

GROUP	MODEL
ENG	2016MY Soul (PS) w/2.0L GDI engine
NUMBER	DATE

151 (REV 1, 11/04/2015) October 2015

### TECHNICAL SERVICE BULLETIN

SERVICE ACTION: ECM/TCM SHIFT LOGIC SUBJECT:

**IMPROVEMENT (SA 207)** 

### \* 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 information related to the ECM/TCM software upgrade for some 2016MY Soul (PS) vehicles to improve transmission "shift-feel" when downshifting (6-5-4). To apply the improved logic, the ECM and TCM should be reprogrammed using the GDS/KDS download, as described in this bulletin. Kia is requesting the completion of this Service Action on all affected vehicles in dealer stock, prior to delivery. For confirmation that the latest reflash has been done to a vehicle you are working on, verify ROM ID using the tables in this TSB.

### \* NOTICE

This reflash contains two (2) upgrade events which MUST be performed in sequence.

### \* 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> Warranty Coverage> Warranty Coverage Inquiry> Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs> Not Completed Recall> Recall VIN> Select Report), which includes a list of affected vehicles.

This issue number is SA 207.

File Under: <Engine>

**☒** General Manager **☒** Service Manager **☒** Parts Manager Circulate To:

Service Advisor(s) 

## SERVICE ACTION: ECM/TCM SHIFT LOGIC IMPROVEMENT (SA 207)

#### **ECM/TCM Upgrade Procedure:**

To apply the improved logic, the ECM/TCM should be reprogrammed using the GDS/KDS download, as described in this bulletin.

#### **UPGRADE EVENT NAME**

Upgrade Event 266.PS 2.0 GDI 16MY 6-5-4 SHIFT LOGIC IMPROVEMENT(ECU)

Upgrade Event 267.PS 2.0 GDI 16MY 6-5-4 SHIFT LOGIC IMPROVEMENT(TCM)

### \* NOTICE

- A fully charged battery is necessary before ECM upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used in ECM mode during charging. DO NOT connect any other battery charger to the vehicle during ECM upgrade.
- All ECM upgrades must be done with the ignition key in the 'ON' position.
- Be careful not to disconnect any cables connected to the vehicle or GDS during the ECM upgrade procedure.
- DO NOT start the engine during ECM upgrade.
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECM upgrade.
- When the ECM upgrade is completed, turn the ignition 'OFF' and wait 10 seconds before starting the engine.
- ONLY use approved ECM upgrade software designated for the correct model, year.

## **△** CAUTION

Before attempting an ECM 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.

## SERVICE ACTION: ECM/TCM SHIFT LOGIC IMPROVEMENT (SA 207)

#### **ROM ID INFORMATION TABLES:**

Upgrade event #266 Soul (PS)

MODEL	SYS	ISG	ІММО	ECM P/NO	ROM ID		
MODEL	515	130		ECIVI P/NO	PREVIOUS	NEW	
	ECM	No (-)	Yes (+)	39131 2EHA7	GGPSGNUAQS00C00	GGPSGNUAQS01C00	
PS			No (-)	39133 2EHA7	GGPSGNUAPS00C00	GGPSGNUAPS01C00	
(2.0)		Yes (+)	Yes (+)	39131 2EHA8	GIPSGNUAQS00C00	GIPSGNUAQS01C00	
			No (-)	39133 2EHA8	GIPSGNUAPS00C00	GIPSGNUAPS01C00	

#### Upgrade event #267 Soul (PS)

MODEL	SYS	TOM DAIG	ROM ID		
MODEL	313	TCM P/NO	PREVIOUS	NEW	
PS (2.0)	ТСМ	39132 2EHA7 39130 2EHA7 39132 2EHA8 39130 2EHA8	TPS0G20NB2	TPS0G20NB3	

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

If performing this TSB using KDS, refer to TSB SST 037 for detailed information.

1. Connect the power supply cable to the GDS.

### \* NOTICE

If attempting to perform the ECM upgrade with the power supply cable disconnected from the GDS, be sure to check that the GDS is fully charged before ECM upgrade. If the GDS is not fully charged, failure to perform the ECM upgrade may occur. Therefore, it is strongly recommended that the power supply connector be connected to the GDS.

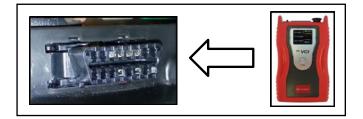
## SERVICE ACTION: ECM/TCM SHIFT LOGIC IMPROVEMENT (SA 207)

2. Connect the USB cable between the VCI and the GDS.

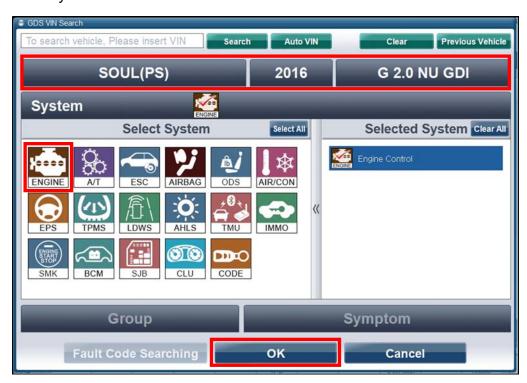
### \* NOTICE

When performing the ECM upgrade using the GDS, wireless communication between the VCI and GDS is not available. Therefore, be sure to connect the USB cable between the VCI and the GDS.

- 3. Connect the Main 16-pin DLC cable (GHDM 241000) to the VCI.
- Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



- 5. With the ignition key ON, turn ON the VCI and GDS. Access the GDS vehicle identification number (VIN) screen and configure the vehicle using the **VIN AUTO DETECT** Function.
- 6. Select **ENGINE** system and click **OK**.

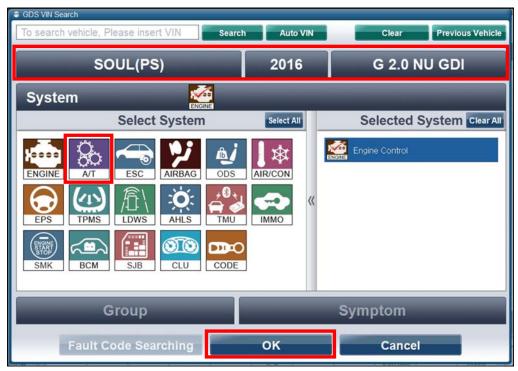


# SERVICE ACTION: ECM/TCM SHIFT LOGIC IMPROVEMENT (SA 207)

7. Select **ECU Upgrade** from the bottom right-hand corner. Next select **Auto Mode**, and then **Engine**. Perform event #266 in accordance with normal GDS upgrade procedures.



8. After performing event #266, return the GDS home screen, select **A/T System** and click **OK.** 



9. Select ECU Upgrade from the bottom right-hand corner. Next select **Auto Mode**, and then **A/T**. Perform the event #267 in accordance with normal GDS upgrade procedures.



10. Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored that may have been set during reprogramming.

### \* NOTICE

Due to "Dealer-Stock" status and no accumulated mileage, resetting the TCM adaptive values is not required for this reflash.

11. Confirm proper operation of the vehicle.

# SERVICE ACTION: ECM/TCM SHIFT LOGIC IMPROVEMENT (SA 207)

## **A** CAUTION

Before attempting an ECM 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.

### \* NOTICE

Do NOT attempt to perform a Manual Mode upgrade unless Auto Mode fails. Always follow the instructions given on the GDS in either Auto or Manual mode. See table for Manual Mode passwords.

\* Do NOT perform Manual Mode ECM upgrade unless Auto Mode fails.

\* MANUAL MODE ECM UPGRADE PASSWORDS:

Upgrade event #266 and #267 Soul (PS)

EVENT #	SYS	MENU	PASSWORD
		PS 2.0GDI A/T -ISG +IMMO/SMK : 39131-2EHA7	3127
266	ECU	PS 2.0GDI A/T -ISG -IMMO : 39133-2EHA7	3327
200		PS 2.0GDI A/T +ISG +IMMO/SMK : 39131-2EHA8	3128
		PS 2.0GDI A/T +ISG -IMMO : 39133-2EHA8	3328
267	TCM	PS 2.0GDI A/T TCU : 39130/32-2EHA7/A8	3028

- 1. Within the ECM Upgrade screen, select **Manual Mode** in the left column, select **Engine** and then select **Upgrade Event #266.** Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 3, and click **OK**. After performing event #266, perform event #267 in the same manner.
- 2. Enter the password from the table above, and click **OK**.
- 3. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 4. When the GDS reports that the ECM/TCM upgrade has been successfully completed, click **OK**, turn OFF the ignition key, and wait at least 10 seconds before attempting to start the engine.
- 5. Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored that may have been set during reprogramming.
- 6. Start the engine to confirm proper operation of the vehicle.

### \* NOTICE

Due to "Dealer-Stock" status and no accumulated mileage, resetting the TCM adaptive values is not required for this reflash.

# SERVICE ACTION: ECM/TCM SHIFT LOGIC IMPROVEMENT (SA 207)

#### AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range			
Soul (PS) w/2.0L engines	2016MY			

#### SERVICE ACTION CLAIM INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty.
V	39131 2EHA7	0	N99	C99	(SA 207) ECM/TCM Upgrade	150096R1	0.4 M/H	N/A	0

### \* NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA 207 when accessing the WebDCS system.