

# RECALL 210 ATTACHMENT A

## CHRONOLOGY OF EVENTS LEADING UP TO DEFECT DECISION

- August 2020 – April 2021

In August 2020, HMA's NASO identified five (5) Vehicle Owner Questionnaires ("VOQ") indicating turn signal malfunctions on certain model year 2015-2017 Hyundai Sonata vehicles. The alleged conditions of the malfunction varied on misdirection by one or more turn signal lamps during normal operation. NASO began routine field data analysis to identify and analyze specific trends in alleged improper operation of the vehicle's turn signal lamps.

- May 2021 – August 2021

In May 2021, NASO's newly-formed Data Analytics ("DA") team began review of identified reports alleging turn signal misdirection on the subject vehicles under its new process for pre-investigation of safety-related quality concerns. During this time, Kia North America ("Kia NA") became aware of Vehicle Owner Questionnaires ("VOQ") indicating turn signal malfunctions on certain model year 2015-2016 Kia Sedona vehicles. KMNA conducted a review of internal records and was able to confirm intermittent turn signal operation on a recovered incident multifunction switch assembly. Kia NA initiated ongoing collection of warranty switches for further analysis by Kia Corporation ("Kia HQ").

In July 2021, Kia NA initiated a warranty extension for multifunction switches on model year 2015-2016 Kia Sedona vehicles aimed at expediting recovery of warranty parts for analysis by Kia HQ. Kia HQ continued testing of incident switches during this time but was unable to replicate the condition.

In August 2021, Kia HQ expanded their investigation to other Kia-badged peer vehicles and noted that while some vehicles used the same multifunction switch as the subject vehicles, there were no similar turn signal misdirection claim trends. Kia HQ also noted the Smart Junction Box software logic used in the subject vehicles originated from a different supplier than other vehicles equipped with the same multifunction switch. Kia HQ investigated further and, based on confirmation of a software logic change during the latter part of 2017 Sedona vehicle production, determined that the software logic used in certain model year 2015-2017 Kia Sedona vehicles may not properly interpret signals received from the multifunction switch in certain circumstances. Kia HQ shifted focus to replication efforts through testing of the software logic and expanding their investigation to all products using the similar logic, including Hyundai products.

- September 2021

On September 8, 2021, Hyundai Motor Company ("HMC") notified HMA's NASO of Kia's investigation findings. NASO escalated DA's analysis to the Technical Review Committee ("TRC") for a complete investigation into the suspected defect condition. On September 9, 2021, Kia HQ successfully replicated the misdirection condition. According to Kia HQ, similar testing using improved Smart Junction Box software logic eliminated the condition. NASO's TRC concluded their investigation and identified 631 warranty claims involving model year 2015-2017 Hyundai Sonata vehicles indicating a condition similar to the misdirection condition replicated by Kia. Based on this

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analysis and the results of Kia's investigation, NASO's TRC recommended to escalate the investigation to the North American Safety Decision Authority ("NASDA") for further review.

On September 17, NASO convened its North American Safety Decision Authority and decided to conduct a safety recall to address the above condition in affected vehicles in the U.S. market.

As of the date of this filing, Hyundai has identified 631 claims related to the recall condition. Hyundai is not aware of any crashes or injuries related to the recall condition.