



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



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February 1, 2022

[REDACTED]  
Basking Ridge, NJ [REDACTED]

NEF-109 ela  
Ref. No. 11424436

Dear [REDACTED]:

Thank you for the follow-up email about your model year (MY) 2012 Kia Forte vehicle. Your report was received in the National Highway Traffic Safety Administration's (NHTSA) Office of Defects Investigation (ODI). I am pleased to respond.

NHTSA is the Federal agency responsible for improving safety on our Nation's roadways. We are authorized to order manufacturers to recall and repair vehicles or motor vehicle equipment when our investigations indicate that they contain safety defects, such as in their design, construction, or performance. Among other activities, we also monitor the completion rates and adequacy of manufacturers' recall campaigns.

We appreciate the report you provided. Reports from motorists are a very important source of information for NHTSA. We received a previous report from you regarding your vehicle problem through our Vehicle Safety Hotline on July 11, 2021. Please note that when a motorist contacts NHTSA, their complaint does not automatically open a formal investigation by our agency. The information from your report was entered into our complaint database and reviewed by our staff to determine if a safety defect trend exists that may require our attention. NHTSA staff may follow up and contact a vehicle owner who submitted a complaint if we require additional information. Also, contacts initiated by our agency to obtain additional information do not automatically open a formal investigation.

ODI has received reports similar to yours and is reviewing all available data concerning allegations of engine failures in the MY 2012 Kia Forte, among other Kia vehicles. On December 22, 2021, ODI opened an investigation, Engineering Analysis (EA) 21-003 (resume enclosed), to further analyze vehicle engine failures in MY 2011 through MY 2016 Hyundai and Kia vehicles. To date, our investigation continues and no determinations have been reached.

Further, while researching your problem, we identified a recall that is applicable to your vehicle: Recall Campaign No. 18V-363 (report enclosed). The air bag control unit contains an integrated circuit that may become overstressed during certain front crash events. The remedy involves installation of a wiring harness kit into your vehicle. You are encouraged to call your local Kia dealership to schedule an appointment to repair your vehicle as soon as possible.

Your request for assistance in obtaining engine replacement from Kia, and/or your extended warranty company, does not fall under our jurisdiction. We encourage you to continue to work with Kia and your dealer to explore the potential for an amicable resolution to your problem. You may also ask your dealership for a meeting with a Kia district manager regarding your problem. You could consider contacting your local Consumer Protection Agency or the New Jersey Attorney General's Office regarding your problem and rights under state law. In addition, the Federal Trade Commission (FTC) regulates and investigates warranty and dealership problems, reimbursement matters, and fair-trade practices. Therefore, if you believe this issue potentially relates to such a practice, you may contact the FTC to discuss the matter. There are three ways to contact the FTC: by toll free telephone at 877-382-4357; by mail at Federal Trade Commission, CRC-240, Washington, DC 20580; and by using the Internet complaint form at [www.ftccomplaintassistant.gov](http://www.ftccomplaintassistant.gov).

Finally, you may also consider contacting the Better Business Bureau (BBB) Auto Line. The BBB offers free mediation/arbitration to resolve warranty disputes under guidelines established by the FTC. Remedies include repair, reimbursement, repurchase or replacement, depending on program eligibility. You can visit their website at [www.bbb.org](http://www.bbb.org) to file a complaint and review eligibility information, or call the BBB Auto Line at 800-955-5100.

We entered your information into our database. It will be included with other reports for our investigation. You can learn more about NHTSA's investigation and recall process on our website at [www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/mvdefectsandrecalls\\_808795.pdf](http://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/mvdefectsandrecalls_808795.pdf). We encourage you to monitor our website at [www.nhtsa.gov](http://www.nhtsa.gov) for future updates to our investigation.

If you encounter a safety-related problem with a motor vehicle or motor vehicle equipment in the future, please complete an electronic Vehicle Owner's Questionnaire online at [www.nhtsa.gov](http://www.nhtsa.gov) or call the Vehicle Safety Hotline at 888-327-4236. Also, you may review owners' complaints, safety recalls, manufacturers' service bulletins, etc., on our website.

Sincerely,

A handwritten signature in cursive script that reads "Randy Reid".

Randy Reid, Chief  
Correspondence Research Division  
Office of Defects Investigation  
Enforcement

Enclosures



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



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**Investigation:** EA 21-003  
**Prompted by:** Prior NHTSA Actions, VOQs  
**Date Opened:** 12/22/2021  
**Investigator:** Nathan Ong **Reviewer:** Scott Yon  
**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

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

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](http://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.

**Attachment A: Recall actions and VOQ reports discussed in the opening resume**

The following products have been identified as displaying potential recall scope concerns: Approximately 550,000 MY 2013 Hyundai Elantra, MY 2011 Kia Sorento, and MY 2012-2015 Kia Rio. The 42 (of 78) ODI reports (VOQs) cited above on the Complaints line of the failure report summary, which involve engine fires on vehicles outside the scope of existing recalls, can be viewed at [NHTSA.gov](http://NHTSA.gov) under ODI identification numbers:

11375940, 11112279, 11057072, 10585543, 10565791, 11354799, 11329676, 11318387, 11310602, 11281705, 11245734, 11221481, 11195298, 11183368, 11149408, 11113386, 11091239, 11040984, 10991038, 10903822, 10778005, 10731649, 10701992, 10694206, 10565984, 10553953, 11424208, 11422246, 11414131, 11351493, 11217527, 11205122, 11133458, 11128568, 11115586, 11114289, 11111767, 11073341, 10991332, 10971641, 10694186, 10429442.

The following recall IDs, which involved approximately 2.5M affected vehicles, have been identified as displaying potential remedy concerns: Hyundai recalls 15V-568, 17V-226, 20V-746, and 21V-727 and Kia recalls 17V-224, 19V120, 20V-750, and 21V-844. The 36 (of 78) VOQs cited above on the Complaints line of the failure report summary, and which involved post-remedy engine fires, can be viewed at [NHTSA.gov](http://NHTSA.gov) under ODI identification numbers:

11427413, 11424490, 11424083, 11423473, 11421771, 11419822, 11418708, 11414129, 11406849, 11400256, 11399073, 11397562, 11388186, 11382825, 11377625, 11375573, 11366708, 11365053, 11360992, 11353693, 11343008, 11316182, 11303066, 11300600, 11288418, 11286465, 11279377, 11277618, 11255924, 11242062, 11231666, 11209204, 11184011, 11171259, 11170246, 11153078.

The 83 ODI reports cited above on the Other line of the failure report summary, which also involve engine fires on vehicles outside the scope of existing recalls (but are not included in the subject makes and models for this investigation), can be viewed at [NHTSA.gov](http://NHTSA.gov) under ODI identification numbers:

11438375, 11437981, 11436659, 11436605, 11436574, 11435397, 11434273, 11433980, 11433898, 11431970, 11431584, 11426895, 11426632, 11423010, 11422167, 11421680, 11421653, 11419170, 11418279, 11416535, 11403582, 11398046, 11397417, 11397349, 11395448, 11394722, 11389438, 11388862, 11387593, 11385531, 11382916, 11378220, 11362515, 11342973, 11339427, 11330054, 11324990, 11324341, 11324235, 11318304, 11309422, 11309184, 11307586, 11300596, 11288869, 11281431, 11246461, 11219948, 11219235, 11207099, 11195743, 11195592, 11191530, 11190044, 11190038, 11170791, 11170549, 11170642, 11161289, 11152866, 11151192, 11143621, 11142527, 11142194, 11141847, 11132366, 11128733, 11123010, 11120051, 11115359, 11109846, 11103080, 11089856, 11058265, 11032346, 11003679, 10994093, 10908482, 10877062, 10871900, 10838454, 10671199, 10596530

## Recalls Results by VIN - Vehicle Identification Number

Print 

VIN: KNAFT4A26C5 [REDACTED]

Year: 2012 Make: Kia Model: FORTE LX AUTO

Number of Open Recalls: 1

NHTSA Recall Number: [18V363](#)

Recall Date: June 1, 2018

Manufacturer Recall Number: SC165A

## SUMMARY:

KIA MOTORS HAS DECIDED THAT A DEFECT WHICH RELATES TO MOTOR VEHICLE SAFETY EXISTS IN ALL 2010-2013 MY FORTE AND FORTE KOUP , ALL 2011-2013 MY OPTIMA, ALL 2011-2012 OPTIMA HYBRID, AND ALL 2011-2012 MY SEDONA VEHICLES. THE AIRBAG CONTROL UNIT ("ACU") DETECTS CRASH SEVERITY AND COMMANDS DEPLOYMENT OF THE ADVANCED AIRBAGS AND SEATBELT PRETENSIONERS WHEN NECESSARY. THE ACU CONTAINS A CERTAIN APPLICATION-SPECIFIC INTEGRATED CIRCUIT ("ASIC") THAT MAY BE SUSCEPTIBLE TO ELECTRICAL OVERSTRESS ("EOS") DURING CERTAIN FRONTAL CRASH EVENTS. THE CONDITION IS LIMITED TO FRONTAL AIRBAGS AND SEAT BELT PRETENSIONERS IN CERTAIN FRONTAL CRASH EVENTS.

## SAFETY RISK:

IF THE ASIC BECOMES DAMAGED, THE FRONTAL AIRBAGS AND SEATBELT PRETENSIONERS MAY NOT DEPLOY IN CERTAIN FRONTAL CRASHES WHERE DEPLOYMENT MAY BE NECESSARY, THEREBY INCREASING THE RISK OF INJURY.

## REMEDY:

KIA HAS ADVISED ITS AUTHORIZED DEALERS TO INSTALL A WIRE HARNESS KIT BETWEEN THE ACU CONNECTOR AND VEHICLE HARNESS CONNECTOR IN YOUR VEHICLE. THE WORK WILL BE PERFORMED AT KIA'S EXPENSE AT NO COST TO YOU. THE ACTUAL TIME REQUIRED TO PERFORM THE REPAIR WILL TAKE APPROXIMATELY ONE (1) HOUR. HOWEVER, YOUR VEHICLE MAY BE NEEDED LONGER; THEREFORE, WE RECOMMEND SCHEDULING A SERVICE APPOINTMENT TO MINIMIZE ANY INCONVENIENCE. (REFER TO SC165A.)

RECALL STATUS: **Recall INCOMPLETE**

## MANUFACTURER NOTES:

SC165A

If the manufacturer has failed or is unable to remedy this safety recall for your vehicle in a timely manner, please contact the NHTSA Vehicle Safety Hotline at: 1-888-327-4236 or TTY: 1-800-424-9153 or file an [online complaint with NHTSA](#).

THIS RECALL DATA LAST REFRESHED: Jan 19, 2022

## Additional Safety Information

Besides the VIN search tool you just used, NHTSA offers additional safety information based on a vehicle's make, model, and model year and not tied to any particular VIN. A search by vehicle make, model, and model year gives you access to information about technical service bulletins, NHTSA investigations, and owner complaints, as well as safety recalls on aftermarket equipment that is often not linked to a particular VIN or even to your vehicle's manufacturer.

To search NHTSA's safety information based on your vehicle's make, model, and model year, please go to the [Safety Issues & Recalls](#) section and follow the instructions there.

Recall information for this manufacturer is only available going back to August 01, 1994. If your vehicle was manufactured before this date, please contact the manufacturer for