



GROUP ENG	MODEL 2017-2018MY Forte (YDm)
NUMBER 208 (Rev 1, 10/16/2019)	DATE June 2019

TECHNICAL SERVICE BULLETIN

SUBJECT: ECU LOGIC IMPROVEMENT FOR P0300, P0301, P0302, P0303, P0304 AND/OR P219C00, P219D00, P219E00, P219F00

* 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 improve the logic of the Engine Control Module (ECM) on some 2017-2018MY Forte (YDm) vehicles, produced from May 15, 2016 through July 27, 2018, which may experience a malfunction indicator lamp (MIL) ON with DTC P0300, P0301, P0302, P0303, P0304 and/or P219C00, P219D00, P219E00, P219F00. 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 P0300, P0301, P0302, P0303, P0304: Misfire Detected
DTC P219C00, P219D00, P219E00, P219F00: Air-Fuel Ratio Imbalance

Refer to Flowchart on page 2: Prior to upgrading the ECU Logic confirm SA321 has been completed.

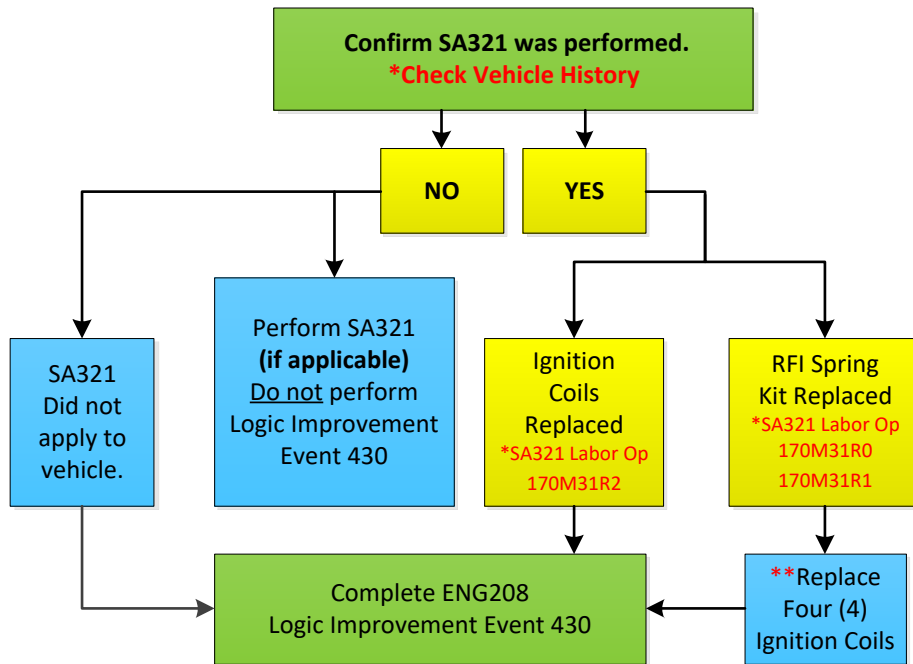


Kia Diagnostic System (KDS)

File Under: <Engine>

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

Flowchart:



*Check Vehicle History **Refer to LTS for Labor Op and Time to replace the ignition coils.

ECU Upgrade Procedure:

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

Upgrade Event Name
430. YDM Nu 2.0ATK ECU MIL ON DTC (P030X) LOGIC IMPROVEMENT


* NOTICE

- A fully charged battery is necessary before ECU upgrade can take place. It is recommended that the Midtronics GR8-1299 be used in ECU mode during reflashing or the use of a fully charged jump starter box.
- 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.

SUBJECT:





ECU LOGIC IMPROVEMENT FOR P0300, P0301, P0302,
P0303, P0304 AND/OR P219C00, P219D00, P219E00, P219F00

★ 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 #430

Model	EM	TM	IMMO	ECU P/No.	ROM ID	
					Previous	New
YDm	SULEV	6AT	Yes 	39171 2EXM0	YD7SP2AS65AA YD7SP2AS65AB YD7SP2AS65DA	YD7SP2AF65EA
			No	39173 2EXM0	YD7SP2US65AA YD7SP2US65AB YD7SP2US65DA	YD7SP2UF65EA
	Yes 		39171 2EXN0	YD7UP2AS65AA YD7UP2AS65AB YD7UP2AS65DA	YD7UP2AF65EA	
	No		39173 2EXN0	YD7UP2US65AA YD7UP2US65AB YD7UP2US65DA	YD7UP2UF65EA	
	ULEV	6MT	No	39177 2EXB0	YD7UP2VS65AA YD7UP2VS65AB YD7UP2VS65DA	YD7UP2VF65EA
	SULEV	6AT	Yes 	39171 2EXM1	YD8SP2AS673A YD8SP2AS673B	YD8SP2AF676A
			No	39173 2EXM1	YD8SP2US673A YD8SP2US673B	YD8SP2UF676A
	ULEV	6AT	Yes 	39171 2EXN1	YD8UP2AS673A YD8UP2AS673B	YD8UP2AF676A
			No	39173 2EXN1	YD8UP2US673A YD8UP2US673B	YD8UP2UF676A
	ULEV	6MT	No	39177 2EXB1	YD8UP2VS673A YD8UP2VS673B	YD8UP2VF676A

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.

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ECU LOGIC IMPROVEMENT FOR P0300, P0301, P0302, P0303, P0304 AND/OR P219C00, P219D00, P219E00, P219F00

*** 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**

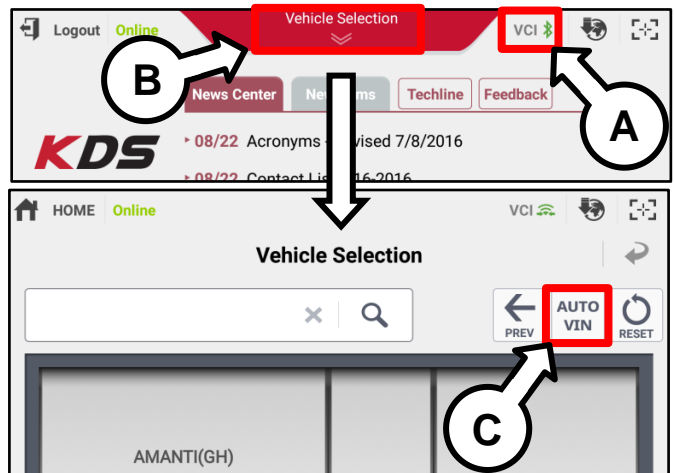
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



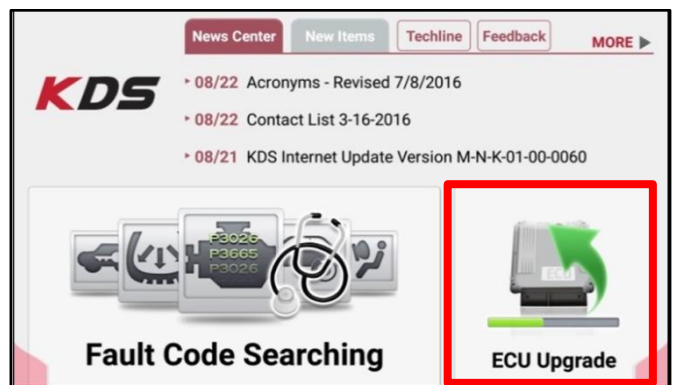
2. With the ignition ON, turn ON the KDS tablet. Select **KDS** from the home screen.



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



4. Select **ECU Upgrade**.



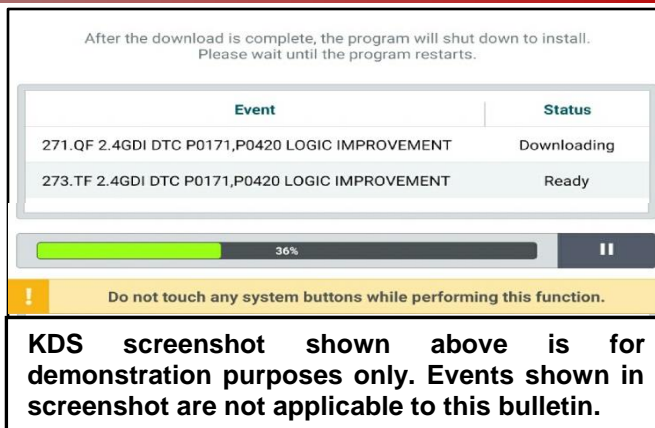
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ECU LOGIC IMPROVEMENT FOR P0300, P0301, P0302, P0303, P0304 AND/OR P219C00, P219D00, P219E00, P219F00

- The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #430**.

*** NOTICE**

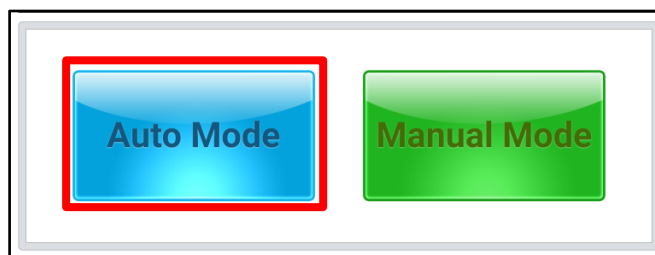
The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.



- Select **Auto Mode**.

CAUTION

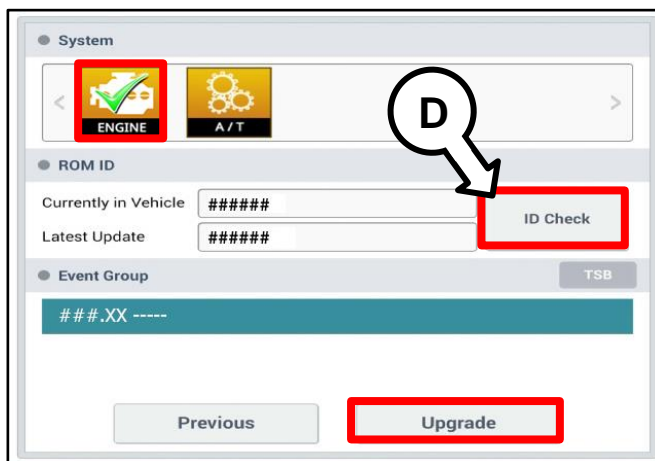
Do NOT attempt to perform a Manual Mode upgrade **UNLESS Auto Mode fails**. Always follow the instructions given on the KDS in either Auto or Manual mode.



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

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

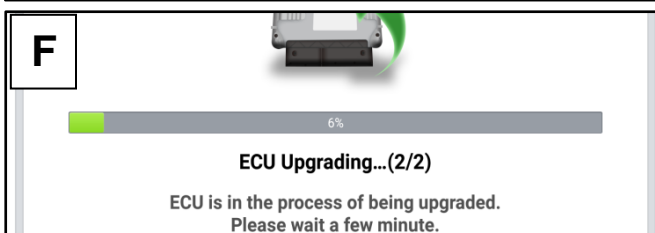
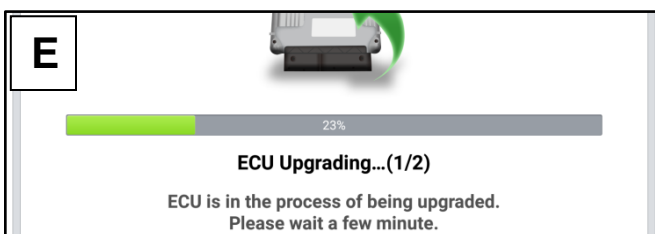
Select **Upgrade Event #430** and select **Upgrade** to continue.



- 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.

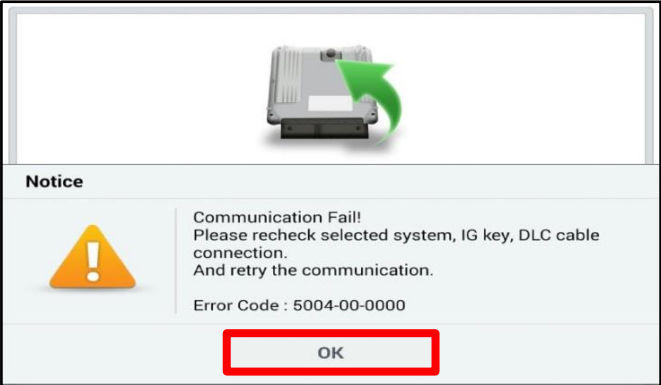


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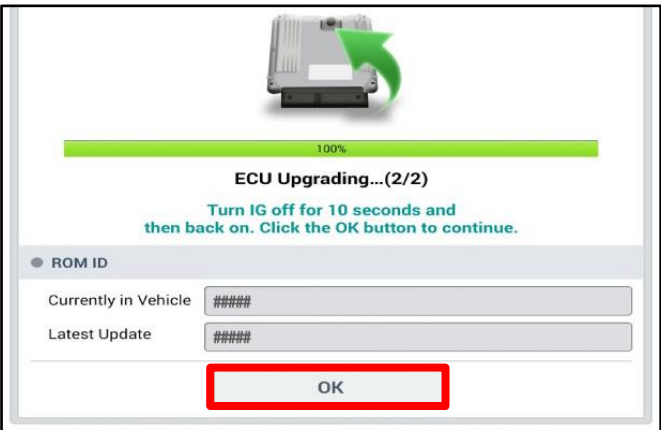
9. If a “Communication Fail” screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

*** NOTICE**

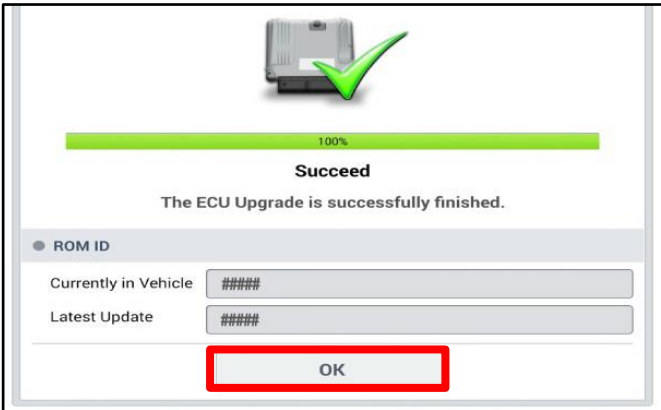
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



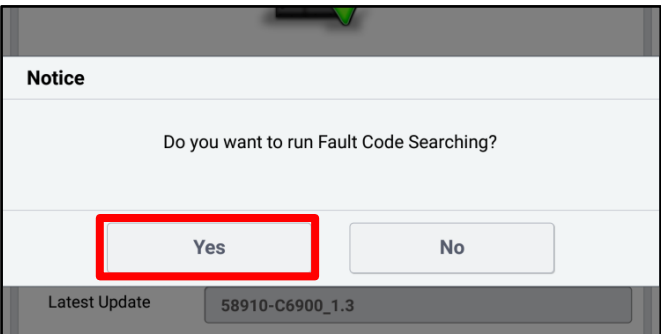
10. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.



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.

SUBJECT:





ECU LOGIC IMPROVEMENT FOR P0300, P0301, P0302,
P0303, P0304 AND/OR P219C00, P219D00, P219E00, P219F00**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
YDm Nu 2.0ATK 6AT SULEV -IMMO : 39173-2EXM0	7320
YDm Nu 2.0ATK 6AT ULEV -IMMO : 39173-2EXN0	7321
YDm Nu 2.0ATK 6MT ULEV -IMMO : 39177-2EXB0	7720
YDm Nu 2.0ATK 6AT SULEV -IMMO : 39173-2EXM1	7322
YDm Nu 2.0ATK 6AT ULEV -IMMO : 39173-2EXN1	7323
YDm Nu 2.0ATK 6MT ULEV -IMMO : 39177-2EXB1	7721
YDm Nu 2.0ATK 6AT SULEV +IMMO/SMK : 39171-2EXM0 	7120
YDm Nu 2.0ATK 6AT ULEV +IMMO/SMK : 39171-2EXN0 	7121
YDm Nu 2.0ATK 6AT SULEV +IMMO/SMK : 39171-2EXM1 	7122
YDm Nu 2.0ATK 6AT ULEV +IMMO/SMK : 39171-2EXN1 	7123

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **ECU** system under the System selection menu. Select **Upgrade Event #430** 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
Forte (YDm)	May 15, 2016 through July 27, 2018

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	Refer to EPC	0	ECU LOGIC IMPROVEMENT FOR P0300, P0301, P0302, P0303, P0304 AND/OR P219C00, P219D00, P219E00, P219F00	39110FJ1	0.3 M/H	N/A	0