

**Classification:**

AT12-003b

**Reference:**

ITB12-027b

**Date:**

August 21, 2012

## 2009 - 2012 G37; SHIFT RESPONSIVENESS ISSUES

This bulletin has been amended to include the G37 convertible hard top (HV36) to Applied Vehicles and add part numbers to Table A. Discard all previous copies.

**APPLIED VEHICLES:** 2009 – 2011 G37 Sedan and Coupe (V36/CV36)  
 2009 – 2012 Convertible (HV36)  
**APPLIED ENGINE:** VQ37VHR  
**APPLIED TRANSMISSION:** 7 speed

### IF YOU CONFIRM

One or more of the following conditions:

- Harsher than expected down shifts when coasting to a stop
- Hesitation/lag when accelerating after coasting
- Hesitation/lag or harsher than expected down shifts when coming to a stop and accelerating again (rolling stop)
- Engine rev matching during moderate to heavy braking

**NOTE:** Engine rev matching is normal operation of the ASC (Adaptive Shift Control) in normal drive mode and sport mode. The ECM and TCM reprogramming in this bulletin will remove engine rev matching from ASC in normal drive mode, but it will remain as part of the ASC in sport mode

### 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 and TCM**.

### CLAIMS INFORMATION

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

DESCRIPTION	OP CODE	PFP	SYM	DIAG	FRT
Reprogram TCM and ECM	DX32AA	(1)	BE	32	0.8

- (1) Refer to the electronic parts catalog (FAST or equivalent) and use the appropriate Control Valve Assembly (31705-XXXXX) part number as the PFP.

**IMPORTANT:** The purpose of "ACTIONS" (above) is to give you a quick idea of the work you will be performing. You **MUST** closely follow the entire Service Procedure (starting on page 2) as it contains information that is essential to successfully completing this 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

- This procedure will require reprogramming of the **ECM and TCM**; which means most steps in this procedure will need to be done twice.
- 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](#). This will link you to the "CONSULT- III plus (C-III plus) Reprogramming" general procedure.

### Preparation for Reprogramming

- Take the vehicle for a 10 minute drive in order to meet the following Idle Air Volume Learn (IAVL) conditions:
  - Engine coolant temperature: 70 -100°C (158 -212°F)
  - Battery voltage: More than 12.9V (At idle)
  - Transmission: Warmed up



Figure A

#### NOTE:

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

#### CAUTION:

- Connect a battery charger to the vehicle battery. The vehicle battery voltage must stay between 12.0V and 15.5V during reprogramming, or the ECM/TCM may be damaged.
- Be sure to turn OFF all vehicle electrical loads. If a vehicle electrical load remains ON, the ECM/TCM 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/TCM 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 ECM/TCM may be damaged.

1. Connect the CONSULT PC to the vehicle to begin the reprogramming procedure.
2. Open ASIST on the CONSULT PC and start C-III plus.
3. Wait for the plus VI to be recognized / connected.
  - Serial number will display when the plus VI is recognized / connected.
4. Select **Re/programming, Configuration**.

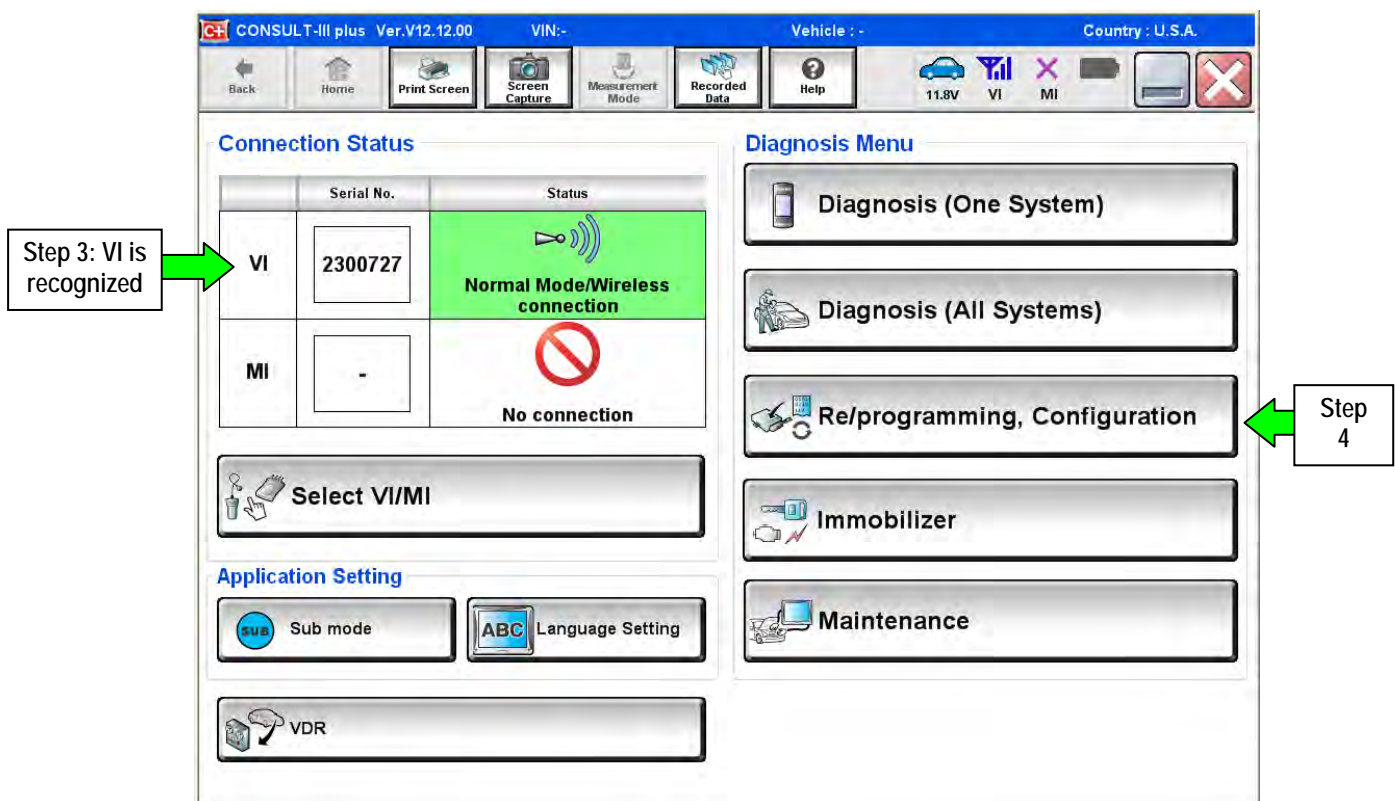
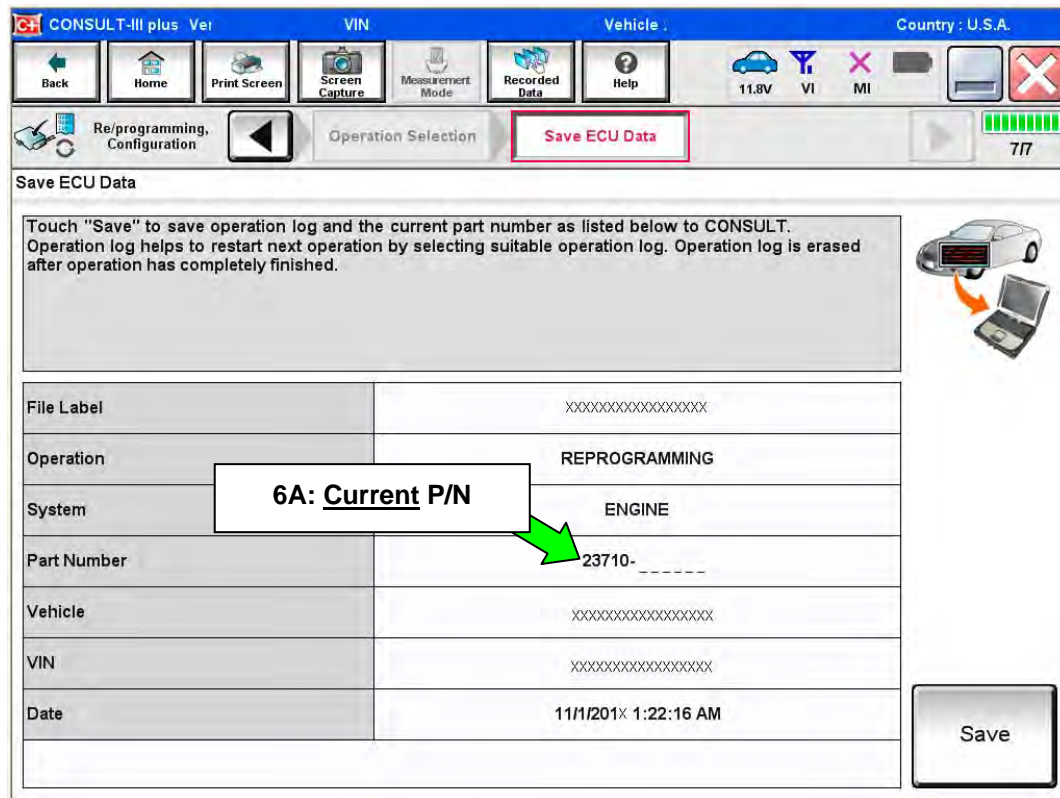


Figure 1

5. Follow the on-screen instructions and navigate the C-III plus to the screen shown in Figure 2 on the next page.

6. When you get to the screen shown in Figure 2, confirm this bulletin applies as follows:
  - A. Find the ECM or TCM **Part Number** and write it on the repair order.

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



CONSULT-III plus Ver. VIN Vehicle Country : U.S.A.

Back Home Print Screen Screen Capture Measurement Mode Recorded Data Help 11.8V VI MI

Re/programming, Configuration Operation Selection **Save ECU Data** 7/7

Save ECU Data

Touch "Save" to save operation log and the current part number as listed below to CONSULT. Operation log helps to restart next operation by selecting suitable operation log. Operation log is erased after operation has completely finished.

File Label	XXXXXXXXXXXXXXXXXX
Operation	REPROGRAMMING
System	ENGINE
Part Number	23710- _____
Vehicle	XXXXXXXXXXXXXXXXXX
VIN	XXXXXXXXXXXXXXXXXX
Date	11/1/201X 1:22:16 AM

Save

Figure 2

- B. Compare the P/N you wrote down to the numbers in the **Current ECM Part Number** column in **Table A** on page 5 and 6, and **TCM Part Number** column in **Table B** on page 7.
  - If there is a match, this bulletin applies. Continue with the reprogramming procedure.
  - If there is not a match, reprogramming does not apply. Make sure to check both ECM and TCM for a match.

**Table A – ECM**

Model	Current <u>ECM</u> Part Number: 23710 -
2009 G37 Sedan	1NC4D, 1NC4C, 1NC4B, 1NC4A
	1NC5D, 1NC5C, 1NC5B, 1NC5A
	1NC6D, 1NC6C, 1NC6B, 1NC6A
	1NC7D, 1NC7C, 1NC7B, 1NC7A
	JU60D, JU60C, JU60B, JU60A
	JU61D, JU61C, JU61B, JU61A
2009 G37 Coupe	1ND4D, 1ND4C, 1ND4B, 1ND4A
	1ND5D, 1ND5C, 1ND5B, 1ND5A
	1ND6D, 1ND6C, 1ND6B, 1ND6A
	1ND7D, 1ND7C, 1ND7B, 1ND7A
	JU70D, JU70C, JU70B, JU70A
	JU71D, JU71C, JU71B, JU71A
2010 G37 Sedan	1MW0A, 1NS0E, 1NS0B, 1NS0A
	1MW0B, 1NS0D, 1NS0C
	1MW1A, 1NS1E, 1NS1B, 1NS1A
	1MW1B, 1NS1D, 1NS1C
	1MW2B, 1NS2D, 1NS2C
	1MW2A, 1NS2E, 1NS2B, 1NS2A
	1MW3A, 1NS3E, 1NS3B, 1NS3A
	1MW3B, 1NS3D, 1NS3C
	1MW6A, 1NS6E, 1NS6B, 1NS6A
	1MW6B, 1NS6D, 1NS6C
	1MW7A, 1NS7E, 1NS7B, 1NS7A
	1MW7B, 1NS7D, 1NS7C
2010 G37 Coupe	1PX0A, 1NG0E, 1NG0B, 1NG0A
	1PX0B, 1NG0D, 1NG0C
	1PX1A, 1NG1E, 1NG1B, 1NG1A
	1PX2A, 1NG2E, 1NG2B, 1NG2A
	1NG3E, 1NG3B, 1NG3A
	1PX1B, 1NG1D, 1NG1C
	1PX2B, 1NG2D, 1NG2C
	1PX3B, 1NG3D, 1NG3C
	1PX7A, 1NG7E, 1NG7B, 1NG7A
	1PX7B, 1NG7D, 1NG7C
	1PX8A, 1NG8E, 1NG8B, 1NG8A
	1PX8B, 1NG8D, 1NG8C

Table A – ECM (continued)

Model	Current <u>ECM</u> Part Number: 23710 -
2011 G37 Sedan	1NX0B, 1NX0A
	1NX0D
	1NX1C
	1NX1B, 1NX1A
	1NX2C
	1NX2B, 1NX2A
	1NX3C
	1NX3B, 1NX3A
	1NX6B, 1NX6A
	1NX6C
	1NX7B, 1NX7A
	1NX7C
2011 G37 Coupe	1VU0B, 1VU0A
	1VU0D
	1VU1B, 1VU1A
	1VU1C
	1VU2B, 1VU2A
	1VU2D
	1VU3B, 1VU3A
	1VU3C
	1VU6B, 1VU6A
	1VU6C
	1VU7C, 1VU7B
	1VU7A
2009 G37 Convertible	JJ50D, JJ50C, JJ50B, JJ50A
	JJ51D, JJ51C, JJ51B, JJ51A
	JJ54D, JJ54C, JJ54B, JJ54A
	JJ55D, JJ55C, JJ55B, JJ55A
2010 G37 Convertible	JJ80C, JJ80A, 1NJ0E, 1NJ0B, 1NJ0A
	JJ80D, JJ80B, 1NJ0D, 1NJ0C
	JJ81C, JJ81A, 1NJ1E, 1NJ1B, 1NJ1A
	JJ81D, JJ81B, 1NJ1D, 1NJ1C
	JJ82C, JJ82A, 1NJ2E, 1NJ2B, 1NJ2A
	JJ82D, JJ82B, 1NJ2D, 1NJ2C
	JJ83C, JJ83A, 1NJ3E, 1NJ3B, 1NJ3A
	JJ83D, JJ83B, 1NJ3D, 1NJ3C

Table A – ECM (continued)

Model	Current <u>ECM</u> Part Number: 23710 -
2011 G37 Convertible	3WP7A, 1NY0B, 1NY0A
	3WP7B, 1NY0D
	1NY1D, 1NY1B, 1NY1A
	1NY1E, 1NY1C
	1NY2D, 1NY2B, 1NY2A
	1NY2E, 1NY2C
	1NY3D, 1NY3B, 1NY3A
	1NY3E, 1NY3C
2012 G37 Convertible	1VZ0C, 1VZ0B, 1VZ0A
	1VZ1C, 1VZ1B, 1VZ1A
	1VZ2C, 1VZ2B, 1VZ2A
	1VZ3C, 1VZ3B, 1VZ3A

Table B - TCM

Model	Current <u>TCM</u> Part Number: 31039 -
2009 G37 Sedan and Coupe	X458D X450A, X439E, X439D, X439C, X439A, X438E, X438D, X438C, X382D, X382C, X380C, X380B, X359D, X359C, X351B, X351A, X350E, X211E, X211D, X211C, X211B, X184E, X184D, X183C, X183B, 3RX4A, 3RX3D, 3RX6E, 3RX6D, 3RX1B, 3RX1A, 3RX0D, 3RX0C, 1XJ5A, 1XJ4E 1XJ4B, 1XJ4A
2010 - 2011 G37 Sedan and Coupe	X458D, X450A, X439E, X439D, X439C, X439A, X438E, X438D, X438C, X382D, X382C, X380C, X380B, X359D, X359C, X351B, X351A, X350E, X184E, X184D, X183C, X183B, X211E, X211D, X211C, X211B, 3RX6E, 3RX6D, 3RX4A, 3RX3D, 3RX1B, 3RX1A, 3RX0D, 3RX0C, 1XJ5A, 1XJ4E 1XJ4B, 1XJ4A
2009 - 2012 G37 Convertible	X450B, X382B, X212A, X185C, 1XJ2D, 3RX9C
	X436E, X439B, X359E, X352C

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

**NOTE:**

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

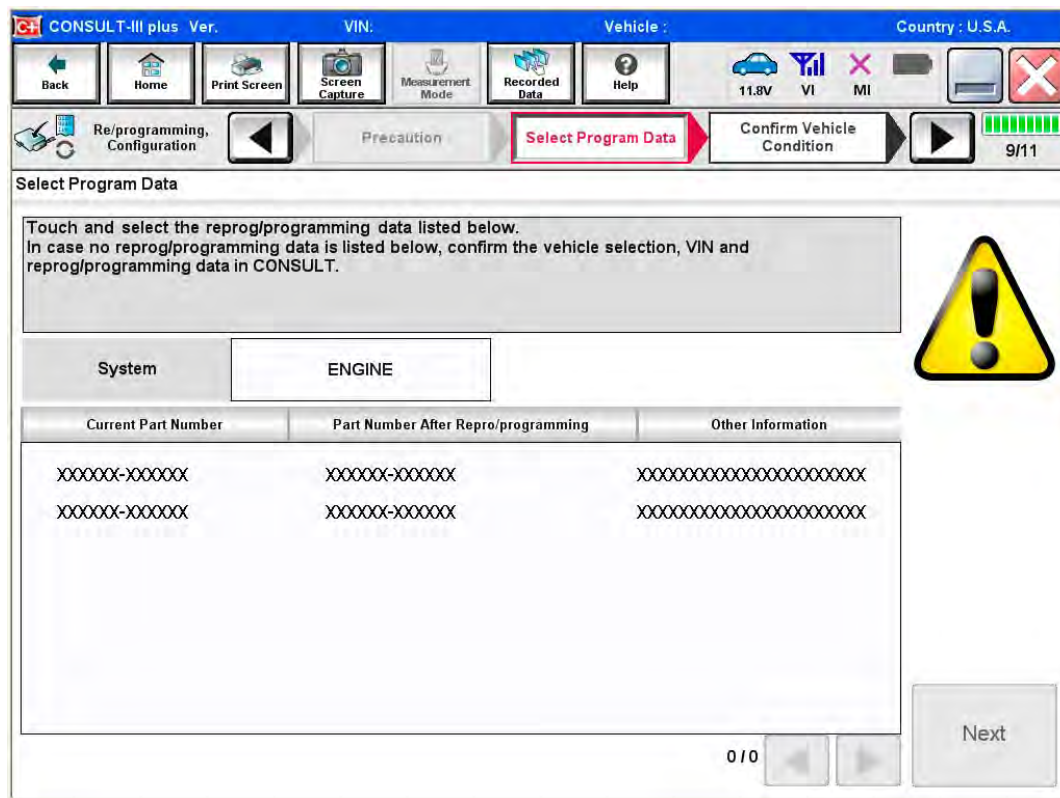


Figure 3



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 the information on the next page.

9. Disconnect the battery charger from the vehicle.

10. Select **Next**.

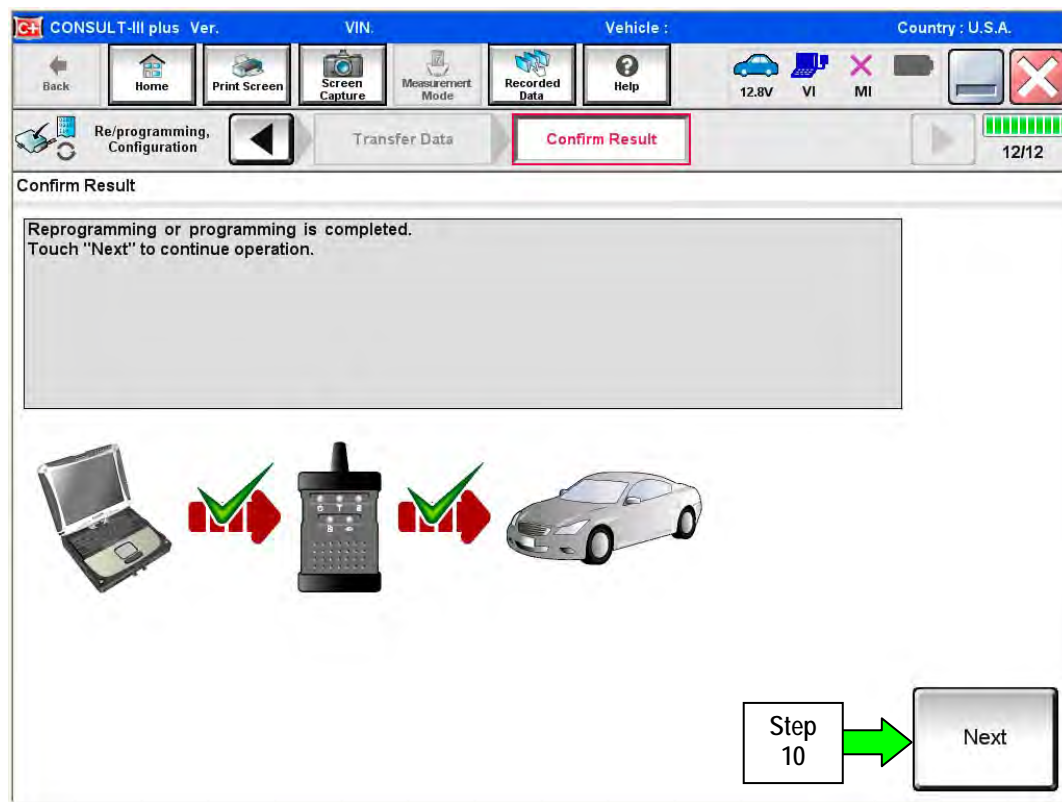


Figure 4

**NOTE:**

- In the next steps (page 10):
  1. For ECM reprogramming you will perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase.
  2. For TCM reprogramming, only DTC erase is needed.
- These operations are required before C-III plus will provide the final reprogramming confirmation report.

## ECM/TCM 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 5:

- Check battery voltage (12.0–15.5 V).
- Ignition is ON, engine 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 first attempt and can be selected more than once.

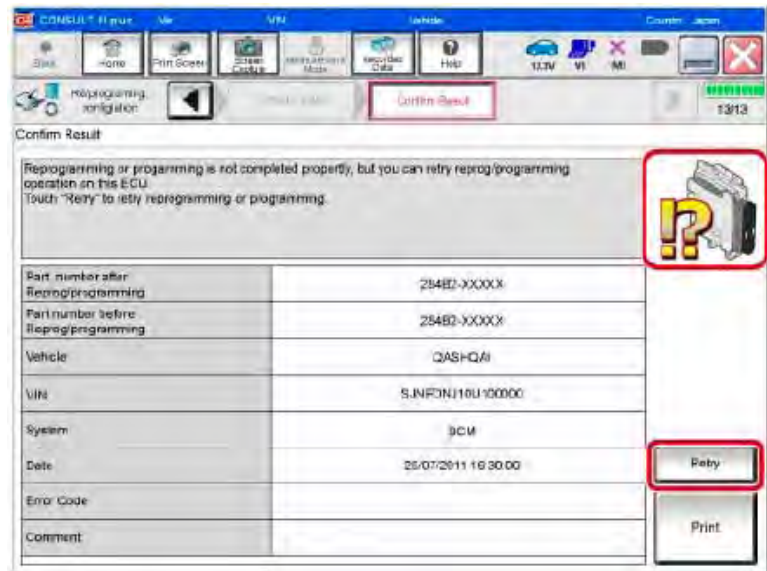


Figure 5

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.**

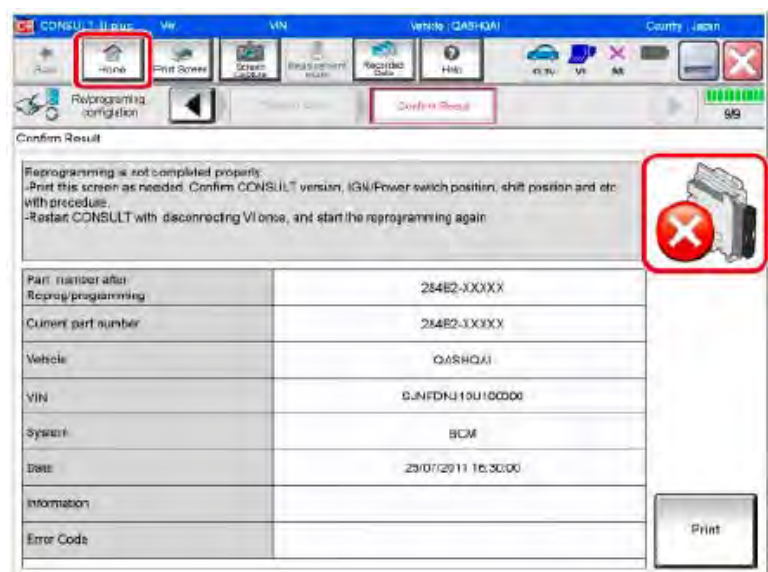


Figure 6

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

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

**NOTE:**

- Listed below are the conditions required for IAVL to complete.
- If IAVL does not complete within a few minutes, a condition may be out of range.
  - 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 (ATF TEMP SE less than 0.9V)
- Accelerator Pedal Close Position Learning
- Erase DTCs

Continue to the next page.

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**.

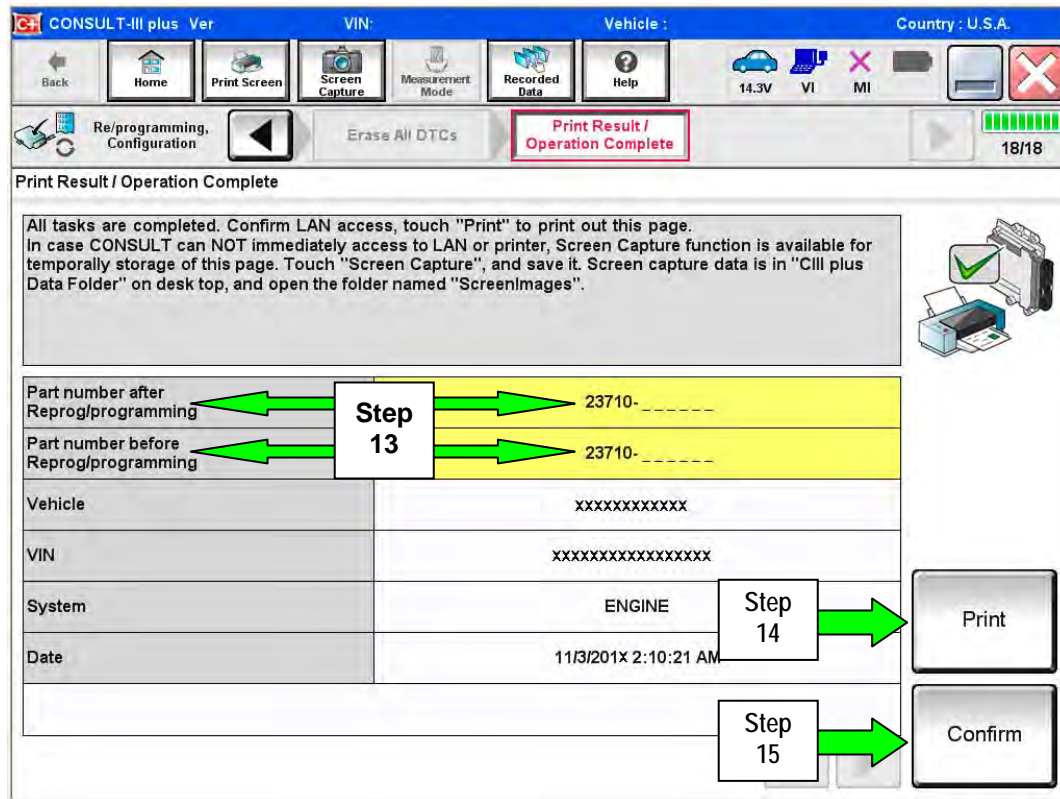


Figure 7

16. Make sure you have performed both ECM and TCM reprogramming.
17. Close C-III plus.
18. Turn the ignition OFF.
19. Disconnect the plus VI from the vehicle.
20. 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 or TCM reprogramming are not covered by this bulletin.