

 <b>HYUNDAI</b>   NEW THINKING. NEW POSSIBILITIES. <b>Technical Service Bulletin</b>	GROUP <b>FUEL SYSTEM</b>	NUMBER <b>14-FL-004</b>
	DATE <b>SEPTEMBER, 2014</b>	MODEL(S) <b>SANTA FE (AN)</b>
SUBJECT: ECM UPDATE – AN 2.0L TURBO COLD START MISFIRE LOGIC		

## **ECU Update**

**Description:** This bulletin provides information related to an ECM software update on certain 2013-2014MY SANTA FE (AN) 2.0L TURBO vehicles to update the cold start misfire logic for the following DTCs: P0300, P0301, P0302, P0303 and P0304.

**Applicable Vehicles:** 2013 - 2014MY SANTA FE (AN) 2.0L TURBO

**GDS Information:**

EVENT #	DESCRIPTION
323	"323.AN 2.0L TURBO COLD START LOGIC"

**Warranty Information:**

Model	Op Code	Operation	Op Time	Causal P/N
SANTA FE (AN)	39100F04	ECM UPGRADE	0.3 M/H	(See NOTE)

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

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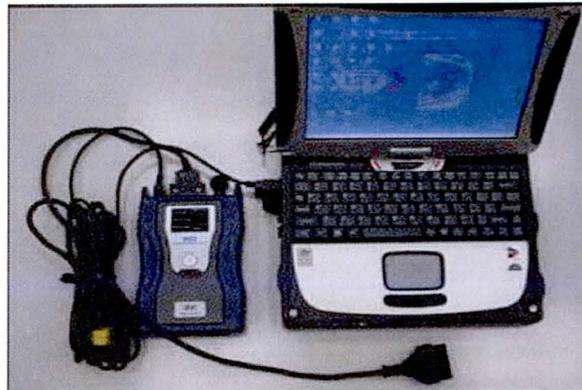
**ECM ROM ID INFORMATION TABLE:**

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

Model	MY	ECM P/N	OPTION	IMMO	ROM ID	
					Previous	New
SANTA FE 2.0L (AN)	13MY	39100-2GBB0	2WD	YES (Push Button Start)	BDC0RE3A BDC0RE3B BDC0RE5A BDC0RE5B BDC0RF2A BDC0RF3A BDC0RG0A	BDC0RG01
		39100-2GBC0	4WD	YES (Push Button Start)	BDC0RE3A BDC0RE3B BDC0RE5A BDC0RE5B BDC0RF2A BDC0RF3A BDC0RG0A	BDC0RG01
		39100-2GBD0	2WD	NO (Key Start)	BDC0ME3A BDC0ME3B BDC0ME5A BDC0ME5B BDC0MF2A BDC0MF3A BDC0MG0A	BDC0MG01
		39100-2GBE0	4WD	NO (Key Start)	BDC0ME3A BDC0ME3B BDC0ME5A BDC0ME5B BDC0MF2A BDC0MF3A BDC0MG0A	BDC0MG01
	14MY	39100-2GBB1	2WD	YES (Push Button Start)	BEC0RH2A	BEC0RH2B
		39100-2GBC1	4WD	YES (Push Button Start)	BEC0RH2A	BEC0RH2B

**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.



**NOTICE**

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. (Turn the ignition key to ON position or press the Start-Stop Button two times without depressing the brake pedal).
- 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.

**NOTICE**

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](http://hmaservice.com) if necessary.

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

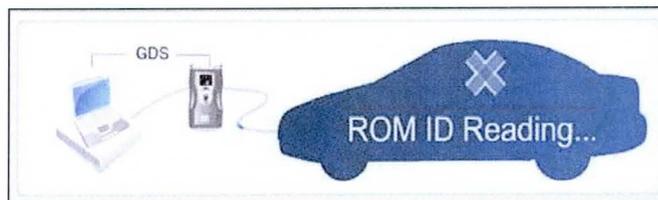
**SERVICE PROCEDURE:**

**GDS AUTO MODE ECM UPDATE PROCEDURE**

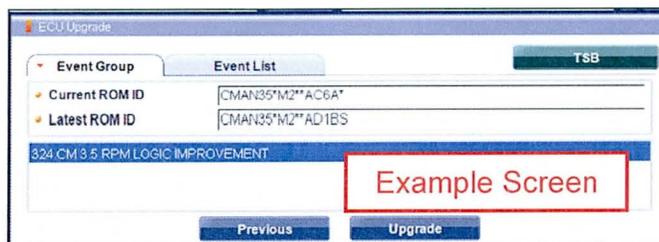
1. From the GDS home page, select **ECU Upgrade**. If necessary, select the VIN.
2. Select **Engine** as the system and then select **OK**.
3. Select **Auto Mode** and then select **Next**.

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- 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 2, “ECM ROM ID Information”.  
**NOTE:** Record the ECM ROM ID in case the auto update fails and a manual update is needed.



- Update event "**323.AN 2.0L TURBO COLD START LOGIC** " will display. Select **Upgrade**.



- 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.
- 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**.
- The GDS will confirm that ECM update is successfully finished. Select **OK**.
- If the ECM update was not successful, go to **GDS MANUAL MODE ECM UPDATE PROCEDURE**.
- Check for DTC in all systems and Erase All DTC that stored due to loss of CAN communication during the ECM Update.
- Turn **OFF ignition for 10 seconds** then turn **ON** before going to engine start.
- Start the engine to confirm proper operation.
- Clear DTC in the BlueLink system per instructions of TSB 12-BE-005-2.

### NOTICE

In the 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 may result in claims charged back.

**GDS MANUAL MODE ECM UPDATE PROCEDURE**

**NOTICE**

- 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 "**323.AN 2.0L TURBO COLD START LOGIC**", then select **Upgrade**.
6. Be certain to enter the exact appropriate password from the table below and select **OK**.

MENU	PASSWORD	COMMENTS
DMA 2.0 IMMO 39100-2GBB0/2GBC0	9120	Push Button Start
DMA 2.0 IMMO 39100-2GBB1/2GBC1	9121	Push Button Start
DMA 2.0 NON IMMO 39100-2GBD0/2GBE0	9122	Key Start

7. The remaining steps are the same as Steps 6~13 of the Auto Procedure.