

Part 573 Safety Recall Report

23V-724

Manufacturer Name : Kia America, Inc.

Submission Date : OCT 30, 2023

NHTSA Recall No. : 23V-724

Manufacturer Recall No. : SC287



Manufacturer Information :

Manufacturer Name : Kia America, Inc.

Address : 111 Peters Canyon Road
Irvine CA 92606

Company phone : 800-333-4542

Population :

Number of potentially involved : 6,262

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2015-2019 Kia Soul EV

Vehicle Type : LIGHT VEHICLES

Body Style : ALL

Power Train : HYBRID ELECTRIC

Descriptive Information : All 2015-2019 model year Soul EV vehicles manufactured from July 15, 2014 through September 28, 2018.

The recall population was determined by a review of vehicle production. The vehicles subject to this recall were not produced in VIN order. Customers seeking information about their specific vehicle will be referred to Kia's Consumer Assistance Center or their Kia dealer.

Production Dates : JUL 15, 2014 - SEP 28, 2018

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Description of Defect :

Description of the Defect : When the vehicle is left unattended while powered ON and the parking brake is not manually engaged, unintended vehicle movement may occur intermittently even though the gear shift lever is in the "P" (Park) position. This is caused by intermittent failure of the parking pawl to engage the parking gear, which Kia suspects is due to damage to the parking mechanism within the GDU.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Unintended vehicle movement can increase the risk of a crash.

Description of the Cause : Intermittent failure of the parking pawl to engage the parking gear.

Identification of Any Warning that can Occur : None.

Involved Components :

Component Name 1 : GEAR DRIVE UNIT ASSY

Component Description : Gear Drive Unit (GDU) Assembly

Component Part Number : 44500-18400

Component Name 2 : GEAR DRIVE UNIT ASSY

Component Description : Gear Drive Unit (GDU) Assembly

Component Part Number : 44500-18410

Supplier Identification :

Component Manufacturer

Name : Hyundai Transys

Address : 105, Sindang 1-ro, Seongyeon-myeon,
Seosan-si Chungcheongnam-do Foreign States 31930

Country : Korea, Republic of

Chronology :

See attached document titled "2015-2019MY Soul EV Gear Drive Unit Chronology".

Description of Remedy :

Description of Remedy Program : All owners of the subject vehicles will be notified by first class mail with instructions to bring their vehicles to a Kia dealer. Dealers will be instructed to update the Electronic Control Unit software for the Electronic Parking Brake (EPB) logic so that the EPB automatically activates when the gear shift lever is in the "P" (Park) position regardless of whether the vehicle is powered ON or OFF. [This recall replaces the prior 20V389 recall involving the 2015-2016MY Soul EV vehicles and is required regardless of whether those vehicles received the software update under that prior recall. To prevent any intermittent unintended vehicle movement prior to completion of this recall, Kia recommends vehicle owners move the gear shifter in the 'P' (Parking) position and manually engage the EPB prior to exiting the vehicle.] Kia will reimburse owners for repair expenses already incurred pursuant to Kia's General Reimbursement Plan filed May 10, 2022.

How Remedy Component Differs from Recalled Component : Not applicable.

Identify How/When Recall Condition was Corrected in Production : Not applicable. The 2019MY Soul EV is the last model year of that vehicle sold in the U.S.

Recall Schedule :

Description of Recall Schedule : The planned dealer notification is scheduled to begin and end on December 19, 2023. The planned owner notification is scheduled to begin and end on December 22, 2023.

Planned Dealer Notification Date : DEC 19, 2023 - DEC 19, 2023

Planned Owner Notification Date : DEC 22, 2023 - DEC 22, 2023

* NR - Not Reported

**2015-2019MY Soul EV
Gear Drive Unit
Basis of Safety Defect Determination 573.6(c)(6)**

July 2, 2020	Kia files recall of 2015-2016MY Soul EV to address unintended vehicle movement which can occur if parking mechanism is damaged and vehicle is left unattended without the parking brake engaged. (20V389). Kia dealers instructed to update the Electronic Control Unit software for the Electronic Parking Brake (EPB) logic so that the EPB automatically activates if the POWER button is turned OFF when the gear shift lever is in the “P” (Park) position. Same updated EPB logic applied beginning with 2017MY Soul EV production.
June 21, 2023—July 12, 2023	NHTSA’s Office of Defect Investigation (ODI) contacts Kia North America (Kia NA) Safety Office to request information regarding two VOQ complaints submitted by same 2017MY Soul EV owner alleging unintended vehicle movement while in Park (Vehicle #1). Kia NA Safety Office responds to ODI with requested information and meets with ODI separately to discuss topic. Kia NA Safety Office begins to monitor and investigate potential issue.
August 16, 2023— August 17, 2023	ODI contacts Kia NA Safety Office to identify VOQ complaint alleging unintended vehicle movement in a 2018MY Soul EV (Vehicle #2). Kia NA Safety Office requests additional information from ODI and works on scheduling inspection.
September 10, 2023	NHTSA issues opening resume for 2015-2019MY Kia Soul EV to investigate complaints of unintended vehicle movement when vehicle shifted to Park and parking brake not engaged (RQ23-005).
September 11, 2023	Kia NA identifies complaint regarding unintended vehicle movement while in Park involving a 2017MY Soul EV (Vehicle #3). Kia NA works with dealer to schedule inspection.
September 13, 2023	Kia NA Safety Office meets with ODI to provide update. Kia NA Safety Office and ODI conduct joint inspection of 2018MY Soul EV (Vehicle #2). Kia engineer able to reproduce vehicle roll while in Park in one (1) of approximately 50 attempts when vehicle is in POWER ON condition. Electronic Parking Brake (EPB) operates normally when manually activated and automatically activates when vehicle is in POWER OFF condition while in Park. Kia NA Safety Office begins efforts to collect vehicle’s Gear Drive Unit (GDU) for further analysis.

September 14, 2023	Kia NA Safety Office inspects 2017MY Soul EV (Vehicle #1). Kia engineer attempts to duplicate vehicle roll while in Park approximately 100 times with vehicle in the POWER ON condition. Roll condition could not be duplicated. EPB operates normally when manually activated and automatically activates when vehicle is in POWER OFF condition while in Park.
September 29, 2023	Kia NA Safety Office receives GDU from dealer for 2018MY Soul EV (Vehicle #2).
October 3, 2023	Kia NA Safety Office inspects 2017MY Soul EV (Vehicle #3). Kia engineer able to reproduce vehicle roll while in Park in one (1) of approximately 200 attempts when vehicle is in POWER ON condition (rolled approx. 4 feet and parking pawl engaged stopping vehicle). EPB operates normally when manually activated and automatically activates when vehicle is in POWER OFF condition while in Park.
October 6, 2023	Kia NA Safety Office conducts teardown inspection of GDU from 2018MY Soul EV (Vehicle #2) with Vehicle Research and Test Center (VRTC) engineer in attendance. GDU operates normally.
October 10, 2023	Kia NA Safety Office installs reassembled GDU from 2018MY Soul EV (Vehicle #2) into an exemplar vehicle. Roll condition could not be duplicated.
October 11, 2023	Kia NA Safety Office inspects 2016MY Soul EV with complaint of unintended vehicle movement while in Park (Vehicle #4). Kia engineer able to reproduce vehicle roll while in Park in three (3) of approximately 100 attempts when vehicle is in POWER ON condition. EPB operates normally when manually activated and automatically activates when vehicle is in POWER OFF condition while in Park. Kia NA Safety Office begins process to repurchase vehicle for further evaluation.
October 12, 2023	Kia NA Safety Office continues to evaluate operation of reassembled GDU from 2018MY Soul EV (Vehicle #2) in exemplar vehicle. Vehicle roll is duplicated while in Park when vehicle is in POWER ON condition.
October 18, 2023	Kia NA Safety Office updates field data analysis and identifies 12 unintended vehicle movement incidents confirmed by Kia or a Kia dealer among 2015-2016MY Soul EV after completion of recall 20V389 and 2017-2019MY Soul EV vehicles (dates of receipt 6/25/2019—10/10/2023).

<p>October 19, 2023</p>	<p>Kia NA Safety Office meets with ODI and provides investigation update. Kia NA Safety Office identifies although root cause of the intermittent unintended vehicle movement condition has not yet been confirmed, it suspects cause of parking pawl's intermittent failure to engage to parking gear is damage to parking mechanism within GDU.</p> <p>Kia NA decides to recall 2015-2019MY Soul EV vehicles to address intermittent condition. Two (2) confirmed crashes, no injuries or deaths.</p>
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U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



Investigation: RQ23005
Prompted By: VOQs and Early Warning Reporting
Date Opened: 09/10/2023
Investigator: Joseph Teitelman **Reviewer:** Peter Kivett
Approver: Tanya Topka
Subject: Vehicle Rollaway

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Kia America, Inc.
Products: 2015-2019 Kia Soul EV
Population: 6,267 (Estimated)

Problem Description: Unintended vehicle movement can occur when the vehicle is shifted to Park and the parking brake is not engaged.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	3	0	0	0	2	CONF
Crashes/Fires:	1	0	0	0	1	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

Description of Other:

ACTION/SUMMARY INFORMATION

Action: A Recall Query has been opened.

Summary:

In July 2020, Kia issued safety recall 20V-389 addressing a defect in the parking mechanism on model year (MY) 2015-2016 Kia Soul EV vehicles. In the recalled vehicles, if the driver moves the gear shift lever into Park before coming to a complete stop, the parking mechanism can be damaged. When the parking mechanism is damaged, unintended vehicle movement can occur when the vehicle is shifted to Park and the parking brake is not engaged. The recall remedy consists of a software update for the Electronic Parking Brake (EPB) that automatically engages EPB if the vehicle is turned off with the gear shift lever located in Park. The updated EPB logic was incorporated into production at the beginning of MY 2017.

The Office of Defects Investigation (ODI) has received three Vehicle Owner Questionnaires (VOQs) alleging unintended vehicle movement while in Park for MY 2017-2018 Kia Soul EV (two of the complaints represent the same VIN and are from the same consumer). One of the VOQs includes a reported rollaway collision which occurred after the operator had parked and exited the vehicle. From Early Warning Reporting data submitted by Kia, ODI identified a failure similar to those described by consumers which was diagnosed to a damaged parking mechanism. Through preliminary communications with Kia, ODI has confirmed that MY 2017-2019 Kia Soul EV vehicles are equipped with the same parking mechanism as the prior model years which were subject to recall. ODI is opening this

Recall Query (RQ) on MY 2015-2019 Kia Soul EV vehicles to evaluate the frequency, scope, and causes of the alleged rollaway incidents, and to assess the effectiveness of the remedy of recall 20V-389.

To review the reports cited in the attached Opening Resume ODI Report Identification Number document, go to [NHTSA.gov](https://www.nhtsa.gov).

Part 573 Safety Recall Report

20V-389

Manufacturer Name : Kia Motors America**Submission Date :** JUL 02, 2020**NHTSA Recall No. :** 20V-389**Manufacturer Recall No. :** SC191**Manufacturer Information :**

Manufacturer Name : Kia Motors America

Address : 111 Peters Canyon Road
Irvine CA 92606

Company phone : 800-333-4542

Population :

Number of potentially involved : 3,714

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2015-2016 Kia Soul

Vehicle Type : LIGHT VEHICLES

Body Style : ALL

Power Train : HYBRID ELECTRIC

Descriptive Information : 2015-2016 model year Kia Soul Electric Vehicle (EV) vehicles manufactured from July 15, 2014 through June 24, 2016.

The recall population was determined by a review of vehicle production records. The vehicles subject to this recall were not produced in VIN order. Customers seeking information about their specific vehicle will be referred to Kia's Consumer Assistance Center or their Kia dealer.

Production Dates : JUL 15, 2014 - JUN 24, 2016

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Defect :**

Description of the Defect : If the driver moves the gear shift lever into "P" (Park) prior to coming to a complete stop, the vehicle's parking mechanism can be damaged. If the parking mechanism is damaged, even though the gear shift lever is in the "P" (Park) position, unintended vehicle movement may occur when the vehicle is left unattended and the parking brake is not used.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Unintended vehicle movement can increase the risk of a crash
Description of the Cause : Damage to the vehicle's parking mechanism due to the gear shift lever being moved into "P" (Park) prior to coming to a complete stop.

Identification of Any Warning that can Occur : N/A

Involved Components :

Component Name 1 : N/A

Component Description : N/A

Component Part Number : N/A

Supplier Identification :

Component Manufacturer

Name : HYUNDAI WIA

Address : 153, Jeongdong-ro, Seongsan-gu
Changwon, Gyeongsangnam-do FOREIGN STATES 51556

Country : Korea, Republic of

Chronology :

See attached document titled "2015-2016 Soul EV Gear Shift Lever Chronology"

Description of Remedy :

Description of Remedy Program : Kia will instruct dealers to update the Electronic Control Unit software for the Electronic Parking Brake logic so that the electronic parking brake automatically activates if the POWER button is turned OFF when the gear shift lever is in the "P" (Park) position. Kia will reimburse owners for repair expenses already incurred pursuant to Kia's General Reimbursement Plan filed May 11, 2020.

How Remedy Component Differs from Recalled Component : N/A

Identify How/When Recall Condition was Corrected in Production : The Electronic Parking Brake (EPB) feature was incorporated into production beginning with the 2017 MY Soul EV on July 11, 2016. No Soul EV's were produced between June 24, 2016 (end of production for 2016 MY Soul EV) and July 11, 2016 (start of production for 2017 MY Soul EV).

Recall Schedule :

Description of Recall Schedule : Dealer Notification is planned for July 30, 2020, and the Owner Notification is planned for August 7, 2020.

Planned Dealer Notification Date : JUL 30, 2020 - JUL 30, 2020

Planned Owner Notification Date : AUG 07, 2020 - AUG 07, 2020

* NR - Not Reported