

Classification:

AT12-003c

Reference:

ITB12-027c

Date:

August 29, 2012

2009 - 2012 G37; SHIFT RESPONSIVENESS ISSUES

This bulletin has been amended to add part numbers to Table A and add an IMPORTANT notice to page 4.
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.

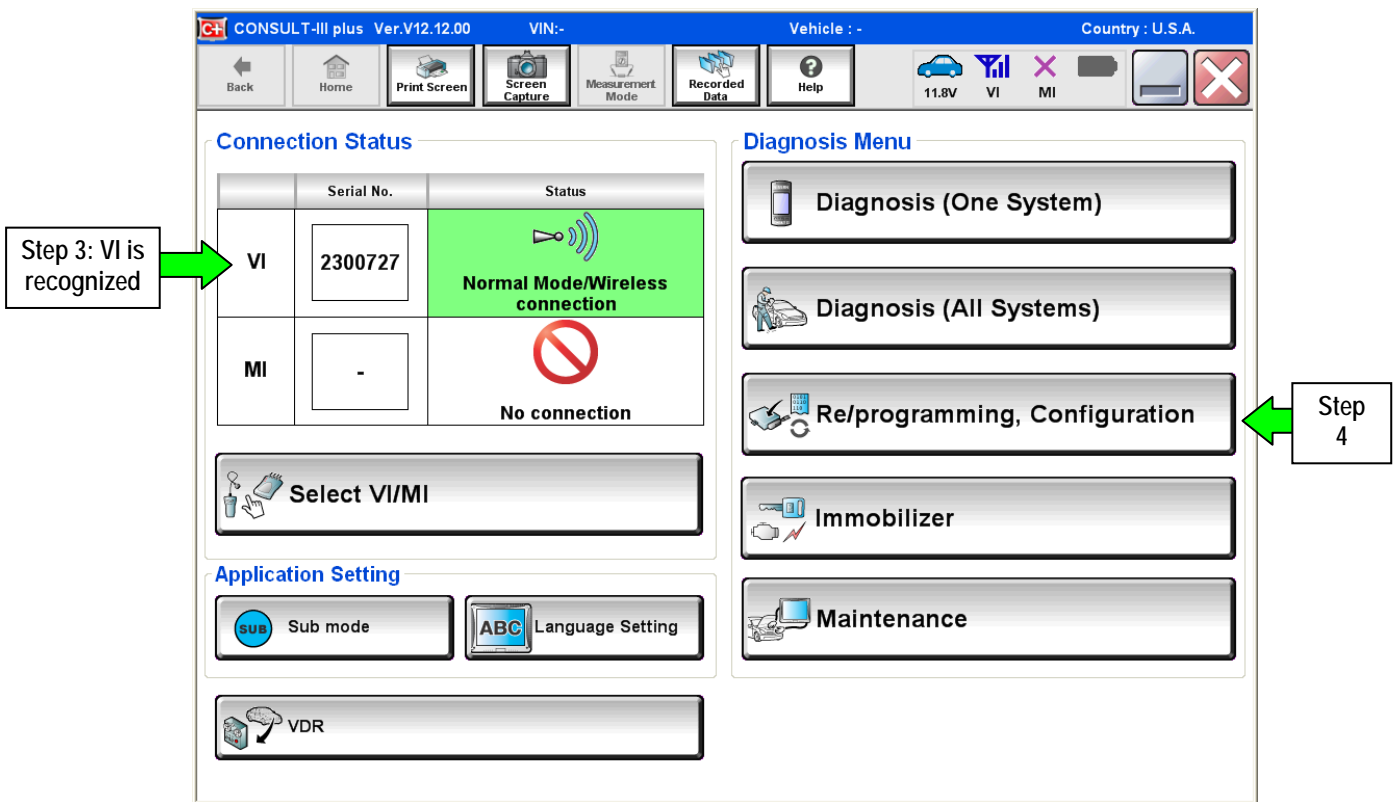


Figure 1

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

IMPORTANT:

While navigating C-III plus, if the screen in Figure 1A displays, select **Delete** and then **Other Operation**.

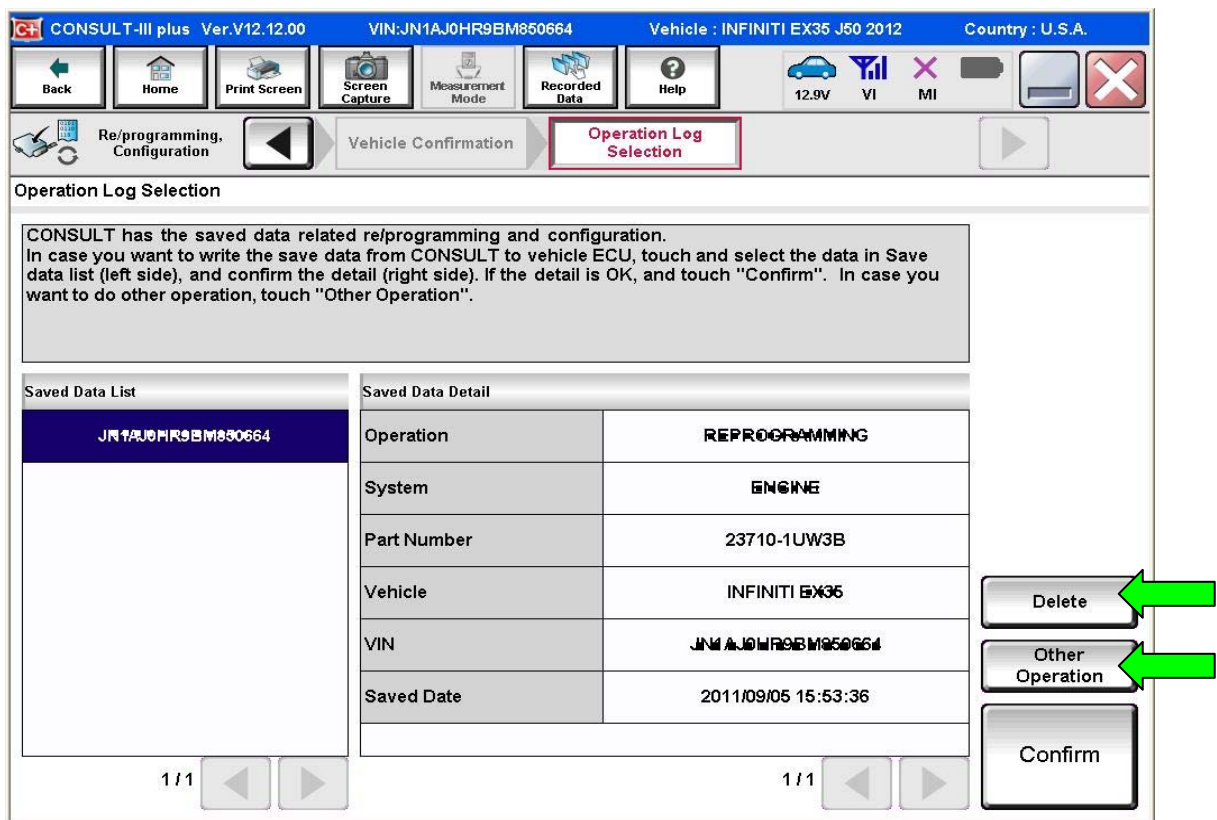


Figure 1A

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).

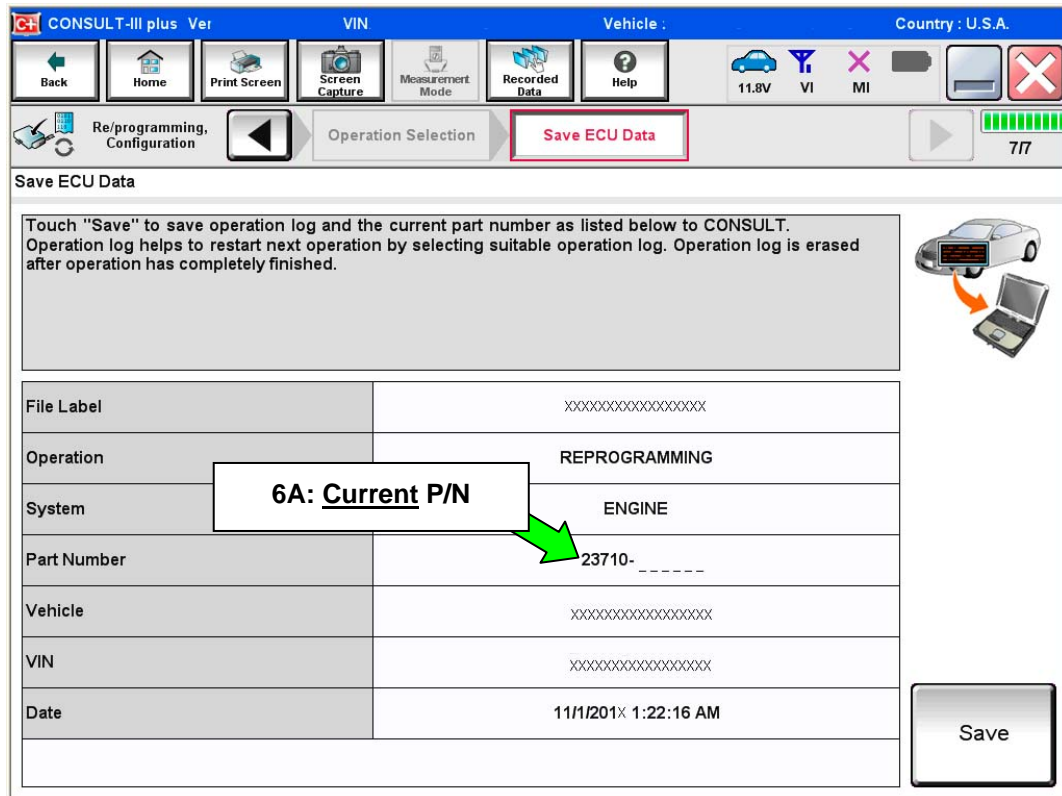


Figure 2

B. Compare the P/N you wrote down to the numbers in the **Current ECM Part Number** column in **Table A** on page 6 and 7, and **TCM Part Number** column in **Table B** on page 8.

- 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 | 1NC4E, 1NC4D, 1NC4C, 1NC4B, 1NC4A |
| | 1NC5E, 1NC5D, 1NC5C, 1NC5B, 1NC5A |
| | 1NC6E, 1NC6D, 1NC6C, 1NC6B, 1NC6A |
| | 1NC7E, 1NC7D, 1NC7C, 1NC7B, 1NC7A |
| | JU60E, JU60D, JU60C, JU60B, JU60A |
| | JU61E, JU61D, JU61C, JU61B, JU61A |
| 2009 G37 Coupe | 1ND4E, 1ND4D, 1ND4C, 1ND4B, 1ND4A |
| | 1ND5E, 1ND5D, 1ND5C, 1ND5B, 1ND5A |
| | 1ND6E, 1ND6D, 1ND6C, 1ND6B, 1ND6A |
| | 1ND7E, 1ND7D, 1ND7C, 1ND7B, 1ND7A |
| | JU70E, JU70D, JU70C, JU70B, JU70A |
| | JU71E, JU71D, JU71C, JU71B, JU71A |
| 2010 G37 Sedan | 1MW0B, 1MW0A |
| | 1NS0E, 1NS0D, 1NS0C, 1NS0B, 1NS0A |
| | 1NS1E, 1NS1D, 1NS1C, 1NS1B, 1NS1A |
| | 1MW1B, 1MW1A |
| | 1NS2E, 1NS2D, 1NS2C, 1NS2B, 1NS2A |
| | 1MW2B, 1MW2A |
| | 1NS3E, 1NS3D, 1NS3C, 1NS3B, 1NS3A |
| | 1MW3B, 1MW3A |
| | 1NS6E, 1NS6D, 1NS6C, 1NS6B, 1NS6A |
| | 1MW6B, 1MW6A |
| | 1NS7E, 1NS7D, 1NS7C, 1NS7B, 1NS7A |
| | 1MW7B, 1MW7A |
| 2010 G37 Coupe | 1NG0E, 1NG0D, 1NG0C, 1NG0B, 1NG0A |
| | 1PX0B, 1PX0A |
| | 1NG1E, 1NG1D, 1NG1C, 1NG1B, 1NG1A |
| | 1NG2E, 1NG2D, 1NG2C, 1NG2B, 1NG2A |
| | 1NG3E, 1NG3D, 1NG3C, 1NG3B, 1NG3A |
| | 1PX1B, 1PX1A |
| | 1PX2B, 1PX2A |
| | 1PX3B, 1PX3A |
| | 1NG7E, 1NG7D, 1NG7C, 1NG7B, 1NG7A |
| | 1PX7B, 1PX7A |
| | 1NG8E, 1NG8D, 1NG8C, 1NG8B, 1NG8A |
| | 1PX8B, 1PX8A |

Table A – ECM (continued)

| Model | Current <u>ECM</u> Part Number: 23710 - |
|----------------------|---|
| 2011 G37 Sedan | 1NX0D, 1NX0B, 1NX0A |
| | 1NX1C, 1NX1B, 1NX1A |
| | 1NX2C, 1NX2B, 1NX2A |
| | 1NX3C, 1NX3B, 1NX3A |
| | 1NX6C, 1NX6B, 1NX6A |
| | 1NX7C, 1NX7B, 1NX7A |
| 2011 G37 Coupe | 1VU0D, 1VU0B, 1VU0A |
| | 1VU1C, 1VU1B, 1VU1A |
| | 1VU2D, 1VU2B, 1VU2A |
| | 1VU3C, 1VU3B, 1VU3A |
| | 1VU6C, 1VU6B, 1VU6A |
| | 1VU7A, 1VU7C, 1VU7B |
| 2009 G37 Convertible | JJ50D, JJ50C, JJ50B, JJ50A |
| | JJ51D, JJ51C, JJ51B, JJ51A |
| | JJ54D, JJ54C, JJ54B, JJ54A |
| | JJ55D, JJ55C, JJ55B, JJ55A |
| 2010 G37 Convertible | 1NJ0E, 1NJ0D, 1NJ0C, 1NJ0B, 1NJ0A |
| | JJ80D, JJ80C, JJ80B, JJ80A |
| | 1NJ1E, 1NJ1D, 1NJ1C, 1NJ1B, 1NJ1A |
| | JJ81D, JJ81C, JJ81B, JJ81A |
| | 1NJ2E, 1NJ2D, 1NJ2C, 1NJ2B, 1NJ2A |
| | JJ82D, JJ82C, JJ82B, JJ82A |
| | 1NJ3E, 1NJ3D, 1NJ3C, 1NJ3B, 1NJ3A |
| | JJ83D, JJ83C, JJ83B, JJ83A |
| 2011 G37 Convertible | 1NY0D, 1NY0B, 1NY0A |
| | 3WP7B, 3WP7A |
| | 1NY1E, 1NY1D, 1NY1C, 1NY1B, 1NY1A |
| | 1NY2E, 1NY2D, 1NY2C, 1NY2B, 1NY2A |
| | 1NY3E, 1NY3D, 1NY3C, 1NY3B, 1NY3A |
| 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 |
| | 3RX0D, 3RX0C |
| | 3RX1B, 3RX1A |
| | 3RX3D |
| | 3RX4A |
| | 3RX6E, 3RX6D |
| | 1XJ4E, 1XJ4B, 1XJ4A |
| 1XJ5A | |
| 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 |

7. 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.

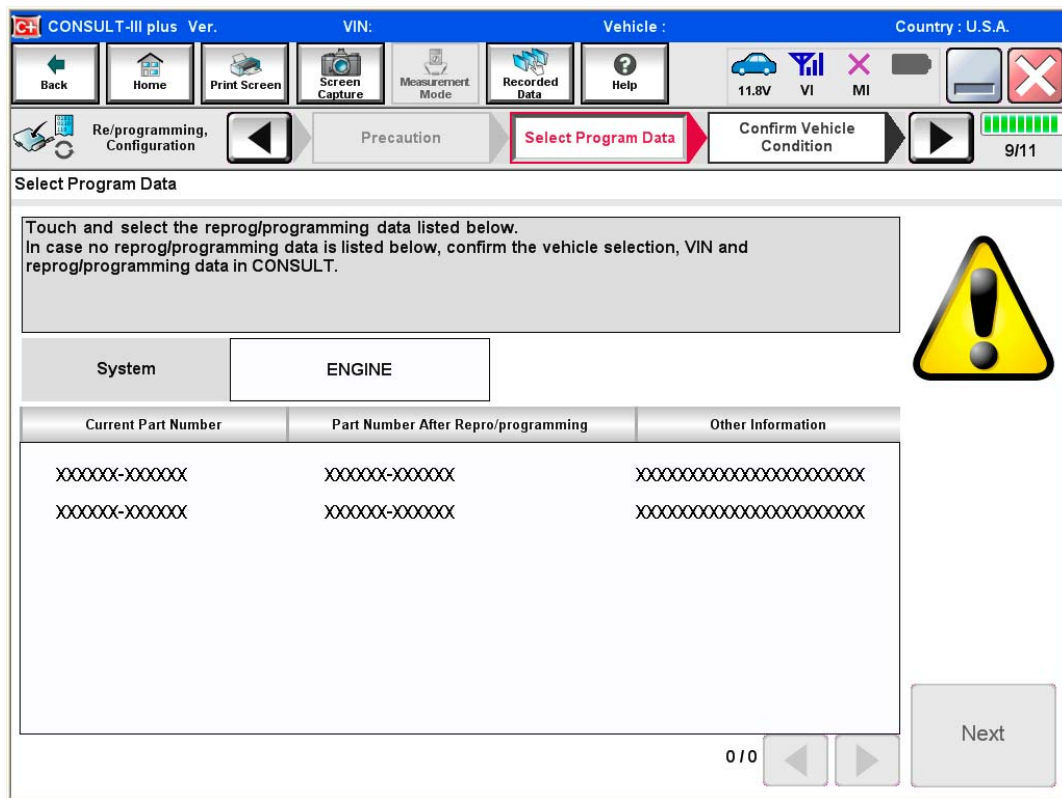


Figure 3

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**.

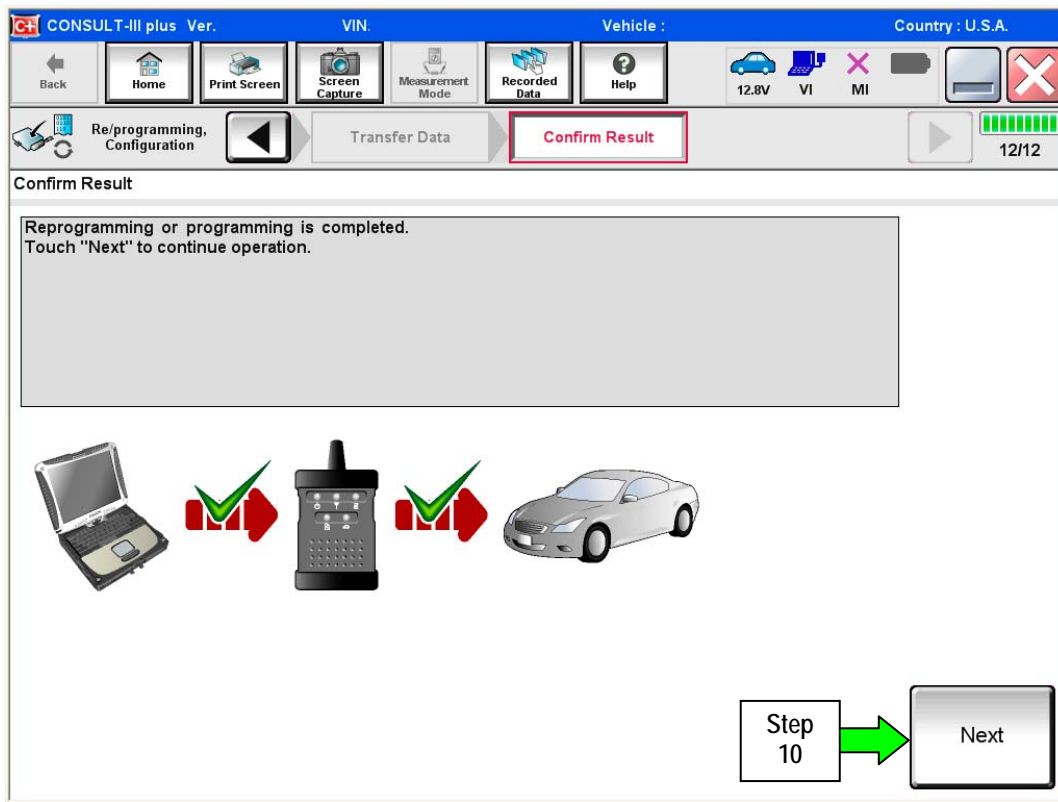


Figure 4

NOTE:

- In the next steps (page 12):
 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.

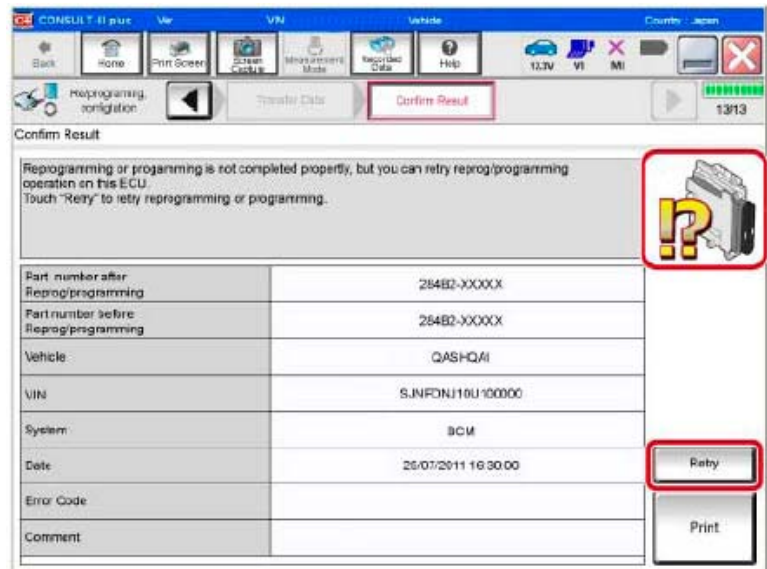


Figure 5

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.

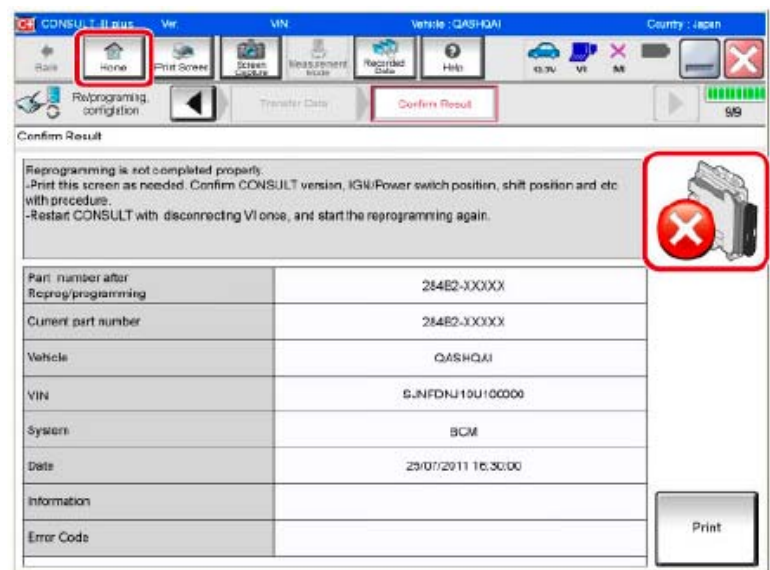


Figure 6

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**.

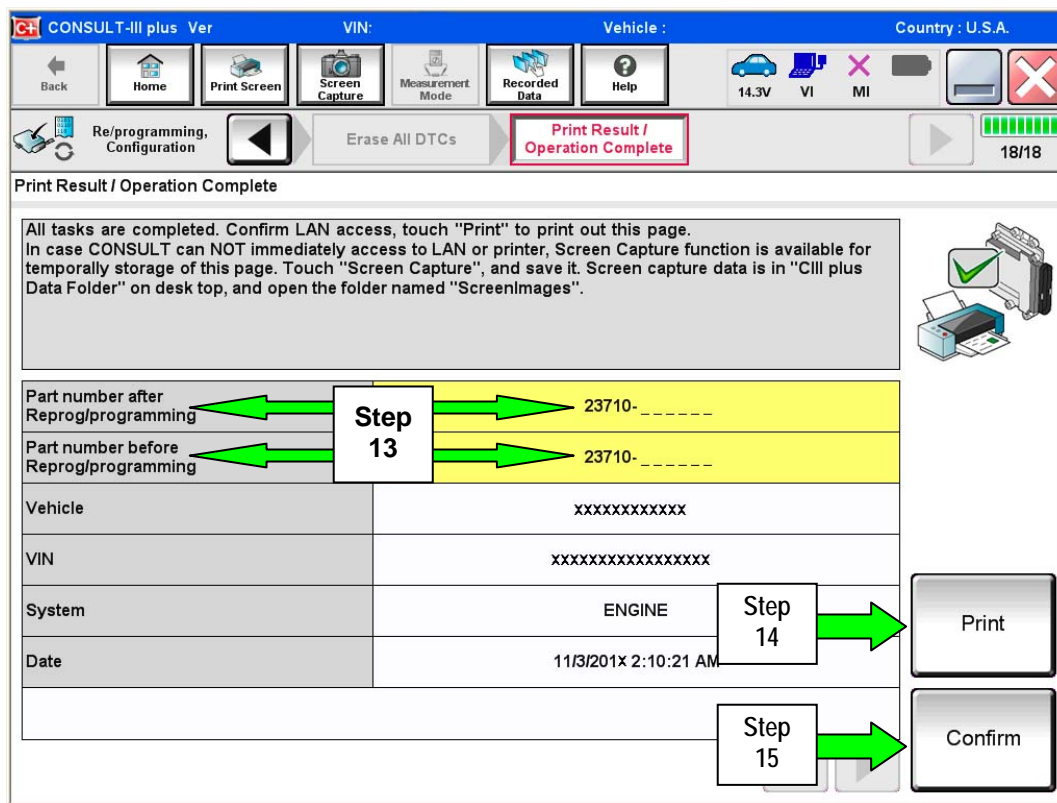


Figure 7

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.