



October 27, 2004

Mr. Kenneth N. Weinstein  
Associate Administrator for Safety Assurance  
National Highway Traffic Safety Administration  
400 Seventh Street, S.W., Room 5321  
Washington, D.C. 20560

04V-525  
(3 pages)

Dear Mr. Weinstein:

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 2004-2005 Cadillac XLR and 2005 Chevrolet Corvette model vehicles.

573.6(c)(1): Cadillac and Chevrolet Divisions of General Motors Corporation

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

573.6(g)(5): General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2004-2005 Cadillac XLR and 2005 Chevrolet Corvette model vehicles. Some of these vehicles were produced with one or both rear brake hydraulic lines that can come in contact with or be affected by heat from the left engine exhaust manifold and the left exhaust pipe. Also, on some 2005 model year Cadillac XLR and Chevrolet Corvette vehicles, the crossover brake line to the right rear brake can come in contact with the rear differential case.

If a rear brake line is affected by heat from the exhaust manifold or exhaust pipe, under some conditions the brake fluid could reach elevated temperatures and boil. If the brake fluid boils in a rear brake line, the effectiveness of the rear brake system would be reduced. Brake line contact could result in a brake line leak and loss of brake fluid. If enough fluid leaks from the rear brake system so that brake pedal application can no longer build pressure to the rear brakes, braking will be limited to the front brakes and the operator would experience extended pedal travel. If the driver does not depress the pedal further to compensate, stopping distance will be increased.

573.6(c)(5): On August 12, 2004 a Product Investigations Investigator was assigned to investigate reports of brake line leaks in 2004 Cadillac XLR model vehicles. Inspection of a random sample of Cadillac XLR and Corvette vehicles revealed that the brake line clip near the left exhaust manifold was out of position or unseated on 50% of the inspected vehicles. Based on the results of a GM Service Operations inspection of 109 XLR vehicles, 93% of XLR vehicles are projected to have at least one rear brake line either contacting the rear exhaust or with less than the design specification of 40 mm clearance to the rear exhaust. In a random sample of 2004 Cadillac XLR and 2005 Chevrolet Corvette vehicles, most of the vehicles inspected had wear or witness marks on the right rear brake line indicating contact with the differential housing.

GM is aware of six Cadillac XLR vehicles that had brake line contact and wear-through at the left rear exhaust pipe. There was one report of a 2005 Corvette in the GM Captured Test Fleet with brake line contact and wear-through at the left engine exhaust manifold.

On September 2, 2004, GM Product Investigations presented the issue to the FPE Director. The issue was presented to the GMNA Senior Management Committee (SMC) on September 17, 2004. The SMC requested additional information, which led to more investigation at the assembly plant. On October 20, 2004, the Field Action Decision Committee decided to conduct a safety recall.

573.8(c)(8): Dealers are to: 1.) Left Engine Exhaust Manifold - Inspect the clip for proper alignment and placement on the body-mounted stud. If incorrect, reposition the clip on the brake lines and reinstall the clip on the stud; 2.) Left Exhaust Pipe - Verify that both rear brake lines have 40 mm of clearance to the exhaust pipe. Reposition lines by bending as necessary; 3.) Rear Differential Housing - Remove the machining tab from the rear differential housing. Also, dealers are to inspect brake lines for wear in these related areas and repair or replace if there is any sign of wear-through on the nylon overcoating.

Pursuant to 577.11(e), GM does not believe notification about reimbursement is required for this recall. The involved vehicles are covered by the new vehicle warranty.

573.8(c)(9): GM will provide a copy of the dealer bulletin and owner letter along with dealer notification and owner letter mailing dates when available.

Sincerely,  
  
Gay P. Kent  
Director  
Product Investigations

2168 - 04088  
Attachments

673.9(c)(2),(3),(4)

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

<b>MAKE</b>	<b>MODEL SERIES</b>	<b>MODEL YEAR</b>	<b>NUMBER INVOLVED</b>	<b>INCLUSIVE MANUFACTURING DATES</b> <b>(FROM) (TO)</b>		<b>DESCRIPTIVE INFO. TO PROPERLY IDENT. VEH.</b>	<b>EST. NO. W/CONDITION</b>
Cadillac	XLR	2004	3,661	01/2003	06/2004	XLR	*Unknown
Cadillac	XLR	2005	499	04/2004	08/2004	XLR	"
Chevrolet	Y Car	2005	865	04/2004	08/2004	Corvette	"
		<b>GM Total:</b>	<b>6,225</b>				

\* All affected vehicles will be contacted.

2166/04056