



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

ODI RESUME

Investigation: PE09-032
Date Opened: 07/15/2009 Date Closed: 12/16/2009
Principal Investigator: Kyle Bowker
Subject: Engine Compartment Fire

Manufacturer: General Motors Corp., Saab Cars USA, Inc.
Products: 2007 Saab 9-3 Aero equipped with 2.8L V6 Turbo engine
Population: 4,029

Problem Description: Alleged engine compartment fire originating at or near the ignition coil.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	7	7
Crashes/Fires:	0	7	7
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	28	28

*Description Of Other: Alleged non-fire thermal events resulting in damage to ignition coil.

Action: This Preliminary Evaluation has been closed.

Engineer: Kyle M. Bowker KMB
Div. Chief: Jeffrey L. Quandt
Office Dir.: Kathleen C. DeMeter

Date: 12/16/2009
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Summary: The Office of Defects Investigation (ODI) is aware of 7 subject vehicles that have allegedly experienced engine compartment fires originating at the coil-on-plug (COP) ignition coil assembly and 28 alleged non-fire thermal events resulting in damage limited to the subject component and associated wiring. All reported incidents occurred while the vehicles were attended and in all but one case the subject vehicles were repaired and returned to service after the incident involving the alleged defect.

According to General Motors (GM), a ceramic capacitor used in the electromagnetic noise filter circuit inside the subject component may have been damaged during the manufacturing process. A fracture inside the capacitor may, depending on its size and location, result in a resistive short circuit. When energized, the resistive short circuit may cause heat that can melt the potting epoxy around the circuit board and lead to smoke, odor and in some instances fire. Other symptoms may include a misfire condition resulting in rough running and/or illumination of the "service engine soon" telltale light.

All 7 fires occurred relatively early in the service life of the vehicle at 120, 171, 198, 207, 297, 365 and 394 days in service, respectively. ODI analysis indicates that approximately 98% of the subject vehicle population is now beyond the exposure age at which fire incidents were observed. The last known fire incident occurred in May 2009 on a vehicle that had 394 days in service and the last known fire incident previous to that occurred in December 2008 on a vehicle that had 198 days in service.

A safety-related defect has not been identified at this time and further use of agency resources does not appear to be warranted. Accordingly, 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 continue to monitor the field experience of the subject vehicles as it relates to the alleged defect and will take further action if warranted by the circumstances. Additionally, the manufacturer will provide the agency with an update of complaint and warranty information in 6 months from the closing date of this investigation and until that time it will notify the agency within 5 business days of any fire incidents it becomes aware of that relates, or may relate, to the alleged defect in the subject vehicles.