

GROUP	MODEL
ELE	2021MY Seltos (SP2)
NUMBER	DATE
199	April 2020

TECHNICAL SERVICE BULLETIN

SUBJECT:

SERVICE ACTION: IBU JUDGEMENT LOGIC IMPROVEMENT UPDATE (\$A423)

This bulletin provides the procedure to improve the judgement logic of the Integrated Body Control Unit (IBU) on some 2021MY Seltos (SP2) vehicles <u>equipped with a standard key type</u> (non-Smart Key), produced from November 21, 2019 through March 23, 2020, which may exhibit MIL ON with DTC(s) listed below. To correct this concern, apply the improved logic to the ECU 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(s) 3-4 of this bulletin. Before conducting the procedure, verify the vehicle is included in the list of affected VINs.

DTC C1662: Auto Learning failure

DTC C1312 - C1315: Front/Rear Left/Right Sensor RF Channel Failure



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 **SA423**.

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

☑ Service Advisors ☑ Technicians ☑ Body Shop Manager ☐ Fleet Repair

SERVICE ACTION: IBU JUDGEMENT LOGIC IMPROVEMENT UPDATE (SA423)

ECU Upgrade Procedure:

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

Upgrade Event Name

"493. SP2 IBU MIL ON AND DTC JUDGMENT LOGIC IMPROVEMENT"

(i) IMPORTANT

This software upgrade is ONLY applicable to "standard key type" vehicles (non-Smart Key). If this upgrade is installed to a Smart Key type vehicle, then the IBU will need to be replaced to revert back to the correct software.

* 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.

SERVICE ACTION: IBU JUDGEMENT LOGIC IMPROVEMENT UPDATE (SA423)

(1) IMPORTANT

This software upgrade is ONLY applicable to "standard key type" vehicles (non-Smart Key). If this upgrade is installed to a Smart Key type vehicle, then the IBU will need to be replaced to revert back to the correct software.

* 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 #493

Madal		SMK	15.45.40	EQUID/N-	ROM ID	
Model	EM		IMMO 🕰	ECU P/No.	Previous	New
SP2	ALL	No	Yes	95400 Q5CA0 95400 Q5CB0 95400 Q5CC0 95400 Q5CD0 95400 Q5CF0 95400 Q5CG0 95400 Q5CH0 95400 Q5CY0 95400 Q5DA0 95400 Q5DB0 95400 Q5DD0 95400 Q5DD0 95400 Q5DD0 95400 Q5DF0	95400Q5CA0_103xx 95400Q5CB0_103xx 95400Q5CC0_103xx 95400Q5CD0_103xx 95400Q5CE0_103xx 95400Q5CF0_103xx 95400Q5CG0_103xx 95400Q5CH0_103xx 95400Q5CY0_103xx 95400Q5CY0_103xx 95400Q5DA0_103xx 95400Q5DB0_103xx 95400Q5DB0_103xx 95400Q5DE0_103xx 95400Q5DF0_103xx 95400Q5DF0_103xx 95400Q5DF0_103xx 95400Q5CB0_104xx 95400Q5CB0_104xx 95400Q5CD0_104xx 95400Q5CB0_104xx 95400Q5CF0_104xx 95400Q5CF0_104xx 95400Q5CF0_104xx 95400Q5CF0_104xx 95400Q5CF0_104xx 95400Q5CF0_104xx 95400Q5CF0_104xx 95400Q5CF0_104xx 95400Q5CT0_104xx 95400Q5CT0_104xx 95400Q5CT0_104xx 95400Q5CT0_104xx 95400Q5CT0_104xx 95400Q5CT0_104xx 95400Q5CT0_104xx 95400Q5DD0_104xx 95400Q5DD0_104xx	95400Q5**0_10701

SERVICE ACTION: IBU JUDGEMENT SUBJECT: LOGIC IMPROVEMENT UPDATE (SA423) Continued... 95400Q5CA0_105xx 95400Q5CB0 105xx 95400Q5CC0_105xx 95400Q5CD0_105xx 95400Q5CE0_105xx 95400Q5CF0_105xx 95400Q5CG0_105xx 95400Q5CH0_105xx 95400Q5CY0_105xx 95400Q5CZ0_105xx 95400Q5DA0 105xx 95400Q5DB0_105xx 95400Q5DC0_105xx 95400Q5DD0_105xx 95400Q5DE0_105xx 95400Q5DF0_105xx 95400Q5CA0_106xx 95400Q5CB0_106xx 95400Q5CC0_106xx 95400Q5CD0_106xx 95400Q5CE0_106xx 95400Q5CF0 106xx 95400Q5CG0_106xx 95400Q5CH0 106xx 95400Q5CY0_106xx 95400Q5CZ0_106xx 95400Q5DA0_106xx 95400Q5DB0_106xx 95400Q5DC0_106xx 95400Q5DD0_106xx 95400Q5DE0_106xx 95400Q5DF0_106xx 95400Q5CA0 10700 95400Q5CB0_10700 95400Q5CC0_10700 95400Q5CD0_10700 95400Q5CE0_10700 95400Q5CF0_10700 95400Q5CG0_10700 95400Q5CH0_10700 95400Q5CY0_10700 95400Q5CZ0_10700 95400Q5DA0_10700 95400Q5DB0 10700 95400Q5DC0_10700 95400Q5DD0_10700 95400Q5DE0_10700 95400Q5DF0 10700

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.

SERVICE ACTION: IBU JUDGEMENT LOGIC IMPROVEMENT UPDATE (SA423)

* NOTICE

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

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

* NOTICE

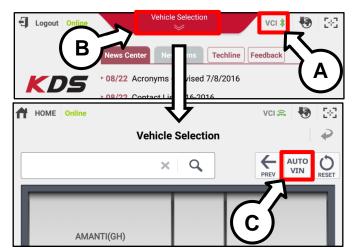
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.

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

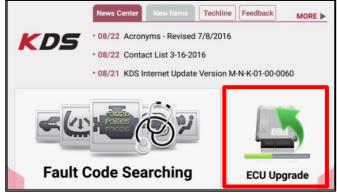




 Confirm communication with VCI (A) and then configure the vehicle (B) using the AUTO VIN (C) feature.



4. Select ECU Upgrade.



SERVICE ACTION: IBU JUDGEMENT LOGIC IMPROVEMENT UPDATE (SA423)

 The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #493.

* NOTICE

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

6. Select Auto Mode.

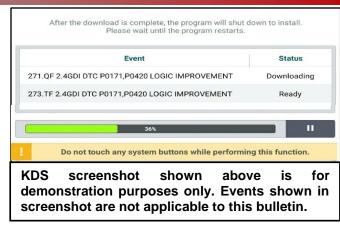


Do NOT attempt to perform a Manual Mode upgrade <u>UNLESS</u> <u>Auto Mode fails</u>. Always follow the instructions given on the KDS in either Auto or Manual mode.

7. Select the **IBU** system under the System selection menu.

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

Select **Upgrade Event #493** and select **Upgrade** to continue.



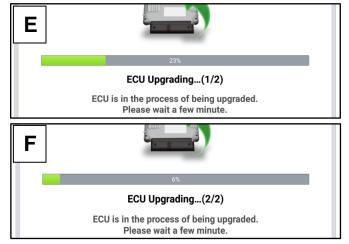




 The ECU upgrade will begin and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.



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



SERVICE ACTION: IBU JUDGEMENT LOGIC IMPROVEMENT UPDATE (SA423)

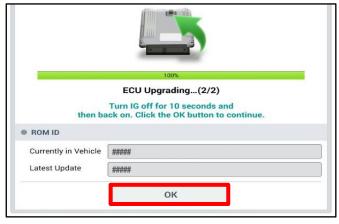
9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

* NOTICE

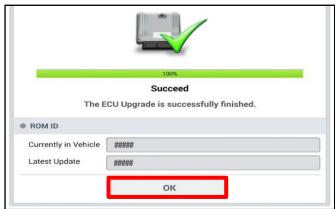
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.

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.



SERVICE ACTION: IBU JUDGEMENT LOGIC IMPROVEMENT UPDATE (SA423)

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
SP2 IBU : 95400-Q5CA0~H0/Y0/Z0, Q5DA0~DF0	0054

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
- 2. Select the **IBU** system under the System selection menu. Select **Upgrade Event #493** and select **Upgrade** to continue.
- 3. Select the appropriate control unit part number with reference to the ROM ID Information Table on page(s) 3-4, 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.

SERVICE ACTION: IBU JUDGEMENT LOGIC IMPROVEMENT UPDATE (SA423)

AFFECTED VEHICLE RANGE:

Model	Production Date Range			
Seltos (SP2)	November 21, 2019 to March 23, 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	95400 Q5CY0	0	(SA423) IBU Judgement Logic Improvement	200033R0	0.4 M/H	N/A	0

* NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SA423</u> when accessing the WebDCS system.