



July 13, 2022

VIA EMAIL

Stephen A. Ridella, Ph.D.  
Director, NHTSA Office of Defects Investigation  
1200 New Jersey Avenue SE  
Washington, DC 20590  
stephen.ridella@dot.gov

Re: Petition for defect investigation of Hyundai/Kia oil drain pan assemblies

Dear Dr. Ridella:

This letter comes on behalf of the undersigned organizations which represent the majority of the nation's automotive repair and preventative maintenance professionals. We are both petitioning for a safety-related vehicle defect investigation pursuant to 49 CFR 554 and providing notice of manufacturer failure to provide necessary maintenance and repair information to consumers as well as required information to NHTSA pursuant to 49 CFR §579.5. Specifically, Hyundai Motor Company and Kia Motor Company ("H/K") have defective oil drain pan assemblies that have experienced unprecedented allegations of mid-interval plug-outs thousands of miles after service without malfunction indicator lights or the leakage associated with under-tightening an oil drain plug or a plug or pan with damaged threads.

Our field research combined with consumer complaints to NHTSA and several consumer forums indicates these unique H/K mid-interval plug-outs likely occur suddenly at highway speeds as a result of (1) double-gasketing due to a paint-camouflaged factory gasket fused to either the plug or the pan; and/or (2) overall flimsy pan material that expands and contracts under pressure such as the kind of intense pressure and vibration associated with H/K's pervasive engine defects.<sup>1</sup>

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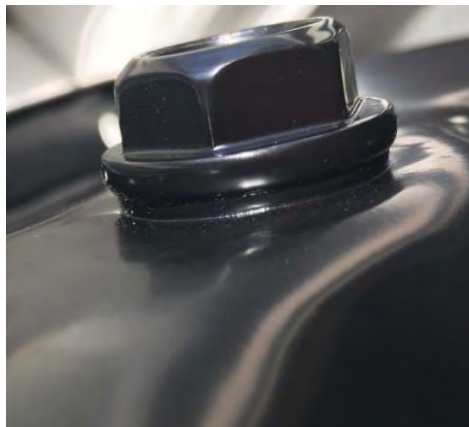
<sup>1</sup> *Cho v. Hyundai & Kia* (March 2022) Class action alleging piston oil ring defect causes excessive oil consumption in Nu, Gamma, Theta, Lambda, and Kappa engines used by both Hyundai and Kia; Kia TSB 222 Rev. 6 March 2022 (Rev 1 Dec 2020) Excessive oil consumption in Nu, Gamma, Theta, and Kappa Engines impacting 69 models; NHTSA Recall 21V301 (April 28, 2021) for Hyundai Improperly Heat-Treated Piston Oil Rings resulting in excessive oil ring hardness. Excessive hardness can cause chipping of the piston oil ring's outer periphery, which could lead to abnormal scuffing of the engine's cylinder bore. A damaged cylinder bore could create accelerated oil consumption, which may then cause abnormal knocking noise from the engine and/or illumination of the oil pressure warning light; Hyundai TSB 21-EM-003H (March 2021) Oil consumption inspection & repair guidelines for 436 models; Hyundai TSB 21-EM-004H (March 30, 2021) Connecting rod bearing

## The H/K Oil Drain Pan Assembly Defects

H/K share engines and engine parts like oil drain pan assemblies. In 2020, automotive aftermarket service providers discovered a trending problem with H/K oil drain pan assemblies about which the manufacturers provide no warning: their oil drain pan assemblies come paint-fused in black paint so that the gasket is painted onto either the drain plug or drain pan and effectively hidden in place thereby causing the likelihood of double-gasketing.

### EXAMPLES Factory Paint-Fused Oil Drain Plug and Gasket

H/K factory oil drain pan assembly 21510-2G500, the most common part in AOCA's study, fits 83 vehicles: 2006-2019 Hyundai Sonata, 2013-2018 Hyundai Santa Fe Sport, 2010-2012 & 2019-2020 Hyundai Santa Fe, 2010-2015 & 2018-2019 Hyundai Tucson, 2011-2021 Kia Sportage, 2005-2020 Kia Optima, 2011-2020 Kia Sorento, 2010-2013 Kia Forte, 2010-2013 Kia Forte Coup, and 2007-2010 Kia Rondo.



clearance testing to determine engine replacement in 297 models—note: this problem causes excessive oil consumption and rod knock; Hyundai & Kia Engine Litigation (Settled 2021) Theta II GDI engine defect and related Hyundai TSB 21-EM-005H-1 (Oct 2021) Warranty Extension for connecting rod bearing wear damage; NHTSA 2021 Recalls Hyundai 21V301 and Kia 21V259 for 2.0L MPI Nu engine with piston oil ring defect that causes excessive oil consumption; NHTSA Recall Kia 20V750 (Dec 2020) and Hyundai TSB 22-EM-001H Inspect & install/update knock sensor; *In re: Hyundai and Kia Engine Litigation*, No. 8:17-cv-00838-JLS-JDE and *Flaherty v. Hyundai Motor Company, et al.*, No. 18-cv-02223 (C.D. Cal.) settlement covers originally equipped or replaced w/ genuine Theta II 2.0- or 2.4-liter GDI engine including: All 2011-2018 & certain 2019 Hyundai Sonatas; All 2013-2018 & certain 2019 Hyundai Santa Fe Sport; All 2014-2015, 2018 & certain 2019 Hyundai Tucson; All 2011-2018 & certain 2019 Kia Optima; All 2011-2018 & certain 2019 Kia Sorento; and All 2011-2018 & certain 2019 Kia Sportage; *Sara Pelayo, et al., v. Hyundai Motor America, Inc. et al.* (C.D. Cal) (dismissed w/out prejudice May 2021) alleges 1.6L Gamma engines cause sudden stalling, shaking, excessive oil consumption, engine failures and fires in these Hyundai and Kia vehicles; *Canada Defects Class Action* <https://www.strosbergco.com/class-actions/hyundai/>; *Brown v. Hyundai*, No.: 2:18-cv-11249 (D.N.J. filed 2018), alleges Hyundai Elantra model years 2011-16 with the Nu 1.8-liter engine have a latent defect in the piston assembly that causes total and irreparable engine failures; symptoms include knocking noise, and about which plaintiffs' various dealerships claimed any damage was caused by consumer neglect and/or use of aftermarket oil filters; *Robert Buettner v. Hyundai Motor America, Inc., et al*, 8:21-cv-01057 (C.D. Cal filed June 15, 2021) alleges defects in 2.0L and 2.4L Theta II MPI engines.

2018 Hyundai Sonata 1.6L T-GDI Gamma 5NPE24AAXJH\*\*\*\*\* (submitter 1)  
Part 21510-2B700



2020 Hyundai Veloster 1.6L T-GDI Gamma KMHTH6AB5LU\*\*\*\*\* (submitter 37)  
Part 21510-2B700 (gasket pried loose by technician prior to photograph)



2017 Hyundai Veloster Turbo 1.6L Gamma KMHTC6AD3HU\*\*\*\*\* (submitter 39)  
Part 21510-2B700



2020 Kia Telluride 3.8L V-Shaped GDI Lambda-II 5XYP34HC5LG\*\*\*\*\* (submitter 103)  
Part 21510-3LFB0



The examples provided above were found by trained experts on the lookout for this problem. For anyone uninformed, the paint-fused gasket is easy to miss. Consider this video of an experienced do-it-yourselfer (DIYer) doing the first oil change on a 2021 Kia K5:

[REDACTED]

- At 18:00 the DIYer struggles to loosen the factory painted oil drain pan plug with the correct torque wrench. “Wow! That was tight! What’d they do at Kia—use Loctite on it?” He must add torque to get the plug loose.
- At 18:57 the DIYer again struggles to loosen the factory painted oil drain pan plug.
- At 19:54 the DIYer examines underside of the drain plug: “Looks like there’s a magnet on it.”
- At 21:30 the DIYer talks about getting the new washer to reinstall the factory painted oil drain pan plug and wonders aloud, “Where’s the old one?” He checks the factory painted drain pan and tries to pry off what appears to be the gasket stuck on the opening. It won’t come off. He concludes it’s part of the pan.

The DIYer video also highlights the fact—and expert technicians agree—that prying off the factory-painted drain plug for the first oil change is difficult and requires extra torque pressure to achieve. Since the DIYer here couldn’t find the paint-fused gasket, he didn’t experience the added risk of trying to pry it off as well, a task for which automotive professionals use a vice and chisel. The few DIYers who report finding the paint-fused gasket say they used knives and flathead screwdrivers to get it off—dangerous approaches that can cut hands and destroy plug threads.

#### **EXAMPLE Consumer experience with paint-fused gasket on drain plug**

[REDACTED]

2019 Hyundai Veloster owner: "Very first oil change I did at 1500 miles it felt like the crush washer was welded onto the plug. So I went ahead and left it. Just did another change at 6000 and got after it with a flathead screwdriver and eventually felt like I was messing up some of the threads."

Why is Hyundai's oil drain plug so bad?

1 - 20 of 22 Posts

Discussion Starter #1 Feb 2, 2021

Very first oil change I did at 1500 miles it felt like the crush washer was welded onto the plug. So I went ahead and left it. Just did another change at 6000 and got after it with a flathead screwdriver and eventually felt like I was messing up some of the threads. Had to drive to a dealership and buy a new one. This is has been the only vehicle I've ever driven that uses washers instead of a plug with a built in gasket. Why did Hyundai choose to go this route? And does anyone make a reusable drain plug?



Joined Aug 25, 2020  
89 Posts







The safest approach to the double-gasketing risk would be for H/K to recommend replacing both the plug and gasket at the first oil change after making sure the factory gasket isn't painted onto the pan, but they haven't done that. Moreover, their owners' manuals no longer contain any necessary technical information for changing oil (such as oil filter specification, oil drain plug torque pressure, gasket replacement) nor have they issued a TSB or consumer outreach on the subject. *See Appendix A.*

Unfortunately, identifying and safely managing the paint-fused factory gasket is not the only problem with these H/K oil drain pan assemblies. The factory paint also camouflages the material inadequacy of the drain pan. They appear to be made from cheap, stamped steel with only light reinforcement provided for the oil drain opening. As described above, the factory paint creates an exceptionally strong bond for the first oil change service provider to break. Once broken, however, the pans appear to be unable to maintain their integrity when subjected to the pressure and vibration associated with H/K's engines. Expansion, contraction, and vibration can loosen the drain plug as well as crack the pan.

The following chart includes cases where consumers used automotive aftermarket professionals (AAPs) for preventative maintenance and later experienced leakage due to cracked oil pans. It should be noted that none of the oil drain plugs or pan threads were stripped or stuck from over-tightening and, even if they had been over-tightened, it isn't possible to crack the pan via that method because the pan and/or plug threads simply give way.

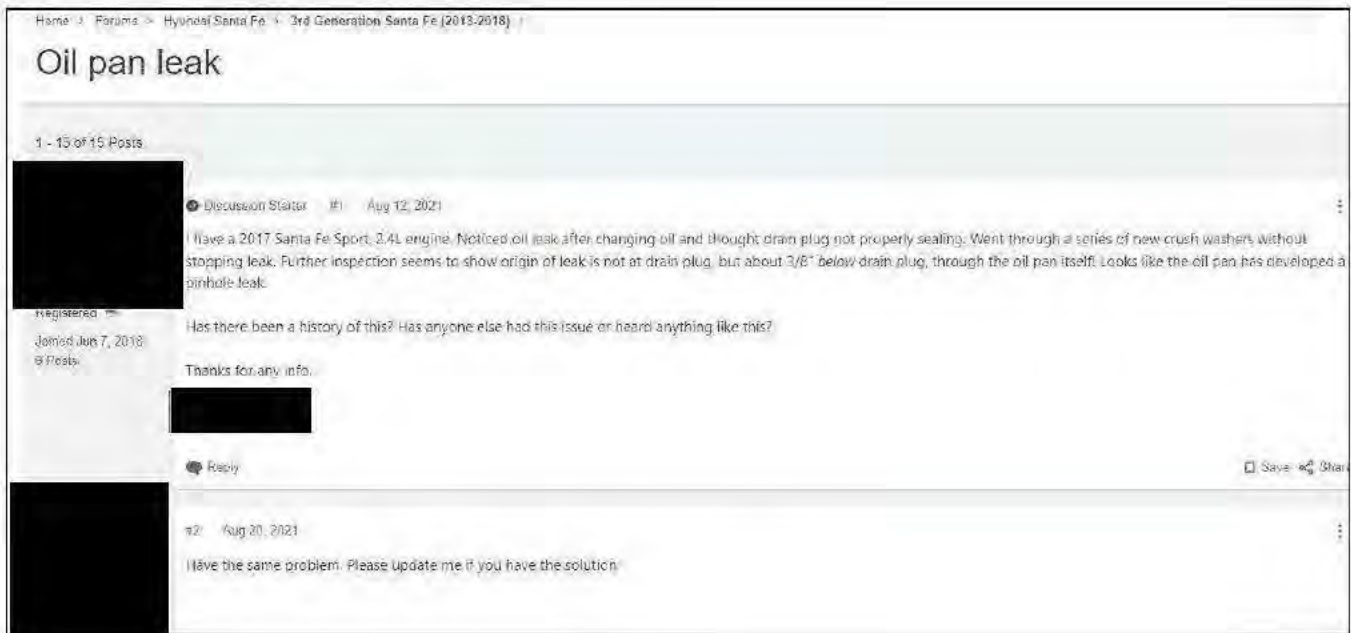
**EXAMPLES Cracked H/K Oil Drain Pans**

Make / Model / Engine / VIN	Oil Drain Pan Assy	Odometer / DOS	Problem
2018 Hyundai Sonata 2.4L Theta II GDI 5NPE24AF8JH*****	21510-2G500	24,963 09/04/21	<p>On or about Oct 13, 2021, customer reported dealer said oil was leaking and the pan cracked.</p> 
2016 Kia Sorento 2.4L DOHC GDI Theta II 5XYPGDA3XGG*****	21510-2G500	114,040 10/01/21	<p>On October 28, 2021, customer reports oil leaking. AAP inspection shows oil pan is cracked under drain plug.</p> 

Make / Model / Engine / VIN	Oil Drain Pan Assy	Odometer / DOS	Problem
2017 Kia Sportage 2.4L In-Line GDI Theta II KNDPMCAC2H7*****	21510-2G500	70,029 02/ 11/22	<p>Customer took vehicle to Auto Repair shop on May 20, 2022; replaced leaking oil pan; odometer was 76,489. AAP inspection shows oil pan was cracked. PHOTOS show oil pan is cracked with the original factory-painted drain plug.</p> 
2017 Kia Optima 2.4L In-Line GDI KNAGT4L3XH5*****	21510-2G500	98589 02/26/21	<p>February 27, 2021, at 98621 odometer, customer reports oil leaking and a crack in the pan. Inspected by dealership March 1, 2021. AAP inspected oil drain pan; front crack; large crack on the pan belly from slight pressure applied.</p> 







### H/K has Reason to Know About the Oil Drain Pan Assembly Defects

Failure to properly torque an oil drain plug is now extremely rare and usually caught before the vehicle leaves the service facility property due to telltale leakage. Moreover, in the past ten years, videotaping in AAP service bays has augmented AAPs' already detailed records made during the vehicle maintenance process with dedicated torque wrenches and engine-specific replacement oil filters, gaskets, and plugs. It therefore came as a shock when the automotive aftermarket documented over 100 cases of alleged H/K mid-interval plug-outs with an average of 1,796 miles post-service and as high as 8,000 miles post-service. See case details in Appendix B. In addition to the high mileage involved, no consumers reported any malfunction indicator lights and only a few reported some oil leakage and seeing the plug out, which simply does not track the progress of a plug-out based on torque pressure alone. Few AAPs had the opportunity to investigate, however, because H/K warranty periods are very long and AAP consumers experiencing a H/K engine problem generally have their vehicles towed directly back to H/K. It is safe to say they have reason to know better than anyone the significant number of consumers involved.

In addition to the cases in Appendix B, consumers have submitted the following eight cases directly to NHTSA and eleven to various consumer forums.

**NHTSA ID 11431200 2019 Hyundai Kona 2.0L MPI Nu VIN KM8K12AA5KU\*\*\*\***  
August 31, 2021: The contact owns a 2019 Hyundai Kona. The contact stated she was informed at the service inspection that her vehicle was low on engine oil however, the oil had recently been refilled. There were no warning lights illuminated. The vehicle was taken to the dealer who

diagnosed that the oil plug was loose. The dealer refilled the engine oil. The contact stated that the failure had been reoccurring and the vehicle was using a third of the engine oil every 1,000 miles. The vehicle was taken to a second dealer (Texoma Hyundai 2500 Texoma Pkwy, Sherman, TX 75090) who test drove the vehicle and diagnosed that no issues were found. The manufacturer was not made aware of the failure. The vehicle was not repaired. The approximate failure mileage was 58,200. Bob Howard Hyundai Oklahoma City OK 73139

NOTE: This vehicle was likely subject to NHTSA CAMPAIGN NUMBER 21V301000 (April 28, 2021) for Improperly Heat-Treated Piston Oil Rings resulting in excessive oil ring hardness. Excessive hardness can cause chipping of the piston oil ring's outer periphery, which could lead to abnormal scuffing of the engine's cylinder bore. A damaged cylinder bore could create accelerated oil consumption, which may then cause abnormal knocking noise from the engine and/or illumination of the oil pressure warning light.

This vehicle is also subject to the following TSBs:

- Hyundai TSB 22-01-043H (May 2022): Hyundai service campaign to enhance the knock sensor logic with the Cylinder Noise Diagnostic System (CNDS) software update. CNDS is to detect abnormal cylinder wall scuffing or noise of the engine block before potentially severe engine damage occurs. [Although this TSB does not discuss it, abnormal cylinder wall scuffing leads to excessive oil consumption.]
- Hyundai TSB 21-EM-004H (March 30, 2021): This bulletin provides the service procedure for engine connecting rod bearing clearance testing to determine next required steps including engine replacement applicable to 297 models. [Although this TSB does not discuss it, connecting rod bearing problems lead to excessive oil consumption.]
- Hyundai TSB 21-EM-003H (March 2021) Engine oil consumption inspection and repair guidelines applicable to 436 models.

**NHTSA ID 11366918 2017 Hyundai Sonata Hybrid 2.0 L GDI Nu KMHE24L34HA\*\*\*\***

October 26, 2020: The oil plug fell out and seized the engine. I bought the car and drove it lightly for 2 days through city streets and highways. Right before the engine seized. The check hybrid systems light came on, followed by the oil light, then the check engine light (within the span of around 45 seconds). After the lights the car became unresponsive to the gas pedal and slowed to a halt. After getting it towed to a Hyundai dealership the next day, they called and said that the oil plug is missing and it caused the whole engine to seize and need a complete replacement. After researching I've found many owners of 2017 Hyundai Sonata hybrids to have had similar issues with the plug falling out. I believe it should be looked into getting recalled.

NOTE: This vehicle is now likely subject to NHTSA CAMPAIGN NUMBER: 21V727000 (Sept. 17, 2021) Engine Damage May Cause Stall or Fire; specifically the connecting rod bearings inside the engine may wear prematurely, break, and puncture the engine block., which can result in a vehicle stall at highway speeds increasing the risk of a crash. If engine oil leaks onto certain engine components running at high operating temperature it could ignite and start an engine compartment fire. Identified warning signs include:

- A. Abnormal (knocking) noise from engine
- B. Reduced motive power and/or hesitation
- C. Illumination of the “Check Engine” warning lamp
- D. Illumination of engine oil pressure warning lamp
- E. Burning smell, oil leaking, smoke

This vehicle is also subject to the following Investigation and TSBs:

- NHTSA Investigation EA21003 (December 22, 2021—Present) for Engine Fires.
- Hyundai TSB 22-01-028H-1 (April 28, 2022) Campaign to enhance the knock sensor software to detect abnormal engine bearing noise before potentially severe engine damage occurs.
- Hyundai Service Campaign T6G DTC P1326 (April 28, 2022) ENGINE BEARING INSPECTION /ENGINE REPLACEMENT- Dealer Best Practice associated with Hyundai TSB 22-01-023H-1.
- Hyundai TSB 22-EM-006H-1 (April 2022) The Powertrain warranty coverage for certain engine repairs and/or replacement where the engine damage or malfunction is related to connecting rod bearing wear, has been extended to 15 years or 150,000 miles.
- Hyundai TSB 21-EM-004H (March 30, 2021): This bulletin provides the service procedure for engine connecting rod bearing clearance testing to determine next required steps including engine replacement applicable to 297 models. [Although this TSB does not discuss it, connecting rod bearing problems lead to excessive oil consumption.]
- Hyundai TSB 21-EM-003H (March 2021) Engine oil consumption inspection and repair guidelines applicable to 436 models.

**NHTSA ID 11433038 2018 Hyundai Sonata 2.4L GDI Theta II VIN 5NPE34AF2JH\*\*\*\***

Incident occurred on October 15, 2020: The contact owns a 2018 Hyundai Sonata. The contact stated that while driving, the oil warning light illuminated. The contact stated that he checked the engine oil level and discovered that there was no oil in the engine. **The vehicle was taken to the dealer where the failure was diagnosed as an oil plug needing replacement.** The vehicle was repaired however, the failure continued. The vehicle was taken back to the dealer several times and the failure cause could not be determined. The contact stated that recently an oil consumption test was completed, and the dealer determined that to be the failure cause. The dealer contacted the manufacturer who stated that the failure cause was due to the owner's negligence and no solution was offered. The approx. failure mileage was 40,000. McGrath City Hyundai Chicago IL 60707

NOTE: This vehicle is subject to the following TSBs:

- Hyundai TSB 22-EM-001H (January 2022) warranty coverage for engine long block repair or replacement regarding engine damage or malfunction from connecting rod bearing wear has been extended to a Limited Lifetime Warranty and is valid for original and subsequent owners Theta II 2L Turbo & 2.4L. Connecting rod bearing wear symptoms include excessive oil consumption.

- Hyundai TSB 21-EM-004H (March 30, 2021): This bulletin provides the service procedure for engine connecting rod bearing clearance testing to determine next required steps including engine replacement applicable to 297 models.
- Hyundai TSB 21-EM-003H (March 2021) Engine oil consumption inspection and repair guidelines applicable to 436 models.

**NHTSA ID 11320689 2017 Hyundai Tucson 2.0L GDI Nu KM8J3CA41HU\*\*\*\***

February 21, 2020: The contact owns a 2017 Hyundai Tucson. The contact stated that while attempting to accelerate after a stop, the vehicle stalled without warning. Due to the failure, the contact had the vehicle towed to McCarthy Olathe Hyundai (681 n Rawhide, Olathe, KS 66061) where the vehicle was diagnosed with a loose drain plug. Due to the damage caused by the loose drain plug, the contact was informed that the engine needed to be replaced. The contact then notified the manufacturer of the failure. After an extensive investigation, the manufacturer deemed the failure to have been caused by the negligence of the independent mechanic who serviced the vehicle for oil changes. The manufacturer denied to honor the warranty. The vehicle had not been repaired. The failure mileage was 47,110.

NOTE: This vehicle is now likely subject to the following recalls:

- NHTSA CAMPAIGN NUMBER: 21V727000 (Sept. 17, 2021) Engine Damage May Cause Stall or Fire; specifically the connecting rod bearings inside the engine may wear prematurely, break, and puncture the engine block., which can result in a vehicle stall at highway speeds increasing the risk of a crash. If engine oil leaks onto certain engine components running at high operating temperature it could ignite and start an engine compartment fire. Identified warning signs include:
  - A. Abnormal (knocking) noise from engine
  - B. Reduced motive power and/or hesitation
  - C. Illumination of the “Check Engine” warning lamp
  - D. Illumination of engine oil pressure warning lamp
  - E. Burning smell, oil leaking, smoke
- NHTSA Recall Number 20V543000 “URGENT: FIRE RISK WHEN PARKED” An urgent safety recall for this vehicle due to the risk of a fire. Use our VIN lookup tool to see if your vehicle is part of this recall. If your vehicle is part of this recall, the manufacturer has recommended that you follow their instructions on how and where to park this vehicle.

This vehicle is also subject to the following Investigation and TSBs:

- NHTSA Investigation EA21003 (December 22, 2021—Present) for Engine Fires.
- Hyundai TSB 22-01-028H-1 (April 28, 2022) Campaign to enhance the knock sensor software to detect abnormal engine bearing noise before potentially severe engine damage occurs.
- Hyundai Service Campaign T6G DTC P1326 (April 28, 2022) Engine Bearing Inspection /Engine Replacement- Dealer Best Practice associated with Hyundai TSB 22-01-023H-1.

- Hyundai TSB 22-EM-006H-1 (April 2022) The Powertrain warranty coverage for certain engine repairs and/or replacement where the engine damage or malfunction is related to connecting rod bearing wear, has been extended to 15 years or 150,000 miles.
- Hyundai TSB 21-EM-004H (March 30, 2021): This bulletin provides the service procedure for engine connecting rod bearing clearance testing to determine next required steps including engine replacement applicable to 297 models. [Although this TSB does not discuss it, connecting rod bearing problems lead to excessive oil consumption.]
- Hyundai TSB 21-EM-003H (March 2021) Engine oil consumption inspection and repair guidelines applicable to 436 models.

**NHTSA ID 11245086 2019 Kia Soul 2.0L GDI Nu KNDJP3A5XK7\*\*\*\***

August 19, 2019: Drain plug missing which caused a leak in vehicle, which caused engine to break while driving car stopped working, was towed then found the drain plug was missing please help I have been reading and found other cases like mine on the Kia Soul. My car was stationary on the highway. I had to get it towed to a gas station where I slept in the car overnight then call a tow company to take me to the closest Kia dealership. There they told me their findings. I had an oil change on 05/20/19, at a Kia dealership in MD. Where I believe that my car was not handled professionally hence the cause of my problem.

NOTE: This vehicle is subject to the following TSBs:

- Kia TSB PI2107Y/Z (May 2022) Engine Replacement Instructions for DTC P1326 (rod knock). Related TSBs & MCs go back to November 11, 2021.
- Kia TSB 222 Rev. 6 March 2022 (Rev 1 Dec 2020) Excessive oil consumption in Nu, Gamma, Theta, and Kappa Engines impacting 69 models.
- Kia TSB 219 (July 2020) Oil Change Maintenance Reminder Feature discussion including (1) oil change reminder feature not set in factory; and (2) KMA's evaluations are that many and maybe most owners are using their vehicles under such SEVERE conditions and they should therefore have their oil and oil filter changed every 3,000 or 3,750 miles depending on the model.

**NHTSA ID 11196311 2018 Kia Sportage 2.4L Theta II GDI**

April 22, 2019: consumer writes in regards to engine failure. \*LD consumer sent additional correspondence. \*LD the consumer stated the dealer denied assistance with the failure due to an aftermarket oil plug being installed in the vehicle. The dealer advised that the 3rd party who changed the oil should be held responsible for the failure. The engine failed and needed to be replaced. Metal shavings were found in the oil.

Consumer's complaint letter to Kia states: "January 29, 2019 the engine in the vehicle failed while I was driving. January 29, 2019 the vehicle was towed to Four Star Automotive where the mechanic found a catastrophically failed engine. January 30, 2019 the vehicle was towed to your service department in West Nyack. Your service department denied to have the vehicle repaired because 'someone installed an aftermarket oil plug in the vehicle'.... I insisted that the cause of the failure was not the oil plug and I have a mechanic's opinion to refute these findings."

NOTE: This vehicle is likely subject to the following recalls:

- NHTSA Recall Number 20V543000 “URGENT: FIRE RISK WHEN PARKED” An urgent safety recall for this vehicle due to the risk of a fire. Use our VIN lookup tool to see if your vehicle is part of this recall. If your vehicle is part of this recall, the manufacturer has recommended that you follow their instructions on how and where to park this vehicle.
- NHTSA Recall 21V137000 (March 4, 2021) Engine Compartment Fire
- NHTSA Recall 18V907000 (December 19, 2018) High Pressure Fuel Pipe May Leak

This vehicle is also subject to the following TSBs:

- Kia TSB 222 Rev. 6 March 2022 (Rev 1 Dec 2020) Excessive oil consumption in Nu, Gamma, Theta, and Kappa Engines impacting 69 models.
- Kia Product Improvement Campaign PI1802YZ (December 23, 2021; updated from March 2020) Engine Replacement Instructions for DTC P1326 (rod knock).
- Kia TSB 067 (Rev 1, Nov. 11, 2021; original March 2020) Testing engine rod bearing wear.
- Kia TSB 219 (July 2020) Oil Change Maintenance Reminder Feature discussion including (1) oil change reminder feature not set in factory; and (2) KMA’s evaluations are that many and maybe most owners are using their vehicles under such SEVERE conditions and they should therefore have their oil and oil filter changed every 3,000 or 3,750 miles depending on the model.
- Kia TSB PI1802W/X (Rev 2/11/2019) Engine replacement instructions for DTC P1326 (rod knock).

**NHTSA ID 11114946 2016 Hyundai Tucson 2.0L KM8J3CA46GU\*\*\*\***

July 31, 2018: Engine oil pressure warning light turned on without any auguries while driving on a highway. We pulled over the car as soon as possible, but the car could not be started again after we turned off the engine. We had the car towed to a Hyundai dealership, and then we were told the engine was seized and needed to be replaced. When we asked how it happened, they told us that our engine oil plug was missing, so all the engine oil was drained out. They checked our maintenance record, and found that we had an oil change three months back at another Hyundai dealership. We were told that it could be possible that the engine oil plug was not properly installed during last maintenance service, but they were not sure about it, after all it had been 3 months not 30 minutes since then. We were never given a sure reason for what happened to the car, but the engine replacement was taken care of by Hyundai warranty. Personally I don't think the 'maintenance mistake' hypothesis make sense. We did not drive this car daily, maximum average usage was about weekly, but long distance most times. If the plug was loose due to the maintenance, we should have a problem sooner unless the oil doesn't drain when a car is parked. In addition, it could not be someone loose the plug at a parking lot on purpose either. Because when we drove the car out, we did not notice any oil trace on the ground, and we had been continuously driving this car for about 2 hours before the engine failure happened. The most possible reason that

I could think of is the engine was defective. I am hoping this issue can be brought into a formal investigation, because it could lead to very serious consequences.

NOTE: This vehicle is likely subject to the following recalls:

- NHTSA Recall 20V543000 URGENT: FIRE RISK WHEN PARKED

This vehicle is also subject to the following TSBs:

- Hyundai TSB 22-01-028H-1 (April 28, 2022) Campaign to enhance the knock sensor software to detect abnormal engine bearing noise before potentially severe engine damage occurs.
- Hyundai Service Campaign T6G DTC P1326 (April 28, 2022) ENGINE BEARING INSPECTION /ENGINE REPLACEMENT- Dealer Best Practice associated with Hyundai TSB 22-01-023H-1.
- Hyundai TSB 22-EM-006H-1 (April 2022) The Powertrain warranty coverage for certain engine repairs and/or replacement where the engine damage or malfunction is related to connecting rod bearing wear, has been extended to 15 years or 150,000 miles.
- Hyundai TSB 22-EM-001H (January 2022) warranty coverage for engine long block repair or replacement regarding engine damage or malfunction from connecting rod bearing wear has been extended to a Limited Lifetime Warranty and is valid for original and subsequent owners Theta II 2L Turbo & 2.4L. Connecting rod bearing wear symptoms include excessive oil consumption.
- Hyundai TSB 21-EM-004H (March 30, 2021): This bulletin provides the service procedure for engine connecting rod bearing clearance testing to determine next required steps including engine replacement applicable to 297 models. [Although this TSB does not discuss it, connecting rod bearing problems lead to excessive oil consumption.]
- Hyundai TSB 21-EM-003H (March 2021) Engine oil consumption inspection and repair guidelines applicable to 436 models.

**NHTSA ID 11097819 2017 Hyundai Elantra 2.0 L KMHD74LF4HU\*\*\*\***

March 22, 2018: This complaint is involving USA Auto Care and ABC Hyundai I went to have an oil change done at USA Auto Care and a week later my oil plug fell out of my car and I lost all my oil had my car towed to Hyundai. Hyundai put a new plug in there refilled with oil show me everything was okay so I proceeded to go to USA Auto Care number for and try and get the money that I paid to ABC Hyundai for the oil in the plugs on my way my engine locked up car came to a stop and shut off I then have the car towed back to Hyundai and was notified by Hyundai that my engine was pretty much done for call progressive insurance my insurance at the time notified them of the claim they sent someone down to take pictures they got back with me after a few days and my case was transferred to about three different people because the original agent had to leave for maternity leave and I was notified by one of the other agents that was on my case that it would not be covered by progressive insurance because it was a non comprehensive accident and that it wasn't in a physical accident causing body damage I also called my warranty because my car is brand new and they told me it was [void] because I did not have the oil change done at Hyundai after a couple of weeks I was notified by ABC Hyundai that my car was fixed thought it was

through the warranty and they change their mind but my insurance went ahead and completed the claim they never notified me of them taking the claim no emails or correspondence what I was notified by ABC Hyundai to come get my car I was told that I had to pay a \$1,000 deductible and that my insurance went ahead and completed the claim I am on social security I do not have \$1,000 sitting around and I was also told that progressive could not cover it now I'm stuck because I can't afford the deductible and I can't use my car to do uber and make the money I need some guidance in this.

NOTE: This vehicle is subject to the following TSBs:

- Hyundai TSB 21-EM-004H (March 30, 2021): This bulletin provides the service procedure for engine connecting rod bearing clearance testing to determine next required steps including engine replacement applicable to 297 models. [Although this TSB does not discuss it, connecting rod bearing problems lead to excessive oil consumption.]
- Hyundai TSB 21-EM-003H (March 2021) Engine oil consumption inspection and repair guidelines applicable to 436 models.

2018 Kia Soul owner reports vehicle going approximately 3,500 miles before oil drain plug came out.

## Oil plug blow out going down the highway

1 - 20 of 21 Posts

Discussion Starter #1 Feb 4, 2020

2018 kia soul 45,000 miles only had it for four months have not had to do oil change yet and have put about 3500 miles on it. Driving down the highway after 8-hour road trip oil lose oil plug out of the blue. Dealer says has to be vandalism somebody had to have loosened it. Not possible I live down a private road out of town no one even around. Any one heard of anything like this before?

Registered  
2018 Kia Soul SE

I am experiencing the worse possible things ever to go wrong with a brand new vehicle. I purchased a 2018 Hyundai Elantra GT, only had 300 miles on it when I drove off the dealership lot. I had a little over 10,000 miles on the car, when the oil plug fell out and locked the engine up. Strange thing is had little over 2,000 miles on since last oil change. Dealership said it's not a warranty issue and place that changed oil wouldn't stand behind the issue. Now I have new vehicle with huge payments and nobody helping me out with this issue. It's been almost a year now. So I worked on freeing up engine and got it running, then the next crazy thing happens. The piston in cylinder 3 breaks and connecting rod knocked hole in my block. Been reading about the piston problems in the Hyundai Elantra GT and other Kia models. Dealership still won't admit that there an issue with my car . I owe huge amount and have a 2018 Hyundai Elantra GT with under 11,000 miles and stuck walking with disabilities. Anyone else experience these issues??



## One huge nightmare of a car.

1 - 13 of 12 Posts



Discussion Starter · #1 · Sep 28, 2020

I am experiencing the worse possible things ever to go wrong with a brand new vehicle. I purchased a 2018 Hyundai Elantra GT, only had 300 miles on it when I drove off the dealership lot. I had a little over 10,000 miles on the car, when the oil plug fell out and locked the engine up. Strange thing is had little over 2,000 miles on since last oil change. Dealership said it's not a warranty issue and place that changed oil wouldn't stand behind the issue. Now I have new vehicle with huge payments and nobody helping me out with this issue. It's been almost a year now. So I worked on freeing up engine and got it running, then the next crazy thing happens. The piston in cylinder 3 breaks and connecting rod knocked hole in my block. Been reading about the piston problems in the Hyundai Elantra GT and other Kia models. Dealership still won't admit that there an issue with my car. I owe huge amount and have a 2018 Hyundai Elantra GT with under 11,000 miles and stuck walking with disabilities. Anyone else experience these issues??

Registered

Joined Sep 2012  
3 Posts

RESOURCES NEWS INVESTIGATIONS RECALLS

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### 2017 HYUNDAI TUCSON OWNER COMMENTS

#1 Tucson SE 2.0L  
Automatic transmission 69,540 miles

Yes I put \$13,000 to replace my motor because that is the estimate I got from the Hyundai dealer in Modesto, CA. I never had an issue with my car. Did my oil changes and checked it regularly.

On New Years Eve my motor seized up and I was told my drain plug fell out. Not once did any check engine lights or oil pressure lights came on the dash.

[Redacted] Ceres, US

#### 3 Engine Oil Leaking problem

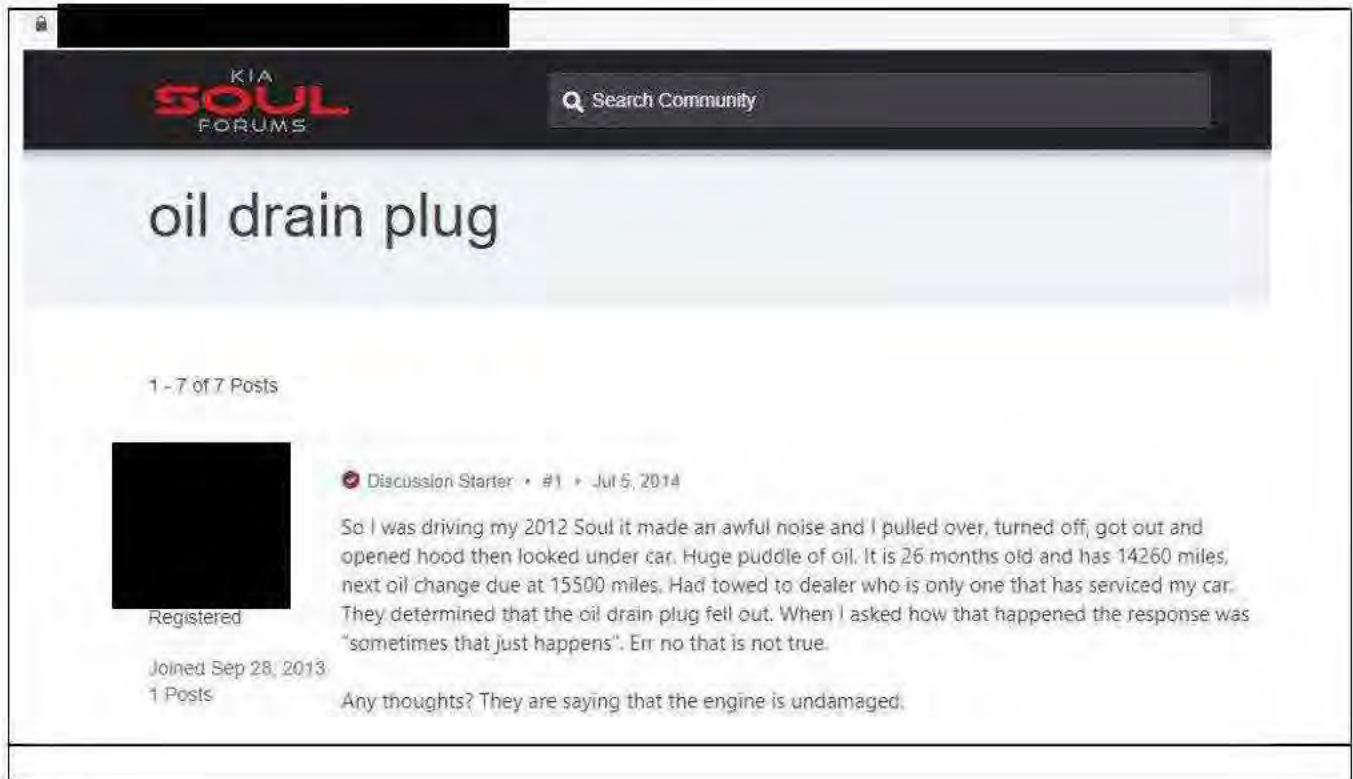
Failure Date: 02/13/2019

While driving on the 5n freeway in the fast lane, my car seized. I had enough momentum to get on the right shoulder. Warning light said nothing of oil leak and gave me the tpms warning (tire pressure). Diagnosis: oil plug fell out of oil pan, all oil leaked and engine was ruined. Weeks later, I receive a "new" engine and they do not know why the plug fell out. If it was loose, it would have fell out quicker than 600 miles after the oil was serviced. Perhaps it was the wrong size oil plug, we wont know because it fell out. Recall is for 2011-2013 models..... Perhaps the 2017 has same issues!!! NHTSA's campaign number: 19v063. 120,000 Hyundai Tucson suvs from the 2011 to 2013 model years. The oil pan may have been improperly sealed during engine production. As a result, an oil leak could develop and lead to engine damage, the engine stalling, or even a fire, NHTSA says.

January 18, 2017

★ ★ ★ ★ ★  
SERVICE VISIT

**do not get your car serviced here** had my oil changed at this dealer in Nov. of 2016. In Jan. my oil plug fell out and blow my engine they r saying its my fault for this happening and will not replace my engine now I have a car that don't run and payments for a car I can not drive now. my life is over...30 more payments for a car I can not drive!!!!!! this place is the going to make me commit suicide bye world!!!! LIES




The screenshot shows a forum post on the KIA SOUL FORUMS website. The page title is "oil drain plug". The post is the first of seven in the thread, dated July 5, 2014. The user is a registered member who joined in September 2013. The post content describes a problem with a 2012 KIA SOUL where the oil drain plug fell out, causing a large puddle of oil. The user mentions that the car is 26 months old with 14,260 miles and that the next oil change is due at 15,500 miles. The user asks for thoughts on the engine's condition, noting that the dealer's response was "sometimes that just happens".

**KIA SOUL FORUMS** Search Community

## oil drain plug

1 - 7 of 7 Posts

 Discussion Starter • #1 • Jul 5, 2014

Registered  
Joined Sep 28, 2013  
1 Posts

So I was driving my 2012 Soul it made an awful noise and I pulled over, turned off, got out and opened hood then looked under car. Huge puddle of oil. It is 26 months old and has 14260 miles, next oil change due at 15500 miles. Had towed to dealer who is only one that has serviced my car. They determined that the oil drain plug fell out. When I asked how that happened the response was "sometimes that just happens". Err no that is not true.

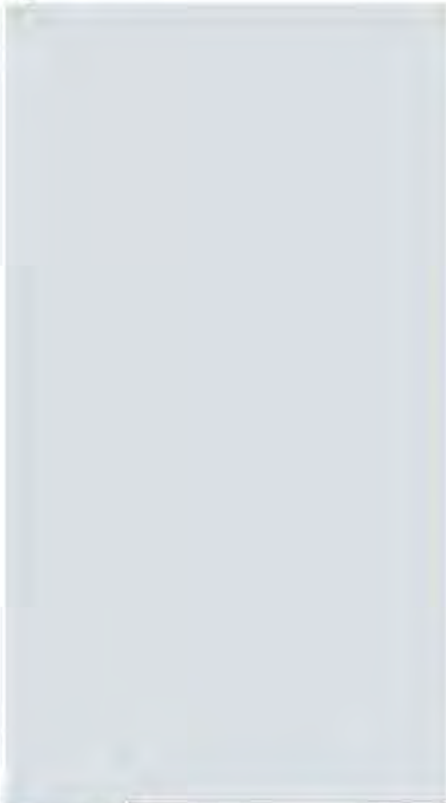
Any thoughts? They are saying that the engine is undamaged.



**Oil drain plug fell off while driving new-ish car, engine now completely destroyed (\$8500 to replace) [WY]**

I bought a new 2017 Kia Soul in July 2017 in the state of Washington and moved to my current residence in Wyoming the following month. Since then I have put 16,500 miles on the car and have maintained it in good condition. This past weekend, I was driving on the highway going about 70 mph when the vehicle shut down- the battery and oil warning lights both turned on at the same time. I was no longer able to accelerate, and I was forced to coast onto the shoulder to a safe location. I tried starting the car back up, unsuccessfully. I then called a tow truck provided by my roadside assistance insurance. When the tow truck arrived and pulled the car onto the bed, we noticed a large puddle of oil formed under the car and leaking onto the truck bed. That is when we noticed that the car was completely missing the oil drain plug. We followed the spotted trail of oil back onto the road and concluded that the oil drain plug somehow fell off while driving, drained the oil, and forced the car to disable itself.

The tow truck driver suggested I tow the car back to the last place I had an oil change, because usually if this happens, it is because the mechanics did not properly tighten the oil drain plug. The last oil change I had, however, was over 3 months ago after having driven over 5000 miles. According to other forums I have read online about oil drain plugs falling out while driving, their oil had just been changed the same day; is it wrong to think that 3 months and 5000 miles is too long to hold the oil change facility responsible for this? I still had the car towed back to the oil change place and they replaced the oil drain plug and changed the oil. Initially, the mechanics and the manager of the shop said it is highly unlikely that they would be responsible, since it had been over three months since the last time they touched my car. They then tried starting the car back up, but it would not start. The mechanics suggested this might have been due to a "computer issue that only licensed Kia mechanics could fix" at a dealership service center. Since the service center was closed over the weekend, I waited until this morning to have my car towed there and have them try to "hot start" the car. After trying this, however, the Kia mechanics said that the engine was completely seized, or locked up. After turning the engine with a crankshaft, they concluded that the engine is pretty much completely finished, and needs to be fully replaced in order for the car to run again. They estimate the cost to total \$8500, plus labor. This is nearly half the value of my car when I bought it brand new only 8 months ago.



Per my request, the manager at the dealership set up an inquiry/claim for Kia's corporate department, to see if this malfunction with the oil drain plug was possibly due to faulty equipment on the vehicle (perhaps a product that has or will be recalled, or due to heat expansion or some other random effect that caused the drain plug to fall off while driving.). He submitted photos and detailed my version of what happened when the oil drain plug fell off. A few hours later, the manager informed me that Kia corporate had denied liability/responsibility for the damage, also saying that this would not be covered under warranty, and suggested that I go back to the oil change place and pursue them to regain my losses. I should also mention that nearly every person I talked to over the past few days, from the oil change shop, to the Kia dealership, half-jokingly asked me if I had "any enemies", pretty much implying that somebody deliberately took a wrench to the oil drain plug under my (1ft of ground clearance) Kia Soul, while it was parked in my apartment parking lot. I have comprehensive auto insurance; I contacted them as well, and they said that they do not cover any mechanical issues. When I asked about the possibility of criminal vandalism leading to the mechanical failure, I was transferred to another department, which was closed for the day (I will call them back tomorrow).

So here I am, with an 8 month old, \$18,000 car in the shop with a dead engine that will cost over \$8500 to repair, and neither the oil change shop nor Kia will accept any liability. I am not sure what other options I have at the moment, and I am now considering hiring an attorney to regain my losses. For this catastrophic failure to happen to my relatively new car from an issue with a cheap oil drain plug is mindboggling and extremely frustrating. If anyone has any suggestions that can help me in this situation I would really appreciate it. Thanks

\*\* [TL;DR]\*\* Oil drain plug fell out of my 2017 Kia Soul w/ 16,500 miles on it. Last oil change was 3 months and 5000 miles ago. Oil change shop denies responsibility from faulty service. Kia Motors denies responsibility due to malfunctioned part. Engine is destroyed, over \$8500 to replace. Considering hiring an attorney. What do I do?



Car Talk Community

### Can it take 2 months for the oil pan plug to blow if loose?

Maintenance/Repairs • Hyundai • Elantra/Elantra



Like

We have a 2012 Hyundai Elantra touring bought brand new off the lot 20 months ago with 35K miles. Regular scheduled maintenance and this last week the engine blew on the interstate within about 2 miles of starting to rattle. Dealer at first said it was a rod that pierced the block and oil pan, but then changed that theory and said that the oil pan plug was not secured and is trying to blame the engine on either the last service which was two months ago or "vandalism". So my question is if the last service provider didn't secure the oil pan plug all the way, could it take two months to dislodge enough to blow the engine? Also, we checked the oil three days before the incident and it was fine, and there is no evidence of oil leak in our driveway. And if it is not possible for it to go two months with a problem, then how do we get the manufacturer to take care of this? the car is still under manufacturer warranty PLUS we purchased additional bumper to bumper up to 100K miles.

**HYUNDAI FORUMS** Search Community

Discussion Starter #1 Jan 9, 2018

Registered [redacted]  
Joined Nov 12, 2016  
25 Posts

So i went in to the dealer for my second oil change. I noticed on the invoice that they changed the oil drain plug under warranty. I questioned this and was able to talk to the tech. He was very sympathetic to my concerns and explained that he assumed that the previous tech (at the same dealer) over-tightened the drain bolt significantly and caused the bolt threads to warp and he had a very hard time getting the bolt out. He said he inspected the threads (on the pan) and they were definitely not stripped out. He installed a new bolt, which went in fine, and tightened up with no problem. So far no leaks.

Does this sound legitimate? I guess i'm curious if the pan is made of steel. Is it possible for the bolt to have "warped" threads and the pan threads be fine?

My other question is regarding the oil filter. When i bought the car (new) i believe it came from the Alabama factory with a black oil filter on it. After my first oil change it still had a black filter on it. After my second oil change it had a blue filter on it. Do OEM filters from the dealer come in both black and blue or did the first tech likely just dump the oil without changing the filter?

Unfortunately there is only one Hyundai dealer in my city and i'd like to continue to get my car serviced there, but just wanted to get any opinions about my situation so i know how best to proceed.

Thanks!

**ANDTECH** Search...

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1 2 3 4 5 Next Previous Next

Nov 30, 2015

Diamond Member [redacted]

I own a 2011 Hyundai Sonata with ~40,000 miles. I was driving on a highway and suddenly there was no response from the engine (i could feel the car decelerating). Then the engine started responding again. A couple minutes later, again there was reduced response but this time I got a bunch of lights (oil pressure, abs and a few others). I pulled over and turned off the car. by this time only the oil pressure light was on.

I checked the oil which was near empty. I walked to a nearby gas station and bought oil and tried filled 2 quarts. Then I noticed that all oil drained right through.

I had the car towed to a nearby Hyundai dealer. The dealer diagnosis was that there is no drain plug which is probably because the last place the oil was changed (around 2-3 months back) did not install the plug properly. He also said that the engine is ruined and will have to be replaced and asked me to contact my insurance company.

The last oil change was also done at a Hyundai dealer (a different one than the one that provided diagnosis).

What are my options. I don't have the thousands required for a new engine.

1 Post #11342 | Nov 30, 2015

H/K's explanations for the problem vary:

"Sometimes that just happens."

"[T]he previous tech (at the same dealer) over-tightened the drain bolt significantly causing the bolt threads to warp."

"The dealer diagnosis was that there is no drain plug which is probably because the last place the oil was changed (2-3 months back) did not install the plug properly."

"Dealer at first said it was a rod that pierced the block and oil pan, but then changed that theory and said that the oil pan plug was not secured and is trying to blame the engine on either the last service which was two months ago or 'vandalism.'"

That last explanation published in ANDTECH consumer forum in 2013 got a reboot on April 4, 2022, by Crain Hyundai of Conway, Arkansas. According to consumer [REDACTED], who owns a 2019 Hyundai Elantra, after first telling her in March that "the motor seized up because a piston had been expelled from the underside of the engine," Brian at Crain Hyundai later spun a grand tale:

He stated that the service needed for my vehicle was not under warranty. He stated that no piston came out of the engine block and that the damage was caused by a missing oil plug. On inquiry he further stated that this could have been the result of the oil plug not being property tightened at the last oil change. When I explained that the oil change was months ago and I have not had any fluid leaks or warning lights that would indicate an issue with the engine oil he stated that I had been the victim of a rash of vandalism that had been occurring frequently in AR, OK, MO, and LA. He stated that teenagers were loosening oil plugs as a prank to cause the engines to seize up. I explained this was not likely in my scenario as, again, I had no fluid loss at the residence where I stayed during my uncle's funeral for the 3 days preceding the breakdown. Brian became argumentative and asked me to recount the events of the day prior to the breakdown. I explained again that I had been driving from Rogers, AR and only stopped once in Van Buren, AR for a 10 minute fuel up prior to breaking down in Morilton, approximately 100 miles down the road. Brian said that my car had been vandalized while I was fueling up. I argued back that I was with the car almost the entire time and no one approached the vehicle. He stated "it only takes 30 seconds to reach up and loosen an oil plug." I stated that the vehicle sits very close to the ground and you could not crawl underneath it without it being jacked up, but he stated that the plug could be reached without jacking up the car. He could not explain how a person could do this without being seen at a busy gas station in broad daylight, nor could he explain how it could be done without injury while the engine was hot from running on the interstate. He concluded that their inspection determined that the cause of the breakdown was vandalism and that I must file a claim with my insurance company. (*See complete consumer timeline in Appendix C*)

Our case study shows these unprecedented mid-interval plug-outs happening nationwide and the suggestion someone could reach and unscrew an oil drain plug bare-handed on a hot engine in a matter of seconds is ridiculous, but one thing does appear certain from Crain Hyundai's story: it is safe to say H/K have reason to know better than anyone the significant number of consumers involved.

### **H/K's Failure to Notify NHTSA in a Timely Manner**

A manufacturer of a motor vehicle that decides in good faith that the vehicle contains a defect related to motor vehicle safety or does not comply with an applicable federal motor vehicle safety standard ("FMVSS") must notify NHTSA by submitting a Defect and Noncompliance Information Report ("DIR"). 49 U.S.C. §30118(c); 49 C.F.R. §573.6. A manufacturer must submit the DIR not more than five working days after it knew or should have known of a safety-related defect or noncompliance in its vehicles. See 49 C.F.R. §573.6(b).

If ODI should conclude for whatever reason that the H/K painted oil drain pan assemblies are not a safety defect worthy of immediate investigation, the existence of this safety-related problem and its proper remedy should nevertheless have been made known to dealers via TSB or other manufacturer communication and, therefore, NHTSA as required by 49 CFR §579.5(a).

Each manufacturer shall furnish to NHTSA's Early Warning Division (NVS-217) a copy of all notices, bulletins, and other communications (including those transmitted by computer, telefax, or other electronic means and including warranty and policy extension communiqués and product improvement bulletins) other than those required to be submitted pursuant to §573.6(c)(10) of this chapter, sent to more than one manufacturer, distributor, dealer, lessor, lessee, owner, or purchaser, in the United States, regarding any defect in its vehicles or items of equipment (including any failure or malfunction beyond normal deterioration in use, or any failure of performance, or any flaw or unintended deviation from design specifications), whether or not such defect is safety-related.

After extensive research of manufacturers communications provided by Hyundai and Kia to NHTSA, AOCA can find no evidence of any manufacturer's communication addressing the risks associated with having so many of their oil drain pan assemblies painted together. For instance, a logical TSB under these circumstances would direct dealers to replace both the oil drain plug and gasket prior to sale and, if not caught at that time, then at the first oil change as well as any time a vehicle arrives for service with a paint-fused oil drain plug and gasket. The TSB would also likely direct dealers to carefully search the oil drain pan to ensure the original gasket isn't painted onto it instead of the oil drain plug.

Stephen A. Ridella, Ph.D.  
Director, NHTSA Office of Defects Investigation  
June 13, 2022  
Page 24 of 35

## Conclusion

We thank you in advance for your consideration of this consumer safety issue. With the exception of publicly posted complaints, we have not provided identifying information about individual consumers impacted by the H/K oil drain pan assembly defects. We made this decision out of respect for them as well as state privacy laws. If you need additional information from us and we can provide it in a way that protects the confidentiality of our customers, we will do so.

Respectfully,



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