



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

ODI RESUME

Investigation: PE 04-061
Date Opened: 08/17/2004 Date Closed: 12/22/2004
Principal Investigator: Michael Lee
Subject: Front Turn Signal/DRL Failure

Manufacturer: General Motors Corp.
Products: 2003-2004 Saturn Ion
Population: 217,461

Problem Description: Front turn signal/daytime running lamp (DRL) may become inoperative due to bulb and/or socket failure.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	19	774	793
Crashes/Fires:	0	1	1
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	96,567	96,567

*Description of Other: Warranty Claims

Action: GM is recalling Saturn Ion sedans (Recall # 04V-547). GM is not recalling the Saturn Ion coupes. This Preliminary Evaluation has been upgraded to an Engineering Analysis for the coupes (EA04-035).

Engineer: Michael Lee MJL
Div. Chief: Thomas Z. Cooper
Office Dir.: Kathleen C. DeMeter

Date: 12/22/2004
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Summary: On November 16, 2004, GM notified NHTSA that it will conduct a safety recall of 178,798 model year (MY) 2003 and 2004 Saturn Ion sedan vehicles for inoperative front turn signal/DRL bulbs. GM stated that temperatures in the lamp assembly exceed the material specification for the bulb sockets and bulb base sleeves, which cause deformation. The deformed sockets can cause loss of bulb and socket contact. The deformed sleeves can cause stress cracks to form on the bulb that can lead to premature bulb failure. The recall remedy is to replace the front turn signal/DRL bulbs and inspect for voltage-reducing jumper (which reduces temperature in lamp assembly) and add if not present. See NHTSA recall no. 04V-547 for details.

The bulbs for the turn signal/DRL in the Saturn Ion sedan and Ion coupe are identical in design and made by the same supplier. But the turn signal/DRL sockets, wiring and housing are different in design for the sedan and coupe, and were made by different suppliers. GM's data shows a lower operating temperature for the coupe's lamp assembly that does not exceed the material specification for the bulb socket and the bulb base sleeve. Complaint and warranty rate is also lower for the coupe. However, GM's warranty data shows a continuing trend for the coupe.

This Preliminary Evaluation has been upgraded to an Engineering Analysis (EA04-035) for further investigation of the MY 2003 and 2004 Saturn Ion coupe vehicles.

MJL