

**UNITED STATES DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION**

1200 New Jersey Avenue, SE
West Building, W41-326
Washington, DC 20590

In re:

RQ17-003

Kia Theta II Engine Recalls

SPECIAL ORDER DIRECTED TO KIA MOTORS AMERICA, INC.

To:

J.S. (Jurassic) Park
Executive Director
Product Litigation & Regulatory Compliance
Kia Motors America, Inc.
111 Peters Canyon Road
Irvine, CA 92606

This Special Order¹ is issued by the Secretary of Transportation pursuant to 49 U.S.C. § 30166(g)(1)(A) and 49 C.F.R. §§ 510.7 and 510.8, and pursuant to a delegation of authority to the Chief Counsel of the National Highway Traffic Safety Administration (NHTSA), an Operating Administration of the United States Department of Transportation, 49 C.F.R. §§ 1.95, 501.8(d).

On March 31, 2017, Kia Motors America, Inc. (Kia Motors America) filed a Defect Information Report (DIR) recalling 618,160 MY 2011-2014 Optima, MY 2012-2014 Sorento, and MY 2011-2013 Sportage vehicles with Theta II engines (Recall No. 17V-224). Kia Motors America's DIR described the defect as an engine malfunction issue involving manufacturing

¹ A Special Order is the functional equivalent of a subpoena. *See* 49 U.S.C. § 30166(g).

debris as well as a machining process causing an uneven surface roughness which could restrict oil flow within the engine.

Theta II engines are a family of engines used by both Kia Motors America and Hyundai Motor America, Inc. (Hyundai Motor America). Previously, on September 10, 2015, Hyundai Motor America filed a DIR recalling certain vehicles containing engines from the shared Theta II engine family, describing the defect as an engine malfunction issue involving manufacturing debris. On March 31, 2017, Hyundai Motor America expanded its original recall to include 572,000 MY 2013-2014 Sonata and Santa Fe Sport vehicles with Theta II engines (Recall No. 17V-226). Kia Motors America's March 31, 2017, DIR stated that Kia Motors America did not conduct a recall upon learning of Hyundai Motor America's September 2015 recall because Kia Motors America's Theta II engines were manufactured on a different production line and did not have the same manufacturing issue.

NHTSA opened a Recall Query (RQ17-003) to investigate the timeliness and scope of Kia Motors America's Theta II engine recalls, and Kia Motors America's compliance with reporting requirements. To that end, NHTSA hereby demands that Kia Motors America file certain reports and answers to questions under oath, and produce certain documents. Kia Motors America's response to this Special Order must be signed under oath and provided to NHTSA's Office of Chief Counsel by **August 25, 2017**.

Failure to respond fully or truthfully to this Special Order may result in a referral to the United States Department of Justice for a civil action to compel responses, and may subject Kia Motors America to civil penalties of up to \$21,000 per day, up to a maximum penalty of \$105,000,000 for a related series of daily violations. 49 U.S.C. §§ 30163(a)(1), 30165(a)(3); 49 C.F.R. § 578.6(a)(3). Falsifying or withholding information in response to this Special Order

may also lead to criminal penalties of a fine or imprisonment of up to 15 years, or both. 49 U.S.C. § 30170(a)(1).

DEFINITIONS

To the extent used in this Special Order, the following definitions apply unless otherwise stated in the text:

1. The definitions of **“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, can be found in 49 C.F.R. § 579.4.

2. **“Affiliates”** means a corporation that is related to another corporation (such as a subsidiary, parent, or sibling corporation) by shareholdings or other means of control.

3. **“Agent”** means an individual, such as a representative, who is authorized to act for or in place of another.

4. **“Defect”** means all allegations and/or instances of any one or more of the following symptoms or conditions:

- a. Engine failure;
- b. Reduced engine performance;
- c. Internal engine damage;
- d. Knocking, rattling, banging, or other unusual type noises from the engine area;
- e. The Engine Oil, or Engine, Malfunction Indicator warning being illuminated;
- f. Excessive oil consumption;

- g. Metal or debris in engine oil;
- h. An oil sludge, oil degradation, oil contamination, or an unusual or unexpected oil condition.

5. **“Document(s)”** is used in the broadest sense of the word under Rule 34 of the Federal Rules of Civil Procedure, and includes all written, printed, typed, recorded, or graphic matter of every kind, nature, and description, however produced or reproduced, whether draft or final, original or reproduction, signed or unsigned, electronic or hard copy, and regardless of whether approved, signed, sent, received, redrafted, or executed, including but not limited to: written communications, letters, correspondence, facsimiles, e-mail, instant messages, text messages, agendas, memoranda, minutes, notes, summaries, reports, voicemails, films, photographs, recordings of any type, transcripts, contracts, agreements, purchase or sales orders, specifications, drawings, diagrams, diaries, journals, logs, desk calendars, interoffice communications, reports, studies, bills, checks, income statements, balance sheets, books of account, ledgers and other financial records, and all information generated by or stored by computer, including without limitation, electronic writings, records, files, reports, hard drives, backup data, removable computer storage media (such as flash drives, tapes, disks, and cards), printouts, document image files, web pages, databases, spreadsheets, software, and digital recordings, or material similar to any of the foregoing however denominated, by whomever prepared, and to whomever addressed, which are in your possession, custody or control or to which you have had or can obtain access. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by the manufacturer or not. If a document is not in the English language, provide both the original document and an English translation of the document.

6. **“Employee”** means a person who works in the service of another person (the employer) under an express or implied contract of hire, under which the employer has the right to control the details of work performance.

7. **“Employer”** means an entity for whom a person (employee) works in the service of another under an express or implied contract of hire, under which the employer has the right to control the details of work performance.

8. **“Hyundai”** means Hyundai Motor America, Inc., Hyundai Motor Company, Hyundai Motor Group, any other affiliate or parent company whether domestic or foreign, and any predecessor company (if applicable), all of their past and present officers and employees, whether assigned to principal offices or any field or other locations, including all divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and its/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).

9. **“Kia”** means Kia Motors America, Inc., Kia Motors Corporation, any other affiliate or parent company whether domestic or foreign, and any predecessor company (if applicable), all of their past and present officers and employees, whether assigned to principal offices or any field or other locations, including all 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).

10. **“Officer”** means a person who holds an office of trust, authority, or command, such as a person elected or appointed by the board of directors to manage the daily operations of a corporation, such as a CEO, president, secretary, or treasurer.

11. **“Subject component”** means all Theta II engines (original equipment or replacement full assemblies, long blocks, or short blocks).

12. **“Subject extended warranty”** means any new vehicle limited warranty extension on the subject component for the subject vehicles (for example, the warranty extension issued by Kia in August of 2016), or any other extended warranty or goodwill program offered on the subject component.

13. **“Subject recall”** means 17V-224.

14. **“Subject vehicles”** means all Kia vehicles equipped with a Theta II engine, manufactured for sale or lease in the United States, including the District of Columbia and current U.S. territories and possessions.

15. **“You” or “Your”** means Kia Motors America, Inc.

INSTRUCTIONS

1. Your response to the Special Order is due **August 25, 2017** and shall be sent to Office of the Chief Counsel (NCC-100), National Highway Traffic Safety Administration, West Building, W41-326, 1200 New Jersey Avenue, SE, Washington, DC 20590.

2. If you have questions regarding this Special Order, contact Arija Flowers, Esq. (arija.flowers@dot.gov, 202-366-5263) for legal matters, or Stephen McHenry (stephen.mchenry@dot.gov, 202-366-4883) for technical questions.

3. Please repeat the applicable request verbatim above your response. After your response to each request, identify the source of the information and indicate the last date the

information was gathered.

4. After your response to each request, state whether you previously had any responsive documents that are no longer within your possession, custody, or control, including but not limited to because the documents were lost or destroyed. If such documents ever existed: describe the documents; identify the reason that the documents are no longer in your possession, custody, or control; and identify the date that you last had the documents.

5. When a request calls for a detailed, narrative response, do not identify business records or other documents in lieu of providing a written narrative. A response to a request for a written narrative that solely directs NHTSA to documents will be considered non-responsive, and may result in civil penalties. 49 U.S.C. §§ 30163(a)(1), 30165(a)(3); 49 C.F.R. § 578.6(a)(3). A response to a request for a detailed, narrative response that includes references to specific Bates Number(s) in addition to a written narrative will not be considered a violation of this Instruction.

6. When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation. Please also be reminded that where a document responsive to a request is not in the English language, both the original document and an English translation of the document must be produced.

7. You are required to respond to every request listed in this Special Order. If you cannot respond to any specific request or subpart(s) thereof, please state the reason why you are unable to do so.

8. If, on the basis of attorney-client, attorney work product, or other privilege, you do not submit one or more requested documents or items of information in response to this

Special Order, you must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, 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.

9. If you claim that any of the information or documents provided in response to this Special Order constitutes confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or is protected from disclosure pursuant to 18 U.S.C. § 1905, you must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 C.F.R. Part 512, to the Office of Chief Counsel (NCC-100), National Highway Traffic Safety Administration, West Building, W41-326, 1200 New Jersey Avenue, SE, Washington, DC 20590. You are required to submit two copies of the documents containing allegedly confidential information and one copy of the documents from which information claimed to be confidential has been deleted. Failure to adhere to the requirements of 49 C.F.R. Part 512 will result in a rejection of your request for confidential treatment.

10. The response to this Special Order, including the document requests, must be submitted in duplicate, together with a copy of any confidentiality request, to this office by the deadline stated above. The requests in this Special Order are deemed to be continuing in nature so as to require additional or amended responses from you should you obtain or become aware of any new, additional, or differing responsive information or documents.

11. All documents shall be produced electronically, as described below, and shall additionally be accompanied by a Concordance-format load file.

a. All documents shall be produced electronically in their original or native format, and without access restrictions or permissions. If a particular file is not provided in a common format (*e.g.*, Word or PDF) and requires the use of special software that is not readily available, you must provide a copy of that software with your submission.

b. Hard copy documents shall be imaged in PDF format to the extent they are not already in a common format. They shall be provided as multi-page PDFs with document-level Optical Character Recognition (“OCR”).

c. Electronically Stored Information (“ESI”) shall be converted to multi-page PDFs and produced along with document-level OCR/extracted text.

d. You shall organize the documents as instructed in the request to which it responds or, if no instruction is given in a request, in chronological order by project, report, or other similar categorization responsive to that numbered request.

e. After the documents are so organized, and in sequential order to the request to which each responds, you shall apply Bates Numbers to the entire production.

f. You shall produce an index that lists the title of each document produced, the Bates Numbers on the document, and the request to which it corresponds.

12. Provide all documents requested in this Special Order, even if such documents have been previously produced.

13. NHTSA reserves the right to request additional information at a later time.

14. The singular includes the plural; the plural includes the singular. The masculine gender includes the feminine and neuter genders; and the neuter gender includes the masculine and feminine genders. “And” as well as “or” shall be construed either disjunctively or conjunctively, to bring within the scope of this Special Order all responses that might otherwise

be construed to be outside its scope. "Each" shall be construed to include "every" and "every" shall be construed to include "each." "Any" shall be construed to include "all" and "all" shall be construed to include "any." The use of a verb in any tense shall be construed as the use of the verb in a past or present tense, whenever necessary to bring within the scope of the document requests all responses which might otherwise be construed to be outside its scope.

15. Your response to this Special Order must be under oath, i.e., accompanied by an affidavit, signed by a responsible officer, stating that he/she has undertaken and directed an inquiry reasonably calculated to assure that the answers and production of documents are complete and correct, that he/she has caused your documents to be searched diligently for information and documents responsive to this Special Order and produced them to NHTSA, and that the answers to the inquiries provided to NHTSA respond completely and correctly to this Special Order.

REQUESTS

1. Provide a detailed narrative describing Kia's understanding of the production of Theta II engines at Hyundai Motor Manufacturing Alabama (HMMA). This response should include a description of the manufacturing processes, quality control, cleaning and maintenance schedules and practices, what products are produced on each production line for all vehicle manufacturers using any variant of a Theta II engine (to the extent known), the dates that Theta II engines were produced at this facility for Kia, and all information relating to engines produced for Kia. To the extent that these processes, practices, or operations changed during HMMA's production of Theta II engines, explain Kia's understanding of the change(s) made, the reason(s) for the change(s), and the date(s) any change was made.

2. For any Theta II engines sold, leased, offered for sale or lease, or otherwise made available to Kia consumers in the United States (including as replacement equipment) but produced at a facility other than HMMA, identify the name and location of the facility and provide a detailed narrative description with the same information as requested in Request 1 for HMMA.

3. Identify by name, job title, and division or work group the individual(s) responsible for quality control of the Theta II production line(s) for Kia at HMMA and all other facilities where Theta II engines for Kia are, or were, produced from the beginning of Theta II production through the present. Also state each such individuals' work phone number, work email address, production facility name and location, employer, and dates of responsibility for quality control. If responsibility was/is divided between shifts or another sub-categorization, so state and provide shift or category responsibility information.

4. State, by model and model year, the number of subject vehicles Kia has manufactured for sale or lease in the United States and current U.S. territories and possessions. Separately, for each subject vehicle manufactured to date by Kia, provide a table that states the following:

- a. Vehicle identification number (VIN);
- b. Vehicle's make, model, and model year;
- c. Date of manufacture;
- d. Date warranty coverage commenced;
- e. Engine type installed as original equipment (e.g., 2.0L, 2.4L, 2.4L Hybrid);
- f. Where the engine was manufactured (e.g., Alabama, South Korea, other);
- g. Vehicle eligible for recall 17V-224 (yes/no);
- h. Date 17V-224 remedy performed (if performed);

- i. Whether 17V-224 remedy performed (if performed) was engine inspection only or engine replacement, and if replacement where the engine was manufactured (e.g. Alabama, South Korea);
- j. Vehicle eligible for subject extended warranty (yes/no);
- k. Date subject extended warranty performed (if performed), and;
- l. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

For items “h” through “k” indicate the manufacturing plant for the replacement subject component. Clearly explain how the plant of origin is identified (e.g., variation in part number).

Provide the table in Microsoft Access 2010, or a compatible format, with the title “PRODUCTION DATA.” A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

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.

6. Provide a table that states, separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 5, the following information:

- a. Kia’s file number or other identifier used;
- b. The category of the item, as identified in Request No. 5 (i.e., consumer complaint, field report, etc.);
- c. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
- d. Vehicle’s VIN;
- e. Vehicle’s model and model year;
- f. Vehicle’s mileage at time of incident;
- g. Incident date;
- h. Report or claim date;
- i. Whether a crash is alleged;
- j. Whether a fire is alleged;
- k. Whether property damage is alleged;
- l. Number of alleged injuries, if any;

- m. Number of alleged fatalities, if any;
- n. For Request 5, items “c” through “g,” a summary description of the alleged problem and causal and contributing factors, and Kia’s assessment of the problem, with a summary of the significant underlying facts and evidence;
- o. Caption of associated legal proceeding(s) (if applicable) including case number and party names;
- p. Court where associated legal proceeding(s) was filed (if applicable);
- q. Date on which associated legal proceeding(s) was filed (if applicable);
- r. Resolution of associated legal proceeding(s) (if applicable); and
- s. Date of resolution of associated legal proceeding(s) (if applicable).

Provide this information in Microsoft Access 2010, or a compatible format, with the title “COMPLAINT DATA.” A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

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.

8. State, by model and model year, a total count for each of the following categories of claims, that have been paid by Kia to date that relate to, or may relate to, the defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Additionally, provide a table that states separately for each such claim the following information:

- a. Kia's claim number;
- b. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
- c. Vehicle model and model year;
- d. Vehicle's VIN;
- e. Repair date;
- f. Vehicle mileage at time of repair;
- g. Repairing dealer's or facility's name, telephone number, and city and state or ZIP code;
- h. Labor operation number(s) and description;
- i. Problem code(s) and description;
- j. Diagnostic trouble code(s);
- k. Replacement part number(s) and description(s);
- l. Concern stated by customer;
- m. Cause as stated on the repair order;
- n. Correction as stated on the repair order; and
- o. Additional comments, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, with the title "WARRANTY DATA." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

Also provide copies of any supplemental authorization document(s) required to process each claim identified in response to this question.

9. Describe in detail the search methods and search criteria used by Kia to identify the claims in response to Request No. 8, including the labor operations, problem codes, diagnostic trouble codes, part numbers and any other pertinent parameters used.
10. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions, diagnostic trouble codes and diagnostic trouble code descriptions applicable to the defect in the subject vehicles. State whether the diagnostic trouble codes are automatically reported to the warranty database electronically or manually entered into the warranty database by a claims administrator.
11. State, by model and model year, the terms of the new vehicle warranty coverage offered by Kia on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Also state any additional warranty coverage that may have been offered (e.g., extended warranty, warranty to subsequent owners).
12. Produce copies of all documents (e.g., engine diagnostic worksheets, photographs of engines, copies of oil change receipts, descriptions and/or stories provided by dealers or vehicle owners, Kia's response to the request, including stating reason for denial if request was denied or approval if request was approved) related to dealer or vehicle owner requests for warranty or goodwill coverage for failed, damaged, broken, or otherwise inoperative engines.

Provide a table that separately, for each such request, states the following:

- a. Kia's claim or identification number;
- b. The category of the item;

- c. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
- d. Vehicle's VIN;
- e. Vehicle's model and model year;
- f. Request date;
- g. Vehicle mileage at time of request;
- h. Associated requesting dealer's or facility's name, telephone number, and city and state or ZIP code,
- i. Date reported;
- j. State whether the request was approved or denied;
- k. Whether the vehicle was involved in a crash; and
- l. Decision or rationale for whether request was approved or denied.

Provide this information in Microsoft Access 2010, or a compatible format, with a title "ENGINE REQUEST DATA." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

13. Describe in detail the process by which any dealer had, has, or may have had restrictions on full or partial engine replacement or repairs related to the subject defect. Describe any programs, restrictions, or qualifications required by HMMA and/or Kia limiting a dealer in replacing subject components, and further state the date on which each such restriction or limitation became effective, the date on which each such restriction or limitation ceased to be in effect (if it ceased), how such effective/cessation dates were communicated to dealers, and what entity placed the restriction, qualification, or other limitation. If restrictions, qualification, or other limitations were communicated to dealers in writing provide a copy of the communication,

or other documents, including any variations on the same communication or document (except variation as to recipient).

14. Produce copies of all service, warranty, extended warranty, goodwill, and other documents that relate to, or may relate to, the defect in the subject vehicles, that Kia has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Kia is planning to issue within the next 120 days. Describe in detail the search methods and search criteria used by Kia to identify the items in response to this Request.

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.

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.

17. Provide all documents that refer or relate to changes in production or production processes of the Theta II engine, including the rationale for such change.

18. Identify and describe any changes contemplated, proposed, considered or begun, but which were not implemented, to address the defect other than those that you may have identified in your response to Request No. 16. For each such instance, identify the individuals who participated in the consideration, evaluation, and decision-making process; the objectives of the

change; and any follow-up study or testing that was conducted, by Kia or any other entity or individual known to Kia, to determine whether the change would have accomplished or otherwise met the identified objective(s).

19. Provide the following information regarding the subject component by engine type (2.0L, 2.4L and 2.4L hybrid):

- a. A schematic of the engine oil lubrication system; and
- b. A detailed description of the engine oil lubrication system.

20. State the number of each of the following components that Kia has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales, if applicable):

- a. Subject component engine assembly;
- b. Subject component connecting rod;
- c. Subject component connecting rod bearing;
- d. Subject component crankshaft;
- e. Subject component long block; and
- f. Subject component short block.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number).

Also state by make, model and model year, any other vehicles of which Kia is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

21. Identify what the process for making defect determinations was at the time 17V-224 was issued. If any change(s) were made, or considered but not adopted, to the process between September 10, 2015 and the time 17V-224 was issued, explain the change(s) and the reason for the change(s). Provide any supporting documents relating to such changes, or changes considered but not adopted.

22. Provide a detailed narrative explanation of the processes, policies, practices, and/or procedures Kia Motors America had in place during the full time period that Theta II engines were being designed and produced for Kia to ensure that Kia Motors America had the necessary information from Kia Motors Corporation and Hyundai, from which Kia Motors America could adequately and timely make safety defect determinations regarding vehicles and equipment sold, leased or offered for sale or lease, in the United States.

23. Provide a detailed narrative explanation of the processes, policies, practices, and/or procedures Kia had in place during the full time period that Theta II engines were being designed and produced for Kia to ensure that Kia had adequate internal information and channels of communication from which to adequately and timely make safety defect determinations regarding vehicles and equipment sold, leased, or offered for sale or lease, in the United States.

24. To the extent not clearly, fully, and completely detailed in Kia's responses to other requests herein, provide a detailed narrative explanation of Kia Motors America's relationship, separately, with Kia Motors Corporation, Hyundai Motor America, Hyundai Motor Company, Hyundai Motor Group, and any other company or corporation that is part of the Hyundai Kia family of brands, as it relates to:

- a. Defect determinations; and

- b. The design, testing, material composition, manufacture, quality control, supply, installation, and analysis of Theta II engines.

25. In support of Kia's responses to Requests 22, 23 and 24, provide any charts, diagrams, plans, or other documents that show work-flow, communication-flow, or organization and/or reporting structure as it relates to safety information collection and sharing within Kia Motors America, between Kia Motors America and Kia Motors Corporation, between Kia Motors America and Hyundai, and between Kia and Hyundai during the full time period that Theta II engines were being designed and produced for Kia.

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.
27. Provide an Excel spreadsheet containing an accounting of all meetings, including, but not limited to, in person meetings, conference calls, and web meetings, held between Kia and Hyundai relating to the defect including the date, time, place, participants invited and subject matter of the meeting.
28. Describe in detail Kia Motors America's process for employees to report concerns regarding actual or potential safety-related defects or actual or potential noncompliance with Federal Motor Vehicle Safety Standards, along with Kia Motors America's process for

evaluating such reports. Your answer should describe whether Kia employees outside the United States are able to report concerns to Kia Motors America using this process, or whether some alternative process is available for such employees.

29. Describe in detail any allegations of a defect made by any current or former Hyundai or Kia employee of a Theta II engine defect of which Kia was aware prior to March 31, 2017.

Describe in detail the steps Kia took to evaluate those allegations, including the date(s) on which Kia learned of the allegations, the date(s) on which Kia took steps to evaluate the allegations, and Kia's evaluation of the allegations. Provide a copy of all related documents, including any documents created or collected by the employee or former employee and provided to Kia regarding the allegations. In the narrative, clearly identify and note the date that any such documents were received from an employee or former employee.

30. List each date between June 2015 and March 31, 2017 on which Kia's recall decision-making body discussed an actual or potential safety-related Theta II engine defect. For each date listed, provide a detailed explanation of the discussion and provide a copy of any presentation materials and any meeting notes.

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.

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.

33. Describe how Kia learned, on May 5, 2016, “of Hyundai Sonata warranty extension program for next two model years after recall (2013MY-2014MY),” as referenced in the “Chronology” section of Kia’s March 31, 2017 DIR for 17V-224.

34. Describe in detail the steps that Kia took as part of “monitoring” the Theta II engines following Translead’s identification of an “oil delivery issue” as referenced in the “Chronology” section of Kia’s March 31, 2017 DIR for 17V-224.

35. Explain in detail why Kia decided to extend “warranty coverage to all 2011-2014 MY Optima owners (original and used) with 2.0L and 2.4L GDI engines to 10 years or 120,000 miles,” and later to MY 2011-2014 Sportage and 2012-2014 Sorento owners, as referenced in the “Chronology” section of Kia’s March 31, 2017 DIR for 17V-224.

36. Provide a detailed narrative explanation for the basis of Kia’s statement in its March 31, 2017 DIR for 17V-224 that the estimated percent of the recall population with the defect is 2%.

37. Provide a detailed narrative explanation of the Theta II engine defect resulting in the recall of approximately 171,000 vehicles in South Korea as announced by the South Korean Ministry of Land, Infrastructure (MOLIT) and Transport on April 7, 2017 including, but not limited to: a timeline of actions, communications, and events leading to the defect and recall decision beginning from the first report or awareness of a problem through the present; an explanation of efforts undertaken to identify and analyze the problem prior to determining a

defect; and the root cause of the defect. Provide all supporting documentation and any documentation that was submitted to MOLIT.

Dated: JUNE 23, 2017



Stephen Wood
Acting Chief Counsel

Enclosures:

CD containing pre-formatted Microsoft Access Databases (1)