Technical Bulletin

SERVICE BULLETIN

Classification:	Reference:	Date:
EL18-018b	NTB18-045b	September 28, 2018

2011-2015 LEAF; 12 VOLT BATTERY LOSES CHARGE AND/OR TELEMATICS SERVICES DO NOT WORK

**This bulletin has been amended. See AMENDMENT HISTORY on the last page.
Please discard previous versions of this bulletin.**

APPLIED VEHICLES: 2011-2015 LEAF (ZE0)
APPLIED SYSTEM: Vehicles equipped with a 3G Telematics control unit

IF YOU CONFIRM

The 12 volt battery continuously loses its charge,

and/or

Remote Telematics services do not work.

NOTE: DTCs P3131 (SYSTEM SHUTOFF ERROR) and/or P31C2 (TCU) may be found stored.

ACTION

1. Refer to step 2 on page 2 of the SERVICE PROCEDURE to confirm this bulletin applies to the vehicle being worked on.

2. If this bulletin applies, reprogram the Telematics control unit (TCU).

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.

SERVICE PROCEDURE

This SERVICE PROCEDURE contains two (2) sections:

Section 1 – **Check the TCU Part Number** (this page)

Section 2 – **TCU Reprogramming (includes turning the TCU OFF and ON)** (next page)

Check the TCU Part Number

1. With CONSULT-III plus (C-III plus), go to **Diagnosis (One System) > System Selection > TELEMATICS > ECU identification**.

2. When you get to the screen shown in Figure 1, confirm this bulletin applies as follows.

   A. Find the TCU **Part Number** and write it on the repair order.

      NOTE: This is the <u>current</u> TCU Part Number (P/N).
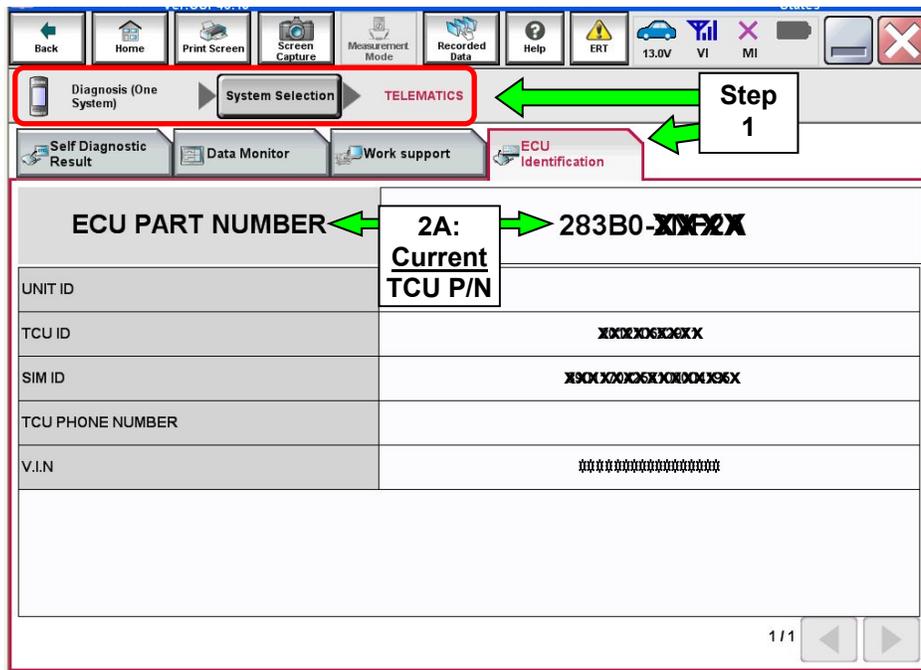
Figure 1

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

   - If there is a <u>match</u>, this bulletin applies. Go to **TCU Reprogramming (includes turning the TCU OFF and ON)** on the next page.

   - If there is <u>not a match</u>, <u>this bulletin does not apply</u>. Refer to ASIST for further diagnostic and repair information.

Table A

MODEL	CURRENT TCU PART NUMBER: 283B0-
LEAF	3NA1A, 3NA2A, 3NF2A

TCU Reprogramming (includes turning the TCU OFF and ON)

IMPORTANT: Before starting, make sure:

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

Turn OFF the TCU

1. Connect the plus VI to the vehicle.

   - Make sure to use the correct VI for C-III plus (plus VI).

   > **CAUTION: Make** sure the plus VI is securely connected. If the plus VI connection is loose during reprogramming, the process may be interrupted and the **TCU 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 may be interrupted and the **TCU may be damaged**.

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

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

4. Put the vehicle in "Ready" mode.

   - The high voltage system will maintain the 12 volt battery.

   > **CAUTION** : Make sure the battery voltage stays between 12.0 and 15.5 volts during reprogramming. If the battery voltage goes out of this range during reprogramming, the **TCU may be damaged**.

5. Turn OFF all vehicle electrical loads such as exterior lights, interior lights, HVAC, blower, rear defogger, audio, NAVI, seat heater, steering wheel heater, etc.

   > **IMPORTANT:** Make sure to turn OFF all vehicle electrical loads. Make sure the battery voltage stays between 12.0 and 15.5 volts during reprogramming. If the battery voltage goes out of this range during reprogramming, the **TCU may be damaged**.

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6. Turn ON the CONSULT PC.

7. Select (open) C-III plus.

8. Wait for the plus VI to be recognized.

   - The serial number (**Serial No.**) will display when the plus VI is recognized.
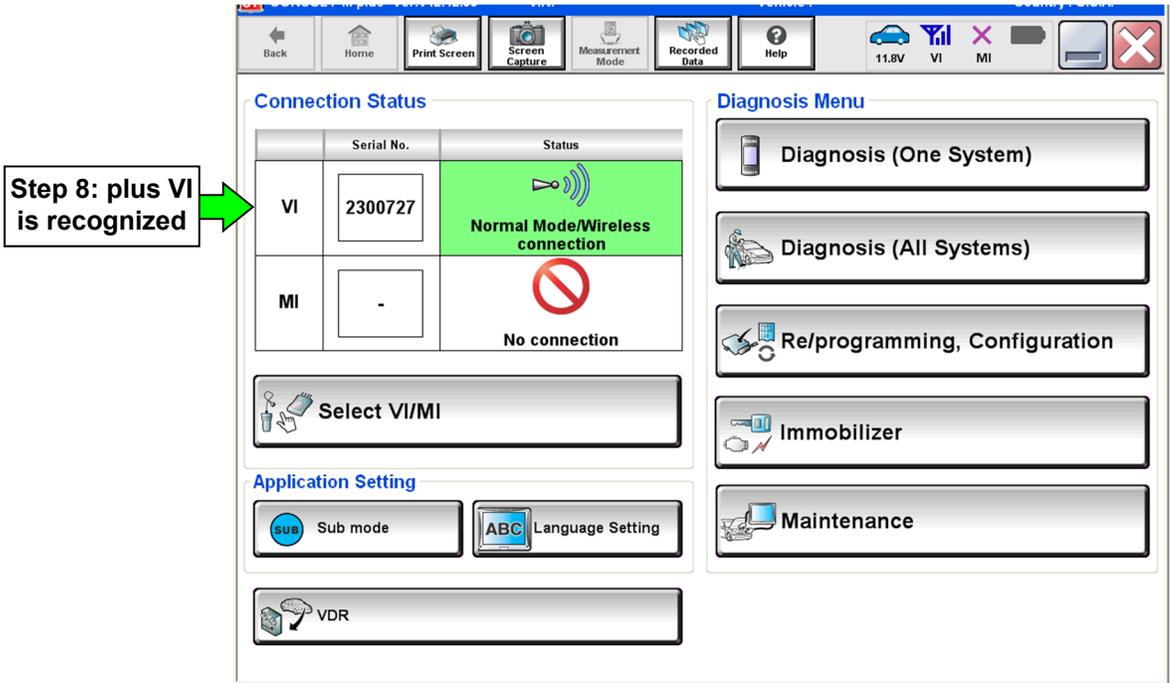
Figure 2

9. Select **Diagnosis (One System)**.

Figure 3

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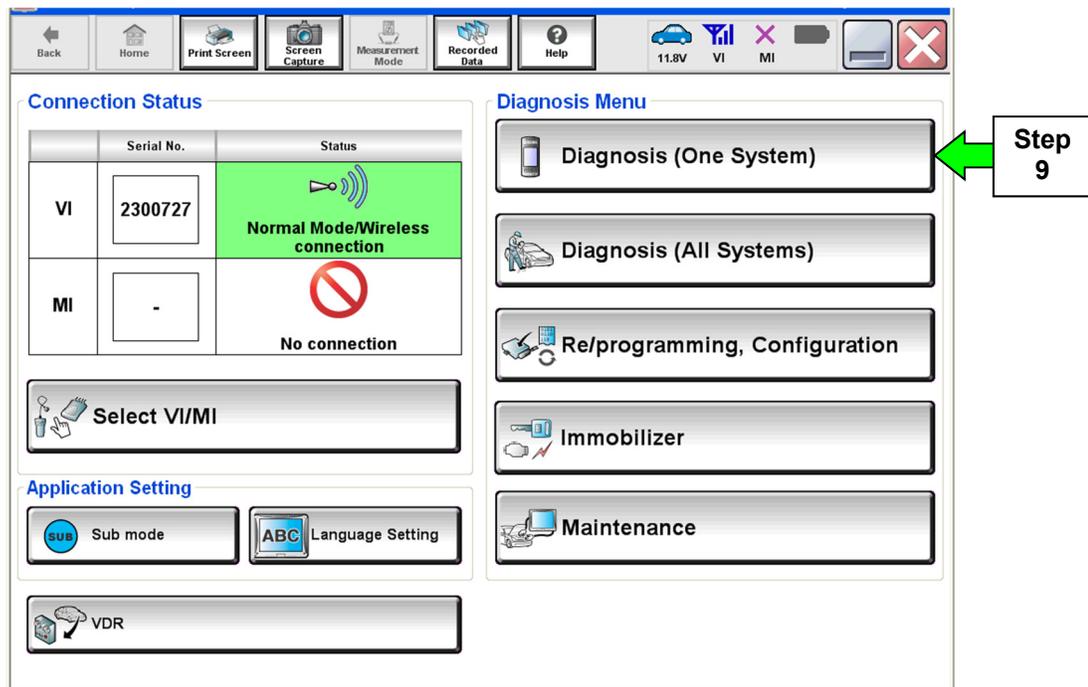
10. Select **Telematics**.
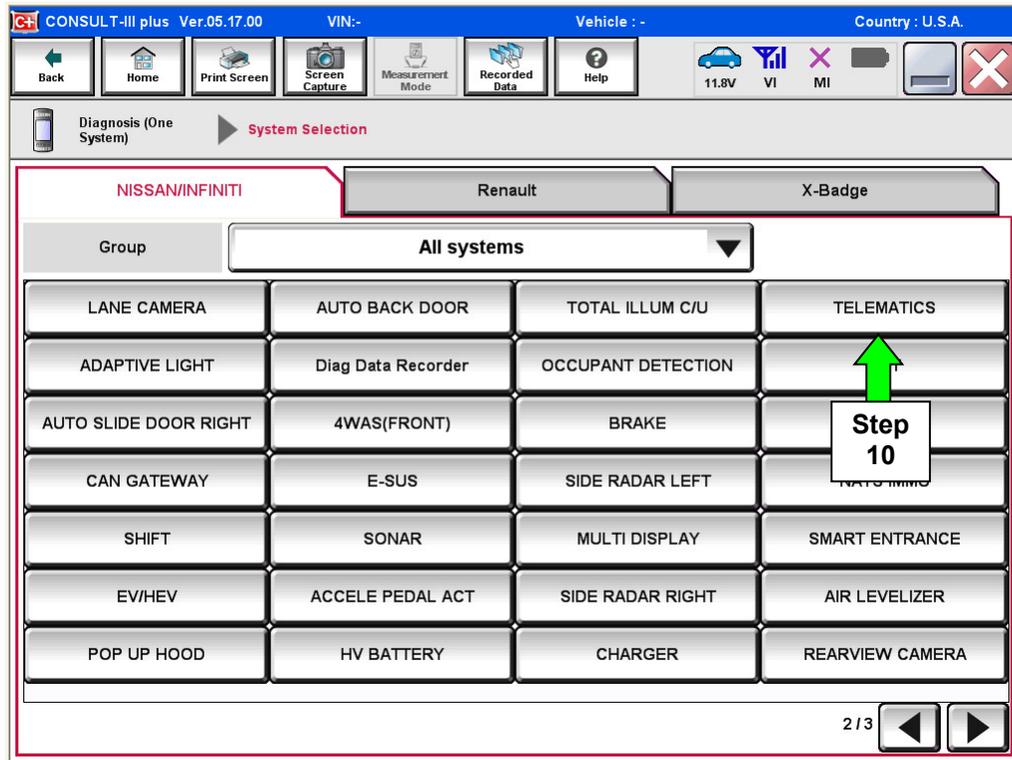
Figure 4

11. Select **Work Support**.

Figure 5

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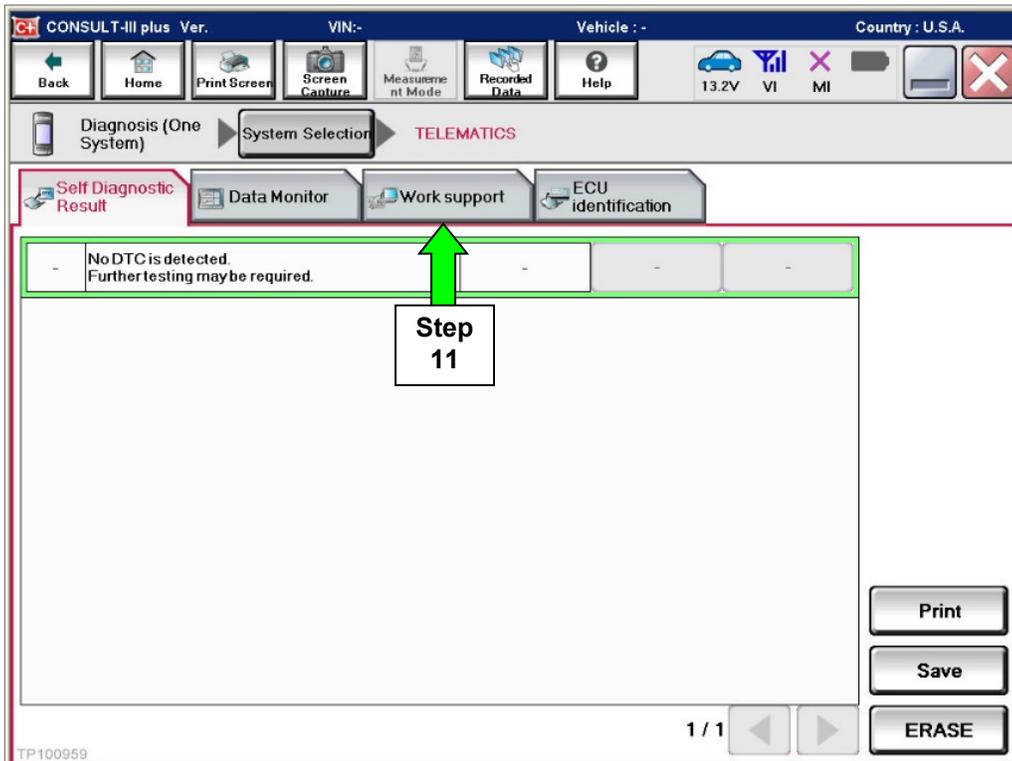
12. Select (highlight) **TCU ACTIVATE SETTING**.
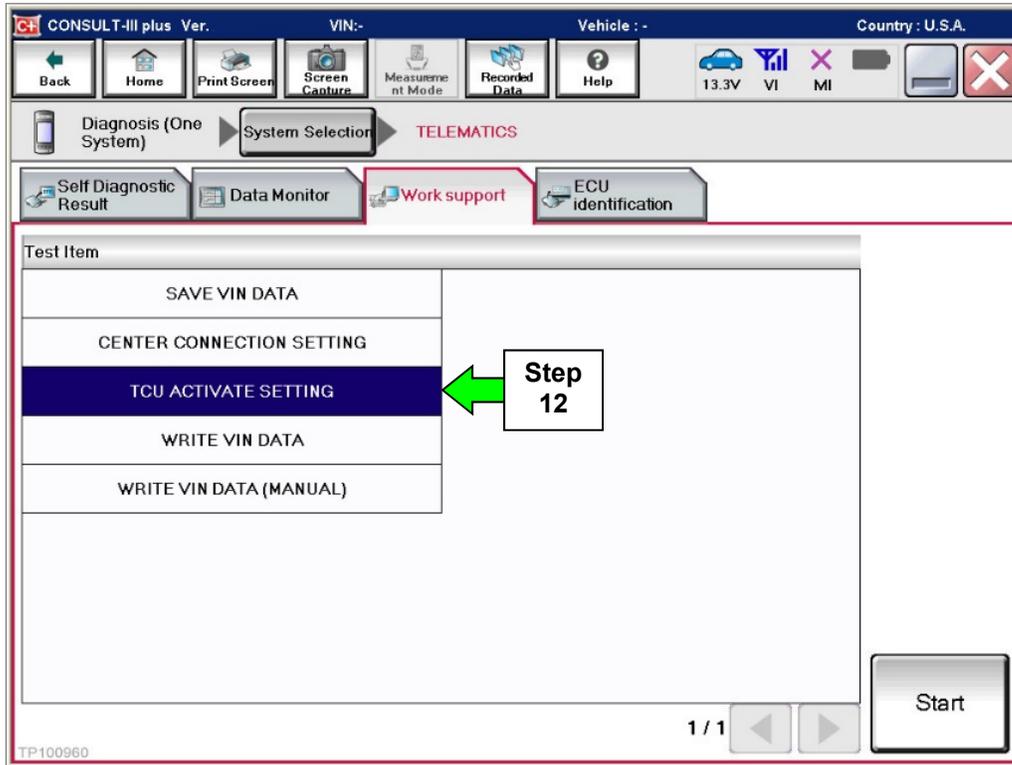
Figure 6

13. Select **Start**.

Figure 7

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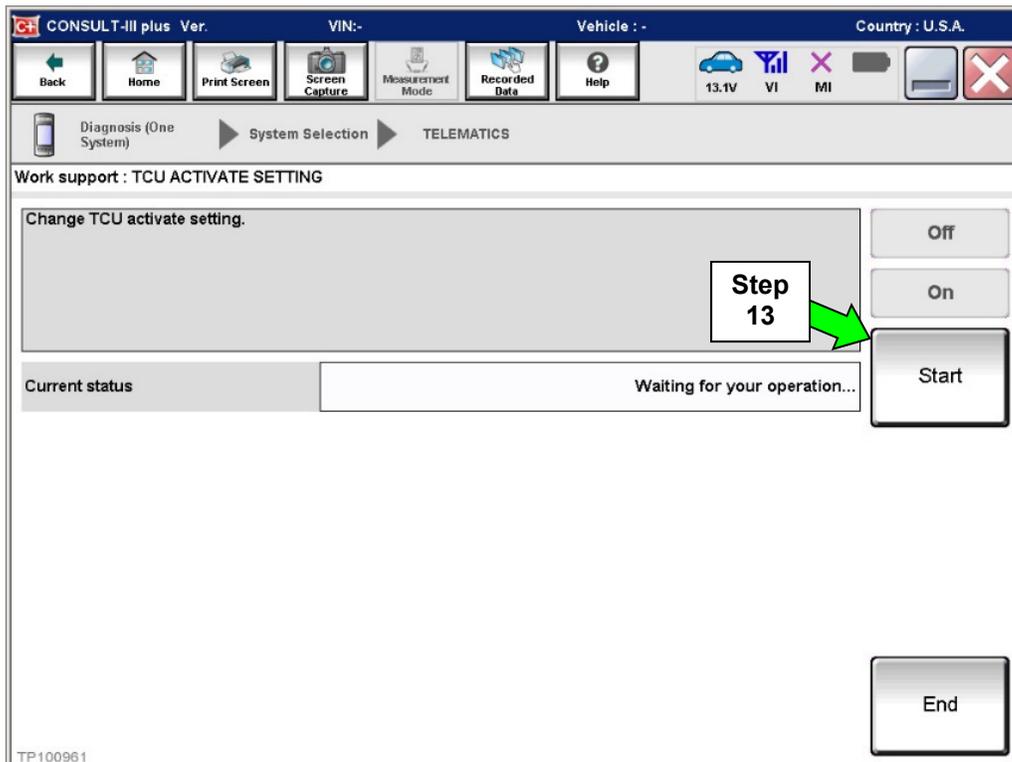
14. Select **OFF**.

15. Select **END**, and then wait 40 seconds.
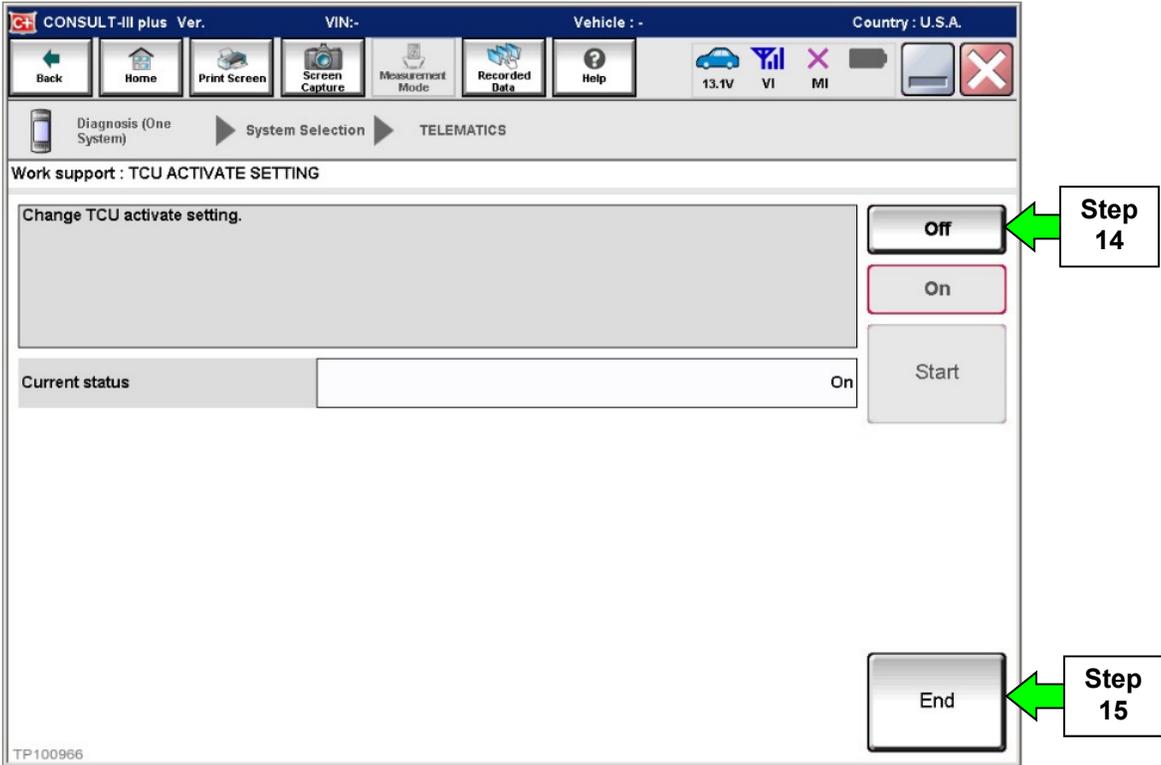
Figure 8

16. Select **Home**, and then go to the next page.
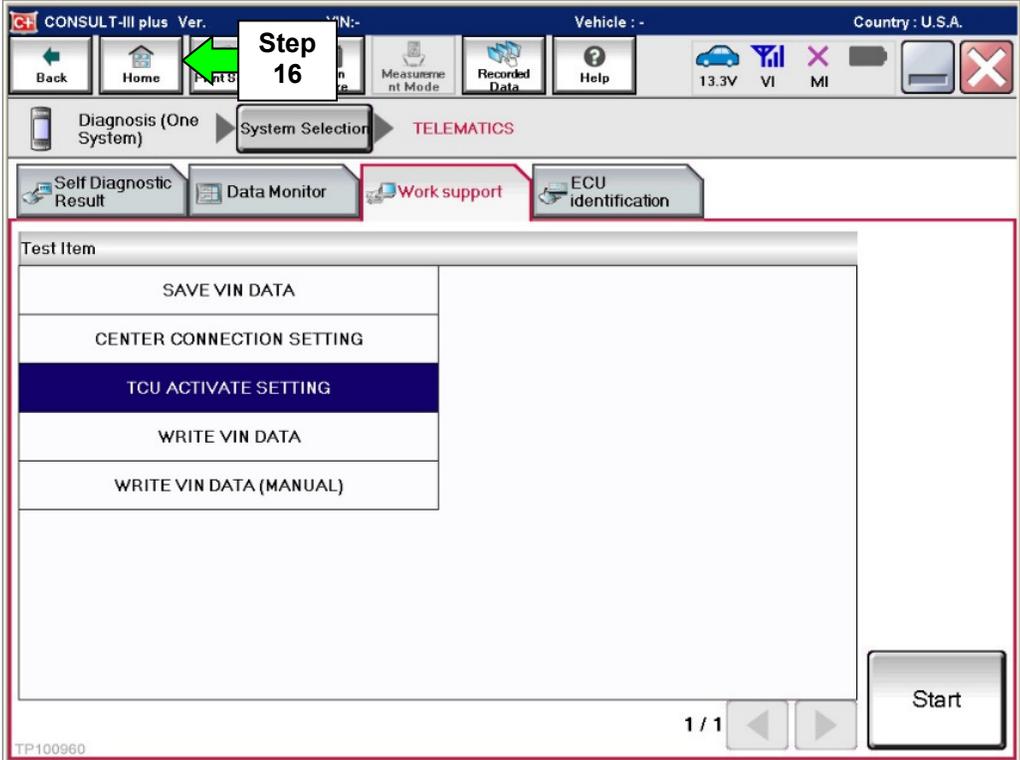
Figure 9

TCU Reprogramming

1. Select **Re/programming, Configuration**.
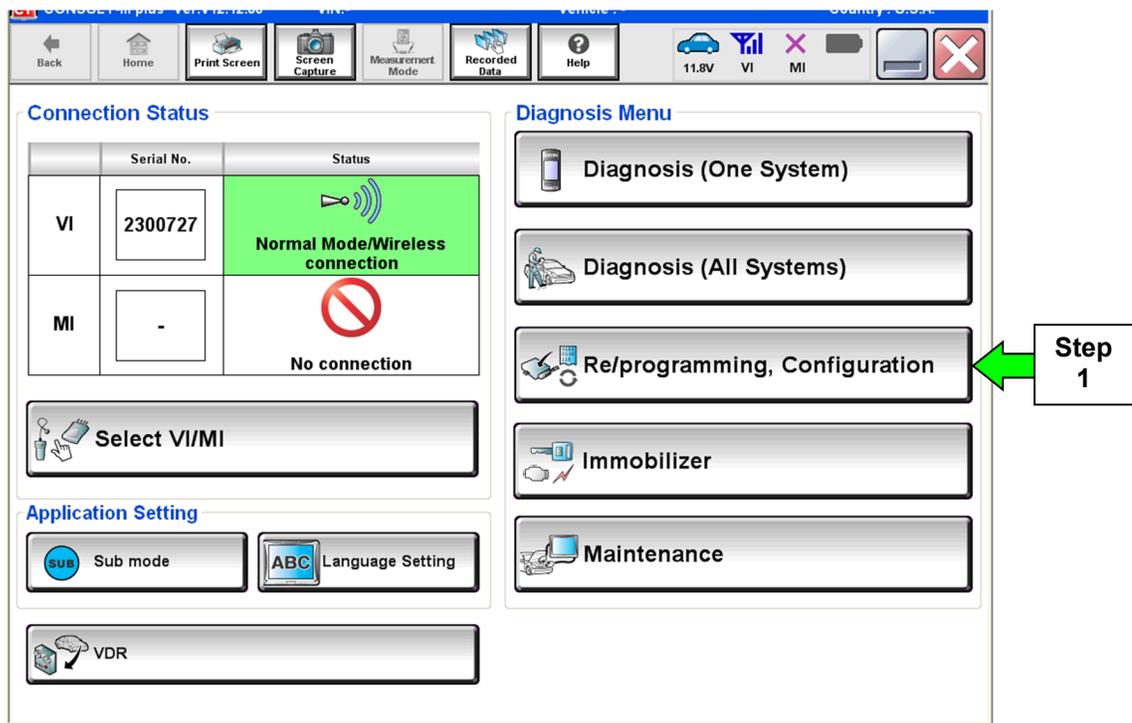
Figure 10

2. Use the arrows (if needed) to view and read all precautions, check the **Confirmed instructions** box, and then select **Next**.
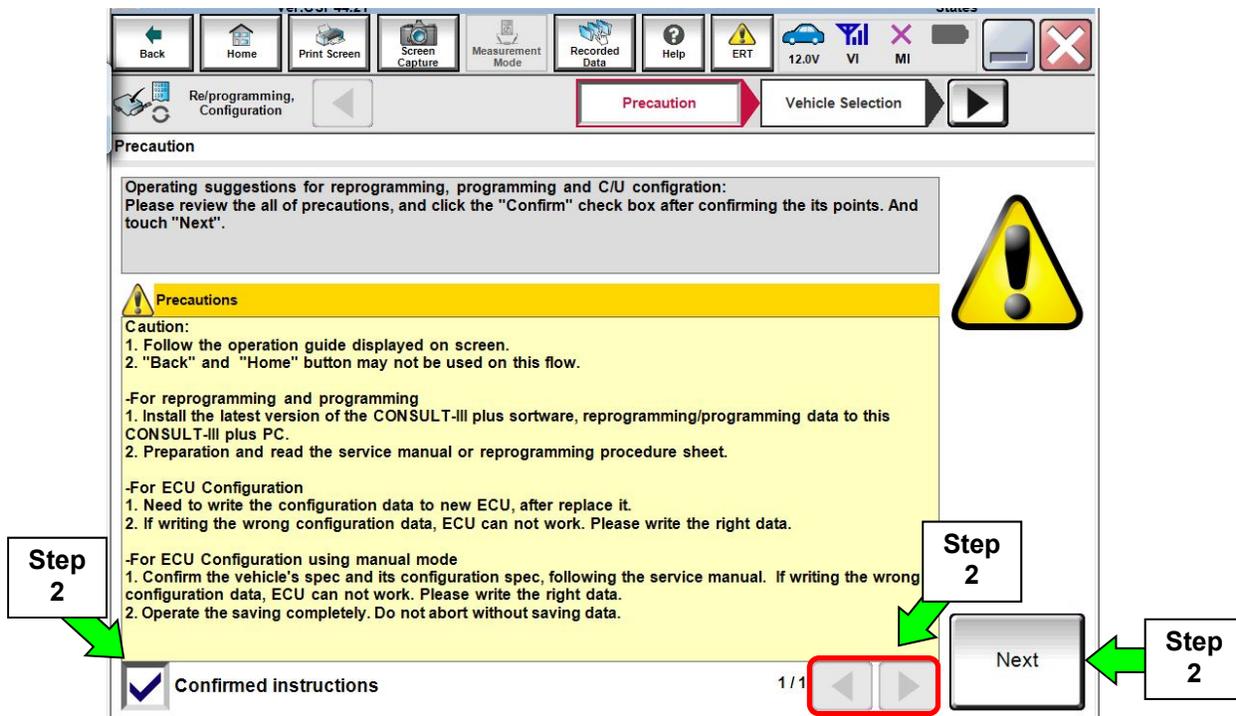
Figure 11

3. Select **Automatic Selection(VIN)**.

- If the screen in Figure 12 does not display, skip to step 4.
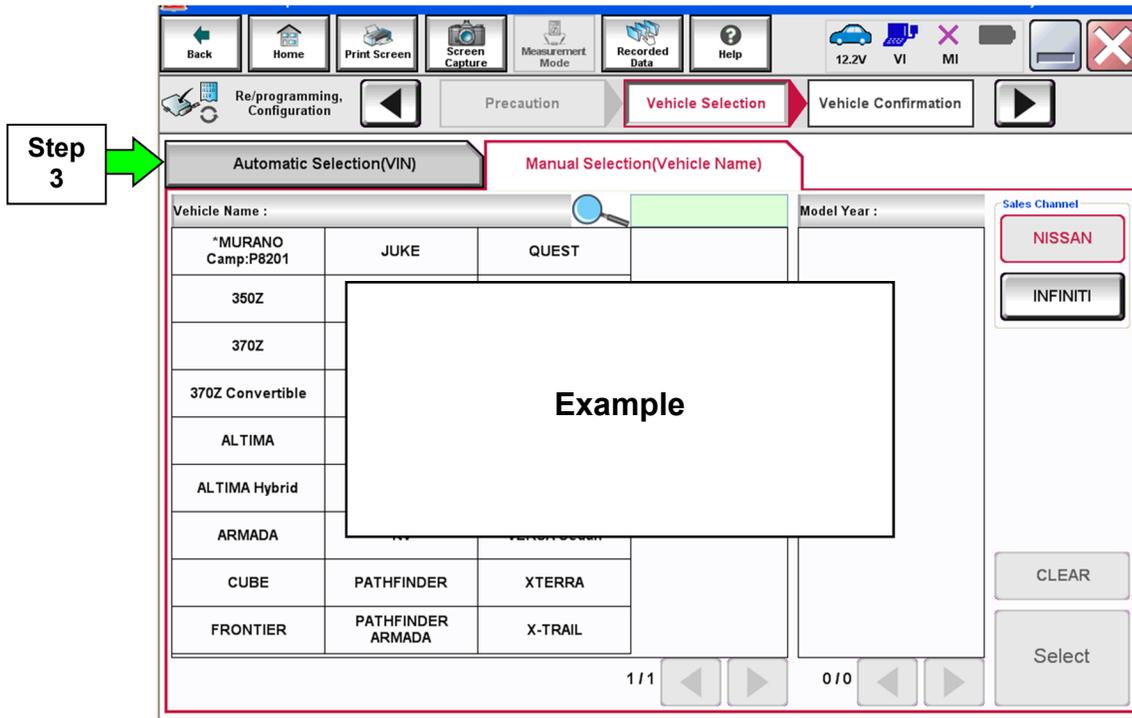
Figure 12

4. If the **VIN or Chassis #** matches the vehicle's VIN, select **Confirm**.
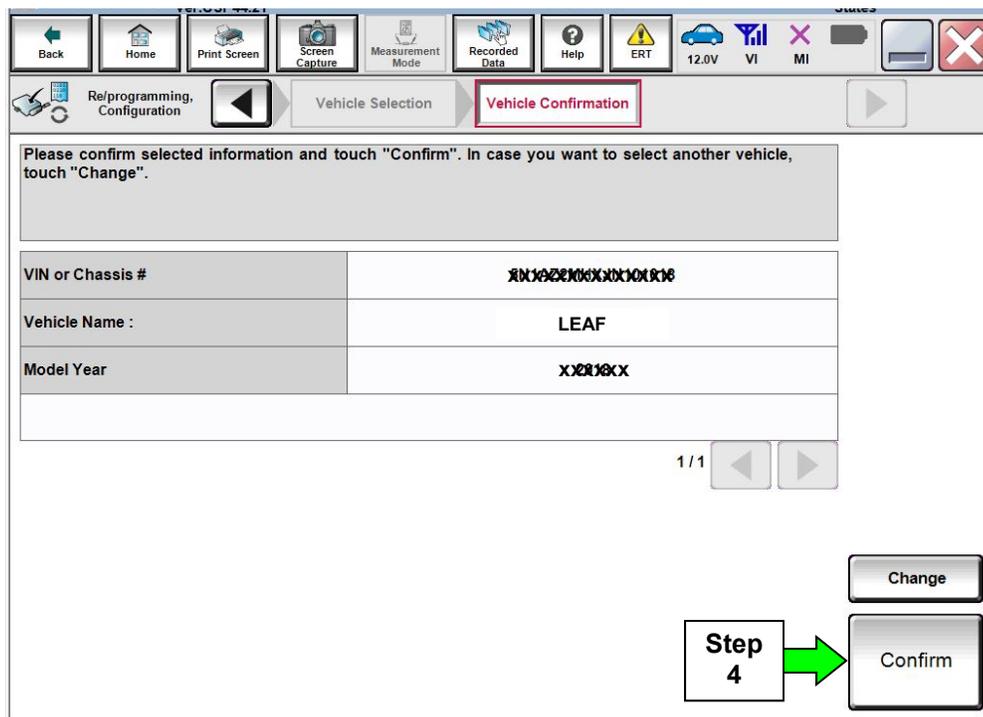
Figure 13

5. Select **Confirm**.
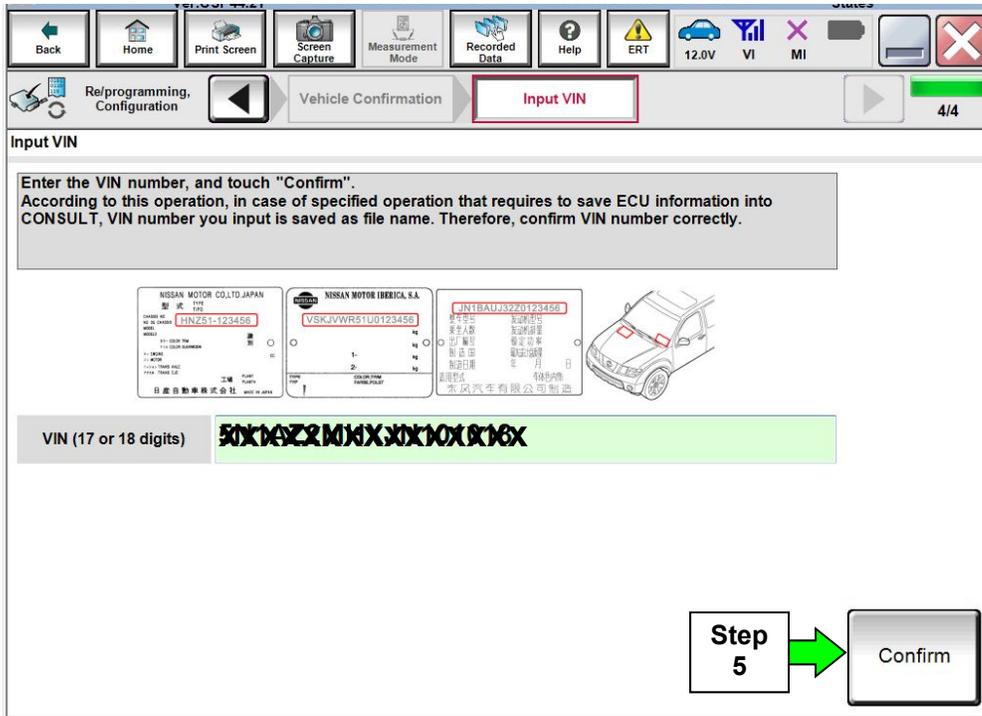
Figure 14

6. Select **TELEMATICS**.
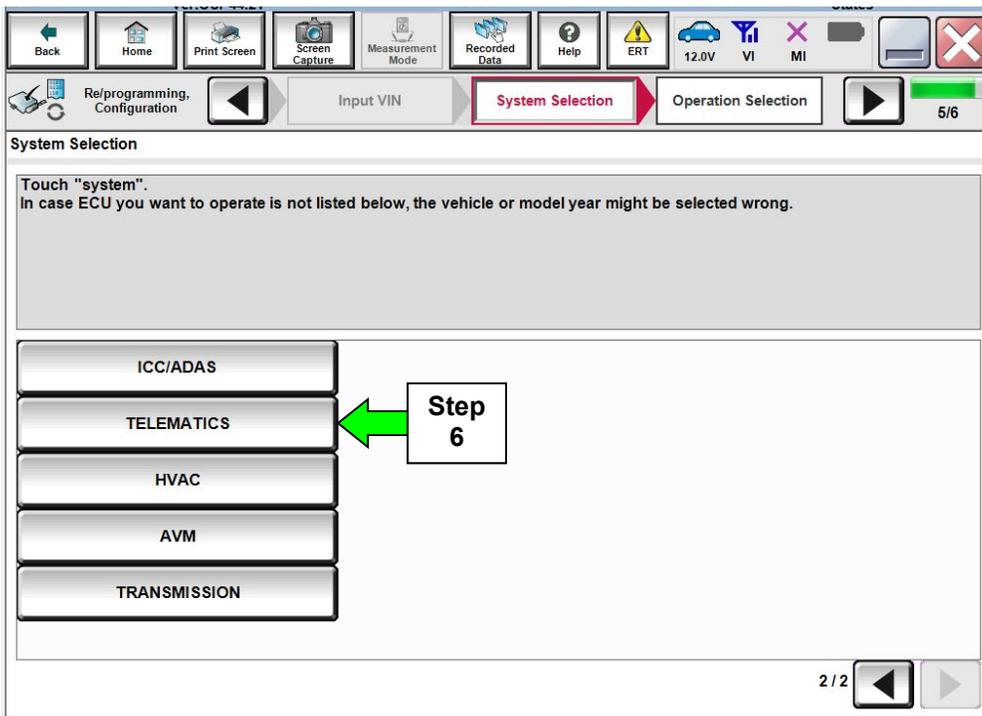
Figure 15

7. Select **Reprogramming**.
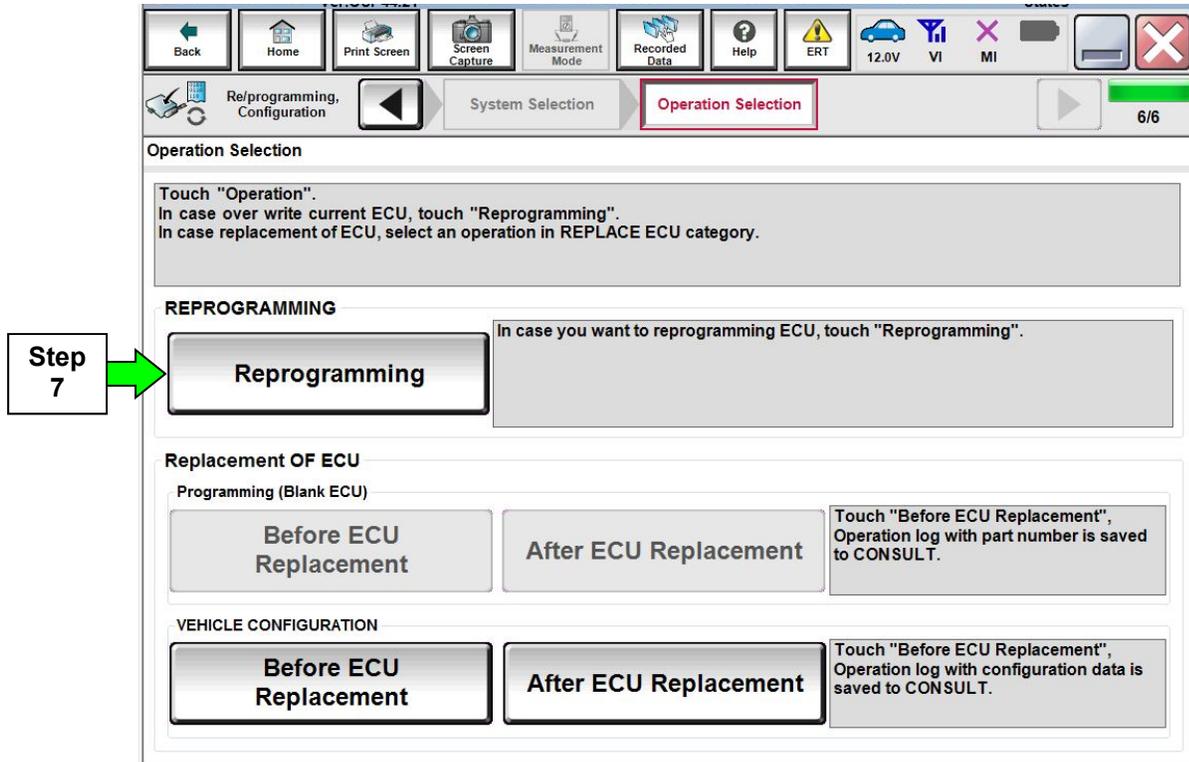
Figure 16

8. Select **Save**.
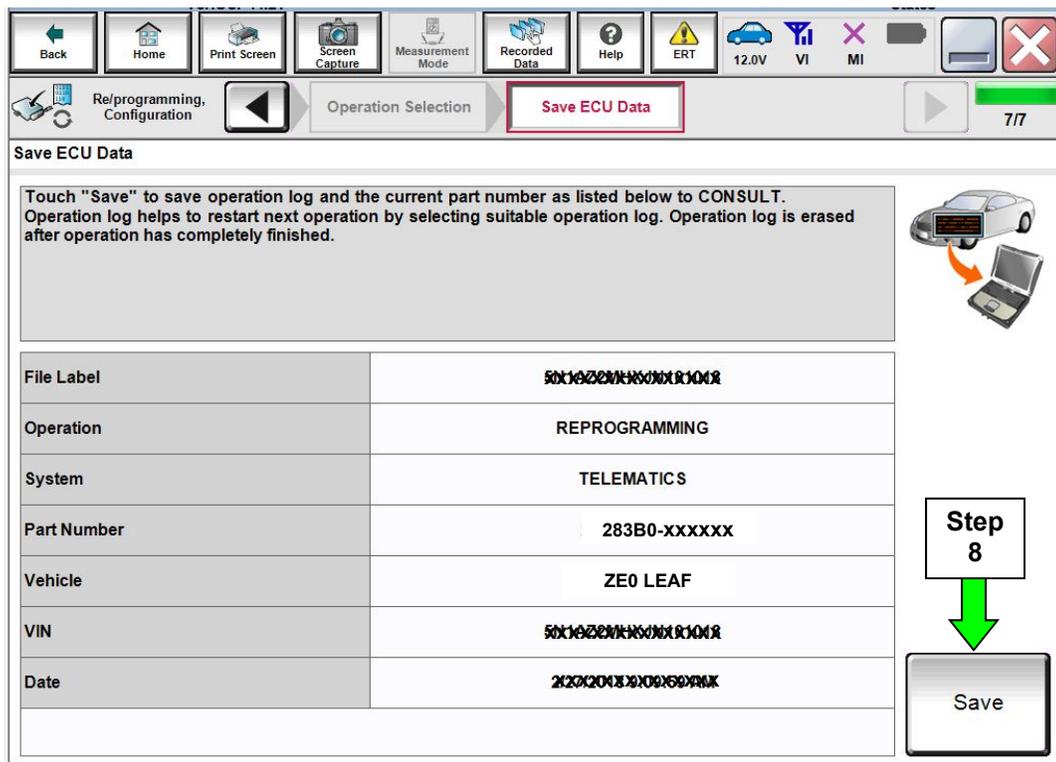
Figure 17

9. Use the arrows (if needed) to view and read all precautions, check the **Confirmed Instructions** box, and then select **Next**.
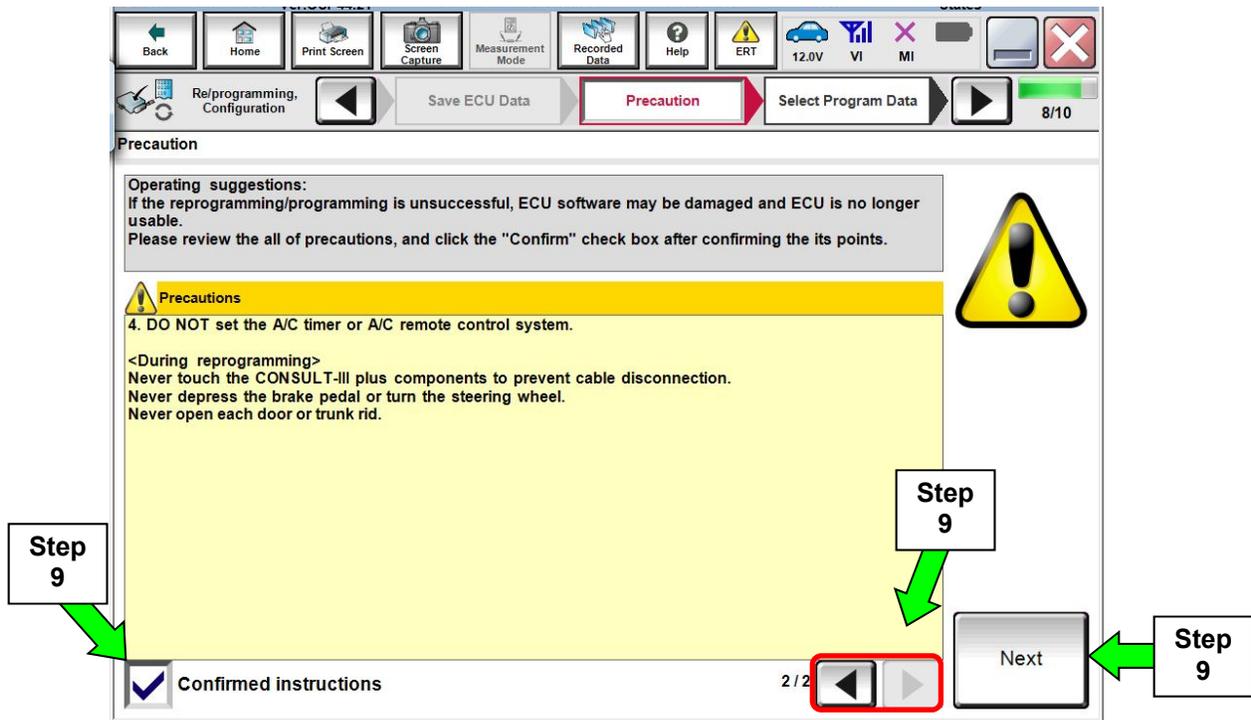
Figure 18

10. Verify the **Current Part Number** and **Part Number After Reprogramming** are different, and then select **Next**.

Figure 19

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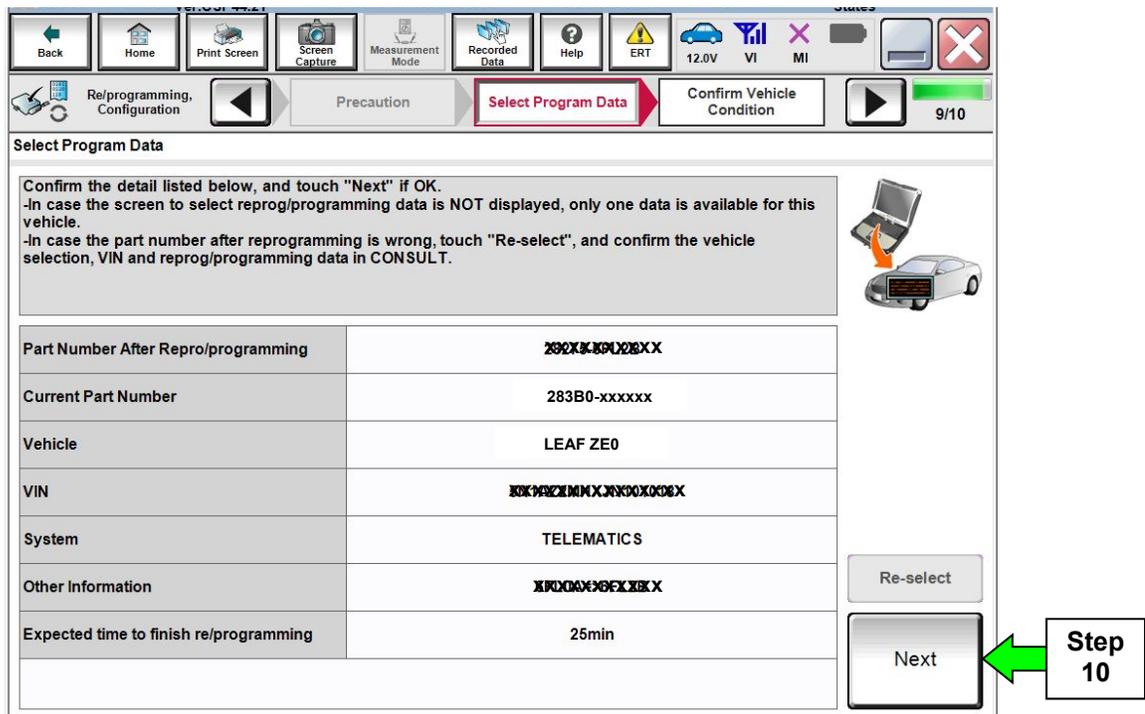
11. Verify **OK** is highlighted **green** (battery voltage must be between **12.0 and 15.5 volts**), and then select Next.

IMPORTANT: Battery voltage must stay between **12.0 and 15.5 volts** during reprogramming. If not, reprogramming may be interrupted and the TCU may be damaged.
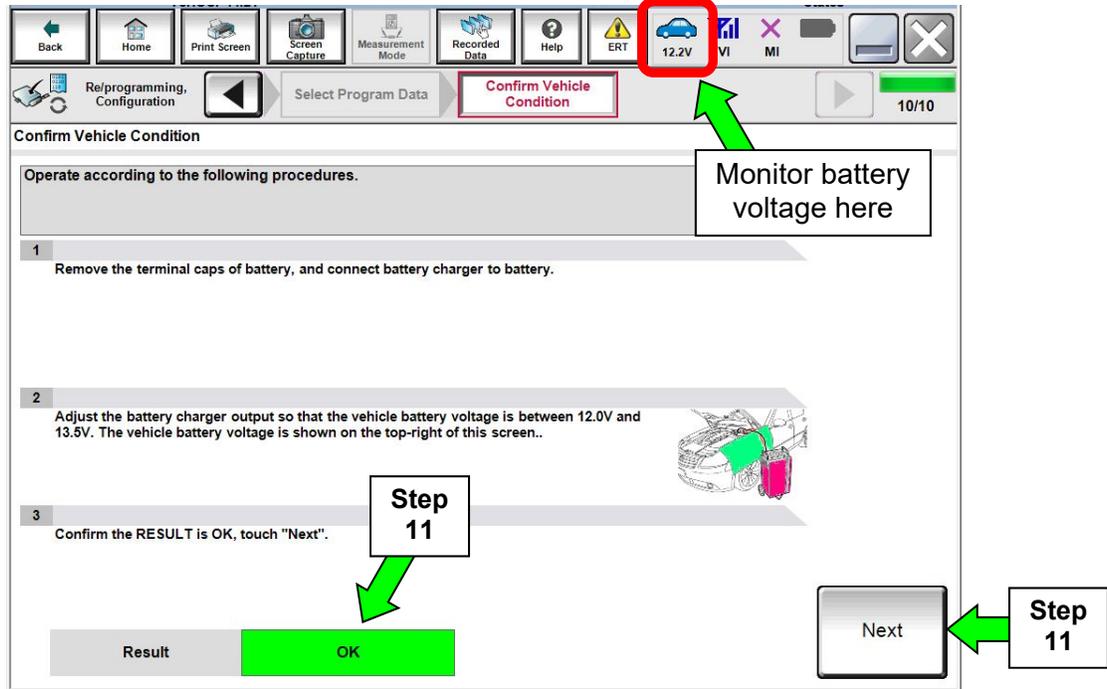
Figure 20

12. Verify all items listed under **Confirm Vehicle Condition** are **OK**, and then select **Start**.

Figure 21

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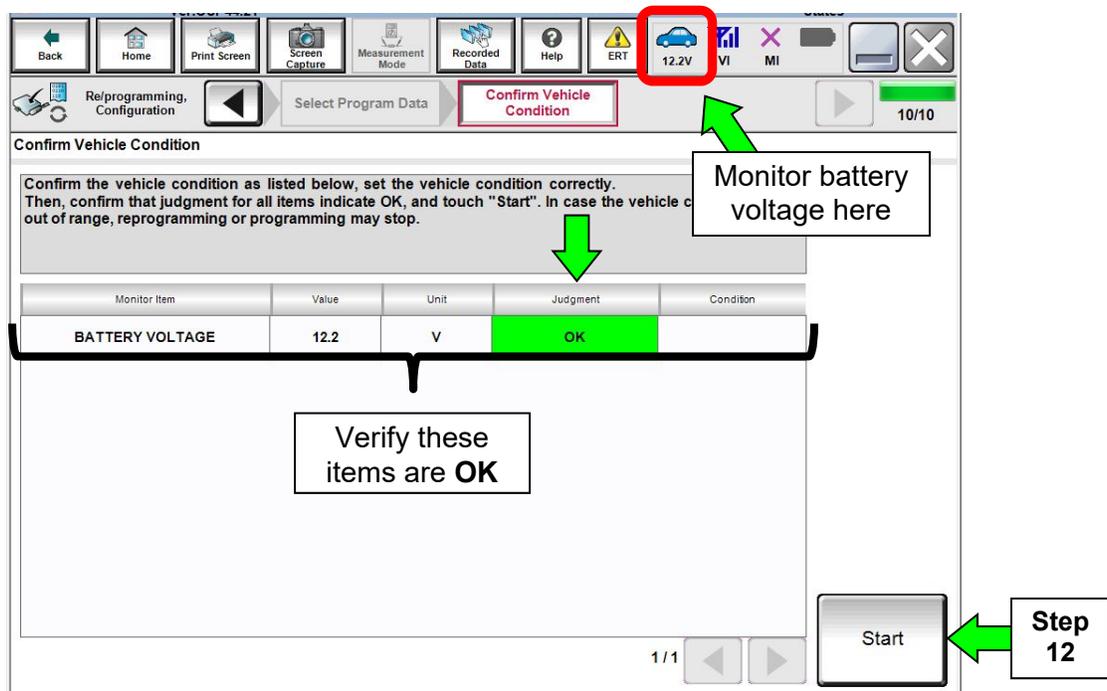
13. Select **USA/CANADA Dealers**.

14. Select **OK**.
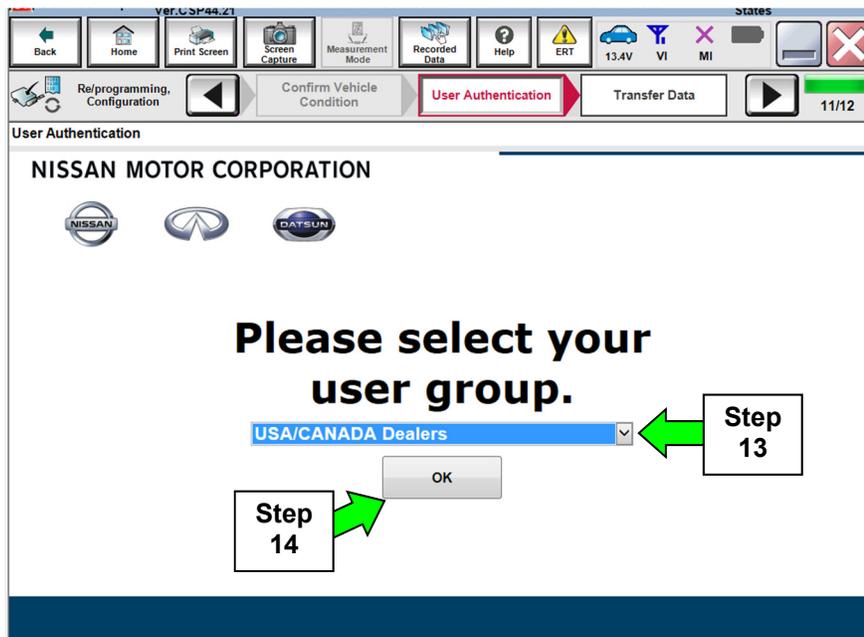
Figure 22

NOTE:

- The above screen may not display if the CONSULT PC has remained ON since the last reprogramming.

- If the CONSULT PC is not connected to the Internet, the screen in Figure 23 will display.
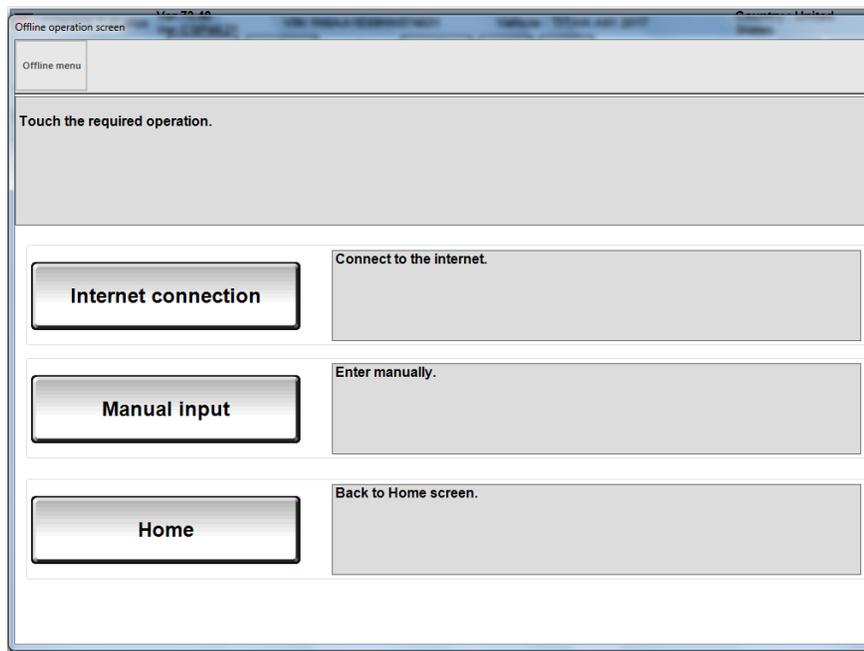
Figure 23

NOTE:

- Before reprogramming will start, you will be required to enter your **Username** and **Password**.

- The CONSULT PC must be connected to the Internet (Wi-Fi or cable).

- If you do not know your **Username** and **Password**, contact your service manager.

15. Start the reprogramming process by selecting **Submit**.
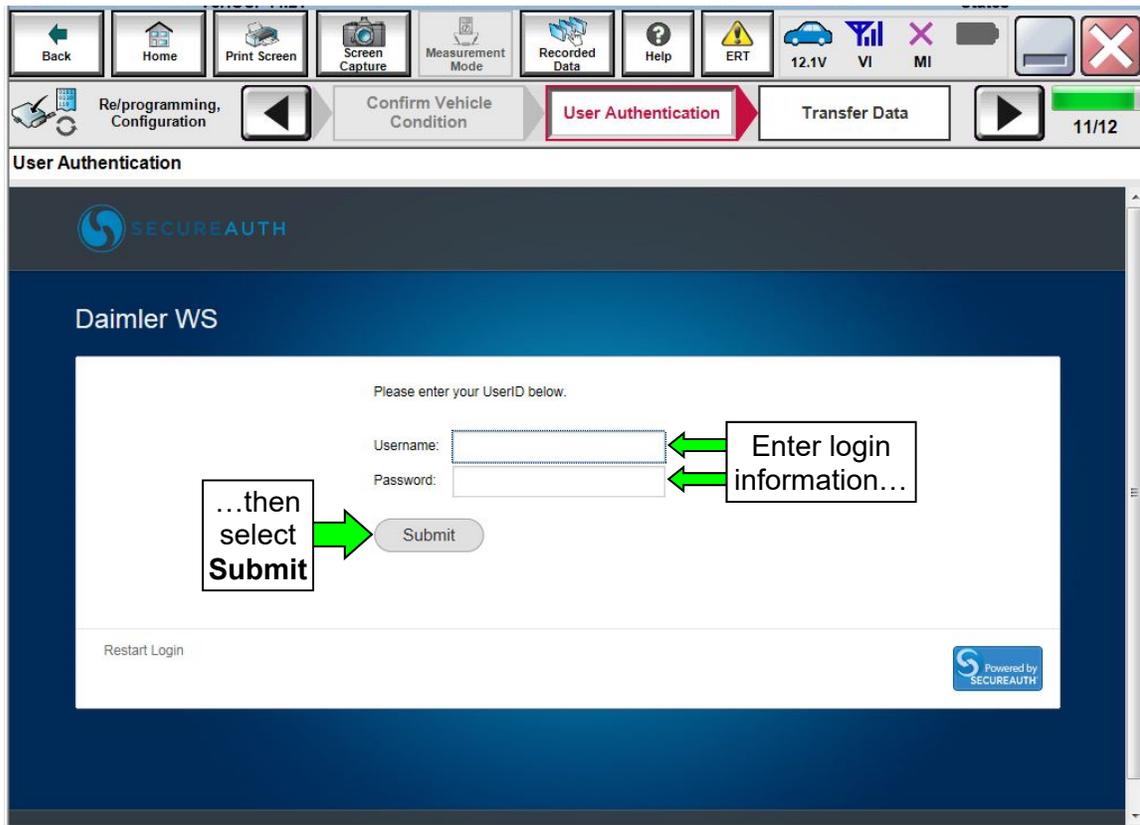
Figure 24

16. The progress bar (Figure 25) should go to approximately 10%, and then the error message in Figure 26 should appear. This is normal.

    NOTE: If a different error message displays, go to **Electronic Control Unit Recovery** on the next page.
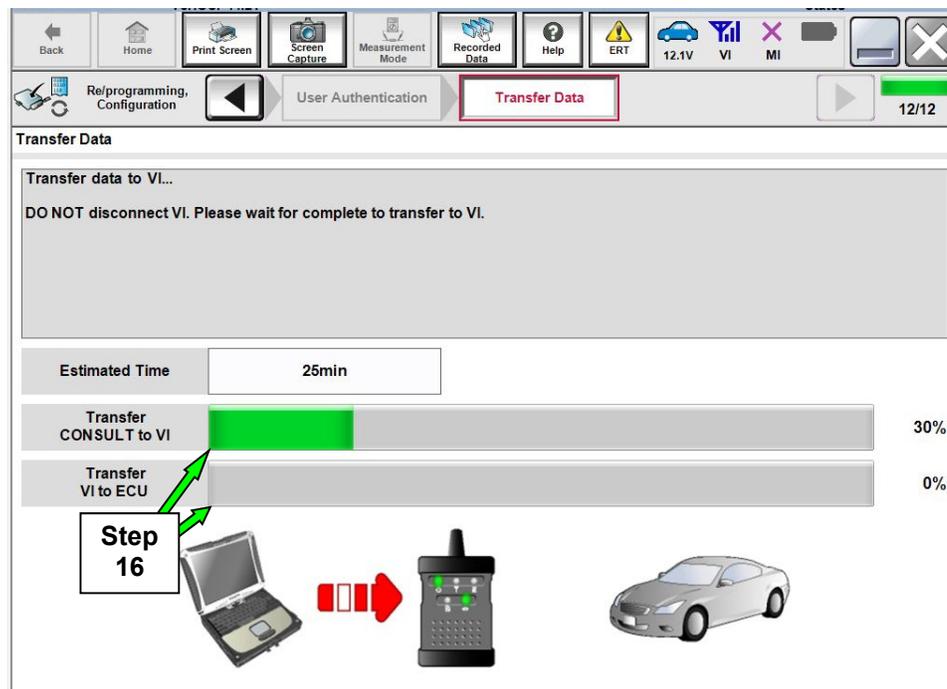
Figure 25

17. When the screen in Figure 26 displays, verify the following, and then select **Retry**.

- Check battery voltage (12.0–15.5 volts).
- Ignition is ON, engine OFF.
- External Bluetooth® devices are OFF.
- All electrical loads are OFF.
- **Select <u>Retry</u> and follow the on screen instructions.**
- "Retry" may not go through on the first attempt and can be selected more than once.
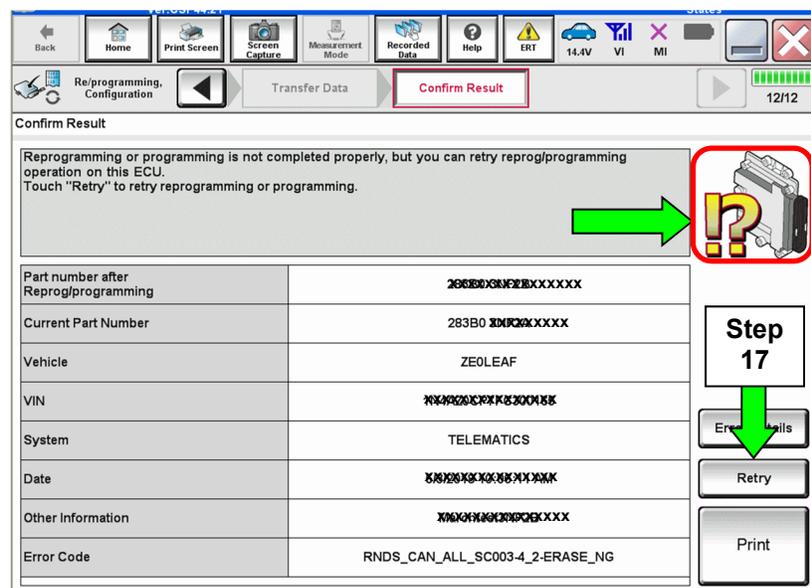
Figure 26

Electronic Control Unit Recovery

<u>Do not disconnect the plus VI or shut down C-III plus if reprogramming does not complete</u>.

If reprogramming does <u>not</u> complete and the "X" icon displays as shown in Figure 27:

- Check battery voltage (12.0 – 15.5 volts).

- CONSULT A/C adapter is plugged in.

- Ignition is ON, engine OFF.

- Transmission is in Park.

- All C-III plus / VI cables are securely connected.

- All C-III plus updates are installed.

- **Select <u>Home</u>, and restart the reprogram procedure from the beginning.**
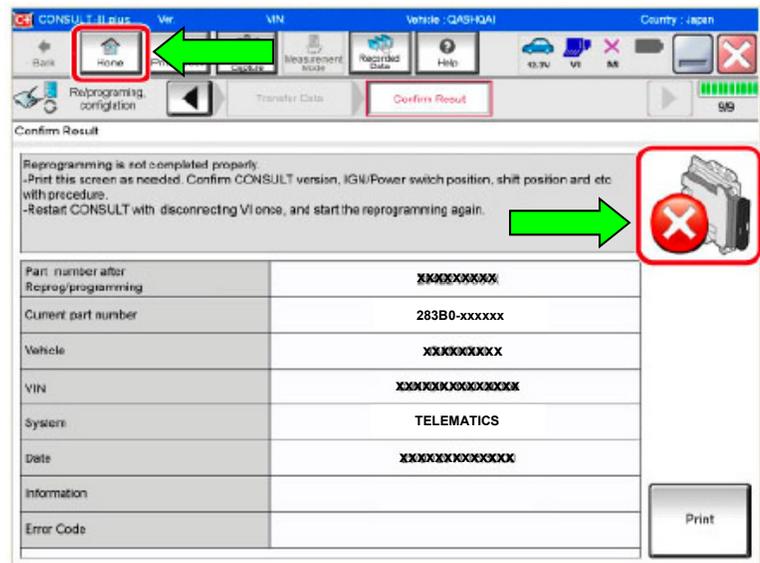
Figure 27

18. Select **Next**.
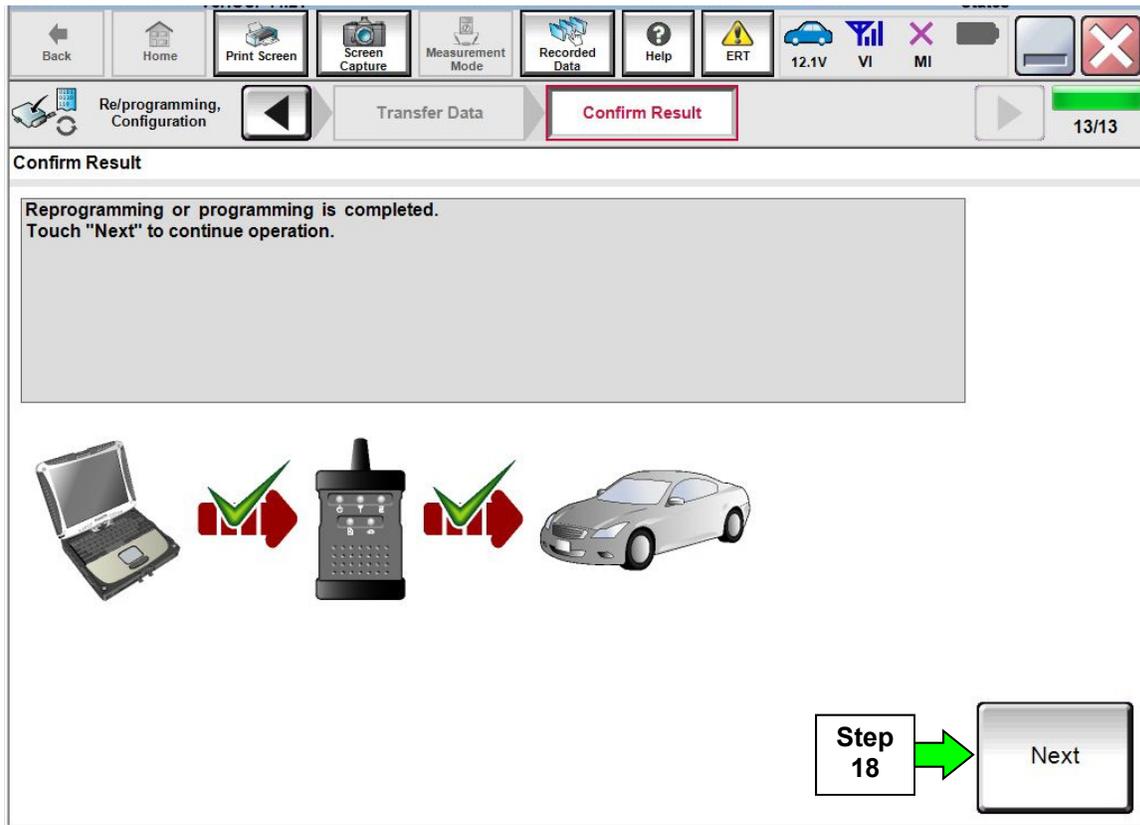
Figure 28

19. Erase all DTCs as follows:

a. Turn the ignition OFF.
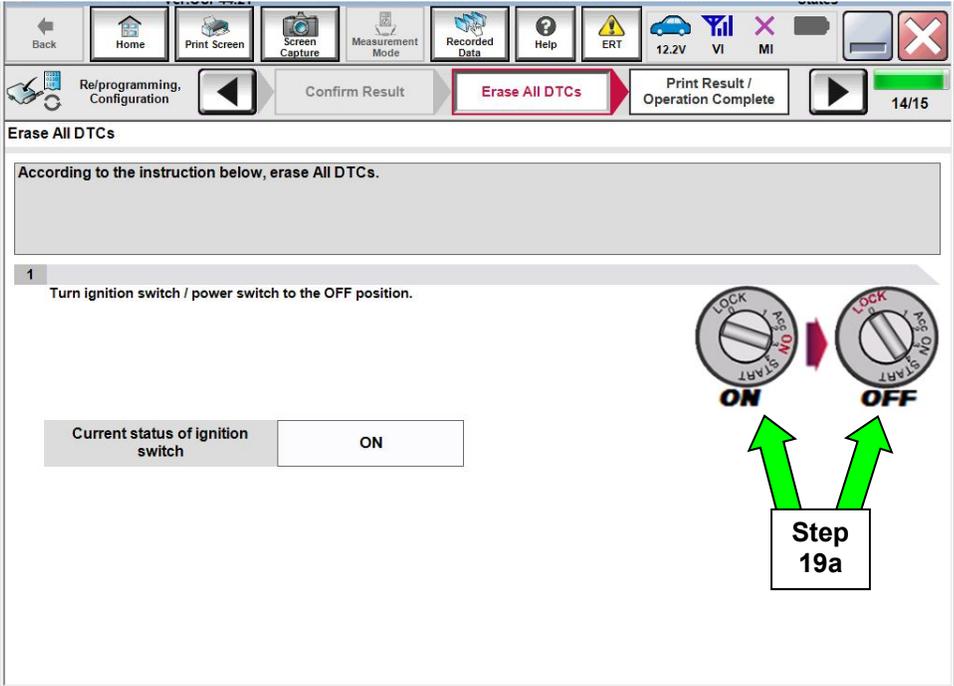
Figure 29

b. Turn the ignition ON.

c. Wait for DTC erase to complete, and then select **Next**.
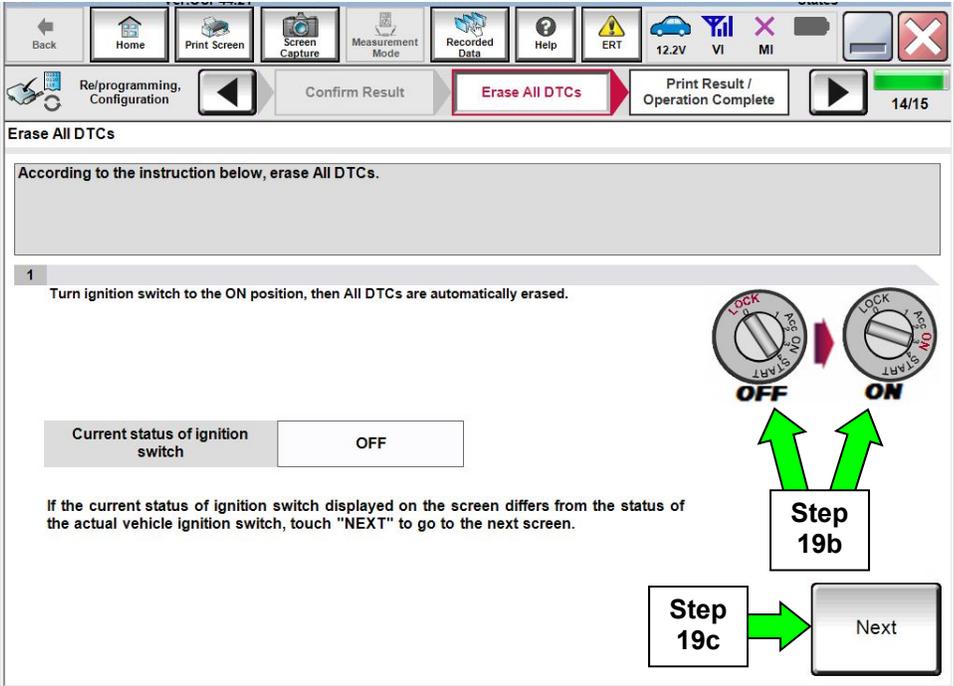
Figure 30

20. When the entire reprogramming process is complete, the screen in Figure 31 will display.

21. Verify the before and after part numbers are different.

22. Print a copy of this screen (Figure 31) and attach it to the repair order for warranty documentation.

23. Select **Confirm**.
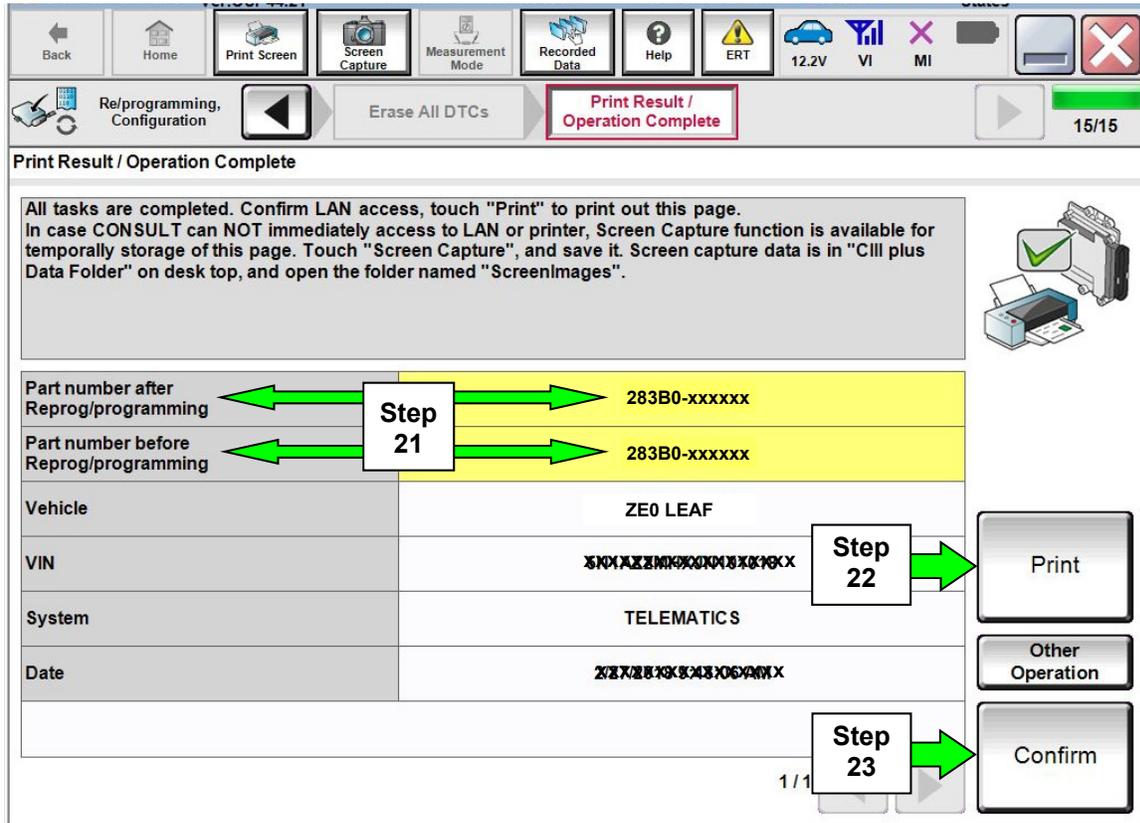
Figure 31

Go to the next page.

Turn ON the TCU

1. Got back to the Home screen, and then follow steps 9-13 starting on page 4 to get to Figure 32 below.

2. Select **On**.

3. Select **End**, and then wait 40 seconds.
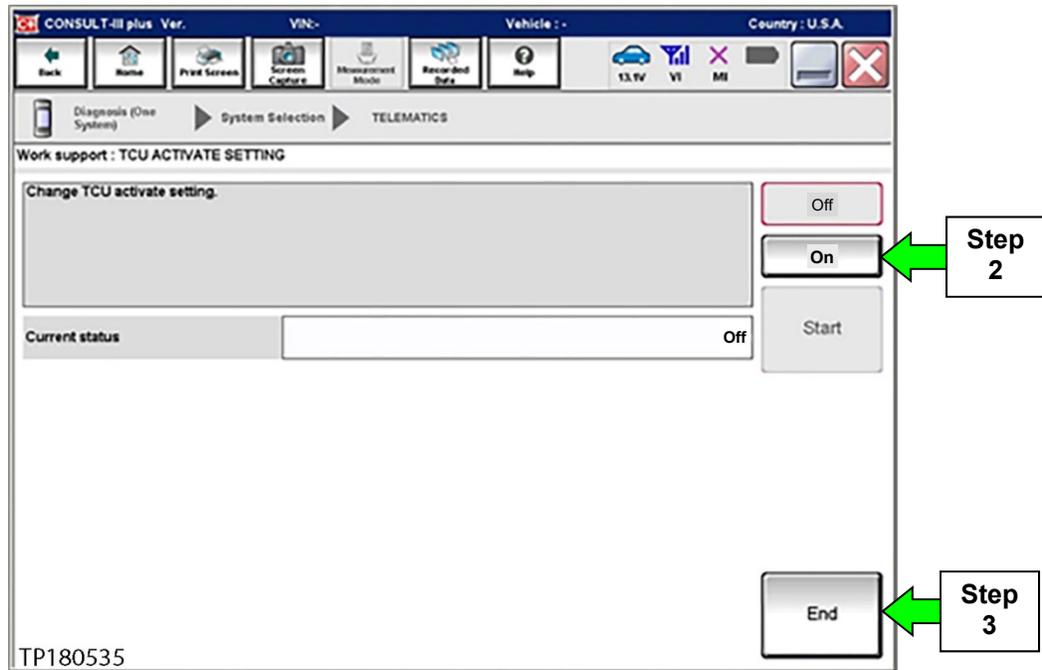
Figure 32

4. Close C-III plus.

5. Turn the ignition OFF (turn OFF "Ready" mode).

6. Disconnect the plus VI from the vehicle.

CLAIMS INFORMATION

Submit a "CM" line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	FRT
Reprogram TCU	PC643	PC6430	0.3

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
June 21, 2018	NTB18-045	Original bulletin published.
September 11, 2018	NTB18-045a	CLAIMS INFORMATION section revised.
September 28, 2018	NTB18-045b	CLAIMS INFORMATION section revised.