



Technical Service Bulletin

GROUP RECALL	NUMBER 21-01-046H
DATE June, 2021	MODEL(S) Kona Electric (OS EV)

SUBJECT: BATTERY MANAGEMENT SYSTEM SOFTWARE UPDATE AND BATTERY SYSTEM ASSEMBLY REPLACEMENT (RECALL 200)

★ IMPORTANT

*****Dealer Stock and Retail Vehicles*****

Dealers must perform this Recall 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 "Vehicle Information Screen (VIS)" screen via WEBDCS to identify open Campaigns.

Description: Some vehicles may experience a short circuit inside the high voltage battery cell. An electrical short within battery cell(s) increases the risk of a vehicle fire while parked, charging and/or driving. The Battery System Assembly may need to be replaced and/or the Battery Management System (BMS) software may need to be updated.

Applicable Vehicles: Certain 2019MY Kona Electric (OS EV) vehicles

Parts Information:

Part Number	Year	Description	Photo	Quantity	Remarks
NOTE: Battery System Assembly (BSA) replacement must have Warranty PA approval prior to ordering and replacing the BSA. Order CSP with VIN and PA Approval.					
37501-K4000AS	2019MY	Battery System Assembly (BSA)		1	IMPORTANT: Do not use in 20MY vehicle
NOTE: Technician should confirm color of coolant in the subject vehicle. Do not mix coolant colors.					
00232-19010	Vehicle built before 5/7/19.	Green Coolant (standard coolant)		1 qty. x 4L bottle	Mix 50/50 with water
00232-19091	Vehicle built 5/7/19 or later.	Blue Coolant (low conductivity type)		3 qty. x 2L Bottle	Do not mix with water
37535-GI500QQH	2019MY	Bolt & Washer Assembly		18	Must replace and discard the old bolts.
37535-Q4050QQH				4	

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

SUBJECT:

BATTERY MANAGEMENT SYSTEM SOFTWARE UPDATE
AND BATTERY SYSTEM ASSEMBLY REPLACEMENT (RECALL 200)

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part	Nature	Cause
Kona Electric (OS EV)	11D043R0	BSA REPLACEMENT	3.4 M/H	37501-K4000AS	D22	ZZ3
	11D043R1	BSA REPLACEMENT AND BMS UPDATE	3.7 M/H	37501-K4000AS		
	11D043R5	BMS UPDATE AND BATTERY LABEL PHOTO	0.4 M/H	375A0-K4000		

NOTE 1: Submit Claim on Campaign Claim Entry Screen.

NOTE 2: If a part that is not covered by this campaign is found in need of replacement while performing this Recall Campaign and the affected part is still under warranty, submit a separate warranty claim using the same Repair Order. If the affected part is out of warranty, submit a Prior Approval Request for goodwill consideration prior to performing the work.

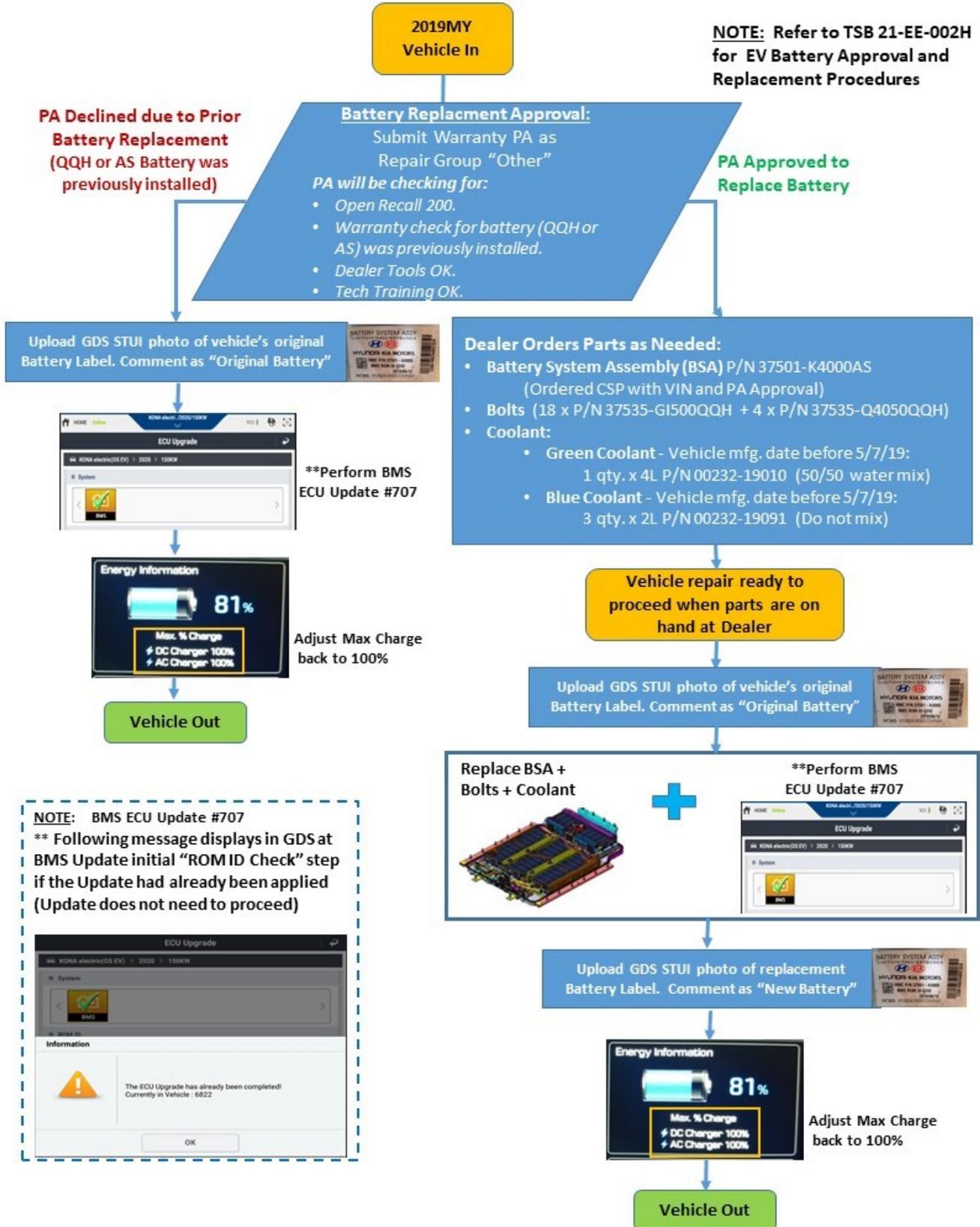
IMPORTANT

- Refer to TSB 21-EE-002H for EV Battery Approval, Receiving, and Replacement Procedures.
- Parts CSP order of a replacement BSA requires Warranty PA approval and VIN.
- Dealer Tools and Tech Training requirements per TSB 21-EE-002H must be satisfied for PA approval.
- An Incident Vehicle received with warning light on and DTC P1AA600 found stored in the BMS must have the BSA replaced. Contact Techline if the BSA had already been replaced in the past for a DTC P1AA600.

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Service Procedure:

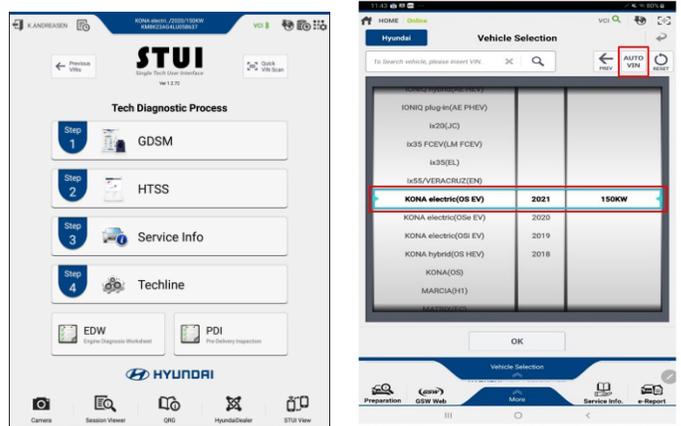
2019MY KONA EV RECALL 200 TSB PROCEDURE SUMMARY:



A. GDS STUI Photo Uploads to HMA of the Battery System Assembly (BSA) Label:

A-1 Before working on the vehicle, connect GDS STUI and VCI with ignition ON.

Perform AUTO VIN to ensure that vehicle's VIN is captured.



A-2. Locate the battery label on the Battery System Assembly (BSA) at the rear of the vehicle as shown.



A-3. Use STUI camera photo upload function to save and submit photo to HMA of the BSA label.

IMPORTANT: Use a shop light pointed at the battery label and tap the tablet screen at the image of the label to ensure a clear image of label. The S/N must be completely clear and visible.



Following Photos are required to be submitted to HMA taken of the BSA Label:

- Original Battery Label in vehicle as received
- Replacement Battery Label



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B. BATTERY SYSTEM ASSEMBLY (BSA) REPLACEMENT:

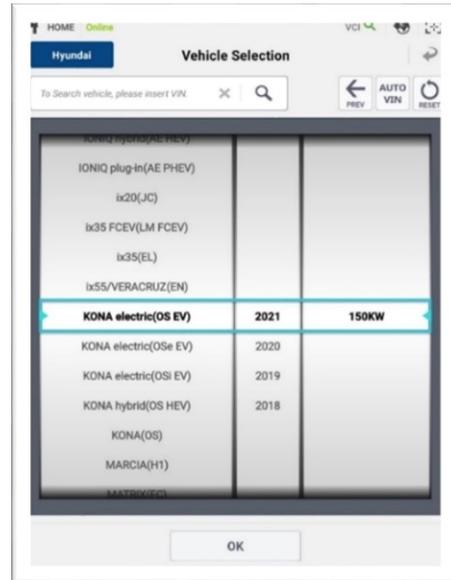
- Refer to TSB 21-EE-002H for the complete instructions for EV Battery Approval, Receiving, and Replacement Procedures.
- Battery System Assembly (BSA) can only be ordered and replaced once Warranty PA approval has been secured.



C. GDS AUTO MODE BMS UPDATE PROCEDURE:

System	Event #	Description
BMS	707	OS EV High Voltage Battery Update or Replacement (2nd Recall)

C-1. Select ECU Upgrade on the initial screen after ensuring the correct vehicle and VIN information.

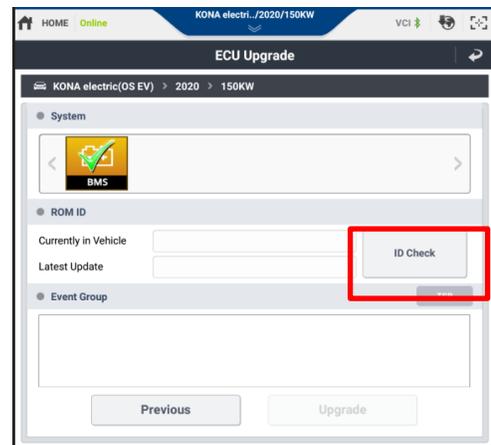


C-2. Select Auto Mode.

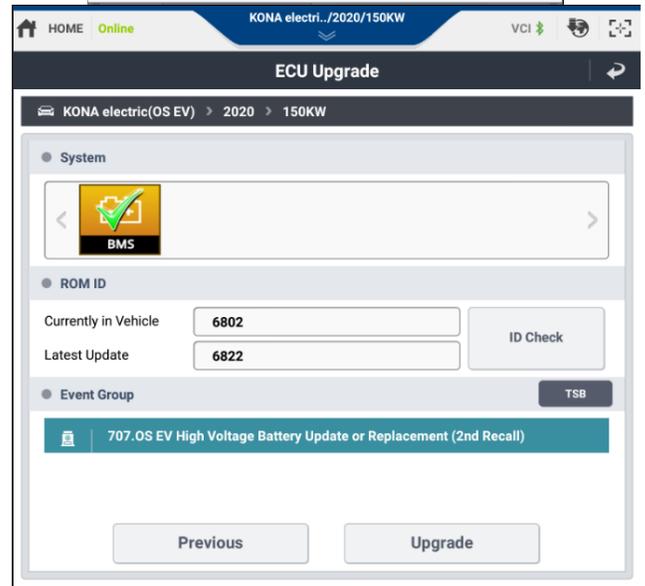
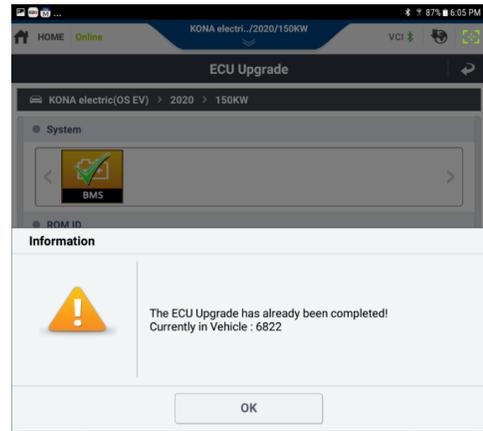
C-3. Select the BMS system.

C-4. Select ID check.

C-5. The GDS will read the current ROM ID in vehicle and check for the newest upgrade event.



- **NOTE:** The following screen will appear had the BMS Update already been applied. BMS Upgrade is not required so do not include a claim for BMS Upgrade.
- Skip to step D to adjust the AVN setting Max Charge % back to 100%
- If the BMS Upgrade event is required, GDS will read the current ROM ID in vehicle and display the latest upgrade event.



C-6. Select the upgrade event, **“707.OS EV High Voltage Battery Update or Replacement (2nd Recall)”**.

C-7. 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.

NOTICE

If battery voltage is below 12 voltages as below, click BACK and then operate the vehicle in Ready mode for a few minutes to assure an adequate battery charge state for reliable upgrade results.



C-8. Upgrade (1/2) will begin and progress until 100% is reached.

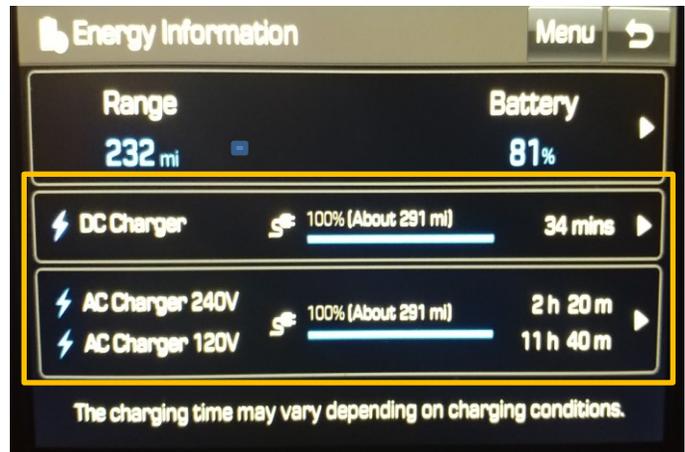
C-9. Upgrade (2/2) will begin and progress until 100% is reached.

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- C-10. Turn the ignition key off for 10 seconds, place it back in the key on position and then tab OK to continue according to information displayed on the screen.
- C.11 Select OK on the final screen which indicates upgrade is complete.
- C-12. Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the upgrade and clear the DTC(s) present.

Set the vehicle in Ready mode to confirm proper operation of the vehicle.

- D. Adjust the AVN system Max Charge % settings for both DC Charger and AC Charger back to 100% in the Energy Information screen.



NOTE: Campaigns T5V and P29 if still open for the vehicle do not need to be completed once Recall 200 is fully completed.

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ROM ID Information Table:

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BMS P/NO	ROM ID	
	PREVIOUS	NEW
375A0-K4050	5300	6820
	5400	
	5500	
	5700	
	5800	
	5900	
	6000	
	6020	
	6040	
	6050	
	6060	
	6070	
	6080	
	6090	
6100		
375A0-K4000	5302	6822
	5402	
	5502	
	5702	
	5802	
	5902	
	6002	
	6022	
	6042	
	6052	
	6062	
	6072	
	6082	
	6092	
6102		
375A0-K4450	5304	6824
	5404	
	5504	
	5704	
	5804	
	5904	

375A0-K4450	6004	6824
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	6024	
	6044	
	6054	
	6064	
	6074	
	6084	
	6094	
	6104	
	5306	
375A0-K4400	5406	6826
	5506	
	5706	
	5806	
	5906	
	6006	
	6026	
	6046	
	6056	
	6066	
	6076	
	6086	
	6096	
	6106	
6200		
375A0-K4051	6220	6820
	6240	
	6540	
	6550	
	6560	
	6570	
	6580	
	6590	
	6600	
	6202	
375A0-K4001	6222	6822
	6242	
	6542	
	6552	
375A0-K4001	6562	6822
	6572	

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	6582	
	6592	
	6602	
375A0-K4451	6204	6824
	6224	
	6244	
	6524	
	6544	
	6554	
	6564	
	6574	
	6584	
	6594	
	6604	
	375A0-K4401	
6226		
6246		
6526		
6546		
6556		
6566		
6576		
6586		
6596		
6606		
375A0-K4052	6400	6820
	6500	
	6700	
	6730	
	6740	
	6770	
	6780	
	6790	
	6800	
	6900	

375A0-K4002	6402	6822
	6502	
	6702	

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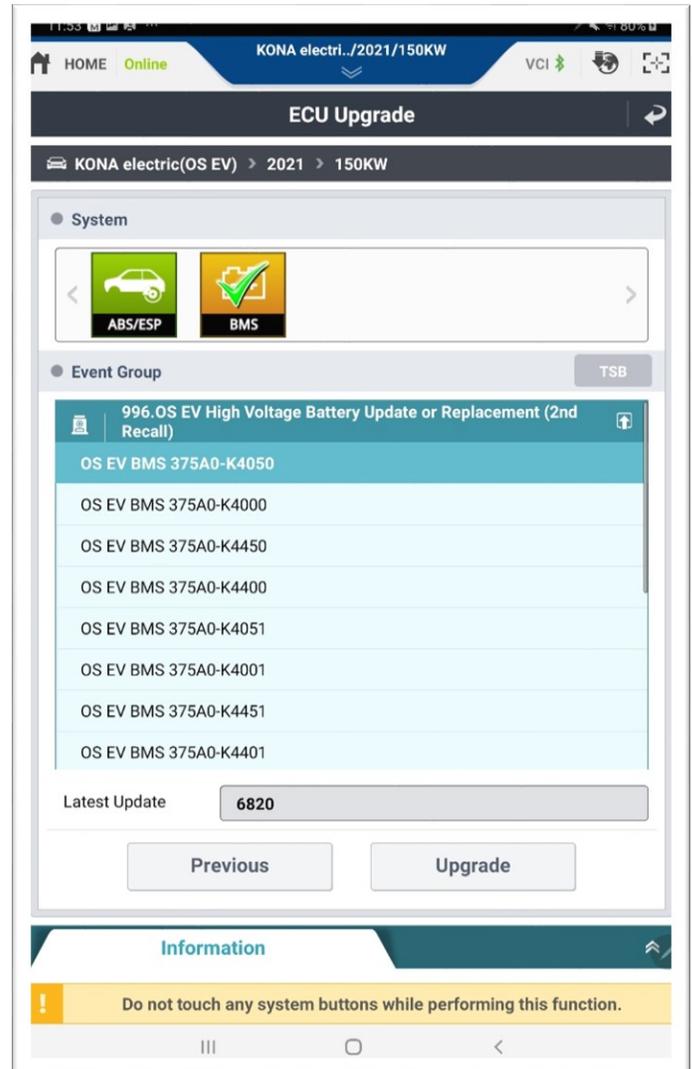
	6732	
	6742	
	6772	
	6782	
	6792	
	6802	
	6902	
375A0-K4452	6504	6824
	6734	
	6744	
	6774	
	6784	
	6794	
	6804	
	6904	
375A0-K4402	6506	6826
	6736	
	6746	
	6776	
	6786	
	6796	
	6806	
	6906	
375A0-K4053	6960	7040
	6980	
	7020	
375A0-K4003	6962	7042
	6982	
	7022	
375A0-K4453	6964	7044
	6984	
	7024	
375A0-K4403	6966	7046

**E. MANUAL UPGRADE PROCEDURE USING
GDS-MOBILE**

NOTICE

- The manual upgrade should only be performed if the automatic upgrade fails.
- If automatic upgrade fails, turn the ignition key off for about 10 seconds, then place it back to the on position to reset the control unit before performing manual upgrade.

E-1. Within the upgrade screen, select Manual Mode, then select upgrade event.



E-2. It is important to select the correct BMS part number with reference to the above ROM ID Information Table and select OK.



E-3. Enter the password from the table below, then touch OK.

707.OS EV High Voltage Battery Update or Replacement (2nd Recall)

Password Information Table:

MENU	PASSWORD
OS EV BMS 375A0-K4050	4050
OS EV BMS 375A0-K4000	4000
OS EV BMS 375A0-K4450	4450
OS EV BMS 375A0-K4400	4400
OS EV BMS 375A0-K4051	4051
OS EV BMS 375A0-K4001	4001
OS EV BMS 375A0-K4451	4451
OS EV BMS 375A0-K4401	4401
OS EV BMS 375A0-K4052	4052
OS EV BMS 375A0-K4002	4002
OS EV BMS 375A0-K4452	4452
OS EV BMS 375A0-K4402	4402
OS EV BMS 375A0-K4053	4054
OS EV BMS 375A0-K4003	4004
OS EV BMS 375A0-K4453	4454
OS EV BMS 375A0-K4403	4404

E-4. The remaining steps are identical to the steps located in the Automatic Upgrade Procedure