



# SERVICE BULLETIN

Classification: EL14-039	Reference: NTB14-083	Date: August 29, 2014
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## 2013 - 2014 LEAF; VEHICLE 12VDC CHARGING SYSTEM STOPS WITH DTC P0A94 AND/OR B2902 PRESENT

This bulletin supersedes NTB14-061 and has had DTC B2902 added to the title and to the If You Confirm section. No other changes have been made to the body of the bulletin. Please discard all previous versions.

**APPLIED VEHICLE** 2013 LEAF (ZE0) All  
**VIN AND DATE:** 2014 LEAF (ZE0)  
Built before 1N4AZ0CP(\*)EC 332878 / Jan 30, 2014

### IF YOU CONFIRM

The EV warning light is ON.

**And**

CHARGER / PD MODULE (Power Delivery Module or PDM) DTC P0A94 (DC/DC Converter) **and/or** B2902 (PDM Memory Error) are stored.

**And**

The vehicle's current CHARGER / PD MODULE software version is in "Table A" on page 9.

- Refer to step 20 on page 9 in the SERVICE PROCEDURE to check current CHARGER / PD MODULE software version.

### ACTION

Reprogram the CHARGER / PD MODULE using the Service Procedure and CONSULT-III plus (C-III plus) starting on the next page.

**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

**NOTE:** Follow all cautions, warnings, and notes in the Electronic Service Manual (ESM) when working on or near a High Voltage (HV) System or Supplemental Restraint System (SRS), such as an airbag.

**IMPORTANT:** Before starting, make sure:

- **ASIST on the CONSULT PC has been freshly synchronized (updated).**
- **All C-III plus software updates (if any) have been installed.**

**NOTE:** The CONSULT PC automatically gets applicable reprogramming data during ASIST synchronization.

- A screen print for Warranty documentation can be done from the CONSULT PC during this process while still connected to the vehicle.
- **No DTCs stored.** Use C-III plus to perform Self Diagnosis for all systems and erase all DTCs.

1. Connect the plus VI to the vehicle, and then to the CONSULT PC with the USB cable.

**CAUTION:** Make sure the plus VI is securely connected. If the plus VI connections are loose during reprogramming, the process will be interrupted and the **Module may be damaged.**

2. Connect the AC Adapter to the CONSULT PC.

**CAUTION:** Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and the **Module May be damaged.**

3. Connect the GR8 (Multitasking Battery Diagnostic Station) to the vehicles 12V battery.

- Set the GR8 to ECM power supply mode.

**CAUTION:** Do not charge the High Voltage (HV) Lithium Ion battery during reprogramming or vehicle component damage may occur.

**NOTE:** Battery voltage must stay between 12 volts and 13.5 volts or reprogramming may not start or be temporarily stopped. Returning battery voltage within the 12-13.5 volt range will resume the reprogramming procedure.

**CAUTION:** Be sure the GR8 is connected securely to the 12V battery. Make sure the battery voltage stays between 12.0V and 13.5V during reprogramming. If the battery voltage goes out of this range during reprogramming, the **Module may be damaged.**

4. Turn off all external Bluetooth® devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI.

**CAUTION:** Make sure to turn off all external Bluetooth® devices. If Bluetooth® signal waves are within range of the CONSULT PC and the VI during reprogramming, reprogramming may be interrupted and the **Module may be damaged.**

5. Depress the vehicle's power ("ignition") switch twice without depressing the brake pedal.
- The meter and gauges will illuminate.

**CAUTION:** Do Not set the vehicle in "READY to drive" mode or vehicle component damage may occur.

- Make sure the ready to drive indicator light is **OFF** (not illuminated).

Ready to drive indicator  
light  
(make sure it is **OFF**)



Figure B

6. Turn OFF all vehicle electrical loads such as exterior lights, interior lights, HVAC, blower, rear defogger, audio, NAVI, seat heater, steering wheel heater, etc.
- Check to see if the timer for "charging" or "climate control" is on. If on, turn it off and make sure to turn it back on after reprogramming.

**NOTE:** For charging timer on vehicles with navigation – write down which days are OFF, Timer 1 or Timer 2.

**IMPORTANT:** Make sure to turn OFF all vehicle electrical loads. Make sure the battery voltage stays between 12.0V and 13.5V during reprogramming. If the battery voltage goes out of this range during reprogramming, the **Module may be damaged.**

7. Turn ON the CONSULT PC.
8. Select CONSULT-III plus (open C-III plus).

**NOTE:** Make sure all applications other than C-III plus are closed.

9. Wait for the plus VI to be recognized.

10. Select Re/programming, Configuration.

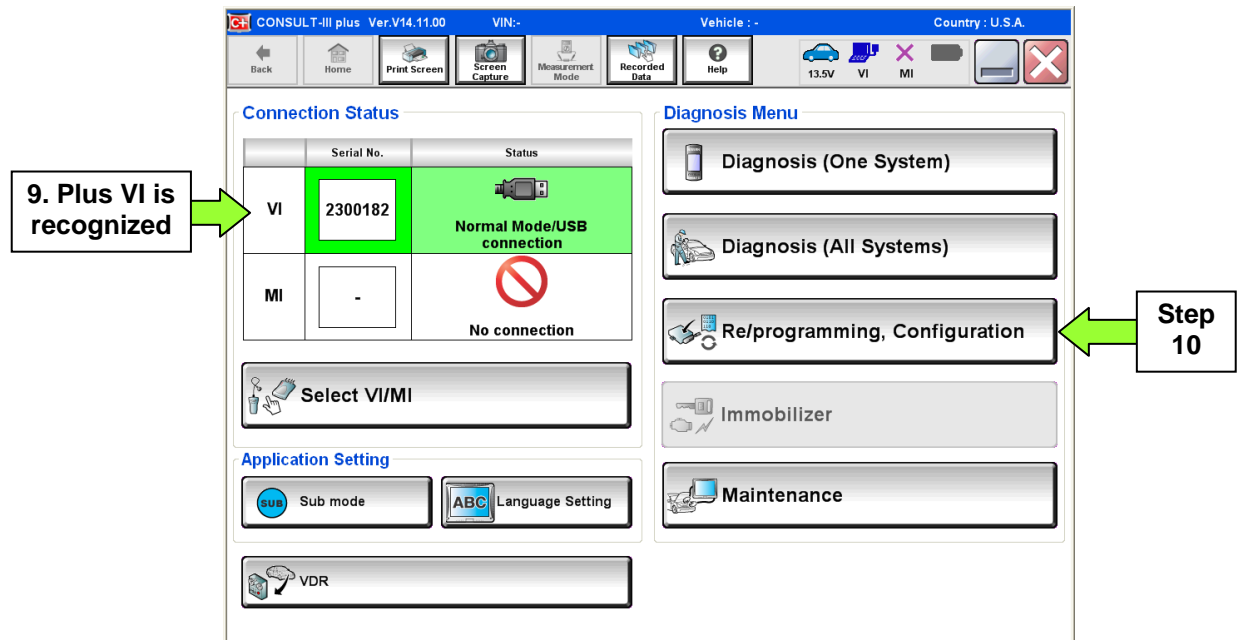


Figure 1

11. Use arrows (if needed) to view and read all precautions.

12. Check the box confirming the precautions have been read.

13. Select Next.

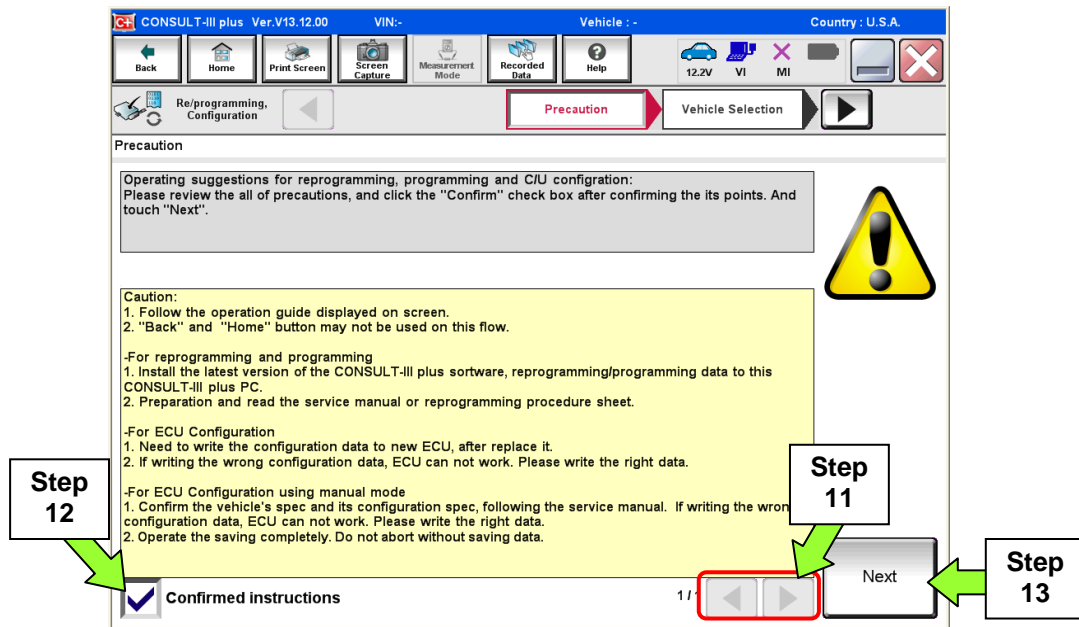


Figure 2

14. Select LEAF and 2013 or 2014, or Automatic Selection (VIN).

- If **Automatic Selection (VIN)** is selected, wait for the **Reading VIN** screen to complete.
- If the screen in Figure 3 does not display, skip to step 16.

15. Select **Select**.

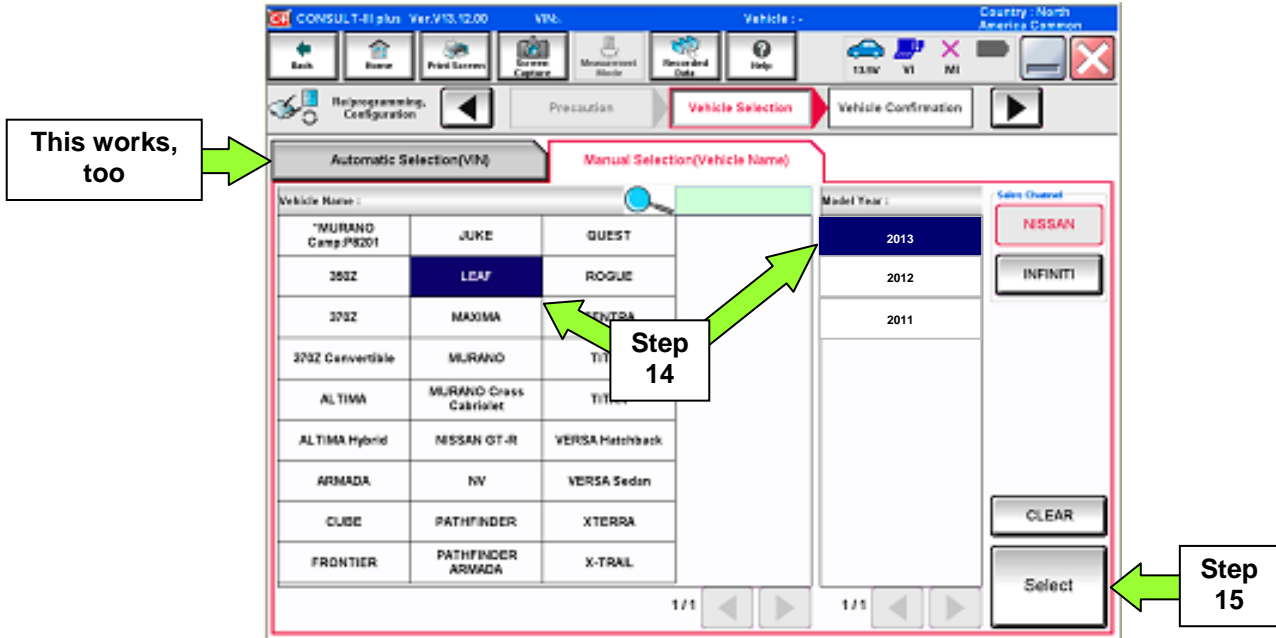


Figure 3

16. Verify the VIN in **VIN or Chassis #** matches the vehicle being reprogrammed.

- If the correct VIN is displayed, select **Confirm**.

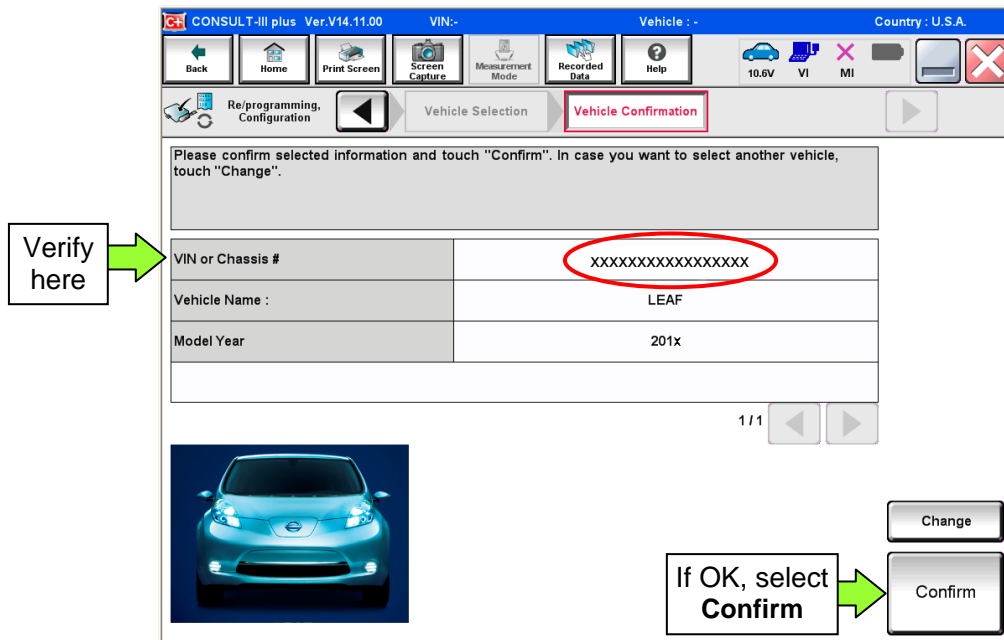


Figure 4

17. Wait for system call to complete, and then select **Confirm** again.

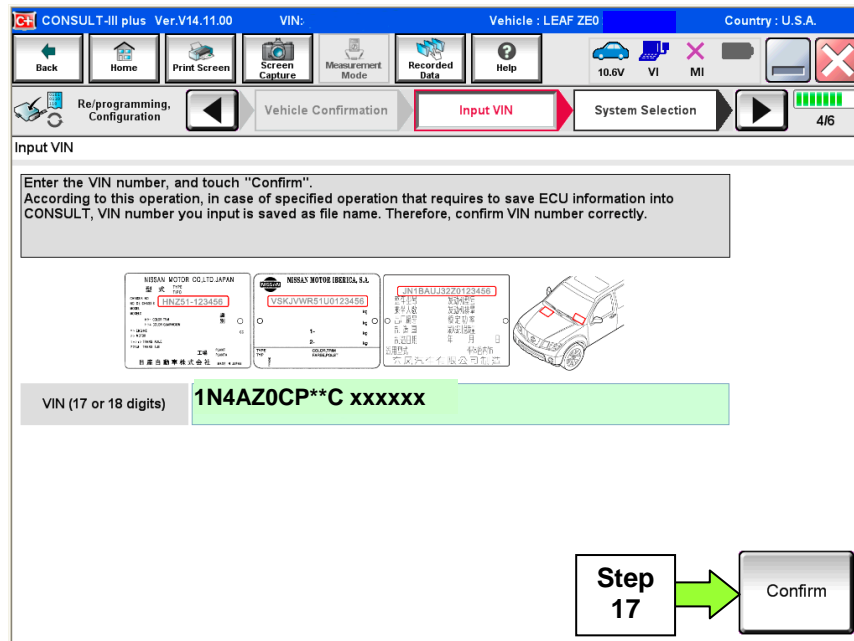


Figure 5

18. Select CHARGER / PD MODULE.

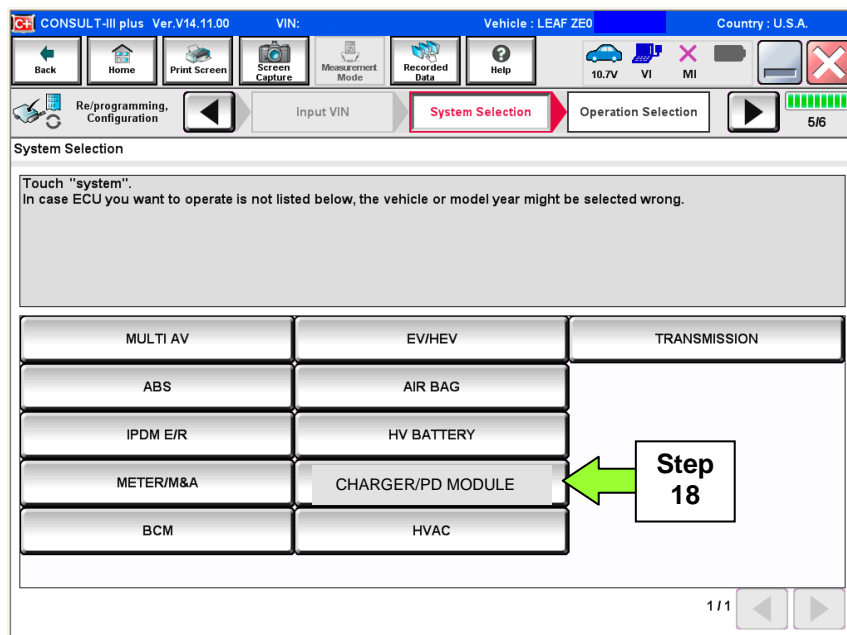


Figure 6

## 19. Select Reprogramming.

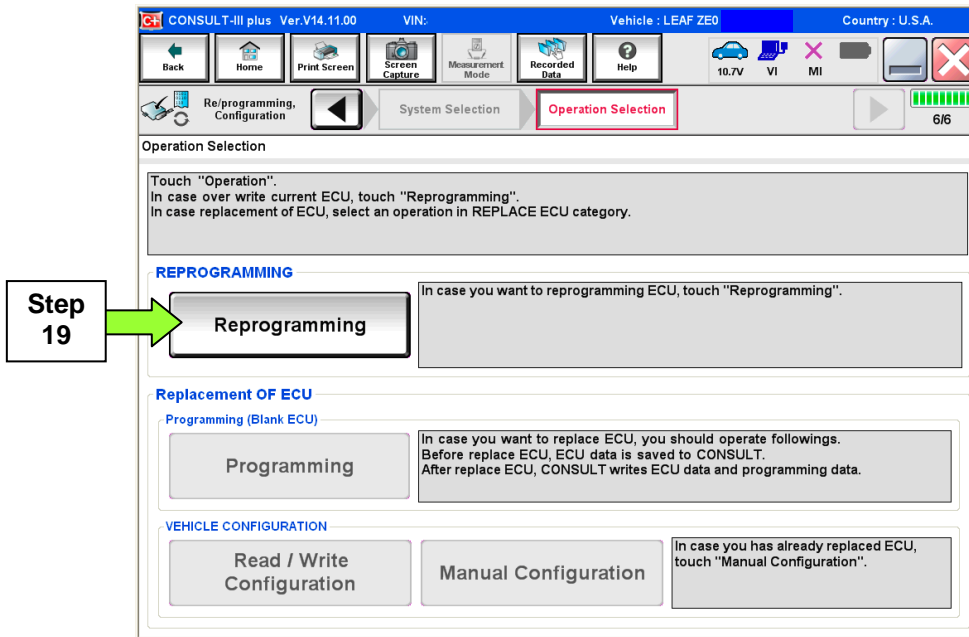


Figure 7



20. When you get to the screen shown in Figure 8, confirm this bulletin applies as follows.

A. Find the **CHARGER/PD MODULE Part Number** and write it on the repair order.

**NOTE:** This is the current CHARGER/PD MODULE Part Number (P/N) and will also be needed for claims information.

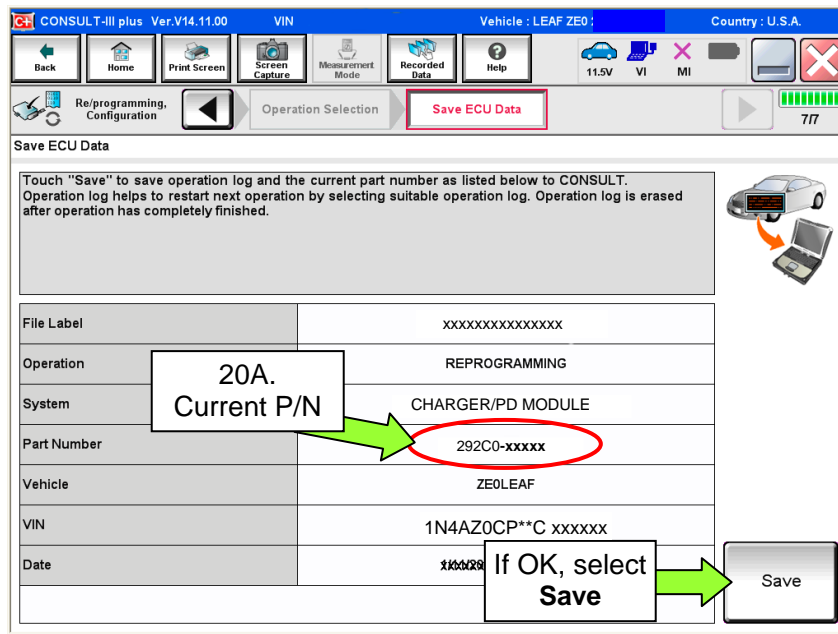


Figure 8

B. Compare the P/N you wrote down to the numbers in the **Current CHARGER/PD MODULE Part Number** column in **Table A** below.

- If the CHARGER / PD MODULE part number is one of the part numbers listed in the **Table A**, continue with reprogramming.
  - Select **Save**, and then go to the next step.
- If the CHARGER / PD MODULE part number is not listed in **Table A**, this bulletin does not apply.
  - Disconnect the GR8 and CONSUTLT PC.

Table A

MODEL YEAR	CURRENT CHARGER/PD MODULE PART NUMBER: 292C0-
2013 – 2014 LEAF® (ZE0)	3NF0A, 3NF1A, 3NF2A, 3NF3A, 3NF4A, 3NF5A, 3NF6A, 3NF7A, 3NF8A, 3NF9A,
	3NF2B, 3NF3B, 3NF4B, 3NF5B, 3NF6B, 3NF7B
	3NF0C, 3NF1C, 3NF2C, 3NF3C

21. Select **Next**.

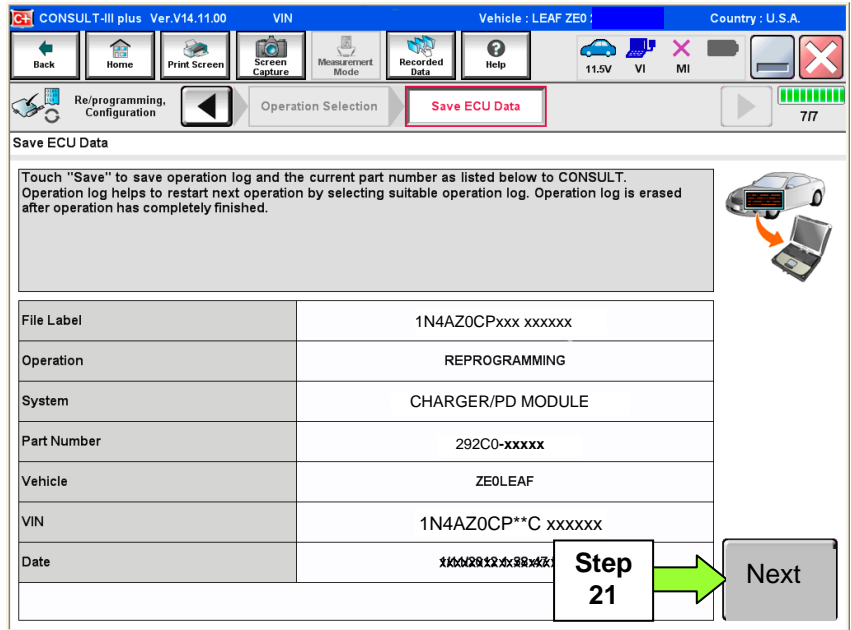


Figure 9

22. Use arrows (if needed) to view and read all precautions, then check the box confirming the precautions have been read.

23. Select **Next**.

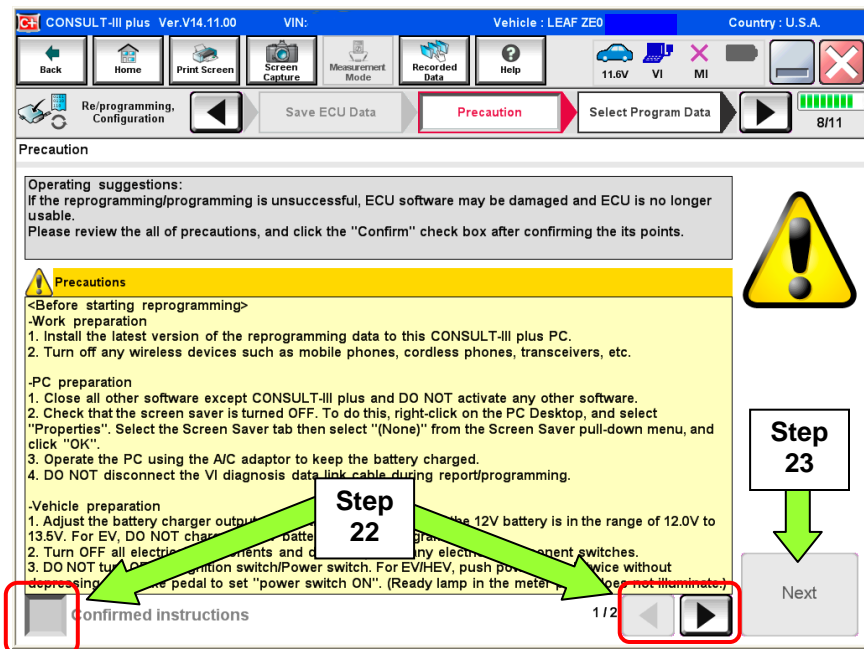


Figure 10

**NOTE:**

- In some cases, more than one new P/N for reprogramming is available.
  - If more than one P/N is available, the screen in Figure 11 will display. Select and use the reprogramming option that **does not** have the message “Caution! Use ONLY with NTBXX-XXX”.
- If you get this screen and it is blank (no reprogramming listed), it means there is no reprogramming available for this vehicle.

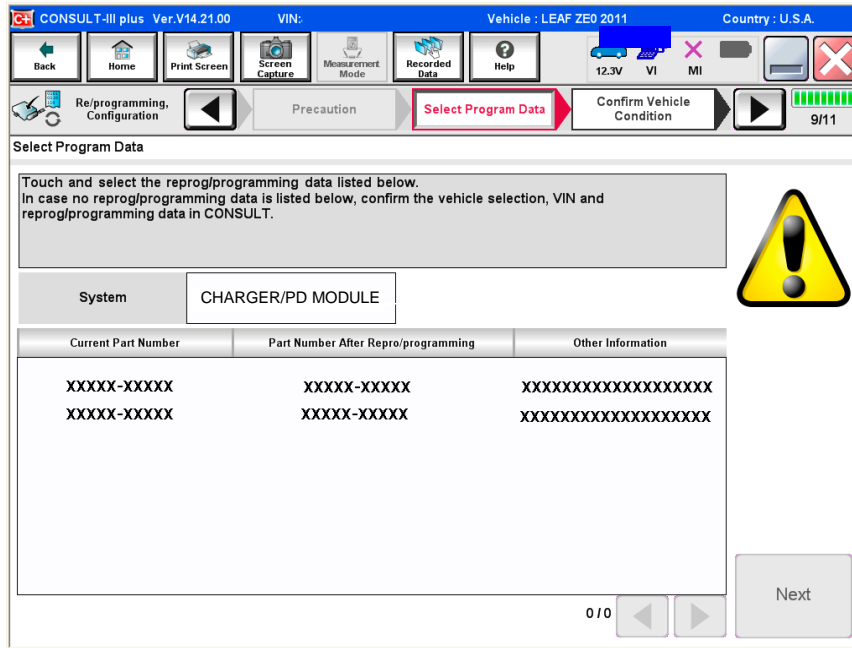


Figure 11

24. Read the Current Part Number and Part Number After Reprogramming. They should be different.

25. Select **Next**.

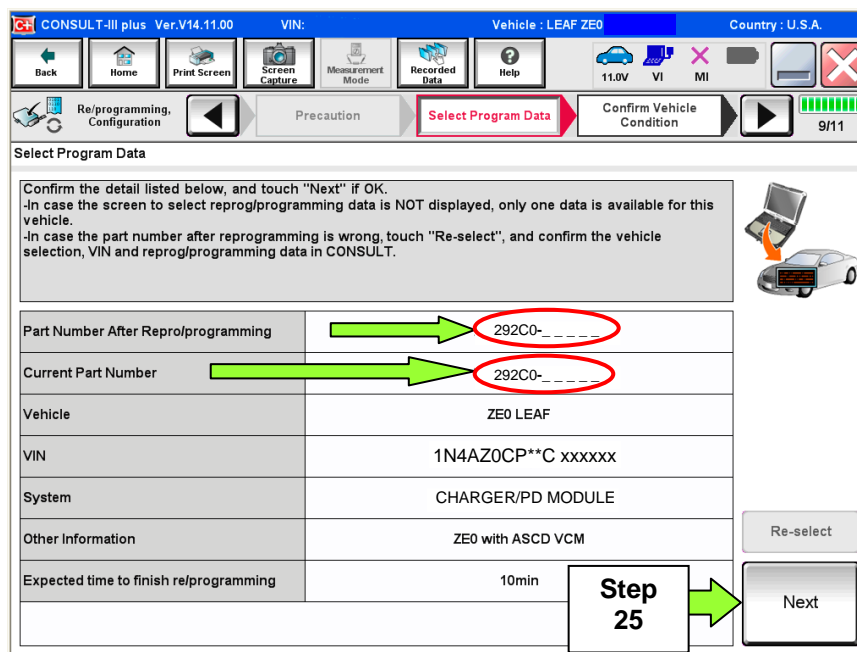


Figure 12

26. Confirm battery voltage is correct, and then select Next.

**NOTE:** Battery voltage must stay within specified range to make the indicator turn green.

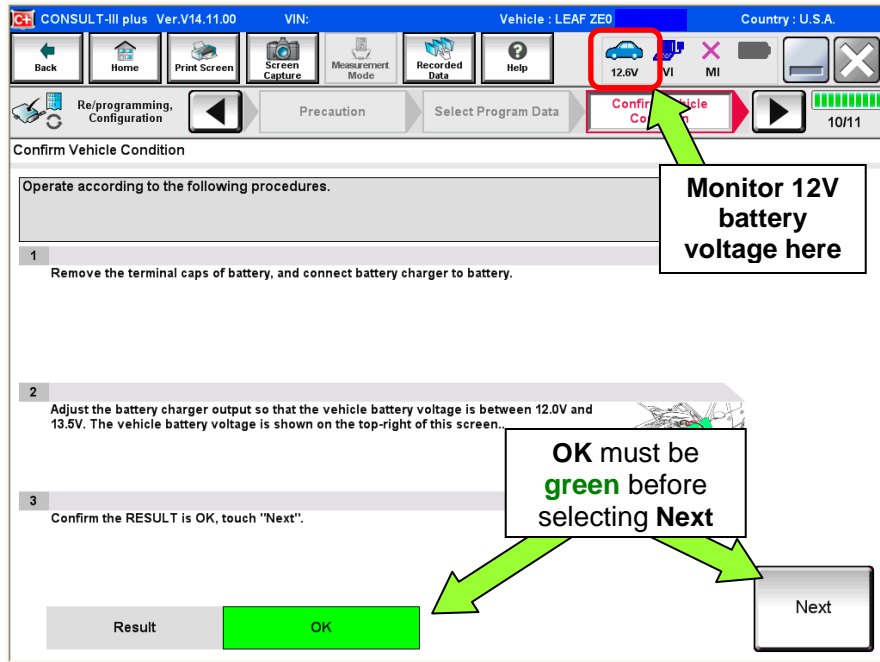


Figure 13

27. With battery voltage in the green, select **Start**.

- The reprogramming process begins when **Start** has been selected.

**NOTE:** For reprogramming to continue, vehicle 12V battery voltage must stay within 12 volts and 13.5 volts. Make sure the voltage level is sufficient.

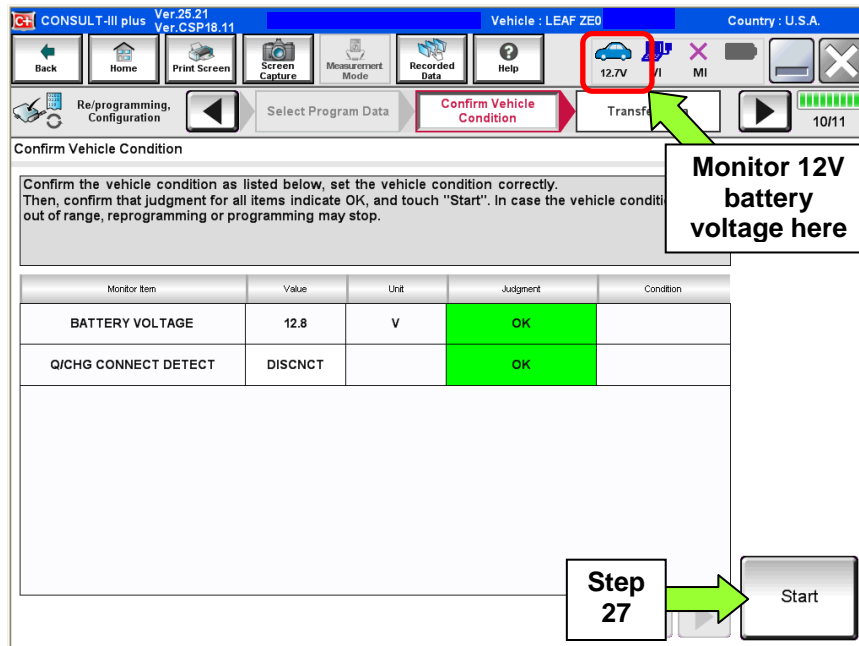


Figure 14

28. Wait for both bar graphs to complete.

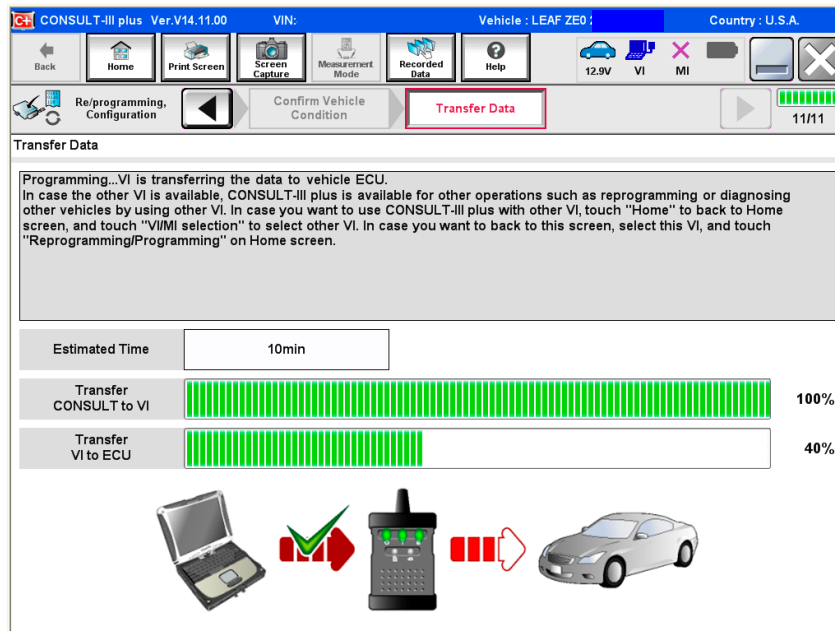


Figure 15

29. When the screen in Figure 16 displays, reprogramming is complete.

- Select **Next**, and then wait for System Call to complete.
- Proceed to step 30 on page 16.

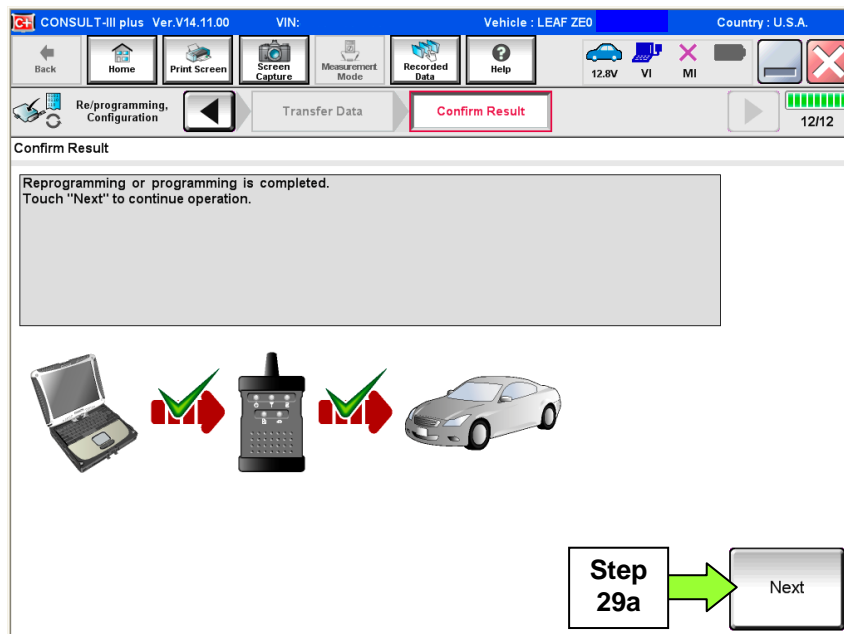


Figure 16

**NOTE:** If the reprogram will not complete, refer to the next page for “recovery” information.

## CHARGER / PD MODULE (On-Board Charger) recovery

**NOTE:** If reprogramming does not complete and the **!?** displays as shown in Figure 17:

- Check battery voltage (12.0 - 13.5V).
- Ignition is ON, Ready Mode is OFF.
- External Bluetooth® devices are OFF.
- All electrical loads are OFF.
- **Select Retry and follow the on screen instructions.**
- **Retry may not go through on the first attempt and can be selected more than once.**

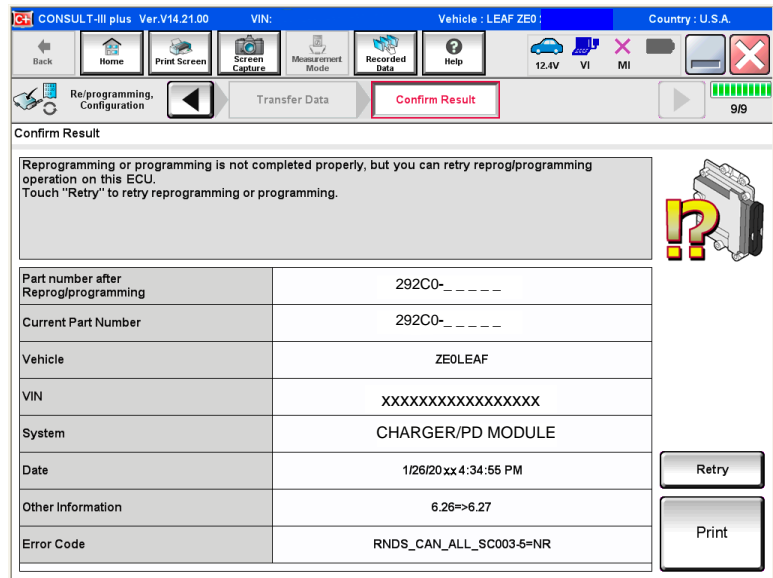


Figure 17

**OR:** If reprogramming does not complete and the **X** displays as shown in Figure 18:

**Do not disconnect plus VI or shut down Consult III plus if reprogramming does not complete.**

- Check battery voltage (12.0 - 13.5V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, Ready Mode is OFF.
- Transmission in Park.
- All C-III plus / plus VI cables are securely connected.
- All C-III plus updates are installed.
- **Select Home, and then restart the reprogram procedure from the beginning.**

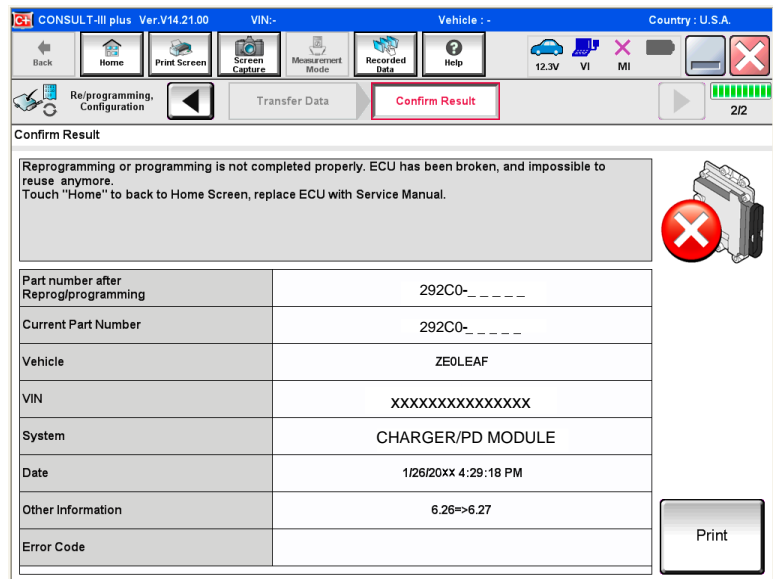


Figure 18

30. 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 once.

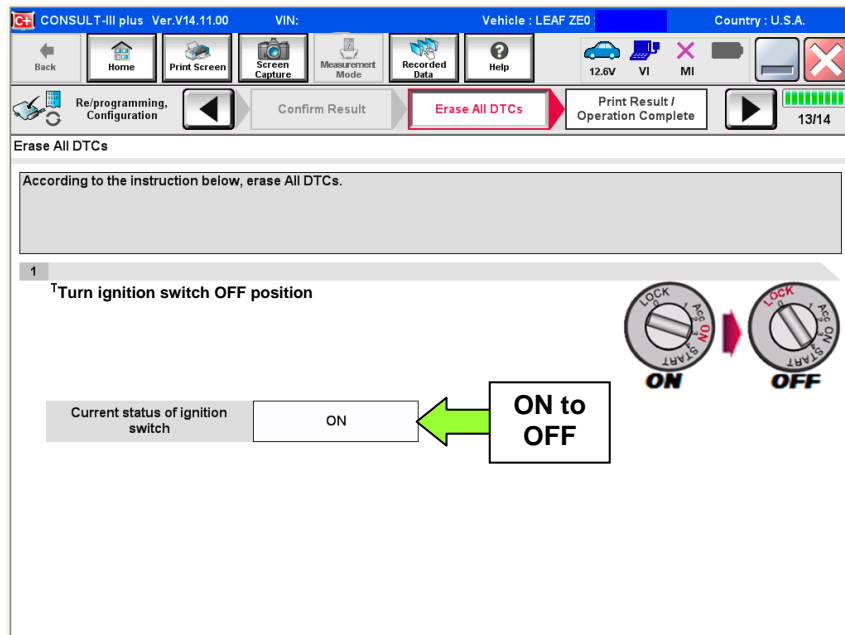


Figure 19

- b. Wait 1 minute with the ignition OFF.
- c. Turn the “ignition” on by depressing the power switch twice (not Ready mode).
  - 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.

**NOTE:** Do not be confused by any screen messages. At this point, simply turn the “ignition” on.

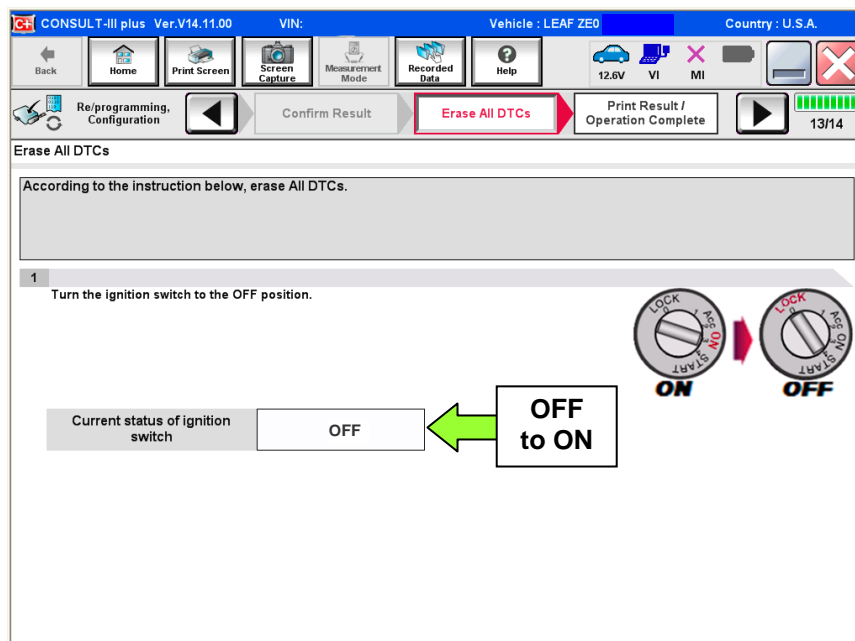


Figure 20

d. Wait for the **ERASE** function to complete.

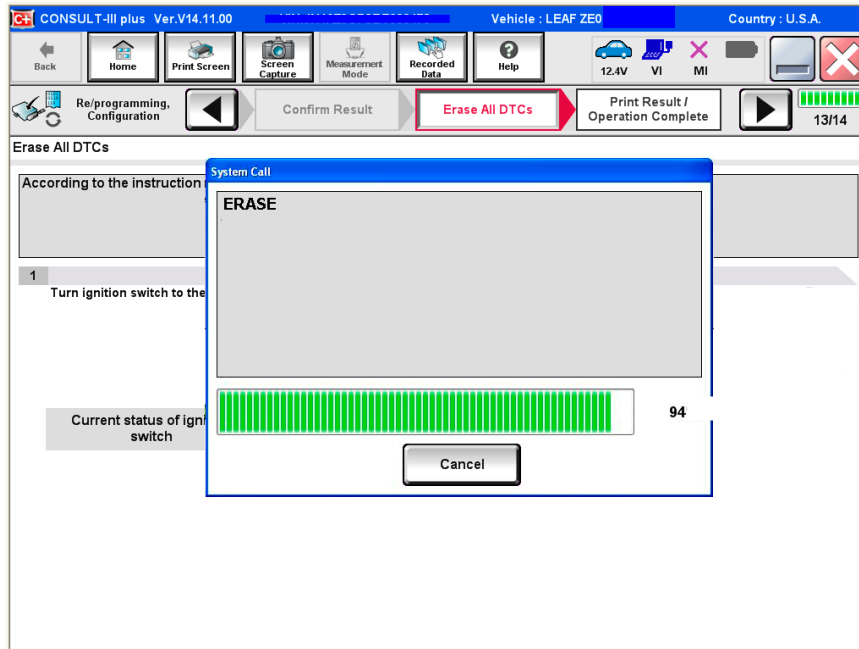


Figure 21

31 Verify the before and after part numbers are different.

32. Print a copy of this screen (Figure 22) and attach it to the repair order.

33. Select **Confirm**.

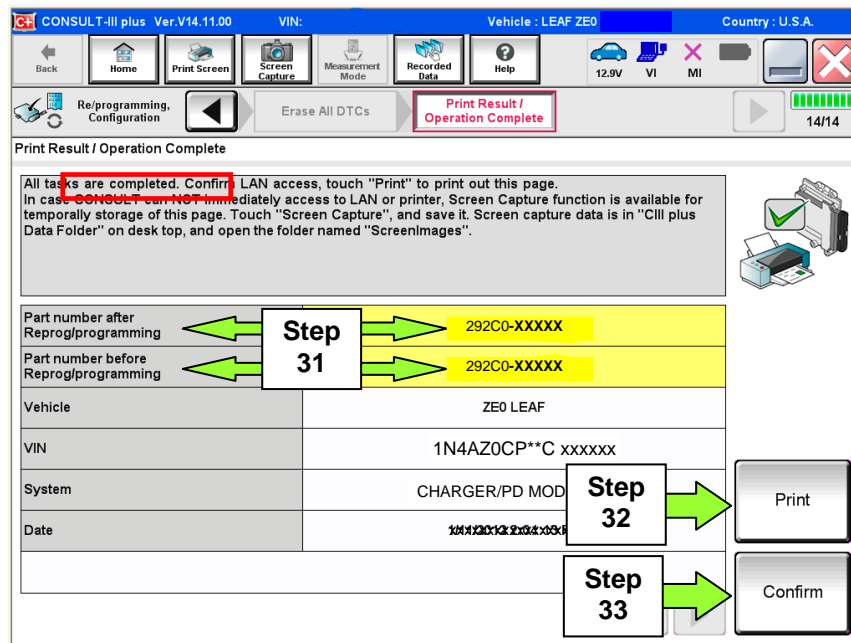


Figure 22



### 34. Select Home.

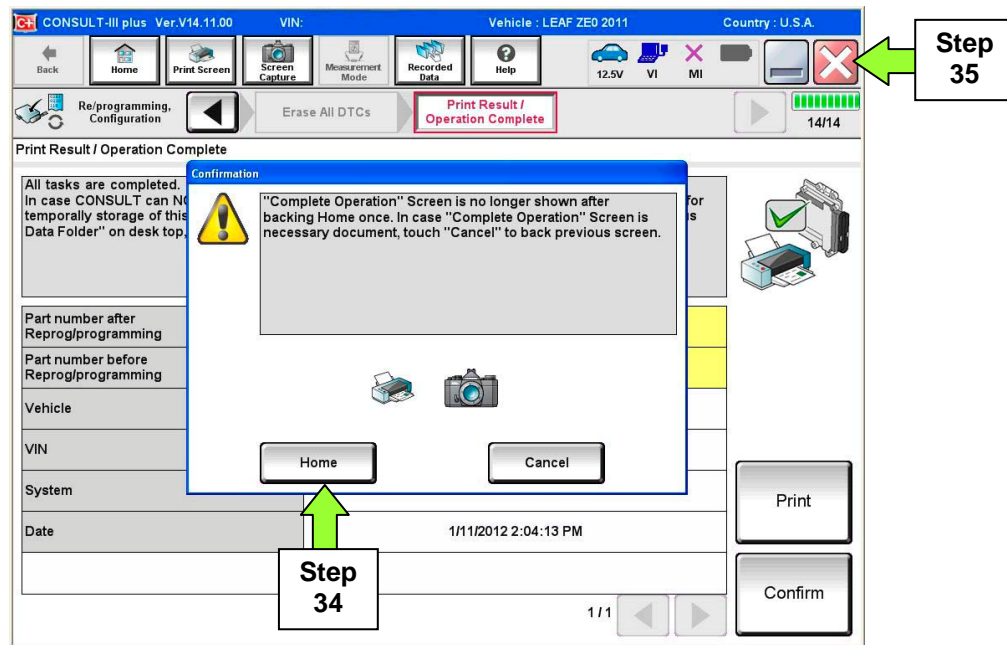


Figure 23

### 35. Close C-III plus by selecting “X” (see Figure 23).

- Do not turn off the CONSULT PC.

### 36. Turn the ignition off.

### 37. Disconnect the GR8 from the 12V battery.

### 38. Place the vehicle in “READY to drive” mode as follows:

- Apply the parking brake.
- Depress the brake pedal.
- Depress the power switch once.
- Make sure the “Ready” light is ON.

Ready to drive indicator light  
(make sure it is **ON**)



Figure 24

### 39. Open C-III plus.

40. Once the plus VI is recognized, select **Diagnosis (All Systems)**.

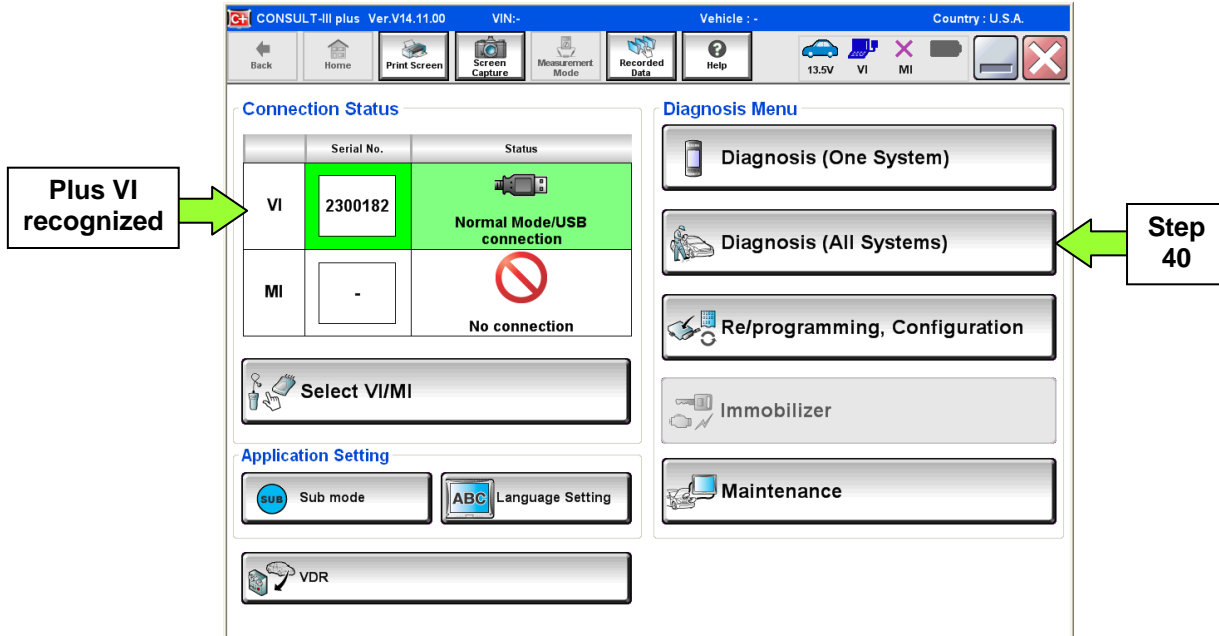


Figure 25

41. Select LEAF and 2013 or 2014, or Automatic Selection (VIN).

- If **Automatic Selection (VIN)** is selected, wait for the **Reading VIN** screen to complete.
- If the screen in Figure 26 does not display, skip to step 43.

42. Select **Select** or **Detect Vehicle**, whichever displays.

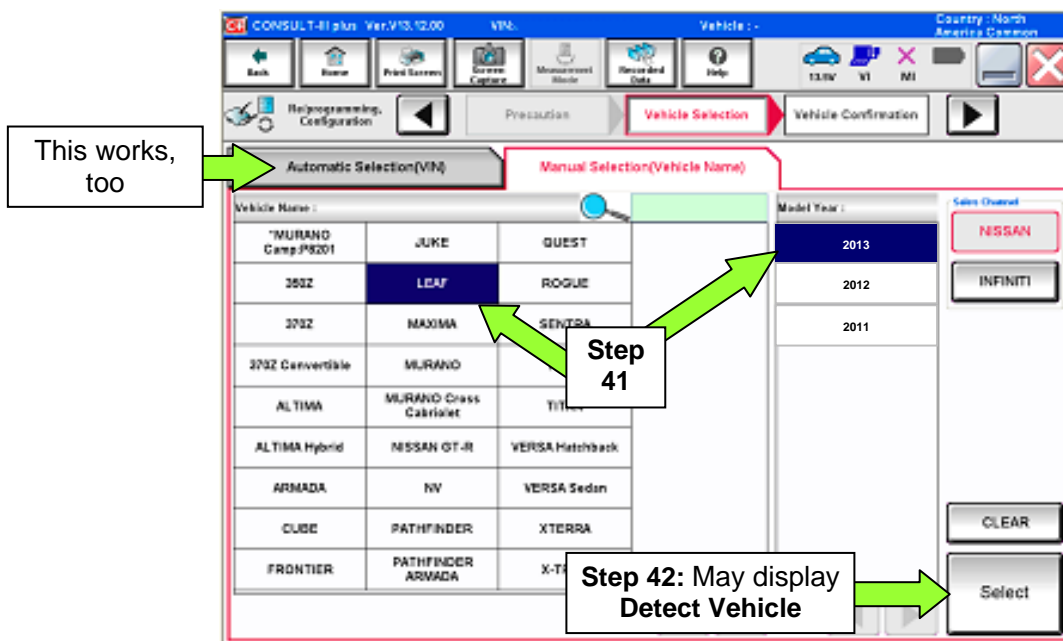


Figure 26

43. Verify the VIN in **VIN or Chassis #** matches that of the vehicle.

- If the VIN is correct, select **Confirm**.

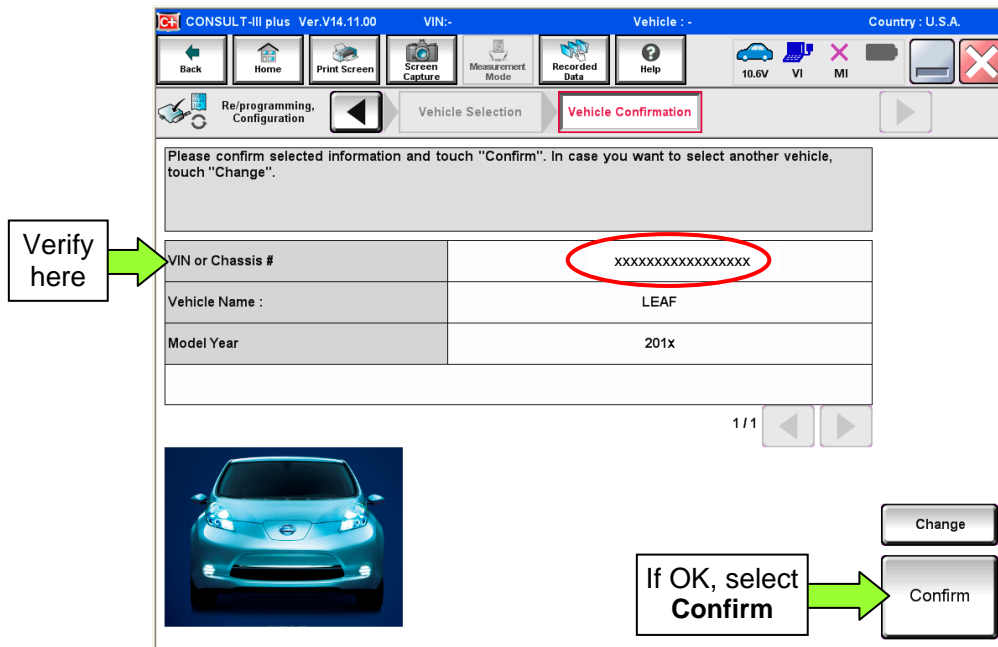


Figure 27

44. Wait for System Call to complete.

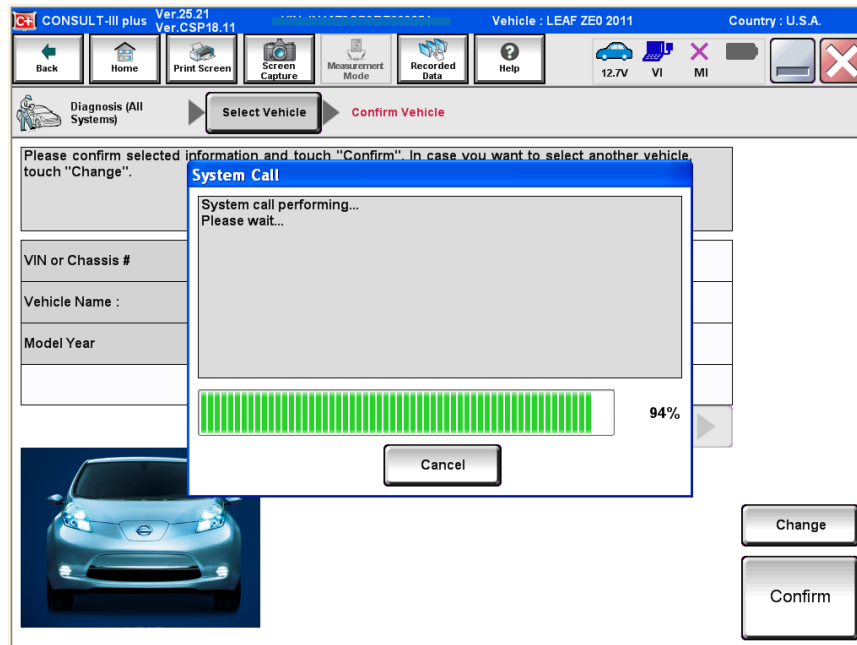


Figure 28

45. If DTCs are present, select **ERASE**.

- If no DTCs are present, skip to step 48.

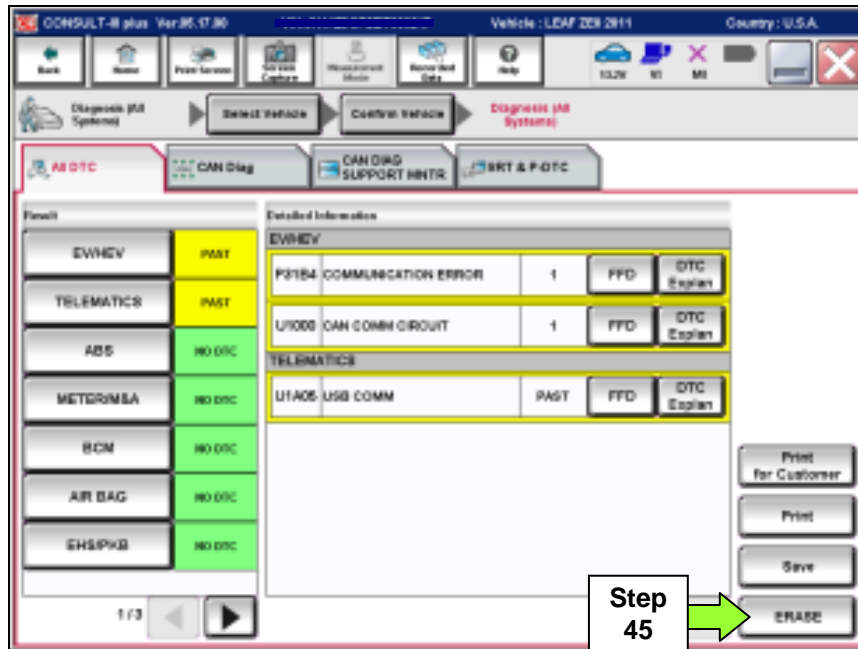


Figure 29

46. Select **ERASE**.

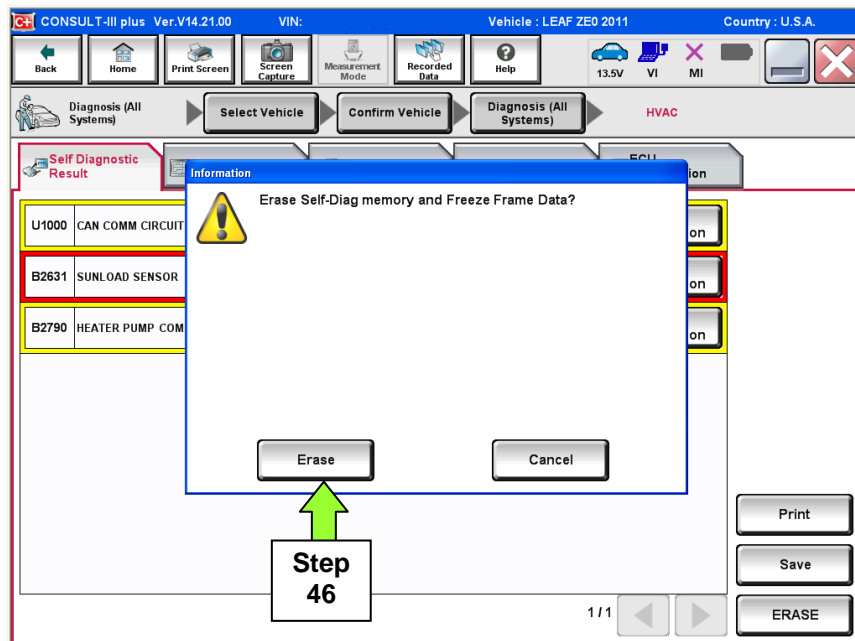


Figure 30

47. Select **Close**.

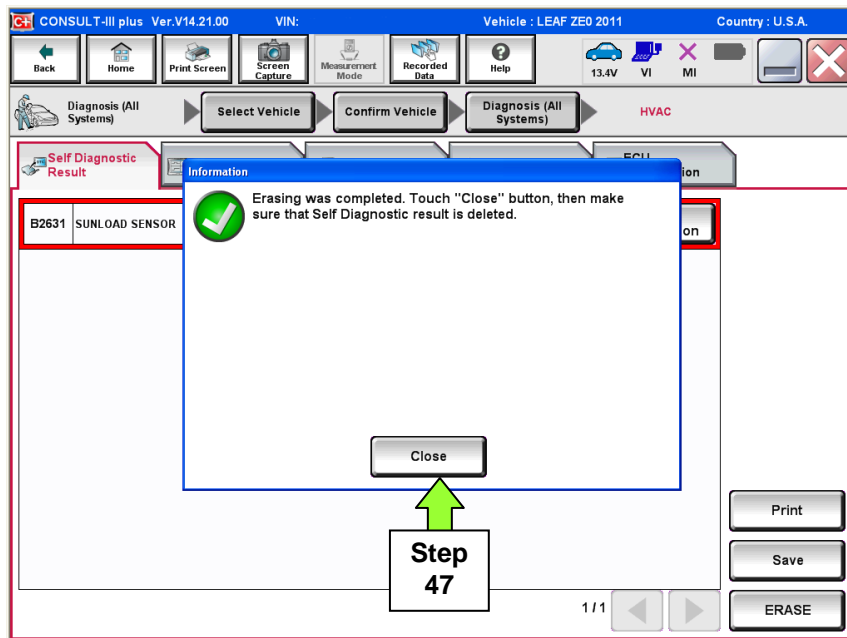


Figure 31

48. Using the arrow keys, select page **3/3**, and then select **HVAC**.

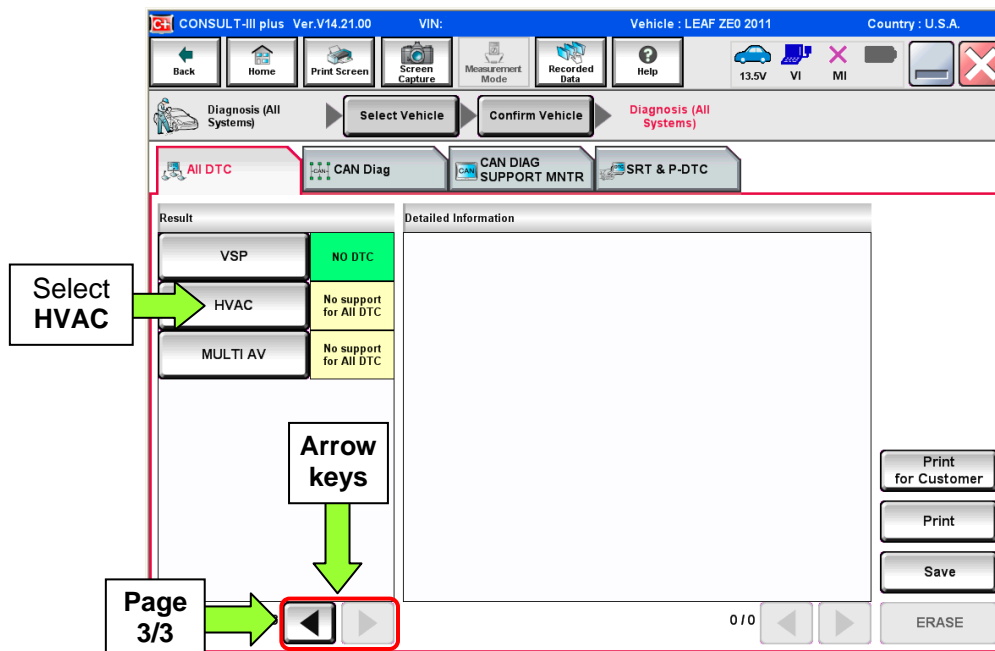


Figure 32

49. Select **ERASE**.

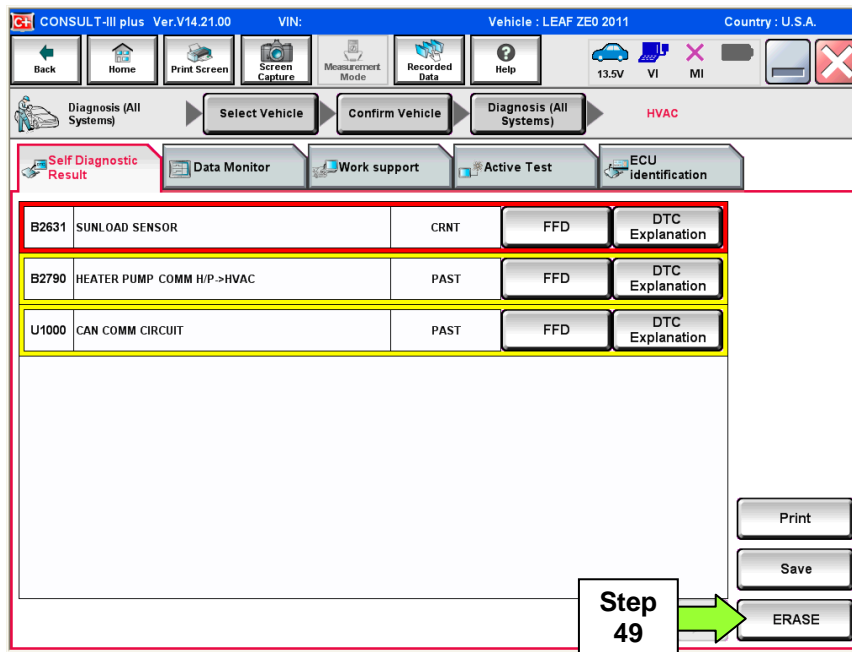


Figure 33

50. Select **ERASE**.

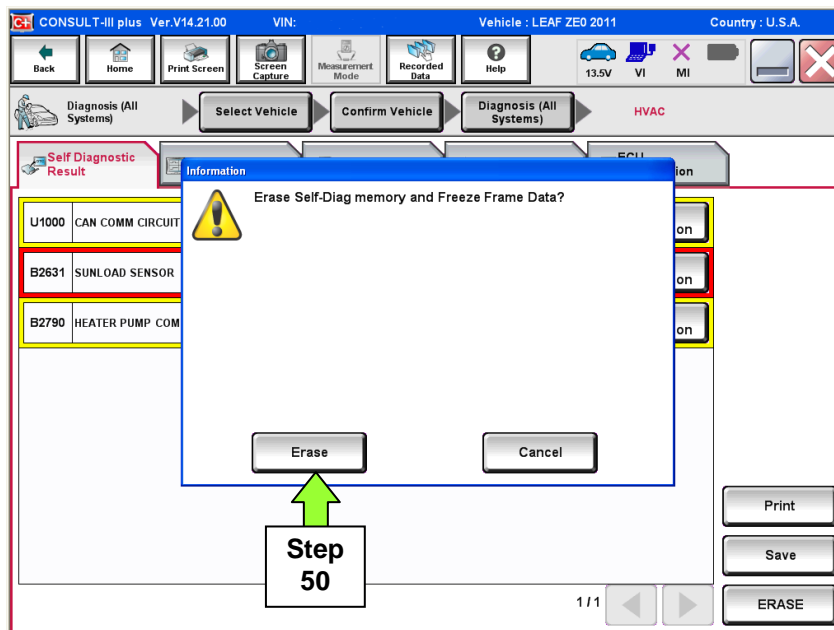


Figure 34

51. Select **Close**.

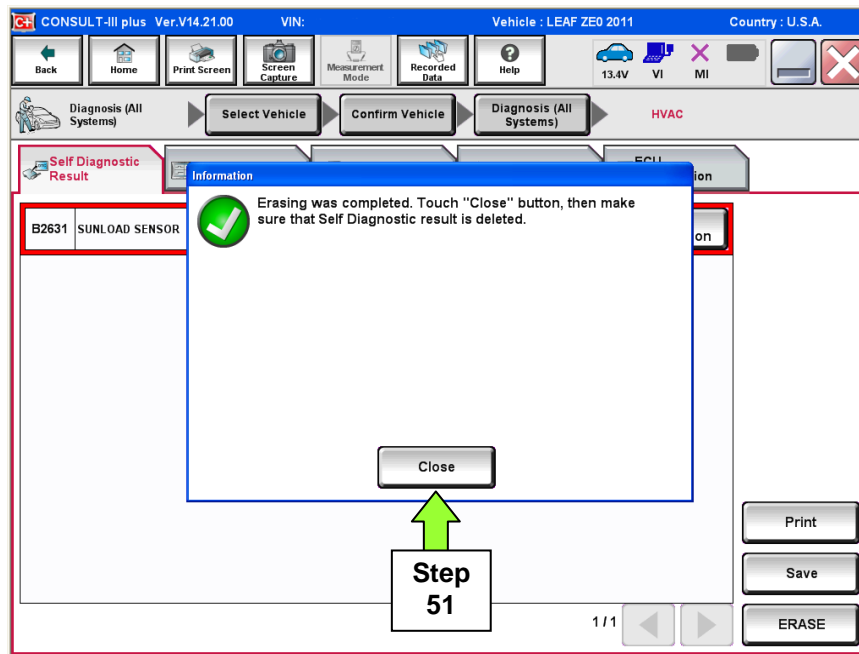


Figure 35

**NOTE:** If DTC B2631 (SUNLOAD SENSOR) sets again, this is okay.

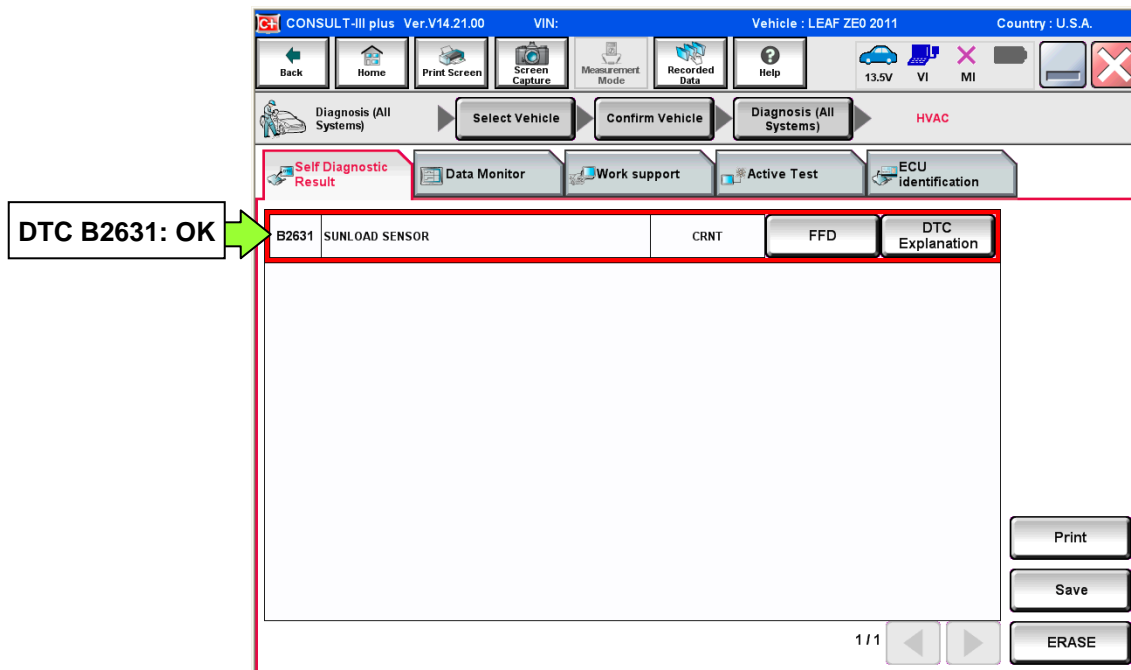


Figure 36

52. Select **Back**.

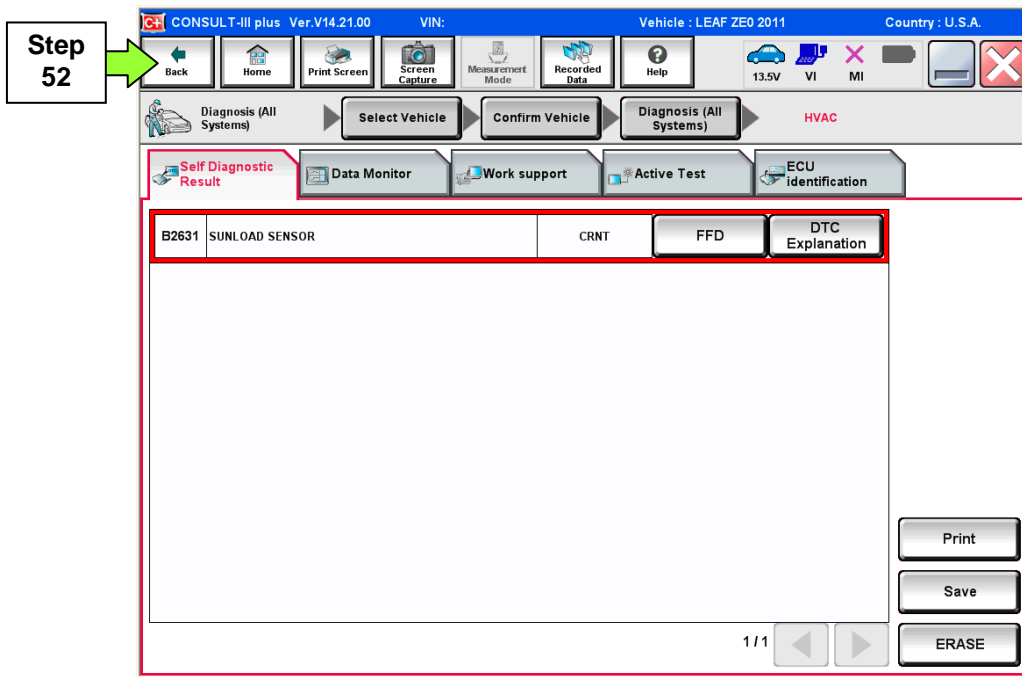


Figure 37

53. Using the arrow keys, go to page **3/3**, and then select **MULTI AV**.

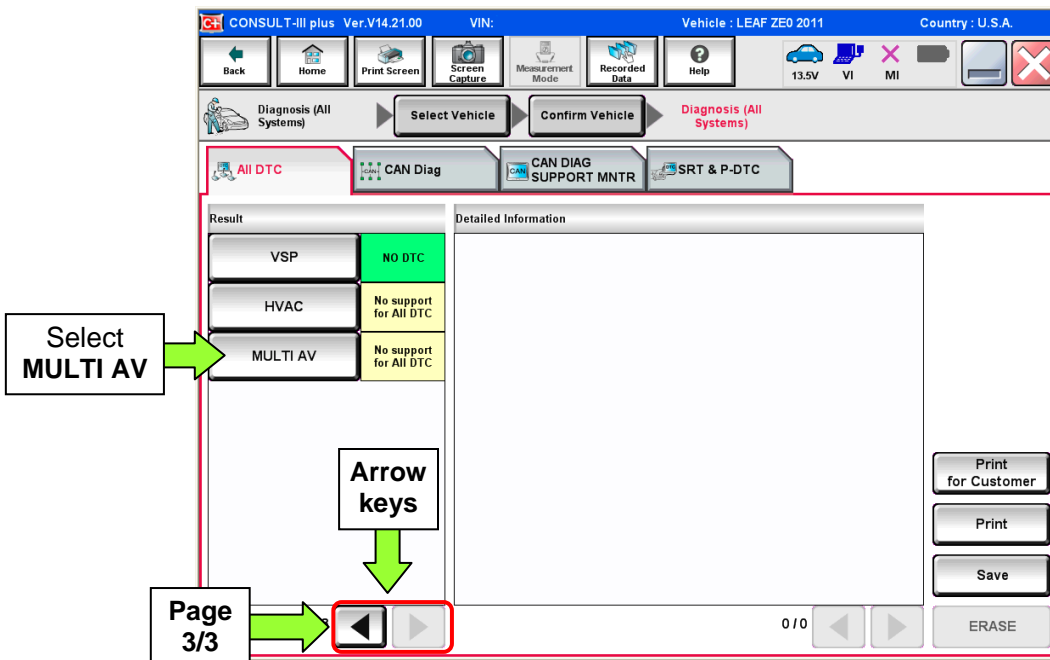


Figure 38



54. Select **ERASE**.

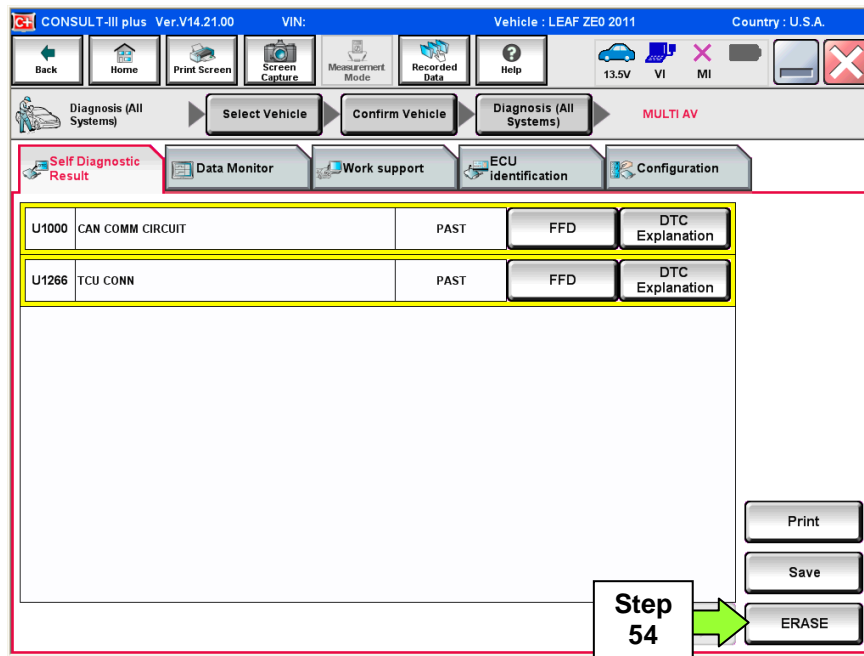


Figure 39

55. Select **Erase**.

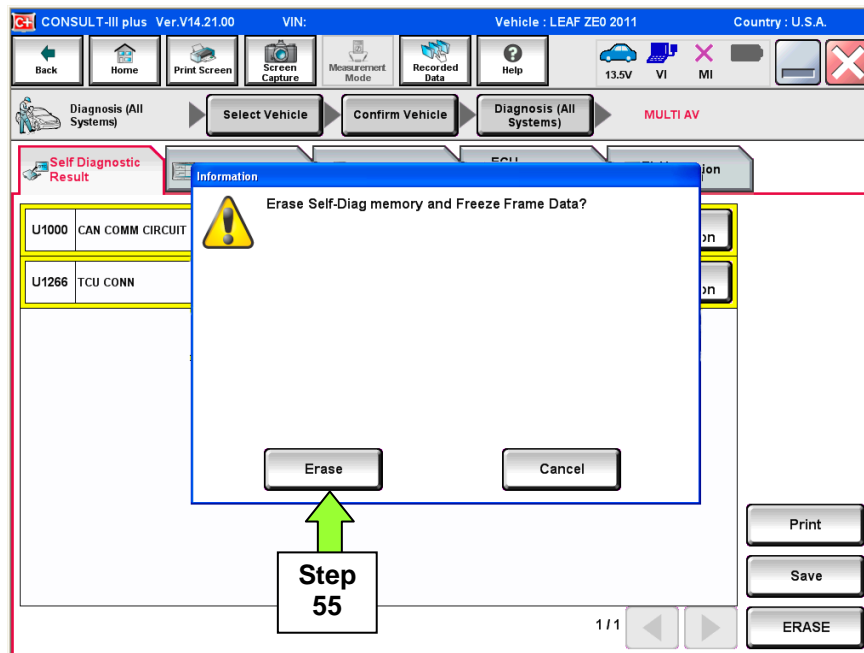


Figure 40

56. Select **Close**.

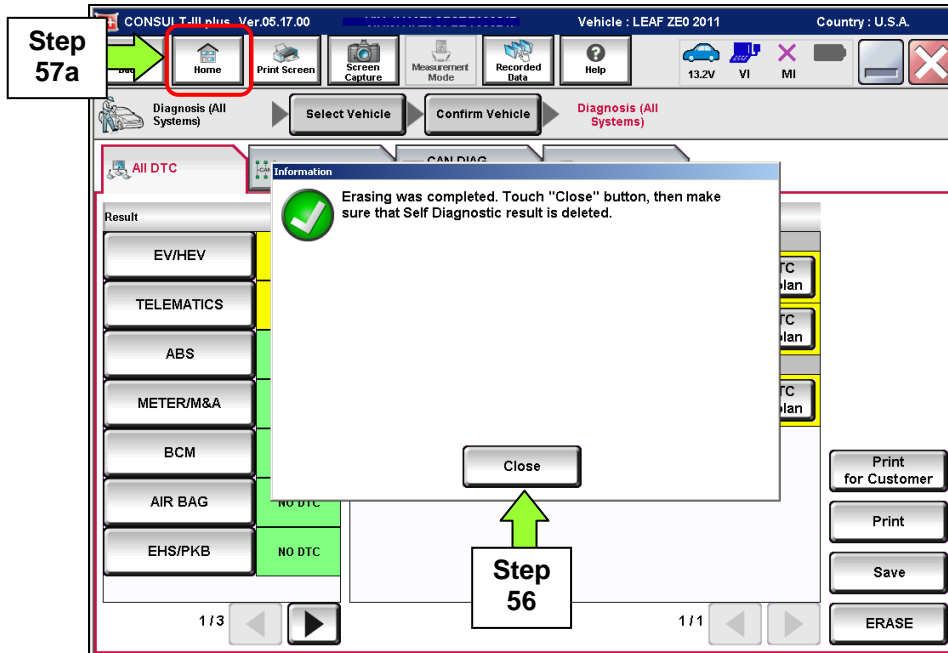


Figure 41

57. Once all DTCs have been erased turn “ignition” off (depress power switch once).

58. Select **Home**, and then on the next screen select **Yes** (screen not shown).

59. Now place the vehicle in “READY to drive” mode (press power switch while stepping on the brake pedal).

60. Verify the repair is complete:

After 30 seconds in “READY to drive” mode, confirm that the 12V battery voltage starts to increase. This can be monitored at the top of the C-III plus **Home** screen (Figure 41).

- If the voltage increases proceed to step 61.
- If the voltage does not increase or drops and DTC P0A94 is set, refer the ESM section **VC – Vehicle Charging System** for further diagnostics.

61. Close C-III plus, turn off the CONSULT PC, and then disconnect the CONSULT PC and plus VI from the vehicle.

62. Verify no additional error messages are displayed in the meter and gauges or center multi-function control panel.

63. 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:**

<b>DESCRIPTION</b>	<b>PFP</b>	<b>OP CODE</b>	<b>SYM</b>	<b>DIA</b>	<b>FRT</b>
Reprogram Charger/ PD Module	(1)	JX24AA	ZE	32	0.5

(1) Reference the repair order and use the **current** PDM P/N (292C0-xxxxx) from step 20 of the Service Procedure as the PFP.

