



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

ODI RESUME

Investigation: EA 03-021
Prompted By: PE03-031/Magno
Date Opened: 11/04/2003
Principal Investigator: Greg Magno
Subject: Front Suspension Coil Spring Fracture

Manufacturer: General Motors Corp.
Products: 1999 Chevrolet Malibu And Pontiac Grand Am
Population: 307,804

Problem Description: A front suspension coil spring may fracture, possibly puncturing the adjacent tire.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	12	16	26
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	243	243

*Description Of Other: warranty claims from the salt belt states

Action: An Engineering Analysis has been opened.

Engineer: Gregory E. Magno SM 11/4/03

Date: 11/04/2003

Div. Chief: Jeffrey L. Quandt

Date: 11/04/2003

Office Dir.: Kathleen C. DeMeter

Date: 11/04/2003

Summary: The subject vehicles are equipped with a coil spring-over-strut front suspension with the spring itself resting in compression between two polymer isolators. PE03-031 was opened to investigate reports of fracture of this spring. The fractures occur in the first active coil above the lower isolator and apparently originate in corrosion pits found beneath regions of damaged epoxy coating. Consumer complaints and warranty data show that the failures occur predominantly in the "corrosion" states and tend to appear outside of the standard 36,000-mile warranty term. These data also suggest that these failures will continue to happen. Slightly more than one third of the consumer complaints have involved the broken spring coil contacting the adjacent tire. ODI has upgraded PE03-031 to an engineering analysis to gather further information concerning the scope and consequences of these failures.

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*Shared 11/11/03
GM*