U.S. Department of Transportation

National Highway Traffic Safety Administration

Part 573 Safety Recall Report 25V418

Manufacturer Name: Mazda North American Operations
Submission Date: Jun 18, 2025
NHTSA Recall No.: 25V418
Manufacturer Recall No.: 7725F

Manufacturer Information

Manufacturer Name: Mazda North American Operations

Address: 1025 Connecticut Avenue, NW
Suite 910
Washington DC, 20036

Population

Total number of potentially involved: 22

Estimated percentage with defect: 100%

Vehicle Information

Vehicle 1: 2025-2025 MAZDA CX-50 HYBRID

Product Category: Light Vehicles

Product Type: Multipurpose Passenger Vehicle

Fuel / Propulsion: Hybrid Electric Vehicle

Production Dates: Feb 26, 2025 - Feb 27, 2025

Number of potentially involved: 22

Descriptive Information:

Recall population was determined based on vehicle inspection records that lacked confirmation of in-plant completed repairs for a separate concern (SAS reprograming), resulting in being in factory mode configuration. Vehicles not included in this recall have verified repairs and inspection records.

The following is the affected number of vehicles by MY/Make/Model:

MY2025 Mazda CX-50 Hybrid built at Mazda Toyota Manufacturing (MTM): 22 units.

Defect / Noncompliance Description

Description of the defect or noncompliance:

The shifter can be moved from Neutral to Drive without pressing the brake pedal.

FMVSS1:

FMVSS2:

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Description of the safety risk, including crash, fire, death, injury:

If the accelerator is applied while the shifter is in Neutral and then unintentionally shifted into Drive, the vehicle may accelerate or move unexpectedly, increasing the risk of a crash.

Description of the cause:

During the repair and inspection process at Mazda Toyota Manufacturing (MTM), certain steps were missed, resulting in vehicles being shipped in factory mode.

Identification of any warning that can occur:

None.

Component Manufacturer

Tier of Supplier:
Supplier Type:
Name:
Address:
Country:

Involved Components

Component Name 1: Module, Engine Control
Component Description: Engine Control Module
Component Part Number: CW01-30120

Component Name 2: Control Unit, Hybrid
Component Description: Hybrid Control Unit
Component Part Number: CW01-30110

Component Name 3: Unit, Power Control
Component Description: Power Control Unit
Component Part Number: TPY1-30310

Chronology

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February 26, 2025: Mazda Toyota Manufacturing (MTM) notified Mazda about a potential configuration issue with the Sophisticated Air bag Sensor (SAS) unit.

February 27~ 28, 2025: Mazda issued a stop shipment for all vehicles at the manufacturing facility as a preliminary containment action. This action was taken after it was discovered that, during the SAS unit write procedure at MTM, incorrect air bag configuration data that was intended for use starting March 3rd, was mistakenly applied. This error was subsequently detected during end-of-line (EOL) testing due to a mismatch between the actual and planned configuration data.

March 3, 2025: Mazda issued a stop movement for all in-transit vehicles that may be impacted with this SAS unit concern and confirmed that no units have been delivered to the dealers.

March 3 ~ May 30, 2025: Mazda initiated an investigation to assess the potential safety impact of the concern and to evaluate the possibility of non-compliance. Since the combination of this particular hardware and software configuration of the SAS unit had not been previously considered, Mazda engaged the SAS unit supplier to understand the potential overall impact on the vehicle performance and operability. At the same time, Mazda continued to study the affected vehicle scope based on production data. During Mazda and MTM's investigation, multiple procedural and data errors were identified in the SAS unit repair process of suspected units at MTM, requiring further analysis and a thorough understanding of the issues based on the production data records.

March 10, 2025: Repairs of plant inventory vehicles were initiated to address incorrect configuration data in the SAS unit. These repairs involved both programming and reprocessing, during which factory mode is activated during SAS unit reprogramming and is intended to be deactivated during reprocessing. For these repairs, plant operators determined that using check sheets to record repair progress, as typically required by repair protocols, was not necessary. As a result, although reprogramming and reprocessing were performed, the completion status of each repair could not be reliably verified. Consequently, some vehicles with incomplete repairs, those that missed the reprocessing step, were mistakenly released with factory mode still active. All units for the initial repair of the SAS unit have been completed correctly after verification of the production records.

April 11 ~ 29, 2025: One vehicle with factory mode was identified at a dealer. Based on the condition of this vehicle, Mazda reported this event to MTM and it was discovered that the vehicles may have been shipped with factory mode still active. As soon as this information was received, the plant processes were reviewed and corrected to ensure proper repair procedures were followed.

April 30 ~ May 30, 2025: Mazda started an investigation to assess the potential safety impact and range of vehicles of the concern. Because factory mode involves a unique system specific to Toyota hybrid system, thorough verification was necessary for Mazda to fully understand the issue. At the same time, Mazda continued studying the scope of affected vehicles against production records. During the joint investigation with MTM, multiple errors were identified in the repair process of suspected units, requiring further analysis and a deeper understanding of the issues.

June 5, 2025: Mazda learned that factory mode affects the Neutral shift interlock feature, allowing the shifter to be moved from Neutral to Drive without pressing the brake pedal. This issue has been escalated for evaluation as a potential safety/emissions concern.

June 13, 2025: Mazda held a Quality Audit Committee meeting and approved a field action for the U.S. and U.S. Territories.

As of June 13, 2025, Mazda is not aware of any reports of accidents or injuries related to this concern.

Related NHTSA Recall Number:

Description of Remedy

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Remedy Type: Replace, Software

Consumer Advisories: ☐ Do Not Drive ☐ Park Outside

Description of remedy program:

Owners will be notified by mail and instructed to take their vehicle to a Mazda dealer. Dealers will replace the Engine Control Module (ECM) and reprogram the Hybrid Control Unit (HCU) and Power Control Unit (PCU) to deactivate factory mode using a special tool, free of charge.
A reimbursement program will not be offered as all vehicles are under full warranty coverage.

How remedy component differs from recalled component:

The remedy component is not applicable, as this defect resulted from improper manufacturing repair processes.

Identify how/when recall condition was corrected in production:

The affected repair process was corrected on April 14, 2025, to follow the proper repair process.

Reimbursement Plan

Manufacturer used general reimbursement plan on file.

Recall Schedule

Description of recall schedule:

Notification to dealers is expected to occur on or before June 23, 2025. Mailing of owner notification letters is expected to be completed on or before August 17, 2025.

Planned Dealer Notification Date: Jun 23, 2025 - Jun 23, 2025 ☐ No Dealers

Planned Interim Owner Notification Date: ☐ No Owners

Planned Remedy Owner Notification Date: Aug 17, 2025 - Aug 17, 2025 ☐ Phased Recall

Date when VIN will be searchable: Jun 23, 2025