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DATE

NUMBER 12-01-049

MODEL

**Technical Service Bulletin** 

DECEMBER 2012

SANTA FE (AN)

# SUBJECT: CLUSTER SOFTWARE UPDATE (SERVICE CAMPAIGN TN6)

# \* IMPORTANT

\*\*\* DEALER STOCK ONLY \*\*\*

Dealers must perform this Campaign on all affected vehicles prior to customer retail delivery.

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



Description: This bulletin provides the service procedure to update the instrument cluster software.

Applicable Vehicles: 2013 MY SANTA FE (AN) vehicles produced from SOP to December 4, 2012.

#### **GDS** Information:

EVENT #	DESCRIPTION	
<b>293</b> (or later compatible event)*	DMA CLUSTER UPDATE	

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

#### Warranty Information:

Op Code	Operation	Op Time
20CG05R0	ECM UPDATE	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 or an instrument cluster without carefully documenting that a MANUAL MODE update attempt was made, will result in a claim charge back.

#### ROM ID INFORMATION TABLE:

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

Medel	Time	Cluster P/N	ROM ID	
Woder	туре	Cluster P/N	Previous	New
SANTA FE w/ <b>Super Vision</b> Cluster		94011-4Z000 94011-4Z010 94011-4Z020	-	B0 AD
SANTA FE w/ <b>Conventional</b> Cluster	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	94001-4Z000 94001-4Z010 94001-4Z020	-	78 A2

#### **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. (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.

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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 BCM (Cluster Module) as the system and then select OK.
- 3. Select Auto Mode and then select Next.
- 4. From the **System** tab, select **BCM** and then select **OK**. The GDS will read the ROM ID. Confirm the ROM is applicable as shown on Page 2, "ROM ID Information".



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

VCH: US8 On 🗣 VMI - Off 🔮 Internet ; Off				
Preparation	Diagnosis	Vehicle S/W Management	Repair	0
(NEV2009/G 2.4 D/OHC	March 1	Engine/Engine Control		0 3
at 🧃 ESU Upgrade 👘 👘				
Event Group	Event List		COLUMN STREAM	8B
Current ROM ID Latest ROM ID	N954ME1A N954MK1F			
19409ROMY NEA FL2	4 SHIFT FEELING M	PROVEMENT - ECM -		
	Previous	Upgrade	1	
Event selection 1. Review and understan 2. Select reprogramming 3. Click the Upgrade but	nd related ISB for vehi g event from Upgrade E tton to begin ECU upgr	cle reprogramming. Vent pull down menu above. ade.		_
Ex	amp	le scre	en	
	Preparation INF/2008/62.4 DOHC Event Group Current ROM ID Latest ROM ID Editoritor Artical Science and under sta Science and under	VCL USD ON IN WILL  Preparation Diagnosis  INF/2008624 DOHC  Event Group Event List  Current ROM ID  ProstMacT  Latest ROM ID  ProstMacT  Editoritment Associated and the second secon	Velidis ON Velidis SW Management Preparation Diagnosis Velidis SW Management INF/2003052 24 DOHO Velidis SW Management Velidis SW Management Velidis SW Management Velidis SW Management Prove Experience State Previous Upgrade I State Rom ID Previous Upgrade I State relation I Review and understand related TSB for velicite repregramming. Schick the Ergorde Norma for SR for velicite repregramming. Schick the Ergorde Norma to begin RCU upgrade. Example Scores	Verluse On Verlue of Verleest of Proparation Diagnosis Verleest of Proparation Diagnosis Verleest Wildingereen Repair Provide Experied of the Control of Verleest One Current Rom D Prostation Prostation Current Rom D Prostation Prostation Current Rom D Prostation Prostation Provide Upgrade Provide Upgrad

- 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 OFF for 10 seconds, then turn it ON and select **OK**.

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- 8. The GDS will confirm that BCM reprogramming had successfully finished. Select OK.
- 9. If the BCM 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 of the instrument cluster.
- 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 BCM (Cluster Module) as the system and then select OK.
- 3. Select Manual Mode and then select Next.
- 4. From the System tab, select BCM 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 6-13 of the Auto Procedure.

MENU	PASSWORD	
DMA CLUSTER (SUPER VISION) : 94011-4Z000/10/20	4020	
DMA CLUSTER (CONVENTIONAL) : 94001-4Z000/10/20	4021	