



June 18, 2014

Ms. Nancy Lewis
Associate Administrator for Enforcement
National Highway Traffic Safety Administration
Recall Management Division (NVS-215)
1200 New Jersey Avenue, SE – Room W45-306
Washington, DC 20590

Dear Ms. Lewis:

The following information is submitted pursuant to the requirements of 49 CFR 573.6 as it applies to a determination by General Motors to conduct a safety related recall involving certain 2011 model year Cadillac CTS all wheel drive vehicles.

573.6(c)(1): Cadillac Brand of General Motors Company.

573.6(c)(2)(3)(4): This information is shown on the attached sheet.

573.6(c)(5): General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2011 model year Cadillac CTS all wheel drive vehicles. Some of these vehicles may have a condition in which loss of grease from the center constant velocity (CV) joint over time results in vibrations of the propeller shaft that are transferred to the roll over sensor located on the floor above it. The signal produced by the vibrations in the rollover sensor may result in deployment of the roof rail airbags (RRAB). The deployment of the RRAB could cause airbag deployment related injury to the occupants of the vehicle.

573.6(c)(6): On April 23, 2014, a Product Investigation engineer was assigned to investigate three field cases of unwanted RRAB deployments on 2011 Cadillac CTS vehicles. These field cases were identified by GM Engineering Analysis, and originated through customer contacts to the General Motors call center. In two of the field cases, the customer noted hearing tapping or ticking noises prior to airbag deployment. Analysis of warranty and other field data found 12 additional cases of RRAB deployments linked to prop shaft (propeller shaft) separation or loosening. The analysis of the field cases suggested that separation or loosening of the CV joint caused vibrations that could be transferred to the rollover sensor resulting in an unwanted RRAB deployment.

In conducting the investigation, the investigator found that the build dates of the 15 subject vehicles mentioned above correlated to a change in the prop shaft supplier that occurred in 2010. The specific change that the investigator found is referenced in the following paragraph.



On October 18, 2010, a new supplier began shipping prop shafts for the 2011 model year Cadillac CTS all wheel drive vehicles that used a metal gasket at the CV joint. This was a change from the liquid sealing system used by the previous supplier. The metal gasket design used by the new supplier was not validated or approved by GM. On June 27, 2011, a Problem Resolution Tracking System (PRTS) was opened related to loss of integrity of the CV joint from the friction coefficient change from grease with a loss of drive in a durability vehicle. The metal gasket prop shaft design was purged from the plant and service inventory in June 2011. A Temporary Work Order (TWO) was issued on July 1, 2011, to use the liquid sealing system at the start of 2012 model year production builds. On August 1, 2011, GM issued an Engineering Work Order (EWO) to permanently use the liquid sealing system in place of the metal gasket design. Additionally, the investigator found that GM reviewed a 2011 CTS CV joint issue in 2012 and closed the investigation without action in October 2012.

The correlation between RRAB deployments and loss of grease in 2011 CTS CV joints was presented to the Open Investigation Review (OIR) on June 3, 2014, and on June 11, 2014, the Safety and Field Action Decision Authority (SFADA) decided to conduct a safety recall.

573.6(c)(8): Dealers are to replace the rear prop shaft assembly.

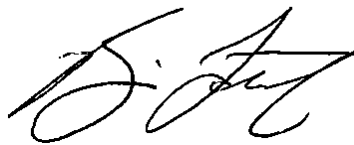
General Motors will provide the dealer bulletin and owner letter mail dates when available.

Pursuant to 577.11, GM will provide reimbursement to owners for repairs according to the plan submitted on May 23, 2013.

573.6(c)(10): General Motors will provide the dealer bulletin and owner letter under separate cover.

573.6(c)(11): General Motors' assigned recall number is 14233.

Sincerely,



Brian Latouf, Director
Field Product Investigations & Evaluations

Attachment

573.6(c)(2)(3)(4)

VEHICLES POTENTIALLY AFFECTED BY MAKE, MODEL, AND MODEL YEAR
PLUS INCLUSIVE DATES OF MANUFACTURE

<u>MAKE</u>	<u>MODEL SERIES</u>	<u>MODEL YEAR</u>	<u>NUMBER INVOLVED</u>	<u>INCLUSIVE MANUFACTURING DATES (FROM) (TO)</u>		<u>DESCRIPTIVE INFO. TO PROPERLY IDENT. VEH.</u>	<u>EST. NO. W/CONDITION</u>
Cadillac	D	2011	16,932	10/18/2010	06/02/2011	CTS	*
	GM Total:		16,932				

* All involved vehicles will be corrected as necessary.

573.6(c)(2)(iv): GKN Driveline
6400 Durham Road
Timberlake, NC, 27583
Phone: (336) 364-6200

The parts are manufactured in the USA.