HYUNDAI Technical Service Bulletin

GROUP	NUMBER
RECALL	21-01-055H-2
DATE	MODEL(S)
July, 2021	Santa Fe (TMa) Sonata (DN8a)

SUBJECT:

HIGH PRESSURE FUEL PIPE INSPECTION AND REPLACEMENT (RECALL 207)

This TSB supersedes TSB# 21-01-055H-1 to revise the high-pressure fuel pump flange nut torque specification listed in pages 5, 8, and 9.

***** IMPORTANT

As required by federal law, dealer must not deliver new vehicle 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.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information screen (VIS)" WEBDCS to identify open Campaigns.

Description: On certain 2021-2022MY Santa Fe (TMa) and Sonata (DN8a) vehicles equipped with 2.5T GDI engines, the fuel pipe connecting the high-pressure fuel pump to the fuel rail may have been installed with insufficient torque during assembly. Additionally, certain fuel pipes could have been produced outside of Hyundai's specification for concentricity. A fuel pipe that has been installed with insufficient torque or improper concentricity could allow fuel to leak at its connections increasing the risk of an engine compartment fire. Follow the procedure outlined in this TSB to inspect, tighten and/or replace, the fuel pipe as needed.

Applicable Vehicles:

Certain 2021-2022MY Santa Fe (TMa) vehicles equipped with 2.5T GDI engines. Certain 2021-2022MY Sonata (DN8a) vehicles equipped with 2.5T GDI engines.

PART NAME	PART NUMBER			NOTES	
PARTNAME	OLD	NEW	FIGURE	NOTES	
High Pressure Fuel Pipe	35305-2S000	35305- 2S200QQH		Replace if it does not pass LOT code inspection, or if a leak is found after	

Parts Information:

		1 box contains 100 test paper strips	
Test Oil Paper	SP045-07305		The oil test paper is the same as the one currently in use for active HMA Recalls 180 and 189. Your dealership may already have some on-hand. Please confirm before ordering additional.
			Additional oil test paper can be ordered through BOSCH at 1-866-539-4248.

Special Service Tool Information:

DESCTRIPTION	PART NUMBER	FIGURE	NOTE
3/8" Drive 12-Point Metric 19 mm Deep Flank Drive® Flare Nut Crowfoot Wrench - ANM19(or equivalent)	09314-3Q100	5000	For removal and installation of the high pressure fuel pipe nut.

NOTE: This is an essential tool that was previously shipped to all active dealers. Additional units can be ordered through Bosch at 1-866-539-4248.

Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
Santa Fe	11DA24R0	HIGH PRESSURE PIPE LOT INSPECTION (OK) + LEAK INSPECTION (OK)	0.4	35305- 2S200QQH	B11	ZZ7
Sonata (DN8a)	11DA24R1	LOT INSPECTION (NG) + HIGH PRESSURE PIPE REPLACEMENT	0.9	35305- 2S200QQH	A31	ZZ4
	11DA24R2	LOT INSPECTION (OK) + LEAK INSPECTION (NG) + HIGH PRESSURE PIPE REPLACEMENT	1.3	35305- 2S200QQH	B11	ZZ7

NOTE 1: Submit Claim on Campaign Claim Entry Screen.

NOTE 2: If a part that is not covered by this recall is in need of replacement while performing this recall, and the affected part is still under warranty, please submit a separate claim using the same repair order. If the affected part is out of warranty, submit a prior approval request for goodwill consideration prior to performing the work.

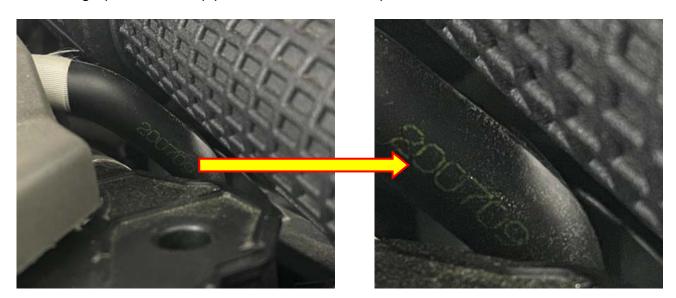
NOTE 3: One (1) oil test paper strip will be reimbursed via sublet for labor op codes 11DA24R0 & 11DA24R1. Two (2) oil test paper strips will be reimbursed via sublet for labor op code 11DA24R2.

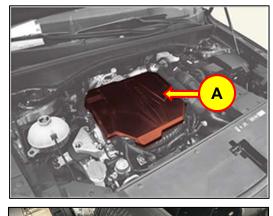
Inspection Procedure:

1. Open the hood and remove the engine top cover (A).

2. Locate the high pressure fuel pipe and pipe insulator (as shown by the red arrow).

3. On the high-pressure fuel pipe insulator, locate the printed LOT number.



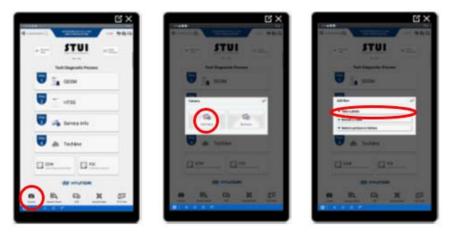




- 4. Review the LOT number inspection criteria below for the high pressure fuel pipe.
 - ▶ If the LOT number is 210111, it is <u>NG</u>.
 - Take a picture of the LOT number and replace the high-pressure fuel pipe with the Service Procedure on page 8.
 - If the LOT number is not 210111, it is <u>OK</u>.
 - \circ Take a picture of the LOT number proceed to step 5 in the Inspection Procedure.

Using STUI, take clear picture(s) of the Lot Number.

Please include the VIN or copy of the RO with the VIN in the STUI picture of the fuel pipe.

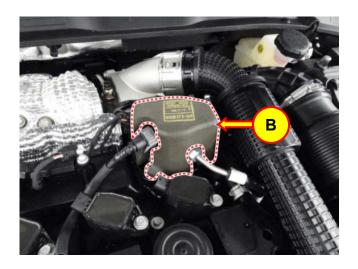


NOTICE

For a guide on how to capture pictures and videos using STUI, refer to the Hyundai Tech Info website and select:

Diagnostic Tools > GDSM and STUI Tips > Tip #622 "Capturing Video and Photos for Techline and PA using the STUI Camera"

5. Remove the high-pressure fuel pump foam cover (B).



6. Remove the air intake hose (C) and the air cleaner assembly (D).

NOTICE

Tightening Torque:

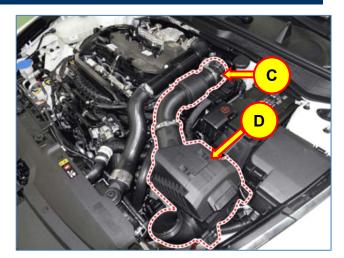
- Intake hose clamp:
 - o 2.9 lb-ft (3.9 Nm)
- Air cleaner mounting bolt:
 6.5 lb-ft (8.8 Nm)
- Using a torque wrench and SST 09314-3Q100, verify that the high-pressure fuel pump flange nut (E) is torqued to specification.



 Using a torque wrench and SST 09314-3Q100, verify that the high-pressure fuel rail flange nut (F) is torqued to specification.



Tightening Torque: • 25 lb-ft (34 Nm)







9. Reinstall the air intake hose (C) and the air cleaner assembly (D).

NOTICE

Tightening Torque:

- Intake hose clamp:
 - o 2.9 lb-ft (3.9 Nm)
- Air cleaner mounting bolt: o 6.5 lb-ft (8.8 Nm)
- 10. Turn the ignition switch ON and start the engine. Step on the accelerator pedal until engine reaches 5000 RPM.

Repeat 2-3 times, building fuel pressure in the high pressure fuel pipe to expose leaks.

11. Turn the ignition switch OFF and disconnect the RCV hose (G) to begin air cleaner removal.

Removing the air cleaner is necessary to properly inspect for leaks using the oil test paper.

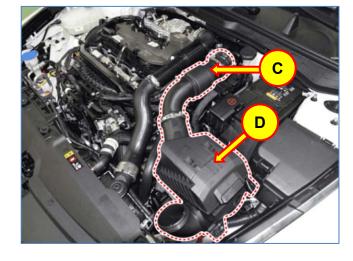
12. Disconnect the air intake hose (C).

If extra working room is needed, remove the air cleaner assembly (D).

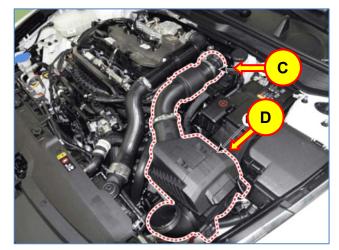
NOTICE

Tightening Torque:

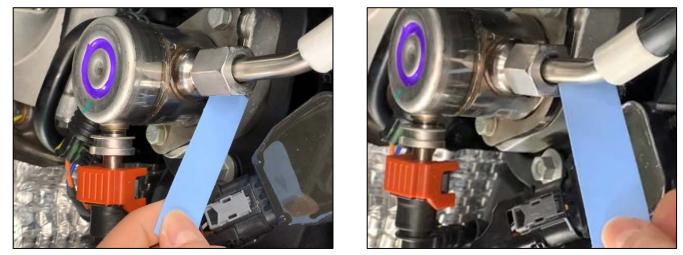
- Intake hose clamp:
 - o 2.9 lb-ft (3.9 Nm)
- Air cleaner mounting bolt: o 6.5 lb-ft (8.8 Nm)





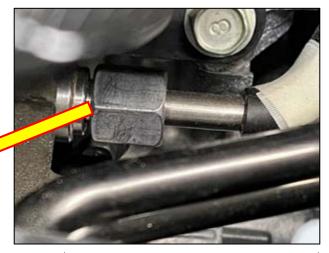


13. Inspect before and after the high pressure fuel pump flange for leakage using an oil test paper.

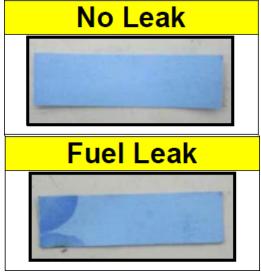


14. Inspect before and after the high pressure fuel rail flange for leakage. Use the other side of the oil test paper if necessary.





15. If no leak is found, reinstall parts in reverse order of disassembly. Removal and replacement are not necessary.



16. If fuel leak is found, replace high pressure fuel pipe with the following service procedure below.



After pipe inspection, if there is a sufficiently dry area on the previously used test oil paper, use it again for reinspection. Otherwise, use a new test oil paper strip.

Fuel Pipe Replacement Service Procedure:

1. Deplete the residual fuel pressure in the fuel lines following the procedure outlined in the Shop Manual section.

Refer to the shop manual section for complete service procedure: Engine Control / Fuel System > Fuel Delivery System > Release Residual Pressure in Fuel Line

NOTICE	
	e connection joints with a shop towel to capture any dripping fuel.

2. Turn the ignition switch OFF and disconnect the battery (-) terminal.



Be sure to record the radio presets prior to battery disconnection.

3. If not already removed, disconnect the air intake hose (C).

If extra working room is needed, remove the air cleaner assembly (D).

NOTICE

Tightening Torque:

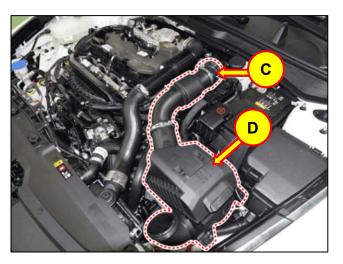
- Intake hose clamp:
 - 2.9 lb-ft (3.9 Nm)
- Air cleaner mounting bolt: o 6.5 lb-ft (8.8 Nm)
- 4. Remove the high pressure pipe bracket bolts (H) and fuel pump flange nut (E).

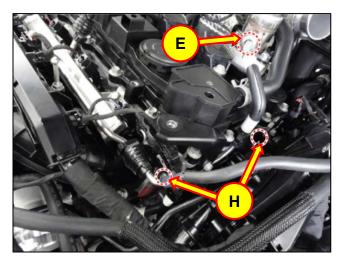
Remove high pressure fuel pump flange nut with SST 09314-3Q100.

NOTICE

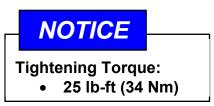
Tightening Torque:

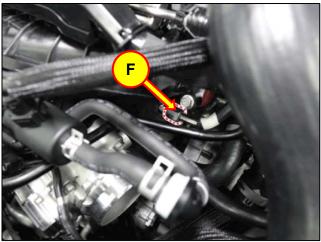
- High pressure pipe bracket bolts:
 7.95 lb-ft (10.8 Nm)
- High pressure pump flange nut:
 25 lb-ft (34 Nm)





5. Remove the high pressure fuel rail flange nut (F) with SST 09314-3Q100.





- 6. Remove the damaged high pressure fuel pipe.
- 7. Install the new pipe and reinstall the removed parts in reverse order of removal and reconnect the negative battery terminal.

NOTICE

Reprogram the radio presets from Service Procedure Step 2.

8. After installing the new high pressure fuel pipe, proceed to Inspection Procedure steps 10-16 to verify that the leak issue has been resolved.

NOTICE

After pipe inspection, if there is a sufficiently dry area on the previously used test oil paper, use it again for reinspection. Otherwise, use a new test oil paper strip.

9. The service procedure is now complete.