

GROUP	MODEL
Service Campaign	2020-2022MY
	Telluride (ON)
NUMBER	DATE
SC243	August 2022

## **VOLUNTARY SERVICE CAMPAIGN**

SUBJECT:

# FRONT RADAR FCA/SCC MISDETECTION PREVENTION LOGIC IMPROVEMENT (SC243)

This bulletin provides information to update the software logic of the Front Collision-Avoidance Assist (FCA) and Smart Cruise Control (SCC) system on certain 2020-2022MY Telluride (ON) vehicles listed below. If foreign material, snow/ice, or roadway debris blocks the front radar located in the front bumper area, misalignment may occur, causing improper obstacle detection by the FCA system without illumination of the FCA warning lamp. If this condition occurs, the vehicle may apply partial braking when passing other vehicles. This update is to adjust the FCA warning lamp strategy and set conditions to improve the detection of a front radar misalignment condition. Follow the procedure outlined in this publication to apply the improved logic to the FCA/SCC 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 2 of this bulletin. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

MY	Production Dates	Campaign #	Availability
2020	1/9/2019 - 7/21/2020	SC243 <u>A</u>	Late September
2021	6/17/2020 - 6/8/2021	SC243 <u>B</u>	Late September
2022	5/26/2021 - 7/26/2022	SC243 <u>C</u>	Available



Kia Diagnostic System (KDS)

#### **NOTICE**

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

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

#### Upgrade Event Name

623. ON (22MY) FRONT RADAR FCA/SCC MISDETECTION PREVENTION LOGIC UPDATE

### **NOTICE**

- Confirm a <u>fully charged battery</u> (12.3 volts or higher is necessary) is used <u>or</u> 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.

### **(1)** 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.

#### **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 #623** 

Model	System	ECU P/No.	ROM ID		
Model System		LCO F/NO.	Previous	New	
ON (22MY)	SCC (Smart Cruise Control)	99110 S9110	1.00	1.01	

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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## **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**

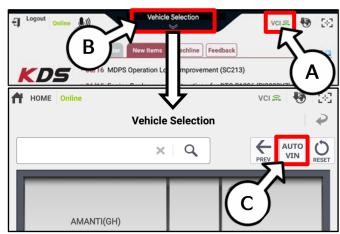
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



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



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 5. uploaded Events and then automatically download Upgrade Event #623.



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

6. Select Auto Mode.



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 SCC system under the System selection menu.

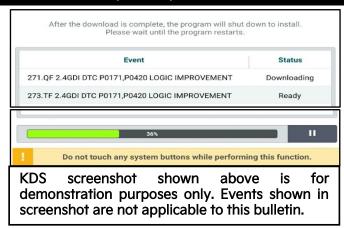
Touch ID Check (D) and confirm that the latest update is available.

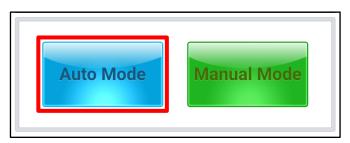
Select Upgrade Event #623, and select Upgrade to continue.

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.

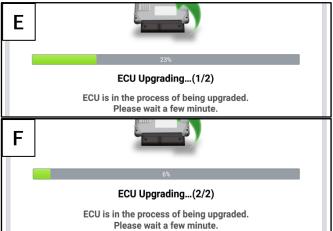
## **ACAUTION**

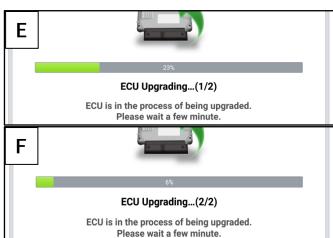
Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.













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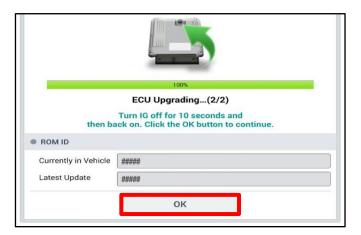
9. <u>If a "Communication Fail" screen appears</u>, verify that the VCI-II and KDS are communicating properly. Select **'OK'** and restart the procedure from step 4.



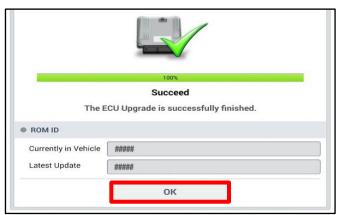
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



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



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



12. 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.



13. Start the engine to confirm normal operation of the vehicle.



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### 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
ON FR_RDR: 99110 S9110	9110

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
- 2. Select the SCC system under the System selection menu. Select **Upgrade Event #623** and select **Upgrade** to continue.
- 3. Select the appropriate control unit part number with reference to the ROM ID Information Table on page 2, 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.



## FRONT RADAR FCC/SCC MISDETECTION PREVENTION LOGIC IMPROVEMENT (SC243)

#### AFFECTED VEHICLE RANGE:

Model	Production Date Range
Telluride (ON)	January 9, 2019 to July 26, 2022

#### **REQUIRED TOOL:**

Tool Name	Figure	Comments
KDS		Kia Diagnostic System

#### WARRANTY INFORMATION:

N Code: N99 C Code: C99

MY	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacemen † P/N	Qty.
(ON) 20MY				(SC243 <u>A</u> ) Front Radar FCA/SCC Misdetection Prevention Logic Improvement	TBD			
(ON) 21MY	R	99110 S9100	0	(SC243 <u>B</u> ) Front Radar FCA/SCC Misdetection Prevention Logic Improvement	TBD	0.3 M/H	N/A	0
(ON) 22MY				(SC243 <u>C</u> ) Front Radar FCA/SCC Misdetection Prevention Logic Improvement	220A15R2			

<u>Note</u>: Currently, <u>only 22MY vehicle software was validated and available for use</u>. The software for 20-21MY vehicles will be available soon and the publication will be revised.

## **■ NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC243 when accessing the WebDCS system.

