

Part 573 Safety Recall Report

23V-675

Manufacturer Name : Ford Motor Company**Submission Date :** OCT 06, 2023**NHTSA Recall No. :** 23V-675**Manufacturer Recall No. :** 23S55**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 : 238,364

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2020-2022 Ford Explorer

Vehicle Type : LIGHT VEHICLES

Body Style : ALL

Power Train : NR

Descriptive Information : Affected vehicles are equipped with rear axle bushing part number L1MW-4B425-BA and the following powertrains: 3.3L FHEV Police, 3.3L Gas Police, 3.0L Gas Police, 2.3L RWD, 3.0L PHEV, 3.3L FHEV, 3.0L ST. Ford's team reviewed plant records to determine the population of affected vehicles. The Ford process is capable of tracing the rear axle bushing part number to the vehicle in which the bushing is installed.

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 : OCT 22, 2018 - JUL 06, 2022

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Description of Defect :

Description of the Defect : Affected vehicles were built with a 3-point mounted axle design. On some units the rear axle horizontal mounting bolt may fracture. Powertrain torque through the driveline causes axle rotation of the pinion angled towards the subframe, which exerts a bending force on the rear axle bolt. Peak torque is normally experienced during a launch event. After numerous peak torque events are experienced, the bolt may suffer a fatigue failure, which will lead to the axle housing moving out of position, resulting in a condition described by customers and dealer technicians variably as loud, grinding, binding, or clunking noises.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : A fractured rear axle bolt will allow the rear axle housing to move out of position, resulting in severe noise and vibration. If the rear axle bolt breaks, the driveshaft or halfshafts may become disconnected, resulting in loss of transmission torque to the rear wheels. Transmission torque is necessary to hold the vehicle in park and is also needed for the vehicle to move forward or backward. The loss of the primary park torque will allow the vehicle to roll in park if the parking brake is not applied, increasing the risk of crash and injury.

Description of the Cause : The joint design is not robust to peak axle input torques and manufacturing variability. The primary contributor is insufficient bearing area for maximum joint loads. This results in bearing area deformation, increasing bending stress on the bolt, which may lead to a fatigue failure.

Identification of Any Warning that can Occur : N/A

Involved Components :

Component Name 1 : Bushing

Component Description : Bushing

Component Part Number : L1MW-4B425-BA

Supplier Identification :**Component Manufacturer**

Name : Hutchinson

Address : 460 Fuller Av.

Grand Rapids Michigan 49503
Country : United States

Chronology :

Chronology is provided as an attachment.

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 their subframe bushing and rear axle bolt replaced. The dealer will also inspect the rear axle cover for damage around the bolt hole location and replace the cover if any damage is found. 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 November 24, 2023.

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

How Remedy Component Differs from Recalled Component : The remedy bushing (part number L1MW-4B425-BB) has been modified to increase the fastener engagement length in order to avoid material deformation.

Identify How/When Recall Condition was Corrected in Production : NR

Recall Schedule :

Description of Recall Schedule : Notification to dealers is expected to occur on October 9, 2023. Mailing of owner notification letters is expected to begin November 6, 2023, and is expected to be completed by November 10, 2023.

Planned Dealer Notification Date : OCT 09, 2023 - OCT 09, 2023

Planned Owner Notification Date : NOV 06, 2023 - NOV 10, 2023

* NR - Not Reported



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: RQ 23-002
Date Opened: 06/20/2023
Investigator: Erin Johnson **Reviewer:** Peter Kivett
Approver: Tanya Topka
Subject: Rear Axle Bolt Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Ford Motor Company
Products: 2020-2022 Ford Explorer
Population: 710,253 (Estimated)
Problem Description: Consumers report loss of motive power and/or loss of transmission torque of the rear wheels.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	2	TBD	TBD
Crashes/Fires:	0	TBD	TBD
Injury Incidents:	0	TBD	TBD
Number of Injuries:	0	TBD	TBD
Fatality Incidents:	0	TBD	TBD
Number of Fatalities:	0	TBD	TBD

ACTION / SUMMARY INFORMATION

Action: A Recall Query has been opened.

Summary:

On March 30, 2023 and April 14, 2022, Ford Motor Company (Ford) filed two safety recalls (NHTSA Recall 23V-199 and 22V-255) on certain model year (MY) 2020-2022 Ford Explorer vehicles produced from October 2, 2019 to April 11, 2022. This recall addressed the rear axle horizontal mounting bolt that may fracture and cause the driveshaft to disconnect. The fracturing of the rear axle bolt can allow the rear axle housing to move out of position, resulting in severe noise, vibration and/or a disconnected driveshaft.

A functioning driveshaft and transmission parking pawl is necessary to hold the vehicle in park. The loss of the vehicle's transmission primary-park will cause the vehicle to roll away while being placed into the "Park" position, increasing the risk of crash and injury. Ford's remedy was to add a software update which automatically applies the electronic service parking brake to keep the vehicle from rolling away in the event of a driveshaft failure. However, there is no safety remedy addressing the failed rear axle horizontal mounting bolt which is the basis of this safety issue and the cause of the impaired vehicle.

ODI has received 2 complaints alleging a loss of motive power and/or loss of transmission torque of the rear wheels in MY 2021 Ford Explorer vehicles due to failure of the rear axle bolts. These vehicles were included in the cited recall and remedied prior to the reported incidents. A Recall Query has been opened to assess the remedy of Recalls 23V-199, and 22V-255.

The ODI complaints cited above can be viewed at NHTSA.gov under the following ODI identification numbers: 11517162, and 11499008.