



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** EA 13-002  
**Prompted by:** DP12-002/PE12-028  
**Date Opened:** 02/21/2013  
**Investigator:** Steve Mchenry  
**Approver:** Frank Borris  
**Subject:** Vehicle Stability Assist Malfunction

**Date Closed:** 03/29/2013  
**Reviewer:** Jeff Quandt

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Honda (American Honda Motor Co.)  
**Products:** 2005 Honda Pilot  
**Population:** 87,803

**Problem Description:** Unexpected vehicle deceleration and/or steering pull resulting from inappropriate electronic brake application with no brake light illumination.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	49	86	106**
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	22	18	25**

\*Description of Other: Brake activations of short duration due to a yaw rate sensor malfunction.

\*\* Total eliminates duplicates received by ODI and manufacturer.

## ACTION / SUMMARY INFORMATION

**Action:** This Engineering Analysis is closed. Recall 13V-092.

### Summary:

On March 14, 2013, American Honda Motor Co., Inc. (Honda) submitted a Defect Information Report to NHTSA identifying a defect in the Vehicle Stability Assist (VSA) system in approximately 183,576 model year (MY) 2005 Honda Pilot, Acura RL and MY 2005-2006 Acura MDX vehicles (NHTSA Recall No 13V-092). The population and failure counts provided pertain only to the MY 2005 Honda Pilots that were the subject of this investigation.

Honda's recall addresses two conditions in the VSA system that could result in inappropriate brake activation. The first condition is related to a manufacturing concern with a capacitor in the VSA electronic control unit (ECU) circuit board. According to Honda, VSA systems with damaged capacitors may apply a small amount of braking force for a fraction of a second, when the brake pedal is not applied by the driver. If the driver does apply the brake pedal during a malfunction, the VSA system may employ the brake assist feature rapidly increasing braking force independent of the amount of pressure the driver applies to the brake pedal (releasing the brake pedal would end the brake assist activation in such events). The second condition applied to a portion of the MY 2005 Pilot vehicles manufactured at the Alabama assembly plant that may have been assembled without tightening one of the VSA system electrical ground connector fasteners to the proper torque. According to Honda, an improperly torqued fastener can result in increased electrical resistance in the VSA system, causing an incorrect signal to be sent to the VSA ECU, which may result in inappropriate braking while driving with no pedal application by the driver.

The owners of all affected vehicles will be contacted by mail and asked to take their vehicle to a Honda or Acura dealer who will install a partial wiring harness containing a capacitor for the VSA modulator and, if necessary, inspect and tighten the affected electrical ground fastener. All work will be performed at no charge to the owner.

ODI identified 106 incidents of inappropriate brake activation by the VSA system that appear to be related to the defect conditions addressed by Honda's recall. While many of the incidents reported experiencing significant unexpected braking while driving, none resulted in crashes or injuries. ODI reviewed a VOQ reporting a crash resulting in two fatalities that allegedly may have been related to the VSA conditions investigated in PE12-028 and EA13-002 (VOQ 10492170). After interviewing the complainant and reviewing evidence regarding the crash (e.g., police report and witness statements), ODI did not find sufficient evidence to determine that the crash was related to the VSA system.

Regarding the 25 incidents of brake activations of short duration due to a yaw rate sensor malfunction, complainants indicate that typically the events are very brief and that the pulsing effect is mild.

This investigation is closed.