

U.S. Department of Transportation

National Highway Traffic Safety Administration

# **ODI RESUME**

Investigation: PE 13-031

Date Opened:09/06/2013Date Closed:11/15/2013Investigator:Kareem HabibReviewer:Jeff Quandt

**Approver:** Frank Borris

**Subject:** Electric powertrain propulsion failure

#### MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Ford Motor Company

**Products:** MY 2012-2014 Ford Focus Electric

Population: 2,456

**Problem Description:** Powertrain Control Module (PCM) software faults may result in vehicle stall.

## **FAILURE REPORT SUMMARY**

	ODI	Manufacturer	Total
Complaints:	31	158	171**
Crashes/Fires:	0	1	1
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	42	42

<sup>\*</sup>Description of Other: Warranty claims related to propulsion failure.

## **ACTION / SUMMARY INFORMATION**

Action: This Preliminary Evaluation is closed. Recall 13V-523.

#### **Summary:**

In an October 28, 2013 letter to NHTSA, Ford Motor Company (Ford) submitted a recall notice identifying a defect in the Powertrain Control Module (PCM) software in approximately 2,456 model year (MY) 2012 through 2014 Ford Focus Electric vehicles manufactured from September 15, 2011 through August 23, 2013 (Recall No. 13V-523). According to Ford, PCM software faults may cause a complete loss of powertrain torque. When this condition occurs, drivers receive a red triangle indicator and the message "Stop Safely Now" in the instrument cluster. In addition, vehicle brake and steering systems will continue to operate normally and the vehicle can be restarted after going through a shutdown process. Ford and its supplier, Magna Powertrain, upgraded the PCM software to address powertrain shutdown conditions and issued a technical service bulletin on September 23, 2013 instructing dealers to reprogram the PCM on all affected vehicles.

The Office of Defects Investigation (ODI) analyzed complaint data provided by Ford as well as complaints submitted to ODI from consumers. In total, there were 171 unique reports indicating loss of motive power while driving, and the predominant failure mode identified involved loss of powertrain torque. Ford began owner notification on November 5, 2012. Owners of the recalled vehicles are notified to take their vehicle to a Ford or Lincoln dealer who will reprogram the PCM to the latest calibration. See the investigative public file for copies of Ford's bulletin and owner letter.

This preliminary evaluation is closed. The ODI reports cited above can be viewed at www-odi.nhtsa.dot.gov/complaints under the following identification numbers (ODI Nos.):

 $10536160, 10534988, 10534323, 10531894, 10525393, 10525187, 10523536, 10521207, 10516270, 10512459, 10512146, \\10509307, 10543015, 10542983, 10542840, 10542753, 10538223, 10537801, 10537111, 10537048, 10536894, 10536592, \\10509307, 10542983, 10542983, 10542840, 10542753, 10538223, 10537801, 10537111, 10537048, 10536894, 10536592, \\10509307, 10542983, 10542983, 10542840, 10542753, 10538223, 10537801, 10537111, 10537048, 10536894, 10536592, \\10509307, 10542983, 10542840, 10542753, 10538223, 10537801, 10537801, 10537048, 10536692, \\10509307, 10542983, 10542840, 10542753, 10538223, 10537801, 10537801, 10537048, 10536692, \\10509307, 10542983, 10542840, 10542753, 10538223, 10537801, 10537801, 10537048, 10536694, \\10509307, 10542983, 10542840, 10542753, 10538223, 10537801, 10537801, \\10509307, 10542983, 10542840, 10542753, 10538223, 10537801, \\10509307, 10542983, 10542840, 10542753, 10538223, 10537801, \\10509307, 10542983, 10542840, 10542840, 10542840, \\10509307, 10542840, 10542840, 10542840, \\10509307, 10542840, 10542840, 10542840, \\10509307, 10542840, 10542840, \\10509307, 10542840, 10542840, \\10509307, 10542$ 

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<sup>\*\*</sup> Total eliminates duplicates received by ODI and manufacturer.

10536538, 10536510, 10526350, 10524026, 10522585, 10521986, 10521459, 10519446, 10545282.

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