HYUNDAI NEW THINKING. NEW POSSIBILITIES. **Technical Service Bulletin**	GROUP **CAMPAIGN**	NUMBER **12-01-027**
	DATE **OCTOBER 2012**	MODEL **SANTA FE (AN)**

SUBJECT: ECM UPDATE – 2.4L GDI/2.0L T-GDI CHECK FUEL CAP LOGIC IMPROVEMENT (SERVICE CAMPAIGN TL8)

★ IMPORTANT

***** Dealer Stock and Retail Vehicles *****

Dealers must perform this Service Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

GDS HYUNDAI Global Diagnostic System ECU Update

Description: This bulletin provides information related to the ECM software update of some 2013MY SANTA FE (AN) 2.4L GDI and 2.0L T-GDI vehicles that may experience "Check fuel cap" warning on the instrument cluster soon after refueling and fuel cap was installed properly.

Applicable Vehicles: 2013 MY SANTA FE (AN) 2.4L GDI and 2.0L T-GDI vehicles produced from Start of Production to October 2, 2012.

GDS Information:

EVENT #	DESCRIPTION
278 (or later compatible event)*	DMA 2.4 GDI FUEL CAP ONE WARNING LOGIC IMPROVEMENT
279 (or later compatible event)*	DMA 2.0 T-GDI FUEL CAP ONE WARNING LOGIC IMPROVEMENT

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

Circulate To: Service Manager, Warranty Manager, Service Advisors, Technicians, Fleet Repair

Warranty Information:

Op Code	Operation	Op Time
20CG04R0	ECM UPGRADE	0.3 M/H

★ 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.

ROM ID INFORMATION TABLE:

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

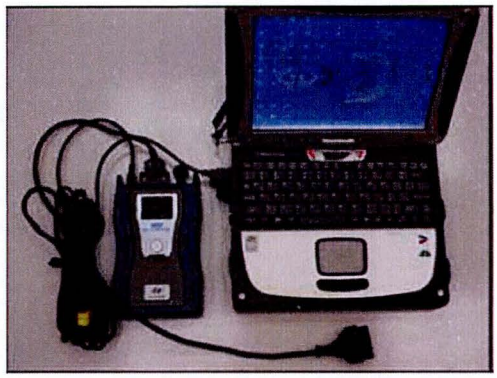
Model	ECM P/N	WD	IMMO	ROM ID	
	AT			Previous	New
SANTA FE 2.4L GDI	39100-2GAE0	2WD	YES	BDC4RE5A BDC4RE5B	**BDC4RE5C**
	39100-2GAE5	4WD		BDC4RE5A BDC4RE5B	
	39100-2GAG0	2WD	NO	BDC4ME5A BDC4ME5B	**BDC4ME5C**
	39100-2GAG5	4WD		BDC4ME5A BDC4ME5B	
SANTA FE 2.0L T-GDI	39100-2GBB0	2WD	YES	BDC0RE3A BDC0RE5A	**BDC0RE5B**
	39100-2GBC0	4WD		BDC0RE3A BDC0RE5A	

★ NOTE

IMMO = YES: Push Button Start
IMMO = NO: Key Start

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.

★ 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.

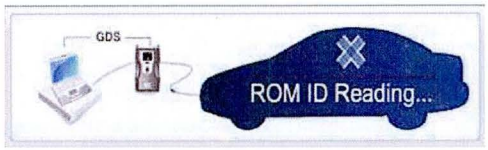
If you encounter GDS related problems, call the GIT Helpline at 888-437-0308.

SERVICE PROCEDURE:

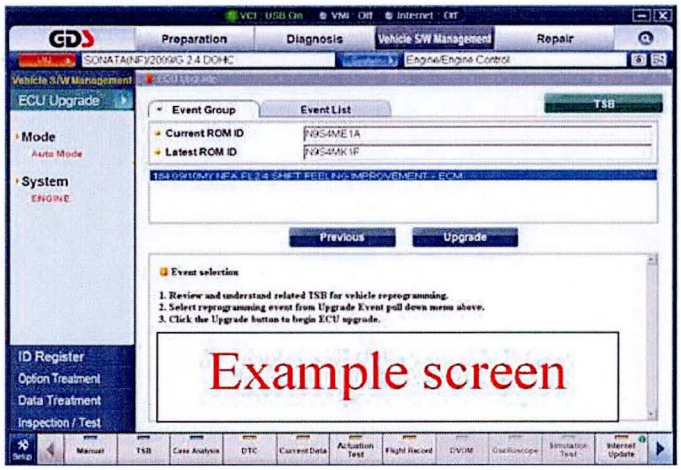
GDS <u>AUTO</u> MODE ECM UPDATE PROCEDURE

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.**



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 continue 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 had successfully finished. Select **OK**.

9 If the ECM update was not successful, go to **GDS MANUAL MODE <u>ECM</u> 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 **ignition OFF for 10 seconds** then turn back **ON** before starting the engine.

12 Start the engine to confirm proper operation.

13 Clear DTC in the BlueLink system per instructions of TSB 12-BE-005-2.

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. Make sure to enter the correct password from the table below and select **OK. See the NOTE above.**
7. The remaining steps are the same as Steps 6-12 of the Auto Procedure.

MENU	PASSWORD	COMMENTS
DMA 2.4 GDI IMMO : 39100/39110-2GAE0, 39100-2GAE5	**0025**	Push Button Start
DMA 2.4 GDI NON IMMO : 39100/39110-2GAG0, 39100-2GAG5	**0026**	Key Start
DMA 2.0 T-GDI IMMO : 39100-2GBB0/2GBC0	**2020**	Push Button Start
DMA 2.0 T-GDI NON IMMO : 39100-2GBD0/2GBE0	**2021**	Key Start