GENERAL MOTORS LLC
Global Vehicle Safety

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April 11, 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-047

Dear Ms. Lewis:

This letter supersedes General Motors' letter of March 28, 2014, and is submitted pursuant to the requirements of 49 C.F.R. 573.6 as it applies to a determination by General Motors to conduct a safety-related recall for the motor vehicle equipment identified below.

573.6(c)(1) & 573.6(c)(2)(iv): General Motors Company; GM Parts and ACDelco Brands.

This safety recall involves Ignition & Start Switches manufactured in Mexico by:

Delphi Packard Electrical/Electronic Architecture
5725 Delphi Drive
M/C 483.400.301
Troy, Michigan 48098
Tel: [1] 248.813.2334
Fax: [1] 248.813.2333

573.6(c)(2),(3),(4): This information is shown on Attachment A.

573.6(c)(2)(iii),(5): General Motors has decided that a defect which relates to motor vehicle safety exists in GM Parts and ACDelco Ignition & Start Switch service part number 10392423, and the following Ignition & Start Switch Housing Kits that contain or may contain part number 10392423: GM Parts and ACDelco service part numbers 10392737, 15857948, 15854953, 15896640, and 25846762. GM records indicate these service parts may have been installed during repairs in some 2008-2010 MY Chevrolet Cobalt, 2008-2011 MY Chevrolet HHR, 2008-2010 MY Pontiac Solstice, 2008-2010 MY Pontiac G5, and 2008-2010 MY Saturn Sky vehicles.

The ignition switch torque performance on vehicles repaired with GM Parts and ACDelco Ignition & Start Switch part number 10392423 or assemblies that contain part number 10392423 may not meet General Motors' specification. If the torque performance is not to specification, the ignition switch may unintentionally move from the "run" position to the "accessory" or "off" position with a corresponding reduction or loss of power. This risk may be increased if the key ring is carrying added weight or the vehicle goes off road or

experiences some other jarring event. 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 rings, 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 attached chronology of principal events that were the basis for the determination that the defect related to motor vehicle safety.

573.6(c)(8): Safety recall letters will be mailed to owners of all 2008-2010 MY Chevrolet Cobalt, 2008-2011 MY Chevrolet HHR, 2008-2010 MY Pontiac Solstice, 2008-2010 MY Pontiac G5, and 2008-2010 MY Saturn Sky vehicles, and their ignition switch will be replaced.

In addition, GM will issue a service parts safety bulletin to GM Dealers, ACDelco Distributors and other wholesale purchasers of part number 10392423 or service part assemblies that may contain part number 10392423, instructing them to post signs in the dealerships for over the counter sales, and identify and notify customers who may have purchased the referenced parts about the recall.

GM plans to issue preliminary notification about the recall to dealers, distributors and other parts customers the week of April 14, 2014, and subsequent bulletins and a first owner letter the week of April 21, 2014. A second owner letter will be mailed and the formal dealer bulletin and service part bulletin will be provided when parts are available.

Pursuant to 577.11, GM will provide reimbursement to owners for repairs completed on or before ten days after the owner mailing is completed, according to the plan submitted on May 23, 2013.

573.6(c)(10): GM will provide copies of the dealer and customer communications, including the owner letter, under separate cover.

573.6(c)(11): GM's assigned recall number is 14092.

Sincerely,

M. Carmen Benavides, Director
Field Product Investigations & Evaluations

14092
Attachments

Attachment A 573.6(c)(2),(3),(4):

The total number of potentially defective items of equipment is 95,023.
GM records do not indicate inclusive dates of manufacture for the suspect parts.
With the exception of part number 10392423, GM records show no direct purchasers other than GM Dealers and ACDelco Distributors.

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

MAKE	MODEL SERIES	MODEL YEAR	NUMBER INVOLVED	INCLUSIVE MANUFACTURING DATES (FROM)	(TO)	DESCRIPTIVE INFO. TO PROPERLY IDENT. VEH.	EST. NO. W/CONDITION
Chevrolet	A	2008	176,471	05/29/2007	06/26/2008	Cobalt	*
Chevrolet	A	2009	141,592	04/15/2008	08/11/2009	Cobalt	"
Chevrolet	A	2010	116,275	04/16/2009	06/23/2010	Cobalt	"
Chevrolet	A	2008	99,227	05/01/2007	06/26/2008	HHR	"
Chevrolet	A	2009	80,782	04/08/2008	06/18/2009	HHR	"
Chevrolet	A	2010	64,733	04/20/2009	06/15/2010	HHR	"
Chevrolet	A	2011	68,455	04/22/2010	05/27/2011	HHR	"
Pontiac	A	2008	20,206	05/30/2007	06/23/2008	G5	"
Pontiac	A	2009	20,662	05/22/2008	08/10/2009	G5	"
Pontiac	A	2010	3	04/16/2009	04/17/2009	G5	"
Pontiac	M	2008	14,088	04/24/2007	06/19/2008	Solstice	"
Pontiac	M	2009	4,207	04/17/2008	07/28/2009	Solstice	"
Pontiac	M	2010	19	04/21/2009	05/28/2009	Solstice	"
Saturn	M	2008	12,982	04/24/2007	06/19/2008	Sky	"
Saturn	M	2009	4,078	04/17/2008	05/19/2009	Sky	"
Saturn	M	2010	8	04/23/2009	05/26/2009	Sky	"

GM Total: 823,788

* Ignition switch on all involved vehicles will be replaced.

GM Recall No. 14092

ATTACHMENT B - 573.6(c)(6)

CHRONOLOGY
Re: Recall of 2008-2010 Chevrolet Cobalt, 2008-2011 Chevrolet HHR, 2008-2010 Pontiac Solstice, 2008-2010 Pontiac G5, and 2008-2010 Saturn Sky Vehicles

On February 7, 2014, General Motors ("GM") notified the National Highway Transportation Safety Administration ("NHTSA") of its decision to recall 2005-2007 model year Chevrolet Cobalt and 2007 model year Pontiac G5 vehicles. By letter dated February 24, 2014, GM submitted to NHTSA a chronology of principal events that were the basis for the determination that the defect related to motor vehicle safety, with respect to the recall of the Cobalt and G5 vehicles ("the Cobalt and G5 recall").

In making this recall determination, GM's Executive Field Action Decision Committee ("EFADC") was asked to consider a proposed recall only of the Cobalt and G5 vehicles. The submissions to the EFADC did not propose a recall of the Ion, HHR, Solstice and Sky vehicles. Following GM's announcement of the Cobalt and G5 recall on February 7, 2014, as discussed in more detail below, the decision was made to conduct a more in-depth analysis of information related to the vehicles that were listed on Service Bulletins 05-02-35-007 and 05-02-35-007A, but were not included in the February 7, 2014 recall submission to NHTSA.

On February 25, 2014, GM notified NHTSA of its decision to recall all of the other vehicles listed in the aforementioned Service Bulletins—specifically, 2003-2007 model year Saturn Ion, 2006-2007 model year Chevrolet HHR and Pontiac Solstice, and 2007 model year Saturn Sky vehicles. By letter dated March 11, 2014, GM submitted to NHTSA a chronology of principal events that were the basis for the determination that the defect related to motor vehicle safety, with respect to the recall of the Ion, HHR, Solstice and Sky vehicles ("the Ion, HHR, Solstice and Sky recall"). Because these vehicles were equipped with the same ignition switch installed in the 2005-2007 model year Chevrolet Cobalt and 2007 model year Pontiac G5 vehicles, the chronology submitted on February 24, 2014, with respect to the Cobalt and G5 recall is relevant to GM's decision to issue the Ion, HHR, Solstice and Sky recall.

By letter dated March 28, 2014, GM notified NHTSA of its decision to recall later model year vehicles within the scope of the Cobalt and G5 recall and the Ion, HHR, Solstice and Sky recall, specifically 2008-2010 model year Chevrolet Cobalt, 2008-2011 model year Chevrolet HHR, 2008-2010 model year Pontiac Solstice, 2008-2010 model year Pontiac G5, and 2008-2010 model year Saturn Sky vehicles ("the 2008-2011 model year recall"). In addition to the events set forth in the chronologies submitted to NHTSA regarding the Cobalt and G5 recall and the Ion, HHR, Solstice and Sky recall, the following describes the principal events that were the basis for the determination, relating to the 2008-2011 model year recall, that the defect related to motor vehicle safety. GM's review of data and information relating to the recalled vehicles continues.

* * *

2004. Around the time of the launch of the 2005 Chevrolet Cobalt, GM learned of at least one incident in which a Cobalt lost engine power because the key moved out of the "run" position when the driver inadvertently contacted the key or steering column. GM employees were able to replicate this phenomenon during test drives. An engineering inquiry known within GM as a Problem Resolution Tracking System inquiry (hereinafter "PRTS"), was opened to investigate the issue. Engineers believed that low key cylinder torque effort was an issue and considered a number of potential solutions. After consideration of the lead time required, cost, and effectiveness of each of these solutions, the PRTS was closed with no action.

2005. GM employees received field reports of Chevrolet Cobalt vehicles losing engine power, including instances in which the key moved out of the "run" position when a driver inadvertently contacted the key or steering column. Further PRTS's were opened to reassess this issue. During the course of a PRTS opened in May 2005, an engineer proposed that GM redesign the key head from a "slotted" to a "hole" configuration. That proposal was initially approved, but later cancelled. The PRTS process led to GM's issuing Information Service Bulletin 05-02-35-007 in December 2005. This Service Bulletin provided "Information on Inadvertent Turning of Key Cylinder, Loss of Electrical System and No DTCs," and applied to 2005-06 Chevrolet Cobalts, 2006 Chevrolet HHRs, 2005-06 Pontiac Pursuits (Canada only), 2006 Pontiac Solstices, and 2003-06 Saturn Ions. The Service Bulletin informed dealers that: "there is potential for the driver to inadvertently turn off the ignition due to low ignition key cylinder torque/effort"; "[t]he concern is more likely to occur if the driver is short and has a large and/or heavy key chain"; and "the customer should be advised of this potential and should take steps to prevent it—such as removing unessential items from their key chain." In addition, the Service Bulletin advised that "Engineering has come up with an insert for the key ring so that it goes from a 'slot' design to a hole design. As a result, the key ring cannot move up and down in the slot any longer—it can only rotate on the hole." The Service Bulletin further stated that, "[i]n addition, the previous key ring has been replaced with a smaller, 13 mm design. This will result in the keys not hanging as low as in the past."

Certain of the reported incidents that pre-dated GM's issuance of Service Bulletin 05-02-35-007 and GM's public response to inquiries about those incidents were chronicled in newspaper articles that appeared in THE NEW YORK TIMES, THE PLAIN DEALER (Cleveland, OH), and THE DAILY ITEM (Sunbury, PA). GM concluded in December 2005 that the Service Bulletin and field service campaign were the appropriate response to the reported incidents, given that the car's steering and braking systems remained operational even after a loss of engine power, and the car's engine could be restarted by shifting the car into either neutral or park.

2006. On April 26, 2006, the GM design engineer responsible for the ignition switch installed in all of the vehicles subject to the Cobalt and G5 recall and the Ion, HHR, Solstice and Sky recall signed a document approving changes to the ignition switch proposed by the supplier. This document referred to the "GMX 357" vehicle platform, which was GM's internal designation for the Saturn Ion. The approved changes included, among other things, the use of a new detent plunger and spring that increased torque force in the ignition switch. This change to the ignition switch was not reflected in a corresponding change in the part number for the ignition switch. GM believes that the

supplier began providing the re-designed ignition switch to GM for all of the recalled vehicles at some point during the 2007 model year.

In May 2006, a field evaluation inquiry, known within GM as a Field Performance Report ("FPR"), was opened to address customer complaints that their Saturn Ion vehicles would neither crank nor start. Attached to this FPR was a document bearing the logo of the ignition switch supplier, titled "PROPOSED PCB [printed circuit board] LAYOUT." Under "[p]roblem description," the document stated, "[s]witch presents Contact Bounces & contact permanent deformation," [c]ustomer rejects switches," and "[f]unctional Problem when car starts." The "[p]roposed actions from Product Engineering" included "[c]hange PCB design to remove via holes from contact traces," "[e]nlarge PCB vias to avoid contactors being in via limits," and "[d]etent plunger to increase torque force to be within spec." Under "[c]urrent status for PCB," the document stated, among other things, "1.-Validation for Torque & Angle for timing corrections – DONE," "2.-GM RDE approve GM3660 – DONE," and "6.-SOP @ Condura for new PCB & Spring/Plunger – 6/30/06." The FPR was closed, citing Technical Service Bulletin 06-02-35-017.

A PRTS was opened on August 1, 2006, after a customer complained of stalling after the car's ignition switch had been replaced. This PRTS indicated that the condition could not be duplicated after more than 100 miles of driving and the PRTS was canceled on October 2, 2006.

GM updated Service Bulletin 05-02-35-007 in October 2006 to include additional vehicles and model years—specifically, the 2007 Chevrolet Cobalt, the 2007 Chevrolet HHR, the 2007 Pontiac G5, the 2007 Pontiac Solstice, the 2007 Saturn Ion, and the 2007 Saturn Sky.[1] GM's warranty records indicate that GM dealers have provided key inserts to 474 customers who brought their vehicles into dealers for service.

2007. On March 29, 2007, a group of GM employees met with NHTSA representatives in Washington, D.C. to discuss occupant restraint systems. During this meeting, a NHTSA representative informed the GM employees of a fatal crash that occurred on July 29, 2005, in which a 2005 Cobalt was involved in a frontal collision, the airbags did not deploy, and data retrieved from the car's sensing and diagnostic module ("SDM") indicated that the car's power mode status was "accessory." While GM Legal Staff opened a file relating to this crash in September 2005, the GM employees meeting with NHTSA on this occasion were not aware of the crash at the time of the meeting. After this meeting, a GM investigating engineer was tasked with tracking crashes in which Cobalts were involved in frontal impacts and the airbags did not deploy, in order to try to identify common characteristics of these crashes. Data from the vehicles' SDM's were available for nine of the crashes, and that data showed that the ignition was in the "run" position in five of the crashes and in the "accessory" position in four of the crashes. Such information was not available for Saturn Ion vehicles because they were equipped with an SDM that was not designed to record when the engine was not running.

A meeting between GM engineers and representatives of Continental, the supplier of the SDMs used in the Cobalt, took place in or about August 2007. During this meeting,

[1] GM's records contain references to a second update of the Service Bulletin in July 2011, which covered the same models and model years as the first update in October 2006. However, upon investigation, GM believes that the Service Bulletin was not updated in July 2011.

Continental representatives discussed SDM data downloaded from a 2005 model year Cobalt vehicle involved in a frontal-impact crash in which the airbags did not deploy.

GM discontinued production of the Ion at the end of the 2007 model year, as previously planned.

2009. In February 2009, another PRTS was opened and resulted in the top of the key being changed from a "slot" design to a "hole" design. According to the PRTS, "[c]ustomers with substantially weighted key chains/additional keys hanging from ignition key have experienced accidental ignition shut-off. Changing from a slot to a hole will significantly reduce downward force and the likelihood of this occurrence." This key design change was implemented in model year 2010 Cobalts.

On or about May 15, 2009, several GM engineers met with representatives of Continental, the supplier of the SDMs used in the Cobalt. In the fourteen frontal-impact crashes for which SDM data was then available, the ignition was recorded in "run" for seven of the crashes and in the "accessory" position for the other seven. Prior to this meeting, GM had provided Continental with two SDMs from crashes involving a 2005 Cobalt and a 2006 Cobalt in which the airbags had not deployed and the SDM data indicated that the car's ignition switch was in the "run" position at the time of the crash (the SDM from the 2005 Cobalt was provided in 2007). During this meeting, Continental representatives informed the GM engineers that, according to further stored data inaccessible to GM engineers but retrieved by Continental, the SDM's sensing algorithm had been disabled at the time of the crash, and discussed reasons why this may have happened. Although GM engineers had identified other crashes in which airbags had not deployed and the ignition switch was recorded in the "run" position at the time of the crash, GM engineers were not able to obtain the SDMs from the vehicles involved in these crashes for further interrogation by Continental.

2010. During the summer of 2010, GM discontinued production of the Cobalt at the end of the 2010 model year, as previously planned.

2011. In late July 2011, a meeting was held at GM involving Legal Staff, Field Performance Assessment ("FPA") and Product Investigations personnel who would be involved in the Field Performance Evaluation ("FPE") process. Soon thereafter, in August 2011, a Field Performance Assessment Engineer ("FPAE") was assigned to move forward with an FPE investigation of a group of crashes in which airbags in 2005-2007 model year Chevrolet Cobalts and a 2007 Pontiac G5 had not deployed during frontal impacts, which also included a review of information related to the Ion, HHR and Solstice vehicles. This FPE investigation did not identify frontal-impact crashes involving 2004 model year Saturn Ion vehicles that resulted in fatalities in which the recall condition may have caused or contributed to the airbags' non-deployment.

During the course of the FPE investigation, the FPAE's analyses included the following: reviewing data relating to complaints of stalling in the Ion for all model years; reviewing data relating to crashes involving Ions from certain model years in which airbags had not deployed; testing the torque performance of ignition switches from salvage yard vehicles, including Ions, HHRs, Cobalts and G5s (but not Solstice or Sky vehicles); measuring the difference among a wide variety of GM vehicles in the distance between a driver's knee

and the ignition; and studying vehicles' different steering columns and shrouds, including those of the Ion and the Cobalt.

GM's FPE process consisted of several steps, beginning with investigation of the issue, then presentation of potential solutions to decision makers, and culminating in a decision and implementation of that decision. At the outset of the process, investigating engineers worked to develop a technical understanding of the issue. They then presented their findings and proposed solutions to the Field Product Evaluation Recommendation Committee ("FPERC"). The FPERC's recommendations were then presented to the Executive Field Action Decision Committee ("EFADC"), which decided on a course of action. The FPERC and EFADC could request further analysis before making recommendations or decisions as to what, if any, field action was warranted.

2012. Based on the information accessed and collected by the FPAE, the investigation sought, among other things, to determine whether there were known engineering reasons that would explain why certain reported non-deployment crashes involved 2007 and earlier model year vehicles. In May 2012, the assigned FPAE studied a cross-section of steering columns and ignition switches from Chevrolet Cobalts, Chevrolet HHRs, Pontiac G5s, and Saturn Ions, in model years ranging from 2003 through 2010. The FPAE accessed, inspected, and tested these steering columns and ignition switches for torque performance at a salvage yard. Some of these ignition switches—including a number for model year 2004-2007 Ion and model year 2006-2008 HHR vehicles—exhibited torque performance below that specified by GM for the ignition switch. Because the Ion was discontinued after model year 2007, no Ion vehicles from later model years could be tested for torque performance. The most prevalent shortfalls in performance were observed on ignition switches found in 2007 and earlier model year vehicles.

The FPE investigation focused on determining the cause of these variations in torque performance by model year. A review of GM's records by those involved in the investigation did not identify design changes to the ignition switch that would explain the variations in torque performance for the 2007 and earlier model year vehicles and that of the 2008 and later model year vehicles, with the exception of the Ion which ceased production after the 2007 model year. GM also considered other components that might potentially influence the torque performance of the ignition switches, including changes made to the Cobalt's anti-theft system at the beginning of the 2008 model year. Again, no explanation was discovered. GM engineers conducted separate studies using the "Red X" and "Design for Six Sigma" problem-solving methodologies, in hopes of better understanding the differences in observed torque performance, but those, too, produced inconclusive results. These latter studies were concluded in November 2012 and January 2013, respectively.

The FPAE collected some data relating to certain Saturn Ion crashes in which airbags did not deploy and where injuries occurred, and discussed the data with at least one other investigator to evaluate whether the ignition switch in Ion vehicles may have caused or contributed to airbag non-deployment. This analysis identified two crashes involving Ion vehicles—from model years 2005 and 2007—in which the FPAE concluded that the ignition switch torque performance could potentially have resulted in airbag non-deployment upon frontal impact. These two crashes did not result in fatalities.

2013. In late April 2013, the FPAE learned that the torque performance of a GM service part ignition switch purchased after 2010 differed substantially from that of an ignition switch that was original equipment installed on a 2005 Cobalt. He also learned that others had observed and documented that the detent plunger and spring used on the service part switch differed from those used on the original equipment switch installed on the 2005 Cobalt. Shortly thereafter, GM retained outside engineering resources to conduct a comprehensive ignition switch survey and assessment. That investigation included torque performance testing, ignition switch teardowns, and x-ray analyses of ignition switches in used production vehicles both before and after the 2007 model year. The data gathered by GM's outside technical expert showed that: the ignition switches that he tested that had been installed in early-model Ion and Cobalt vehicles did not meet GM's torque specification; changes had been made to the ignition switch's detent plunger and spring several years after the start of production; and those changes most likely explained the variation from GM's specifications for torque performance observed in the original switches installed in 2007 and earlier model year vehicles.

On October 29, 2013, after dialogue with the supplier, GM was provided with supplier records showing that changes had in fact been made to the detent plunger and spring late in the 2006 calendar year. Those changes increased the switch's torque performance. Testing and analysis further determined that whether a key moves from the "run" to "accessory" position and how that key movement affects airbag deployment depends on a number of factors, including: vehicle steering inputs and path of travel immediately before key movement; the weight and load on the key ring immediately before key movement; whether the installed ignition switch meets the torque specifications that GM provided to its supplier; and the timing of the movement of the key out of the "run" position relative to the activation of the airbag's sensing algorithm of the crash event.

Upon completion of this analysis, the issue was presented to the FPERC and the EFADC. These two committees reviewed the findings in early December, culminating in an EFADC meeting on December 17, 2013. Factual questions were raised at that meeting that required further analysis, the findings of which were presented at a second EFADC meeting on January 31, 2014, on which date the EFADC directed a safety recall of the Chevrolet Cobalt and Pontiac G5 for model years 2005 through 2007.

2014. As part of the FPE analysis, PowerPoint documents were prepared for purposes of presenting the investigative findings and recommendation to the EFADC on December 17, 2013, and January 31, 2014. The PowerPoint documents reflect the fact that the EFADC was asked to consider a proposed recall of only the Cobalt and G5 vehicles. The members of the EFADC received a primary slide deck in advance of the meeting. For these two meetings, a "backup" slide deck was prepared so that additional slides could be presented, as necessary, in order to respond to questions posed by EFADC members. The primary slide decks for these meetings include information relating to the FPAE's examination of the Ion and HHR vehicles and the results of field testing of vehicles' ignition switch torque performance, which reflected a number of model year 2004-2007 Ion and model year 2006-2008 HHR vehicles that were below GM specifications. The "backup" decks for these two meetings also include information relating to the FPAE's examination of key insert claims data for the Ion, HHR and Solstice vehicles, and proffered differences between the Cobalt, Ion and HHR vehicles that could explain a

perceived absence of the recall condition in the Ion and HHR vehicles. These documents do not contain any information relating to the Sky vehicles. The "backup" slide decks also included factual material relating to other vehicles, including: (1) a chart, which in part reflects "Ignition Switch Position from SDM Download - Airbag Non-Deployment Incidents," and which identifies two crashes involving Ion vehicles—from model years 2005 and 2007—in which the ignition switch torque performance could potentially have resulted in airbag non-deployment upon frontal impact (also referred to as "unconfirmed reports")[2] and a statement that there were no such incidents for the HHR; (2) the review of Vehicle Owner Questionnaires ("VOQ's") for Ion and HHR vehicles; (3) photographs comparing the steering columns in Ion and Cobalt vehicles; and (4) a copy of the April 26, 2006 document approving changes to the ignition switch proposed by the supplier. It is not clear which of the backup slides were reviewed during these two meetings.

The submissions to the EFADC did not propose a recall of the Ion, HHR, Solstice and Sky vehicles. The data collected by the FPAE did not include the crashes involving model year 2004 Ion vehicles that resulted in fatalities in which the recall condition may have caused or contributed to the airbags' non-deployment. As stated above, these crashes have since been identified. GM has provided copies of these PowerPoint documents to NHTSA.

Additional analyses were conducted in February 2014 relating specifically to the Ion, HHR, Solstice and Sky vehicles. These analyses included a collection and review of data regarding crashes involving these vehicles and allegations of airbag non-deployment. The analyses also included a search for and review of FPR and PRTS reports relating to these vehicles, regardless of model year; a number of these, initiated in 2003 and 2006, addressed complaints of stalling in Ion vehicles. One report initiated in 2001, during pre-production development of the Ion, addressed an issue relating to the ignition switch's "passlock" system. The report stated that the causes of the problem included "low detent plunger force" in the ignition switch, and stated that an ignition switch design change had resolved the problem. A 2003 report documented an instance in which the service technician observed a stall while driving, noted that "[t]he owner had several keys on the key ring," and stated that "[t]he additional weight of the keys had worn out the ignition switch." In that instance, the technician replaced the ignition switch and the FPR was closed. Other reports primarily addressed customer complaints of not being able to start their Ions' engines, but the warranty and technical assistance data collected in support of these reports included complaints of stalling.

An EFADC meeting was held on February 24, 2014, on which date the EFADC directed a safety recall of the Chevrolet HHR and Pontiac Solstice for model years 2006 and 2007, Saturn Ion for model years 2003 through 2007, and the Saturn Sky for model year 2007.

In late February and early March 2014, while implementing the Cobalt and G5 recall (the "First Recall") and the Ion, HHR, Solstice and Sky recall (the "Second Recall"), certain GM personnel involved in the implementation of the recalls observed that the ignition switch at issue, GM Parts Ignition & Start Switch service part number 10392423 (the

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[2] These two crashes did not result in fatalities.

"subject ignition switch"), could be found in Ignition & Start Switch Housing Kits ("housing kits") associated with other service part numbers.

On or about March 3, 2014, GM personnel identified certain housing kits that contained or potentially contained the subject ignition switch. Personnel researched GM dealer repair order data that had been reported to GM to determine whether those housing kits may have been used as service parts in vehicles outside the vehicle populations included in the First and Second Recalls.

During the weeks of March 3 and March 10, research into GM's repair order database indicated that housing kits with the subject ignition switch may have been used to repair certain 2008-2011 model year vehicles whose makes and models fell within the scope of the First and Second Recalls (hereafter the "2008-2011 Model Year Vehicles").

On or about March 4 or 5, 2014, GM engineering confirmed through testing that the subject ignition switch could function in 2008-2011 Model Year Vehicles, even though those vehicles should have utilized a different ignition switch bearing a different service part number (Ignition & Start Switch service part number 15886190).

On March 19 and 20, 2014, the EFADC was presented with information regarding the potential use of the subject ignition switch in 2008-2011 Model Year Vehicles. Specifically, the presentation materials at both meetings identified the following five housing kits that contained or potentially contained the subject ignition switch: Ignition & Start Switch Housing Kit service part numbers 10392737, 15857948, 15854953, 15896640, and 25846762. The presentation included data from GM dealer repair orders, showing that the subject ignition switch or one of the identified housing kits may have been used to repair as many as 2,664 2008-2011 Model Year Vehicles.

The presentation materials for the March 19 and March 20 EFADC meetings showed that the vast majority of these instances—2,543 of 2,664—were associated with the potential use of Ignition & Start Switch Housing Kit service part number 25846762. According to the presentation, the bill of material for that housing kit did not list the subject ignition switch, but instead called for ignition switch number 15886190 to be used. The housing kit was included in the EFADC presentation because GM personnel had learned that some of the boxes labeled with the 25846762 part number erroneously contained a housing kit that contained the subject ignition switch.

The EFADC presentation also included repair order data showing that the subject ignition switch or one of the identified housing kits may have been used to repair 111 GM vehicles whose makes and models fell outside the scope of the First and Second Recalls (this number was reduced to 109 GM vehicles by March 28, 2014, when GM notified NHTSA of its decision to recall later model year vehicles within the scope of the First and Second Recalls). GM engineers determined that the subject ignition switch was mechanically or electrically incompatible with vehicles outside of the makes and models included in the First and Second Recalls. Nevertheless, the 111 vehicles were contemplated as being included in the "Potential Field Remedy" in the EFADC presentation materials. The "Potential Field Remedy" proposed the following: "Vehicles outside the Safety Recalls population that had [part number] 10392423, 10392737, 15857948, 15854953, 15896640

or 25846762 installed as replacement parts should be returned for inspection and replacement of the ignition switch if [part number] 10392423 is found."

On March 26, 2014, a third EFADC meeting was held. The EFADC considered expanding the field action beyond the population of vehicles identified in repair order data to include all model year 2008-2011 vehicles in the First and Second Recalls. The presentation materials proposed the alternative "Potential Field Remedy" of replacing all ignition switches in the 2008-2011 model year population. The presentation showed the population to be approximately 970,808 vehicles in the United States, Canada, Mexico, Europe, Japan, and Columbia. It projected the cost of the proposed action to be approximately $39.7 million.

Out of an abundance of caution and to provide a replacement switch to all customers whose vehicles could have been impacted by the subject ignition switch, the EFADC decided that GM would expand the First and Second Recalls to include all 2008-2011 Model Year Vehicles. Safety recall letters will be mailed to the owners of all 2008-2010 model year Chevrolet Cobalt, 2008-2011 model year Chevrolet HHR, 2008-2010 model year Pontiac Solstice, 2008-2010 model year Pontiac G5, and 2008-2010 model year Saturn Sky vehicles, and the vehicles' ignition switch will be replaced.

In addition, a safety recall letter will be mailed to the owner of any other vehicle, not subject to the First or Second Recall, identified in GM records as being repaired with the subject ignition switch or one of the five identified housing kits. Dealers will inspect the vehicle and, if the subject ignition switch is found, replace it with a new one. GM's review of data and information relating to the recalled vehicles continues.