

U.S. Department of Transportation

National Highway Traffic Safety Administration

ODI RESUME

Scott Yon

Investigation: PE 13-021

Date Opened: 06/14/2013

Investigator: Michael Lee

nvestigator: Michael Lee Reviewer:

Approver: Frank Borris

Subject: Occupant Classification System Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Suzuki Motor of America, Inc.

Products: 2006-2011 Suzuki Grand Vitara and 2007-2011 Suzuki SX4

Population: 205,000 (Estimated)

Problem Description: Complaints allege problems with the occupant classification system intended to identify

the type/size of the occupant in the front passenger seat and suppress (turn off) the

passenger frontal air bag in the event of a seated child or small stature adult.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	128	TBD	TBD
Crashes/Fires:	0	TBD	TBD
Injury Incidents:	0	TBD	TBD
Number of Injuries:	0	TBD	TBD
Fatality Incidents:	0	TBD	TBD
Number of Fatalities:	0	TBD	TBD

ACTION / SUMMARY INFORMATION

Action: Open a Preliminary Evaluation.

Summary:

ODI has received 128 complaints that allege problems with the occupant classification system (OCS) for the front passenger seat in model year (MY) 2006-2011 Suzuki Grand Vitara and MY 2007-2011 Suzuki SX4 vehicles. About half of the complaints appear to report air bag warning light illumination. Other complaints report passenger seat belt indicator light or passenger air bag off light illumination typically associated with OCS related problems. Other complaints report vehicles experiencing OCS related problems and/or that the passenger air bag off light illuminated when adult or young adult passengers were sitting in the front seats (i.e., they should not have been classified as children.)

In addition, Suzuki issued two service bulletins to address OCS related issues. The first bulletin addresses an open-circuit condition in the OCS sensor-mat located in the front passenger seat bottom cushion assembly in the vehicles described above. When this failure occurs, the air bag warning light and passenger seat belt indicator light illuminate and a diagnostic trouble code (DTC) B1312 is stored in the air bag control module. In September 2012, Suzuki notified the affected owners by mail and issued a special coverage for this problem for 10 years or 120,000 miles from the date of first use of the vehicle to replace the front passenger seat cushion assembly if needed. As explained in the owner letter, Suzuki says the passenger frontal air bag will remain active for all type/size occupants. This means the air bag will not be suppressed for a child or small adult sitting in the front passenger seat.

The second bulletin addresses air bag warning light illumination when DTC B1318 is set on MY 2009 Grand Vitara and SX4 vehicles. This problem is apparently caused by a programming error related to detecting a change or shifting in load on the front passenger seat. The remedy is to re-flash the occupant control module software.

Investigation: PE 13-021 Open Resume Page 1 of 2

A Preliminary Evaluation has been opened to investigate the OCS sensor-mat open-circuit problem (DTC 1312), as well as the other issues described above.

The ODI reports cited above can be reviewed online at http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID under the following identification numbers: 10178750, 10185778, 10200217, 10200123, 10206368, 10217021, 10250561, 10254251, 10263756, 10283309, 10285166, 10294320, 10316125, 10323718, 10324530, 10326910, 10332645, 10347204, 10348957, 10349038, 10350237, 10353604, 10354901, 10355400, 10364190, 10367631, 10369777, 10371056, 10373558, 10375165, 10375789, 10376071, 10376621, 10378154, 10380794, 10382860, 10392447, 10392434, 10392599, 10393975, 10395430, 10395602, 10395821, 10395983, 10398172, 10400092, 10400035, 10401106, 10401424, 10404772, 10405359, 10406459, 10407500, 10409412, 10409993, 10413235, 10418162, 10419237, 10419578, 10425035, 10425212, 10426703, 10434905, 10435090, 10435091, 10437600, 10437892, 10437994, 10438100, 10438501, 10438613, 10439357, 10439979, 10440088, 10442968, 10442759, 10442883, 10443173, 10443592, 10443594, 10444434, 10445034, 10445447, 10446215, 10446580, 10447689, 10448161, 10448446, 10448499, 10448554, 10449238, 10450746, 10451260, 10452961, 10453168, 10453403, 10453376, 10454445, 10454978, 10455231, 10455529, 10456043, 10456367, 10456407, 10459063, 10460417, 10460510, 10462016, 10463337, 10464941, 10464693, 10467988, 10468641, 10479583, 10479929, 10481120, 10484053, 10484863, 10486369, 10486729, 10487379, 10491755, 10499622, 10506034, 10508282, 10511057, 10511439, 10512962.

Investigation: PE 13-021 Open Resume Page 2 of 2