

EC16-032a

Classification:

Reference:

January 30, 2018

Date:

2016-2017 TITAN XD; DTC P207F AND DEF SYSTEM ERROR IS DISPLAYED ON THE VEHICLE **INFORMATION DISPLAY**

NTB17-060a

This bulletin has been amended. The Title and all sections on page 1 have been updated. Table A has also been updated. Please discard previous versions of this bulletin.

APPLIED VEHICLES:	2016
APPLIED ENGINE:	Cum

6-2017 Titan XD (A61) mins 5.0L V8 Diesel

IF YOU CONFIRM

DTC P207F DEF QLTY SENS is stored,

NOTE: DEF System Error message may be displayed in the Vehicle Information Display,

DEF System Error See Dealer

AND

DEF concentration is 32.5% ± 1.5% as indicated by refractometer J-54466.

NOTE: If DEF concentration is incorrect, this bulletin does not apply. Drain DEF tank and fill with new DEF.

ACTION

- 1. Save Computer Data with CONSULT-III plus (C-III plus).
- 2. At step 6 of the ECM Reprogramming procedure, confirm this bulletin applies to the vehicle you are working on (see page 7).
- 3. If this bulletin applies, continue with **ECM Reprogramming** procedure.
- 4. Write Saved Data with CONSULT-III plus.
- 5. Perform DTC Confirmation procedure.

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

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).

reorded Help TI.8V VI MI
Diagnosis Menu
Diagnosis (One System)
Diagnosis (All Systems)
Re/programming, Configuration
Immobilizer
Maintenance

Figure A

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

Ver.CSP31.10				Sta	tes
Back Print Screen Capture Mode	t Recorded Data	Help	12.3V VI	MI MI	
Diagnosis (One System)	INGINE				
Self Diagnostic Data Monitor	upport	Active Test	ECU Identif	fication	
Test Item	45				
Reset fuel consumption short term log	Step 6	Engine serial nu	mber		
AFT maintenance					
Reset fuel and timing learn tables					
VIN REGISTRATION					
	Step				
SAVE COMPUTER DATA	7				
WRITE SAVED DATA			г		
RTCV actuator calibrate				Step 8	×
					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.

• 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.

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.

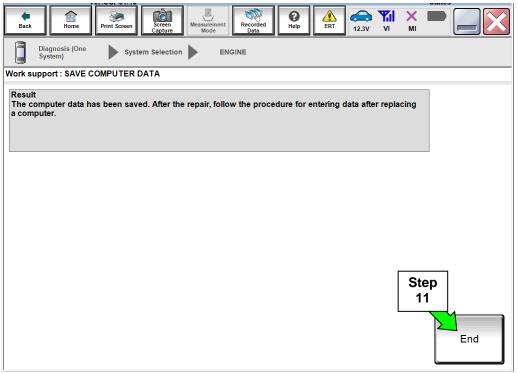


Figure D

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 goes 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 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 <u>the ECM may be damaged</u>.

- 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.

Step 3: plus VI is recognized	Image: Section Status VI 2300727 Normal Mode/Wireless connection Diagnosis (One System) Image: Section Status MI	
	No connection	
	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.

11.8V Y. VI × Back Home **P** Help int Scree Rec **\$**0 Re/programming Configuration ◀ Operation Selection Save ECU Data 717 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 XXXXXXXXXXXXXXXXX REPROGRAMMING Operation Step 6A: ENGINE System **Current ECM P/N** 23710-**10050 X X** Part Number XXXXXXXXXXXXXXXXX Vehicle VIN Date Save

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** below.
 - If there is a <u>match</u>, continue with the reprogramming procedure.
 - 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.

Model	Current ECM Part Number: 23710-		
	EZ41C, EZ41D, EZ41E		
2016 Titan XD Cummins Diesel	EZ42A, EZ42B, EZ42C, EZ42D, EZ42E		
	EZ43A, EZ43B		
2017 Titan XD	EZ44D, EZ44E		
Cummins Diesel	EZ45A, EZ45B, EZ45C		

Table A

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	t Screen Capture	Recorded Data	(11.8V VI MI	•
Re/programming, Configuration	Precaution	Select Program Data	Confirm Vehicle Condition	9/11
Select Program Data				
	orog/programming data listed be mming data is listed below, confi in CONSULT.		l and	
System	ENGINE			
Current Part Number	Part Number After Repr	o/programming	Other Information	
xxxxx-xxxx xxxxx-xxxx		xxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx		
			0/0	Next
		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.

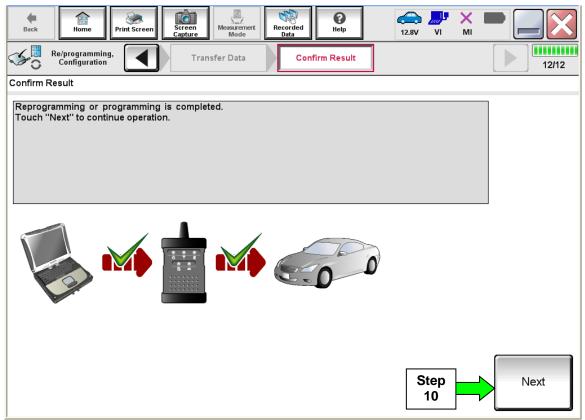


Figure 4

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[®] 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 plue Ver	VN Veticle	County : Japan
Back Bane Print Screen	Streen Mode Collar Help	12.TV VI MI
sonigiation	Transfer Data	131
onfirm Result		
Reprogramming or progamming is not operation on this ECU. Touch "Retry" to retry reprogramming i	completed propertly, but you can retry reprogrp or programming.	rogramming
Part number after	25482-0000	
Reprog/programming	20402-0000/	
Part number before	28482-30000	
Part number before Reprog/programming		
Reprociprogramming Part number behre Reprogiprogramming Vehicle	28482-30000	<
Part number before Reprog/programming Vehicle VIN	28482-0000 QASHQAI	<
Part number sefore Reprog/programming Vehicle	28482-XXXXX QASHQAI SJNFDNJ10U100	000
Part number before Reprog/programming Vehicle VIN	28482-XXXXX QASHQAI SJNFONJ10U100 BCM	000

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-ILDUS Ver	MN	Vehicle : QASHQAI	County : Japan
Back Hone Print Screen	Screen Node Reg	ended Help	• 📲 💥 🖿 🥅 🔀
Reprograming.	Transfer Esta	Confirm Result	99
onfirm Result			
Reprogramming is not completed pro- Print this screen as needed. Confirm with precedure. -Restart CONSULT with disconnecting	CONSULT version, IGN/P		ion and etc
Part number after			
		284B2-XXXXX	
Reprog/programming		28482-XXXXX 28482-XXXXX	
Reprog/programming Current part number			
Reprog/programming Current part number Vahicle		284B2-XXXXX	
Reprog/programming Current part number Vehicle		284E2-XXXXX QASHQAI	
Vahicle ViN System Dete		28482-3XXXX QASHQAI SJNFDNJ10U100000	
Reprogriprogramming Current part number Vehicle VIN System		244E2-JXXXX QASHQAI SJINEDINJ10U100000 BCM	



- 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	Measurement Mode	■ ₩ × ■ _ <				
Re/programming, Configuration	se All DTCs Print Result / Operation Complete	18/18				
Print Result / Operation Complete						
In case CONSULT can NOT immediately ac temporally storage of this page. Touch "Sci	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	13 23710-#E#28X					
Vehicle	234437032					
VIN	XMX AXA EXHXXXIII SOX236K					
System	ENGINE	Step Print				
Date	ጞፙኯቜ፧ቜቔቚቚዄጙኯዄኯ፟ፙኯኯ					
	17	Step 1 15 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).

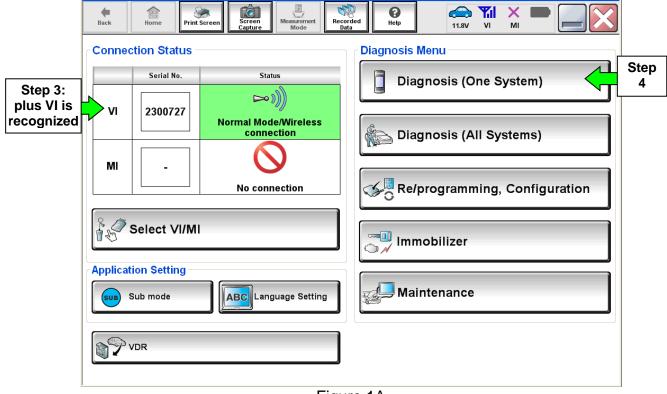


Figure 1A

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

Ver.CSP31.10	States
Back Back Print Screen Capture Mode	nt Recorded Data
Diagnosis (One System) System Selection	ENGINE
Self Diagnostic Data Monitor	support Active Test
Test Item	43
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
	Figure 2A

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

			States
Back Home Print Screen Sc	reen oture Measurement Mode	Help LERT 12.3V	
Diagnosis (One System) System Se	lection ENGINE		
Work support : WRITE SAVED DATA			
Ignition on, engine stopped. This command must only be used wh It serves to rewrite previously saved or IMPORTANT: The time required for en order to write the saved data into the co	ata so that it can automatical ering the data varies. Never in	ly be reloaded into the cor	
Current status			Step
			0% 9
			End

Figure 3A

10. Wait for the procedure to complete.

		States
Back Print Screen Screen Measurement Mode Recorded Data Print France		
Diagnosis (One System) System Selection ENGINE		
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 PF	ROGRESS	
	25%	
		End

Figure 4A

11. Select End.

		/er.CSP31.10	• • • •				••				States
Back	Home	Print Screen	Screen Capture	easurement Mode	Recorded Data	P Help	ERT	12.3V	Yil Vi	X MI	-
	Diagnosis (One System)	System	m Selection	▶ ENG							
Work su	pport : WRITE	SAVED DATA									
Data tra	ansfer done.										
									F		
										Ste 11	
											End

Figure 5A

IMPORTANT:

The following DTC Confirmation Procedure must be done to confirm proper operation of the DEF system sensors. If these sensors are not operating properly, **DTC P207F may be** stored again in a short time.

DTC Confirmation Procedure.

- 1. Navigate C-III plus to Engine > Data Monitor and select UREA TANK TEMP (see Figure 1B) and DEF QUALITY SENSOR TEMP (see Figure 2B).
- 2. Select Start.

Back Back Print	Screen Screen Mode Record		× • • • •					
System)	System Selection ENGINE							
Result Data Monitor								
System	ENGINE		Custom list					
ENGINE	Monitor Menu	▼	Recording Condition Sampling Rate 10msec					
	DEF PUMP TIME	WATER IN FUEL V	Rec Time 10sec Pre Trigger 80%					
	DEP PUMP TEST TIMER	WATER IN FUEL	Trigger Setting Information DTC Switch IGN ON Engine Stall Formula					
	DEF TANK LEVEL	TOTAL WATER IN FUEL TIME						
	UREA TANK TEMP	ENGINE OPER STATE	Setting					
	DEF TANK TEMP SENS V	DEF PUMP ASH	DISPLAY TYPE					
	WAIT START CMD	PRIMING TIME REMAIN	Numerical 🔻					
	Sort : Default Setting	13 / 16						
1/1	Clear Monitor Item		START					

Figure 1B

Back Home Print	Screen Screen Mode	rded Help ERT 12.1V VI	
Diagnosis (One System)	System Selection ENGINE		
Self Diagnostic Result	Data Monitor	Active Test	cation
System ENGINE	ENGINE		Load Save
	Monitor Menu	\checkmark	Recording Condition
	DEF PUMP TIME	WATER IN FUEL V	Sampling Rate 10msec Rec Time 10sec Pre Trigger 80%
	DEP PUMP TEST TIMER	Trigger Setting Information DTC Switch IGN ON	
	DEF TANK LEVEL	TOTAL WATER IN FUEL TIME	Engine Stall Formula
	DEF QUALITY SENS TEMP	ENGINE OPER STATE	Setting
	DEF TANK TEMP SENS V	DEF PUMP ASH	DISPLAY TYPE
	WAIT START CMD	PRIMING TIME REMAIN	Numerical 🔻
	Sort : Default Setting	8 / 16	Step
1/1	Clear Monitor Item		START 2

Figure 2B

- 3. Confirm **UREA TANK TEMP** and **DEF QUALITY SENSOR TEMP** are -4°C (25°F) or more.
 - If needed, start the engine and let it run until the UREA TANK TEMP and DEF QUALITY SENSOR TEMP warms to -4°C (25°F) or more.

Ver	:CSP41.10	Venicie	· •	States
Back Back	Print Screen Capture Mode	ent Recorded Help	ERT 12.1V VI	× • • • • •
Data Monitor S	ort by selection	ling order	Graph	Single List 🛛 🔻
ENGINE	UREA TANK TEMP		73	°F
ENGINE	DEF QUALITY SENSOR TE	MP	73	°F
UREA TANK TEMP and DEF QUALITY SENSOR TEMP: -4°C (25°F) or more.				
E	xplanation Tri	gger Info.		Record

Figure 3B

- 4. Turn the hazard lights (4 way flashers) ON.
- 5. Allow the vehicle to set for 30 minutes with the ignition ON.

NOTE: If preferred, the GR8 (battery charger) can be disconnected from the vehicle and the vehicle can be started and idled for 30 minutes.

- 6. Use C-III plus to check for DTC P207F.
 - If DTC P207F is stored again: Refer to the Electronic Service Manual (ESM), section **EC-Engine Control**, for further diagnosis and repair.
 - If P207F is not stored, go to the next step (step 7).
- 7. Close C-III plus.
- 8. Turn the ignition OFF.

9. Disconnect the plus VI from the vehicle.

10. If not already completed, disconnect the GR8 (battery charger) from the vehicle.

11. 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
Save Computer Data and ECM Reprogram	(1)	DX50AA	ZE	32	0.8*

(1) Refer to the electronic parts catalog (FAST) and use the ECM assembly part number as the Primary Failed Part (PFP).

* 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.