



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** RQ 22-004  
**Date Opened:** 08/08/2022  
**Investigator:** Matthew Yandrick  
**Approver:** Stephen Ridella  
**Subject:** Front Brake Jounce Hose Failures  
**Date Closed:** 03/24/2023  
**Reviewer:** Peter Kivett

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Ford Motor Company  
**Products:** 2013-2018 Ford Fusion, Lincoln MKZ  
**Population:** 1,726,734  
**Problem Description:** Front brake jounce hoses may rupture resulting in a brake fluid leak. This may extend brake pedal travel and reduce the rate of deceleration, increasing the risk of a crash.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	103	97	193**
<b>Crashes/Fires:</b>	3	2	5
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	0	623	623

\*Description of Other: Warranty Claims

\*\* Total eliminates duplicates received by ODI and manufacturer.

## ACTION / SUMMARY INFORMATION

**Action:** Close the Recall Query (RQ). Ford is conducting recall 23V-162.

### Summary:

On August 8, 2022, the Office of Defects Investigation (ODI) opened this investigation based on 50 Vehicle Owner Questionnaires (VOQs) alleging front brake jounce hose ruptures on model year (MY) 2013-2018 Ford Fusion and Lincoln MKZ vehicles. A ruptured front brake hose results in a brake fluid leak. As a result, the driver may experience an increase in pedal travel and a reduction in the rate of deceleration, increasing the risk of a crash. It should be noted that the subject vehicles identified fell outside the scope of NHTSA Safety Recall 20V-469, which addressed front brake hoses rupturing on certain MY 2015-2018 Ford Edge and 2016-2018 Lincoln MKX vehicles. The result causes a brake fluid leak, lengthening the distance needing to stop the vehicle, increasing the risk of a crash.

On March 10, 2023, Ford Motor Company (Ford) submitted to NHTSA Safety Recall 23V-162 (Ford Recall 23S12) to address front brake jounce hoses that may rupture. Ford found the rupture occurs from a localized failure of the internal reinforcement braid due to cyclic fatigue through tensile/bending and torsional inputs during suspension and steering articulations. The supplier for the front brake jounce hoses is Hitachi. This recall affects the subject vehicles equipped with non-hybrid engines and the suspect front brake jounce hoses (a total of 1,280,726 vehicles). The recall covers subject vehicles built from February 3, 2012 to July 19, 2017 when the suspect hoses were used in vehicle production. The remedy is for dealerships to replace both front brake jounce hoses with new hoses that have a revised braid material at no cost. The vehicles equipped with hybrid engines are excluded from the recall because the internal hose pressure is much lower due to the regenerative braking provided by the hybrid brake system. No failures of brake hoses on hybrid vehicles have been reported to ODI or Ford.

Ford's actions address ODIs concerns at this time. Hybrid vehicles will be monitored for related failures. The agency

reserves the right to take further action if warranted by new circumstances.

The 103 ODI numbers cited above can be viewed at [NHTSA.gov](http://NHTSA.gov) under the following ID numbers:

11511014, 11510867, 11510318, 11509030, 11505993, 11504989, 11504400, 11502147, 11502082, 11501820, 11501283, 11498439, 11498296, 11496842, 11496335, 11494931, 11494851, 11494252, 11493001, 11492084, 11492070, 11491444, 11491274, 11488858, 11488027, 11487627, 11487416, 11487233, 11486150, 11484924, 11484526, 11484080, 11483948, 11483926, 11483739, 11483723, 11482773, 11482690, 11481077, 11480788, 11480294, 11480052, 11479338, 11479334, 11479252, 11479247, 11479187, 11479094, 11479048, 11478985, 11478953, 11478729, 11478216, 11476892, 11476282, 11470558, 11468994, 11467109, 11466294, 11462746, 11461217, 11456065, 11455367, 11444848, 11436419, 11436376, 11430685, 11428329, 11425083, 11421026, 11420738, 11420735, 11420298, 11418197, 11403926, 11397549, 11366991, 11366757, 11361016, 11359968, 11354569, 11352165, 11350344, 11348799, 11343929, 11343205, 11331947, 11329020, 11319596, 11310529, 11292271, 11288455, 11254787, 11253479, 11253244, 11234622, 11230669, 11230050, 11228240, 11221111, 11143630, 11129392 and 11120228.