

U.S. Department of Transportation

National Highway Traffic Safety Administration

ODI RESUME

Investigation: PE24019
Prompted By: VOQ Review

Closed:

Investigator: Jayson Winick **Reviewer:** Peter Kivett

Approver: Tanya Topka

Subject: Low-pressure fuel pump failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Ford Motor Company **Products:** 2021 Ford Bronco

Population: 45,599

Problem The low-pressure fuel pump may fail, resulting in a complete loss of

Description: motive power with no ability to restart the engine.

FAILURE REPORT SUMMARY ODI Manufacturer EWR D&I Other Total **EWR Field Reports** 11,60 1.125 All Incidents: 22 1.103 0 0 3 0 0 0 **Crashes/Fires:** 0 0 0 Injury 0 0 0 0 0 0 **Incidents: Number of** 0 0 0 0 0 0 **Injuries: Fatality** 0 0 0 0 0 0 Incidents: **Number of** 0 0 0 0 0 0 **Fatalities:**

Description of Other:

Warranty Claims

*Total eliminates duplicates received by the manufacturer

ACTION/SUMMARY INFORMATION

Action: This Preliminary Evaluation (PE) is closed with 25V455.

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Summary:

On July 29, 2024, the Office of Defects Investigation (ODI) opened PE24019 to investigate complaints of low-pressure fuel pump failures in MY 2021 Ford Bronco vehicles. Some consumers reported that the failure occurred without warning while driving, resulting in a complete loss of motive power with no ability to restart the engine.

Ford determined that several other vehicle models contain low-pressure fuel pumps substantially similar to the 2021 Ford Bronco, including the 2022-2023 Ford Bronco, 2018-2023 Ford F-150, 2022-2023 Ford Expedition, 2019-2023 Lincoln Navigator, 2020-2023 Ford F-250-F-550, 2024 Ford Super Duty Chassis Cab, 2024-2025 Ford Ranger, 2020-2023 Ford Explorer, 2020-2023 Lincoln Aviator, and 2021-2025 Ford Mustang.

ODI's investigation found that the affected vehicles may lose fuel pressure and flow from the fuel delivery module (consisting of a low-pressure fuel pump, jet pump, reservoir, and other parts) due to a low-pressure pump failure. This can cause the engine to stall while driving. The root cause is reduced internal clearance in the fuel pump, increasing friction and sensitivity to vapor lock. Fuel blockage from contamination inside the jet pump also contributed to the failure. Ford stated that the contamination source was unknown.

On July 7, 2025, Ford filed recall 25V-455 for certain 2021-2023 Ford F-550 SD/F-450 SD/F-350 SD/F-250 SD, 2021-2022 Lincoln Navigator, 2021-2022 Ford Mustang, 2021-2022 Ford F-150, 2021-2023 Ford Explorer, 2022 Ford Expedition, and 2021-2023 Ford Bronco vehicles produced between July 1, 2021, and July 30, 2022. The recall also included certain 2021-2023 Lincoln Aviator produced between July 1, 2021, and December 21, 2022.

Ford explained in its recall filing that the production dates used for the recall were based on changes in the manufacturing process. Specifically, Ford determined that in June 2021, the supplier modified the jet pump manufacturing process, producing fuel pump chambers with a lower-than-specified internal clearance. In July 2022, the supplier implemented corrective actions to the manufacturing process by adding two additional vacuum pumps to reduce contamination during the production of the jet pump.

ODI has identified approximately 1,000 reports involving vehicles covered in this investigation but excluded from recall 25V-455. However, even with such reports, these vehicles experienced comparatively lower failure rates than the vehicles that are subject to Recall 25V-455. Ford has explained that these vehicles were excluded from the recall population because they did not experience the manufacturing changes that prompted the recall. Specifically, according to Ford, vehicles built before July 1, 2021 (the recall production start date), were not affected by the supplier's change to the jet pump manufacturing process. Even after closing this investigation, ODI will continue to monitor complaints for vehicles excluded from recall 25V-455 to consider whether they exhibit the same risks as the vehicles encompassed by the recall.

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The recall remedy is currently under development. In view of Ford's recall action, ODI is closing this Preliminary Evaluation, but will continue to monitor the issue as a remedy is developed and implemented. ODI will take additional action if warranted by future circumstances. To review the reports cited in the Closing Resume ODI Report Identification Number document, go to NHTSA.gov.

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