



GROUP	MODEL
ELE	2024-2025MY EV9 (MV1)
NUMBER	DATE
380	April 2025

TECHNICAL SERVICE BULLETIN

VEHICLE-TO-EVERYTHING (V2X) SOFTWARE UPGRADE

This bulletin provides information to install the Vehicle-to-Everything 'V2X' function enhancements by upgrading the software of the Vehicle Charging Management System 'VCMS', Rear Motor Control Unit 'R_MCU', Vehicle Control Unit 'VCU' and Battery Management Unit 'BMU' systems on some 2024-2025MY EV9 (MV1) vehicles produced from September 25, 2023 through October 15, 2024, that have been unable to be updated using the Over-The-Air (OTA) method. The V2X technology allows EV9 vehicles to interact with other devices such as Vehicle-to-Home 'V2H' and Vehicle-to-Grid 'V2G' technology which enables bidirectional charging, where the EV's battery can be used as a mobile energy storage unit, providing power to the grid or a home backup power source. Follow the procedure outlined in this publication to install the software upgrade to the four (4) required systems, 1) 'VCMS', 2) 'R_MCU', 3) 'VCU' and 4) 'BMU'. 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.

This software upgrade may also be available via an Over-the-Air (OTA) update on vehicles with an 'active' Kia Connect subscription.



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.

Refer to [TSB SST081](#) for instructions to upgrade the following four (4) systems:

VCM + R_MCU + VCU + BMU

① IMPORTANT

The software update may also be available via **Over-The-Air (OTA)** upgrade feature through an 'active' Kia Connect account for customers. An OTA software upgrade may not be available at the time a TSB publication is released. Dealers can confirm OTA availability by checking for OTA release notes on the Kia [Owners Portal: OTA Software Update Release Notes](#). If the affected vehicle had the latest software installed via OTA, no further action is required by the dealer.

Note: An OTA installed software is time-stamped for each VIN.

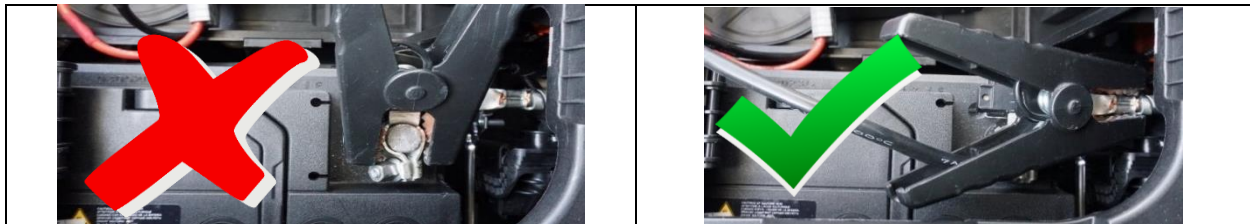
To correct this condition, the specified system module should be reprogrammed using KDS as described in this bulletin in 'Auto Mode'.

Upgrade Event Name
794.MV1 V2X Function Enhancement (VCMS)
795.MV1 V2X Function Enhancement (R_MCU)
796.MV1 V2X Function Enhancement (VCU)
797.MV1 V2X Function Enhancement (BMU)

📄 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.




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VEHICLE-TO-EVERYTHING (V2X) SOFTWARE UPGRADE

ROM ID Information Table:


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.

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 #794

System	IMMO 	ECU P/No.	ROM ID	
			Previous	New
VCMS	Yes	35000 1XHA0	MVEP S10RA MVEP S11RA MVEP S12RA	MVEP S13RA

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.

Upgrade Event #795

System	IMMO 	ECU P/No.	ROM ID	
			Previous	New
R_MCU	Yes	36601 1XHNO	EMVDE23NERS7 010 EMVDE24NERS8 010	EMVDE24NERS9 010


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.

IMPORTANT

If [ELE369/SA601](#) (Upgrade Event #809) has been completed, Upgrade Event #795 may indicate that it has already been installed.


SUBJECT: **VEHICLE-TO-EVERYTHING (V2X) SOFTWARE UPGRADE**

Upgrade Event #796

System	Type	IMMO 	ECU P/No.	ROM ID	
				Previous	New
VCU	AWD	Yes	39751 1XVN1	MV10 67H N03 S00 MV10 67H N03 S01 MV10 67H N03 S02 MV10 67H N03 S03 MV10 67H N03 S04 MV10 67H N03 S05 MV10 67H N03 S06	MV10 67H N03 S07
	RWD		39751 1XVN2	MV10 57H N03 S00 MV10 57H N03 S01 MV10 57H N03 S02 MV10 57H N03 S03 MV10 57H N03 S04 MV10 57H N03 S05 MV10 57H N03 S06	MV10 57H N03 S07

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.

Upgrade Event #797

System	IMMO 	ECU P/No.	ROM ID	
			Previous	New
BMU	Yes	375A0 DO000	630A 640A 660A	670A
		375A0 DO050	6308 6408 6608	6708
		375A0 DO100	6302 6402 6602	6702
		375A0 DO150	6300 6400 6600	6700

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.



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VEHICLE-TO-EVERYTHING (V2X) SOFTWARE UPGRADE

Software Information:

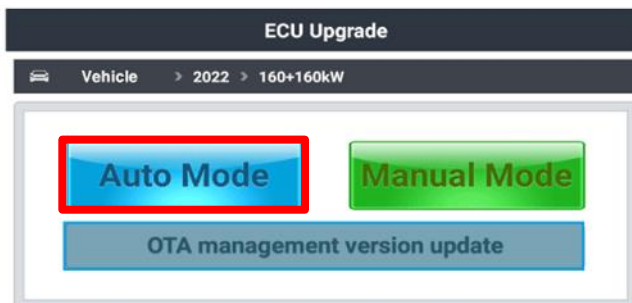
ⓘ IMPORTANT

The software update may also be available via **Over-The-Air (OTA)** upgrade feature through an 'active' Kia Connect account for customers. An OTA software upgrade may not be available at the time a TSB publication is released. Dealers can confirm OTA availability by checking for OTA release notes on the Kia [Owners Portal: OTA Software Update Release Notes](#). If the affected vehicle had the latest software installed via OTA, no further action is required by the dealer.

Note: An OTA installed software is time-stamped for each VIN.

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.

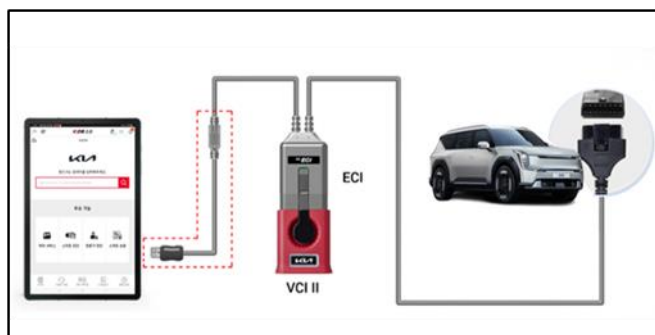
Event No.	Menu	Password
794	MV1 VCMS_unit2: 35000-1XHAO	2630
795	MV1 R_MCU: 36601-1XHNO	0110
796	MV1 VCU (4WD): 39751-1XVN1	8483
	MV1 VCU (2WD): 39751-1XVN2	9543
797	MV1 BMU: 375A0-DO000	3744
	MV1 BMU: 375A0-DO050	8444
	MV1 BMU: 375A0-DO100	6062
	MV1 BMU: 375A0-DO150	2887

Ensure the ECI cable is configured by referring to the ['KDS Configuration for ECI Cable Usage'](#).

Connect the ECI DLC connector to the OBD-II connector, located under the driver's side of the instrument panel.

Connect the ECI USB -C connector to the KDS tablet.

Connect the VCI II to the ECI OBD-II connector.



① IMPORTANT

ALL FOUR Upgrade Event's #794 **AND** #795 **AND** #796 **AND** #797 are **REQUIRED** to be installed.

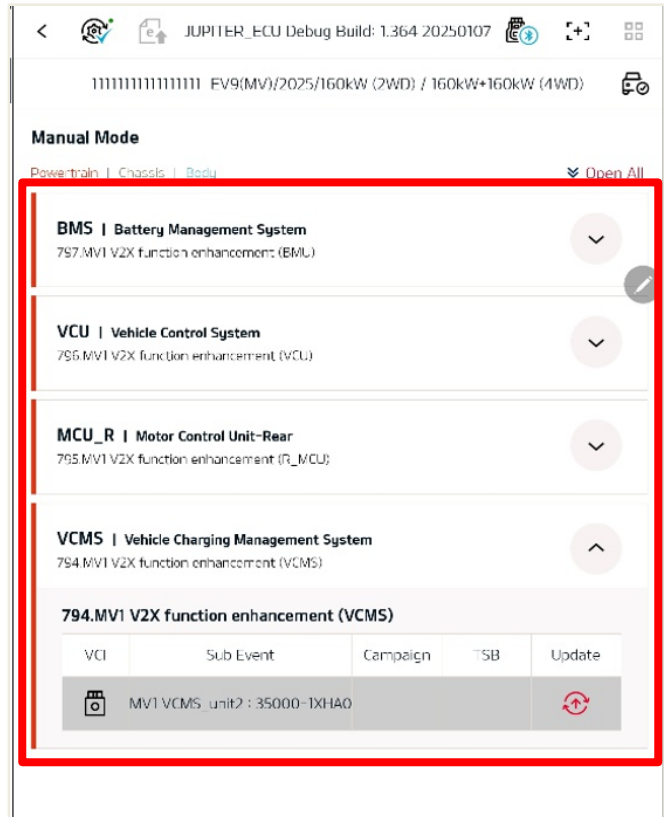
If **ELE369/SA601** (Upgrade Event #809) was previously completed, then the 'R-MCU' upgrade may indicate that Event #795 has been installed.

UPGRADE ALL FOUR (4) EVENTS:

Select the applicable '**VCMS**' and '**R_MCU**' and '**VCU**' and '**BMU**' system module and the Event Group.

1. 794.MV1 V2X Function Enhancement (VCMS)
2. 795.MV1 V2X Function Enhancement (R_MCU)
3. 796.MV1 V2X Function Enhancement (VCU)
4. 797.MV1 V2X Function Enhancement (BMU)

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

**📄 NOTICE**



The last 1% of each upgrade event can take up to four (4) minutes.

SUBJECT:

VEHICLE-TO-EVERYTHING (V2X) SOFTWARE UPGRADE**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
EV9 (MV1)	September 25, 2023 to October 15, 2024

REQUIRED TOOL:

Tool Name	Part Number	Figure	Comments
Kia Diagnostic System (KDS)	N/A		KDS + VCI
ECI Adapter	GIT1XDDMN057 or GIT0XDDMN052		Located in Toolbox #1 Drawer 8

WARRANTY INFORMATION:**N Code: D22 C Code: ZZ3**

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	OTAFAIL	0	Vehicle-To-Everything (V2X) SW Installation	O9999F05	0.7 M/H	N/A	0

