By Recall Management Division at 10:28 am, Aug 07, 2013

Company

BMW of North America, LLC

**BMW** Group Company

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## VIA CERTIFIED MAIL, RETURN RECEIPT REQUESTED, AND EMAIL

August 1, 2013

Ms. Nancy Lewis Associate Administrator for Enforcement National Highway Traffic Safety Administration 1200 New Jersey Ave., S.E. Washington, DC 20590

Re: Recall Campaign

**Fuel Filter Heater** 

2009 BMW X5 xDrive35d

**Amendment** 

Dear Ms. Lewis:

This is an amendment to our August 18, 2011 report (11V-441), and is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act of 1966 and 49 CFR Part 573.

Pursuant to Section 573.6(c), Sections 2, 3, 6, 8, and 11 of our August 18, 2011 report have been amended to contain the information for the additional vehicles.

Manufacturer: Bayerische Motoren Werke AG (BMW AG)

Designated Agent: Samuel Campbell, III

Department Head, Safety Engineering and ITS

BMW of North America, LLC

200 Chestnut Ridge Rd. (Bldg. 150)

Woodcliff Lake, NJ 07677

2. Make: BMW

Model Year / Model: 2009-2010 / X5 xDrive35d (or X5 Diesel)

Inclusive Dates of Manufacture: June 13, 2009 – November 9, 2009

 The number of vehicles affected for the additional population is approximately 1,540.

4. The percentage of vehicles estimated to actually contain the problem is 100%.





5. The issue involves the fuel filter heater (FFH) unit which is used for warming up the diesel fuel during vehicle operation at low outside temperatures. The FFH unit includes an electronic control circuit with a pressure switch and a temperature sensor. An internal electrical contact may be inadequate. If the contact was inadequate, this could lead to an electrical overload condition in the unit's power transistor. If this happened, then a permanent activation of the fuel filter heater could result draining the battery. In most cases, it would not be possible to start the vehicle due to a dead battery. However, in a rare case, the unit could overheat and eventually lead to a vehicle fire.

The name, business address, telephone number, and contact person of the supplier, and country of origin of the component, is:

Olessja Stepanow MAHLE Filtersysteme GmbH Fuel Filtration Systems (BD2F) Pragstr. 54, 70376 Stuttgart, Germany Phone: +49 (0) 711/501 -20600, Fax: +49 (0) 711/501-20540 Mobile: +49 (0) 151 19505278

Country of Origin - Austria

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6. In early 2012, BMW started receiving additional field reports from non-US markets involving vehicles that were manufactured after the end-date of the 11V-441 recall production period. These field reports indicated that vehicles were exhibiting similar symptoms to those involved in the recalled vehicles. Therefore, analyses were initiated in order to determine the root cause. For the 2012 calendar year, a total of 16 possibly related field reports were received in non-US markets. No field reports were received pertaining to vehicles in the US market.

Preliminary lab analyses were performed involving Fuel Filter Heaters (FFH) returned from the field. The lab analyses identified the MOSFET as the starting point of concern, as the electrical contact area on this part was damaged. FFHs from vehicles that had a drained battery, which were produced between June and October 2009, were also collected for investigation. In these vehicles, the FFH electronics were not damaged, but it was decided to test and examine the electrical contacts. The results indicated that the electrical contacts were a weak point for current flow and also the starting point for failure of the FFH. Further analyses of the field reports from 2012 indicated that the FFHs in these vehicles did not meet supplier production process quality.

As background, the 11V-441 vehicle manufacturing end-date was based upon several factors, including a supplier production process quality check that had been implemented in June 2009 due to an increasing number of field cases at that time involving drained batteries. Therefore, during a

review of the 2012 field cases, it was suspected that the June 2009 supplier update was not sufficient.

Between late 2012 and mid-2013, BMW and the supplier conducted a thorough review and analysis of all of the FFH production changes and FFH production process quality updates initiated by the supplier. Also, in early 2013, an additional 6 field reports involving non-US models were received.

In July 2013, the review and analysis revealed that vehicles produced between June 2009 and November 2009 were potentially affected. It was determined that a change in the material treatment of the FFH's internal electrical contacts, introduced into vehicle production in November 2009 as a quality update, resulted in a sufficient improvement to the FFH such that it was not susceptible to environmental degradation.

On July 25, 2013, BMW decided to conduct a voluntary recall for the additional vehicles.

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

- 7. Not applicable.
- 8. BMW will conduct a recall campaign to remedy the affected vehicles. Specifically, the fuel filter heater will be replaced.

For the additional vehicles, BMW expects to begin and complete dealer and owner notification in August 2013.

- Not applicable.
- 10. A copy of the Service Bulletin will be submitted when available.
- The owner notification letter will be identical to the 11V-441 owner notification, although it will reflect the appropriate model years for the additional production.
- 12. Not applicable.

Sincerely,

BMW of NORTH AMERICA, LLC

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Sam Campbell

Department Head

Safety Engineering and Intelligent Transportation Systems