

 HYUNDAI NEW THINKING. NEW POSSIBILITIES. Technical Service Bulletin	GROUP CAMPAIGN	NUMBER 16-01-004-1
	DATE FEBRUARY 2016	MODEL(S) SONATA 2.4L (LF)
SUBJECT: ECM UPDATE - DTC P200A AND P0605 (SERVICE CAMPAIGN TZ3)		

This TSB supersedes TSB 16-01-004 to update the Applicable Vehicles and DTC information.

ECU Update

★ 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.

Description:

This bulletin provides a logic update and inspection for CEL ("Check Engine Light") ON with DTC P200A (Intake Manifold Runner Performance - Bank 1) and for P0605 (Engine Control Module - ROM Error) on certain 2015 and 2016 model year Sonata (LF) vehicles equipped with a 2.4L GDI engine.

The vehicle may exhibit one or more of the following conditions:

- DTC P200A (Intake Manifold Runner Performance - Bank 1)
 - Check Engine Light ON
 - Slight hesitation or reduced power during acceleration
 - Automatic transmission upshift hesitation during acceleration
 - Clicking noise from the intake manifold VCM (Variable Charge Motion) actuator when the engine RPM is increased
- (2015 MY Only) DTC P0605 (Engine Control Module – ROM Error)
 - Check Engine Light ON
 - Electronic Stability Control (ESC) Warning Light ON
 - Limited engine power ("Limp Home") mode

Follow the Service Procedure outlined in this bulletin to update the ECM and confirm proper operation of the VCM Actuator.

Applicable Vehicles:

- Certain 2015-2016 SONATA (LF) with 2.4L GDI engine

GDS Information:

Event #	Description
377*	“LFA 2.4GDI VCM GEAR DAMAGE IMPROVEMENT”

(*or use a later available event as listed in the GDS ECU Update screen if one is available.)

NOTES:

- Refer to the TSB **15-GI-001** for the tablet-based Mobile GDS ECU update procedures.
- Refer to the TSB **15-GI-002** for the PC-based GDS ECU update procedures.
- Clear DTC(s) present after the ECM update and then perform VCM actuation test.

Parts Information:

Part Name	Part Number
VCM Motor Assembly	28323-2GGA1

NOTES:

- Parts are not required if the vehicle has no reoccurring DTC P200A after clearing any incidental DTC(s) from the ECM Update and passes the VCM actuation test with no abnormal noise.
- Parts are only required if the VCM does not pass the actuation test and/or is abnormally noisy after the logic update has been completed. All parts will be requested back and will be tested for any abnormalities.
- The K-Ring should be reused whenever possible during VCM Motor Assembly replacement.

Warranty Information:

Model	Op Code	Operation	Op Time
SONATA LF 2.4L GDI	50CA16R0	ECM UPGRADE	0.3 M/H
	50CA16R1	ECM UPGRADE and VCM REPLACEMENT	0.8 M/H

NOTE: Submit claim on Campaign Claim Entry Screen.

Service Procedure:

1. Perform ECM Update using Event #377 or use a later available event as listed in the GDS ECU Update screen if one is available.
 - Refer to the TSB **15-GI-001** for the tablet-based Mobile GDS ECU update procedures.
 - Refer to the TSB **15-GI-002** for the PC-based GDS ECU update procedures.
 - Clear any DTC(s) present after the ECM update.
2. Clear engine adaptive values using GDS.
3. Perform VCM actuation test using GDS.
 - If the VCM actuation test passes with no abnormal noises, then the procedure is complete.
 - If there are abnormal noises from the VCM or the actuation test does not pass, replace the VCM Motor Assembly following all published Shop Manual procedures.
 - Whenever possible, reuse the K-Ring (this is the clip that attaches the VCM Motor Assembly to the VCM actuation arm) during VCM Motor Assembly replacement.

ROM ID Information Table:

Verify the ECU ROM ID before updating the software. Refer to the table below.

Model	MY	IMMOBILIZER	ECM P/N	ROM ID	
				OLD	NEW
LFA 2.4GDI	15MY	IMMO	39111-2GGK5	LFAFNC4ER86A LFAFNC4ER86B LFAFNC4ER86C LFAFNC4ER87A LFAFNC4ER87B LFAFNC4ER88A LFAFNC4ERA51	LFAFNC4ERA53
			39111-2GGM0	LFAFGC4ER87A LFAFGC4ERA51	LFAFGC4ERA53
		NON IMMO	39111-2GGK0	LFAFNC4EM86A LFAFNC4EM86B LFAFNC4EM86C LFAFNC4EM87A LFAFNC4EM87B LFAFNC4EM88A LFAFNC4EMA51	LFAFNC4EMA53
		IMMO	39111-2GGL5	LFAFNS4ER86A LFAFNS4ER86B LFAFNS4ER86C LFAFNS4ER87A LFAFNS4ER87B LFAFNS4ER88A LFAFNS4ERA51	LFAFNS4ERA53
	NON IMMO	39111-2GGL0	LFAFNS4EM86A LFAFNS4EM86B LFAFNS4EM86C LFAFNS4EM87A LFAFNS4EM87B LFAFNS4EM88A LFAFNS4EMA51	LFAFNS4EMA53	
	16MY	IMMO	39111-2GGK6	LFAGNC4ERA3A LFAGNC4ERA5A	LFAGNC4ERB0B
		NON IMMO	39111-2GGK1	LFAGNC4EMA3A LFAGNC4EMA5A	LFAGNC4EMB0B
		IMMO	39111-2GGL6	LFAGNS4ERA3A LFAGNS4ERA5A	LFAGNS4ERB0B
NON IMMO		39111-2GGL1	LFAGNS4EMA3A LFAGNS4EMA5A	LFAGNS4EMB0B	

MANUAL MODE PASSWORD INFORMATION TABLE:

MENU	PASSWORD
LFA 2.4GDI NON IMMO 39111-2GGK0	1120
LFA 2.4GDI NON IMMO 39111-2GGL0	1121
LFA 2.4GDI NON IMMO 39111-2GGK1	1122
LFA 2.4GDI NON IMMO 39111-2GGL1	1123
LFA 2.4GDI IMMO 39111-2GGK5	1124
LFA 2.4GDI IMMO 39111-2GGM0	1125
LFA 2.4GDI IMMO 39111-2GGL5	1126
LFA 2.4GDI IMMO 39111-2GGK6	1127
LFA 2.4GDI IMMO 39111-2GGL6	1129

NOTE: IMMO is for Start-Stop Button Start. NON IMMO is for Key Start.