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 | |
| | | | | 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.

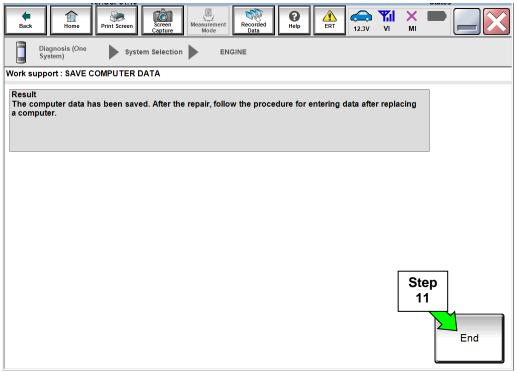


Figure D

ECM Reprogramming

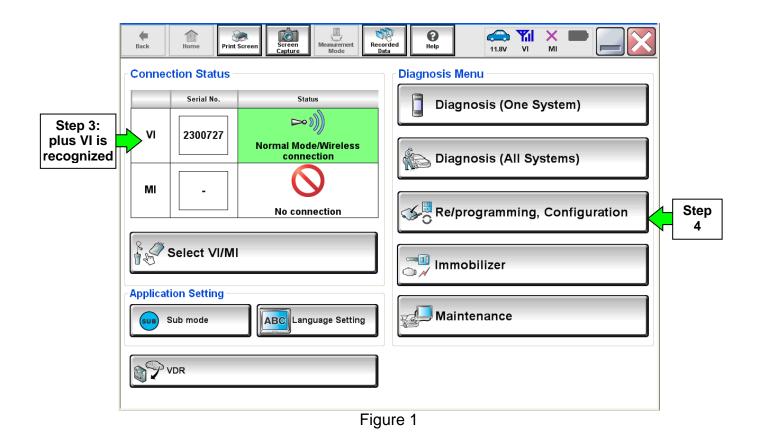
NOTE:

- 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[®] 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.



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 | |
|---------|--|
|---------|--|

| 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.

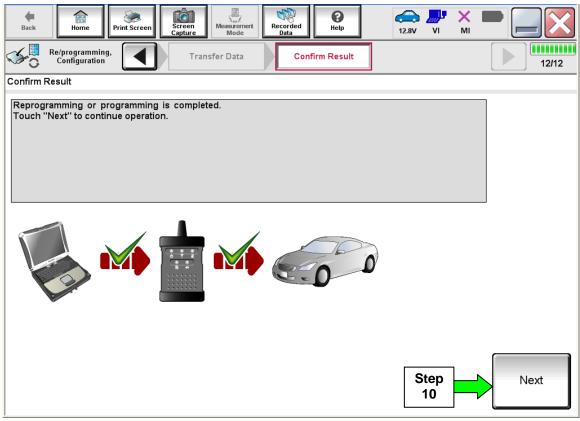


Figure 4

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[®] 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 | P Help | ERT | 12.3V | Yil VI | × ^{MI} | | |
| | 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.