

# U.S. Department of Transportation

National Highway Traffic Safety Administration

## **ODI RESUME**



Investigation: RQ24000 Prompted By: VOQ Review Date Opened: 01/16/2024

Investigator: Daniel Pinero Reviewer: Bruce York-B

**Approver:** Tanya Topka

Subject: Ignition-off high voltage battery fire (Remedy effectiveness of

Recall 22V-077)

#### MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Chrysler (FCA US, LLC)

Products: 2017-2018 Chrysler Pacifica

Population: 16,741

Problem Description: Alleged ignition-off high voltage battery fires after installation of the 22V-077 recall

remedy

#### **FAILURE REPORT SUMMARY**

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	4	0	0	0	4	0
Crashes/Fires:	4	0	0	0	4	0
Injury Incidents:	0	0	0	0	0	0
Number of Injuries:	0	0	0	0	0	0
Fatality Incidents:	0	0	0	0	0	0
Number of Fatalities:	0	0	0	0	0	0

#### **ACTION/SUMMARY INFORMATION**

Action: A Recall Query (RQ) has been opened.

## Summary:

On February 11, 2022, Fiat Chrysler Automobiles (FCA) issued a safety recall (NHTSA Recall 22V-077) on all 2017-2018 Pacifica Plug-In Hybrid Electric Vehicles (PHEV) produced between August 12, 2016 through August 7, 2018. The recall addresses ignition "OFF' fires that originate at the high voltage (HV) battery pack assembly. An ignition 'OFF' vehicle fire can result in an increased risk of occupant injury, injury to persons outside the vehicle, and property damage, with little to no warning. At the time of the recall filing the root cause of the vehicle fires was unknown and under investigation by FCA and suppliers. A software remedy designed to improve thermal event detectability by monitoring battery diagnostics is currently being installed on subject vehicles as an interim remedy. As of November 23, 2023, the root cause of the battery failure is unknown.

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From December 2022 through December 2023, NHTSA has received four consumer complaints (VOQs) alleging vehicle thermal events involving recalled 2017 and 2018 Chrysler Pacifica PHEVs. Additional information collected from complainants confirmed a thermal event originating near or at the HV battery pack after the Recall 22V077 remedy had been applied to the vehicle. Follow up meetings with FCA and suppliers in November and December 2023 to discuss the ongoing root cause investigation and post-recall remedy incidents indicated a recent increase in HV battery thermal events. Furthermore, a review of NHTSA complaint data indicated the post-recall HV battery thermal event complaint rate now exceeds pre-recall levels.

The Office of Defects Investigation (ODI) is opening this Recall Query (RQ) to review the effectiveness of the original recall remedy, understand the root cause of the battery fires, investigate additional reports of Pacifica PHEV HV battery fires, and to increase monitoring of the manufacturer root cause investigation.

To review the ODI reports cited in the Opening Resume ODI Report Identification Number document, go to NHTSA.gov.

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

Safety

**Administration** 

## **OPENING RESUME ODI REPORT IDENTIFICATION NUMBERS**

**Investigation ID:** RQ24000 **Date Opened:** 01/16/2024

**Subject:** Ignition-off high voltage battery fire (Remedy

effectiveness of Recall 22V-077)

## **List of 4 ODI Report reference numbers:**

11496917, 11553283, 11555014, 11558139

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OMB Control No.: 2127-0004

## Part 573 Safety Recall Report

## 22V-077

**Manufacturer Name:** Chrysler (FCA US, LLC)

NHTSA Recall No.: 22V-077

Manufacturer Recall No.: Z11



#### **Manufacturer Information:**

Manufacturer Name: Chrysler (FCA US, LLC)

Address: 800 Chrysler Drive

CIMS 482-00-91 Auburn Hills MI

48326-2757

Company phone: 1-800-853-1403

## **Population:**

Number of potentially involved: 16,741 Estimated percentage with defect: 100 %

#### **Vehicle Information:**

Vehicle 1: 2017-2018 Chrysler Pacifica

Vehicle Type:

Body Style : VAN Power Train : NR

Descriptive Information: Some 2017-2018 MY Chrysler Pacifica Plug-In Hybrid Electric Vehicles ("PHEVs")

have experienced fires. The defect has not yet been identified and the root cause of

these fires is still being investigated.

The potentially affected vehicle production period began on August 12, 2016, when production of Chrysler Pacifica PHEVs began, and ended on August 7, 2018, when 2018 MY production ended. The suspect population was determined using vehicle

manufacturing records.

Similar vehicles not included in this recall are not PHEVs, or were built after the

suspect vehicle production period.

Production Dates: AUG 12, 2016 - AUG 07, 2018

VIN Range 1 : Begin : NR End : NR Not sequential

### **Description of Defect:**

Description of the Defect: A vehicle may experience a fire, even with the ignition in the "OFF" mode.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: A vehicle fire can result in increased risk of occupant injury and/or injury to

persons outside the vehicle, as well as property damage.

Description of the Cause: NR

The information contained in this report was submitted pursuant to 49 CFR §573

Identification of Any Warning None that can Occur :

### **Involved Components:**

Component Name 1: NR
Component Description: NR
Component Part Number: NR

## **Supplier Identification:**

## **Component Manufacturer**

Name: NR Address: NR NR Country: NR

**61** 1

## **Chronology:**

- On August 31, 2021, the FCA US LLC ("FCA US") Technical Safety and Regulatory Compliance organization opened an investigation as a result of detecting a potential trend in fires in certain Chrysler Pacifica PHEVs.
- From September 2021, to January 2022, FCA US repurchased two vehicles for origin and cause investigation. The cause of these fires is under investigation.
- As of February 4, 2022, FCA US is aware of ten additional fires. The cause of these fires is under investigation.
- As of February 4, 2022, FCA US has identified five customer records, zero warranty claims, and 12 field reports potentially relating to this issue for all markets with dates of receipt ranging from April 23, 2019, to December 14, 2021.
- As of February 4, 2022, FCA US is not aware of any accidents or injuries potentially relating to this issue for all markets.
- On February 6, 2022, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.

### **Description of Remedy:**

Description of Remedy Program: FCA US will conduct a voluntary safety recall on all affected vehicles.

Remedy is under development. Until further notice, the Company is advising owners of these hybrid vehicles to refrain from recharging them,

and to park them away from structures and other vehicles.

FCA US has a longstanding policy and practice of reimbursing owners who have incurred the cost of repairing a problem that subsequently becomes the subject of a field action. To ensure consistency, FCA US, as part of the owner letter, will request that customers send the original receipt and/or other adequate proof of payment to the company for confirmation of the

expense.

How Remedy Component Differs from Recalled Component:

How Remedy Component Differs Remedy is under development. Root cause is unknown.

Identify How/When Recall Condition NR

was Corrected in Production:

#### **Recall Schedule:**

Description of Recall Schedule: \*\*02/11/2022: FCA US will notify dealers and begin notifying owners on

or about 04/02/2022.

Planned Dealer Notification Date: APR 02, 2022 - APR 02, 2022 Planned Owner Notification Date: APR 02, 2022 - APR 02, 2022

\* NR - Not Reported

#### OMB Control No.: 2127-0004

## Part 573 Safety Recall Report

## 22V-077

**Manufacturer Name:** Chrysler (FCA US, LLC)

Submission Date: FEB 21, 2022 NHTSA Recall No.: 22V-077 Manufacturer Recall No.: Z11



#### **Manufacturer Information:**

Manufacturer Name: Chrysler (FCA US, LLC)

Address: 800 Chrysler Drive

CIMS 482-00-91 Auburn Hills MI

48326-2757

Company phone: 1-800-853-1403

## **Population:**

Number of potentially involved: 16,741 Estimated percentage with defect: 100 %

#### **Vehicle Information:**

Vehicle 1: 2017-2018 Chrysler Pacifica

Vehicle Type:

Body Style : VAN Power Train : NR

Descriptive Information: Some 2017-2018 MY Chrysler Pacifica Plug-In Hybrid Electric Vehicles ("PHEVs")

have experienced fires that may have originated at the center of the vehicle underbody where the high voltage ("HV") battery pack assembly is located. The defect has not yet been identified and the root cause of these fires is still being

investigated.

The potentially affected vehicle production period began on August 12, 2016, when production of Chrysler Pacifica PHEVs began, and ended on August 7, 2018, when 2018 MY production ended. The suspect population was determined using vehicle

manufacturing records.

Similar vehicles not included in this recall are not PHEVs, or were built after the  $\,$ 

suspect vehicle production period.

Production Dates: AUG 12, 2016 - AUG 07, 2018

#### **Description of Defect:**

Description of the Defect: A vehicle may experience a fire potentially originating in the center of the

vehicle underbody with the ignition in the "OFF" mode.

FMVSS 1: NR FMVSS 2: NR Description of the Safety Risk: A vehicle fire can result in increased risk of occupant injury and/or injury to

persons outside the vehicle, as well as property damage.

Description of the Cause: NR

that can Occur:

Identification of Any Warning None

### **Involved Components:**

Component Name 1: Hybrid Battery Pack Assembly

Component Description: Please see attached supplemental information titled "FCA US LLC Z11 Involved

Component Part Numbers Chrysler Pacifica PHEV Battery Pack Assembly -

02212022.pdf"

Component Part Number: See attached document referenced above for Chrysler Pacifica PHEV battery pack

assembly part numbers

## **Supplier Identification:**

#### **Component Manufacturer**

Name: LG Energy Solutions Michigan, Inc.

Address: 1 LG Way

Holland Michigan 49423

**Country: United States** 

## **Chronology:**

- On August 31, 2021, the FCA US LLC ("FCA US") Technical Safety and Regulatory Compliance organization opened an investigation as a result of detecting a potential trend in fires in certain Chrysler Pacifica PHEVs.
- From September 2021, to January 2022, FCA US repurchased two vehicles for origin and cause investigation. The cause of these fires is under investigation.
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- As of February 4, 2022, FCA US is not aware of any accidents or injuries potentially relating to this issue for all

#### markets.

- On February 6, 2022, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.
- As of February 21, 2022, FCA US has not made a determination of whether the HV battery pack assembly is defective and/or the root cause of these fires.

## **Description of Remedy:**

Description of Remedy Program: FCA US will conduct a voluntary safety recall on all affected vehicles.

Remedy is under development. Until further notice, the Company is advising owners of these hybrid vehicles to refrain from recharging them,

and to park them away from structures and other vehicles.

FCA US has a longstanding policy and practice of reimbursing owners who have incurred the cost of repairing a problem that subsequently becomes the subject of a field action. To ensure consistency, FCA US, as part of the owner letter, will request that customers send the original receipt and/or other adequate proof of payment to the company for confirmation of the

expense.

How Remedy Component Differs Remedy is under development. Root cause is unknown.

from Recalled Component:

Identify How/When Recall Condition NR

was Corrected in Production:

#### **Recall Schedule:**

Description of Recall Schedule: \*\*02/11/2022: FCA US will notify dealers and begin notifying owners on

or about 04/02/2022.

Planned Dealer Notification Date : APR 02, 2022 - APR 02, 2022 Planned Owner Notification Date : APR 02, 2022 - APR 02, 2022

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#### OMB Control No.: 2127-0004

## Part 573 Safety Recall Report

## 22V-077

**Manufacturer Name:** Chrysler (FCA US, LLC)

Submission Date: SEP 22, 2022 NHTSA Recall No.: 22V-077 Manufacturer Recall No.: Z11



#### **Manufacturer Information:**

Manufacturer Name: Chrysler (FCA US, LLC)

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CIMS 482-00-91 Auburn Hills MI

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manufacturing records.

Similar vehicles not included in this recall are not PHEVs, or were built after the  $\,$ 

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Production Dates: AUG 12, 2016 - AUG 07, 2018

#### **Description of Defect:**

Description of the Defect: A vehicle may experience a fire potentially originating in the center of the

vehicle underbody with the ignition in the "OFF" mode.

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persons outside the vehicle, as well as property damage.

Description of the Cause: NR

that can Occur:

Identification of Any Warning None

### **Involved Components:**

Component Name 1: Hybrid Battery Pack Assembly

Component Description: Please see attached supplemental information titled "FCA US LLC Z11 Involved

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Component Part Number: See attached document referenced above for Chrysler Pacifica PHEV battery pack

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- As of February 4, 2022, FCA US is not aware of any accidents or injuries potentially relating to this issue for all

#### markets.

- On February 6, 2022, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.
- As of February 21, 2022, FCA US has not made a determination of whether the HV battery pack assembly is defective and/or the root cause of these fires.

## **Description of Remedy:**

Description of Remedy Program: FCA US will conduct a voluntary safety recall on all affected vehicles to update the High Voltage Battery Pack Control Module ("BPCM") software to monitor battery pack assembly operational status for conditions that could lead to a fire in the battery pack assembly. FCA US will inspect and, if necessary, replace the battery pack assembly. Until the remedy is complete, the Company is advising owners of these hybrid vehicles to refrain from recharging them, and to park them away from structures and other vehicles.

> FCA US has a longstanding policy and practice of reimbursing owners who have incurred the cost of repairing a problem that subsequently becomes the subject of a field action. To ensure consistency, FCA US, as part of the owner letter, will request that customers send the original receipt and/or other adequate proof of payment to the company for confirmation of the expense.

from Recalled Component:

How Remedy Component Differs Remedy is updated BPCM software to monitor battery pack assembly operational status for conditions that could lead to a fire in the battery pack assembly. FCA US will inspect and, if necessary, replace the battery pack assembly. Root cause is unknown.

Identify How/When Recall Condition NR was Corrected in Production:

### **Recall Schedule:**

Description of Recall Schedule: \*\*09/22/2022: FCA US will notify dealers and begin mailing Final Owner

Letters on or about 10/11/2022.

\*\*02/11/2022: FCA US will notify dealers and begin notifying owners on

or about 04/02/2022.

Planned Dealer Notification Date: APR 02, 2022 - APR 02, 2022 Planned Owner Notification Date: APR 02, 2022 - APR 02, 2022

\* NR - Not Reported