

GROUP	MODEL
ELE	2021-2022MY Niro PHEV (DE PHEV) w/ 1.6L GDI Kappa
NUMBER	DATE
324	December 2023

# TECHNICAL SERVICE BULLETIN

# SUBJECT: ECM SOFTWARE LOGIC IMPROVEMENT FOR DTC U134100

This bulletin provides information to upgrade the Engine Control Module (ECM) software logic on certain 2021-2022MY Niro PHEV (DE PHEV) vehicles equipped with 1.6 GDI Kappa, produced from December 23, 2020 through April 13, 2022, which may exhibit a "Check Hybrid System" message displayed on the instrument cluster with DTC U134100 stored. This condition may occur when the ECM tries to communicate via CAN with the Integrated Electronic Brake Module (IEB) while it is in sleep mode due to the vehicle being charged. Follow the procedure outlined in this publication to upgrade the ECM software to correct this concern on the applicable vehicle.

#### **DTC Description:**

U134100: Lost Communication with IEB (Integrated Electronic Brake Module, P-CAN)

### **NOTICE**

A Technical Service Bulletin is a field fix repair program without customer notification that may be performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

# ECM SOFTWARE LOGIC IMPROVEMENT FOR DTC U134100

## **ECU Upgrade Procedure:**

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

### Upgrade Event Name

704.DE PHEV Kappa 1.6 ECU MIL on DTC judgment logic improvement (U1341)

### **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 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.

### **(i)** 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.



## ECM SOFTWARE LOGIC IMPROVEMENT FOR DTC U134100

#### **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 #704

Model	System	IMMO 🖪	ECU P/No.	ROM ID		
Year	System	IIVIIVIO 🔛	ECO F/NO.	Previous	New	
2021	ECM	Yes	39110 03930	DEDBS6PGXG50	DEDBS6PGXG9F	
2022	ECM		39110 03934	DEDCS6PGXG61	DEDCS6PGXG9F	

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.

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.



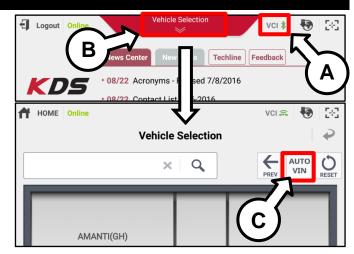
2. With the ignition **ON**, turn ON the KDS tablet. Select **'KDS'** from the home screen.





# ECM SOFTWARE LOGIC IMPROVEMENT FOR DTC U134100

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



Select 'ECU Upgrade'.



5. The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #704.** 

## **■** 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

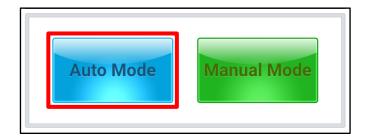
I Do not touch any system buttons while performing this function.

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

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.

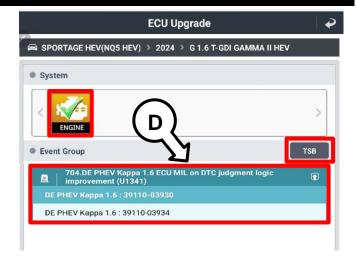




## ECM SOFTWARE LOGIC IMPROVEMENT FOR DTC U134100

7. Select **'ENGINE'** system and applicable **'Event Group'** (D) for the vehicle:

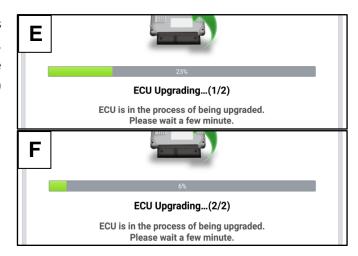
Event #704.DE PHEV Kappa 1.6 ECU MIL on DTC judgment logic improvement (U1341)



8. 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.



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

### **NOTICE**

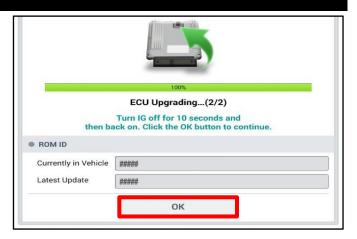
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.





# ECM SOFTWARE LOGIC IMPROVEMENT FOR DTC U134100

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.



# ECM SOFTWARE LOGIC IMPROVEMENT FOR DTC U134100

## **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
DE PHEV Kappa 1.6 : 39110-03930	4813
DE PHEV Kappa 1.6 : 39110-03934	4814

- 1. Within the ECU Upgrade screen displayed, select Manual Mode.
- 2. Select the **'ENGINE'** system under the System selection menu. Select **Upgrade Event #704** 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.



# ECM SOFTWARE LOGIC IMPROVEMENT FOR DTC U134100

## **AFFECTED VEHICLE RANGE:**

Model	Production Date Range		
Niro PHEV (DE PHEV)	December 23, 2020 to April 13, 2022		

## **REQUIRED TOOL:**

Tool Name	Figure	Comments
KDS		Kia Diagnostic System

## **WARRANTY INFORMATION:**

N Code: I3A C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	39110 03929	0	ECM Software Logic Upgrade for DTC U134100	39110F16	0.3 M/H	N/A	0

