

22S21 Chronology

Ford Motor Company

Date of Submission: March 25, 2022

FSA Number: 22S21

Title: 2020-2022 Escape, 2021-2022 Bronco Sport, 1.5L Engine Oil Separator Leak

On July 19, 2021, NHTSA informed Ford's Critical Concern Review Group (CCRG) of a Vehicle Owner Questionnaire pertaining to a 2021 Bronco Sport underhood fire.

On July 26, 2021, NHTSA informed Ford's Critical Concern Review Group (CCRG) of a Vehicle Owner Questionnaire pertaining to a 2021 Escape underhood fire.

From July-October 2021, CCRG investigated the underhood fire reports. Ford Design Analysis Engineering inspected the two VOQ vehicles that experienced underhood fires and observed extensive fire damage to the engine compartment. Although there was no conclusive evidence of a cause for either fire, there was evidence of oil and severe heat damage at the upper rear of the engine. Based on these facts, CCRG opened an investigation into potential leaks at the engine oil separator which was a possible source of oil and is located in the upper rear of the engine. CCRG and Engineering searched for any other reports of 1.5L underhood fires that occurred prior to the July 19, 2021, report. Based upon these reviews, CCRG identified five other cases of underhood fire in 2020-2021 Escape vehicles where leaks at the oil separator may have initiated the fires. Additionally, CCRG and Engineering identified twelve warranty claims for vehicles where the oil separator was replaced for an external oil leak and described a crack in the separator housing. CCRG and Engineering understood underhood fire claims and warranty part replacements were occurring at low time in service and at low vehicle mileage based upon studied reports.

In October 2021 Ford's supplier Bruss NA and Ford manufacturing implemented visual inspections to ensure there is no damage present for each oil separator shipped from the supplier manufacturing facility, at the engine assembly plant, and at the vehicle assembly plants where completed engines are shipped to.

From November - December 2021 the CCRG worked with the supplier and departments within Ford to understand the potential root cause of oil separator damage and determine if there was a population of vehicles in the field at risk. Ford did not identify any new related claims that occurred during this period. CCRG determined the probability of a damaged oil separator to be low. Additionally, at this time, CCRG determined that due to low time in service of the known failures, and the nature of the symptoms associated with an oil leak, including oil smoke or smell, all damaged separators in the field would have already been identified by owners and repaired.

In January 2022, CCRG placed the investigation into a monitoring period with the understanding that all damaged separators had been remedied under warranty.

On February 16, 2022, Ford met with NHTSA and shared the investigation findings and plan to monitor. NHTSA requested a follow up discussion.

On February 25, 2022 CCRG received a report of a 2021 Escape vehicle that experienced an underhood fire where a leak at the oil separator was suspected as a contributor to the fire.

On March 3, 2022 Ford met with NHTSA and shared the results of the additional vehicle fire identified on February 25.

On March 9, 2022 Ford's Technical Review Group reviewed the CCRG's investigation findings.

On March 16, Ford met with NHTSA and shared the plan to present a recommendation to Ford's Field review Committee.

On March 18, 2022, Ford's Field Review Committee reviewed the concern and approved a field action.

As of February 23, 2022, there are approximately 14 warranty claims and 1 field report describing leaks from the oil separator. The earliest warranty report describing a leak from the oil separator is May 20, 2021.

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