### **Technical Bulletin**



# SERVICE BULLETIN Classification: Reference:

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EC16-011a NTB16-030a December 1, 2016

## 2013-2016 ALTIMA WITH QR25DE ENGINE; MIL ON WITH DTC P0101

This bulletin has been amended throughout. Discard all previous versions of this bulletin.

APPLIED VEHICLE: 2013-2016 Altima (L33)

**APPLIED ENGINE:** QR25DE (4-cyl)

#### IF YOU CONFIRM

The MIL is ON with DTC P0101 (MAF SEN/CIRCUIT-B1) stored

#### and

There are no drivability issues.

#### **ACTION**

- 1. Inspect the PCV valve.
  - If the PCV valve is **orange** in color, replace it.
    - See PARTS INFORMATION.
  - If the PCV valve is **black** in color, do not replace it.
- 2. Determine if the ECM needs to be reprogrammed.
  - Check the vehicle's ECM part number (P/N), and then refer to step 6 and Table A
    in the SERVICE PROCEDURE section of this bulletin.
- 3. If it applies, reprogram the ECM.

**NOTE:** If this bulletin does apply (the PCV valve needs to be replaced and/or the ECM needs to be reprogrammed), DO NOT replace the mass air flow sensor.

**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.

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

#### **PCV Valve**

 Open the engine hood and locate the PCV valve.

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

- 2. If the PCV valve is **orange** in color, replace it.
  - See PARTS INFORMATION.
  - Refer to the Electroninc Service Manual (ESM), section EC-Engine Control System, for PCV valve replacement information.

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

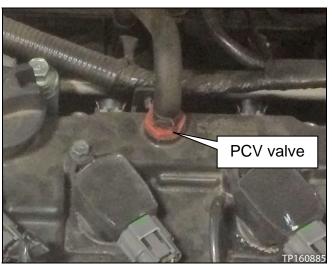


Figure A

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

## **ECM Reprogramming**

#### 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) 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



Figure B

**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® devices (e.g., cell phones, printers, etc.) within
  range of the CONSULT PC and the plus VI. If Bluetooth® 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.
- 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**.

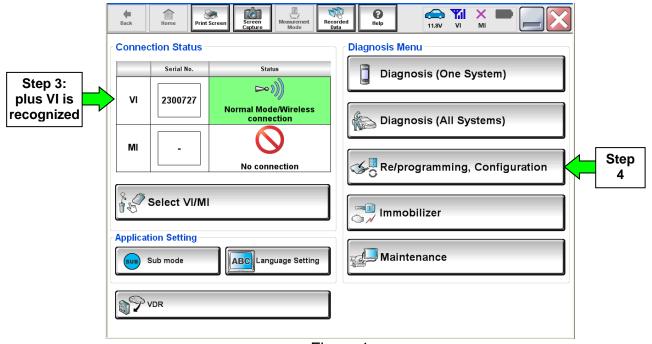


Figure 1

5. Follow the on-screen instructions and navigate 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 **Part Number** and write it on the repair order.

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

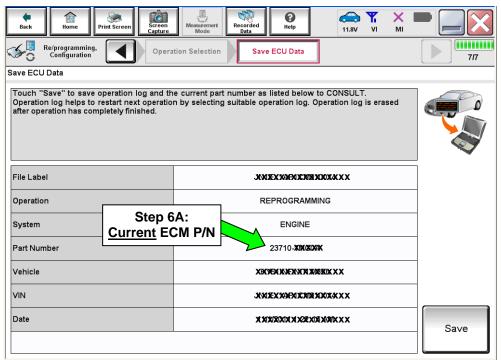


Figure 2

- B. Compare the P/N you wrote down to the numbers in the **Current ECM Part Number** column in **Table A** on the next page.
  - If there is a <u>match</u>, this bulletin <u>applies</u>. Continue with the reprogramming procedure.
  - If there is <u>not a match</u>, the ECM does not need to be reprogrammed. Close C-III plus and refer to ASIST for further diagnostic information as needed.

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## Table A

Model	Current ECM Part Number: 23710-			
	3TA0A, 3TA0B, 3TA0C			
	3TA1B, 3TA1C, 3TA1D			
	3TA6A, 3TA7A, 3TA8A			
	3TA6B, 3TA7B, 3TA8B			
2013 Altima Sedan	3TA6C, 3TA7C, 3TA8C			
(with QR25DE engine)	3TY0A, 3TY0B, 3TY0C			
	3TY1A, 3TY1B, 3TY1C			
	3TY6A, 3TY7A, 3TY8A			
	3TY6B, 3TY7B, 3TY8B			
	3TY6C, 3TY7C, 3TY8C			
2014 Altima	9HM3A, 9HM4A, 9HM5A, 9HM6A, 9HM7A, 9HM8A			
(with QR25DE engine)	9HM3B, 9HM4B, 9HM5B, 9HM6B, 9HM7B, 9HM8B			
2015 Altima (with QR25DE engine)	9HP0A, 9HP1A, 9HP2A, 9HP3A, 9HP4A, 9HP5A			
	9HN4A, 9HN4B, 9HN4C			
	9HN5A, 9HN5B, 9HN5C			
	9HN6A, 9HN6B, 9HN6C			
	9HN7A, 9HN7B, 9HN7C			
2016 Altima	9HN8A, 9HN8B, 9HN8C			
(with QR25DE engine)	3TY2A, 3TY2B, 3TY2C			
	3TY3A, 3TY3B, 3TY3C			
	3TY4A, 3TY4B, 3TY4C			
	3TY5A, 3TY5B, 3TY5C			

7. 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.
  - 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 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. Close C-III plus and refer back to ASIST for further diagnosis.

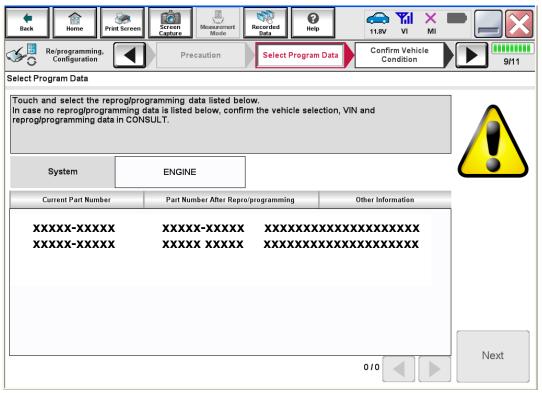


Figure 3

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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 on the next page.

9. Disconnect the GR8 (battery charger) from the vehicle.

#### 10. Select Next.

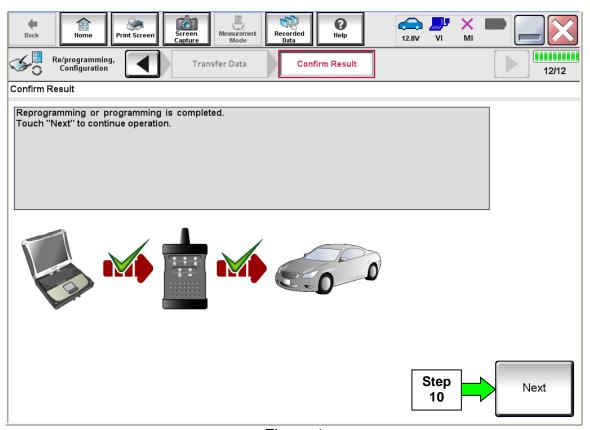


Figure 4

#### NOTE:

- In the next steps, (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.

### **ECM Recovery**

## <u>Do not disconnect plus VI or shut down Consult III plus if reprogramming does not complete.</u>

If reprogramming does <u>not</u> 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 <u>retry</u> and follow the on screen instructions.
- "Retry" may not go through on first attempt and can be selected more than once.

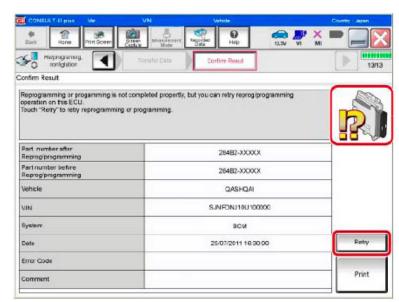


Figure 5

## If reprogramming does <u>not</u> 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 <u>Home</u>, and restart the reprogram procedure from the beginning.

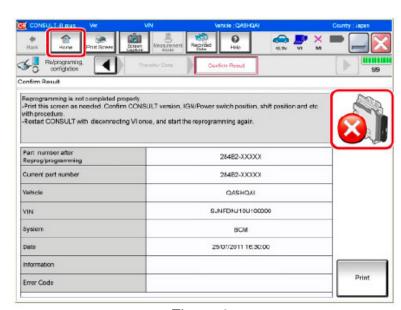


Figure 6

- 11. Follow the on-screen instructions to perform the following:
  - Throttle Valve Closed Position
  - Idle Air Volume Learn (IAVL)

#### NOTE:

- Listed below are 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.
  - o Engine coolant temperature: 70 -105° C (158 221°F)
  - o Battery voltage: More than 12.9V (At idle)
  - o Selector lever: P or N
  - o Electric load switch: OFF (Air conditioner, headlamp, rear window defogger)

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- o Steering wheel: Neutral (Straight-ahead position)
- o Vehicle speed: Stopped
- o Transmission: Warmed up
- Accelerator Pedal Close Position Learning
- Erase DTCs

Continue to the next page.

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- 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.

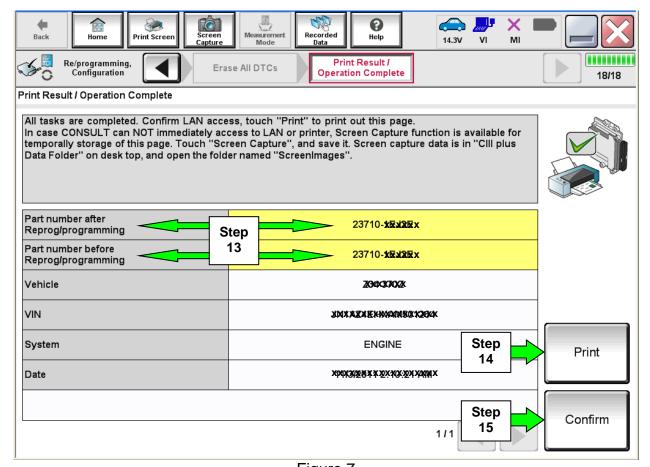


Figure 7

- 16. 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.

#### PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
VALVE ASSY-CONTROL (PCV valve - black in color)	11810-6N202	1 (if needed)

#### **CLAIMS INFORMATION**

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

## If the PCV Valve is inspected and not replaced:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Inspect PCV Valve	(1)	AR20AA	ZE	32	(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.

#### OR

## If the PCV Valve is inspected and replaced:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL PCV Valve	(1)	AR32AA	ZE	32	(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 FRT.

## And if needed on the <u>same repair line</u> if the ECM is reprogrammed:

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

- (1) Refer to the electronic parts catalog (FAST or equivalent) 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 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.