



U.S. Department of Transportation
National Highway Traffic Safety Administration

ODI RESUME

Investigation: RQ24008
Prompted By: Recall Remedy Review
Date Opened: 04/11/2024 **Date:** 10/30/2025
Closed:
Investigator: Joseph Geissler **Reviewer:** Peter Kivett
Approver: Tanya Topka
Subject: Underhood fires caused by fuel leak

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Ford Motor Company
Products: 2020-2022 Ford Escape and 2021-2024 Ford Bronco Sport
Population: 694,271
Problem Description: Cracking fuel injectors leak liquid fuel and/or fuel vapor that can accumulate near ignition sources resulting in an increased risk of a vehicle fire.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	0	3	0	7	10	0
Crashes/Fires:	0	3	0	7	10	0
Injury Incidents:	0	0	0	0	0	0
Number of Injuries:	0	0	0	0	0	0
Fatality Incidents:	0	0	0	0	0	0
Number of Fatalities:	0	0	0	0	0	0

Description of Other:
Vehicles unavailable for inspection to determine origin of fire

ACTION/SUMMARY INFORMATION

Action: This (RQ) Recall Query is closed with 25V467.

Summary:

On April 11, 2024, NHTSA's Office of Defects Investigation ("ODI") opened this Recall Query ("RQ") to investigate the adequacy of, including various safety concerns associated with, the remedy program in recalls 22V-859 (filed Nov. 18, 2022) and 24V-187 (filed Mar. 8, 2024). The vehicle population associated with these recalls includes certain MY 2020-2022 Ford Escape vehicles and MY 2021-2023 Ford Bronco Sport vehicles equipped with 1.5L engines. The safety defect in each recall involves high-pressure fuel injectors that are susceptible to cracking, allowing liquid fuel and fuel vapor to migrate onto hot surfaces within the engine compartment potentially resulting in underhood vehicle fires.

The remedy programs described in recalls 22V-859 and 24V-187 are identical and involve both a software component and a hardware component. Specifically, Ford developed an updated engine control software designed to detect a pressure drop in the high-pressure fuel rail, provide instrument cluster messaging to the driver, invoke a strategy to disable the high-pressure fuel pump, derate the engine output, and lower the temperatures of possible ignition sources within the engine compartment. Additionally, Ford would install a tube into the engine's cylinder head drain hole to shunt spilled liquid fuel past the various hot surfaces within the engine compartment and ultimately discard the spilled liquid fuel onto the roadway.

ODI identified various safety concerns with this remedy program, which, among other things, notably did not include repairing or replacing the defective part and potentially did include the introduction of new safety defects (like fuel spilling near the spark plugs and fuel spilling onto the public roadway). NHTSA opened this investigation to evaluate these concerns with the remedy program, including whether the vehicles were still susceptible to underhood fires even post-remedy.

As described in more detail in the Additional Summary posted simultaneously with this resume, ODI conducted a thorough investigation that included analyzing data and other materials received in response to two Information Requests, as well as inspections of post-remedy vehicles that experienced an underhood fire. ODI and Ford worked to identify and locate vehicles that experienced post-remedy fires and conduct joint vehicle inspections. ODI's investigation also prompted Ford to initiate a more in-depth evaluation of the defect, including Ford's conducting component level testing of high-pressure fuel injectors. ODI met with Ford on several occasions throughout this investigation to jointly conduct certain of these described tasks and to discuss test results.

A collateral issue surfaced as a result of this investigation: in March 2025, Ford realized that despite relevant repairs having been recorded as successfully completed, approximately 33,576 vehicles subject to recalls 22V-859 and 24V-187 did not have the software component of the remedy program installed correctly. Thus, on March 27, 2025, Ford filed a new related recall (25V-165) for these vehicles, notifying NHTSA and the public that they were still at risk of experiencing an underhood vehicle fire due to cracked fuel injectors despite the consumer having had their vehicle remedied pursuant to one of the two earlier recalls.

In June 2025, Ford committed to implementing a new remedy program to repair the vehicles. On July 11, 2025, Ford documented this commitment in a new recall filing (25V-467), which explains that Ford's upcoming remedy program will involve proactive replacement of all high-pressure fuel injectors within the recall population.

In view of the recall action taken by Ford, ODI is closing this Recall Query, which was opened given NHTSA's concerns that the initial remedy programs of the software to detect the pressure drop plus installation of the drain tube did not constitute an adequate repair. The agency reserves the right to take additional action if warranted by future circumstances.