

# RECALL 246 ATTACHMENT A [AMENDED – 2023.09.18]

## CHRONOLOGY OF EVENTS LEADING UP TO DEFECT DECISION

### ❖ December 2022

On December 20, 2022, HMA's Techline Assistance Call Center notified NASO of a model year 2023 Hyundai Palisade vehicle exhibiting a condition of heat damage on the wire harness/connector of the electric oil pump ("EOP") used in the vehicle's Idle Stop & Go ("ISG") system. NASO's Data Review Committee ("DRC") opened a new investigation matter and began actively monitoring information sources for similar incidents.

### ❖ January – April 2023

On January 11, 2023, the DRC decided to escalate the investigation to the Technical Review Committee ("TRC") for further study into root cause and issue trend.

NASO's TRC began monitoring field information for new reports of the condition and collecting warranty part returns for additional analysis by HMC. By April 2023, two (2) parts were collected and sent to HMC for review. Additionally, the TRC expanded the scope of vehicles involved in the investigation to model year 2023 Hyundai Tucson, Sonata, Elantra, and Kona vehicles based on shared componentry.

During this period, NASO shared Hyundai's investigation findings with NHTSA's ODI during recurring monthly reviews of top safety investigations in February, March, and April 2023.

### ❖ May 2023

On May 18, 2023, HMC shared its returned parts analysis findings with NASO. According to HMC, the electric oil pump controller used in the vehicle's Idle Stop & Go ("ISG") system was produced with printed circuit boards containing damaged capacitors due to improper manufacturing by the Tier 2 supplier of the controller. The damaged capacitors could create abnormal electrical activity that may generate heat and damage the controller PCB in addition to its wire harness and connector.

On May 24, 2023, NASO shared its latest findings with NHTSA's ODI during its recurring monthly review of top safety investigations.

### ❖ June 2023

On June 18, 2023, HMC shared details of market data for vehicles outside of the USA. Also that resistance tests were implemented at manufacturing plants on March 16, 2023. Additionally, HMC noted that parts from the subject controller supplier were eliminated from production on March 24, 2023.

### ❖ July 2023

On July 13, 2023, HMC concluded testing and provided NASO with an issue update. In addition to the risk of fire, the localized heat damage could trigger a short circuit in the EOP and/or EOP wiring impacting the CAN network and other onboard vehicle controllers.

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Based on HMC's findings, on July 20, 2023, NASO convened its North America Safety Decision Authority and decided to initiate a safety recall of all vehicles affected by the defect condition in the U.S. and Canadian markets.

As of the date of the original filing, Hyundai has confirmed there are 4 unique thermal incidents associated with the subject defect condition in the U.S. Additionally, there are no confirmed crashes, or injuries related to this condition.

Vehicle	Receipt Date
KM8R5DGE9PU*****	12/20/2022
KM8R7DGE8PU*****	2/20/2023
KM8R3DGE8PU*****	2/20/2023
KM8R34GE7PU*****	2/24/2023

### ❖ August - September 2023

**On September 12, 2023, NASO was informed of 111 additional vehicles to be added to the affected vehicle population based on final confirmation of transmission production records. Hyundai is submitting this revision as amended information to the initial Part 573 report for Recall 246.**