

| GROUP | MODEL | | |
|--------|----------------|--|--|
| ELE | 2021MY | | |
| | Seltos (SP2) | | |
| NUMBER | DATE | | |
| 210 | September 2020 | | |

TECHNICAL SERVICE BULLETIN

SUBJECT:

SERVICE ACTION: ICU OPERATION LOGIC IMPROVEMENT (\$A435)

This bulletin provides the procedure to improve the logic of the Integrated Central Control Unit (ICU) on some 2021MY Seltos (SP2) vehicles, produced from November 20, 2019 through August 13, 2020, which may exhibit a parasitic draw during long-term storage, while the ICU is in Transportation Mode. To correct this concern, apply the improved logic to the ICU on vehicles in dealer stock only, 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 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 \rightarrow Warranty Coverage \rightarrow Warranty Coverage Inquiry \rightarrow Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs \rightarrow Not Completed Recall \rightarrow Recall VIN \rightarrow Select Report), which includes a list of affected vehicles.

This issue number is SA435.

Printed TSB copy is for reference only; information may be updated at any time. Always refer to KGIS for the latest information.

Circulate To:

General Manager

Service Manager

Parts Manager

ECU Upgrade Procedure:

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

Upgrade Event Name

507. SP2 ICU OPERATION LOGIC IMPROVEMENT

* NOTICE

- A fully charged battery is necessary before ECU upgrade can take place. It is recommended that a battery charger is used in ECU mode during reflashing or the use of a fully charged jump starter box connected to the battery.
- DO NOT connect any other battery charger to the vehicle during ECU upgrade.
- Ensure the KDS or GDS is sufficiently charged prior to reflash.
- All ECU upgrades must be done with the ignition key in the 'ON' position.
- 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 model and model year.

* NOTICE

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 particular 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 #507

| | Model | EM | TM | SYS | ECU P/No. | ROM ID | | |
|----|-------|-----|-----|-----|---|---------------------------------|-----|--|
| IV | Model | | | | | Previous | New | |
| | SP2 | ALL | ALL | ICU | 91952 Q5010 91952 Q5020 91952 Q5370 91952 Q5380 91952 Q5430 | 437 A00 A11 A20 A31 | A33 | |

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

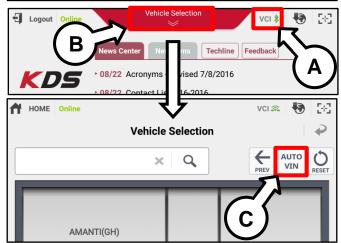
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.

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

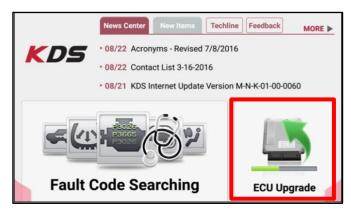




Confirm communication with VCI (A) and 3. then configure the vehicle (B) using the AUTO VIN (C) feature.



Select ECU Upgrade. 4.



 The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event** #507.

* 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

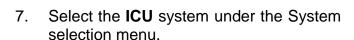
1 Do not touch any system buttons while performing this function.

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

Select Auto Mode.

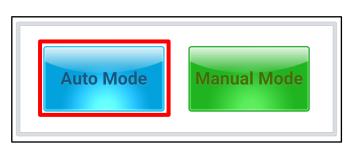


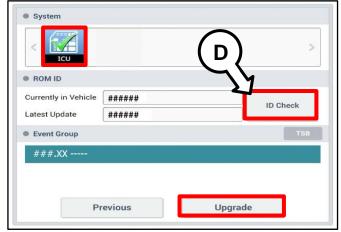
Do NOT attempt to perform a Manual Mode upgrade <u>UNLESS</u> <u>Auto Mode fails</u>. Always follow the instructions given on the KDS in either Auto or Manual mode.



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

Select **Upgrade Event #507** and select **Upgrade** to continue.

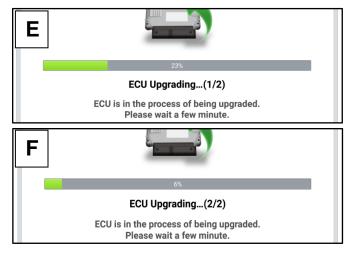




 The ECU upgrade will begin and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.



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



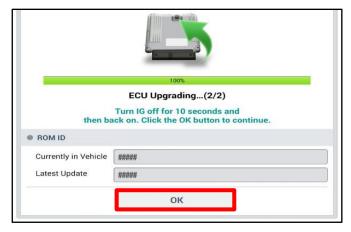
9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

* 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. Touch **OK** to continue.

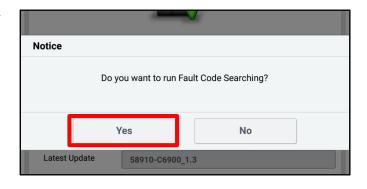




11. Once the upgrade is complete, touch **OK** to finalize the procedure.



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 proper 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.

* NOTICE

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.

Manual Mode ECU Upgrade Passwords

| Menu | Password |
|--------------------------------------|----------|
| SP2 ICU: 91952-Q5010/020/370/380/430 | 5430 |

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
- 2. Select the **ICU** system under the System selection menu. Select **Upgrade Event #507** 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. Touch **OK** to continue.
- 7. Once the upgrade is complete, touch **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 | | | |
|--------------|--------------------------------------|--|--|--|
| Seltos (SP2) | November 20, 2019 to August 13, 2020 | | | |

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 | 91952 Q5010 | 0 | (SA435) ICU Logic Improvement | 200093R0 | 0.3 M/H | N/A | 0 |

* NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SA435</u> when accessing the WebDCS system.