



GROUP	MODEL
ELE	2024MY EV9 (MV)
NUMBER	DATE
331	February 2024

TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: WIRELESS POWER CHARGER OPERATION LOGIC IMPROVEMENT (SA561)

This bulletin provides information to improve the wireless power charger (WPC) (also referred to as wireless phone charger) operation logic on certain 2024MY EV9 (MV) vehicles produced from July 27, 2023 through February 7, 2024. The WPC controller can switch from 'standby mode' to 'active mode' potentially causing the 12V auxiliary battery to discharge while the vehicle is parked. If this occurs, the vehicle might not be able to be started. Follow the procedure outlined in this publication to upgrade the WPC software on the applicable vehicle. This software upgrade may also be available via Over The Air (OTA) through Kia Connect if it has been activated. For confirmation that the latest reflash has been applied to a vehicle you are working on, verify the ROM ID using the table on page 3 of this bulletin. 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 SA561.

ECU Upgrade Procedure:

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

Upgrade Event Name
725. MV1 WPC Operation Logic Improvement

NOTICE

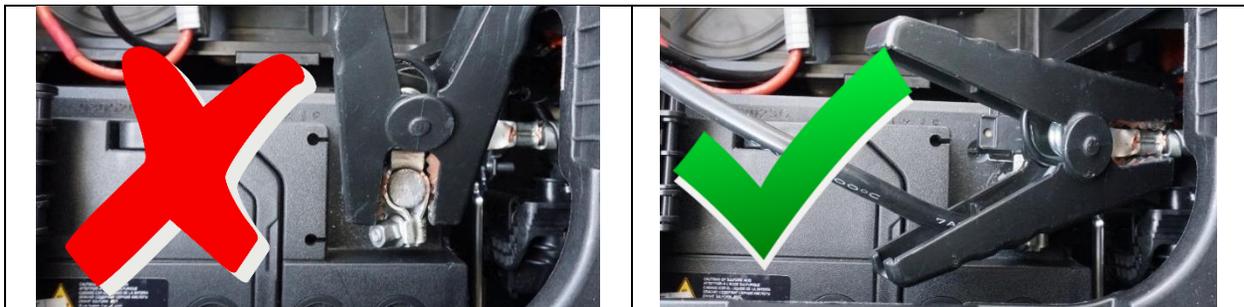
- Confirm a fully charged battery (12.3 volts or higher is necessary) is used or utilize a fully charged jump starter box connected to the battery.
- **Ensure the KDS GDS is sufficiently charged at 60% or higher prior to reflash.**
- All ECU upgrades must be performed with the ignition set to the 'ON' 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.

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.

Note: When connecting the external battery pack, in-vehicle operation built-in CAM might be issued by impossible charging amount sensing of the battery sensor.

[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.

ROM ID INFORMATION TABLE:

Upgrade Event #725

Model	System	IMMO 	ECU P/No.	ROM ID	
				Previous	New
EV9	WPC	Yes	95560 DO000	1.00 1.10 1.20	1.30

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.

[NOTE]

- ECU upgrade function on KDS is basically operating in wireless communication as Wi-Fi direct. Also, it's possible to be performing via USB cable between Tablet PC and VCI-II.
- Before start ECU upgrade, must make certain that the battery of Tablet PC is sufficiently charged.

NOTICE

Prior to performing the ECU upgrade, be sure to check that the KDS is fully charged.

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

NOTICE

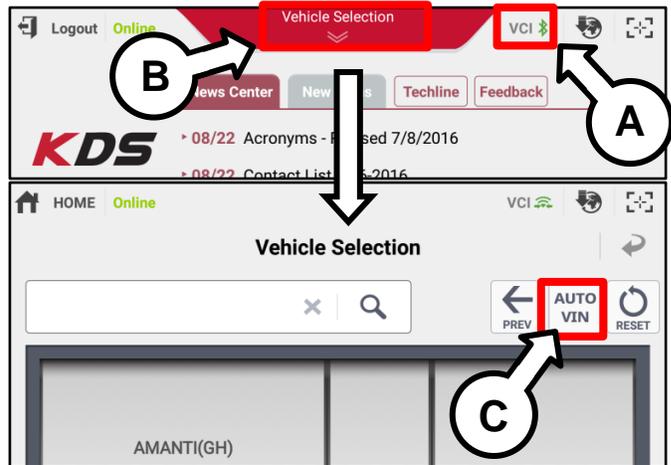
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



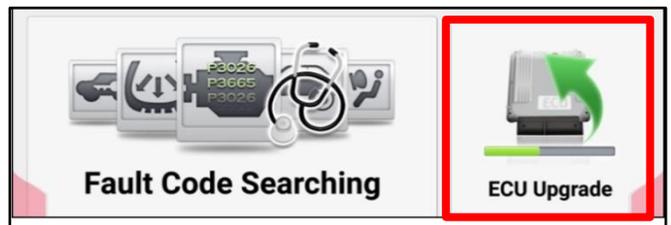
2. With the ignition ON, turn ON the KDS tablet. Select 'KDS' from the home screen.



3. Confirm communication with VCI (A) and then configure the vehicle (B) using the 'AUTO VIN' (C) feature.



4. Select 'ECU Upgrade'.



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- The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #725.

NOTICE

The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.

After the download is complete, the program will shut down to install. Please wait until the program restarts.

Event	Status
271.QF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT	Downloading
273.TF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT	Ready

36%

Do not touch any system buttons while performing this function.

KDS screenshot shown above is for demonstration purposes only. Events shown in screenshot are not applicable to this bulletin.

- Select Auto Mode.

CAUTION

Do NOT attempt to perform a Manual Mode upgrade UNLESS Auto Mode fails. Always follow the instructions given on the KDS in either Auto or Manual mode.

Auto Mode Manual Mode

OTA management version update

Note: This software upgrade is also available via Over The Air (OTA) through Kia Connect if it has been activated.

- Select the 'WPC' system under the System selection menu.

Select 'TSB' (D) to confirm that the latest update is available (if applicable).

Select upgrade Event #725. MV1 WPC Operation Logic Improvement and select 'Upgrade' to continue.

ECU Upgrade

EV9(MV) > 2024 > 160kW (2WD) / 160kW+160kW (4WD)

System

WPC

Event Group

725.MV1 WPC operation logic improvement

MV1 WPC : 95560-DO000

TSB

- The ECU upgrade will begin, and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.

CAUTION

Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.

E

23%

ECU Upgrading...(1/2)

ECU is in the process of being upgraded. Please wait a few minute.

F

6%

ECU Upgrading...(2/2)

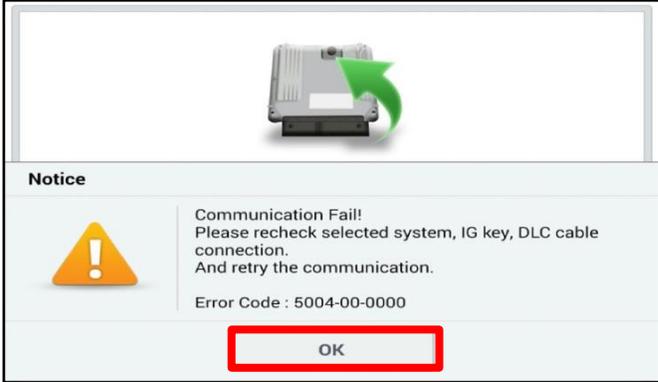
ECU is in the process of being upgraded. Please wait a few minute.



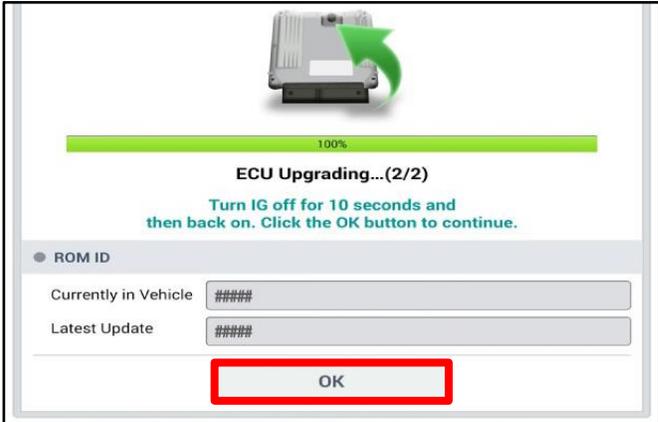
- If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Select 'OK' and restart the from step 4.

NOTICE

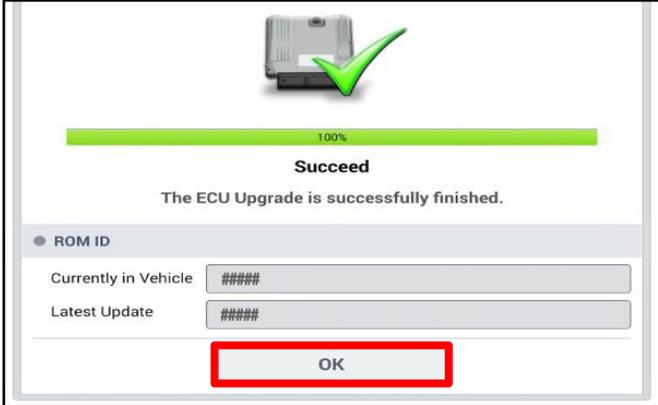
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



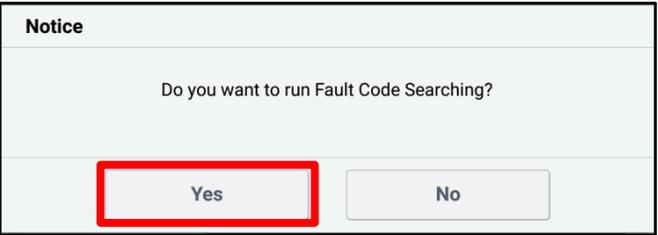
- When instructed on the KDS, turn the ignition OFF for ten (10) seconds then back on. Select 'OK' to continue.



- Once the upgrade is complete, select 'OK' to finalize the procedure.



- When prompted, select 'YES' to check for Diagnostic Trouble Codes (DTC) and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during the upgrade.



- Start the vehicle and confirm the WPC is operating properly by placing a Qi compatible phone on the charging pad and confirm the charging indicator light illuminates.



Manual Upgrade Procedure:**NOTICE**

The manual upgrade should ONLY be performed if the automatic upgrade fails.

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 manual upgrade.

See table below for 'Manual Mode' passwords.

Manual Mode ECU Upgrade Passwords

Menu	Password
MV1 WPC : 95560-DO000	0130

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **'WPC'** system under the System selection menu. Select **Upgrade Event #725** and select **Upgrade** to continue.
3. Select the appropriate control unit part number with reference to the ROM ID Information Table on page 3, and select **OK**.
4. Enter the appropriate password from the Manual Mode password table above and select **OK**.
5. The upgrade will begin and the progress of the upgrade will appear on the bar graph.
6. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Select **OK**.
7. Once the upgrade is complete, select **OK** to finalize the procedure.
8. When prompted, select **YES** to check for Diagnostic Trouble Codes (DTC) and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during the upgrade.
9. Start the engine to confirm proper operation of the vehicle.

AFFECTED VEHICLE RANGE:

Model	Production Date Range
EV9 (MV)	July 27, 2023 to February 7, 2024

REQUIRED TOOL:

Tool Name	Figure	Comments
KDS		Kia Diagnostic System

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	36400 1XHA0	0	(SA561) Wireless Power Charger Logic Improvement	240024R0	0.3 M/H	N/A	0

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA561 when accessing the KDealer+ system.

