

Part 573 Safety Recall Report

21V-598

Manufacturer Name : BMW of North America, LLC**Submission Date :** AUG 02, 2021**NHTSA Recall No. :** 21V-598**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 : 50,024

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2020-2020 BMW M340i, M340i xDrive

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Approximately 10,877 vehicles have been manufactured with engine management software that, under certain engine start conditions, could damage the oil/vacuum pump which supplies vacuum for brake assistance.

Basis for recall population determination: Vehicle assembly information was reviewed to determine the production date of potentially affected vehicles.

Recall component difference to non-recall component: The engine management software, under certain engine start conditions, could damage the oil/vacuum pump.

Production Dates : FEB 21, 2019 - JUL 28, 2020

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 2 : 2020-2021 BMW X4 M40i

Vehicle Type : LIGHT VEHICLES

Body Style : SUV

Power Train : GAS

Descriptive Information : Approximately 4,130 vehicles have been manufactured with engine management software that, under certain engine start conditions, could damage the oil/vacuum pump which supplies vacuum for brake assistance.

Basis for recall population determination: Vehicle assembly information was reviewed to determine the production date of potentially affected vehicles.

Recall component difference to non-recall component: The engine management software, under certain engine start conditions, could damage the oil/vacuum pump.

Production Dates : SEP 03, 2019 - JUN 22, 2021

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 3 : 2020-2020 BMW 540i, 540i xDrive

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Approximately 5,375 vehicles have been manufactured with engine management software that, under certain engine start conditions, could damage the oil/vacuum pump which supplies vacuum for brake assistance.

Basis for recall population determination: Vehicle assembly information was reviewed to determine the production date of potentially affected vehicles.

Recall component difference to non-recall component: The engine management software, under certain engine start conditions, could damage the oil/vacuum pump.

Production Dates : JUN 11, 2019 - JUN 26, 2020

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 4 : 2020-2021 BMW 745Le xDrive

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Approximately 470 vehicles have been manufactured with engine management software that, under certain engine start conditions, could damage the oil/vacuum pump which supplies vacuum for brake assistance.

Basis for recall population determination: Vehicle assembly information was reviewed to determine the production date of potentially affected vehicles.

Recall component difference to non-recall component: The engine management software, under certain engine start conditions, could damage the oil/vacuum pump.

Production Dates : FEB 11, 2019 - FEB 22, 2021

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 5 : 2020-2020 BMW X3 M40i

Vehicle Type : LIGHT VEHICLES

Body Style : SUV

Power Train : GAS

Descriptive Information : Approximately 14,006 vehicles have been manufactured with engine management software that, under certain engine start conditions, could damage the oil/vacuum pump which supplies vacuum for brake assistance.

Basis for recall population determination: Vehicle assembly information was reviewed to determine the production date of potentially affected vehicles.

Recall component difference to non-recall component: The engine management software, under certain engine start conditions, could damage the oil/vacuum pump.

Production Dates : AUG 16, 2019 - JUN 22, 2021

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 6 : 2019-2021 BMW Z4 M40i

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : Approximately 2,151 vehicles have been manufactured with engine management software that, under certain engine start conditions, could damage the oil/vacuum pump which supplies vacuum for brake assistance.

Basis for recall population determination: Vehicle assembly information was reviewed to determine the production date of potentially affected vehicles.

Recall component difference to non-recall component: The engine management software, under certain engine start conditions, could damage the oil/vacuum pump.

Production Dates : FEB 21, 2019 - JUN 18, 2021

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 7 : 2020-2021 Toyota Supra

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : Approximately 13,014 vehicles have been manufactured with engine management software that, under certain engine start conditions, could damage the oil/vacuum pump which supplies vacuum for brake assistance.

Basis for recall population determination: Vehicle assembly information was reviewed to determine the production date of potentially affected vehicles.

Recall component difference to non-recall component: The engine management software, under certain engine start conditions, could damage the oil/vacuum pump.

Production Dates : FEB 06, 2019 - JUN 10, 2021

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Description of Defect :

Description of the Defect : This safety recall involves engine management software that, under certain engine start conditions, could cause the oil/vacuum pump, which supplies vacuum for brake assistance (brake boost), to become damaged. The specific engine start conditions consist of either 1) pressing the engine start/stop button two times in rapid succession, or 2) depressing the brake pedal very briefly while pressing the engine start/stop button. This could result in a loss of brake assist. However, prior to a loss of brake assist, the full brake assist function is available for approximately two or three full brake applications, or approximately six partial brake applications. Fully mechanical braking (without assist) is not affected, and remains available.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : An increase in stopping distance could occur, which could increase the risk of a crash.

Description of the Cause : NR

Identification of Any Warning that can Occur : NR

Involved Components :

Component Name 1 : Engine Management Software

Component Description : Engine Management Software

Component Part Number : Software Issue - No Part Number

Supplier Identification :**Component Manufacturer**

Name : BMW AG

Address : NR

NR

Country : NR

Chronology :

In February 2021, an increasing number of warranty claims that seemed to be associated with damage to an

oil/vacuum pump were noticed. An engineering review was initiated.

Between February and April, warranty claim information and other field data were reviewed, and discussions with the supplier occurred. Analyses were conducted to determine if the issue could be related to certain vehicle models, oil/vacuum pump build level configurations, or vehicle operating conditions. Preliminary information suggested that engine management software could be involved.

In May and June, additional analyses were performed and tests were conducted. It was suggested that certain pump parameter specifications, in combination with certain vehicle operating conditions (unusual engine start conditions caused by the vehicle operator), could cause a brief reverse rotation of the crankshaft and cause damage to the oil/vacuum pump.

In July, further analyses were conducted involving vehicle operating conditions and assessment of risk.

Vehicle assembly information was reviewed to determine the number and production dates of potentially affected vehicles.

On July 26, 2021, BMW decided to conduct a voluntary recall.

As of July 26th, a diligent review of records has determined that there are approximately 29 warranty claims (BMW – 24, Toyota – 5), and 4 field reports (BMW – 2, Toyota – 2), that may be related to this issue.

Description of Remedy :

Description of Remedy Program : The engine management software will be updated.

Owners will be notified by First Class mail and instructed to take their vehicle to an authorized BMW / Toyota dealer to have the remedy performed for free. If this condition was noticed on a potentially affected vehicle prior to this recall, the remedy would be covered by the BMW / Toyota 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: Engine Management Software – part number – No part number for software

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 Aug 2, 2021.

Notification to owners is planned to begin and end on Oct 1, 2021.

Planned Dealer Notification Date : AUG 02, 2021 - AUG 02, 2021

Planned Owner Notification Date : OCT 01, 2021 - OCT 01, 2021

* NR - Not Reported