OMB Control No.: 2127-0004

Part 573 Safety Recall Report

23V-877

Manufacturer Name: Kia America, Inc.
Submission Date: DEC 21, 2023
NHTSA Recall No.: 23V-877
Manufacturer Recall No.: SC291



Manufacturer Information:

Manufacturer Name: Kia America, Inc.

Address: 111 Peters Canyon Road

Irvine CA 92606

Company phone: 800-333-4542

Population:

Number of potentially involved: 79,812 Estimated percentage with defect: 1 %

Vehicle Information:

Vehicle 1: 2011-2011 Kia Sorento

Vehicle Type: LIGHT VEHICLES

Body Style: ALL Power Train: GAS

Descriptive Information: All 2011 model year Sorento vehicles manufactured at Kia Georgia plant from October

24, 2009 through June 24, 2011 equipped with Theta II 2.4L Multi-Point Injection (MPI) engines that have not had the Knock Sensor Detection System (KSDS) software

installed (79,812 units).

The recall population was determined by a review of vehicle production and campaign records. The vehicles subject to this recall were not produced in VIN order. Customers seeking information about their specific vehicle will be referred to Kia's

Customer Care Center or their Kia dealer.

Production Dates: OCT 24, 2009 - JUN 24, 2011

Description of Defect:

Description of the Defect: An engine compartment fire can occur while driving for many different reasons

and depending on the severity of the fire, the identification of the cause can be untraceable. A cause resulting from a manufacturing or design defect has not been identified. As a preventative measure, Kia is conducting this recall to

mitigate an unreasonable fire risk due to potential engine damage.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: A fire increases the risk of injury.

Description of the Cause: Undetermined. However, a fire can occur for various reasons.

Identification of Any Warning Depending on the condition, engine noise, illumination of check engine light,

that can Occur: burning smell, or smoke.

Involved Components:

Component Name 1: ENGINE ASSY - SUB

Component Description: Sub Engine Assembly

Component Part Number: 21101-2GK00

Supplier Identification:

Component Manufacturer

Name: Hyundai Motor Manufacturing Alabama

Address: 700 Hyundai Blvd.

Montgomery Alabama 36105

Country: United States

Chronology:

See attached document titled "2011MY Sorento Engine Compartment Chronology".

Description of Remedy:

Description of Remedy Program: All owners of the subject vehicles will be notified by first class mail with instructions to bring their vehicles to a Kia dealer. In an effort to mitigate a potential fire risk, Kia dealers will be instructed to conduct an inspection and if necessary, replace the engine.

> As a preventative measure, dealers will also be instructed to install the Knock Sensor Detection System (KSDS) software. Upon installation of the KSDS software, Kia will provide extended warranty coverage for 15 years/150,000 miles, whichever occurs first, for related engine long block assembly repairs.

> Kia will reimburse owners for repair expenses already incurred pursuant to Kia's General Reimbursement Plan filed May 10, 2022.

How Remedy Component Differs N/A from Recalled Component:

Identify How/When Recall Condition N/A was Corrected in Production:

Recall Schedule:

Description of Recall Schedule: The planned dealer notification begin and end date is February 7, 2024.

The planned owner notification begin and end date is February 9, 2024.

Planned Dealer Notification Date: FEB 07, 2024 - FEB 07, 2024 Planned Owner Notification Date: FEB 09, 2024 - FEB 09, 2024

* NR - Not Reported



U.S. Department of Transportation

Administration

National Highway
Traffic Safety

ODI RESUME

Reviewer:

Scott Yon

Investigation: EA 21-003

Prompted by: Prior NHTSA Actions, VOQs

Date Opened: 12/22/2021 Investigator: Nathan Ong

Approver: Stephen Ridella Subject: Engine Fires

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Kia Motors America, Hyundai Motor America
Products: Certain MY 2011-2016 Hyundai and Kia Models

Population: 3,000,000 (Estimated)

Problem Description: Engine fires due to engine failure

FAILURE REPORT SUMMARY

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	ODI	Manufacturer	Total	
Complaints:	78	N/A	N/A	
Crashes/Fires:	78	N/A	N/A	
Injury Incidents:	3	N/A	N/A	
Number of Injuries:	3	N/A	N/A	
Fatality Incidents:	0	N/A	N/A	
Other*:	83	N/A	N/A	

^{*}Description of Other: Vehicle Owner Questionnaire (VOQ) reports of recall scope-related fires due to engine

failure on other (non-subject) Hyundai and Kia models some of which use engines similar

to those in the subject vehicles.

ACTION / SUMMARY INFORMATION

Action: Open an Engineering Analysis.

Summary:

In 2017, the Office of Defects Investigation (ODI) opened two Recall Queries (RQ17-003 and 004) following multiple recall actions initiated by Hyundai and Kia for "Theta II" engine-equipped vehicles. The RQs were opened to investigate both the timeliness and scope of the recalls as well as the compliance of each company to meet their reporting requirements established under the Motor Vehicle Safety Act. Numerous violations of the requirements were found for both companies, and in on November 20, 2020, both companies entered into Consent Orders with NHTSA to resolve NHTSA's assertions of violations of law. Both Consent Orders remain in effect.

In 2018, the Center for Automotive Safety (CAS) petitioned the Agency under Defect Petition (DP) 18-003 to investigate non-crash fires on various Hyundai and Kia models, citing 120 VOQs alleging vehicle fires at varying points of origin and occurring under various non-crash related circumstances (including key-off fires). In opening DP18-003, ODI noted that many of the 120 fire incidents appeared to originate in the engine compartment area and made reference to the two open RQ investigations as likely pertinent. ODI issued information request (IR) letters to Hyundai and Kia and several peer OEMs in its efforts to properly evaluate and disposition CAS' petition.

After reviewing responses to the DP requests, ODI granted CAS' petition and in 2019 opened two Preliminary Evaluations (PE19-003 and 19-004, one for each company) to broadly investigate incidents of non-crash fires (regardless of origin or operational status of the vehicle) on various model year Hyundai (Sonata and Santa Fe) and Kia (Optima, Sorento and Soul) models. ODI issued additional, more broadly scoped IR letters to both Hyundai and Kia, which upon review, identified certain vehicle populations exhibiting higher rates of non-crash fires for various defects and points of origin, including some due to engine failure.

Investigation: EA 21-003 Open Resume Page 1 of 2

To date, Hyundai and Kia have issued several recalls to address vehicle fires, including those due to engine failure involving various engine types (Theta II GDI, Theta II MPI, Theta II MPI HEV, Nu GDI, and Gamma GDI). The remedies for the engine failure recalls typically involve engine inspection (to detect existing damage), and if necessary, engine replacement. Additionally, both manufacturers are installing an engine control software modification known as Knock Sensor Detection Software (KSDS) which is intended to detect impending engine failure, alert the driver, and limit engine power (to lessen likelihood of engine failure). KSDS is being installed under recalls and non-safety field actions, and both companies have extended limited engine warranties (see recall files). They have even replaced engines if the KSDS software detects an impending engine failure.

The 78 VOQs cited above, which all involve fires likely due to engine failure, consist of 36 remedy-related and 42 scope-related incidents. The injury allegations involve eye and burn injuries not requiring medical treatment. With the 83 Other VOQs, ODI is aware of 161 fires potentially due to engine failures. The downloadable version of the resume available at NHTSA.gov contains additional information on the recall actions and ID numbers for the VOQs.

The Office of Defects Investigation (ODI) is opening this Engineering Analysis for two primary purposes. First, the investigation will continue to evaluate the scope of recalls initially begun under prior ODI actions (see below), and will also include other recalls for fires due to engine failures, which Hyundai and Kia have subsequently launched (many influenced by ODI investigations). Second, the investigation will monitor and evaluate the efficacy of the recall remedies for engine fire related recalls, as well as the long-term viability of related programs and non-safety field actions being conducted by Hyundai and Kia.