



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

ODI RESUME

Investigation: EA 04-008
 Prompted By: PE03-059
 Date Opened: 03/19/2004 Date Closed: 10/27/2004
 Principal Investigator: Peter Kivett
 Subject: Engine Stall

Manufacturer: Saab Cars USA, INC.
 Products: 2003 Saab 9-3 with automatic transmission
 Population: 12249

Problem Description: The engine may stall during certain driving maneuvers.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	20	505	525
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	1153	1153

*Description of Other: Warranty claims indicating stalling

Action: This engineering analysis has been closed.

Engineer: Peter Kivett
 Div. Chief: Jeffrey L. Quandt
 Office Dir.: Kathleen C. DeMeter

Date: 10/27/2004
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Summary: Refer to page 2.

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 FAXED 10/28 @ 12:30

SUMMARY REPORT

On December 30, 2003, ODI opened a Preliminary Evaluation (PE03-059) to investigate 16 complaints alleging engine stall while driving in model year 2003 Saab 9-3 Sport Sedans with 2.0L turbocharged engines. On January 15, 2004, General Motors (GM) advised ODI that GM and Saab had decided to conduct a global Customer Satisfaction Campaign to correct two distinct engine management software conditions that could result in engine stall in approximately 12 thousand Saab 9-3 vehicles equipped with automatic transmissions. The remedies for both conditions involved reprogramming the engine management software.

The first condition affected approximately 7 thousand vehicles equipped with 175-hp engines and built from September 10, 2002 through January 15, 2003. According to GM, Dual Mass Flywheel (DMF) protection was intended only for manual transmission vehicles. In automatic transmission vehicles, DMF protection may result in engine stall when the driver quickly and completely releases the accelerator pedal or during hard brake applications. GM reports that 82.8 percent of the affected vehicles have had the campaign procedure completed through the end of September 2004.

The other condition affected approximately 5 thousand vehicles equipped with 210-hp engines and built from January 21, 2003 through August 11, 2003. According to GM, the engine management software in these vehicles had a mismatch between the three engine RPM controlling functions. This condition could result in engine speed oscillations and stall if the accelerator pedal is depressed and quickly released when the vehicle is stationary, in drive, with the engine idling (GM refers to these as "aborted take-off" stalls). This condition is more likely to occur following a cold start, before engine warm-up is complete. GM reports a campaign completion rate of 84.1 percent through the end of September 2004 for these vehicles.

GM has stated that neither condition can occur during vehicle acceleration and in both cases the vehicle can be safely controlled and immediately restarted after engine stall. For these reasons, among others, GM believes that the subject vehicles do not contain a safety-related defect.

To date, ODI has not received any reports of crashes allegedly due to stalling of the subject vehicles. Nevertheless, ODI believes that the circumstances associated with these stalling conditions can have a significant adverse effect on safety.

During the course of this investigation, ODI met with GM representatives on several occasions to discuss issues related to the safety consequences of stalling in the subject vehicles, as well as other conditions that can cause engine stalling. At those meetings, GM identified the principles it uses and the factors that it considers in deciding whether a particular stalling condition constitutes a safety-related defect. In a letter to ODI, GM noted that it had recently applied those principles and factors in making a safety defect determination with respect to stalling in certain GM sport utility vehicles, which are currently being recalled. In that letter, GM also stated that it anticipated that, in the future, it will apply these principles in a manner consistent with that determination and with NHTSA's current approach to stalling issues.

ODI believes that the conditions addressed by GM's customer satisfaction campaign would have been more appropriately treated as a safety recall. However, based on the very high completion rates for that campaign and GM's letter describing its future approach to the consideration of stalling issues, ODI has decided that further expenditure of agency resources on this investigation is not warranted. Therefore, this investigation is closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist. The agency will take further action if warranted by the circumstances.