## **ATTACHMENT A**

# CHRONOLOGY OF EVENTS REGARDING HECU/ABS MODULE NHTSA Recall No. XXX-XXX

## June 2019—December 2019

HL Mando Corporation ("Mando") received incident ABS modules recovered from Elantra and Santa Fe from Hyundai Motors Company ("HMC") and inspected such recovered parts.

Mando observed a leakage of brake fluid inside of the ABS module, and was not able to find a correlation between the leakage and the ABS module. Therefore, an approximate failure mechanism or root cause was not able to be determined at that time.

#### June 2020

Mando received an ABS module from Kia Motors Company ("KMC") regarding electrical complaint for Kia and evaluated the recovered ABS module with KMC. During the analysis, Mando observed that the ABS module had a brake fluid leak and internal damages, contamination, and foreign substances. This analysis lasted until August 20, 2020, and Mando realized internal contamination and foreign substances were oxides came from corrosion on the surface of the block. So, Mando judged that an additional analysis is needed to investigate the cause of the corrosions.

#### October 2020

As an alternate means of investigating potential root causes, Mando arranged for several types of brake oil and ABS modules from field vehicles and also samples for in-depth evaluation by an external engineering analysis firm in Korea.

#### <u>January – February 2021</u>

On January 28, Mando received a module of 2013 Elantra vehicle from HMC and Mando reported the analysis result to HMC that an internal brake fluid leak was found on February 24, 2021, and it was judged that additional testing was necessary to confirm possible leak sources in the ABS module componentry.

#### April 5, 2021

An external engineering analysis firm presented its findings regarding a test Mando requested in October, 2020. According to the firm, the deteriorated brake fluid would cause the corrosion of aluminum blocks

and steel parts. Also, the firm mentioned a possibility that these corrosion oxides are stacked between seal and block and it makes contact points of them damaged.

## May, 2021 - March, 2022

Starting May 26, 2021, Mando received several modules, including vehicles from Hyundai Motor Manufacturing Alabama and Kia Motor Manufacturing of Georgia, and Mando confirmed the same phenomenon—that there is a corrosion not only on the seating surface but also in other areas.

#### <u>September 27, 2023</u>

On September 27, 2023 Mando became aware that a public safety recall announcement was issued by the Hyundai Motor North American Safety Office based on the accumulated field issues and reports from third party reports.