This TSB supersedes bulletin 12-FL-005 to add DTC P0128.

GDS ⊛HYUNDAI Global Diagnostic System ECU Update

Description:

This bulletin provides information related to the ECM software update of some 1.6L vehicles that may experience the following DTC:

- P0456: Evaporative Emission System-Leak detected (Very small leak)
- P0128: Coolant thermostat - Coolant temperature below thermostat regulating temperature

NOTE: There are no vehicle performance issues associated with this condition.

Applicable Vehicles:
- 2012 MY VELOSTER (FS) with 1.6L GDI Engine
- Built before May 14, 2012

GDS Information:

EVENT #	DESCRIPTION
274 (or later compatible event)*	"FS 1.6 P0456 DTC LOGIC IMPROVEMENT"

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

★ IMPORTANT:

DCT Vehicles - Reset operation after ECU Update required:
- After ECU Update there is a prompt to turn OFF ignition for 30 seconds then back ON.
- This is required to reset the DCT and if not done the DCT may become inoperative.

Warranty Information:

Model	Op Code	Operation	Op Time	Causal P/N	Nature	Cause
VELOSTER (FS)	39110F6Y	ECM UPGRADE	0.3	(See **NOTE**)	N69	C40

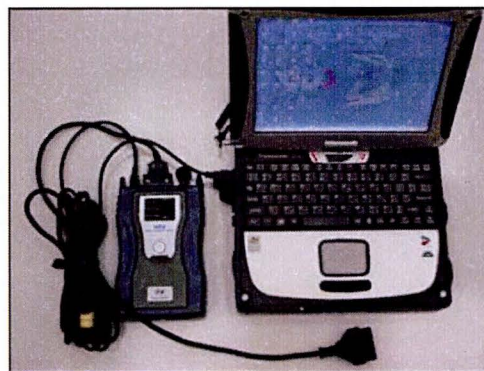**NOTE:** Use the applicable ECM P/N listed in the ROM ID Information Table from the following page.

ROM ID INFORMATION TABLE:

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

ECM P/N	T/M	IMMO	ROM ID	
			Previous	**New**
39110-2BBF3	M/T	NO (Key Start)	GGFS-BFU6ES00600 GGFS-BFU6ES01600 GGFS-BFU6ES02600 GGFS-BFU6ES03600 GGFS-BFU6ES04600 GGFS-BFU6ES05600	GGFS-BFU6EF00600
39110-2BBF0		YES (Push Button Start)	GGFS-BFU6FS00600 GGFS-BFU6FS01600 GGFS-BFU6FS02600 GGFS-BFU6FS03600 GGFS-BFU6FS04600 GGFS-BFU6FS05600	GGFS-BFU6FF00600
39110-2BBH3	DCT	NO (Key Start)	GGFS-BFU6ES00H00 GGFS-BFU6ES01H00 GGFS-BFU6ES02H00 GGFS-BFU6ES03H00 GGFS-BFU6ES04H00 GGFS-BFU6ES05H00 GGFS-BFU6ES06H00	GGFS-BFU6EF00H00
39110-2BBH0		YES (Push Button Start)	GGFS-BFU6FS00H00 GGFS-BFU6FS01H00 GGFS-BFU6FS02H00 GGFS-BFU6FS03H00 GGFS-BFU6FS04H00 GGFS-BFU6FS05H00 GGFS-BFU6FS06H00	GGFS-BFU6FF00H00

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.

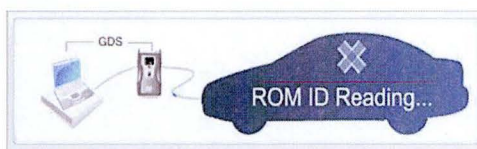If you encounter GDS related problems, call the GIT Helpline at 888-437-0308.

SERVICE PROCEDURE:

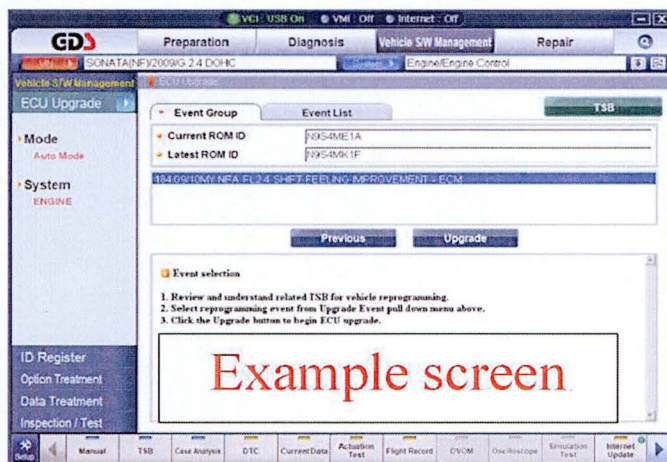### GDS AUTO MODE ECM UPDATE PROCEDURE

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.**

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.

8 When prompted turn **OFF ignition 30 seconds** then turn **ON** before going to engine start.
NOTE: Failure to perform this 30 second reset may result in the DCT being inoperative.

9 The GDS will confirm that ECM reprogramming is successfully finished. Select **OK.**

10 If the ECM update was not successful, go to **GDS MANUAL MODE ECM UPDATE PROCEDURE.**

11 Check for DTC in all systems and Erase All DTC that stored due to loss of CAN communication during the ECM Update.

12 Start the engine to confirm proper operation.

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

★ NOTE:

In event of AUTO MODE ECU 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.

GDS <u>MANUAL</u> 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 6~13 of the Auto Procedure.

MENU	PASSWORD	Comments
FS 1.6 MT NON IMMO : 39110-2BBF3	1023	Key Start
FS 1.6 MT IMMO : 39110-2BBF0	1020	Push Button Start
FS 1.6 DCT NON IMMO : 39110-2BBH3	1024	Key Start
FS 1.6 DCT IMMO : 39110-2BBH0	1021	Push Button Start