# SERVICE BULLETIN

EC16-013

NISSAI

NTB16-037

Date: April 5, 2016

### 2016 TITAN XD; MIL ON WITH ENGINE DTCs STORED

**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
- P2048: Reductant Injector Circuit Low
- P207F: Reductant Quality Performance
- P2263: Turbocharger Boost System Performance

#### ACTION

- 1. Save Computer Date 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 Date 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.

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

#### 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).

	Back	Home	t Screen Capture Mode	Recorded Data	
	Conne	ction Status		Diagnosis Menu	•
Cton 4		Serial No.	Status	_ Diagnosis (One System)	Step 5
Step 4: plus VI is recognized	VI	2300727	کر است Normal Mode/Wireless connection	Diagnosis (All Systems)	
	мі	-	$\otimes$		
			No connection	Re/programming, Configuration	
	8 B	Select VI/N	11	Immobilizer	
		tion Setting	Language Setting	Maintenance	
	\$P	VDR			
			F		

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

Ver.CSP31.10				Sta	ites
Back Home Print Screen Capture	t Recorded Data	Help	12.3V VI	MI	
Diagnosis (One System) System Selection E	NGINE				
Self Diagnostic Data Monitor	upport	Active Test	ECU Bldenti	fication	
Test Item					
Reset fuel consumption short term log	Step 6	Engine serial nur	nber		
AFT maintenance		I			
Reset fuel and timing learn tables					
VIN REGISTRATION					
ENTER INJECTOR CODES	Step				
SAVE COMPUTER DATA	7				
WRITE SAVED DATA			Г	•	
RTCV actuator calibrate				Step 8	<b></b>
				P	Start
			1/1		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.

• It the above message appears, select Continue.

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

Ver.CSP31.10			States
Back Home Print Screen Sc	Measurement Mode Recorded	Image: Weight of the large state of the large s	
Diagnosis (One System) System Sel	ection ENGINE		
Work support : SAVE COMPUTER DATA			
Ignition on, engine stopped. This command must be used only wh It is used to save some data (including computer.Confirm to run the backup pr	the injector calibrations) so a	ng the computer. Is to load it automatically in	nto the new
Current status			Step 10
			End

Figure C

#### 11. Select End.

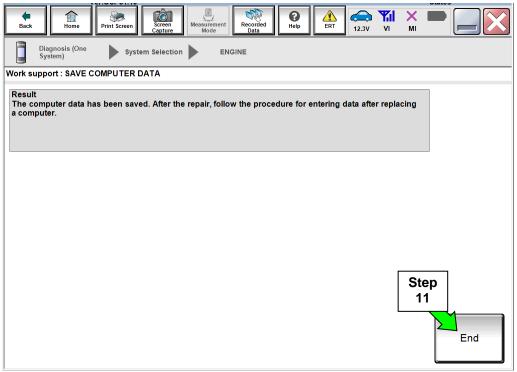


Figure D

#### **ECM** Reprogramming

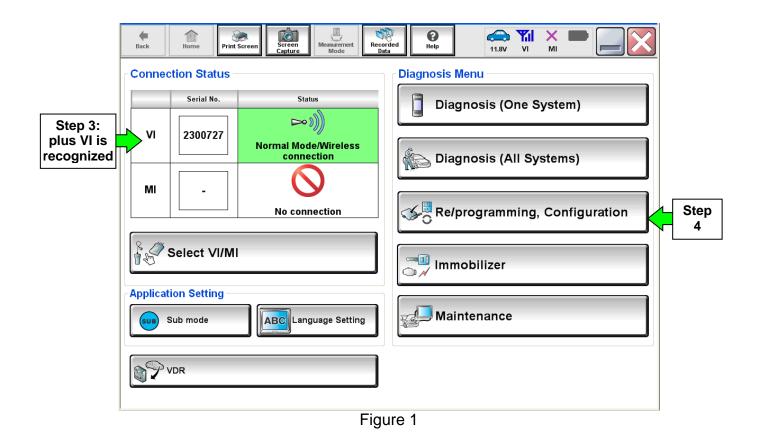
#### NOTE:

- 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.
- 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 <u>12.0V or above 15.5V</u> during reprogramming, <u>the ECM may be damaged</u>.
- Be sure to turn OFF all vehicle electrical loads. If a vehicle electrical load remains ON, <u>the ECM 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 may be damaged</u>.
- Turn off all external Bluetooth<sup>®</sup> devices (e.g., cell phones, printers, etc.) within
  range of the CONSULT PC and the plus VI. If Bluetooth<sup>®</sup> 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.



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).

Back Fint Screen Capture	Measurement Mode Bata	11.8V VI MI	-		
Re/programming, Configuration	tion Selection		7/7		
Save ECU Data					
Touch "Save" to save operation log and the current part number as listed below to CONSULT. Operation log helps to restart next operation by selecting suitable operation log. Operation log is erased after operation has completely finished.					
File Label	JANEX KARX KRAI KOOX	cxx			
Operation	REPROGRAMMING				
System Step 6 Current EC			_		
Part Number	23710-ЖОМОКОИЧК				
Vehicle	C XURBANK HOK KENK KANA GENYEK	cx			
VIN	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	κxx			
Date	K KKRKK K KKRKK K	cxx	Save		
	·				
	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 <u>match</u>, this bulletin <u>applies</u>. Continue with the reprogramming procedure.
  - If there is <u>not a match</u>, this bulletin <u>does not apply</u>. Close C-III plus and refer to ASIST for further diagnostic information.

Table A	
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Model	Current ECM Part Number: 23710-
2016 Titan XD Cummins Diesel	EZ41C, EZ41D, EZ41E

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.

Back Prir	nt Screen Screen Capture Measurement.	Recorded Data	11.8V VI MI	-		
Re/programming, Configuration	Precaution	Select Program Data	Confirm Vehicle Condition	9/11		
Select Program Data						
	prog/programming data listed be mming data is listed below, confi i in CONSULT.		and			
System	ENGINE					
Current Part Number	Part Number After Repr	o/programming	Other Information	1		
XXXXX-XXXX XXXXX-XXXX						
			0/0	Next		
		Tiguro 2				

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.

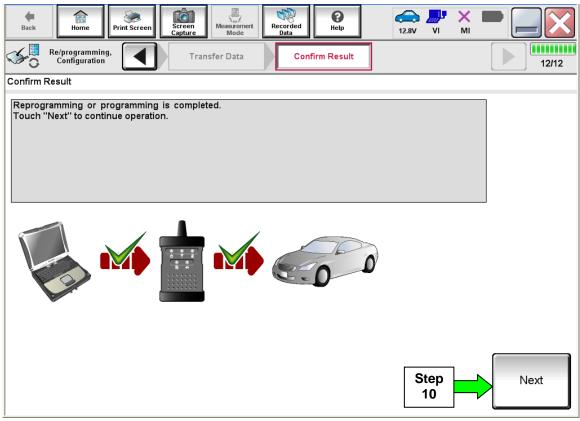


Figure 4

#### NOTE:

- In the next step, (page 11), you will perform DTC erase.
- This operation is required before C-III plus will provide the final reprogramming confirmation report.

#### **ECM Recovery**

### Do not disconnect the plus VI or shut down C-III plus if reprogramming does not complete.

## 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.
- <u>"Retry" may not go through on</u> <u>first attempt and can be</u> <u>selected more than once</u>.

CONSULT-II plus Ver	VN	Usticle		Country : Jacon
Back Hone Print Sce	er Cattur Mode	Necotibed Data	12.3V VI	× =
resprograming, resprograming,	Transfer Data	Confirm Resul		1313
onfirm Result				
Reprogramming or programmin operation on this ECU. Touch "Retry" to retry reprogra	7	, but you can retry reprog/	programming	R
Part number after			-	_
Part number after Reprog/programming		284B2-XXXX	x	
		28482-XXXX 28482-XXXX	35	
Reprog/programming Part number sefore			35	
Reprogramming Part number before Reprogramming Vehicle		26482->>>>	x	
Reprog/programming Part number before Reprog/programming		284B2-XXXX QASHQAI	x	
Reprograngen Part number behare Reprograngen Vehicle		284B2-XXXX QASHQAI SJNFDNJ16U10	x 0000	Retry
Reprog/programming Part number before Reprog/programming Vehicle VIN		284B2-XXXX QASHQAI SJNFDNJ10U10 BCM	x 0000	Retry

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.

CONSULT-IL Blus	VIN	Vehicle : CLASHQAI	County : Japan
Balk Hone Print Screen	Ecreen Capeline Note	enkel Helo	e 📲 💥 🖿 🛄 🔀
Re/programiag.	Transfer Data	Confirm Reput	99
onfirm Result			
Reprogramming is not completed ( Print this screen as needed. Conf with precedure. Restart CONSULT with disconnee	firm CONSULT version, IGN/F		fion and etc
		284B2-XXXXX	
Reprog/programming		284E2-300000 284E2-300000	
Reprog/programming Current part number			
Reprog/programming Current part number Vahicle		284E2-XXXXX	
Reprog/programming Current part number Vahiela		284E2-JXXXX QASHQAI	
Reprogriprogramming Current part number Vahiele VIN		284E2-XXXXX QASHQAI GJNFDNJ10U100000	
Part number after Reprog/programming Current part number Vehicle VIN System Date		284E2-XXXXX QASHQAI SJNFDNJ19U100000 BCM	

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.

Back Back Print Screen	Messurement Mode Recorded Help	🕞 🦊 🗙 🖿 🦲 🔀					
Re/programming, Configuration	se All DTCs Print Result / Operation Complete	18/18					
Print Result / Operation Complete							
All tasks are completed. Confirm LAN access, touch "Print" to print out this page. In case CONSULT can NOT immediately access to LAN or printer, Screen Capture function is available for temporally storage of this page. Touch "Screen Capture", and save it. Screen capture data is in "CIII plus Data Folder" on desk top, and open the folder named "ScreenImages".							
	Reprog/programming Step 23710-XXXXXXX						
Vehicle	23403702						
VIN	XMX AXX EXXXXII BO12044						
System	ENGINE	Step Print					
Date	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX						
	1/1 Step 1/1						

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).

	Back Home Print	Screen Capture	Recorded Data	
	Connection Status		Diagnosis Menu	
Step 3:	Serial No.	Status	Diagnosis (One System)	р
plus VI is recognized	VI 2300727	لللہ کی اللہ کی اللہ کی اللہ کی اللہ کی اللہ کی اللہ کی کہ	Diagnosis (All Systems)	
	MI _	No connection	Re/programming, Configuration	
	Select VI/M	1		
	Application Setting	Language Setting	Maintenance	
	VDR			

Figure 1A

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

Ver.CSP31.10	States
Back Rome Print Screen Capture	Resurement Mode Recorded Data
Diagnosis (One System) System Selection	ENGINE
Self Diagnostic Data Monitor	Work support
Test Item	
Reset fuel consumption short term log	Step Engine serial number
AFT maintenance	5
Reset fuel and timing learn tables	
VIN REGISTRATION	
ENTER INJECTOR CODES	
SAVE COMPUTER DATA	Step
WRITE SAVED DATA	6 Step
RTCV actuator calibrate	
	Start
	1/1
	Figure 2A

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

ver.CSP31.10					States
Back Home Print Screen St	Creen pture Measurement Mode	Recorded Data	ERT 12.3V		
Diagnosis (One System) System Se	election ENGI	NE			
Work support : WRITE SAVED DATA					
Ignition on, engine stopped. This command must only be used wh It serves to rewrite previously saved of IMPORTANT: The time required for en order to write the saved data into the co	data so that it can au tering the data varies	tomatically be reloa	aded into the con		Confirm
Current status					Step
				0	
					End

Figure 3A

10. Wait for the procedure to complete.

Image: Construction     Image: Construction       Image: Back     Image: Construction		
Work support : WRITE SAVED DATA		
Ignition on, engine stopped. This command must only be used when replacing or reprogramming the computer. It serves to rewrite previously saved data so that it can automatically be reloaded into the compu IMPORTANT: The time required for entering the data varies. Never interrupt the procedure.Validate order to write the saved data into the computer.		Confirm
Current status COMMAND IN PI	ROGRESS	
	25%	
		End

Figure 4A

#### 11. Select End.

		/er.CSP31.10					•				States	
Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	<b>P</b> Help	ERT	12.3V	Yil VI	× <sup>MI</sup>		
	Diagnosis (One System)	Syste	em Selection		SINE							
Work s	upport : WRITE	SAVED DAT	A									
Data t	transfer done.											
										Ste 11		
												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 (FAST or equivalent) 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.