



GROUP	MODEL
ELE	2022-2024MY EV6 (CV1)
NUMBER	DATE
367	January 2025

## TECHNICAL SERVICE BULLETIN

### SUBJECT: SERVICE ACTION: LIMP-HOME MODE OPERATION LOGIC IMPROVEMENT (SA599)

This bulletin provides information to upgrade the Vehicle Control Unit (VCU) software on certain 2022-2024MY EV6 (CV) vehicles produced from November 17, 2021, through July 18, 2024, which are equipped with a limp-home mode function that activates in response to a fault detected in the Low-Voltage DC-DC Converter (LDC). Follow the procedure outlined in this publication to upgrade the VCU software to enhance the limp-home mode function on the applicable vehicles. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



#### NOTICE

**A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.**

Repair status for a VIN is provided on KDealer+ (Service → Warranty Coverage → Warranty Coverage Inquiry → Campaign Information). Not completed Recall / Service Action reports are available on KDealer+ (Consumer Affairs → Not Completed Recall → Recall VIN → Select Report), which includes a list of affected vehicles.

This issue number is SA599.

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

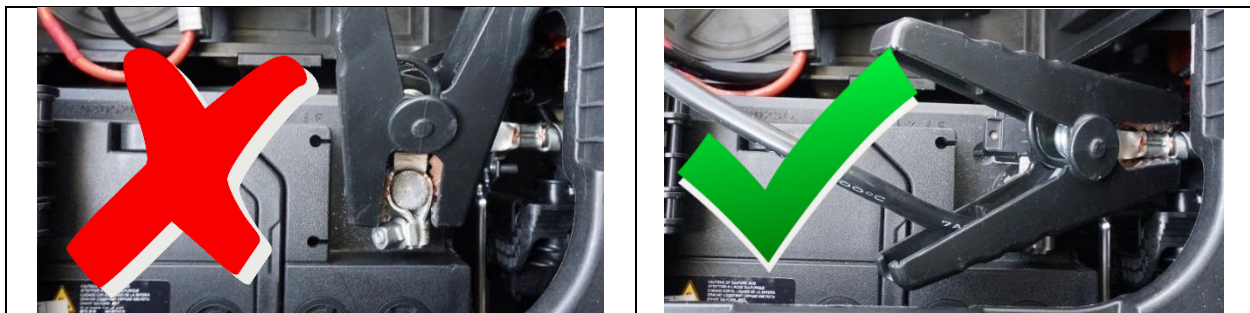
To correct this condition, the ECU should be reprogrammed using the KDS download, as described in this bulletin.

Upgrade Event Name
803.CV VCU Limp-Home Mode Operation Logic Improvement (2nd)


### NOTICE

- Confirm a fully charged battery (12.3 volts or higher is necessary) is used or utilize a fully 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.
- **Damaged 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:

**LIMP-HOME MODE OPERATION LOGIC IMPROVEMENT (SA599)****ROM ID Information Table:****Upgrade Event #803****❗ 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.

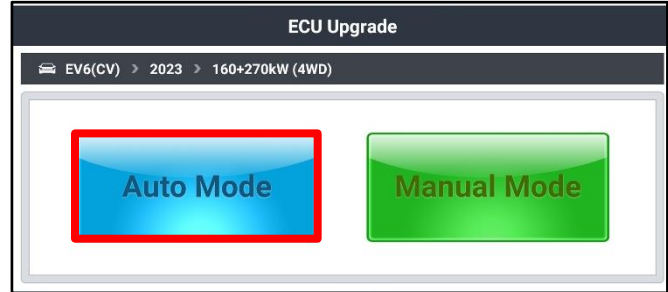
System	IMMO		ECU P/No.	ROM ID	
				Previous	New
Vehicle Control Unit (VCU)	Yes		39751 1XCN1	CV1A-N0-SB0-V400 CV1A-N0-SB1-V400 CV1A-N0-SB2-V400 CV1A-N0-SB3-V400 CV1A-N0-SB4-V400 CV1A-N0-SB5-V400 CV1A-N0-SB6-V400 CV1A-N0-SB7-V400 CV1A-N0-SD2-V400 CV1A-N0-SD3-V400	CV1A-N0-SB8-V400
			39751 1XCN4	CV1A-N0-KB0-V200 CV1A-N0-KB1-V200 CV1A-N0-KB2-V200 CV1A-N0-KB3-V200 CV1A-N0-KB4-V200 CV1A-N0-KB5-V200 CV1A-N0-KB6-V200 CV1A-N0-KB7-V200 CV1A-N0-KD2-V200 CV1A-N0-KD3-V400	CV1A-N0-KB8-V200
			39751 1XGN1	CV1A-N7-S00-V400 CV1A-N7-S01-V400 CV1A-N7-S02-V400 CV1A-N7-S03-V400 CV1A-N7-S04-V400	CV1A-N7-S05-V400

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:**

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.

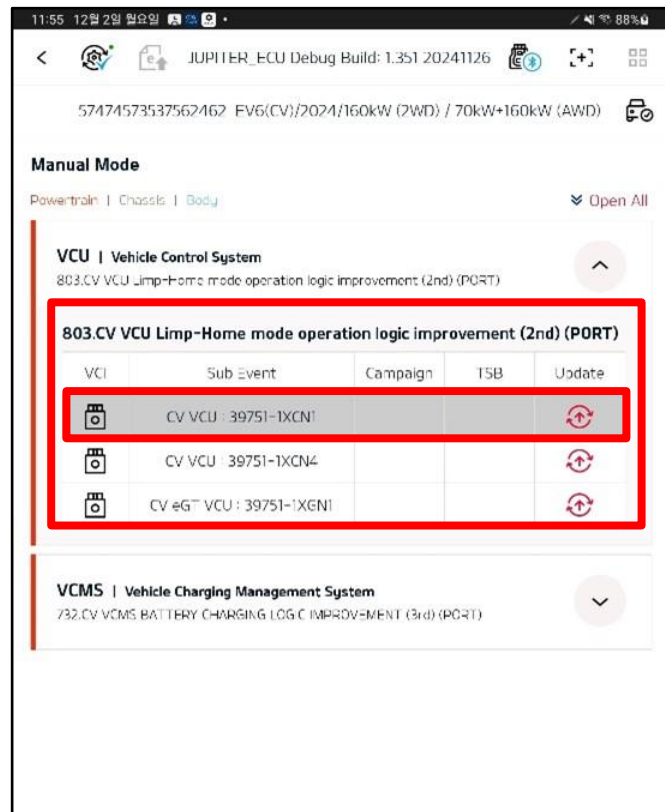
'Manual Mode' passwords.

Event No.	Menu	Password
#803	CV VCU: 39751-1XCN1	1115
	CV VCU: 39751-1XCN4	4115
	CV eGT VCU: 39751-1XGN1	3975

**UPGRADE EVENT:**

Select the applicable 'VCU' system module and the Event Group.

- 803.CV VCU Limp-Home mode operation logic improvement (2nd)




SUBJECT:

**LIMP-HOME MODE OPERATION LOGIC IMPROVEMENT (SA599)****AFFECTED VEHICLE RANGE:**

Model	Production Date Range
EV6 (CV1)	November 17, 2021 to July 18, 2024

**REQUIRED TOOL:**

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

**WARRANTY INFORMATION:****N Code: N99 C Code: C99**

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
V	39751 1XCN1	0	(SA599) VCU Limp-Home Mode Operation Logic Improvement	240228R0	0.7 M/H	N/A	0

**NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA599 when accessing the KDealer+ system.