OMB Control No.: 2127-0004

☐ Not sequential

Part 573 Safety Recall Report

18V-465

Manufacturer Name: BMW of North America, LLC

Submission Date: JUL 11, 2018 NHTSA Recall No.: 18V-465 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 : 12 Estimated percentage with defect : 100 %

Vehicle Information:

Vehicle 1: 2018-2018 BMW 540d xDrive

Vehicle Type: LIGHT VEHICLES

Body Style : 4-DOOR Power Train : DIESEL

Descriptive Information: Approximately 12 vehicles may have been manufactured with a crankshaft sensor

that, due to sensor firmware, cannot accurately process the input from the crankshaft

reluctor ring.

Basis for recall population determination: Supplier production information was used to identify the start and end date of affected crankshaft sensors which was then correlated with engine production and vehicle assembly information to determine the start date (05/17/2018) and the end date (06/06/2018) of affected vehicles.

Recall component difference to non-recall component: Recalled crankshaft sensors cannot accurately process the input from the crankshaft reluctor ring.

Production Dates: MAY 17, 2018 - JUN 06, 2018

VIN Range 1: Begin: NR End: NR

Description of Defect:

Description of the Defect: This safety recall involves the crankshaft sensor which may have been

equipped with firmware that will not allow the sensor to accurately process the

input from the crankshaft reluctor ring.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: If the crankshaft sensor cannot accurately process the input from the reluctor

ring, then engine stalling could occur and increase the risk of a crash.

Description of the Cause: NR

Identification of Any Warning The driver may experience a rough running engine, and the vehicle may that can Occur: convert to failsafe mode. A warning lamp will be illuminated in the instrument cluster.

Supplier Identification:

Component Manufacturer

Name: AB Elektronik GmbH

Address: Feldmark 50

Werne FOREIGN STATES 59368

Country: Germany

Chronology:

On May 22, 2018, at the assembly plant, BMW became aware of a vehicle with a rough running engine and reduced engine power. Vehicle diagnostic information was reviewed which pointed to a possible issue involving the crankshaft sensor. The supplier was contacted.

It was found that an updated firmware level of the crankshaft sensor's semiconductor contained an error which could lead to a processing failure of the input from the crankshaft reluctor ring.

BMW vehicle assembly and engine production records were reviewed to determine the number and production range of potentially affected vehicles.

On June 4, 2018, an emissions related recall was decided for all affected vehicle / engine types, i.e., gas and Diesel. At that time, the issue was assessed as emissions related, because it caused a rough running engine, the engine would convert to failsafe mode, and a warning lamp would be illuminated in the instrument cluster.

On June 13, 2018, further analysis for vehicles with Diesel engine was initiated, because affected crankshaft sensors could have a different effect on Diesel engine vehicles. The analysis found that Diesel engine vehicles could also experience stalling.

On July 4, 2018, BMW decided to upgrade the emissions recall to a safety recall for Diesel engine vehicles.

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 crankshaft sensor will be replaced.

Owners will be notified by First Class mail and instructed to take their vehicle to an authorized BMW center to have the remedy performed for free. If this condition were to occur to a potentially affected vehicle prior to the recall, the remedy would be covered by the BMW New Vehicle Limited Warranty program. Therefore, reimbursement for a prenotification remedy re Part 573.13 and Part 577.11 is not necessary.

from Recalled Component:

How Remedy Component Differs Recalled Component: Crankshaft sensor, part number - 7806782 AI06

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 July 11, 2018.

Notification to owners is planned to begin and end on August 27, 2018.

Planned Dealer Notification Date: JUL 11, 2018 - JUL 11, 2018 Planned Owner Notification Date: AUG 27, 2018 - AUG 27, 2018

* NR - Not Reported