



U.S. Department
of Transportation

National Highway
Traffic Safety
Administration

Part 573 Safety Recall Report

25V686

Manufacturer Name: Ford Motor Company

Submission Date: Oct 10, 2025

NHTSA Recall No.: 25V686

Manufacturer Recall No.: 25SA8

Manufacturer Information

Population

Manufacturer Name: Ford Motor Company

Address: 330 Town Center Drive
Suite 500
Dearborn MI, 48126-2738

Total number of potentially involved: 291,901

Estimated percentage with defect: 100%

Vehicle Information

Vehicle 1: 2020-2022 FORD F-450 SD

Product Category: Buses, Medium & Heavy Vehicles

Product Type:

Fuel / Propulsion: Spark Ignition Fuel

Production Dates: Oct 28, 2020 - Dec 23, 2022

Number of potentially involved: 20,128

Descriptive Information:

Ford's team reviewed supplier process and records to determine the population of affected vehicles. The Ford process is capable of tracing affected camera systems to the vehicle in which the Image Processing Module software is installed. Affected vehicles are equipped with 360 View Camera system.

These vehicles are not produced in VIN order. Information as to the applicability of this action to specific vehicles can best be obtained by either calling Ford's toll-free line (1-866-436-7332) or by contacting a local Ford or Lincoln dealer who can obtain specific information regarding the vehicles from the Ford On-line Automotive Service Information System (OASIS) database

Vehicle 2: 2020-2022 FORD F-250 SD

Product Category: Light Vehicles

Product Type: Light Truck

Fuel / Propulsion: Spark Ignition Fuel

Production Dates: Oct 28, 2020 - Dec 23, 2022

Number of potentially involved: 152,657

Descriptive Information:

Ford's team reviewed supplier process and records to determine the population of affected vehicles. The Ford process is capable of tracing affected camera systems to the vehicle in which the Image

Part 573 Safety Recall Report

25V686

Processing Module software is installed. Affected vehicles are equipped with 360 View Camera system.

These vehicles are not produced in VIN order. Information as to the applicability of this action to specific vehicles can best be obtained by either calling Ford's toll-free line (1-866-436-7332) or by contacting a local Ford or Lincoln dealer who can obtain specific information regarding the vehicles from the Ford On-line Automotive Service Information System (OASIS) database

Vehicle 3: 2020-2022 FORD F-350 SD

Product Category: Light Vehicles

Product Type:

Fuel / Propulsion: Spark Ignition Fuel

Production Dates: Oct 28, 2020 - Dec 23, 2022

Number of potentially involved: 119,116

Descriptive Information:

Ford's team reviewed supplier process and records to determine the population of affected vehicles. The Ford process is capable of tracing affected camera systems to the vehicle in which the Image Processing Module software is installed. Affected vehicles are equipped with 360 View Camera system.

These vehicles are not produced in VIN order. Information as to the applicability of this action to specific vehicles can best be obtained by either calling Ford's toll-free line (1-866-436-7332) or by contacting a local Ford or Lincoln dealer who can obtain specific information regarding the vehicles from the Ford On-line Automotive Service Information System (OASIS) database

Defect / Noncompliance Description

Description of the defect or noncompliance:

In a 360 Degree Camera system, a substantial difference in lighting conditions across the various cameras can lead to an exposure disparity in the composite view. When one or more cameras are exposed to significantly different light than other cameras, the system's automatic exposure compensation, which attempts to balance the overall scene, may cause the camera(s) image to appear severely underexposed or overexposed.

FMVSS1:

FMVSS2:

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

The customer may not be able to clearly view the area behind the vehicle when using the rearview camera while reversing under specific mixed lighting conditions, increasing the risk of a crash.

Description of the cause:

The Image Processing Module (IPMB) software applies a single light exposure balance setting across all four cameras of the 360-degree Camera system simultaneously. This results in underexposure of

Part 573 Safety Recall Report

25V686

darker scenes in the rearview camera image it operates in significantly darker conditions than the other cameras.

Identification of any warning that can occur:

No warning lights or messages will appear.

Component Manufacturer

Tier of Supplier: Tier 1

Supplier Type: OEM

Name: Magna Electronics

Address: 26360 American Dr.
Southfield MI, 48034

Country: United States

Involved Components

Component Name 1: Image Processing Module Software B

Component Description: Image Processing Module Software B

Component Part Number: NC3T-14F017-AB

Chronology

On **August 7, 2025**, an issue pertaining to a Vehicle Owner Questionnaire alleging a dark rearview camera image when backing into a dark area in a Super Duty vehicle equipped with a 360-degree camera system was brought to Ford's Critical Concern Review Group for review. The VOQ was subject to prior discussions with NHTSA's Medium Heavy Duty Division in the Office of Defects Investigation.

In **August 2025**, Ford was able to replicate this condition on a 2022MY Super Duty vehicle. Engineering analysis identified a light exposure balance issue on 2020 to 2022 model year Super Duty vehicles equipped with this feature. During mixed lighting conditions the system can apply incorrect light balance to the rearview camera (RVC) causing the displayed view to be too dark or too bright.

From **August to October 2025**, Ford conducted a read-across as part of the investigation which revealed that 2021-2025MY Bronco, 2017-2020MY Continental, and 2018-2021MY Navigator use a similar camera system from the same supplier, but those camera systems utilize different process exposure logic and do not exhibit this condition.

Ford considered FMVSS 111 which mandates rearview camera requirements for vehicles at or below 10k lbs. Gross Vehicle Weight Rating (GVWR). Based on the test conditions outlined in FMVSS 111 S14 and discussions with NHTSA's Office of Vehicle Safety Compliance (OVSC), Ford concluded that the rearview camera systems are in compliance with FMVSS 111 but believes that, when the vehicle is driven in this condition, it presents an unreasonable risk to safety.

Part 573 Safety Recall Report

25V686

Ford reviewed customer complaint data and warranty information to understand customer occurrence in the field. As of September 20, Ford is aware of 10 reports with first report occurring on January 20, 2022.

On **October 3, 2025**, Ford's Field Review Committee reviewed the concern and approved a field action. Ford is not aware of any reports of accident or injury related to this condition.

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 Image Processing Module software updated. There will be no charge for this service.

How remedy component differs from recalled component:

Updated Image Processing Module B Software will contain decoupling logic for lighting contrast between cameras to prevent a dark rearview image during mixed lighting conditions.

Identify how/when recall condition was corrected in production:

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 March 31, 2025 and is expected to be completed by March 31, 2025. The date VINs are planned to be searchable is October 13, 2025.

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

☐ No Dealers

Part 573 Safety Recall Report**25V686**

Planned Interim Owner Notification Date: Oct 20, 2025 - Oct 20, 2025 ☐ No Owners

Planned Remedy Owner Notification Date: Mar 31, 2026 - Mar 31, 2026 ☐ Phased Recall

Date when VIN will be searchable: Oct 13, 2025