



GROUP Climate	MODEL 2012MY Soul (AM) 1.6L GDI
NUMBER 021	DATE June 2013

TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: MANUAL HVAC CONTROL UNIT LOGIC IMPROVEMENT (SA148)

This bulletin provides information related to a controller software upgrade for 2012MY Soul vehicles, produced from July 11, 2011 to June 22, 2012, and equipped with Manual HVAC controls. The possible concern relates to an HVAC controller which may emit CAN error messages that may cause communication concerns between other systems on the network. As a result, MIL maybe "ON" along with CAN Communication related DTCs, C1623 and C1687 (active or stored). To correct this condition, upgrade the HVAC controller using the procedure outlined in this TSB. 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.



Global
Diagnostic
System
(GDS)

*NOTICE

DO NOT replace any parts related to the DTCs mentioned above unless proven to be the cause for the DTC AFTER the reflash has been performed. First perform the reflash as described in this bulletin, and verify that no DTC(s) will re-set. Should a DTC re-set after the reflash, diagnose according to KGIS. Parts replacement in conjunction with this TSB may be subject to Mandatory Parts Return and returned parts will be tested by KMA. Parts replaced unnecessarily will be subject to chargeback.

*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 SA148.

File Under: <Climate>

Circulate To: General Manager Service Manager Parts Manager
 Service Advisor(s) Technician(s) Body Shop Manager Fleet Repair

SUBJECT:**SERVICE ACTION: MANUAL HVAC CONTROL UNIT
LOGIC IMPROVEMENT (SA148)****ECM Upgrade Procedure:**

To correct this condition, the HVAC controller should be reprogrammed using the GDS download as described in this bulletin.

UPGRADE EVENT NAME
207.AM FL MTC LOGIC IMPROVEMENT

***NOTICE**

- A fully charged battery is necessary before ECM/PCM upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used in ECM/PCM mode during charging. DO NOT connect any other battery charger to the vehicle during ECM/PCM 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/PCM upgrade.
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECM/PCM upgrade.
- When the ECM/PCM upgrade is completed, turn the ignition 'OFF' and wait 20 seconds before starting the engine.
- ONLY use approved ECM/PCM upgrade software designated for the correct model, year.
- Make sure all outstanding updates are installed before performing the ECM/PCM upgrade.

ROM ID Information Table:

MODEL	A/C UNIT P/N	ROM ID	
		PREVIOUS	NEW
AM1.6 GDI	97250-2KAE0	020DXX	040012
	97250-2KAE1	0212XX	
	97250-2KAF0	030EXX	
	97250-2KAF1	040FXX	
	97250-2KAG0	0410XX	
	97250-2KAG1	040011	

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.

1. Connect the power supply cable to the GDS tool.

***NOTICE**

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

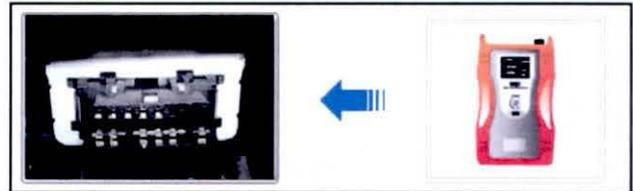
2. Connect the USB cable between the VCI and the GDS tool.

***NOTICE**

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

3. Connect the Main 16-pin DLC cable (GHDM – 241000) to the VCI.

4. Connect the Main 16-pin DLC cable (GHDM – 241000) between the VCI and 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 tool. Access the GDS vehicle identification number (VIN) screen and configure the vehicle using the **VIN Auto Detect** function.

6. Select **AIR/CON** system and click **OK**.



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7. Select **ECU Upgrade**.



8. Select **Auto Mode**, then **Next**.

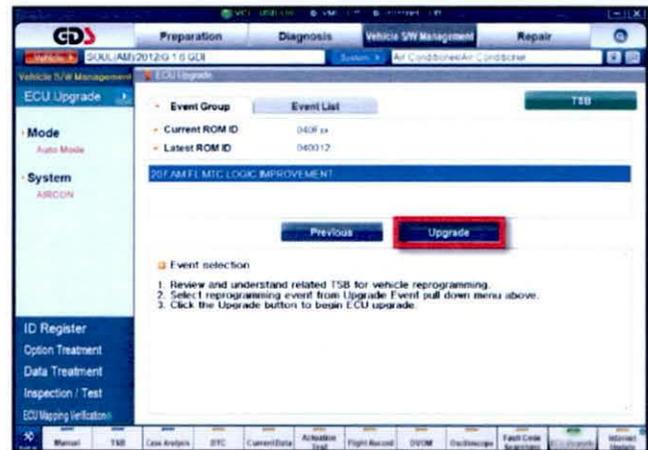


9. Select **AIR/CON**, and click **OK**.



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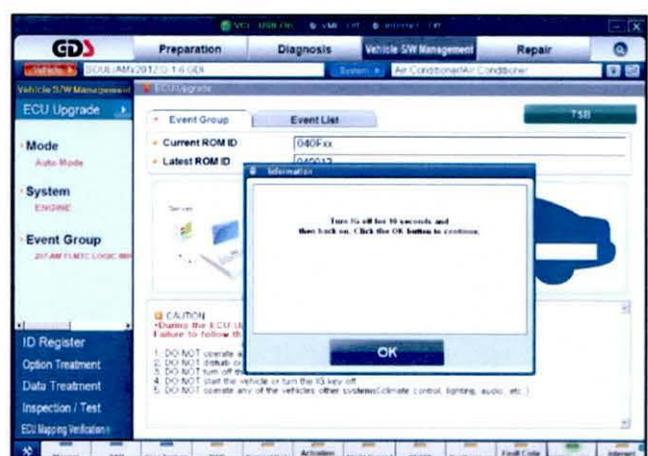
10. Select **Upgrade Event: 207.AM FL MTC LOGIC IMPROVEMENT**, then click **Upgrade** button and **OK** on battery voltage check screen.



11. Upgrade will begin and the progress of the upgrade will appear on the bar graph.

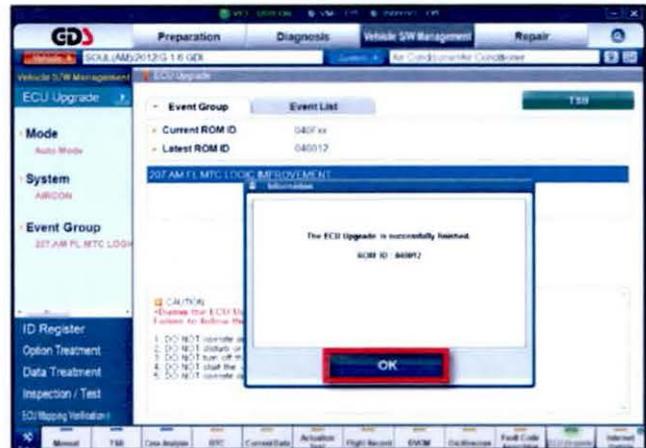


12. Follow the guidelines displayed on the screen during upgrade procedure and make sure to cycle the ignition **OFF** → **ON** one (1) time.



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13. Click **OK** on the final screen. **Upgrade event 207** is now complete.



14. Check if any incidental Diagnostic Trouble Codes DTC(s) have been created by the upgrade process; clear any DTC(s) that may be present.

*NOTICE

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

MANUAL MODE ECM UPGRADE PASSWORDS:

DO NOT perform Manual Mode ECM upgrade unless Auto Mode fails.

Upgrade event #207 Soul (AM):

MODEL YEAR	MENU	PASSWORD
AM1.6 GDI 12MY	AM FL 12MY MTC : 97250-2KAE0/E1/F0/F1/G0/G1	5021

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1. Within the **ECM Upgrade** screen, select **Manual Mode** in the left column, select **Engine** and then select **Upgrade Event 207**. Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 3 and click **OK**.
2. Enter the appropriate password from the table above, and then click **OK**.
3. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
4. Following the guidelines displayed on the screen during upgrade procedure, cycle the ignition **OFF** → **ON** one (1) time.
5. Click **OK** on the final screen. **Upgrade Event 207** is now complete.
6. Check if any incidental Diagnostic Trouble Codes DTC(s) have been created by the upgrade process; clear any DTC(s) that may be present.
7. Confirm HVAC control is functioning properly.

AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Soul (AM)	From July 11, 2011 to June 22, 2012

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty
V	97250 2KAE0DS5	0	N94	C40	(SA 148) ECU Upgrade	130054R0	0.2 M/H	N/A	0

***NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SA148** when accessing the WebDCS system.