



GROUP ENG	MODEL 2017-2019MY Niro (DE HEV/PHEV)
NUMBER 211	DATE January 2020

TECHNICAL SERVICE BULLETIN

SUBJECT: HEV/PHEV P0128 LOGIC IMPROVEMENT

This bulletin provides the procedure to improve the logic of the Engine Control Module (ECU) on some 2017-2019MY Niro (DE HEV/PHEV) vehicles, produced from November 1, 2016 through November 25, 2019 and equipped with Kappa 1.6 GDI engine, regarding DTC (P0128) judgement logic. 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 3 of this bulletin.

DTC P0128: Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)



Kia Diagnostic System (KDS)

File Under: <Engine>

Circulate To: General Manager Service Manager Parts Manager
 Service Advisors Technicians Body Shop Manager Fleet Repair

ECU Upgrade Procedure:

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

Upgrade Event Name**465. DE HEV/PHEV KAPPA 1.6GDI ECU MIL ON DTC (P0128) JUDGMENT 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.**

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*** 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 #465 Niro (DE HEV/PHEV)**

MY	EM	TM	IMMO	ECU P/No.	ROM ID	
					Previous	New
17MY	Kappa 1.6 GDI	DCT	Yes	DE6NSGHF10S 0	DE6NSGHF10F0	DE6NSGHF10S0
18MY	Kappa 1.6 GDI	DCT	Yes	391A5-03DH1	DE8NSGHF10S0 DE8NSGHF10S1 DE8NSGHF10S2 DE8NSGHF10S3	DE8NSGHF10F3
				391A5-03DH7	DE8NSGHF1PS0 DE8NSGHF1PS1 DE8NSGHF1PS2	DE8NSGHF1PF2
19MY	Kappa 1.6 GDI	DCT	Yes	391A5-03DM0	DED9S6HE0SF0 DED9S6HE0SF1 DED9S6HE0SF2 DED9S6HE0SF3	DED9S6HE0SF4
				391A5-03DM5	DED9S6PE0SF0 DED9S6PE0SF1 DED9S6PE0SF2 DED9S6PE0SF3	DED9S6PE0SF4

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**

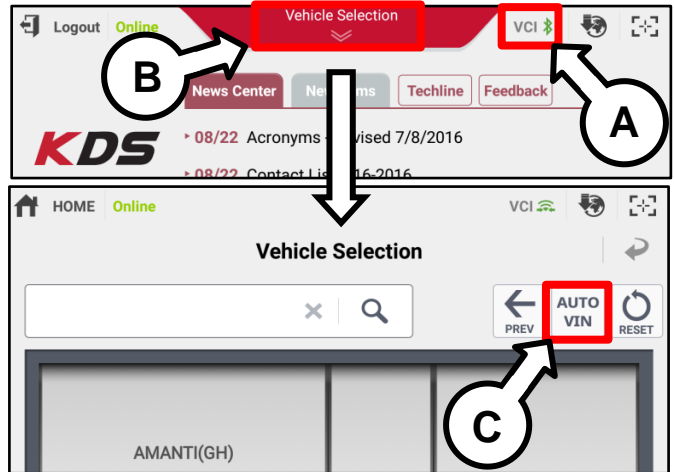
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



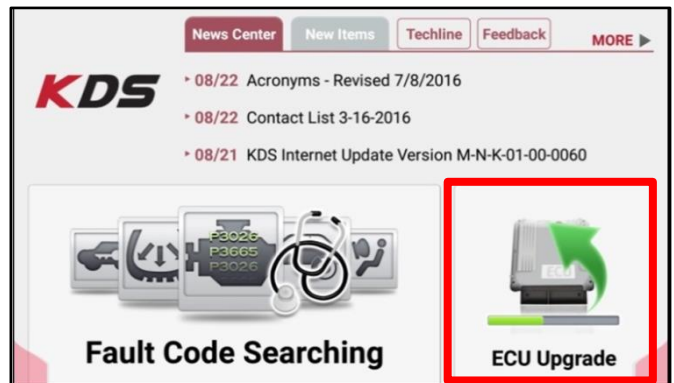
2. With the ignition ON, turn ON the KDS tablet. Select **KDS** from the home screen.



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



4. Select **ECU Upgrade**.



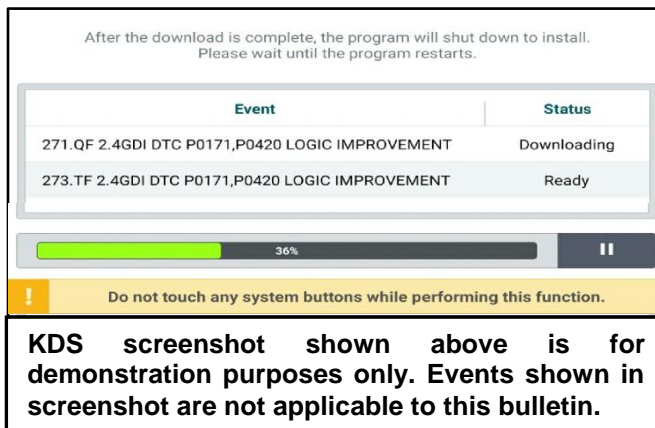
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- The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #465**.

*** NOTICE**

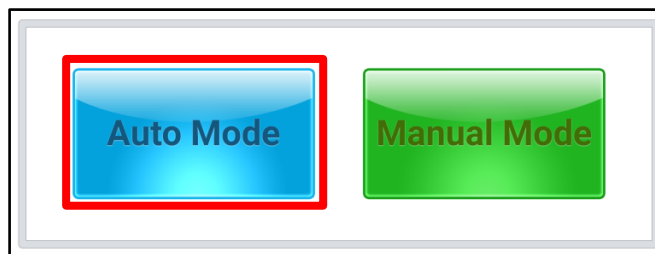
The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.



- Select **Auto Mode**.

CAUTION

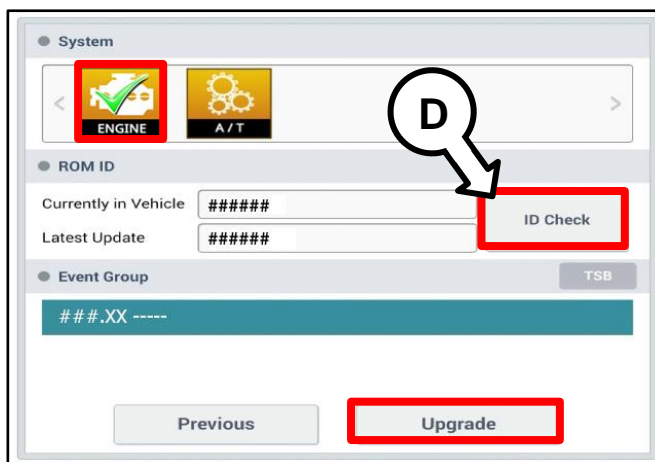
Do NOT attempt to perform a Manual Mode upgrade UNLESS Auto Mode fails. Always follow the instructions given on the KDS in either Auto or Manual mode.



- Select the **ENGINE** system under the System selection menu.

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

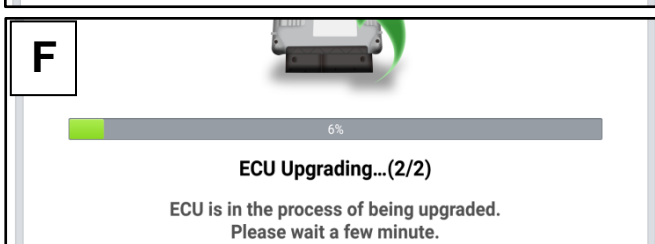
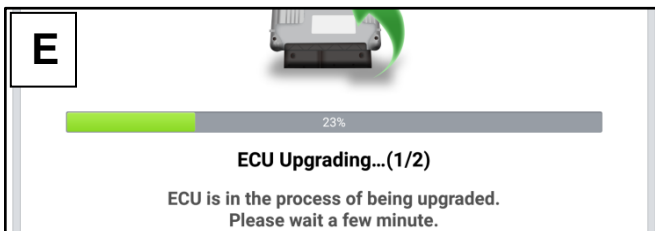
Select **Upgrade Event #465** and select **Upgrade** to continue.



- 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

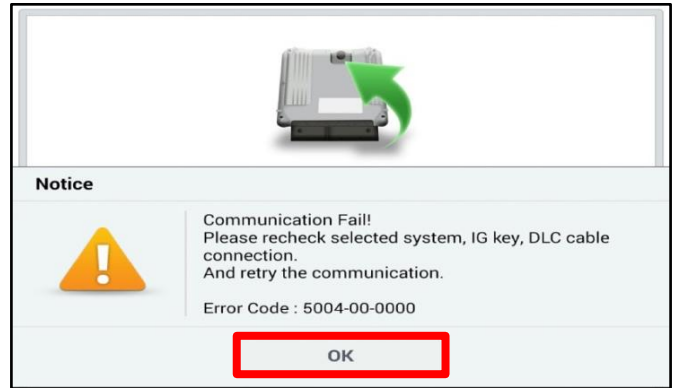
Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.



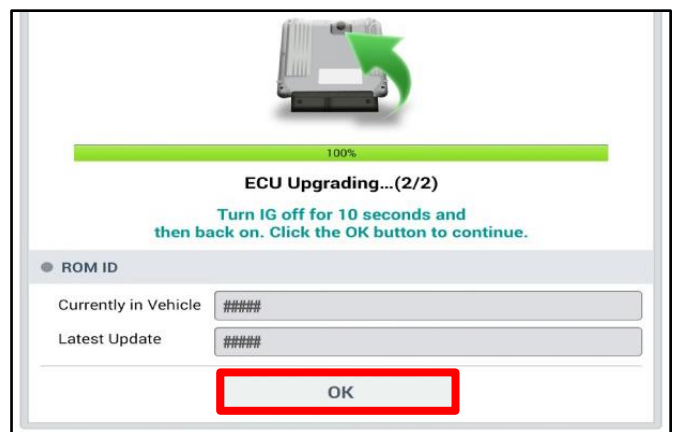
9. If a “Communication Fail” screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

* NOTICE

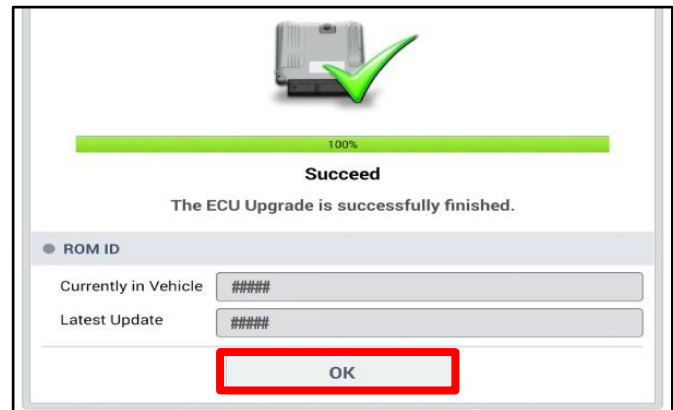
If an error notice continues to appear or if the upgrade cannot be performed, **DO NOT** disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



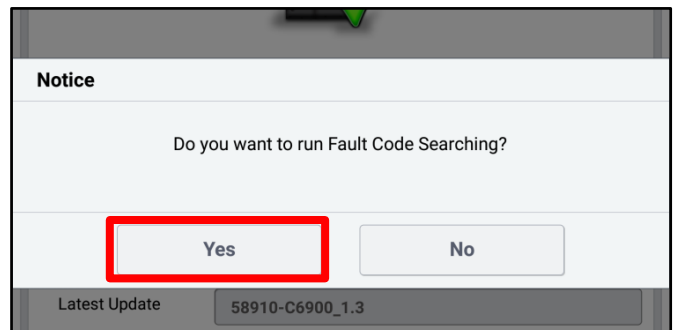
10. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.



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.

Manual Mode ECU Upgrade Passwords

Menu	Password
DE HEV/PHEV Kappa 1.6GDI +IMMO/SMK DCT (17MY) : 391A5-03DH5	5035
DE HEV/PHEV Kappa 1.6GDI +IMMO/SMK DCT (18MY) : 391A5-03DH1	5031
DE HEV/PHEV Kappa 1.6GDI +IMMO/SMK DCT (18MY) : 391A5-03DH7	5037
DE HEV/PHEV Kappa 1.6GDI +IMMO/SMK DCT (19MY) : 391A5-03DM0	5030
DE HEV/PHEV Kappa 1.6GDI +IMMO/SMK DCT (19MY) : 391A5-03DM5	5036

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **ECU** system under the System selection menu. Select **Upgrade Event #465** 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.

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AFFECTED VEHICLE RANGE:

Model	Production Date Range
Niro (DE HEV/PHEV)	November 1, 2016 to November 25, 2019

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	391A5 03DH1	0	DE HEV/PHEV MIL ON DTC P0128 Judgement Logic	39110FL5	0.3 M/H	N/A	0