



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** RQ 19-002  
**Date Opened:** 05/10/2019  
**Investigator:** Frederick Lamance      **Reviewer:** Jeff Quandt  
**Approver:** Stephen Ridella  
**Subject:** Loss of Brake Power Assist

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Mitsubishi Motors North America, Inc.  
**Products:** 2010-2017 Mitsubishi i-MiEV  
**Population:** 2,108 (Estimated)  
**Problem Description:** The electric vacuum pump may fail while driving, resulting in a loss of power assisted braking.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	3	TBD	TBD
<b>Crashes/Fires:</b>	0	TBD	TBD
<b>Injury Incidents:</b>	0	TBD	TBD
<b>Number of Injuries:</b>	0	TBD	TBD
<b>Fatality Incidents:</b>	0	TBD	TBD
<b>Number of Fatalities:</b>	0	TBD	TBD

## ACTION / SUMMARY INFORMATION

**Action:** A Recall Query has been opened.

**Summary:**

In 2013 and 2014, Mitsubishi conducted recalls 13V-031 (Mitsubishi SR-13-001) and 14V-522 (Mitsubishi SR-14-007) to address defect conditions that could result in an inoperable brake vacuum pump in certain model year (MY) 2012 (13V-031) or MY 2010 through 2014 (14V-522) Mitsubishi i-MiEV vehicles (subject recalls). Mitsubishi's recall submissions indicated that an inoperable brake vacuum pump may result in increased stopping distance which may increase the risk of a crash. The remedy for 13V-031 involved replacing the vacuum pump with a redesigned part. Depending on the affected vehicle, the remedy for 14V-522 involved reprogramming the EV-ECU, which controls the brake vacuum pump, replacing the brake vacuum pump with a redesigned part (if necessary), or both.

From March 2018 through March 2019, the Office of Defects Investigation (ODI) received three complaints alleging loss of brake power assist due to vacuum pump failure in MY 2012 Mitsubishi i-MiEV vehicles. All three vehicles had the vacuum pumps replaced with countermeasure pumps in early-2013 under recall 13V-031 and also were subsequently remedied under 14V-522. The reported vacuum pump failures occurred approximately 5 to 6 years after the pump replacement repairs. A Recall Query has been opened to assess the failure frequency of the countermeasure vacuum pumps used as remedy parts in the subject recalls and as original equipment parts in subsequent production of Mitsubishi i-MiEV vehicles.

The following VOQ numbers are associated with this opening resume: 11078966, 11171175, 11187483.