	GROUP	NUMBER
HYUNDAI NEW POSSIBILITIES.	CAMPAIGN	15-01-041
Technical Service Bulletin	DATE	MODEL(S)
reclinical Service Bulletin	OCTOBER 2015	LFa SONATA

SUBJECT: LFA SONATA INSTRUMENT CLUSTER ABS WARNING LAMP ILLUMINATION LOGIC UPDATE (RECALL CAMPAIGN 134)

***** IMPORTANT

*** Dealer Stock and Retail Vehicles ***

As required by federal law, dealers must not deliver new vehicles for sale or for lease to customers until all open recalls have been performed. Dealers must also perform all open recalls on used vehicles, demo and rental vehicles prior to placing them into customer use 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 describes the procedure to update the instrument cluster software on certain Sonata (LFa) vehicles. Affected vehicles (those equipped with supervision gauge cluster, both Base and Sport) currently do not illuminate the ABS warning lamp. The software revises the logic to illuminate the ABS warning lamp at vehicle ignition on, or if any ABS system malfunction is detected.



Applicable Vehicles: Certain 2015~2016MY LFa Sonata vehicles equipped with supervision cluster, produced from May 28, 2014 ~ August 21, 2015

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

Parts Information: ROM ID Table

Model Year	Cluster	Part Number	Old ROM ID	New ROM ID	
		94011-C2000			
		94011-C2100			
	Base supervision	94012-C2000	A.06 1.01	1.02	
2015		94012-C2100			
		94013-C2000			
	Sports supervision	94031-C2000	A.05	1.01	
		94032-C2000	1.00		
		94011-C2200			
	Base supervision	94012-C2200			
2016		94013-C2100	2.02	2.02	
2010		94031-C2100	2.02	2.03	
	Sports supervision	94032-C2100			
		94033-C2100			

GDS Information:

Event #	Description
380	LFA Cluster Warning Lamp (ABS) On Logic Improvement

Warranty Information:

Model	Op. Code	Operation	Op. Time
LFa Sonata	51CA19R0	Cluster Upgrade	0.3 M/H

NOTE: Submit Claim on Campaign Claim Entry Screen

Service Procedure:

NOTICE

This Service Procedure is performed using PC-based GDS, or GDS-mobile. For update information and general precautions, please refer to TSBs #15-GI-001 and #15-GI-002.

PC-Based GDS Procedure: AUTO MODE

1. From the ECU Upgrade screen, select AUTO MODE and click Next.



2. Select CLU (cluster) for System, and click OK.



3. ROM ID will be read and displayed. Confirm current and latest ROM IDs are applicable to the vehicle according to the ROM ID Table on page 2. Select event **# 380. LFA Cluster Warning Lamp (ABS) On Logic Improvement**, then click **Upgrade.**

			VCI : W	LAN On 🔍	VMI : Off	Internet	: Off			- X
GD	Pr	eparation		Diagnos	sis	/ehicle S/W I	Management	F	Repair	0
Vehicle 🕨 SONATA(L	FA)/201	5/G 1.6 T-GD			System	🕟 Cluste	r Module/Cli	uster Module	э	۵ 🗄
Vehicle S/W Management	📕 ECI	J Upgrade								
ECU Upgrade D	•	Event Group		Event	List				TS	В
Mode	● C	urrent ROM	D	9401	1-C2100-1	01				
Auto Mode	🔹 La	atest ROM ID		9401	*-C2*00-10	2				
- Curatam	380.1	FA CLUSTE	R WARI	NING LAMP	(ABS) ON	LOGIC IMPI	ROVEMENT	-		
CLU					,,					
				Pi	evious		Upgrade			
		Event selection	ı							
	1. F 2. S 3. C	eview and un elect reprogra lick the Upgra	derstand mming e de buttor	related TSB f vent from Upg to begin EC	or vehicle r trade Event U ungrade.	eprogrammin pull down m	g. enu above.			
Audio Update										
ID Register										
Option Treatment										
Data Treatment										
Inspection / Test										
ECU Mapping Verification										-
Setup Manual	TSB	Case Analysis	DTC	Current Data	Actuation Test	Flight Record	Oscilloscope	Simulation Test	Internet Update EC	U Upgrade

- After confirming USB cable is connected between VCI and laptop PC, and that the vehicle's battery has adequate charge, the update will begin. After update progress reaches 100%, turn the ignition OFF for 10 seconds, then back ON again.
- 5. Update completion confirmation window will be displayed, along with ROM ID.



- 6. Check for any incidental diagnostic trouble codes (DTCs) and clear any present.
- 7. Start the engine to confirm proper operation of the vehicle.

PC-Based GDS Procedure: MANUAL MODE

- 1. From the ECU Upgrade screen, select **MANUAL MODE** and click **Next**.
- 2. Select CLU for System, and click Ok.
- 3. Select the applicable event (#380. LFa Cluster Warning Lamp (ABS) On Logic Improvement) and click Next.

	() V	CI : USB On 🛛 🔍	VMI : Off	Internet : Off		— ×
GD	Preparation	Diagnos	is V	ehicle S/W Managemen	t Repair	0
Vehicle SONATA(L	FA)/2015/G 1.6 T-GDI		System	Cluster Module/Cl	uster Module	0 2
Vehicle S/W Management	🚪 ECU Upgrade					
ECU Upgrade 🌓	 Event Group 	Event	List			TSB
Mode Manual Mode	380.LFA CLUSTER	WARNING LAMP	(ABS) ON L	.OGIC IMPROVEMEN	T	
System						
CLU		Pr	evious	Next		
Audio Indeto	 Preparation 1) Connect the DLC(I 	Data Link Connecto	r) of VCI to 1	he OBD-II connector of	Vehicle side.	<u> </u>
Ontion Treatment	2) Turn on VCI unit	then Click the OK	button to or	stipus		
Data Treatment	57 Check the system	unen, chick ule OK	button to cu	nunue.		
ECU Mapping Verification						v
Setup Manual	TSB Case Analysis D	FC Current Data	Actuation Test	Flight Record Oscilloscope	Simulation Interne Test Update	ECU Upgrade

4. Select the applicable cluster type (base or sports). GDS will display latest ROM ID, to which CLU system will be upgraded. Confirm ROM ID is correct based on the ROM ID Table on page 2, then click **Upgrade**.

	<u></u>	: USB On 🛛 🕒 VMI : Of	ff 🕒 Internet : Off		- ×
GD	Preparation	Diagnosis	Vehicle S/W Management	Repair	0
Vehicle 🕨 SONATA(LF	A)/2015/G 1.6 T-GDI	Sys	tem 🕥 Cluster Module/Clust	ter Module	0 2
Vehicle S/W Management	📕 ECU Upgrade				
ECU Upgrade 🌓	 Event 	Event List			ГSB
► Mode Manual Mode	 Current ROM ID Latest ROM ID 	9401*-C2*00-	-102		
▶System CLU	LFA 15MY BASE CLUS LFA 15MY SPORTS C	STER 94011/2-C2000/2 LUSTER 94031/2-C200	100,94013-C2000 0		
Event Group 380.LFA CLUSTER WARNING		Previous	Upgrade		
Audio Update	CAUTION During the ECU Upgra Failure to follow these DO NOT operate any ott 2) DO NOT disturb or disco	ade, observe the following precautions may result in precomputer program, or PON DE disconcent VCLU	g precautions, h ECU damage, nector), SP Concentry		
ID Register	4) DO NOT start the vehicle 5) DO NOT operate any of	e or turn the IG key off, the vehicles other systems(cl	limate control, lighting, audio, etc.)		
Option Treatment					
Data Treatment					
Inspection / Test					
ECU Mapping Verification					V
Setup Manual T	SB Case Analysis DTC	Current Data Actuation	on Flight Record Oscilloscope S	Simulation Internet Test Update	ECU Upgrade

5. A prompt for password will be displayed. Input the password according to the table below.

Password	
ОК	Cancel

VEHICLE	PART NUMBERS	PASSWORD
	94011-C2000	
	94011-C2100	
15MY LFA BASE CLUSTER	94012-C2000	2000
	94012-C2100	
	94013-C2000	
	94031-C2000	2004
15MH LFA SFORTS CLOSTER	94032-C2000	2001
	94011-C2200	
16MY LFA BASE CLUSTER	94012-C2200	2100
	94013-C2100	
	94031-C2100	
16MY LFA SPORTS CLUSTER	94032-C2100	2101
	94033-C2100	

6. After confirming the USB cable is connected between VCI and laptop PC, and that the vehicle's battery has adequate charge, the update will begin. After update progress reaches 100%, turn the ignition **OFF** for 10 seconds, then back **ON** again.

7. Update completion confirmation window will be displayed, along with ROM ID.



- 8. Check for any incidental diagnostic trouble codes (DTCs) and clear any present.
- 9. Start the engine to confirm proper operation of the vehicle.

GDS Mobile Procedure: AUTO MODE

1. Starting from the ECU Upgrade menu, select AUTO MODE.



 Select CLU system, and click ID Check. Select Event #380. LFA CLUSTER WARNING LAMP (ABS) ON LOGIC IMPROVEMENT. Current ROM ID will be displayed along with update ROM ID. Verify ROM IDs according to the ROM ID Table on page 2. Click Upgrade to continue.

G	22	5NPE34AB3	3FH037804		10/	/21/15	15:33
A	HOME	OffLine	SONATA(LFA)/2	2015/G 2.0 T-G	VCI 🚌	•	2-3
			ECU U	pgrade			₽
s	≕ son/	ATA(LFA) > :	2015 > G 2.0 T-GI	וכ			
	Syste	m					
	<	AIRBAG	CLU)	>
•	ROM	ID					
	Current	ly in Vehicle	94031-C2000-/	405	ID Che	eck	
	Latest L	Jpdate	9403*-C2*00-1	01			
	Event	Group				TSB	
		380.LFA CLU	JSTER WARNING L ENT	AMP(ABS) ON LOGIC			
		Pr	evious	Upgrade			
		Inform	nation				≽
	CAUTI	DN					
1 2 3 E 4	. DO NO luring th 2. Ensure 3. Confir CU upg 1. Review	DT start the e le ECU upgrad e that the batt m the target rade. y the applicate	ngine and DO NOT le. ery is fully charged vehicle/system Bl le TSB/procedure l	turn the ignition key t BEFORE beginning EC FORE performing a r pefore performing an E	to the OFI CU upgrad manual/er	F posit e. ror m de.	ion ode
		Do not touc	n any system butt	ons while performing	this fund	ction.	

3. Read the caution note, and then click **OK** to continue.



4. ECU Upgrading graph will display in two parts. After ECU Upgrading...(2/2) reaches 100%, turn the ignition **OFF** for 10 seconds, then back **ON** again. Click **OK** to continue.



5. Click **OK** after "ECU Upgrade is successfully finished" message is displayed.

	100%
	Succeed
The E	CU Upgrade is successfully finished.
ROM ID	
Currently in Vehicle	94031-C2000-101
Latest Update	9403*-C2*00-101
	ок

6. Click Yes to search for fault codes in <u>all systems</u>. Clear any DTCs found.

Notice			
	Do you want run Fa	ult Code Searching?	
	Vac	No	

7. Start the engine to confirm proper operation of the vehicle.

GDS Mobile Procedure: MANUAL MODE

- 1. Starting from the ECU Upgrade menu, select **MANUAL MODE.**
- Select CLU system, Event #380. LFA CLUSTER WARNING LAMP (ABS) ON LOGIC IMPROVEMENT. Select the applicable cluster type (base or sports). Verify upgrade ROM ID according to the ROM ID Table on page 2. Click Upgrade to continue.

GDS 5NPE34AB3FH037804	10/21/15	5 15:44
HOME OffLine SONATA(LFA)/2015/G 2.0 T-G VCI	a 🐶	2-3
ECU Upgrade		₽
📾 SONATA(LFA) > 2015 > G 2.0 T-GDI		
System		
AIRBAG CLU		>
Event Group	тѕв	
380.LFA CLUSTER WARNING LAMP(ABS) ON LOGIC IMPROVEMENT	G	Ð
LFA 15MY BASE CLUSTER 94011/2-C2000/2100,94013-C2000		
LFA 15MY SPORTS CLUSTER 94031/2-C2000		
Latest Update 9401*-C2*00-102 Previous Upgrade		
Information		\$
Po not touch any system buttons while performing this fu	unction.	

3. Input the appropriate password according to the table below, then click OK.

VEHICLE	PART NUMBERS	PASSWORD
15MY LFA BASE CLUSTER	94011-C2000	
	94011-C2100	
	94012-C2000	2000
	94012-C2100	
	94013-C2000	
15MY LFA SPORTS CLUSTER	94031-C2000	2004
	94032-C2000	2001
16MY LFA BASE CLUSTER	94011-C2200	
	94012-C2200	2100
	94013-C2100	
16MY LFA SPORTS CLUSTER	94031-C2100	
	94032-C2100	2101
	94033-C2100	

ECU Upgrade		
Password		•
	m ·····o	
	Check the TSB	
	ОК	

- 4. Read the caution note, then click **OK** to continue.
- 5. ECU Upgrading graph will display in two parts. After ECU Upgrading...(2/2) reaches 100%, turn the ignition **OFF** for 10 seconds, then back **ON** again. Click **OK** to continue.
- 6. Click **OK** after "ECU Upgrade is successfully finished" message is displayed.
- 7. Click **Yes** to search for fault codes in <u>all systems</u>. Clear any DTCs found.
- 8. Start the engine to confirm proper operation of the vehicle.