



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

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



Investigation: PE23012

Prompted By: VOQ Review

Date Opened: 07/03/2023

Date Closed: 04/17/2024

Investigator: Erin Johnson

Reviewer: Peter Kivett

Approver: Tanya Topka

Subject: Loss of Motive Power

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Kia America, Inc.

Products: 2022 KIA EV6

Population: 19,824

Problem Description: Consumers report experiencing a reduced or complete loss of motive power during vehicle operation increasing the risk of a crash.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	27	37	0	40	104	CONF
Crashes/Fires:	0	1	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: Warranty/TechLine Claims from KIA

ACTION/SUMMARY INFORMATION

Action: This (PE) Preliminary Evaluation is closed with a manufacturer action Recall 24V-200.

Summary:

On July 3, 2023, the Office of Defect Investigation (ODI) opened PE23012 to investigate allegations of loss of motor power on model year (MY) 2022 Kia EV6 vehicles. Some consumers reported loss of motor power immediately after warning lamp illumination or reduction of motive power while the vehicle was in motion.

This investigation found that the Integrated Charging Unit (ICCU) may become damaged over time from transient high voltage and thermal cycling. A damaged ICCU may not be able to charge the 12-volt battery which can discharge gradually while driving with a reduction of motive power. The vehicle could eventually

experience a complete loss of motive power thereby increasing the risk of a crash.

On July 13, 2023, Kia conducted a service campaign to inspect the ICCU and install an improved over-current detection software logic in certain 2022-2023 EV6 vehicles.

On March 15, 2024, Kia filed recall 24V-200 for 48,232 MY 2022-2024 Kia EV6 vehicles. The recall remedy provides an inspection of the ICCU, and if necessary, a replacement of the ICCU and the associated fuse. The ICCU software reduces the risk of overcurrent and implements voltage peak reduction at the end of EV battery charging. The recall also includes a software update that revises the electric water pump operational threshold to reduce thermal loading during charging and driving.

In view of the recall action being taken by Kia, ODI is closing this Preliminary Evaluation. The agency reserves the right to take additional action if warranted by future circumstances. To review the reports cited in the Closing Resume ODI Report Identification Number document, go to [NHTSA.gov](https://www.nhtsa.gov).