U.S. Department of Transportation
National Highway Traffic Safety Administration

ODI RESUME

Investigation: PE08-002
Date Opened: 1/10/2008 Date Closed: 4/28/2008
Principal Investigator: Chris Lash
Subject: Brake line rupture

Manufacturer: Mercedes-Benz USA, LLC
Products: 2002 Mercedes ML 500/ML55 AMG with V-8 Engine
Population: 19,227

Problem Description: The brake line from the master cylinder to the ABS pump may be damaged and rupture from chaffing with a fuel line.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	7	7
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	66	66

*Description of Other: Mercedes warranty claims for ML500/AMG55

Action: this PE has been upgraded to an Engineering Analysis (EA08-009).

Engineer: *Chris Lash* Date: *04/28/2008*
Div. Chief: *Jeffrey L. Quandt* Date: *04/28/2008*
Office Dir.: *Kathleen C. DeMeter* Date: *04/28/2008*

Summary: Mercedes-Benz's response to ODI's information request letter for PE08-002 indicated that the subject fuel/brake line bundle (part no. A1634201526) was used without significant change from model year 1998 through 2002 on all M-class light truck vehicles. Mercedes further indicated that in 2002 a problem was identified in production that could cause unwanted contact between the fuel and brake lines. In May 2002, a production action was authorized as a result of post-production inspections of vehicles exhibiting contact between the fuel and brake lines. The action authorized the use of additional plastic spacer clips to eliminate such contact. Mercedes has indicated that contact between the lines is more likely in vehicles equipped with V-8 engines due to less free space in the engine compartment.

ODI has received one complaint from the owner of a MY2001 ML430 that was involved in a crash because of sudden lose of brake effectiveness. Inspection of the vehicle after the crash showed that the loss of braking was the direct result of chaffing of the fuel line on the brake line that caused the sudden lose of brake line pressure when coming to a normal traffic stop.

This investigation has been upgraded to an engineering analysis (EA08-009) to further assess the scope, frequency and potential safety consequences associated with the rupture of the fuel line/brake line because of chaffing in all Mercedes M-class vehicles equipped with V-8 engines.