

Date: June 23, 2017

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

Subject: Recall 132: 2011-2012 YF Sonata GDI Engine Inspection/Replacement UPDATED 6/23 (TSB #17-01-046)

Updates To This Document	Document #
<ul> <li>Updated TSB ##17-01-046 throughout</li> <li>Engine Noise Inspection Tool – Applicable to both Recall 132 and Recall 162 (Tools Required section, page 9)         <ul> <li>An initial shipment of one (1) tool was sent to all dealers on June 09, 2017 at no charge</li> <li>A subsequent shipment was sent to some dealers the week of June 19, 2017 based on affected campaign vehicle volume, at no charge</li> <li>Dealers may order additional tools beginning early July, 2017</li> </ul> </li> <li>Updated "No Pass" inspection procedure (Inspection Process section, page 3)</li> <li>Updated list of parts backorder ETA's are now posted on HyundaiDealer.com &gt; Service tab homepage &gt; Campaign Central &gt; Recall 132 (Parts section, page 6)</li> </ul>	V4 06/23/17
Initial communication to dealers	V1 12/07/2015

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# **Campaign Overview**

Hyundai has launched a safety recall involving 2011-2012 model year YF Sonata vehicles with GDI engine (hybrid Sonata vehicles of these model years are not impacted). During the manufacturing of the engine, excess metal debris may have been generated during factory machining operations, possibly contaminating the connecting rod oiling passages and restricting oil flow to the connecting rod bearings and increasing the potential of premature bearing wear. A worn connecting rod bearing:

- Will produce a metallic, recurring knocking noise from the engine that increases in frequency as the engine rpm increases.
- May result in illumination of the check engine light in the instrument cluster.

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

Additionally, Hyundai increased the warranty for the engine "short block" (cylinder block, crankshaft, pistons, and connecting rods) to 10 years/120,000 miles for both original and subsequent owners of 2011 and 2012 Sonatas manufactured at Hyundai Motor Manufacturing Alabama.

Hyundai Motor America will notify all owners of the affected vehicles to visit their local Hyundai dealers for inspection, dipstick replacement and oil top off. If the vehicle doesn't pass the inspection, the dealer will repair/replace the engine. Final Customer Notification letters of the recall campaign mailed beginning December 21, 2015 (interim letters were mailed in October/November).

## **Readiness Checklist**

Ensure your dealer has received the Engine Noise Inspection Tool (PN: G1XTD CP001)
 Applicable to both Recall 162 and Recall 132
 An initial shipment of one (1) tool was sent to all dealers on June 09, 2017 at no charge
 A subsequent shipment will be sent to some dealers the week of June xx, 2017 based on affected campaign vehicle volume, at no charge
 Dealers may order additional tools beginning early July, 2017
 Review the Recall 132 Technical Service Bulletin (TSB) #17-01-046
 Refer to Hyundaitechinfo.com
 Update your GDS Mobile tablet
 Samsung Galaxy Note 2014 Edition 10.1 or S2 models with latest software as of June 24, 2017

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Ensure your dealer has the other tools required as listed in the "Tools Required" section of this document:

Software must be updated daily or the inspection application will not function

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



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
 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) #17-01-046 for this recall was published on June 23, 2017. Refer to <a href="https://hyundaitechinfo.com"><u>Hyundaitechinfo.com</u></a> 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 with latest software as of June 24, 2017
- 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: -Test
<b>√</b>	If there are no anomalies in the audio files, PA will approve the PA request and advise dealer to move forward with engine replacement	<b>√</b>		the audio files, PA will request along with recommendations to conclusive
✓ ✓ ✓	Part numbers  o Engine sub-assembly part o Service kit(s) o VIN required  Refill oil - synthetic (Quaker State 5w30)  See Parts section for additional details	<ul><li>✓</li><li>✓</li></ul>	Dealer will perform re-test pealer will upload re-test peaking the re-test peaking the re-test peaking	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	<ul> <li>✓ 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</li> <li>✓ 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</li> </ul>
		✓	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
  - o 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 conventional motor oil
- Engine Replacement: Quaker State 5w30 synthetic motor oil

\*\*\*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. \*\*\*

#### 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	<ul> <li>✓ E-mail to: <u>customercare-us@shell.com</u>         OR</li> <li>✓ Customer Service telephone 1-877-350-7030</li> </ul>

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

<sup>\*\*\*</sup>Orders placed before 4:00 CST are processed the same day with delivery within five (5) days\*\*\*



## **Engine**

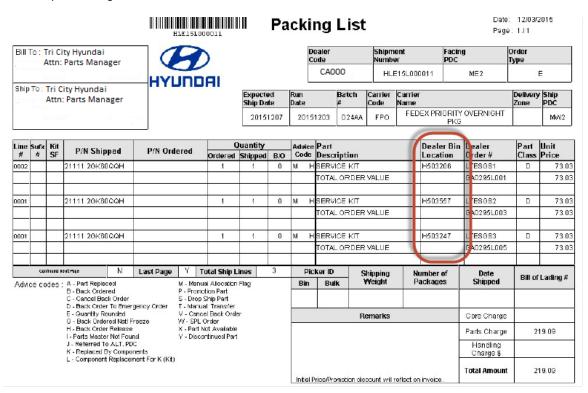
#### **Engine Orders**

- 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
  - ✓ Dealers should hold the old engines for 20 days from the warranty payment date
- Dealer submits an E-Order in WebDCS using the VIN and the noted part numbers from the TSB #17-01-046
   Note: Order will be automatically converted to a SPL order
  - ✓ List of ETAs will be posted when parts are available on HyundaiDealer.com > Service Homepage> Campaign Central> Recall 162 folder
  - ✓ 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

#### Shipping of Parts

- Engine and the service kit(s) will be shipped via ground in separate packages. The Dealer will be able to identify the parts by the "QQH" 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

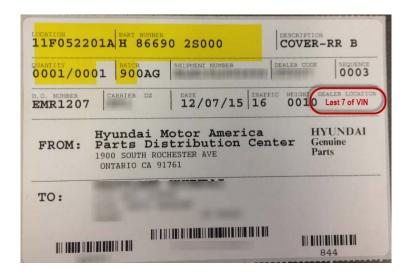
#### Sample Packing List



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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 as of June 24, 2017
  - o Required to perform Recall 132 and Recall 162 inspection procedure
  - o Perform latest GDS Mobile update daily to access the GDS inspection application
- Hyundai G1XTDCP001 Engine Noise Inspection Tool
  - o Required to perform Recall 132 and Recall 162 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
  - Required to perform the engine sub-assembly replacement
  - o Sample pictures below:





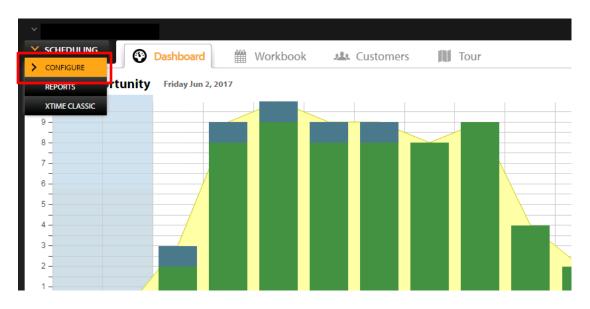
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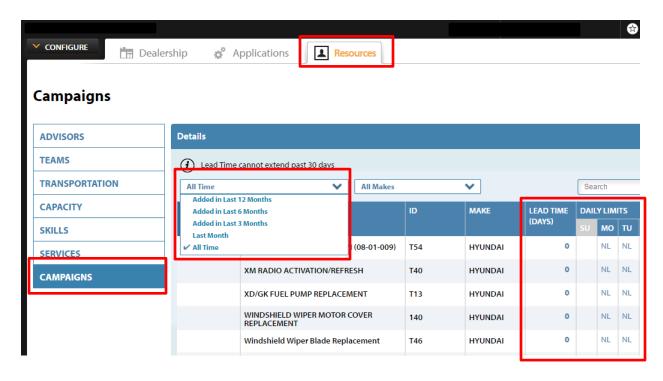
# Online Scheduling

#### How to Set Capacity and Lead Times for a Recall Service

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

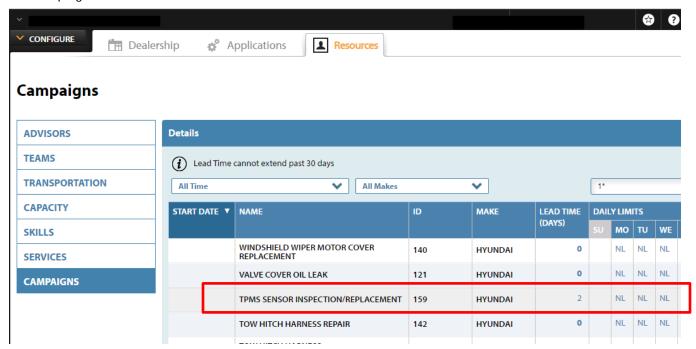


- 2. Click on the 'Resources' tab, click on 'Campaigns', and select 'All Time' to view all available recalls.
- 3. As new recalls are launched with remedy available, they will be automatically added to the Xtime catalog, and configured with a default value of "NL" (No Limit) for each day of the week.

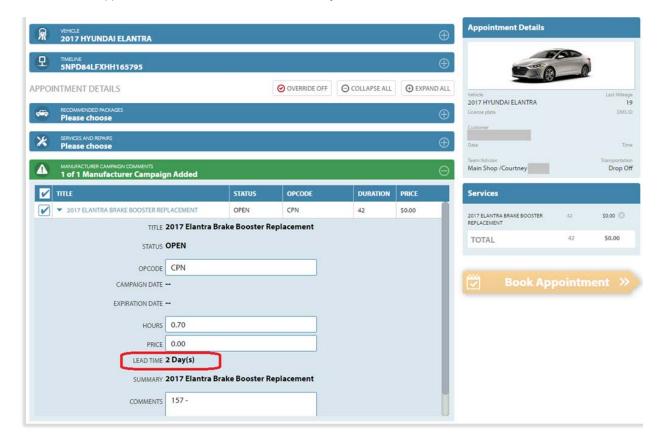




4. The Service Manager can sort, search, and set the Lead Time, and Daily Capacity Limits for individual campaigns.

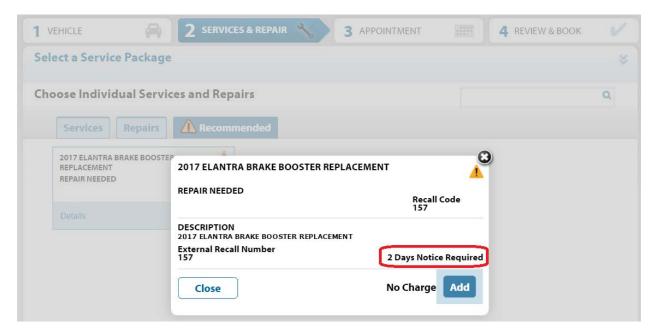


Appointment takers will have visibility to the designated lead time when booking appointments, so if a recall-related repair is added to an appointment the service date is advanced by the lead time.

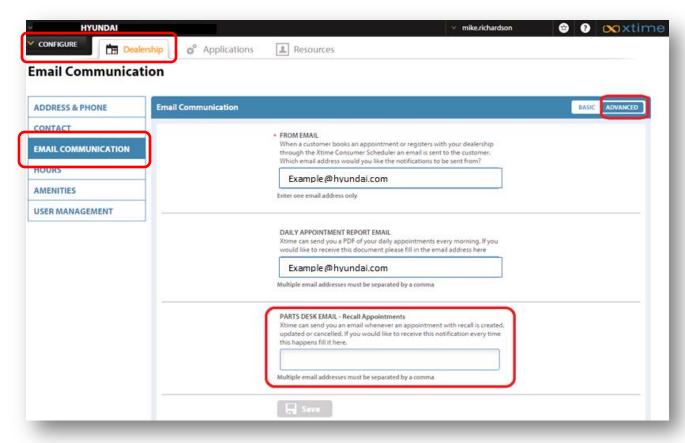




6. Consumers will also have visibility to the required lead time when booking appointments.



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: During the manufacturing of the engine, excess metal debris may have been generated during factory machining operations, possibly contaminating the connecting rod oiling passages and restricting oil flow to the connecting rod bearings and increasing the potential of premature bearing wear. A worn connecting rod bearing:
  - 1) Will produce a metallic, recurring knocking noise from the engine that increases in frequency as the engine rpm increases.
  - 2) May result in illumination of the check engine light in the instrument cluster. 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, replace the dipstick and top off the oil. If necessary, they will replace the engine. This will be performed at no cost to owners. Additionally, Hyundai will increase the warranty for the engine "short block" to 10 years/120,000 miles for both original and subsequent owners of 2011 and 2012 Sonatas manufactured at Hyundai Motor Manufacturing Alabama equipped with 2.0 liter and 2.4 liter Gasoline Direct injection engines.

- 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 Service Rental Vehicles 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 <a href="www.HyundaiUSA.com/campaign132">www.HyundaiUSA.com/campaign132</a> to submit a reimbursement claim. They will need to be prepared to provide specific details including copies of the required documents (repair order, proof of payment, proof of ownership, etc.). Please remind customers that they will still need to have the campaign completed by the dealer. If a customer does not have internet access, they can send their reimbursement documents to the call center at 1-800-633-5151.
- Q: When will owners be notified?
  - A: Owners were mailed notification letters beginning December 21, 2015.
- Q: What should I do if my engine was tested and passed the inspection before the Recall 132 inspection method was changed?
  - **A:** If your vehicle already passed an inspection, and you experience engine knocking, unusual engine noise, or illumination of the check engine 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 Dealers		
Xtime Technical Support	Support@xtime.com 1-866-984-6355	Assistance with Car Care Scheduling		
Customer Support	Contact Information	Description		
Hyundai Customer Care Center (Recall/Campaign Questions)	1-855-671-3059	Customer questions or concerns related to <u>recall or</u> <u>service campaigns</u>		
Hyundai Recall /Campaign Website	www.hyundaiusa.com/campaign132	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 <a href="https://www.HyundaiDealer.com">www.HyundaiDealer.com</a>			
Car Care Scheduling (Xtime) - Tutorials	www.HyundaiDealer.com > Service > Dealer Resources > Documents Library > Car Care Scheduling			
Car Care Scheduling (Xtime) - Recall Appointment Notification	<ol> <li>Log into Xtime</li> <li>Under the menu at the top left, select 'CONFIGURE'</li> <li>Under the dealership tab, click "EMAIL COMMUNICATION"</li> <li>Slide the toggle to "ADVANCED"</li> <li>Populate as many e-mails as desired in the "PARTS DESK EMAIL FIELD"</li> </ol>			
Parts – Campaign Parts Management (CPM) Procedure	As applicable; <a href="www.HyundaiDealer.com">www.HyundaiDealer.com</a> > 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/campaign132			
NHTSA Website	www.safercar.gov			