



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

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



Investigation: PE24011
Prompted By: Early Warning Reporting Field Report Review
Date Opened: 04/11/2024
Investigator: Antonio Moore **Reviewer:** Sharon Yukevich
Approver: Tanya Topka
Subject: Electronic Brake Module Component Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: General Motors, LLC
Products: 2023 Cadillac LYRIQ
Population: 3,322

Problem Description: Lose of brake assist and ABS performance is effected

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	0	0	0	0	0	CONF
Crashes/Fires:	0	0	0	0	0	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: Open PE Investigation

Summary:

The Office of Defects Investigation (ODI) has received multiple Early Warning Reporting field reports alleging a loss of brake boost assist in MY2023 Cadillac LYRIQ vehicles. The reports allege a hard brake pedal, followed by a "Brake System Failure" message at start up or while driving.

The EWR field reports have been verified by General Motors (GM). GM stated the electronic brake control module, also known as "eBoost", has an internal spindle that can fracture during an Anti-Lock Braking System (ABS) event. GM further stated that due to the fracture, the vehicles can lose brake assist, experience speed limitation, and ABS would lose some functionality.

GM indicated a new material clean break point was introduced in the assembly plants in May 2023. GM has

also developed an over the air (OTA) update, which will cycle the brake booster similarly to an ABS event at start-up for every key cycle. If the spindle fractures during this start-up cycling, a warning lamp will illuminate to prompt the customer to bring the vehicle to the dealership to be diagnosed and repaired under warranty. This software update was not conducted as a recall.

ODI is opening this Preliminary Evaluation (PE) to determine the scope and severity of the potential problem and to fully assess the potential safety-related issues.