SERVICE BULLETIN

Classification:	Reference:	Date:
EC12-034	NTB13-001	January 3, 2013

2013 SENTRA; ENGINE HAS HESITATION OR STOPS RUNNING AT IDLE OR VERY LOW SPEEDS

APPLIED VEHICLE: 2013 Sentra (B17)
APPLIED VIN AND DATE   Built before 3N1AB7AP(*)DL 650298
                             And before   December 14, 2012

APPLIED TRANSMISSION: CVT

IF YOU CONFIRM:

- The engine intermittently experiences a small RPM decrease for a short duration or stops running during braking, as the vehicle is coming to a stop.

- The engine intermittently experiences a small RPM decrease for a short duration or stops running when shifting into reverse or drive.

- There is a hesitation/lag or the engine stops running when accelerating from a stop.

ACTION:

1. Refer to step 6 in the **SERVICE PROCEDURE** and use the ECM Part Number to confirm this bulletin applies to the vehicle you are working on.

2. If this bulletin applies, reprogram the **ECM** <u>first</u> and if applicable the **TCM**.

   - Some vehicles may only require the ECM to be reprogrammed and may not require the TCM to be reprogrammed.

   - Use Table A on page 6 to determine if TCM reprogramming is applicable.

   - Refer to Claims Information on next page.

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 <u>entire</u> Service Procedure as it contains information that is essential to successfully completing this repair.

CLAIMS INFORMATION

DESCRIPTION	OP CODE	PFP	SYM	DIAG	FRT
REPROGRAM ENGINE CONTROL MODULE	DE97AA	(1)	ZE	32	(2)

(1) Reference the repair order and use the ECM part number written down in step 6 of the Service Procedure.

(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

And (if required *on the same repair line)*

DESCRIPTION	OP CODE	PFP	SYM	DIAG	FRT
REPROGRAM A/T CONTROL UNIT	JE99AA	(1)	ZE	32	(2)

(1) Reference the repair order and use the TCM part number written down in step 6 of the Service Procedure.

(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

SERVICE PROCEDURE

- This procedure will require reprogramming of the ECM first, and for some vehicles the TCM; which means most steps in this procedure may need to be done <u>twice</u>.

- 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.

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CAUTION:

- Connect a battery charger to the vehicle battery.
  The vehicle battery voltage must stay between <u>12.0V and 15.5V</u> during reprogramming, <u>or the ECM/TCM may be damaged</u>.

- Be sure to turn OFF all vehicle electrical loads.
  If a vehicle electrical load remains ON, <u>the ECM/TCM may be damaged</u>.

- Be sure to connect the AC Adapter.
  If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and <u>the ECM/TCM may be damaged</u>.

- 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 <u>the ECM/TCM may be damaged</u>.

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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.

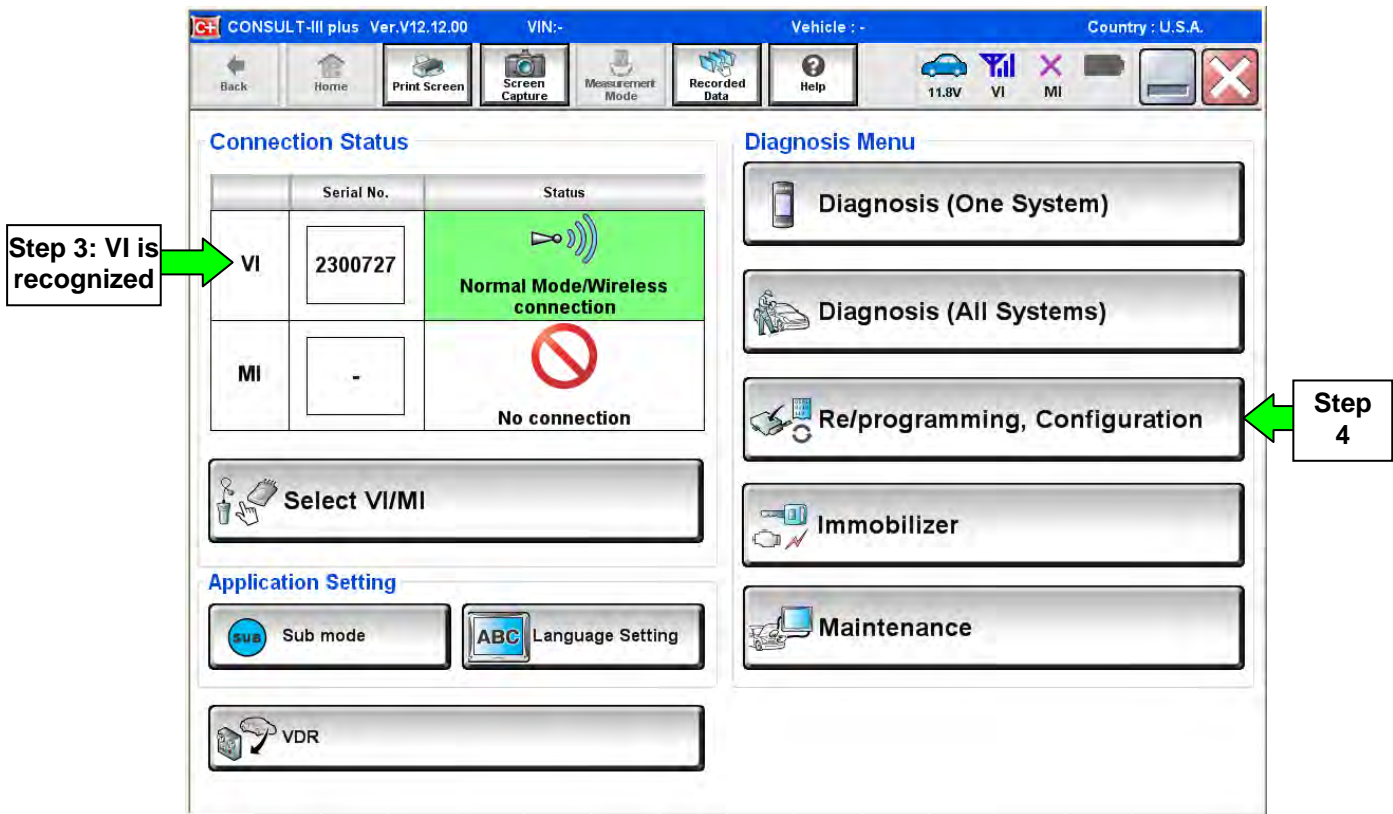4. Select **Re/programming, Configuration**.

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 <u>current</u> ECM or TCM Part Number (P/N).
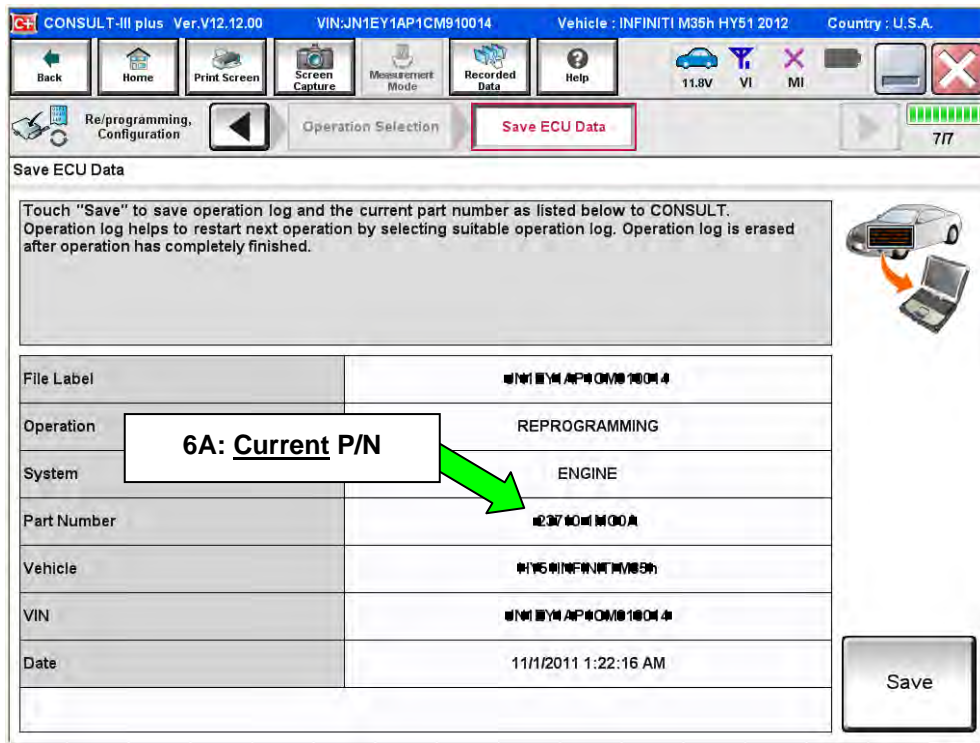   <u>ECM preprogramming must be performed first.</u>

Figure 2

B. Compare the P/N you wrote down to the numbers in the **Current ECM** or **TCM Part Number** column in **Table A** on next page.

   - 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-
2013 Sentra (B17)	3SB0A
	3SG2A
	3SA2A, 3SA2B, 3SA2C
	3SG3A, 3SG3B, 3SG3C
	3SA4A, 3SA4B, 3SA4C
	3SA5A, 3SA5B, 3SA5C
	3SA8A, 3SA8B, 3SA8C

TCM

MODEL	CURRENT <u>TCM</u> PART NUMBER: 31036-
2013 Sentra (B17)	3SR0A
	3SG0A
	3SH0A

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 NTBXX-XXX".

- If you get this screen and it is <u>blank</u> (no reprogramming listed), it means there is no reprogramming available for this vehicle.
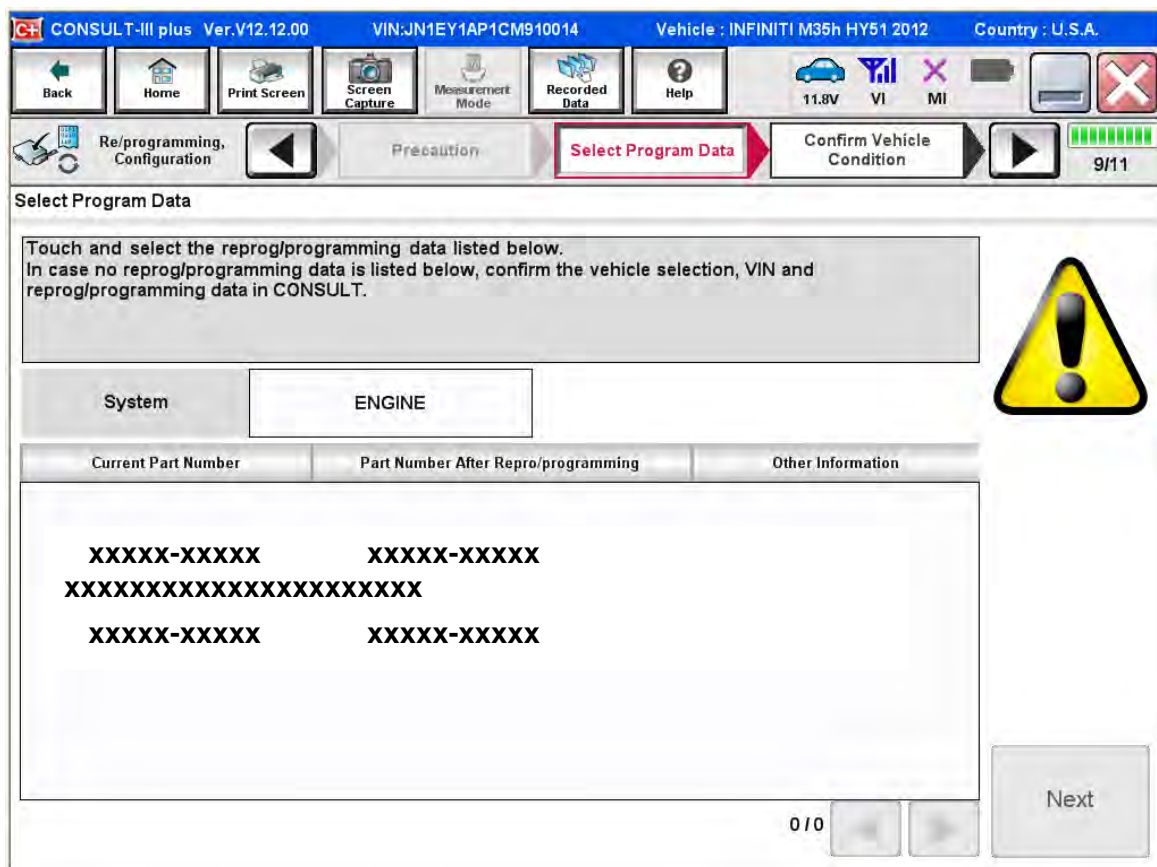
Figure 3

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

    NOTE: If the screen in Figure 4 does <u>not</u> display (reprogramming does not complete), refer to the information on the next page.

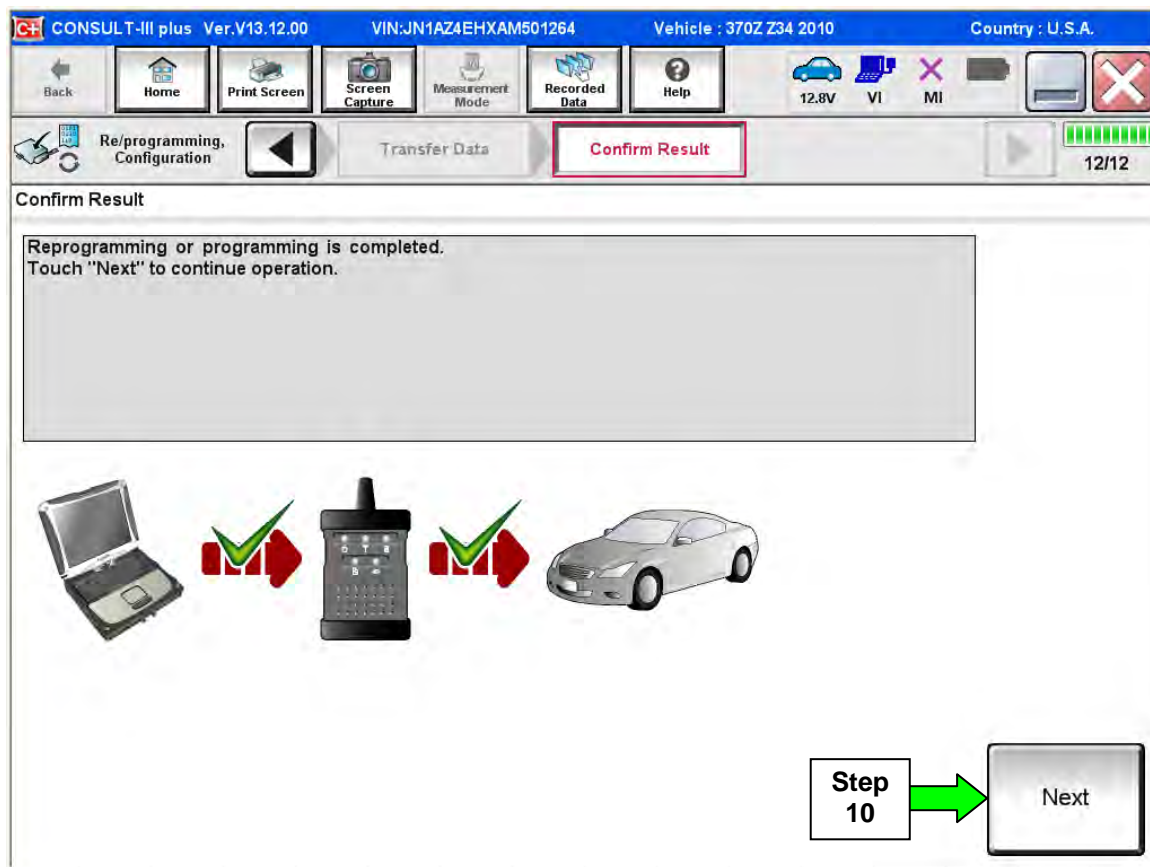9. Disconnect the battery charger from the vehicle.

10. Select **Next**.

Figure 4

NOTE:

- In the next steps (page 10):
    - ➢ For ECM reprogramming you will perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase.
    - ➢ 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 Consult 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.**

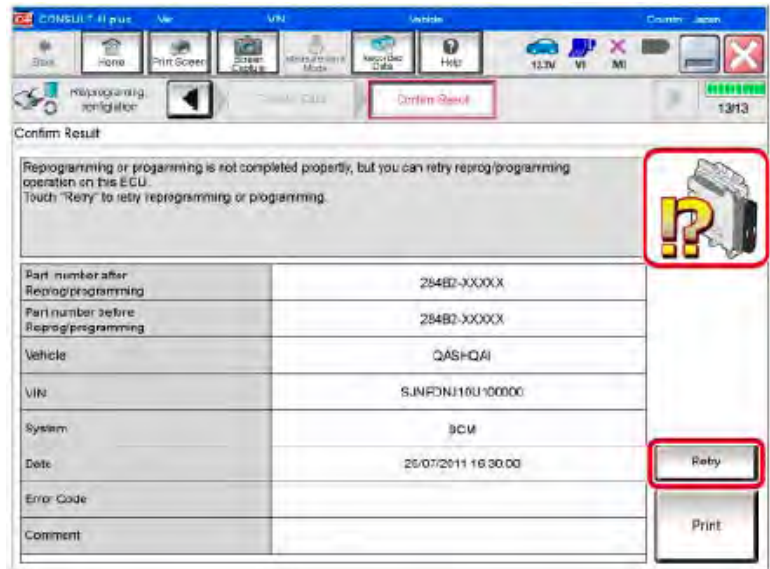- "Retry" may not go through on first attempt and can be selected more than once.

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.

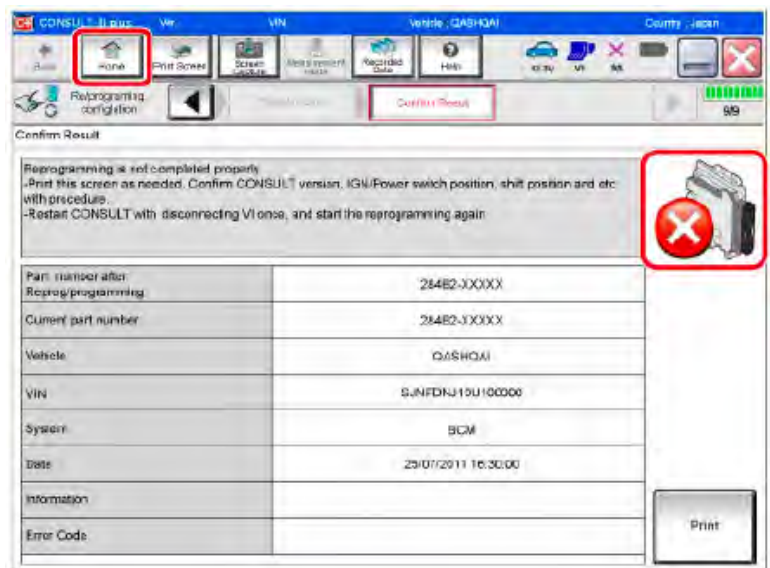- **Select Home, and restart the reprogram procedure from the beginning.**

Figure 6

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

    NOTE: For TCM reprogramming only erase DTCs as needed.

    - **Throttle Valve Closed Position.**

    - **Idle Air Volume Learn (IAVL).**

      NOTE:

      o **Listed below are the conditions required for IAVL to complete.**

      o **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, and 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.
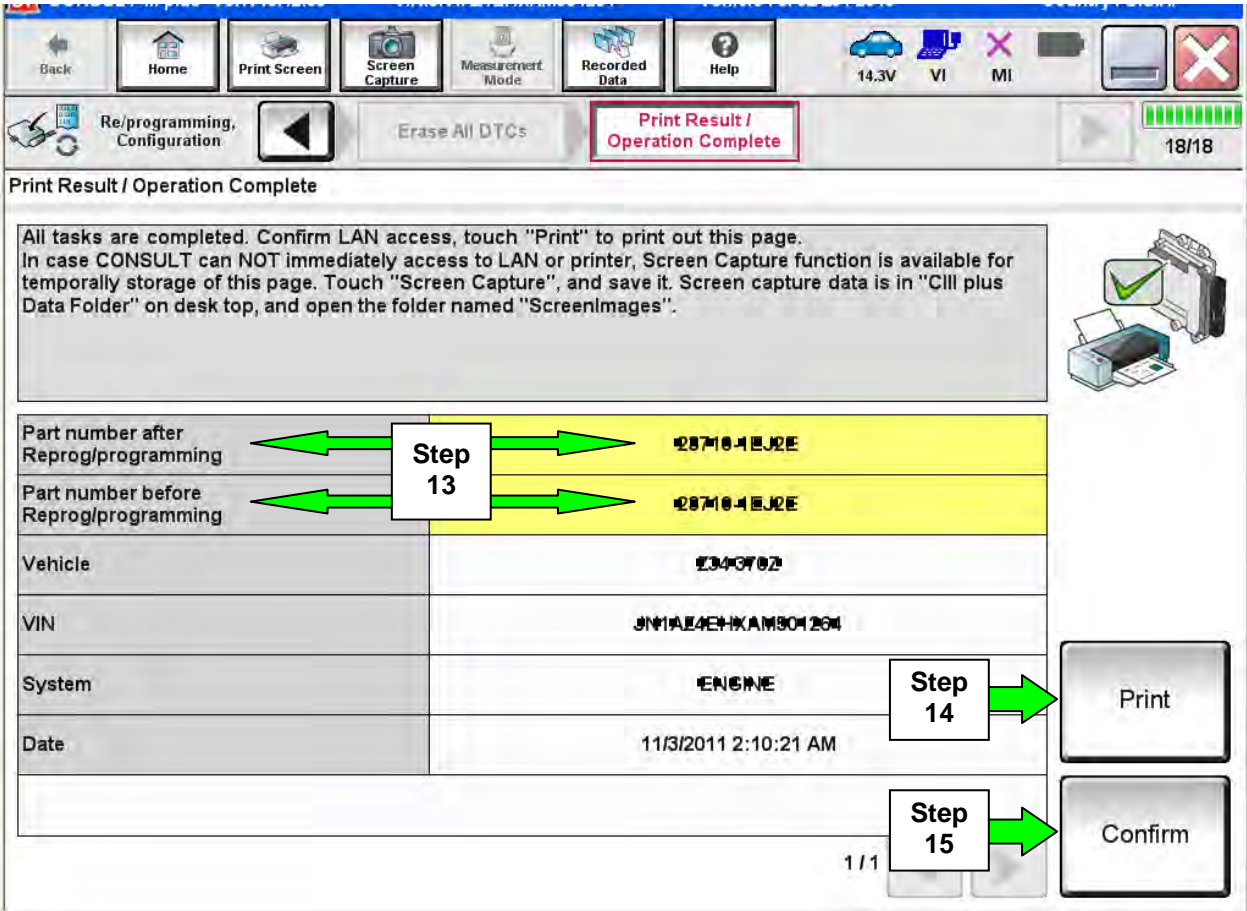
15. Select **Confirm**.

Figure 7

16. Make sure you have <u>performed both ECM and TCM</u> reprogramming (ECM first).

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.