



GROUP	MODEL
CLI	2022MY EV6 (CV)
NUMBER	DATE
052	November 2022

## TECHNICAL SERVICE BULLETIN

SUBJECT: **SERVICE ACTION: DATC LOGIC IMPROVEMENT FOR  
CELSIUS TO FAHRENHEIT CONVERSION (SA513)**

This bulletin provides the procedure to update the software logic of the Dual Auto Temperature Controller (DATC) on some 2022MY EV6 (CV) vehicles produced from November 17, 2021 through September 16, 2022, in order to prevent the temperature units from changing to Celsius from Fahrenheit when using remote functions. Follow the procedure outlined in this publication to apply the improved logic to the 'AIRCON' system using the KDS ECU Upgrade function as described in this bulletin. 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.



Kia Diagnostic System (KDS)

### 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 WebDCS (Service → Warranty Coverage → Warranty Coverage Inquiry → Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs → Not Completed Recall → Recall VIN → Select Report), which includes a list of affected vehicles.**

**This issue number is SA513.**

SUBJECT:

## SERVICE ACTION: DATC LOGIC IMPROVEMENT FOR CELSIUS TO FAHRENHEIT CONVERSION (SA513)

### ECU Upgrade Procedure:

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

Upgrade Event Name
638. CV DATC UPGRADE FOR CELSIUS TO FAHRENHEIT CONVERSION

#### 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 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.

SUBJECT:

## SERVICE ACTION: DATC LOGIC IMPROVEMENT FOR CELSIUS TO FAHRENHEIT CONVERSION (SA513)

### 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 #638

Model	System	ECU P/No.	ROM ID	
			Previous	New
CV	DATC	97255 CV020		
		97255 CV050		
		97255 CV080		
		97255 CV110	100.00	
		97255 CV140	100.01	
		97255 CV170	100.02	
		97255 CV220	100.03	
		97255 CV250	101.00	
		97255 CV300	101.01	
		97255 CV310	101.02	
		97255 CV350	102.00	
		97255 CV360	103.00	
		97255 CV370	104.00	112.00
		97255 CV380	104.01	
		97255 CV730	104.02	
		97255 CV770	105.00	
		97255 CV800	106.00	
		97255 CV810	107.00	
		97255 CV820	108.00	
		97255 CV830	109.00	
97255 CV850	110.00			
97255 CV860				
97255 CV870				
97255 CV880				

*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.*



SUBJECT: SERVICE ACTION: DATC LOGIC IMPROVEMENT FOR CELSIUS TO FAHRENHEIT CONVERSION (SA513)

**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.

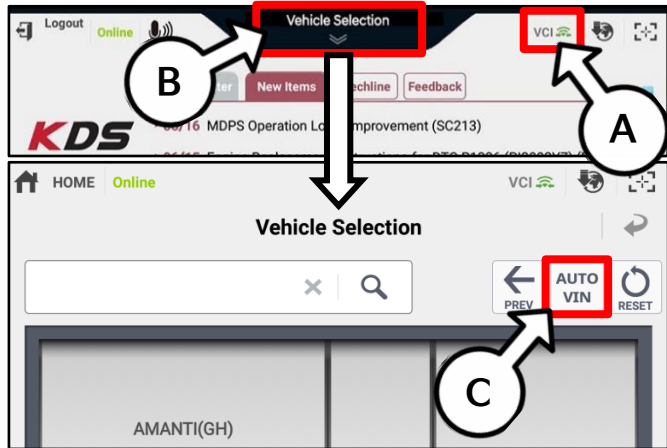
**NOTICE**  
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



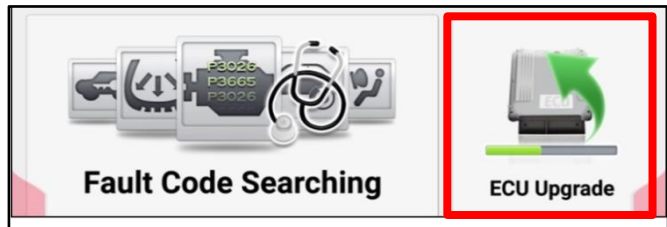
- 2. With the ignition ON, turn ON the KDS tablet. Select 'KDS' from the home screen.



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



- 4. Select 'ECU Upgrade'.



**SUBJECT: SERVICE ACTION: DATC LOGIC IMPROVEMENT FOR CELSIUS TO FAHRENHEIT CONVERSION (SA513)**

- The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #638.

**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

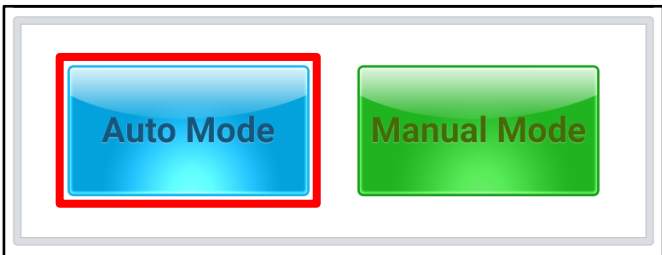
36%

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.



- Select the AIRCON system under the System selection menu. Touch ID Check (D) and confirm that the latest update is available.

Select Upgrade Event #638 and select Upgrade to continue.

- 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.

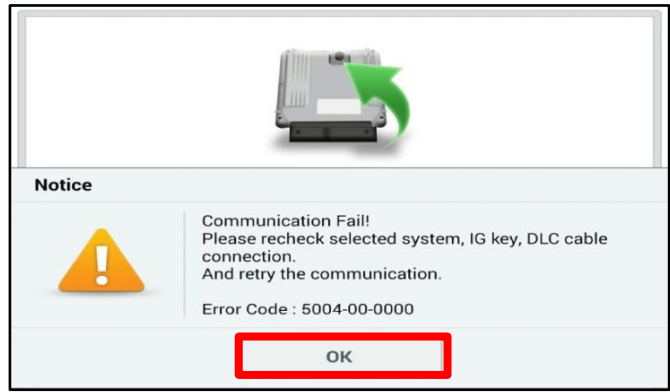
**SERVICE ACTION: DATC LOGIC IMPROVEMENT FOR CELSIUS TO FAHRENHEIT CONVERSION (SA513)**

SUBJECT:

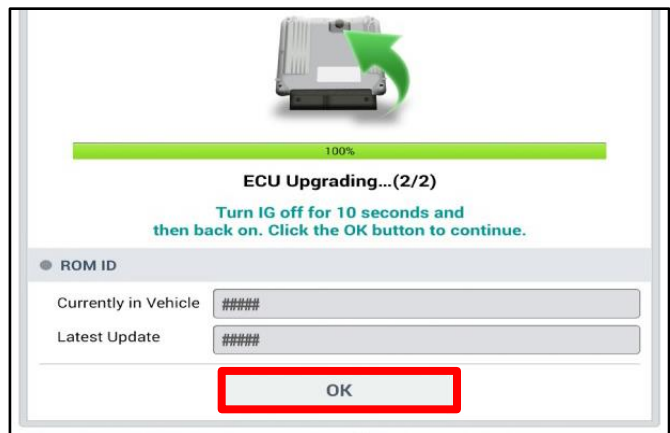
- If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Select 'OK' and restart the procedure from step 4.

**NOTICE**

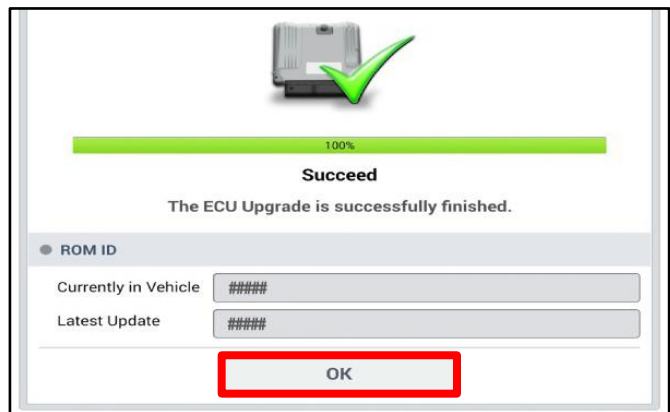
**If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.**



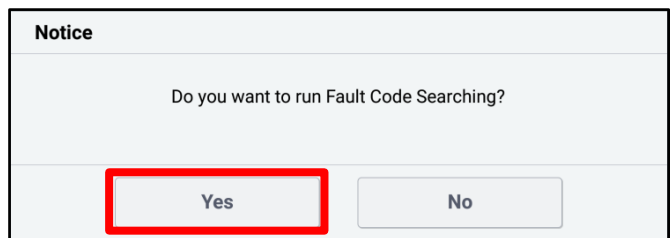
- When instructed on the KDS, turn the ignition OFF for ten (10) seconds then back on. Select 'OK' to continue.



- 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 engine to confirm normal operation of the vehicle.
- Confirm that temperatures are now displaying in °F (Fahrenheit) instead of °C (Celsius).



SUBJECT:

## SERVICE ACTION: DATC LOGIC IMPROVEMENT FOR CELSIUS TO FAHRENHEIT CONVERSION (SA513)

### 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
CV DATC: 97255-CV020/050/080/110/140/170/220/250/300~380/730/770/800~880	5880

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **AIRCON** system under the System selection menu. Select **Upgrade Event #638** 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.
10. Confirm that temperatures are now displaying in °F (Fahrenheit) instead of °C (Celsius).

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**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
EV6 (CV)	November 17, 2021 to September 16, 2022

**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	97255 CV110	0	(SA513) DATC Logic Improvement	220131R0	0.3 M/H	N/A	0

**NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA513 when accessing the WebDCS system.

