

Hyundai Recall Campaign 271

Attachment A: Technical Analysis Leading Up to Decision

❖ August – December 2023

- On August 1, 2023, NASO (“North America Safety Office”) identified a population of increased field claims related to a rearview camera durability concern.
- On September 5, 2023, NASO requested HMC (“Hyundai Motor Company”) investigation into the rearview camera mechanism based on the increased field data.

❖ January 2024

- On January 24, 2024, HMC provided that the duplication testing results were inconclusive.

❖ February - November 2024

- From February through May 2024, parts from the field were collected for further analysis.
- From May 17 through July 1, 2024, NASO performed replication testing of the subject rearview camera system in support of an ongoing investigation into allegations of intermittent, distorted, or inoperative rearview camera images from owners. In the replication testing, NASO detected cracks in the camera processor’s solder joints. Some of the samples exhibited abnormal performance, consistent with the alleged condition, while others showed no abnormal performance, proving to be inconsistent with the alleged condition.
- From July 1 to October 29, 2024, NASO reviewed the test results and continued discussion with HMC on potential causalities. From the investigation, multiple camera assemblies were identified as faulty due to a “black” or “white” image, or undetected signal. Information provided by HMC identified a potential issue with the camera’s PCB, on which the solder joints securing the integrated signal processor showed signs of damage occurring during manufacturing. It was also concluded that certain environmental factors such as temperature and humidity along with the damage could worsen the performance of the rearview camera system. Based on these findings, NASO convened its North American Safety Decision Authority on November 13, 2024, and determined that the subject condition would result in a failure of the requirements and test condition(s) specified in FMVSS No. 111, “Rear Visibility,” requiring a new noncompliance recall of all affected Hyundai Santa Fe and Elantra vehicles in the U.S. and other affected North American market(s).
- **As of the date of this filing, Hyundai is not aware of any confirmed crashes, injuries, or fires related to the noncompliance condition in the U.S.**