

086 (Rev 2, 07/16/2018)	December 2017
NUMBER	DATE
	2017-2018MY Niro (DE HEV)
CHA	2017-2018MY
GROUP	MODEL

## TECHNICAL SERVICE BULLETIN

SUBJECT:

SERVICE ACTION: BRAKE PEDAL FEEL LOGIC IMPROVEMENT (\$A325/325A)

### \* 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 Electronic Stability Control/Active Hydraulic Booster (ESC/AHB) on all 2017-2018MY Niro (DE HEV) vehicles, produced from November 1, 2016 through October 25, 2017, which is to improve brake pedal feedback and feel to the driver. This improvement does not affect the braking performance or stopping distance. To improve customer satisfaction, apply the improved logic to the ESC/AHB, 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 2 of this bulletin. Kia is requesting the completion of this Service Action on all affected vehicles. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



Kia Diagnostic System

### \* NOTICE

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

Repair status for a VIN is provided on WebDCS (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  Warranty Coverage Inquiry  $\rightarrow$  Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs  $\rightarrow$  Not Completed Recall  $\rightarrow$  Recall VIN  $\rightarrow$  Select Report), which includes a list of affected vehicles.

This issue number is SA325/325A.

File Under: <Chassis>

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# SERVICE ACTION: BRAKE PEDAL FEEL LOGIC IMPROVEMENT (\$A325/325A)

#### **ECU Upgrade Procedure:**

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

Upgrade Event Name
365.DE HEV 17MY BRAKE FEELING IMPROVEMENT (ESC/AHB)
355.DE HEV 18MY BRAKE FEELING IMPROVEMENT (ESC/AHB)

#### \* NOTICE

- A fully charged battery is necessary before ECU upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used in ECU mode during charging. DO NOT connect any other battery charger to the vehicle during ECU upgrade.
- 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, year.

### \* 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 #365 (17MY) & #355 (18MY)

Model	Model EM TM			,	ROM ID		
wodei	EM	I IVI	IMMO	ECU P/No.	Previous	New	
17MY 18MY	1.6L Kappa	DCT		58500 G5300	4D2BAI1D1216B03 4D2BAJ1E1217116 4D2BAK1F1317427 4D2BAL1G1317906	4D2BAM1G1317A19	
				58500 G5400	4D2BAI1D1216B04 4D2BAJ1E1217117 4D2BAL1G1317907 4D2BAK1F1317428	4D2BAM1G1317A20	
			N/A	58500 G5300	4D2BAK1F1317427 4D2BAL1G1317906 4D2BAI1D1216B03 4D2BAJ1E1217116	4D2BAM1G1317A19	
				58500 G5400	4D2BAK1F1317428 4D2BAL1G1317907 4D2BAI1D1216B04 4D2BAJ1E1217117	4D2BAM1G1317A20	

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.

## SERVICE ACTION: BRAKE PEDAL FEEL LOGIC IMPROVEMENT (SA325/325A)

### \* NOTICE

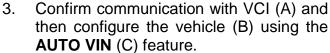
Prior to performing the ECU upgrade, be sure to check that the KDS is fully charged.

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.

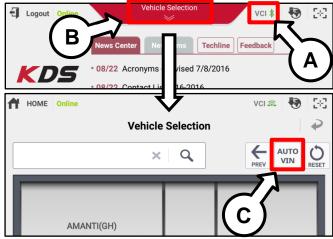
With the ignition ON, turn ON the KDS 2. tablet. Select KDS from the home screen.



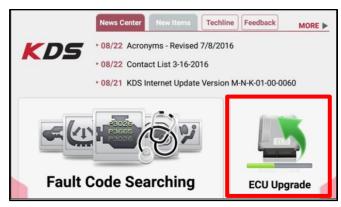
then configure the vehicle (B) using the







4. Select ECU Upgrade.



# SERVICE ACTION: BRAKE PEDAL FEEL LOGIC IMPROVEMENT (\$A325/325A)

 The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #365(17MY) or #355(18MY).

### \* NOTICE

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

6. Select Auto Mode.



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 **ESCAHB** system under the System selection menu.

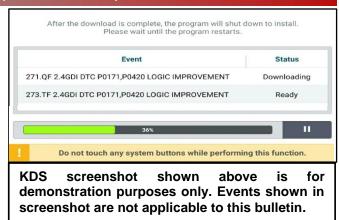
Touch **ID Check** (D) and confirm that the latest update is available.

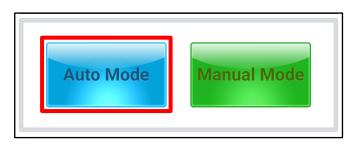
Select Upgrade Event #365(17MY) or #355(18MY) and select Upgrade to continue.

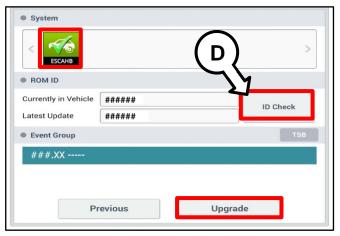
8. The ECU upgrade will begin and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.

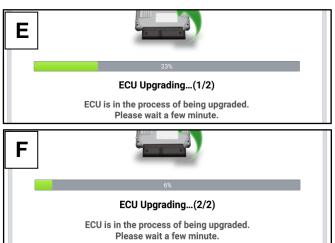


Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.









# SERVICE ACTION: BRAKE PEDAL FEEL LOGIC IMPROVEMENT (\$A325/325A)

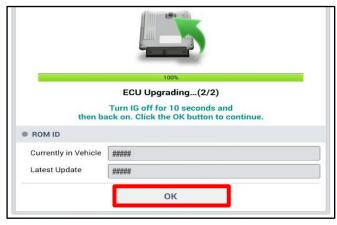
9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

### \* NOTICE

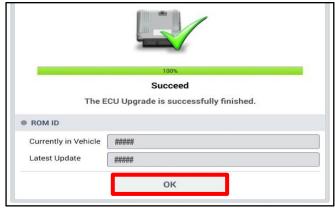
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.

 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.

# SERVICE ACTION: BRAKE PEDAL FEEL LOGIC IMPROVEMENT (\$A325/325A)

#### **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 (Non SCC): 58500 G5300	5300
DE HEV (SCC): 58500 G5400	5400

- 1. Within the ECU Upgrade screen displayed, select Manual Mode.
- 2. Select the **ESCAHB** system under the System selection menu. Select **Upgrade Event** #365(17MY) or #355(18MY) 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.

# SERVICE ACTION: BRAKE PEDAL FEEL LOGIC IMPROVEMENT (\$A325/325A)

#### AFFECTED VEHICLE RANGE:

Model	Production Date Range			
Niro (DE HEV)	November 1, 2016 through October 25, 2017			

#### WARRANTY INFORMATION:

N Code: N99 C Code: C99

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
17MY	V	58500 G5300	0	(SA325A) Brake Pedal Feel Logic Improvement	180007R0	0.3 M/H	I NI/A	
18MY	V	58500 G5300	0	(SA325) Brake Pedal Feel Logic Improvement	170115R0			0

## \* NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SA325/325A</u> when accessing the WebDCS system.