



GROUP	MODEL
ELE	2021-2022MY K5 (DL3a)
NUMBER	DATE
262 (Rev 1, 2/10/2023)	September 2022

TECHNICAL SERVICE BULLETIN

SUBJECT:

IBU LOGIC IMPROVEMENT FOR SMART KEY BATTERY DRAIN

NOTICE

This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.

This bulletin provides the procedure to update the software logic of the Integrated Body Control Unit (IBU) system on some 2021-2022MY K5 (DL3a) vehicles produced from March 27, 2020 through May 12, 2022, which may exhibit excessive discharge of the smart key battery. Follow the procedure outlined in this publication to apply the improved logic to the 'IBU' system using the KDS ECU Upgrade function as described in this bulletin and replace the batteries on both of the customer's key fobs. For confirmation that the latest reflash has been applied to a vehicle you are working on, verify the ROM ID using the table on pages 3-5 of this bulletin.



Kia Diagnostic System (KDS)

ECU Upgrade Procedure:

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

Upgrade Event Name
621. DL3a IBU UPGRADE FOR SMART KEY OPERATION


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.

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.

SUBJECT:

IBU LOGIC IMPROVEMENT FOR SMART KEY BATTERY DRAIN

ROM ID INFORMATION TABLE:

Upgrade Event #621

Model	System	ECU P/No.	ROM ID	
			Previous	New
2021MY DL3a	IBU (Integrated Body Control Unit)	95400 L3320	1.11	1.16
		95400 L3330		
		95400 L3340		
		95400 L3350		
		95400 L3370		
		95400 L3380		
		95400 L3410		
		95400 L3420		
		95400 L3430		
		95400 L3440		
		95400 L3460		
		95400 L3470		
		95400 L3620		
		95400 L3630		
		95400 L3650		
		95400 L3680		
		95400 L3690		
		95400 L3710		
		95400 L3321		
		95400 L3331		
		95400 L3341		
		95400 L3351		
		95400-L3371		
		95400 L3381		
		95400 L3411		
		95400 L3421		
95400 L3431				
95400 L3441				
95400 L3461				
95400 L3471				
95400 L3621				
95400 L3631				
95400 L3651				
95400 L3681				
95400 L3691				
95400 L3711				
2021MY DL3a (GT)		95400 L3501	2.06	2.11
		95400 L3511		
		95400 L3521		
		95400 L3531		
		95400 L3561		
		95400 L3571		
		95400 L3581		
		95400 L3591		
		95400 L3741		
		95400 L3751		
95400 L3781				
95400 L3791				



ROM ID INFORMATION TABLE:

Upgrade Event #621

Model	System	ECU P/No.	ROM ID		
			Previous	New	
2021MY DL3a	IBU (Integrated Body Control Unit)	95400 L3320			
		95400 L3330			
		95400 L3340			
		95400 L3350			
		95400 L3370			
		95400 L3380			
		95400 L3410			
		95400 L3420			
		95400 L3430			
		95400 L3440			
		95400 L3460			
		95400 L3470			
		95400 L3620			
		95400 L3630			
		95400 L3650			
		95400 L3680			
		95400 L3690		1.06	
		95400 L3710		1.07	1.15
		95400 L3321		1.09	
		95400 L3331			
		95400 L3341			
		95400 L3351			
		95400 L3371			
		95400 L3381			
		95400 L3411			
		95400 L3421			
		95400 L3431			
		95400 L3441			
		95400 L3461			
		95400 L3471			
95400 L3621					
95400 L3631					
95400 L3651					
95400 L3681					
95400 L3691					
95400 L3711					

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:

IBU LOGIC IMPROVEMENT FOR SMART KEY BATTERY DRAIN**ROM ID INFORMATION TABLE:****Upgrade Event #621**

Model	System	ECU P/No.	ROM ID	
			Previous	New
2021MY DL3a (GT)	IBU (Integrated Body Control Unit)	95400 L3501 95400 L3511 95400 L3521 95400 L3531 95400 L3561 95400 L3571 95400 L3581 95400 L3591 95400 L3741 95400 L3751 95400 L3781 95400 L3791	2.01 2.02 2.04	2.10
2022MY DL3a (GT)		954B0 L3500 954B0 L3510 954B0 L3520 954B0 L3530 954B0 L3560 954B0 L3570 954B0 L3580 954B0 L3590 954B0 L3740 954B0 L3750 954B0 L3780 954B0 L3790	2.05 2.07 2.08	2.09
2022MY DL3a		954B0 L3320 954B0 L3330 954B0 L3340 954B0 L3350 954B0 L3370 954B0 L3380 954B0 L3410 954B0 L3420 954B0 L3430 954B0 L3440 954B0 L3460 954B0 L3470 954B0 L3620 954B0 L3630 954B0 L3650 954B0 L3680 954B0 L3690 954B0 L3710	1.10 1.12 1.13	1.14

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: **IBU LOGIC IMPROVEMENT FOR SMART KEY BATTERY DRAIN**

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.

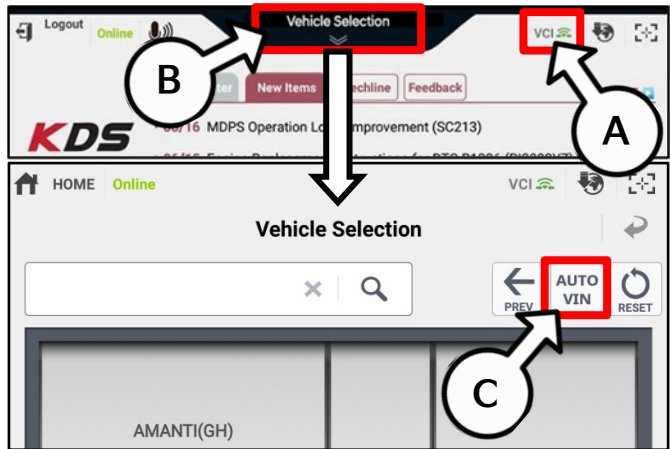
NOTICE
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



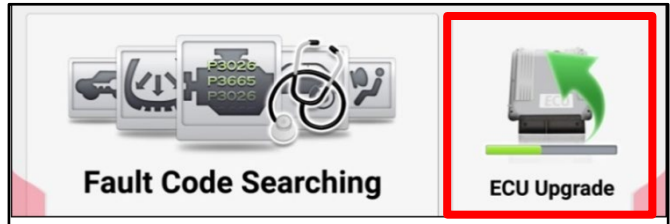
2. With the ignition ON, turn ON the KDS tablet. Select 'KDS' from the home screen.



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



4. Select 'ECU Upgrade'.



SUBJECT:

IBU LOGIC IMPROVEMENT FOR SMART KEY BATTERY DRAIN

- The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #621.

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 IBU-SMK system under the System selection menu. Touch ID Check (D) and confirm that the latest update is available. Select Upgrade Event #621 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)

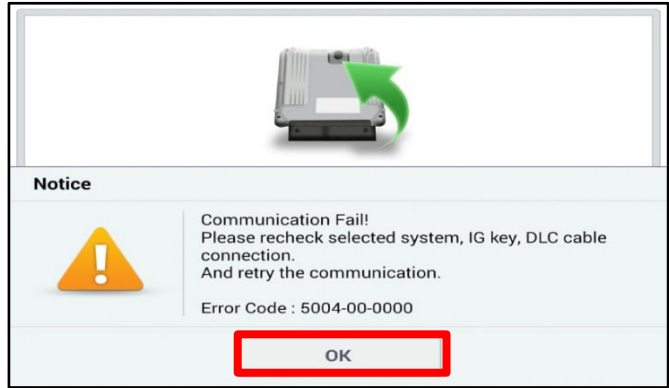
ECU is in the process of being upgraded. Please wait a few minute.

SUBJECT: **IBU LOGIC IMPROVEMENT FOR SMART KEY BATTERY DRAIN**

- 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

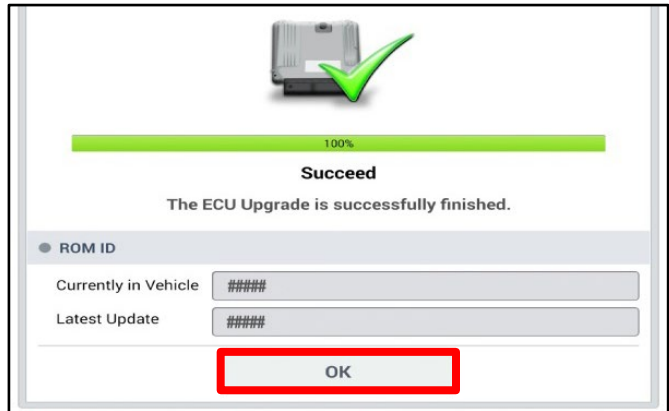
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



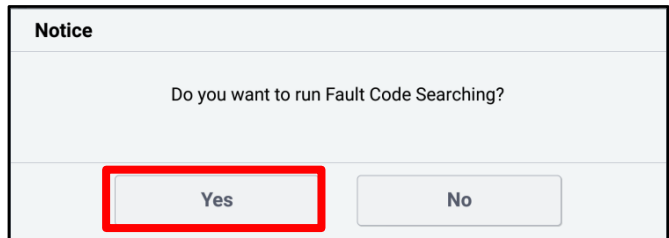
- When instructed on the KDS, turn the ignition OFF for ten (10) seconds then back on. Select 'OK' to continue.



- 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.



- Replace both smart key batteries (maximum of 2 per vehicle).
- 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
DL3a GT IBU : 954B0-L3500~530, L3560~590, L3740~750, L3780~790	3790
DL3a IBU : 954B0-L3320~350, L3370~380, L3410~440, L3460~470, L3620~630, L3650, L3680~690, L3710	3710
DL3a IBU [S/W ver. 1.11] : 95400-L3320~350, L3370~380, L3410~440, L3460~470, L3620~630, L3650, L3680~690, L3710, L3321~351, L3371~381, L3411~441, L3461~371, L3621~631, L3651, L3681~691, L3711	3711
DL3a GT IBU [S/W ver. 2.06] : 95400-L3501~531, L3561~591, L3741~751, L3781~791	3791
DL3a IBU [S/W ver. 1.06, 1.07, 1.09] : 95400-L3320~350, L3370~380, L3410~440, L3460~470, L3620~630, L3650, L3680~690, L3710, L3321~351, L3371~381, L3411~441, L3461~371, L3621~631, L3651, L3681~691, L3711	3320
DL3a GT IBU [S/W ver. 2.01, 2.02, 2.04] : 95400-L3501~531, L3561~591, L3741~751, L3781~791	3501

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **IBU-SMK** system under the System selection menu. Select **Upgrade Event #621** and select **Upgrade** to continue.
3. Select the appropriate control unit part number with reference to the ROM ID Information Table on pages 3-5, 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. Replace both smart key batteries (maximum of 2 per vehicle).
10. Start the engine to confirm proper operation of the vehicle.

SUBJECT:


IBU LOGIC IMPROVEMENT FOR SMART KEY BATTERY DRAIN**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
K5 (DL3a)	March 27, 2020 to May 12, 2022

REQUIRED TOOL:

Tool Name	Figure	Comments
KDS		Kia Diagnostic System

REQUIRED PART:

Part Name	Part Number	Figure	Qty.
Transmitter Battery	95430 U2032		2

WARRANTY INFORMATION:**N Code: I14 C Code: ZZ3**

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	95400 L3600	0	IBU Logic Improvement for Smart Key <u>and</u> FOB Battery Replacement	954BOQ0A	0.4 M/H	95430 U2032	2