
Power Train :	GAS						
Descriptive Information :	Approximately 24 vehicles are equipped with an air bag control unit containing a rollover sensor which may not have been produced to supplier specifications.						
	Basis for recall population determination: Vehicle assembly and supplier production records were reviewed to determine the production range of potentially suspect parts and, via parts traceability, the production range of potentially affected vehicles.						
	Recall component difference to non-recall component: The air bag control unit contains a rollover sensor which may not have been produced to supplier specifications.						
Production Dates :	MAR 12. 2020 -	MAR 20. 2020					
VIN Range 1:		NR	End: NR	☐ Not sequential			

Vehicle Type : Body Style : Power Train :	HYBRID ELECTR	IC	•			
Descriptive Information :	Approximately 8 vehicles are equipped with an air bag control unit containing a rollover sensor which may not have been produced to supplier specifications. Basis for recall population determination: Vehicle assembly and supplier production records were reviewed to determine the production range of potentially suspect parts and, via parts traceability, the production range of potentially affected vehicles. Recall component difference to non-recall component: The air bag control unit contains a rollover sensor which may not have been produced to supplier specifications.					
Production Dates :	MAR 18, 2020 - M	IAR 18, 2020				
VIN Range 1:	Begin:	NR	End: NR		■ Not sequential	
	BUSES, MEDIUM 4-DOOR		or (Cooper, Cooper S IICLES)		
Descriptive Information :	Basis for recall percords were revand, via parts trace. Recall component contains a rollove specifications.	which may not opulation deterior deteri	have been produced rmination: Vehicle a	to supplier sp assembly and so a range of pote potentially affe nt: The air ba	supplier production entially suspect parts ected vehicles.	
Production Dates : VIN Range 1 :		IAR 20, 2020 NR	End: NR		☐ Not sequential	

Not sequential

Vehicle 6: 2020-2020 MINI Clubman (Cooper S All4)

Vehicle Type: LIGHT VEHICLES

Body Style : 4-DOOR Power Train : GAS

Descriptive Information: Approximately 1 vehicle is equipped with an air bag control unit containing a rollover

sensor which may not have been produced to supplier specifications.

Basis for recall population determination: Vehicle assembly and supplier production records were reviewed to determine the production range of potentially suspect parts and, via parts traceability, the production range of potentially affected vehicles.

Recall component difference to non-recall component: The air bag control unit contains a rollover sensor which may not have been produced to supplier

specifications.

Production Dates: MAR 19, 2020 - MAR 19, 2020

VIN Range 1: Begin: NR End: NR

Description of Defect:

Description of the Defect: This safety recall involves the rollover sensor within the air bag control unit

which may not have been produced to supplier specifications. During supplier production, an oxide etching machine may have been programmed with an incorrect parameter. If this occurred, then the sensor's aluminum bonding pad may delaminate from a poly layer substrate on the sensor. As a result, it may

not be possible for the sensor to detect a rollover condition.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: In a crash involving a rollover, deployment of the head air bag and safety belt

pretensioner, and activation of other safety systems, may not occur, which

could increase the risk of injury.

Description of the Cause: NR

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Identification of Any Warning At vehicle start, if a fault is present in the sensor, the air bag warning lamp will

that can Occur: be illuminated in the instrument panel.

Involved	Components :	:
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Component Name 1: ACSM4i, Mid-Roll

Component Description: Air Bag Control Unit

Component Part Number: 9873244-01

Supplier Identification:

Component Manufacturer

Name: ZF Automotive Germany GmbH

Address: Fritz-Reichle-Ring 8

Radolfzell Foreign States 78315

Country: Germany

Chronology:

On March 19, 2020, the air bag control unit supplier informed BMW that certain control units may have been produced with rollover sensors that do not meet specifications.

Between April and May, an engineering analysis, and a review of the supply chain was conducted. A review of supplier quality control records revealed that during a training session, an oxide etching machine may have been programmed with an incorrect parameter. Further reviews suggested that this could cause the rollover sensor to be produced with an inadequate or uneven amount of etching.

This could allow the sensor's aluminum bonding pad to delaminate from a poly layer substrate on the sensor. An analysis indicated that a reduced robustness of the sensor could occur which could lead to a premature failure of the air bag control unit during vehicle operation and its ability to detect a rollover condition. An examination of supplier quality testing indicated that even with the potential for an etching anomaly, the sensors passed all functional testing.

Vehicle assembly information and supplier production records were reviewed to determine the number and production date range of potentially affected vehicles.

On May 13, 2020, BMW Group decided to conduct a voluntary recall for potentially affected vehicles.

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

Description of Remedy:

Description of Remedy Program: The air bag control unit will be replaced.

If this condition were to occur to a potentially affected vehicle prior to the recall, the remedy would be covered by the BMW and MINI New Vehicle Limited Warranty program. Therefore, reimbursement for a prenotification remedy re Part 573.13 and Part 577.11 is not necessary.

 $How\ Remedy\ Component\ Differs\ Recalled\ Component:\ air\ bag\ control\ unit\ (ACSM4i,\ Mid-Roll);\ p/n$

from Recalled Component: (9873244-01).

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

Recall Schedule:

Description of Recall Schedule: Notification to dealers is planned to begin and end on May 20, 2020.

Notification to owners is planned to begin and end on July 13, 2020.

Planned Dealer Notification Date : MAY 20, 2020 - MAY 20, 2020 Planned Owner Notification Date : JUL 13, 2020 - JUL 13, 2020

* NR - Not Reported