

November 13, 2023

FSA # 23S23 Amendment #3

23S23 – CERTAIN 2020-23 FORD EXPLORER, LINCOLN CORSAIR AND AVIATOR – REAR  
CAMERA BLUE IMAGE

## **Chronology**

On September 15, 2021, Ford's Field Review Committee (FRC) approved Field Service Action 21S44 to remedy blue screen conditions observed on Explorer, Aviator, and Corsair vehicles equipped with 360-degree camera systems.

On Jan 13, 2023, Ford's Field Review Committee (FRC) approved Field Service Action 23S02 to remedy rearview camera blue image conditions observed on Explorer, Aviator, and Corsair vehicles equipped with 360-degree camera systems post 21S44 repair.

Between Jan 13, 2023, and March 2, 2023, Ford and supplier teams continued to investigate the root cause of the camera loss of video frames.

On March 2, 2023, Ford's Critical Concern Review Group (CCRG) met to review 29 claims of vehicles exhibiting symptoms of full blue or black screens after 23S02 remedy. Ford's Advanced Driver Assistance Systems (ADAS) team and supplier team prioritized the investigation to determine the cause of these failure modes.

On March 14, 2023, Ford paused the implementation of 23S02 due to occurrences of full blue screen, full black screen and rear camera blue image failure modes after the 23S02 remedy was performed.

On April 4, 2023, Ford's CCRG team issued a Stop-Ship for the affected vehicle lines upon review of updated warranty data for full blue screen, full black screen and rearview camera blue image post 23S02 remedy.

Between April 4, 2023, and April 28, 2023, Ford's ADAS team and supplier performed analysis which led to confirmation of a software susceptibility in the 23S02 software remedy causing the full blue screen, full black screen and rear camera blue image failure modes.

As of March 21, 2023, there have been 250 warranty reports alleging occurrence of rear camera blue images or full blue or black screens for vehicles post 23S02 repair. There has been 1 warranty report alleging occurrence of rear camera blue image or full blue or black screen for vehicles produced after the implementation of the 23S02 remedy. As of April 26, 2023, there have been 5 VOQs alleging blue screen post 23S02 repair.

As of April 26, 2023, Ford is unaware of any injuries related to this concern. There is 1 allegation of a minor crash related to a loss of rear-view camera image.

On **May 5, 2023**, Ford's Field Review Committee (FRC) approved Field Service Action 23S23; at the time the root cause was unknown, and the remedy was not defined. After the approval of

this program in FRC, Ford kicked-off several workstreams to better understand root cause(s) for this concern.

**May-June 2023:** Ford and its suppliers worked to perform a deep-dive analysis of the internal camera connector, reviewed IPMB and camera software, and developed testing to replicate the condition on a camera system. In May 2023, Ford and its suppliers were able to reproduce the issue in the vehicle and at a component level. The supplier ran key life testing and Ford developed and performed Highly Accelerated Life Test (HALT) testing to replicate camera concerns in the laboratory environment.

**July- August 2023:** Ford and its supplier determined that camera hardware contributed to the blue or blank screen condition when a customer is in a backing event on the Aviator, Explorer, and Corsair vehicle lines and began validation of a hardware remedy. Once Ford determined that hardware root cause(s) affected rear view cameras, a read-across was conducted to determine other vehicle lines with shared camera hardware and to review the field performance of those cameras. Ford CCRG opened an investigation into the other applications sharing this rearview camera design: Navigator, Bronco, and Transit vehicles with 360 view feature, and Transit and Aviator vehicles with High Definition Rear View Camera feature. These were not previously included in FSA 23S23 or other rear view camera recalls which were focused on software.

On August 18, 2023, Ford's Field Review Committee reviewed the concern and approved the remedy.

On November 3, 2023, Ford's Field Review Committee reviewed and approved the amended population which includes the population of vehicles built prior to production implementation of the remedy.