



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 12-012
Date Opened: 05/10/2012
Investigator: Michael Lee
Approver: Frank Borris
Subject: Side Curtain Air Bag Improper Deployment

Date Closed: 09/17/2012
Reviewer: Scott Yon

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: HYUNDAI MOTOR COMPANY
Products: 2012 Hyundai Elantra
Population: 75,581

Problem Description: The improper deployment of the driver-side curtain air bag resulted in a laceration injury to the driver.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	1	0	1
Crashes/Fires:	0	0	0
Injury Incidents:	1	0	1
Number of Injuries:	1	0	1
Fatality Incidents:	0	0	0

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation has been upgraded to an Engineering Analysis (EA12-008).

Summary:

The Office of Defects Investigation (ODI) is aware of one incident of an improper deployment of the driver-side curtain air bag that deployed as a result of a crash involving a model year (MY) 2012 Hyundai Elantra. An inspection of this vehicle showed that a metal bracket (stiffener) in the headliner assembly had detached and was forced downward by the deploying air bag. The metal bracket caused a laceration to the driver's ear and other possible injuries.

Approximately 75,000 MY 2012 Hyundai Elantra vehicles, built in Korea and sold in the U.S., have stiffeners in the headliners while the MY 2012 Elantra vehicles built in the U.S. utilize a different headliner that does not use a stiffener. Thus, the latter vehicles are not included in this investigation.

Hyundai has inspected the headliner assemblies from eight Elantra vehicles (which were sold in the Korean market) with production dates in the same range as the field incident vehicle. Hyundai reported to ODI that the metal brackets from these vehicles were found to be securely attached to the headliners. Hyundai also has conducted several static deployment tests in attempts to replicate the field incident. In one test, the metal bracket detached from the headliner but the test condition did not replicate or explain the condition observed in the incident vehicle.

This Preliminary Evaluation has been upgraded to an Engineering Analysis (EA12-008) to further assess whether incidents like the single field incident could potentially occur with other subject vehicles. In addition to the subject vehicles, ODI also will collect and review information on MY 2011 and 2013 Elantra vehicles that have headliners with stiffeners similar to those in the subject vehicles. To date, there have been no reports on the MY 2011 and 2013 vehicles.

The ODI report cited above can be viewed at www-odi.nhtsa.dot.gov/complaints under the following identification number: 10457696