



HYUNDAI

Technical Service Bulletin

GROUP ENGINE MECHANICAL	NUMBER 23-EM-009H
DATE DECEMBER 2023	MODEL(S) SONATA HYBRID (DN8 HEV)

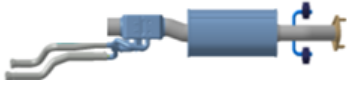
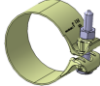



SUBJECT: EHR'S COOLANT LEAK REPAIR

Description: Certain 2020-2023MY Sonata Hybrid (DN8 HEV) vehicles may exhibit coolant leakage, engine overheating, and white smoke from the exhaust due to an internal leak at the Exhaust Heat Recovery System (EHR'S) portion of the center muffler assembly.

Follow the procedure outlined in this bulletin to repair this condition after confirming EHR'S is leaking internally.



Applicable Vehicles: 2020-2023MY Sonata Hybrid (DN8 HEV) vehicles produced from 01/29/2020 to 11/14/2023.

Parts Information:

Model	Part Name	Part Number	Figure	Remarks
Sonata Hybrid (DN8 HEV)	Center Muffler	28650-L5501QQH		
	Clamp	28640-L5000QQH		
	Front Exhaust Pipe Gasket	28751-3S100		Replace if corrosion or crack is found.
	Center Muffler Gasket	28751-3S000		Replace if corrosion or crack is found.
	Pink Coolant	00232-19098		1 Gallon may be used for up to 2 vehicles.

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

Required Tools & Equipment:

Tool Name	Figure	Remarks
Hacksaw		Use Hacksaw, Chain Pipe Cutter, or commercially available tube cutter
Chain Pipe Cutter		

Warranty Information:

Model	Op. Code	Operation	Op. Time	Casual Part	Nature Code	Cause Code
Sonata Hybrid (DN8 HEV)	30D098R0	Center Muffler Partial Repair (Front and Center Gasket Replacement)	1.1 M/H	28600-L5210	L31	ZZ1
	30D098R1	Center Muffler Partial Repair (Only Front Gasket Replacement)				
	30D098R2	Center Muffer Partial Repair (Only Center Gasket Replacement)				

NOTE 1: Submit claim on Claim Entry Screen as “Campaign” type.

NOTE 2: If a part is found in need of replacement while performing this campaign and the affected part is still under warranty, 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: This TSB includes Repair validation photos. Op times include VIN, Mileage and Repair validation photos as outlined in the Digital Documentation Policy.

NOTE 4: The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the part is not returned.**

NOTE 5: \$15.00 will be reimbursed in sublet for use of Pink Coolant.

Service Procedure:

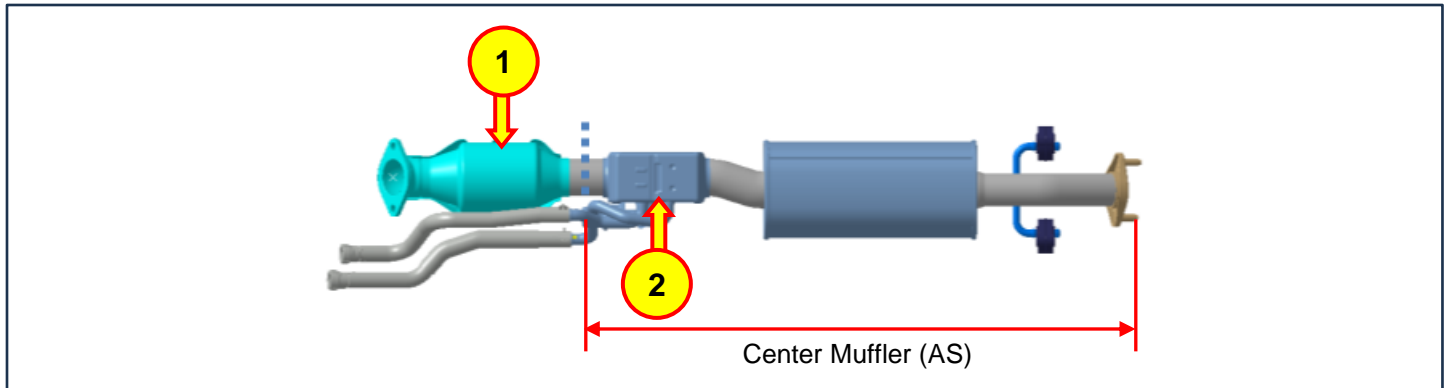
STUI



This TSB includes Repair validation photos. Refer to the latest Digital Documentation Policy for requirements.

Service Procedure Summary:

Remove the center muffler. After cutting the pipe, reuse the catalyst (1), replace the center muffler with one that has an improved EHRS (2). Tighten the clamp and install it on the vehicle.

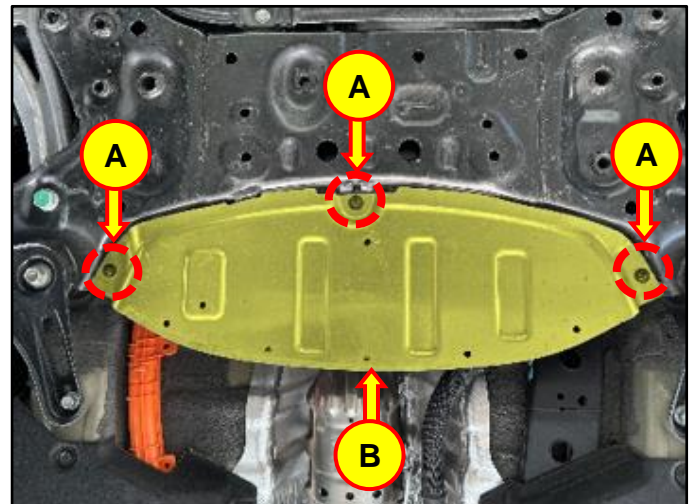


EHRS Coolant Leak Repair

1. Raise the vehicle on a lift.
2. Loosen the three (3) bolts (A) and remove the front muffler heat protector (B).

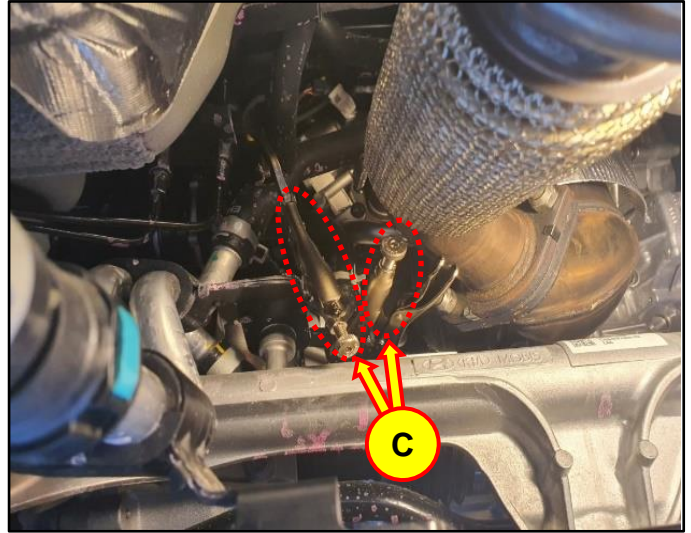
Tightening Torque:

lb-ft	8.0
lb-in	95
N.m	10.8



i Information

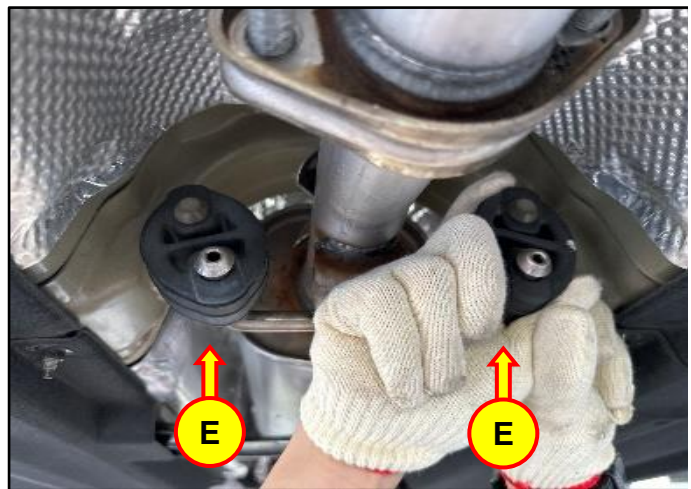
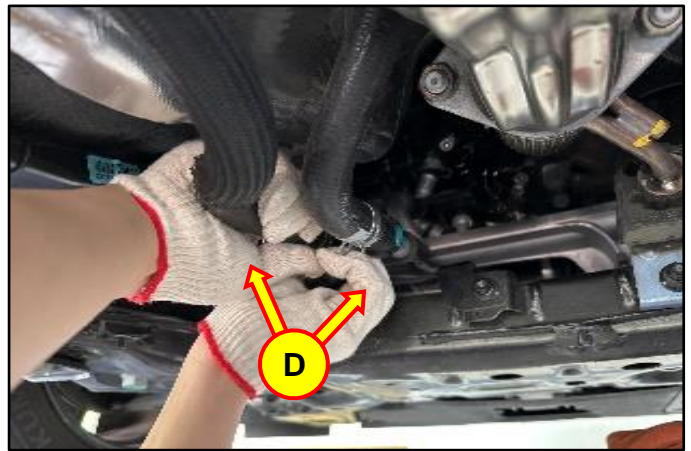
To prevent excess coolant loss, pinch off the ends of the hoses with pliers (C).



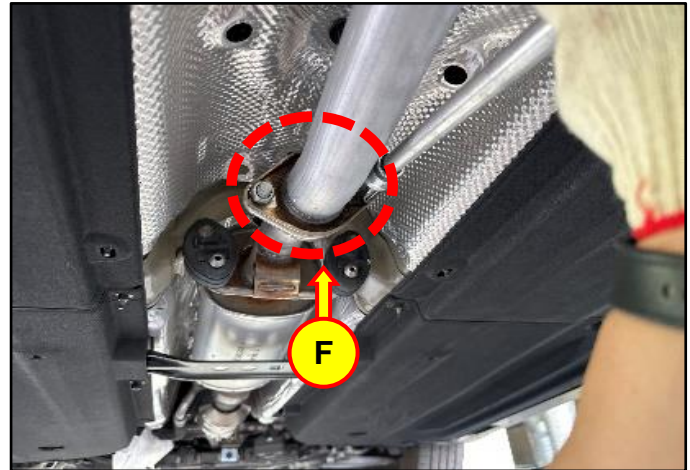
3. Remove the two (2) quick connectors (D) and the two (2) hangers (E) from the center muffler and exhaust heat recovery system (EHRS).

⚠ CAUTION

Allow the exhaust to cool down before performing any work.



- Remove the four (4) bolts for the front and rear center muffler. (F).



- Remove the center muffler & exhaust heat recovery system (EHRS) (G).

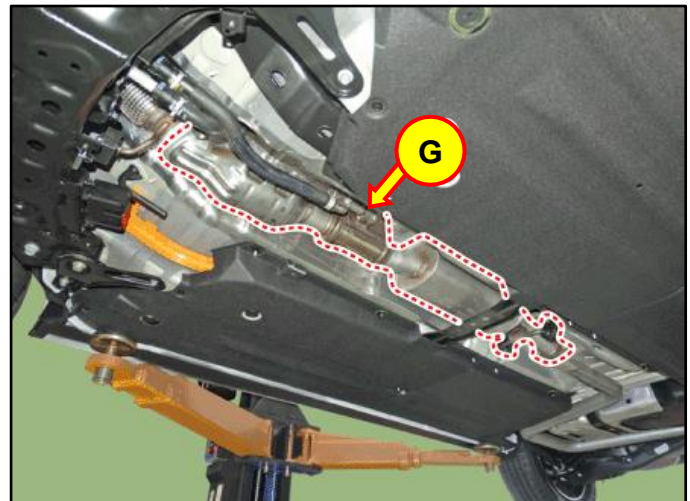
Tightening Torque:

Center Muffler & Catalyst (M10):

lb-ft	18
N.m	25

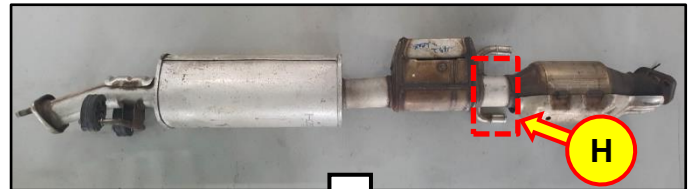
Center Muffler & Catalyst (M12):

lb-ft	36
N.m	49



- Before cutting the center muffler, mark the cutting area (H).

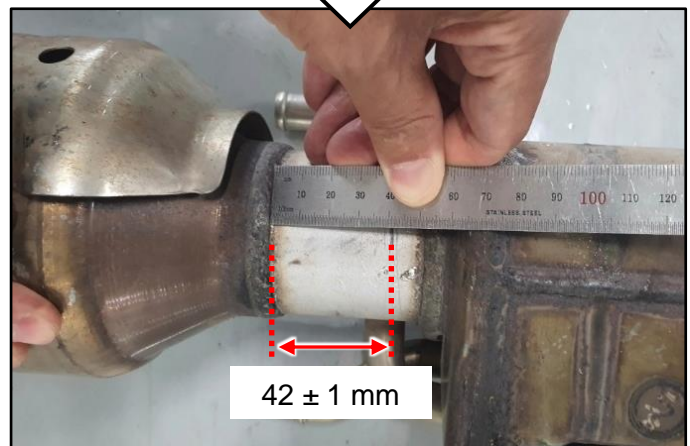
- Cutting area: **42 ± 1 mm** from the end of the weld, as shown



i Information

Before cutting the pipe, be sure to measure and mark all the way around the pipe to ensure a vertical cut.

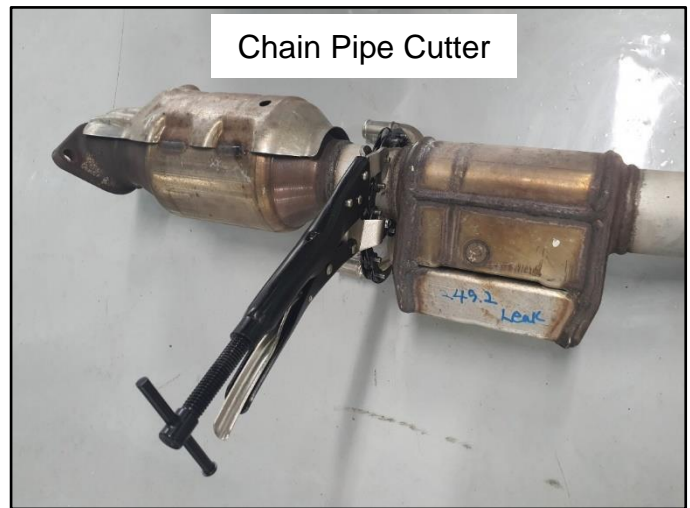
Use a hacksaw, chain pipe cutter, or a commercially available pipe cutter that is in good shape and can cut at a right angle cleanly and accurately.



7. Use a hacksaw, chain pipe cutter, or a commercially available pipe cutter to cut the pipe where marked.

⚠ CAUTION

Be sure to hold the pipe firmly to prevent it from shaking while cutting.



8. Remove any foreign substances, burrs, welding spatter, rust, and rough edges with a file or similar tool. Be sure to remove any debris that may have fallen into the catalyst.

***i* Information**

This will help ensure smooth surfaces to prevent leakage and abnormal sounds when assembled with the new parts.



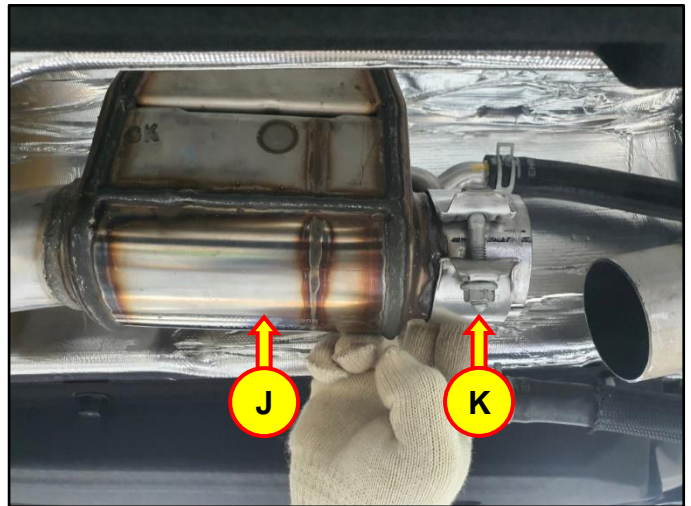
9. Place the cut catalyst (I) on the vehicle.



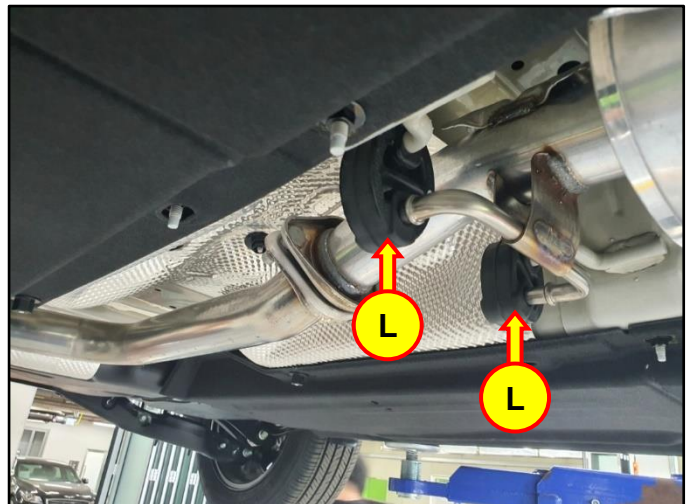
10. Place the supplied center muffler (J) and clamp (K) on the vehicle.

NOTICE

Clamps cannot be reused once previously tightened. Airtightness will be compromised.



11. Install the two (2) hangers (L) to the body and temporarily fasten the nuts to the flange.



12. Combine the catalyst (M) and center muffler (N) and then tighten the clamp (O) temporarily.

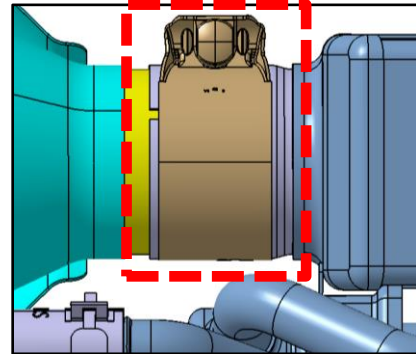
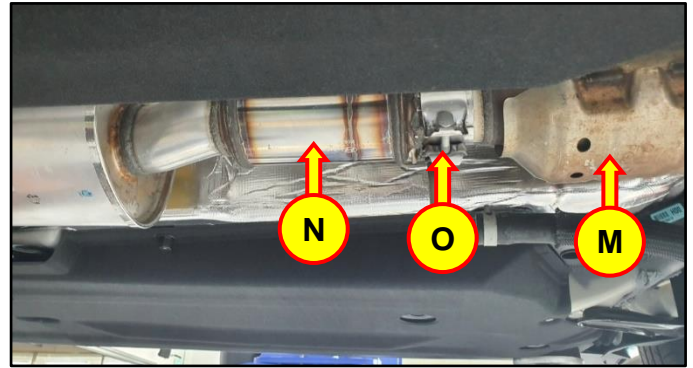
Fully fasten the nuts to the flange.

NOTICE

Replace the exhaust gaskets with new ones if corrosion or cracks are found.

i Information

Tighten the clamp to the end of the center muffler.



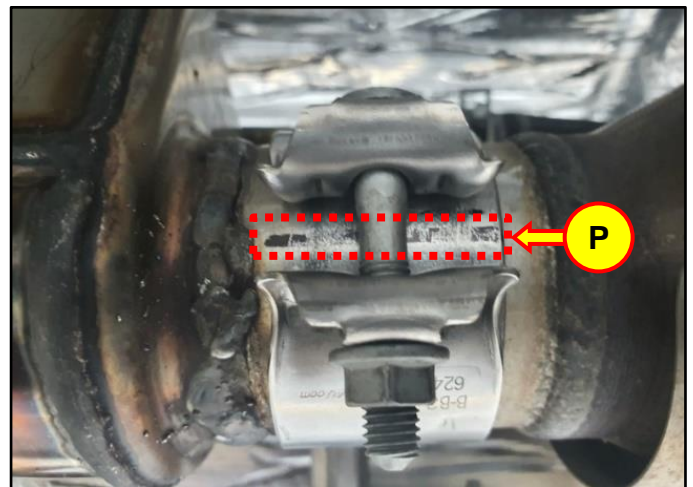
13. Ensure that the center muffler is mounted horizontally, then fully tighten the clamp.

Tightening Torque:

lb-ft	20
N.m	28



Tighten the clamp so that the line (P) is centered in the clamp as shown.



14.

STUI



Using STUI, take a photo of the new EHRS and clamp installed on the vehicle, with the last 6 digits of the VIN and the date of repair on a piece of paper.

Upload the photo to STUI.



15. Install all remaining parts in reverse order of removal.

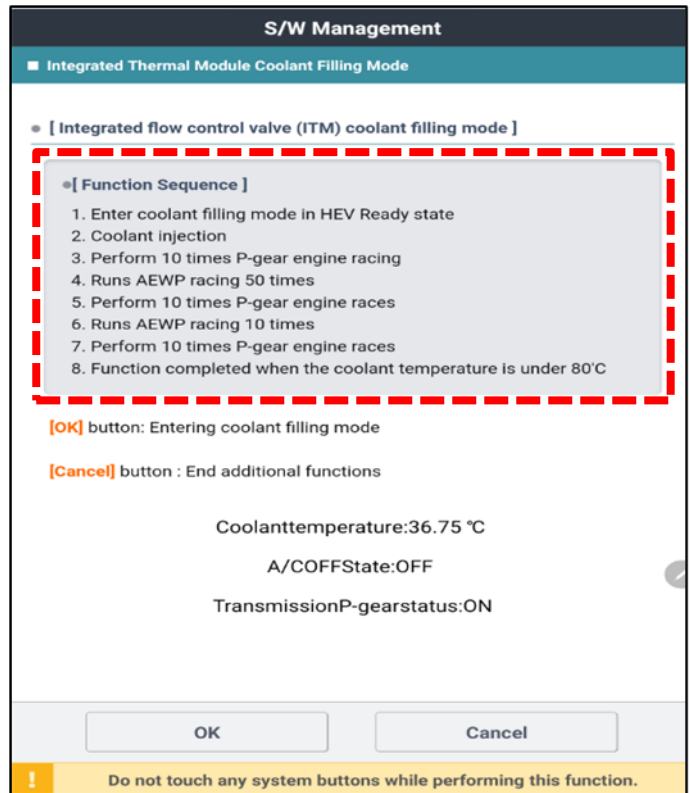
16. Fill the radiator with about 1 L of coolant.

Refer to Shop Manual:

- **Engine Mechanical > Cooling System > Coolant > Repair Procedures**

NOTICE

Be sure to follow the **NEW** ITM Coolant Filling Mode procedure. Failure to do so may result in air pockets and overheating of engine. Refer to TSB 23-HC-002H.



17. Start the engine and check for leaks.

18. Service procedure is now completed.