ODI RESUME

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

Investigation: EA 03-011
Prompted By: RQ03-005, RECALL 98V-183
Date Opened: 07/17/2003 Date Closed: 1/30/2004
Principal Investigator: Scott Yon
Subject: Automatic transmission ignition-park interlock

Manufacturer: DaimlerChrysler Corporation
Products: 1993-1999 JA, JX, and LH with console shift automatic transmission
Population: 2,315,768

Problem Description: The ignition-park interlock system fails allowing the ignition key to be removed when the shifter is in a non-park position, or allowing the shifter to be moved from park when the key is not present.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	47	592	639
Crashes/Fires:	20	115	115
Injury Incidents:	5	14	14
# Injuries:	5	14	14
Fatality Incidents:	0	1	1
# Fatalities:	0	1	1

Action: This engineering analysis is closed. Safety recall 04V-021.

Engineer: *D. Scott Yon* 1/30/04 Date: *01/30/2004*
Div. Chief: *Jeffrey L. Quandt* Date: *01/30/2004*
Office Dir.: *Kathleen C. DeMeter* Date: *01/30/2004*

Summary: The manufacturer reports above are based on DaimlerChrysler's (DC) analysis of model year (MY) 1998 (population = 356,384) and 1999 (population = 486,948) JA, JX and LH family subject vehicle data (earlier MYs excluded). The population number includes all MYs. The precise number of duplicates between ODI and DC reports cannot be determined due to missing or incomplete information. The fatality incident involved an elderly person who attempted to stop a roll away vehicle and received fatal injuries.

ODI also gathered information on MY 1997-1999 Prowler vehicles in this investigation. The Prowler vehicles were manufactured with a different design shifter mechanism (the shift lever is shorter). There are no complaints of PR interlock failure in ODI's database, and DC has received no reports either. The PR model is excluded from the recall scope.

The investigation involved a condition where the interlock system could fail (or be made inoperative by the operator) during vehicle use, possibly inadvertently. The interlock system is required under FMVSS 114. With the transmission in the Park position and the ignition key off, the combined action of pressing the shift button and pulling the shift lever rearward may result in the operator overcoming the interlock system and cause the mechanical linkage of the system to disconnect. When this occurs, there is no overt indication to an operator that the system is defeated, and an increased risk of vehicle roll-away exists. Under recall 04V-021, DC will replace damaged shift mechanisms, and will install on all vehicles a device which inhibits the operator's ability to overcome the interlock and defeat the system.

Beginning with MY 2000, DC incorporated a brake and transmission shifter interlock (BTSI) system into the subject vehicles. Introduction of BTSI involved design changes to the shift mechanism, one of which resulted in reduced mechanical advantage (RMA) of the shift button. The RMA shifter requires increased forces to overcome the interlock system, making the shifter less susceptible to damage.

VTC 2-2-04