

Reference:

ITB16-029

Date:

August 9, 2016

VOLUNTARY SAFETY RECALL CAMPAIGN 2012 – 2013 M35 HYBRID CONTROL MODULE

CAMPAIGN ID #: R1623

NHTSA #: 16V-527

APPLIED VEHICLES: 2012 – 2013 M35 Hybrid (Y51)

Check Service COMM to confirm campaign eligibility.

INTRODUCTION

Infiniti is conducting a voluntary safety recall campaign on certain specific Model Year 2012 – 2013 M35 Hybrid vehicles to reprogram the Hybrid Powertrain Control Module, Traction Motor Controller, and the Transmission Control Module. This service will be provided at no charge to the customer for parts or labor.

IDENTIFICATION NUMBER

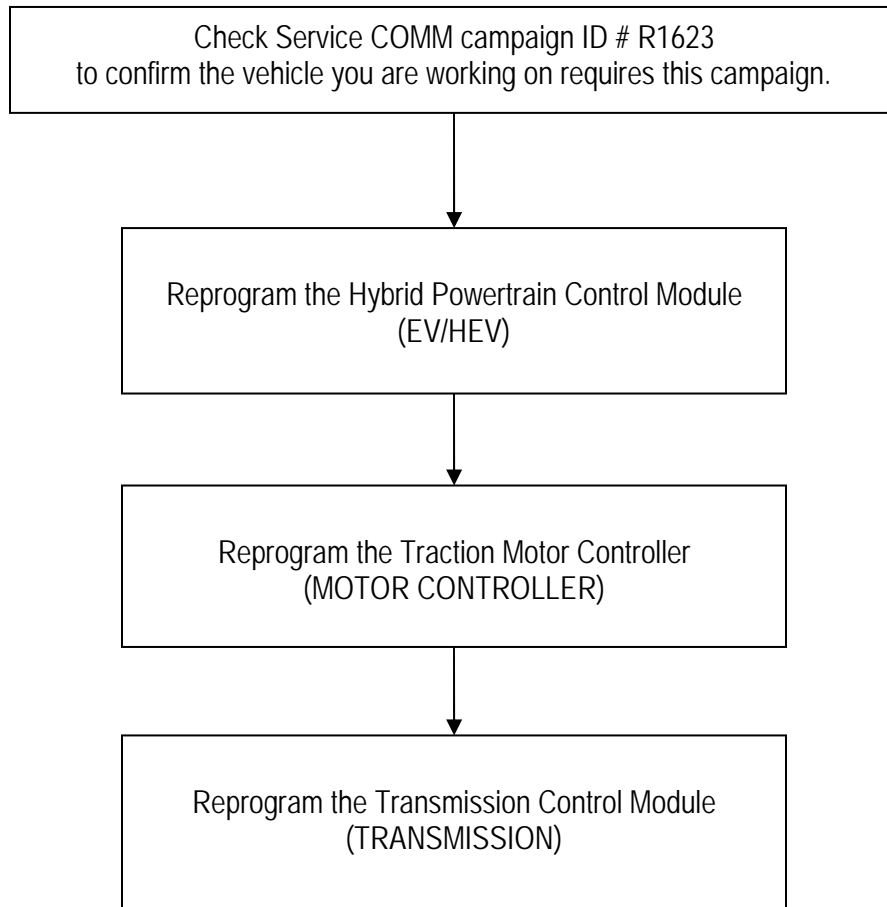
Infiniti has assigned identification number R1623 to this campaign. This number must appear on all communication and documentation of any nature dealing with this campaign.

DEALER RESPONSIBILITY

It is the dealer's responsibility to check Service COMM for the campaign status on each vehicle falling within the range of this voluntary safety recall which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in a dealer's inventory. **Federal law requires that new vehicles in dealer inventory which are the subject of a safety recall must be corrected prior to sale. Failure to do so can result in civil penalties by the National Highway Traffic Safety Administration.** While federal law applies only to new vehicles, Infiniti strongly encourages dealers to correct any used vehicles in their inventory before they are retailed.

Infiniti 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 Infiniti dealer to determine if this applies to your vehicle.

REPAIR OVERVIEW



Modules and order of reprogramming

Order of reprogramming	Control Module	Listed in C-III plus as:
1	Hybrid Powertrain Control Module	EV/HEV
2	Traction Motor Controller	MOTOR CONTROLLER
3	Transmission Control Module	TRANSMISSION

SERVICE PROCEDURE

IMPORTANT: The reprogramming procedure in this bulletin must be performed 3 separate times to reprogram the control modules for EV/HEV, MOTOR CONTROLLER, and TRANSMISSION.

1. Before continuing, it is **IMPORTANT** to make sure:

- ASIST on the CONSULT PC has been freshly synchronized (updated) to the current date.
- All CONSULT related software updates (if any) have been installed.

NOTE: The CONSULT PC automatically gets all reprogramming software during ASIST synchronization.

CAUTION:

- Connect the GR8 to the vehicle 12 volt battery and set to ECM power supply mode. If the vehicle battery voltage drops below 12.0V or rises above 15.5V during reprogramming, control unit may be damaged.
- Be sure to turn OFF all vehicle electrical loads. If a vehicle electrical load remains ON, control unit may be damaged.
- Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and control unit may be damaged.
- 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 during reprogramming, reprogramming may be interrupted and control unit may be damaged.

2. Once all ASIST and CONSULT related updates have been performed, attach the CONSULT PC to the vehicle.

- Connect the plus VI to the vehicle.
- Connect the AC adapter to the CONSULT PC.

3. Turn ON the CONSULT PC, and then open CONSULT III plus (C-III plus).

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

4. Press the ignition switch twice without depressing the brake pedal.
 - The meter and gauges will illuminate.
 - Make sure the Ready light is OFF.

5. Check for stored DTCs in all systems as follows:
 - a. Wait for the plus VI to be recognized.
 - b. Select **Diagnosis (All Systems)**.
 - c. Wait for **System Call** to complete.
 - d. Check for stored DTCs.
 - If no DTCs found, go to step 6.
 - If any DTCs are found stored:
 - Perform diagnosis and repairs related to the stored DTC(s), and then erase the DTC(s).
 - When completed, go to step 6.

IMPORTANT: The reprogramming procedure in this bulletin must be performed 3 separate times to reprogram the control modules for EV/HEV, MOTOR CONTROLLER, and TRANSMISSION.

6. Go to **Re/programming, Configuration**.
 - a. Select the **Home** button, and then **YES** to return to the screen shown in Figure 1.
 - b. Select **Re/programming, Configuration**.

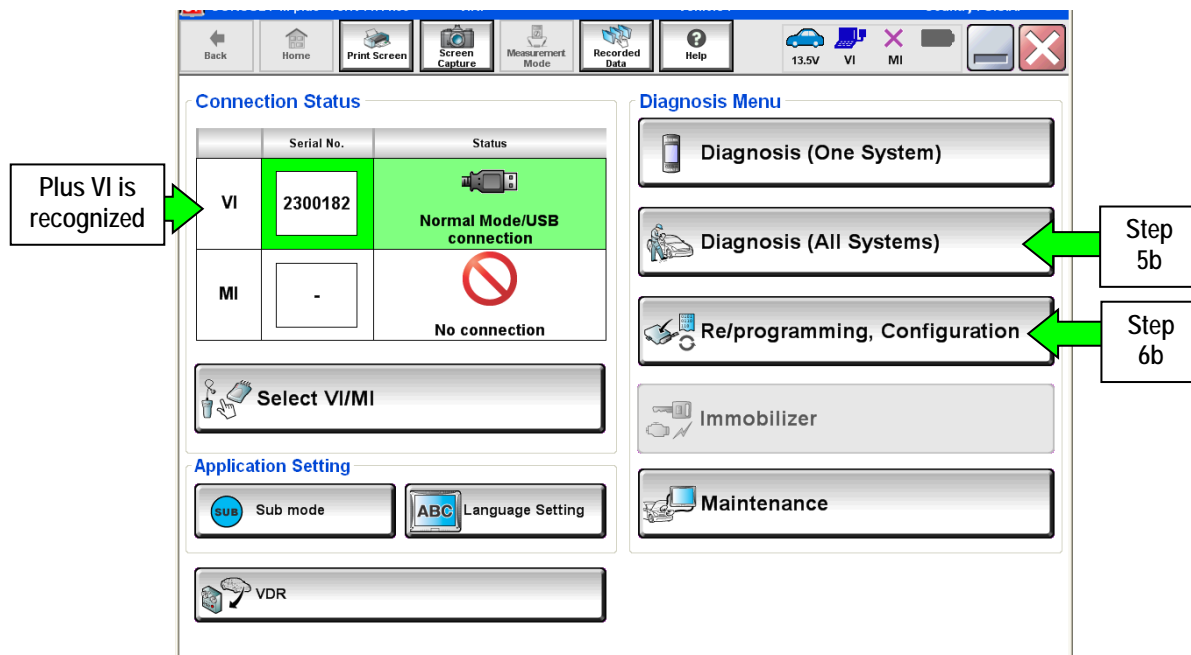


Figure 1

7. Check the box for **Confirmed Instructions**, and then select **Next**.

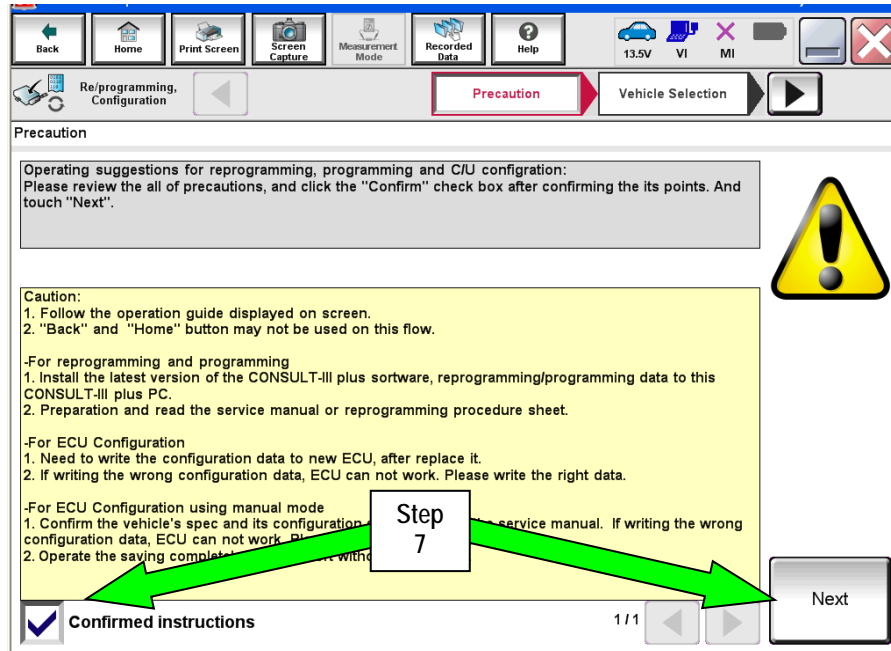


Figure 2

8. If the screen in Figure 3 does not display, skip to step 10.
9. If the screen in Figure 3 displays, select **Automatic Selection(VIN)**.

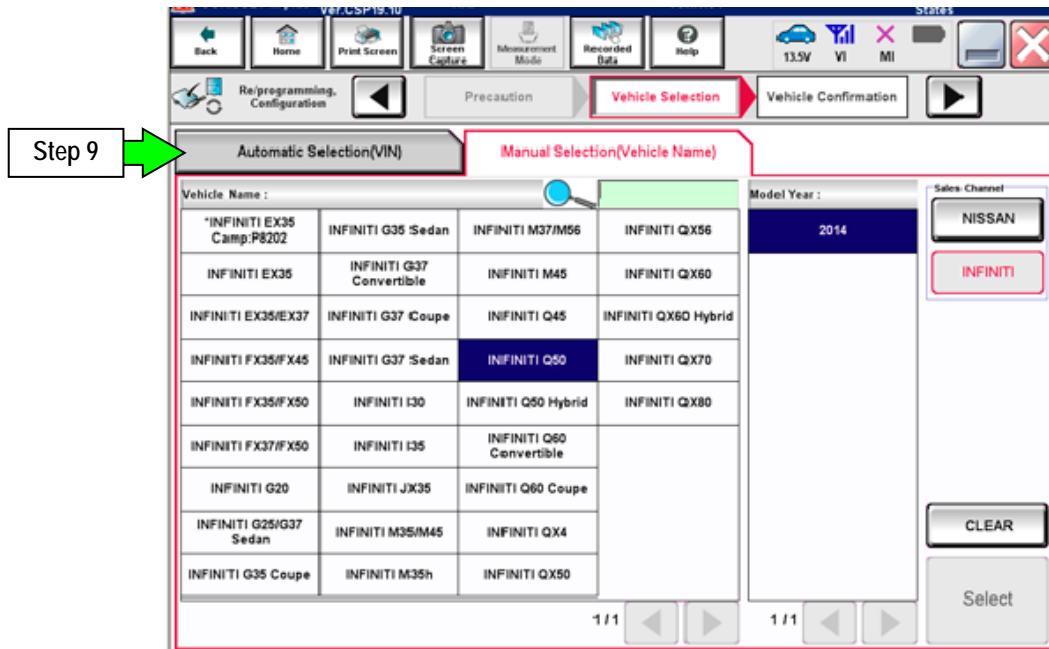


Figure 3

10. Verify the VIN or Chassis # matches that of the vehicle.

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

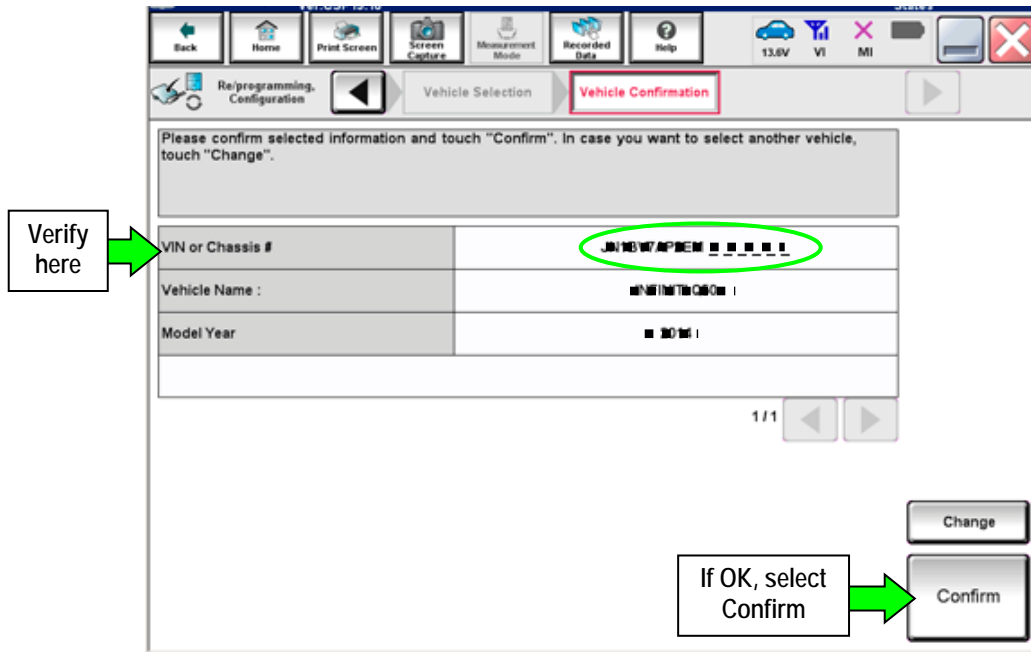


Figure 4

11. Select **Confirm** again.

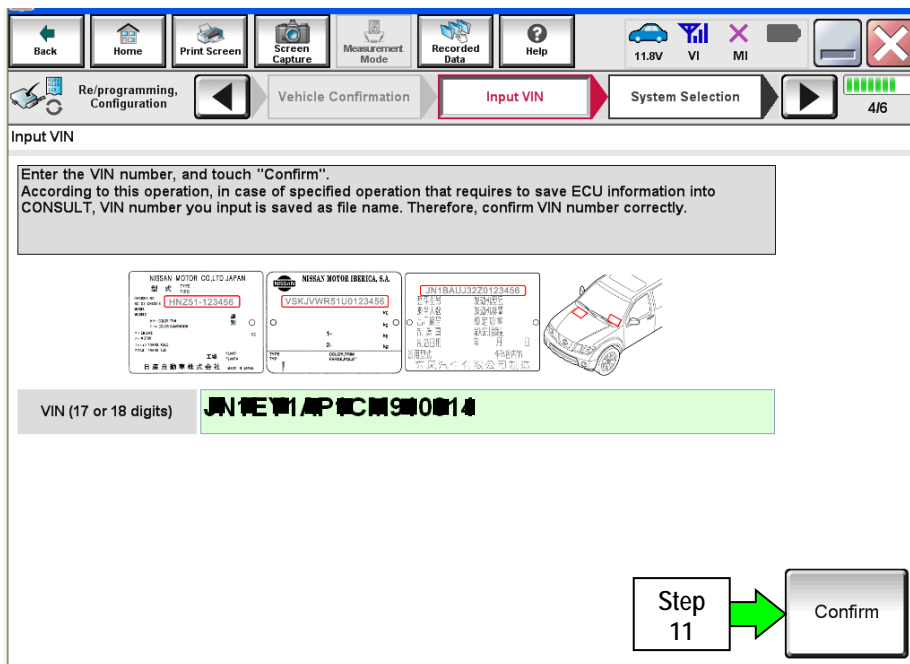


Figure 5

12. Use the page arrows to scroll and select the correct control module to be reprogrammed.

IMPORTANT: The reprogramming procedure in this bulletin must be performed 3 separate times to reprogram the control modules in this order: EV/HEV, MOTOR CONTROL, and TRANSMISSION.

NOTE: EV/HEV and TRANSMISSION are shown in Figure 6; MOTOR CONTROLLER is not shown.

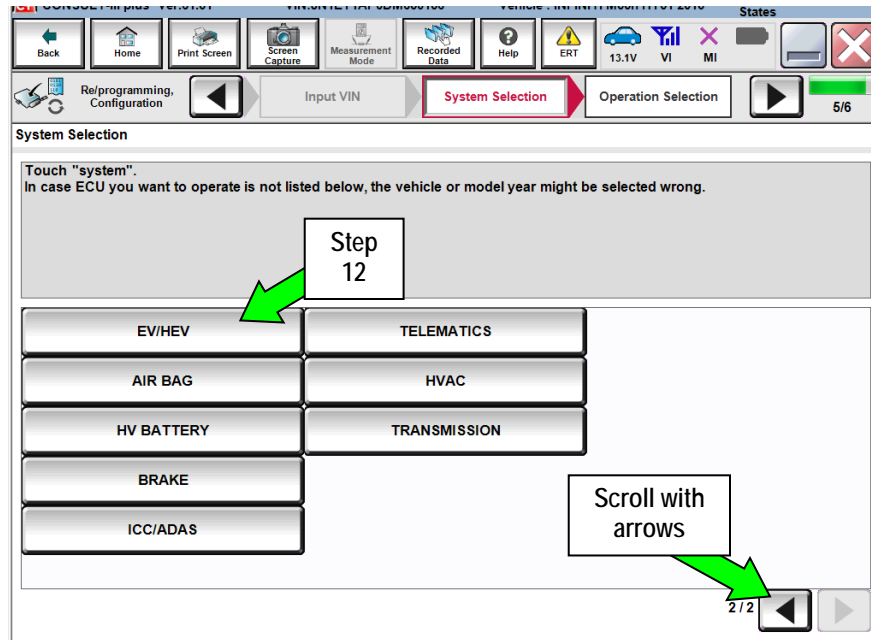


Figure 6

13. Wait for System Call to complete, and then select **Reprogramming**.

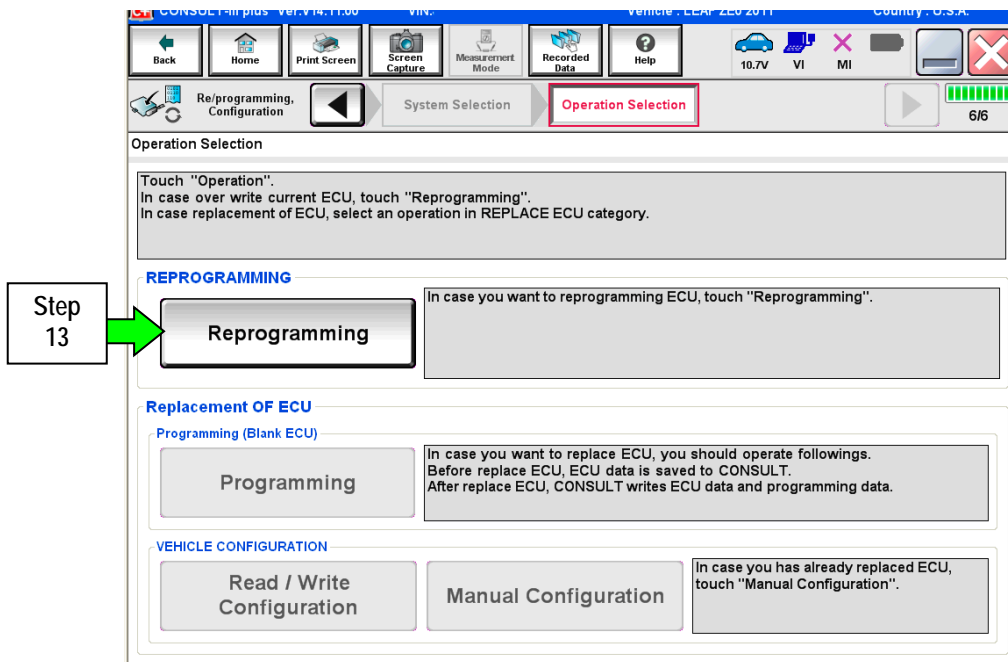


Figure 7

14. When you get to the screen shown in Figure 8, confirm reprogramming applies as follows:

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

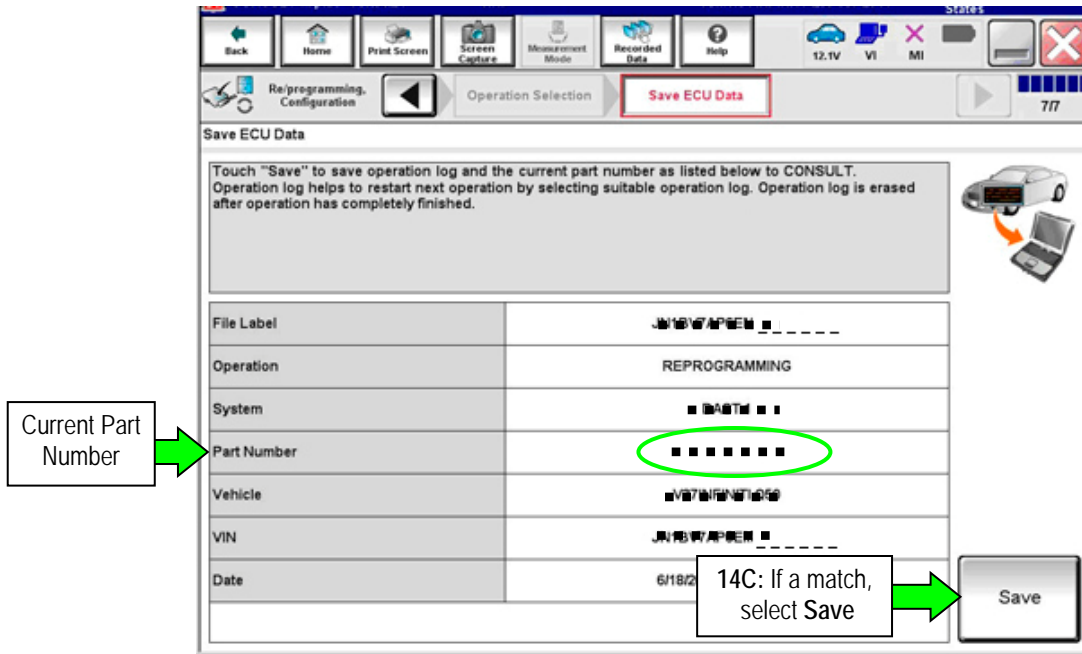


Figure 8

B. Compare the P/N written down to the P/Ns in the **Current Part Number** column of **Table A** below:

- If there is a match, reprogramming applies. Continue with the reprogramming procedure.
- If there is not a match, this campaign does not apply or it has already been done.

NOTE: Make sure to check for a match for all 3 control modules.

C. If there is a P/N match as specified above, select **Save**, and then continue with the reprogramming procedure.

Table A

MODEL	CONTROL MODULE	CURRENT PART NUMBER (P/N):
2012 – 2013 M35 Hybrid	EV/HEV	237A0 – 1MG0A, 1MG0B, 1MG0C, 1MG0D 237A0 – 1MG4A, 1MG4B, 1MG4C, 1MG4D 237A0 – 1MG8A, 1MG8B 237A0 – 1PM0A, 1PM0B, 1PM0C, 1PM0D 237A0 – 1PM4A, 1PM4B 237A0 – 1PN0A, 1PN0B
	MOTOR CONTROLLER	291A0 – 1MG0B, 1MG1B
	TRANSMISSION	31039 – 3SX0A, 3SX1A, 3SX2A, 3SX3A, 3SX4A, 3SX5A, 3SX9A 31039 – X960A, X961A, X963A, X964A, X966A 31039 – X967D 31039 – 12X0A 31039 – 12X3D

15. Read the precautions on the C-III plus screen (use page arrow as needed). After reading, select **Confirmed instructions**, and then select **Next**.

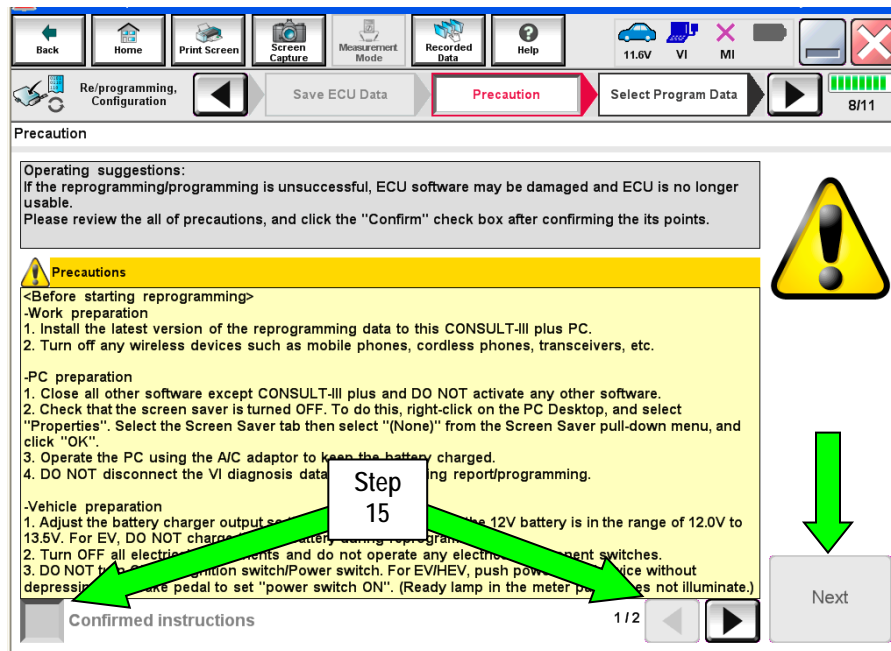


Figure 9

NOTE: In some cases, more than one new P/N for reprogramming is available.

- If more than one new P/N is available, the screen in Figure 10 will display.
- Select and use the reprogramming option that **does not** have the message "Caution! Use ONLY with ITBXX-XXX".
- If you get this screen and it is blank (no reprogramming listed), it means there is no reprogramming available for that control unit.

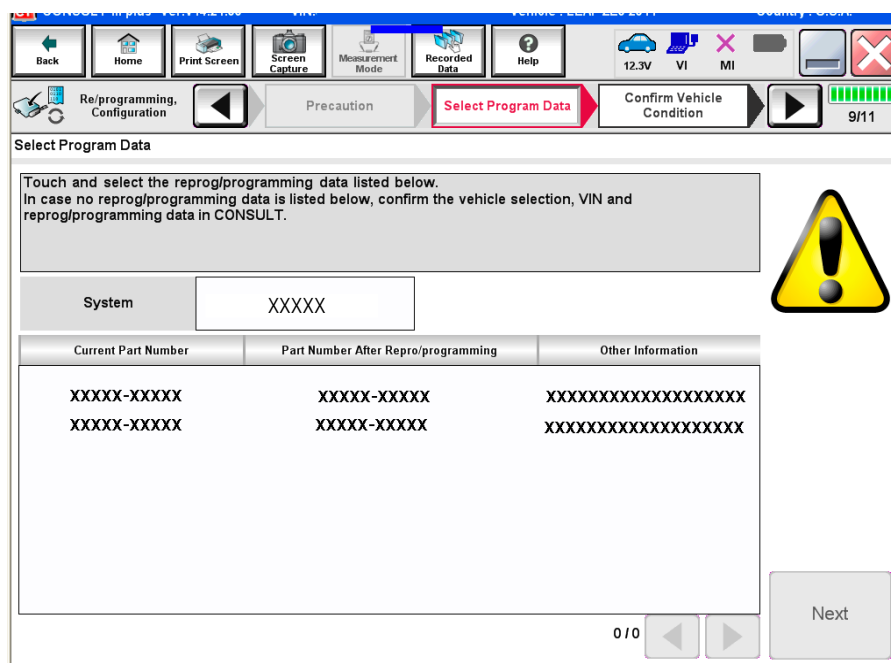


Figure 10

16. Verify the **Current Part Number** matches the P/N written down in step 14, and then select **Next**.

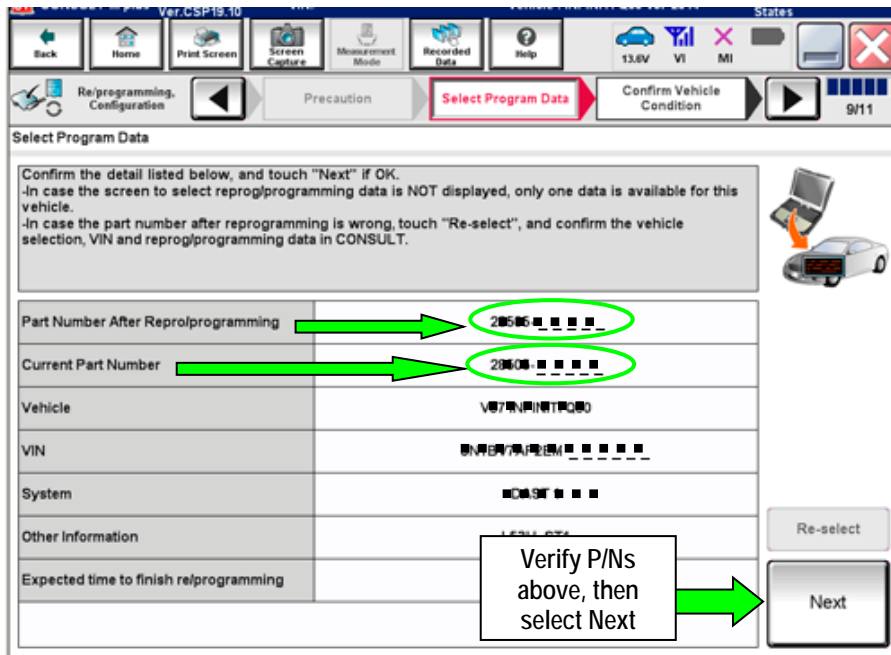


Figure 11

17. Confirm battery voltage is correct, and then select **Next**.

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

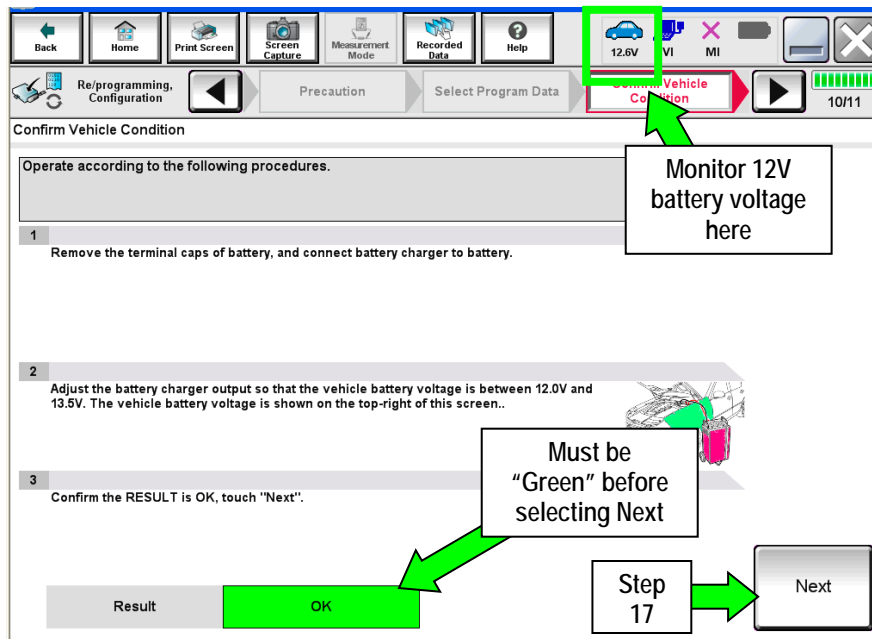


Figure 12

18. Confirm all items on the C-III plus screen are OK (green), then select **Start**.

- The reprogramming process begins when **Start** is selected.

NOTE: For reprogramming to continue, vehicle 12V battery voltage must stay within 12 volts and 15.5 volts.

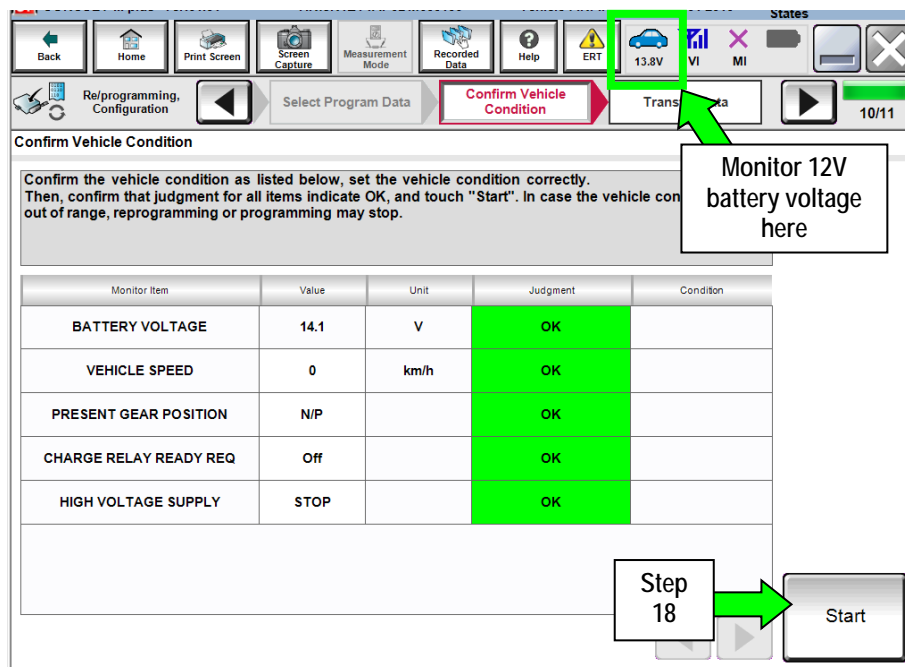


Figure 13

19. Wait for both bar graphs to complete.

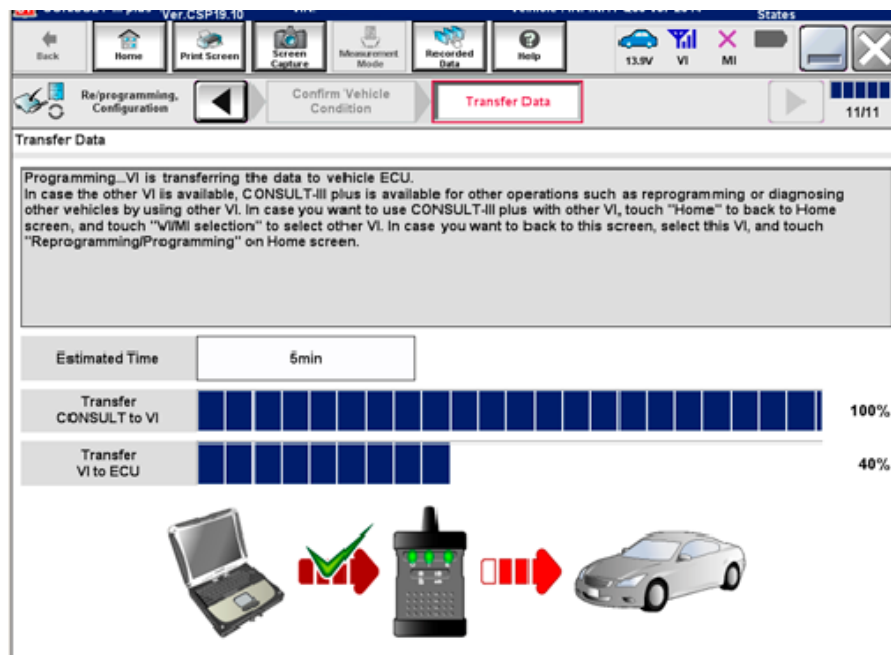


Figure 14

20. When the screen in Figure 15 displays, reprogramming is complete.

NOTE: If the screen in Figure 15 does not display (indicating that reprogramming did not complete), refer to the information on page 13.

21. Select **Next**.

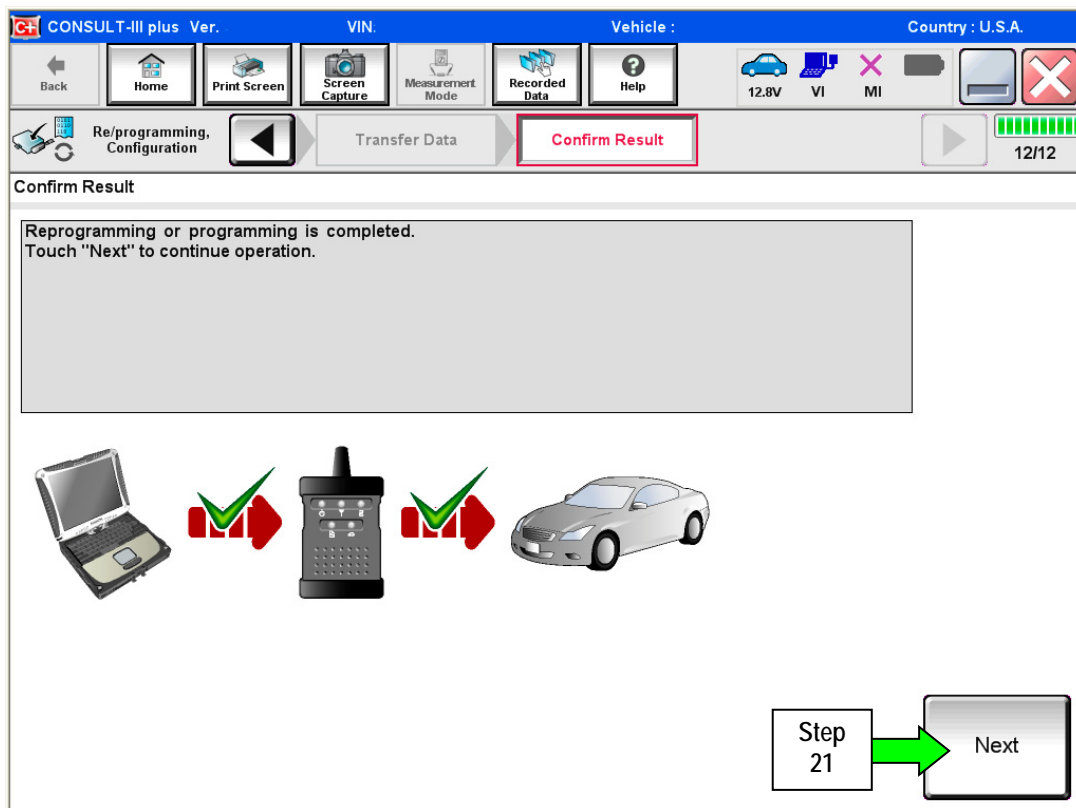


Figure 15

NOTE:

- In the next step, on page 14, you will perform DTC erase
- DTC erase is required before C-III plus will provide the final reprogramming confirmation report.

Control Unit Recovery:

Do not disconnect plus VI or shut down C-III plus if reprogramming does not complete.

If reprogramming does not complete and the “!” icon displays as shown in Figure 16:

- Check battery voltage (12.0–15.5 V).
- Ignition is ON, not Ready.
- External Bluetooth® devices are OFF.
- All electrical loads are OFF.
- **Select retry and follow the on screen instructions.**
- “Retry” may not go through on first attempt and can be selected more than once.

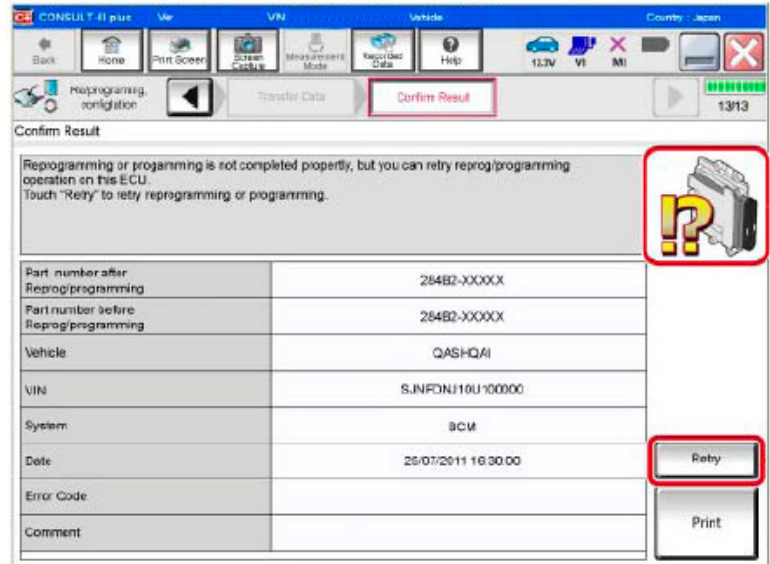


Figure 16

If reprogramming does not complete and the “X” icon displays as shown in Figure 17:

- Check battery voltage (12.0 – 15.5 V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, not Ready.
- Transmission is in Park.
- All C-III plus / VI cables are securely connected.
- All C-III plus updates are installed.
- **Select Home, and restart the reprogram procedure from the beginning.**

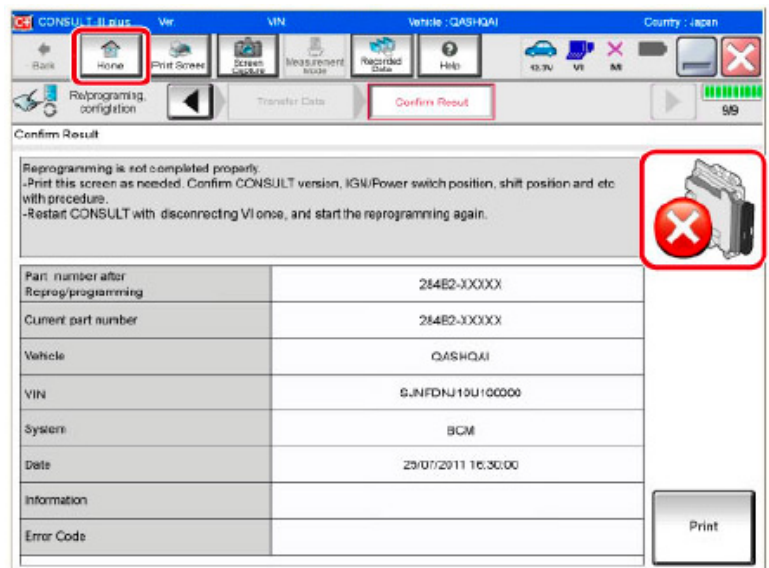


Figure 17

22. Erase all DTCs as follows:

a. Turn the ignition OFF.

- The screen in Figure 18 will read OFF after pressing the power switch once.

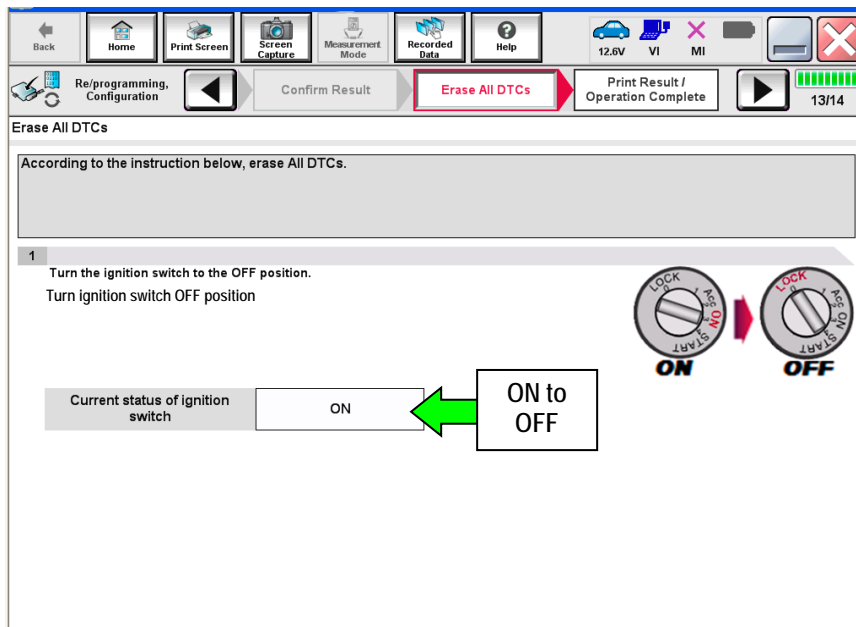


Figure 18

b. Turn the ignition ON, not Ready (press switch twice, no foot on brake).

- The screen in Figure 19 will read ON after pressing the power switch twice.

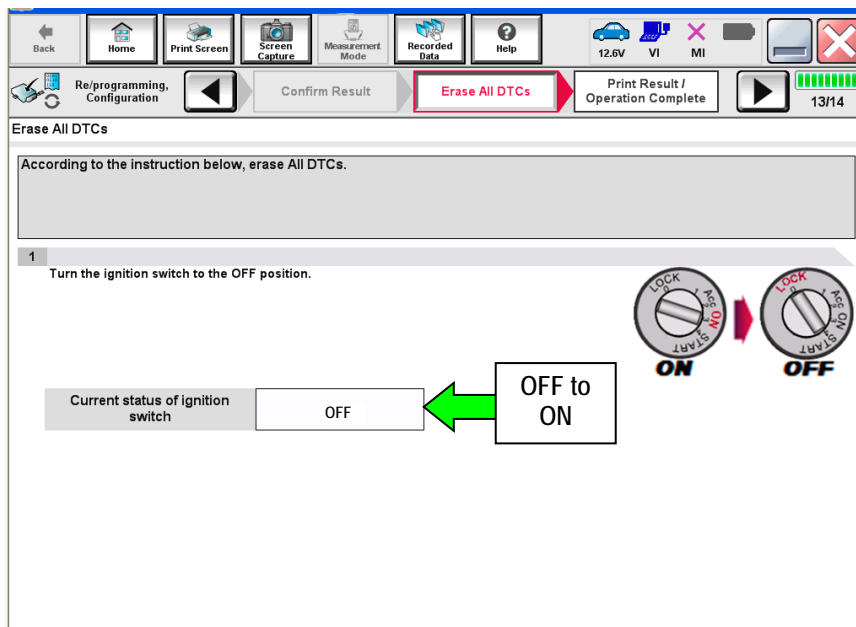


Figure 19

- c. Wait for the bar graph in the **ERASE** window to complete 100%.
- d. Select **Next**.

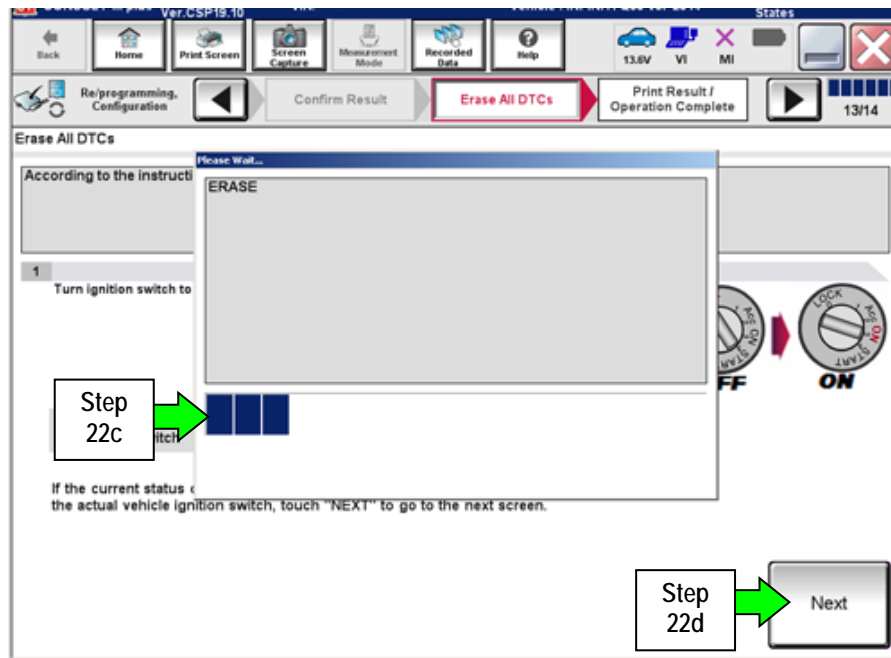


Figure 20

- 23. Verify the P/N has changed (before and after reprogramming P/Ns should be different).
 - a. Print a copy of the screen in Figure 21 by selecting **Print**.
 - b. Attach the copy to the repair order.
 - c. Once a copy has been printed, select **Confirm**.

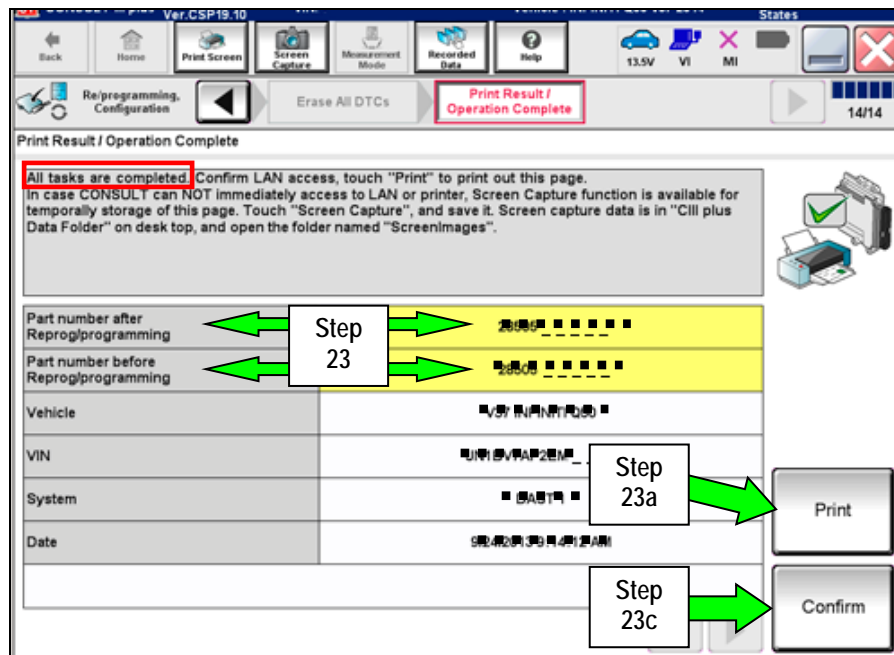


Figure 21

24. After confirmation has completed, select Home

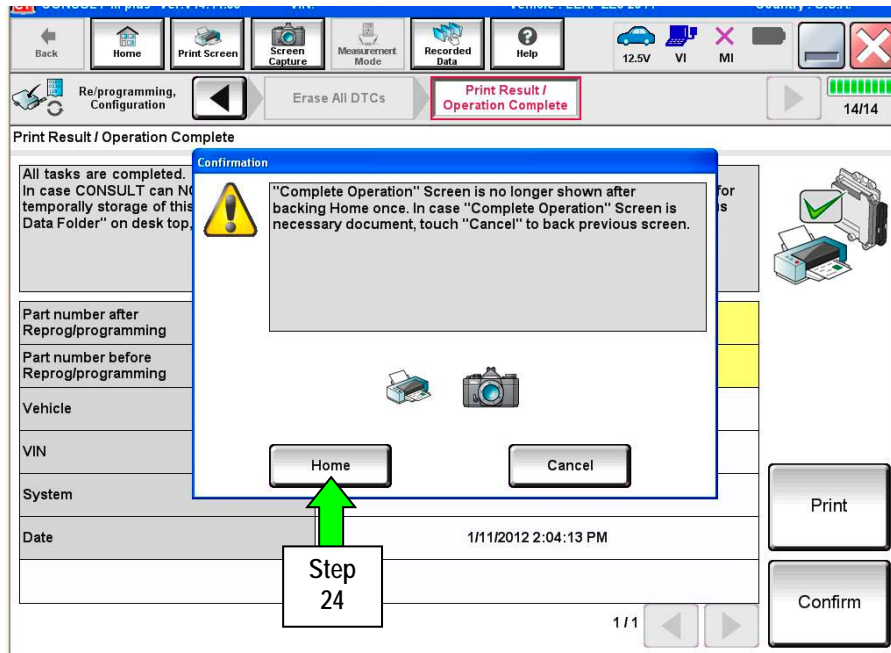


Figure 22

25. Repeat the entire reprogramming procedure for MOTOR CONTROLLER.

26. Repeat the entire reprogramming procedure for TRANSMISSION.

27. Use C-III plus to check and erase any stored DTCs in all systems as follows:

- a. Select **Diagnosis (All Systems)**.
- b. Wait for **System Call** to complete.
- c. Check and erase any stored DTCs.

28. Disconnect C-III plus from the vehicle.

29. Turn the ignition OFF.

30. Disconnect the GR8 from the 12V battery.

CLAIMS INFORMATION

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

CAMPAIGN ("CM") I.D.	DESCRIPTION	OP CODE	FRT
R1623	Reprogram EV/HEV, MOTOR CONTROLLER, and TRANSMISSION	R16230	1.0 hrs.

