



GROUP	MODEL
Emissions Service Campaign	2017-2018MY Forte (YDm)
NUMBER	DATE
SC203	October 2021

VOLUNTARY EMISSIONS SERVICE CAMPAIGN

SUBJECT: ECM UPDATE FOR OBD LOGIC IMPROVEMENT (SC203)

This bulletin provides the procedure to improve the logic of the Engine Control Module (ECM) on some 2017-2018MY Forte (YDm) vehicles equipped with the NU 2.0L MPI engine, produced from May 27, 2016 through June 27, 2018. Affected vehicles may have had a software update that turned off certain fuel system monitoring functions. While this issue has no effect on the drivability of the vehicle, nor does it release any air pollutants, the vehicle may fail a SMOG check and/or may not illuminate the Malfunction Indicator Light (MIL) for certain fuel system failures. In order to improve On-Board Diagnostics (OBD) logic, apply the improved software logic to the Engine system 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. Before conducting the procedure, verify the vehicle is included in the list of affected VINs.



Kia Diagnostic System (KDS)

NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

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 OBD FUEL SYSTEM READINESS DIAGNOSIS IMPROVEMENT


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 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.

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:

ECM UPDATE FOR OBD LOGIC IMPROVEMENT (SC203)

ROM ID INFORMATION TABLE:

Upgrade Event #430

Model	EM	TM	IMMO 	ECU P/No.	ROM ID		
					Previous	New	
17MY (YDm)	SULEV	6AT	Yes	39171-2EXM0	YD7SP2AS65AA YD7SP2AS65AB YD7SP2AS65DA YD7SP2AF65EA	YD7SP2AF65EB	
			No	39173-2EXM0	YD7SP2US65AA YD7SP2US65AB YD7SP2US65DA YD7SP2UF65EA	YD7SP2UF65EB	
	Yes		39171-2EXN0	YD7UP2AS65AA YD7UP2AS65AB YD7UP2AS65DA YD7UP2AF65EA	YD7UP2AF65EB		
	No		39173-2EXN0	YD7UP2US65AA YD7UP2US65AB YD7UP2US65DA YD7UP2UF65EA	YD7UP2UF65EB		
	ULEV	6MT	Yes	39175-2EXB0	YD7UP2CS65AA YD7UP2CS65AB YD7UP2CS65DA YD7UP2CF65EA	YD7UP2CF65EB	
			No	39177-2EXB0	YD7UP2VS65AA YD7UP2VS65AB YD7UP2VS65DA YD7UP2VF65EA	YD7UP2VF65EB	
	18MY (YDm)	SULEV	6AT	Yes	39171-2EXM1	YD8SP2AS673A YD8SP2AS673B YD8SP2AF676A	YD8SP2AF676B
				No	39173-2EXM1	YD8SP2US673A YD8SP2US673B YD8SP2UF676A	YD8SP2UF676B
Yes		39171-2EXN1		YD8UP2AS673A YD8UP2AS673B YD8UP2AF676A	YD8UP2AF676B		
No		39173-2EXN1		YD8UP2US673A YD8UP2US673B YD8UP2UF676A	YD8UP2UF676B		
ULEV		6MT	Yes	39175-2EXB1	YD8UP2CS673A YD8UP2CS673B YD8UP2CF676A	YD8UP2CF676B	
			No	39177-2EXB1	YD8UP2VS673A YD8UP2VS673B YD8UP2VF676A	YD8UP2VF676B	

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

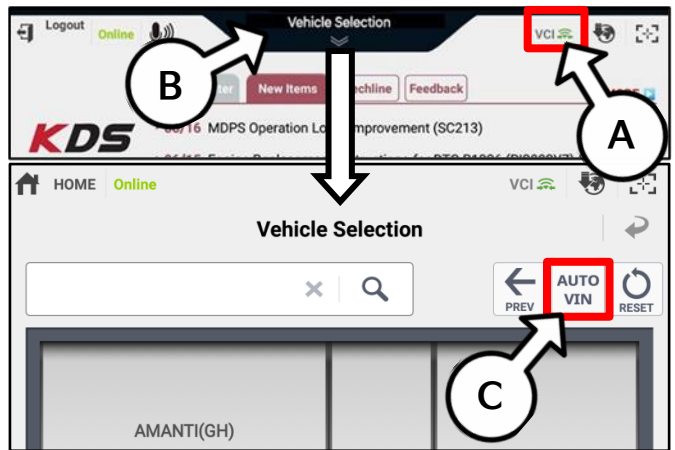
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



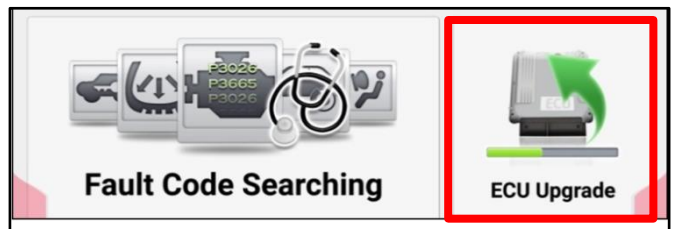
2. With the ignition ON, turn ON the KDS tablet. Select 'KDS' from the home screen.



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



4. Select 'ECU Upgrade'.



SUBJECT:

ECM UPDATE FOR OBD LOGIC IMPROVEMENT (SC203)

- 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.

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%

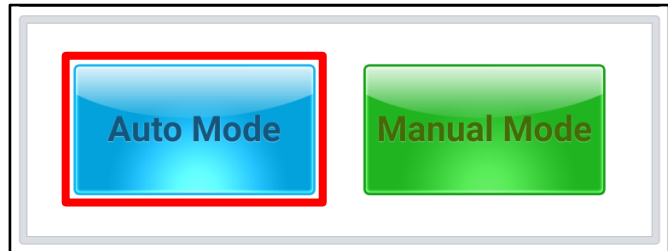
Do not touch any system buttons while performing this function.

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 ENGINE 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.

System

ENGINE A/T

ROM ID

Currently in Vehicle ##### ID Check

Latest Update #####

Event Group TSB

###.XX ----

Previous Upgrade

- 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.

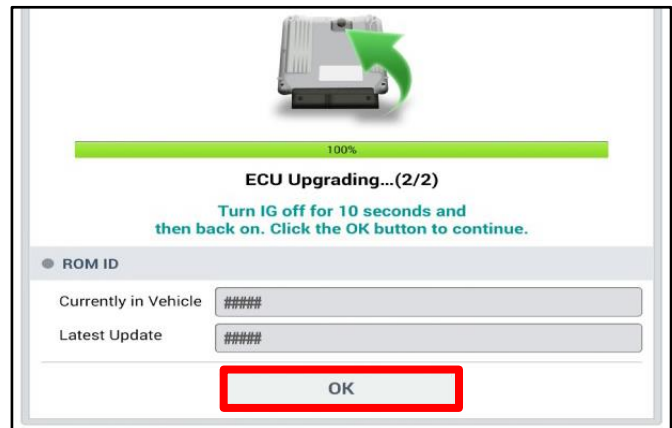
- If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Select 'OK' and restart the procedure from step 4.

NOTICE

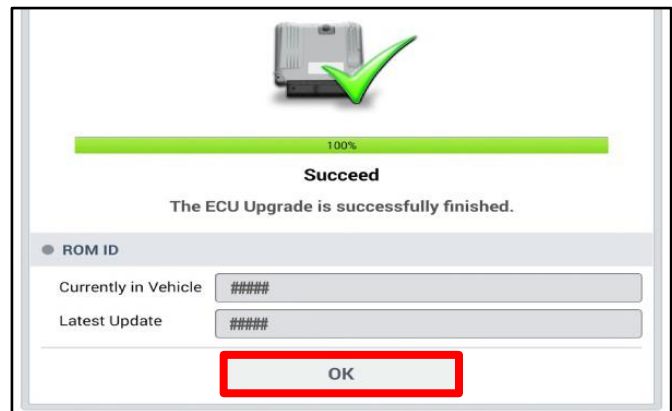
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



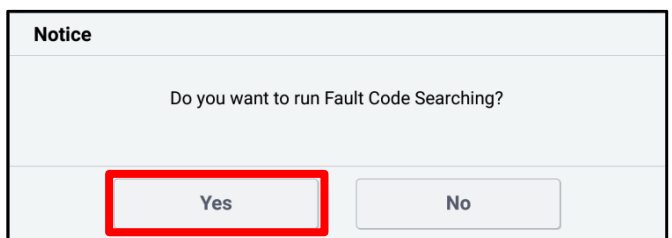
- When instructed on the KDS, turn the ignition OFF for ten (10) seconds then back on. Select 'OK' to continue.



- 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.



- 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
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 6MT ULEV +IMMO/SMK: 39175-2EXB0	7520
YDm Nu 2.0ATK 6AT SULEV +IMMO/SMK: 39171-2EXM1	7122
YDm Nu 2.0ATK 6AT ULEV +IMMO/SMK: 39171-2EXN1	7123
YDm Nu 2.0ATK 6MT ULEV +IMMO/SMK: 39175-2EXB1	7521

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **ENGINE** 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. 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.

ATTENTION: THE PROOF OF CORRECTION CARD AND CAMPAIGN COMPLETION STICKER ARE RESTRICTED ONLY TO DEALERS IN THE FOLLOWING STATES:

California, Connecticut, District of Columbia, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington. See Parts Information below to order the Proof of Correction Card and Campaign Completion Label from the PDC.

VEHICLE EMISSION RECALL - PROOF OF CORRECTION CARD

A Vehicle Emission Recall - Proof of Correction card must be filled out for all vehicles registered in California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, New York and Delaware. Residents of these states, who own an affected vehicle, will be required to possess a Vehicle Emission Recall - Proof of Correction card as evidence of voluntary service campaign completion, when they apply for vehicle registration renewal.

WHAT TO DO WITH THE CARD:

The Vehicle Emission Recall - Proof of Correction card must be completed by the Dealership's Service Manager using a permanent ink pen. A fine point pen is recommended. When filling in the information, copy the information directly from the vehicle, not the repair order. **ALL INFORMATION MUST BE PRINTED AND NEAT.**

NOTE: DO NOT COMPLETE THE CARD UNLESS THE SERVICE CAMPAIGN WORK IS COMPLETED.

The copy of the card shown below indicates the areas to be filled in. Each area must be filled in. The completed card should be given to the owner of the vehicle upon completion of the Campaign and placement of the Campaign Completion Label outlined below.

FILLING OUT AND APPLYING THE CAMPAIGN COMPLETION LABEL (CA and S.177 STATES ONLY):

The dealer must fill in the Dealer Code and Date information fields on the Campaign Completion Label. Once complete, affix the campaign completion label under the hood of the vehicle, as shown below.

CA and S.177 States Only: Apply SC203 Campaign Completion Label onto the body in the area next to the shock tower, as shown. **NOTE: Be sure to clean the mounting surface to ensure proper label adhesion.**



SUBJECT:

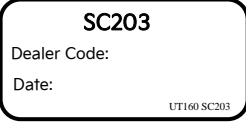
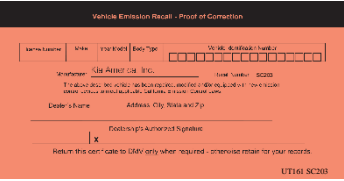
ECM UPDATE FOR OBD LOGIC IMPROVEMENT (SC203)**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
Forte (YDm)	May 27, 2016 to June 27, 2018

REQUIRED TOOL:

Tool Name	Figure	Comments
KDS		Kia Diagnostic System

REQUIRED PART:

Part Name	Part Number	Figure	Qty.
Campaign Completion Label	UT160 SC203*		1
Vehicle Emission Recall Proof of Correction Card	UT161 SC203*		1

*Completion Label and Proof of Correction Card only required for vehicles registered in CA, CT, DE, MA, MD, ME, NJ, NY, OR, PA, RI, VT, and WA "States" only.

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.
R	95660 B0000	0	(SC203) ECU Logic for OBD Fuel System Readiness Diagnosis	200M13R0	0.3 M/H	N/A	0

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SC203** when accessing the WebDCS system.

