



Kia Motors America, Inc.

Corporate Headquarters

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September 7, 2017

VIA FEDERAL EXPRESS

Stephen Wood, Acting Chief Counsel
Office of Chief Counsel (NCC-100)
National Highway Traffic Safety Administration
West Building, W41-326
1200 New Jersey Avenue, S.E.
Washington D.C. 20590

Re: **Special Order Directed to Kia Motors America, Inc.**
In re: RQ17-003, Kia Theta II Engine Recalls

Dear Mr. Wood:

This response is provided to NHTSA as specified by NHTSA's Special Order regarding RQ17-003 dated June 23, 2017 which was sent to Kia Motors America ("KMA") to investigate the timeliness and scope of KMA's Theta II engine recalls and its compliance with NHTSA reporting requirements. Pursuant to the extensions granted to KMA by the Office of Chief Counsel, KMA hereby supplements its August 25, 2017 response to Request numbers 7, 15, 16, 26, 31, and 32. KMA also amends its responses to Request numbers 5 and 16 pursuant to Instruction 10. KMA incorporates its previous preliminary statements and its August 25, 2017 response to NHTSA's Special Order.

REQUEST NO. 5:

State the number of each of the following, received by Kia, or of which Kia is otherwise aware, which relate to, or may relate to, the defect in the subject vehicles:

- a. Consumer complaints, including those from fleet operators;
- b. Field reports, including dealer field reports;
- c. Reports involving a crash, injury or fatality;
- d. Reports involving a fire;
- e. Property damage claims;
- f. Third-party arbitration proceedings where Kia is or was a party to the arbitration; and
- g. Lawsuits, both pending and closed, in which Kia is or was a defendant or codefendant.

For subparts "a" through "g" state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

Describe in detail the search methods and search criteria used by Kia to identify the items in response to this Request.

RESPONSE TO REQUEST NO. 5:

A chart summarizing the total number of Consumer Assistance Center Case Reports ("CA"), Field Reports, Technical Assistance Center Case Reports, Arbitrations and Lawsuits is being submitted electronically.

KMA's search included all CA's, Field Reports and Techline Reports generated through June 23, 2017 that mentioned the words "engine" OR "oil" OR "short block" OR "long block" OR "connecting rod" OR "rod bearing". In light of the limited time in which to respond to this request, KMA did not attempt to further narrow its production, which likely includes documents that are ultimately not related to the "defect" at issue. Due to the broad definition of "defect" KMA erred on the side of caution and its search and production in response to this request was expansive and over-inclusive. With respect to CA reports, KMA is unable to extract incident date information in an automated manner from the source system. A manual review of each CA report would be required to obtain this information. KMA has, however, included the incident date where an assessment has been made.

As to lawsuits and arbitrations, KMA's search identified all Complaints involving the subject vehicles equipped with a Theta II engine of which KMA received notice on or before June 23, 2017. Those Complaints were then reviewed and those responsive to this Request have been provided.

The information to respond to this Request was provided by KMA.

SUPPLEMENTAL RESPONSE TO REQUEST NO. 5:

An amended chart summarizing the total number of Consumer Assistance Center Case Reports ("CA"), Field Reports, Technical Assistance Center Case Reports, Arbitrations and Lawsuits is being submitted electronically and contemporaneously with this response pursuant to Instruction 10.

The information to respond to this Request was provided by KMA.

REQUEST NO. 7:

Produce copies of all documents related to each item within the scope of Request No. 5. This shall include litigation documents including, but not limited to, depositions and discovery. Organize and provide the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Kia used for organizing the documents.

RESPONSE TO REQUEST NO. 7:

Pursuant to the extensions granted to KMA by the Office of Chief Counsel on August 18, 2017 and August 23, 2017, CA Report Attachments stored off-site for Calendar Years 2008-2014 and those stored on-site for Calendar Years 2015-2017 which are still being reviewed to confirm the absence of confidential documents, are not being provided by the due date of this response but will be provided on September 8, 2017. All other copies of the documents identified in response to Request No. 5 are being provided electronically and submitted contemporaneously with this response. The documents responsive to this Request are identified in the index required by Instruction 11(f) and categorized under the column "Document Type" with the categories: Consumer Assistance Center Case Report, Consumer Assistance Center Report Attachment, Techline Assistance, Techline Assistance Attachment, and Litigation.

The information to respond to this Request was provided by KMA.

SUPPLEMENTAL RESPONSE TO REQUEST NO. 7:

Pursuant to the extensions granted to KMA by the Office of Chief Counsel on August 18, 2017 and August 23, 2017, CA Report Attachments stored off-site for Calendar Years 2008-2014 and those stored on-site for Calendar Years 2015-2017 are being submitted electronically and contemporaneously with this response. The documents responsive to this Request are identified in the index required by Instruction 11(f) and categorized under the column "Document Type" with the categories: Consumer Assistance Center Case Report, Consumer Assistance Center Report Attachment, Techline Assistance, Techline Assistance Attachment, and Litigation.

The information to respond to this Request was provided by KMA.

REQUEST NO. 15:

Describe in detail any internal and/or external audits, assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, for this request "actions") that relate to, or may relate to, the defect that have been conducted, are being conducted, are planned, or are being planned by, or for, Kia. For each such action, provide the following information:

- a. Action title or identifier;
- b. The actual or planned start date;

- c. The actual or expected end date;
- d. Brief summary of the action and objective of the action;
- e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action;
- f. A brief summary of the findings and/or conclusions resulting from the action;
- g. Copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. This includes, but is not limited to, all documentation for design of experiments (including any presentations, reports, or documents related to same), all Fault Tree Analyses and supporting documents conducted for Theta II engine failure, and all design and process Failure Mode and Effects Analysis (FMEA) that refers or relates to Theta II engine failures.

Organize the documents chronologically by action. Provide all reports, presentations, and any and all other documents that relate to an analysis of root cause or root causes of the defect, and state the date (MM/DD/YY or MM/YY if DD is unknown) the report, presentation, or other document was created, where possible.

For analyses of individual subject components, full or partial, recovered from the field, provide all photographs, metallurgical analysis, conclusions, and any and all other relevant documents. Identify the subject component by the VIN number of the vehicle from which it was harvested.

RESPONSE TO REQUEST NO. 15:

A chart summarizing the actions conducted by Kia or at Kia's request, including any supporting documents, is being produced electronically and submitted contemporaneously with this response. Kia notes that while the actions conducted by the Task Force Team (TFT) were not specifically conducted or requested by Kia, it is Kia's understanding that the TFT was created to address manufacturing deviations in relation to all the production facilities and thus their actions have been included as an "action" in response to this request.¹ Additionally, Hyundai Translead routinely conducts visual inspections and at times breakdowns of engines in Kia vehicles. To the extent the subject Kia vehicles were equipped with Theta II engines, analyses of Theta II engines, which were conducted by Hyundai Translead have also been included.

KMA requested this information from HKMC Legal. They obtained and provided the information from KMC, HMMA and Hyundai Translead to KMA. Information was also provided by KMA.

¹ Since the TFT was tasked with the responsibility of addressing all types of manufacturing issues, the documents provided include information relating to non-Theta II engines. The Korean language PowerPoints produced in response to this request have been translated to English. However, for the supporting documents embedded in said Korean language PowerPoints, only information relating to Theta II engines has been translated due to the significant amount of documents which exist.

SUPPLEMENTAL RESPONSE TO REQUEST NO. 15:

Pursuant to the extension granted to KMA by the Office of Chief Counsel on August 23, 2017, a supplemental chart summarizing the actions conducted by Kia or at Kia's request, including any supporting documents, is being produced electronically and submitted contemporaneously with this response.

The information to respond to this request was provided by KMA.

REQUEST NO. 16:

Describe all modifications or changes made in the design, material composition, manufacture, quality control, supply, or installation of the Theta II engine for Kia, from the start of production to date, which relate to, or may relate to, the defect. For each such modification or change, provide the following information:

- a. A detailed description of the modification or change;
- b. The reason(s) for the modification or change, including the underlying rationale and purpose of the design change;
- c. The individuals who participated in the decision to make the modification or change, including whether those individuals were employees of Hyundai, Kia, or both;
- d. When the decision to modify or change was made;
- e. The objectives of implementing the modification or change, and any follow-up study, evaluation, inquiry, investigation, analysis, and/or testing that was conducted to determine whether the change or modification accomplished or otherwise met the identified objectives;
- f. The part number(s) (service and engineering) of the original component;
- g. The part number(s) (service and engineering) of the modified component;
- h. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- i. When the modified component was made available as a service component; and
- j. Whether the modified component can be interchanged with earlier production components.

Also provide the above information for any modification or change that Kia is aware of which may be incorporated into vehicle production within the next 120 days.

RESPONSE TO REQUEST NO. 16:

Pursuant to the extension granted to KMA by the Office of Chief Counsel on August 24, 2017, Kia will provide an updated chart which will include its response to 16(i) by September 8, 2017.

A chart summarizing the modifications and/or changes made in the design, material composition, manufacture, quality control, supply, or installation of the Theta II engines is being provided electronically and submitted contemporaneously with this response.

Kia is aware of four (4) modification and/or changes for HMMA plant facility and two (2) modifications and/or changes for the Hwasung plant facility that may be incorporated into vehicle production within the next 120 days. These modifications/changes are identified in the summary chart as line items 115-118 under the "HMMA" tab and line items 162 and 163 under the "Hwasung" tab.

KMA requested this information from HKMC Legal. They obtained and provided the information from KMC and the engine plants to KMA.

SUPPLEMENTAL RESPONSE TO REQUEST NO. 16:

Pursuant to the extension granted to KMA by the Office of Chief Counsel on August 24, 2017, a supplemental chart summarizing the modifications and/or changes made in the design, material composition, manufacture, quality control, supply, or installation of the Theta II engines is being provided electronically and submitted contemporaneously with this response. This chart includes a supplemental response to 16(i) as well as amended information responsive to 16(h) and 16(j) in compliance with Instruction 10.

KMA requested this information from HKMC Legal. They obtained and provided the information from KMC and the engine plants to KMA.

REQUEST NO. 26:

Provide copies of any and all communications (documents, or otherwise) between Hyundai and Kia relating to the following:

- a. Any problems, corrections, changes or alterations, malfunctions, or other concerns relating to any production line(s) that produce(d) Theta II engines for Kia;
- b. Any problems, corrections, changes or alterations, malfunctions, or other concerns relating to any production line(s) that produce(d) Theta II engines for Hyundai;
- c. Any different procedures for assembly line(s) that produced Theta II engines for Kia versus assembly line(s) that produced Theta II engines for Hyundai;
- d. Connecting rod bearing failures in Theta II engines produced by HMMA that were installed in Kia vehicles;
- e. Hyundai's evaluation of a potential safety-related defect and determination that a safety-related defect existed in the vehicles identified in Hyundai's September 10, 2015 recall (15V-568), including but not limited to, Hyundai's decision to limit that recall to Theta II equipped Sonata's built between December 11, 2009 and April 12, 2012;

- f. The April 15, 2015 class action complaint filed against Hyundai in the Northern District of California containing allegations that the Theta II engines installed in certain Hyundai vehicles were defective;
- g. Hyundai's warranty extension program for MY 2011-2014 Sonata vehicles manufactured at HMMA;
- h. Kia's warranty, goodwill program, and other costs stemming from the defect;
- i. The June 2, 2016 class action complaint filed in the Central District of California containing allegations that the Theta II engines installed in certain Kia vehicles were defective;
- j. Kia's offer, made on or about June 10, 2016, to provide an extended warranty to owners of certain Theta II equipped Kia vehicles;
- k. Kia's assessment of the safety consequences, or the lack thereof, of the defect;
- l. Hyundai's assessment of the safety consequences, or lack thereof, of the defect in the various Theta II engines; and
- m. Allegations by any current or former Hyundai or Kia employee of a Theta II engine defect.

RESPONSE TO REQUEST NO. 26:

The response to this request is not complete. Pursuant to the extension granted to KMA by the Office of Chief Counsel on August 18, 2017, the remaining requested communications will be provided on September 8, 2017. Communications collected and identified thus far as being responsive to this request are being provided electronically and submitted contemporaneously with this response.

KMA requested this information from HKMC Legal. They obtained and provided the information from KMC to KMA. Information for this request was also provided by KMA and KMMG.

SUPPLEMENTAL RESPONSE TO REQUEST NO. 26:

Pursuant to the extension granted to KMA by the Office of Chief Counsel on August 18, 2017, supplemental non-privileged communications are being provided electronically and submitted contemporaneously with this response. There are certain Korean email communications, and those documents will be submitted to NHTSA in the coming days.

KMA requested translations from HKMC Legal, which is in the process of providing those translations to KMA.

REQUEST NO. 31:

State the date on which Kia first became aware that Hyundai was investigating a potential safety-related defect in Theta II engines. Provide a detailed description of all information regarding the potential safety-related defect of which Kia was aware prior to September 10, 2015, along with

any actions Kia took prior to September 10, 2015 to investigate whether a safety-related defect existed in Theta II engines installed in Kia vehicles.

RESPONSE TO REQUEST NO. 31:

Kia is still researching this issue and the details regarding the engine assembly line procedures and anticipates updating this response by September 8, 2017. KMC first became aware of some aspect of NHTSA's interest in the Theta II engine as a potential safety defect issue on or shortly after July 21, 2015, when HKMC began an all-vehicle VOQ analysis initiated by HMC. Thereafter, on about July 29, 2015, KMC conducted an XMa/QF/TF [Sorento/Optima US/Optima Korea] connecting rod defect rate analysis. Based on the low claims rates identified, KMC elected to take no further action.

After Hyundai decided to conduct a recall in September 2015, KMC again reviewed such data and identified a very low warranty claim rate. In September, QST identified engine issues underlying the Hyundai recall with Kia and asked whether KMA should consider a warranty extension program. By October 6, 2015, KMC had completed a further field action review for the Optima and confirmed to its satisfaction that no design issue was involved and decided that no recall or other field action was warranted. KMC also determined that a warranty extension was not warranted at this time and scheduled a full review for no later than June 2016.

KMA first became aware of the Hyundai Sonata recall decision at about the time the decision was made, on about September 4, 2015. KMA promptly began a field data review and eventually reached the same conclusion that no action was warranted due to the extremely low KMA Optima warranty claim rate related to HMMA engines installed in KMMG vehicles. KMA specifically considered and rejected QST's suggestion to immediately initiate a warranty extension. KMA provided KMC with its recommendation to monitor future field data.

SUPPLEMENTAL RESPONSE TO REQUEST NO. 31:

After further diligent inquiry and search, KMA has not identified any earlier date on which Kia was aware of the Hyundai investigation into the Theta II engine issue. The operative date for KMC thus remains about July 21, 2015 and the operative date for KMA is the 5-day period between the Hyundai decision to conduct the Sonata recall and September 10, 2015, when HMA notified NHTSA of the recall decision.

Since KMMG received the HMMA manufactured engines for installation in Kia vehicles, KMA also requested that KMMG conduct inquiries and a document review as to any awareness it had of the Hyundai investigation, but KMMG has identified no awareness prior to September 10, 2015.

Further inquiry and document review at KMC has identified that it received sufficient information regarding the Hyundai investigation and recall decision to begin a KMC investigation into the Theta II engines prior to September 10. As stated above, KMC made an

initial limited inquiry in July 2015. However, a more complete investigation in early September 2015 at its start focused on the claims rate for the KMMG Optima Theta II engine, as described in KMA's initial response to this Request. KMA has received information that two additional issues were likely submitted for consideration to Kia prior to September 10, including that QST raised an issue as to whether Kia should issue an extended warranty for the Optima, and QST also raised an issue as to whether a design defect regarding the materials and the oil flow gap existed for the Theta II connecting rod bearings. KMC determined in each case that the QST position was not supported. A more detailed analysis of the potential for a design defect issue was addressed by HKMC in response to inquiries from KATRI, and the same conclusions that no design defect underlay the September 2015 recall were reached. That HKMC analysis to KATRI has been provided in documents submitted to NHTSA on August 25, 2017.

REQUEST NO. 32:

Describe in detail the actions Kia took to "check[] Theta engine manufacturing process for Optima on separate assembly line and identifie[d] different procedures and no issues," as referenced in the "Chronology" section of Kia's March 31, 2017 DIR for 17V-224. Further, explain the "different procedures" identified that resulted in a determination that "no issues" existed.

RESPONSE TO REQUEST NO. 32:

Kia is still researching this issue and the details regarding the engine assembly line procedures and anticipates updating this response by September 8, 2017. To date, KMA has determined that, KMA caused contacts to be made with KMMG in mid-September 2015 to obtain information on the differences between the production elements for the Sonata and Optima. KMMG in turn contacted HMMA. In about late September 2015, KMA received feedback information that the Optima engine was manufactured on a single line, while the Sonata engine for the relevant time period was manufactured on both engine lines at HMMA. Additional information was received at some point identifying that the two engine lines had received wet-blasting equipment and procedures at different times, but it is currently unclear when the relevant personnel at KMA and KMC learned this.

SUPPLEMENTAL RESPONSE TO REQUEST NO. 32:

Further diligent inquiry and document review by KMA and initiated by KMA with KMMG and HMMA has confirmed that communications were initiated at KMA and then responded to by HMMA through KMMG during September-October 2015. KMA had already determined that the claims rate for the Optima and other Kia models with the Theta II engine were very low, and KMA was evaluating whether manufacturing differences between the Hyundai Sonata and the Kia Optima engines manufactured at HMMA could be readily identified.

KMA was already aware that the Optima Theta II engines were only manufactured for a single model year (2012) that was possibly relevant to the Hyundai Theta II engine recall for engines

manufactured at HMMA for the Sonata. In addition, communications from HMMA confirmed that the Theta II engines were manufactured on two lines. The KMA coordinator eventually reached an understanding in spite of ambiguities that, based on all communications, the Hyundai engines had exposure to different cleaning processes than the Kia engines and that the Theta II engines installed in the 2012 Optima were manufactured on a single line at HMMA. KMA received information that the Optima line included wet blasting machinery which greatly improved the engine cleaning process. KMA also understood that wet blasting cleaning machinery was installed on the other line at a later time. KMA's conclusion was that the lower Kia Optima claims rates were due to the wet blasting process used for the 2012 Optima model year. That information was retained at KMA and then included in the chronology for the Section 573 defect notice to NHTSA.

After receipt of the NHTSA Special Order, KMA sought to obtain a detailed confirmation regarding the lines and cleaning equipment used for the Theta II engine at HMMA. Those efforts have failed to support certain of KMA's prior understandings. KMA has however confirmed that the inquiries made starting in September 2015 did create the understanding that the 2012 MY Optima engines being manufactured at HMMA were all being manufactured on a single line and that this line had wet blasting equipment installed. The corrected information is that both lines were used to manufacture engines for installation in the 2012 Kia Optima, and that in the relevant period only one of those lines had the wet blasting cleaning equipment. KMA has provided NHTSA with an overview of these newly identified facts and proposed submitting an amended chronology for the Section 573 Defect Notice. NHTSA has advised KMA that it will evaluate the information and provide guidance to KMA at a later time.

Affidavit of Mark Goldzweig in Support of Kia Motors America, Inc.'s Response to NHTSA
Special Order RQ 17-003, Dated September 7, 2017

I, Mark Goldzweig, declare,

I am Executive Director and Associate General Counsel of Kia Motors America, Inc. (KMA) and am responsible for supporting the company in preparing its responses to NHTSA Special Order RQ 17-003. I have in coordination with other company in house and outside counsel, and based on my requests for support to counsel from other Kia and Hyundai Kia Motor Group companies, undertaken and directed inquiries reasonably calculated to assure that the answers and production of documents are complete and correct to the best of my ability. Since such inquiries have extended beyond KMA, I lack direct personal knowledge of all of the steps undertaken by counsel for such other companies, but we have worked diligently to assure that all information has been requested and, as necessary, followed up on. We have caused the documents requested by NHTSA to be searched for diligently and for information and documents responsive to this Special Order to be produced to NHTSA in a timely fashion in the formats requested by NHTSA.

Stephen Wood, Acting Chief Counsel
Office of Chief Counsel
September 7, 2017
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Executed this 7th day of September, 2017 at Irvine, California. I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct.

A large black rectangular redaction box covering the signature of Mark Goldzweig.

Mark Goldzweig