



HYUNDAI

Technical Service Bulletin

GROUP FUEL SYSTEM	NUMBER 26-FL-002H
DATE JUNE 2026	MODEL(S) SONATA HYBRID (DN8 HEV)

SUBJECT: ECM SOFTWARE UPDATE FOR AIR-FUEL RATIO
LOGIC IMPROVEMENT – DTC P219X00

* IMPORTANT

This field action requires both a reported condition consistent with the symptoms outlined in this TSB and dealer confirmation of those symptoms before any repair work is performed. If requirements are not met, any submitted claims are subject to debit. 8 / 80,000 New Vehicle Limited Warranty applies. See Warranty Information section for more details.

Description: Some Sonata Hybrid (DN8 HEV) vehicles may display a Check Engine light and store one or more of the DTCs listed below due to an abnormal air-fuel ratio in a specific cylinder. This bulletin provides instructions to update the Engine Control Module (ECM) to resolve the air-fuel ratio logic.

- **P219C00** – Cylinder 1 Air-Fuel Ratio Imbalance
- **P219D00** – Cylinder 2 Air-Fuel Ratio Imbalance
- **P219E00** – Cylinder 3 Air-Fuel Ratio Imbalance
- **P219F00** – Cylinder 4 Air-Fuel Ratio Imbalance

Applicable Vehicles:

Model Year	Model	Production Dates
2024 – 2026	Sonata Hybrid (DN8 HEV)	12/12/2023 – 11/24/2025

SST Information:

Tool Name	Tool Number	Figure	Ordering Information
VCI 3	G0VHNNN06		Website: https://hyundaiaessentialtools.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
Sonata Hybrid (DN8 HEV)	Engine	1362	DN8 FL HEV P219X DTC IMPROVEMENT

(*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
Sonata Hybrid (DN8 HEV)	50D320R0	ECM Software Update	0.3 M/H	39116-2J031	I11	ZZ3

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: 8 / 80,000 Emissions Warranty applies to the part(s) and repair procedure(s) outlined in this TSB. Prior to beginning any repair work, ensure the part(s) associated with the repair procedure are within Emissions Warranty, observing mileage and Warranty Start Date or date of first use. If the subject part(s) 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: 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 4: This TSB includes repair justification in the form of automatically uploaded DTC(s) via GDS e-Report at the time of diagnosis. To ensure adherence to the Digital Documentation Policy before claim submission, DTC history can be reviewed via the e-Report function within the GDS.

Additionally, required photos include a capture of the ECU Update “Success” screen for the associated update events.

ROM ID Information:

Model	Event	System	ECU Part Number	ROM ID	
				Current	Latest
Sonata Hybrid (DN8 HEV)	1362	Engine	39116-2J031	HDN84NS0AQ0B3C00	2572HDN84NS0A1A0
			39116-2J037	HDN85NS0AQ0C1C00	2572HDN85NS0A1A0
			39116-2J038	2551HDN86NS0A0A0	2572HDN86NS0A1A0

Service Procedure:**DIGITAL DOCUMENTATION**

This TSB includes repair justification in the form of automatically uploaded DTC(s) via GDS e-Report at the time of diagnosis. To ensure adherence to the Digital Documentation Policy before claim submission, DTC history can be reviewed via the e-Report function within the GDS. Additionally, required photos include a capture of the ECU Update “Success” screen for the associated update events.

NOTICE

Perform the **ECM** software update in **Manual Mode**.

NOTICE

Ensure the vehicle’s battery charge is **12.3 Volts or higher** and the tablet’s battery charge is **above 30%** before performing a software update to avoid update failure.

**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** start the engine OR place in **Ready** mode during the update.
- Do **NOT** turn **OFF** the ignition switch during the update.

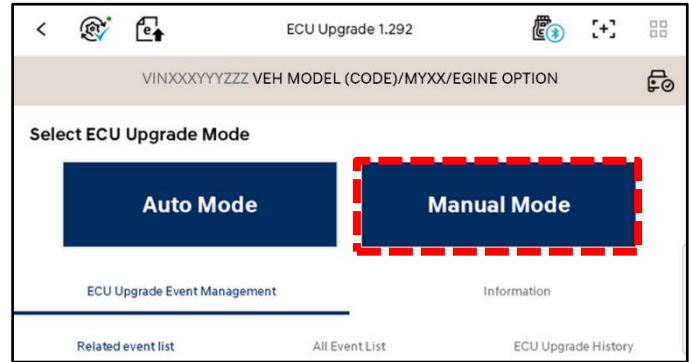
Manual Mode Password:

Event	Menu	Password
1362	DN8 FL HEV PCU 391162J031	1302
	DN8 FL HEV PCU 391162J037	7302
	DN8 FL HEV PCU 391162J038	8302

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

i Information

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



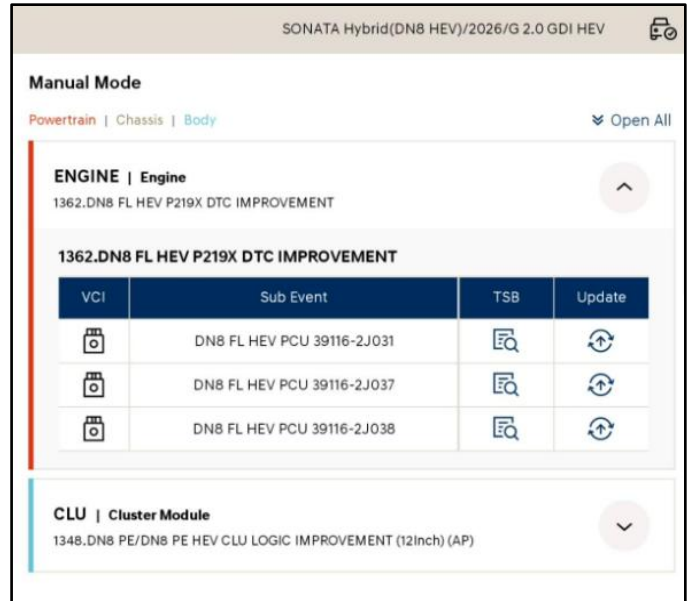
2. Verify the ROM ID by selecting the **Engine** system to scan the vehicle's current ROM ID.

NOTICE

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

NOTICE

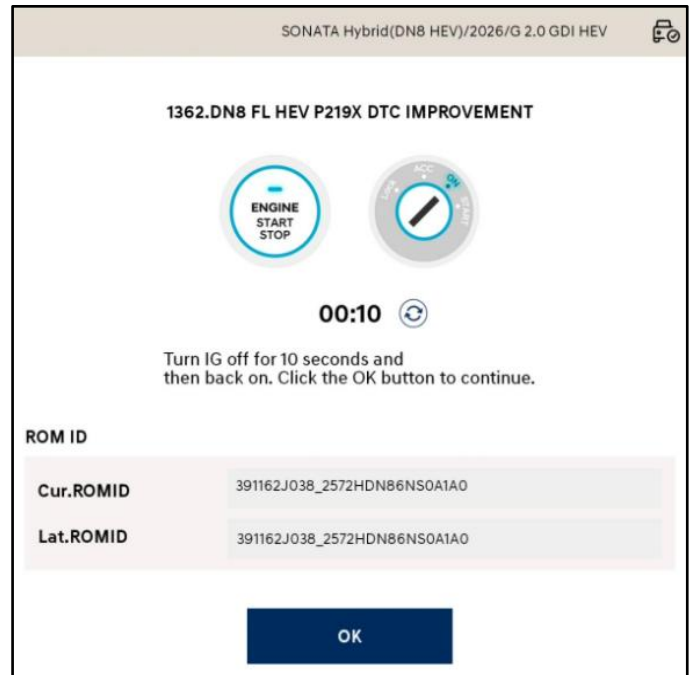
If the update fails, remove the power connector from the in-cabin fuse box for at least **5 seconds**. Alternatively, disconnect the negative (–) **12V** battery terminal and wait at least **5 seconds**. Reassemble and retry the update.



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**).

i Information

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



5.

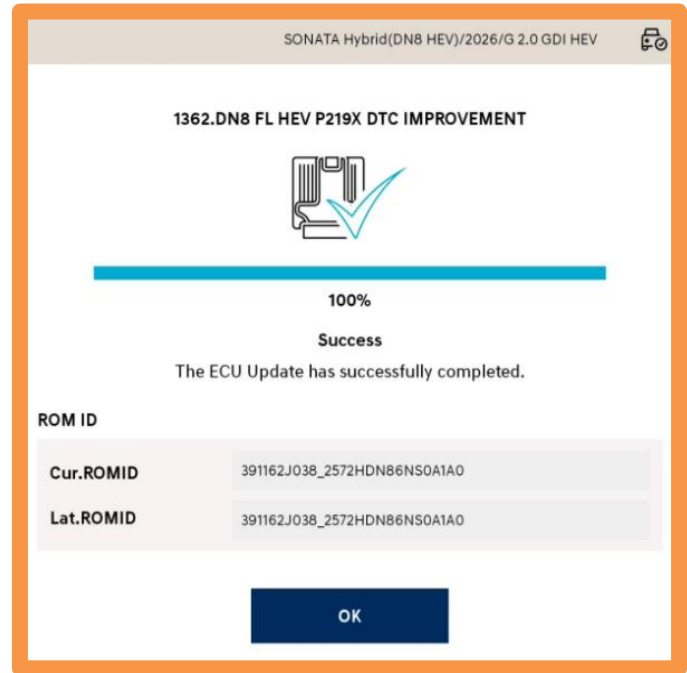
**DIGITAL
DOCUMENTATION**



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.



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



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

8. The service procedure is now complete.