



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** EA 14-004  
**Prompted by:** PE14-004, Consumer Complaints  
**Date Opened:** 07/29/2014 **Date Closed:** 01/04/2016  
**Investigator:** Michael Lee **Reviewer:** Scott Yon  
**Approver:** Stephen Ridella  
**Subject:** Inadvertent Side Air Bag Deployment

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Honda (American Honda Motor Co.)  
**Products:** 2008-2009 Honda Accord Sedan  
**Population:** 303,900

**Problem Description:** The side curtain air bag and seat-mounted thorax air bag can inadvertently deploy when the vehicle is stationary and one of the front doors is shut.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	49	388	351**
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	5	18	18**
<b>Number of Injuries:</b>	5	18	18**
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	0	150	150

\*Description of Other: Related warranty claims

\*\* Total eliminates duplicates received by ODI and manufacturer.

## ACTION / SUMMARY INFORMATION

**Action:** Close this Engineering Analysis; see NHTSA recall 15V-665.

### Summary:

Honda is conducting a safety recall of approximately 303,900 model year 2008-2009 Honda Accord sedans to address inadvertent deployment of the side air bags (see NHTSA recall 15V-665 for more information). It should be noted that almost all of the recalled vehicles are the 2008 Accords (built from start of model year 2008 production to June 25, 2008) as only about 500 early-built 2009 Accords (built from June 24 to June 30, 2008) are included in the recall.

The Office of Defects Investigation (ODI) has identified 351 reported incidents of inadvertent side air bag deployments in the 2008 Accord sedans. This investigation found there is risk of serious injury to vehicle occupants or users who are positioned in the direct path of a deploying side curtain air bag.

Based on the recall action taken by Honda, this Engineering Analysis is closed. Additional information on this closing resume and the investigation are in the EA14-004 public file available on-line at SaferCar.gov.

The ODI reports cited above can be reviewed online at <http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID> under the following identification numbers: 10232206 10235294 10255323 10268158 10268191 10269514 10276755 10279446 10280675 10308292 10319979 10342520 10353536 10408925 10436506 10447151 10458732 10468196 10468200 10493407 10494971 10522291 10524389 10543092 10544473 10545258 10547591 10554073 10563629 10565311 10565423 10576518 10579241 10584501 10585442 10606937 10608973 10627302 10638541 10640968 10650861 10654858 10679518 10680063 10683967 10712981 10717410 10717777 10761860

## **EA14-004 Close Resume**

### **Additional Information**

The side air bag system in the redesigned model year 2008 Honda Accord sedan consists of side curtain air bags for the two front seat occupants and two outboard rear seat occupants and seat-mounted thorax air bags for the front seat occupants. The system utilizes a side crash sensing system that consists of an electronic control unit, impact sensors located on the left and right sides of the vehicle structure, and a safing sensor. The thorax air bag in the front passenger seat is designed to be suppressed if the occupant sensor detects an out-of-position, small-statured occupant in the seat. This suppression feature is not present in the driver's thorax air bag design.

ODI found most of the inadvertent side air bag deployments occurred when the vehicle was stationary and either of the vehicle's front doors was shut. Honda determined the original crash parameter for door closing force, which is embedded in the electronic control unit's software code, was inadequate for the Accord sedan and accordingly changed the software code in June 2008 to reduce the incidents of inadvertent side air bag deployments. ODI found the number of these incidents declined significantly for the vehicles with the new crash parameter setting. Also, Honda reported the Accord coupe utilizes a different software/crash parameter than the subject sedan model primarily due to the larger (longer) door size.

ODI is aware of 18 injuries allegedly caused by deploying side air bags as a result of the air bag defect in the subject vehicles. Most of the reported injuries were not serious in nature which required little or no medical attention, such as abrasions, cuts and bruises to the head, face, arm and torso, as well as reports of headaches and ringing in the ear. Several small children were among the injured. Most were not seriously injured except for one: a nine-year-old child sitting in the right rear seat allegedly suffered a concussion from being hit in the head by the side curtain air bag that deployed when the front passenger door was closed by an exiting occupant.

ODI is aware of a voluntary set of out-of-position (OOP) test requirements for side air bags. A joint government-industry group, known as the Technical Working Group, created the test procedures and requirements in the early 2000s. ODI reviewed the results of the OOP tests conducted by Honda on the side air bags in the subject vehicles. Although the injury criteria were met in all of the tests, the neck injury criteria values in two of the 12 tests were moderately high—53 and 82 percent of the Injury Assessment Reference Value (IARV or the maximum allowable value)—which indicate some risk of serious neck injury for some OOP occupants.

The agency's Vehicle Research and Test Center conducted side air bag deployment testing to evaluate the risk of air bag injuries for vehicle users placed in foreseeable and vulnerable positions, such as an adult reaching into the backseat of the vehicle (e.g., putting a child in a car seat). The testing found there is some risk of serious neck injury and brain injury for users positioned in direct path of the side curtain air bag. The neck injury criteria and brain injury criteria values were 70 and 72 percent of the IARV, respectively, for the test simulating an adult reaching into the backseat of the vehicle.