Part 573 Safety Recall Report 20V-283

Manufacturer Name : BMW of North America, LLC
Submission Date : JUN 17, 2020
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 (May 16, 2016 and May 30, 2016) 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
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Vehicle 2 :	2020-2020 BMW X2 xDrive28i, X2 sDrive28i
Vehicle Type :	LIGHT VEHICLES
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 (May 16, 2016 and May 30, 2016) 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
VIN Range 1 :	Begin : NR End : NR ☐ Not sequential

Vehicle 3 :	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 (May 16, 2016 and May 30, 2016) 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 ☐ Not sequential

Vehicle 4 :	2021-2021 MINI Hardtop 2 Door (Cooper S E)
Vehicle Type :	LIGHT VEHICLES
Body Style :	2-DOOR
Power Train :	HYBRID ELECTRIC
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 (May 16, 2016 and May 30, 2016) 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 18, 2020
VIN Range 1 :	Begin : NR End : NR ☐ Not sequential

Vehicle 5 :	2021-2021 MINI Hardtop 4 Door (Cooper, Cooper S)
Vehicle Type :	BUSES, MEDIUM & HEAVY VEHICLES
Body Style :	4-DOOR
Power Train :	GAS
Descriptive Information :	Approximately 25 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 (May 16, 2016 and May 30, 2016) 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 :	Begin : NR End : NR ☐ Not sequential

Vehicle 6 :	2021-2021 MINI Hardtop 2 Door (Cooper, Cooper S, John Cooper Works)
Vehicle Type :	LIGHT VEHICLES
Body Style :	2-DOOR
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 (May 16, 2016 and May 30, 2016) 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 : Begin : NR End : NR ☐ Not sequential

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
Identification of Any Warning that can Occur :	At vehicle start, if a fault is present in the sensor, the air bag warning lamp will be illuminated in the instrument panel.

Involved Components :

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 pre-notification remedy re Part 573.13 and Part 577.11 is not necessary.
How Remedy Component Differs from Recalled Component :	Recalled Component: air bag control unit (ACSM4i, Mid-Roll); p/n (9873244-01).
Identify How/When Recall Condition was Corrected in Production :	NR

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