



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 14-016
Date Opened: 06/11/2014
Investigator: Peter Ong
Approver: Frank Borris
Subject: Air Bag Inflator Rupture
Date Closed: 03/02/2015
Reviewer: Scott Yon

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Takata Corporation, Mitsubishi Motors North America, Inc., Chrysler (FCA US LLC), General Motors LLC, Subaru of America, Inc., BMW of North America, LLC, Honda (American Honda Motor Co.), Nissan North America, Inc., Mazda Motor Corp., Ford Motor Company, Toyota Motor Corporation
Products: Various MY 2001-2011 models with Takata air bag inflators
Population: 11,500,000 (Estimated)
Problem Description: The inflator(s) ruptured during frontal air bag deployment (driver and/or passenger) resulting in metal fragments being propelled into the passenger compartment.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	5	9	14
Crashes/Fires:	0	0	0
Injury Incidents:	5	9	14
Number of Injuries:	5	9	14
Fatality Incidents:	0	0	0

ACTION / SUMMARY INFORMATION

Action: This PE is being upgraded to an Engineering Analysis (EA15-001), see Recalls Nos. below.

Summary:

The Office of Defects Investigation (ODI) opened PE14-016 in June 2014 based on six inflator rupture incidents involving consumer owned vehicles produced by five vehicle manufacturers. All six vehicles were operated in Florida or Puerto Rico at the time of the rupture and for the majority of their service life, and were equipped with inflators produced by Takata, a tier-one supplier of automotive air bag systems.

During the course of PE14-016, ODI determined that five additional vehicle manufacturers used inflators of a similar design and vintage also supplied by Takata. No evidence of field failures was found in vehicles produced by these five additional manufacturers. Nonetheless, at ODI's insistence, all 10 vehicle manufacturers initiated a regional recall within approximately two weeks of the opening of the investigation. The regions recalled initially included Florida, Puerto Rico, Hawaii, and the U.S. Virgin Islands, areas with consistently high absolute humidity and climatic conditions believed to be a significant factor in the inflator ruptures. As part of the recall actions, inflators removed from remedied vehicles are to be returned to Takata for testing.

Takata's initial test results on passenger inflators from remedied vehicles indicated a much higher than anticipated rupture frequency for inflators returned from Florida. Accordingly, ODI requested all 10 manufacturers expand the regional recalls for passenger inflators to include other geographic areas where high absolute humidity conditions exist, including the Gulf States and other coastal areas. Takata's testing of the passenger inflators to date continues to indicate this geographic area as having the highest risk, with no ruptures occurring from inflators returned from outside the expanded recall regions. During PE14-016, four additional passenger inflator field events occurred, all in vehicles from the same expanded geographic region.

Also during PE14-016, four additional driver inflator field events occurred including two in vehicles from regions not known for high absolute humidity, specifically California and North Carolina. Accordingly, ODI requested all five of the affected vehicle manufacturers currently using the subject Takata driver inflators expand to nationwide recalls. Significantly, neither of the affected vehicle manufacturers or Takata provided any explanation to account for these two driver air bag inflator ruptures outside the area of high absolute humidity. Takata testing of returned driver inflators indicates a lower rupture frequency as compared to passenger inflator testing. All test ruptures reported by Takata to date have occurred on inflators returned from high absolute humidity areas.

The PE is now closed/upgraded to an Engineering Evaluation (EA15-001) to include all manufacturers and vehicles known to be affected at this time. ODI's EA investigation will focus on, among other things, root cause analysis, other potential defect consequences, identification of affected vehicles scope, and adequacy of the remedy.

The recalls related to this PE are: 14V343, 14V344, 14V348, 14V351, 14V353, 14V655, 14V700, 14V701, 14V752, 14V763, 14V770, 14V773, 14V787, 14V802 and 14V817. The number of vehicles affected are an estimate since some vehicles may have both the driver and passenger side inflators recalled.

The five ODI reports cited above can be reviewed online at <http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID> under the following identification numbers: 10537899, 10568848, 10585224, 10605877, 10651492