

Date: June 06, 2018

Attn: Dealer Principal/General Manager/Service Manager/Parts Manager

Subject: Recall 162: 2013-2014 Sonata/Santa Fe Sport 2.0 & 2.4L GDI Engine Inspection UPDATED 06/06/2018

Please review this document in its entirety for information on the service, parts, and customer handling process.

Updates To This Document	Document #
Updated TSB #18-01-007- <u>01</u> throughout	V3
Updated reference to Reman Engine and Core Collection Process (Parts section, page 7)	06/06/2018
 Updated TSB #18-01-007 throughout (formerly #17-01-047) DO NOT damage the short block casting / starter motor mounting tab. That procedure only applies to Recall 132 engine replacements. HMA may ask dealers to ship the engine back for inspection and if starter mounting tab is broken off, the campaign claim may be subject to chargeback. (Parts section, page 7) Oil cooler pipe & hose assembly is required with engine replacement (Parts section, page 7 and Inspection Process section, page 4) 	V2 02/07/2018
Initial communication to dealers	V1 06/23/2017

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Recall Overview

Hyundai Motor America is conducting a safety recall to inspect, and if necessary, replace the engine assembly in:

- All Model Year 2013 and 2014 Hyundai Sonata vehicles equipped with 2.0 liter and 2.4 liter gasoline direct injection (GDI) engines manufactured at Hyundai Motor Manufacturing Alabama (HMMA).
- Certain Model Year 2013 and 2014 Hyundai Santa Fe Sport vehicles equipped with 2.0 liter and 2.4 liter gasoline direct injection (GDI) engines manufactured at Kia Motor Manufacturing Georgia (KMMG) and HMMA.

The engines in certain 2013-2014 model year Sonata (YF) and Santa Fe Sport (AN) vehicles equipped with 2.4L and 2.0T GDI engines may contain residual debris from factory machining operations, potentially restricting oil flow to the main bearings and leading to premature bearing wear. Over time, a bearing may fail and the vehicle could lose power while in motion. Indications of a worn connecting rod bearing include:

- 1. Knocking noise from the engine
- 2. Reduced power and/or hesitation
- 3. Illumination of the "Check Engine" warning lamp
- 4. Illumination of engine oil pressure warning lamp

The service process consists of an inspection and dipstick, oil and oil filter replacement. If the vehicle does <u>not</u> pass the inspection, the dealer will replace the engine. See the "Inspection Process" section for additional information.

Service/campaign tools are required. See the "Tools Required" section for additional information.

Have Service Rental Car (SRC) vehicles available and a process in place

Hyundai Motor America will notify all owners of the affected vehicles to visit their local Hyundai dealers for inspection. Final Customer Notification letters of the recall are scheduled to begin mailing beginning in early July 2017 (interim letters were mailed in April/May).

Readiness Checklist

eview the Recall 162 Technical Service Bulletin (TSB) #18-01-007-01
 Refer to Hyundai Tech Info under the Service tab at <u>Hyundaidealer.com</u>
pdate your GDS Mobile tablet
 Samsung Galaxy Note 2014 Edition 10.1 and S2 models with latest software
 Software must be updated daily or the inspection application will not function
nsure your dealer has the Engine Noise Inspection Tool
 An initial shipment of one (1) tool was sent to all dealers on June 09, 2017 at no charge
 A subsequent shipment was sent to some dealers the week of June 19, 2017 based on affected campaigr
vehicle volume, at no charge
 Dealers may order additional tools beginning early July, 2017
 Applicable to both Recall 162 and Recall 132
nsure your dealer has the other tools required as listed in the "Tools Required" section of this document:



Note: If the customer needs an engine replacement, be prepared to place them in a SRC. Once ready to submit the warranty claim for the rental, ensure the repair claim is in the system and the number of days are justified with a timeline
 Certified Pre-Owned (CPO) vehicles previously de-certified due to open Recall 162 are eligible to be re-certified

 A vehicle may be re-entered into CPO inventory status once all applicable recalls are completed, as long as it meets all other CPO eligibility guidelines

 Prepare for the volume of customers requiring an inspection and dipstick, oil, and oil filter replacement. The VIN list for eligible customers in your market area is available on WebDCS > Service tab > Uncompleted Campaign VIN List
 Conduct a resource assessment to support the recall; people, time, facility, parts, and adjust accordingly. Remember that you still need to accommodate your regular customers as well as customers from other recent recalls/campaigns
 Shop Capacity – Instructions to set up appointment scheduling through Xtime has been sent to your service managers. See "Online Scheduling" section for additional details

Inspection Process

The Technical Service Bulletin (TSB) #18-01-007-01 for this recall was published on June 23 2017. Refer to Hyundai Tech Info under the Service tab at Hyundaidealer.com for the latest TSB.

Follow the inspection procedure outlined in the bulletin to perform the engine noise inspection, and if necessary, to replace the engine. The following is an overview outlining the service and parts process. Refer to the additional sections referenced within this document for details.

Inspection and dipstick, oil and oil filter replacement:

- Will take 0.7 hours
- Utilizes the GDS mobile tablet Samsung Galaxy Note 2014 Edition 10.1 and S2 models
- Utilizes the Engine Noise Inspection Tool
- Data will be uploaded to HMA electronically for use in confirming test results and part order by VIN
- See "Pass" or "No Pass" below:

Pass ✓ Upload test results ✓ Install rod assembly-oil level (dipstick), oil filter and oil (conventional Quaker State 5w30) ✓ Verify oil level ✓ See Parts section for additional details

(See "No Pass" on next page)



No Pass

- ✓ Place the customer in a Hyundai Service Rental Car (SRC)
- ✓ Do not order the engine until approved by Warranty Prior Approval (PA)
- ✓ Do not inform the customer that they will need a new engine until approved by Warranty Prior Approval (PA)
- ✓ Immediately upload test results
 - o Tests will not upload if mobile tablet is not connected to a Wi-Fi network; please ensure tests are uploaded to avoid any delay in PA review
- ✓ PA request will be auto created and saved in WebDCS PA Request screen. Dealer will be required to edit PA request if needed and submit to PA for review
 - o In certain instances where multiple tests are performed, duplicate requests may be auto created. Please 'Delete' the duplicate or any unneeded requests to remove it from PA list
- ✓ PA will review the audio file within 1 business day to ensure validity of the test

	PA Review: Replace Engine			Review: e-Test
√	If there are no anomalies in the audio files, PA will approve the PA request and advise dealer to move forward with engine replacement	✓		the audio files, PA will request along with recommendations to conclusive
✓ ✓ ✓	Part numbers o Engine sub-assembly part o Service kit(s) o Oil cooler pipe & hose assembly VIN required Refill oil - synthetic (Quaker State 5w30) See Parts section for additional details	✓ ✓	Dealer will perform re-te: Dealer will upload re-tes request PA will review the re-test	t results and update related PA
			PA Re-Test Review: Pass	PA Re-Test Review: No Pass
		✓	PA agent will update and close out the PA request Follow initial "Pass" scenario above	 ✓ If result is a No Pass and anomalies in the audio files are still present, PA agent may have dealer perform test again with other recommendations or perform normal engine diagnosis worksheet ✓ If result is a No Pass and there are no anomalies in the audio file, PA agent will approve PA request and advise dealer to move forward to "Replace Engine" scenario
		✓	complain about abnorma	but the customer continues to all engine noise, PA agent will normal engine diagnostic



Additional Inspection Process Notes:

If the Engine is NOT Running:

- The test cannot be performed
- Submit PA request
 - Attach RO and completed engine diagnostic worksheet
 - o Video may be required of a walk-around and an attempt to start the vehicle
 - o Tear down and/or photos of the oil pan contents may be required
- Contact PA at 1-844-371-3808 for any questions

If Additional Part Replacement Is Needed:

- If additional parts are needed to repair the vehicle and are covered under warranty, submit a claim. PA is not required.
- If ancillary parts are required to be replaced as part of the inspection or repair, or if the parts needed to repair the vehicle are no longer covered under warranty, contact PA for approval <u>PRIOR</u> to performing the repair

Comebacks AFTER Recall Completion:

- Regardless of mileage, contact PA for all vehicles that have previously passed an inspection using the GDS or have had the engine replaced under the recall, and are now experiencing engine related issues
- PA will provide next steps



Parts

Dipstick & Oil Filter

- Dipstick, oil, and oil filter are required replacement when vehicle passes the Recall 162 inspection
- Dealer submits order in WebDCS using noted part number from the TSB

Oil

- Inspection: Quaker State 5w30 <u>conventional</u> motor oil
- Engine Replacement: Quaker State 5w30 synthetic motor oil

How to Reorder:

Dealers Enrolled in Hyundai Lubricants Program	Dealers NOT in Hyundai Lubricants Program	
✓ Order through e-serve or	✓ Order form located on HyundaiDealer.com>Service Homepage>Campaign Central>Recall162 folder	
✓ Contact Shell Customer Service at 1-877-350-7030	 ✓ E-mail to: <u>customercare-us@shell.com</u> OR ✓ Customer Service telephone 1-877-350-7030 	

- ✓ Quaker State Advance Durability 5w30
 - o Conventional motor oil (24 quart container) SKU: 550023662
 - o Full synthetic motor oil (6 quarts) **SKU**: **550036717**

^{***}Dealers are encouraged to maintain adequate stock of both motor oil SKU's based on their requirement needs and lead-time from order to delivery, which is typically 5 days. ***

^{***}Orders placed before 4:00 CST are processed the same day with delivery within five (5) days***



Engine

Engine Orders

- Warranty Prior Approval (PA) is required to place order
 - ✓ VIN will be required
 - ✓ "No Pass" data upload needs to be completed
 - ✓ Engine replacements will be subject to claim reviews including review of audio files and parts account debit
 - ✓ A Recall 162 Engine Reman program was established on 06/06/2018 and includes an engine core collection process. Refer to the "Reman Engine Core Collection Process" outlined below.
 - ✓ DO NOT damage the short block casting / starter motor mounting tab. That procedure only applies to Recall 132 engine replacements. HMA may ask dealers to ship the engine back for inspection and if starter mounting tab is broken off, the campaign claim may be subject to chargeback
 - ✓ Dealer submits an E-Order in WebDCS using the VIN and the part numbers from the TSB #18-01-007-01
 - ✓ Make sure to include Service Kit(s) and Oil Cooler Pipe & Assembly

Note: Order will be automatically converted to a SPL order

- ✓ Urgent cases must be escalated to the Hyundai Parts Hotline at 1-800-545-4515
- ✓ Orders related to Recall 162 cannot be upgraded to XVOR

Reman Engine Core Collection Process

- As of June 6, 2018 a \$1,000.00 core charge will be charged on each engine purchase for Recall 162.
- In order for dealers to receive a credit for the core charge amount, the entire engine core must be returned through current reman core return procedure, as follows.
 - ✓ Retain the original packaging materials as received.
 - ✓ When an engine is supplied in a cardboard box, do not discard the box, take the engine out of box and place the removed engine into the same shipping box with all cushioning materials so you may return the core for full applied credit.
 - ✓ After replacing an engine under Recall 162 and as detailed in TSB #18-01-007-01, drain all fluids as much as possible, put the entire core into the retained packaging material and request a core pick-up on the Hyundaidealer.net.
 - ✓ Failure to drain all fluids may result in the deduction of partial core credit.
 - ✓ Required documents should be included:
 - i. Reman Engine Core Worksheet Dealer should include the correct engine serial number and note it on the core return worksheet.
 - ii. Copy of Repair Order Please place all documents in a plastic bag and tie to the top of engine core (using a tie-strap or wire) to avoid missing document in transit.
 - ✓ Return multiple cores under the same Bill of Lading, if possible.
 - ✓ All core credit related concerns or disputes should be submitted within 2 days after the core credit is issued.

Shipping of Parts

- Engine, the service kit(s), and the oil cooler pipe & assembly will be shipped via ground in separate packages. The Dealer will be able to identify the parts by the "QQHRM" at the end of the part number
- The method of shipping will be DDS or LTL
- Shipping and handling fees will be waived for this Recall. Check the warranty box when placing the order so that any handling fees are deferred for 30 days. Handling fees will not be applied if the warranty claim arrives within 30 days of the ship date
- The Packing List and Packing Labels for all packages will display the last 7 digits of the VIN
- On the Packing List, the last 7 digits of the VIN will appear in the Dealer Bin Location field





Sample Label



***Dealers can email any questions related to parts ordering and/or shipment to HyundaiPartsHotline@MobisUSA.com and receive a response within 24 hours. ***



Tools Required

- GDS Mobile Samsung Galaxy Note 2014 Edition 10.1 or S2 models with latest software
 - o Required to perform Recall 162 and Recall 132 inspection procedure
 - Perform latest GDS Mobile update daily to access the GDS inspection application
- Hyundai G1XTDCP001 Engine Noise Inspection Tool
 - o Required to perform Recall 162 and Recall 132 inspection procedure
 - o An initial shipment of one (1) tool was sent to all dealers on June 09, 2017
 - A subsequent shipment was sent to some dealers the week of June 19, 2017 based on affected campaign vehicle volume, at no charge
 - o Additional orders will be available through the parts ordering process in WebDCS
 - Sample picture below:



- Hyundai 09314-3Q100 Torque Wrench Socket
- Hyundai 09353-2B000 Injector Combustion Seal Ring Installer
 - o Required to perform the engine sub-assembly replacement
 - Sample pictures below:



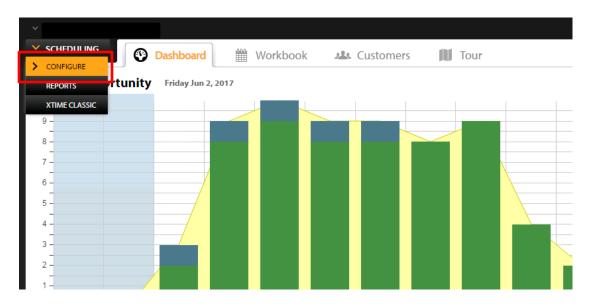




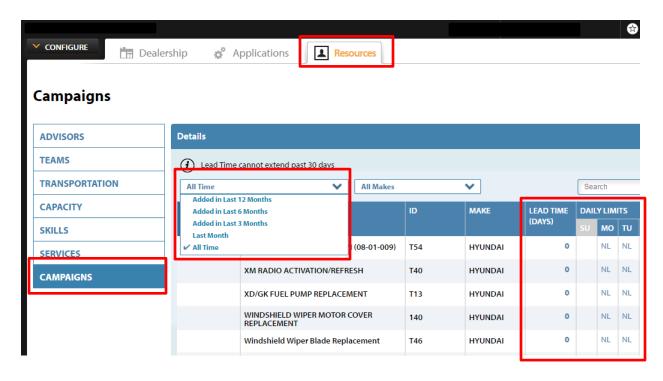
Online Scheduling (Xtime)

How to Set Capacity and Lead Times for a Recall Service

Navigate to the 'Configure' page after logging into the Xtime Business Portal.

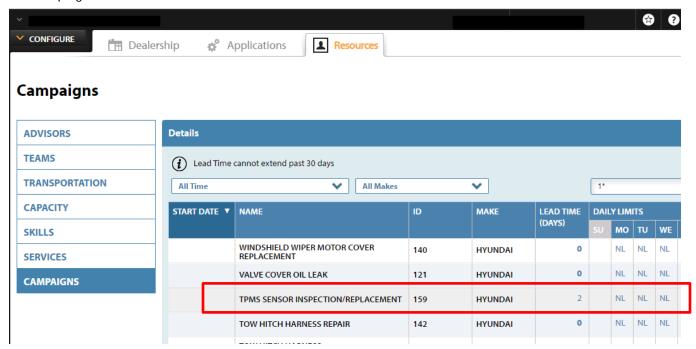


- 2. Click on the 'Resources' tab, click on 'Campaigns', and select 'All Time' to view all available recalls.
- 3. As new recalls are launched with remedy available, they will be automatically added to the Xtime catalog, and configured with a default value of "NL" (No Limit) for each day of the week.

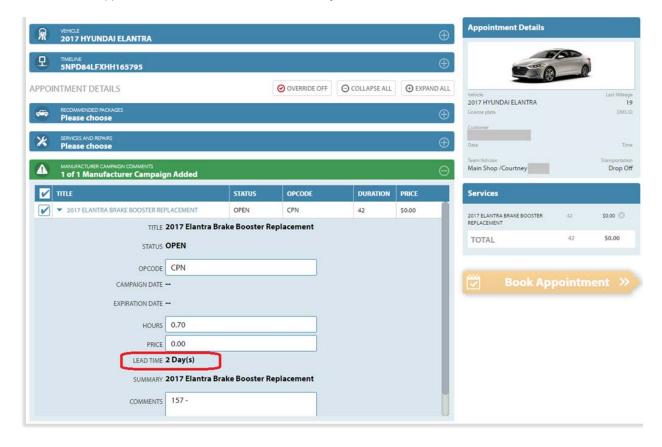




4. The Service Manager can sort, search, and set the Lead Time, and Daily Capacity Limits for individual campaigns.



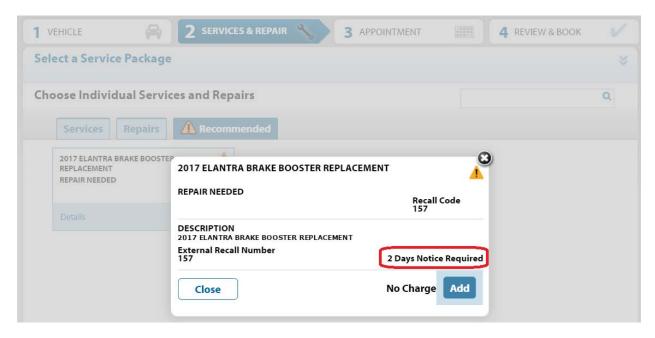
5. Appointment takers will have visibility to the designated lead time when booking appointments, so if a recall-related repair is added to an appointment the service date is advanced by the lead time.



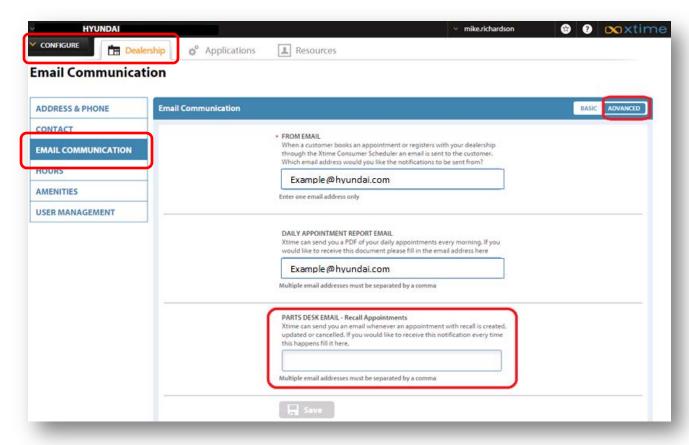
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6. Consumers will also have visibility to the required lead time when booking appointments.



7. In addition to managing individual recalls, the Parts and Service Manager should input their email addresses so they can be notified when a recall appointment has been made, to confirm parts and time are available.





Customer FAQ's

Q: What is the problem?

A: The engines in these vehicles may contain residual debris from factory machining operations, potentially restricting oil flow to the main bearings and leading to premature bearing wear. Over time, a bearing may fail and the vehicle could lose power while in motion. Indications of a worn connecting rod bearing include:

- 1. A knocking noise from the engine that increases in frequency as the engine rpm increases
- 2. Reduced power and/or hesitation
- 3. Illumination of the check engine light in the instrument cluster
- 4. Illumination of engine oil pressure warning lamp

If the vehicle continues to be driven with a worn connecting rod bearing, the bearing can fail, and the vehicle could stall.

Q: What is done during the recall service at the dealer?

A: Hyundai dealers will inspect the engine and replace the dipstick, oil and oil filter. If necessary, they will replace the engine. This will be performed at no cost to owners.

Q: How long will it take for the inspection?

A: The inspection procedure should take no longer than one hour. If it is necessary to replace the engine, the repair time will depend on parts availability and the dealer's workload. Dealers can arrange for a loaner vehicle as needed.

Q: What if I need my vehicle towed to the dealership?

A: Most vehicles are still covered under the 5 year Roadside Assistance program. Customers can contact Roadside Assistance to have their vehicle towed at 1-800-243-7766.

Q: What if I have already paid for repairs related to this recall?

A: Customers can go online to www.HyundaiUSA.com/campaign162 to submit a reimbursement claim. Specific details including copies of the required documents (repair order, proof of payment, proof of ownership, etc.) will be required. Please keep in mind your recall must still be completed by the dealer.

Q: When will owners be notified?

A: Final Customer Notification letters of the recall began mailing beginning in early July 2017 (interim letters were mailed in April/May).

Q: What if I previously had my engine inspected under the recall, and now my engine is experiencing the symptoms listed in the recall?

A: Although prior inspections may not have found issues with your vehicle, if you experience engine knocking, unusual engine noise, or illumination of the oil lamp, please contact your Hyundai dealer to schedule an appointment to have an engine inspection performed.



Contact / Reference Information

Key Contact Information		
Dealer Support	Contact Information	Description
Parts	HyundaiPartsHotline@MobisUSA.com 1-800-545-4515	Parts ordering hotline
Techline	1-800-325-6604	Vehicle Technical Support for Hyundai Dealer Techs
Warranty HELPREP Line	1-877-446-2922	Warranty Claim questions for Hyundai Dealers
Warranty Prior Approval (PA) Center	1-844-371-3808	Warranty Prior Approval (PA) Center for Hyundai
Service Lane Technology (SLT) Xtime / AutoLoop / CDK	Support@xtime.com / 1-866-984-6355 support@autoloop.com / 1-877-850-2010 CDK Service Connect within the CDK system / 1-866-668-5394 (option 6)	Assistance with SLT Appointment: • Appointment / Shop Capacity Management / Campaign Integration / Operation Codes
Customer Support	Contact Information	Description
Hyundai Customer Care Center (Recall/Campaign Questions)	1-855-671-3059	Customer questions or concerns related to <u>recall</u> <u>or service campaigns</u>
Hyundai Recall /Campaign Website	www.hyundaiusa.com/campaign162	Specific recall or service campaign information
Hyundai Customer Care Center (General Questions)	1-800-633-5151	Customers general questions, <u>non-campaign</u> related
Hyundai Roadside Assistance	1-800-243-7766	Hyundai Roadside Assistance

Key Reference Information		
Name	Source	
Campaign Central	Consolidated repository of recall and service campaign info. Located on the service tab homepage in www.HyundaiDealer.com	
Parts – Campaign Parts Management (CPM) Procedure	As applicable; www.HyundaiDealer.com > Parts > Documents Library > Campaign Parts Management	
Service Rental Car (SRC) Program	www.HyundaiDealer.com > Service tab	
Technical Service Bulletin (TSB)	www.HyundaiDealer.com > Service tab > Hyundai Tech Info	
Uncompleted Campaign VIN Listing	WEBDCS> SERVICE tab> select UNCOMPLETED CAMPAIGN VIN LIST	
Recall Campaign Website	www.hyundaiusa.com/recall www.hyundaiusa.com/campaign162	
NHTSA Website	www.safercar.gov	