June 11, 2018

Administrator

c/o Deputy Administrator Heidi King

National Highway Traffic Safety Administration

1200 New Jersey Avenue SE, West Building

Washington, D.C. 20590

PETITION FOR DEFECT INVESTIGATION

Deputy Administrator King:

In accordance with 49 U.S.C. 30162 and 49 C.F.R § 552.1, the Center for Auto Safety (Center), on behalf of its members who own and share the road with 2011-2014 Kia Optima, Sorento, and Hyundai Sonata and Santa Fe vehicles, hereby petitions the National Highway Traffic Safety Administration (NHTSA) to initiate a safety defect investigation into the excessive number of non-collision related fires that the owners and operators of these vehicles suffer as compared to similar class and model year vehicles from other manufacturers. If the investigation concludes that these vehicles contain a “defect that relates to motor vehicle safety,” because of the deadly potential of car fires, such a defect would be an unreasonable risk to the public and NHTSA should issue a recall order pursuant to 49 U.S.C. §§ 30118(b), 30119, and 30120 for all 2011-2014 Kia Optima, Sorento, and Hyundai Sonata and Santa Fe vehicles.

Complaints submitted to NHTSA via Vehicle Owner Questionnaire (VOQ), and to other sources, reveal a frighteningly large number of these vehicles manufactured at the same time catching on fire. In NHTSA’s VOQ database alone, at least 120 owners have reported that their 2011-2014 Optima, Sorento, Sonata, or Santa Fe caught fire without a preceding collision.1 There are also 229 separate complaints regarding melted wires in the engine bay, smoke, and burning odors, indicating potential fires.2 The vast majority of complaints which discuss the origins of the vehicle fires state that smoke and/or flames are first seen emanating from the engine bay, then the car is quickly engulfed.


Unfortunately, most, if not all, auto manufacturers occasionally produce vehicles that catch fire. However, when these Hyundai and Kia vehicles are compared to other similar vehicles, there is enough of a statistical disparity to suggest a systemic issue that NHTSA must investigate and seek a repair remedy as soon as possible. More specifically, as of June 7, 2018, a review of all the reported cases to NHTSA of non-collision related fires involving similar class and size vehicles, the Center found 22 reported cases in competitor vehicles as opposed to 120 for the Kia and Hyundai models. When factoring in the number of vehicles of these types sold per manufacturer compared to the number of fire complaints, the differences are even more profound.

By model, there were:

- 33 reported cases of non-collision related vehicle fires for the 2011-2014 Optima;
- 30 reported cases of non-collision related vehicles fires for the 2011-2014 Sorento;
- 10 reported cases of non-collision related vehicles fires for the 2011-2014 Santa Fe Sport; and
- 47 reported cases of non-collision related vehicles fires for the 2011-2014 Sonata.

Some typical examples of fire complaints include:

**2011 Kia Santa Fe** – NHTSA ID No. 11080980
Car was driven about 10 miles and then parked inside an attached garage. No issues were present during the drive. The ignition was turned off and key removed from vehicle. After approximately 1 hour had passed the car started on fire. Flames were visible behind the front right headlight and front right wheel. Luckily no one was harmed. The fire caused significant damage to the garage and home. Fire department investigation concluded that the cause of the fire was not external to the vehicle.

**2012 Hyundai Sonata** - NHTSA ID No. 10553823
Walked out of store I had been shopping in for over an hour and car was in flames. The fire investigator explained it as an electrical short that started at the main engine wire harness and melted the tubing/wiring all through the engine compartment down near passenger headlight and the melting wires/tubing/rubber dripped and ignited on a pile of leaves underneath the car in the parking space. The resulting fire and electrical burn melted all rubber plastic, external belts, wire harness, front bumper, intake manifold and any plastic rubber, fluid lids, exterior parts surrounding or attached to the engine.

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4 US sales of the competitor Honda and Toyota models number 3.4 million vehicles. US sales of the Hyundai/Kia vehicles number just over 2.2 million vehicles.
2011 Kia Optima - NHTSA ID No. 10572612
Vehicle was driven a mile to a commuter rail station for a drop off and back home. Nothing unusual was noted during the short trip nor had any problems been observed in the days leading up to the incident. Shortly after parking the vehicle on the 5th floor of the parking garage and entering the residence, the complex fire alarms actuated and all residents were advised to evacuate without entering the community parking garage. Shortly thereafter, I was notified by the complex manager via my cell phone that my car was on fire in the garage. The entire front of the vehicle was burned and was declared a total loss by the insurance company. The entire car would have burned if it hadn't been parked directly under a sprinkler head in the garage plus a speedy response from the fire department. An independent fire origin investigator was hired by the insurance company. His professional opinion was the fire started at the radiator fan assembly.

2013 Kia Sorento - NHTSA ID No. 10748707
Approximately two weeks after the contact purchased the vehicle, she began smelling tar. The vehicle was taken to the dealer, but the technician was unable to diagnose the failure. The failure recurred and the headlights burned out. The dealer replaced the headlights and stated that there was a recall; however, the contact did not receive any recall notice. The failure recurred and the driver seat began to burn, jamming the driver side door. The contact called 911 and the fire department extinguished the fire. There were no injuries and a police report was not filed. The vehicle was towed away by the insurance company.

The 2011-14 Kia Sorento and Optima vehicles were manufactured at the same facility, Kia Motors Manufacturing Georgia (KMMG) in West Point, Georgia, as were the Hyundai Santa Fe models. The Hyundai Sonata vehicles were made in Montgomery, Alabama. An important question is whether these commonalities indicate potential flaws in the manufacturing process that is worthy of immediate investigation, not only into the vehicles but the oversight and safety processes at these facilities. In the alternative, supplier error may be at fault.

The Center’s analysis of the publicly available information indicates some potential causes for these fires that could serve as starting points for NHTSA’s investigation. Owner supplied complaints indicate what appears to be faulty electrical components and/or faulty housing for those electrical components. Additionally, there are reports of leaking engine fluids. It could be that either issue can result in a vehicle fire, or it could be that the two issues combined cause such a fire.


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Center for Auto Safety Petition for Defect Investigation of Kia and Hyundai

(E.D. Mo. Mar. 20, 2018), the court found that the plaintiff’s expert testimony concerning manufacturing defects on behalf of Kia, specifically KMMG, was admissible. The ongoing case involves a 2013 Kia Sorento that caught fire while parked in the owner’s garage. The expert stated:

The circumstances that caused the fire started with a manufacturing defect in the [Kia]. The front wiring harness was not properly secured to the vehicle, which allowed the wiring harness to come in contact with the sharp edge of the front fender. This resulted in an abrasion of the wiring sleeve and insulation, allowing the wiring harness to electrically short to the grounded vehicle frame which resulted in the fire.

Brown, 2018 WL 1397494, at *2. While Brown only provides analysis of one vehicle fire, the Center cites Brown as an example of these vehicles catching fire, and to recommend that NHTSA’s investigation of these vehicles includes consideration of wiring harnesses interacting with fender edges.

For the reasons discussed above, the Center urges NHTSA to grant this Petition for a Defect Investigation into 2011-14 Kia Optima and Sorento, and Hyundai Sonata and Santa Fe vehicles. Since there are VOQ complaints as recent as last week, it is reasonable to conclude that more Kias and Hyundais will catch on fire, leading to fatalities or serious injuries - if they have not done so already. Pursuant to 49 U.S.C. § 30162(d), the Center formally requests NHTSA respond to this petition within 120 days. In the meantime, the Center will do its part to inform the public of the fire risk these vehicles present and the need for Kia and Hyundai to recall and repair them as quickly as possible.

Thank you for your prompt consideration of this petition.

Sincerely,

Jason Levine
Executive Director