



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PB 05-061
Date Opened: 11/10/2005 Date Closed: 03/08/2006
Principal Investigator: Michael Lee
Subject: Front Air Bag; Crash Sensor Failure

Manufacturer: DaimlerChrysler Corporation
Products: 2005 DaimlerChrysler Minivans (Dodge Caravan, Dodge Grand Caravan, and Chrysler Town and Country)
Population: 622,820

Problem Description: Failure of a front crash sensor(s) can potentially result in reduced crash sensing performance and no/reduced air bag protection in certain frontal crashes.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	24	926	950
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	13,632	13,632

*Description of Other: Warranty Claims

Action: This Preliminary Evaluation has been upgraded to an Engineering Analysis (EA06-003).

Engineer: Michael Lee MJL

Date: 03/08/2006

Div. Chief: Thomas Z. Cooper

Date: 03/08/2006

Office Dir.: Kathleen C. DeMeter

Date: 03/08/2006

Summary: The model year (MY) 2005 DaimlerChrysler (DC) Minivans have the new advanced frontal air bag systems with two front crash sensors mounted on the frame rails behind the front bumper and a main crash sensor inside the air bag control module mounted in the passenger compartment. According to DC, the front crash sensors are designed to optimize detection of frontal offset and angular crashes. The advanced air bag system offers different levels of air bag inflation based on input from the crash sensors.

This investigation revealed that the front crash sensors can corrode from water entering the sensor assembly. DC is still investigating all potential root causes of sensor failures. A corroded sensor can set a fault code, illuminate the air bag warning lamp, and become disabled. It appears that failure of one or both front crash sensors can potentially result in no/late deployment of frontal air bags and non-deployment of driver's higher inflation levels in certain frontal crashes. It should be noted that occupants of vehicles involved in a crash may not be aware of late or improperly reduced level of air bag inflation and thus field reporting of such events may be suppressed.

This Preliminary Evaluation has been upgraded to an Engineering Analysis (EA06-003) for further investigation of MY 2005 (and 2006) DC Minivans. Note: Total number of ODI and manufacturer complaints includes some duplicate reports.

MJL 3/9/06