U.S. Department of Transportation

National Highway Traffic Safety Administration

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION

NHTSA

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Investigation: PE 22-004
Date Opened: 04/10/2022 **Date Closed:** 06/13/2023
Investigator: Michael Lee **Reviewer:** Peter Kivett
Approver: Tanya Topka
Subject: Power Sliding Door Auto Reverse Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Kia America, Inc.
Products: MY 2022 Kia Carnival
Population: 31,213 (Estimated)

Problem Description: Consumers allege Power Sliding Door (PSD) auto reverse function stops working properly.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	26	62	61**
Crashes/Fires:	0	0	0
Injury Incidents:	11	21	28**
Fatality Incidents:	0	0	0

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation is closed; NHTSA Recall No. 23V-236.

Summary:

On April 10, 2022, the Office of Defects Investigation (ODI) opened this Preliminary Evaluation (PE) after receiving 5 consumer complaints alleging the Power Sliding Doors (PSD) auto-reverse function failed to work properly in the model year (MY) 2022 Kia Carnival minivan vehicles. At that time, ODI was aware of 3 complaints alleging injuries to consumer's arm, hand or shoulder caused by the closing PSD. Additionally, consumers alleged being trapped against the closing door while it was traversing in the closing direction. The initial complaints also alleged excessive force is needed to reverse the direction of the closing door. At this time, ODI is aware of 26 complaints and 11 injuries on the MY 2022 Carnival vehicles.

In its August 2022 responses to ODI's Information Request on the PE, Kia provided 36 customer complaints, 21 field reports, and 5 related warranty claims. Kia also provided ODI with 21 reports of alleged injuries, however, Kia stated that it was able to confirm only 9 injuries. Typically, these injuries are attributed to fingers and arms.

The Kia Carnival automatic stop and reversal system is designed to automatically reverse the direction of the closing PSD if it meets resistance from an object or person. It relies on resistance sensing technology which requires a minimum input force or pressure to trigger activation. The primary sensing components used to regulate the auto-reverse system activation are the anti-pinch sensor and the PSD motor torque systems.

Following several discussions with ODI during this investigation, on March 31, 2023, Kia filed a safety recall (NHTSA No. 23V-236) of 51,568 MY 2022 and 2023 Kia Carnival vehicles (produced through February 22, 2023) to reduce the risk of injury from the closing PSD. The remedy will be to reprogram the PSD control module with an updated software that provides two warning chimes when the door begins to close or open (to alert the vehicle users the door is about to move). Also, the updated software will change the door speed to move more slowly as the door approaches its latching point.

In view of the recall action being taken by Kia, ODI is closing this PE. The agency reserves the right to take additional action if warranted by future circumstances.

The ODI complaints cited above can be viewed at www.NHTSA.gov under the following ODI identification numbers:

11423165, 11442133, 11447955, 11448290, 11450964, 11458125, 11461462, 11466619, 11466623, 11468938, 11469661, 11471224, 11471232, 11472272, 11487649, 11487671, 11489378, 11489577, 11491053, 11498214, 11501337, 11507176, 11507880, 11509037, 11512506, and 11516428.