

TK Holdings Inc.

868 16th Street, NW, Suite 800
Washington, DC 20006 USA
TEL 202-729-6332
FAX 202-349-4034

December 23, 2009

Mr. George Person, Chief Recall Management Division Office of Defects Investigation National Highway Traffic Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

Re: RQ09-004; NVS-215/jtt

Dear Mr. Person:

On behalf of TK Holdings Inc. (Takata), we are providing this partial response to the agency's November 20, 2009 letter seeking information concerning the airbag inflators in vehicles subject to recalls 08V-593 and 09V-259 conducted by American Honda Motor Company (Honda). As agreed upon, we shall provide additional information in response to your inquiry by the end of January, 2010.

Before responding to the specific questions set out in the information request, Takata wishes to point out that not all of the vehicles identified by Honda in its Part 573 reports for these two recalls were included within Honda's defect determinations. Rather, in accordance with Takata's recommendation, Honda agreed to request owners of additional vehicles not covered by the defect determinations to return their vehicles to a dealership to have the driver air bag inflator replaced at no charge. The purpose of this was to obtain inflators from outside of the date range covered by the defect determinations for further analysis. This is explained in greater detail below.

 Did Takata manufacture, distribute or sell the same or substantially similar airbag inflators, in terms of design, production, or manufacturing, as are involved in either Safety Recall 08V-593 or 09V-259, for or to anyone other than Honda? If so, please identify each such entity by name, address, and phone number and provide your contact at that entity's name, address, and phone number. Also, for each such entity, state the total number of inflators that were distributed and the beginning and ending dates of their manufacture, serial or other identifying

- 1. ANSWER: At the present time, Takata does not believe that it provided any of the same or substantially similar air bag inflators to customers other than Honda. The physical characteristics of the inflator housing used in the Honda vehicles subject to these recalls are unique to Honda.
- 2. Honda informed NHTSA that based on information from Takata, it understands the cause of the defect to be related to a production process involving one of several compression presses used to form the propellant into wafers that were then installed into the inflator modules. Please identify and explain in detail what this production process was, and produce any pictures, diagrams, or other documentation necessary to help understand the process. Please state whether Takata agrees with Honda's assessment that this production process is the cause of the safety defect Honda identified and provide the reason(s) for Takata's opinion.
- 2. ANSWER: Takata and Honda reached this conclusion in cooperation. Specifically, the propellant wafer compression process utilized during the period when the inflators covered by Honda's defect determination were produced could permit isolated departures from intended process control boundaries. Takata will provide a detailed explanation of this process in its supplemental response to be filed in January 2010.
- 3. Did Takata manufacture, distribute or sell any airbag inflators that were subject to the same propellant chemistry or production process involved in the production of the Honda airbag inflators involved in Recalls 08V-593 or 09V-259, to anyone other than Honda? If so, please identify each such entity by name, address, and phone number and provide your contact at that entity's name, address, and phone number. Also, for each such entity, state the total number of inflators that were distributed and the beginning and ending dates of their manufacture, serial or other identifying numbers. Identify all design or production changes, or any other factors, that determine those beginning and ending dates.

Also, please explain whether or not Takata believes these inflators present the same or similar safety defect as those involved in Safety Recalls 09V-259 and 08V-593. Provide any supporting information or documentation that supports this opinion.

3. ANSWER: With regard to the application of the same propellant chemistry as used in the subject inflators, yes. Takata has applied this chemistry broadly in excess of 100,000,000 inflators over the past 10 years.

With regard to the application of the same production process as used in the subject inflators, no. Takata applied this production process, which includes the manufacturing control system, only to Honda, and only for the manufacturing period covered by the defect determinations that led to Safety Recalls 08V-593 and 09V-259.

- 4. Honda informed NHTSA that it determined the vehicle population for Safety Recall 08V-593 based on information from Takata concerning the causal factors and production history of the inflators. Honda reported that it understood the causal factors to be related to the airbag propellant and its handling during the inflator module's assembly. Please identify and describe in detail the sources or causes Takata believed to have contributed to the safety defect in the inflators involved in 08V-593, including in that description any pictures, diagrams, or other information helpful in understanding how Takata came to its opinion at the time. Please also state when Takata shared information with Honda concerning its opinions on the source or cause of the safety defect and produce copies of any communications, presentations, or other documentation that evidence this date.
- 4. ANSWER: With regard to the causes that Takata believed to have contributed to the safety defect in the inflators involved in Recall 08V-593, and those involved in Recall 09V-259, the history of Takata's investigation into and analysis of those issues is beneficial.

Information provided to Takata by Honda in mid-2007 identified three events with inflator manufacturing dates within a narrow two-week window. After review of the inflator manufacturing records, this window coincided with the overlap of two unique manufacturing process changes. This suggested to Takata that there was a linkage between the inflator manufacturing changes and the incidents reported by Honda. However, Takata decided to undertake additional activities to assess the accuracy of this theory. For example, Takata procured field aged inflators from different manufacturing periods from salvage yards, which demonstrated no abnormalities.

Takata presented this theory to Honda in late 2007. In March-July 2008, sample inflators from the same manufacturing lots as the three event inflators were recovered from the field and analyzed. Analysis was directed

at evaluating the early theories related to anomalies in inflator performance. Results from this work were presented to Honda in early October 2008, which led to Recall 08V-593 in November 2008.

Notwithstanding Takata's good faith belief at the time that all of the defective inflators were covered by Recall 08V-593, Takata recommended and Honda agreed to conduct an additional survey of other inflators manufactured outside of the date range covered by that defect determination. Therefore, at the same time as it conducted Recall 08V-593, Honda requested additional owners to bring their vehicles to a dealer to have the inflator replaced at no charge. Takata then conducted additional analyses of these recovered inflators. The results of those analyses were communicated to Honda, which led to Recall 09V-259.

See the detailed chronology set out below.

- 06/07 Honda notifies Takata of two inflator field events. Takata immediately begins to conduct full failure mode analysis, quality control records review, etc.
- 08/07 Honda notifies Takata of a third inflator field event
- 09/07 Takata presents propellant exposure theory to Honda (elevated moisture and thermal cycling compromise propellant)
- 10/07 Takata presents salvage yard inflator recovery analysis to Honda (no issues observed)
- 01/08 Takata and Honda agreed to recover and analyze sample inflators from the initial, limited inflator population (objective of this program was to assess whether the theoretical failure mode and root cause was correct and to confirm the appropriate field population)
- 03/08 Takata started to receive sample inflators
- 07/08 Sample inflator recovery completed (Approximately 85 inflators were recovered and analysis continued)

- 10/08 Takata reports to Honda on the survey inflator analysis results
- 11/08 Honda initiates Safety Recall 08V-593
- 01/09 Takata starts to receive and analyze inflators produced outside of the date range covered by Recall 08V-593
- 03/09 Takata reports to Honda early results on its analysis
- 06/09 Takata provides a follow-up report to Honda on its analysis (i.e., that issues related to propellant production appeared to have caused improper inflator performance)
- 06/09 Honda initiates Safety Recall 09V-259, which covers all vehicles built with inflators that Takata believes could contain a safety defect. However, as with Recall 08V-593, Takata recommended and Honda agreed to request additional owners to return their vehicles to dealers to allow Takata to conduct additional analysis of inflators from vehicles outside of the defect population
- Current Takata continues to analyze those additional inflators

Please note that additional information and documents will be provided in Takata's supplemental response in January 2010.

- 5. Honda informed NHTSA that there is no design or other difference between the inflators involved in Safety Recalls 08V-593 and 09V-259. Please state whether or not Takata believes that this statement is correct? If not, please identify and describe in detail any differences, including in that description a copy of any pictures, diagrams, chemical composition, or other information helpful in understanding the differences.
- 5. ANSWER: There are no substantive design differences between inflators from each of the two recalls. However, there were differences in the production processes, including the production control system. Additional information and documents will be provided in Takata's supplemental response in January 2010.

- 6. Honda informed NHTSA that it and Takata now believe that any differences between the two vehicle populations in the two safety recalls, as well as any differences between the vehicles included in Safety Recall 09V-259 and those excluded from that campaign, relate to production of the airbag propellant prior to assembly of the inflators, as opposed to handling of the propellant during inflator assembly. Is this correct? If so, how and when did Takata come to discover that the defect was due to a production process before assembly, and not handling of the propellant during assembly? State when Takata shared this information with Honda and with whom at Honda and produce copies of any communications, presentations, or other documentation that evidence this. Also, identify and describe any differences relating to production of the propellant prior to assembly between first, the inflators involved in Safety Recall 08V-593 and 09V-259. and then second, the inflators involved in 09V-259 and those excluded from that recall. If not, explain why Takata does not agree with this assessment, include in your explanation a copy of any pictures, diagrams, or other information helpful in understanding Takata's opinion. Then state whether Takata shared its opinions with Honda, identify when it did so and with whom, and produce copies of any communications, presentations, or other documentation that evidence this. To the extent not already explained earlier in response to this question, identify and describe any differences relating to production of the propellant prior to assembly between first, the inflators involved in Safety Recall 08V-593, and then second, the inflators involved in 09V-259 and those excluded from that recall.
- 6. ANSWER: Yes, the issue is related to the propellant manufacturing process as opposed to the handling of the propellant during inflator assembly.

The information responsive to the portions of this question related to the chronology of Takata's investigation and analysis is set out in the Answer to Question 4. Additional details and the documents requested in this question will be provided in Takata's supplemental response.

- 7. Describe any responsibilities Takata had in identifying which inflators were affected by the safety defect in either or both Safety Recall 08V-593 and 09V-259, including in your description how Takata discriminated between an affected inflator and other inflators. State when Takata undertook its responsibilities, when it completed those responsibilities, and when it informed Honda of the identities of the affected inflators.
- 7. ANSWER: Takata is not certain what NHTSA means by the term "responsibilities" in this question. As the manufacturer of the inflators at issue, Takata took a primary role in the analysis of the issues and in the

efforts to identify the root cause of the problem and the suspect inflator population boundaries. As stated above, Takata began to work on these issues in June 2007. As the work progressed, Takata provided timely and contemporaneous reports to Honda of its progress and of Takata's theories and conclusions. Once the time frames were determined, Takata identified the production lots of inflators that would be covered by each of the recalls and also identified other inflators to be recovered for additional analysis, which Honda agreed was the appropriate direction. Honda then utilized the inflator serial numbers to determine the VINs of the vehicles to be recalled and of the vehicles to be retrieved to allow further analysis.

- State the date and produce copies of each communication, including emails and presentations, in which Takata and Honda discussed whether there was a defect in the airbag inflators outside of those involved in Safety Recall 08V-593.
- 8. The information and documents will be provided in Takata's supplemental response in January 2010.
- 9. State the date and produce copies of each communication, including emails and presentations, in which Takata and Honda discussed whether the defect in the airbag inflators outside of those involved in Safety Recall 08V-593 was safety-related and/or the severity of the defect upon safety.
- 9. The information and documents will be provided in Takata's supplemental response in January 2010.
- 10. Separately for Safety Recall 08V-593 and 09V-259, please state the beginning and ending dates for shipments from Takata to Honda of the defective inflators.
- 10. Although this question refers to "shipment dates," Takata's response will be based on inflator manufacturing dates, because of the way that Takata's records are kept. The inflators covered by Honda's defect determinations that led to Safety Recall 08V-593 and 09V-259, and the inflators that Honda and Takata sought to retrieve for surveillance and further analysis, were manufactured between the dates shown below:

Recall	Earliest Mfg. Date	Latest Mfg. Date
08V-593		
Defect Determination	10/29/00	12/1/00
Surveillance	10/16/00	12/14/00
09V-259		
Defect Determination	8/23/00	2/25/01
Surveillance	10/18/00	11/26/01

Please let me know if I can be of any assistance.

Sincerely yours,

Kazuo Higuchi

Kazuo Higuchi Senior Vice President