

ONE HUNDRED FOURTEENTH CONGRESS
Congress of the United States
House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Majority (202) 225-2927
Minority (202) 225-3641

June 22, 2015

Mr. Kevin M. Kennedy
Executive Vice President of North America
Takata Holdings Incorporated
2500 Takata Drive
Auburn Hills, MI 48326

Dear Mr. Kennedy,

Thank you for appearing before the Subcommittee on Commerce, Manufacturing, and Trade on Tuesday, June 2, 2015, to testify at the hearing entitled "An Update on the Takata Airbag Ruptures and Recalls."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions by the close of business on Monday, July 6, 2015. Your responses should be e-mailed to the Legislative Clerk in Word format at Kirby.Howard@mail.house.gov and mailed to Kirby Howard, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Michael C. Burgess
Chairman
Subcommittee on Commerce,
Manufacturing, and Trade

cc: Jan Schakowsky, Ranking Member, Subcommittee on Commerce, Manufacturing, and Trade

Attachment

Additional Questions for the Record

The Honorable Michael C. Burgess

1. How many different types of inflators does Takata produce? Can you provide a list of each inflator model made by Takata along with the year, make, and model of the vehicles they are installed in? Please indicate the chemical composition of each inflator propellant as well as any models subject to existing recalls.
2. Are there any other inflators not identified in the Consent Order that have experienced ruptures in the field or during testing? If so, please provide the name of the inflator and why it was not determined to be defective.
3. Are there any other Takata inflators beyond those identified in the Consent Order that have been the basis for a vehicle safety recall in the last six months? If so, why weren't those inflators included in the DIRs?
4. Are any passenger or driver side airbag inflators more susceptible to moisture intrusion issues or are they both equally susceptible?
5. When did Takata first begin using desiccant in its inflators? What prompted Takata to start including it in its airbag inflator design?
 - a. Do you intend to stop using and producing inflators that do not have desiccant?
6. Has Takata formed the Independent Quality Assurance panel to audit its operations? When can we expect the audit to be completed and the report issued?
7. Mr. Kennedy testified that "ammonium nitrate is certainly a factor in the inflator ruptures." Based on that understanding, has Takata considered using a different propellant formula that does not contain ammonium nitrate at least until a root cause of the ruptures is determined?
8. Takata has maintained that ammonium nitrate is safe when properly manufactured and installed but as we have seen over the last 13 years that sounds more like a testing protocol than the real world. Why has it taken so many years for Takata to perfect its manufacturing processes, given that it's known about manufacturing problems with the ammonium nitrate propellant since 2002 and it is still experiencing manufacturing problems today?
9. Has Takata examined the impact of thermal cycling, humidity exposure, and age decomposition on any of its inflator propellant compounds?
 - a. When did it first examine the impact of these factors?
 - b. Can you provide a complete timeline of any and all testing done by Takata, and/or by an independent testing entity contracted by Takata, on the stability and safety of the propellant compounds used in Takata inflators as it relates to the chronology of reported defective airbag ruptures? Additionally, provide a brief summary on each test as well as the concluding analysis.

10. To your knowledge, is a propellant formula with phase-stabilized ammonium nitrate the safest, most stable formula on the market today?
11. How does Takata ensure that the propellant composition chemically remains phase-stabilized when using a compound containing ammonium nitrate?
12. What does it mean when an ammonium nitrate based compound has cycled through a phase transformation? What contributing factors would cause a phase transformation in an ammonium nitrate based compound?
13. Would a phase transformation alter the structure of a propellant containing an ammonium nitrate based compound?
 - a. If so, how would it change the structure of an ammonium nitrate based propellant?
 - b. Would a structural change of an ammonium nitrate based propellant alter the intensity in the deployment of an airbag?
14. Did any tests conducted by Takata show a potential problem of a structural change in ammonium nitrate based propellants due to thermal cycling and humidity exposure?
 - a. If so, would the scope of conducting thermal cycling and moisture exposure testing be comparable to environmental factors such as temperature and humidity?
15. What testing has Takata done or developed to replicate environmental exposure to inflators over time?
 - a. If so, what prompted these tests and what length of time was evaluated?
16. Have any automakers requested that Takata stop using ammonium nitrate in the propellant formula of inflators? If so, which ones?
17. Do the replacement inflators being installed in vehicles contain the same ammonium nitrate based propellant as the recalled inflators being taken out of the car?
 - a. Is the propellant compound in the new inflators susceptible to a phase transformation due to thermal cycling and moisture exposure from humidity? Could this potentially increase the intensity of an inflator deployment causing a rupture?
 - i. If not, why not?
 - b. Does Takata intend to use the same ammonium nitrate based compound in future inflator designs? If no, what is different about the propellant compound in the new inflator designs?

The Honorable Jan Schakowsky

1. A number of recent reports have suggested that Takata's use of ammonium nitrate as a propellant in airbag inflators is at least partly responsible for the explosive nature of the defective airbags. Takata itself has stated that the compound may be one of the factors contributing to airbag inflator ruptures.
 - a. You testified that some automakers have expressed a desire or requested alternative technologies for the replacement inflators. Which automakers have made that request?
 - b. Please list all suppliers other than Takata that are providing inflators for the replacement kits used for this recall.
 - c. For each supplier other than Takata that is providing inflators for the replacement kits used for this recall, please list the propellant(s) used in the replacement inflators and whether they include desiccant.
 - d. Are airbags with desiccant in the propellant mixture any safer? If so, what evidence do you have that they are safer?
2. The recall process began last year at the request of the National Highway Traffic Safety Administration (NHTSA) as a regional field action to collect, inspect, test, and investigate both passenger- and driver-side airbag inflators from high absolute humidity regions to determine the root cause of the ruptures. I want to understand more about Takata's testing.
 - a. Please describe the testing is Takata currently undertaking to determine the root cause of the inflator ruptures? What tests are being conducted? Where is testing being conducted? What is the lead indicator that there could be a problem? For example, if you open up a 7-year old inflator and see rust or moisture, is that an indicator of a problem?
 - b. Has the testing revealed any specific amount of time before the inflators are capable of rupture? For example, if I have my inflator replaced today, on June 2, 2015, in how many years should I have it replaced again? Is Takata testing the replacement inflators—either before they are installed into vehicles or sometime after the replacement inflators have been in use—to ensure that they do not have the same problems? If so, please provide a brief summary of the results of that testing. Has evidence of moisture or rust been found in any replacement inflators? If Takata is not testing replacement inflators, why not?
 - c. Takata has indicated that one of the reasons the airbags are failing is that testing specifications prescribed by the vehicle manufacturers failed to uncover faults. If that is the case, are the testing specifications for the replacements still a problem? Why wouldn't we expect to see the same problems in 7 or so years?
 - d. Takata has also indicated that the design of certain vehicles is one of the factors causing the airbags to fail. For example, the way the inflator fits into the steering wheel can allow moisture into the inflator. If that is the case, is that still a problem with the replacement inflators? Why wouldn't we expect to see the same problems in 7 or so years?

- e. I am concerned that in 7-12 years, these replacement inflators will have the same problem. Does Takata intend to test the replacement inflators again in seven years or some other future time and not wait until someone has been injured or killed by one of the replacement inflators before investigating the replacement inflators?
 - f. Is Takata testing any other types of inflators—for example PSDI-5 or PSDI-X inflators—to ensure that they do not have the same problems? If so, please provide a brief summary of the results of that testing. Has evidence of moisture or rust been found in any replacement inflators? If Takata is not testing other types of inflators, why not?
 - g. Takata has been consulting with Fraunhofer Institute for Chemical Technology, a research organization in the airbag system industry. What role is Fraunhofer playing in the testing? Is Takata doing its own testing in addition to Fraunhofer's testing?
 - h. What information about the testing and results is Takata sharing with the automakers? How is that information being shared with the automakers and how often is it being shared?
3. Takata has said that the “batwing” shape of the propellant wafer likely contributes to defects in the driver-side inflators.
- a. When does Takata expect to completely stop production of the batwing-style inflators?
 - b. Many people have already had their original driver-side inflators with batwing shaped propellant replaced with “new” batwing-style inflators since June 2014. Will they need to have them replaced again? When do you expect that those replacements will take place?
 - c. Please list all recalled inflators that have batwing-shaped propellant wafers.
 - d. Are batwing shaped propellants used in any other inflators not subject to the recall? If so, which inflators?
 - e. Are there any batwing shaped wafers in passenger airbags?
 - f. You testified that there will be consumers that have had their cars' airbags replaced that will have to have it replaced again. You said the airbags that need a second replacement were the PSDIs and the PSDI-4s. Are there others? Please indicate for each whether it is a driver-side or passenger-side airbag.
4. You testified that prolonged exposure to high humidity and the age of the unit are factors causing the inflator ruptures. But Takata still does not know the root cause of the defect, leading consumers and the automakers concerned that the replacement inflators are not safe.
- a. Has Takata received any reports of malfunctioning replacement parts?
 - b. For each inflator listed in the four May 18, 2015, Defect Information Reports submitted by Takata, please provide the following:
 - i. The approximate date by which Takata plans to stop producing that inflator.
 - ii. By vehicle make, model, and model year, the type of inflator used as a replacement and the manufacturer of that inflator.

- iii. By vehicle make, model, and model year, the differences between the original inflator and the replacement inflator, including the shape of the propellant, the chemicals used in the propellant(s), and any other distinguishing characteristics.
 - c. Are the replacement airbags being provided to consumers safer than the recalled airbags? If so, what evidence supports this conclusion? If not, why is Takata replacing defective airbags with products that may also be defective?
 - d. Will Takata replace the replacement inflators in the future if the replacements are found to be unsafe? Will Takata replace the replacement inflators if no root cause is determined? Will Takata replace the replacement inflators if there can be no guarantee that the replacements are safe?
 - e. Are consumers being told whether the replacement inflator installed in their cars are produced by Takata or a competitor? How can consumers find out whether they are getting a replacement manufactured by Takata or a competitor? Can consumers request a replacement inflator manufactured by a competitor?
 - f. Please list all makes and models of vehicles that were subject to the recalls between June 2014 and May 29, 2015 that will need to have the inflators replaced again under the most recent recalls?
- 5. The current Takata recall now involves more than 40 million cars from 11 different automakers. In addition to confusion resulting from multiple regional recalls, the sheer volume of vehicles and the complexity of handling a recall across 11 manufacturers has led to substantial consumer uncertainty.
 - a. What specific steps is Takata taking to get recall information directly to consumers? Has Takata set up a website or phone number where consumers can get information about the recall?
 - b. How is Takata working with the automakers to get the most accurate, up-to-date information to their customers?
 - c. What specific steps is Takata taking to provide auto dealers with up-to-date information to ensure that dealers are able to answer consumer questions?
- 6. Consumers can use their VIN numbers to determine if their cars are subject to a recall at safercar.gov. If a person looks up their VIN number, it will show that their car is subject to the recall. But if a person who has already had their Takata inflator replaced, but needed to have it replaced again under recalls announced in May 2015, the website would not show that that person's car is subject to an open recall.

Further, as an example, a person from Florida who already had their inflator replaced in 2014 as part of the safety improvement campaign/regional recall conducted a VIN-specific search on Honda's website, which showed no open recalls for that car. However, a generic search for the model year and make of the car showed an open recall that included a notice that states: "Even if your vehicle was previously repaired, your vehicle is still covered by this recall and will need to be repaired again."

- a. What specific steps is Takata taking to communicate to those consumers who have had their Takata inflators replaced since June 2014 that they need to have their cars repaired again?
 - b. How is Takata working with the automakers to get that information to consumers?
 - c. What is Takata doing to ensure that consumers in this situation will not ignore future notices thinking they have already had their inflator replaced?
 - d. What specific steps is Takata taking to ensure that auto dealers are aware that replacement airbag inflators may need to be replaced again?
7. In your June 8, 2015, letter following-up on some issues raised at the hearing, you state that phase-stabilized ammonium nitrate (PSAN) “is safe for use in inflators” and that Takata has “full confidence” in the safety of PSAN inflators, including the replacement parts. However, you also note that Takata is continuing to conduct testing to “determine the appropriate service life of the parts.” You also state that Takata will replace the remedy parts if it is “determined to be appropriate.”
- a. Do PSAN inflators expire?
 - b. What is Takata’s current understanding of the service life of PSAN inflators?
 - c. How will Takata decide whether replacement of the remedy parts is appropriate? How does Takata define “appropriate” in this context?
 - d. Will all PSAN inflators, whether or not subject to the recall, need to be replaced after some number of years?
 - e. People are keeping and driving their cars for an increasing number of years. One estimate of the average age of cars on the roads is 12 years. How does Takata communicate to consumers that airbags may not last as long as they use their cars? Should consumers get their airbags replaced after some period of time, whether or not subject to a recall? Should airbag replacement be part of standard maintenance of a vehicle?
8. In your June 8, 2015, letter following-up on some issues raised at the hearing, you note that if additional testing “shows that these non-desiccated remedy parts should be replaced at some point in the future, [Takata] will act in the interests of public safety to do so.”
- a. How will Takata determine if non-desiccated remedy parts should be replaced in the future?
 - b. What is Takata’s current understanding of the service life of the non-desiccated remedy parts?
 - c. Please explain what you mean by the “interests of public safety.” If the remedy parts are defective, unsafe or problematic in some way, does Takata commit to replacing them?

9. In your June 8, 2015, letter following-up on some issues raised at the hearing, you state that the great majority of the more than 50,000 returned inflators were tested in the last six months. However, the safety improvement campaigns and regional recalls began a year ago.
 - a. Why did it take so long for Takata to collect the inflators and test them?
 - b. What specific steps did Takata take to collect suspect inflators as quickly as possible?
 - c. How many inflators were tested between June 2014 and January 2015?

10. In your June 8, 2015, letter following-up on some issues raised at the hearing, you state that in response to questions regarding whether Takata agrees that NHTSA has authority over Takata with regard to recalls, you did not intend to describe Takata's legal position on whether Takata is subject to NHTSA's jurisdiction. However, Takata sent you as its representative to answer questions on its behalf. Accordingly, has Takata changed its legal position from last December and does Takata now agree that NHTSA has statutory authority to require original equipment parts manufacturers like Takata to decide that a safety defect exists and to conduct recalls?