



July 2, 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

Re: NHTSA Notification Campaign No. 14V-355

Dear Ms. Lewis:

This letter supersedes General Motors' letter of June 20, 2014, and 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 2005-2009 model year (MY) Buick Lacrosse, 2006-2011 MY Buick Lucerne, 2000-2005 MY Cadillac Deville, 2006-2011 MY Cadillac DTS, 2006-2014 MY Chevrolet Impala and 2006-2007 MY Chevrolet Monte Carlo vehicles. Specifically, the information submitted pursuant to 49 CFR 573.6(c)(6) below supersedes information included in General Motors' letter of June 20, 2014.

573.6(c)(1): Buick, Cadillac and Chevrolet Brands 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 2005-2009 model year (MY) Buick Lacrosse, 2006-2011 MY Buick Lucerne, 2000-2005 MY Cadillac Deville, 2007-2011 MY Cadillac DTS, 2006-2014 MY Chevrolet Impala and 2006-2007 MY Chevrolet Monte Carlo vehicles. If the key ring is carrying added weight and the vehicle goes off road or experiences some other jarring event, it may unintentionally move the key away from the "run" position. If this occurs, engine power, power steering and power braking will be affected, increasing the risk of a crash. The timing of the key movement out of the "run" position, relative to the activation of the sensing algorithm of the crash event, may result in the airbags not deploying, increasing the potential for occupant injury in certain kinds of crashes.

Until the recall has been performed, it is very important that customers remove all items from their key ring, leaving only the vehicle key. The key fob (if applicable), should also be removed from the key ring.

573.6(c)(6): As permitted by the provisions of 49 C.F.R. 573.6(b), and pursuant to the requirements of 49 C.F.R. 573.6(c)(6), General Motors now submits the chronology of



principal events that were the basis for the determination that the defect related to motor vehicle safety.

On June 20, 2014, GM submitted a 573 letter to NHTSA advising NHTSA that the Safety and Field Action Decision Authority (SFADA) had decided to conduct a Safety Recall relating to 2005-2009 model year (MY) Buick Lacrosse, 2006-2011 MY Buick Lucerne, 2000-2005 MY Cadillac Deville, 2006-2011 MY Cadillac DTS, 2006-2014 MY Chevrolet Impala and 2006-2007 MY Chevrolet Monte Carlo vehicles. The chronology below describes the principal events that led to the determination to issue a Safety Recall.

## **2005**

In the summer of 2005, GM was preparing to launch two models on the GM W platform, the 2006 Impala and the 2006 Monte Carlo. As part of the roll out of the 2006 Impala, GM provided early, saleable vehicles to certain GM employees who were participating in the Product Evaluation Program (PEP). These early, saleable vehicles were designated Captured Test Fleet (CTF) vehicles. In August 2005, a GM employee assigned a 2006 Impala CTF vehicle reported a potential safety issue through the GM CTF reporting system. The employee reported that the vehicle stalled after hitting a large bump when going from gravel road to pavement while driving at about 45 mph. On August 24, 2005, the GM employee took the vehicle to the GM Service and Parts Operations at the GM Technical Center in Warren, Michigan.

Over several days in August 2005, GM Technicians checked the vehicle and test drove the vehicle more than 400 miles, including over bumpy roads. The technicians were not able to duplicate the condition reported in the CTF report and returned the vehicle to the GM employee.

## **2014**

An email relating to the August 2005, CTF report was identified during a document review being conducted in relation to the Cobalt ignition switch recall. The email was brought to the attention of the Product Investigation group on April 30, 2014, and a Product Investigator was assigned to investigate the issues raised in the email on May 1, 2014. Between May 1, 2014, and June 6, 2014, the investigator worked with GM subject matter experts to gather and analyze data relating to the ignition switch used on the 2006 Impala and other similar ignition switches. GM test personnel conducted lab tests on the ignition switches and determined that, although the ignition switches themselves performed below the target specification, the ignition system as a whole as installed in the vehicles' steering columns performed approximately at the target specification. GM also collected and began review of information from GM's databases, including its TREAD, warranty, customer satisfaction, and Engineering Analysis databases, and NHTSA's Vehicle Owners' Questionnaire (VOQ) database relating to vehicles using the ignition switch parts under review. On June 6, 2014, the investigator made a presentation regarding the ignition switch investigation at an Open Investigation Review (OIR) meeting.

Following the June 6, 2014, Open Investigations Review (OIR) meeting, GM personnel at the Milford Proving Grounds conducted road testing of the Impala and other vehicles using the ignition switches under review to analyze the performance of the subject ignition systems

under various driving conditions. The road testing indicated that, when a slotted key is carrying added weight, the torque performance of the ignition system may be insufficient to resist energy generated when a vehicle goes off road or experiences some other jarring event, potentially resulting in the unintentional movement of the key away from the "run" position. Testing on keys with holes instead of slots indicated that the torque performance of the ignition system on the subject vehicles would be sufficient to resist the force generated by the driving conditions tested.

On June 11, 2014, the investigator presented to the SFADA. The SFADA did not make a decision at the June 11, 2014, meeting because the investigator had not yet completed review of the GM and NHTSA data. The SFADA directed that the review of that data be completed in time for an SFADA meeting on June 13, 2014. The investigator completed review of the GM and NHTSA data and presented to the SFADA at the Milford Proving Grounds on June 13. The SFADA directed the investigator to work with other GM personnel to further refine the potential recall population so that it accurately included the vehicles using the identified ignition switches that were subject to the condition identified during the road tests. On June 15, 2014, the SFADA met and decided to conduct a Safety Recall of that population of vehicles.

On June 16, 2014, GM announced its decision to issue a Safety Recall. On June 20, 2014, GM submitted a 573 letter to NHTSA advising NHTSA of the SFADA's June 15, 2014, decision to conduct a Safety Recall. GM's June 20 letter states that, until the recall has been performed, it is very important that customers remove all items from their key ring, leaving only the vehicle key; the key fob (if applicable) should also be removed from the key ring.

573.6(c)(8): Dealers are to install two 13mm key rings and key insert into all involved vehicle's ignition keys.

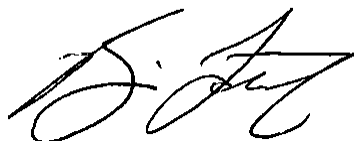
General Motors will provide the dealer bulletin and owner letter mail dates when available.

Pursuant to 577.11, General Motors does not plan to provide notice about reimbursement to owners because the provided repair has not previously been available.

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 14299.

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>
Buick	W	2005	81,894	05/31/2004	06/27/2005	LaCrosse	*
Buick	W	2006	76,034	04/12/2005	06/19/2006	LaCrosse	"
Buick	W	2007	54,933	04/18/2006	07/17/2007	LaCrosse	"
Buick	W	2008	41,966	05/15/2007	07/25/2008	LaCrosse	"
Buick	W	2009	18,532	04/08/2008	01/27/2009	LaCrosse	"
Buick	H	2006	85,979	08/02/2005	06/19/2006	Lucerne	"
Buick	H	2007	85,924	04/12/2006	06/19/2007	Lucerne	"
Buick	H	2008	66,119	05/15/2007	07/21/2008	Lucerne	"
Buick	H	2009	31,752	05/02/2008	08/13/2009	Lucerne	"
Buick	H	2010	20,530	04/09/2009	06/09/2010	Lucerne	"
Buick	H	2011	31,888	05/04/2010	06/02/2011	Lucerne	"
Cadillac	K	2000	93,742	05/18/1999	06/29/2000	DeVille	"
Cadillac	K	2001	90,139	03/10/2000	06/08/2001	DeVille	"
Cadillac	K	2002	92,946	02/14/2001	06/27/2002	DeVille	"
Cadillac	K	2003	79,381	04/11/2002	06/20/2003	DeVille	"
Cadillac	K	2004	75,019	03/26/2003	06/16/2004	DeVille	"
Cadillac	K	2005	58,624	03/18/2004	06/24/2005	DeVille	"
Cadillac	K	2006	67,405	05/10/2005	06/19/2006	DTS	"
Cadillac	K	2007	48,944	04/11/2006	06/19/2007	DTS	"
Cadillac	K	2008	42,481	03/14/2007	07/21/2008	DTS	"
Cadillac	K	2009	17,656	05/02/2008	08/13/2009	DTS	"
Cadillac	K	2010	16,609	04/09/2009	06/09/2010	DTS	"
Cadillac	K	2011	18,460	05/04/2010	05/24/2011	DTS	"

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

<u>MAKE</u>	<u>MODEL SERIES</u>	<u>MODEL YEAR</u>	<u>NUMBER INVOLVED</u>	<u>INCLUSIVE MANUFACTURING DATES</u>		<u>DESCRIPTIVE INFO. TO PROPERLY IDENT. VEH.</u>	<u>EST. NO. W/CONDITION</u>
				<u>(FROM)</u>	<u>(TO)</u>		
Chevrolet	W	2006	274,547	02/25/2005	06/20/2006	Impala	"
Chevrolet	W	2007	279,486	03/27/2006	06/11/2007	Impala	"
Chevrolet	W	2008	332,839	03/19/2007	07/25/2008	Impala	"
Chevrolet	W	2009	192,926	04/25/2008	06/17/2009	Impala	"
Chevrolet	W	2010	157,525	04/16/2009	06/10/2010	Impala	"
Chevrolet	W	2011	177,624	04/10/2010	06/17/2011	Impala	"
Chevrolet	W	2012	172,104	04/19/2011	06/15/2012	Impala	"
Chevrolet	W	2013	131,793	04/12/2012	06/06/2013	Impala	"
Chevrolet	W	2014	66,103	04/26/2013	06/09/2014	Impala	"
Chevrolet	W	2006	38,138	06/09/2005	06/20/2006	Monte Carlo	"
Chevrolet	W	2007	21,689	04/21/2006	06/19/2007	Monte Carlo	"
GM Total:			3,141,731				

\* All involved vehicles will be corrected as necessary.

573.6(c)(2)(iv): Dalian Alps Electronics Company LTD  
 6 Han Zheng rd.  
 Jinzhou district Dalian 116100 PR of China  
 +86 41187687110

The parts are manufactured in China.