DEFECT INFORMATION REPORT FOR DRIVER AND PASSENGER SIDE AIRBAG INFLATORS

January 2, 2020

TK Global LLC

TAKATA NON-DESICCATED FRONTAL AIR BAG INFLATORS CONTAINING PHASE STABLIZED AMMONIUM NITRATE

Number potentially involved:

Approximately 10 million inflators

Estimated Percentage of involved with defect:

 $1\%^{-1}$

Describe the defect or non-compliance:

TK Global is submitting this DIR in accordance with the terms specified in the May 4, 2016 Amendment to the November 3, 2015 Consent Order in EA15-001. Per the order, NHTSA concluded that all Takata non-desiccated, frontal, PSAN inflators will reach a threshold level of degradation that could result in the inflator becoming unreasonably dangerous. As such, the Agency determined there was a reasonable and appropriate basis to require Takata to submit five DIRs on a rolling basis, per a defined schedule, that concludes with all vehicles containing Takata non-desiccated, frontal, phase stabilized ammonium nitrate-based (PSAN) inflators will be recalled by December 31, 2019.

This is the final report in the defined schedule, encompassing all vehicles equipped with Takata non-desiccated, frontal, PSAN inflators that were used as an interim remedy, throughout the Unites States. The subject inflators include all "like-for-like" PSPI, PSPI-2, PSPI-6, PSPI-L, SPI, PSDI, PSDI-4, PSDI-5, and SDI.

As defined in the Coordinated Remedy Order, some vehicle manufacturers replaced recalled inflators with newly manufactured "like-for-like" inflators while they worked towards an alternative, final remedy. The vehicles received an "interim remedy", meaning they have been remedied with a Takata non-desiccated, frontal, PSAN inflator and now require a final remedy.

¹ Estimated Percentage of involved with defect is unknown, 1% is used here because submission within NHTSA's safety portal will not allow a non-numeric value.

TK Global is not aware of any inflator ruptures during ballistic testing of returned inflators or confirmed field events in the population of inflators used as an interim remedy. However, out of an abundance of caution, TK Global is filing this report in cooperation with NHTSA to promote public safety.

Describe the defect or non-compliance:

Specific Takata non-desiccated, frontal, airbag inflators containing phase stabilized ammonium nitrate propellant that were used as interim remedy parts. Also known as "like-for-like" replacements.

The estimate of 10 million inflators represents the quantity produced for the U.S, market. TK Global does not know the quantity of vehicles affected. Many of these inflators were never installed on vehicles. Several vehicle manufacturers have already initiated their "like-for-like" recalls, replacing the recalled inflator with an alternative final remedy part.

The subject inflators were installed as interim remedy parts in vehicles sold in the United States by the following vehicle manufacturers (listed alphabetically):

Audi USA Volkswagen Group of America 3800 Hamlin Road Auburn Hills, MI. 48326 Phone (248) 754-5000

BMW of North America P.O. Box 1227 Woodcliff Lake, NJ 07677-7731 Phone: (201) 307-4000

American Honda Motor Co. 1919 Torrance Blvd. Torrance, CA 90501-2746 Phone: (310) 783-2000

Daimler Vans USA LLC 303 Perimeter Center North Suite 202 Atlanta, GA 30346 Phone: (770) 705-2070

FCA US LLC 800 Chrysler Drive CIMS 482-00-91 Auburn Hills, MI 48326-2757 Phone: (800) 853-1403 Ferrari North America, Inc. 250 Sylvan Ave. Englewood Cliffs, NJ 07632 Phone: (201) 816-2600

Ford Motor Company 330 Town Center Drive Suite 500, Dearborn, MI 48126 Phone: (866) 436-7332

General Motors LLC 30001 Van Dyke Road Warren, MI 48094-9020. Phone: (313) 556-5000

Mazda North America Operations 1025 Connecticut Avenue NW Suite 910 Washington DC 20036 Phone: (800) 222-5500

Mitsubishi Motors North America Inc. 6400 Katella Avenue Cypress, CA 90630 Phone: (714) 372-6000

Nissan North America Inc. PO Box 685001 Franklin, TN 37068-5009 Phone: (615) 725-3111

Subaru of America Inc. One Subaru Drive Camden, NJ 08103 Phone: (856) 488-8500

Toyota Motor Engineering & Manufacturing 6565 Headquarters Drive Plano, TX 75024 Phone: 800-331-4331

Volkswagen Group of America 3800 Hamlin Road Auburn Hills, MI. 48326 Phone (248) 754-5000

Describe the safety risk:

Some of the subject non-desiccated ammonium nitrate inflators due to propellant degradation occurring after prolonged exposure to high absolute humidity, high temperatures, and high temperature cycling. Testing and analysis conducted by Takata, TK Global and by independent entities have found that there are wide differences in the time periods in which propellant degradation takes place. The propellant degradation varies in different climate zones, in different vehicle makes and models, and in different inflator and propellant configurations. The Agency has concluded that these Takata non-desiccated, frontal, PSAN inflators do not pose an unreasonable risk to safety under the Safety Act until they reach a certain level of propellant degradation.

Activation of a non-desiccated ammonium nitrate inflator with degraded propellant may result in an inflator rupture. An inflator rupture may cause metal fragments to pass through the air bag and into the vehicle interior at high speed, which may result in injury or death to vehicle occupants.

Describe the cause:

The propellant in some of the subject inflators may degrade over time, which could lead to over-aggressive combustion in the event the air bag is activated. Overly aggressive combustion creates excessive internal pressure when the inflator is activated, which may cause the inflator body to rupture. Based upon Takata's and TK Global's investigations to date, the potential for such ruptures occurs in some of the subject inflators after several years of exposure to persistent conditions of high absolute humidity, high temperatures, and high temperature cycling. The potential for rupture may also be influenced by other factors, including the specific vehicle environment, the inflator and propellant configuration, and manufacturing variability.

Chronology:

November 3, 2015 – NHTSA and Takata entered into a Consent Order in EA15-001 to resolve issues raised in that investigation, to mitigate and control risks of harm, and to promote public safety.

May 4, 2016 – NHTSA and Takata entered into an Amendment to the November 3, 2015 Consent Order. As stated in that Amendment, on the basis of testing and analysis conducted by Takata and by independent research organizations, NHTSA has concluded that, "at some point in the future all non-desiccated frontal Takata PSAN inflators will reach a threshold level of degradation that could result in the inflator becoming unreasonably dangerous". As a result of this conclusion, and pursuant to Paragraph 29 of the November 3, 2015 Consent Order, NHTSA ordered Takata to file certain defect information reports ("DIR"), in accordance with the schedule set forth in Paragraph 14 of the Amendment.

May 16, 2016 – Takata submitted DIRs per the schedule specified by NHTSA in the Amendment to the Consent Order.

January 3, 2017 – Takata submitted DIRs per the schedule specified by NHTSA in the Amendment to the Consent Order. The schedule called for certain DIRs to be submitted by Dec. 31, 2016. NHTSA agreed that the DIRs would be submitted on Jan. 3, 2017.

January 2, 2018 – Takata submitted DIRs per the schedule specified by NHTSA in the Amendment to the Consent Order. The schedule called for certain DIRs to be submitted by Dec. 31, 2017. NHTSA agreed that the DIRs would be submitted on Jan. 2, 2018.

April 10, 2018 – Due to the company bankruptcy and sale of the majority of Takata assets, the successor company responsible for PSAN inflators is TK Global LLC. TK Global LLC is responsible for investigations and necessary field actions for all Phase Stabilized Ammonium Nitrate (PSAN) airbag inflators, originally manufactured by Takata.

January 2, 2019 – TK Global submitted DIRs per the schedule specified by NHTSA in the Amendment to the Consent Order. The schedule called for all subject inflators installed as original equipment in all remaining vehicles to be submitted by Dec 31, 2018. NHTSA agreed that the DIRs would be submitted on Jan. 2, 2019.

January 2, 2020 – TK Global is submitting this DIR per the schedule specified by NHTSA in the Amendment to the Consent Order. The schedule calls for all Takata non-desiccated, frontal, PSAN inflators used as interim remedy parts be submitted by Dec. 31, 2019. NHTSA agreed that this DIR could be submitted on Jan. 2, 2020.

With the filing of this DIR, all Takata non-desiccated, frontal, PSAN inflators used in frontal airbag systems, throughout the United States, are under recall.

Describe the defect / noncompliance remedy program:

Per the sale of the majority of Takata assets to Joyson Safety Systems (JSS) and the bankruptcy agreement, the supplier of remedy parts is JSS. The Coordinated Remedy Program, being administered by the Independent Monitor, has prioritized the supply of remedy parts.