



HYUNDAI Technical Service Bulletin

Group	CAMPAIGN
Number	08-01-008
Date	JULY, 2008
Model	2009 SONATA

Subject
**ECM UPDATE - 2009 SONATA (NF) 3.3L ROUGH IDLE
 (CAMPAIGN T53)**

CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY MGR	<input type="checkbox"/> SALES MANAGER

IMPORTANT: DEALERS MUST PERFORM THIS CAMPAIGN ON ALL AFFECTED VEHICLES PRIOR TO CUSTOMER RETAIL DELIVERY AND WHENEVER AN AFFECTED VEHICLE IS IN THE SHOP FOR ANY MAINTENANCE OR REPAIR.

IMPORTANT: WHEN A VEHICLE ARRIVES AT THE SERVICE DEPARTMENT, ACCESS HYUNDAI MOTOR AMERICA'S "WARRANTY VEHICLE INFORMATION" SCREEN VIA DCS ON-LINE TO IDENTIFY OPEN CAMPAIGNS.

DESCRIPTION:

Some 2009 SONATA (NF) 3.3L vehicles may experience a rough idle when the steering wheel is turned all the way to the right or left during parking maneuvers with air conditioner running. The following procedure describes the procedure to reprogram the ECM software.

APPLICABLE TO:

Model: 2009 SONATA (NF) vehicles equipped with 3.3L gasoline engines

Applicable vehicle production date range: December 17, 2007 to May 12, 2008

NOTE: To verify the vehicle is affected, be sure to check the version of the vehicle's control unit ROM ID with reference to the ROM ID Information table mentioned below before attempting to update the control unit software.

ECM P/N	ROM ID	
	Previous	New
39110-3C785	NF8N33* S2AS8J9AA NF8N33* S2AS8JAAA NF8N33* S2AS8JACA NF8N33* S2AS8JADA	NF8N33* S2AS8JFBA

SERVICE PROCEDURE

WARNING: CAUTIONS DURING CONTROL UNIT UPDATE

- Make sure the vehicle's battery has reasonable charge. If the vehicle has been in storage for days, run the engine to assure an adequate battery charge state for reliable update results.
- Turn off all lamps (Do not leave head lamp switch in auto mode.) and all accessories (including heater, A/C, blower, radio, seat warmer, defroster, etc.) to prevent battery discharge during the update procedure.
- Perform update with the ignition switch in the ON position.
- Be careful not to disconnect any cables connected to the vehicle or scan tool during update.
- Do not start the engine during the update procedure.
- Do not turn off the ignition switch during the update procedure.

TOOLS/PARTS INFORMATION

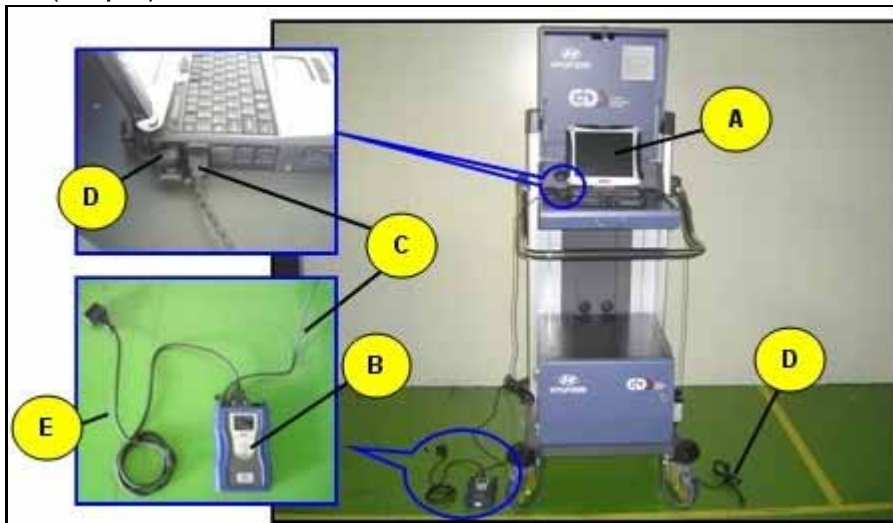
A: Diagnostic terminal

B: VCI (Vehicle Communication Interface)

C: USB (Universal Serial Bus) cable

D: Power supply cable

E: DLC cable (16-pin)





HYUNDAI Technical Service Bulletin

Group	CAMPAIGN
Number	08-01-008

CONTROL UNIT UPDATE PROCEDURE

1. GDS (Global Diagnostic System) INSTALLATION PROCEDURE

- a. Connect the power supply connector to the diagnostic terminal.

NOTE: If attempting to perform the update with the power supply cable disconnected from the diagnostic terminal, make certain that the diagnostic terminal is charged enough for the update. If not, the update may fail in progress. Therefore, it is strongly recommended to connect the power supply cable to the diagnostic terminal during the update procedure.

- b. Connect the USB cable between the VCI and the diagnostic terminal.

NOTE: When performing the update using the GDS, wireless communication between the VCI and the diagnostic terminal is NOT available. Therefore, be sure to connect the USB cable between the VCI and the diagnostic terminal.

- c. Connect the 16-pin DLC cable from the VCI into the vehicle's DLC connector under the driver side instrument panel.
- d. Turn on the VCI and diagnostic terminal with the ignition key in the ON position.

NOTE: Do not start the engine.

2. AUTOMATIC UPDATE PROCEDURE

- a. Choose VIN or ECU Upgrade on the initial screen.
- b. Enter the vehicle information by entering the vehicle's VIN or selecting the vehicle model, model year, engine/fuel type and ENGINE as the system and then click OK.

The screenshot shows the GDS VIN Search interface. The 'VIN' field is highlighted with a red box. The 'Go' button is also highlighted. The 'VIN Auto Detect' button is highlighted. The 'Year' column in the table is highlighted with a red box. The '0.3 3 DOHC' engine option is highlighted with a red box. The 'ABS' system icon is highlighted with a red box. The 'OK' button is highlighted with a red box.

Vehicle	Year	Engine
ACCENT(MC)	2008	0.3 3 DOHC
ACCENT(LC)	2007	
ACCENT(DC)	2006	
AZERA(TO)		
ELANTRA(HD)		
ELANTRA(D)		
ELANTRA(J)		
ELANTRA(S)		
ENTOURAGE(EF)		
EXCELO(G)		
GENESIS(BH)		
SANTA FE(CM)		
SANTA FE(SM)		
SONATA(LF)		



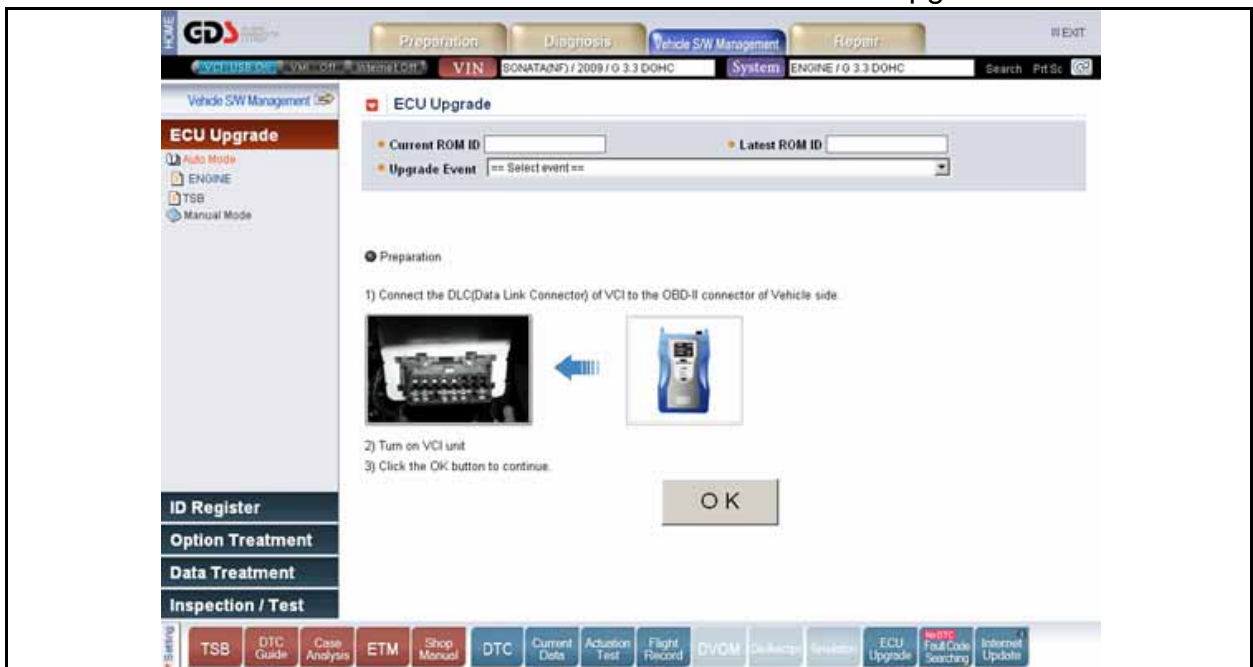
HYUNDAI Technical Service Bulletin

Group	CAMPAIGN
Number	08-01-008

c. Select ECU Upgrade on the initial screen after entering the vehicle information.

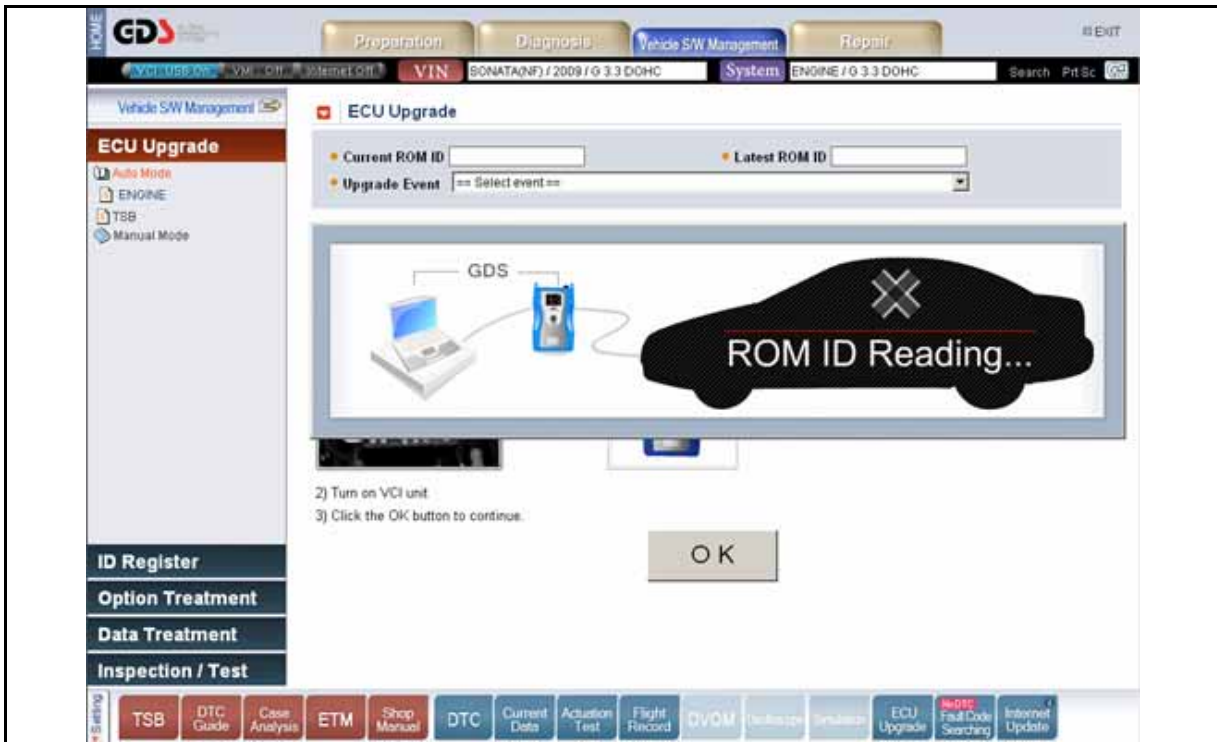


d. Select Auto Mode then ENGINE in the left ECU Upgrade column.

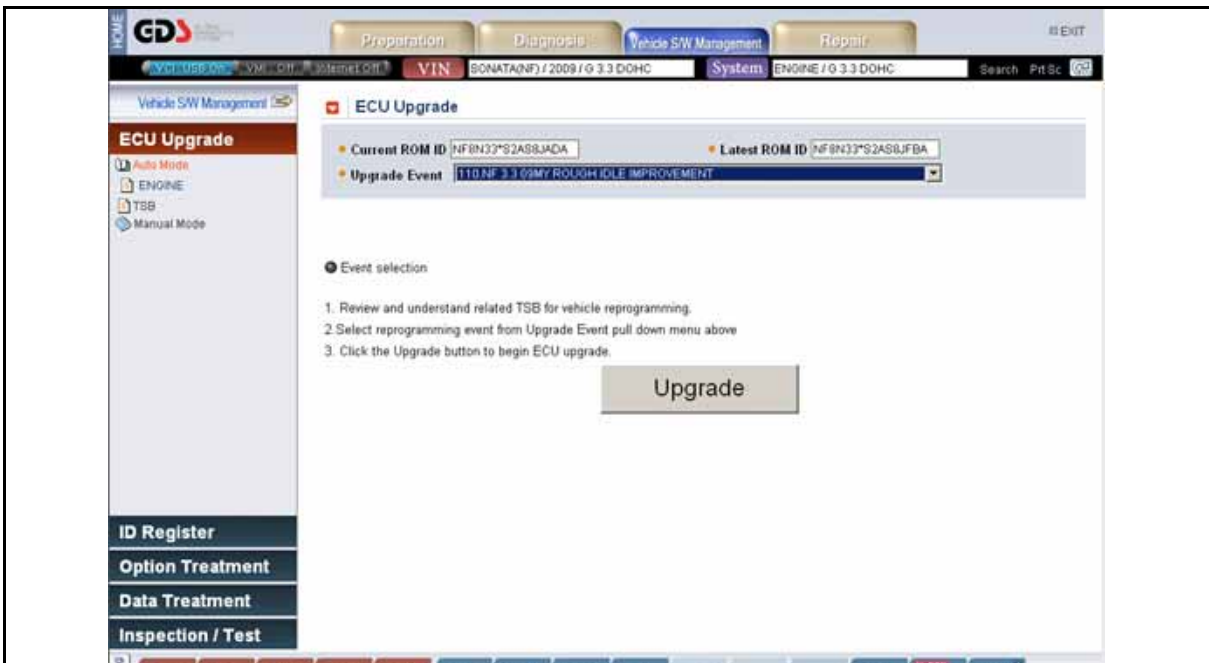


e. Read Preparation and click OK.

f. The GDS will read the vehicle's ROM ID.



g. After the Current ROM ID is displayed, select the Upgrade Event, "110. NF 3.3 09MY ROUGH IDLE IMPROVEMENT."



h. After clicking the Upgrade button, read Information then click OK.

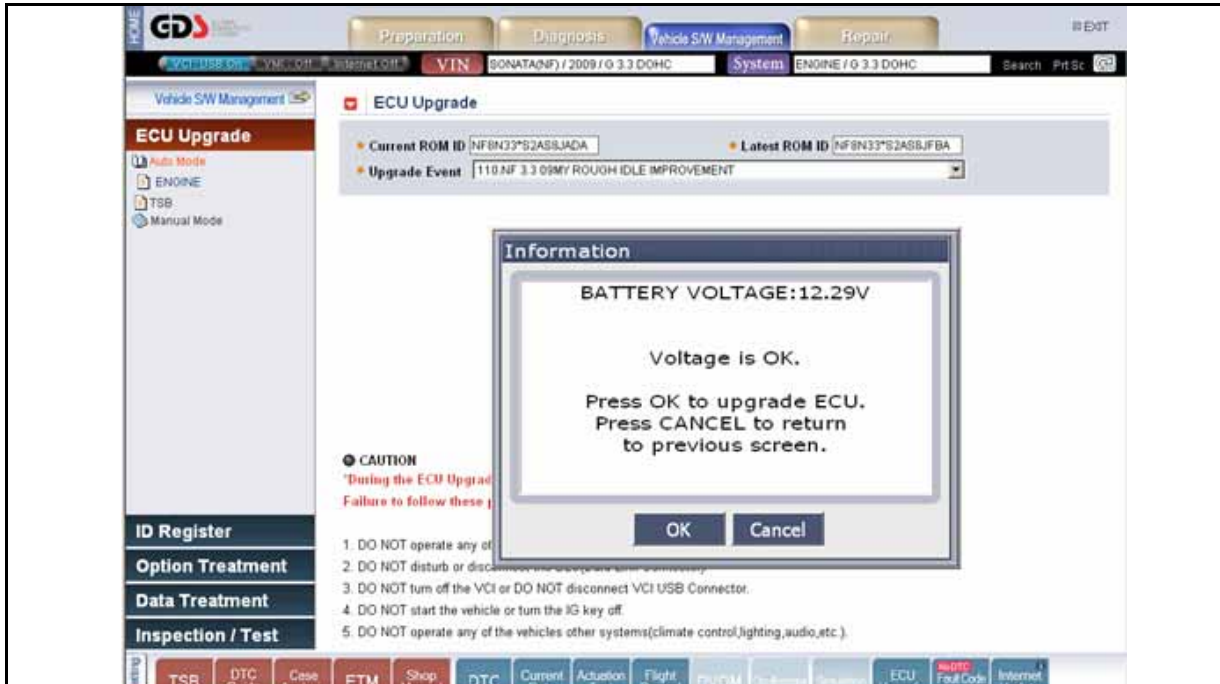


HYUNDAI Technical Service Bulletin

Group	CAMPAIGN
Number	08-01-008

- i. The vehicle battery voltage is checked to make sure it is at least 12 volts to assure reliable update results. Click OK if the results indicate Voltage is OK.

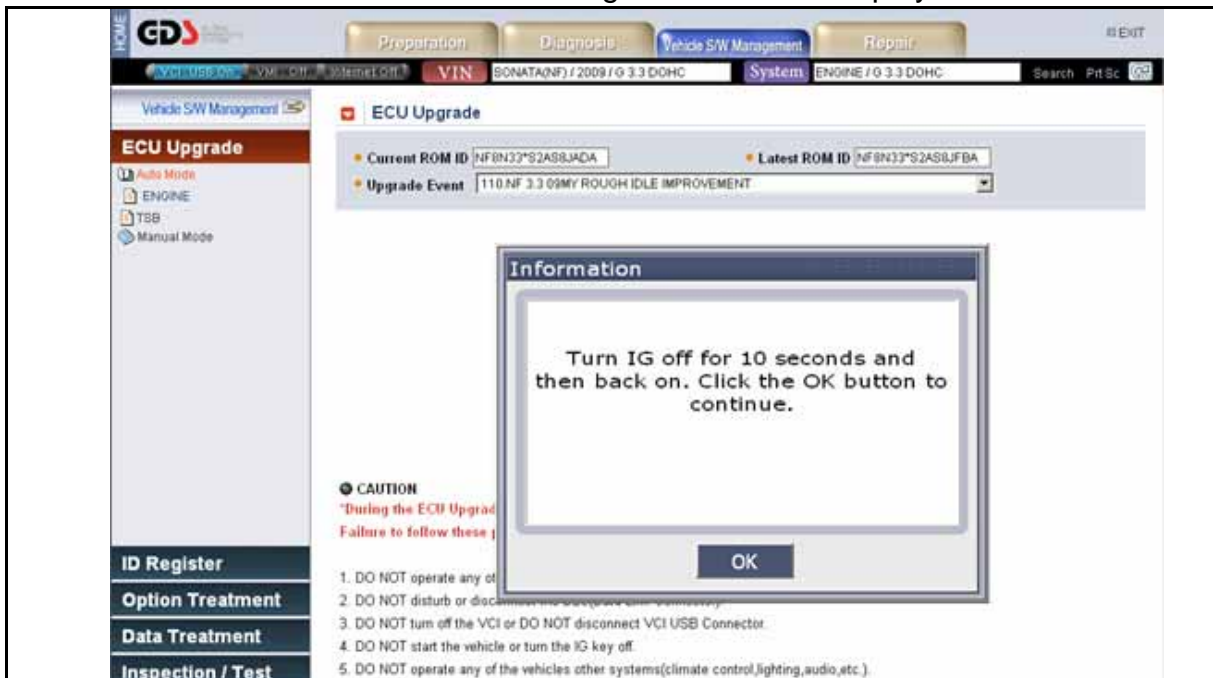
NOTE: If voltage is below 12 volts, click Cancel and then run the engine to assure an adequate battery charge state for reliable update results.



- j. Update will begin and the progress of the update will appear on the bar graph.



- k. Update will occur until 100% is reached on the bar graph. Turn the ignition key OFF for 10 seconds, place it back in the ON position and then click OK to continue according to information displayed on the screen.



- l. Click OK on the final screen, which indicates update is complete.



HYUNDAI Technical Service Bulletin

Group	CAMPAIGN
Number	08-01-008

- m. Check for any diagnostic trouble codes (DTC) and erase the DTC (s) present.
- n. Start the engine to confirm proper operation of the vehicle.

3. MANUAL UPDATE PROCEDURE

NOTE: The manual update should be performed only when the automatic update fails. If automatic update fails, turn the ignition key OFF for about 10 seconds, place it back in the ON position and then perform manual update.

- a. Within the ECU Upgrade screen, select Manual Mode in the left column, then select Upgrade Event #110. Select the system as NF 3.3 NON IMMO : 39110-3C765 and click OK.



- b. Enter the password from the below table then click OK.

MENU	Password
NF 3.3 NON IMMO: 391 10-3C765	3765

- c. The vehicle battery voltage is checked to make sure it is at least 12 volts to assure reliable update results. Click OK if the results indicate Voltage is OK.

NOTE: If voltage is below 12 volts, click Cancel and then run the engine to assure an adequate battery charge state for reliable update results.

- d. update will begin and the progress of the update will appear on the bar graph.
- e. Update will occur until 100% is reached on the bar graph. Turn the ignition key OFF for 10 seconds, place it back in the ON position and then click OK to continue according to Information displayed on the screen.
- f. Click OK on the final screen, which indicates update is complete.

- g. Check for any diagnostic trouble codes (DTC) and erase the DTC (s) present.
- h. Start the engine to confirm proper operation of the vehicle.

CAMPAIGN CLAIM INFORMATION:

OP CODE	OP NAME	OP TIME
80BA07R2	ECM UPGRADE	0.2

NOTE: Submit claim using the Campaign Claim Screen.