## TAKATA AIRBAG INFLATOR RUPTURES: TIMELINE OF EVENTS

May 2004	A driver's airbag inflator ruptured in Alabama in a 2001 Honda Accord.
Summer 2004	Takata conducted an "urgent experiment" on airbags at its Auburn Hills, Michigan facility at the request of NHTSA to investigate an incident involving an airbag cushion tear. Takata claimed that the incident was unrelated to an inflator rupture and instead involved an abrasion on the inside cover of the cushion that required additional fabric to fix. In late 2004, Honda notified NHTSA that it would conduct a recall to address the issue.
June 2005	Takata received photographs depicting the 2004 ruptured airbag inflator incident. A visual inspection of the photographs determined that the rupture was an anomaly. Takata did not perform any physical tests on inflators at that time.
May - August 2007	Honda reported three accident reports to Takata involving driver side airbag inflator ruptures.
Mid to Late 2007	Takata began testing approximately 42 inflators acquired from the field to find a root cause of the ruptures. No problems were detected. Takata found that all inflators were designed within specification and performed properly.
2007	Takata experimented with "specially fabricated prototypes" to try alternative inflator designs. Experiments were unsuccessful and resulted in broken inflators. These experiments were eventually shut down.
Late 2007 to September 2008	Takata tested approximately 86 more airbag inflators.
September 2008	Takata verified that a pressing operation problem at its Moses Lake, Washington facility produced potentially defective propellant. Takata determined that the defective propellant was produced from 2000 – 2002.
November 2008	Honda launched a safety recall (08V-593) for 4,000 vehicles globally (3,940 in the U.S.) equipped with potentially defective propellant in driver's airbag inflators.
May 27, 2009	A driver side airbag inflator ruptured in a 2001 Honda Accord in Oklahoma. The death of the driver was linked to the rupture.
June 9, 2009	Honda was notified of another driver's airbag inflator rupture.
June 23, 2009	Honda initiated another safety recall (09V-259) to expand the VIN range for vehicles recalled in November 2008 following notice from Takata that more inflators in driver side airbags were potentially defective. Honda recalled 510,000 vehicles globally (440,000 in the U.S.).
November 2, 2009	NHTSA opened an investigation (RQ09-004) to evaluate the scope and timeliness of Honda's two recalls.
December 24, 2009	An airbag inflator exploded in a 2001 Honda Accord in Richmond, Virginia. The death of the driver was linked to the rupture.

Honda initiated another recall (10V-041) due to lingering uncertainty about the manufacturing processes of the inflator propellant and uncertainty about which vehicles may have received potentially defective replacement parts in driver side airbags. Honda recalled 437,000 vehicles globally (379,000 in the U.S.).
NHTSA closed its investigation into Honda, finding that there was "insufficient information" to determine that Honda failed to make timely defect decisions in its 08V-593 and 09V-259 recalls.
Honda launched a safety recall (11V-260) to capture approximately 2,430 defective replacement service part inflators that could have been installed in driver side airbags in vehicles covered in prior recall expansions. Honda recalled 896,000 vehicles globally (833,277 vehicles were recalled in the U.S.).
Takata was notified of airbag inflator ruptures occurring in scrapyards in Japan by salvage operations conducting "end-of-life" recycling processes on expired vehicles.
Honda expanded recall 11V-260 due to an inflator manufacturing record discrepancy. This recall included 273,419 vehicles in the United States. Outside of the U.S. approximately 304,000 vehicles were recalled to find defective driver side airbag inflators installed as replacement parts.
Takata's ongoing testing of returned inflators showed that inadequate compression of the propellant wafers, exposure to uncontrolled environmental conditions, and the aging of the propellant were possible causes to the ruptures.
Takata had been notified of three additional accidents involving ruptured airbag inflators in the U.S two in Puerto Rico and one in Maryland. The Maryland vehicle had previously been operated in Florida for eight years.
Takata confirmed that inadequate compression of the propellant wafers and the inflator's exposure to certain environmental conditions could cause the passenger side airbag inflator to rupture upon airbag deployment. The compression problem stemmed from improper operation of the "auto-reject" feature on a machine at its Moses Lake, WA facility. This feature failed to identify and reject propellant wafers with inadequate compression. The exposure to uncontrolled environmental conditions stemmed from improper storage of the propellant wafers at a Takata facility in Monclova, Mexico.
Takata acknowledged being aware of six total incidents involving ruptured inflators.
Takata submitted a Defect Information Report to NHTSA notifying the agency of a potential defect in certain passenger side airbag inflators.
Mazda initiated a national safety recall (13V-130) due to defects in passenger side airbag inflators as reported by Takata. Mazda recalled approximately 149 vehicles.
Honda initiated a national safety recall (13V-132) due to defects in passenger side airbag inflators as reported by Takata. Honda recalled approximately 561,422 vehicles.

	Toyota initiated a national safety recall (13V-133) due to defects in passenger side airbag inflators as reported by Takata. Toyota recalled approximately 844,277 vehicles.
	Nissan initiated a national safety recall (13V-136) due to defects in passenger side airbag inflators as reported by Takata. Nissan recalled approximately 438,302 vehicles.
May 5, 2013	BMW initiated a safety recall (13V-172) due to defects in passenger side airbag inflators as reported by Takata. BMW recalled approximately 220,000 vehicles globally (42,080 were recalled in the U.S.).
September 3, 2013	A reported airbag inflator rupture in California in a 2002 Acura TL was linked to the death of the driver.
January 2014	Takata and Honda met with NHTSA to discuss prior recalls related to the defective airbag inflators.
May 2014	Following reports of six ruptures occurring in Puerto Rico and Miami, Florida in both passenger and driver frontal airbags, Takata met with NHTSA to discuss the issue further. Given the geographic location of the incidents, humidity was thought to be a factor.
Beginning of June 2014	NHTSA called Takata requesting its support for a regional field action to collect, inspect, test and investigate both passenger side and driver side airbag inflators from high absolute humidity regions to determine the root cause of the ruptures. The regional field action targeted Gulf Coast regions including Florida, Hawaii, Puerto Rico, and the U.S. Virgin Islands. Separately, Takata found that its production records and its methodology used to determine the recall range of cars recalled in 2013(for passenger side airbag inflators) due to improper manufacturing processes may have been inadequate or incomplete.
June 10, 2014	Toyota launched a safety recall (14V-312) (a reissued recall of vehicles it recalled in 2013) to fully replace, rather than inspect, all passenger airbag inflators in 844,277 U.S. vehicles due to Takata's disclosure that its records were inadequate and/or incomplete. Globally, Toyota recalled 2.27 million vehicles.
June 11, 2014	Takata issued a letter to NHTSA stating its support for the requested regional field action. NHTSA also opened a formal Preliminary Evaluation into airbag inflator ruptures (PE14-016).
June 13, 2014	NHTSA held a conference call with vehicle manufacturers requesting their participation in the regional field action.
June 19, 2014	Nissan launched a Regional Safety Improvement Campaign (SIC) (14V-340) at the request of NHTSA to collect passenger inflator parts from Gulf regions (FL, HI, PR, VI) to determine the root cause of the ruptures and whether humidity was a contributing factor. Approximately 29,998 Nissan vehicles were subject to this campaign.
	Ford launched a Regional SIC (14V-343) per NHTSA's request to collect both driver and passenger inflator parts from Gulf regions (FL, HI, PR, VI). Approximately 58,669 Ford vehicles were subject to this campaign.

Mazda launched a Regional SIC (14V-344) per NHTSA's request to collect both driver
and passenger inflator parts from Gulf regions (FL, HI, PR). Approximately 47,188
Mazda vehicles were subject to this campaign.

June 20, 2014 BMW launched a Regional SIC (14V-348) per NHTSA's request to collect driver inflator parts from Gulf regions (FL, HI, PR, VI). Approximately 11,600 BMW vehicles were subject to this campaign.

Honda launched a national safety recall (14V-349), expanding its 2013 recall to capture additional vehicles that may have a defective passenger side inflator following Takata's disclosure earlier in the month that its records were inadequate and/or incomplete in determining the VIN range of vehicles affected by the poorly manufactured inflator propellant. Approximately 988,440 vehicles were recalled in this campaign.

Toyota launched a Regional SIC (14V-350) per NHTSA's request to collect passenger inflator parts from Gulf regions (FL, HI, PR, VI). At the time of the launch, Toyota did not know how many vehicles were affected by this campaign because it was awaiting airbag module serial numbers from Takata.

Honda launched a Regional SIC (14V-351) per NHTSA's request to collect driver inflator parts from Gulf regions and other high absolute humidity climates (including FL, HI, PR, VI, AL, GA, LA, MS, SC, TX). Approximately 2,803,214 Honda vehicles were subject to this campaign.

Honda launched another Regional SIC (14V-353) per NHTSA's request to collect passenger inflator parts from Gulf regions and other high absolute humidity climates (FL, HI, PR, VI, AL, GA, LA, MS, SC, TX). Approximately 698,288 Honda vehicles were subject to this campaign.

Chrysler launched a Regional SIC (14V-354) per NHTSA's request to collect both driver and passenger inflator parts from Gulf regions (FL, HI, PR, VI). Approximately 371,309 vehicles were subject to this campaign.

Mazda launched a national safety recall (14V-362), expanding its 2013 recall to capture additional vehicles that may have defective passenger side inflators following Takata's disclosure earlier in the month that its records were inadequate and/or incomplete in determining the VIN range of vehicles affected by poorly manufactured inflator propellant. Mazda identified 18,050 potentially affected vehicles in this expanded recall.

June 24, 2014Nissan launched a national safety recall (14V-361), expanding its 2013 recall to<br/>capture additional vehicles that may have defective passenger side inflators following<br/>Takata's disclosure earlier in the month that its records were inadequate and/or<br/>incomplete in determining the VIN range of vehicles affected by poorly manufactured<br/>inflator propellant. Nissan identified 226,326 potentially affected vehicles in this<br/>expanded recall.

July 7, 2014Subaru launched a national safety recall (14V-399) for cars equipped with defective<br/>passenger side inflators caused by inadequate compaction force of the propellant and<br/>possible moisture exposure during inflator production. Subaru recalled 8,557<br/>vehicles.

July 11, 2014	Mitsubishi launched a Regional SIC (14V-421) per NHTSA's request to collect passenger side inflator parts from Gulf regions (FL, HI, PR, VI). Approximately 11,985 Mitsubishi vehicles were subject to this campaign.
July 16, 2014	BMW launched a national safety recall (14V-428), expanding its 2013 recall to capture additional vehicles that may have defective passenger side inflators following Takata's disclosure in June that its records were inadequate and/or incomplete in determining the VIN range of vehicles affected by poorly manufactured inflator propellant. BMW recalled 573,935 in the U.S. and 1.6 million vehicles worldwide.
August 1, 2014	Subaru launched a Regional SIC (14V-471) per NHTSA's request to collect passenger side inflator parts from Gulf regions (FL, HI, PR, VI). Approximately 8,959 Subaru vehicles were subject to this campaign.
August 2014	A driver side airbag inflator rupture occurred in a 2007 Ford Mustang in North Carolina – outside of the designated high absolute humidity region.
October 2, 2014	An airbag inflator ruptured in a 2001 Honda Accord in Orlando, FL and was linked to the driver's death.
October 20, 2014	Toyota launched a Regional SIC (14V-655) per NHTSA's request to collect passenger's inflator parts from Gulf regions (FL, HI, PR, VI). There were 247,000 <sup>1</sup> Toyota vehicles subject to this campaign.
October 30, 2014	Nissan re-launched a Regional SIC (14V-701) per NHTSA's request to collect passenger side inflator parts from Gulf regions (PR, VI, Guam, Saipan, FL, Southern GA, AL, LA, MS, TX)
	NHTSA issued a Special Order requiring Takata to provide documents and answer questions about the agency's ongoing investigation into Takata airbags.
November 3, 2014	NHTSA orders Honda to provide documents and answer questions about the agency's ongoing investigation into Takata airbags.
November 4, 2014	Honda launches a Regional Safety Recall (14V-700) superseding its Regional SIC 14V- 353. Approximately 807,599 vehicles were subject to this campaign.
November 6, 2014	The New York Times reported that Takata destroyed the results of tests showing cracked inflators. Takata refuted this claim.
November 12, 2014	Takata told <i>Reuters</i> it modified the chemical composition of its propellant but acknowledged that it was still using ammonium nitrate.
November 13, 2014	A fifth reported death that occurred on July 27 <sup>th</sup> in Malaysia is linked to an airbag inflator rupture in a Honda City compact car. Honda subsequently recalled 170,000 vehicles in Asia and Europe.

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<sup>&</sup>lt;sup>1</sup> This includes approximately 98,000 GM vehicles that are designed by Toyota and sold by GM.

November 18, 2014	NHTSA called for a National Safety Recall of certain vehicles (Honda, Ford, Mazda, BMW, and Chrysler) with potentially defective driver's airbag inflators produced prior to 2008 due to the inflator rupture that occurred in a 2007 Ford Mustang in North Carolina - outside of the designated high absolute humidity area. NHTSA also issued a Special Order to Takata demanding information about the propellant composition in the inflators. It also issued a General Order to automakers impacted by the Takata recalls demanding information about the methods and results of testing on Takata inflators outside of the regional recall areas.
November 24, 2014	Honda submitted a response to NHTSA's November 3 <sup>rd</sup> Special Order acknowledging its failure to notify the agency about 1,729 claims of injuries and deaths related to accidents in its vehicles, including those with Takata airbags.
November 25, 2014	Mitsubishi launched a Regional Safety Recall (14V-700) superseding its Regional SIC 14V-421. Approximately 22,259 vehicles were subject to this recall.
November 26, 2014	NHTSA sent a Recall Request Letter to Takata formally demanding that it acknowledge the existence of a defect and issue a national recall for driver's side airbag inflators
December 2, 2014	Takata responds to NHTSA's Recall Request Letter refusing to conduct a national recall and determine the existence of a safety defect in driver side inflators because the current information available did not support a nationwide determination of a safety defect.
	Chrysler (FCA) launched a Regional Safety Recall (14V-770) superseding its Regional SIC (14V-354). Approximately 420,564 vehicles were subject to this recall.
December 3, 2014	Commerce, Manufacturing, and Trade Subcommittee held an oversight hearing with witnesses from Takata Corporation, Toyota, Honda North America, BMW of America, and NHTSA.
December 5, 2014	Reponses to NHTSA's Special Order to Takata and General Order to the OEMs dated November 18, 2014 were due.
December 12, 2014	Ford launched a Regional Safety Recall (14V-787) expanding its Regional SIC 14V-343. Approximately 40,952 vehicles were subject to this recall.
December 19, 2014	Ford launched a National Safety Recall (14V-802) partially superseding its Regional SIC 14V-343. Approximately 462,911 vehicles were subject to this recall.
December 24, 2014	Chrysler (FCA) launched a National Safety Recall (14V-817) expanding its Regional SIC 14V-354. Approximately 2,908,790 vehicles were subject to this recall.
December 2014	A group of OEMs led by Honda, Toyota and Ford created the Independent Testing Coalition (ITC) and later contracted with Orbital ATK to test the defective inflators separate from the testing that Takata is preforming at its facilities. The ITC selected former NHTSA Acting Administrator David Kelly to lead the investigation. As of May 2015, the ITC had not tested any inflators.

January 8, 2015	NHTSA fines Honda \$70 million for failing to report deaths, injuries and certain warranty claims to NHTSA, which was in violation of the TREAD Act.
January 18, 2015	A sixth reported death occurred in Houston, TX that is linked to a driver side airbag inflator rupture in a 2002 Honda Accord. The vehicle was covered under a 2011 recall for driver side inflators but had not been fixed.
February 20, 2015	NHTSA imposed a civil penalty of \$14,000 per day against Takata for failure to meet the obligations required under the October 30, 2014 and November 18, 2014 Special Orders.
February 24, 2015	NHTSA updated its preliminary investigation to an "Engineering Evaluation."
February 25, 2015	Takata agreed to a Preservation Order imposed by NHTSA that requires Takata to preserve certain information related to the inspection, testing, and analysis of returned or recalled inflators. Takata also agreed to submit a written protocol detailing how it would execute the requirements of the Preservation Order.
March 16, 2015	Honda launched a National Safety Recall (15V-153) expanding its Regional SIC 14V- 351. Approximately 88,549 vehicles were subject to this recall.
April 17, 2015	Nissan launched a Regional Safety Recall (15V-226) expanding its previous Regional Safety Recall 14V-701. Approximately 45,000 vehicles were subject to this recall.
April 23, 2015	Takata's written protocol detailing how it will comply with the Preservation Order is published by NHTSA.
May 15, 2015	Nissan launched a National Recall (15V-287) expanding two previous recalls – 14V- 701, launched October 30, 2014, and 15V-226, launched April 17, 2015. Approximately 263,692 vehicles were subject to this recall.
May 18, 2015	Takata filed four Defect Information Reports (15E-043, 15E-042, 15E-041, and 15E-040) acknowledging a defect exists in certain models of frontal driver side airbag inflators (PSDI, PSDI-4, PSDI-4K) and passenger side airbag inflators (SPI, PSPI, and PSPI-L). Takata identified a total of 17.6 million driver side inflators installed in vehicles in the U.S. as defective. It identified 16.2 million defective passenger side inflators installed in vehicles in the United States.
May 19, 2015	NHTSA announced Takata's acknowledgment of a defect in certain airbag inflators and the corresponding Consent Order that requires Takata to cooperate with all future regulatory actions that NHTSA undertakes. This Consent Order ended the \$14,000 per day fines that NHTSA imposed on Takata in February. NHTSA's VIN lookup tool on its website does not have the newly recalled vehicles listed.

May 22, 2015	NHTSA publishes a notice of intent to open a coordinated remedy program proceeding for the replacement of defective Takata airbag inflators with BMW, Chrysler, Daimler, Ford, GM, Honda, Mazda, Mitsubishi, Nissan, Subaru, and Toyota. This is the first coordinated remedy program undertaken by NHTSA. <sup>2</sup>
May 27, 2015	Chrysler (FCA) launched a voluntary safety recall (15V-312) expanding a previous recall related to Takata passenger side SPI inflators. Approximately 438,156 vehicles are subject to this recall.
	Chrysler (FCA) launched an expanded voluntary safety recall (15V-313) for defective driver-side PSDI-4 inflators. Approximately 4,066,732 vehicles are subject to this recall.
May 28, 2015	BMW converts its national improvement campaign (14V-348) to a voluntary national recall (15V-318) for vehicles containing defective driver side PSDI-4 inflators. This increased BMW's affected vehicle population from 140,696 to 420,661.
	Ford launched a voluntary safety recall (15V-322) for vehicles equipped with defective passenger side SPI inflators. Approximately 361,523 vehicles are subject to this action. This expands on a previous recall, 14V-787.
	Mitsubishi launched a voluntary safety recall (15V-321) expanding on a previous recall (14V-752) for vehicles equipped with defective passenger side SPI inflators. Approximately 82,784 vehicles are subject to this recall.
	Subaru launched a National Safety Recall (15V-323) for defective SPI passenger side inflators. Approximately 81,100 vehicles were subject to this recall.
	GM launched a National Safety Recall (15V-324) for defective SPI passenger side inflators. Approximately 330,198 vehicles were subject to this recall.
May 29, 2015	Nissan submitted a notification letter to NHTSA stating that all Nissan vehicles equipped with defective SPI inflators are subject to ongoing recalls and that no additional vehicles were impacted by Takata's defect acknowledgement. Consequently, no further action is required by Nissan.
June 2, 2015	Commerce, Manufacturing, and Trade Subcommittee held a second oversight hearing on the Takata inflator recalls with witnesses from NHTSA, Takata, Global Automakers, Alliance of Automobile Manufacturers, and the ITC.

<sup>&</sup>lt;sup>2</sup> 80 FR 29791, <u>https://www.federalregister.gov/articles/2015/05/22/2015-12449/notice-of-intent-to-open-a-coordinated-remedy-program-proceeding-for-the-replacement-of-certain</u>.