



# ODI RESUME

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

Investigation: EA 02-015  
 Prompted By: PE02-021  
 Date Opened: 08/01/2002      Date Closed: 01/12/2004  
 Principal Investigator: Scott Yon  
 Subject: Throttle sticking closed

Manufacturer: General Motors Corp.  
 Products: MY 1999-2002 Silverado/Sierra/Tahoe/Suburban/Avalanche/Yukon  
 Population: 3,401,467

**Problem Description:** The throttle valve sticks in the closed position resulting in alleged excessive accelerator pedal opening effort, throttle overshoot and unexpected vehicle movement.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	159	1,230	1,309
Crashes/Fires:	3	56	59
Injury Incidents:	0	4	4
# Injuries:	0	4	4
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	291,746	291,746

\*Description of Other: Throttle body related warranty claims

Action: This engineering analysis has been closed.

Engineer: D. Scott Yon *DSY 1/13/04*

Date: 01/12/2004

Div. Chief: Jeffrey L. Quandt

Date: 01/12/2004

Office Dir.: Kathleen C. DeMeter

Date: 01/12/2004

**Summary:** This investigation involves the General Motors Corporation (GM) throttle body (TB) utilized in model year (MY) 1999-2002 Silverado, Sierra, Tahoe, Suburban, Avalanche and Yukon (subject vehicle(s)) with 4.8L, 5.3L, and 6.0L engines. The TB valve may intermittently stick in a closed position. In such a situation, an operator may apply additional accelerator pedal force to increase engine speed. The application of additional accelerator pedal force, to open a stuck throttle valve, may open the throttle valve more than intended and, in turn, accelerate the engine and vehicle more than intended and reasonably expected by the driver. On August 1, 2002, the Office of Defects investigation (ODI), of the National Highway Traffic Safety Administration (NHTSA), opened this engineering analysis. The investigation revealed that two factors may cause the defect: 1) TB manufacturing process problems; and 2) accumulation of deposits (a PCV system by-product) on or around the TB throttle valve and bore.

ODI concludes that the TB performs in a defective manner after analyzing GM's data submissions, and test data collected by the Vehicle Research and Test Center (VRTC). Fifty-nine crashes are alleged to have occurred as a result of GM's TB defect. The majority of the crashes involve a single vehicle, engaging in a close quarter vehicle maneuver (or low speed), and causing only minor property damage. Four out of the fifty-nine crashes involve injury, and those injuries were minor.

Although GM's TB is defective, based on the evidence gathered, ODI has not found that the defect poses an unreasonable risk to safety. The accelerator pedal force required to open a stuck throttle valve is negligible, and the throttle valve does not stick in the open position. Therefore this engineering analysis (EA02-015) will be closed at this time. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist.

For a detailed discussion of the TB component and testing, please see the attached report.

*V102  
1/15/04*