



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: RQ 13-002
Date Opened: 05/31/2013
Investigator: Michael Lee
Approver: Frank Borris
Subject: Air Bag Non-deployment

Date Closed: 07/09/2014
Reviewer: Scott Yon

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: General Motors LLC
Products: 2012 Buick Verano and Chevrolet Camaro, Cruze and Sonic
Population: 467,867

Problem Description: The shorting bar inside the dual stage driver's frontal air bag inflator may contact either the primary or secondary stage air bag terminals. In the event of a frontal crash, if the shorting bar and terminals are contacting each other, the primary or secondary stage air bag will not deploy.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	221	221
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	2,247	2,247

*Description of Other: Warranty claims

ACTION / SUMMARY INFORMATION

Action: This Recall Query is closed; see NHTSA recalls 14V-300 and 13V-023 (amended).

Summary:

General Motors (GM) has initiated a safety recall of 31,520 model year (MY) 2012 Buick Verano and Chevrolet Camaro, Cruze and Sonic vehicles to address a defect condition that could result in the primary or secondary stage air bag not deploying. These vehicles are a small percentage of all MY 2012 vehicles and were built on several specific production dates broadly ranging from December 1, 2011 to August 2, 2012 (see NHTSA recall 14V-300 for more information). Also, see attached additional report for more information.

This investigation was opened to evaluate the scope of two uninfluenced safety recalls (NHTSA recalls 12V-522 and 13V-023) of certain MY 2012 Verano, Camaro, Cruze and Sonic vehicles. These recalls involved the same defect issue as the new recall mentioned above. Accordingly, this investigation is closed based on the recall actions GM is undertaking.

RQ13-002 Close Resume

Additional Information

In October 2012 and January 2013, GM initiated two safety recalls to address a shorting bar defect in the driver's frontal air bag inflators in 6,845 model year (MY) 2012 Buick Verano and Chevrolet Cruze, Sonic and Camaro vehicles (see NHTSA recalls 12V-522 and 13V-023 for more information). If the shorting bar and terminals are contacting each other, the air bag warning light will illuminate, and the primary or secondary stage air bag will not deploy in the event of a crash that would otherwise normally warrant a deployment. The vehicles recalled comprised a very small percentage of the total number of all MY 2012 vehicles and were built on several specific production dates ranging from December 16, 2011 to February 1, 2012 and from April 2, 2012 to June 29, 2012, although the exact inclusive manufacture dates vary slightly for each vehicle model.

GM did not adequately determine the root cause(s) of the defects and the scope of vehicles for the above mentioned recalls. GM used warranty claim rates by inflator production (or build) date to identify those air bag inflators/vehicles with high warranty rates. Based on this analysis, GM recalled those vehicles equipped with inflators built on twelve (12) specific inflator build days (IBD). Also, in recall 12V-522, GM limited the scope of vehicles to those that were in service 30 days or less at the time the recall was initiated. According to GM, this criterion was used because its analysis showed the failures (warranty claims) were declining significantly over time in service, thus additional failures were unlikely to occur.

This investigation found, among other things, several concerns with the scope of the two original recalls, as described below.

1. Approximately 10,000 vehicles were excluded from 12V-522 because they did not meet the 30 days-in-service criterion. ODI found the overall warranty rate for these vehicles was very high – more than 40 incidents per thousand vehicles (IPTV) – as of about June 2013.
2. Approximately 20,000 vehicles built on twelve (12) additional (non-recalled) IBDs with relatively high warranty rates were not included in any of the previous recalls. ODI found the inflators built on these IBDs had warranty rates ranging at least from 10 to 20 IPTV, as of about June 2013. The 12 additional IBDs generally fell within the same several clusters of IBDs of the 12 recalled IBDs discussed earlier.
3. 390 vehicles met the criteria for 12V-522 or 13V-023 but were excluded because warranty records showed repairs were made prior to the recalls. ODI found the prior repairs were likely made using replacement components that will not remedy the defect condition.

GM is now addressing the above items by undertaking a recall action (14V-300) covering an additional 31,520 vehicles. Also, not discussed above, ODI found 271 vehicles were erroneously excluded from the original recalls. In November 2013, GM amended its recall population to include these vehicles under 13V-023.

In addition, ODI has reviewed ODI and GM reports of alleged non-deployment of the frontal air bags in the subject vehicles. ODI found no specific non-deployment incidents related to the defect condition nor any indication of a trend in non-deployment incidents potentially related to a defect or failure in the

air bag system. In general, the air bag non-deployments reports did not indicate: 1) that the air bag warning light was on before or after the crash; 2) that any relevant or other diagnostic trouble codes were found after the crash; 3) that a command for an air bag deployment had been issued according to EDR data (when available); and/or 4) the presence of any serious crashes and/or serious injuries.