 <h1 style="text-align: center;">TSB-Local</h1>	Model	SOUL(PS) (2014)
	Group	Restraint (81)
	TSB No.	KCE15-81-P030-PS
Subject Soul (PS) Airbag Unit Replacement And ACU, Cluster Upgrade	TSB Type	Service Action
	Published	

Description

This bulletin has been issued to provide information on how to replace the side airbags.

The replacement of the LH and RH side airbags is NOT due to a defect but to improve the performance of the front seat airbags in the event of a side impact.

On a small number of vehicles the Airbag Control Unit (ACU) and/or Cluster (CLU) may also require a software upgrade, further details are provided below.

Vehicles produced after 12 November 2014 have these modified parts fitted in production.

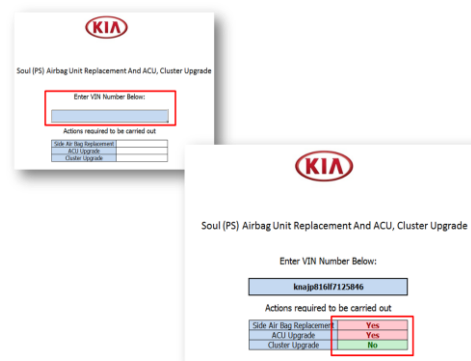
All air bags should be deployed immediately after repair and then retained as per normal warranty procedures.

■ Counter measure/remedy

First check which Service Procedure is required, refer to the attached Excel spread sheet.

EXAMPLE:

After entering the VIN procedure's that need to be carried out will be displayed



The bottom screenshot displays the following table:

Actions required to be carried out	
Side Air Bag Replacement	Yes
ACU Upgrade	Yes
Cluster Upgrade	No

Note – Every VIN will require “Side Air Bag Replacement” but not every VIN will require “ACU Upgrade” or “Cluster Upgrade”.

Applicable Vehicles

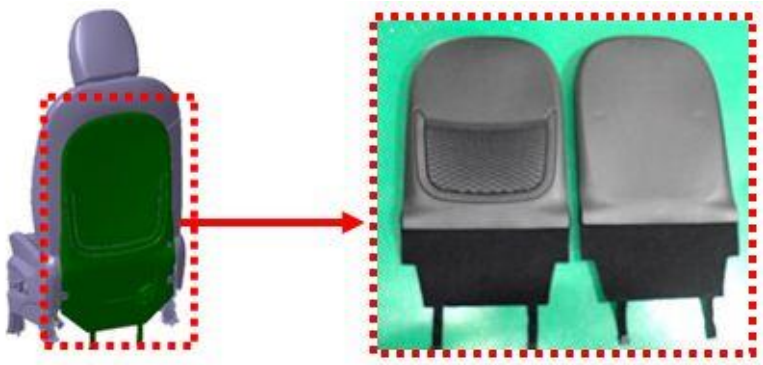
- **Model:** Soul (PS) vehicles equipped with side airbag system
- **Applicable vehicle production date range:** See campaign look up

Parts Information

ALL vehicles will require quantity 1 each of the following:

Front Seat Backboard	88390B2200QQK
Front Seat Backboard	88390B2050QQK
Side Airbag (LH)	88910B2100QQK
Side Airbag (RH)	88920B2100QQK

DO NOT order excessive stock of these items as it will not be possible to return any unused parts at the end of the campaign to the Mobis warehouse.

PART NAME	PART NUMBER		REMARKS
	PREVIOUS	NEW	
Front Seat Backboard			<p>The passenger seat backboard has two types, pocket and non-pocket.</p> <p>Pocket type is fitted to the left front seat / passenger seat.</p> <p>Non pocket is fitted to the right seat / driver's seat (RHD vehicle's)</p>
	88390-B2200 (Non-Pocket) 88390-B2050 (Pocket)	88390-B2200 QQK (Non-Pocket) 88390-B2050 QQK (Pocket)	

Side Airbag		
	88910B2000 (LH Side) 88920B2000 (RH side)	88910B2100 QK (LH Side) 88920B2100 QK (RH Side)

Operation Code And Time

OP CODE	OPERATION	OP TIME	NATURE		CAUSE	
			Old	New	Old	New
150016R1	Side Airbag and Seat backboard Replacement (*Seat Backboards: (Driver) Non Pocket + (Passenger) Pocket)	0.6M/H				
150016R3	Side Airbag and Seat backboard Replacement + ACU S/W Upgrade (*Seat Backboards: (Driver) Non Pocket + (Passenger) Pocket)	0.8M/H	N50	I14	C11	ZZ3
150016R5	Side Airbag and Seat backboard Replacement + ACU S/W Upgrade and CLU S/W Upgrade (*Seat Backboards: (Driver) Non Pocket + (Passenger) Pocket)	0.9M/H				

ACU ROM ID Information Table

SYSTEM	ACU PART NO.	ROM ID	
		Previous	New
ACU	95910-B2300	95910-B2300_E217	95910-B2300_E219
		95910-B2300_E218	95910-B2300_E219

IMPORTANT: If the upgrade event does not automatically appear / cannot be seen in the event log of your diagnostic equipment the software may not yet have been installed. If this is the case the software will need to be manually downloaded from GSW and installed.

CLU ROM ID Information Table

SYSTEM	CLU PART NO.	ROM ID	
		Previous	New
CLU	94014-B2000 ~ 94014-B2150	1.01	1.04

IMPORTANT: If the upgrade event does not automatically appear / cannot be seen in the event log of your diagnostic equipment the software may not yet have been installed. If this is the case the software will need to be manually downloaded from GSW and installed.

Airbag Deployment / Disposal

As with all airbag & Pretensioner replacements, care should be taken during the deployment of displaced SRS components as some small parts may become detached.

When using the deployment adaptors in conjunction with the deployment tool, ensure the adaptor is 'tethered' to the component to avoid adaptor harness damage during deployment.

All dealers must ensure that appropriate precautions are taken such as; making sure the area is clear, stand as far back as possible, use of correct PPE (including eye protection) and use a suitable cage or container that will capture small parts.

Failure to take suitable precautions or using the deployment tools incorrectly could lead to injury.

Deployment adapter: 0957A3F100

Service Procedure

NOTE

- 1) **Before conducting this procedure, verify that the vehicle is included in the attached VIN list.
If not, no further procedure is required.**
- 2) **The service procedure below is described for side airbag replacement of left front seat. For side airbag of right front seat follow the same procedure.**
- 3) **Refer to table below for relevant section for coding information dependant on diagnostic device used:**

Procedure Chapter Overview			
Side airbag Replacement			
ACU Upgrade	GDS	G-Scan	KDS
Upgrade Procedure	1-1	2-1	3-1
Automatic Upgrade	1-2	2-2	3-2
Manual Upgrade	1-3	2-3	3-3
Cluster(CLU) Upgrade	GDS	G-Scan	KDS
Upgrade Procedure	4-1	5-1	6-1
Automatic Upgrade	4-2	5-2	6-2
Manual Upgrade	4-3	5-3	6-3

Side Airbag Replacement

1. Turn the ignition key to the OFF position and remove the key from the vehicle.
Disconnect the battery negative cable

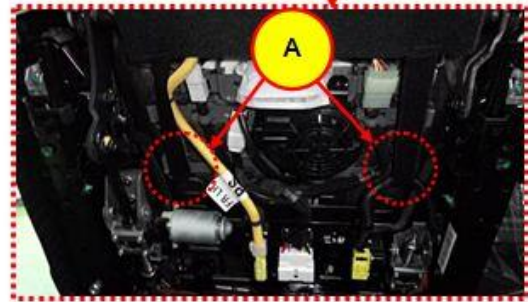
Warning

Wait for at least 3minutes after the negative (-) battery cable before proceeding with any SRS or wiring related aspects of this procedure.

CAUTION

Be sure to wear glove to avoid any injury from sharp frame.

2. Position the front seat fully forward. Disengage the two elastic straps (A) from under the front seat.



3. Remove the front seat backboard (B) by lifting it up from the the lower part of seat then pulling out / disengaging the top clips.

NOTE

- Replace with a new front seat backboard at reassembly.
- Check a new front seat backboard for proper installation by pulling to make sure clips are engaged at reassembly.



Checking a new seat backboard for proper installation



4. Remove the two rear securing mounting bolts (C).

Tightening torque:
34.3 ~ 53.9 N.m (3.5 ~ 5.5 kgf.m,
25.3 ~ 39.8 lb-ft)



5. Push the front seat all the way backward and remove the two front securing mounting bolts (D). Lean seat forward to create work space.

Tightening torque:
34.3 ~ 53.9 N.m (3.5 ~ 5.5 kgf.m,
25.3 ~ 39.8 lb-ft)

Note: With the seat loose be careful not to damage any trims while working on the seat.



6. Disconnect the side airbag connector (E) under LH front seat, Connector (F) = Seat warmer connector & power seat switch connector
Connector (G) = Front safety belt buckle connector

IMPORTANT!
Take care when disconnecting plugs, do not pull the wiring.

NOTE
The seat warmer connector & power seat switch connector (F) or front safety belt buckle connector (G) may not be visible depending on model version!



7. Detach the Velcro tape (H) securing side airbag connector wire harness.

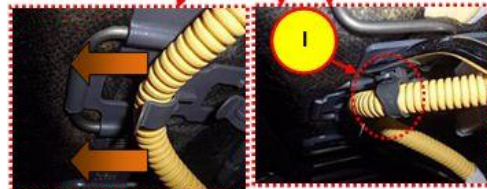


8. Remove the two securing fasteners (I) of side airbag connector wire harness and separate the side airbag connector wire harness from the front seat cushion frame assembly.

NOTE

- *Replace the side airbag connector wire harness securing fastener with a new one at reassembly, new fasteners come with the new side airbag harness.*

- *Completely remove any broken fastener from around seat if the fastener is broken when removing.*



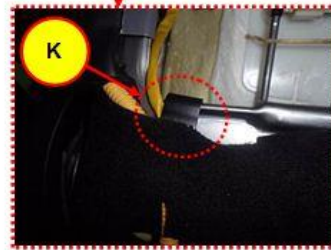
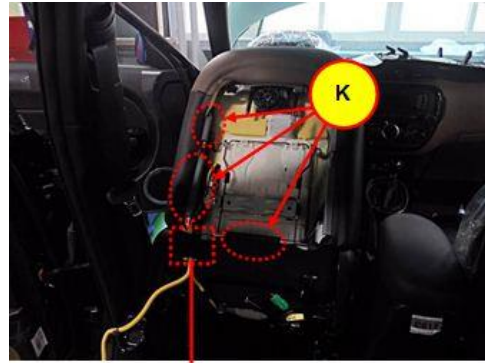
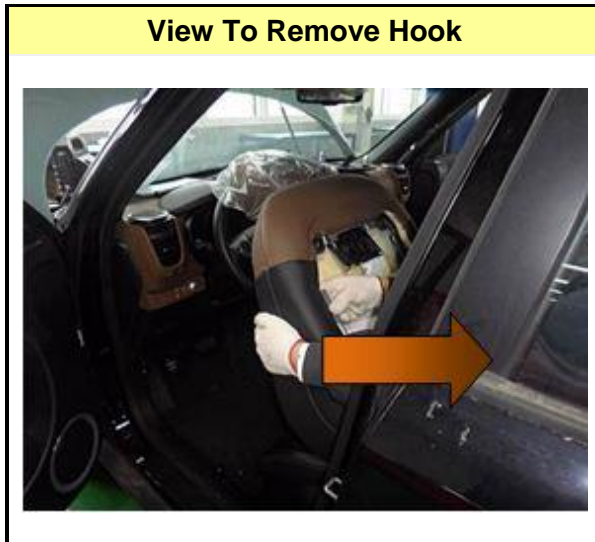
9. Separate the side airbag connector (J) from the front seat cushion frame assembly.



10. Remove the four side seat cover hooks (K) from the seatback frame.

NOTE

Remove the hooks with the side surface of front seatback held by pulling it in the direction of hook.



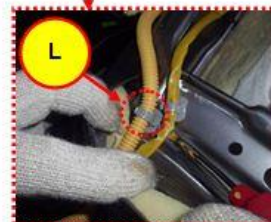
CAUTION

Check the hooks for dislocation, side airbag seam for opening and the front seat inside for foreign material at reassembling.

11. Remove the side airbag connector wire harness securing fastener (L) inside of the lower part of seatback.

NOTE

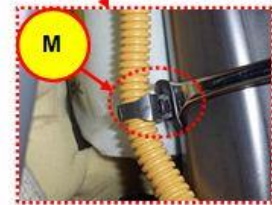
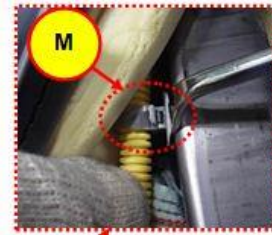
- **Replace the side airbag connector wire harness securing fastener with a new one at reassembly.**
- **Completely remove the broken fastener around seat if the fastener is broken when removing it.**



12. Remove the two side airbag connector wire harness securing fasteners (M) inside of the seat back frame.

NOTE

- *Replace the side airbag connector wire harness securing fastener with a new one's at reassembly.*
- *Completely remove the broken fastener around seat if the fastener is broken when removing it.*



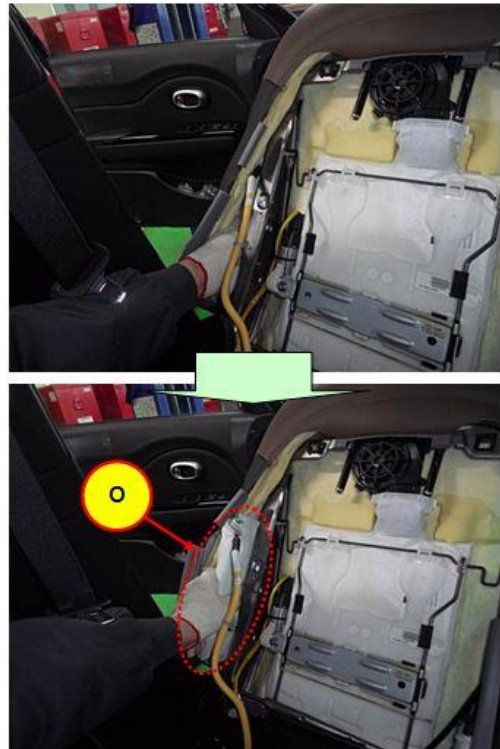
13. Remove the two LH side airbag module securing nuts (N) of the side of front seat back frame

Tightening torque:

$6.9 \pm 1 \text{ N.m}$ ($0.7 \pm 0.1 \text{ kgf.m}$, $5.1 \pm 0.7 \text{ lb-ft}$)



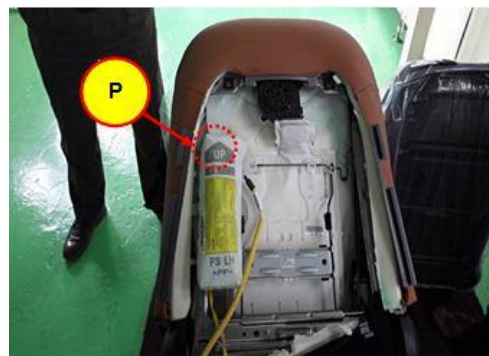
14. Remove the LH side airbag module (O)



15. Replace the side airbag module with a new one and install all the removed parts by reversing order of removal.

CAUTION

- **Confirm that the UP (P) mark faces upward.**
- **Airbag modules are marked PS LH (Left Hand) and PS RH (Right Hand), make sure the air bag module is installed on the correct side**



16. Replace the right side airbag unit with a new one in the same way as the replacement of the left side airbag unit.

■ CAUTIONS DURING CONTROL UNIT UPGRADE

Verify that the vehicle is affected and check the version of the vehicle's control unit ROM ID with reference to the ROM ID Information Table in the TSB.

- NOTE: Ensure only the applicable updated ROM ID are applied, installation of incorrect ROM ID can cause various concerns such as malfunction of the Gear Shift Indicator logic, illumination of MIL etc.
- Make sure your KDS / GDS / G Scan software is up to date and the latest internet update have been downloaded / installed. Failure to do this may result in the ECU upgrade not being installed on your GDS / G-Scan and not being visible being in the event table.
- Any dealers experiencing issues with the VCI / data leads should address these problems before attempting to carry out any upgrades.
- Make a note on the repair order of the current ECU part number ROM ID prior to starting the upgrade (and the revised ROM ID once complete) as this is Warranty policy.
- Make sure the vehicle's battery is in a good state of charge then connect the Midtronics battery charger (mandatory workshop equipment) set to power supply mode / ECU upgrade function.
- 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.) Do not to allow the battery to be discharged during upgrade.
- Connect the diagnostic equipment ensuring that all connections are good and that the leads are positioned to avoid being accidentally disconnected during the upgrade.
- Check the 'USB' lead carefully to ensure a good stable data connection.
- Perform the upgrade with the ignition switch in the ON position (unless otherwise stated in the relevant TSB).
- Do not start the engine during upgrade.
- Do not turn off the ignition during the upgrade. After completing the upgrade ensure all other system control units are checked for DTC and any erased. Please advise the customer that after the upgrade the ECU adaption values may take up to 1000miles to be re-learnt.

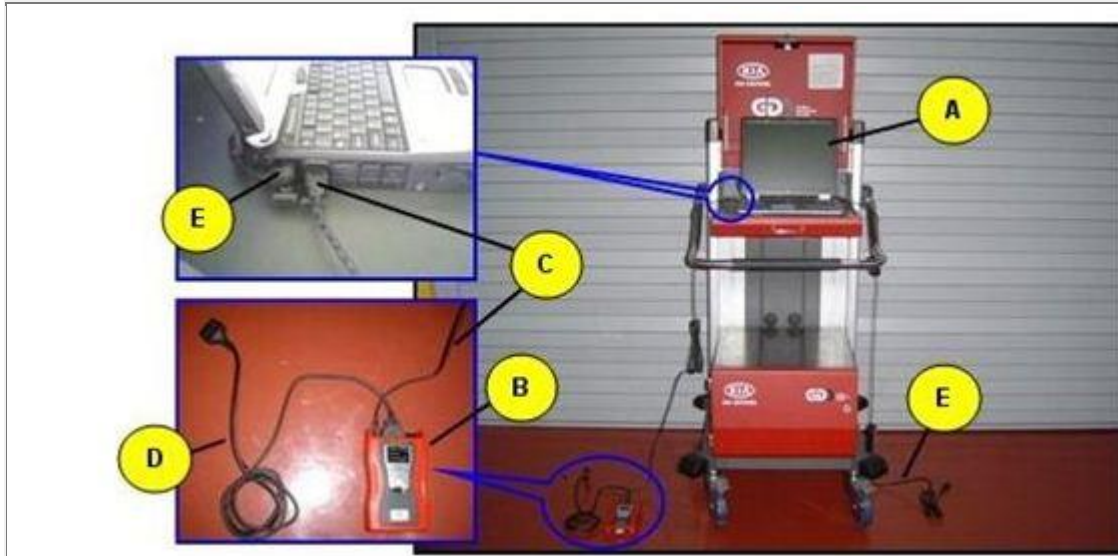
If Upgrade Fails in Auto Mode

- Ensure that the precautions outlined above have been taken to avoid potential system voltage concerns.
- Refer to the Manual Upgrade Procedure in the TSB

IMPORTANT: If the upgrade event does not automatically appear / cannot be seen in the event log of your diagnostic equipment the software may not yet have been installed. If this is the case the software will need to be manually downloaded from GSW and installed.

ACU(Airbag Control Unit) UPGRADE

1-1. CONTROL UNIT UPGRADE PROCEDURE USING THE GDS GDS (Global Diagnostic System) INSTALLATION PROCEDURE



A: Diagnostic terminal / B: VCI (Vehicle Communication Interface) / C: USB (Universal Serial Bus) cable
D:DLC cable (16-pin) / E: Power supply cable

1) Connect the power supply connector to the diagnostic terminal.

[NOTE]

- If attempting to perform the upgrade with the power supply cable disconnected from the diagnostic terminal, make certain that the diagnostic terminal is charged enough for the upgrade.

If not, the upgrade may fail in progress. Therefore, it is strongly recommended to connect the

power supply cable to the diagnostic terminal during the upgrade procedure.

2) Connect the USB cable between the VCI and the diagnostic terminal.

[NOTE]

- When performing the upgrade 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.

3) Connect the 16-pin DLC cable from the VCI into the vehicle's DLC connector under the driver side

instrument panel.

4) Turn on the VCI and diagnostic terminal with the ignition key in the ON position.

[NOTE] Do not start the engine.

ACU(Airbag Control Unit) UPGRADE

1-2. CONTROL UNIT UPGRADE PROCEDURE USING THE GDS AUTOMATIC UPGRADE PROCEDURE USING THE GDS

- 1) Choose VIN or ECU Upgrade on the initial screen.
- 2) 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.



- 3) Select ECM Upgrade on the initial screen after entering the vehicle information.
- 4) Select Auto Mode then AirBag in the left ECU Upgrade column.
- 5) Read Preparation and click OK.
- 6) The GDS will read the vehicle's ROM ID.
- 7) After the Current ROM ID is displayed, select the Upgrade Event,
"371.PS ACU S/W LOGIC UPGRADE."
- 8) After clicking the Upgrade button, read Information then click OK.
- 9) The vehicle battery voltage is checked to make sure it is at least 12 volts to assure reliable upgrade 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 upgrade results.

- 10) Upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 11) Upgrade 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.
- 12) Click OK on the final screen, which indicates upgrade is complete.
- 13) Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the upgrade and clear the DTC (s) present.
- 14) Start the engine to confirm proper operation of the vehicle.

ACU(Airbag Control Unit) UPGRADE
1-3. CONTROL UNIT UPGRADE PROCEDURE USING THE GDS
MANUAL UPGRADE PROCEDURE USING THE GDS

[CAUTION]

- **Manual upgrade should be performed only when automatic upgrade fails.**
- **If the automatic upgrade fails, check if the DTC B162000 has been created . Retry the ACU manual Upgrade. But the manual upgrade fails at least 3 times, replacing the ACU**
- **If automatic upgrade fails, turn the ignition key OFF for about 10 seconds, place it back in the ON position to reset the control unit before performing manual upgrade.**

- 1) Within the ECU Upgrade screen, select Manual Mode in the left column, then select Upgrade Event #371.
Select the appropriate control unit part number with reference to the above ROM ID Information Table and click OK.



- 2) Enter the appropriate password from the below table then click OK.

MENU	PASSWORD
PS ACU : 95910-B2300	2300

- 3) The vehicle battery voltage is checked to make sure it is at least 12 volts to assure reliable upgrade 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 upgrade results.**

- 4) Upgrade will begin and the progress of the upgrade will appear on the bar graph.

- 5) Upgrade 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.
- 6) Click OK on the final screen, which indicates upgrade is complete.
- 7) Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the upgrade and clear the DTC (s) present.
- 8) Start the engine to confirm proper operation of the vehicle.

ACU(Airbag Control Unit) UPGRADE
2-1. CONTROL UNIT UPGRADE PROCEDURE USING THE G-SCAN
G-SCAN INSTALLATION PROCEDURE

- 1) Connect the 16-pin Data Link Connector (DLC) cable to the G-Scan and securely tighten the three bolts.
- 2) Insert the updated SD memory card into the G-Scan bottom slot.
- 3) Connect the 16-pin DLC cable from the G-Scan into the OBD-II connector, located under the driver's side of the instrument panel.



ACU(Airbag Control Unit) UPGRADE
2-2. CONTROL UNIT UPGRADE PROCEDURE USING THE G-SCAN
AUTOMATIC UPGRADE PROCEDURE USING THE G-SCAN

- 1) Select ECM Upgrade. Select the vehicle model, model year, Airbag as the system and engine displacement, and then touch OK.



- 2) Select the upgrade event, "371.PS ACU S/W LOGIC UPGRADE." and touch AUTO.
- 3) Perform the ECM upgrade in accordance with the instructions given on the G-Scan screen.



- 4) Turn the ignition key OFF for 10 seconds and place it back in the ON position, then touch OK to continue.
- 5) Check for any diagnostic trouble codes (DTC) and erase the DTC (s) present.
- 6) Start the engine to confirm proper operation of the vehicle.

ACU(Airbag Control Unit) UPGRADE
2-3. CONTROL UNIT UPGRADE PROCEDURE USING THE G-SCAN
MANUAL UPGRADE PROCEDURE USING THE G-SCAN

[CAUTION]

- Manual upgrade should be performed only when automatic upgrade fails.
- If the automatic upgrade fails, check if the DTC B162000 has been created .

Retry the ACU manual Upgrade. But the manual upgrade fails at least 3 times, replacing the ACU

- If automatic upgrade fails, turn the ignition key OFF for about 10 seconds, place it back in the ON position to reset the control unit before performing manual upgrade..

- 1) Select ECU Upgrade. Select the vehicle model, model year, ENGINE as the system and engine displacement, and then touch OK.
- 2) Select the upgrade event, #371 and touch MANUAL.
- 3) Select the appropriate control unit part number with reference to the ROM ID Information Table and touch MANUAL.



- 4) Enter the appropriate password from the below table then click OK.

MENU	PASSWORD
PS ACU : 95910-B2300	2300

- 5) Perform the ECM upgrade in accordance with the instructions given on the G-Scan screen.
- 6) Turn the ignition key OFF for 10 seconds and place it back in the ON position, then touch OK to continue.
- 7) Check for any diagnostic trouble codes (DTC) and erase the DTC (s) present.
- 8) Start the engine to confirm proper operation of the vehicle.

ACU(Airbag Control Unit) UPGRADE

3-1. CONTROL UNIT UPGRADE PROCEDURE USING THE KDS

KDS INSTALLATION PROCEDURE



- 1) Connect the VCI-II into the vehicle's DLC connector under the driver side instrument panel and check to turn the VCI-II on.



[NOTE]

ECU upgrade function on KDS is basically operating in wireless communication as Wi-Fi direct. Also it's possible to be performing via USB cable between Tablet PC and VCI-II.

Before start ECU upgrade, must make certain that the battery of Tablet PC is

sufficient charged.

ACU(Airbag Control Unit) UPGRADE 3-2. CONTROL UNIT UPGRADE PROCEDURE USING THE KDS AUTOMATIC UPGRADE PROCEDURE

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

2) Select Auto Mode and then tab Airbag in the System.

3) Read information and tab ID Check.

4) The GDS-Mobile will read the Currently in Vehicle.

5) Select the upgrade event, "371.PS ACU SW LOGIC UPGRADE" and touch Upgrade.



6) Upgrade (1/2) will begin and the progress of the upgrade will appear on the bar graph.

7) Upgrade (1/2) will occur until 100% is reached on the bar graph.

8) Upgrade (2/2) will begin and the progress of the upgrade will appear on the bar graph.

9) Upgrade (2/2) 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 tab **OK** to continue according to **Information** displayed on the screen.

10) Tab **OK** on the final screen, which indicates upgrade is complete.

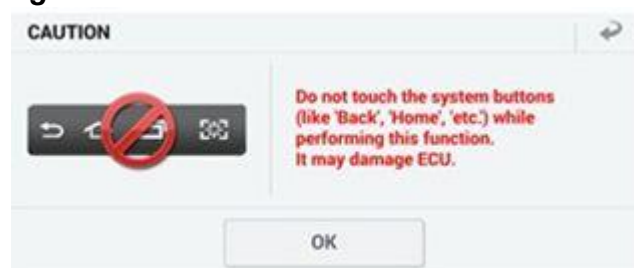
11) Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the upgrade and clear the DTC (s) present.

12) Start the engine to confirm proper operation of the vehicle.

[CAUTION]

- Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.

- Do not start the engine.



ACU(Airbag Control Unit) UPGRADE

3-3. CONTROL UNIT UPGRADE PROCEDURE USING THE KDS MANUAL UPGRADE PROCEDURE

[CAUTION]

- **Manual upgrade should be performed only when automatic upgrade fails.**
 - **If the automatic upgrade fails, check if the DTC B162000 has been created . Retry the ACU manual Upgrade. But the manual upgrade fails at least 3 times, replacing the ACU**

- **If automatic upgrade fails, turn the ignition key OFF for about 10 seconds, place it back in the ON position to reset the control unit before performing manual upgrade**

1) Within the ECU Upgrade screen, select Manual Mode, then select Upgrade Event #371.

2) Select the appropriate control unit part number with reference to the above ROM ID Information Table and tab OK.



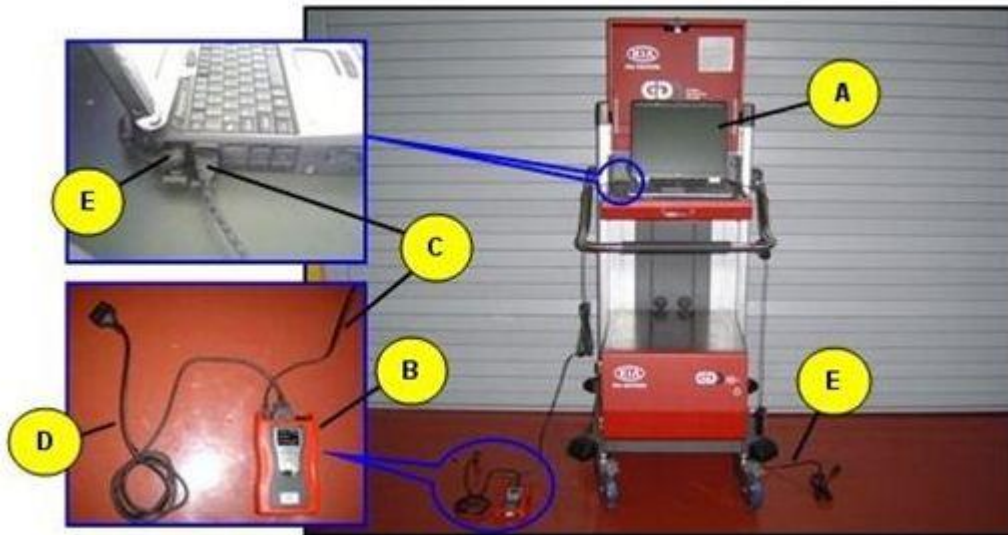
3) Enter the appropriate password from the below then touch OK.

MENU	PASSWORD
PS ACU : 95910-B2300	2300

- 4) Upgrade (1/2) will begin and the progress of the upgrade will appear on the bar graph.
- 5) Upgrade (1/2) will occur until 100% is reached on the bar graph.
- 6) Upgrade (2/2) will begin and the progress of the upgrade will appear on the bar graph.
- 7) Upgrade (2/2) 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 tab OK to continue according to Information displayed on the screen.
- 8) Tab OK on the final screen, which indicates upgrade is complete.
- 9) Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the upgrade and clear the DTC (s) present.
- 10) Start the engine to confirm proper operation of the vehicle

CLU(Cluster Unit) UPGRADE

4-1. CONTROL UNIT UPGRADE PROCEDURE USING THE GDS GDS (Global Diagnostic System) INSTALLATION PROCEDURE



A: Diagnostic terminal / B: VCI (Vehicle Communication Interface) / C: USB (Universal Serial Bus) cable
D: DLC cable (16-pin) / E: Power supply cable

1) Connect the power supply connector to the diagnostic terminal.

[NOTE]

- If attempting to perform the upgrade with the power supply cable disconnected from the diagnostic terminal, make certain that the diagnostic terminal is charged enough for the upgrade.

If not, the upgrade may fail in progress. Therefore, it is strongly recommended to connect the

power supply cable to the diagnostic terminal during the upgrade procedure.

2) Connect the USB cable between the VCI and the diagnostic terminal.

[NOTE]

- When performing the upgrade 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.

3) Connect the 16-pin DLC cable from the VCI into the vehicle's DLC connector under the driver side instrument panel.

4) Turn on the VCI and diagnostic terminal with the ignition key in the ON position.

[NOTE] Do not start the engine.

CLU(Cluster Unit) UPGRADE

4-2. CONTROL UNIT UPGRADE PROCEDURE USING THE GDS AUTOMATIC UPGRADE PROCEDURE USING THE GDS

1) Choose VIN or ECU Upgrade on the initial screen.

2) 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.



- 3) Select **ECM Upgrade** on the initial screen after entering the vehicle information.
- 4) Select **Auto Mode** then **BCM>>Cluster Module** in the left **ECU Upgrade** column.
- 5) Read **Preparation** and click **OK**.
- 6) The GDS will read the vehicle's ROM ID.
- 7) After the **Current ROM ID** is displayed, select the **Upgrade Event**,
"368.PS S/CLUSTER SW UPGRADE." 8) After clicking the Upgrade button, read
Information then click **OK**.
- 9) The vehicle battery voltage is checked to make sure it is at least 12 volts to
assure reliable upgrade
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 upgrade results.*
- 10) Upgrade will begin and the progress of the upgrade will appear on the bar
graph.
- 11) Upgrade 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.
- 12) Click **OK** on the final screen, which indicates upgrade is complete.
- 13) Check if any incidental Diagnostic Trouble Codes (DTC) have been created by
the upgrade and clear
the DTC (s) present.

14) Start the engine to confirm proper operation of the vehicle.

CLU(Cluster Unit) UPGRADE
4-3. CONTROL UNIT UPGRADE PROCEDURE USING THE GDS
AUTOMATIC UPGRADE PROCEDURE USING THE GDS

[CAUTION]

- **Manual upgrade should be performed only when automatic upgrade fails.**
- **If automatic upgrade fails, turn the ignition key OFF for about 10 seconds, place it back in the ON position to reset the control unit before performing manual upgrade.**

1) Within the **ECU Upgrade** screen, select **Manual Mode** in the left column, then select **Upgrade Event #368**.

Select the appropriate control unit part number with reference to the above ROM ID Information Table and click **OK**.



2) Enter the appropriate password from the below table then click **OK**.

MENU	PASSWORD
PS S/CLUSTER : 94014-B2000~2150	2150

3) The vehicle battery voltage is checked to make sure it is at least 12 volts to assure reliable upgrade 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 upgrade results.**

4) Upgrade will begin and the progress of the upgrade will appear on the bar graph.

5) Upgrade 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.

6) Click **OK** on the final screen, which indicates upgrade is complete.

7) Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the upgrade and clear the DTC (s) present.

8) Start the engine to confirm proper operation of the vehicle.

CLU(Cluster Unit) UPGRADE

5-1. CONTROL UNIT UPGRADE PROCEDURE USING THE G-SCAN G-SCAN INSTALLATION PROCEDURE

- 1) Connect the 16-pin Data Link Connector (DLC) cable to the G-Scan and securely tighten the three bolts.
- 2) Insert the updated SD memory card into the G-Scan bottom slot.
- 3) Connect the 16-pin DLC cable from the G-Scan into the OBD-II connector, located under the driver's side of the instrument panel.



CLU(Cluster Unit) UPGRADE

5-2. CONTROL UNIT UPGRADE PROCEDURE USING THE G-SCAN G-SCAN INSTALLATION PROCEDURE

- 1) Select **ECM Upgrade**. Select the vehicle model, model year, **BCM>>Cluster Module** as the system and engine displacement, and then touch **OK**.



- 2) Select the upgrade event, "**368.PS S/CLUSTER SW UPGRADE.**" and touch **AUTO**.
- 3) Perform the ECM upgrade in accordance with the instructions given on the G-Scan screen.



- 4) Turn the ignition key OFF for 10 seconds and place it back in the ON position, then touch OK to continue.
- 5) Check for any diagnostic trouble codes (DTC) and erase the DTC (s) present.
- 6) Start the engine to confirm proper operation of the vehicle.

CLU(Cluster Unit) UPGRADE

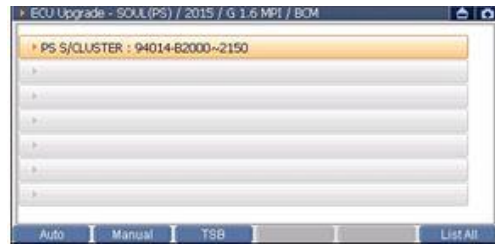
5-3. CONTROL UNIT UPGRADE PROCEDURE USING THE G-SCAN G-SCAN INSTALLATION PROCEDURE

NOTE)

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

- 1) Select ECU Upgrade. Select the vehicle model, model year, **ENGINE** as the system and engine displacement, and then touch **OK**.
- 2) Select the upgrade event, #368 and touch **MANUAL**.

3) Select the appropriate control unit part number with reference to the ROM ID Information Table and touch **MANUAL**.



4) Enter the appropriate password from the below table then click **OK**.

MENU	PASSWORD
PS S/CLUSTER : 94014-B2000~2150	2150

5) Perform the ECM upgrade in accordance with the instructions given on the G-Scan screen.

6) Turn the ignition key OFF for 10 seconds and place it back in the ON position, then touch OK to continue.

7) Check for any diagnostic trouble codes (DTC) and erase the DTC (s) present.

8) Start the engine to confirm proper operation of the vehicle.

CLU(Cluster Unit) UPGRADE 6-1. CONTROL UNIT UPGRADE PROCEDURE USING THE KDS KDS INSTALLATION PROCEDURE



1) Connect the VCI-II into the vehicle's DLC connector under the driver side instrument panel and check to turn the VCI-II on.



[NOTE]

ECU upgrade function on KDS is basically operating in wireless communication as Wi-Fi direct. Also it's possible to be performing via USB cable between Tablet PC and VCI-II.

Before start ECU upgrade, must make certain that the battery of Tablet PC is sufficient charged.

CLU(Cluster Unit) UPGRADE

6-2. CONTROL UNIT UPGRADE PROCEDURE USING THE KDS AUTOMATIC UPGRADE PROCEDURE

1) Select **ECU Upgrade** on the initial screen after entering the vehicle information.

2) Select **Auto Mode** and then tab **BCM>>Cluster Module in the System**.

3) Read information and tab **ID Check**.

4) The GDS-Mobile will read the **Currently in Vehicle**.

5) Select the upgrade event, "**368.PS S/CLUSTER SW UPGRADE**" and touch **Upgrade**.



7) Upgrade (1/2) will occur until 100% is reached on the bar graph.

8) Upgrade (2/2) will begin and the progress of the upgrade will appear on the bar graph.

9) Upgrade (2/2) 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 tab **OK** to continue according to **Information** displayed on the screen.

10) Tab **OK** on the final screen, which indicates upgrade is complete.

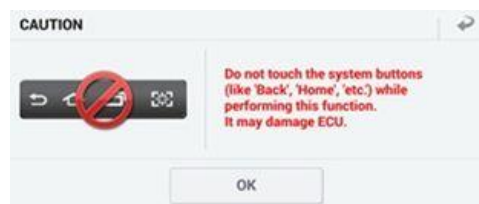
11) Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the upgrade and clear the DTC (s) present.

12) Start the engine to confirm proper operation of the vehicle.

[CAUTION]

- Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.

- Do not start the engine.



CLU(Cluster Unit) UPGRADE

6-3. CONTROL UNIT UPGRADE PROCEDURE USING THE KDS MANUAL UPGRADE PROCEDURE

NOTE)

- *The manual upgrade should be performed only when the automatic upgrade fails.*
- *If automatic upgrade fails, turn the ignition key OFF for about 10 seconds, place it back in the ON position to reset the control unit before performing manual upgrade.*

- 1) Within the ECU Upgrade screen, select Manual Mode, then select Upgrade Event #368.
- 2) Select the appropriate control unit part number with reference to the above ROM ID Information Table and tab OK.



- 3) Enter the appropriate password from the below then touch OK.

MENU	PASSWORD
PS S/CLUSTER : 94014-B2000~2150	2150

- 4) Upgrade (1/2) will begin and the progress of the upgrade will appear on the bar graph.
- 5) Upgrade (1/2) will occur until 100% is reached on the bar graph.
- 6) Upgrade (2/2) will begin and the progress of the upgrade will appear on the bar graph.
- 7) Upgrade (2/2) 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 tab OK to continue according to Information displayed on the screen.
- 8) Tab OK on the final screen, which indicates upgrade is complete.
- 9) Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the upgrade and clear the DTC (s) present.
- 10) Start the engine to confirm proper operation of the vehicle.