



# HYUNDAI Technical Service Bulletin

Group	TRANSAXLE
Number	06-01-003
Date	MAY, 2006
Model	SONATA

Subject  
**2006 SONATA 3.3L PCM REPROGRAMMING  
 INSTRUCTIONS FOR REDUCING DOWNSHIFT TIME  
 (CAMPAIGN T15)**

<b>CIRCULATE TO:</b>	<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

*This bulletin updates TSB# 05-01-015. Page 2 was revised to add the section "IMPORTANT PREPARATION BEFORE STARTING REPROGRAMMING" which includes new required steps to help assure successful reprogramming.*

**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 INTERACTIVE OR DCS ON-LINE TO IDENTIFY OPEN CAMPAIGNS.**

**DESCRIPTION:**

This bulletin provides a procedure to reprogram the PCM with the Hi-Scan to reduce the 5->2 downshift time when accelerating with full or nearly full throttle at approximately 40-50 mph.

**VEHICLES AFFECTED:**

- Model: 2006 Sonata 3.3L vehicles with automatic transaxles
- Affected vehicle production date range:
  - From the beginning VIN of 2006 Sonata production ~ October 20, 2005

## PCM SPECIFICATIONS:

MODEL	IMMOBILIZER APPLICATION	PCM P/NO	PCM ROM ID	
			PREVIOUS	NEW
	NO	39110-3C760	NF5N33*S2AS5B0BB NF5N33*S2AS5B3BB NF5N33*S2AS5B3CB NF5N33*S2AS5B3DB	NF5N33*S2AS5E1BC

## PROCEDURE:

**NOTE:** Verify that the vehicle is affected by accessing Hyundai Motor America's "Warranty Vehicle Information" screen via DCS interactive or DCS on-line to identify an open T15 Campaign on the vehicle.

## IMPORTANT PREPARATION BEFORE STARTING REPROGRAMMING:

- 1. Turn off all lights** (do not leave headlight switch in auto mode) **and all accessories** (including heater/AC/blower, radio, heated seats, rear defogger, etc.) **to make certain the battery will not be discharged during reprogramming.**
- 2. If the vehicle was in storage, you must START and RUN the engine for at least 10 minutes before reprogramming to assure there will be adequate stabilized vehicle battery voltage required for a successful reprogram. Battery voltage must remain above 11.0V for the duration of 20-25 minutes of reprogram.**

## CAUTIONS DURING REPROGRAMMING:

1. Perform reprogramming with the ignition key in the ON position.
2. Be careful not to disconnect the Hi-Scan Pro during reprogramming.
3. Do not start the engine during reprogramming.
4. Do not turn the ignition key OFF during reprogramming.
5. When the reprogramming is completed, turn the ignition key OFF then wait for about 20 seconds. Start the engine and confirm normal operation of the vehicle.



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## PCM REPROGRAMMING PROCEDURE:

**NOTE:** Verify that the vehicle is within the affected production date and VIN range.

## HI-SCAN PRO INSTALLATION PROCEDURE

1. Attach the Data Link Connector (DLC) cable to the Hi-Scan Pro main body and securely tighten the two bolts.
2. Remove the system software card from the Hi-ScanPro and insert the black 32 MB reprogramming software card into the Hi-Scan top slot.
3. Connect the DLC cable from the Hi-Scan Pro into the data link connector (16 Pin connector).

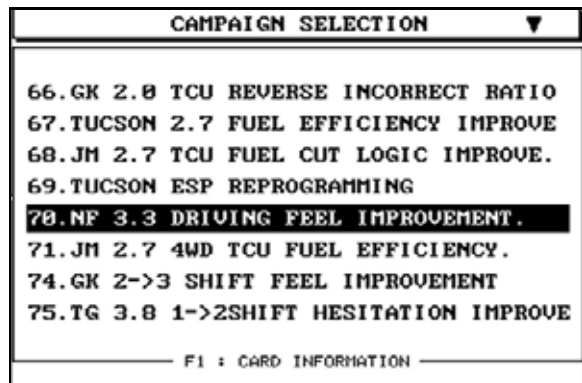


**NOTE:** Route the cable over the steering column to ensure the cable does not become disconnected.

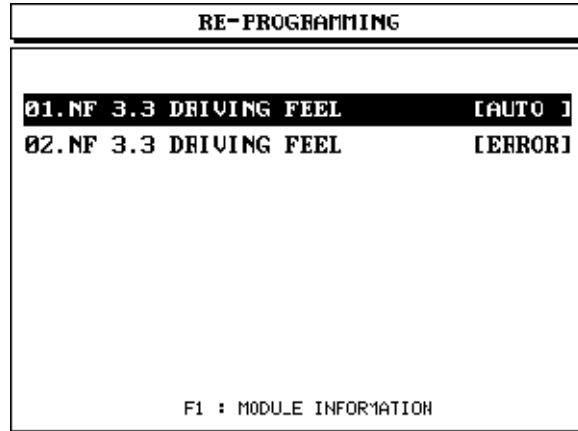


## AUTOMATIC REPROGRAMMING PROCEDURE:

1. Turn the ignition switch to the ON position. (Do not start the engine)
2. Turn the Hi-Scan Pro ON and press ENTER.
3. Select option "70. NF 3.3 DRIVING FEEL IMPROVEMENT" and press ENTER.



4. Select option "**01. NF 3.3 DRIVING FEEL [AUTO]**" and press ENTER.



5. Enter "**1229**" as the password for automatic reprogramming mode and press ENTER.
6. The Hi-Scan Pro will establish communication, check the PCM ID, and reprogram the PCM automatically.

**NOTE:**

- The Hi-Scan Pro detects the current PCM ID, assigns the new PCM ID and displays them on the Hi-Scan Pro screen.
- Check the PCM ID displayed on the Hi-Scan Pro screen to verify that the correct PCM software is being downloaded (NF5N33\*S2AS5E1BC).

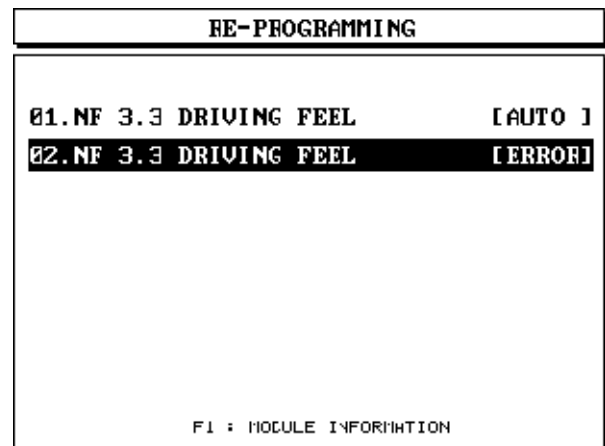
**WARNING: Do not interrupt the reprogramming at any time.**

- If the Hi-Scan Pro does not download the program, use the "**MANUAL REPROGRAMMING PROCEDURE**" following this section.
7. When "**REPROGRAMMING COMPLETED**" message is displayed, turn the Hi-Scan Pro OFF.
  8. Turn the ignition key OFF for about 20 seconds and start the engine to confirm proper operation of the vehicle.
  9. Check for diagnostic trouble codes using the Hi-Scan Pro with the system software card and erase any trouble codes.



## MANUAL REPROGRAMMING PROCEDURE:

1. Turn the ignition switch to the OFF position.
2. **Pull out the ECU fuse #16 (10A) from the engine room relay box for 15 seconds and then reinstall it.**
3. Turn the ignition switch to the ON position. (Do not start the engine)
4. Turn the Hi-Scan Pro ON and press ENTER.
5. Select option **"70. NF 3.3 DRIVING FEEL IMPROVEMENT"** and press ENTER.
6. Select option **"02. NF 3.3 DRIVING FEEL [ERROR]"** and press ENTER.

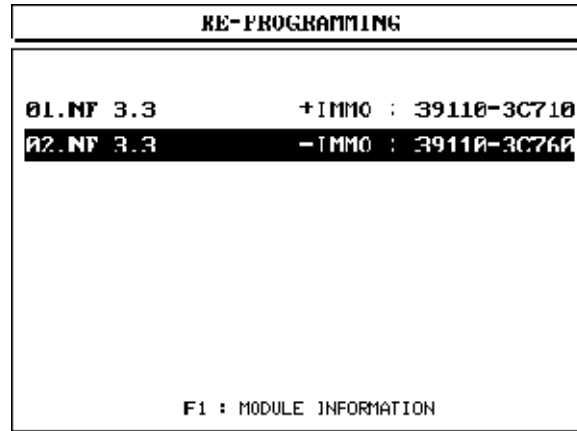


7. Select 39110-3C760 and press ENTER.

8. Enter the password (3760) and press ENTER.

MENU	PASSWORD
02. NF 3.3 - IMMO: 39110-3C760	3760

9. The Hi-Scan Pro will establish communication, check the PCM ID, and reprogram the PCM automatically.



**NOTE:**

- The Hi-Scan Pro detects the current PCM ID, assigns the new PCM ID and displays them on the Hi-Scan Pro screen.
- Check the PCM ID displayed on the Hi-Scan Pro screen to verify that the correct PCM software is being downloaded (NF5N33\*S2AS5E1BC).

**WARNING: Do not interrupt the reprogramming at any time.**

10. When "**REPROGRAMMING COMPLETED**" message is displayed, turn the Hi-Scan Pro OFF.
11. Turn the ignition key OFF for about 20 seconds and start the engine to confirm proper operation of the vehicle.
12. Check for diagnostic trouble codes using the Hi-Scan Pro with the system software card and erase any trouble codes.

**CAMPAIGN CLAIM INFORMATION:**

OP CODE	OP NAME	OP TIME
50B049R1	TCM Reprogramming	0.4M/H

Submit claim using Campaign Claim Screen