#### OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

# 23V-509

**Manufacturer Name:** Ford Motor Company

NHTSA Recall No.: 23V-509

Manufacturer Recall No.: 23S35



#### **Manufacturer Information:**

Manufacturer Name: Ford Motor Company

Address: 330 Town Center Drive

Suite 500 Dearborn MI 48126-2738

Company phone: 1-866-436-7332

# **Population:**

Number of potentially involved: 870,701

Estimated percentage with defect: 1 %

#### **Vehicle Information:**

Vehicle 1: 2021-2023 Ford F-150

Vehicle Type: LIGHT VEHICLES

Body Style : Power Train : NR

Descriptive Information: Affected vehicles are equipped with a single exhaust system. In the affected vehicles,

the rear axle wiring harness bundle may contact the rear axle housing.

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.

Production Dates: JAN 08, 2020 - FEB 25, 2023

#### **Description of Defect:**

Description of the Defect: The affected vehicles may experience an unintended activation of the electric

parking brake while driving if the electric parking brake wiring is damaged and

the circuit shorts to ground.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: Damaged electric parking brake wiring may lead to inadvertent parking brake

application while driving, potentially resulting in loss of control of the vehicle

and increasing the risk of a crash.

Description of the Cause: In certain circumstances, the rear axle wiring harness bundle may contact the

rear axle housing. Over time, contact with the rear axle housing can cause the

abrasion resistant tape and circuit insulation of the wiring harness assembly to

wear, exposing the wiring.

Identification of Any Warning The driver may see a parking brake warning light and message on the

that can Occur: instrument panel cluster.

# **Involved Components:**

Component Name 1: Rear Axle Wire Harness

Component Description: Rear Axle Wire Harness

Component Part Number: ML3Z-15K857-C / ML3Z-15K857-A

#### **Supplier Identification:**

# **Component Manufacturer**

Name: Ford Motor Company

Address: 1 American Road

Dearborn Michigan 48126

**Country: United States** 

#### **Chronology:**

February - April 2023

On February 23, 2023, Ford's Critical Concern Review Group (CCRG) opened an investigation into reports describing unintended parking brake application on 2021 model year F-150 vehicles. The warranty and field reports indicated damage to wiring containing the rear electric parking brake circuits.

Initial investigation determined that the damaged wiring is part of a rear axle wiring harness assembly that contains wires for the rear electric parking brakes and other electrical components. The rear axle wiring harness bundle may contact the rear axle housing which can, in certain circumstances, result in chafing of the wiring harness bundle.

Further investigation determined that, over time, the chafing of the rear axle wiring harness assembly can wear through the abrasion resistant tape and circuit insulation, ultimately exposing copper wiring which can result in the grounding of circuits on the rear axle housing. This abrasion can be expedited due to corrosion on the rear axle housing.

May - July 2023

From May through July 2023, Ford Engineering performed vehicle-level testing and data analysis to determine the effect on vehicle operation of damaged circuits within the wiring harness bundle. The investigation found

that vehicles may experience an unintended activation of the electric parking brake if the low side electric parking brake motor circuit is shorted to ground.

As of July 11, 2023, Ford is aware of 918 warranty and three field reports for the wire chafing condition in North America, received within the range of August 2021 and July 2023. Of these reports, 299 indicated that the electric parking brake had unintended activation, of which nineteen (19) allege electric parking brake application while driving.

Ford is not aware of any reports of accident or injury related to this condition.

On July 14, 2023, Ford's Field Review Committee reviewed the concern and approved a field action.

### **Description of Remedy:**

Description of Remedy Program: Owners will be notified by mail and instructed to take their vehicle to a Ford or Lincoln dealer to have the rear axle wiring harness inspected. If the abrasion tape that covers the wire bundle exhibits wear-through, the suspect harness will be replaced with a new service harness. If the abrasion tape does not exhibit wear-through, the dealer will install a protective tie strap and tape wrap. There will be no charge for this service.

> Ford provided the general reimbursement plan for the cost of remedies paid for by vehicle

owners prior to notification of a safety recall in May 2023. The ending date for reimbursement

eligibility is estimated to be September 11, 2024.

Ford will forward a copy of the notification letters to dealers to the agency when available.

How Remedy Component Differs The new service harness (component part number ML3Z-15K857-C or from Recalled Component: ML3Z-15K857-A) has a plastic shield that prevents chafing of the wiring harness. The tie strap and tape wrap for vehicles that do not exhibit the tape wear-through condition also protect the wiring harness from chafing.

Identify How/When Recall Condition Not required per 49 Part 573. was Corrected in Production:

#### **Recall Schedule:**

Description of Recall Schedule: Notification to dealers is expected to occur on September 11, 2023.

Mailing of owner notification letters is expected to begin September 11,

2023 and is expected to be completed by September 15, 2023.

Planned Dealer Notification Date: SEP 11, 2023 - SEP 11, 2023

Planned Owner Notification Date: SEP 11, 2023 - SEP 15, 2023

Part 573 Safety Recall Report	23V-509	Page 4
* NR - Not Reported		
The information contained in this report was submitted	d pursuant to 49 CFR §573	