

U.S. Department of Transportation

National Highway Traffic Safety Administration

Part 573 Safety Recall Report

25E068

Manufacturer Name: Ford Motor Company

Submission Date: Oct 10, 2025

NHTSA Recall No.: 25E068

Manufacturer Recall No.: 25SA7

Manufacturer Information

Population

Manufacturer Name: Ford Motor Company

Address: 330 Town Center Drive

Suite 500

Dearborn MI, 48126-2738

Total number of potentially involved: 1,048

Estimated percentage with defect: 100%

Equipment Information

Brand / Trade 1: Ford Performance Parts

Model: 2024-2025 Ford Mustang

Part Number: M-6066-M8800

Type: Original

Function:

Size:

Production Dates: May 31, 2023 - Jul 22, 2025

Number of potentially involved: 1,048

Descriptive Information:

Supercharger Upgrade Kits sold as accessory parts "Over-The-Counter" (OTC) for 2024-2025 Ford

Mustang

vehicles.

Defect / Noncompliance Description

Description of the defect or noncompliance:

Supercharger Upgrade Kits that were sold as aftermarket accessories for 2024-2025 MY 5.0L Mustang vehicles include an updated Powertrain Control Module (PCM) calibration that incorrectly disabled Level 2 (L2) Functional Safety features in the PCM.

FMVSS1:

FMVSS2:

25E068

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

In the event of a PCM Level 1 (L1) software error, L2 Functional Safety features will fail to detect an issue, which may result in a failure to prevent unintended acceleration or unintended vehicle movement, increasing the risk of a crash.

Description of the cause:

The issue results from changes made to the PCM software provided in the Supercharger Upgrade Kit. A Qualified Calibration Modifier utilized by the Supercharger Kit provider disabled the features in the course of software modification.

Identification of any warning that can occur:

The customer may notice a Malfunction Indicator Lamp (MIL) or wrench light in the cluster.

Component Manufacturer

Tier of Supplier: Tier 1

Supplier Type: OEM

Name: Whipple Superchargers

Address: 3292 N Weber Ave

Fresno CA, 93722

Country: United States

Involved Components

Component Name 1: Supercharger upgrade kit PCM calibration software

Component Description: Powertrain Control Module calibration software

Component Part Number: RR3A-14C204-GJ/JK

Component Name 2: Supercharger upgrade kit PCM calibration software

Component Description: Powertrain Control Module calibration software

Component Part Number: RR3A-SEMWFPA**/

B**/GK/GL/HK/HL/JL/JM/KK/KL/LK/LL/MM/MN/SM/SN/TM/TN/UM/UN/VM/V

N/VP

Component Name 3: Supercharger upgrade kit PCM calibration software

Component Description: Powertrain Control Module calibration software

25E068

Component Part Number: RR3A-SEMWS1-

A**/B**/GH/GJ/HH/HJ/JJ/JK/KH/KJ/LH/LJ/MH/ML/SH/SL/TH/TL/UH/UL/VH/V

L

Component Name 4: Supercharger upgrade kit PCM calibration software

Component Description: Powertrain Control Module calibration software

Component Part Number: RR3A-SEMWS2-UH

Component Name 5: Supercharger upgrade kit PCM calibration software

Component Description: Powertrain Control Module calibration software

Component Part Number: SR3A-SEMWFP-

A**/HA/KB/LA/LB/SA/SB/SC/UA/UB/VA/VB/XA/XB/YA/YB/ZA/ZB

Purchaser Information

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name: Ford Motor Company

Address: 1 American Road

Dearborn MI, 48126

Country: United States

Chronology

On August 20, 2025, during sign-off testing, the Ford Performance Parts (FPP) Powertrain (PT) Engineering

team discovered that L2 Failure Mode Effects Management actions were disabled within the PCM on a

Mustang with a Ford Performance Supercharger upgrade kit installed. The supercharger upgrade kit is offered

as an aftermarket accessory on 5.0L S650 Mustang vehicles and includes an updated PCM calibration

developed by a Qualified Calibration Modifier (QCM) for the Supercharger upgrade kit provider. On August 23,

2025, FPP stopped sales of these upgrade kits.

The PCM's L1 FMEM software calculates commanded throttle based on a series of factors. The L1 software

compares what the actual throttle is versus what the software calculates it should be. If a mismatch between

25E068

actual throttle and the commanded throttle calculated is identified due to a throttle actuator fault (such as a

stuck or sticking throttle), the L1 software will invoke L1 FMEM actions to prevent unintended acceleration.

As part of Ford's functional safety strategy, L2 functional monitoring serves as a redundant independent

functional safety check. The PCM's L2 software is intended to identify potential issues with the L1 software that

calculates commanded throttle. If L1 software is calculating commanded throttle wrong, the L1 checks may not

detect issues. The L2 software independently compares driver demand torque to actual torque, monitoring

potential mismatches and triggering L2 FMEM actions to mitigate as needed.

On September 2, 2025, this issue was brought to Ford's Critical Concern Review Group (CCRG) for review.

On September 15, 2025, Ford's Automotive Safety Office (ASO) and Powertrain team members recommended testing to validate performance of the Badillo-provided PCM calibration against FMVSS 102 -

Starter Interlock and FMVSS 124 - Accelerator Control Systems requirements. Testing was completed and

compliance was verified on September 19, 2025.

The FPP PT team also confirmed during testing that the L1 core safety functions remained operational and that

the issue only affected L2 functional monitoring.

As of September 18, 2025, Ford is not aware of any warranty claims, field reports, accidents, injuries, or fires

related to this issue.

On October 03, 2025, Ford's Field Review Committee reviewed the concern and approved a field action.

Related NHTSA Recall Number:

Description of Remedy

Remedy Type: 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 Ford or Lincoln dealer to have

Planned Dealer Notification Date: Oct 13, 2025 - Oct 13, 2025

Planned Interim Owner Notification Date: Oct 13, 2025 - Oct 13, 2025

Planned Remedy Owner Notification Date: Oct 27, 2025 - Oct 31, 2025

25E068

No Dealers

No Owners

Phased Recall

their vehicle's PCM software updated through the dedicated flash tool installed on the vehicle as part of the supercharger kit. There will be no charge for this service.
How remedy component differs from recalled component:
The remedy PCM Calibration software (RR3A-14C204-*/ RR3A-SEMWFP-*/RR3A-SEMWS1-*/ RR3ASEMWS2-*/SR3A-SEMWFP-*) will have L2 FMEM actions enabled.
Identify how/when recall condition was corrected in production:
Not required per 49 Part 573.
Reimbursement Plan
Manufacturer used general reimbursement plan on file.
Recall Schedule
Description of recall schedule:
Notification to dealers is expected to occur on October 13, 2025. Mailing of remedy owner notification letters is expected to begin October 27, 2025 and is expected to be completed by October 31, 2025.