

Service Campaign 9B4: Software Update for DTC P1BB20: 12V Battery Over Voltage Warning – Dealer Best Practice

February 11, 2025

Document Topic (changes highlighted in yellow)	Date
<ul style="list-style-type: none">• Technical Service Bulletin (TSB) 25-01-010H; supersedes TSB 24-01-054H<ul style="list-style-type: none">○ Revise the ending production date range for the Sonata Hybrid (DN8 HEV) in 'Affected Vehicles (Certain)' (pages 1 & 4)	02/11/2025

Campaign Description

Certain Elantra hybrid (CN7 HEV), Sonata hybrid (DN8 HEV), and Tucson hybrid (NX4 HEV) vehicles may exhibit a warning light due to DTC Code P1BB20 (12V Lithium Battery Cell Voltage High). Follow the procedure in **TSB 25-01-010H** (or latest version) to perform the update the Battery management System (BMS) software.

Affected Vehicles (Certain)

- 2021-23MY Elantra Hybrid (CN7 HEV) produced from 12/15/2020 – 02/13/2023
- 2020-22MY Sonata Hybrid (DN8 HEV) produced from 01/29/2020 – 03/08/2022
- 2022-24MY Tucson Hybrid (NX4 HEV) produced from 01/20/2021 – 12/18/2023

Remedy Information

The procedure outlined in **TSB 25-01-010H** (or latest version) requires update of the BMS software.

- **Recommended Service Technician Training Level:** Hyundai Certified (or higher)

GDS Information

- **System Selection:** Battery Management System (BMS)
- **Event(s):** Use Event shown in the table below (or use a later available event as listed in the GDS DTC Update screen if one is available).

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

Recommended Alternative Transportation

A Service Rental Vehicle (SRC) should be provided to customers who do not feel safe operating their vehicle until a remedy is available. In addition, a SRC may be required based on any other additional work on the vehicle that may need to be addressed during customer's visit. If a SRC is not available, other options such as a 3rd Party Rental or Rideshare may be provided.

Service Tips/Training

- If a customer arrives to the dealer with no appointment scheduled, it is recommended for the dealer to offer alternative transportation to the customer.
- If customer schedules an appointment in advance, ensure the appropriate tools and equipment are on hand to perform any related repairs.
- Ensure the appropriate expectations for completion are set with the customer in advance.
- Always inquire if the customer will have time for an additional service to be performed if he/she was originally scheduled for a different service.
- Offer SRC assistance for customers who may be pressed on time.
- Be honest with customers on wait times.
- If the service is taking longer than expected, update the customer.
- If you are unsure of certain processes, don't guess. Take time to familiarize yourself with the proper procedures or ask for help/clarity from your teammates or leadership.
- If you see a team member having trouble addressing the concern, ask if you can provide some help.

Warranty Information

- Refer to **TSB 25-01-010H** (or latest version), the service campaign pays the following:
 - Labor: 0.3 M/H for updating the BMS software
 - Parts: None
- **Photos:**
 - The time above includes taking a validation photo of the 'ECU Update Complete' screen with your tablet.
 - Op times include VIN, Mileage, and Repair validation photo(s) as outlined in the Digital Documentation Policy.

Customer Talk Tracks

1. For customer with an appointment, but campaign not part of originally scheduled services:

"I see that your vehicle has an open service campaign that we would like to take care of for you while you are here today. This service campaign requires the vehicle's Battery Management System software to be updated. This service, of course, will be provided at no charge to you and, if necessary, we would like to offer you alternative transportation while we repair your vehicle. We apologize for the inconvenience."

2. For walk-in customer:

"During your visit today, I checked your vehicle for any open campaign or recalls and found that your vehicle has an open campaign. This service campaign requires the vehicle's Battery Management System software to be updated. This service, of course, will be provided at no charge to you and, if necessary, we would like to offer you alternative transportation while we repair your vehicle. We apologize for the inconvenience."

3. For customers over the phone:

"While I have you on the line and am verifying your current appointment, I ran your VIN and see that your vehicle has an open campaign. This service campaign requires the vehicle's Battery Management System software to be updated. If time permits, we can address this campaign during your current appointment, and it will be at no cost to you. Should you need, we can arrange for alternate transportation since this may prolong the stay of your vehicle at service. We apologize for the inconvenience."

Best Practice Checklist



Reservation: Did you check WebDCS for additional campaigns or recalls? Did you check for any declined services from previous visits?

- Yes
- No** – Please ensure all open campaign(s)/recall(s) are identified and completed by the dealership. Also ask customer if he/she would like to have any of the previous declined services performed.



Readiness: Are the required tools in-stock/available to perform the update?

- Yes
- No** – Ensure a functioning GDS is on-hand to complete the software update.



Reception: Did the customer provide authorization to perform repairs?

- Yes
- No** – Customer must be consulted and provide approval before proceeding with any repairs on their vehicle.

Did you explain to the customer the expected repair time and an expectation for a status update?

- Yes
- No** – Customer should be given an estimated time of when his/her vehicle is completed so the customer can plan the rest of their day away from the dealership.



Repair: Does the Technician meet the recommended training requirements (Certified level or above) to complete this campaign?

- Yes
- No** – Please ensure a technician with a Certified level (or higher) completes this repair.

Repair: Were the appropriate picture(s) taken as outlined in **TSB 25-01-010H** (or latest version)?

- Yes
- No** – Please ensure appropriate picture(s) are taken for the dealership to be paid. See **TSB 25-01-010H** (or latest version) for sample photos. Refer to the latest Warranty Digital Documentation Policy for requirements.

Repair: Did you provide the customer an eMPI and review with him/her?

- Yes
- No** – Service Consultant should review the MPI with the customer.



Return: Did you get the customer's signature on all warranty lines in addition to the final RO?

- Yes
- No** - Customer must sign the final invoice upon dealer delivery of the vehicle back to the customer.

Customer FAQs

Q1: What is the issue?

A1: Certain Elantra hybrid (CN7 HEV), Sonata hybrid (DN8 HEV), and Tucson hybrid (NX4 HEV) vehicles that may exhibit a warning light with DTC P1BB20 related to the vehicle's battery management system.

Q2: What are the affected vehicles?

A2: The following vehicles are certain affected:

- 2021-23MY Elantra Hybrid (CN7 HEV) produced from 12/15/2020 – 02/13/2023
- 2020-22MY Sonata Hybrid (DN8 HEV) produced from 01/29/2020 – 03/08/2022
- 2022-24MY Tucson Hybrid (NX4 HEV) produced from 01/20/2021 – 12/18/2023

Q3: What will be done during service at the dealer?

A3: The service procedure requires updating the software of the Battery Management System (BMS) to improve the charging logic to prevent overcharging of the batteries.

Q4: When will affected customer(s) be notified of this campaign?

A4: Customers were notified via First Class Mail in August 2024.

Contact Reference

Please see the list below for commonly referred to contacts. Thank you for your prompt attention to this important matter and continued commitment to Hyundai customers.

Key Contact Information		
Dealer Support	Contact Information	Description
Parts	HyundaiPartsHotline@MobisUSA.com 1-800-545-4515	Parts ordering hotline
Techline	1-800-325-6604	Vehicle Technical Support for Hyundai Dealer Technicians
Warranty HELP Line	1-877-446-2922	Warranty Claim questions for Hyundai Dealers
Warranty Prior Approval (PA)Center	PA@hmausa.com	Warranty Prior Approval (PA) Center for Hyundai Dealers
Xtime Technical Support	Support@xtime.com 1-866-984-6355	Assistance with Car Care Scheduling: <ul style="list-style-type: none"> Appointment / Shop Capacity Management / Campaign Integration / Operation Codes
AutoLoop Technical Support	Support@autoloop.com 1-877-850-2010	Assistance with Car Care Scheduling: <ul style="list-style-type: none"> Appointment / Shop Capacity Management / Campaign Integration / Operation Codes
CDK Technical Support	https://serviceconnect.support.cdk.com/	Assistance with Car Care Scheduling: <ul style="list-style-type: none"> Appointment / Shop Capacity Management / Campaign Integration / Operation Codes
Customer Support	Contact Information	Description
Hyundai Customer Care Center (Recall/Campaign Questions)	1-855-671-3059	Customer questions or concerns related to <u>recall or service campaigns</u>
Hyundai Recall /Campaign Website	www.hyundaiusa.com/recall	Updated information related to the specific recall or service campaign
Hyundai Customer Care Center (General Questions)	1-800-633-5151	Customers general questions, <u>non-campaign related</u>
Hyundai Roadside Assistance	1-800-243-7766	Hyundai Roadside Assistance
Key Reference Information		
Name	Source	
Campaign Central	Consolidated repository of recall and service campaign dealer best practices. Located on the service tab homepage in www.HyundaiDealer.com	
Car Care Scheduling (Xtime) -Tutorials	www.HyundaiDealer.com > Service > Dealer Resources > DocumentsLibrary > Car Care Scheduling	
Car Care Scheduling (Xtime) - Recall Appointment Notification	<ol style="list-style-type: none"> 1. Log into Xtime 2. Under the menu at the top left, select 'CONFIGURE' 3. Under the dealership tab, click "EMAIL COMMUNICATION" 4. Slide the toggle to "ADVANCED" 5. Populate as many e-mails as desired in the "PARTS DESK EMAIL FIELD" 	
Parts – Campaign Parts Management (CPM) Procedure	As applicable; www.HyundaiDealer.com > Parts > Documents Library > Campaign Parts Management	
Service Rental Car (SRC) Program	SRC Documentation: www.HyundaiDealer.com > Service tab > Documents Library > Service Rental Car TSD: www.HyundaiDealer.com > Service tab > SRC Fleet Mgmt Software Insurance: www.HyundaiDealer.com > Service tab > SRC Insurance	
Technical Service Bulletin (TSB)	www.HyundaiDealer.com > Service tab > Hyundai Tech Info	
Uncompleted Campaign VIN Listing	A listing of vehicles is located on WEBDCS > SERVICE tab > select UNCOMPLETED CAMPAIGN VIN LISTING – Dealer Stock (New, SRC, CPO, etc.) and Retailed.	
Recall Campaign Website	www.hyundaiusa.com/recall	
NHTSA Website	www.safercar.gov	

Appendix

Document Topic	Date
• Technical Service Bulletin (TSB) 24-01-054H Now Available	07/08/2024