	GROUP	MODEL
	ELE	2023-2024MY Sportage (NQ5 HEV)
	NUMBER	DATE
	399	September 2025

TECHNICAL SERVICE BULLETIN

SUBJECT:

BMS DISCHARGE LOGIC IMPROVEMENT

This bulletin provides information to upgrade the 'BMS' system software on certain 2023-2024MY Sportage (NQ5 HEV) vehicles produced from February 15, 2022, through December 15, 2023, which may experience excessive discharging of the 12V lithium battery while parked, potentially resulting in a no-start condition. Follow the procedure outlined in this publication to improve the discharge prevention logic for the 12V lithium battery. Refer to [SST081](#) for software upgrade instructions using Kia Diagnostic System (KDS) tablet and VCI-II and confirm the Upgrade Event Number/Name, ROM ID Information, and Manual Mode passwords (if applicable) on the applicable vehicle.



NOTICE

A Technical Service Bulletin is a field fix repair program without customer notification that may be performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

A printed copy is for reference only; publication information can be updated at any time. Always refer to KGIS for the latest information. After logging in kdealer.com, the newest technical publications are listed in 'Service Releases' and has the latest service information that has been released.

Refer to [TSB SST081](#) for instructions to upgrade the 'BMS' system:

To correct this condition, the specified system module should be reprogrammed using KDS as described in this bulletin in 'Auto Mode'

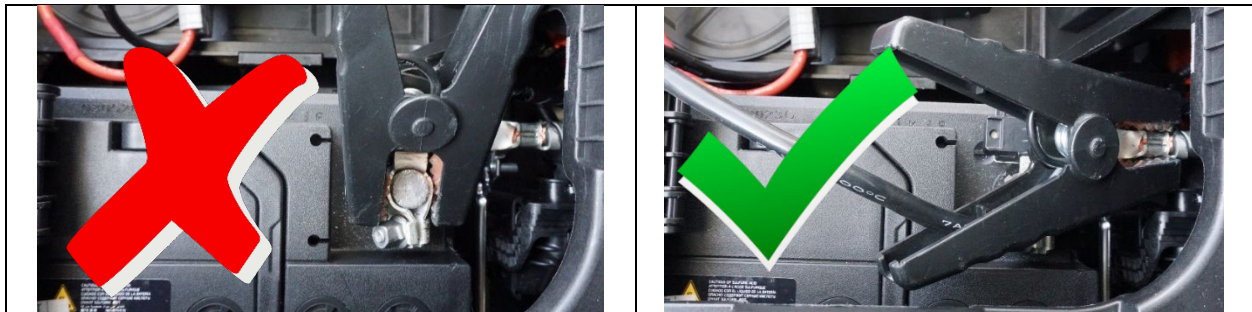
Upgrade Event Name

824.NQ5 HEV BMS discharge logic improvement (Battery Saver Conditions) - 3rd


 NOTICE

- Confirm a fully charged battery (12.3 volts or higher is necessary) is used or utilize a full charged jump starter box connected to the battery.
- **Ensure the KDS GDS is sufficiently charged at 60% or higher prior to reflash.**
- All ECU upgrades must be performed with the ignition set to the 'ON' position unless otherwise stated.
- **Damage VCI-II units should not be used and promptly replaced.**
- Be careful not to disconnect the VCI-II connected to the vehicle during the ECU upgrade procedure.
- **DO NOT start the engine during ECU upgrade.**
- **DO NOT** turn the ignition key 'OFF' or interrupt the power supply during ECU upgrade.
- **When the ECU upgrade is completed, turn the ignition 'OFF' and wait 10 seconds before starting the engine.**
- **ONLY** use approved ECU upgrade software designated for the correct application.

[Connect the negative \(-\) terminal to the battery as shown below.](#)



 NOTICE


Before attempting an ECU upgrade on any Kia model, make sure to first determine whether the applicable model is equipped with an immobilizer  security system. Failure to follow proper procedures may cause the PCM to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback.

SUBJECT:

BMS DISCHARGE LOGIC IMPROVEMENT**ROM ID Information Table:****ⓘ IMPORTANT**

It is recommended to **ALWAYS** check the Electronic Parts Catalog (EPC) to locate the ECU Part Number respective to Auto/Manual Mode ROM IDs. **DO NOT** reference the parts label affixed to the ECU.

Upgrade Event #824 (NQ5 HEV)

Model	System	IMMO 	ECU P/No.	ROM ID	
				Previous	New
SNQ5 HEV	BMS (Battery Management System)	Yes	37513 CH000	6080	6180
				6100	
				6120	
				6140	
				6160	

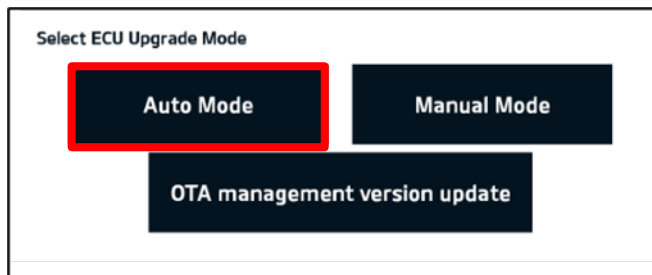
To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECM ROM ID and reference the Information Table as necessary.

Software Information:**⚠ CAUTION**

It is highly recommended to connect a 12V battery charger to the vehicle during the upgrade procedure to prevent discharge of the 12V battery.

The required software must be installed by selecting the **'Auto Mode'** ECU Upgrade option.

Note: In some case, the 'Manual Mode' installation option may be required **ONLY** if the 'Auto Mode' function fails or is otherwise noted above.

**📄 NOTICE**

- If the automatic upgrade fails, turn the ignition 'OFF' for about 10 seconds then place it back in the 'ON' position to reset the control unit **BEFORE** performing the manual upgrade.
- After the upgrade is completed, a 30-second IG-OFF period is required to finalize the procedure.

'Manual Mode' passwords.

Menu	Password
824.NQ5 HEV BMS discharge logic improvement (Battery Saver Conditions) - 3rd	7513

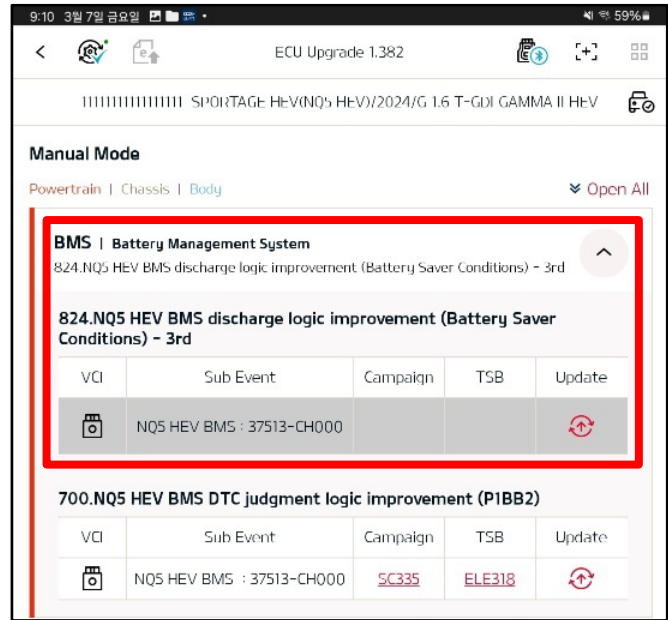
SUBJECT: **BMS DISCHARGE LOGIC IMPROVEMENT**

UPGRADE EVENT:

Select the applicable **'824'** system module and the Event Group.

- **824.NQ5 HEV BMS discharge logic improvement (Battery Saver Conditions) - 3rd**


Verify the affected vehicle Calibration Identification of the applicable ECU ROM ID and reference the Information Table on page 3 as necessary.



AFFECTED VEHICLE RANGE:

Model	Production Date Range
Sportage (NQ5 HEV)	February 15, 2022 to December 15, 2023

REQUIRED TOOL:

Tool Name	Part Number	Figure	Comments
Kia Diagnostic System (KDS)	N/A		KDS + VCI

WARRANTY INFORMATION:

N Code: N99 Code: C99

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
NQ5 HEV	W	37513 CH000	0	Upgrading software on the Battery Management System (BMS)	37513F40	0.3 M/H	N/A	0

For Substitute Transportation policy, please refer to [Service Policy and Procedures Manual \(SPPM\) 6.11 "Kia Substitute Transportation"](#).

