

# Part 573 Safety Recall Report

# 23V-439

**Manufacturer Name :** Ford Motor Company**Submission Date :** JUN 23, 2023**NHTSA Recall No. :** 23V-439**Manufacturer Recall No. :** 23S32**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 : 366

Estimated percentage with defect : 70 %

**Vehicle Information :**

Vehicle 1 : 2023-2023 Lincoln Nautilus

Vehicle Type : LIGHT VEHICLES

Body Style : ALL

Power Train : NR

**Descriptive Information :** Ford's team reviewed supplier process and maintenance records to determine the population of affected parts. The Ford process is capable of tracing rear shock production to the vehicle in which the rear shock is installed.

Affected vehicles are equipped with suspect rear continuous controlled damping shocks.

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.

2023MY Lincoln Nautilus - 366 vehicles

Production Dates : FEB 20, 2023 - MAR 09, 2023

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Defect :**

**Description of the Defect :** Some vehicles were produced with rear continuous controlled damping (CCD) shocks that may over travel in rebound during certain driving conditions which may cause damage to the rear brake hose, rear axle half shaft, wheel speed sensor, and/or stabilizer bar end links.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : A damaged brake hose can extend vehicle stopping distance, increasing the risk of a crash.

Description of the Cause : Supplier produced rear CCD shocks with the shock rod stopper support not securely crimped in the rod groove, allowing over travel of the shock rod.

Identification of Any Warning that can Occur : If the wheel speed sensor is damaged, the anti-lock brake system (ABS) and electronic stability control (ESC) telltale light on the cluster may illuminate. The driver could also experience noise and vibration while driving if the rear axle half shaft and/or rear stabilizer bar sustains damage over an extended period of time.

## Involved Components :

Component Name 1 : CCD Shock Assembly

Component Description : Rear Right Hand CCD Shock

Component Part Number : K2GC-18W002-SUG

Component Name 2 : CCD Shock Assembly

Component Description : Rear Left Hand CCD Shock

Component Part Number : K2GC-18W003-SUG

## Supplier Identification :

### Component Manufacturer

Name : HITACHI ASTEMO AMERICAS, INC.

Address : 301 MAYDE DR DOCK 50  
BEREA Kentucky 40403-9777

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 the rear shocks inspected and the rear shocks, rear brake hoses, rear wheel speed sensor, and rear half shafts replaced if required. 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 August 18, 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 rear right hand CCD shock assembly (K2GC-18W002-SUG) and rear left hand CCD shock assembly (K2GC-18W003-SUG) will have a properly crimped shock rod stopper.

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

**Recall Schedule :**

Description of Recall Schedule : Notification to dealers is expected to occur on June 26, 2023. Mailing of owner notification letters is expected to begin July 31, 2023 and is expected to be completed by August 4, 2023.

Planned Dealer Notification Date : JUN 26, 2023 - JUN 26, 2023

Planned Owner Notification Date : JUL 31, 2023 - AUG 04, 2023

\* NR - Not Reported

Date of Submission: 6/23/2023

FSA 23S32 – Certain 2023 model year Lincoln Nautilus vehicles – Defective rear Continuous Controlled Damping (CCD) shock crimp

## Chronology

On March 7, 2023, the Ford Oakville Assembly Complex (OAC) Tire & Wheel install area identified an over-extended condition on rear Continuous Controlled Damping (CCD) shock absorbers. Visual checks confirmed that the rear shocks were over-extending up to 27 mm.

OAC identified a similar condition on the front shocks on March 8, 2023. All front CCD shocks go through a Spring Module sub-assembly where a load of approximately 3KN in the process will reveal the overextended condition, which is detectable by the operator, preventing the shocks from being installed into a vehicle. Rear CCD shocks do not go through this process.

On March 9, 2023, Ford's Critical Concern Review Group (CCRG) approved a stop ship for Nautilus vehicles equipped with CCD shocks. Vehicles at the plant were inspected for this condition and repaired accordingly. Of the 90 vehicles inspected, 72 right rear shocks and 21 left rear shocks were identified with this concern. Based upon this data, it was determined that rear shocks with this condition could be assembled into a vehicle without detection by the operator. All inventory of the suspect shocks were quarantined.

On March 14, 2023, the issue was reviewed by Ford's CCRG. The CCRG investigation identified an insufficient crimping operation in the shock assembly at the supplier facility. Supplier production data review by the CCRG revealed that the issue may have existed and gone undetected from February 14, 2023 through Mar 10, 2023 when additional load capability verification was established. Tooling replacement & 100% detection was restored for parts produced on Mar 11, 2023.

From April through May 2023, the Underbody Systems engineering team evaluated the effect on vehicle components if an over extended rear shock condition is present. The analysis included review of Design Failure Mode Effects Analysis (DFMEA) control documents along with analysis of technical drawings. The CCRG determined that an over extension of the rear shock during assembly into vehicle or during certain vehicle driving conditions may damage the brake hose along with other suspension components.

Ford is not aware of any warranty, field reports, or customer complaints related to this condition

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

On **June 16, 2023**, Ford's Field Review Committee reviewed the concern and approved a field action.