

Service Campaign 953 Dealer Best Practice

Date: February 15, 2019

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

Subject: Service Campaign 953: ECM & Cluster Update (TSB #19-01-002H-1 supersedes TSB#19-01-002) – UPDATED v9

Updates To This Document	<u>Date</u>
• Update: Added Extended Warranty Coverage to description, details to Service Actions and updated FAQs. "Limp Home Mode" is now referred to as "Engine Protection Mode". Updated TSB reference for Campaign 953 and T3G.	02/15/19

IMPORTANT Retail Vehicles

As required by federal law, dealers must not deliver new vehicles for sale or for lease to customers until all open recalls have been performed. Dealers should also perform all open recalls on used vehicles, demo and rental vehicles prior to placing them into customer use and whenever an affected vehicle is in the shop for any maintenance or repair.

Affected Vehicles

Hyundai has launched a Product Improvement Campaign to perform a knock sensor software update on applicable vehicles.

The affected vehicles include:

- Certain 2011-2014 MY Sonata (YF) vehicles with 2.4L and 2.0L Turbo engines
- Certain 2015-2018 MY Sonata (LF) vehicles with 2.4L and 2.0L Turbo engines
- Certain 2013-2018 MY Santa Fe Sport (AN) vehicles with 2.4L and 2.0L Turbo engines
- Certain 2014-2015 MY Tucson (LM) vehicles with 2.4L engines
- Certain 2018 MY Tucson (TL) vehicles with 2.4L engines

Hyundai is initiating this action to ensure the safety and quality of its vehicles and the continued satisfaction of Hyundai customers.

Description

Hyundai has developed a new engine monitoring technology called a Knock Sensor Detection System (KSDS). The technology uses software innovations and leverages existing engine sensors to continuously monitor for symptoms that may precede an engine failure. Watch this <u>video</u> to learn more.

The KSDS software continuously monitors engine vibrations for unusual patterns that develop as an engine connecting rod bearing wears abnormally that could later cause engine seizure. If vibrations caused by bearing wear start to occur, the malfunction indicator lamp will blink continuously, an audible chime will sound and the vehicle will be placed in a temporary engine protection mode with reduced power and acceleration. At that time, Diagnostic Trouble Code (DTC) P132600 will be recorded in the ECM.

In addition, Hyundai will extend the warranty to 10 years and 120,000 miles (up from 100,000 miles) for original and subsequent owners of the covered vehicles for engine repairs needed because of excessive connecting rod bearing damage.

Service Action



Reservation – Always check the Vehicle Information Screen in WebDCS for open campaigns and recalls, and advise the customer on time requirements.

- As this is a high volume campaign, make sure to check your appointment reservation settings and verify customer information. This will help reduce unplanned work and speed up the customer check in process.
- Make sure to review Blue Link alerts with DTC P132600 and reach out accordingly.
- Provide customer with transportation options such as SRC or alternative vehicle.



- When a customer's vehicle is eligible for 953, please explain: "Hyundai developed a new engine monitoring technology that uses software innovations and existing engine sensors to continuously monitor for symptoms that may precede an engine failure. Your vehicle is eligible for this product improvement campaign at no cost, may I add it to your service order today?"
- If the customer declines, please follow up: "We can schedule the procedure at a better time for you. When would that be?"



Readiness – Review this announcement and the accompanying FAQs with all Service and Parts staff including Reservationist/BDC. Also, complete all applicable training, check your reservation capacity settings (you can set separate capacities for every recall/campaign), confirm email addresses for campaign appointments, and that you have all necessary tools, campaign parts and shop equipment as needed.

- This campaign can be completed quickly and does not require a hoist.
- Dealers should consider a workspace that offers the technicians the appropriate vehicle and Wi-Fi access that also
 ensures high frequency completion rates.
- Prepare for unplanned work and make sure there is sufficient staff on the service drive to keep vehicles moving through the shop.



Reception – Always check the Vehicle Information Screen in WebDCS for open campaigns and recalls, and print a copy for technicians. Provide SRC or an alternative vehicle, as needed. If a customer has declined the campaign, note this on the repair order and request the customer's signature next to the statement.

- When a customer's vehicle is eligible for 953, please explain: "Hyundai developed a new engine monitoring technology that uses software innovations and existing engine sensors to continuously monitor for symptoms that may precede an engine failure. Your vehicle is eligible for this product improvement campaign at no cost, may I add it to your service order today?"
- If the customer declines, please follow up: "We can schedule the procedure at a better time for you. When would that be?"



Repair – Always plug in the GDS before starting the repair. Make sure to complete an MPI on all vehicles and Quality Control your work.

- Perform any open Recalls prior to performing Service Campaign 953.
- TSB #19-01-002H-1 (supersedes TSB#19-01-002) provides vehicle service procedures, affected VIN production range, and warranty claim information.
- Use Greeters, Porters and Service Consultants to bring vehicles to Technicians to make it easier for them to stay working in the bay.



Return – Review all completed campaign and repairs to answer any customer questions. Also, schedule the customer's next service.

- It's important to explain to each customer during the return step of the service process what happens with their **vehicle if abnormal engine bearing noise is detected**. If the customer experiences a flashing MIL and restricted performance, let them know they should return to the dealership to have the condition addressed by a subsequent campaign (T3G) or available warranty. **No diagnostic fee should be charged if the customer returns with a check engine light on and describes engine protection mode**.
 - In the event DTC code P132600 is set <u>after</u> the campaign software update is performed, refer to TSB# #19-01-006H (supersedes #18-01-032) for campaign T3G to inspect the vehicle and install a wire harness extension or replacement engine based on the inspection results.
 - Please note: The DTC code may not set until vehicle is test driven through a normal drive cycle.
 - Campaign T3G will not show as an open campaign in WebDCS and is for warranty claim submission purposes, or alternative vehicle.
 - If the customer needs an engine replacement, be prepared to place them into a Service Rental Car (SRC), or alternative vehicle.



Reconnect – Follow up for customer satisfaction.



<u>Parts</u>

This campaign is a software update only. In the event any parts are needed, please proceed with ordering OE parts as outlined in the corresponding TSB(s).

Customer Notification

Hyundai will notify all owners of the vehicles described above and strongly encourage them to return their vehicles to their Hyundai dealers for the service procedure as soon as possible. The owner notification schedule is a follows:

- 2015 Sonata: November, 2018.
- 2015 Santa Fe Sport: December 2018
- 2011-2014 Sonata: Beginning late-December through early 2019
- Remaining vehicles: Early 2019

Thank you for your prompt attention to this important matter and continued commitment to Hyundai customers.

Hyundai Motor America



Engine Software Update Product Improvement Campaign Q&A

Q: What is this Product Improvement Campaign?

A: Hyundai has recently developed a new engine monitoring technology called a knock sensor detection system as an added layer of protection from engine damage. The technology uses software innovations and leverages existing engine sensors to continuously monitor for symptoms that may precede an engine failure. The software update is being performed by Hyundai dealers free of charge to customers as part of a Product Improvement Campaign.

In addition, Hyundai will extended the warranty to 10 years and 120,000 miles (up from 100,000 miles) for original and subsequent owners of the covered vehicles for engine repairs needed because of excessive connecting rod bearing damage. This extended warranty will be automatically applied to the covered vehicles.

Q: What vehicles are covered by this Product Improvement Campaign?

A: This Product Improvement Campaign covers 2011-2018 model year Sonata and 2013-2018 Santa Fe Sport vehicles equipped with 2.4L GDI and 2.0L Turbo GDI engines and 2014-15 and 2018 model year Tucson vehicles with 2.4L engines.

Q: Why is Hyundai conducting this product improvement campaign?

A: Hyundai is conducting this product improvement campaign to ensure the satisfaction of its customers and provide additional warranty protection. The knock sensor detection system being installed is able to alert customers at an early stage of bearing wear before the occurrence of severe engine damage. This will allow customers to get their vehicle to a Hyundai dealer for repair.

Q: Do I need the Product Improvement Campaign performed on my vehicle?

A: Hyundai strongly encourages customers bring their vehicles in to their Hyundai dealer for the free software update as soon as possible. The software is designed to alert the vehicle driver at an early stage of bearing wear before the occurrence of severe engine damage, including engine failure, and enable the customer to safely drive their vehicle to a Hyundai dealer for inspection and repair.

Q: How long will it take for the software update?

A: The software installation should take less than one hour. However, it is always suggested that customers contact their local Hyundai dealer to schedule a service appointment. The dealer can advise on the actual time needed for the procedure.

Q: What will happen if the knock sensor detects bear wearing?

A: If excessive bearing wear is detected after the knock sensor detection system software update has been completed, the following will occur:

1. The Malfunction Indicator Lamp (MIL) will blink continuously, an audible chime will sound and the vehicle will be placed in a temporary engine protection mode with reduced power and acceleration.



Malfunction Indicator Lamp (MIL)

2. The vehicle can continue to be operated for a limited time in Engine Protection Mode to permit the customer to drive the vehicle to a safe location, but it will accelerate slowly and have a reduced maximum speed. Engine RPMs will be limited to approximately 1800-2000 RPM. This means the maximum vehicle speed will be limited to approximately 65 mph or less depending on vehicle loading and road conditions.

Q: If the knock sensor is activated and bearing wear is identified, what is the repair that will take place?

A: Hyundai dealers will inspect, and if necessary, replace the engine.

Q: Will other Hyundai vehicles get this update?

A: Hyundai is currently evaluating the deployment of the knock sensor detection system in additional vehicles and model years as part of ongoing technology and software innovations.

Q: When will owners be notified?

A: Hyundai began notifying customers of 2015 Sonata and 2015 Santa Fe Sport vehicles in December, 2018. The remaining vehicles



will be notified through Q1 of 2019. If a customer wishes to have the dealer inspect their vehicle before receiving the Product Improvement Campaign notification, they can contact their Hyundai dealer to schedule an appointment or visit <u>www.HyundaiUSA.com/campaignhome</u>.

Q: What if I have already paid for related engine repairs?

A: Hyundai has a Reimbursement Program in place if you previously had any repairs or expenses related to this Product Improvement Campaign. Submit a request for reimbursement online at <u>www.HyundaiUSA.com/campaignhome</u>.

2011-2014 Sonata and 2013-2014 Santa Fe Sport Only Additional Q&A

Q: What is the difference between the previous engine recalls and this Product Improvement Campaign?

A: Hyundai previously recalled certain 2011-2014 Sonata and 2013-2014 Santa Fe Sport vehicles equipped with 2.0 liter and 2.4 liter gasoline direct injection engines to inspect, and if necessary, replace the engine assembly.

In addition, Hyundai has recently developed a new engine monitoring technology called a knock sensor detection system as an added layer of protection from engine damage. The technology uses software innovations and leverages existing engine sensors to continuously monitor for symptoms that may precede an engine failure. The software update is being added to vehicles beyond the recalled population as a preventive measure, and is being performed free of charge by Hyundai dealers to customers as part of the Product Improvement Campaign.



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 Technicians	
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: • Appointment / Shop Capacity Management / Campaign Integration / Operation Codes	
AutoLoop Technical Support	Support@autoloop.com 1-877-850-2010	 Assistance with Car Care Scheduling: Appointment / Shop Capacity Management / Campaign Integration / Operation Codes 	
CDK Technical Support	https://serviceconnect.support.cdk.com/	 Assistance with Car Care Scheduling: 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 or</u> <u>service campaigns</u>	
Hyundai Recall /Campaign Website	www.hyundaiusa.com/recall	Updated information related to the specific recall or service campaign	
Hyundai Customer Care Center (GeneralQuestions)	1-800-633-5151	Customers general questions, <u>non-campaign</u> <u>related</u>	
Hyundai Roadside Assistance	1-800-243-7766	Hyundai Roadside Assistance	

Key Reference Information			
Name	Source		
Campaign Central	Consolidated repository of recall and service campaign dealer best practices. Located on the service tab homepage in <u>www.HyundaiDealer.com</u>		
Car Care Scheduling (Xtime) - Tutorials	www.HyundaiDealer.com > Service > Dealer Resources > Documents Library > Car Care Scheduling		
Car Care Scheduling (Xtime) - Recall Appointment Notification	 Log into Xtime Under the menu at the top left, select 'CONFIGURE' Under the dealership tab, click "EMAIL COMMUNICATION" Slide the toggle to "ADVANCED" Populate as many e-mails as desired in the "PARTS DESK EMAIL FIELD" 		
Parts – Campaign Parts Management (CPM) Procedure	As applicable; <u>www.HyundaiDealer.com</u> > Parts > Documents Library > Campaign Parts Management		
Service Rental Car (SRC) Program	<pre>www.HyundaiDealer.com > Service tab > SRC Fleet Mgmt Software</pre>		
Technical Service Bulletin (TSB)	www.HyundaiDealer.com > Service tab > Hyundai Tech Info		
Uncompleted Campaign VIN Listing	A listing of vehicles is located on WEBDCS> SERVICE tab> select UNCOMPLETED CAMPAIGN VIN LISTING – Dealer Stock (New, SRC, CPO, etc.) and Retailed.		
Recall Campaign Website	www.hyundaiusa.com/recall		
NHTSAWebsite	www.safercar.gov		



Appendix

Updates To Previous Versions of this Document	<u>Date</u>
 Update: Added verbiage to include "Contact Warranty Prior Approval (PA)" if DTC Code P132600 is set and Campaign T3G is not applicable. Updated template. 	01/17/19
 16-18MY Sonata, 16-18MY Santa Fe Sport, 14-15MY and 18MY Tucson vehicles added to Service Campaign 953. Updated TSB#19-01-002 supersedes TSB#18-01-027-2. 	01/10/19
 2011-2014 Sonata and 2013-2014 Santa Fe Sport only: In the event DTC code P132600 is set after Service Campaign 953 is performed: Down vehicle and provide SRC. 	12/17/18
 Update: 2015 Santa Fe Sport vehicles repair process outlined for each model and model year in the event DTC code P132600 is set after Service Campaign 953 is performed 	12/12/18
 2011-2014 Sonata and 2013- 2014 Santa Fe Sport vehicles added to Service Campaign 953. Repair process outlined for each model and model year in the event DTC code P132600 is set after Service Campaign 953 is performed 	12/07/18
 2015 Santa Fe Sport vehicles added to Service Campaign 953. 	11/08/18
 2015 Sonata only: In the event DTC code P132600 is set after Service Campaign 953 is performed, refer to TSB #18-01-032 (campaign T3G) for the service procedure and Special Service Tools information. 	10/17/18
2015 Sonata only: Initial communication to dealers.	08/09/18