

This bulletin provides the procedure to improve the logic of the Electronic Stability Control/Active Hydraulic Booster (ESC/AHB) system on some 2019MY Niro (DE P/HEV), produced from July 19, 2018 through October 1, 2018, 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 in <u>dealer stock</u> <u>only</u>, prior to delivery. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



Kia Diagnostic System (KDS)

## **\*** 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 <u>SA356</u>.

File Under: <Chassis>

Circulate To:	General Manager	Service Manager	I Parts Manager
Service Advisor	s 🛛 Technicians	☑ Body Shop Manager	□ Fleet Repair

SUBJECT:

## SERVICE ACTION: ESC/AHB LOGIC IMPROVEMENT FOR BRAKE FEEL (SA356)

#### ECU Upgrade Procedure:

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

**Upgrade Event Name** 

386. DE HEV 19MY ESC/AHB BRAKE FEELING IMPROVEMENT

387. DE PHEV 19MY ESC/AHB BRAKE FEELING IMPROVEMENT

# \* 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 #386 (DE HEV), #387 (DE PHEV)

Model	System	SCC	ECU P/No.	ROM ID		
Widdei	System	Equipped		Previous	New	
19MY DE		No	58500-G5300	4D2BAN1H15-1-8603	4D2BAO1H15-1-8903	
P/HEV		Yes	58500-G5400	4D2BAN1H15-1-8604	4D2BAO1H15-1-8904	

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: ESC/AHB LOGIC IMPROVEMENT FOR BRAKE FEEL (SA356)

# **\*** 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.

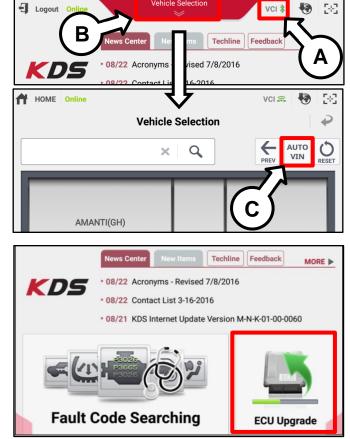
2. With the ignition ON, turn ON the KDS tablet. Select **KDS** from the home screen.





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

4. Select ECU Upgrade.



TSB: SA356 Niro (DE P/HEV) October 2018

#### Page 4 of 7

SUBJECT:

## SERVICE ACTION: ESC/AHB LOGIC IMPROVEMENT FOR BRAKE FEEL (SA356)

 The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #386 or #387.

## **\*** NOTICE

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

6. Select Auto Mode.

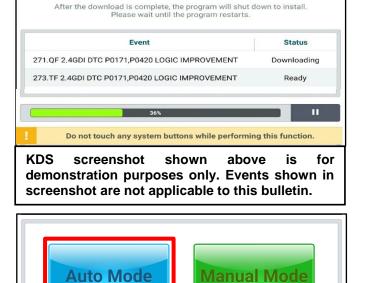


Do NOT attempt to perform a Manual Mode upgrade <u>UNLESS</u> <u>Auto Mode fails</u>. Always follow the instructions given on the KDS in either Auto or Manual mode.

7. Select the **ESC/AHB** system under the System selection menu.

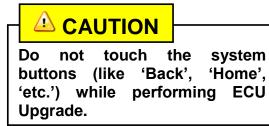
Touch **ID Check** (D) and confirm that the latest update is available.

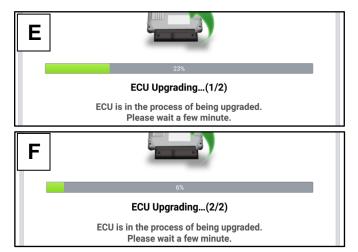
Select **Upgrade Event #386 or #387** and select **Upgrade** to continue.





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.





Page 5 of 7

#### SUBJECT:

## SERVICE ACTION: ESC/AHB LOGIC IMPROVEMENT FOR BRAKE FEEL (SA356)

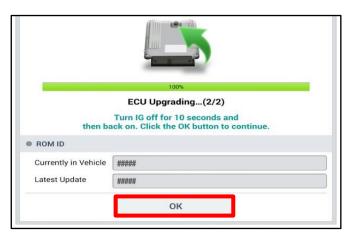
9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

# **\*** 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.

100%	
Succeed	
CU Upgrade is successfully finished.	
#####	
	100% Succeed

 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.

Notice							
Do you want to run Fault Code Searching?							
		Yes	No				
Latest	Update	58910-C6900_1.3					

13. Start the engine to confirm proper operation of the vehicle.

#### Page 6 of 7

SUBJECT:

### SERVICE ACTION: ESC/AHB LOGIC IMPROVEMENT FOR BRAKE FEEL (SA356)

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

Model	Menu	Password
DE HEV	DE HEV 19MY ESC/AHB (SCC) : 58500-G5400	5400
	DE HEV 19MY ESC/AHB (Non SCC) : 58500-G5300	5300
DE PHEV	DE PHEV 19MY ESC/AHB (SCC) : 58500-G5400	5400
	DE PHEV 19MY ESC/AHB (Non SCC) : 58500-G5300	5300

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
- Select the ESC/AHB system under the System selection menu. Select Upgrade Event #386 or #387 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: ESC/AHB LOGIC IMPROVEMENT FOR BRAKE FEEL (SA356)

#### AFFECTED VEHICLE RANGE:

Model	Production Date Range
Niro (DE P/HEV)	July 19, 2018 through October 1, 2018

# WARRANTY INFORMATION:

N Code	: N99 C COde	: 699					
Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
V	58500 G5300	0	(SA356) ESC/AHB Logic Improvement for Brake Feel	180127R0	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>SA356</u> when accessing the WebDCS system.