Kia America, Inc.
Corporate Headquarters
111 Peters Canyon Road, Irvine, CA 92606-1790 USA

**VIA ELECTRONIC SUBMISSION**

September 10, 2025

Alexander Ansley, Chief
Recall Management Division
U.S. Department of Transportation
National Highway Traffic Safety Administration
1200 New Jersey Avenue, S.E.
Washington D.C. 20590

Re: **Audit Query (AQ25-001);**
**Safety Recall 25V099 Remedy Program**

Dear Mr. Ansley:

This letter is submitted in response to your letter received by Kia America, Inc. ("Kia") on August 11, 2025 (AQ25-001). That letter requests information regarding the "effectiveness of Kia's remedy program for Safety Recall 25V099 and understand how Kia is responding to vehicle owner's complaints concerning the changes to the procedures used to remedy vehicles."

**REQUEST NO. 1:**

Detail why Kia placed the TSB for Safety Recall 25V009 on hold and paused the remedy program in April 2025.

**RESPONSE TO REQUEST NO. 1:**

On April 29, 2025, Kia revised the engine vibration test procedure to require that the test be performed on a warm engine to address inaccurate test results when performed on a cold engine. See Response to Request No. 3 for detailed information regarding this revision.

This issue was quickly corrected and on May 7, 2025, Kia removed the hold, released a corrected version of the software, and instructed dealers to re-test any vehicles which received a "no pass" test result prior to May 7, 2025.

On May 8, 2025, Kia proactively informed NHTSA's Recall Management Division (RMD) by email of the software glitch, its temporary pausing of engine inspections, and its awareness of the VOQs being filed as a result. Kia further advised RMD that the temporary hold had been released on May 7, 2025.

**REQUEST NO. 2:**

With respect to Request #1, a description of the data analyzed or considered during this period.

**RESPONSE TO REQUEST NO. 2:**

After receiving reports from the field of a potential issue with the inspection software, Kia reviewed the aggregate results of the engine vibration inspection test received for each vehicle (i.e., "pass" or "no pass").

**REQUEST NO. 3:**

Detail why the engine vibration inspection test was revised from requiring a 'cold' engine after the vehicle sits for a minimum of 24 hours to requiring a 'warm' engine with minimum temperatures of 185ºF (85ºC), including any documents, supporting this revision.

**RESPONSE TO REQUEST NO. 3:**

Dealers were initially instructed to perform the engine vibration inspection test on a cold engine (i.e., after the vehicle was parked overnight for 24 hours). While this test identified engines with piston ring cracks and resulting cylinder wall damage, preliminary results from the field identified an [redacted] Kia's evaluation identified that performing the inspection test on a cold engine can result in the detection of normal cold-start vibrations (e.g., from incomplete fuel-air mixing and from other components in the engine not yet at operating temperature), which are unrelated to the recall condition and which caused false "no pass" results.

To address this issue, Kia revised the inspection test procedure and instructed dealers to perform the engine vibration inspection test on vehicles with a warm engine (185ºF / 85ºC) which Kia ultimately has found results in a more precise detection of vibrations caused by piston ring cracks and resulting cylinder wall damage.

**REQUEST NO. 4:**

With respect to Request #3, a description and documentation of how the revised engine vibration inspection test procedure is expected to effectively identify a vehicle with a damaged engine.

**RESPONSE TO REQUEST NO. 4:**

The above verification of inspection test results confirm that, when the inspection is performed on a warm engine instead of a cold engine, damage due to piston-ring cracks and cylinder bore scuffing is identified with increased accuracy and precision.

**REQUEST NO. 5:**

The number and percentage of vehicle that failed the engine vibration inspection test where the "cold" engine was tested after the vehicles sits for a minimum of 24 hours.

**RESPONSE TO REQUEST NO. 5:**

See **TAB 3** for information responsive to this request.

**REQUEST NO. 6:**

The number and percentage of vehicles that failed the engine vibration inspection test where the 'warm' engine was tested with minimum temperatures of 185°F (85°C).

**RESPONSE TO REQUEST NO. 6:**

See **TAB 3** for information responsive to this request.

**REQUEST NO. 7:**

The number and percentage of vehicles that previously failed the 'cold' engine test but passed the revised 'warm' engine test.

**RESPONSE TO REQUEST NO. 7:**

See **TAB 4** for information responsive to this request.

**REQUEST NO. 8:**

A detailed analysis on the difference in failure rate, if any, between the 'cold' engine test and 'warm' engine test populations identified in Requests #5 and #6.

**RESPONSE TO REQUEST NO. 8:**

See **TAB 3** for information responsive to this request.

The difference in the "no pass" rate between an engine vibration inspection on a cold engine and on a warm engine is due to vibrational interference. Performing an inspection test on a cold engine can result in the detection of normal cold-start vibration (e.g., from incomplete fuel-air mixing and from other components in the engine not yet at operating temperature), which is unrelated to the recall condition. However, when the engine is warm, all components reach operating temperatures resulting in steady combustion vibrations, thereby minimizing interference during the inspection test.

**REQUEST NO. 9:**

Copies of the notices or communications to vehicle owners, if any, informing them of (1) the pause in the remedy program; and/or (2) the need for an engine vibration inspection re-test on a 'warm' engine after completing an engine vibration inspection test on a 'cold' engine.

**RESPONSE TO REQUEST NO. 9:**

None.

**REQUEST NO. 10:**

With respect to Request #9, if no copies of communications to owners exist, how Kia communicated remedy developments or changes with affected owners during this period.

**RESPONSE TO REQUEST NO. 10:**

As more fully discussed in Response to Request No. 1, on April 30, 2025, Kia temporarily paused the TSB [redacted] Since Kia resolved the issue faster than it would have

taken to draft and mail letters to customers (i.e., pause lifted in 7 days on May 7, 2025), Kia did not want to create unnecessary customer confusion involving an issue that would have already been addressed upon receipt of a letter.

Regarding re-test communications, vehicles that received a "no pass" from an inspection on a cold engine would have remained at the dealer awaiting an engine replacement. As a result, a separate communication from Kia to customers regarding the need for a re-test was deemed unnecessary. In most instances, Kia Customer Care agents would respond to customer inquiries about this recall, including inquiries about remedy availability, dealer issues, and questions about differing engine vibration test results.

**REQUEST NO. 11:**

The number of consumer complaints Kia has received alleging engine or other engine related failures post remedy application and what Kia has done to address those consumer complaints.

**RESPONSE TO REQUEST NO. 11:**

Kia has interpreted this request to seek customer complaints "alleging engine or other engine related failures" to include all post recall remedy engine complaints even if the complaint is confirmed to be unrelated to cylinder bore scuffing due to piston oil-ring cracks. Kia has also interpreted "engine [failure]" to include customer complaints alleging stalling and engine seizures, and "other engine related failures" to include customer complaints alleging oil consumption, check engine light illumination, engine overheating, low oil pressure warning light illumination, or engine noise. Based on its review, there is no common pattern or trend related to these complaints following completion of the recall.

Kia notes that both "engine [failures]" and "other engine related failures" can be due to a variety of causes that are completely unrelated to cylinder bore scuffing due to piston oil-ring cracks (which is the subject of this recall). Review of Kia field data associated with the customer complaints referenced above revealed various causes unrelated to piston oil-ring cracking such as

Each customer complaint and associated vehicle must be evaluated on a case-by-case basis in order to identify the cause and whether it is related to the recall. To aid in this diagnosis of whether the issue is related to the recall, Piston-ring Noise Sensing System ("PNSS") software is installed as part of the remedy recall as a preventative measure. Once PNSS is installed, the software will continuously monitor the engine for unusual noise patterns that are often associated with early damage to the piston rings. If unusual noise patterns are identified, the check engine

light will flash, DTC P1327 is set, and dealers are instructed to replace the engine, regardless of the actual cause. For a further explanation of how Kia is handling engine complaints following installation of PNSS, see its response to Request No. 12.

**REQUEST NO. 12:**

Warranty coverage, if any, Kia is offering to the vehicle owners where the vehicle has passed either engine vibration inspection tests.

**RESPONSE TO REQUEST NO. 12:**

Warranty coverage related to the subject recall condition is not dependent on passing the engine vibration inspection test whether conducted on a warm or cold engine. If the vehicle passes the engine vibration inspection test, the Piston-ring Noise Sensing System (PNSS) software is installed to continuously monitor the engine for unusual noise patterns that could indicate potential damage to the piston rings. If unusual noise patterns are identified, the check engine light will flash and set Diagnostic Trouble Code (DTC) P1327. If at any time, following installation of the PNSS software, DTC P1327 is set, the engine will be replaced at no cost to the customer, with no time or mileage limitation.

If the vehicle presents to the dealer with a seized engine following completion of the recall campaign, dealers are instructed to contact Kia's Technical Assistance Center for authorization to replace the engine at no cost to the customer. See **TAB 5**.

Kia notes that any engine issues determined to be unrelated to the recall are subject to the terms of the 10-year / 100,000-mile Powertrain warranty for original purchasers and a 5-year / 60,000-mile Limited Basic Warranty for subsequent purchasers as described in the applicable Warranty and Consumer Information Manual.

**REQUEST NO. 13:**

Any additional information, including supporting documentation, that may be helpful to explain the effectiveness of Kia's changes to the remedy program and Kia's response, if any, to complaints of difficulties that vehicle owners are experiencing due to these changes.

**RESPONSE TO REQUEST NO. 13**

As indicated in response to Request Number 1, once Kia suspected an issue with the engine vibration inspection test, it paused the TSB and took steps to swiftly correct it. As of September 5, 2025, over 53,630 vehicles have received the recall remedy. Kia has been monitoring the effectiveness of the recall remedy. Kia has not identified any trend suggesting that there is any ongoing concern.

Kia recognizes that NHTSA has referenced a number of VOQs (47) as part of this AQ inquiry. However, when examined, most of the VOQs relate to customers seeking an explanation

regarding the hold period, parts/dealer issues and changes to the vibration testing process. Specifically,

> 27 of the 47 directly relate to the recall remedy pause (i.e., holding period);
> 10 of the 47 focus on customer service (i.e., parts availability[1] and dealer handling);
> 9 of the 47 are from customers that were confused as to why their results changed under the updated engine vibration inspection (i.e., "No Pass" to "Pass" indicating no engine replacement was needed); and
> 1 of the 47 involves a unique scenario where the customer's vehicle was presented to the dealer and the dealer was unable to perform the engine vibration test because the engine could not maintain an "RPM steady enough to satisfy conditions of the test" and the engine replacement was denied.[2]

While these customer complaints are understandable, there is no evidence of any issues with the ability of the engine vibration test to detect potential cylinder wall scoring, or with the effectiveness of the PNSS software to continuously monitor the engine for unusual noise patterns that could indicate potential damage to the piston rings.

While reviewing the recall efforts in relation to responding to this AQ, Kia has determined that there may be some confusion regarding how to appropriately address a vehicle taken to a dealer in a condition that does not permit the performance of the engine vibration inspection test under the recall. To clarify dealer actions in such a scenario, Kia issued a revised TSB that specifically instructs dealers to contact Kia's Technical Assistance Center for authorization to replace the engine. See **TAB 6**. Kia also issued a Subsequent Repair Action TSB which provides engine diagnosis and replacement instructions for vehicles that return to the dealer with a potentially related engine complaint following completion of the recall. Under this Subsequent Repair Action TSB, customers whose vehicles set DTC P1327 will have their engine replaced. If DTC P1327 is not present and it is unclear whether the engine issue is related to the recall, dealers are instructed to contact Kia's Technical Assistance Center for individual review to ensure that the issue is appropriately handled. See **TAB 5.**

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[1] Kia notes that replacement engines are no longer on back order as of the submission of this letter and thus, the part availability issue has been resolved.
[2] Investigation into this VOQ showed that this vehicle had a sporadic maintenance record and several owners. Upon further review, Kia subsequently decided to replace the engine under goodwill.

Kia continuously monitors the effectiveness of all its recalls, including Recall 25V099. Kia has confidence in the overall effectiveness of this recall remedy, including the accuracy of the current version of the engine vibration inspection test and PNSS software. Kia is committed to the safety of its customers, including providing quality recall remedies free of charge.

Sincerely,

[redacted]

J.S. (Jurassic) Park
Vice President, Chief Safety Officer