



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

## ODI RESUME

Investigation: EA 07-006  
Prompted By: RQ06-009  
Date Opened: 04/18/2007  
Principal Investigator: Peter Ong  
Subject: Fuel Tank Leakage

Manufacturer: General Motors Corp.  
Products: 2001-2004 Pontiac Aztek/Buick Rendezvous Vehicles  
Population: 279,780 (Estimated)

Problem Description: Fuel odor and/or fuel leakage at the inlet pipe portion of the fuel tank.

### FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	32	181	213
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	2470	2470

\*Description Of Other: Warranty claims for fuel tank replacement

Action: Open this Engineering Analysis

Engineer: Peter C. Ong

Date: 04/18/2007

Div. Chief: Thomas Z. Cooper

Date: 04/18/2007

Office Dir.: Kathleen C. DeMeter

Date: 04/18/2007

Summary: Certain subject vehicles may exhibit leakage of odor and/or fuel from the lower portion of the fuel tank inlet filler pipe (Inlet Check Valve). The Inlet Check Valve (ICV) and the fuel tank are joined together using a hot plate welding process for plastic parts. GM reports that its analysis of field returned parts show evidence of process variations for different manufacturing periods. These variations produced some ICV to fuel tank joints with "poor melt flow lines."

GM modified the ICV in December 2003, and vehicles built after that change do not exhibit the fuel leak problem at the fuel tank inlet filler pipe. The scope of vehicles for this investigation is vehicles built prior to the ICV modification.

ODI's analysis of GM's warranty claim data finds more frequent fuel tank replacements in the hotter climate states.

This Engineering Analysis is being opened to further assess this matter.