

# Part 573 Safety Recall Report

# 17E-034

**Manufacturer Name :** Takata Corporation

**Submission Date :** AUG 25, 2017

**NHTSA Recall No. :** 17E-034

**Manufacturer Recall No. :** NR



## Manufacturer Information :

**Manufacturer Name :** Takata Corporation

**Address :** 4-30, ROPPONGI 1-CHOME  
MINATO-KU, TOKYO, JAPAN 00  
106-8510

**Company phone :** 202-637-2434

## Population :

**Number of potentially involved :** 2,700,000

**Estimated percentage with defect :** 1 %

## Equipment Information :

**Brand / Trade 1 :** Takata

**Model :** PSDI-5 PSAN Inflators with Calcium Sulfate

**Part No. :** NPN

**Size :** NR

**Function :** NR

**Descriptive Information :** Takata PSDI-5 PSAN driver air bag inflators containing calcium sulfate for  
Production Years 2005-2012.

**Production Dates :** JAN 01, 2005 - DEC 31, 2012

## Description of Defect :

Description of the Defect : Takata is submitting this DIR to address concerns shown in PSDI-5 PSAN air bag inflators that use calcium sulfate as a desiccant. This product is used in the United States as original equipment in frontal driver air bag modules. Takata is taking this action out of an abundance of caution. This DIR is not for all desiccated PSAN inflators; rather it relates to a subset containing calcium sulfate. Takata is not aware of any field ruptures and has not experienced any ruptures as a result of the field evaluation program. This report contemplates a national recall of vehicles equipped with the subject inflators for Takata inflator production years (2005-2012).

Takata has produced multiple generations of desiccated PSAN inflators. This DIR applies to only the earliest generation, which used calcium sulfate as a desiccant. This DIR does not include any of the subsequent generations, which use a different optimized desiccant and pyrotechnic materials. All of the generations of Takata desiccated PSAN inflators are being evaluated for their safe service life, consistent with the requirements in the Consent Order of November 2015.

The subject inflators were installed as original equipment in vehicles sold in the United States by Ford Motor Company, Mazda North American Operations, and Nissan North America Inc.

As a result of the developments and circumstances described below, Takata has determined that a defect related to motor vehicle safety may arise in some of the subject inflators.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Takata has conducted evaluations of certain Nissan and Ford PSDI-5 inflators with calcium sulfate returned from the field. The field returned inflators have had zero ruptures in ballistic test deployments. Some of the inflators within the population analyzed show a pattern of propellant density reduction over time that is understood to predict a future risk of inflator rupture. Inflator design and vehicle environment differences between the Nissan and Ford inflators/vehicles may influence their aging characteristics. Takata has not tested PSDI-5 inflators with calcium sulfate from Mazda vehicles.

In the event of an inflator rupture, metal fragments could pass through the air bag cushion material, which may result in injury or death to vehicle occupants.

Description of the Cause : The propellant tablets in some of the subject inflators may experience an alteration over time, which could potentially lead to over-aggressive combustion in the event of an air bag deployment. Depending on the circumstances, this potential condition could create excessive internal pressure when the air bag is deployed, which could result in the body of the inflator

rupturing upon deployment. Based upon Takata's investigation to date, the potential for such ruptures may occur in some of the subject inflators after several years of exposure to persistent conditions of high absolute humidity. The potential for rupture may also be influenced by other factors, including manufacturing variability or vehicle type.

Identification of Any Warning NR  
that can Occur :

## Supplier Identification :

### Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

## Chronology :

March 2016. Nissan and Takata initiated a project to recover and evaluate certain Nissan vehicles equipped with PSDI-5 inflators that use calcium sulfate as a desiccant. NHTSA was informed of this activity.

April 2016 – January 2017 Returned Nissan inflators were subjected to live dissections, including propellant analysis (chemical and dimensional), as well as ballistic testing. Interim reports were provided to Nissan and NHTSA.

June 2016. Ford agreed to initiate a similar project to recover and evaluate certain vehicles equipped with PSDI-5 inflators that use calcium sulfate as a desiccant. NHTSA was informed.

January 2017. Field return data from the Nissan inflators tested to date was reviewed with Nissan and NHTSA. A very limited number of samples from Ford were available and tested at that time.

March 2017. Takata and Ford met to review all of the field data collected to date from inflators returned by Nissan and Ford.

March 2017-June 2017. Additional Ford inflators were subjected to live dissections, including propellant analysis (chemical and dimensional), as well as ballistic testing.

June 2017. Takata reviewed the available field return data from Ford inflators with Ford and NHTSA.

**Description of Remedy :**

Description of Remedy Program : Takata plans to work with the manufacturers of the vehicles, in which the subject PSDI-5 inflators were installed, to implement appropriate recalls to replace the subject inflators. Takata will also work with NHTSA and the Independent Monitor, in conformity with the Coordinated Remedy Program.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production : NR

**Recall Schedule :**

Description of Recall Schedule : Recall schedule is to be determined and submitted by the affected OEM's. Takata has no dealers so there is no dealer notification.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : JUL 10, 2017 - JUL 10, 2017

**Purchaser Information :**

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : Ford Motor Company

Address : 330 Town Center Drive  
Dearborn MI 48126

Country : US

Company Phone : 8664367332

Name : Mazda North American Operations

Address : 200 Spectrum Center Drive  
Irvine CA 92618

Country : US

Company Phone : 9492225500

Name : Nissan North America Inc.

Address : PO Box 685001  
Franklin TN 37068

Country : US

Company Phone : 6157253111

\* NR - Not Reported