



# Technical Service Bulletin

GROUP <b>CAMPAIGN</b>	NUMBER <b>25-01-010H</b>
DATE <b>FEBRUARY 2025</b>	MODEL(S) <b>SEE BELOW</b>

**SUBJECT:** BMS SOFTWARE UPDATE FOR DTC P1BB20: 12V BATTERY OVER VOLTAGE WARNING (SERVICE CAMPAIGN 9B4)

This TSB supersedes 24-01-054H to revise the ending production date range for the Sonata Hybrid (DN8 HEV) in Applicable Vehicles (page 1), and to remove ROM IDs 5700 & 5720 in the ROM ID Information table for Event # 796, Sonata Hybrid (DN8 HEV) (page 2).

## ★ 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:** This bulletin provides the procedure to update the software for the Battery Management System (BMS) on certain Elantra Hybrid (CN7 HEV), Sonata Hybrid (DN8 HEV), and Tucson Hybrid (NX4 HEV) vehicles that may exhibit a warning light with DTC P1BB20.

**DTC Description:** P1BB20 – 12V Lithium Battery Cell Voltage High

### Applicable Vehicles (Certain):

- 2021–2023MY Elantra Hybrid (CN7 HEV) produced from 12/15/2020 - 02/13/2023
- 2020-2022MY Sonata Hybrid (DN8 HEV) produced from 01/29/2020 - 03/08/2022
- 2022–2024MY Tucson Hybrid (NX4 HEV) produced from 01/20/2021 - 12/18/2023

### GDS Information:

System	Event #	Description
BMS	796	DN8 HEV 12V LITHIUM BATTERY OVER VOLTAGE WARNING LIGHT IMPROVEMENT (P1BB20)
	1037	CN7 HEV 12V LITHIUM BATTERY OVER VOLTAGE WARNING LIGHT IMPROVEMENT
	1038	NX4 HEV 12V LITHIUM BATTERY OVER VOLTAGE WARNING LIGHT IMPROVEMENT

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

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**Warranty Information:**

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
Elantra Hybrid (CN7 HEV)	30D163R0	BMS Software Update	0.3 M/H	37513-BY000	I14	ZZ3
Sonata Hybrid (DN8 HEV)				37513-L7000		
Tucson Hybrid (NX4 HEV)				37513-P0000		

**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:** Op times include VIN, Mileage, and photo capture of the “ECU update complete” screen as outlined in the Digital Documentation Policy.

**ROM ID Information: Event # 796**

Model	MY	System	ECU Part Number	ROM ID	
				Old	New
Sonata Hybrid (DN8 HEV)	2020 - 2022	BMS	37513-L5000	5000	5520
				5200	
				5400	
				5420	
				5440	
				5460	
				5480	
				5500	
			37513-L7000	5600	5740
				5620	
				5640	
				5680	

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**ROM ID Information: Event # 1037**

Model	MY	System	ECU Part Number	ROM ID	
				Old	New
Elantra Hybrid (CN7 HEV)	2021 - 2023	BMS	37513-BY000	6000	6080
				6020	
				6040	
				6060	

**ROM ID Information: Event # 1038**

Model	MY	System	ECU Part Number	ROM ID	
				Old	New
Tucson Hybrid (NX4 HEV)	2022 – 2024	BMS	37513-P0000	6000	6120
				6020	
				6040	
				6060	
				6100	

**Service Procedure:**

**STUI**



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

**NOTICE**

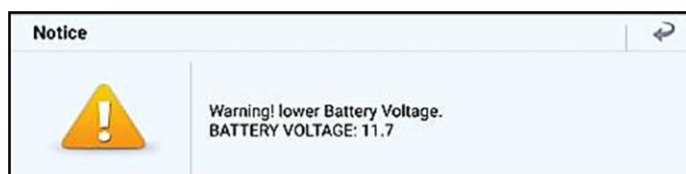
**You must initially perform the GDS ECU update in Auto Mode.**

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

**NOTICE**

**GDS Vehicle Battery Low Voltage Warning:**

If voltage is below 12 Volts per the GDS warning, then select **Back** and attach a battery charger to ensure an adequate battery charge for reliable update results. Turn ignition back **ON**, and then retry the ECU update again.



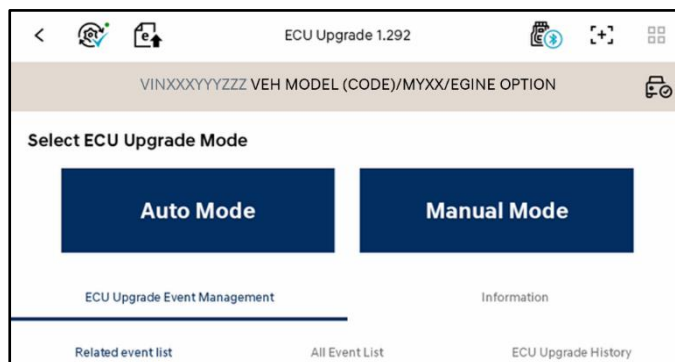
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1. Perform the ECU update in **Auto Mode**.

Use the **ID Check** to verify the ROM ID before updating the software.

**i Information**

Refer to **TSB # 24-GI-012H**, “**ECU Update Procedure for Tablet-Based GDS-Smart**”, for additional information.



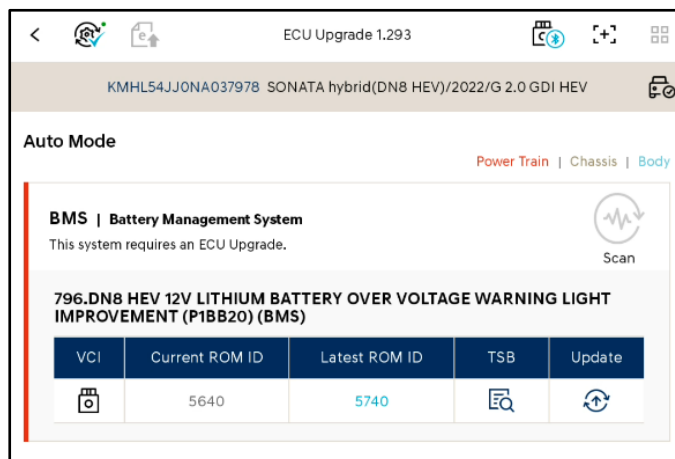
2. Select the **BMS** system to scan the vehicle’s current ROM ID.

**NOTICE**

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

**NOTICE**

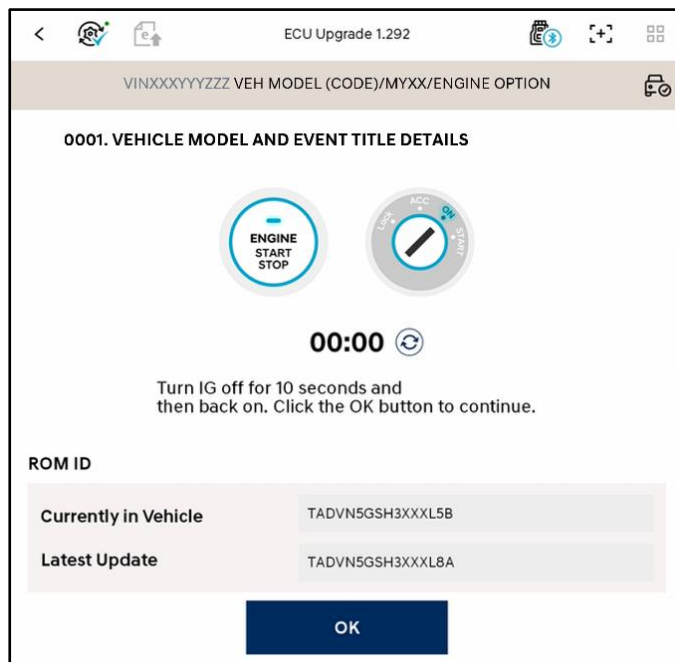
If the update fails, please remove the power connector or the battery (–) connector from the indoor fuse box for at least **5 seconds** and reassemble it to retry the update.



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.

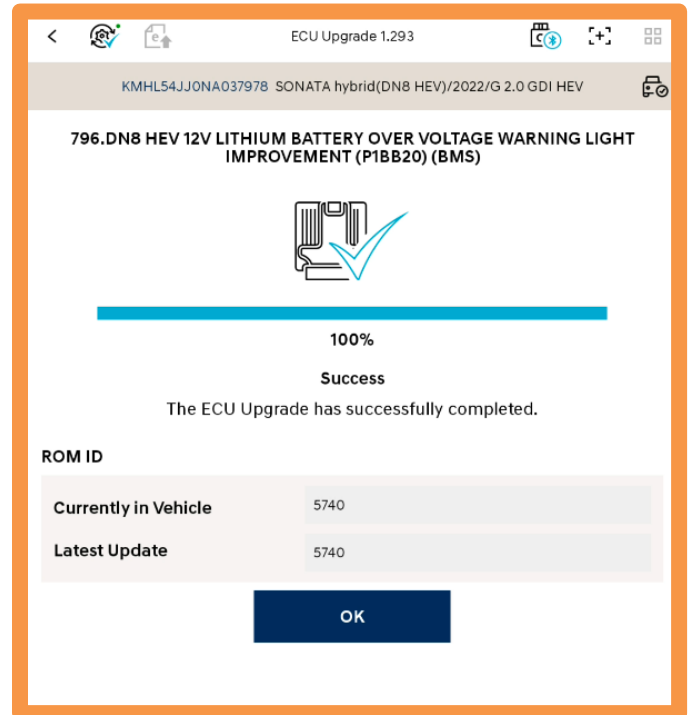


4.

**STUI**



Take a screenshot of the “ECU Update Complete” screen using your tablet and upload to STUI.



5. After the ECU update process shows 100% complete, cycle the ignition key to **OFF** for at least 10 seconds to reset the control unit.
6. Perform an **All Systems Fault Code** search and erase DTC history that had incidentally occurred from the ECU update.
7. Start the vehicle in **Ready** mode to confirm proper operation of the vehicle.



### Information

For multiple ECU updates, go back to the Auto Mode screen to view all updates available in one screen.

### NOTICE

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

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**Manual Mode Password: Event # 796**

ECM Menu	Password
DN8 HEV BMS 37513-L5000	5000
DN8 HEV BMS 37513-L7000	7000

**Manual Mode Password: Event # 1037**

ECM Menu	Password
CN7 HEV BMS 37513-BY000	7531

**Manual Mode Password: Event # 1038**

ECM Menu	Password
NX4 HEV BMS 37513-P0000	3000