

This bulletin provides the procedure to update the Engine Control Module (ECM) software on some 2014-2016MY Forte (YD) Nu 2.0L GDI SULEV vehicles, produced from November 13, 2013 through March 17, 2016, to improve catalyst heating logic to ensure compliance with emissions regulations. To correct this issue, install the improved logic to the ECM using the KDS ECU Upgrade function as described in this bulletin. For confirmation that the latest reflash has been installed 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 that 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  $\rightarrow$  Warranty Coverage  $\rightarrow$  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.

File Under: <service campaign=""></service>	
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Circulate To:	General Manager	Service Manager	🛛 Parts Manager
Service Advisor	s 🛛 🖾 Technicians	☑ Body Shop Manager	I Fleet Repair

SUBJECT:

## NU 2.0L GDI SULEV CATALYST HEATING LOGIC IMPROVEMENT (SC180)

### ECU Upgrade Procedure:

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

**Upgrade Event Name** 

429. YD NU 2.0GDI SULEV CATALYST HEATING LOGIC IMPROVEMENT

# \* NOTICE

- A fully charged battery is necessary before the 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.

## NU 2.0L GDI SULEV CATALYST HEATING LOGIC IMPROVEMENT (SC180)

# **\*** 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 #429

Madal	EM	TNA			ROM ID	
woder				ECU P/NO.	Previous	New
			Yes	39131 2EYD2	GGYD GNSAQS00C00 GGYD GNSAQS01C00	GGYD GNSAQF01C00
		SULEV 6AT	No	39133 2EYD2	GGYD GNSAPS00C00 GGYD GNSAPS01C00	GGYD GNSAPF01C00
YD SULEV	SULEV 6AT		Yes	39131 2EYC4 39131 2EYC6	GGYD FNSAQS00C00 GGYD FNSAQS01C00	GGYD FNSAQF01C00
			No	39133 2EYC4 39133 2EYC6	GGYD FNSAPS00C00 GGYD FNSAPS01C00	GGYD FNSAPF01C00
			Yes	39131 2EYC0 39131 2EYC2	GGYD DNSAQS00C00	GGYD DNSAQF00C00
			No	39133 2EYC0 39133 2EYC2	GGYD DNSAPS00C00	GGYD DNSAPF00C00
			Yes	39131-2EYC1	GGYD DNSAQSC0C00	GGYD DNSAQFC0C00
			No	39133-2EYC1	GGYD DNSAPSC0C00	GGYD DNSAPFC0C00

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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# **\*** 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.



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

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





Vehicle Selectic

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

Select ECU Upgrade. 4.



## NU 2.0L GDI SULEV CATALYST HEATING LOGIC IMPROVEMENT (SC180)

5. The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #429.** 

# **\*** NOTICE

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

6. Select Auto Mode.

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

7. Select the ECU system under the System selection menu.

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

Select **Upgrade Event #429** 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.

# 

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

ricuse war and the program restants.	
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 performin	g this function.

After the download is complete, the program will shut down to install





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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.



	100%
	ECU Upgrading(2/2)
then ba	Turn IG off for 10 seconds and ack on. Click the OK button to continue.
ROM ID	
Currently in Vehicle	#####
Latest Update	#####
	ок

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:

### NU 2.0L GDI SULEV CATALYST HEATING LOGIC IMPROVEMENT (SC180)

# For California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, New York and Delaware:

### **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 <u>must be completed by the Dealership's</u> <u>Service Manager using a permanent ink pen</u>. A fine point pen is recommended. When filling in the information, copy the information directly from the vehicle, not the repair order. <u>ALL</u> **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 <u>must</u> be filled in. The completed card should be given to the owner of the vehicle upon completion of the Campaign <u>and</u> placement of the **Campaign Completion Label** outlined on Page 8.

Recall Number	r SC1	180		
The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws				
1	equipped with ws.	equipped with new emission ws.		

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### FILLING OUT AND APPLYING THE CAMPAIGN COMPLETION LABEL:

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.

Apply <u>SC180</u> 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.** 



### NU 2.0L GDI SULEV CATALYST HEATING LOGIC IMPROVEMENT (SC180)

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.

Menu	Password
YD NU 2.0GDI 6AT SULEV -IMMO : 39133-2EYD2	3322
YD NU 2.0GDI 6AT SULEV +IMMO/SMK : 39131-2EYD2	3122
YD NU 2.0GDI 6AT SULEV -IMMO : 39133-2EYC4/C6	3326
YD NU 2.0GDI 6AT SULEV +IMMO/SMK : 39131-2EYC4/C6	3126
YD NU 2.0GDI 6AT SULEV -IMMO : 39133-2EYC0/C2	3323
YD NU 2.0GDI 6AT SULEV +IMMO/SMK : 39131-2EYC0/C2	3123
YD NU 2.0GDI 6AT SULEV -IMMO : 39133-2EYC1	3321
YD NU 2.0GDI 6AT SULEV +IMMO/SMK : 39131-2EYC1	3121

### Manual Mode ECU Upgrade Passwords

- 1. Within the ECU Upgrade screen displayed, select Manual Mode.
- 2. Select the **ECU** system under the System selection menu. Select **Upgrade Event #429** and select **Upgrade** to continue.
- 3. Select the appropriate control unit part number with reference to the ROM ID Information Table on page 2, 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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## NU 2.0L GDI SULEV CATALYST HEATING LOGIC IMPROVEMENT (SC180)

### AFFECTED VEHICLE RANGE:

Model	Production Date Range
Forte (YD)	November 13, 2013 through March 17, 2016

### **REQUIRED PART:**

Part Name	Part Number	Figure
Campaign Completion Label	UT160 SC180	SC 180 Dealer Code: Date:
Vehicle Emission Recall-Proof of Correction Card	UT161 SC000	Number of the stand of control of the stand of the st

## WARRANTY INFORMATION:

N	Cod	e: N	99 C	Cod	e: C99	

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
R	39131 2EYD2	0	(SC180) YD Nu 2.0 GDI SULEV Catalyst Heating Logic Improvement	190053R0	0.3 M/H	N/A	0

# **\*** NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SC180</u> when accessing the WebDCS system.