



14645 Keswick Street * Van Nuys, CA 91405

Technical Service Bulletin

The following service bulletin contains information essential to the proper diagnosis and repair of any P0420 / P0430 codes present in these specific vehicles.

Failure to follow the procedure EXACTLY and ENTIRELY will likely cause repeat coding even after catalytic converter replacement.

The most important information contained in this bulletin is the proper completion of Idle Air Volume Learning (IAVL).

Read this bulletin to the end.

Failure to complete this procedure as outlined will likely result in higher than normal fuel trims and lower than normal MAF readings resulting in recurring catalyst efficiency codes.

2012 Infiniti Truck QX56 AWD V8-5.6L (VK56VD)

- Engine Controls - MIL ON, DTC's P0420/P0430 Set

Classification:

EC13-015

Reference:

ITB13-053

Date: December 13, 2013

2011 - 2012 QX56; MIL "ON" WITH DTC P0420 AND/OR P0430

APPLIED VEHICLES: 2011 - 2012 QX56 (Z62)

IF YOU CONFIRM

MIL "ON" with DTC P0420 and/or P0430 (Three Way Catalyst Function),

ACTION:

1. Refer to step 6 in the SERVICE PROCEDURE to confirm this bulletin applies to the vehicle you are working on.
2. If this bulletin applies, reprogram the ECM.

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

NOTE:

- ^ Most instructions for reprogramming with CONSULT-III plus (C-III plus) are displayed on the CONSULT PC screen.
- ^ If you are not familiar with the reprogramming procedure, click here (link not active). This will link you to the "CONSULT- III plus (C-III plus) Reprogramming" general procedure.
- ^ Take the vehicle for a 10-minute drive in order to meet the following Idle Air Volume Learn (IAVL) conditions:
 - > Engine coolant temperature: 70 - 105°C (158 - 221°F)
 - > Battery voltage: More than 12.9V (at idle)
 - > Transmission: Warmed up

NOTE:

After reprogramming is complete, you will be required to perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase. The above conditions are required for IAVL to complete.

CAUTION:

- ^ Connect the GR8 to the 12V battery and set to ECM power supply mode. If the vehicle battery voltage drops below 12.0V or above 15.5V during reprogramming, the ECM may be damaged.
- ^ Be sure to turn OFF all vehicle electrical loads. If a vehicle electrical load remains ON, the ECM 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 ECM may be damaged.
- ^ Turn off all external Bluetooth(R) devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI. If Bluetooth(R) signal waves are within range of the CONSULT PC during reprogramming, reprogramming may be interrupted and the ECM may be damaged.

1. Connect the CONSULT PC to the vehicle to begin the reprogramming procedure.
2. Open / start C-III plus.

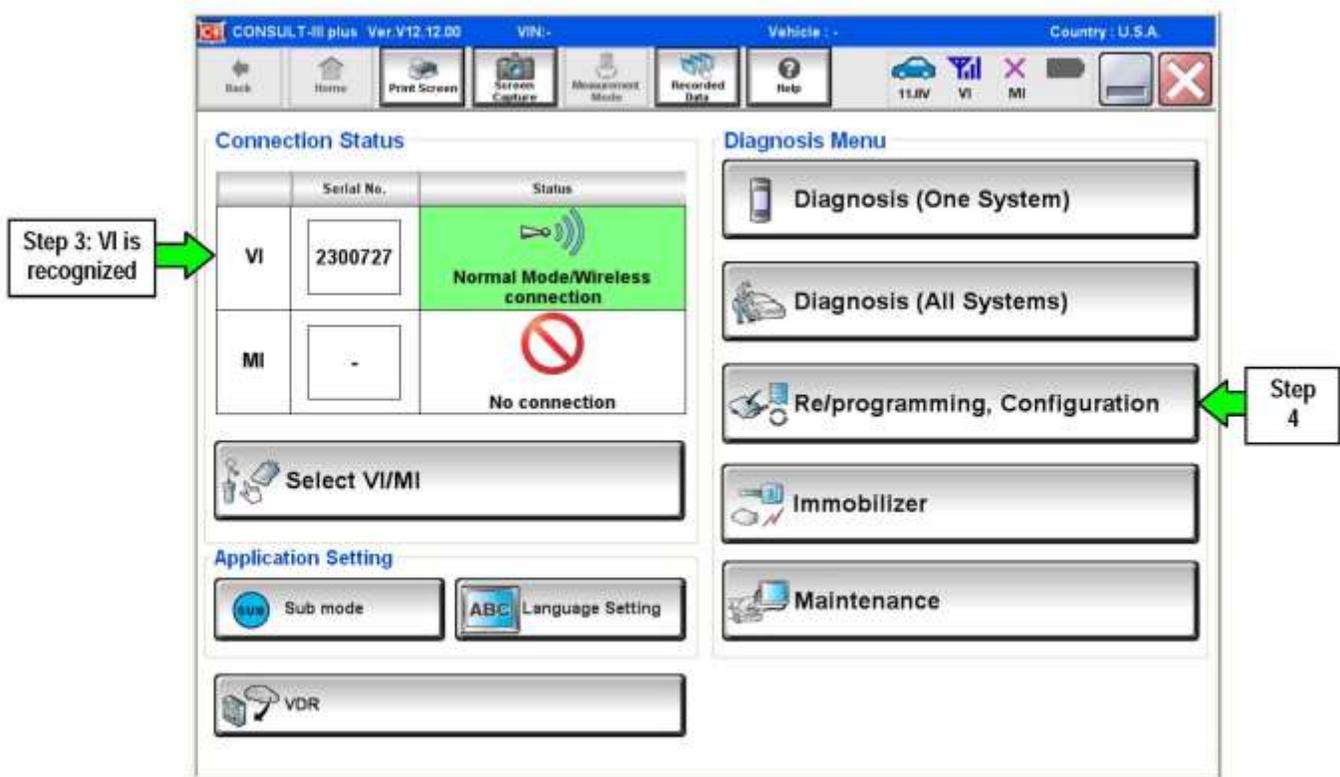


Figure 1

3. Wait for the plus VI to be recognized.
 - ^ The Serial No. will display when the plus VI is recognized.
4. Select Re/programming, Configuration.

NOTE: This is the current ECM Part Number (P/N).

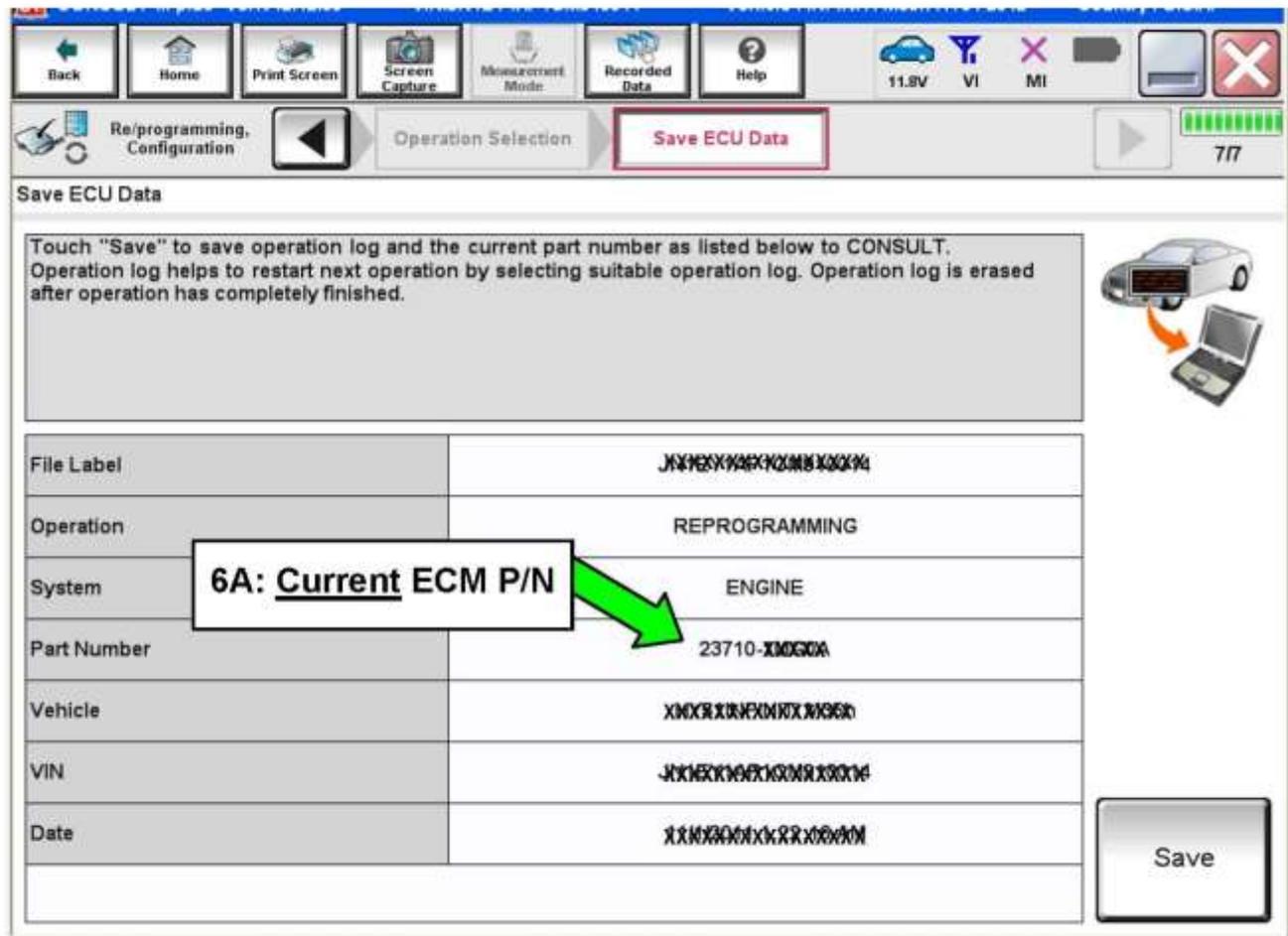


Figure 2

5. Follow the on-screen instructions and navigate the C-III plus to the screen shown in Figure 2.
6. When you get to the screen shown in Figure 2, confirm this bulletin applies as follows.
 - A. Find the ECM Part Number and write it on the repair order.

Table A

Model	Current ECM Part Number: 23710-
2011 QX56	1LA3B, 1LA3C, 1LA3D, 1LA3E
	1LS0A, 1LS0B, 1LS0C, 1LS0D
	1LA4B, 1LA4C, 1LA4D, 1LA4E
	1LS1A, 1LS1B, 1LS1C, 1LS1D
	1LA5B, 1LA5C, 1LA5D, 1LA5E,
	1LS2A, 1LS2B, 1LS2C, 1LS2D,
	1LA6B, 1LA6C, 1LA6D, 1LA6E
	1LS3A, 1LS3B, 1LS3C, 1LS3D,
2012 QX56	1ZS0A, 1ZS0B, 1ZS0C, 1ZS0D, 1ZS0E
	1YN0A, 1YN0B
	1ZS1A, 1ZS1B, 1ZS1C, 1ZS1D, 1ZS1E
	1YN1A, 1YN1B
	1ZS2A, 1ZS2B, 1ZS2C, 1ZS2D, 1ZS2E
	1YN2A, 1YN2B
	1ZS3A, 1ZS3B, 1ZS3C, 1ZS3D, 1ZS3E
	1YN3A, 1YN3B
	1YN4A, 1YN5A, 1YN6A, 1YN7A

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

^ If there is a match, this bulletin applies. Continue with the reprogramming procedure.

^ If there is not a match, this bulletin does not apply. Close C-III plus and refer to ASIST for further diagnostic information.

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 3 displays.
 - 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 this vehicle. Close C-III plus and refer back to ASIST for further diagnosis.

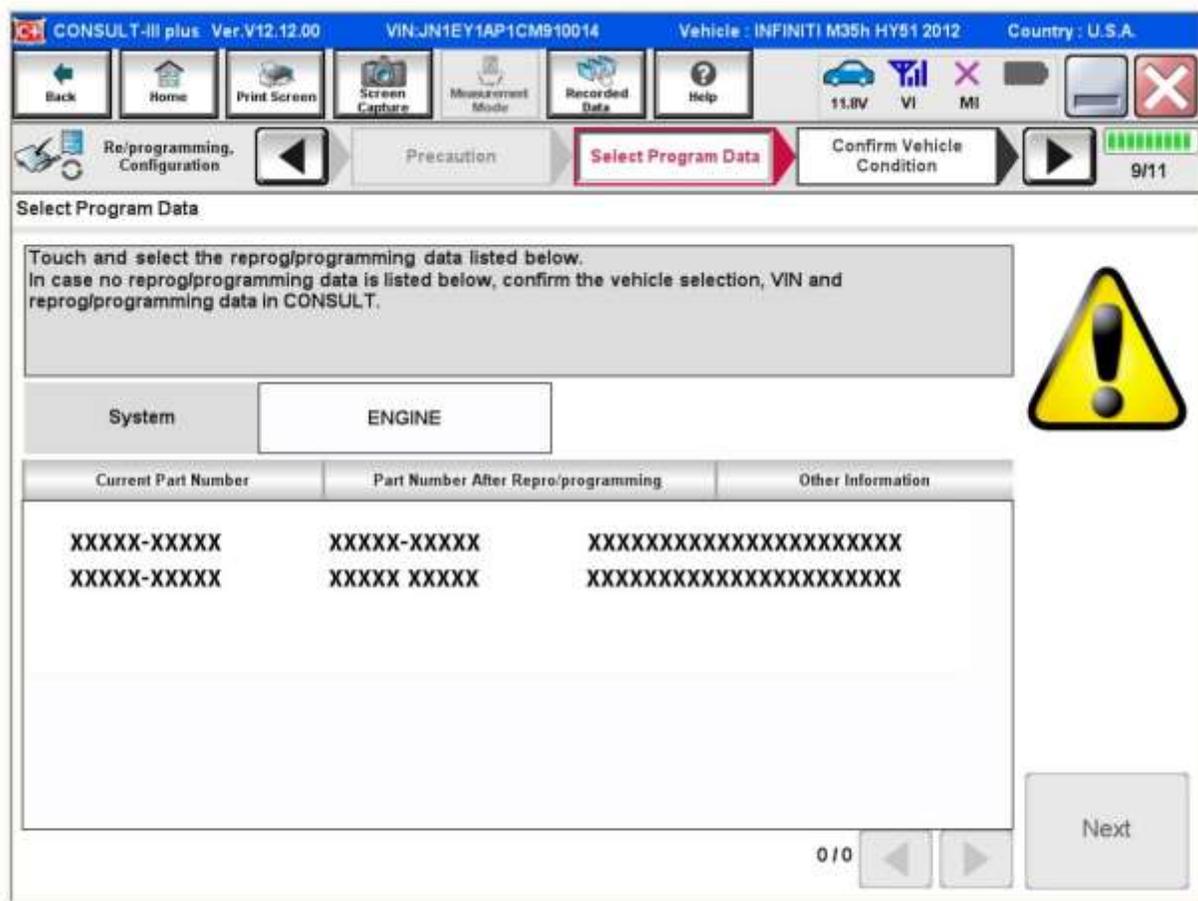


Figure 3

7. Follow the on-screen instructions to navigate C-III plus and reprogram the ECM.

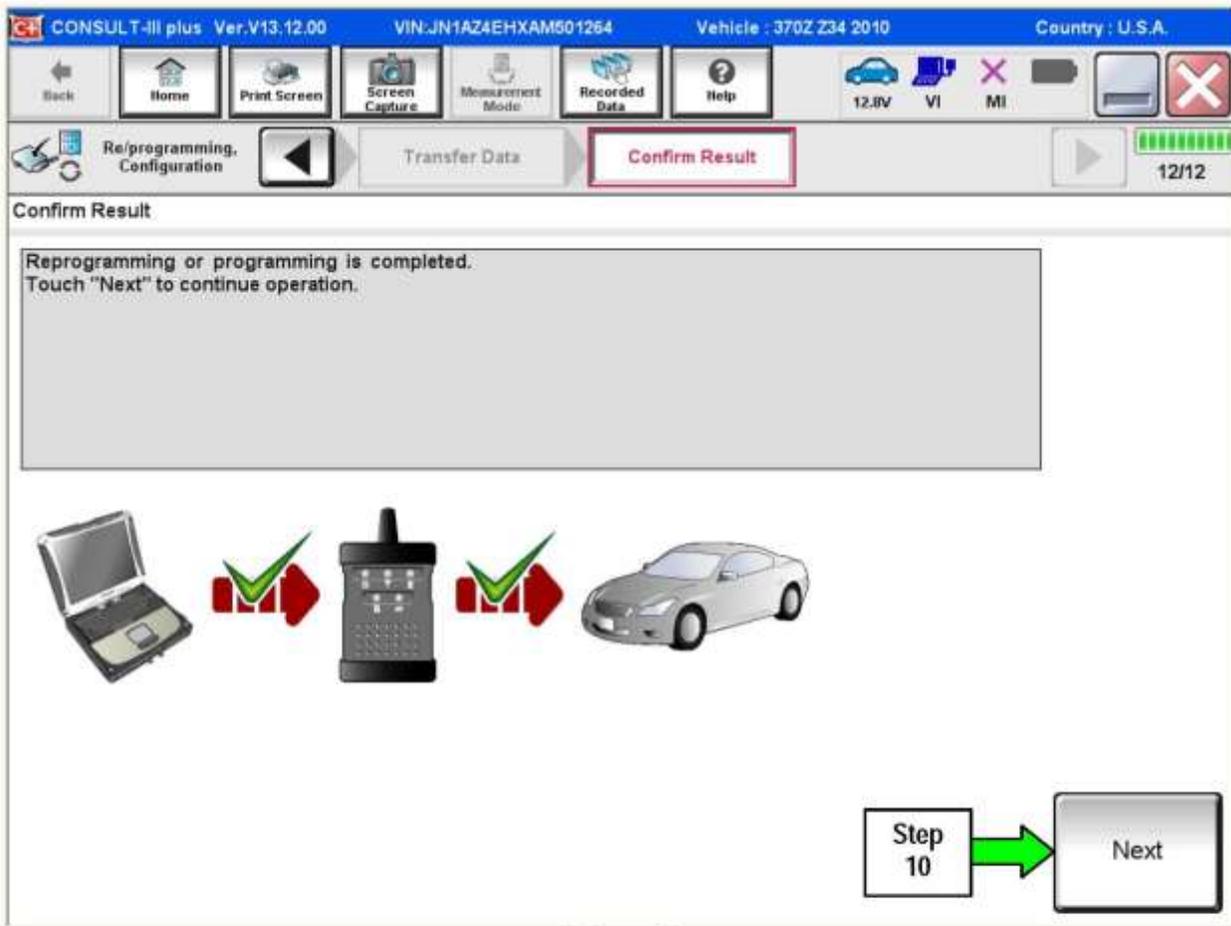


Figure 4

NOTE:

- In the next steps, starting on page 9, you will perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase.
- These operations are required before C-III plus will provide the final reprogramming confirmation report.

8. When the screen in Figure 4 displays, reprogramming is complete.

NOTE:

If the screen in Figure 4 does not display (reprogramming does not complete), refer to ECM recovery.

9. Disconnect the GR8 (battery charger) from the vehicle.
10. Select Next.

ECM recovery:

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

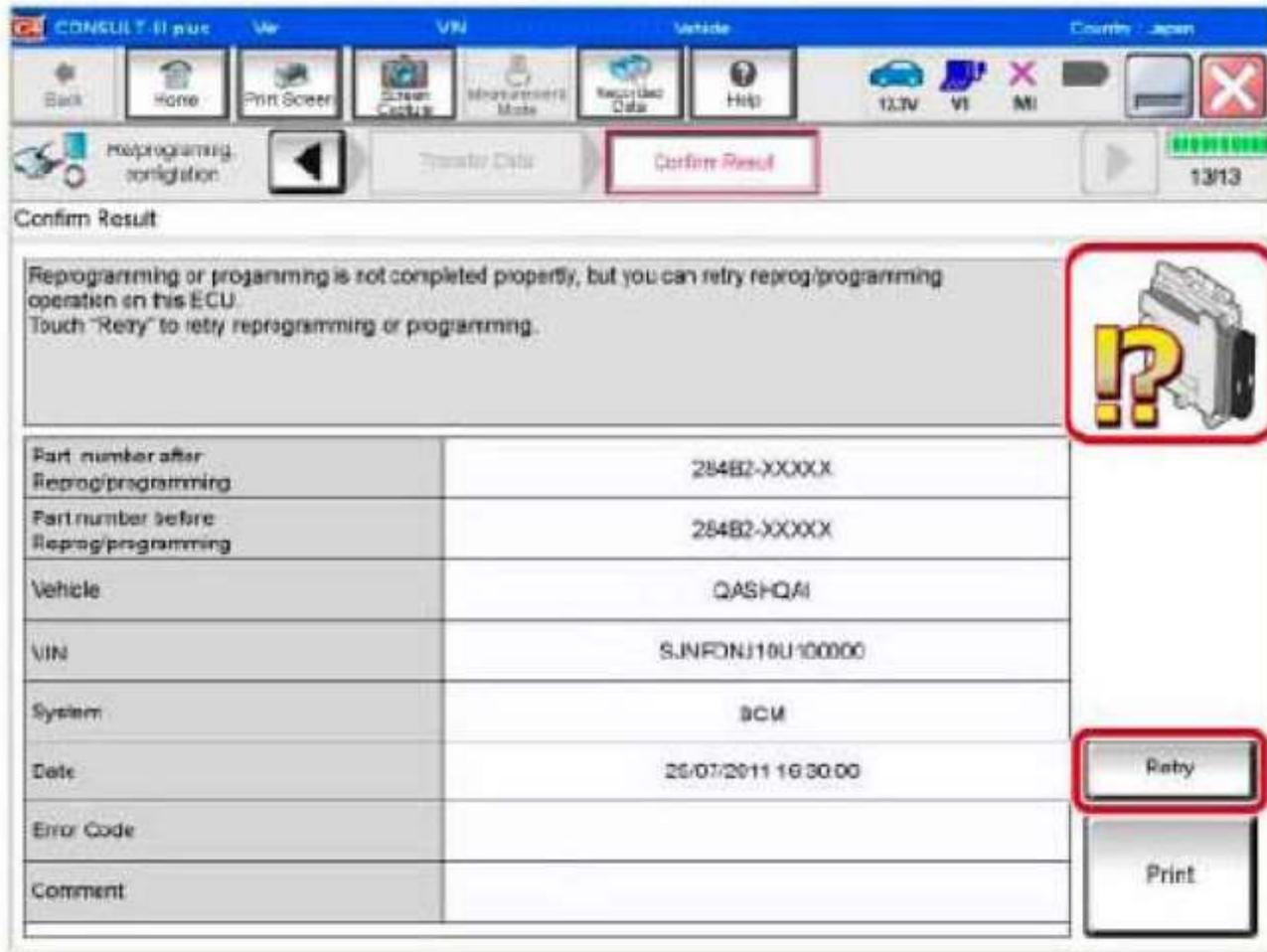


Figure 5

If reprogramming does not complete and the "!" icon displays as shown in Figure 5:

- ^ Check battery voltage (12.0 - 15.5 V).
- ^ Ignition is ON, engine OFF.
- ^ External Bluetooth(R) 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.

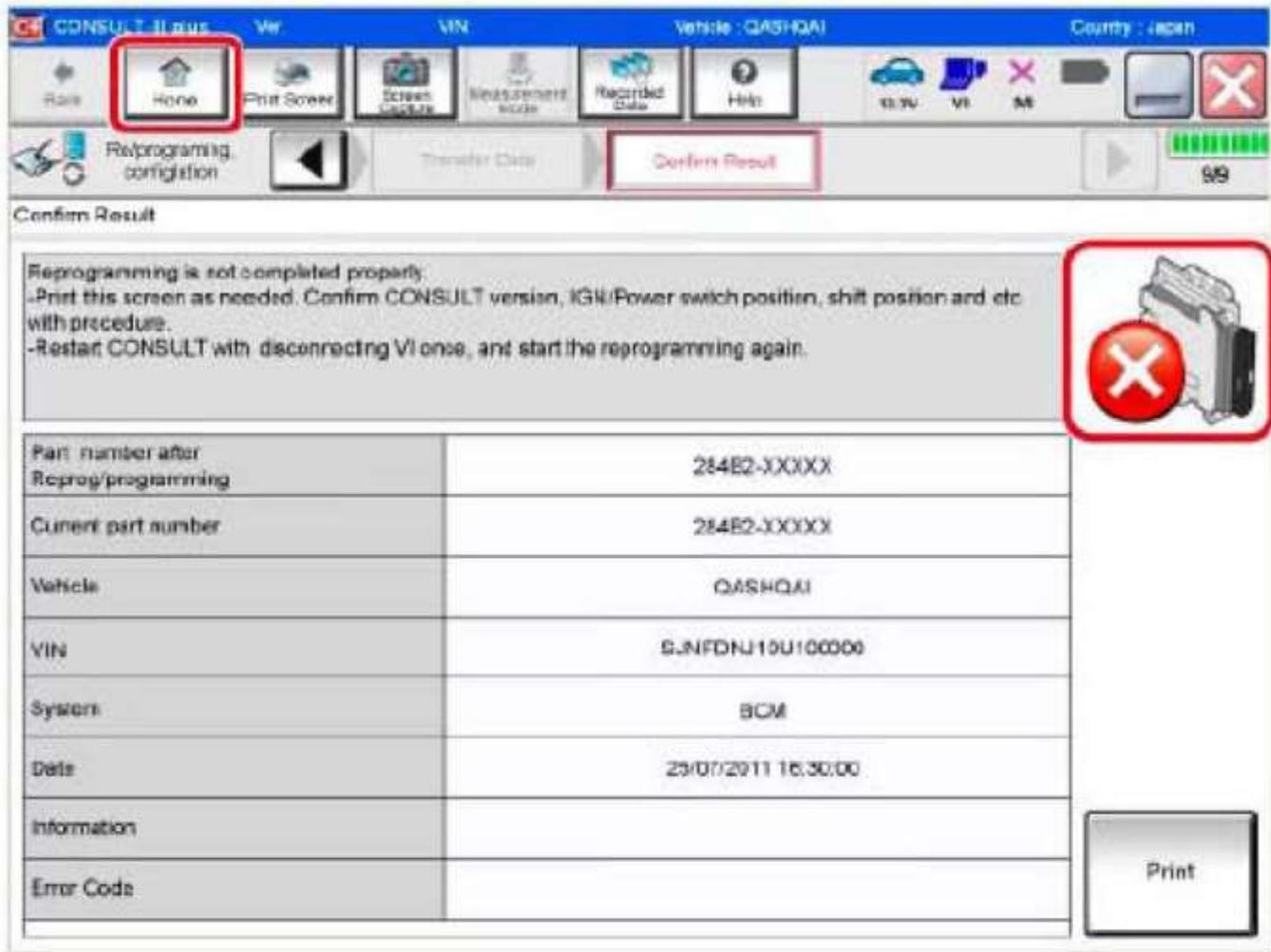


Figure 6

If reprogramming does not complete and the "X" icon displays as shown in Figure 6:

- ^ Check battery voltage (12.0 - 15.5 V).
- ^ 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 Home, and restart the reprogram procedure from the beginning.

11. Follow the on-screen instructions to perform the following:

- ^ Throttle Valve Closed Position
- ^ Idle Air Volume Learn (IAVL)

NOTE:

> Listed are common conditions required for IAVL to complete.

- > If IAVL does not complete within a few minutes, a condition may be out of range.
- > Refer to the appropriate Electronic Service Manual (ESM) for specific conditions required for the vehicle you are working on.
 - ^ Engine coolant temperature: 70 -105°C (158 -221°F)
 - ^ Battery voltage: More than 12.9V (At idle)
 - ^ Selector lever: P or N
 - ^ Electric load switch: OFF (Air conditioner, headlamp, rear window defogger)
 - ^ Steering wheel: Neutral (Straight-ahead position)
 - ^ Vehicle speed: Stopped
 - ^ Transmission: Warmed up
- ^ Accelerator Pedal Close Position Learning
- ^ Erase DTCs

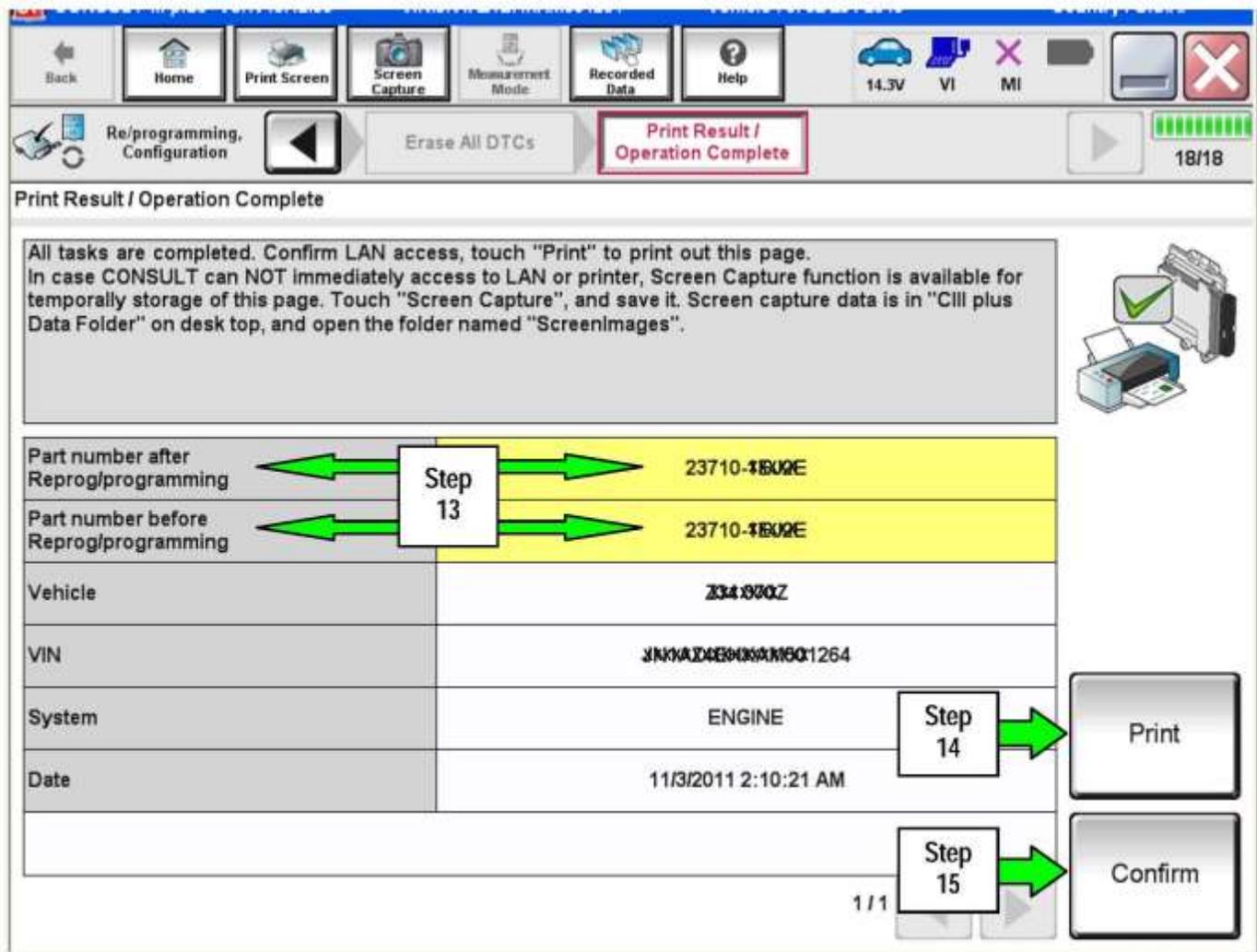


Figure 7

12. When the entire reprogramming process is complete, the screen in Figure 7 will display.
13. Verify the before and after part numbers are different.
14. Print a copy of this screen (Figure 7) and attach it to the repair order for warranty documentation.
15. Select Confirm.

- 16. Close C-III plus.
- 17. Turn the ignition OFF.
- 18. Disconnect the plus VI from the vehicle.
- 19. Test drive the vehicle and make sure it operates correctly and the MIL is OFF.
 - ^ If the MIL comes ON, go back to ASIST for further diagnostic information.
 - ^ Diagnosis and repairs beyond ECM reprogramming are not covered by this bulletin.

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram Engine Control Module	(1)	DE97AA	ZE	32	(2) (3)

- (1) Refer to the electronic parts catalog (FAST or equivalent) and use the ECM part number as the Primary Failed Part (PFP).
- (2) Reference the current Infiniti Warranty Flat Rate Manual and use the indicated FRT.
- (3) FRT allows adequate time to access DTC codes and reprogram ECM. No other diagnostic procedures subsequently required. Do NOT claim any Diagnostic Op Codes with this claim.