

SERVICE BULLETIN

AT17-001b

NTB17-016b

April 18, 2017

Date:

# 2017 ARMADA, TITAN AND TITAN XD SHIFT SHOCK, LACK OF POWER, AND/OR RPM FLUCTUATES

This bulletin has been amended throughout. Please discard previous versions of this bulletin.

APPLIED VEHICLES:	2017 Armada (Y62)
	2017 Titan (A61)
	2017 Titan XD (A61)
APPLIED ENGINE:	VK56VD (Gasoline V8)
APPLIED TRANSMISSION:	7AT - RE7R01B

### **IF YOU CONFIRM**

One or more of the following, or the customer reports one or more of the following:

- Transmission shift shock when accelerating enough to create a 7th gear to 3rd gear down shift.
- While driving at a steady speed, the engine RPM goes up and down (fluctuates) a small amount.
- With light acceleration at lower speeds there is a lack of power; feels like the selected transmission gear is too high (may also be described as hesitation).

# ACTION

- 1. Refer to step 6 in the **SERVICE PROCEDURE** to confirm ECM reprogramming applies.
- 2. Reprogram the ECM, if it applies.
- 3. Refer to step 22 in the **SERVICE PROCEDURE** to confirm TCM reprogramming applies.
- 4. Reprogram the TCM, if it applies.

**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

#### NOTE:

- This procedure may require reprogramming of the **ECM and TCM**.
- 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.

#### ECM Reprogram

#### **Preparation for Reprogramming**

- Take the vehicle for a 10 minute drive in order to meet the following Idle Air Volume Learn (IAVL) conditions:
  - Engine coolant temperature: 70 -100°C (158 - 212°F)
  - Battery voltage: More than 12.9V (At idle)
  - Transmission: Warmed up



Figure A

#### NOTE:

- After ECM reprogramming is complete, you will be required to perform Throttle Valve Closed Position, Idle Air Volume Learn (IAVL), and Accelerator Closed Position.
- The above conditions are required for the IAVL to complete.

#### 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 <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. Connect the plus VI to the vehicle and open/start CONSULT-III plus.
- 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 ECM reprogramming 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).

	20.00	2014		Jiales
Back Back Print S	Screen Capture Mode	ent Recorded Help	11.9V VI	× • • • • •
Re/programming, Configuration	Operation Selection	on 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	File Label XXXXXXXXX XXXXXX			
Operation REPROGRAMMING				
System 6A: Current P/N ENGINE				
Part Number			xx	
Vehicle		xxxxxxxxx	xxxx	
VIN		*****	xxxxx	
Date		******	xxxxxx	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>, continue with the ECM reprogramming procedure.
  - If there is <u>not a match</u>, ECM reprogramming <u>does not apply</u>. Go to TCM reprogram on page 10.

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Model	Current ECM Part Number: 23710 -
2017 Armada	5ZW0B, 5ZW1B, 5ZW2B, 5ZW3B 5ZW0C, 5ZW1C, 5ZW2C, 5ZW3C
2017 Titan and Titan XD	EZ10A, EZ11A, EZ13A, EZ14A, EZ16A, EZ17A, EZ19A, EZ24A EZ10B, EZ11B, EZ13B, EZ14B, EZ16B, EZ17B, EZ19B, EZ24B EZ10C, EZ11C, EZ13C, EZ14C, EZ16C, EZ17C, EZ19C, EZ24C

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 <u>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 Home Prir	t Screen Capture Mode	Recorded Help	11.8V VI MI	
Re/programming, Configuration	Precaution	Select Program Data	Confirm Vehicle Condition	9/11
Select Program Data				
Touch and select the rep In case no reprog/prograr reprog/programming data	rog/programming data listed be nming data is listed below, confi in CONSULT.	low. rm the vehicle selection, VI	N and	
System	ENGINE			
Current Part Number	Part Number After Repr	o/programming	Other Information	
XXXXX-XXXXX XXXXX-XXXXX	XXXXX-XXXXX XXXXX XXXXX	XXXXXXXXXXXX XXXXXXXXXXXXXXXX	XXXXXXXX XXXXXXXXX	
			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. Select Next.



Figure 4

**NOTE:** Additional steps on page 8 are 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>.

	And and a second se	and the second division of the second divisio		
Back Home Print Sceen	tean Measurement R	econted Help	12.3V VI MI	
sonigiston	Transfer Data	Corfirm Resul		1313
Confirm Result				
Reprogramming or progamming is not o operation on this ECU. Touch "Retry" to letty reprogramming or	completed propertly, bu r programming.	it you can retry reprogr)	programming	R
Part number after Reprogramming		284B2-XXXXX	x	
Part number before Reprog/programming		28482-XXXX	x	
Vehicle		QASHQAI		
VIN		SJNFDNJ10U100	0000	
System		BCM		
Date		25/07/2011 16:30	2.00	Retry
Error Code				
Comment				Print

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-ILBUS Ver.	VIN	Vehicle : QASHQAI	County : Japan
Bark Hone Print Screen	Screen Neasurenert	Noordad Data	) 🐙 💥 💻 🦲 🚺
Configition	Transfer Data	Confirm Result	999
nfirm Rosult			
eprogramming is tot compated pr init this screen as needed. Confir ith procedure. Restart CONSULT with disconnect	opens. m CONSULT version, IGk ng VI once, and start the	/Power switch position, shift posi reprogramming again.	fion and etc
art number after		28482-XXXXX	
cho8-ho8inuuug8			
urrent part number		28482-XXXXX	
ument part number ahicle		284E2-XXXXX QASHQAI	
unent part number africle		28482-XXXXX QASHQAI SJNFDNJ10U100000	
unent part number ahicle IN ystem		28482-300000 QASHQAI SUNFDNU10U100000 BCM	
ument part number whicle IN ystem rate		28482-300000 QASHQAI 6-INFDNJ10U100000 BCM 23/07/2911116:50:00	
epop programming ument part number ehicle IN ystem ste inormation		284E2-XXXXX QASHQAI SUNFDNU10U100000 BCM 25/07/291116/30/00	

Figure 6

10. Follow the on-screen instructions to perform the following:

- Throttle Valve Closed Position
- Idle Air Volume Learn (IAVL)

# NOTE:

- Listed below are the conditions required for IAVL to complete.
- If IAVL does not complete within a few minutes, a condition may be out of range.
  - Engine coolant temperature: 70 -105° C (158 221°F)
  - Battery voltage: More than 12.9V (At idle)
  - Selector lever: P or N
  - > Electric load switch: OFF (Air conditioner, headlamp, rear window defogger)
  - Steering wheel: Neutral (Straight-ahead position)
  - Vehicle speed: Stopped
  - Transmission: Warmed up (ATF TEMP SE less than 0.9V)
- Accelerator Pedal Close Position Learning
- Erase DTCs

Continue to the next page.

- 11. When the entire reprogramming process is complete, the screen in Figure 7 will display.
- 12. Verify the before and after part numbers are different.
- 13. Print a copy of this screen (Figure 7) and attach it to the repair order for warranty documentation.
- 14. Select Confirm.

Ver.CSP20.30	2014		States	
Back Home Print Screen	Measurement Mode Recorded Help	(13.7V VI MI		
Configuration	Se All DTCs Print Result / Operation Complete		14/14	
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".				
Part number after Reprog/programming	ep <u>xxxxx-xxxxx</u>			
Part number before Reprog/programming	2			
Vehicle	*****			
VIN	*****			
System	******		Print	Step
Date	*****			
1/1 Confirm 14				
	<b></b> , _			

Figure 7

- 15. Return C-III plus to the Home screen.
- 16. Go to TCM Reprogram on the next page.

#### TCM Reprogram

#### **Preparation for Reprogramming**

#### 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 TCM may be damaged</u>.
- Be sure to turn OFF all vehicle electrical loads.
   If a vehicle electrical load remains ON, <u>the TCM 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 TCM may be</u> <u>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 TCM may be damaged.
- 17. Confirm C-III plus is on the Home Screen (see Figure 8).

18. Confirm the ignition is ON, with engine OFF.

- 19. Confirm the plus VI is recognized.
  - The Serial No. will display when the plus VI is recognized.
- 20. Select Re/programming, Configuration.

	Back Rome Print Screen Capture Mode Reco	
Step 19: plus VI is recognized	Serial No.     Status       VI     2300727       MI     -	Diagnosis Menu         Diagnosis (One System)         Diagnosis (All Systems)
	No connection	Re/programming, Configuration 20
	Application Setting           Sub mode         ABC           Language Setting           VDR	Maintenance

Figure 8

- 21. Follow the on-screen instructions and navigate C-III plus to the screen shown in Figure 9 below.
- 22. When you get to the screen shown in Figure 9, confirm TCM reprogram applies as follows.
  - A. Find the TCM **Part Number** and write it on the repair order.

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

ver.0.3F20.00	2014		JIALES
Back Home Print Screen Capture	Measurement Mode Recorded Help	(11.9V VI MI	-
Re/programming, Configuration Opera	tion Selection Save ECU Data		7/7
Save ECU Data			
Touch "Save" to save operation log and th Operation log helps to restart next operation after operation has completely finished.	e current part number as listed below to C n by selecting suitable operation log. Opera	ONSULT. ation log is erased	
File Label	*****	t III	
Operation	REPROGRAMMING		
System 22 A: <u>Curr</u>	TRANSMISSION		
Part Number			
Vehicle	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
VIN	*****	x	
Date	******	ĸx	Save

Figure 9

- B. Compare the P/N you wrote down to the numbers in the **Current TCM Part Number** column in **Table B** below.
  - If there is a <u>match</u>, continue with the reprogramming procedure.
  - If there is <u>not a match</u>, TCM reprogramming <u>does not apply</u>.

Table B	
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Model	Current TCM Part Number: 31039 -
2017 Armada	26X9D, 26X9E, X041A, X041B
	26X2A, 26X2B, 26X2C, 26X2D X046A, X046B
2017 Titan and Titan XD	X048A, X048B, X048C, X048D X049A, X049B X058C, X058D

23. Follow the on-screen instructions to navigate C-III plus and reprogram the TCM.

### 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 10 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.

Back Home Prin	t Screen Capture Measurement Recorded Data	Image: Wile wile wile wile wile wile wile wile w
Re/programming, Configuration	Precaution Select Pro	gram Data Confirm Vehicle Condition 9/11
Select Program Data		
Touch and select the repr In case no reprog/program reprog/programming data System	rog/programming data listed below. Iming data is listed below, confirm the vehicle in CONSULT.	selection, VIN and
Current Part Number	Part Number After Repro/programming	Other Information
XXXXX-XXXX XXXX-XXXX	XXXXX-XXXXX XXXXX XXXXX XXXXX XXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
		0/0 Next

Figure 10

24. When the screen in Figure 11 displays, reprogramming is complete.

**NOTE:** If the screen in Figure 11 does not display (indicating that reprogramming did not complete), refer to TCM Recovery on the next page.

- 25. Disconnect the GR8 (battery charger) from the vehicle.
- 26. Select Next.



Figure 11

**NOTE:** Additional steps on page 15 are required before C-III plus will provide the final reprogramming confirmation report.

# **TCM 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 12:

- 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>.

	VN	Vanicia		Ecunity : Japan
Back Back Print Screen	Salaran Cachua	Recorded Help	12.3V VI	× =
resprograming.	Transfer Data	Corfirm Resul		1313
onfirm Result		· · · · · · · · · · · · · · · · · · ·		
Reprogramming or progamming is no operation on this ECU. Touch "Retry" to retry reprogramming	ot completed propertly, b a or programming.	ut you can retry reprogr	programming	
Part number after			5	
Reprog/programming		284B2-XXXX	x	
Reprog/programming Part number sefore Reprog/programming		284B2-XXXX 284B2-XXXX	x	
Reprogiprogramming Part number before Reprogiprogramming Vehicle		28482-XXXX 28482-XXXX QASHQAI	x	
Reprog/programming Part number before Reprog/programming Vehicle		28482-3XXX 28482-3XXX QASHQAI SJNFDNJ10U10	x x 0000	
Reprog/programming Part number before Reprog/programming Vehicle VIN	-	28482-XXXX 28482-XXXX QASHQAI SJNFDNJ10U10 BCM	x x 0000	_
Reprog/programming Part number befare Reprog/programming Vehicle VIN System Dote		28482-XXXX 28482-XXXX QASHQAI SJNFDNJ10U10 BCM 26/07/2011163	x x 00000	Retry
Reprog/programming Part number before Reprog/programming Vehicle VIN System Date Error Code		28482-XXXX 28482-XXXX QASHQAI SJNFDNJ10U10 BCM 26/07/2011183	x x 0000	Retry

Figure 12

# If reprogramming does <u>not</u> complete and the "X" icon displays as shown in Figure 13:

- 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.

GONSOLT IL BUS W.	VIN Vehicle : QASHQAI	County : Japan
Bark Hone Print Screek	Hen Measurenert Recarded Help Co.70	📲 💥 🖿 🥅 🔀
Relprogramiag.	Transfer Esta	9/9
Confirm Result		
Reprogramming is not completed proper -Print this screen as needed. Confirm CC with precedure. -Restart CONSULT with disconnecting V	ly NSULT version, IGN/Power switch position, shift position I once, and start the reprogramming again.	nard etc
Part number after		
Reprog/programming	28482-00000	
Reprog/programming Current part number	284E2-XXXXX 284E2-XXXXX	
Reprogramming Current part number Vehicle	28482-XXXXX 28482-XXXXX QASHQAI	
Reprog/programming Current part number Vehicle VIN	28482-XXXXX 28482-XXXXX QASHQAI GASHQAI SUNFDNJ 10U100000	
Reprog/programming Current part number Vehicle VIN System	28482-XXXXX 28482-XXXXX QASHQAI SJINFDNJ10U100000 BCM	_
Reprog/programming Current part number Vehicle VIN System Date	28482-XXXXX 28482-XXXXX QASHQAI GASHQAI GUNFDNJ 10U100000 BCM 25/07/2011 16.30.00	
Reprog/programming Current part number Vehicle VIN System Date Information	28482-XXXXX 28482-XXXXX QASHQAI SUNFDNJ10U100000 BCM 23/07/201116:30:00	

Figure 13

- 27. Follow the on-screen instructions to Confirm Shift Lever Position Display.
- 28. Follow the on-screen instructions to Erase DTCs.
- 29. When the entire reprogramming process is complete, the screen in Figure 14 will display.
- 30. Verify the before and after part numbers are different.
- 31. Print a copy of this screen (Figure 14) and attach it to the repair order for warranty documentation.
- 32. Select Confirm.

Ver.CSP20.30	2014	States
Back Home Print Screen Capture	Measurement Mode Recorded Data Help 13.7V	
Re/programming, Configuration	e All DTCs Print Result / Operation Complete	14/14
Print Result / Operation Complete		
All tasks are completed. Confirm LAN acce In case CONSULT can NOT immediately ac temporally storage of this page. Touch "Sc Data Folder" on desk top, and open the fold	ss, touch "Print" to print out this page. .ess to LAN or printer, Screen Capture function is a een Capture", and save it. Screen capture data is in r named "ScreenImages".	railable for "Cill plus
Part number after Reprog/programming		
Part number before Reprog/programming		
Vehicle	*****	
VIN	*****	
System	******	Print Step 31
Date	*****	
	1/1	Confirm Step 32

Figure 14

33. Make sure both ECM and TCM have been checked and reprogrammed, if needed.

- 34. Close C-III plus.
- 35. Turn the ignition OFF.
- 36. Disconnect the plus VI from the vehicle.

### **CLAIMS INFORMATION**

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

DESCRIPTION	OP CODE	PFP	SYM	DIAG	FRT
Reprogram TCM and ECM	DX53AA	(1)	ZE	32	0.8 hrs.

(1) Refer to the electronic parts catalog (FAST or equivalent) and use the Control Valve Assembly (31705- \*\*\*\*\*) as the Primary Failed Part (PFP).