



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

## ODI RESUME

**Investigation:** DP 21-002  
**Prompted by:** VOQ requesting a Defect Petition  
**Date Opened:** 11/12/2021  
**Investigator:** Nathan Ong  
**Approver:** Tanya Topka  
**Subject:** Engine Oil Pressure Switch Leak

**Date Closed:** 06/26/2023  
**Reviewer:** Michael Lee

### MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Kia America, Inc.  
**Products:** 2015-2017 Kia Sorento  
**Population:** 162,000 (Estimated)

**Problem Description:** Petitioner alleged a defective oil pressure switch causes a leak from the engine that can result in a stall condition without warning to the driver.

### FAILURE REPORT SUMMARY

|                            | ODI | Manufacturer | Total |
|----------------------------|-----|--------------|-------|
| <b>Complaints:</b>         | 1   | 0            | 1     |
| <b>Crashes/Fires:</b>      | 0   | 0            | 0     |
| <b>Injury Incidents:</b>   | 0   | 0            | 0     |
| <b>Fatality Incidents:</b> | 0   | 0            | 0     |

### ACTION / SUMMARY INFORMATION

**Action:** This Defect Petition has been denied.

#### Summary:

In a letter dated September 30, 2021, Mr. Gerald James (the petitioner) requested that NHTSA conduct an investigation of the Model Year (MY) 2015-2017 Kia Sorento equipped with 3.3L V6 "Lambda" engines for "severe oil leaks" from the oil pressure switch (OPS) that could "lead to engine failure" with little warning to the driver. Mr. James based this request on his own experience and data found in NHTSA's Vehicle Owner Questionnaire (VOQ) database. NHTSA reviewed the material cited by the petitioner, information submitted by Kia, NHTSA's testing, and other pertinent information in NHTSA databases.

On November 12, 2021, ODI opened Defect Petition DP21-002 to evaluate the petitioner's request. ODI performed an analysis that included evaluation of the petitioner's vehicle, searches of ODI complaints from vehicle owners, non-dealer field reports, manufacturers' supplemental information relating to design of the component, and component testing performed by ODI.

On December 16, 2021, ODI and Kia North America performed a joint inspection on the petitioner's vehicle. ODI and Kia agreed the OPS was leaking oil and observed oil in the crevices atop the engine block. The vehicle received a new replacement OPS and was delivered back to the petitioner. The original part that was removed from the subject vehicle was retained by ODI for further analysis.

As of December 30, 2022, for the MY 2015-2017 Kia Sorento population of 161,519 vehicles with 3.3L engine, NHTSA reviewed internal data and has identified no consumer complaints or field reports in its database, with unique Vehicle Identification Numbers (VIN), citing engine failure or stalling related to the petition's allegation of defective OPS. When combined with the supplemental warranty and technical analysis from the manufacturer, field report and customer complaint data in response to the Information Request letter sent, NHTSA identified no unique VINs alleging engine failure or stalls caused by OPS leaking on the subject vehicles named in the petition.

On April 4, 2022, the Vehicle Research and Test Center (VRTC) performed testing of the petitioner's component

(OPS) based on testing protocol consistent with Kia's specifications for the subject vehicle. The testing involved the petitioner's original OPS in a controlled system to replicate the subject vehicle's oil pressure, flow, and temperature. VRTC determined that a vehicle would have to miss more than a dozen oil change intervals to reach low engine oil capacity. Testing also revealed the OPS would operate, as manufacturer intended, illuminating the vehicle's MIL to alert the driver of lower oil pressure.

In April of 2022, Kia North America issued a warranty extension that extended the coverage of the Oil Pressure Switch from 5 years/60,000 miles to 15 years/150,000 miles on MY 2014-2018 Sorento, MY 2014-2016 Cadenza, and MY 2015-2018 Sedona vehicles, all equipped with the 3.3L Lambda engine. The extended warranty coverage includes diagnosis, repair, and applies to customers experiencing engine oil leaking from the engine or if the engine oil pressure warning light stays illuminated after the engine is turned on.

After a thorough review of the material submitted by the petitioner, information already in NHTSA's possession, testing performed by VRTC, technical information provided by Kia, the potential risks to safety implicated by the petitioner's allegation, NHTSA does not believe that an engine failure due to the alleged defect is likely and does not warrant a formal investigation. Therefore, the petition is denied. A Federal Register Notice (FRN) further detailing NHTSA's reasons for denial of the petition will be published.

The ODI report (the entire petition) cited above can be viewed at [NHTSA.gov](https://www.nhtsa.gov) under ODI number 11431827.