









July 13, 2022 VIA EMAIL

Stephen A. Ridella, Ph.D.
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Washington, DC 20590
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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>

<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

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#### 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 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.

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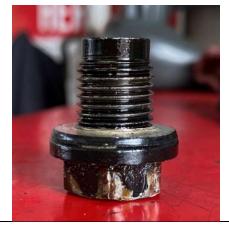
2018 Hyundai Sonata 1.6L T-GDI Gamma 5NPE24AAXJH\*\*\*\*\* (submitter 1) Part 21510-2B700



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



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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: <a href="https://www.youtube.com/watch?v=N4SYgllqBnY">https://www.youtube.com/watch?v=N4SYgllqBnY</a>.

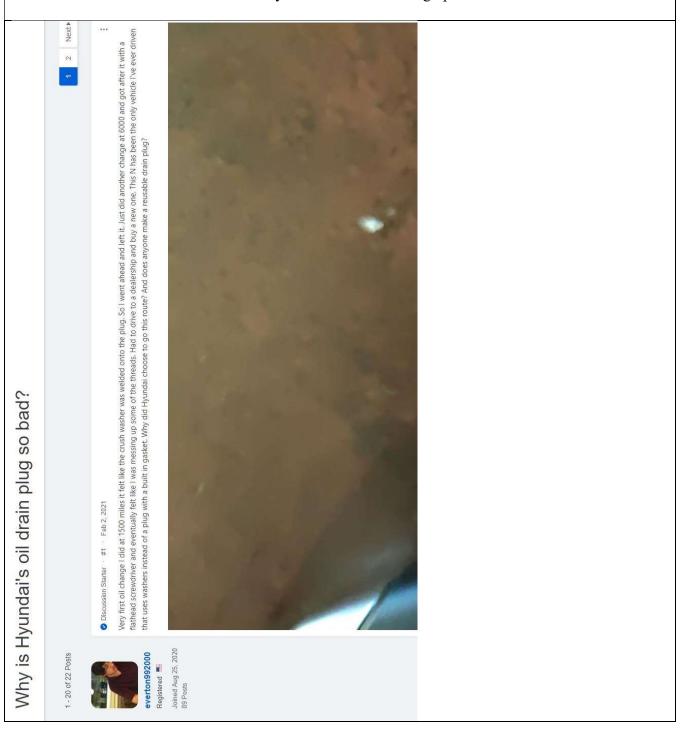
- At 18:00 the DIYer struggles to loosen the factory painted oil drain pan plug with the correct torque wrench. "Wow! That was tight! What'd they do at Kia—use Loctite on it?" He must add torque to get the plug loose.
- At 18:57 the DIYer again struggles to loosen the factory painted oil drain pan plug.
- 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

https://www.velostern.com/threads/why-is-hyundais-oil-drain-plug-so-bad.2845/

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."



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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.

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## **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	On or about Oct 13, 2021, customer reported dealer said oil was leaking and the pan cracked.
2016 Kia Sorento 2.4L DOHC GDI Theta II 5XYPGDA3XGG*****	21510-2G500	114,040 10/01/21	On October 28, 2021, customer reports oil leaking. AAP inspection shows oil pan is cracked under drain plug.

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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	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.
2017 Kia Optima 2.4L In- Line GDI KNAGT4L3XH5*****	21510-2G500	98589 02/26/21	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.

https://www.santafeforums.com/threads/oil-pan-leak.17093/



## 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

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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:

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- 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 Tubo & 2.4L. Connecting rod bearing wear symptoms include
excessive oil consumption.

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- 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.

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- 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."

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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

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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 Tubo & 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 Hvundai 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

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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.



#### https://www.hyundai-forums.com/threads/one-huge-nightmare-of-a-car.670432/

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



Joined Sep 28, 2020

O 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 since last oil change. Dealership said it's not a warranty issue and place that changed oil wouldn't stand behind the issue. Nov I have new vehicle with huge payments and nobody helping me out with his 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 roc 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??

a carcomplaints.com/Hyundai/Tucson/2017/engine/oil\_plug\_fell\_out\_engine\_seized\_up.shtml

#### RESOURCES NEWS INVESTIGATIONS RECALLS

## CARCOMPLAINTS.COM

Failure Date: 02/13/2019



## 2017 HYUNDAI TUCSON OWNER COMMENTS

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.

- jluzinski1967jl, Ceres, US

carproblemzoo.com/hyundai/tucson/2017/engine-oil-leaking-problems.php

#### 3 Engine Oil Leaking problem

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 recieve 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

dealerrater.com/dealer/Hyundai-Of-Greer-service-37439/page2/

January 18, 2017

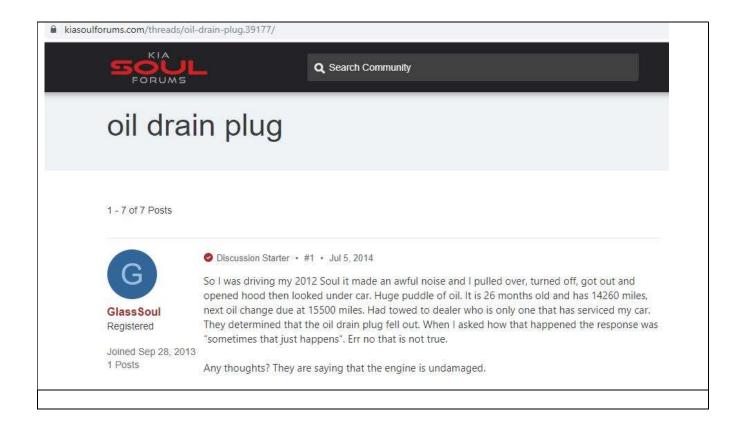
\*\*
SERVICE VISIT

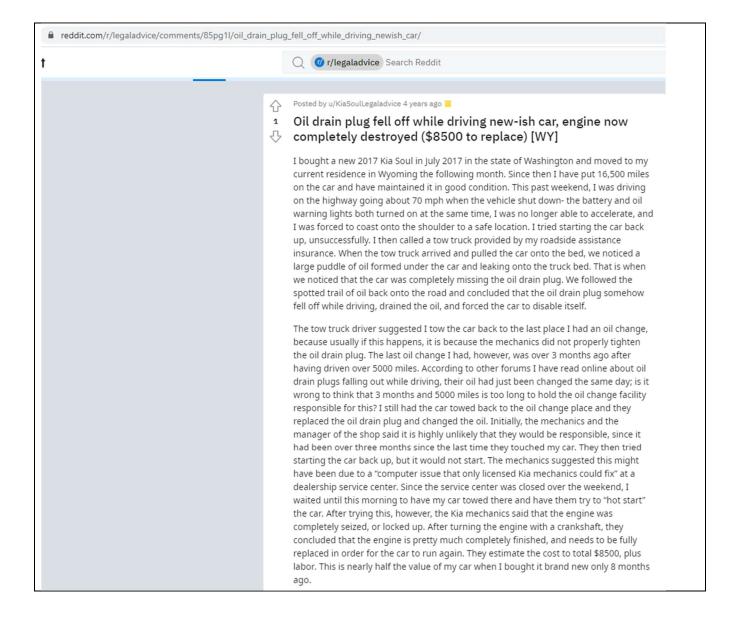
do not get your car serviced here had my oil changed at this dealer in nov. of 2016 in jan. my o plug fell out and blow my engine they r saying its my fault for this happening and will not replace my engine now i have a car that don't run and payments for a car i can not drive now my life is over . 30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

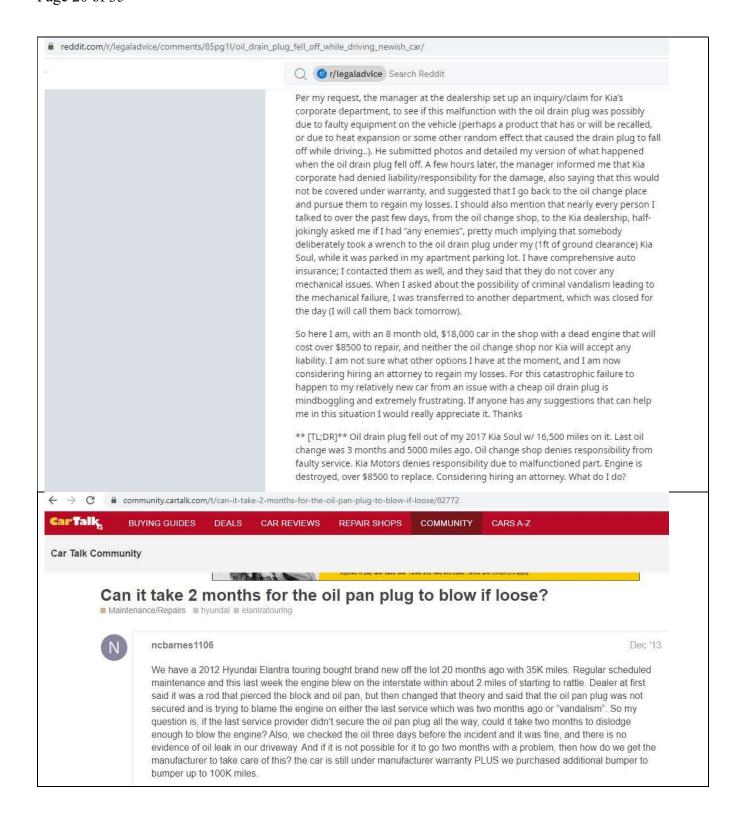
by hurricane22

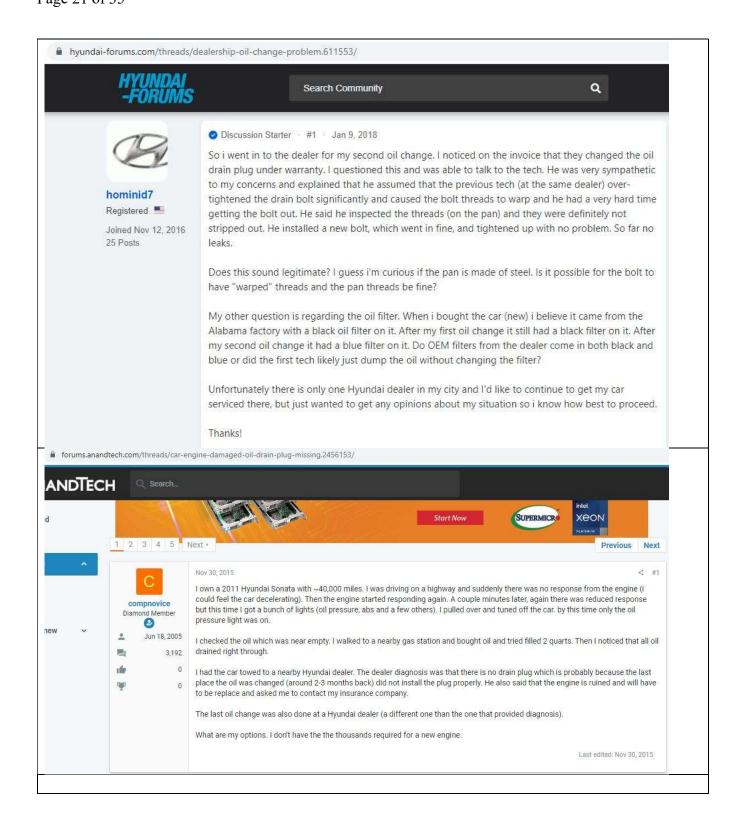
and lead to engine damage, the engine stalling, or even a fire, NHTSA says.

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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 Mariya Sisco Cate, 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 be 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)

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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.

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#### **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,

Aaron Lowe

Senior VP, Regulatory & Government Affairs Auto Care Association

7101 Wisconsin Ave., Suite 1300

Bethesda, MD 20814

(240) 333-1021

Joanna L. Johnson, Policy Advisor Johnson Policy Associates, Inc. for Christina Bauders, Executive Director Automotive Oil Change Association 2443 Fair Oaks Blvd. #1177 Sacramento, CA 95825

800.230.0702

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lez Sattefield

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Robert L. Redding, Jr.

Washington, D.C. Representative Automotive Service Association

. The stale of the

313 Massachusetts Avenue, N.E.

Washington, D.C. 20002

Ph. 202-543-1440

rlredding@reddingfirm.com

## APPENDIX A

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2017 Hvundai Elantra Owner's Manual	Checking the engine oil and filter:  Have engine oil and filter changed by an authorized HVUNDAI dealer according to the Maintenance Schedule at the beginning of this Chapter. (Part 7 p. 489)	OWNER MAINTENANCE WARNING Performing maintenance work on a vehicle can be dangerous. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, have it done by an authorized Hyundai dealer. (Part 7 p. 465)  Engine oil (drain and refill) Recommends Quaker State API SM & ILSAC GF-4 (or above) ACEA A5*3 (or above) (Part 8 p. 567) Note: There is no oil filter specification or part # The following terms do not appear: Do-it-yourself	Oil filter tightening torque
2007 Hvundai Elantra Owner's Manual	Changing the engine oil and filter:  Have engine oil and filter changed by an authorized Hyundai dealer according to the Maintenance Schedule at the beginning of this section. (p. 7-15)	WARNING - Maintenance Work  Performing maintenance work on a vehicle can be dangerous. You can be seriously injured while performing some maintenance procedures. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, have it done by an authorized Hyundai dealer. (Part 7 p. 259)  Engine oil (drain and refill)  Recommends Quaker State  Recommends Quaker State  (Part 9 p. 331)  Note: There is no oil filter specification or part #  The following terms do not appear:  Do-it-yoursit process.	Oil filter tightening torque
2006 Hvundai Elantra Owner's Manual		F010E01A-AAT Do-It-Yourself Maintenance If you are mechanically inclined, own a few tools that are required and want to take the time to do so, you can inspect and service a number of items. For more information about doing it yourself, see Section 6. (p. 191)  The engine oil quality should meet the following classification. API SI, SL or ABOVE, ILSAC GF-3 or ABOVE Hyundai Recommends Quaker State (p. 202) Engine Oil Q'tydrain and refill with oil filter 4.2 US.QTS (3.5 Imp.gts, 4.0 liter) (owner's manual Part 9 Vehicle Specifications) Note: There is no oil filter specification or part # When the oil has stopped draining, replace the drain plug using a new gasket and re-tighten by turning it clockwise.	4.0 ~ 4.5 kgfm Install a new oil filter in accordance with the instructions on the carton or on the filter itself.  Do not over-tighten.  Oil filter tightening torque: 1.2 ~ 1.6 kgf.m  (Part 6 p. 204)

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# APPENDIX B Aftermarket Customers Reporting Outlier Mid-Interval Plug-Outs

Year/Make/Model/Eng/Oil Drain Pan Part	Time to Plug-Out	Submitter
2019 Hyundai Elantra GT 2.0L GDI Nu	Customer reported dealer said	64
KMHH35LE4KU*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	1,699 miles at 33,265.	
2019 Hyundai Elantra 2.0L MPI Nu engine	Customer reported dealer said	65
5NPD74LF3KH*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E040	907 miles at 7,752.	
2018 Hyundai Elantra 2.0L MPI Nu engine	Customer reported dealer said	66
5NPD84LFXJH*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	366 miles at 37,858.	
2018 Hyundai Elantra 2.0L MPI Nu engine	Customer reported dealer said	67
5NPD84LF4JH*****	dealer said drain plug fell out 38	
Oil Drain Pan Assembly Part 21510-2E023	days after service.	
2018 Hyundai Elantra 2.0L MPI Nu engine	Customer reported dealer said	68
5NPD84LF4JH*****	dealer said drain plug fell out 27	
Oil Drain Pan Assembly Part 21510-2E023	days after service.	
2018 Hyundai Elantra 2.0L MPI Nu engine	Customer reported dealer said	69
5NPD84LF1JH2*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	1,533 miles at 81,000.	
2017 Hyundai Elantra 2.0L Nu engine	Customer reported dealer said	71
KMHD74LF6HU*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	4439 miles at 30,001.	
2017 Hyundai Elantra 2.0L Nu engine	Customer reported dealer said	72
5NPD74LF8HH*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	3,237 miles at 42,848.	
2017 Hyundai Elantra 2.0L Nu engine	Customer reported dealer said	73
KMHD84LF7HU*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	6,500 miles.	
2017 Hyundai Elantra 2.0L Nu engine	Customer reported dealer said	75
5NPD74LF0HH*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	1,386 miles at 81,728.	
2016 Hyundai Elantra 1.8L Nu engine	Customer reported dealer said	78
5NPDH4AE8GH*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	838 miles at 33,205.	
2015 Hyundai Elantra 2.0L GDI Nu engine	Customer reported dealer said	79
KMHDH4AHXFU*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	3,064 miles at 48,362.	

Year/Make/Model/Eng/Oil Drain Pan Part	Time to Plug-Out	Submitter
2015 Hyundai Elantra 1.8L Nu engine	Customer reported dealer said	80
5NPDH4AE0FH*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	213 miles at 87,200.	
2015 Hyundai Elantra 1.8L Nu engine	Customer reported dealer said	81
KMHDH4AE8FU*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E023	144 miles at 45,585.	
2014 Hyundai Elantra 2.0L Nu engine	Customer reported dealer said	83
KMHDH4AH3EU*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E022	607 miles at 34150.	
2014 Hyundai Elantra 1.8L Nu engine	Customer reported dealer said	85
5NPDH4AE6EH*****	dealer said drain plug fell out after	
Oil Drain Pan Assembly Part 21510-2E022	1,685 miles at 123,560.	
2013 Hyundai Elantra 1.8L DOHC MPI Nu	Customer reported dealer said	89
KMHDH4AE7DU*****	drain plug fell out after 1,168	
Oil Drain Pan Assembly Part 21510-2E022	miles at 69,677.	
2012 Hyundai Elantra 1.8L DOHC MPI Nu	Customer reported dealer said	90
5NPDH4AE6CH*****	drain plug fell out after 604 miles	
Oil Drain Pan Assembly Part 21510-2E022	at 98,017.	
2020 Hyundai Kona 2.0L MPI Nu engine	Customer reported dealer said	101
KM8K22AA2LU*****	drain plug fell out at 183 miles at	
Oil Drain Pan Assembly Part 21510-2E023	17998.	
2018 Hyundai Santa Fe Sport 2.4L Theta II	Customer reported dealer said	31
5NMZU3LB7JH*****	drain plug fell out after 535 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 41,002.	
2013 Hyundai Santa Fe Sport 2.4L Theta	Customer reported dealer said	32
5XYZU3LB9DG*****	drain plug fell out after 1,948	
Oil Drain Pan Assembly Part 21510-2G500	miles at 92,579.	
2013 Hyundai Santa Fe Sport 2.4L Theta	Customer reported dealer said	33
5XYZU3LB1DG*****	drain plug fell out after 1,459	
Oil Drain Pan Assembly Part 21510-2G500	miles at 118,870.	
2017 Hyundai Sonata Hybrid 2.0 L GDI Nu	Customer reported dealer said	2
KMHE24L15HA*****	drain plug fell out approx. 2	
Oil Drain Pan Assembly Part 21510-2E023	months after service in Sept. 2018.	
2017 Hyundai Sonata 2.4L Theta II	Customer reported dealer said oil	3
5NPE24AF9HH*****	drain plug fell out after 2540 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 45,850.	
2017 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	4
5NPE24AF6HH*****	drain plug fell out after 1,041	
Oil Drain Pan Assembly Part 21510-2G500	miles at 96,880.	
2017 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	5
5NPE24AF9HH*****	drain plug fell out after 1,236	
Oil Drain Pan Assembly Part 21510-2G500	miles at 89,478.	

Year/Make/Model/Eng/Oil Drain Pan Part	Time to Plug-Out	Submitter
2016 Hyundai Sonata Hybrid 2.0L GDI Nu	Customer reported dealer said	7
KMHE24L18GA*****	drain plug fell out after 437 miles	
Oil Drain Pan Assembly Part 21510-2E023	at 35,267.	
2016 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	8
5NPE24AF4GH*****	drain plug fell out after 744 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 129,424.	
2015 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	10
5NPE24AF4FH*****	drain plug fell out after 1,324	
Oil Drain Pan Assembly Part 21510-2G500	miles at 70,562.	
2015 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	11
5NPE24AF8FH*****	drain plug fell out after 613 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 96,524.	
2014 Hyundai Sonata 1.6L Gamma	Customer reported dealer said	12
5NPEB4AC1EH*****	drain plug fell out after 602 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 35,732.	
2014 Hyundai Sonata 1.6L Gamma	Customer reported dealer said	13
5NPEB4ACXEH*****	drain plug fell out after 720 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 86,004.	
2013 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	14
5NPEC4AC0DH*****	drain plug fell out after 3,683	
Oil Drain Pan Assembly Part 21510-2G500	miles at 55,931.	
2013 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	15
5NPEC4ACXDH*****	drain plug fell out after 202 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 146,505.	
2011 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	17
5NPEB4AC9BH*****	drain plug fell out after 7,321	
Oil Drain Pan Assembly Part 21510-2G500	miles at 117,962.	
2011 Hyundai Sonata 2.4L Theta II	Repair shop reported dealer said	18
5NPEB4AC4BH*****	vehicle towed with no drain plug.	
Oil Drain Pan Assembly Part 21510-2G500	Customer had driven over 400	
	miles post-service on 1/20/17.	
2011 Hyundai Sonata 2.4L Theta II	Customer reported dealer said	20
5NPEC4AC7BH*****	drain plug fell out after 942 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 139,768.	
2018 Hyundai Tucson 2.0L GDI Nu engine	Customer reported dealer said	42
KM8J3CA44JU*****	drain plug fell out after 4,137	
Oil Drain Pan Assembly Part 21510-2E023	miles.	
2018 Hyundai Tucson 2.0L GDI Nu engine	Customer reported dealer said	45
KM8J3CA45JU*****	drain plug fell out after 2,400	
Oil Drain Pan Assembly Part 21510-2E023	miles.	

Year/Make/Model/Eng/Oil Drain Pan Part	Time to Plug-Out	Submitter
2018 Hyundai Tucson 2.0L GDI Nu engine	Customer reported dealer said	46
KM8J33A49JU*****	drain plug fell out 2,790 miles	
Oil Drain Pan Assembly Part 21510-2E023	after service.	
2018 Hyundai Tucson 2.0L GDI Nu engine	Customer reported dealer said	47
KM8J33A41JU*****	drain plug fell out after 68 miles at	
Oil Drain Pan Assembly Part 21510-2E023	62042.	
2016 Hyundai Tucson 2.0L GDI Nu engine	Customer reported dealer said	48
KM8J33A49GU*****	drain plug fell out after 3,106	
Oil Drain Pan Assembly Part 21510-2E023	miles at 37,066.	
2016 Hyundai Tucson 2.0L GDI Nu engine	Customer reported dealer said	50
KM8J33A42GU*****	drain plug fell out after 149 miles	
Oil Drain Pan Assembly Part 21510-2E023	at 86,359.	
2016 Hyundai Tucson 2.0L GDI Nu engine	Customer reported dealer said	51
KM8J33A44GU*****	drain plug fell out after 822 miles	
Oil Drain Pan Assembly Part 21510-2E023	at 48,237.	
2015 Hyundai Tucson 2.4L Theta II	Customer reported dealer said	52
KM8JU3AG2FU*****	drain plug fell out after 1,651	
Oil Drain Pan Assembly Part 21510-2G500	miles at 51,677.	
2014 Hyundai Tucson 2.4L Theta II	Customer reported dealer said	53
KM8JU3AG9EU*****	drain plug fell out after 585 miles	
Oil Drain Pan Assembly Part 21510-2G500	at 35,657.	
2012 Hyundai Tucson	Customer reported dealer said	54
	drain plug fell out after 4046	
	miles.	
2019 Hyundai Veloster 2.0L Nu MPI	Customer reported dealer said	38
KMHTG6AF0KU*****	drain plug fell out after 2,203	
Oil Drain Pan Assembly Part 21510-2E023	miles at 6,610.	
2017 Kia Forte 2.0L MPI Nu engine	Customer reported dealer said	55
3KPFL4A78HE*****	drain plug fell out after 8,000	
Oil Drain Pan Assembly Part 21510-2E023	miles; 123 days.	
2015 Kia Forte	Customer reported dealer said	58
Oil Drain Pan Assembly Part 21510-2E023	drain plug fell out 9,500	
·	kilometers after service.	
2015 Kia Forte 1.8L Nu engine	Customer reported dealer said	59
KNAFX4A62F5*****	drain plug fell out after 723 miles	
Oil Drain Pan Assembly Part 21510-2E023	at 40,097.	
2014 Kia Forte 2.0L Nu engine	Customer reported dealer said	60
KNAFX4A8XE5*****	drain plug fell out after 172 miles	
Oil Drain Pan Assembly Part 21510-2E022	at 137,025.	
2012 Kia Forte 2.0L Theta II	Customer reported dealer said	62
KNAFU4A22C5*****	drain plug fell out after 694 miles	
Oil Drain Pan Assembly Part 21510-25001	at 165,937.	

Year/Make/Model/Eng/Oil Drain Pan Part	Time to Plug-Out	Submitter
2010 Kia Forte 2.0L Theta II	Customer reported dealer said	63
KNAFU4A24A5*****	drain plug fell out after 117 miles	
Oil Drain Pan Assembly Part 21510-25001	at 100,527.	
2016 Kia Optima 2.4L Theta II	Customer reported dealer said	21
5XXGT4L32GG*****	drain plug fell off 39 days after	
Oil Drain Pan Assembly Part 21510-2G500	service.	
2016 Kia Optima 2.4L Theta II	Customer reported dealer said	22
5XXGT4L34GG*****	drain plug missing 2,833 miles	
Oil Drain Pan Assembly Part 21510-2G500	after service.	
2015 Kia Optima 2.4L Theta II	Customer reported dealer said	24
5XXGN4A70FG*****	drain plug fell out after 1,786	
Oil Drain Pan Assembly Part 21510-2G500	miles at 53,149.	
2014 Kia Rio 1.6L DOHC Gamma	Customer reported dealer said	102
KNADM4A35E*****	drain plug fell out after 1,799	
Oil Drain Pan Assembly Part 21510-2B040	miles at 95,004.	
2021 Kia Seltos 2.0L MPI Nu engine	Customer reported dealer said	100
KNDEPCAAXM7*****	drain plug fell out 3,188 miles	
Oil Drain Pan Assembly Part 21510-2E023	after vehicle's first oil change at	
	6,885.	
2016 Kia Sorento 2.4L Theta II	Customer reported dealer said	28
5XYPG4A3XGG*****	drain plug fell out after 2,086	
Oil Drain Pan Assembly Part 21510-2G500	miles at 37,769.	
2011 Kia Sorento 2.4L Theta	Customer reported dealer said	29
5XYKT3A17BG*****	drain plug fell out after 1,084	
Oil Drain Pan Assembly Part 21510-3C150	miles at 14,701.	
2016 Kia Soul 2.0L DOHC GDI Nu Engine	Customer reported dealer said	92
KNDJP3A55G7*****	drain plug fell out after 349 miles	
Oil Drain Pan Assembly Part 21510-2E023	at 17921.	
2016 Kia Soul 2.0L DOHC GDI Nu engine	Customer reported dealer said	93
KNDJP3A5XG7*****	drain plug fell out 2,508 miles	
Oil Drain Pan Assembly Part 21510-2E023	after service. Odometer was	
·	106,476 at service.	
2014 Kia Soul 2.0L DOHC GDI Nu engine	Customer reported dealer said	95
KNDJP3A51E7*****	drain plug fell out after 500 miles	
Oil Drain Pan Assembly Part 21510-2E022	at 102,208	
2012 Kia Soul 1.6L DOHC GDI Gamma	Customer reported dealer said	97
(without turbo) KNDJT2A55C7*****	drain plug fell out after 1,820	
Oil Drain Pan Assembly Part 21510-2B040	miles at 95,895.	
2011 Kia Soul 2.0L Beta	Customer reported dealer said	98
KNDJT2A23B7*****	drain plug fell out after 1,469	
Oil Drain Pan Assembly Part 21520-23604	miles at 90,325.	

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#### APPENDIX C

Timeline of incidents relating to motor failure of my 2019 Hyundai Elantra, by Mariya Sisco Cate (email address & phone number available to NHTSA but not for publication)

- November 30, 2021—Oil Changed at Werner Hyundai, Tallahassee FL
- March 13, 2022
  - Approximately 10 am left Rogers, AR to return home to Pensacola, FL after a funeral. Travelled southbound on I-49 then eastbound on I-40
  - Approximately 11:15 am stopped for fuel at Casey's General Store on Hwy 59 in Van Buren, AR
  - o Approximately 11:25 am, finished fueling and resumed trip traveling eastbound on I-40
  - Approximately 12:50 pm car broke down on I-40 near mile marker 109 just east of Morilton, AR
  - o 12:58 pm called Hyundai Roadside Assistance for towing
  - Approximately 2:30pm tow truck driver Chris of JT Towing arrived, loaded vehicle, and transported it to Crain Hyundai of Conway, AR. As it was Sunday, the dealership was closed and I was forced to get a room at a nearby hotel to await reopening.
- March 14, 2022
  - 8:53 am contacted Crain Hyundai of Conway, AR at 501-470-7300 to inquire about service needs and expectations. Was informed that there were several vehicles ahead of me awaiting processing and that they would get back with me in "a few days" once they were able to look at the vehicle. Explained that I was stranded out of town and was supposed to be back at work this morning. They said they might be able to have someone look at it at some time today, but could not guarantee this.
  - O Approximately 10 am arrived at dealership to speak with a service manager in person to explain my plight. Requested assistance obtaining loaner vehicle or rental while my vehicle was awaiting service, however this was deferred pending diagnostics in order to ensure the repair was covered by warranty. Continued to wait for a technician to check diagnostic issues.
  - O Approximately 12:30pm spoke with service technician who stated that the motor seized up because a piston had been expelled from the underside of the engine. He indicated that the engine would need to be replaced and that these engines are on backorder nationwide. He estimated 2-4 months time before service would be complete. Again Requested assistance obtaining loaner vehicle or rental while my vehicle was awaiting service, however this was refused by the service manager Larry Harris who stated he could not provide a rental or loaner because I live out of state. Explained that my vehicle's coverage was not limited to one state or another but he continued to reject my requests

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for assistance. They did contact a local rental agency they have a relationship with to request a good rate that I might be reimbursed for by Hyundai Corporate, however it was Spring Break and there was a car rental shortage, therefore the lowest priced vehicle available was over \$500/day rental, plus fees. I was told that the total cost would be over \$700/day with taxes and fees but that Hyundai would only reimburse up to \$40/day. I declined this.

- 1:46 pm contacted Hyundai Customer Care at corporate HQ 800-633-5151. Explained circumstances and needs. They opened a claim for me (Case 19499182) and also advised me to contact Roadside Assistance to invoke my Trip Interruption coverage.
- 2:16 pm contacted Hyundai Roadside Assistance to invoke my Trip Interruption coverage. Explained the situation and was told that I would be reimbursed for all expenses of my trip interruption including lodging, meals, transportation, incidental expenses, and travel home including airfare for myself and my passenger. This was added to the existing service ticket from my vehicle's tow, Case 72041573.
- O Made arrangements for emergency travel back home to Pensacola, FL. A friend came to Conway from Little Rock, AR and brought me to his home where I was able to purchase airfare for myself and my daughter. I was not prepared for air travel and all my items were in tote bags so I had to purchase luggage and pay extra to have the bags checked on the airplane. My flight out of Little Rock was delayed and caused us to miss our connection home. We stayed the night in Atlanta and waited for our flight the next day.
- March 15, 2022 returned home to Pensacola. Utilized Uber for transportation from airport to home, as rental car prices were still well beyond the Hyundai's \$40 reimbursement limit.
- March 19, 2022 purchased short term car rental in order to transport my daughter from our home in Pensacola, FL back to her dorm at Florida State University in Tallahassee, FL
- March 21, 2022
  - Received email from Hyundai Consumer Affairs indicating that a "possible" rental reimbursement of up to \$40/day but can only be requested AFTER the vehicle has been fully repaired and returned to me. At this point I had been told to estimate up to months (120 days) which I would be expected to pay out of pocket for a rental car. Even if a rental was available at this cost, I would be on the hook for approximately \$4800 out of pocket in addition to taxes, fees, deposits, and my regular car payment for the vehicle in the shop. This was unfeasible for me financially. I explained this to the Consumer Affairs specialist Raven in a return email.
    - o submitted receipts to request reimbursement of Trip Interruption expenses as previously directed.
- March 22, 2022 returned short term rental car
- March 28, 2022 spoke with Red at 800-243-7766 to verify Trip Interruption reimbursement request was received. She indicated it was being reviewed by TI Coordinator Che who would make a decision regarding expense reimbursement approval in 6-8 weeks (by May 21<sup>st</sup>). Explained that I was out of pocket a significant amount of money and was not told that trip

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interruption reimbursement may not be fully reimbursed or that it would take such a long time to process. Red stated there was no way to expedite the claim, but there was a new case number 72045997.

- March 31, 2022 AAA printed check for \$300 Reference HY72045997 with the comment "trip interruption." The check was received in the mail 4/5/2022. There was no accompanying documentation to indicate what was being reimbursed and this amount is about 1/2 the cost of the airfare home, and does not take into account the other promised reimbursements of hotel, meals, and incidental expenses/travel (luggage, transportation to/from airport, etc).
- April 1, 2022 spoke to service manager Barry Boullion of Pensacola's Allen Turner Hyundai (my local dealership) who has been communicating with me and the Conway dealership attempting to help obtain a long term rental while my car is awaiting service in Arkansas. He spoke with Larry Harris at Crain Hyundai and was told that the engine block needed was approved for order but is on backorder nationwide and it is unknown how long it will take them to get the part but we should expect additional delays dur to labor shortages even once the part is received. He notified me that he coordinated with Mr. Harris and the local Enterprise rental dealership so that they could bill Crain Hyundai directly at Hyundai's pre-approved reimbursement rate so that this expense is handled by the dealership as I do not have the resources to pay out of pocket for the long term rental while also paying my monthly payments on the Elantra while it is out of service. Barry stated that he & Mr. Harris would get the details settled on Monday, April 4, 2022 and once it is set up, Enterprise will bring me the vehicle.
- April 4, 2022
  - o 8:56am received a phone call from Brian of Crain Hyundai. 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

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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.

- o Approximately 11 am filed claim 227325809 with Progressive Insurance
- April 5, 2022 at 12:09 pm received follow up call from Barry at Allen Turner Hyundai of Pensacola to ensure that my rental situation had been resolved yesterday as previously planned. Explained that it had not because Crain Hyundai contacted me and said that the damage would not be covered under warranty. Barry stated that he believed this was an error or that I had misunderstood what I was told because he had just spoke to Larry Harris on Friday and that they were just waiting on the engine to come off back order. He stated that he would call Mr. Harris and get clarification as the situation I described about the vandalism did not seem accurate.
- April 6, 2022
  - o at 8:09am received follow up call from Barry at Allen Turner Hyundai of Pensacola. He states that he spoke to Mr. Harris and confirmed the situation was as I had described it to him. He stated that he had no way to continue to assist me if the other dealership is denying the warranty claim because the rental would not be covered unless the damage was covered under warranty. Barry stated that he did not understand why the story had changed about what happened with my car or why the missing oil plug was not noticed until the car had sat on the Crain lot for 3 weeks. He profusely apologized and said that he wished he could help but recommended that I continue to follow up with Hyundai Customer Care as something did not add up in this case.
  - Filed complaint [SR#:1-1082270497] with FL DEPARTMENT OF FINANCIAL SERVICES DIVISION OF CONSUMER SERVICES REGARDING WARRANTY REFUSAL.
  - At 02:46 pm EDT Progressive Matthew a. Chalk (a128425) insured recorded interview.
     Claims rep initiated a transfer for mechanical investigation, engine seized up, no actual accident
- April 7, 2022 at 07:56 PM EDT Progressive Claims Processor Laura Ibarra (A164400) took another recorded interview from insured.
- April 12, 2022 Consult with attorney Winter Spires. She agreed to accept my case with a \$875
  retainer, however despite multiple calls back to the attorney's office, I never received the retainer
  contract to complete payment. Therefore I began considering different legal representation.
- April 15, 2022 Progressive Managed Repair Ovlen D. Tatom (A058333) completed mechanical investigation. Provided statements from dealer service department. Concluded the dealership had not run diagnostics on the vehicle at any time. Further concluded: NO SIGNS OF OIL LEAKING DURING THE RECENT TRIP ALSO ACCESS ISSUES TO OIL PLUG MAKE THE THEFT OF PLUG SEEM UNLIKELY.
- April 19, 2022 PD Suite 2019 HYUNDAI ELANTRA Progressive Robert Christopher Turner (RCT0004) 04/19/2022 09:13 AM EDT reviewed w/SDD. No evidence of vandalism or

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- collision. Does not appear to meet the def of a loss, all indications are the oil plug backed out which would be mech failure
- April 20, 2022 [SR#:1-1082270497] received email response from Diana Quinones with FL DEPARTMENT OF FINANCIAL SERVICES DIVISION OF CONSUMER SERVICES INDICATING THAT After reviewing your warranty thoroughly, this warranty seems to have been issued by the Hyundai dealership directly. We do not have jurisdiction to reach out to the dealership, there is a state agency that you can contact solely because the warranty was issued by the dealership itself. That state agency is: Florida Highway Safety and Motor Vehicles, 850-617-2000
- April 25, 2022 received email response from **Devin L. Joseph** at Florida Highway Safety and Motor Vehicles requesting additional information.
- May 5, 2022
  - Hyundai Motor America Case#: 19499182 submitted in attempt to dispute initial warranty denial now that the insurance investigation has concluded that the damage was caused by mechanical failure.
  - o received email response from Seth Rubin to online complaint filed with FL Office of the Attorney General requesting additional information and a completed form.
- May 10, 2022 at 5:32pm received call from Brian Hicks at Werner Hyundai inquiring about when my vehicle would be removed from their lot. He indicated there was no rush and no charge to keep it there.