

**18V-465
Crankshaft Sensor
Model Year 2018 – 2019
BMW / MINI
Part 573 Chronology
(Rev. 1)
12 Sep 2018**

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.

In late July, further analysis for vehicles with gasoline engines was initiated based upon warranty claims and dealer field reports that included some indications of engine stalling. At the time, it was thought that gasoline engines would not experience stalling due to different engine running behavior and failsafe mode programming in comparison to diesel engines.

In August, an engineering review and test program was conducted to understand the field information pertaining to gasoline engine vehicles.

In late August, the analysis found that the failsafe mode programming of gasoline engines could not always prevent engine stalling, when the crankshaft sensor firmware doesn't accurately process the input from the crankshaft reluctor ring.

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

On September 5, 2018, BMW decided to upgrade the emissions recall to a safety recall for gasoline engine vehicles.

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