

SERVICE BULLETIN

Classification:

Reference: NTB20-017 Date: March 16, 2020

2018-2019 LEAF; EV BATTERY WARNING LIGHT ON AND DTC B2902-42 STORED

APPLIED VEHICLES: APPLIED VIN: APPLIED DATE: APPLIED SYSTEM:

EL20-007

2018-2019 LEAF (ZE1) Vehicles built before 1N4AZ1(*)(*)(*)KC306826 Vehicles built before January 8, 2019 Vehicles equipped with a 40 kWh lithium-ion battery

IF YOU CONFIRM

The EV Battery warning light is ON

AND

DTC B2902-42 (PDM POWER DELIVERY MODULE) is stored.

ACTION

- 1. Confirm the current Power Delivery Module (PDM) part number.
- 2. Reprogram the PDM, if applicable.

IMPORTANT: The purpose of ACTION (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the entire SERVICE PROCEDURE as it contains information that is essential to successfully completing this repair.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. **NOTE:** If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

SERVICE PROCEDURE

PDM Reprogramming

IMPORTANT: Before continuing, make sure:

- ASIST on the CONSULT PC has been synchronized (updated) to the current date.
- All CONSULT-III plus (C-III plus) software updates (if any) have been installed.
- The CONSULT PC is connected to the internet (Wi-Fi or cable).

NOTICE

To avoid vehicle damage, disconnect the Electric Vehicle Service Equipment (EVSE). DO NOT charge the High Voltage (HV) lithium-ion battery during reprogramming.

NOTE: Check to see if the timer for either charging or climate control is ON. If ON, turn it OFF and make sure to turn it back ON after reprogramming.

NOTICE

- Connect a battery maintainer or smart charger set to reflash mode or a similar setting. If the vehicle's battery voltage drops <u>below 12.0V or rises above 15.5V</u> during reprogramming, <u>the PDM may be damaged</u>.
- Be sure to turn OFF all vehicle electrical loads. If a vehicle electrical load remains ON, <u>the PDM may be damaged</u>.
- Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and <u>the PDM may be damaged</u>.
- Turn OFF all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within
 range of the CONSULT PC and the plus VI. If Bluetooth[®] signal waves are within
 range of the CONSULT PC and/or the plus VI during reprogramming,
 reprogramming may be interrupted and <u>the PDM may be damaged</u>.



Figure 1

- 1. Connect the plus VI to the vehicle.
- 2. Connect the plus VI to the CONSULT PC with the USB cable.
- 3. Connect the AC adapter to the CONSULT PC.
- 4. Turn ON the CONSULT PC, and then open C-III plus.
 - Turn OFF any screen savers that are on the CONSULT PC.
- 5. Set the parking brake.
- 6. Depress the power (ignition) switch twice <u>without</u> depressing the brake pedal.
 - The meter and gauges will illuminate.

NOTICE

To avoid damage to the vehicle, DO NOT set the vehicle in READY to Drive position.

7. After the plus VI is recognized, select **Re/programming, Configuration**.

	Back Horne P	rint Screen Capture Mode	neorded Bats	
	Connection Statu	5	Diagnosis Menu	
	Serial No.	Status	Diagnosis (One System)	
Plus VI is				
recognized		Normal Mode/USB connection	Diagnosis (All Systems)	
		No connection		
		No connection		
	Select VI/	мі	Immobilizer	
	Application Setting		GA	
	Sub mode	Language Setting	Maintenance	
	VDR			

Figure 2

- 8. Read the **Precaution** and **Caution**.
- 9. After the **Precaution** and **Caution** have been read, check-mark the box for **Confirmed instructions** by selecting it, and then select **Next**.

Precaution Operating suggestions for reprogramming, programming and C/U configration: Please review the all of precautions, and click the "Confirm" check box after confirming the its points. And touch "Next". Caution: 1. Follow the operation guide displayed on screen. 2. "Back" and "Home" button may not be used on this flow. For reprogramming and programming 1. Install the latest version of the CONSULT-III plus sortware, reprogramming/programming data to this CONSULT-III plus PC. 2. Preparation and read the service manual or reprogramming procedure sheet. -For ECU Configuration 1. Need to write the configuration data, ECU can not work. Please write the right data. -For ECU Configuration using manual mode 1. Confirm the vehicle's spec and its configuration spec, following the service manual. If writing the wrong configuration data, ECU can not work. Please write the right data. 2. Operate the saving completely. Do not abort without saving data.	0	Configuration		Precaution	Vehicle Selection	
Operating suggestions for reprogramming, programming and C/U configration: Please review the all of precautions, and click the "Confirm" check box after confirming the its points. And touch "Next". Caution: 1. Follow the operation guide displayed on screen. 2. "Back" and "Home" button may not be used on this flow. -For reprogramming and programming 1. Install the latest version of the CONSULT-III plus sortware, reprogramming/programming data to this CONSULT-III plus PC. 2. Preparation and read the service manual or reprogramming procedure sheet. -For ECU Configuration 1. Need to write the configuration data, ECU can not work. Please write the right data. -For ECU Configuration using manual mode 1. Confirm the vehicle's spec and its configuration spec, following the service manual. If writing the wrong configuration data, ECU can not work. Please write the right data. 2. Operate the saving completely. Do not abort without saving data.	Precaution					
Caution: 1. Follow the operation guide displayed on screen. 2. "Back" and "Home" button may not be used on this flow. For reprogramming and programming 1. Install the latest version of the CONSULT-III plus sortware, reprogramming/programming data to this CONSULT-III plus PC. 2. Preparation and read the service manual or reprogramming procedure sheet. For ECU Configuration 1. Need to write the configuration data to new ECU, after replace it. 2. If writing the wrong configuration data, ECU can not work. Please write the right data. For ECU Configuration using manual mode 1. Confirm the vehicle's spec and its configuration spec, following the service manual. If writing the wrong configuration data, ECU can not work. Please write the right data. 2. Operate the saving completely. Do not abort without saving data.	Operating Please re touch "Ne	suggestions for reprogram view the all of precautions, a ext".	nming, programming and click the "Confirm	and C/U configration: n" check box after confir	ming the its points. A	
For ECU Configuration 1. Need to write the configuration data to new ECU, after replace it. 2. If writing the wrong configuration data, ECU can not work. Please write the right data. For ECU Configuration using manual mode 1. Configuration data, ECU can not work. Please write the right data. 2. Operate the saving completely. Do not abort without saving data.	Caution: 1. Follow 2. "Back" -For represent 1. Install 1 CONSUL 2. Prepar	the operation guide display and "Home" button may n ogramming and programmin he latest version of the COP -Ill plus PC. ation and read the service r	red on screen. ot be used on this flo ng ISULT-III plus sortwa nanual or reprogram	ow. Ire, reprogramming/progr ming procedure sheet.	amming data to this	
-For ECU Configuration using manual mode 1. Confirm the vehicle's spec and its configuration spec, following the service manual. If writing the wrong configuration data, ECU can not work. Please write the right data. 2. Operate the saving completely. Do not abort without saving data.	-For ECU 1. Need t 2. If writin	Configuration write the configuration dat g the wrong configuration	ta to new ECU, after data, ECU can not w	replace it. ork. Please write the righ	nt data.	
		Configuration using manua	al mode configuration spec, fo	ollowing the service man oht data.	ual. If writing the wro	ong

Figure 3

- 10. Select LEAF and the correct Model Year, or the Automatic Selection(VIN) tab.
 - If Automatic Selection(VIN) is selected, wait for the Reading VIN screen to complete (picture not shown).
 - If the screen in Figure 4 does not display, skip to step 12 on page 5.
- 11. Select Select.



Figure 4

12. Verify the Vehicle Identification Number (VIN) in **VIN or Chassis #** matches that of the vehicle, and then select **Confirm**.

Back Rome Print Screen Screen Capture	Measurement Mode Recorded Confirm Vehicle	•
Please confirm selected information and to touch "Change".	uch "Confirm". In case you want to select another vehicle,	
VIN or Chassis # Vehicle Name : Model Year		
	1/1	
		Change
		Confirm

Figure 5

13. Select **Confirm**.

Back Home Print Screen Screen Capture Mode Recorded Data	
Configuration Vehicle Confirmation Input VIN	4/4
Input VIN Enter the VIN number, and touch "Confirm".	
According to this operation, in case of specified operation that requires to save ECU information into CONSULT, VIN number you input is saved as file name. Therefore, confirm VIN number correctly.	
VIN (17 or 18 digits) XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
	Confirm

Figure 6

14. Select CHARGER/PD MODULE.

Back Home Print Screen Capture	Measurement Mode Recorded Data			
Re/programming, Configuration	Input VIN System Selection	Operation Selection 5/6		
System Selection				
Touch "system". In case ECU you want to operate is not listed below, the vehicle or model year might be selected wrong.				
INTELLIGENT KEY	EV/HEV	ICC/ADAS		
ВСМ	AIR BAG	Side radar (Rear right)		
SONAR	HV BATTERY	CHARGER/PD MODULE		
LANE CAMERA	BRAKE	TELEMATICS		
CAN GATEWAY	Side radar (Rear left)	HVAC		
		2/3		

Figure 7

15. Select Reprogramming.



Figure 8

- 16. Find the PDM part number (**Part Number**) and write it on the repair order.
 - This is the <u>current</u> PDM part number.
 - If the current PDM part number IS 292C0-5SA0A or 292C0-5SA1A, continue to step 17 to reprogram the PDM.
 - If the current PDM part number IS NOT 292C0-5SA0A or 292C0-5SA1A, this bulletin does not apply. Refer to the ESM for further diagnostic and repair information.

Back Home Print Screen Capture	Measurement Mode Recorded Data			
Configuration	tion Selection Save ECU Data	717		
Save ECU Data				
Touch "Save" to save operation log and the current part number as listed below to CONSULT. Operation log helps to restart next operation by selecting suitable operation log. Operation log is erased after operation has completely finished.				
File Label	*****			
Operation	REPROGRAMMING	_		
System	CHARGER/PD MODULE	_		
Part Number	292C0-XXXXX _			
Vehicle	ZE1LEAF	_		
VIN	*****	Ī		
Date	****	Save		
Save				

Figure 9

17. Select Save.

Back Brown Print Screen Cupture Configuration Operal Save ECU Data	Measurement Recorded Data	717		
Touch "Save" to save operation log and the current part number as listed below to CONSULT. Operation log helps to restart next operation by selecting suitable operation log. Operation log is erased after operation has completely finished.				
File Label	****			
Operation	REPROGRAMMING			
System	CHARGER/PD MODULE			
Part Number	292C0-XXXXX			
Vehicle	ZE1LEAF			
VIN	*****			
Date	*****	Save		

Figure 10

- 18. Use arrows (if needed) to view and read all precautions.
- 19. Check the box for Confirmed instructions and then select Next.



Figure 11

20. On the Select Program Data screen, select Next.

Back Home Print Screen Capture	Messacrant Mode Data	
Re/programming, Configuration	Select Program Data Confirm Vehicle Condition	9/11
Select Program Data		
Confirm the detail stated below, and touch " In case the screen to select reproglorogram vehicle. In case the part number after reprogramming data	Next" if OK. ming data is NOT displayed, only one data is available for this g is wrong, touch "Re-select", and confirm the vehicle in CONSULT.	
Part Number After Repro/programming	292C0-XXXXX	
Current Part Number	292C0-XXXXX	
Vehicle	LEAF ZE1	
VIN	*****	
System	CHARGER/PD MODULE	
Other Information	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Expected time to finish relprogramming	Tenán	
	0/0	Next

Figure 12

21. On the **Confirm Vehicle Condition** screen, select **Next**.



Figure 13

22. On the second Confirm Vehicle Condition screen, select Start.

Back Borne Print Screen	Screen Capture	surement Mode	d Pelp	12.7V VI MI	
Configuration	Select Progr	am Data	Confirm Vehicle Condition	Transfer Data	10/11
Confirm Vehicle Condition					
Confirm the vehicle condition as Then, confirm that judgment for al out of range, reprogramming or pro	listed below, se I items indicate ogramming may	it the vehicle co OK, and touch " stop.	ndition correctly. 'Start''. In case the veh	nicle condition is	
Monitor tem	Value	Unit	Judgment	Condition	L .
BATTERY VOLTAGE	12.8	v	ок		
					Start

Figure 14

If the screen in Figure 15 displays, select USA/CANADA Dealers, then select OK. If it 23. does not, continue to step 24.



Figure 15

- Enter your username and password. 24.
 - The CONSULT PC must be connected to the internet via cable or Wi-Fi. ٠
 - If you do not know your username or password, contact your service manager. •
- 25. Select Submit.



Figure 16

26. Wait for both bar graphs to complete.



Figure 17

- 27. When the screen in Figure 18 displays, select Next.
 - Reprogramming is complete.



Figure 18

- 28. Erase all DTCs as follows:
 - a. Turn the "ignition" OFF by depressing the power switch once.
 - The screen in Figure 19 will read **OFF** after pressing the power switch <u>once</u>.

CONSOLT-III PIUS VELVINI. 11.00	WILK.	Venicle . LEAL 220	2011 000	antry . 0.3.N.
Back Back Print Screen	Screen Capture	Help	🕋 🔑 🗙 🗖 2.6V VI MI	•
Configuration	Confirm Result	rase All DTCs Op	Print Result / eration Complete	13/14
Erase All DTCs				
According to the instruction below,	erase All DTCs.			
1 Turn the ignition switch to the OF	F position.		(X)	A.K.
			ON TRAF	OFF
Current status of ignition switch	ON	ON to		
	Figure	e 19		

b. Wait one (1) minute after turning the ignition **OFF.**

- c. Turn the "ignition" ON by depressing the power switch twice (not Ready to Drive position).
 - Do not step on the brake pedal when depressing the power switch.
 - The screen in Figure 20 will read ON after pressing the power switch twice.
 - Do not be confused by any screen messages. At this point, simply turn the "ignition" ON.

Back Home Print Screen	Screen Capture	Recorded Data	12.6V VI	× 💻 🥅 🔀
Re/programming, Configuration	Confirm Result	Erase All DTCs	Print Result / Operation Comple	ete 13/14
Erase All DTCs				
According to the instruction below, e	rase All DTCs.			
1				
Turn the ignition switch to the	ON position.		OFF	
Current status of ignition switch	OFF		o ON	
If the current status of ignition s the actual vehicle ignitio	witch displayed on t n switch, touch " NEX	he screen differs from T" to go to the next so	the status of creen.	Next

Figure 20

d. If the screen in Figure 21 displays, select **Erase DTC**.

Back Home Print Screen Capture Messarement Mode Pata	a 😧 🚓 🚚 🗙 🖿 🔤 🔀
Configuration	rase All DTCs Print Result / Operation Complete 13/14
Erase All DTCs	
According to the instruction below, erase All DTCs.	
1 Turn the ignition switch to the OFF position.	ON OFF
1	
Turn the ignition switch to the ON position and then tou DTC". All DTCs are erased.	ich "Erase

Figure 21

- 29. Verify the before and after part numbers are different.
- 30. Print a copy of this screen (Figure 22) and attach it to the repair order.
- 31. Select **Confirm**.

Back Home Print Screen Capture	Messaurement Mode	lp 12.9V		🔀	
Re/programming, Configuration	e All DTCs Operation Cor	lt / nplete		14/14	
Print Result / Operation Complete					
Ail tasks are completed. Confirm LAN access, touch "Print" to print out this page. In case CONSULT can NOT immediately access to LAN or printer, Screen Capture function is available for temporally storage of this page. Touch "Screen Capture", and save it. Screen capture data is in "CIII plus Data Folder" on desk top, and open the folder named "ScreenImages".					
Part number after Reprog/programming	29	2C0-XXXXX			
Part number before Reprog/programming	29	2C0-XXXXX			
Vehicle	ZE1	LEAF			
VIN	JN1AZXXX	****	xx		
System	CHARGER/F	PD MODULE		Print	
Date	XMXXXX XX	****	xxx		
1/1 Confirm					

Figure 22

32. After confirmation has completed, select **Home**.



Figure 23

- 33. Close C-III plus, turn OFF the CONSULT PC, and then disconnect the CONSULT PC and plus VI from the vehicle.
- 34. Turn the ignition OFF (depress power switch <u>once</u>).
- 35. Verify there are no error messages:
 - a. Place the vehicle in the READY to Drive position (depress power switch <u>once</u> while stepping on the brake pedal).
 - b. Verify no error messages are displayed in the meter and gauges or center multifunction control panel.
- 36. If the timer for either charging or climate control were "ON" prior to reprogramming, turn them back ON.

CLAIMS INFORMATION

Submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram Charger/PD Module	(1)	JX66AA	ZE	32	0.5

 Reference the repair order and use the current PDM P/N (292C0-****) from step 16 of the Service Procedure as the PFP.

AMENDMENT HISTORY

PUBLISHED DATE REFERENCE		DESCRIPTION	
March 16, 2020	NTB20-017	Original bulletin published	