

Reference:

ITB15-035

Date:

December 7, 2015

VOLUNTARY SERVICE CAMPAIGN 2014 - 2015 Q50 HYBRID; DIRECT ADAPTIVE STEERING REPROGRAM AND 12 VOLT BATTERY REPLACEMENT

CAMPAIGN ID #: P5323

APPLIED VEHICLES: 2014 – 2015 Q50 Hybrid (V37)

Check Service COMM to confirm campaign eligibility.

- There are five bulletins with different service campaign ID numbers for the DAST system.
- Each bulletin is applicable to specific vehicles.
- Make sure the correct bulletin (Campaign ID #) is being used.

INTRODUCTION

Infiniti is conducting a Voluntary Service Campaign on certain specific Model Year 2014 - 2015 Q50 Hybrid cold state vehicles (listed below) to reprogram the Direct Adaptive Steering (DAST) and replace the 12 volt battery. This service will be performed at no cost to the customer for parts or labor.

Colorado, Connecticut, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New York, North Dakota, Ohio, Pennsylvania, South Dakota, Utah, Vermont, Washington, Wisconsin, Wyoming.

IDENTIFICATION NUMBER

Infiniti has assigned identification number P5323 to this campaign. This number must appear on all communication and documentation of any nature dealing with this campaign.

DEALER RESPONSIBILITY

Dealers are to correct each vehicle falling within the range of this campaign that enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in a dealer's inventory.

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.

SERVICE PROCEDURE

IMPORTANT: Make sure this campaign P5323 applies to the vehicle you are working on by using the VIN and checking Service COMM.

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

- ASIST on the CONSULT PC has been 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 13.5V during reprogramming, the DAST may be damaged.
- Be sure to turn OFF all vehicle electrical loads. If a vehicle electrical load remains ON, the DAST 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 the DAST may be damaged.
- Turn off all external Bluetooth® devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI. If Bluetooth® signal waves are within range of the CONSULT PC during reprogramming, reprogramming may be interrupted and the DAST 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 CONSULT PC with the USB cable.
- Connect the AC adapter to the CONSULT PC.

IMPORTANT: Reprogramming Procedure must be performed 3 separate times to reprogram the control modules for DAST 1, DAST 2, and EPS/DAST 3.

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.

CAUTION: Do Not start the engine, the DAST may be damaged. (For Hybrid vehicles, make sure the Ready light is OFF.)

NOTE: Make sure ALL accessories are turned OFF.

5. Erase all stored DTCs as follows:

- Wait for the plus VI to be recognized.
- Select **Diagnosis (All Systems)** and Confirm.
- Wait for system call to complete.
- Erase all DTCs.

INFORMATION: If you have DTCs related to the Brake or Steering systems that will not erase, do the following:

- Turn the ignition OFF.
- Disconnect the 12V battery negative cable.
- Wait 5 minutes.
- Reconnect the negative battery cable.
- Restart the Service Procedure from the beginning.

6. Go to Re/programming, Configuration.

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

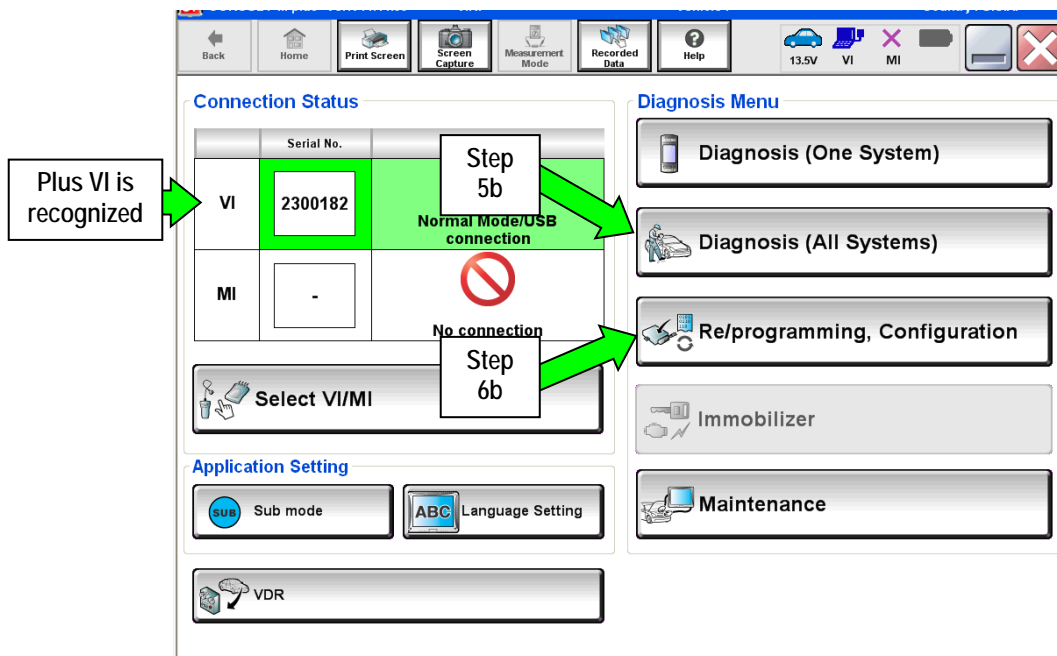


Figure 1

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

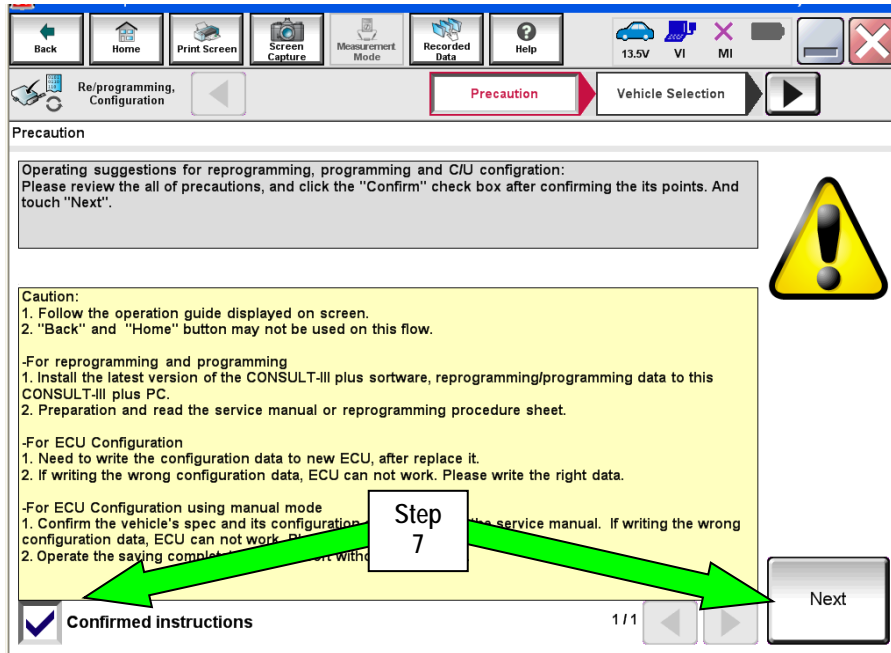


Figure 2

8. Select Q50 Hybrid and 2014 or 2015, or Automatic Selection(VIN).

- If Automatic Selection (VIN) is selected, or the screen in Figure 3 does not display, skip to step 10.

9. Select Select.

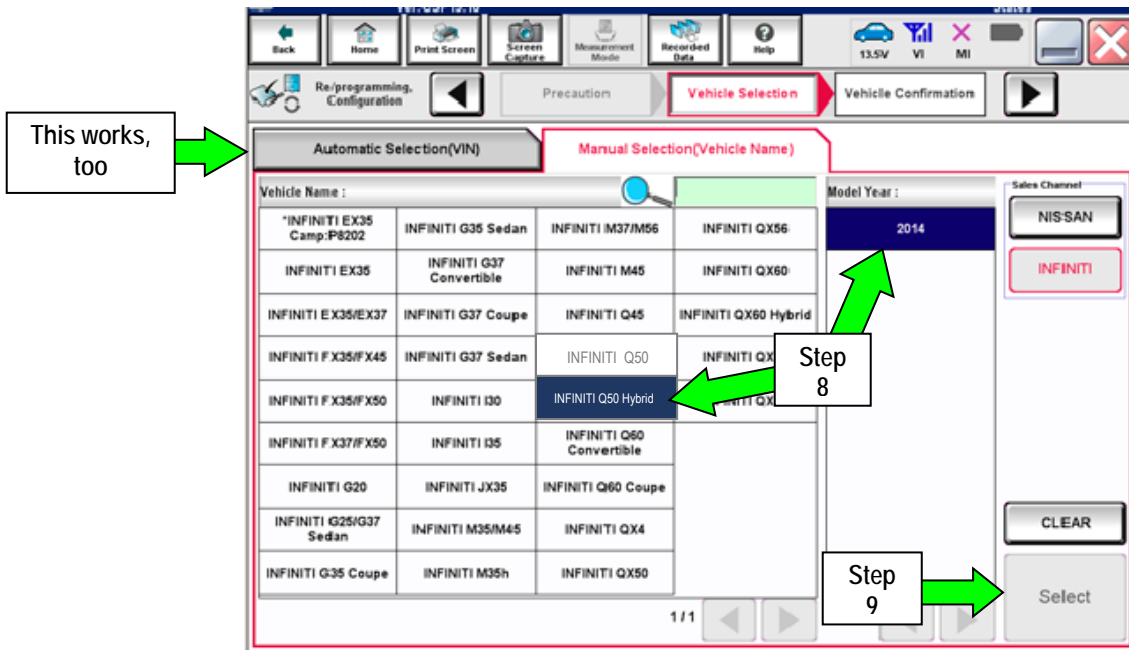


Figure 3

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

- If the correct VIN is displayed, select Confirm.

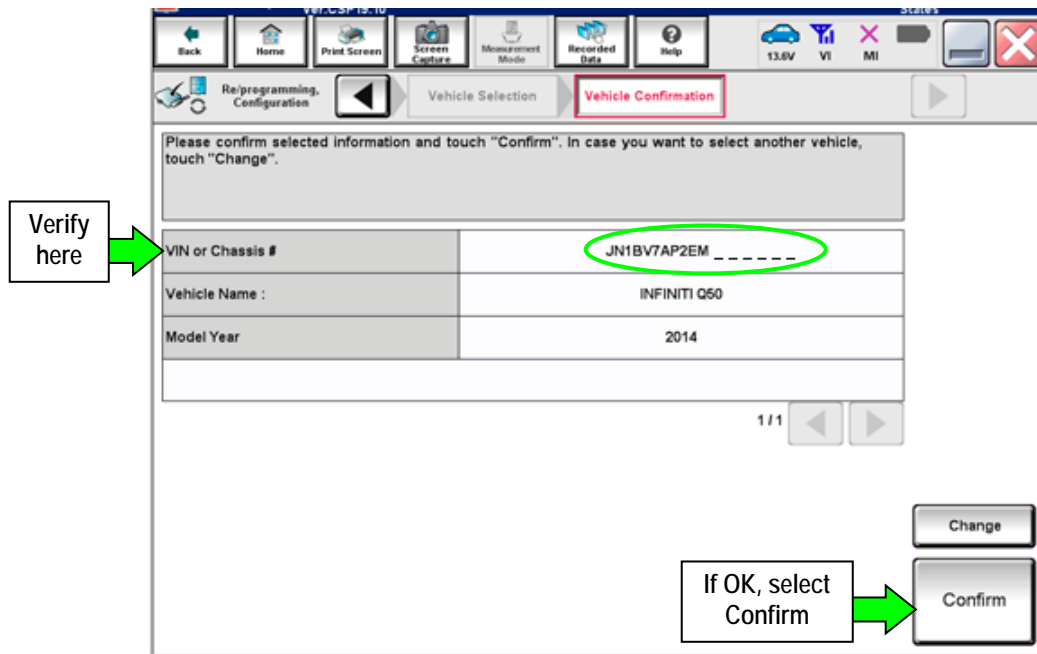


Figure 4

11. Select Confirm again.

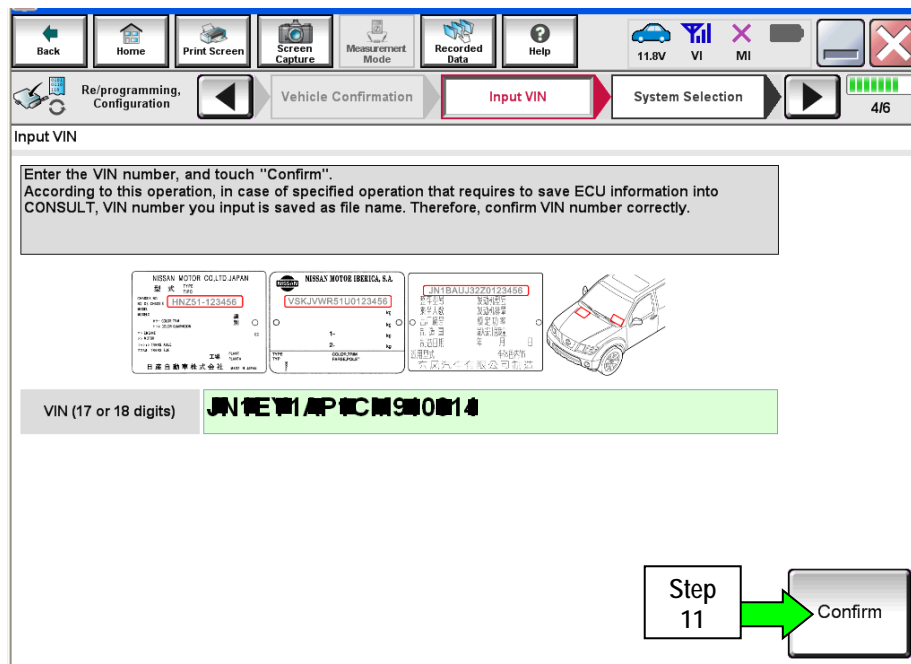


Figure 5

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

Make sure to reprogram the control modules in this order:

DAST 1, then DAST 2, and then EPS/DAST 3

NOTE: DAST 1 and DAST 2 are shown in Figure 6; EPS/DAST 3 is not shown.

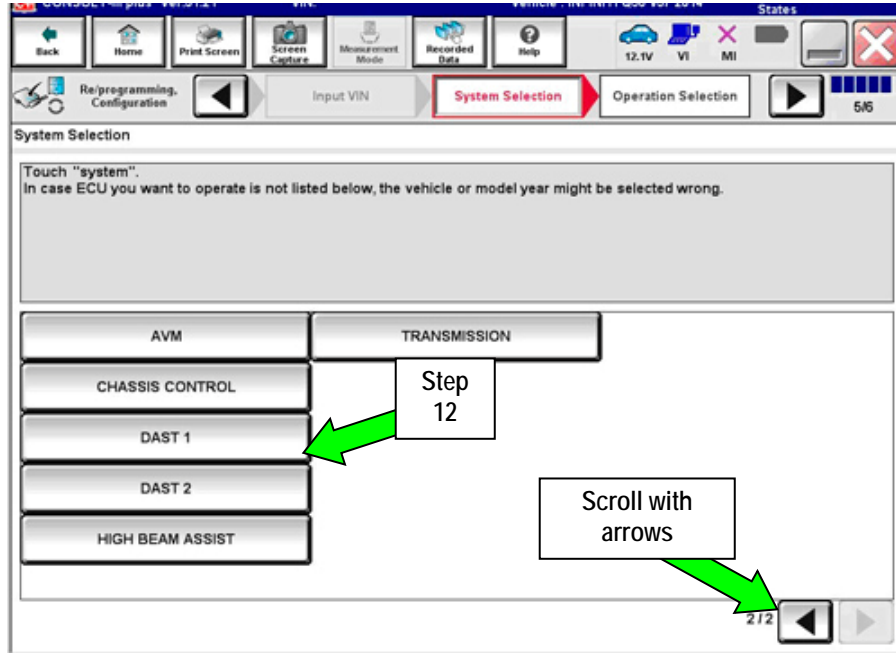


Figure 6

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

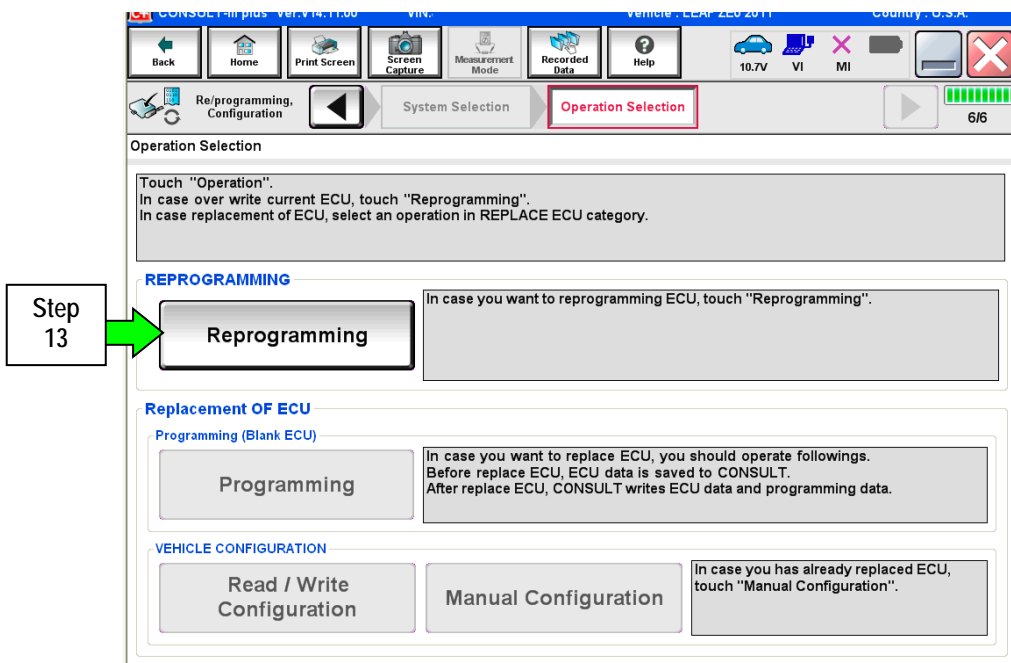


Figure 7

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

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

NOTE: This is the current DAST Part Number. DAST 1 is shown; DAST 2 and DAST 3 are similar.

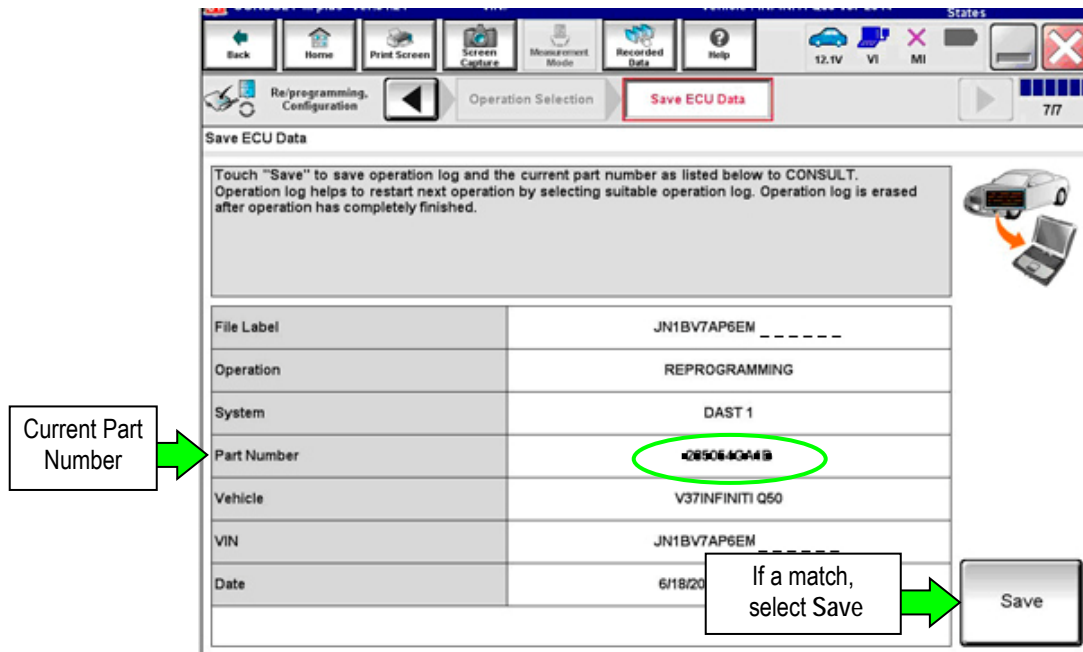


Figure 8

B. Compare the P/N you wrote down to the numbers 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, reprogramming does not apply.

NOTE: If there is no match for DAST 1, there will be no match for DAST 2 or DAST 3. You can stop. This reprogramming does not apply or it has already been done.

Table A

MODEL	CONTROL MODULE	CURRENT PART NUMBER:
2014 – 2015 Q50 Hybrid	DAST 1	28505 - 4GA0B, 4GA0C, 4GA0D, 4GA0E. 4GA0F, 4GA0K 28505 - 4GA1B, 4GA1C, 4GA1D, 4GA1E, 4GA1F, 4GA1K 28505 - 4GA2B, 4GA2C, 4GA2D, 4GA2E. 4GA2F, 4GA2K
	DAST 2	28505 - 4GA5B, 4GA5C, 4GA5D, 4GA5E, 4GA5F, 4GA5K, 28505 - 4GA6B, 4GA6C, 4GA6D, 4GA6E, 4GA6F, 4GA6K 28505 - 4GA7B, 4GA7C, 4GA7D, 4GA7E, 4GA7F, 4GA7K
	EPS/DAST 3	285H0 - 4GA5B, 4GA5C, 4GA5D, 4GA5E, 4GA5F, 4GA5K 285H0 - 4GA0B, 4GA0C, 4GA0D, 4GA0E, 4GA0F, 4GA0K 285H0 - 4GA1B, 4GA1C, 4GA1D, 4GA1E, 4GA1F, 4GA1K 285H0 - 4GA6B, 4GA6C, 4GA6D, 4GA6E, 4GA6F, 4GA6K

C. If there is a part number match as specified above, select Save and then continue with the reprogramming procedure on the next page.

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

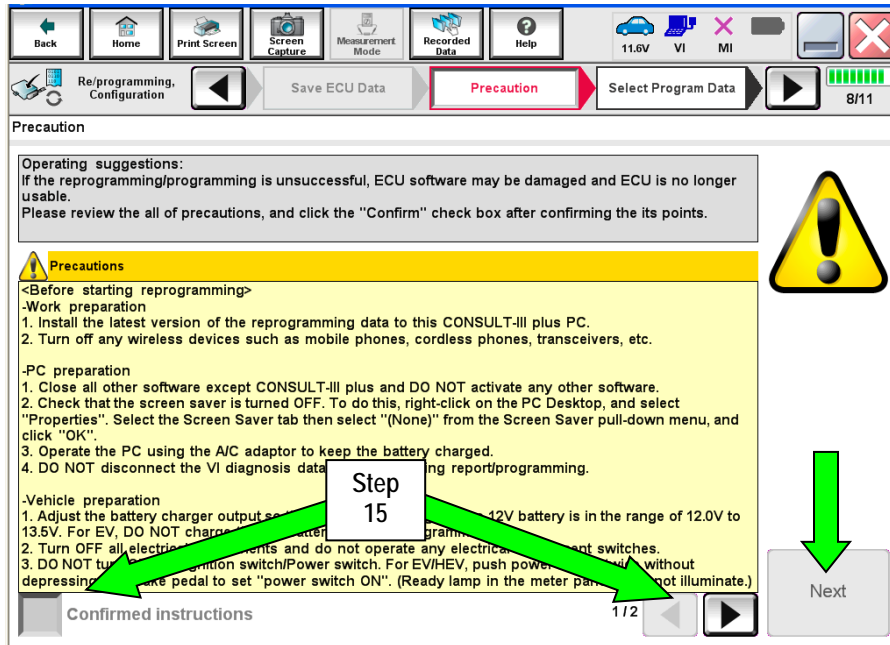


Figure 9

NOTE:

- In some cases, more than one new P/N for reprogramming is available.
 - If more than one 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 module.

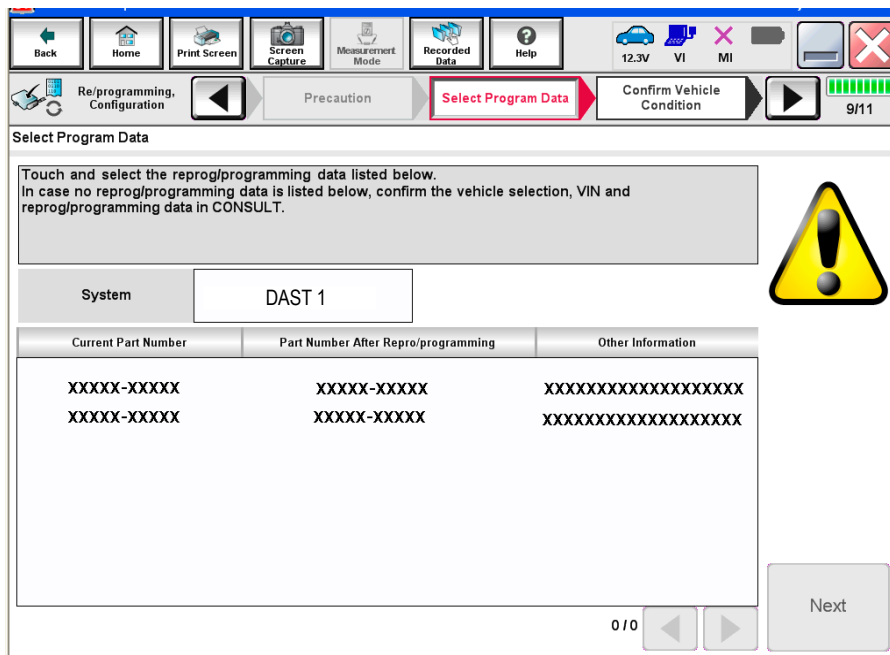


Figure 10

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

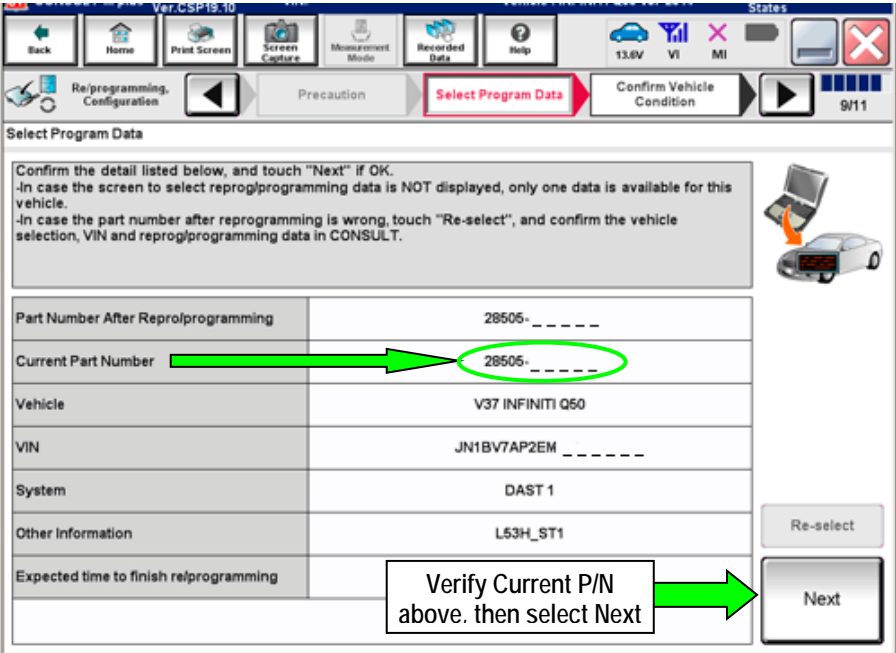


Figure 11

17. If the screen in Figure 12 appears, first select Delete then Confirm, and then Other Operation.

- This will erase the Saved Data List and restart the reprogram from step 12. You must go back to step 12.
- If no Saved Data List is stored, Figure 13 on the next page will be displayed.

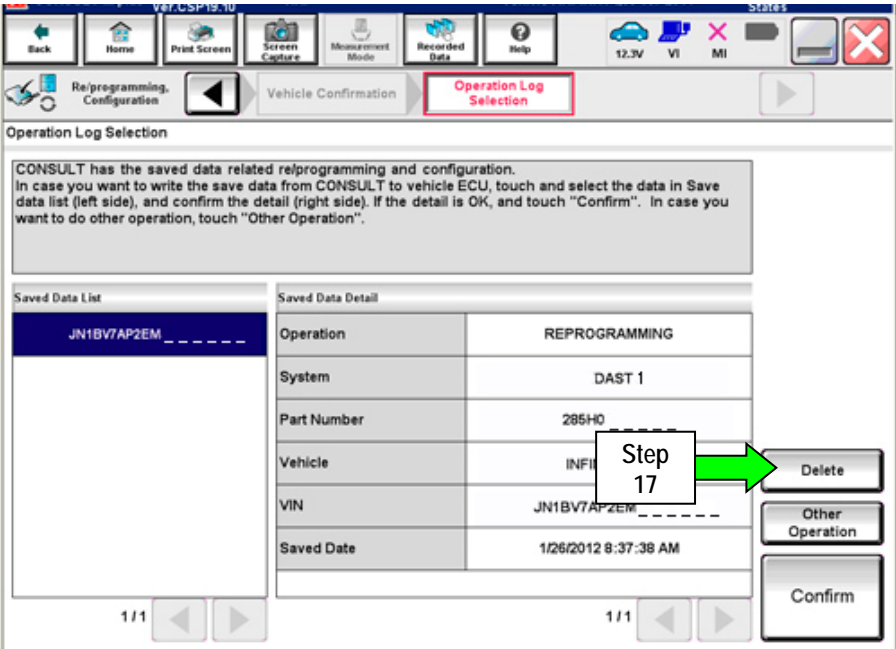


Figure 12

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

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

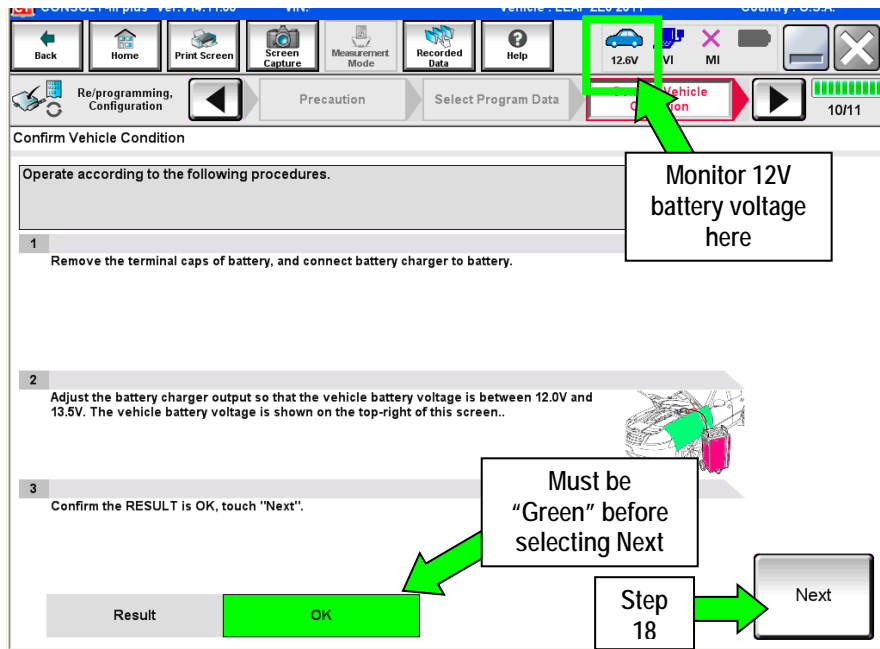


Figure 13

19. With battery voltage OK (green), select Start.

- The reprogramming process begins when Start is selected.

NOTE: For reprogramming to continue, the vehicle 12V battery voltage must stay within 12 volts and 13.5 volts. .

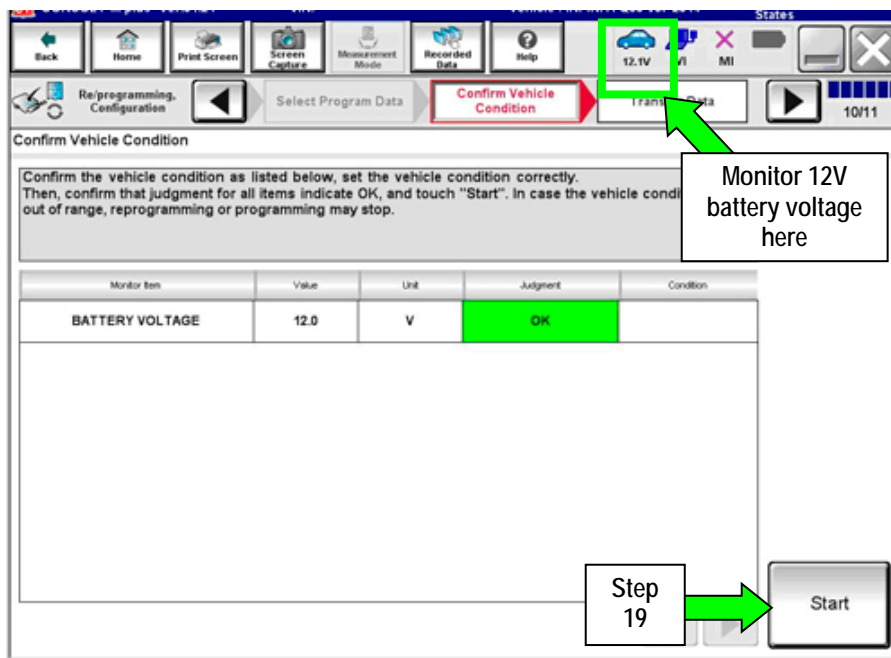


Figure 14

IMPORTANT: Until the reprogramming has completed:

- Do not disconnect the USB cable, although the following message appears:

“Disconnecting CONSULT and VI is Available”

- Do not touch the Home button until instructed to.
- When the VI is transferring the reprogram to the DAST control module, do not disconnect the VI from the vehicle even if the PC freezes.
- If you need to disconnect the VI, first check the LED on the VI body to confirm that the communication from the VI to the vehicle has completed and the LED for the vehicle icon is OFF.
- If you accidentally disconnect the VI during program writing to the vehicle, the DAST control module that is being reprogrammed may need to be replaced. Refer to Control Unit Recovery on the next page.

20. Wait for both bar graphs to complete.

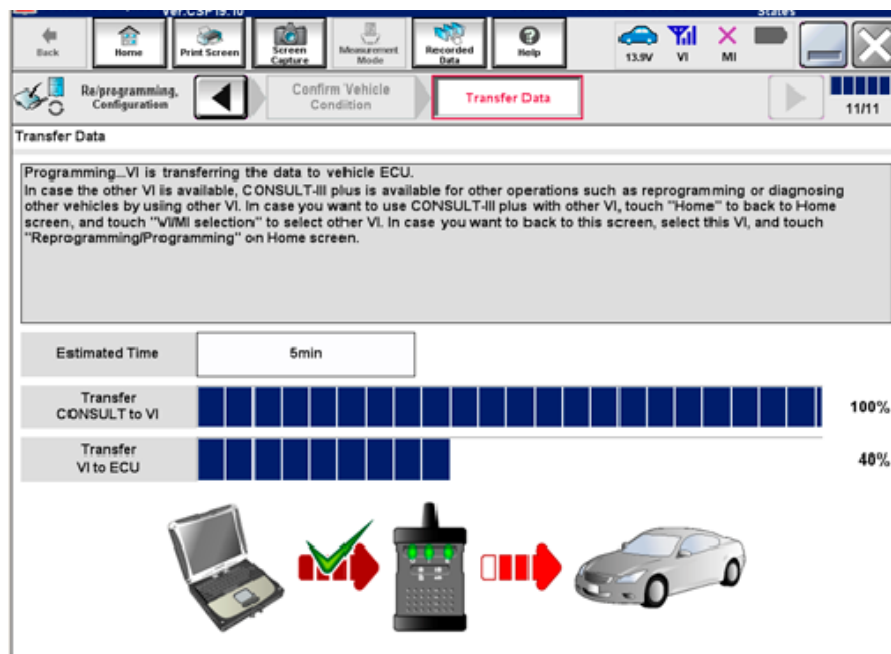


Figure 15

Possible errors that may rarely occur:

- If the progress bar freezes at 90% of a complete transfer to the VI and error code “12-1-1NR” is displayed (see Figure 16 on the next page), turn the ignition OFF, then ON, and then refer to Control Module Recovery on the next page.
- If the progress bar freezes at 90% more than 3 times “on the same DAST control module” but without Error Code “12-1-1NR”, the DAST control module that is currently being reprogrammed will need to be replaced.
- If the reprogramming does not complete, refer to Control Unit Recovery on the next page.

NOTE: If a DAST control module replacement is required:

- Refer to the appropriate section of the ESM for the procedure to replace and configure a DAST control module.
- **Make sure to perform Read/Write Configuration:** Save the Control module’s configuration before replacement and then write the configuration to the new control module.

Control Unit Recovery:

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

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

- Check battery voltage (12.0–13.5 V).
- Ignition is ON, engine OFF (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 the first attempt and can be selected more than once.

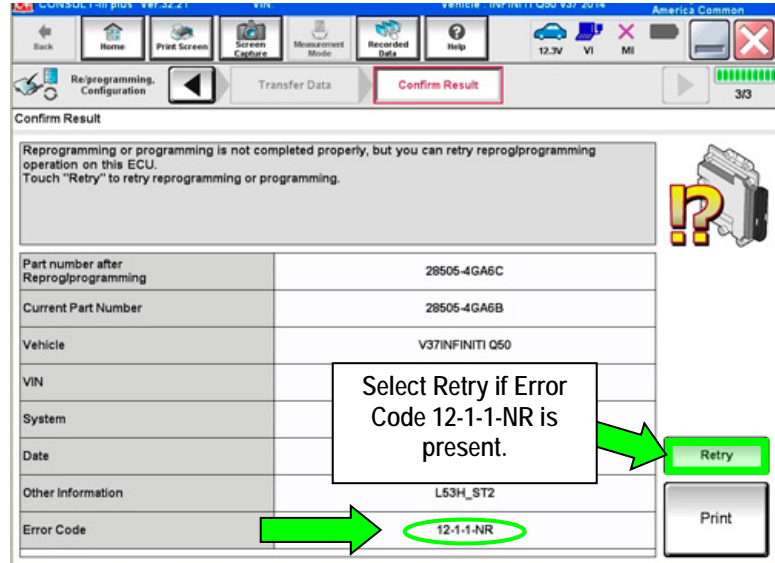


Figure 16

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

- Check battery voltage (12.0 – 13.5 V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, engine OFF (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.

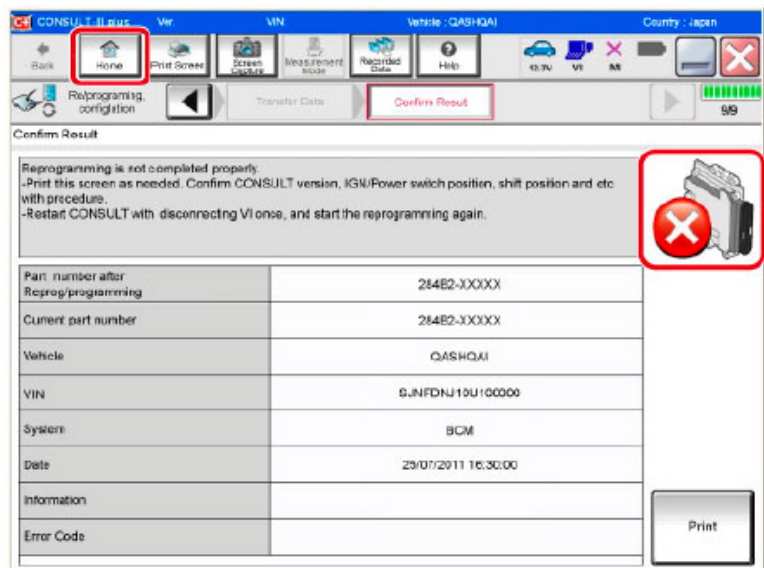


Figure 17

21. When the screen in Figure 18 appears, reprogramming is complete.

22. Select Next.

23. Wait for System Call to complete.

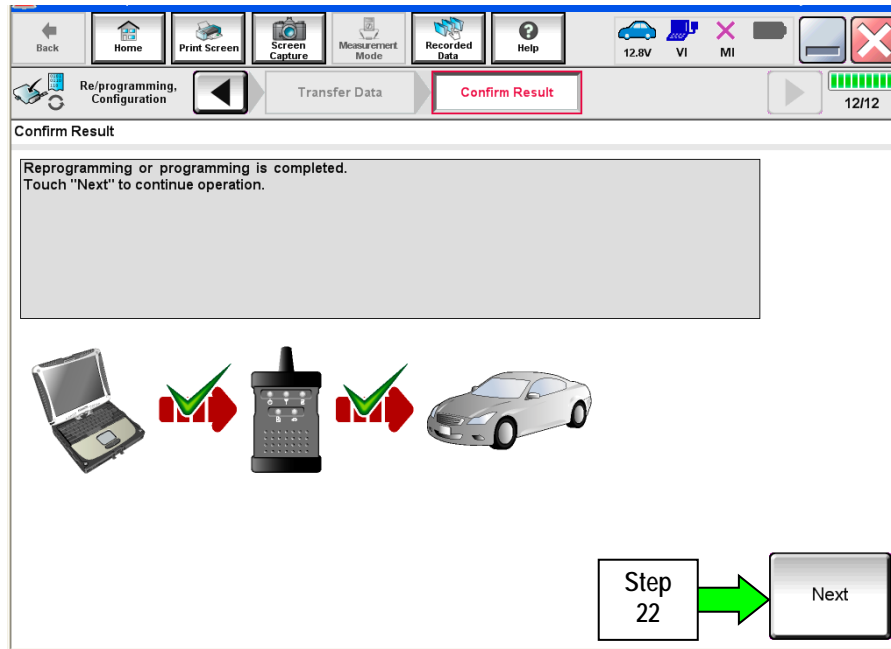


Figure 18

24. Erase all DTCs as follows:

a. Turn the ignition OFF.

- The screen in Figure 19 will read OFF after pressing the power/ignition switch once.

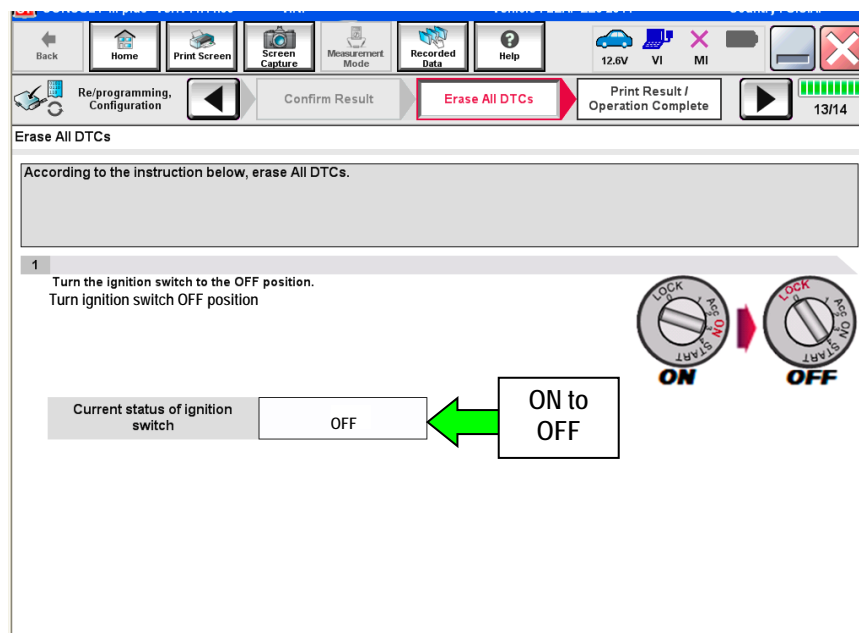


Figure 19

- b. Turn the ignition ON with engine OFF (press switch twice, foot off brake).
 - The screen in Figure 19 will read ON after pressing the power/ignition switch twice.
- NOTE: Do not be confused by any screen messages. At this point, simply turn the ignition ON.

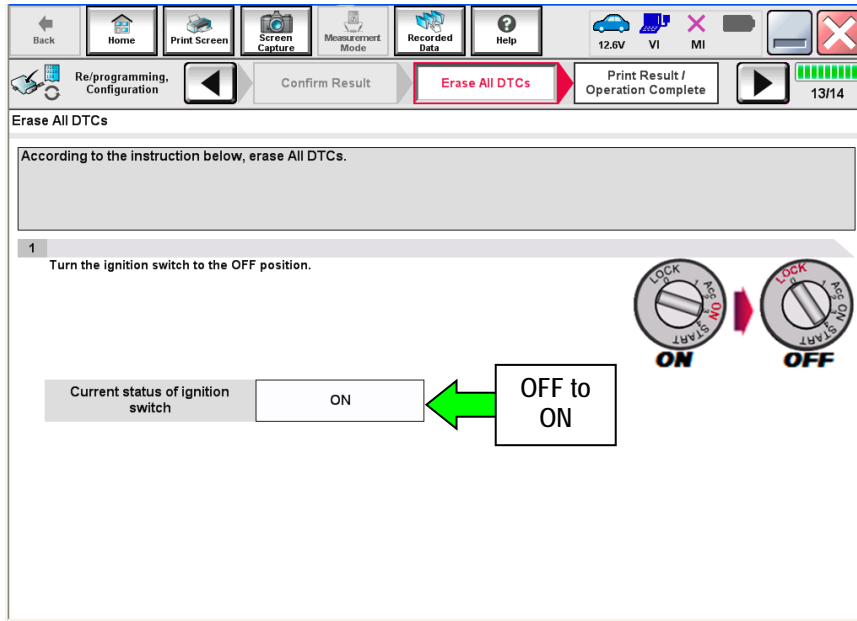


Figure 20

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

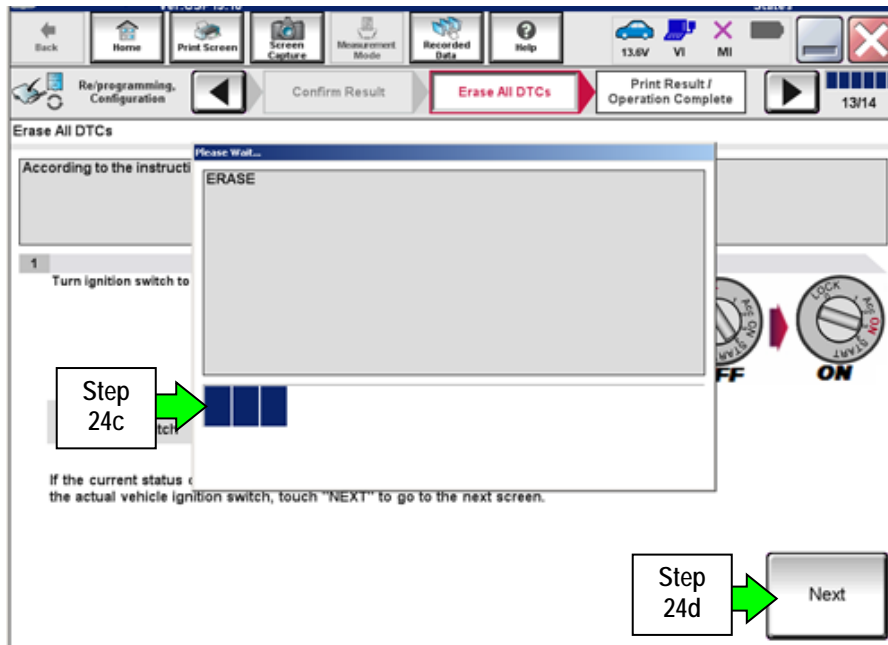


Figure 21

25. Verify the part number has changed (before and after reprogramming part numbers should be different).

- a. Print a copy of the screen in Figure 22 by selecting Print.
- b. Attach a copy to the repair order.
- c. Once a copy has been printed, select Confirm.

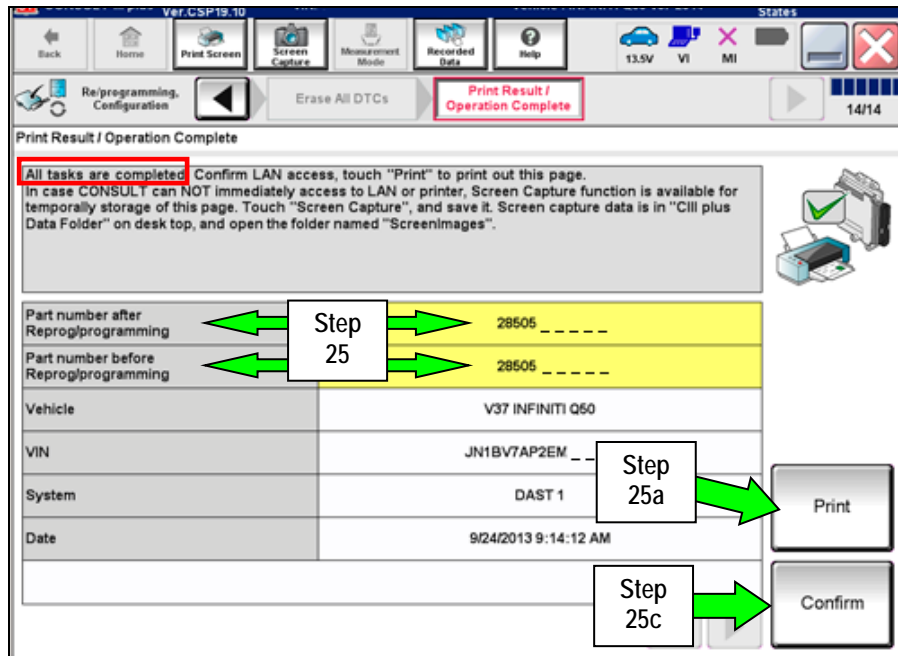


Figure 22

26. After Confirmation has completed, select Home.

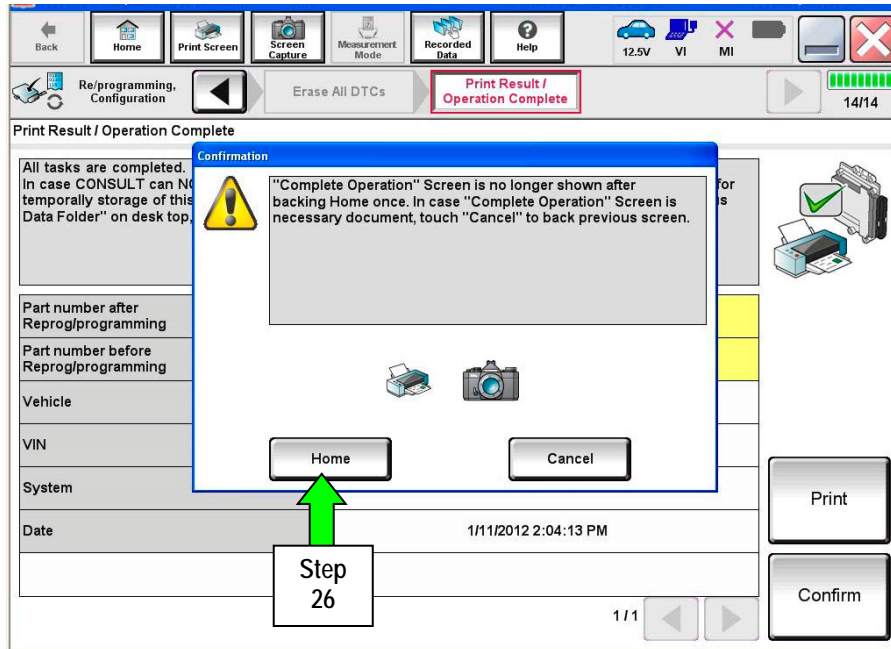


Figure 23

27. Repeat the entire reprogramming procedure for DAST 2.

28. Repeat the entire reprogramming procedure for EPS/DAST 3.

After all three reprograms (DAST 1, DAST 2, and EPS/DAST 3) are complete, the reprogramming is finished.

Proceed to 12 Volt Battery Replacement on the next page.

12 Volt Battery Replacement

1. Without depressing brake pedal, push the vehicle "Power Switch" to ON.
2. Write down the customer preferred setting for the Automatic Air Conditioning System.
 - If needed, refer to System Settings in the HAC section of the ESM.
3. Turn the vehicle OFF.
4. Replace the 12 volt battery with the new part listed in Parts Information.
 - Refer to the Electronic Service Manual (ESM), section PG - Power Supply, Ground & Circuit Elements for 12 battery removal and installation.
NOTE: The replacement battery does not come with a new vent tube. The preexisting vent tube is to be reused.
5. Reset the customer preferred settings for the Automatic Air Conditioning System.
 - If needed, refer to System Settings in the HAC section of the ESM.
6. Reinitialize and check the Anti-Pinch Function for all Auto-UP power windows:
7. Reinitialize "Automatic Drive Positioner" (ADP).
8. Inform the customer that:
 - Some memory settings in the navigation system may need to be reset.
 - Settings for ADP seat and mirror may need to be reset.

Reinitialize Anti-Pinch:

- a. Turn the ignition ON.
- b. Operate the power window switch to fully open the window (glass all the way down).
- c. Hold the window switch UP until the glass stops at the fully closed position, and then continue holding the switch UP for 2 seconds or more.
- d. Check that AUTO-UP function operates normally.

Check Anti-Pinch Function:

- a. Fully open the door window (glass all the way down).
- b. Hold a piece of wood near the fully closed position.
- c. Close the door window glass using the AUTO-UP switch. Allow the window glass to hit the wood.
- d. Check the following conditions:
 - Check that the glass lowers for approximately 150 mm (5.9 in), without pinching the wood, and stops.
 - Check that the glass does not rise when operating the power window main switch, while the window is lowering after hitting the wood.

CAUTION: Do not check anti-pinch function with hands or other body parts because they may be pinched.

Reinitialize ADP:

- a. Turn ignition switch from ACC to OFF position.
- b. Open → Close → Open Driver door.

Or

Drive the vehicle at more than 25 km/h (16 MPH).

PARTS INFORMATION

Description	PART NUMBER	Quantity
12 Volt Battery (1))	999M1-QYQ85	1

(1) Order this item through the Infiniti Maintenance Advantage Program; 1-877-INF-IMA1 (877-463-4621) or through website via link on dealer portal www.NNA.net and click on the "Maintenance Advantage" link.

CLAIMS INFORMATION

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

CAMPAIGN ("CM") I.D.	DESCRIPTION	OP CODE	FRT
P5323	Reprogram DAST C/U and Replace 12 Volt Battery	P53230	1.4 hrs.