

October 20, 2011

Mr. Claude Harris
Acting Associate Administrator for Enforcement
National Highway Traffic Safety Administration
1200 New Jersey Ave., S.E.
Washington, DC 20590

11V-521
(4 Pages)

**Re: Recall Campaign
Electric Auxiliary Water Pump
2008-2011 BMW 5-Series, 5-Series Gran Turismo, 7-Series, X5 SAV, X6 SAV
Models with 8- and 12-cylinder engines**

Dear Mr. Harris:

This notice is 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), we submit the following information.

1. **Manufacturer:** Bayerische Motoren Werke AG (BMW AG)

Designated Agent: Jan Urbahn
BMW of North America, LLC
Woodcliff Lake, New Jersey 07677

2. **Make:** BMW

<u>Model Year / Model:</u>	<u>Inclusive Dates of Manufacture:</u>
2011 / 550i, 550i xDrive	Mar. 2010 – Oct. 2010
2010-11 / 550i GT, 550i GT xDrive	Sep. 2009 – Sep. 2010
2009-11 / 750i/Li, 750i/Li xDrive, 750iH/LiH, 760Li (including Alpina B7)	Nov. 2008 – Sep. 2010
2011 / X5 xDrive50i	Apr. 2010 – Dec. 2010
2010-11 / X5 M	Jul. 2009 – Nov. 2010
2008-11 / X6 xDrive50i	May. 2008 – Oct. 2010
2010-11 X6 M	Jul. 2009 – Nov. 2010
2010-11 / X6 xDrive50ih	Oct. 2009 – Nov. 2010

3. The number of vehicles affected is approximately 32,084 as follows:

<u>Series</u>	<u>Approximate Number Affected</u>
5-Series	2,606
5-Series Gran Turismo	1,787
7-Series (including Alpina B7)	18,195
X5 SAV	4,309
X6 SAV	5,187

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

Company
BMW of North America, LLC

BMW Group Company

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5. The issue involves the electric auxiliary water pump on the models identified above that are equipped with 8- and 12-cylinder engines. The auxiliary pump is controlled electronically by an engine control unit. The pump supports cooling of the turbocharger under specific engine operating conditions. After switching off the engine, the electric auxiliary water pump conducts heat away from the turbocharger.

Under certain conditions, the pump's electronic circuit board can malfunction. The malfunction can occur as a result of certain design features in combination with high operating temperatures. Under these conditions, this can lead to a failure of the water pump. In some cases, the circuit board can overheat. In an extreme case, overheating of the circuit board can lead to smoldering of the water pump. If smoldering occurs, it cannot be excluded that this may also lead to an engine compartment or vehicle fire. If the auxiliary water pump fails, or if there is a reduction in engine cooling, the driver will, in most cases, be informed by a warning message in the instrument cluster's "message center" during driving and also when stopping the vehicle.

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

Gerd Zimutta
Legal Department
Pierburg Pump Technology GmbH
Alfred-Pierburg-Str. 1
41460 Neuss
Tel. +49 2131 5202037
Fax. +49 2131 5202166
Email: Gerd.Zimutta@de.kspg.com

Country of Origin – Germany

6. BMW became aware of this matter through its internal quality control analyses and processes.

In June 2009, the first occurrences of electric auxiliary water pump failure were noticed on internal test vehicles with 8-cylinder engines. Initial analyses showed different fault patterns at the water pump circuit components.

A field parts return process was initiated. Further analyses of parts returned from the field during 2009 indicated that one of the fault patterns could be electro-migration.

In April 2010, a smoldered electrical cable of the water pump was found on an internal vehicle.

In May 2010, there were two occurrences of field vehicles with a burned engine compartment. Analyses of these two vehicles pointed to a defective water pump as the cause.

In July 2010, a Task Force was created to intensively analyze this issue. Between July and November 2010, further analyses were conducted. It was found that in the field, thermal degradation of the auxiliary pump on vehicles with 8-cylinder engines were occurring with increasing frequency. Specifically, it was determined that there were 21 cases as of July 2010 and 44 cases as of November 2010.

In November 2010, electro-migration was confirmed as the root cause of the circuit board and water pump overheating failures.

The field continued to be monitored, and as of July 2011, there were 92 cases of pump failure. To date, there are 102 known cases worldwide. Two of these cases (from May 2010) include engine compartment fire.

On October 13, 2011, BMW decided to conduct a voluntary recall.

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. The electric auxiliary water pump will be replaced.

BMW expects to begin dealer notification in November, and begin and complete owner notification in December.

9. Not applicable.
10. A copy of the Service Bulletin will be submitted when available.
11. A draft copy of the owner notification letter is attached.
12. Not applicable.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Jan Urbahn', is written over the typed name.

Jan Urbahn
General Manager
Safety Engineering and Intelligent Transportation Systems

Attachment