## **Technical Bulletin**



## SERVICE BULLETIN

Classification: Reference: Date

EC16-013e NTB16-037e February 28, 2019

# 2016 TITAN XD; MIL ON WITH ENGINE DTCs STORED AND/OR IDLE FLUCTUATION

This bulletin has been amended. See Amendment History on the last page.

Please discard previous versions of this bulletin.

**APPLIED VEHICLES:** 2016 Titan XD (A61) **APPLIED ENGINE:** Cummins 5.0L V8 Diesel

#### IF YOU CONFIRM

The MIL is ON with one or more of the following DTCs stored:

- P020A F: Cylinder 1 6 Injection Timing
- P021A B: Cylinder 7 8 Injection Timing
- P060C: Internal Control Module Main Processor Performance
- P061B: Internal Control Module Torque Calculation Performance
- P0605: ECM
- P0299: Boost Pressure
- P2263: Turbocharger Boost System Performance
- P0401: Flow in the Exhaust Gas Recirculation (Insufficient)
- P0402: Flow in the Exhaust Gas Recirculation (Excessive)
- P2483: Exhaust Gas Temperature Sensor Circuit Intermittent 1/5
- P244D: Exhaust Temperature Too High For PF Regeneration
- U0415: VDC CAN CIR2
- P2BAD: NOx Concentration Exceeded
- P1C55: NOx Sensor 1/1 Intermittent
- P1C56: NOx Sensor 1/2 Intermittent
- P2201: NOx Sensor 1
- P229F: NOx Sensor 2
- P064C: Glow Output Stage

#### and/or

At times, when coming to a stop, the idle fluctuates with RPM dropping below 500 RPM.

See page 2 for **ACTION** section.

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.

#### **ACTION**

- 1. Save Computer Data with CONSULT-III plus (C-III plus).
- 2. At step 6 of the reprogramming procedure, confirm this bulletin applies to the vehicle you are working on.
- 3. If this bulletin applies, continue with reprogramming procedure.
- 4. Write Saved Data with CONSULT-III plus.

**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.

#### SERVICE PROCEDURE

## **Save Computer Data**

- 1. Connect the CONSULT PC to the vehicle.
- 2. Open / start C-III plus.
- 3. Turn the ignition ON, with engine OFF (engine not running).
- 4. Wait for the plus VI to be recognized.
  - The **Serial No.** will display when the plus VI is recognized.
- 5. Select Diagnosis (One System).

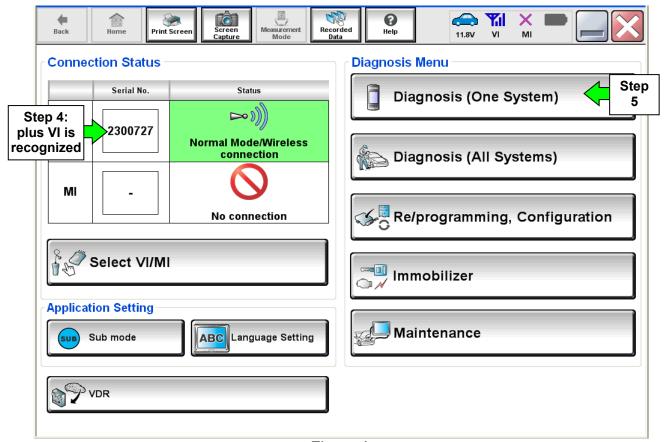


Figure A

- 6. Navigate C-III plus to Engine > Work Support (see Figure B).
- 7. Select SAVE COMPUTER DATA.
- 8. Select Start.

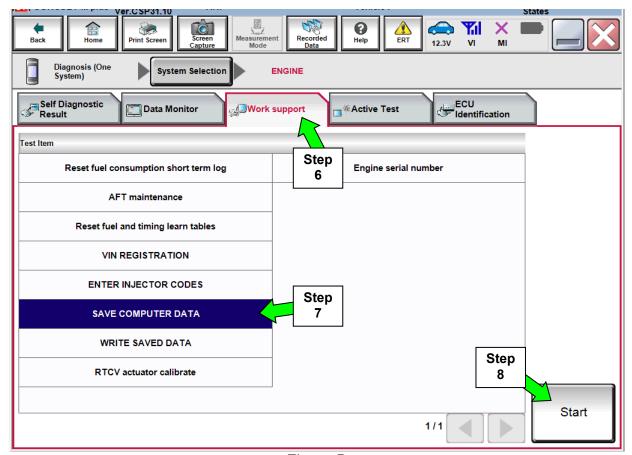


Figure B

## NOTE:

• After selecting Start, a screen message may appear that says:

Latest diagnostic tool update must be used before saving the data, otherwise there is a risk that the data entry will not work.

If the above message appears, select Continue.

9. Make sure the ignition is ON and the engine is OFF (engine not running).

## 10. Select Confirm.

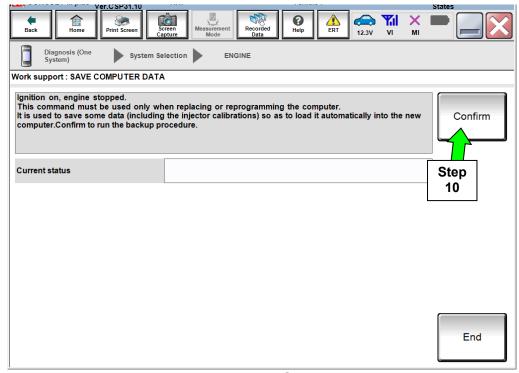


Figure C

## 11. Select End.

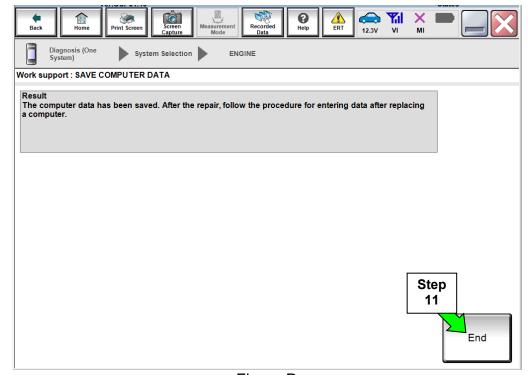


Figure D

## **ECM Reprogramming**

## **IMPORTANT:** Before starting, make sure:

- ASIST 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) Reprogramming" general procedure.
- For the Titan XD Diesel, the GR8 set to ECM power supply mode can be attached to either 12 volt battery.

#### **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. Return to the C-III- plus Home screen (see Figure 1).
- 2 Confirm the ignition is ON, with engine OFF.
- 3. Confirm the plus VI is recognized.
  - The **Serial No.** will display when the plus VI is recognized.
- 4. Select Re/programming, Configuration.

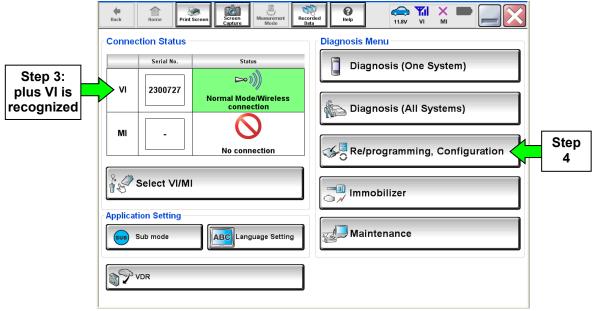


Figure 1

- 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 current ECM Part Number (P/N).

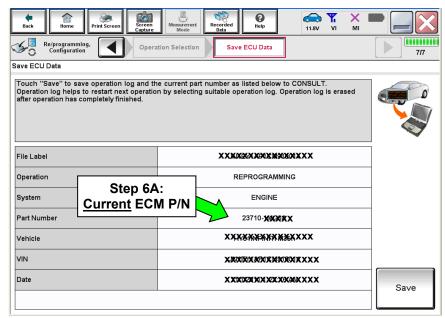


Figure 2

- B. Compare the P/N you wrote down to the numbers in the **Current ECM Part Number** column in **Table A** below.
  - If there is a **match for EZ41C**, **EZ41D**, **or EZ41E** this bulletin applies. Continue with the reprogramming procedure.
  - If there is a match for EZ42A:
    - ➤ If vehicle has the confirmed symptom of "idle fluctuates when coming to a stop", this bulletin applies. Continue with the reprogramming procedure.
    - ➢ If only DTC P060C and P2263 were stored and no idle fluctuation, this bulletin does not apply. Close C-III plus and refer to ASIST for further diagnostic information.
    - ➤ If a DTC listed on page 1 other than P060C and P2263 was stored, this bulletin applies. Continue with the reprogramming procedure.
  - If there is a match for EZ42B or EZ42C:
    - ➢ If only DTC P060C, P2263, P244D, P061B, P2483, P2BAD, P1C55, P1C56 and/or P229F was stored, this bulletin does not apply. Close C-III plus and refer to ASIST for further diagnostic information.
    - ➤ If a DTC listed on page 1 <u>other than</u> those listed above was stored, this bulletin applies. Continue with the reprogramming procedure.
    - ➤ If vehicle has confirmed symptom of "idle fluctuates when coming to a stop", but no DTCs are stored, this bulletin <u>does not apply</u>. Close C-III plus and refer to ASIST for further diagnostic information.
  - If there is <u>no match</u>, this bulletin <u>does not apply</u>. Close C-III plus and refer to ASIST for further diagnostic information.

#### Table A

Model	Current ECM Part Number: 23710-	
2016 Titan XD	EZ41C, EZ41D, EZ41E	
Cummins Diesel	EZ42A, EZ42B, EZ42C	

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 <u>does not</u> 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.

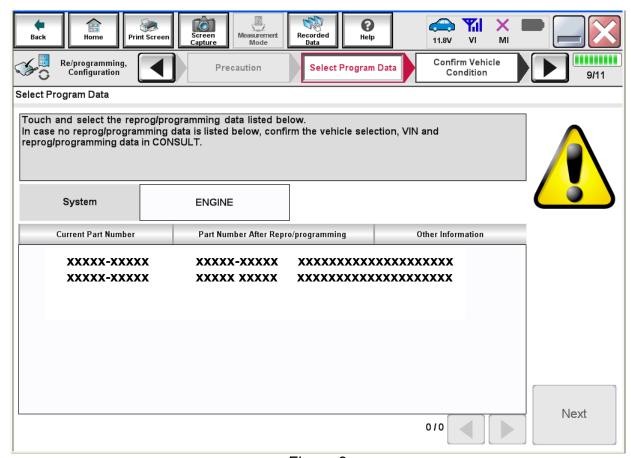


Figure 3

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

**NOTE:** If the screen in Figure 4 does not display (indicating that reprogramming did not complete), refer to ECM recovery on the next page.

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

#### 10. Select Next.

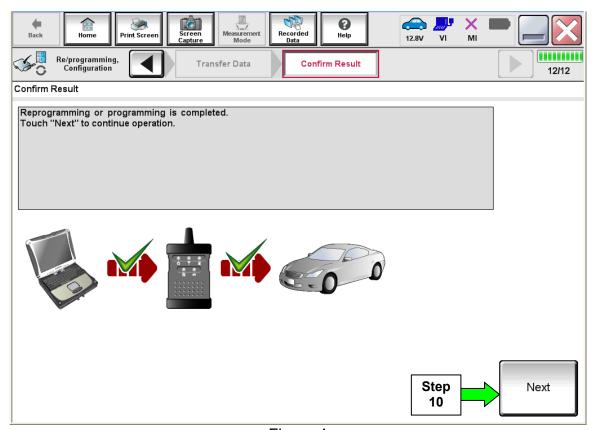


Figure 4

## NOTE:

- In the next step (page 12) you will perform DTC erase.
- This operation is required before C-III plus will provide the final reprogramming confirmation report.

## **ECM Recovery**

## <u>Do not disconnect the plus VI or shut down C-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<sup>®</sup> 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.

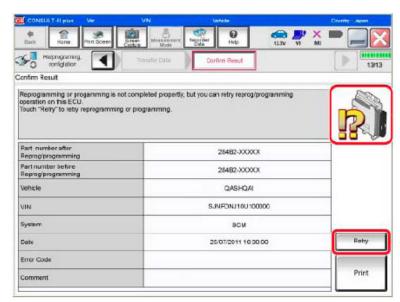


Figure 5

## If reprogramming does $\underline{not}$ 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 <u>Home</u>, and restart the reprogram procedure from the beginning.

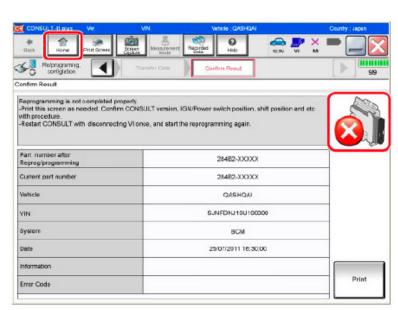


Figure 6

- 11. Follow the on-screen instructions to **Erase DTCs**.
- 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.

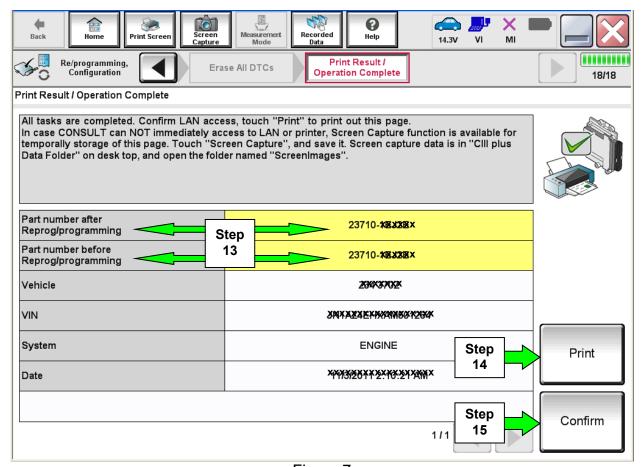


Figure 7

Continue to the next page.

## **Write Saved Data**

- 1. Return to the C-III- plus Home screen (see Figure 1A).
- 2 Confirm the ignition is ON, with engine OFF.
- 3. Confirm the plus VI is recognized.
  - The **Serial No.** will display when the plus VI is recognized.
- 4. Select Diagnosis (One System).

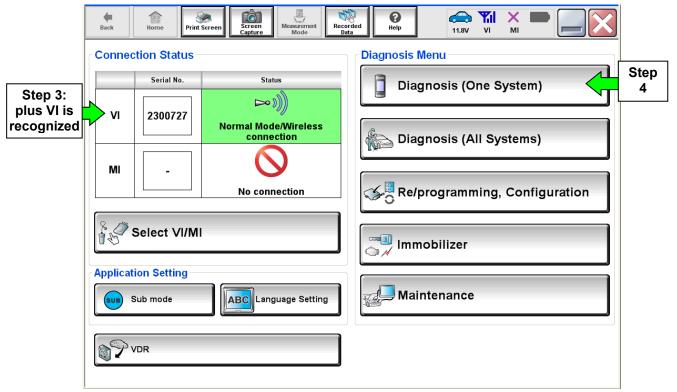


Figure 1A

- 5. Navigate C-III plus to Engine > Work Support (see Figure 2A).
- 6. Select WRITE SAVED DATA.
- 7. Select Start.

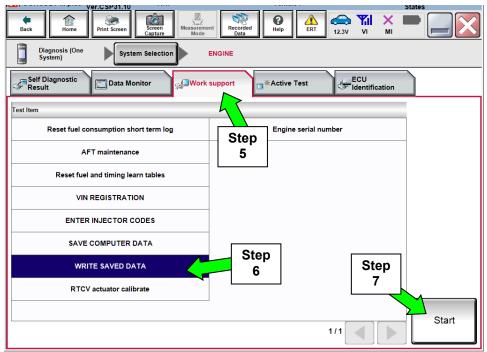


Figure 2A

- 8. Make sure the ignition is ON and the engine is OFF (engine not running).
- 9. Select Confirm.

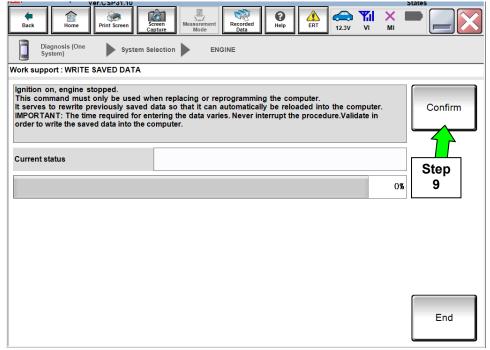


Figure 3A

## 10. Wait for the procedure to complete.

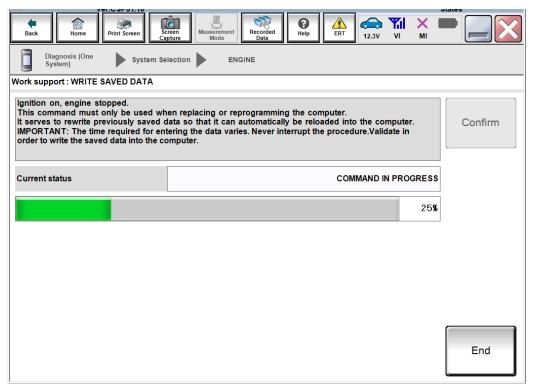


Figure 4A

## 11. Select End.

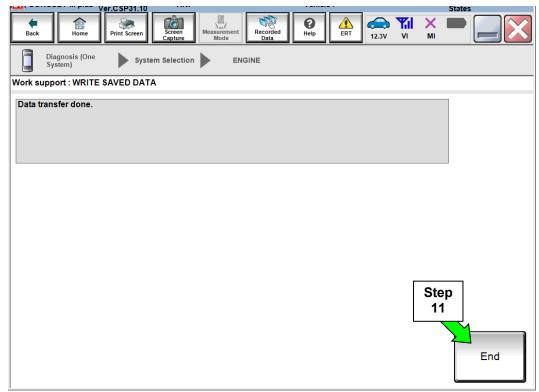


Figure 5A

- 12. Close C-III plus.
- 13. Turn the ignition OFF.
- 14. Disconnect the plus VI from the vehicle.
- 15. 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.

## **CLAIMS INFORMATION**

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

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

- (1) Refer to the electronic parts catalog and use the ECM assembly part number 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.

#### AMENDMENT HISTORY

PUBLISHED DATE REFERENCE		DESCRIPTION
March 14, 2016	NTB16-037	Original bulletin published
April 7, 2016	NTB16-037a	Procedure has been changed throughout
May 18, 2016	NTB16-037b	Updated the IF YOU CONFIRM section
May 31, 2016	NTB16-037c	Added DTCs to If You Confirm section
October 17, 2016	NTB16-037d	Amended IF YOU CONFIRM section
February 28, 2019	NTB16-037e	Removed DTC P2048