



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

OFFICE OF DEFECTS INVESTIGATION

## ODI RESUME

**Investigation:** EA26006  
**Prompted By:** PE24011  
**Date Opened:** 08/21/2026  
**Investigator:** Kevin McGough      **Reviewer:** Sharon Yukevich  
**Approver:** Tanya Topka  
**Subject:** Electronic Brake Module Component Failure

### MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** General Motors, LLC  
**Affected Manufacturers:** Honda (American Honda Motor Co.)  
**Products:** 2023-2026MY General Motors Models (see list in summary below)  
**Population:** 1,164,820 (Estimated)  
**Problem Description:** Failure of eBoost system causing loss of braking and steering assist functions

### FAILURE REPORT SUMMARY

|                              | ODI | Manufacturer | EWR D&I | Other | Total | EWR Field Reports |
|------------------------------|-----|--------------|---------|-------|-------|-------------------|
| <b>All Incidents:</b>        | 227 | 531          | 0       | 0     | 745*  | CONF              |
| <b>Crashes/Fires:</b>        | 21  | 1            | 0       | 0     | 22    | 0                 |
| <b>Injury Incidents:</b>     | 5   | 0            | 0       | 0     | 5     | 0                 |
| <b>Number of Injuries:</b>   | 6   | 0            | 0       | 0     | 6     | 0                 |
| <b>Fatality Incidents:</b>   | 0   | 0            | 0       | 0     | 0     | 0                 |
| <b>Number of Fatalities:</b> | 0   | 0            | 0       | 0     | 0     | 0                 |

\*Total eliminates duplicates received by the manufacturer

### ACTION/SUMMARY INFORMATION

**Action:** Open this Engineering Analysis (EA) (EA26900)

**Summary:**

On April 11, 2024, the Office of Defects Investigation (ODI) opened Preliminary Evaluation PE24011 after receiving complaints concerning a loss of brake assist in 2023 MY Cadillac Lyriq vehicles. These complaints allege a hard brake pedal, followed by a "Brake System Failure" message at start up or while driving.

GM shared records regarding several internal investigations for loss of brake assist due to alleged spindle fractures in the eBoost system. GM has stated that in the event of a spindle fracture, anti-lock brakes (ABS), stability control, and traction control remain functional until the vehicle comes to a complete stop. At this point, ABS, brake assist, stability control, and traction control functions are lost. The loss of these functions causes the vehicle to set one of three Diagnostic Trouble Codes (DTCs) based on failed performance criteria for the Electronic Brake Control Module (EBCM). These DTCs, in turn, activate several driver alerts: an audible chime, a visual "Service Brake System" message in the display, and multiple illuminated Malfunction Indicator Lights (MILs) for the ABS, Traction Control, and Brakes informing the driver of loss of functionality. The vehicle speed will also be limited to 70 KPH (43 MPH).

Since opening PE24011, ODI has continued to receive reports of loss of brake assist. Some of these reports describe symptoms inconsistent with GM's description of a spindle failure. These reports allege an immediate loss of brake assist functionality as opposed to the loss occurring after the vehicle comes to a complete stop. The sudden loss of brake assist during a braking event could result in extended braking distance, which increases the risk of a crash or injury. ODI believes further analysis is necessary to assess the potential for failures in GM's eBoost system to resulting in safety-related outcomes.

At this time, ODI is aware of the following vehicles that are equipped with this eBoost system: 2023-2026 MY Cadillac Lyriq, Chevrolet Colorado, and GMC Canyon; 2024-2026 MY Buick Enclave, Envision; Chevrolet Blazer EV, Equinox EV, Traverse; Cruise Origin; and GMC Acadia; 2025-2026 MY Cadillac Celestiq and Optiq. ODI is also aware of 2024-2026 MY Acura ZDX and 2024-2026 MY Honda Prologue vehicles that were built with this system. The Acura and Honda vehicles were manufactured by GM in a joint venture with Honda, and will be included in the Engineering Analysis as peer vehicles.

ODI is opening this Engineering Analysis to further assess the safety-related consequences of a failed eBoost system. In addition, ODI is expanding the scope of the investigation to encompass all GM vehicles that share this eBoost system.

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