



## SERVICE BULLETIN

Classification: EC16-036b	Reference: NTB16-117b	Date: December 7, 2017
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### 2016-2017 ALTIMA; MIL ON WITH A/F RATIO SENSOR DTC(s)

This bulletin has been amended. Changes have been made throughout.  
It is necessary for you to read this revised procedure to properly perform this action.  
Please discard all previous versions of this bulletin.

**APPLIED VEHICLE:** 2016-2017 Altima (L33)

**APPLIED ENGINE:** QR25DE

#### IF YOU CONFIRM

One or more of the following DTCs is stored:

- **P014C** - A/F SENSOR1 (B1) (O2 sensor slow response - rich to lean bank 1 sensor 1)
- **P014D** - A/F SENSOR1 (B1) (O2 sensor slow response - lean to rich bank 1 sensor 1)
- **P015A** - A/F SENSOR1 (B1) (O2 sensor delayed response - rich to lean bank 1 sensor 1)
- **P015B** - A/F SENSOR1 (B1) (O2 sensor delayed response - lean to rich bank 1 sensor 1)

#### ACTION

1. Replace the Air Fuel Ratio (A/F) Sensor 1.
2. Inspect the PCV valve.
3. Inspect the front under cover for modifications.
4. Inspect the exhaust manifold cover (upper).
5. Modify the grille shutter.
6. Determine if the ECM needs to be reprogrammed.

**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.

Nissan 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 Nissan dealer to determine if this applies to your vehicle.

## SERVICE PROCEDURE

### A/F SENSOR

1. Replace the Air Fuel Ratio (A/F) Sensor 1.
  - Refer to the Electronic Service Manual (ESM), section **EC – Engine Control / REMOVAL AND INSTALLATION / EXHAUST MANIFOLD AND THREE WAY CATALYST / Removal and Installation.**

### PCV VALVE

2. Open the engine hood and locate the PCV valve.

**NOTE:** An engine cover may need to be removed.

3. If the PCV valve is **orange** in color, replace it.

- The new PCV valve is listed in the **PARTS INFORMATION** section of this bulletin.
- Refer to the Electronic Service Manual (ESM), section **EC-Engine Control System**, for PCV valve replacement information.

**NOTE:** The new PCV valve is **black** in color.

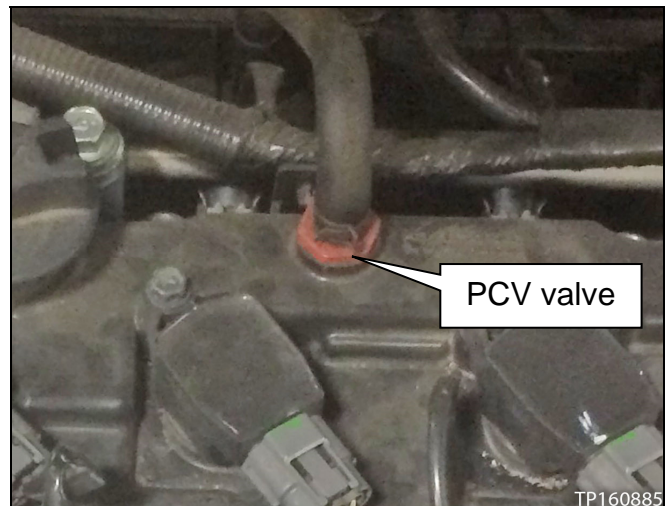


Figure 1

4. If the vehicle's PCV valve is already **black** in color, do not replace it.

## FRONT UNDER COVER

5. Inspect the front under cover for modifications.

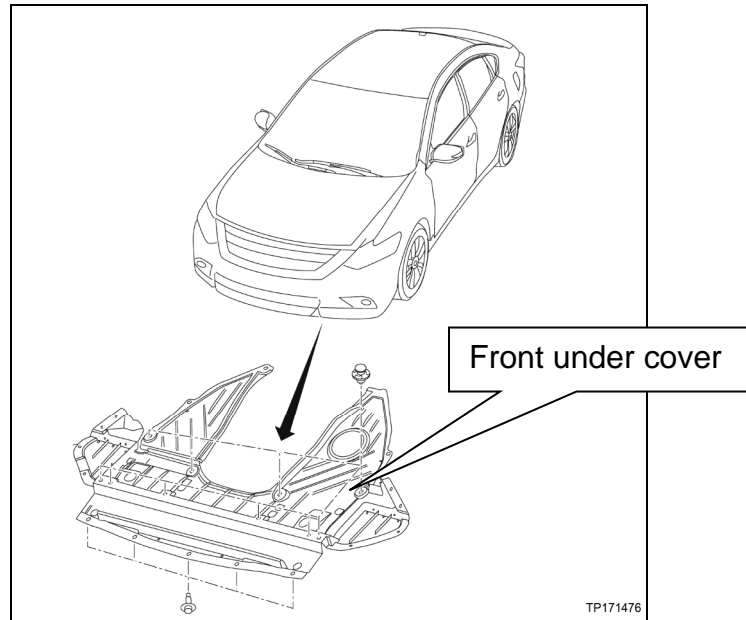


Figure 2

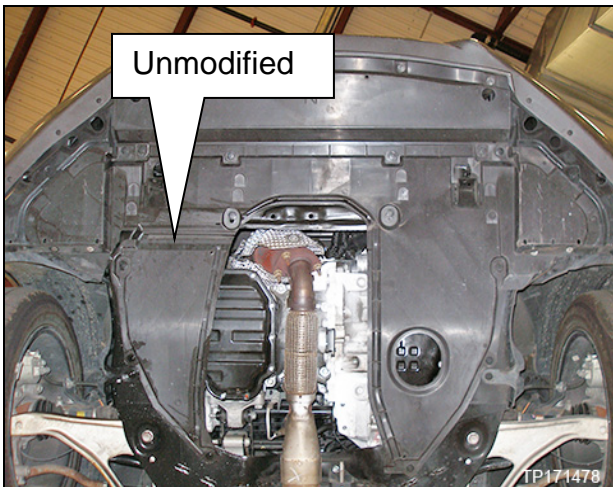


Figure 3

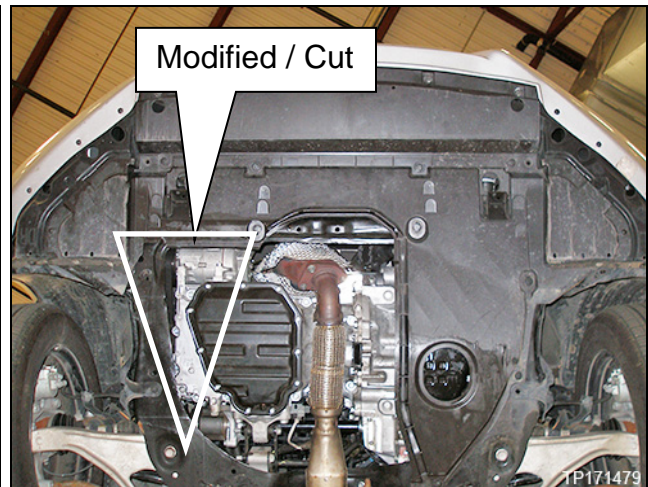


Figure 4

6. Replace the front under cover if it has been modified / cut / broken.

- Refer to the Electronic Service Manual (ESM), section **EXT – Exterior / REMOVAL AND INSTALLATION / FRONT UNDER COVER / Removal and Installation**.

**NOTE:** Replacement of a missing, modified, or broken under cover is not covered under warranty.

## EXHAUST MANIFOLD COVER (upper)

7. Replace the Exhaust manifold cover (upper), if needed.

- 2016 – (All) - Replace the Exhaust manifold cover (upper).
- 2017 – If VIN / manufacture date is before:
  - 1N4AL3A(\*)(\*)**HN**317529 – October 25, 2016
  - 1N4AL3A(\*)(\*)**HC**146224 – October 25, 2016
- Refer to the Electronic Service Manual (ESM), section **EM – Engine Mechanical / REMOVAL AND INSTALLATION / EXHAUST MANIFOLD AND THREE WAY CATALYST / Removal and Installation.**

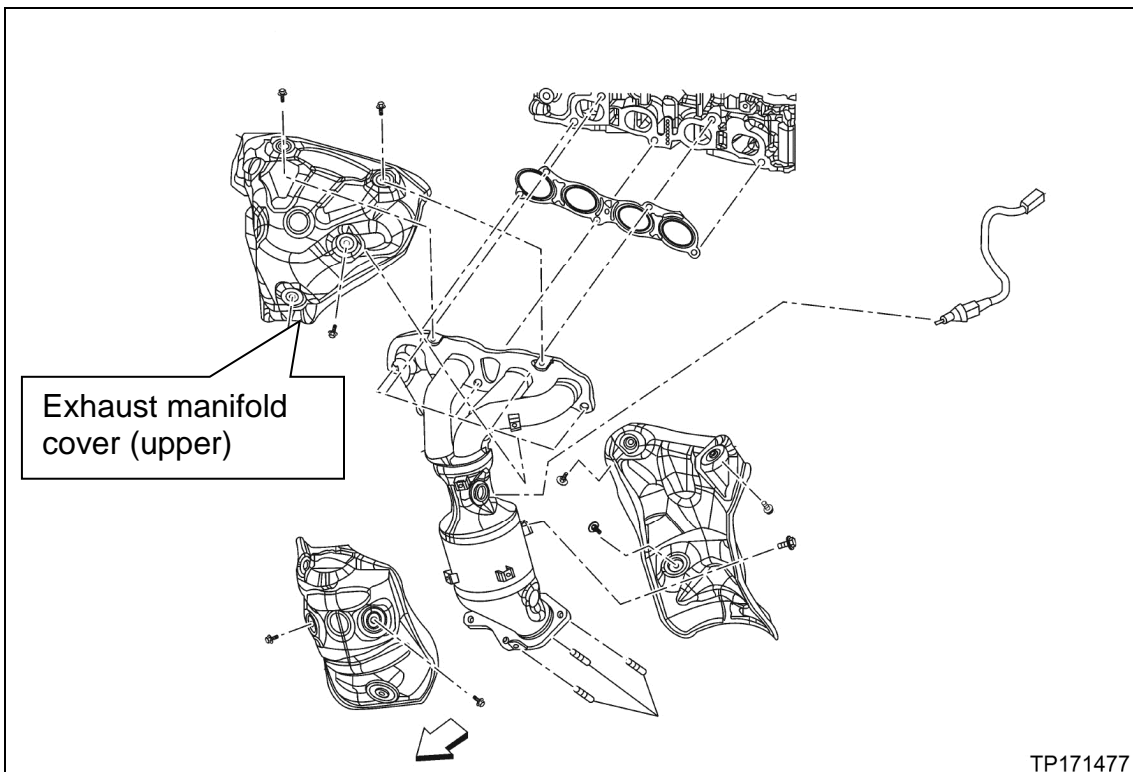


Figure 5

## GRILLE SHUTTER

8. Remove the front bumper fascia.

- Refer to the Electronic Service Manual (ESM), section **EXT – Exterior / REMOVAL AND INSTALLATION / FRONT BUMPER / Removal and Installation.**

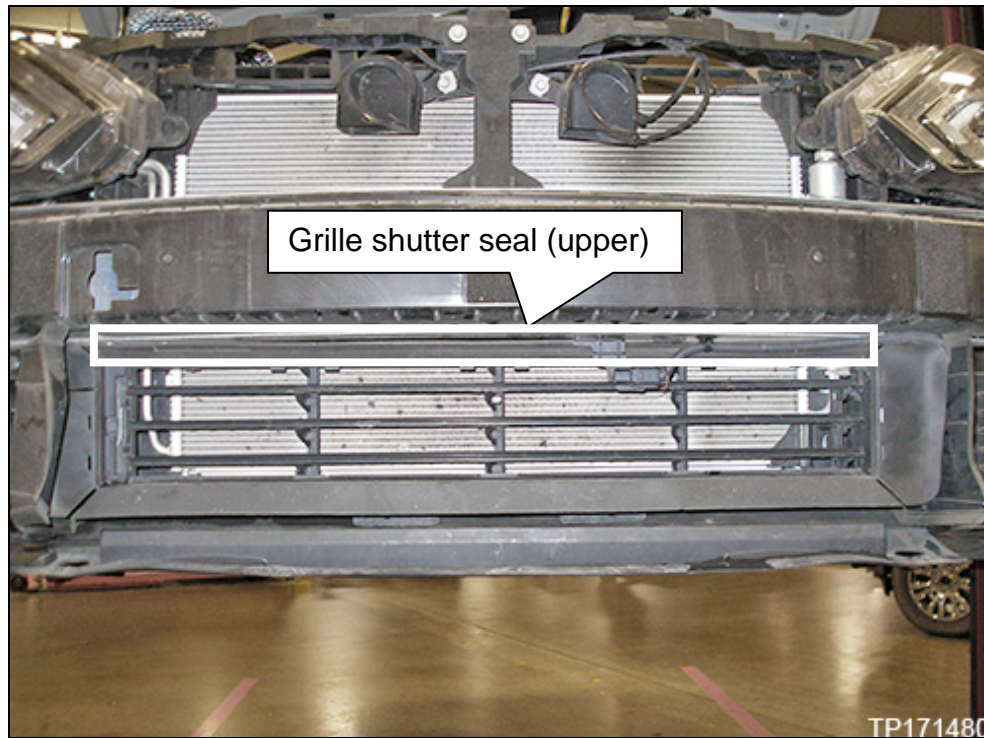


Figure 6

9. Cut the grille shutter seal (upper) away from the grille shutter.

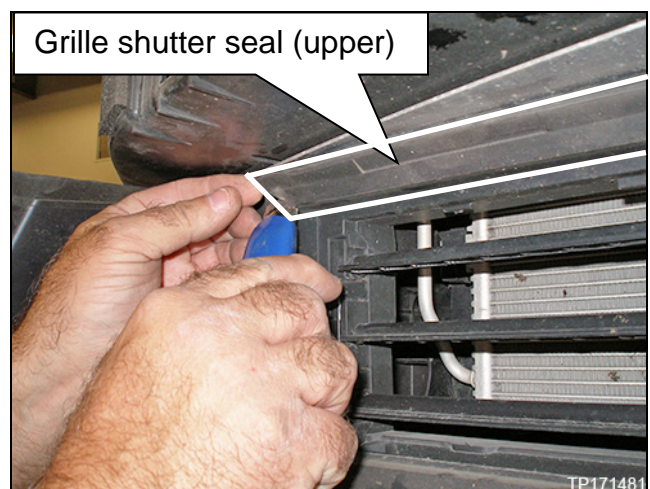


Figure 7

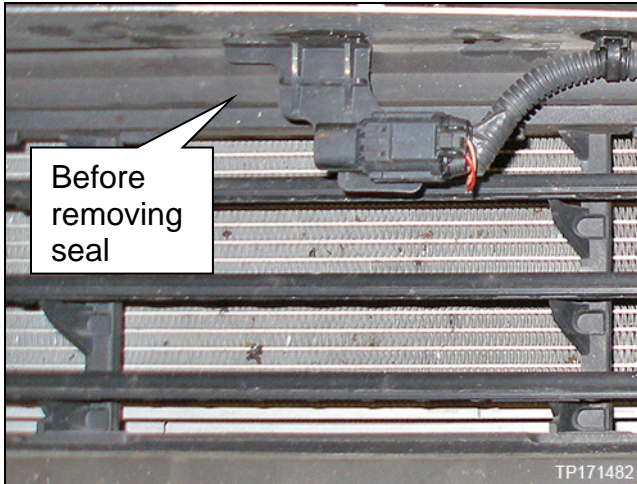


Figure 8

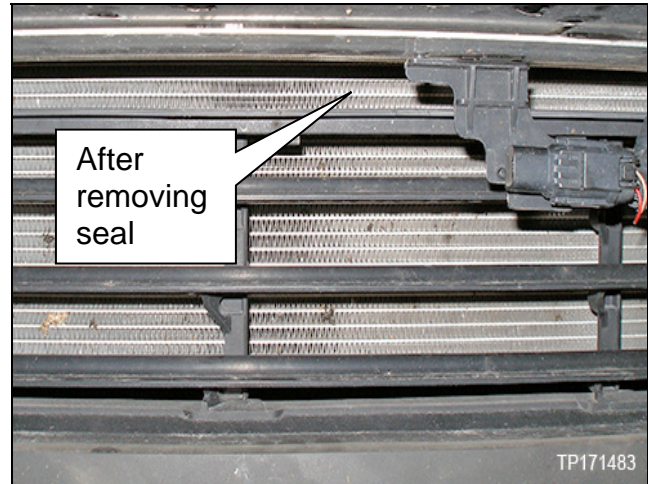


Figure 9

10. Figure 10 shows the grille shutter seal (upper) after being removed from the vehicle.



Figure 10

11. Install the front bumper fascia.

- Refer to the Electronic Service Manual (ESM), section **EXT – Exterior / REMOVAL AND INSTALLATION / FRONT BUMPER / Removal and Installation.**

## REPROGRAM THE ECM

### IMPORTANT: Before starting, make sure:

- ASSIST on the CONSULT PC has been synchronized (updated) to the current date.
- All CONSULT-III plus (C-III plus) software updates (if any) have been installed.
- The CONSULT PC is connected to the Internet (Wi-Fi or cable).

### 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. This will link you to the "CONSULT- III plus (C-III plus) ECM 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 -100°C (158 -212°F)
  - Battery voltage: More than 12.9V (At idle)
  - Transmission: Warmed up
- After reprogramming is complete, you will be required to perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase.



Figure A

### CAUTION:

- Connect the GR8 to the 12V battery and select 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® 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 may be damaged.

12. Connect the CONSULT PC to the vehicle to begin the reprogramming procedure.

13 Start C-III plus.

14. Wait for the plus VI to be recognized / connected.

- The serial number will display when the plus VI is recognized / connected.

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

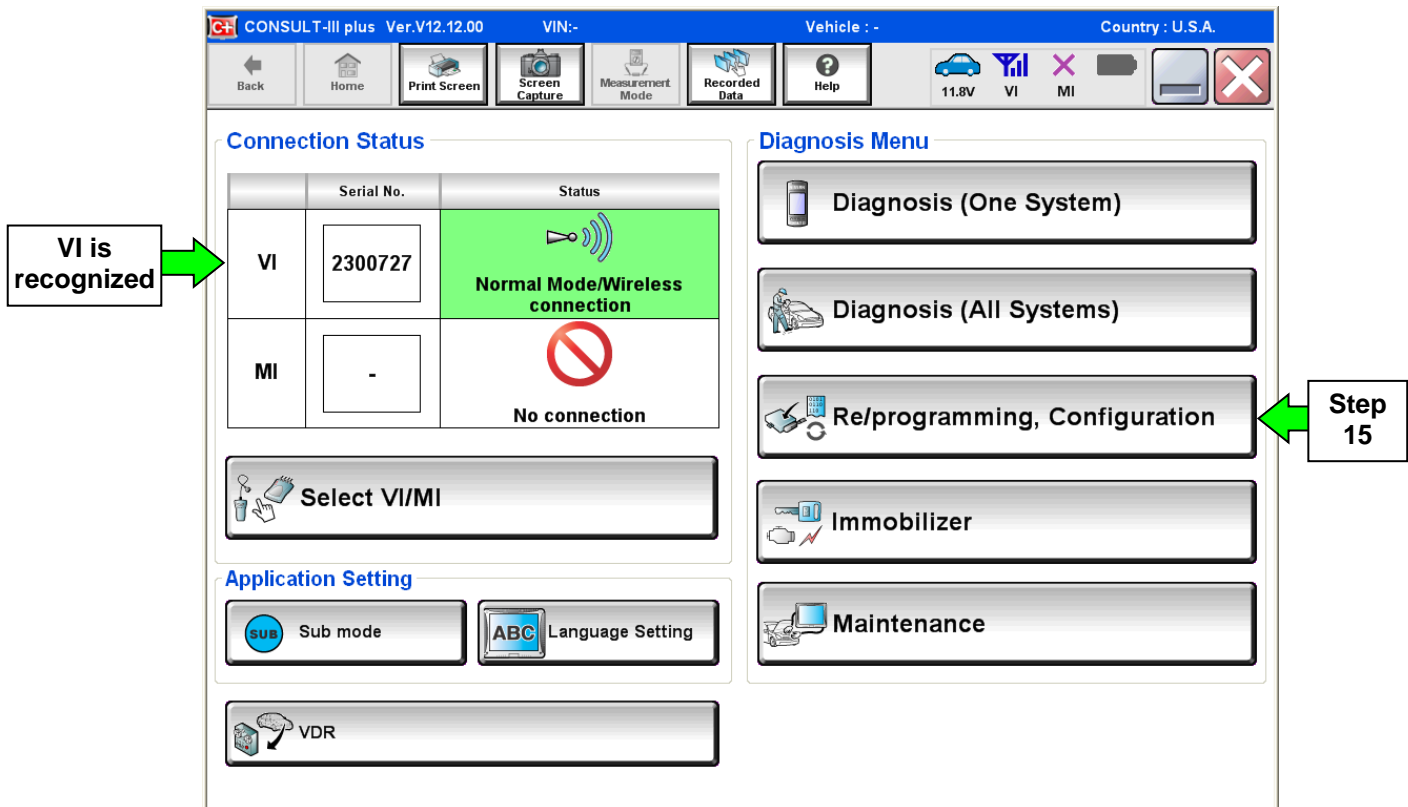


Figure 11

16. Follow the on-screen instructions and navigate the C-III plus to the screen shown in Figure 12 on the next page.



17. When you get to the screen shown in Figure 12, confirm this bulletin applies as follows.

A. Find the ECM **Part Number** and write it on the repair order.

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

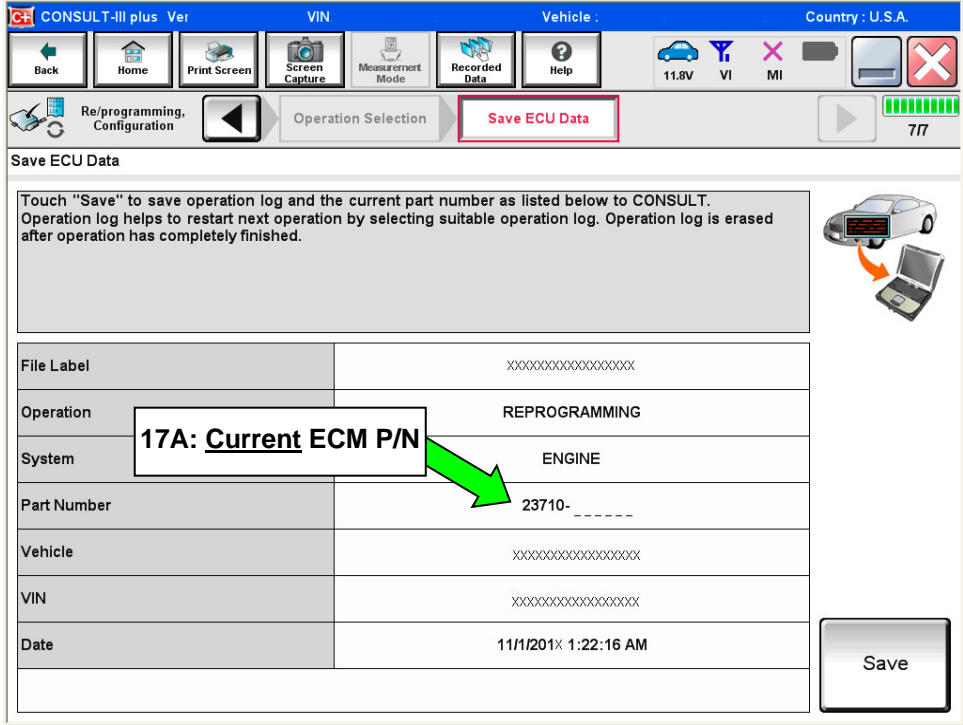


Figure 12

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

- If there is a match, this bulletin applies. Continue with the reprogramming procedure.
- If there is not a match, reprogramming is not needed.

**Table A**

<b>MODEL</b>	<b>CURRENT ECM PART NUMBER: 23710-</b>
<b>2016 Altima with QR25DE</b>	9HN4A, 9HN4B, 9HN4C, 9HN4D, 9HN4E
	9HN5A, 9HN5B, 9HN5C, 9HN5D, 9HN5E
	9HN6A, 9HN6B, 9HN6C, 9HN6D, 9HN6E
	9HN7A, 9HN7B, 9HN7C, 9HN7D, 9HN7E
	9HN8A, 9HN8B, 9HN8C, 9HN8D, 9HN8E
	3TY2A, 3TY2B, 3TY2C, 3TY2D, 3TY2E
	3TY3A, 3TY3B, 3TY3C, 3TY3D, 3TY3E
	3TY4A, 3TY4B, 3TY4C, 3TY4D, 3TY4E
	3TY5A, 3TY5B, 3TY5C, 3TY5D, 3TY5E
	3TY9A, 3TY9B, 3TY9C, 3TY9D, 3TY9E
<b>2017 Altima with QR25DE</b>	9HL0A, 9HL0B
	9HL1A, 9HL1B
	9HL2A, 9HL2B
	9HL3A, 9HL3B
	9HL4A, 9HL4B

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

**NOTE:**

- In some cases, more than one new P/N for reprogramming is available.
  - In this case, the screen in Figure 13 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 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.

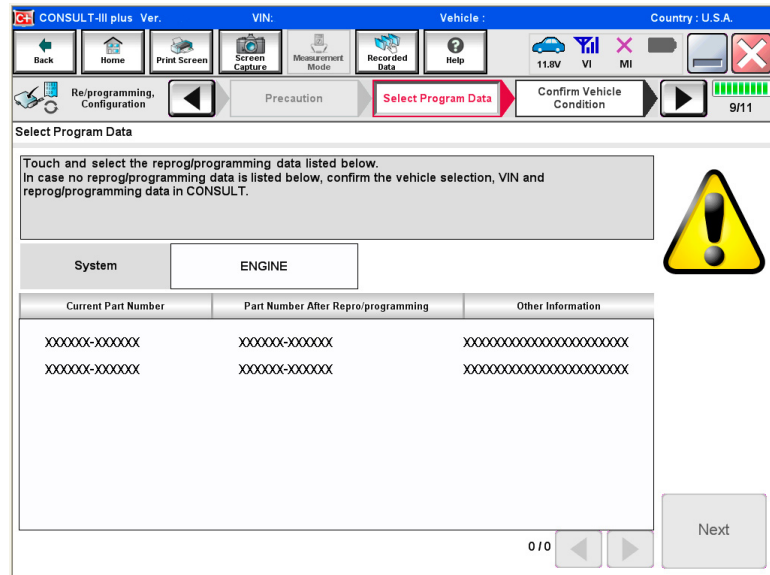


Figure 13

- Before reprogramming will start, you will be required to enter your User Name and Password.
  - The CONSULT PC must be connected to the Internet (Wi-Fi or cable).
  - If you do not know your User Name and Password, contact your Service Manager.

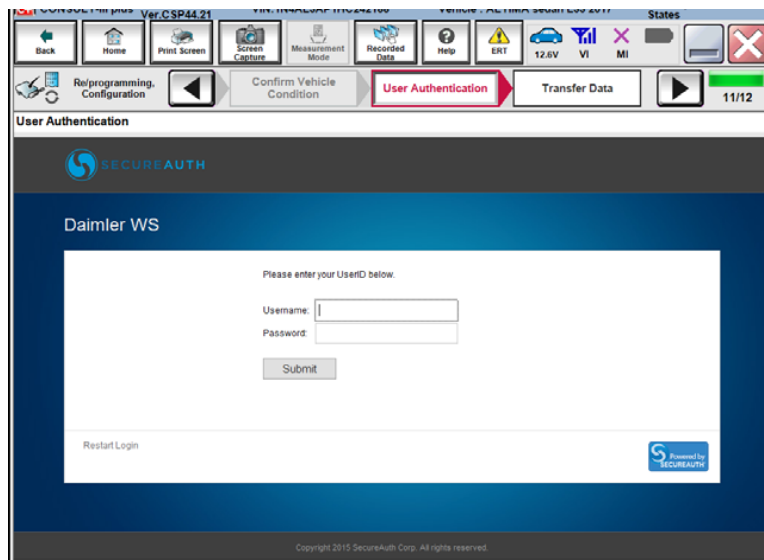


Figure 14

19. When the screen in Figure 15 displays, reprogramming is complete.

**NOTE:** If the screen in Figure 15 does not display (reprogramming does not complete), refer to the information on page 13.

20. Disconnect the battery charger from the vehicle.

21. Select **Next**.

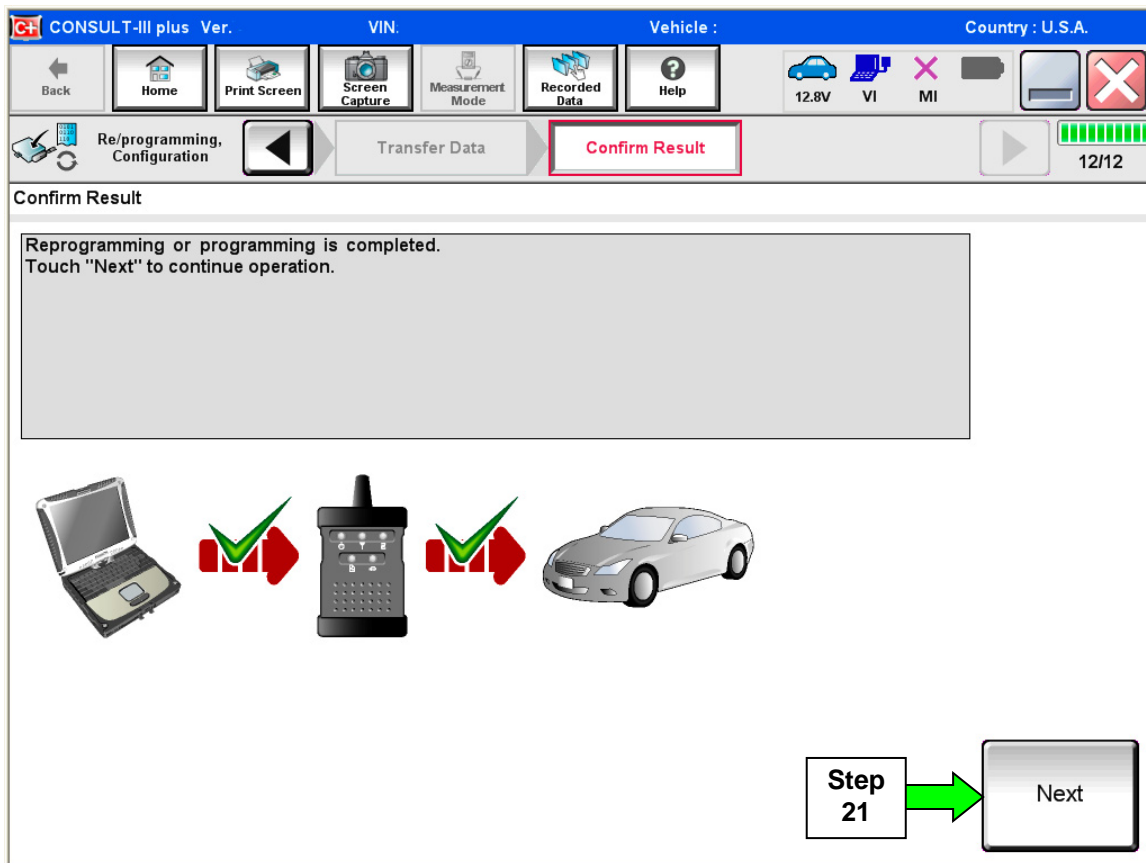


Figure 15

**NOTE:**

- In the next steps, starting on page 14, 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.

## ECM 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 16:

- 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.

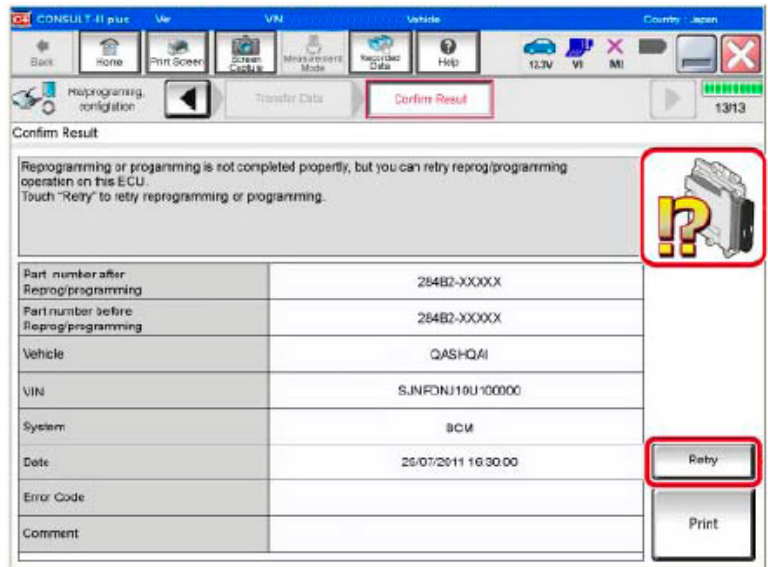


Figure 16

If reprogramming does not complete and the “X” icon displays as shown in Figure 17:

- 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.**

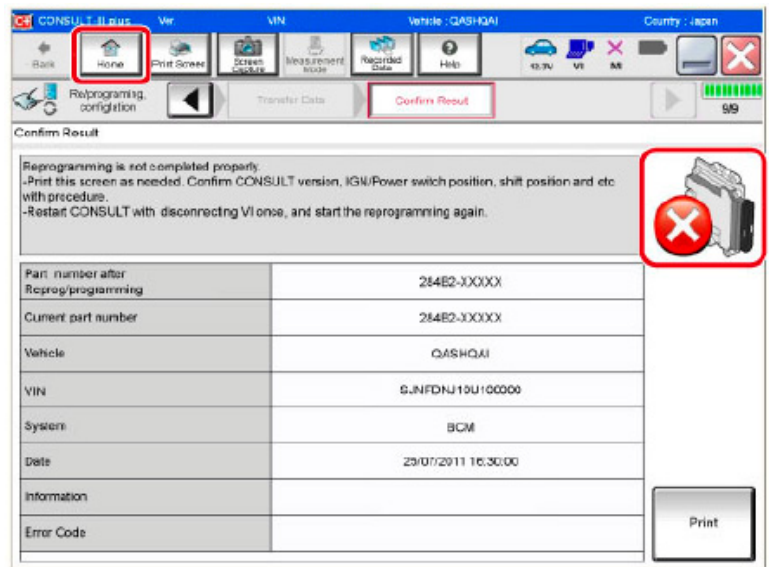


Figure 17

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

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

**NOTE:**

- **Listed below 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 ESM for specific conditions required for the vehicle you are working on.**
    - Engine coolant temperature: 70 -100° C (158 -212°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**

Continue to the next page.

23. When the entire reprogramming process is complete, the screen in Figure 18 will display.
24. Verify the before and after part numbers are different.
25. Print a copy of this screen (Figure 18) and attach it to the repair order for warranty documentation.
26. Select **Confirm**.

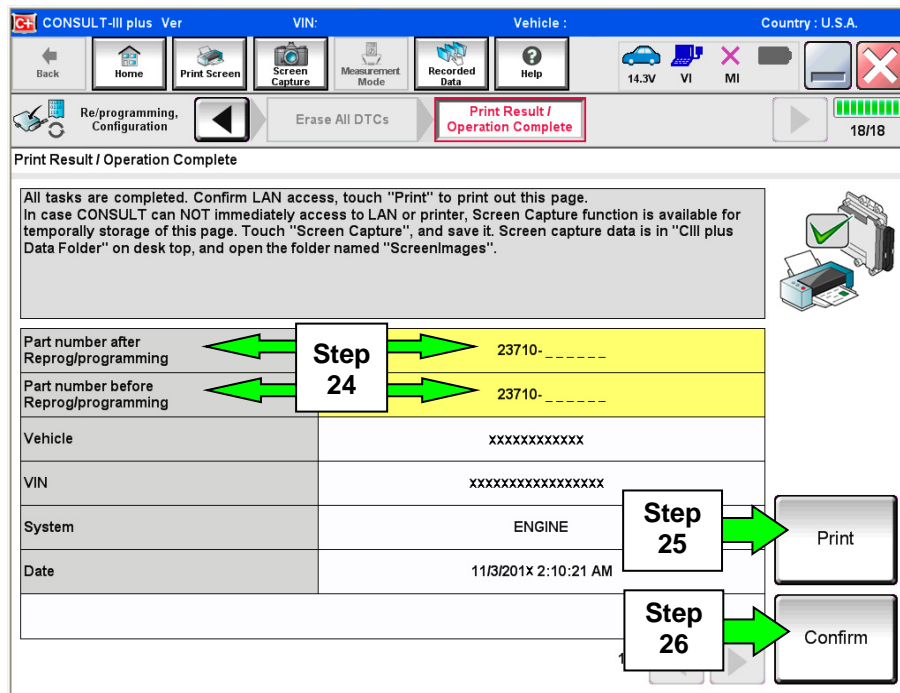


Figure 18

27. Close C-III plus.
28. Turn the ignition OFF.
29. Disconnect the plus VI from the vehicle.

## PARTS INFORMATION

SPECIFICATION	DESCRIPTION	PART NUMBER	QUANTITY
50-State	Air Fuel Ratio (A/F) Sensor 1	22693-3TA0B	1
California		22693-3TY0B	1
	PCV Valve	11810-6N202	1 (If needed)
	Exhaust Manifold Cover (Upper)	16590-3TA1A	1 (If needed)
	Front Under Cover (1)	75890-9HS0A	1 (If needed)

(1) Replacement of a missing, modified, or broken under cover is not covered under warranty.

## CLAIMS INFORMATION

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

DESCRIPTION	OP CODE	PFP	SYM	DIAG	FRT
Reprogram Engine Control Module	DE97AA	(1)	ZE	32	(2,3)
Replace One Air/Fuel Ratio Sensor	DE53AA				
Modify Grille Shutter	CX29AA				0.9
Replace PCV Valve	AR32AA				(2)
Replace Exhaust Manifold Cover (Upper)	AR20AA				(2)

- (1) Refer to the electronic parts catalog (FAST) and use the Blank ECM assembly part number (23703-\*\*\*\*\*) as the Primary Failed Part (PFP).
- (2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated flat rate time.
- (3) FRT allows adequate time to access DTC codes and reprogram ECM. No other diagnostic subsequently required. Do NOT claim any diagnostic Op Codes with this claim.

**NOTE:** Replacement of a missing, modified, or broken under cover is not covered under warranty. The Nissan New Vehicle Limited Warranty does not cover incidents due to lack of vehicle maintenance and/or physical damage. Refer to the Nissan Assurance Products Resource Manual (APRM) for guidelines on warranty coverage. The vehicle owner's manual contains the complete details regarding the limited warranty.