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

ODI RESUME

Investigation: PE07-015
Date Opened: 03/13/2007 Date Closed: 07/13/2007
Principal Investigator: Stephen McHenry
Subject: Failure of Engine/Transmission of Mount

Manufacturer: Mazda Motor Corp.
Products: MY 2007 MazdaSpeed3
Population: 5,700

Problem Description: The engine or transmission mount may break or become unbolted, allowing the engine to fall while the vehicle is in motion.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	11	21	31
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	25	25

*Description of Other: Warranty Claims

Action: This Preliminary Evaluation is closed. Recall 07V-295.

Engineer: *Steve McHenry* SMH 07/16/07 Date: *07/13/2007*
Div. Chief: *Jeffrey L. Quandt* Date: *07/13/2007*
Office Dir.: *Kathleen C. DeMeter* Date: *07/13/2007*

Summary: On July 2, 2007, Mazda North American Operations submitted a Defect Information report to NHTSA regarding the left hand side (LHS) engine mount bolts in approximately 5,700 Model Year (MY) 2007 Mazdaspeed3 vehicles built from June 26, 2006, through May 19, 2007 (Mazda Recall 4607F, NHTSA Recall 07V-295). According to Mazda, the LHS engine mount could loosen under repeated loads produced during rapid accelerations. Loose bolts could pull out or break, allowing the engine and transmission to drop on the left side. When the engine drops, the Driveshaft may become detached and disable the vehicle. Mazda will replace the LHS engine mount bolts in the recalled vehicles. In addition, the LHS engine mount rubber and bracket will be inspected and replaced if necessary. Mazda stated in its letter that it "Continues to believe that there is no unreasonable risk of accident or injury associated with the condition," citing the lack of accidents and contending that most of the reported incidents were identified by operators before there was any effect on vehicle operation.

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ODI disagrees with Mazda. Although only about half the subject vehicles had entered service by the cutoff date of the failure data submitted by Mazda, ODI's analysis of consumer complaint and warranty claim data identified a total of 36 subject vehicles with repairs for loose or broken LHS mounting bolts. ODI verified 17 incidents of bolt fracture resulting in the engine dropping in these vehicles, including at least 10 that resulted in vehicle disablement. All of the bolt fractures occurred in the first 7 months of vehicle service, with 8 failing within 4 months. These failures result in a relatively high failure rate when compared with other ODI investigations involving defect conditions with similar safety consequences that resulted in safety recalls, particularly when considering the very short service life of the subject vehicle population.

ODI interviewed owners to further assess the safety consequences of the LHS bolt defect. More than two-thirds of those interviewed who experienced an engine fall incident indicated the event disabled the vehicle, some being stranded in the flow of traffic. At least three-quarters of these incidents occurred when the driver was attempting to increase speed, resulting in a sudden change in acceleration. Each of these drivers expressed some concerns about the potential safety hazards associated with the event, including the possibility of being struck by trailing or crossing traffic. In one incident the vehicle veered to the left across oncoming traffic lanes after the LHS mount bolt broke, stopping in the roadway after striking a curb.

Based on this information, ODI strongly disagrees with Mazda's characterization of the safety risk associated with the defect in the LHS engine mount bolts. This investigation has been closed based on Mazda's recall. ODI will monitor the effectiveness of Mazda's Campaign Remedy and take further action if warranted.