

**United States Department of Transportation  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION**

In re:	)
	)
PE14-016	)
Air Bag Inflator Rupture	)
	)

**BMW of North America's Response to General Order Directed to Manufacturers**

BMW of North America hereby submits its response to NHTSA's General Order directed to manufacturers. BMW of North America is continuing to investigate these matters and expects to supplement the responses provided herein as new information responsive to this request becomes available. BMW of North America's basis for responding to several of the questions below is based on, and thus limited to, such information as provided to it by Takata.

1. File a report that describes, in detail, all completed, ongoing or planned testing of Takata inflators outside of the HAH Region. At a minimum, your report must include but should not be limited to the following:
  - a. All documents regarding or relating to the testing contained in your report;

*We understand that Takata is currently performing PSPI inflator tests at its facility in Armada, Michigan. As of November 25, 2014, Takata has completed a total of 572 tests. See the attached Takata's weekly summary dated November 25, 2014 and also the document "BMW Meeting 11-17-14.pptx" which was presented during an onsite visit to Takata's facility in Armada, Michigan. The document "20141122\_BMW\_Visit\_TKH\_Nov14.xlsx" details the open points agreed at this meeting.*

- b. The location of the testing; the dates of the testing; whether the testing is completed, in progress, or planned; anticipated date of completion of testing, the nature and objective of the testing and testing protocols.

*BMW AG is planning to conduct tests with the PSPI inflator with the world renowned third party test institute, Fraunhofer ICT, Pfinztal, Germany. Initial inflator tests have already been completed in order to qualify and define a reproducible test setup. Testing is planned to officially start at the end of January once test fixtures are complete and will continue through the end of March. A total of 300 inflators are planned to be tested: 100 inflators taken from vehicles in South Florida, 100 inflators taken from vehicles from Northern US states and 100 newly built inflators from Takata's Freiberg Germany production facility (BMW AG's current source for replacement inflators). The objective of the tests is to add additional test quantities for statistical purposes and also to substantiate the results from Takata's testing.*

*Once a suitable number of parts have been returned from the driver front airbag regional technical campaign and Takata has completed tests of returned parts, we plan to review the Takata test results regarding the PSDI-4 inflators. The review is targeted for the end of January 2015. After this review, it will be decided whether additional independent and/or Takata tests are required with the PSDI-4 inflators.*

*We understand that further tests are ongoing at Takata's facility in Armada, Michigan, regarding passenger air bag inflators, please see the attached documents for an overview. Driver airbag inflators are expected to start being tested during January 2015 once returned parts are available.*

- c. A roster of all vehicles where the inflator was tested which includes: the model; model year; vehicle build date; VIN; the vehicle registration history, by location; inflator serial number; inflator type; dealership location with zip code where the inflator unit was returned; whether any deaths, injuries or claims are associated with the inflator in the vehicle and product specifications for the air bag inflator modules in each vehicle.

*Please see attachments with regards to completed tests. Traceability is ongoing and the following information will be supplied as soon as cross checks have been completed (Inflator number, VIN and address of where the airbag was replaced, etc.).*

*To the best of our knowledge, there have been no deaths, injuries or claims associated with the tested inflators. BMW is continuing to investigate these issues and will supplement this response as required.*

*The inflator is specified by Takata.*

- d. If testing of inflators has been completed, describe in detail the result of the testing and the conclusions you have reached based upon the test results. If your conclusion is that a safety defect does not exist in inflators outside of the HAH Regions, describe in detail the basis for that conclusion and when the decision was made and by whom. Provide a copy of all documents to or from any persons related to the conclusion that no safety defect exists in inflators outside of the HAH Region.

*Passenger Airbag Inflator:*

*We understand that limited testing by Takata has been completed outside of HAH regions. As of November 25, 2014, Takata had completed a total of 572 tests of BMW PSPI inflators; 46 of which are outside of HAH regions.*

*We understand that Takata has completed testing and analyzing 46 returned passenger inflators from BMW vehicles operating outside of high absolute humidity regions. BMW's analysis is continuing.*

*We understand that, during the testing of the other 526 returned PSPI inflators from HAH regions, one rupture occurred. The test was completed at 85°C and not at room temperature to have a comparison to production release testing. The rupture is currently attributed to a test setup problem as both the measured pressure curves and the physical specimen after the test show minimal correlation to other rupture events as already seen by Takata in its testing of other OEM's inflators. Takata advises that it has not yet reproduced this incident. BMW AG plans to hold a review with Takata on December 9th to get a detailed understanding. If it is not possible to attribute this event to a test setup problem the event will be added as a rupture event in the weekly overview.*

*Driver Airbag Inflator:*

*Following an internal review, it has also come to light that tests were completed in 2003 with driver inflators related to a field incident from Switzerland. Detailed information is currently being compiled and will be supplied as soon as possible.*

- e. Sub-part(e) is directed to BMW, Chrysler, Ford, GM, Honda, Mazda, Mitsubishi, Nissan, Subaru and Toyota: State in your report whether or not Takata has performed testing of inflators used in your vehicles outside of the HAH Region. If so, describe in detail what Takata has communicated to you about the testing and/or tests results. Produce all documents related to Takata's testing, test results and your communications, internal and external, related to the testing. State whether you have requested additional information from Takata concerning its testing of inflators outside of the HAH Region which you believe would assist in your determination of whether a defect exists. Identify and describe any information, documents or categories of information and documents that you reasonably believe that Takata has or reasonably should have concerning inflators or testing of inflators used in your vehicles that Takata has not provided you and which you believe would assist you in testing inflators to determine whether a safety defect exists in inflators outside of the HAH Region.

*See answer to question (d). BMW visited Takata's test facility November 17-18, 2014 to review the test methods and the latest results from the testing. The Takata presentation from this visit is attached along with the open points agreed in the meeting. BMW's analysis and investigation is continuing.*

- f. Provide the name, title and complete contact information for each and every manager or supervisor (at all levels of management or supervisory responsibility) involved in your investigation and decision-making process concerning rupturing air bag inflators manufactured, in whole or in part, by Takata.

*The following managers and supervisors had substantial involvement in BMW's investigation and decision-making process concerning rupturing air bag inflators manufactured, in whole or part, by Takata: The contact information for all BMW AG managers and supervisors is [REDACTED] 300 Chestnut Ridge Road, Woodcliff Lake, New Jersey 07677.*

- [REDACTED] Senior Vice President Corporate Quality, BMW AG
- [REDACTED] Senior Vice President, Whole Vehicle Engineering, BMW AG
- [REDACTED] Sr. VP, Product Planning and Aftersales, BMW AG
- [REDACTED] Senior Vice President, Electronics, BMW AG
- [REDACTED] Senior Vice President, Driving Dynamics, BMW AG
- [REDACTED] Senior Vice President, Purchasing, BMW AG
- [REDACTED] General Counsel, BMW AG
- [REDACTED] Senior Vice President, Small and Medium Product Lines, BMW AG
- [REDACTED] Vice President, Vehicle Safety, BMW AG
- [REDACTED] Department Head, Passive Safety Concepts, BMW AG
- [REDACTED] VP Engineering, BMW of North America, LLC  
300 Chestnut Ridge Road, Woodcliff Lake, NJ 07677
- [REDACTED] Department Head, Safety Engineering and ITS,  
BMW of North America, LLC, 300 Chestnut Ridge Road, Woodcliff Lake, NJ 07677
- [REDACTED] Safety Integrity and Recall Manager, BMW of North America, LLC  
300 Chestnut Ridge Road, Woodcliff Lake, NJ 07677

Provide the name, title and complete contact information for each and every person who prepared and provided input and/or data included in the report contained in Request No. 1, including but not limited to inside or outside counsel, accountants, engineers, employees and other professionals.

The contact information for all BMW AG managers and supervisors is [REDACTED]  
[REDACTED] 300 Chestnut Ridge Road, Woodcliff Lake, NJ 07677.

- [REDACTED] Vice President, Interior, BMW AG
- [REDACTED] Vice President, Driving Dynamics, BMW AG
- [REDACTED] Department Head, Passive Safety Concepts, BMW AG
- [REDACTED] Department Head, Safety Engineering and ITS, BMW of North America, LLC, 300 Chestnut Ridge Road, Woodcliff Lake, NJ 07677
- [REDACTED] Safety Integrity and Recall Manager, BMW of North America, LLC  
300 Chestnut Ridge Road, Woodcliff Lake, NJ 07677
- [REDACTED] Corporate Counsel, BMW of North America, LLC  
300 Chestnut Ridge Road, Woodcliff Lake, NJ 07677
- [REDACTED]

BMW of North America expects to produce additional documents responsive to this General Order. BMW of North America reserved its right not to produce privileged documents that may be responsive to this General Order. BMW of North America is not claiming a legal privilege for any documents provided with this response, but it does not waive the legal privilege or work product protection with respect to other documents that may have been prepared in connection with a specific litigation or claim. In addition, BMW or North America may assert the attorney

client privilege or claim protection under the work-product doctrine for analyses or other documents that may be prepared in connection with litigation or claims in the future.

In its search for responsive materials, BMW of North America anticipates that it may identify responsive documents in the Japanese or German languages. Consistent with the instructions in the General Order, BMW of North America will arrange for translations of each such document into English. As is the case with all the Requests herein, BMW of North America's efforts to identify responsive documents in the United States, Germany, and Japan are continuing.

BMW of North America objects to certain of the definitions, instructions and requests contained in the General Order as follows:

BMW of North America objects to the definition of "documents" in the General Order because it exceeds a reasonable understanding of the term "documents."

BMW of North America objects to the definition of "You" and "Your" to the extent it purports to include outside counsel. It would be unduly burdensome to require BMW of North America to request that outside counsel search files for responsive documents. Moreover, it is highly unlikely that outside counsel would possess any non-privileged documents responsive to this General Order that are not already being produced by BMW of North America. In light of the significant burden and cost associated with canvassing outside counsel for potentially responsive documents and the very low probability of identifying any non-privileged document not already being produced, BMW of North America has not asked its outside counsel to search for responsive documents.

BMW of North America understands that NHTSA will protect any private information about persons that is contained in this response, based on privacy considerations. Such private information includes data such as names, addresses, phone or fax numbers, email addresses, license plate numbers, driver's license numbers, and the last 6 digits of the vehicle's VIN.

Dated: December 5, 2014

Respectfully submitted



**Christoph Huss**  
Vice President, Engineering  
BMW of North America, LLC  
300 Chestnut Ridge Road  
Woodcliff Lake, New Jersey 07675-1227

United States Department of Transportation  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

BMW of North America, LLC  
300 Chestnut Ridge Road  
Woodcliff Lake, New Jersey 07675-1227

In re: )

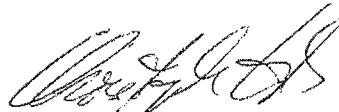
PE14-016 )

Air Bag Inflator Rupture )

AFFIDAVIT OF CHRISTOPH HUSS

I declare under penalty of perjury that I have undertaken and directed, and will continue to undertake and direct, an inquiry reasonably calculated to assure that the answers and production of documents are complete and correct; that I have caused or will cause the documents of BMW of North America, to be searched diligently for information and documents responsive to this General Order and produced them to NHTSA; and that, to the best of my knowledge, the answers to the inquiries provided to NHTSA respond completely and correctly to this General Order subject to supplementation as additional information becomes available.

Executed on this 5<sup>th</sup> day of December, 2014  
Woodcliff Lake, New Jersey



---

**Christoph Huss**  
Vice President, Engineering