 <b>HYUNDAI</b>   NEW THINKING. NEW POSSIBILITIES.  <b>Technical Service Bulletin</b>	GROUP	MODEL
	FUEL SYSTEM	SANTA FE (CM)
	DATE	NUMBER
	NOVEMBER 2012	12-FL-008
<b>SUBJECT: ECM UPDATE – MIL ON WITH CYLINDER CONTRIBUTION/BALANCE</b> <b>DTC(s): P0263, P0266, P0269, P0272, P0275, P0278</b>		

## **ECU Update**

### Description:

This bulletin provides information for an ECM software update of some Santa Fe (CM) vehicles with 3.5L engine that may experience any of the following DTC(s):

- P0263 Cylinder1 Contribution/Balance
- P0266 Cylinder2 Contribution/Balance
- P0269 Cylinder3 Contribution/Balance
- P0272 Cylinder4 Contribution/Balance
- P0275 Cylinder5 Contribution/Balance
- P0278 Cylinder6 Contribution/Balance

### Applicable Vehicles:

- 2011-2012 MY SANTA FE (CM) with 3.5L engine

### GDS Information:

EVENT #	DESCRIPTION
<b>291</b> (or later compatible event)*	"CM 3.5 CYLINDER IMBALANCE DTC LOGIC IMPROVEMENT."

(\* the latest event that shows up in the Engine Auto Mode event list for the particular vehicle/engine)

### Warranty Information:

Model	Op Code	Operation	Op Time	Causal P/N	Nature	Cause
SANTA FE (CM)	39110F7S	ECM UPGRADE	0.3	(See <b>NOTE</b> )	N69	C40

**NOTE:** Use the applicable ECM P/N listed in the ROM ID Information Table from the following page.

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**ROM ID INFORMATION TABLE:**

Verify the ECM ROM ID before updating the vehicle's software. Refer to the table below.

Model	Engine	MY	ECM P/N	T/M	ROM ID	
					Previous	New
SANTA FE (CM)	3.5L	2011	39109-3C561	AT	CMAN35*S2**AB8G* CMAN35*S2**AC1A* CMAN35*S2**AC1B* CMAN35*S2**AC1C*	CMAN35*S2**AC6A*
		2012	39109-3C562		CMBN35*S2**AC4A* CMBN35*S2**AC4B*	CMCN35*S2**AC6A*

**GENERAL PRECAUTIONS:**

- Connect the USB cable between the GDS and the VCI.
- Connect the 16-pin DLC connector from the VCI into the DLC located under the driver's side dash.



**\* NOTE**

Make sure the battery icon at the bottom right of the GDS laptop shows at least 50%; if not, charge the GDS or attach a battery charger.

- Turn off all lights (Do not leave the headlight switch in auto mode) and all accessories (including heater/air conditioner/fan, audio, heated seats, rear defroster, etc) to ensure the battery will not be discharged during the update.
- Perform the update with the ignition key in the ON position.
- Do not disconnect any cables connected to the vehicle or the GDS during the update.
- Do not start the engine or turn the ignition switch OFF during the update.

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## ★ NOTE

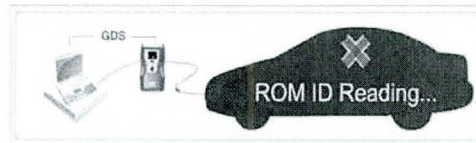
Confirm your GDS has the most recent version. If not, connect the GDS to an Internet port, open the GDS home page and select “Update”. Refer to instructions on hmaservice.com if necessary.

If you encounter GDS related problems, call the GIT Helpline at 888-437-0308.

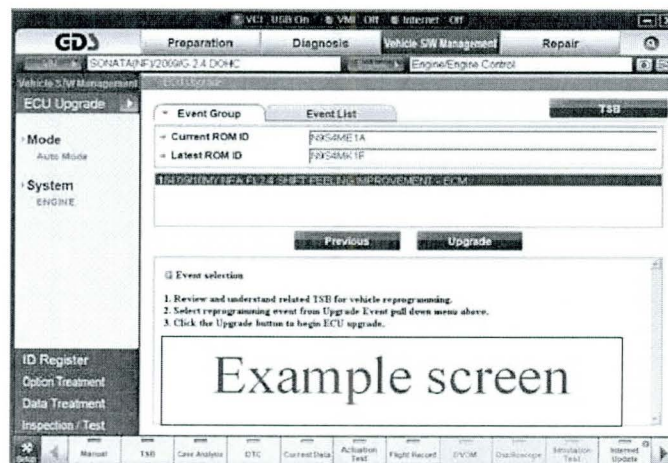
## SERVICE PROCEDURE:

### GDS AUTO MODE ECM UPDATE PROCEDURE

1. From the GDS home page, select **ECU Upgrade**. If necessary, select the VIN.
2. Select **Engine** as the system and then select **OK**.
3. Select **Auto Mode** and then select **Next**.
4. From the **System** tab, select **Engine** and then select **OK**. The GDS will read the ROM ID. Confirm the ROM is applicable as shown on Page 1, “ROM ID Information”.



5. Select update event as listed on the **GDS Event list of page-1**. Select **Upgrade**.



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6. If the screen indicates “**Voltage is OK**” (voltage > 12volts), select **OK**. If not, select **CANCEL** and charge the vehicle battery by running the engine for 10 minutes.
7. Updating will occur until 100% is reached on the bar graph. At the prompt, turn the ignition key OFF for 10 seconds, then turn it ON and select **OK**.
8. The GDS will confirm that ECM reprogramming is successfully finished. Select **OK**.
9. If the ECM update was not successful, go to **GDS MANUAL MODE ECM UPDATE PROCEDURE**.
10. Check for DTC in all systems and Erase All DTC that stored due to loss of CAN communication during the ECM Update.
11. Turn **OFF ignition 10 seconds** then turn **ON** before going to engine start.
12. Start the engine to confirm proper operation.

**\* NOTE:**

In event of AUTO MODE update failure:

- You must attempt MANUAL MODE. Use the ECM P/N from the vehicle’s ECM label if it is not clear from the ROM ID Table as to the correct ECM P/N to use for your vehicle.
- Replacing an ECM without carefully documenting that a MANUAL MODE update attempt was made, will result in claims charge back.

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**GDS MANUAL MODE ECM UPDATE PROCEDURE**

**\* NOTE**

- GDS Manual Mode is intended for recovery of an ECM Update should it begin but then later fail in process in the Auto Mode.
- The ECM connectors must be disconnected for 15 minutes to reset its contents then perform this Manual Mode Update.
- Do not force Manual Mode if you get an error in Auto Mode that the vehicle's current ROM ID did not apply.
- It is critical to identify the correct ECM Part Number in the PASSWORD table or the ECM may be permanently damaged. It is recommended to remove ECM and read the part number from the label to confirm.

1. From the GDS home page, select **ECU Upgrade**. If necessary, select the VIN.
2. Select **Engine** as the system and then select **OK**.
3. Select **Manual Mode** and then select Next.
4. From the **System** tab, select **Engine** and then select **OK**.
5. Select update event as per the **GDS Event List of page-1**, then select **Upgrade**.
6. Be certain to enter the exact appropriate password from the table on the next page and select **OK. See the important NOTE above.**
7. The remaining steps are same as Steps 6~ 12 of the Auto Procedure.

<b>MENU</b>	<b>PASSWORD</b>
CM 3.5 AT NON IMMO : 39109-3C561	3561
CM 3.5 AT NON IMMO : 39109-3C562	3562