



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



Investigation: PE22009
Prompted By: VOQ Review
Date Opened: 07/22/2022 **Date Closed:** 10/29/2023
Investigator: Taylor Collins **Reviewer:** Bruce York-b
Approver: Tanya Topka
Subject: Electronic Parking Brake Water Ingress

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Chrysler (FCA US, LLC)
Products: 2014-2016 JEEP CHEROKEE
Population: 595,525

Problem Description: Water leaks into the subject vehicles causing the Electronic Parking Brake to inadvertently activate and stop the vehicle while in motion.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	163	1,504	0	0	1,655*	0
Crashes/Fires:	1	3	0	0	4	0
Injury Incidents:	1	2	0	0	3	0
Number of Injuries:	1	2	0	0	3	0
Fatality Incidents:	0	0	0	0	0	0
Number of Fatalities:	0	0	0	0	0	0

Description of Other:

*Total eliminates duplicates received by the manufacturer

ACTION/SUMMARY INFORMATION

Action: Preliminary Evaluation (PE) has been closed.

Summary:

The Office of Defects Investigation (ODI) opened investigation PE22-009 after having received 80 complaints on model years 2014-2020 Jeep Cherokees alleging the Electronic Parking Brake (EPB) inadvertently activated while the vehicle was in motion. During this investigation, the subject vehicles were updated to include only Model Years (MY) 2014-2016, while MY 2017-2020 were considered peers. Based on related repair invoices, ODI believed the EPB module was damaged by water leaking into the vehicle. When the EPB inadvertently activates, it can cause a stalling condition bringing the

vehicle to a stop. ODI was aware of recall 15V-393 that addresses water ingress affecting the power liftgate module on nearly the same population of vehicles subject of this investigation. The liftgate module can potentially catch fire as a result of the water damage. Both the liftgate and EPB modules are located in a similar area of the vehicle. On May 11, 2016, the manufacturer released a Technical Service Bulletin (ODI #10191415, FCA #08-060-16) that instructs dealers on replacing the EPB module and inspecting the electrical connector for corrosion if a customer describes having the EPB not releasing. This Preliminary Evaluation was opened to assess the scope, frequency, and safety-related consequences of the alleged defect.

On September 8th, 2022, ODI sent an information request letter to Fiat Chrysler US LLC (FCA) requesting pertinent information on the subject 2014-2016 Jeep Cherokee and Peer 2017-2020 Jeep Cherokee vehicles. FCA Provided its full response on October 27th, 2022 after ODI granted a one-week extension. ODI has reviewed the information FCA provided as well as new reports submitted to NHTSA's Vehicle Owner Questionnaire database. Based on a review of all available information, ODI has identified evidence supporting a total of 1,655 subject vehicles that likely experienced a failure of the

subject EPB. Within the subject vehicle complaints, ODI identified the 2014 Model Year (MY) Jeep Cherokee as having the highest rate of failure, while also being the oldest group of vehicles in this investigation. The 2014 Jeep Cherokees that likely experienced a failure of the subject EPB represent an incident rate of approximately 0.58%. The average Time In Service (TIS) at failure was 2.6 years and the oldest failure occurred at 8.5 years in service. The 2014 population of vehicles is at 9 years in service. All other MY Jeep Cherokee vehicles (both subject and peer) within this investigation had significantly lower failure rates than the 2014 MY Jeep Cherokee.

ODI has reviewed all the information available at this time, and identified four allegations of a crash, three allegations of injuries, and one allegation of a fire. Two of the crash allegations alleged injuries, and the alleged injuries were minor severity. All of the alleged injuries appeared to be consistent with hard braking and did not need medical attention. There was no supporting information that demonstrated a fire had occurred on the vehicle.

In its response to ODI, FCA provided its assessment of the alleged defect in the subject vehicles, stating that it does not believe the alleged defect poses an unreasonable risk to motor vehicle safety. FCA states the majority of incidents involving the EPB inadvertently activating occurred while the vehicle was stationary and that a small number of incidents occurred while the vehicle was backing up or at low speeds. This is consistent with ODI's observations.

Based on the analysis conducted by ODI, this investigation will be closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist. NHTSA reserves the right take additional actions if warranted by future circumstances. To review the ODI reports cited in the Closing Resume ODI Report Identification Number document, go to [NHTSA.gov](https://www.nhtsa.gov).