

October 22, 2009

Mr. Daniel C. Smith  
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 Mr. Smith:

The following information is submitted pursuant to the requirements of 49 CFR 573.6 as it applies to a determination by General Motors of a safety defect involving certain 2006 model year Chevrolet Cobalt and Saturn Ion vehicles in Arizona and Nevada and 2007 model year Chevrolet Cobalt, Saturn Ion and Pontiac G5 vehicles in Arizona, Nevada, California, Florida and Texas.

573.6(c)(1): Chevrolet, Saturn and Pontiac Brands of General Motors LLC

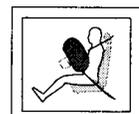
573.6(c)(2)(3)(4): This information is shown on the attached sheet.

573.6(c)(5): General Motors has decided that a defect, which relates to motor vehicle safety, exists in certain 2006 model year Chevrolet Cobalt and Saturn ION vehicles registered in Arizona and Nevada; and 2007 model year Chevrolet Cobalt, Pontiac G5 and Saturn ION vehicles registered in Arizona, California, Florida, Nevada and Texas. Some of these vehicles have a condition in which the plastic supply or return port on the modular reservoir assembly (MRA) may crack. If either of these ports develops a crack, fuel will leak from the area. The customer may notice a fuel odor while the vehicle is being driven or after it is parked. If the crack becomes large enough, fuel may be observed dripping onto the ground and vehicle performance may be affected.

573.6(c)(6): On September 5, 2008, this issue was assigned as a new internal investigation to determine the root cause for a population of vehicles with an increase of leaks at the MRA ports. Analysis of the warranty data revealed that the condition was more likely to occur in "hot" portions of the US and the number of claims in the summer months was significantly higher than the remainder of the year.

From September 2008 through October 2009, extensive work was done to help determine the root cause of the condition. This includes the following:

- Electron microscope analysis of cracked ports to understand location and initiation
- Review of port molding parameters and MRA assembly at the MRA supplier
- Review of MRA installation procedures at the fuel tank assembly supplier
- Review of fuel tank installation procedures at vehicle assembly



The root cause was narrowed to port loading due to swell and/or static line load in combination with temperature and material processing parameters.

Further analysis and testing has identified the failure mechanism of the cracks to be creep rupture of the material due to multiple inputs (Creep rupture is the rupture of a plastic under a continuously applied stress at a point below the normal tensile strength.):

- Material swell due to fuel exposure
- Loads imparted by thermal cycling of the tank/lines
- Loads due to initial line installation at MRA/tank assembly

The aspects of the port that combined to make the final part more susceptible to creep rupture as a failure mode include:

- Radius and wall thickness chosen
- Process parameters inconsistent with material supplier's recommended guidelines

Extensive evaluation of field parts has been conducted, and multiple series of tests have been performed in attempt to replicate a leak like those from warranty returns.

The issue was presented to the Field Performance Evaluation Review Committee and on October 15, 2009, the Executive Field Action Decision Committee decided to conduct a safety recall.

573.6(c)(8): Dealers/retailers are to replace the fuel pump module.

Pursuant to 577.11(e), 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 January 22, 2009.

573.6(c)(9): The dealer bulletin and owner letter along with mail dates will be provided when available.

A special coverage will be implemented in the same time frame for 2006 model year vehicles registered in: Alabama, Arkansas, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, North Carolina, New Mexico, Oklahoma, South Carolina, Tennessee and Texas and 2007 model year vehicles registered in: Alabama, Arkansas, Georgia, Hawaii, Louisiana, Mississippi, North Carolina, New Mexico, Oklahoma, South Carolina and Tennessee.

Sincerely,



Gay P. Kent,  
Director, Product Investigations  
and Safety Regulations

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</u>		<u>DESCRIPTIVE INFO. TO PROPERLY IDENT. VEH.</u>	<u>EST. NO. W/CONDITION</u>
				<u>(FROM)</u>	<u>(TO)</u>		
Chevrolet	A-Car	2006	6,720	04/2005	06/2006	Cobalt	*
Chevrolet	A-Car	2007	23,863	04/2006	03/2007	Cobalt	"
Saturn	A-Car	2006	3,169	04/2005	06/2006	Ion	"
Saturn	A-Car	2007	14,764	04/2006	03/2007	Ion	"
Pontiac	A-Car	2007	4,421	04/2006	03/2007	G5	"
GM Total:			52,937				

\* All involved vehicles will be corrected as necessary.

573.6(c)(2)(iv): The component part that will be replaced to remedy the defect is the fuel pump module supplied by Robert Bosch LLC.

Robert Bosch LLC  
 38000 Hills Tech Drive  
 Farmington Hills, MI 48331  
 248-876-1000

The fuel pump module was assembled in Toluca, Mexico.