



Classification: BR14-003	Reference: ITB14-026	Date: June 18, 2014
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2014 Q50 HYBRID; BRAKES INTERMITTENTLY GRAB ON INITIAL APPLICATION AT AMBIENT TEMPERATURES BELOW 40°F

APPLIED VEHICLE: 2014 Q50 Hybrid (V37)

APPLIED VINS AND DATES: Built before:

2WD JN1AV7AP(*)EM 692166 / Apr 16, 2014

AWD JN1AV7AR(*)EM 703481 / Apr 16, 2014

IF YOU CONFIRM

When initially applying the brakes:

- The brakes are too sensitive and may unexpectedly grab with a lower than normal pedal pressure.

AND

- Only occurs at ambient temperatures below 40°F (4°C).

NOTE: This Service Procedure will not change or affect any braking sensitivity above 40°F (4°C).

ACTION

1. Bleed the brake hydraulic system.
2. Reprogram the Brake Controller.
3. Erase all DTCs present.

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 the repair.

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

Bleed Hydraulic Brake System

Bleed all four brake calipers first before performing the Brake Controller reprogram.

- Refer to the Electronic Service Manual (ESM) section **BR Brake System** for the procedure to bleed air from the Hydraulic Brake System.

IMPORTANT: The vehicle ignition must be ON while bleeding the hydraulic system for this braking system.

Reprogram the Brake Controller

NOTE: Follow all cautions, warnings, and notes in the 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 CONSULT III PLUS (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.

NOTE: Battery voltage must stay between 12 volts and 15.5 volts or reprogramming may not start or be temporarily stopped. Returning battery voltage within the 12-15.5V 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 15.5V 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 A

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.

IMPORTANT: Make sure to turn OFF all vehicle electrical loads. Make sure the battery voltage stays between 12.0V and 15.5V 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.

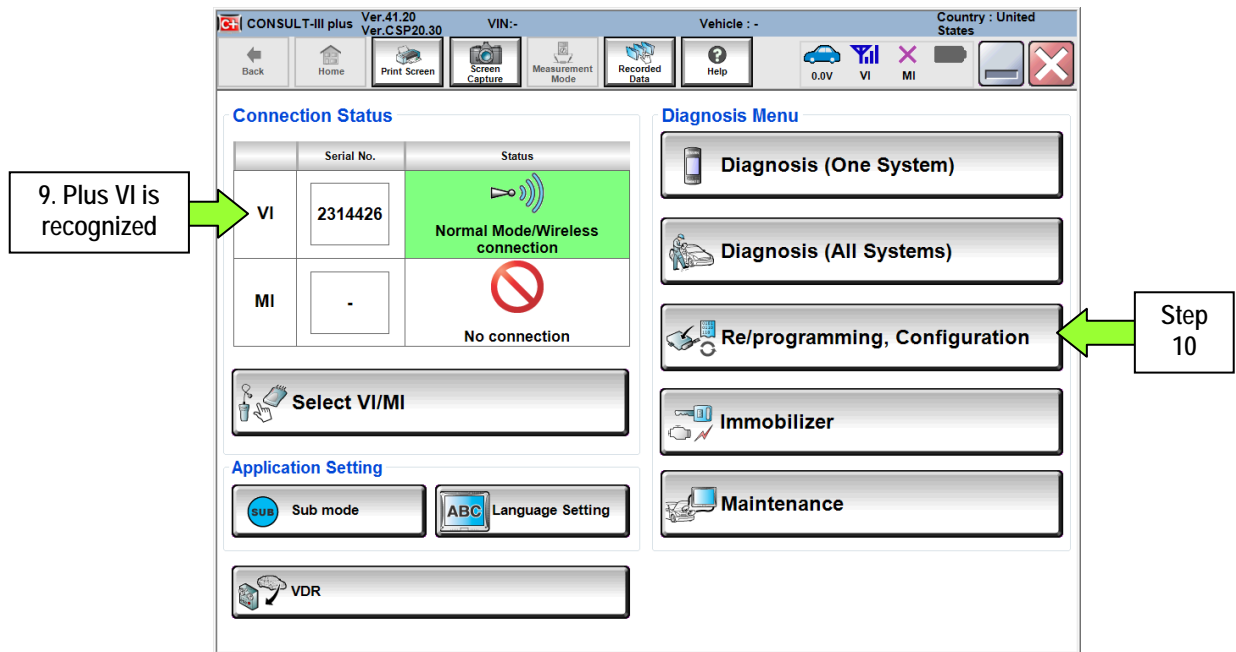


Figure 1

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

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

13. Select Next.

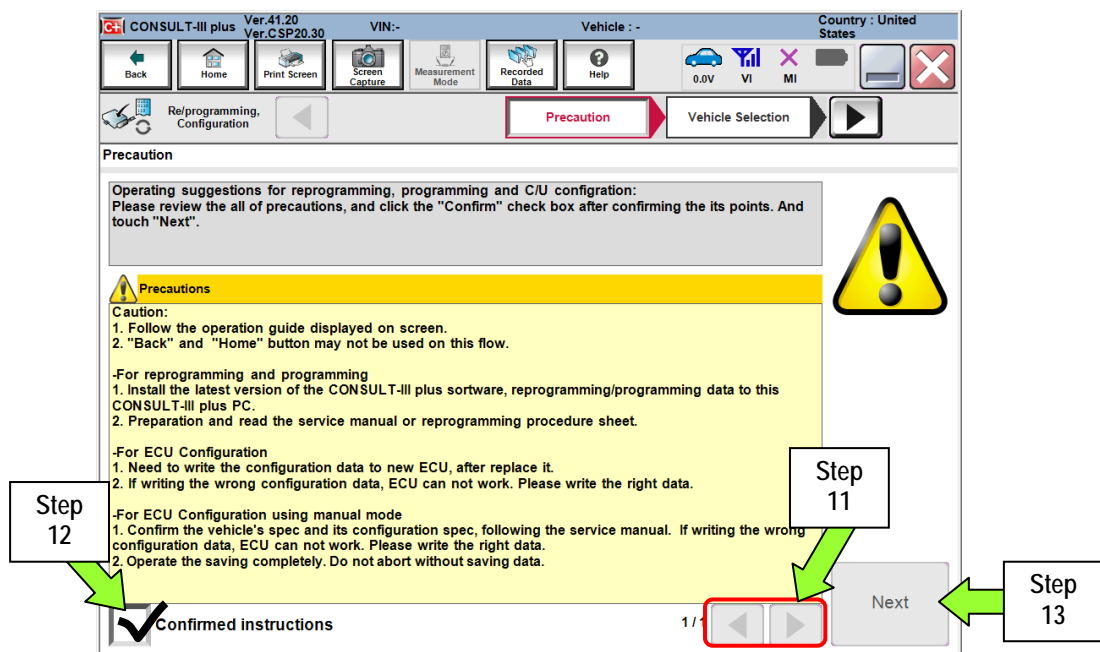


Figure 2

14. Select Q50 and 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.

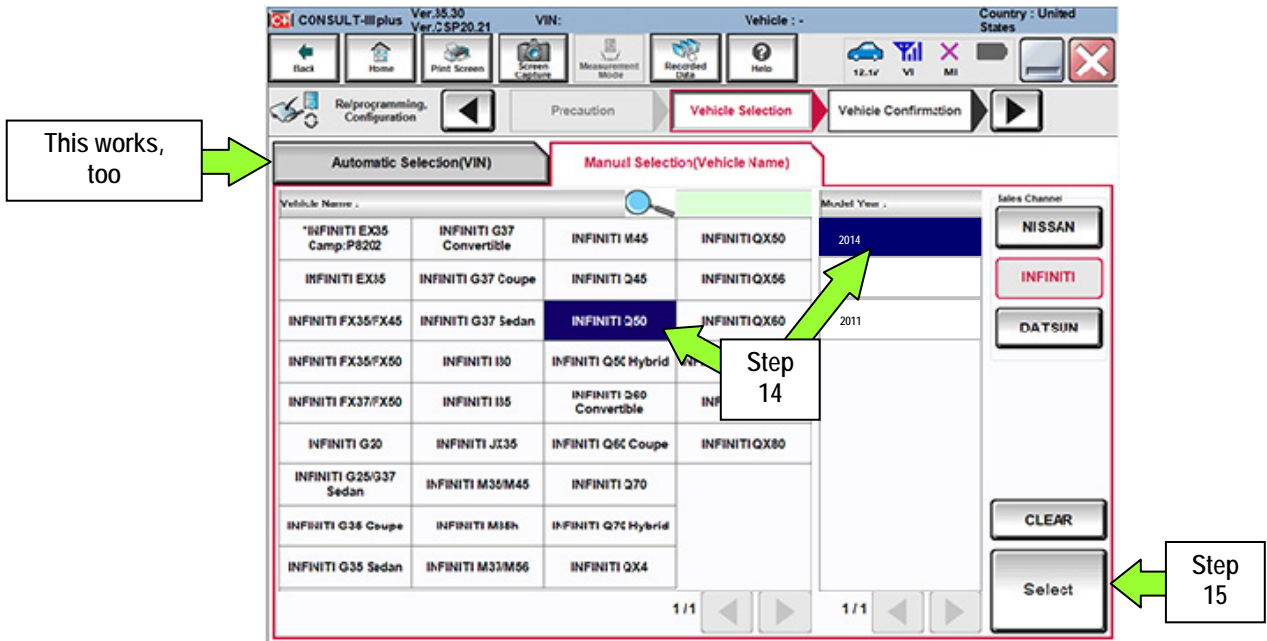


Figure 3

16. Verify the VIN in VIN or Chassis # matches the vehicle being reprogrammed.
 - If the correct VIN is displayed, select Confirm.

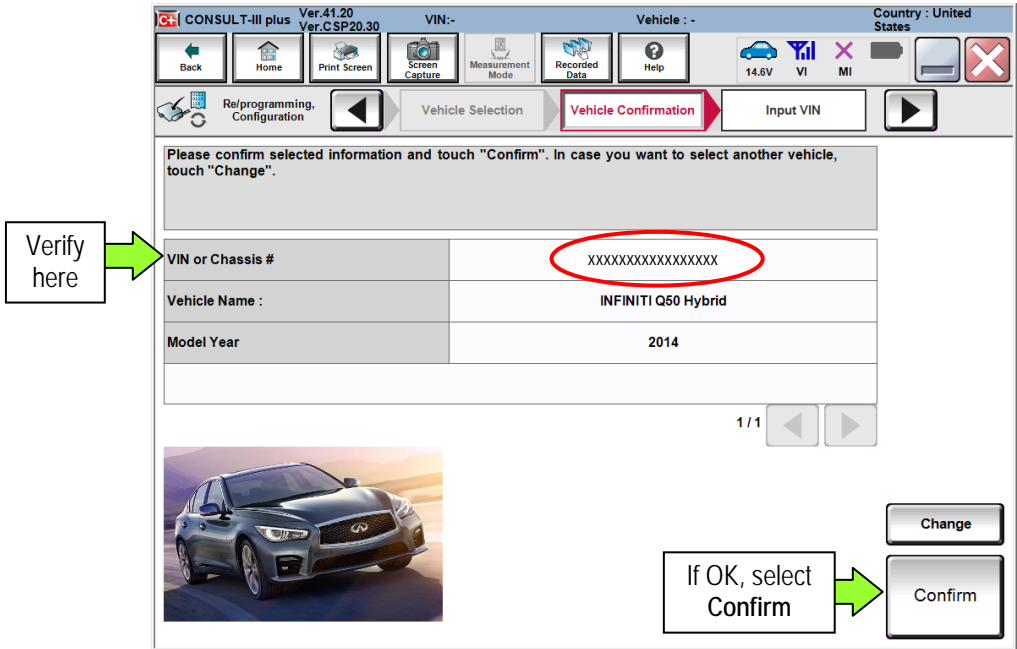


Figure 4

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

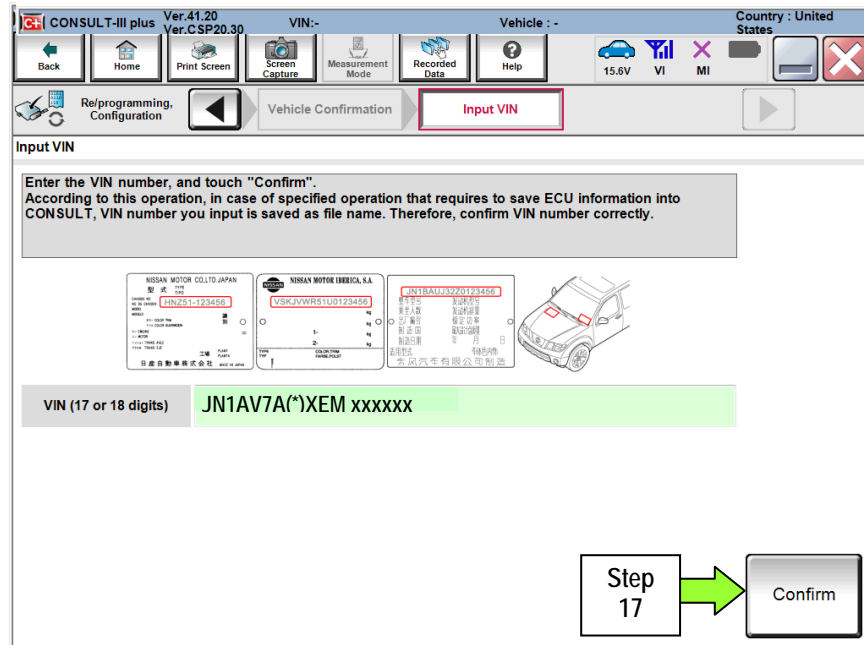


Figure 5

18. Select **BRAKE**.

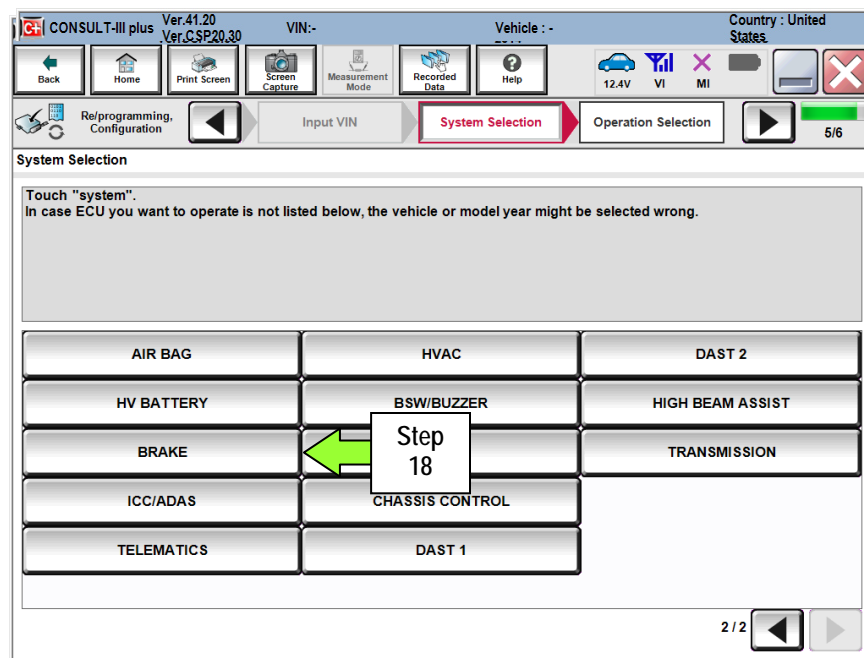


Figure 6

19. Select Reprogramming.

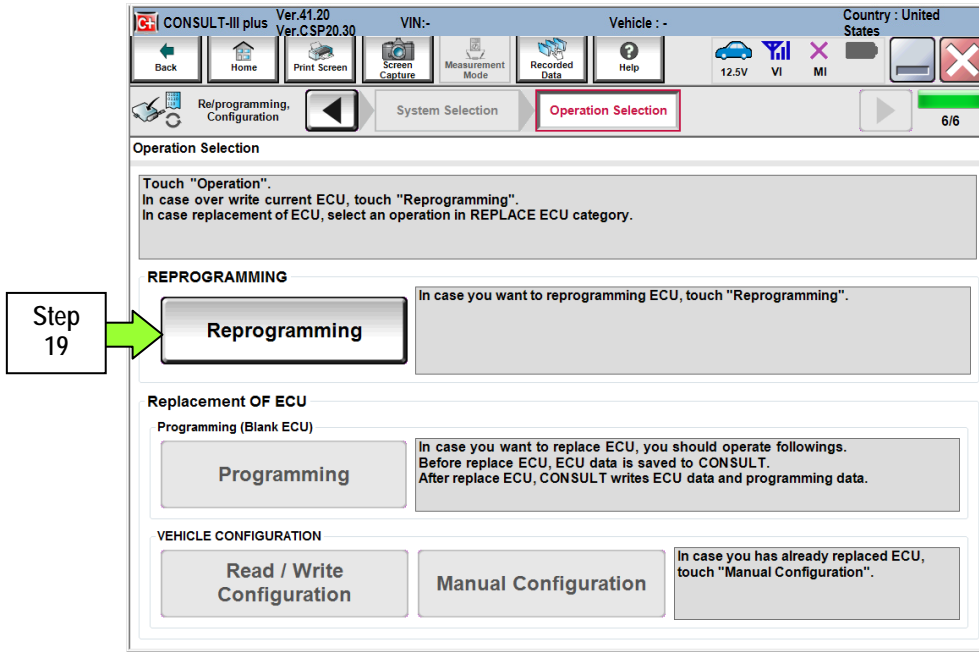


Figure 7

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

- a. Find the **BRAKE Part Number** and write it on the repair order.

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

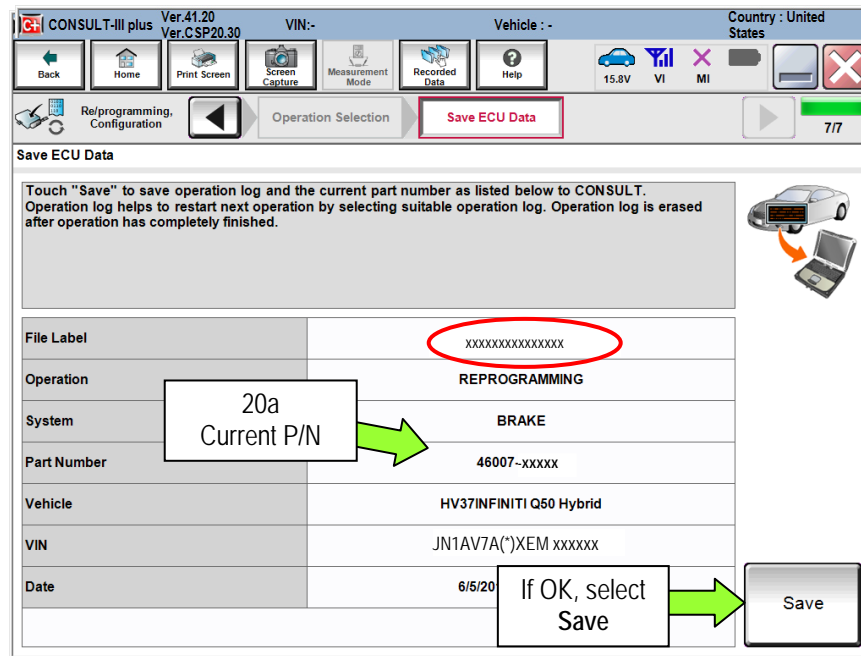


Figure 8

- b. Compare the P/N you wrote down to the numbers in the **CURRENT BRAKE PART NUMBER** column in **Table A** below.

- If the **BRAKE** 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 **BRAKE** part number is not listed in **Table A**, this bulletin does not apply.
 - Disconnect the GR8 and CONSUTLT PC.

Table A

Model year	CURRENT BRAKE PART NUMBER: 46007-
2014 QX50 (V37)	4GF5A, 4GF6B, 4GF6D, 4GF6E
	4GF7B, 4GF7D, 4GF7E
	4GF8B, 4GF8D, 4GF8E,
	4GA8B, 4GA8D, 4GA8E

21. Select Next.

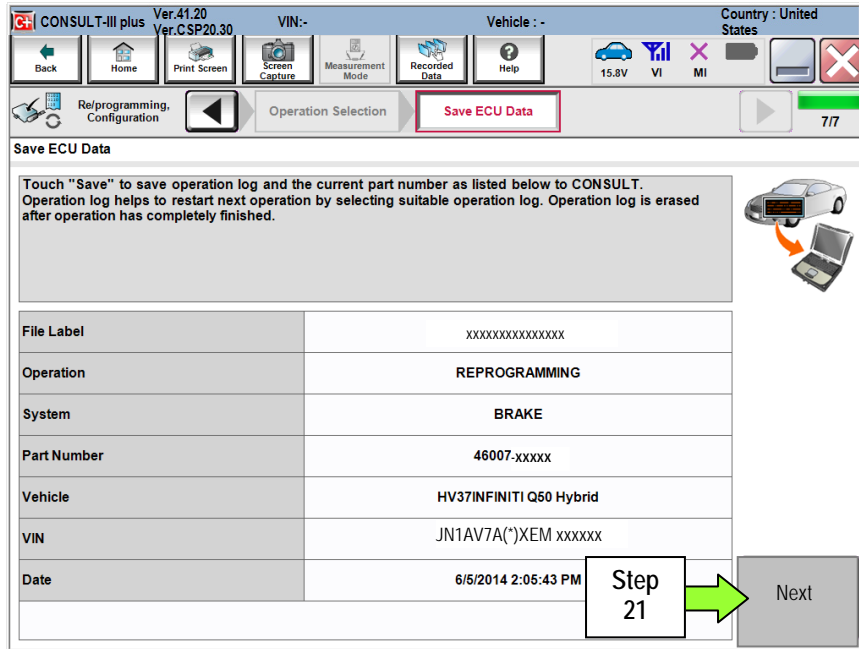


Figure 9

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

23. Select Next.

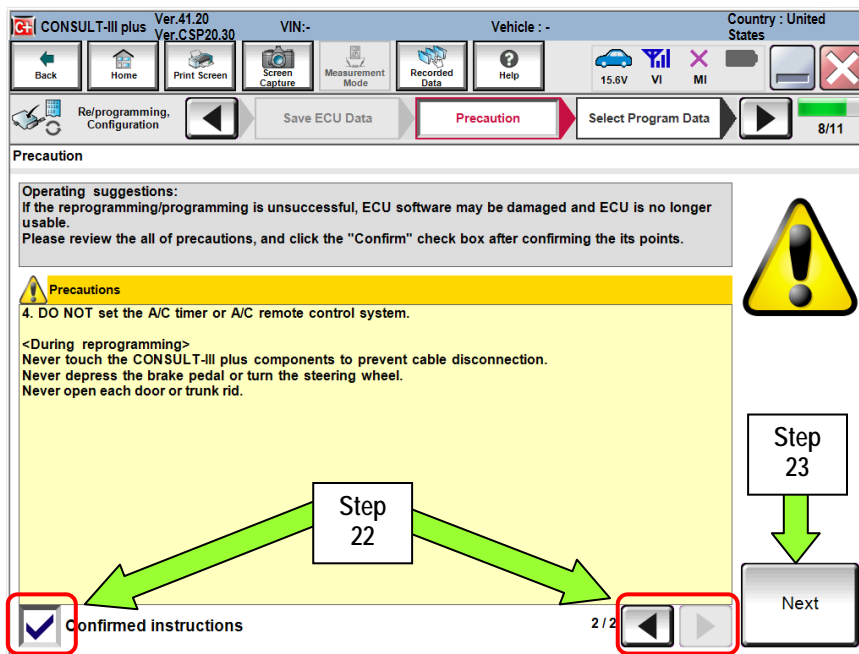


Figure 10

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.

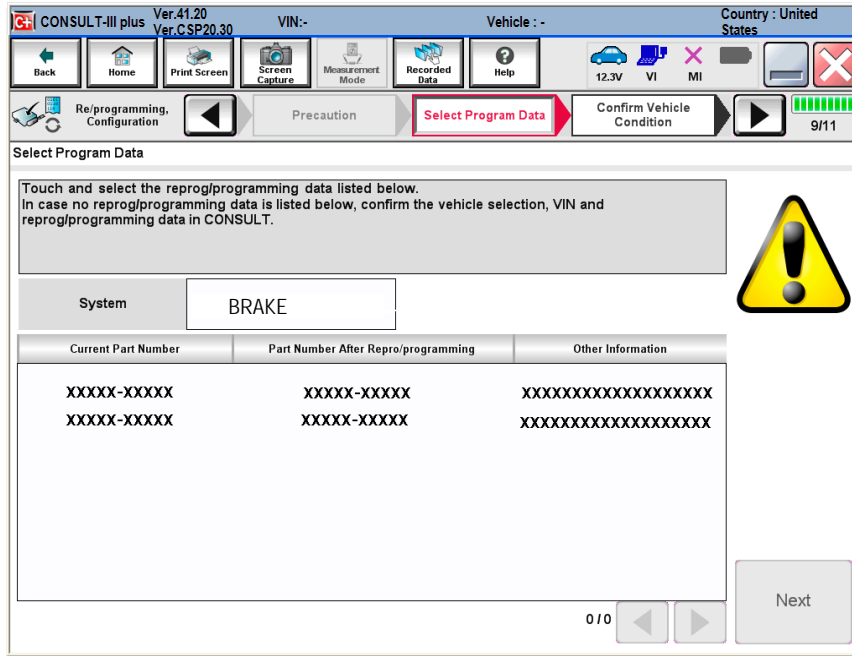


Figure 11

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

25. Select **Next**.

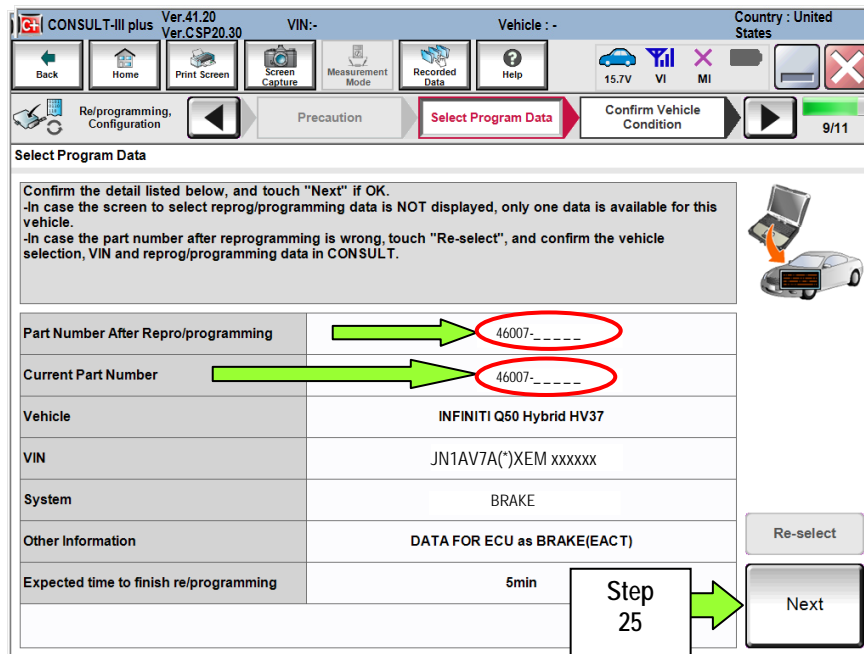


Figure 12

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

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

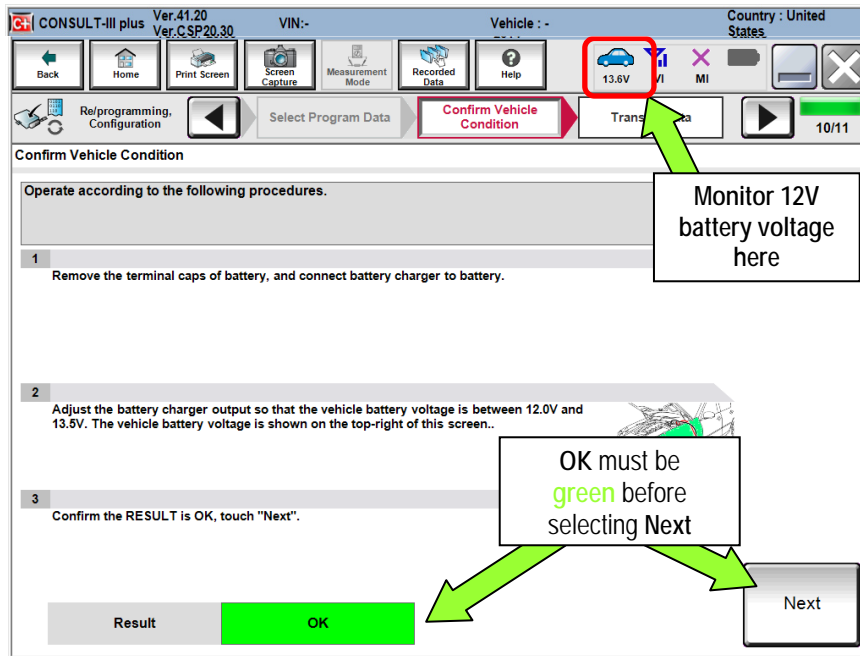


Figure 13

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 15.5 volts. Make sure the voltage level is sufficient.

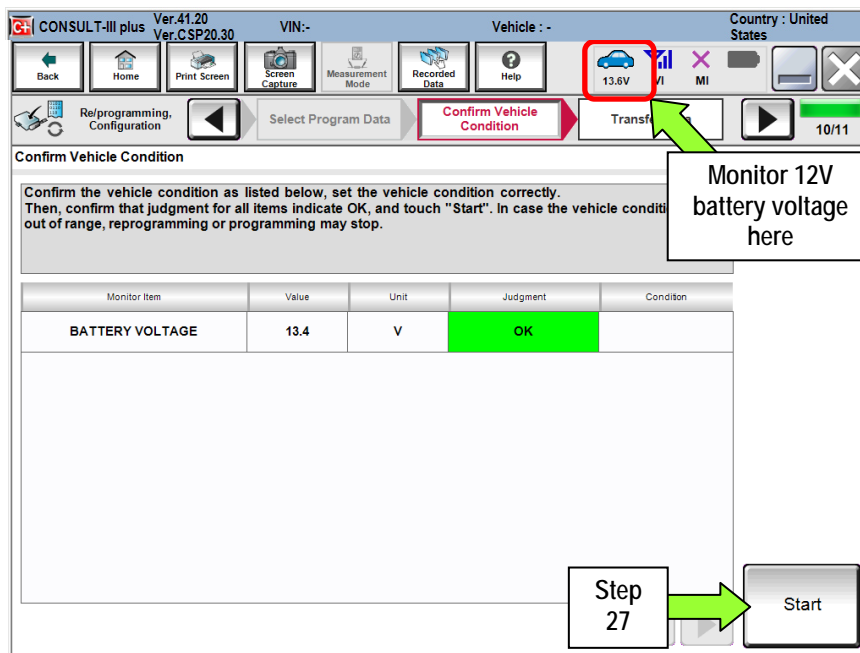


Figure 14

28. Wait for both bar graphs to complete.

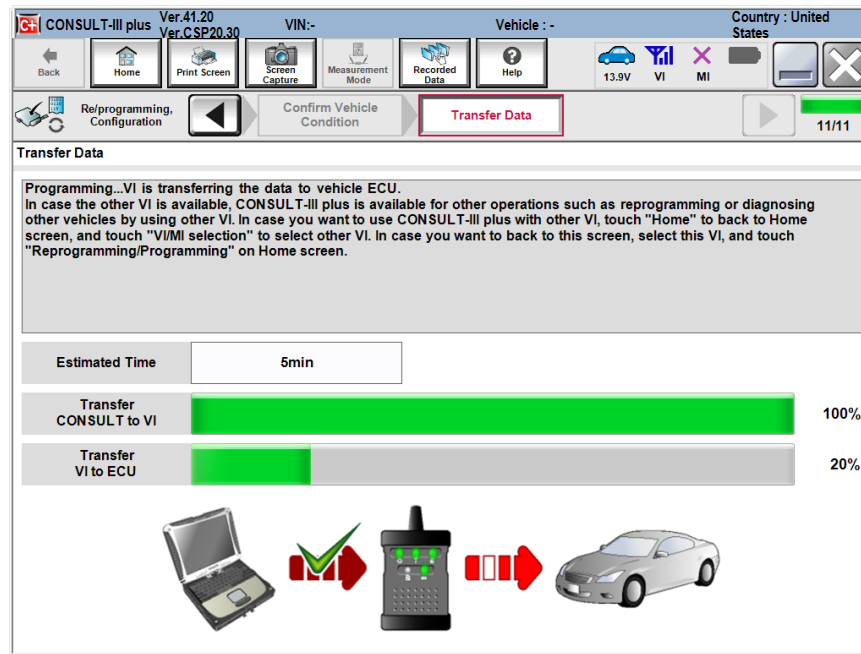


Figure 15

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

- a. Select **Next**, and then wait for System Call to complete.
- b. Proceed to step 30 on page 15.

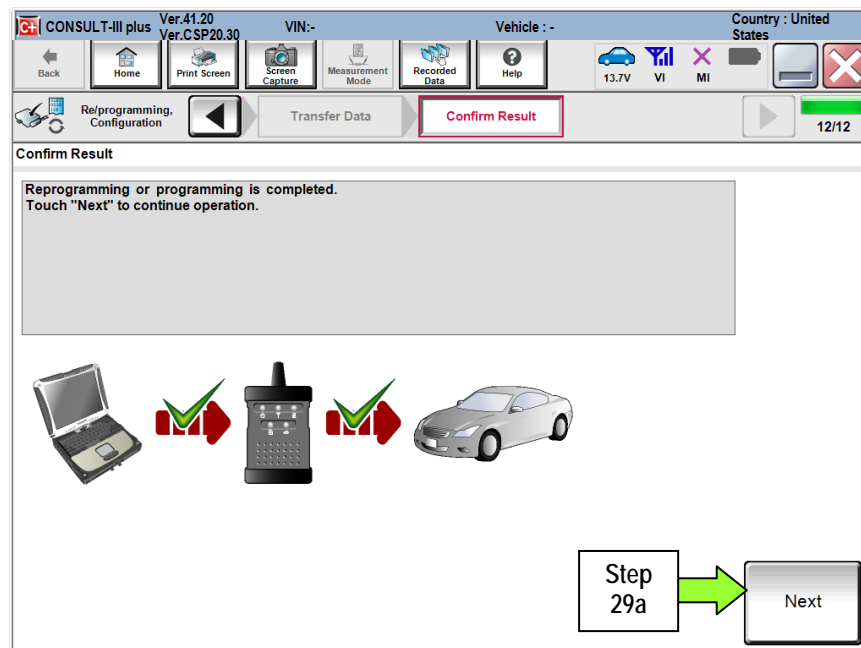


Figure 16

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

BRAKE MODULE recovery

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

- Check battery voltage (12.0 - 15.5V).
- 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.

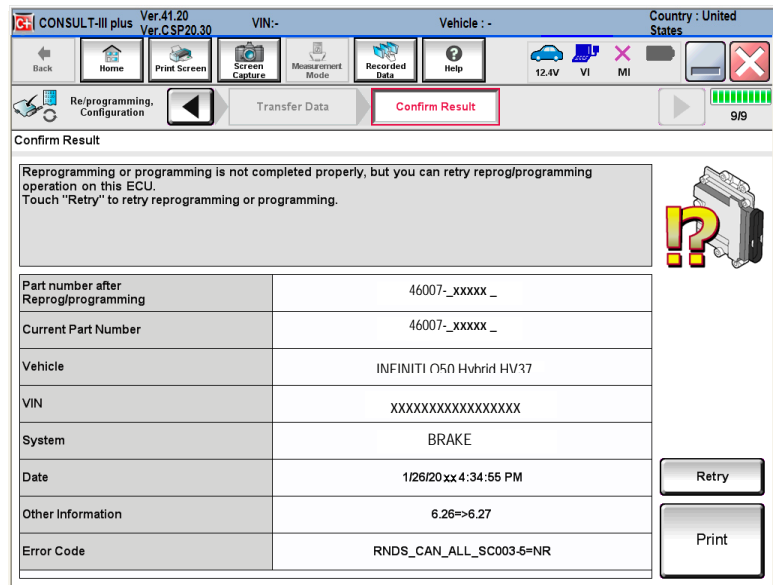


Figure 17

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 - 15.5V).
- 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.

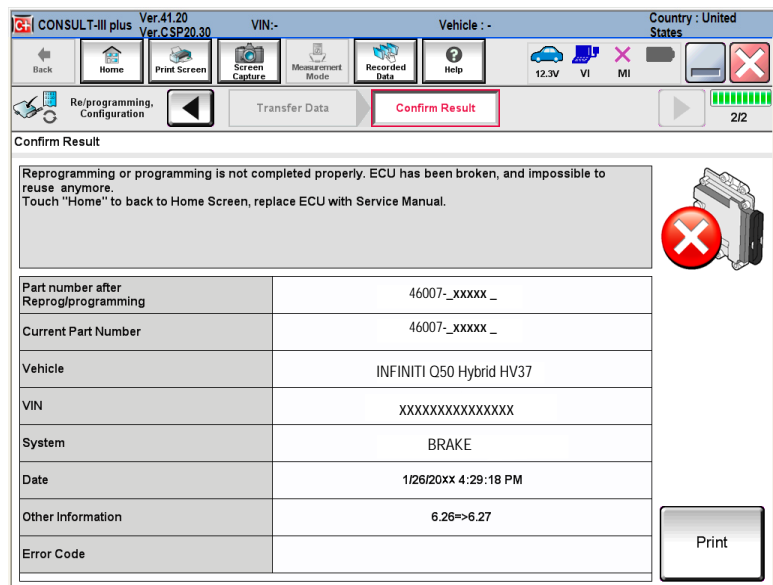


Figure 18

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.

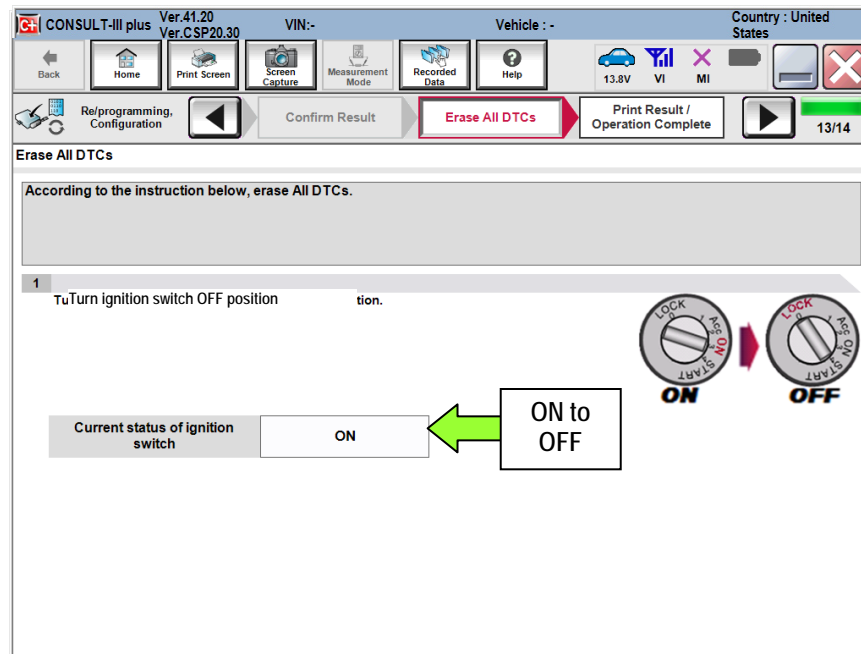


Figure 19

- 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.

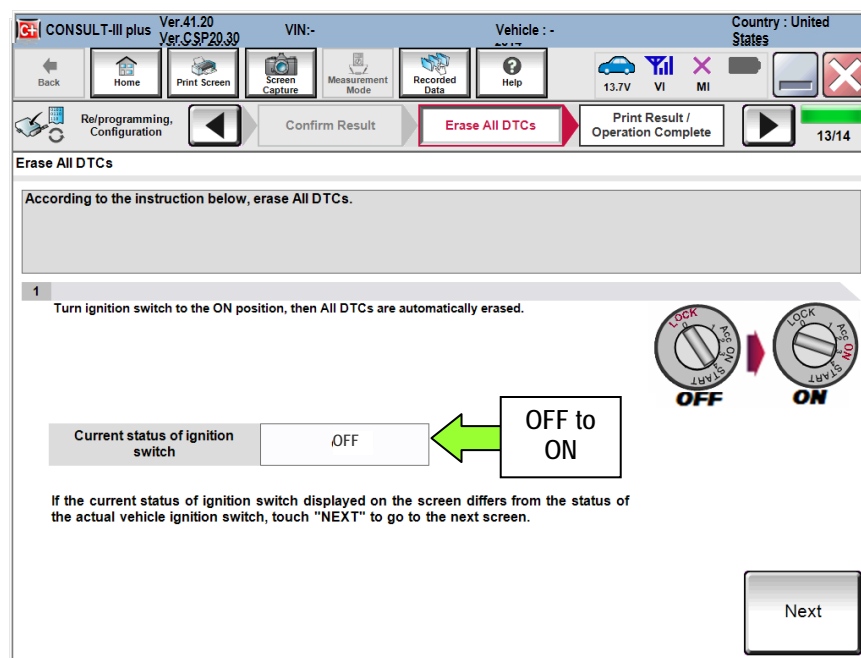


Figure 20

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

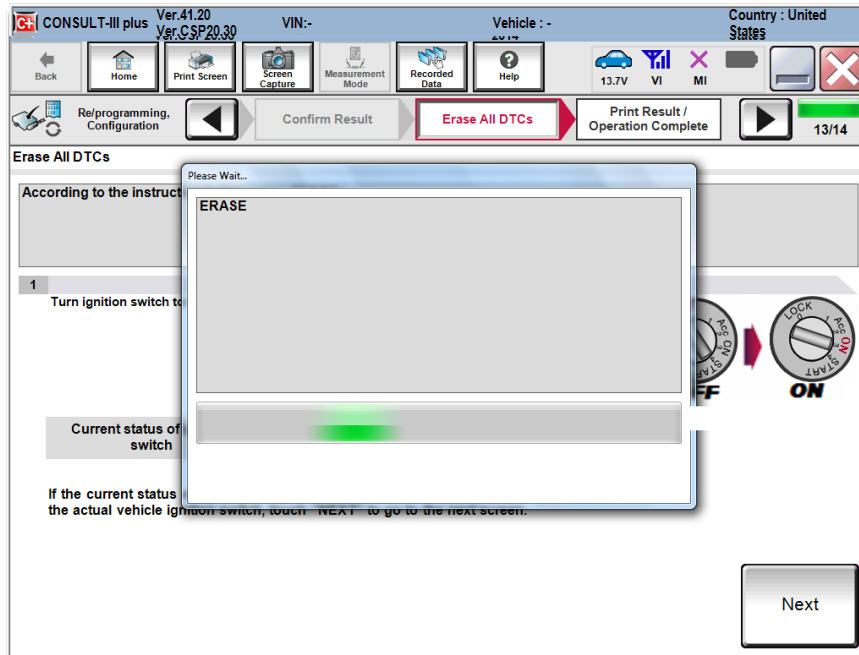


Figure 21

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**.

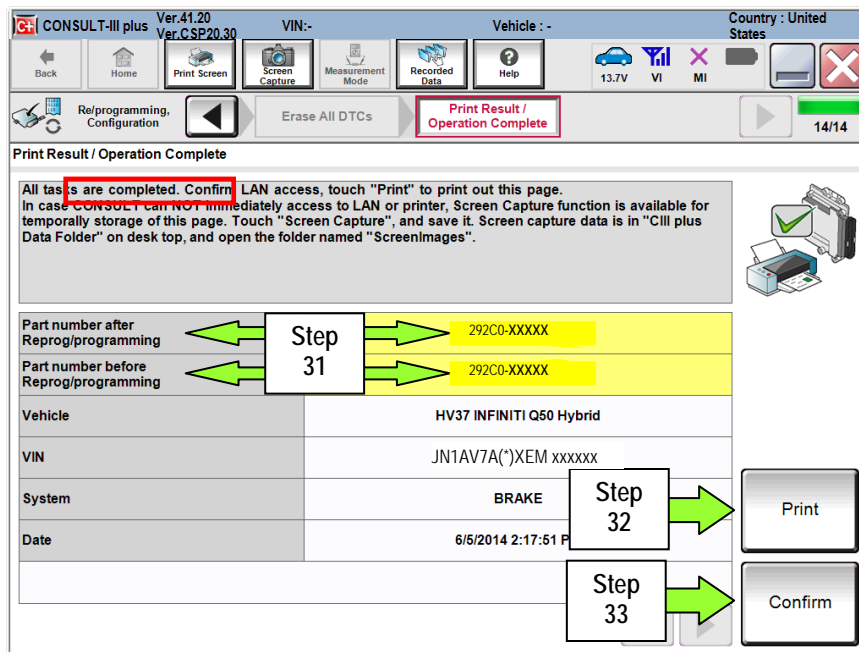


Figure 22

34. Select Home.

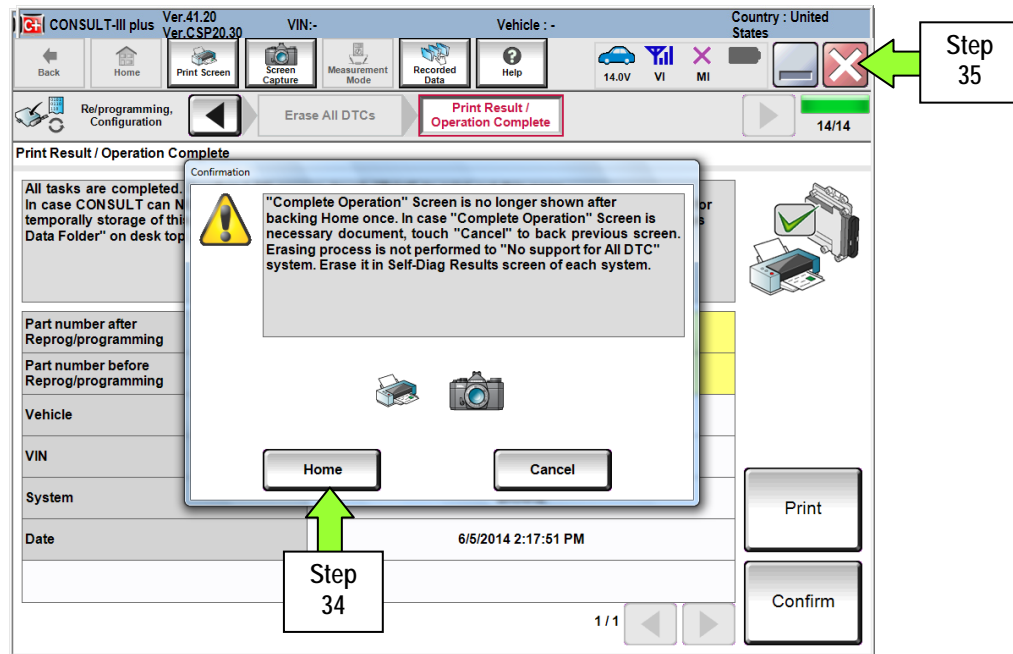


Figure 23

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. Open C-III plus.

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

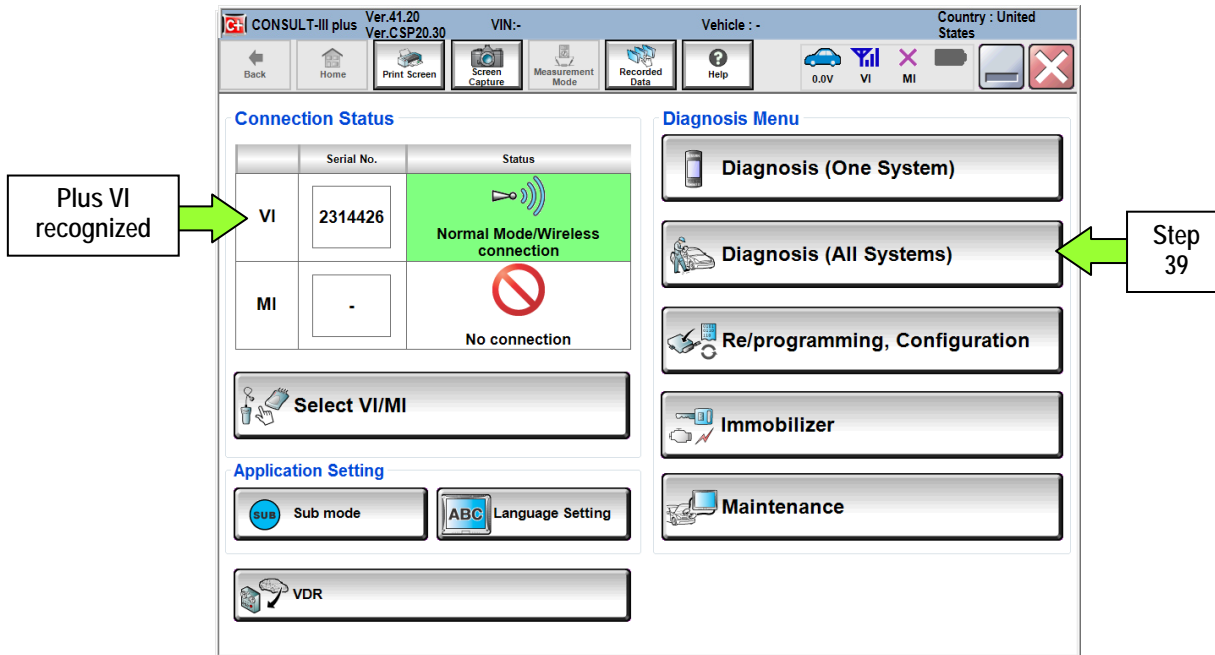


Figure 25

40. Select Q50 and 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 42.

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

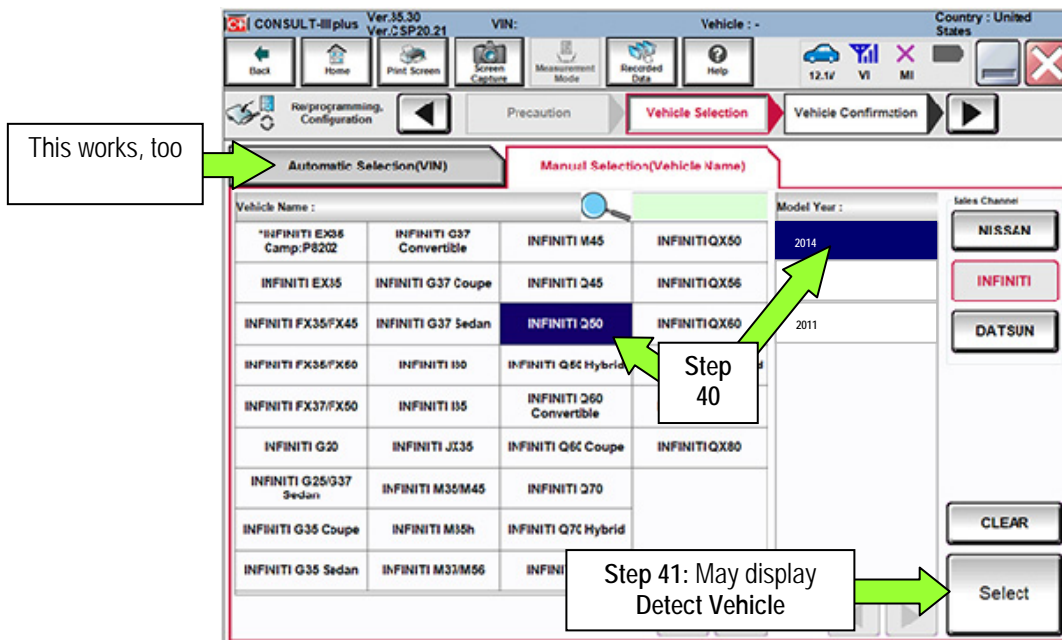


Figure 26

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

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

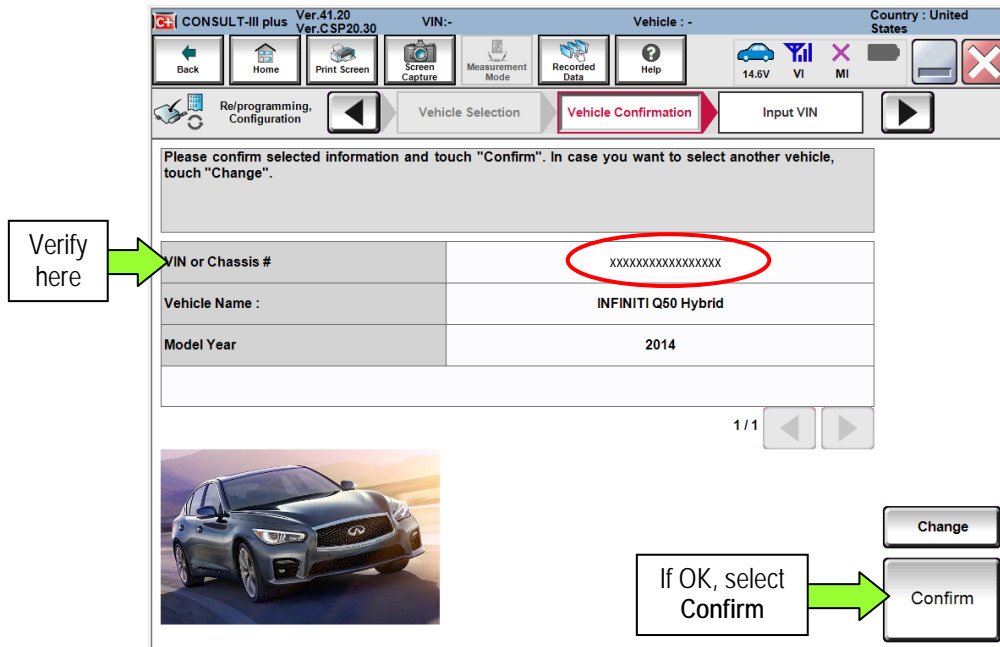


Figure 27

43. Wait for System Call to complete.

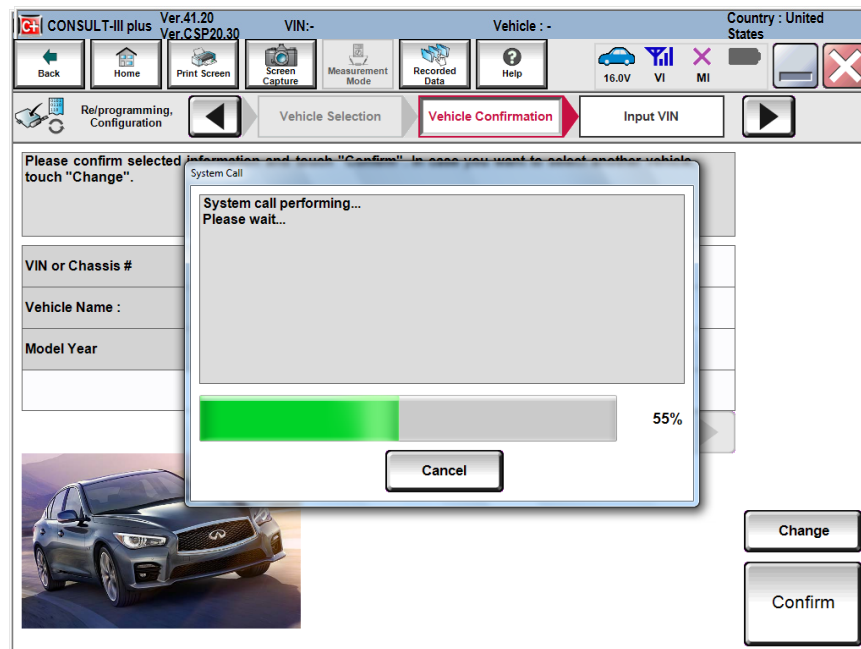


Figure 28

Erase all DTCs present

44. Once the screen in Figure 29 appears:

- Do not select **ERASE** until the Step 47.
- Turn the ignition OFF.
- Close CIII plus application.
- Disconnect the CIII plus VI.
- Wait for at least 5 minutes.

IMPORTANT:

- If the VI is not disconnected in "step e", DTCs will not clear.
- If the ignition is not left OFF for 5 minutes the DTCs will not clear.

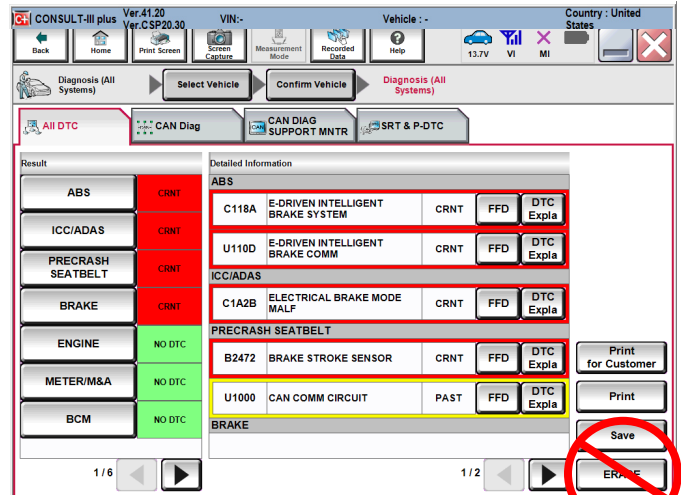


Figure 29

45. After 5 minutes depress the vehicle's power ("ignition") switch twice without depressing the brake pedal to turn ignition ON:

- Re-connect the CIII plus VI.
- Start CIII plus.
- Check DTCs.

NOTE: Some, but not all should go to past as shown in Figure 30.

- After checking DTCs turn ignition OFF

NOTE: This can be done immediately after DTCs are checked.

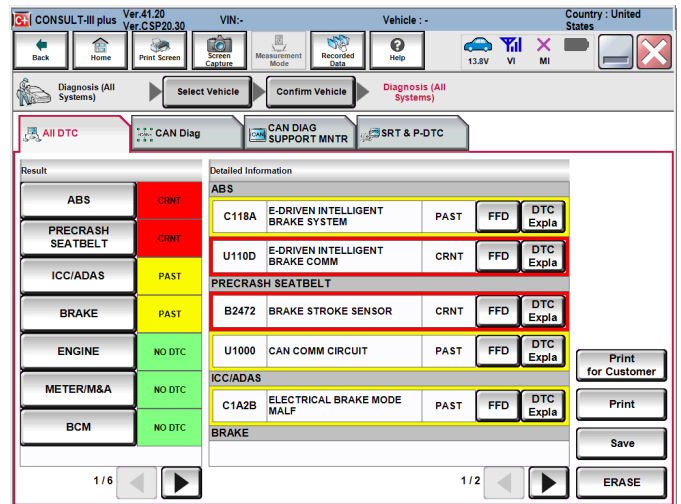


Figure 30

46. Wait 1 minute and then:

- 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.
- While in "READY to drive" mode depress brake pedal for at least 5 seconds (all DTCs as shown in Figure 31 should now be PAST).

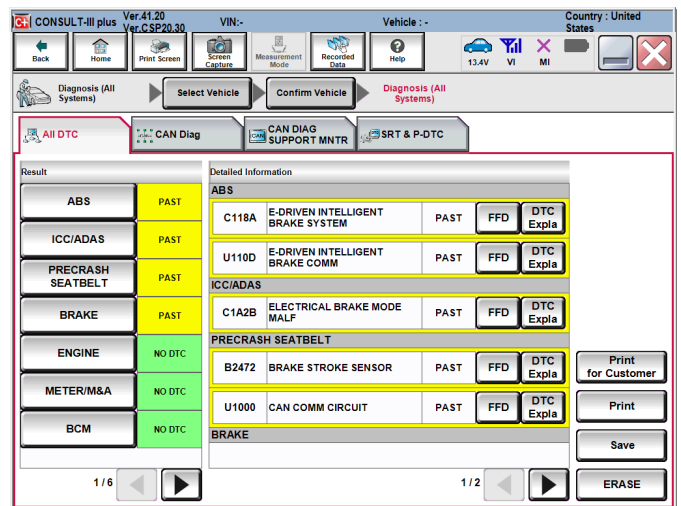


Figure 31

47. Select **ERASE**.

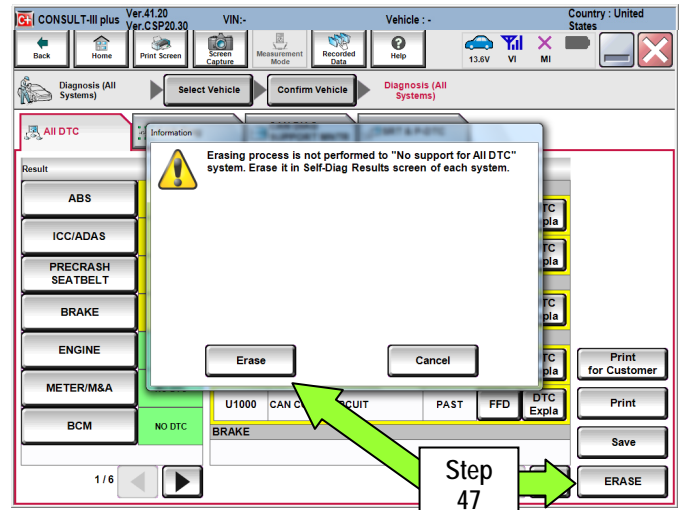


Figure 32

48. Once all DTCs have been cleared turn "ignition" off (depress power switch once).

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

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

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

CLAIMS INFORMATION

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

OPERATION	OP CODE	PFP	SYM	DIAG	FRT
E-ACT REPROGRAMMING & BRAKE SYSTEM AIR BLEED ALL	PX72AA	(1)	DC	32	1.0

(1) Refer to the electronic parts catalog (FAST) and use the Brake Controller assembly part number (46007-*****) as the Primary Failed Part (PFP).

