



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** EQ 11-001  
**Prompted by:** 10V-644  
**Date Opened:** 02/07/2011 **Date Closed:** 07/19/2011  
**Investigator:** Alexander Ansley  
**Approver:** Jennifer Timian  
**Subject:** IEE Passenger Sensing System Mats

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** GENERAL MOTORS LLC  
**Products:** Certain 2005 -2007 Cadillac CTS vehicles  
**Population:** 95,927  
**Problem Description:** Certain IEE manufactured Passenger Sensing System mats may become disabled preventing the passenger seat airbag from deploying.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	0	0	0
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	0	0	0

\*Description of Other:

## ACTION / SUMMARY INFORMATION

**Action:** Close EQ

### Summary:

On December 17, 2010, General Motors (GM) notified the NHTSA that it had decided certain 2005 - 2007 model year Cadillac CTS vehicles contain a safety related defect. GM stated that certain CTS vehicles contain a passenger sensing system mat, manufactured by IEE, in the front passenger seat that may flex causing the mat to kink, bend or fold. If this flexing causes the connections in the mat to break, the passenger airbag could become disabled. Non-deployment of the front passenger air bag in the event of a crash necessitating that air bag's deployment may reduce protection of the passenger and increase the risk or severity of injury to them. This issue was assigned recall number 10V-644.

On February 8, 2011, RMD mailed an information request (IR) letter to IEE requesting a list of purchasers for any company that was sold the same or similar defective mats. RMD also requested IEE supply the year, make and models of compatible vehicles for each of the mats it listed in its response. IEE responded on February 15, 2011, reporting that the mats recalled in GM recall 10V-644 were developed specifically for the 2005-2007 Cadillac CTS. IEE noted that, "...the CTS Sensor Mat is not the same or similar to any other sensor mat manufactured by IEE."

IEE further explained that the sensor mats were sold to Lear Corp. (Lear), for incorporation into seat assemblies, with the seat assemblies finally being sold to GM. Also, some sensor mats were sold to Integrated Manufacturing and Assembly, LLC (IMA) who would then re-sell the mats to GM to use as service parts. Ultimately, these parts were all sold to GM for use in the 2005-2007 Cadillac CTS vehicles.

According to its 10V-644 Defect Report, GM reported that some vehicles outside the recall population have "... significantly lower incident rates and will be provided a special coverage." This special coverage includes a free repair should the same issue occur to non-recalled 2005-2007 Cadillac CTS vehicles up to 10 years or 120,000 miles. On

April 7, 2011, RMD mailed an IR letter to GM to gather more information on GM's decision to only recall a portion of the vehicles that contained the subject IEE mats. RMD also requested that GM provide updated to current warranty claims, field reports, and other field information for CTS vehicles both recalled and those under the special coverage.

On May 19, 2011, GM responded with a letter and several CD attachments that were submitted to NHTSA's Office of the Chief Counsel along with a request for confidentiality. GM confirmed that the IEE mats recalled in 10V-644 were only used in the 2005-2007 Cadillac CTS. GM also explained its reasoning in only recalling a portion of the CTS vehicles containing IEE mats. Due to various production phases, error detections, and false corrections, certain vehicles were more prone to mat failures than other vehicles. GM identified 4 distinct seat assembly production periods and chose to recall CTS vehicles depending on which seat assembly each vehicle received.

Examining the data submitted in regards to warranty claims, field reports, and incidents, the CTS vehicles that were included in the safety recall were responsible for about 80% of the overall claims. CTS vehicles included in the special coverage (essentially an extended warranty), those with seat assemblies from other identified production phases, were responsible for about 20% of the overall claims.

As GM has provided clear data to support its recall decision and since no other manufacturer has installed these same or similar passenger sensing system mats / seat assemblies in their vehicles, this Equipment Query is satisfied.

This EQ is closed.