

This bulletin provides information related to the reprogramming of the Low Voltage DC-DC Converter (LDC) system of some 2015~2016MY Soul EV (PS EV) vehicles, produced from Job# 1 through August 17, 2015, to prevent the possibility of 12V battery discharge during "key off/doors locked" condition. To correct and/or prevent this condition, Kia is requesting the completion of this Service Action on all affected vehicles, including dealer stock, prior to delivery. Before conducting the procedure, verify the vehicle is included in the list of affected VINs.



Global Diagnostic System (GDS)



Kia Diagnostic System (KDS)

# \* NOTICE

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

Repair status for a VIN is provided on WebDCS (Service> Warranty Coverage> Warranty Coverage Inquiry> Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs> Not Completed Recall> Recall VIN> Select Report), which includes a list of affected vehicles.

This issue number is <u>SA 201</u>.

File Under: <ELECTRICAL>



Page 2 of 6

SUBJECT:

## SERVICE ACTION: OW VOLTAGE DC-DC CONVERTER (LDC) SYSTEM LOGIC IMPROVEMENT (SA 201)

#### Upgrade Procedure:

To correct this condition, the LDC system should be reprogrammed using the GDS download as described in this bulletin.

UPGRADE EVENT NAME 263.PS EV LDC S/W UPGRADE

# **\*** NOTICE

- A fully charged battery is necessary before the upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used in ECM mode during charging. DO <u>NOT</u> connect any other battery charger to the vehicle during the upgrade.
- Be careful not to disconnect any cables connected to the vehicle or GDS/KDS during the upgrade procedure.
- Make sure the ignition is set to "ON", prior to performing the procedure.
- DO <u>NOT</u> place the vehicle in Ready Mode 🤤 during the upgrade.

#### ROM ID INFORMATION TABLES:

#### Upgrade Event #263

MODEL	975		RO	MID
WODLL	515		PREVIOUS	NEW
PS EV	LDC	36632 0E140	EPSEENL LS3 D000 EPSEGNL LS0 D000	EPSEGNL LS1 D000

To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ROM ID and reference the Information Table as necessary.

## **\*** NOTICE

If performing this TSB using KDS, refer to TSB SST 037 for detailed information.

1. Turn the ignition switch to the <u>ON</u> position. NOTE: ignition ON mode is achieved by pressing the Start Stop Button (SSB), twice, without depressing the brake pedal.





SUBJECT:

## SERVICE ACTION: OW VOLTAGE DC-DC CONVERTER (LDC) SYSTEM LOGIC IMPROVEMENT (SA 201)

2. Connect the power supply cable to the GDS/KDS.

# **\*** NOTICE

If attempting to perform the upgrade with the power supply cable disconnected from the GDS/KDS, be sure to check that the GDS/KDS is fully charged before performing the upgrade. If the GDS/KDS is not fully charged, the upgrade may not occur. Therefore, it is strongly recommended that the power supply connector be connected to the GDS/KDS.

3. Connect the USB cable between the VCI and the GDS.



- 4. Connect the Main 16-pin DLC cable (GHDM 241000) to the VCI.
- Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



6. With the ignition key ON, turn ON the VCI and GDS/KDs. Access the GDS vehicle identification number (VIN) screen and configure the vehicle using the **VIN AUTO DETECT** Function.

Page 4 of 6

SUBJECT:

## SERVICE ACTION: OW VOLTAGE DC-DC CONVERTER (LDC) SYSTEM LOGIC IMPROVEMENT (SA 201)

7. Select LDC System, and click OK.

To search vehicle, I	Please insert VIN Searci	n	Clear Previous Vehicle
SOUL	EV (PS EV)	2015	80KW
System		_	
	Select System	Select All	Selected System Clear All
VMCU ABS/VDC ABS/VDC ABS/VDC LDC LDC	Image: PBImage: PB	AIR/CON SMK	Low DC/DC Converter
(	Group	_	Symptom
Fault C	ode Searching	ОК	Cancel

8. Select **ECU Upgrade** from the bottom right-hand corner. Next select **Auto Mode**, and then **LDC** System. Perform the ECM upgrade in accordance with normal GDS ECM upgrade procedures.

Setup lest searching Update	* Setup	Manuai	TSB	Case Analysis	DTC	Current Data	Actuation Test	Flight Record	DVOM	Oscilloscope	Fault Code Searching	ECU Upgrad	Internet Update
-----------------------------	------------	--------	-----	---------------	-----	--------------	-------------------	---------------	------	--------------	-------------------------	------------	--------------------

- 9. When the GDS/KDS reports that the upgrade has been successfully completed, click **OK** and turn the ignition off for ten (10) seconds.
- 10. Check if any incidental Diagnostic Trouble Codes (DTC(s)) have been created by the upgrade process; clear any DTC(s) that may be present.

## SUBJECT: SERVICE ACTION: OW VOLTAGE DC-DC CONVERTER (LDC) SYSTEM LOGIC IMPROVEMENT (SA 201)

#### Manual Mode Upgrade

### **\*** NOTICE

Do <u>NOT</u> attempt to perform a Manual Mode upgrade unless Auto Mode fails. Always follow the instructions given on the GDS/KDS in either Auto or Manual mode. See the table below for Manual Mode passwords.

#### MANUAL MODE ECM UPGRADE PASSWORDS:

#### Upgrade Event #263

EVENT #	MENU	PASSWORD
263	PS EV LDC : 36632 0E140	0140

- 1. Turn the ignition switch to the ON position. Do NOT place the ignition in Ready Mode(⇔).
- Within the ECU Upgrade screen, select Manual Mode in the left column, select LDC System and then select Upgrade Event #263. Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 2, and click OK.
- 3. Enter the appropriate password from the table above, and click **OK**.
- 4. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 5. When the GDS reports that the upgrade has been successfully completed, click **OK** and turn the ignition off for ten (10) seconds.
- 6. Check if any incidental Diagnostic Trouble Codes (DTC(s)) have been created by the upgrade process; clear any DTC(s) that may be present.

Page 6 of 6

SUBJECT:

## SERVICE ACTION: OW VOLTAGE DC-DC CONVERTER (LDC) SYSTEM LOGIC IMPROVEMENT (SA 201)

#### AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Soul EV (PS EV)	From Job #1 through August 17, 2015

#### WARRANTY INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty.
V	36601 0E140	0	N99	C99	(SA 201) LDC Logic Upgrade	150081R0	0.3 M/H	N/A	0

## **\*** NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA 201 when accessing the WebDCS system.