

TECHNICAL SERVICE BULLETIN

 Classification:
 Reference:
 Date:

 AT14-014C
 NTB15-014C
 May 17, 2022

ENHANCED DIAGNOSTIC LOGIC FOR CVT JUDDER

This bulletin has been amended. See AMENDMENT HISTORY on the last page.

Please discard previous versions of this bulletin.

APPLIED 2013-2015 Pathfinder (R52) with **V6 engine only VEHICLES:** 2013-2015 Altima Sedan (L33) with **V6 engine only**

2015 Quest (E52) 2015 Murano (Z52) 2016 Maxima (A36)

APPLIED VINS 2013-2014 Pathfinder: All VINs and dates

& DATES: 2015 Pathfinder:

AWD - Built <u>before</u> 5N1AR2**M**(**)FC 663**6**17 / April 14, 2015 2WD - Built <u>before</u> 5N1AR2**N**(**)FC 663**7**17 / April 14, 2015

2013-2015 Altima: All VINs and dates

2015 Quest: Built <u>before</u> JN8AE2K(**)F9 132672 / July 9, 2015 2015 Murano: Built <u>before</u> 5N1AZ2M(**)FN 229612 / April 10, 2015 2016 Maxima: Built <u>before</u> 1N4AA6AP(*)GC 380445 / May 28, 2015

IF YOU CONFIRM

The customer reports a transmission judder (shake, shudder, single or multiple bumps or vibration).

NOTE: A new diagnostic logic has been established to enhance the diagnostic process by storing diagnostic trouble codes (DTCs) on **APPLIED VEHICLES**.

The new DTCs are:

P17F1 (CVT_JUDDER [C/U INSPECTION]) P17F0 (CVT_JUDDER [T/M INSPECTION])

See **ACTION** on page 2.

IMPORTANT: The purpose of **ACTION** (on the next page) 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.

ACTION

1. Refer to page 4, step 6 in the **SERVICE PROCEDURE** to confirm this bulletin applies to the vehicle you are working on.

NOTE: The current TCM Part Numbers in this bulletin have been updated. The vehicle you are working on may require reprogramming per this bulletin again.

2. If this bulletin applies, reprogram the TCM.

SERVICE PROCEDURE

IMPORTANT: Before starting, make sure:

- ASIST on the CONSULT PC has been synchronized (updated) to the current date.
- All CONSULT software updates (if any) have been installed.

NOTE:

- Most instructions for reprogramming with CONSULT 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 REPROGRAMMING FOR ENGINE OR TRANSMISSION
 CONTROL MODULE (ECM OR TCM)" general procedure.

CAUTION:

- Connect a battery maintainer or smart charger, set to reflash mode or a similar setting, to ensure the battery voltage stays between 12.0 V and 15.5 V.. If the vehicle battery voltage drops below <u>12.0V or above 15.5V</u> during reprogramming, <u>the TCM</u> may be damaged.
- Be sure to turn OFF all vehicle electrical loads.
 If a vehicle electrical load remains ON, the TCM 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 TCM may be damaged.
- Turn off all external Bluetooth® devices (e.g., cell phones, printers, etc.) within range
 of the CONSULT PC and the VI. If Bluetooth® signal waves are within range of the
 CONSULT PC during reprogramming, reprogramming may be interrupted and the
 TCM may be damaged.

- 1. Connect the VI to the vehicle to begin the reprogramming procedure.
- 2. Start C-III plus.
- 3. Wait for the VI to be recognized (Figure 1).
 - The serial number will display when the VI is recognized.
- 4. Select Re/programming, Configuration.

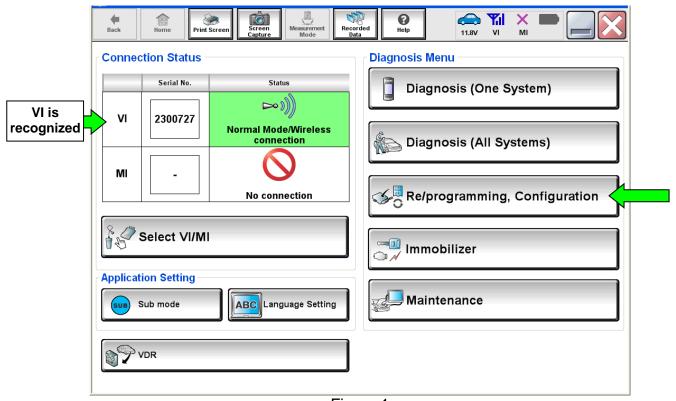


Figure 1

5. Follow the on-screen instructions and navigate the 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 TCM Part Number and write it on the repair order.

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

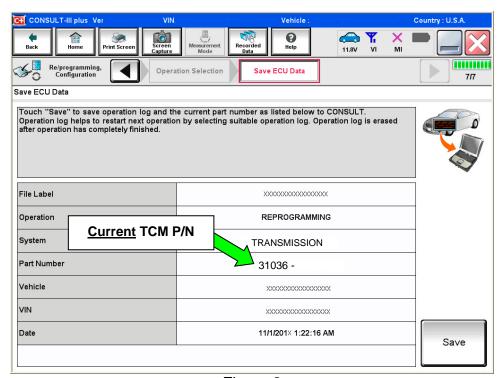


Figure 2

- b. Compare the P/N you wrote down to the numbers in the **CURRENT TCM PART NUMBER BEFORE REPROGRAMMING** column in **Table A** on the next page.
 - If there is a <u>match</u>, this reprogramming <u>applies</u>. Continue with the reprogramming procedure.
 - If there is <u>not a match</u>, this bulletin <u>does not apply</u>. Refer to ASIST for further diagnostic and repair information.

Table A

MODEL	MODEL YEAR	CURRENT TCM PART NUMBER BEFORE REPROGRAMMING: 31036 -		
Pathfinder with V6 engine	2013	3KD2A 3KD4A, 3KD4B, 3KD4C, 3KD4D, 3KD4E 3KD5A, 3KD5B 3KA2A 3KA4A, 3KA4B, 3KA4C, 3KA4D, 3KA4E 3KA5A, 3KA5B 3KA6A, 3KA6B		
	2014	9PA3A, 9PA3B, 9PA3C, 9PA3D 9PA5D, 9PA5E 9PA7A, 9PA7B, 9PA7C, 9PA7D		
	2015	9PB0A, 9PB0B, 9PB0E		
Altima with V6 engine	2013	3NT0A 3TA6A, 3TA6B 3TA9E 3TM0A, 3TM0D, 3TM0E 3TM1A, 3TM1D, 3TM1E		
	2014	9HM2A, 9HM5A 9HM5B, 9HM5C		
	2015	9HP0A, 9HP0B		
Murano	2015	5AA0A, 5AA0D, 5AA0E 5AA2A		
Quest	2015	4AY0A		
Maxima	2016	4RA0A		

7. 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.
 - o 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. This bulletin does not apply.

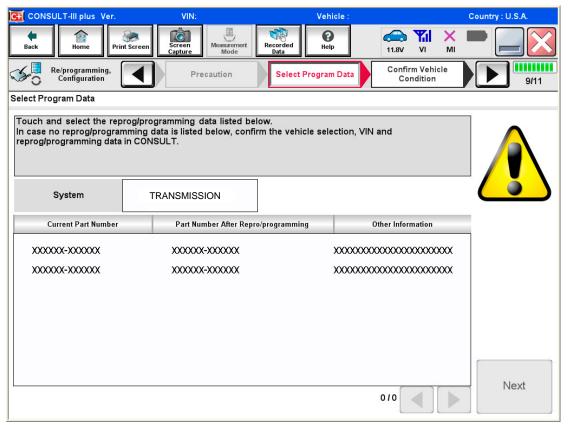


Figure 3

IMPORTANT: If C-III plus locks up/freezes at this point, or displays "cannot complete reprogramming, the CONSULT PC is set up with User Rights. Reprogramming can be completed with Administrator log in", the CONSULT PC settings need to be changed so that Users have full access rights. See your dealership's IT System Administrator for details.

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

NOTE: If the screen in Figure 4 does <u>not</u> display (indicating that reprogramming did not complete), refer to the information on the next page.

- 9. Disconnect the battery maintainer/smart charger from the vehicle.
- 10. Select Next.

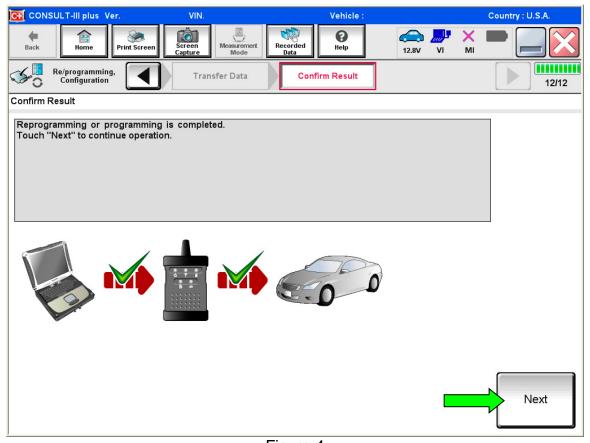


Figure 4

NOTE:

- In the next step (page 9), you will perform Erase All DTCs.
- DTC erase is required before C-III plus will provide the final reprogramming confirmation report.

TCM Recovery:

Do not disconnect the 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.
- "Retry" may not go through on first attempt and can be selected more than once.

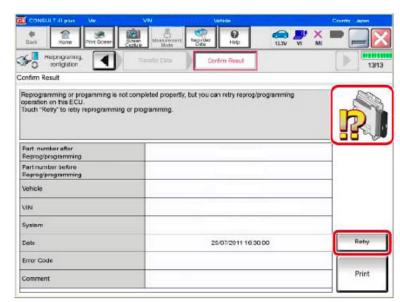


Figure 5

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.

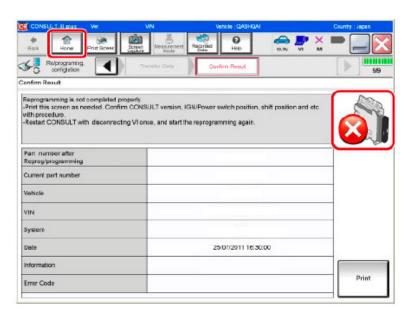


Figure 6

- 11. Follow the on-screen instructions to erase all 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.

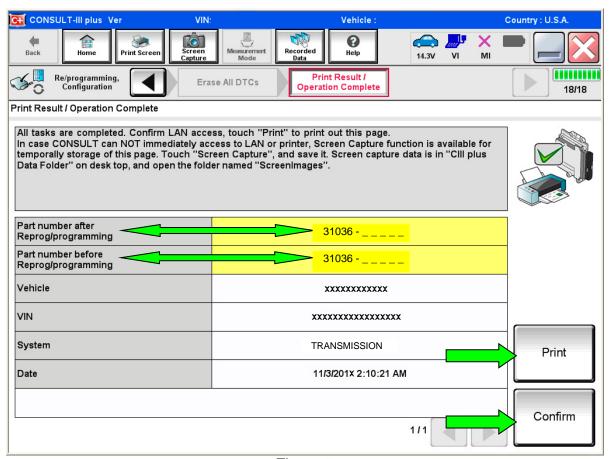


Figure 7

- 16. Close C-III plus.
- 17. Turn the ignition OFF.
- 18. Disconnect the VI from the vehicle.

NOTE: The information below is provided as **SERVICE INFORMATION** and is not part of the **SERVICE PROCEDURE** in this bulletin.

SERVICE INFORMATION

DTC detection drive pattern for P17F0 / P17F1

- This new diagnostic logic will monitor conditions in the CVT and provide a more precise diagnosis of any potential issues with the CVT.
- Figure 8, on the next page, illustrates conditions under which judder can be reproduced.
- Specific drive conditions that can be used to test for judder (shake, shudder, single or multiple bumps or vibration) are:
 - 1. Slowly accelerate from a stop (zero mph), applying only slight accelerator pedal (0% 10% throttle opening) until 40 mph is reached.
 - During acceleration, torque converter engagement (full lock up) can occur between 20-35 mph.
 - 2. Prior to torque converter lock up, slowly modulate the accelerator pedal:
 - a. Decrease accelerator pedal pressure slowly, approaching a closed throttle position.
 - b. Smoothly and slowly reapply accelerator pedal pressure back to approximately 10% throttle opening.

IMPORTANT:

- Slight grade (climbing hill) may aid in performing the above drive conditions.
- DTC detection logic will require three events before storing a DTC.

Figure 8, below, illustrates conditions under which judder can be reproduced.

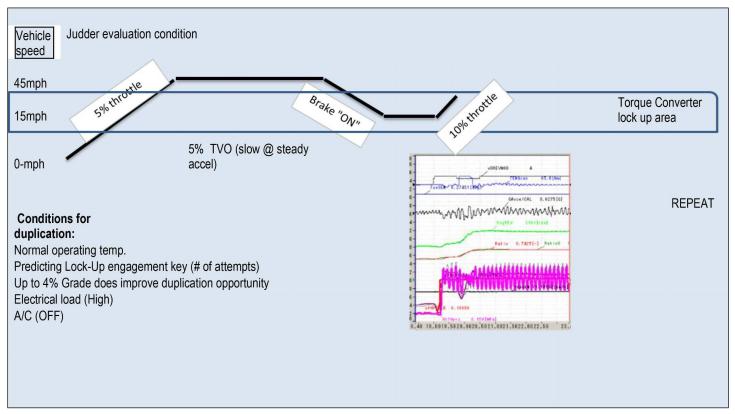


Figure 8

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram Transmission Control Module	(1)	JE99AA	ZE	32	(2)

- (1) Refer to the Electronic Parts Catalog and use the Transmission Control Module part number (31036-XXXXX) as the PFP.
- (2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION	
March 12, 2015	NTB15-014	Original bulletin published	
December 21, 2015	NTB15-014a	Pages 1 and 5 revised	
April 5, 2016	NTB15-014b	APPLIED VEHICLES, APPLIED VINS & DATES, and page 5 revised	
May 17, 2022	NTB15-014C	Page 10 revised	