



U.S. Department of Transportation
**National Highway Traffic Safety
 Administration**



August 20, 2024

VIA Email – Delivery and Read Receipt Requested

Catherine Corrigan, Ph.D.
 President and CEO
 Exponent, Inc.
 149 Commonwealth Drive
 Menlo Park, CA 94025
 (650) 688-7171
 ccorrigan@exponent.com

AQ23-002
 Mando Hyundai Kia
 21E-038 20V-520 16V-815
 21E-039 20V-543 20V-518
 23E-073 21V-160 20V-519
 21V-161 21V-137
 21V-303 21V-331
 22V-056 22V-051
 22V-810 22V-800
 23V-651 23V-652

Dear Dr. Corrigan:

The Office of Defects Investigation (ODI), Recall Management Division (RMD), is conducting an Audit Query (AQ) in relation to sixteen (16) Part 573 Defect Reports from vehicle manufacturers Hyundai Motor America (Hyundai) and Kia America, Inc. (Kia), and three (3) reports from equipment manufacturer Mando Corporation (Mando), describing defects that may exist in Antilock Braking Systems (ABS) or Hydraulic Electronic Control Units (HECU) produced by Mando Corporation (Mando). The reports contain varying defect descriptions and differing remedy descriptions for the same or similar equipment supplied by Mando. This investigation has been assigned the identification AQ23-002.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Exponent:** Exponent, Inc., all of their past and present officers and employees, whether assigned to their principal offices or any of their field or other locations, including all of their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Exponent (including all business units and persons previously referred to), who are or were involved in any way with recalls of Hyundai and Kia vehicles, and Mando ABS/HECU units.
- **Mando:** Mando Corporation, Mando America Corporation, Mando Pyeongtaek Plant, Mando Corporation Mexico, HL Mando America Corporation, all of its past and present

officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Mando (including all business units and persons previously referred to), who are or were involved in any way with any of Mando ABS or HECU Units

- **Kia:** Kia America, Inc., all of their past and present officers and employees, whether assigned to their principal offices or any of their field or other locations, including all of their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Kia (including all business units and persons previously referred to), who are or were involved in any way with recalls of Kia vehicles.
- **Hyundai:** Hyundai Motor America, all of their past and present officers and employees, whether assigned to their principal offices or any of their field or other locations, including all of their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Hyundai (including all business units and persons previously referred to), who are or were involved in any way with recalls of Hyundai vehicles.
- **Document:** “Document(s)” is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar

to any of the foregoing, however denominated by Mando, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film, or photograph originally produced in color must be provided in color. Furnish all documents whether verified by Mando or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 C.F.R. § 579.4.

The purpose of this request is to evaluate the timeliness and scoping of Hyundai and Kia's defect decision making and adherence with reporting requirements; and understand the varying defect descriptions and remedies between these recalls. We have been made aware that Exponent was retained by Hyundai, Kia or Mando for the purpose of examining and determining the cause of failures related to the recalls listed in the table below.

Accordingly, we require the following information:

1. For each of the recalls listed in the below table, provide the following:
 - a. The date in which Exponent was retained by Hyundai, Kia or Mando (OEM) for the purpose of examining and determining the cause of failures related to the recalls listed in the table below;
 - b. The date in which Exponent initially received information or other materials, such as samples, from each OEM or any other source, as related to the recalls listed in the table below;
 - c. The identity of the source of the information or materials, whether it be from an OEM or any other source;
 - d. The dates in which Exponent made its initial determination as to the root cause;
 - e. The dates in which Exponent presented its initial findings to each OEM, as related to the recalls listed in the table below;
 - f. A brief summary of the initial findings presented to each OEM;
 - g. The corresponding Mando part number (e.g., MGH60, MGH80, etc.) discussed in those presentations, if known;
 - h. A brief description of the response to the initial presentation by each OEM, if known;
 - i. A brief description of actions taken by each OEM, if known;
 - j. The date in which Exponent presented its final report to each OEM, as related to the recalls listed in the table below;

- k. A brief summary of the final report presented to each OEM;
- l. A brief description of the response to the final report by each OEM, if known;
- m. A brief description of the actions taken by each OEM, if known;

1	Mando	21E-038 / Anti-Lock Brake System Module May Short Circuit
2	Mando	21E-039 / Anti-Lock Brake System Module May Short Circuit
3	Mando	23E-073 / ABS Unit May Cause Engine Compartment Fire
4	Hyundai	20V-520 / Anti-lock Brake System Module May Short
5	Hyundai	20V-543 / ABS Unit may cause Engine Compartment Fire
6	Hyundai	21V-160 / Anti-Lock Brake System Module May Short Circuit
7	Hyundai	21V-161 / Anti-Lock Brake System Module May Short Circuit
8	Hyundai	21V-303 / Anti-Lock Brake System Module May Short
9	Hyundai	22V-056 / ABS Unit May Cause Engine Compartment Fire
10	Hyundai	22V-810 / ABS Unit May Cause Engine Compartment Fire
11	Hyundai	23V-651 / ABS Unit May Cause Engine Compartment Fire
12	Kia	16V-815 / Hydraulic Electronic Control Unit may Short
13	Kia	20V-518 / ABS Unit may cause Fire
14	Kia	20V-519 / Hydraulic Electronic Control Unit May Short
15	Kia	21V-137 / Engine Compartment Fire
16	Kia	21V-331 / Hydraulic Electronic Control Unit May Short
17	Kia	22V-051 / Engine Compartment Fire
18	Kia	22V-800 / Engine Compartment Fire
19	Kia	23V-652 / HECU May Cause Engine Compartment Fire

Provide your responses in a table in Microsoft Excel organized by recall number.

- 2. Copies of all written communications and documents, including but not limited to mail, email, presentations, reports, meeting minutes, and dictations to and from Exponent regarding the recalls listed in the table above. These communications should be organized by recall number and should include a table in Microsoft Excel that identifies the file name, file type, original creation date of the file, and a brief description explaining the subject of the file.

Legal Authority for This Request

This letter is being sent to Exponent pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports. It constitutes a new request for information.

Civil Penalties

Exponent’s failure to respond promptly and fully to this letter could subject Exponent to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to \$27,168 per violation per day, with a maximum of \$135,828,178 for a related series of daily violations, for failing or refusing to

perform an act required under 49 U.S.C. § 30166. *See* 49 C.F.R. § 578.6(a)(3). This includes failing to respond completely, accurately, or in a timely manner to ODI information requests.

If Exponent cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, Exponent does not submit one or more requested documents or items of information in response to this information request, Exponent must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Confidential Business Information

If Exponent's response contains any information that you claim is confidential business information, Exponent must request two secure electronic file transfer links from Choon Lee at choon.lee@dot.gov. One secure electronic file transfer link is for your request for confidential treatment in compliance with 49 C.F.R. part 512 and will be directed to NHTSA's Office of the Chief Counsel. The second secure electronic file transfer link is for your non-confidential response to this letter, including the public versions of all documents with claimed confidential information redacted. Please refer to **AQ23-002** in Exponent's response to this letter and in a request for confidential treatment that Exponent may submit.

If you have any questions regarding submission of a request for confidential treatment, contact Daniel Rabinovitz, Trial Attorney, Office of Chief Counsel at daniel.rabinovitz@dot.gov.

DO NOT submit your numbered responses to this letter (or any responsive materials) through the Recalls Portal. Rather, send correspondence and materials directly to Choon Lee of my staff at choon.lee@dot.gov.

Due Date

Exponent's response to this letter must be submitted to this office within 30 days of receipt of this letter. If Exponent finds that it is unable to provide all the information requested within the time allotted, Exponent must request an extension from me at (202) 366-0388 no later than five business days before the response due date. If Exponent is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Exponent then has available, even if an extension has been granted.

If you have any questions concerning this matter, please contact Choon Lee at (202) 366-0388 or by e-mail at choon.lee@dot.gov.

Sincerely,

Alex Ansley, Chief

Recall Management Division
Office of Defects Investigation