



GROUP	MODEL
Safety Recall Campaign	2020-2021MY Stinger (CK)
NUMBER	DATE
SC219	December 2021

SAFETY RECALL CAMPAIGN

SUBJECT: **CLUSTER LOGIC IMPROVEMENT FOR ACCURATE FUEL GAUGE DISPLAY (SC219)**

This bulletin provides the procedure to update the instrument cluster (CLU) system software on certain 2020-2021MY Stinger (CK) vehicles produced from March 20, 2020 through December 28, 2020. The fuel gauge reading may not accurately display the amount of fuel remaining in the fuel tank due to a software logic/calibration error. If the fuel gauge wrongly displays more fuel than is present in the fuel tank, the vehicle can unexpectedly run out of fuel. If this occurs, the vehicle may stall, increasing the risk of a crash. Follow the procedure outlined in this publication to apply the improved logic to the 'CLU' 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

There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.

NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → 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.

ECU Upgrade Procedure:

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

Upgrade Event Name
581. CK CLUSTER DISPLAY 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.

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.

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ROM ID INFORMATION TABLE:

Upgrade Event #581

Model	SYS	Type	ECU P/No.	ROM ID	
				Previous	New
CK	Cluster	Standard (3.5" Mono TFT)	94002 J5101 94002 J5111 94002 J5121 94002 J5131 94001 J5361 94001 J5371 94001 J5381 94001 J5391	1.13 1.14	9.00
		Super Vision (7" Color TFT)	94012 J5101 94012 J5111 94012 J5121 94012 J5131 94012 J5141 94012 J5151 94011 J5501 94011 J5511 94011 J5521 94011 J5531 94011 J5541 94011 J5551	1.14 1.15	

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.



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.

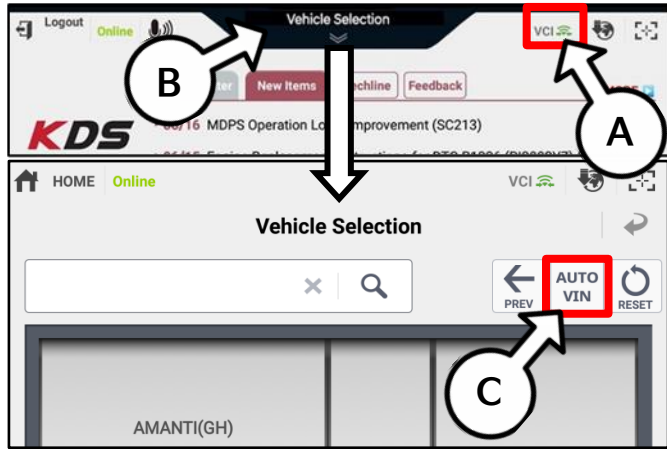
NOTICE
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



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 #581.

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

- Select the CLU system under the System selection menu. Touch TSB (D) and confirm that the latest update is available. Select Upgrade Event #581 and select Upgrade to continue.

ECU Upgrade

STINGER(CK) > 2021 > G 2.0 T-GDI THETA II

System

CLU

TSB

581.CK CLUSTER DISPLAY LOGIC IMPROVEMENT

CK CLU STD (3.5" Mono TFT) : 94001-J5361/71/81/91, 94002-J5101/11/21/31

CK CLU SVC (7" Color TFT) : 94011-J5501/11/21/31/41/51, 94012-J5101/11/21/31/41/51

- 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)

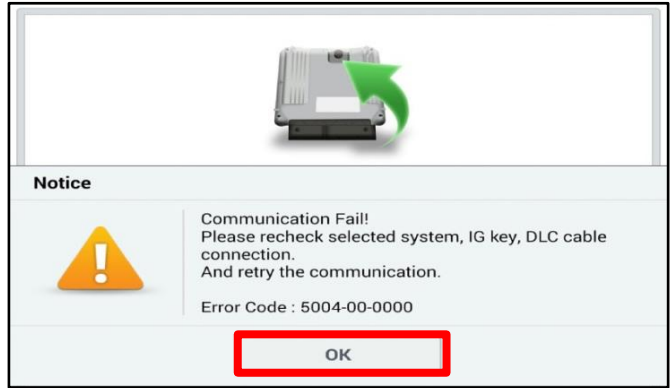
ECU is in the process of being upgraded. Please wait a few minute.



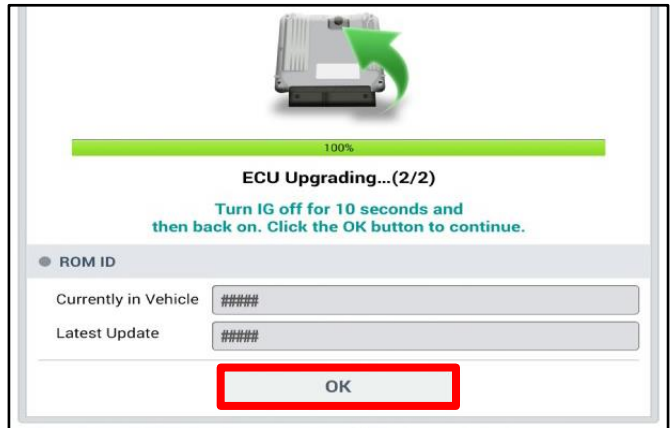
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- 9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Select 'OK' and restart the procedure from step 4.

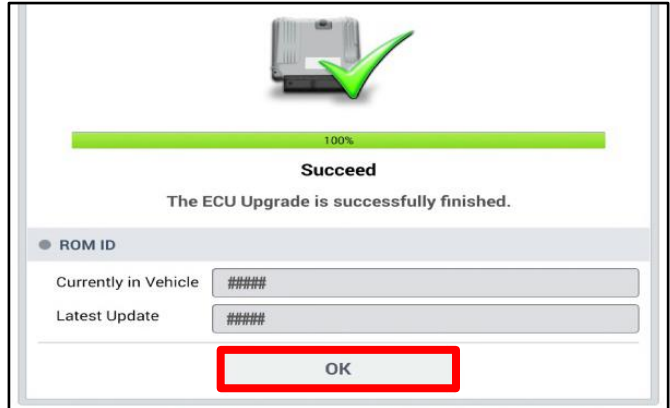
NOTICE
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



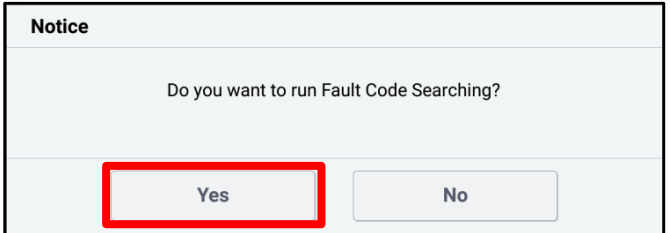
- 10. When instructed on the KDS, turn the ignition OFF for ten (10) seconds then back on. Select 'OK' to continue.



- 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.



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
CK CLU STD (3.5" Mono TFT): 94001-J5361/71/81/91, 94002-J5101/11/21/31	2131
CK CLU SVC (7" Color TFT): 94011-J5501/11/21/31/41/51, 94012-J5101/11/21/31/41/51	4151

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **CLU** system under the System selection menu. Select **Upgrade Event #518** 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.

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Model	Production Date Range
Stinger (CK)	March 20, 2020 to December 28, 2020

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.
R	94021 J5040	0	(SC219) Cluster Logic Improvement	211167R0	0.3 M/H	N/A	0

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC219 when accessing the WebDCS system.