GM GENERAL MOTORS NORTH AMERICA
Structure & Safety Integration

05V-005
(3 pages)

January 6, 2005

Mr. Ronald Medford
Senior Associate Administrator, Vehicle Safety
National Highway Traffic Safety Administration
400 Seventh Street, S.W., Room 5321
Washington, D.C. 20590

Dear Mr. Medford:

This letter provides information relative to a field action program that General Motors has decided to conduct on certain 2000 model year series 2500 and 3500 Chevrolet CK Pickup, Silverado, Suburban, and Express vehicles; and GMC Sierra, Yukon XL, and Savana vehicles, manufactured from May 1, 1999 through October 14, 1999.

The involved vehicle population information is shown on the attached sheet.

Some of these vehicles have a hydraulic pump driveshaft that can fracture, resulting in immediate loss of hydraulic power steering assist. On vehicles equipped with Hydro-Boost® power brakes, the same condition can result in loss of power assist for braking after the reserve pressure is depleted. An inoperative pump on a vehicle with vacuum-assisted power brakes increases steering effort without affecting braking effort.

An inoperative pump can cause increased steering and braking effort, but does not eliminate the ability to steer or slow the vehicle. GM believes the operator can continue to control the vehicle if loss of power assist occurs. The subject vehicles comply with the stopping requirements with no power assist as specified in MVSS 105.

If the hydraulic pump becomes inoperative, the steering system reverts to manual mode. Accordingly, increased steering effort will be less obvious to the driver at higher vehicle speeds when small steering adjustments are required, but will become more pronounced as the vehicle's speed decreases and steering movements increase. The highest expected steering effort inputs by the driver would be required for low-speed parking lot or tight turning maneuvers.

In September 1999, the GM dealer network initially identified broken pump driveshafts as a potential concern on 2000 model year vehicles. In October, cumulative warranty exposure data showed that warranty claims for hydraulic pump replacement had peaked that July. Further investigation revealed that the supplier of the subject hydraulic pumps, Delphi-Saginaw Plant 3, had begun an internal operation in May to salvage 45,000 rejected pump rotors by manually regrinding them from oversize dimensions to a thickness within acceptable tolerances. This finish-grinding process required gauging which was operator experience-dependent. Process control sensitivity was compounded by the variation in the "rejected" incoming rotors.

On October 1, 1999, Delphi-Saginaw Plant 3 completely stopped all rotor salvage regrinding. Accordingly, all suspect pumps are believed to have been installed on vehicles produced prior to October 15, 1999.

In May 2000, GM Quality Engineering first documented loss of power assist for steering and braking systems on 2000 model year G vans with Problem Resolution Tracking System (PRTS). This was done to formally capture the July 1999 elevated warranty rate and Delphi's subsequent corrective actions.

In late October and early November 2001, GM Engineering formally documented broken hydraulic pump driveshafts in PRTS documents. Analysis results captured in these documents indicates that over two thirds of the claims occurred at less than 10,000 miles.

Product Investigations
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PRODUCT INVESTIGATIONS

In January 2004, NHTSA issued Preliminary Evaluation Information Request (IR) PE 04-004 regarding hydraulic pump driveshaft failures on 2000-2002 model year 2500-3500 series trucks and vans, to which GM responded in late February.

In late May, NHTSA issued Engineering Analysis IR EA04-012 to Delphi regarding hydraulic pumps used on 2000-2004 model year 2500-3500 series trucks and vans with Hydro-Boost® brakes, to which Delphi responded in mid-June.

In early June, NHTSA issued GM Engineering Analysis IR EA04-012, covering the same years and models as the Delphi request. GM responded in late June.

On October 7, 2004, GM Product Investigations presented the issue to the FPE Director. A recommendation from the GMNA Senior Management Committee (SMC) was received and on January 4, 2005, the Field Action Decision Committee decided to conduct a field action program.

Dealers are to replace the hydraulic pumps on affected vehicles at no cost to the owners.

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 15, 2003.

GM will provide final copies of the dealer bulletin and owner letter when available. GM plans to notify dealers and owner in February 2005 when parts become available.

GM will also provide NHTSA with quarterly completion rates for six quarterly reports.

Sincerely,

Gay P. Kent
Director
Product Investigations

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Attachments

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	C/K Truck	2000	50,340	05/1999	10/1999	CK Pickup/Silverado	*Unknown
Chevrolet	C/K Truck	2000	41	05/1999	10/1999	Suburban	"
Chevrolet	G Van	2000	22,823	05/1999	10/1999	Express	"
GMC	C/K Truck	2000	17,704	05/1999	10/1999	Sierra	"
GMC	C/K Truck	2000	29	05/1999	10/1999	Yukon XL	"
GMC	G Van	2000	7,284	05/1999	10/1999	Savana	"
		GM Total:	98,221				

* All affected vehicles will be corrected.

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