HYUNDAI **Technical Service Bulletin**	GROUP **CAMPAIGN**	NUMBER **26-01-081H**
	DATE **OCTOBER 2026**	MODEL(S) **SEE BELOW**

SUBJECT: ECM SOFTWARE UPDATE FOR EGR LOGIC IMPROVEMENT (SERVICE CAMPAIGN 9C7)

This TSB supersedes 23-EE-002H and 23-EE-007H to revise the service procedure with the latest GDS events and the Op. time within the Warranty Information section.

★ IMPORTANT

Dealers must perform this service campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

Access the “Vehicle Information” screen via WebDCS to identify open campaigns.

Description: Certain Santa Fe Hybrid (TM HEV), Santa Fe Plug-in Hybrid (TM PHEV), Tucson Hybrid (NX4 HEV), and Tucson Plug-in Hybrid (NX4 PHEV) vehicles may experience intake air line freezing and Exhaust Gas Recirculation (EGR) valve corrosion due to excessive condensation accumulating within the EGR system. This condition can lead to drivability concerns related to the following DTCs:

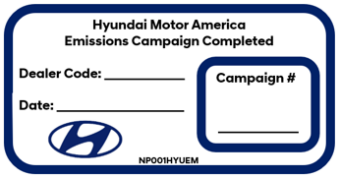
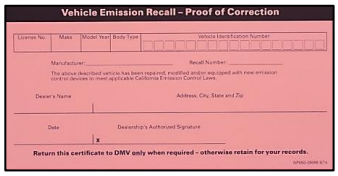
- **P040400:** (Exhaust Gas Recirculation Control Circuit Range)
- **P049D00:** (EGR 'A' Control Position Exceeded Learning Limit)
- **P047100:** (Exhaust Pressure Sensor 'A' Circuit Range/Performance)
- **P012800:** Coolant Thermostat (Coolant Temperature below Thermostat Regulation Temperature)
- **P262B00:** (Control Module Power Off Timer Performance)
- **P050C00:** Cold Start Engine Coolant Temperature Performance
- **P1DFD00:** (EVAP System Purge Pump Target Speed)
- **P2DFD00:** (EVAP System Purge Pump Performance)
- **P112000:** (Inlet Metering Valve – Malfunction)
- **P033500:** (Crankshaft Position Sensor A)

The bulletin below provides instructions to perform a software update for the Engine Control Module (ECM).

Applicable Vehicles (Certain):

Model Year	Model	Engine	Production Dates
2021 – 2022	Santa Fe Hybrid (TM HEV)	1.6 T-GDI	12/18/2020 – 09/28/2022
2022 – 2023	Santa Fe Plug-in Hybrid (TM PHEV)		05/13/2021 – 09/14/2023
2023	Santa Fe Hybrid (TMA HEV)		10/10/2022 – 12/29/2023
2022 – 2024	Tucson Hybrid (NX4 HEV)		01/20/2021 – 07/08/2024
2022 – 2024	Tucson Plug-In Hybrid (NX4 PHEV)		06/30/2021 – 07/05/2024

Parts Information:

Model	Part Name	Part Number	Figure	Remarks
Santa Fe Hybrid (TM HEV) & Santa Fe Hybrid (TMA HEV) & Santa Fe Plug-in Hybrid (TM PHEV) & Tucson &Hybrid (NX4 HEV) & Tucson Plug-In Hybrid (NX4 PHEV)	Hyundai Emissions Label	NP001-HYUEM		Apply to all vehicles regardless of state.
	Vehicle Emission Recall – Proof of Correction Card	NP050-09006		Order only for states: CA, CO, CT, DE, ME, MD, MA, NJ, NY, OR, PA, RI, VT, WA

SST Information:

Tool Name	Tool Number	Figure	Ordering Information
VCI 3	G0VHNNN06		Website: https://hyundaiessentialtools.com/ Email: Hyundaitools@snapon.com Phone: 1-855-763-9199 Hours: 7 AM – 7 PM CST
VCI 2	G1XDDMN001		

NOTE: VCI 2 can **NO** longer be ordered but can be used for the updates in this TSB.

GDS Information:

Model	System	Event Number*	Description
Tucson Hybrid (NX4 HEV)	ENGINE	1389	NX4 (P)HEV GAMMA 1.6 T-GDI LP EGR IMPROVEMENT
Tucson Plug-In Hybrid (NX4 PHEV)			
Santa Fe Hybrid (TM HEV)		1390	TM (P)HEV GAMMA 1.6 T-GDI LP EGR IMPROVEMENT
Santa Fe Hybrid (TMA HEV)			
Santa Fe Plug-in Hybrid (TM PHEV)			

(*or use a later available event listed in the GDS **ENGINE** Update screen if one is available.)

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
Tucson Hybrid (NX4 HEV)	60D051R0	ECM Software Update	0.4 M/H	39131-2MND0	I11	ZZ3
Tucson Plug-in Hybrid (NX4 PHEV)						
Santa Fe Plug-in Hybrid (TM PHEV)				39131-2MTC1		
Santa Fe Hybrid (TM HEV)						
Santa Fe Hybrid (TMA HEV)	60D051R1			39131-2MTL0		

NOTE 1: Submit a campaign claim on the "Claim Entry/Edit/Submit" screen on WebDCS and attach all required Digital Documentation per TSB to the claim.
NOTE 2: If any part(s) not subject to this TSB are found in need of replacement while performing the repair procedure, and the affected part(s) are still under warranty, the dealer may submit a separate claim using the same repair order. If the part(s) not subject to this TSB are out of warranty coverage, the dealer has the option to submit a PA Request for goodwill consideration on a case-by-case basis.
NOTE 3: This TSB includes repair validation photos. Op times include VIN, mileage, and photo capture of the ECU Update “Success” result screen as outlined in the Digital Documentation Policy.

Service Procedure:

DIGITAL DOCUMENTATION

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

NOTICE

You must initially perform the GDS ECU update in Auto Mode.

- If the ECU update starts but then fails in Auto Mode, perform the update in Manual Mode to recover.

NOTICE

"Ensure the vehicle's battery charge is **≥12.3 Volts** and the tablet's battery charge is **above 30%** before performing a software update, to avoid update failure. Hyundai recommends connecting a battery maintainer/charger when performing **all ECU updates**."

Information

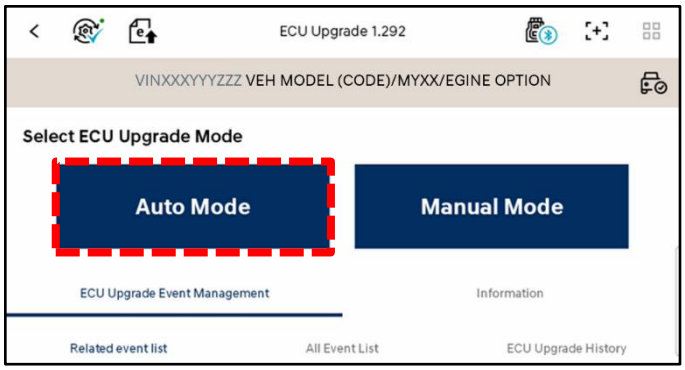
- Turn **OFF** all lamps (do **NOT** leave head lamp switch in auto mode) and all accessories.
- Perform update with the ignition switch in the **ON** position.
- Do **NOT** disconnect any cables connected to the vehicle or scan tool during the update.
- Do **NOT** place in **Ready** mode during the update.
- Do **NOT** turn **OFF** the ignition switch during the update.

ECU Update Procedure

1. Perform the ECU update in **Auto Mode**.

Information

Refer to **TSB # 25-GI-011H**, "**ECU Update Procedure for Tablet-Based GDS-Smart**", for additional information.



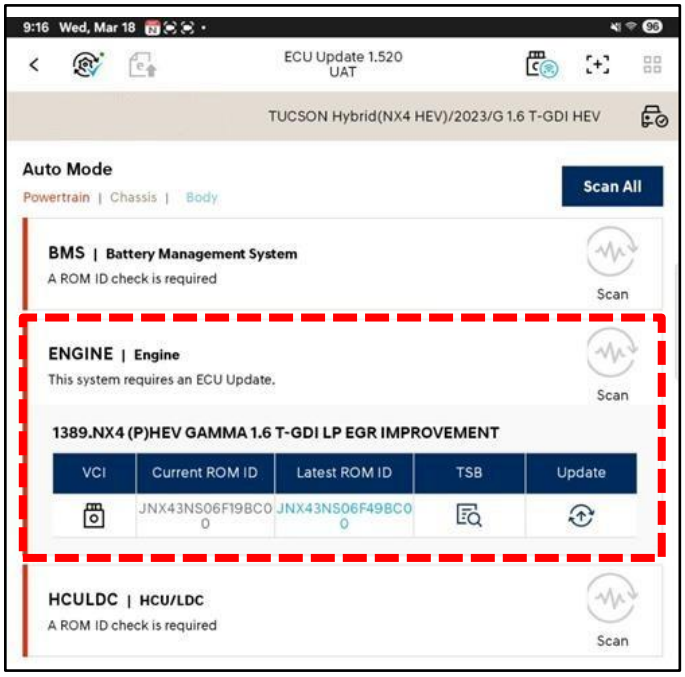
2. Verify the ROM ID by selecting the **ENGINE** system to scan the vehicle's current ROM ID.

NOTICE

Check the current ROM ID version and compare it to the **ROM ID Information** table before attempting to perform the software update.

NOTICE

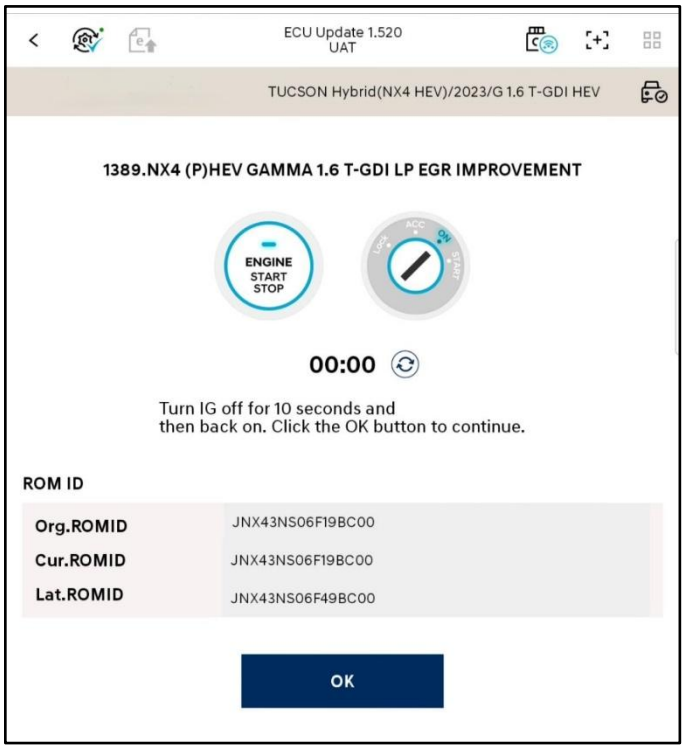
If the update fails, remove the power connector from the in-cabin fuse box for at least **5 seconds**. Alternatively, disconnect the negative (–) **12V** battery terminal and wait at least **5 seconds**. Reassemble and retry the update.



3. After the ECU update process shows 100% complete, follow the prompts on the screen to cycle the ignition **OFF** for at least **10 seconds** to reset the control unit (certain models may take up to **30 seconds**).

Information

Use the **Refresh** button to reset the timer.

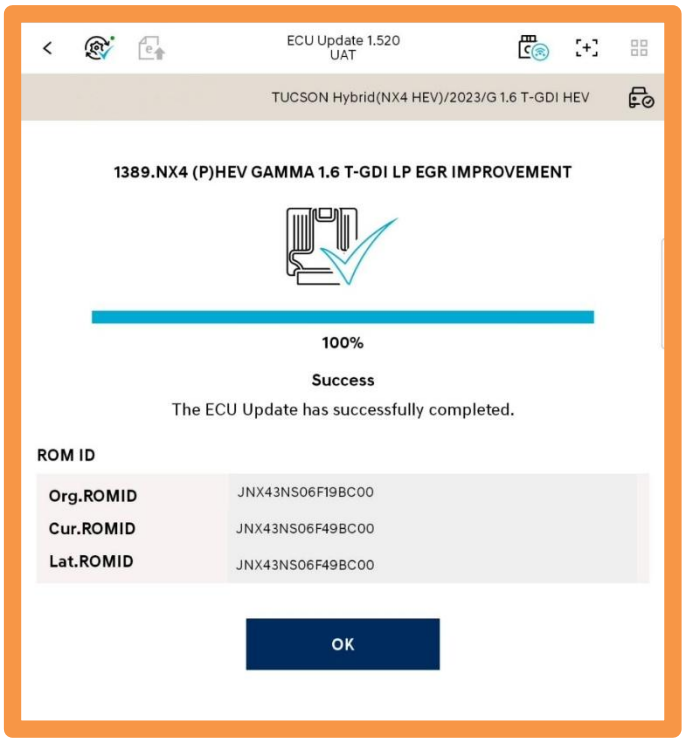


4. ***DIGITAL DOCUMENTATION***

Using the tablet or GDS screen capture function, take a screenshot of the ECU Update "Success" result screen.

Upload the photo to STUI.

NOTE: The VIN/Date/Time/Mileage photo imprint is **NOT** required for GDS screenshots.



5. Perform an **All Systems Fault Code** search and erase DTC history that had incidentally occurred from the ECU update.



6. Place in **Ready** mode to confirm proper operation of the vehicle.

7. Proceed to **Emissions Label Application (for All Vehicles)** on **page 10**.

NOTICE

If the ECU update fails in Auto Mode, perform the update in Manual Mode using the password(s) below.

Manual Mode Password:

Event	Menu	Password
1389	NX4 (P)HEV T-GDI ECU 39131-2MND0	1084
	NX4 (P)HEV T-GDI ECU 39131-2MNH0	2528
	NX4 (P)HEV T-GDI ECU 39131-2MNC1	3663
	NX4 (P)HEV T-GDI ECU 39131-2MNH1	5512
	NX4 (P)HEV T-GDI ECU 39131-2MNC2	7526
	NX4 (P)HEV T-GDI ECU 39131-2MNH2	8667
1390	TM HEV T-GDI ECU 39131-2MTC0	0746
	TM HEV T-GDI ECU 39131-2MTC1	3449
	TMa HEV T-GDI ECU 39131-2MTL0	7424
	TM PHEV T-GDI ECU 39131-2MTF0	8098
	TM PHEV T-GDI ECU 39131-2MTF1	9169

ROM ID Information:

Model	Transmission	Event	System	ECU Part Number	ROM ID	
					Current	Latest
Tucson Hybrid (NX4 HEV) & Tucson Plug-in Hybrid (NX4 PHEV)	6AT4	1389	ECM	39131-2MND0	JNX41NS06F00LF50	JNX41NS06F69BF00
					JNX41NS06F196F00	
					JNX41NS06F29BF00	
					JNX41NS06F39BF00	
					JNX41NS06F49BF00	
					JNX41NS06F59BF00	
				39131-2MNH0	QNX41NS06F091F00	QNX41NS06F89BF00
					QNX41NS06F193F00	
					QNX41NS06F296F00	
					QNX41NS06F396F00	
					QNX41NS06F49BF00	
					QNX41NS06F59BF00	
					QNX41NS06F69BF00	
					QNX41NS06F79BF00	
	6AT2/4			39131-2MNC1	JNX43NS06F09BC00	JNX43NS06F49BC00
					JNX43NS06F19BC00	
					JNX43NS06F29BC00	
					JNX43NS06F39BC00	
	6AT4			39131-2MNH1	QNX43NS06F09BF00	QNX43NS06F49BF00
					QNX43NS06F19BF00	
					QNX43NS06F29BF00	
					QNX43NS06F39BF00	
	6AT2/4			39131-2MNC2	JNX44NS06F09GC00	JNX44NS06F49LC00
					JNX44NS06F19GC00	
					JNX44NS06F29LC00	
					JNX44NS06F39LC00	
	6AT4			39131-2MNH2	QNX44NS06F09GF00	QNX44NS06F49LF00
					QNX44NS06F19GF00	
					QNX44NS06F29LF00	
					QNX44NS06F39LF00	

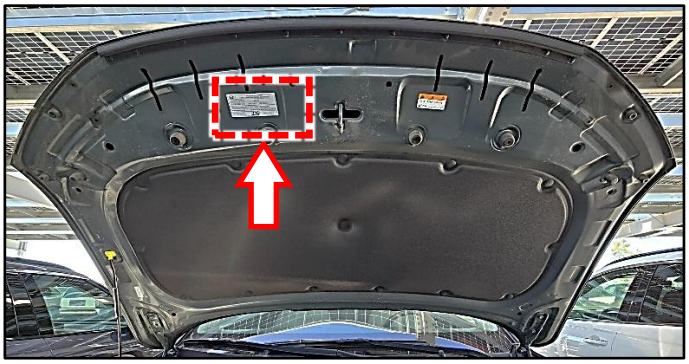
ROM ID Information (Continued):

Model	Model Year	Event	System	ECU Part Number	ROM ID	
					Current	Latest
Santa Fe Hybrid (TM HEV)	2021	1390	ECM	39131-2MTC0	JTM-1NS06F00CF40	JTM-1NS06F58BF00
					JTM-1NS06F183F00	
					JTM-1NS06F288F00	
					JTM-1NS06F388F00	
					JTM-1NS06F48BF00	
	2022			39131-2MTC1	JTM-2NS06F080F00	JTM-2NS06F68BF00
					JTM-2NS06F180F00	
					JTM-2NS06F283F00	
					JTM-2NS06F388F00	
					JTM-2NS06F488F00	
					JTM-2NS06F58BF00	
Santa Fe Hybrid (TMA HEV)	2023			39131-2MTL0	JTMA3NS06F086F00	JTMA3NS06F48BF00
					JTMA3NS06FT87F00	
					JTMA3NS06F087F00	
					JTMA3NS06F188F00	
					JTMA3NS06F288F00	
					JTMA3NS06F38BF00	
Santa Fe Plug-in Hybrid (TM HEV)	2022			39131-2MTF0	QTM-2NS06F080F00	QTM-2NS06F78BF00
					QTM-2NS06F181F00	
					QTM-2NS06F283F00	
					QTM-2NS06F388F00	
					QTM-2NS06F488F00	
					QTM-2NS06F588F00	
					QTM-2NS06F68BF00	
	2023			39131-2MTF1	QTM-3NS06F084F00	QTM-3NS06F58BF00
					QTM-3NS06F086F00	
					QTM-3NS06F087F00	
					QTM-3NS06F188F00	
					QTM-3NS06F288F00	
					QTM-3NS06F388F00	
					QTM-3NS06F48BF00	

Emissions Label Application (for All Vehicles)

1. Fill in the Dealer Code and Date on the emissions label, and apply adjacent to the existing label, on the underside of the hood, as shown.

   Be sure to clean the mounting surface to ensure proper label adhesion.



2. ***DIGITAL DOCUMENTATION***

   Using the STUI camera function, take a photo of the emissions label attached to the vehicle.

   Upload the photo to STUI.

   NOTE: If the STUI camera function is **NOT** used, write the last 6 digits of the VIN and date of repair on a piece of paper to include in the photo.



3. Proceed to the next section and complete the **Vehicle Emission Recall - Proof of Correction Card** for the states listed.

   If **NOT** applicable to your state, the repair process is complete.

Vehicle Emission Recall – Proof of Correction Card (for Vehicles Registered in Certain States)

For vehicles registered in California, Colorado, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington:

VEHICLE EMISSION RECALL - PROOF OF CORRECTION CARD

A Vehicle Emission Recall - Proof of Correction card must be filled out for all vehicles registered in California, Colorado, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington. Residents of these states, who own an affected vehicle, will be required to possess a Vehicle Emission Recall - Proof of Correction card as evidence of voluntary service campaign completion, when they apply for vehicle registration renewal.

WHAT TO DO WITH THE CARD:

The Vehicle Emission Recall - Proof of Correction card must be completed by the Dealership's Service Manager using a permanent ink pen. A fine point pen is recommended. When filling in the information, copy the information directly from the vehicle, not from the repair order.
ALL INFORMATION MUST BE PRINTED AND NEAT.

The copy of the card shown below indicates the areas to be filled in. Each area must be filled in.

A completed Vehicle Emission Recall - Proof of Correction card should be given to the owner of the vehicle upon completion of the Campaign.

1. Enter Vehicle's License Number
2. Enter "Hyundai"
3. Enter Model Year
4. Enter Model (e.g. **Tucson/Santa Fe**)
5. Enter the vehicle's VIN
6. Enter Campaign Number – **9C7**
7. Enter Dealership Name
8. Enter Dealership's Address
   NOTE: Enter the physical address, not the mailing address (not a P.O. Box)
9. Enter Date of Repair
10. Service Manager Sign Here

