



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 21-005  
**Date Opened:** 02/25/2021  
**Investigator:** Matthew Martens                      **Reviewer:** Gregory Magno  
**Approver:** Stephen Ridella  
**Subject:** Fire Originating from 12V Battery Area

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Toyota Motor Corporation  
**Products:** MY 2013-2018 RAV4  
**Population:** 1,862,103 (Estimated)

**Problem Description:** The 12V battery B+ terminal shorts to the battery hold down frame which may result in the sudden loss of electrical power, vehicle stalling, and/or a fire originating in the engine compartment.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	11	TBD	11
<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
<b>Other*:</b>	0	Confidential	Confidential

\*Description of Other: EWR Field Report Data

## ACTION / SUMMARY INFORMATION

**Action:** A Preliminary Evaluation (PE) has been opened.

### Summary:

NHTSA's Office of Defects Investigation (ODI) has received eleven complaints and additional Early Warning Report (EWR) data alleging a non-crash thermal event originating in the left side of the engine compartment of the fourth generation (XA40 platform, Model Year 2013-2018) Toyota RAV4 vehicles.

A majority of thermal events occurred during driving conditions, with four taking place with the ignition off. Drivers experienced stalling prior to the thermal event in half of the instances where the vehicle was in motion. The twelve-volt battery was identified as the area of origin in a majority of the incidents reviewed.

Improper battery installation or prior front end collision repair was a factor in the EWR Field Reports. Despite these external influences on the battery retaining method, the overall number of vehicle fire allegations with the battery as the area of origin is larger than its peer population.

This Preliminary Evaluation has been opened to better understand the contributing factors and frequency of vehicle fires originating from the battery region of the subject vehicles relative to peer vehicles.

The ODI reports cited above can be reviewed at: <http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID> using the following complaint identification numbers: 11394683, 11378273, 11362502, 11348663, 11327143, 11317639,

11316999, 11315799, 11311546, 11271217, 11034782.