



# Technical Service Bulletin

GROUP <b>EV SYSTEMS</b>	NUMBER <b>23-EV-002H</b>
DATE <b>MARCH 2023</b>	MODEL(S) <b>Ioniq 5 Electric (NE1)</b>

**SUBJECT:** 4WD/AWD VCU UPDATE FOR ECO MODE IMPROVEMENT

**Description:**

If you are servicing a 2022-2023 IONIQ 5 AWD vehicle with drivability concerns in ECO Mode follow this bulletin for updating the software of the Vehicle Control Unit (VCU) for improved drivability.

**IMPORTANT:** Please see the conditions below before performing this TSB:

- If Service Campaign T9Q has not been performed it must be performed and this TSB is not applicable.
- If Service Campaign T9Q has been previously performed and ECO Mode drivability condition is verified proceed with this TSB.
- If Service Campaign T9Q is not applicable for the vehicle and ECO Mode drivability condition is verified proceed with this TSB.

**Applicable Vehicles:**

- 2022-2023MY IONIQ 5 Electric (NE1) – All Wheel Drive (AWD/4WD) Model Only

**GDS Information:**

System	Event #	Description
VCU	935*	NE VCU 4WD IMPROVEMENT

\* or select the latest available Event # that displays in GDS.

**Warranty Information:**

VEHICLE	OP CODE	OP NAME	OP TIME	CAUSAL PART	NATURE	CAUSE
Ioniq 5 Electric (NE1)	IONIQVCU	VCU UPDATE	0.5 M/H	39751-1XNN1	I11	ZZ3

NOTE 1: This is related to complaint for the ECO mode issue.

NOTE 2: If campaign T9Q is open against the VIN, please perform repairs first under TSB 23-01-017H (or latest version) and it will address this issue.

NOTE 3: Submit claim on Campaign Claim Entry screen.

NOTE 4: If a part that is not covered by this TSB needs replacement while performing this TSB, and the affected part is still under warranty, please submit a separate claim using the same repair order. If the part is out of warranty, submit a prior approval request for goodwill consideration prior to performing the work.

## Service Procedure:

 Information
**GDS ECU Updates must be performed in Auto Mode.**

- If ECU Update starts but then fails in Auto Mode, perform the update in Manual Mode to recover.
- Turn off ignition for 30 seconds and try Manual Mode recovery.
- If unsuccessful, re-attempt Manual Mode after disconnecting the cables from the 12V battery terminals and performing cap discharge (connecting bar or heavy wire between “+” to “-” cables).

 **WARNING**
**GDS Vehicle Battery Voltage:**

- If the voltage is below 12 volts as per the GDS warning, then select **Back** and run the vehicle at least 15 minutes to reach an adequate battery state of charge to prevent an ECU Update failure. Cycle the ignition **OFF/ON** before retrying ECU update again.



## 1. Perform the VCU Update in Auto Mode.

- Use the Auto Mode ID Check to verify the VCMS ROM ID before updating the software.



- After the ECU Upgrade process shows 100% complete, cycle the ignition key to **OFF** for at least 10 seconds to reset the control unit.

2. Perform an All Systems Fault Code search and erase the history of the DTC that had incidentally occurred from the ECU update.
3. Start the vehicle in **Ready** mode to confirm a proper operation of the vehicle.

**ROM ID Table:**

VEHICLE	SYSTEM	MY	VCU P/No.	ROM ID	
				OLD	NEW
IONIQ5 (NE) 4WD	VCU	22-23MY	39751-1XNN1	NE1A-N0-S07-V300 NE1A-N0-SB0-V400 NE1A-N0-SB1-V400 NE1A-N0-SB2-V400 NE1A-N0-SB3-V400 NE1A-N0-SD2-V400	NE1A-N0-SB5-V400
		23MY	39751-1XNN4	NE1A-N0-KB0-V200 NE1A-N0-KB1-V200 NE1A-N0-KB2-V200 NE1A-N0-KB3-V200 NE1A-N0-KD2-V200 NE1A-N2-S17-V300	NE1A-N0-KB5-V200

**Manual Mode Password:**

MENU	PASSWORD
NE1 VCU 4WD 39751-1XNN1	1054
NE1 VCU 4WD 39751-1XNN4	1052

**Ioniq 5 AWD Additional Continuous Improvements:**

- Added battery conditioning
- EPB (Electronic Parking Brake) auto engagement when shift into Park/auto disengagement shift out of Park while pressing brake pedal
- DTE (Distance to Empty) strategy
- Snow road surface performance
- Air conditioning performance during AC slow charging
- Enhance i-Pedal mode operation
- Enhance charging sequence