	GROUP <b>Climate</b>	MODEL <b>2014MY Sorento (XM)</b>
	NUMBER <b>22</b>	DATE <b>October 2013</b>
<b>TECHNICAL SERVICE BULLETIN</b>		
SUBJECT:       HVAC CONTROL UNIT LOGIC IMPROVEMENT		

This bulletin provides information related to HVAC controller software upgrade for 2014MY Sorento vehicles, produced from January 24, 2013 to September 22, 2013, equipped with Auto (FATC) or Manual HVAC controls. The concern relates to the possibility of diminished A/C performance in high humidity climates, where slight icing may occur on the evaporator core and restrict airflow through the dashboard vents. To correct this condition, upgrade the HVAC controller logic 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)

File Under: <Climate>

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

**ECU Upgrade Procedure:**


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

UPGRADE EVENT NAME
221.XM HEATER CONTROL UPGRADE FOR EVA ICING(MTC)
222.XM HEATER CONTROL UPGRADE FOR EVA ICING(FATC)

**\* 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 any cables connected to the vehicle or GDS 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 20 seconds before starting the engine.
- **ONLY** use approved ECU upgrade software designated for the correct model, year.

**CAUTION**

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 ECU to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback. 

## ROM ID INFORMATION TABLES :

Upgrade event #221 &amp; 222

MODEL	A/C Unit P/N	ROM ID		FIGURE
		PREVIOUS	NEW	
XM	97250-1U255 97250-1U265	0500	0600	 Manual Control
	97250-1U355 97250-1U365 97250-1U455 97250-1U465	05	06	 FATC-Audio
	97250-1U555 97250-1U565 97250-1U575 97250-1U585	05	06	 FATC-AVN

*To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECU 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 ECU upgrade with the power supply cable disconnected from the GDS tool, be sure to check that the GDS tool is fully charged before ECU upgrade. If the GDS tool is not fully charged, failure to perform the ECU upgrade may occur. Therefore, it is strongly recommended that the power supply connector be connected to the GDS tool.

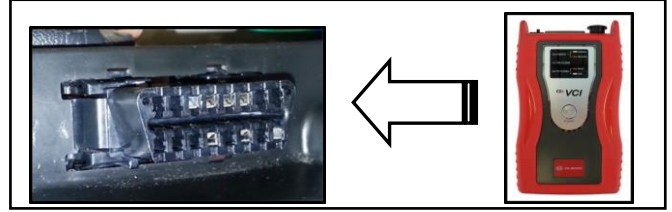
2. Connect the USB cable between the VCI and the GDS tool.

**\* NOTICE**

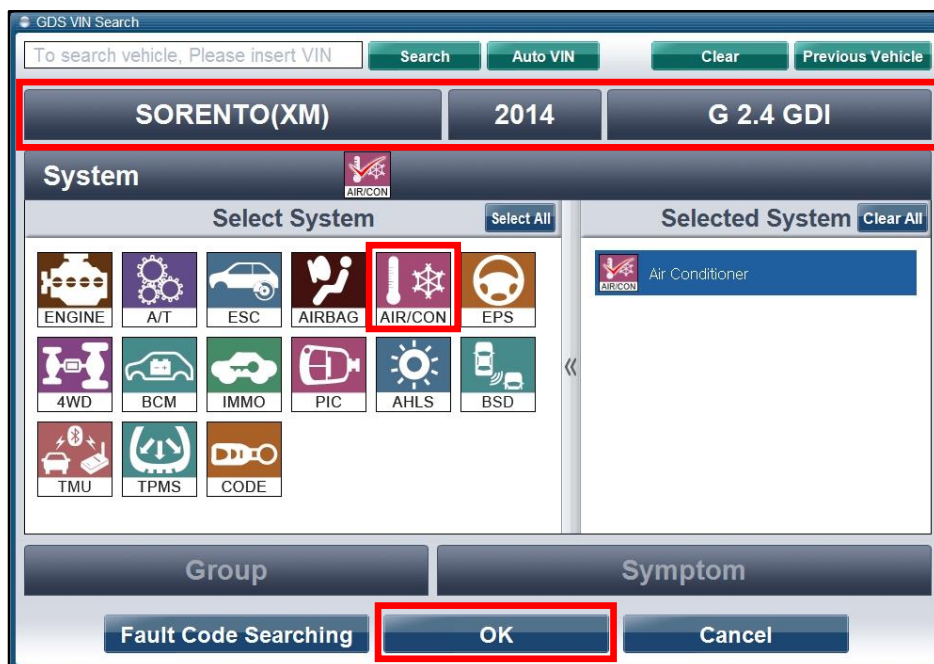
When performing the ECU upgrade using the GDS tool, wireless communication between the VCI and GDS tool is not available. Therefore, be sure to connect the USB cable between the VCI and the GDS tool.

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

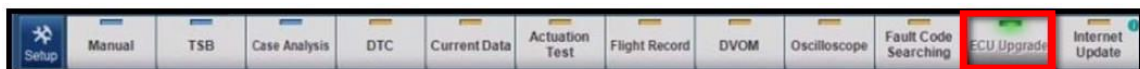
- Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



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



- Once back at the GDS Main Screen, select **ECU Upgrade** from the bottom right-hand corner. Next, select **Auto Mode** and then **Air/Con**. Perform the upgrade in accordance with normal GDS tool upgrade procedures.

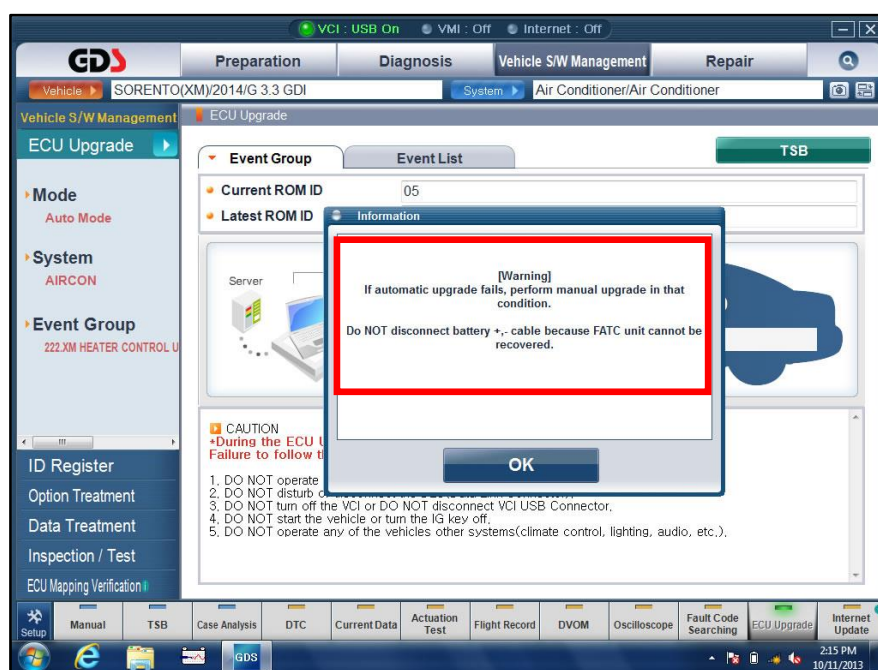


- After the Current ROM ID is displayed, select appropriate Upgrade Event, “**221.XM HEATER CONTROL UPGRADE FOR EVA ICING(MTC)**” or “**222.XM HEATER CONTROL UPGRADE FOR EVA ICING(FATC)**”.
- Click **OK** on the battery voltage check screen.
- Upgrade will begin and the progress of the upgrade will appear on the bar graph.

11. The upgrade will proceed until 100% is reached on the bar graph. Turn the ignition key **OFF** for 10 seconds, place it back in the **ON** position and click **OK** to continue according to information displayed on the screen.
12. Click **OK** on the final screen, which indicates upgrade is complete.

### \* NOTICE

If at any point during the event the auto upgrade fails, the screen below will appear. Follow the on-screen instructions and perform a manual upgrade without disconnecting the battery.



13. Check if any incidental diagnostic Trouble Codes DTC(s) have been created by the upgrade process; clear any DTC(s) that may be present.
14. Operate the A/C system to confirm proper operation.

**CAUTION**

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 ECU to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback.

## MANUAL MODE ECU UPGRADE PASSWORDS:

**\* 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.

## Upgrade event #221 Sorento (XM)

MY	MENU	PASSWORD
XM14MY	XMA FL MTC : 97250-1U255/65	1265

## Upgrade event #222 Sorento (XM)

MY	MENU	PASSWORD
XM14MY	XMA FL FATC AUDIO : 97250-1U355/365/455/465	1465
XM14MY	XMA FL FATC AVN : 97250-1U555/565/575/585	1585

1. Within the **ECU Upgrade** screen, select **Manual Mode** in the left column, select **AIR/CON** and then select **Upgrade Event 221 or 222**. 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. Click **OK** on the final screen. The upgrade event is now complete.
5. Check if any incidental diagnostic Trouble Codes DTC(s) have been created by the upgrade process; clear any DTC(s) that may be present.
6. Operate the A/C system to confirm proper operation.

SIB.IFCT

## HVAC CONTROL UNIT LOGIC IMPROVEMENT

AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Sorento (XM)	From January 24, 2013 to September 22, 2013

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty
W	97250 1U575VA	0	N94	C40	(CLI 022) Heater Control Reflash	97250F02	0.3 M/H	N/A	0