#### **Technical Bulletin**



### SERVICE BULLETIN

Classification: Reference: Date:

AT18-009 NTB18-077 November 8, 2018

# MIL ON WITH DTC P0776, P1715 AND MAY HAVE HESITATION AND/OR LACK OF POWER

APPLIED VEHICLES: 2017-2018 Sentra Turbo (B17) with MR16DDT engine only

2017-2018 Rogue Sport (J11) 2015-2018 NV200 (M20)

2014-2017 Taxi

**APPLIED TRANSMISSION:** CVT (RE0F10D)

#### IF YOU CONFIRM

The MIL is ON with DTC P0776 (PC SOLENOID B – Pressure Control Solenoid "B" Performance/Stuck OFF) stored.

#### NOTE:

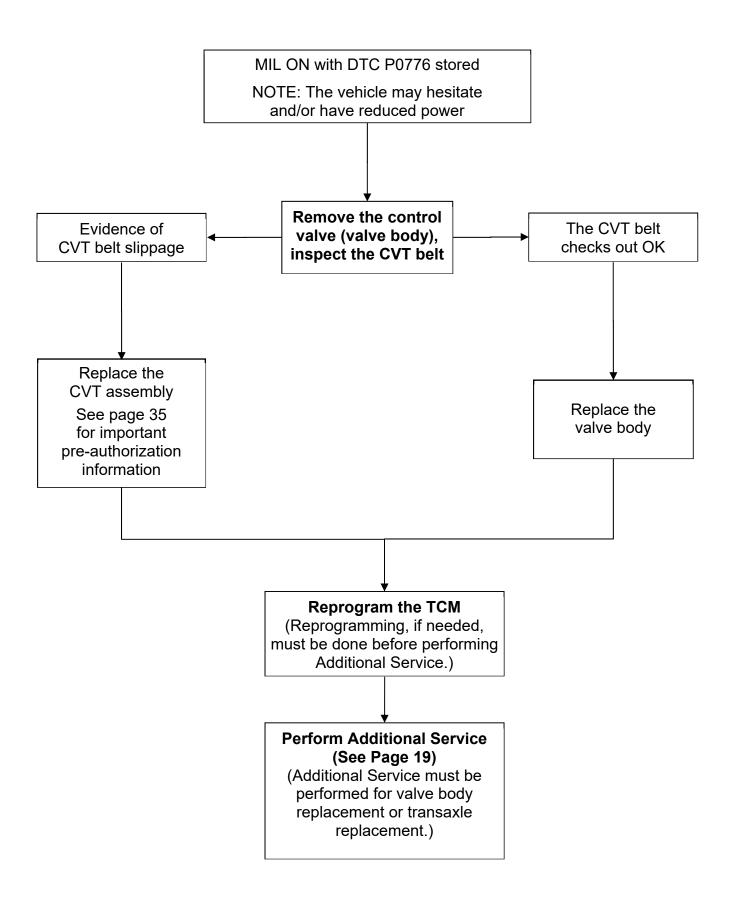
- If P0744, P0746, P0841, P0965, P2813, or P17F0 are stored this bulletin **does not apply**. Refer to ASIST for diagnostic assistance.
- With this incident, if it should occur, P1715 (INPUT SPEED SENSOR) may be stored with DTC P0776. The vehicle may also hesitate and/or have reduced power.

#### **ACTION**

- 1. Refer to the **Repair Flow Chart** on page 2 for mechanical CVT repair.
- 2. If needed, reprogram the TCM.
  - Refer to step 30 in the TCM Reprogram section (page 21) of the SERVICE PROCEDURE to confirm if reprogramming is needed.
- 3. Perform Additional Service (page 19).

**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

#### Control Valve (Valve Body) Removal and CVT Belt Inspection

1. Write down all radio station presets.

Presets	1	2	3	4	5	6
AM						
FM 1						
FM 2						
SAT 1						
SAT 2/3						
Bass	Treble	Bal	lance	Fade	Speed Sen.	Vol.

- 2. Disconnect both battery cables, negative cable first.
- 3. Remove the valve body.
- Before lifting the vehicle;
  - Place the transmission gear selector in <u>Neutral</u>.
  - For valve body removal, refer to the Electronic Service Manual (ESM), section TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT: RE0F10D > REMOVAL AND INSTALLATION > CONTROL VALVE.

**NOTE:** The number '7' is on the head of all bolts that need to be removed for valve body removal. Do not remove any bolt that does not have the number '7'.

CAUTION: Never allow any chemicals or fluids other than NS-3 CVT fluid or equivalent to enter the CVT assembly. Never allow any foreign debris, dust, dirt, etc. to enter the CVT assembly.

• For additional information, see video # 544: "CVT Belt Inspection". This video is located under the TECH TRAINING GARAGE VIDEOS tab in Virtual Academy.

#### **Exploded View**

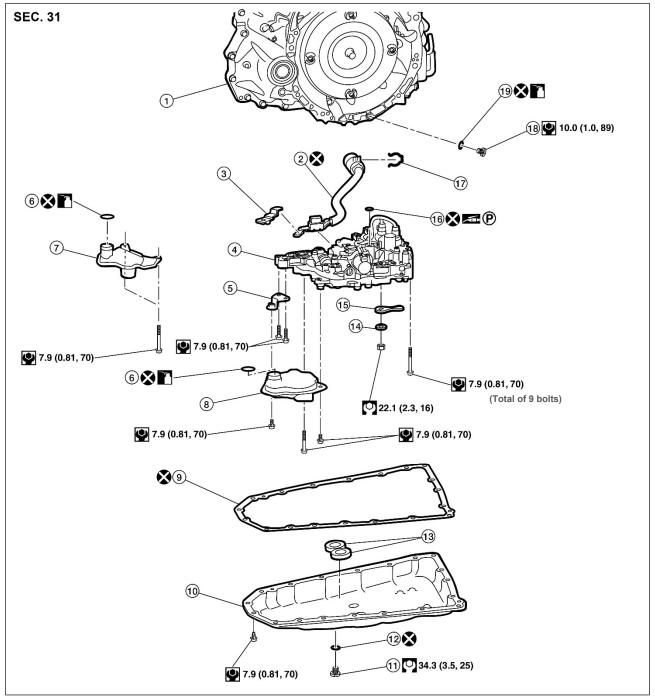


Figure 1

- Transaxle assembly 1.
- Control valve 4.
- New-style oil strainer assembly 7.
- 10. Oil pan
- Magnet 13.
- 16. Lip seal
- 19. O-ring
- : Always replace after every disassembly.
- : N·m (kg-m, ft-lb) : N·m (kg-m, in-lb)

- 2. Terminal cord assembly
- 5. Bracket
- Old-style oil strainer assembly
- 11. Drain plug
- Spring washer
- 17. Snap ring

- CVT fluid temperature sensor bracket
- 6. O-ring
- 9. Oil pan gasket
- 12. Drain plug gasket
- 15. Manual plate
- 18. Overflow plug

- 4. Secure the front <u>right</u> tire with a suitable strap, so it cannot rotate.
  - This will assist in making the belt turn.
- 5. Mark the front <u>left</u> tire with a suitable marking.
  - This will assure all 360° of the belt is inspected.



Figure 2

- 6. Using borescope J-51951 with mirror attachment, inspect the entirety of the two sides of the belt that come in contact with the pulleys (see page 7 Figure 8).
  - Reference the Figures on pages 9 through 12 for comparison of an OK and NG belt condition.

#### NOTE:

- Be sure to remove the protective film from the mirror before the first use.
- Clean the camera lens and mirror before each inspection. Use 90% isopropyl alcohol, and a lens swab from Lens Swab packet J-51963 listed in the PARTS INFORMATION.
  - Before inspecting, make sure the camera handle's AA batteries are charged and the LCD monitor's battery is charged.
- a. Insert the camera lens between the CVT case and pulley where shown in Figure 3 and Figure 4.
  - Insert the lens approximately seven (7) inches, and then view the side of the belt that contacts the pulley.

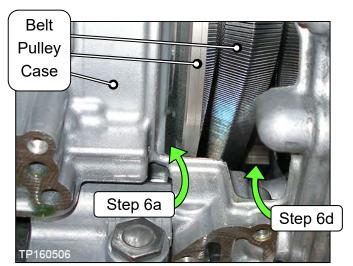


Figure 3

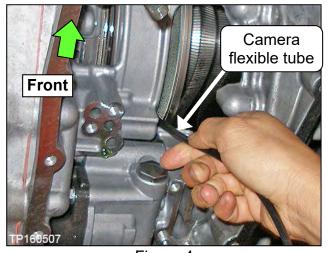


Figure 4

- b. Slowly and carefully turn the front left tire one full turn in the forward rotation to view all of the belt.
  - Holding the borescope with one hand allows for turning the tire with the other hand (see Figure 5).

**CAUTION:** If the tire is rotated in the rearward rotation, the camera lens may get caught between the belt and pulley.



Figure 5

- c. Was damage found?
  - > YES: Skip to step 6f.
  - > **NO:** Proceed to step 6d.
- d. Inspect the other side of the belt.
  - Insert the camera lens in the second location where shown in Figure 3 and Figure 6, and then perform step 6b again.
- e. Was damage found?
  - > YES: Continue to step 6f.
  - NO: Proceed to step 10 on page 13 and replace valve body.

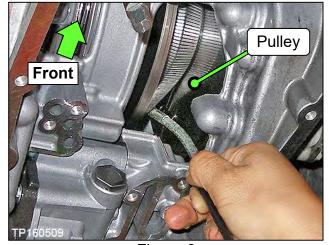


Figure 6

**NOTE:** For additional information, see video # 544: "CVT Belt Inspection". This video is located under the TECH TRAINING GARAGE VIDEOS tab in Virtual Academy.

f. If CVT replacement is required based on the inspection results from 6b and 6d, use borescope J-51951 to record a continuous video, 15 seconds or less, of the most severe evidence of belt slip and the VIN on the F.M.V.S.S. certification label (VIN label). See Figure 7.



Figure 7

**NOTE:** This required video must be attached to the Powertrain Call Center CVT Preauthorization Form (in ASIST) prior to calling for authorization. Failure to submit a continuous video will cause immediate denial of request for replacement.

- Before starting to record, make sure the camera handle's AA batteries are charged and the LCD monitor's battery is charged.
- The video will show a backward or reversed image when mirror end is used; this
  is okay.
- The required video must show clear evidence of belt slippage and be 15 seconds or less.

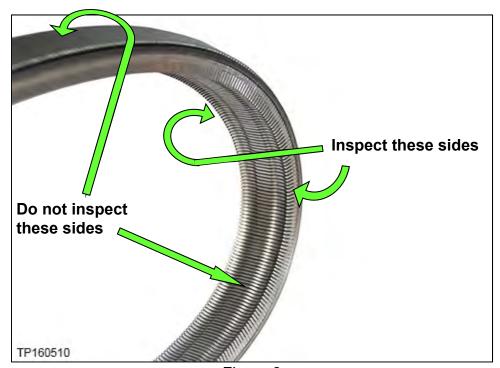
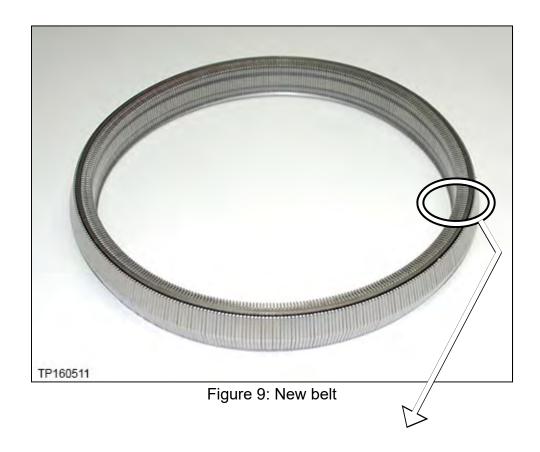


Figure 8

7. Reassemble the CVT.

**NOTE**: The CVT unit requiring replacement will need to be reassembled for Nissan parts return/collection.

- 8. Obtain authorization to replace the CVT assembly. See CVT Assembly Replacement Approval Procedures on page 35.
- 9. After receiving authorization, replace the CVT assembly, then proceed to page 20 to reprogram the TCM, and then perform **Additional Service** when Replacing Transaxle Assembly. Additional information related to TCM reprogramming is found on page 19.
  - For CVT assembly replacement, refer to the ESM, section TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT: RE0F10D > UNIT REMOVAL AND INSTALLATION > TRANSAXLE ASSEMBLY.
    - ➤ **IMPORTANT:** For those vehicles that have an external CVT cooler, <u>a cooler</u> <u>flush is required</u> after a valve body or CVT assembly replacement.
      - For the procedure to flush the CVT cooler, refer to the ESM, section
         TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT:
         RE0F10D > BASIC INSPECTION > CVT FLUID COOLER SYSTEM.
  - For the procedure to fill CVT with NS-3 CVT fluid or equivalent, refer to the ESM, section TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT: RE0F10D > BASIC INSPECTION > CVT FLUID.



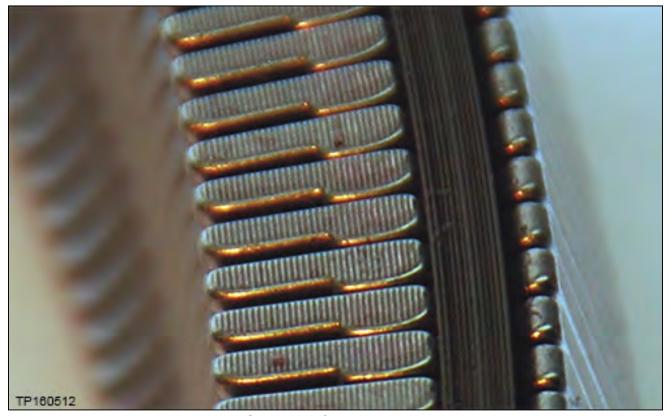


Figure 10: Close-up of section to be inspected

Pictures in Figure 11 and Figure 12 were taken with borescope J-51951.

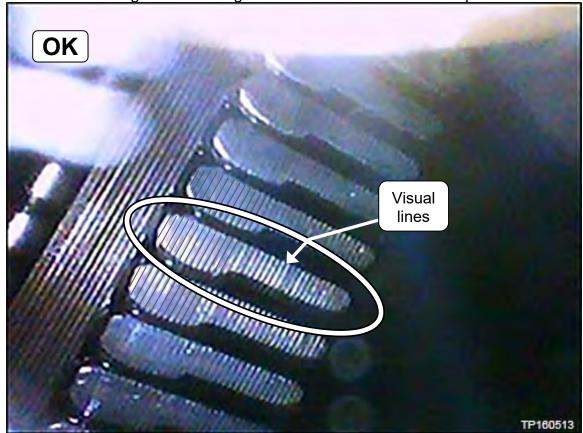


Figure 11: Belt is OK

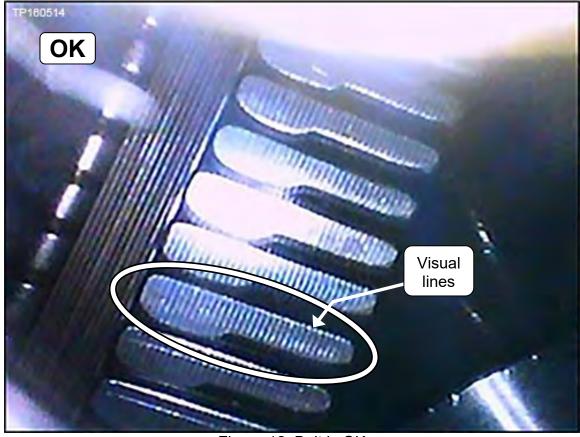


Figure 12: Belt is OK

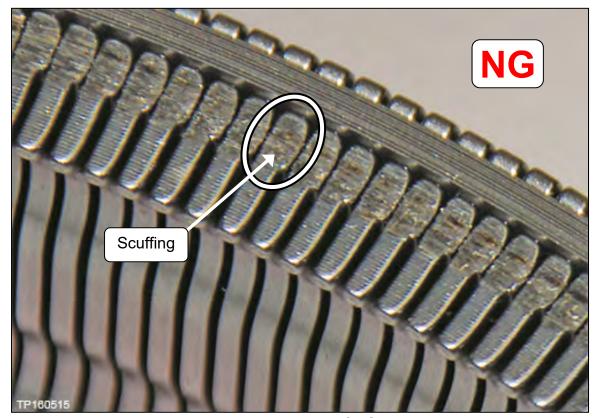


Figure 13: Example of NG belt

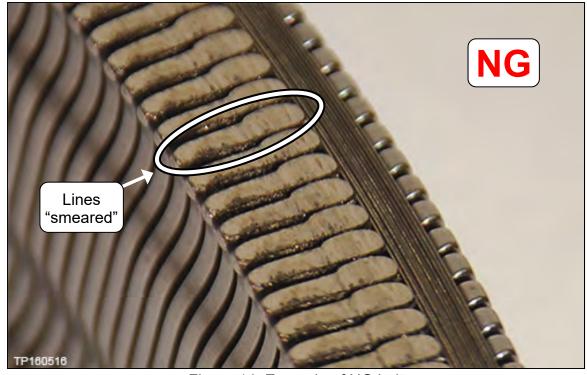


Figure 14: Example of NG belt

Pictures in Figure 15-Figure 17 were taken with borescope J-51951.



Figure 15: Example of NG belt



Figure 16: Example of NG belt



Figure 17: Example of NG belt

#### New Control Valve (Valve Body) Strainer and Pan Installation

#### **IMPORTANT:**

- For those vehicles that have an external CVT cooler, <u>a cooler flush is required</u> after a valve body or CVT assembly replacement.
  - ➤ For the procedure to flush the CVT cooler, refer to the ESM, section TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT: RE0F10D > BASIC INSPECTION > CVT FLUID COOLER SYSTEM.
- Installation steps in this bulletin may contain different style parts than what were originally installed in the CVT. Pay careful attention, REASSEMBLY MAY NOT BE IDENTICAL TO DISASSEMBLY.
- Confirm that the QR label, control valve and CD part numbers <u>all match</u> before installing the control valve.
- For additional information, see video # 547: "CVT Belt and Pulley Replacement" and fast forward to minute marker 20:09. This video is located under the TECH TRAINING GARAGE VIDEOS tab in Virtual Academy.

**CAUTION:** Handle the valve body carefully.

**NOTE:** If an oil strainer bracket was removed, discard it. An oil strainer bracket (Figure 18) will not be used with the new oil strainer.



Figure 18

10. Install a new lip seal (Figure 19).

- Do <u>NOT</u> reuse the old lip seal.
- Apply a small amount of petroleum jelly or equivalent to the lip seal to keep it in place on the CVT.

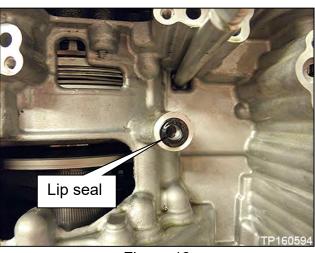


Figure 19

- 11. Install a new valve body with eleven (11) mounting bolts (Figure 20).
  - See the Parts Information for new Valve Body.

**IMPORTANT**: Leave four (4) <sup>★★</sup> bolt holes empty at this step.

**CAUTION:** Make sure the wiring harness does not get pinched (see Figure 21 and Figure 22 for correct routing).

- 54 mm (**2.125 inches**) long bolt **9**; 7 pieces
- 44 mm (1.73 inch) long bolt **()**; 2 pieces
- 25 mm I (1 inch) long bolt 0; 2 pieces

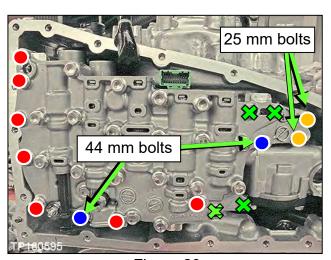


Figure 20

**CAUTION**: The two 25 mm bolts are installed <u>WITHOUT</u> the strainer bracket.

> Bolt torque: 7.9 N•m (0.81 kg-m, **70 in-lb.**)

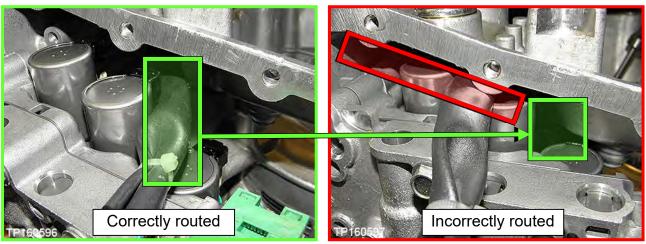


Figure 21 Figure 22

12. Replace the metal bracket of the fluid temperature sensor as follows:

**NOTE:** The new bracket will be oriented the same way the old bracket was.

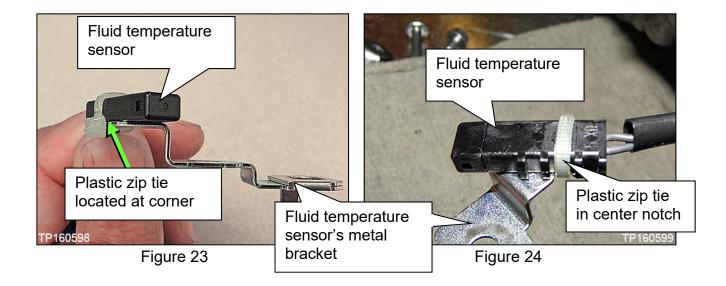
a. Cut the old plastic zip tie with an appropriate tool to remove the fluid temperature sensor's metal bracket from the terminal harness assembly (Figure 24 and Figure 23).

**CAUTION:** Cut the plastic zip tie over the metal bracket to avoid damage to the fluid temperature sensor.

- b. Discard the removed metal bracket and plastic zip tie.
- c. Use the new plastic zip tie from the Parts Information to attach the fluid temperature sensor of the terminal connector harness to the fluid temperature sensor's new metal bracket.

#### **IMPORTANT:**

- Locate the plastic zip tie at the <u>center notch</u> of three notches on the fluid temperature sensor (Figure 24).
- Tighten the plastic zip tie so that it is oriented as shown in Figure 23.
- d. Cut off the plastic zip tie excess.



13. Connect the electrical harness connector (Figure 25).

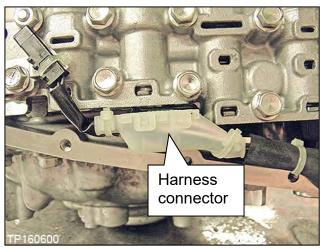


Figure 25

14. Install the CVT fluid temperature sensor bracket to the valve body with one (1) bolt (Figure 26).

**NOTE:** Leave one (1) bolt hole empty as it will be used to secure the oil strainer at a later step.

- 54 mm (2.125 inches) long bolt.
  - Bolt torque: 7.9 N•m (0.81 kg-m, 70 in-lb.)

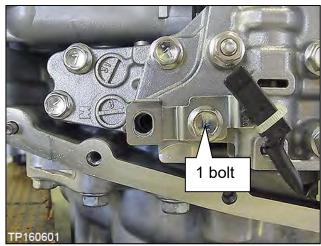


Figure 26

15. Install the new oil strainer with its new Oring seal with two (2) bolts (Figure 27).

**NOTE:** Replacement strainer maybe a different shape than the original.

- 54 mm (**2.125 inches**) long bolt **9**; 2 pieces.
  - Bolt torque: 7.9 N•m (0.81 kg-m, 70 in-lb.)

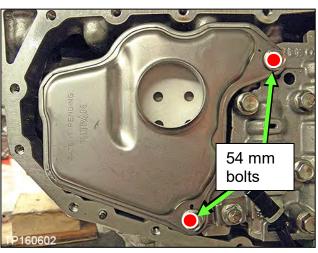


Figure 27

16. Install the manual plate, lock washer, and nut (Figure 28).

**NOTE:** Make sure the manual plate fits into the slot of the manual valve before applying torque to the nut.

- Reuse the existing manual plate, lock washer, and nut.
  - Nut torque: 22.1 N•m (2.3 kg-m, 16 ft-lb.)
- 17. Clean the original oil pan and magnets with a suitable cleaner. Visible debris should not be present at re-assembly.
- 18. Reassemble the original magnets to the oil pan.

**NOTE:** Return the magnets to their original locations.

- 19. Install a new oil pan gasket to the oil pan.
- 20. Install the oil pan bolts (see Figure 29).
  - Reuse the existing oil pan bolts.
    - Oil pan bolts torque: 7.9 N•m
       (0.81 kg-m, **70 in-lb.**)
- 21. Install a new drain washer to the drain plug on the oil pan.

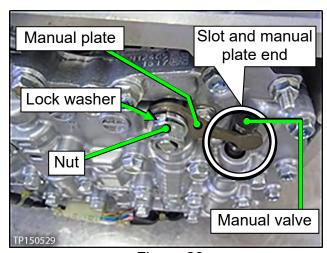


Figure 28

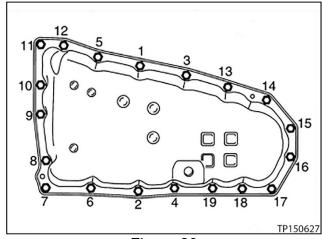


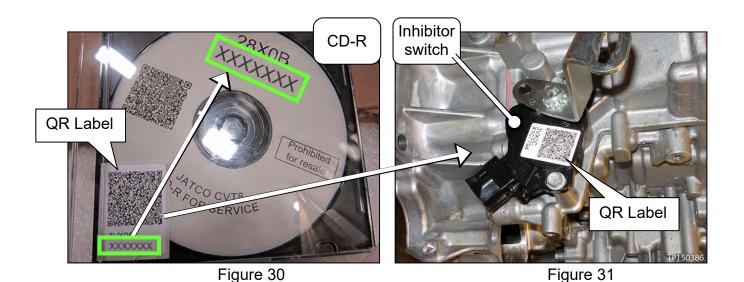
Figure 29

- 22. Fill the CVT assembly with NS-3 CVT fluid or equivalent.
  - For the procedure to fill CVT with NS-3 CVT fluid or equivalent, refer to the ESM, section TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT: RE0F10D > BASIC INSPECTION > CVT FLUID.

**IMPORTANT:** For those vehicles that have an external CVT cooler, <u>a cooler flush is required</u> after a valve body or CVT assembly replacement.

For the procedure to flush the CVT cooler, refer to the ESM, section TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT: RE0F10D > BASIC INSPECTION > CVT FLUID COOLER SYSTEM.

- 23. Attach the QR label (Figure 30) with the new calibration data onto the transmission range switch (inhibitor switch Figure 31).
  - o A QR Label and CD-R are included with the new valve body.
  - o Confirm that the QR label and the CD-R part numbers are the same (Figure 31).



24. Proceed to the next page for TCM Reprogram and Additional Service.

#### **TCM Reprogram and Additional Service**

The steps starting on the next page must be completed in the following order:

- A. TCM Reprogram, if needed.
- B. Perform Additional Service

#### For Transaxle Assembly Replacement

- Perform ADDITIONAL SERVICE WHEN REPLACING TRANSAXLE ASSEMBLY.
  - Refer to the ESM, section TRANSMISSION & DRIVELINE TRANSAXLE & TRANSMISSION CVT: RE0F10D BASIC INSPECTION ADDITIONAL SERVICE WHEN REPLACING TRANSAXLE ASSEMBLY.

#### For Valve Body Replacement:

- Perform ADDITIONAL SERVICE WHEN REPLACING CONTROL VALVE.
  - Refer to the ESM, section TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT: RE0F10D > BASIC INSPECTION > ADDITIONAL SERVICE WHEN REPLACING CONTROL VALVE.
- C. Confirm DTC's are erased.
- D. Confirm that there are no fluid leaks.

#### **TCM Reprogramming**

**IMPORTANT:** Before starting, make sure:

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

#### NOTE:

- Most instructions for reprogramming with 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.

#### **CAUTION:**

- Connect the GR8 to the vehicle battery, set to "power supply" mode.
  If the vehicle battery voltage drops below 12.0V or rises above 15.5V during reprogramming, the TCM 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<sup>®</sup> devices (e.g., cell phones, printers, etc.)
  within range of the CONSULT PC and the 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.

- 25. Connect the CONSULT PC to the vehicle to begin the reprogramming procedure.
- 26. Start C-III plus.
- 27. Wait for the plus VI to be recognized.
  - The serial number will display when the plus VI is recognized.

#### 28. Select Re/programming, Configuration.

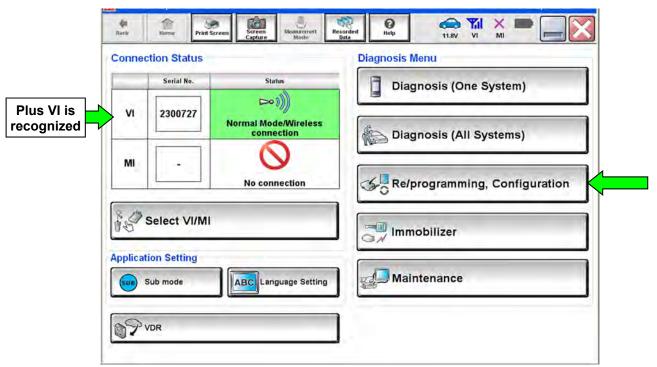


Figure 32

- 29. Follow the on-screen instructions and navigate the C-III plus to the screen shown in Figure 33 on the next page.
- 30. When you get to the screen shown in Figure 33, confirm reprogramming 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).

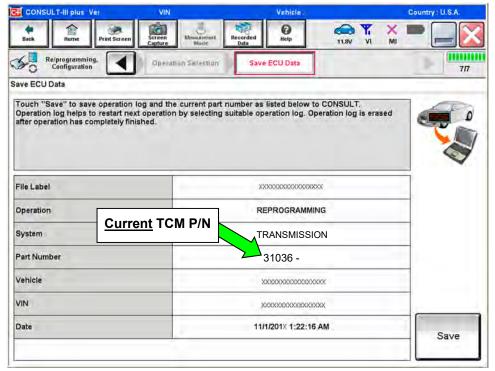


Figure 33

- B. Compare the P/N you wrote down to the numbers in the **Current TCM Part Number** column in **Table A** below.
  - If there is a match, continue with the reprogramming procedure.
  - If there is <u>not a match</u>, reprogramming is <u>not needed</u>, continue to step 40 and perform **ADDITIONAL SERVICE**.

#### Table A

MODEL	MODEL YEAR	CURRENT TCM PART NUMBER BEFORE REPROGRAMMING: 31036 -
Sentra	2017	3YU2A, 3YU2B
Sentia	2018	5UD2A
Rogue Sport	2017-2018	6MA0B
	2015	9SB0C, 9SD0C
NV200	200 2016 9SE0C, 9SE2C	
	2017	9SF0A, 9SF2A
	2018	9SJ0A, 9SJ2A
	2014	3LN0B
Taxi	2015	9SC0A
	2016	9SH0B
	2017	9SG0A

31. 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 34 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.

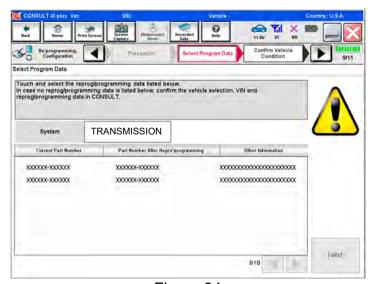


Figure 34

- Before reprogramming will start, you will be required to enter your User Name and Password.
  - > The CONSULT PC must be connected to the Internet (Wi-Fi or cable).
  - If you do not know your User Name and Password, contact your Service Manager.

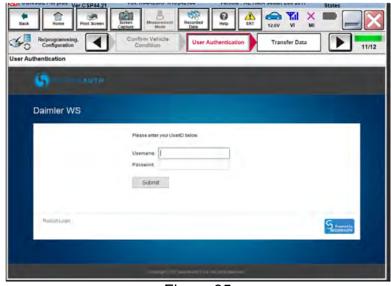


Figure 35

32. When the screen in Figure 36 displays, reprogramming is complete.

**NOTE:** If the screen in Figure 36 does <u>not</u> display (indicating that reprogramming did <u>not</u> complete), refer to the information on the next page.

33. Disconnect the battery charger from the vehicle.

#### 34. Select Next.

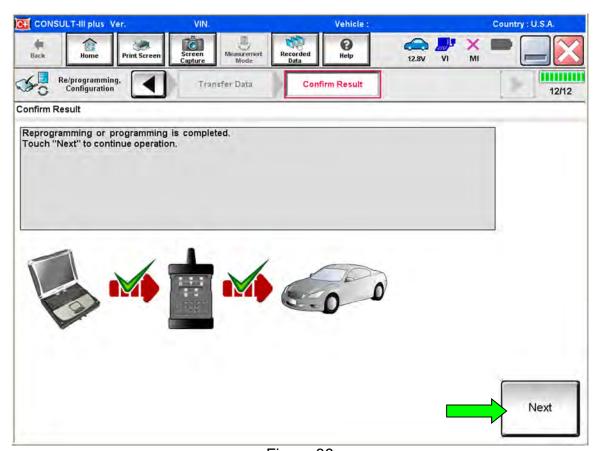


Figure 36

#### NOTE:

- In the next step (page 26) you will perform Erase All DTCs.
- DTC erase is required before C-III plus will provide the final reprogramming confirmation report.

#### **TCM Recovery:**

### <u>Do not disconnect plus VI or shut down C-III plus if reprogramming does not complete.</u>

If reprogramming does <u>not</u> complete and the "!?" icon displays as shown in Figure 37:

- 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.

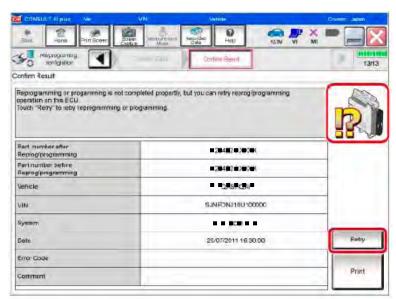


Figure 37

## If reprogramming does <u>not</u> complete and the "X" icon displays as shown in Figure 38:

- 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.

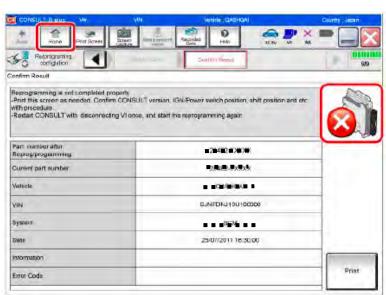


Figure 38

- 35. Follow the on-screen instructions to **Erase All DTCs**.
- 36. When the entire reprogramming process is complete, the screen in Figure 39 will display.
- 37. Verify the before and after part numbers are different.
- 38. Print a copy of this screen (Figure 39) and attach it to the repair order for warranty documentation.
- 39. Select Confirm.

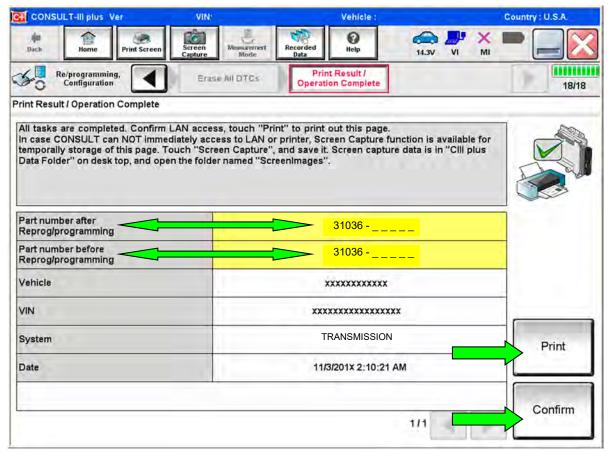


Figure 39

#### 40. Perform ADDITIONAL SERVICE.

- Refer to the ESM, section TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > CVT: RE0F10D - BASIC INSPECTION >
  - > ADDITIONAL SERVICE WHEN REPLACING CONTROL VALVE
    OR
  - ADDITIONAL SERVICE WHEN REPLACING TRANSAXLE ASSEMBLY
- Use the check-off table below and check off each Additional Service Procedure as they are performed.

**IMPORTANT:** Check off these additional services as they are completed and <u>attach</u> this to the repair order when finished.

CHE	CK OFF	ADDITIONAL SERVICE PROCEDURE
VALVE BODY	CVT ASSEMBLY	
		PRINT CURRENT CALIBRATION DATA
		CHECK THE SERIAL NUMBER
		WRITE THE DATA (WRITE IP CHARA)
		PRINT NEW CALIBRATION DATA
	Not required	FWD CLUTCH POINT LEARNING (If needed, TCM reprogramming must be done first. Reference provided on page 28.)
		PERFORM SELECT LEARNING (DRIVE/REVERSE LEARNING. Reference provided on page 31)
		ERASE CVT FLUID DEGRADATION LEVEL DATA

- 41. Return C-III plus to the Home screen.
- 42. Turn OFF C-III plus and the vehicle ignition.
- 43. Disconnect C-III plus from the vehicle.
- 44. Test drive the vehicle:
  - Make sure the MIL is OFF.
    - This bulletin does not cover any DTC repairs other than those listed under "If You Confirm" on page 1.
    - ➤ If the MIL comes ON, go to ASIST for further diagnostic information.
    - Verify the CVT operates normally and no abnormal noises are heard during a test drive.

#### FWD CLUTCH POINT LEARNING (using CONSULT-III plus)

**NOTE:** If a TCM update is available (see page 21), the TCM <u>MUST</u> be reprogrammed before performing FWD CLUTCH POINT LEARNING.

- 45. Apply the vehicle's parking brake.
- 46. Start the engine and warm up CVT to an operating temperature (50-100° C [122-212° F]).
- 47. Connect the CONSULT PC to the vehicle
- 48. Start C-III plus.
- 49. Wait for the plus VI to be recognized.
  - The serial number will display when the plus VI is recognized.
- 50. Select Diagnosis (One System).

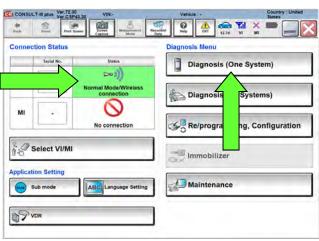


Figure 40

51. Select **Work Support** under TRANSMISSION.

**IMPORTANT:** The following **FWD CLUTCH POINT LEARNING** will be performed <u>twice</u>; once in drive (**D**) and once in reverse (**R**).

52. Select **FWD CLUTCH POINT LEARNING** and then **Start**.

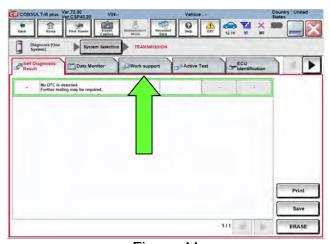


Figure 41

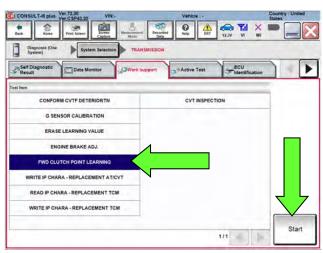
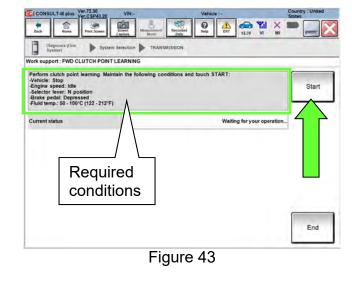


Figure 42

- 53. With the engine still running and at idle, depress the brake pedal and shift the CVT into neutral (**N**).
  - Confirm that all of the required conditions indicated in Figure 43 are being met.

54. Select Start.



55. While maintaining <u>all conditions</u> shown in Figure 43 and the "Current status" indicates "EXECUTING", shift the CVT into **D** and then wait until the Current status indicates "COMPLETED".

**NOTE:** This may take up to three (3) minutes to complete.

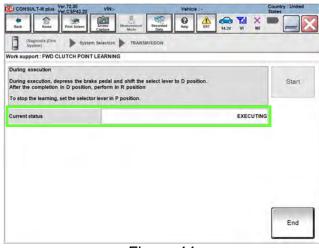
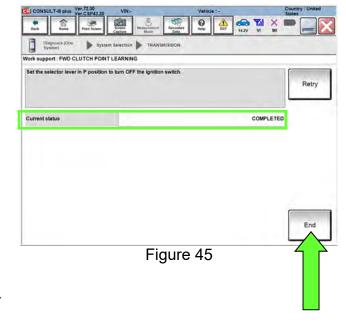


Figure 44

56. When the screen in Figure 45 is displayed, shift the CVT into park (**P**), and then select **End**.



57. Turn the engine OFF and then back ON.

### 58. Select **FWD CLUTCH POINT LEARNING** and then **Start**.

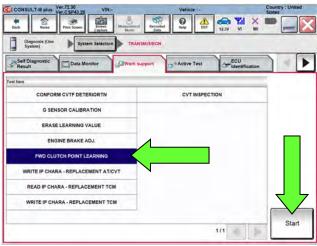


Figure 46

- 59. With the engine still running and at idle, depress the brake pedal and shift the CVT into neutral (**N**).
  - Confirm that all of the conditions indicated in Figure 47 are being met.
- 60. Select Start.

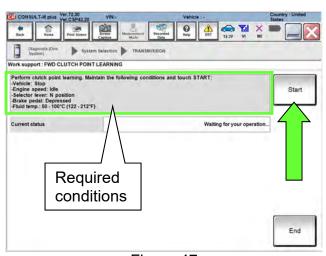


Figure 47

61. While maintaining <u>all conditions</u> shown in Figure 47 and the Current status indicates EXECUTING, shift the CVT into **R** and then wait until the Current status indicates COMPLETED.

**NOTE:** This may take up to 3 minutes to complete.

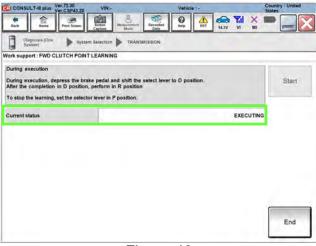


Figure 48

62. When the screen in Figure 49 is displayed, select **End**.

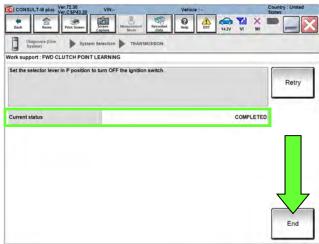


Figure 49

#### **SELECT LEARNING (DRIVE/REVERSE LEARNING)**

Perform Select Learning (Drive / Reverse Learning) as follows:

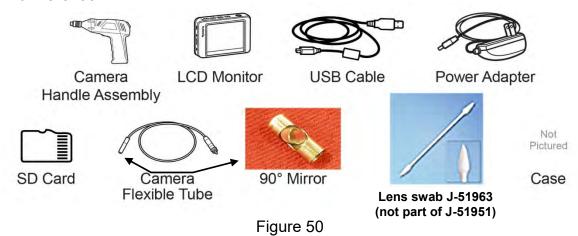
- 63. Set the parking brake.
- 64. Start the engine, and then wait five (5) seconds.
- 65. Move the shift selector to the **N** position and hold more than two (2) seconds, and then move it to the **D** position and wait for transmission engagement.
- 66. Repeat step 65 ten (10) times.
- 67. Move the shift selector to the **N** position and hold for more than 2 seconds, and then move it to the **R** position and wait for transmission engagement.
- 68. Repeat step 67 ten (10) times.
- 69. Move the shift selector to the **P** position, and then turn the ignition OFF.

#### PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
CVT ASSEMBLY (1)	(2)	1
VALVE ASSEMBLY KIT-CONTROL (valve body)	3170E-28X0B	1
Valve Assembly Kit-Control includes:		
VALVE ASSEMBLY-CONTROL (3)		1
STRAINER ASSY-OIL AUTO TRANS		1
GASKET-OIL PAN		1
BRACKET (for temperature sensor)		1
BAND (zip tie for sensor bracket)		1
SEAL-LIP		1
SEAL, O-RING (fluid filler plug gasket)		1
WASHER-DRAIN	11026-JA00A	1
NS-3 CVT Fluid (4) (5)	999MP-CV0NS3	As needed
Lens Swab (6)	J-51963 (Shop supply)	As needed

- (1) If the CVT assembly is being replaced, no other parts in the table above, except NS-3 CVT fluid or equivalent, are needed.
- (2) Refer to the Electronic Parts Catalog (EPS) or equivalent for the correct part number.
- (3) Includes QR Label and CD-R.
- (4) For warranty repairs, Nissan NS-3 CVT Fluid <u>must</u> be used. For customer pay repairs, Nissan NS-3 CVT Fluid or an equivalent is recommended.
- (5) NS-3 CVT Fluid can be ordered through the Nissan Maintenance Advantage program: Phone: 877-NIS-NMA1 (877-647-6621) or Website: Order via link on dealer portal <a href="https://www.NNAnet.com">www.NNAnet.com</a> and click on the "Maintenance Advantage" link.
- (6) Lens swabs are available from Tech•Mate online: <a href="www.nissantechmate.com">www.nissantechmate.com</a>, or by phone: 1-800-662-2001.

#### Tech Cam J-51951



Additional kits and components of Tech Cam J-51951 are available from Tech•Mate online: <a href="https://www.nissantechmate.com">www.nissantechmate.com</a>, or by phone: 1-800-662-2001.

#### CLAIMS INFORMATION

**NOTE:** Refer to CVT Assembly Replacement Approval Procedures (on page 35) before submitting a claim.

#### If belt condition shows no signs of belt slip, OK

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL CVT CONTROL VALVE ASSY	(1)	JD48AA	ZE	32	(2)

- (1) Reference the Parts Information Table and use the applicable Control Valve Assembly Part Number (31705-\*\*\*\*\*) as the Primary Failed Part.
- (2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

**NOTE:** FRT allows adequate time to access DTC codes. No other diagnostic procedures subsequently required. Do NOT claim any diagnostic OP Codes with this claim.

#### And

DESCRIPTION	OP CODE	FRT
Inspect CVT Belt, Belt = OK	JX37AA	0.3

#### And; if TCM requires reprogramming

OPERATION	PFP	OP CODE	SYM	DIAG	FRT
TCM Reprogramming	(3)	JE99AA	ZE	32	(4)

- (3) Refer to the Electronic Parts Catalog (EPS) or equivalent and use the TCM part number (31036 \*\*\*\*\*) as the PFP.
- (4) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

**NOTE:** FRT allows adequate time to access DTC codes. No other diagnostic procedures subsequently required. Do NOT claim any diagnostic OP Codes with this claim.

Claims Information continued on the next page.

#### **CLAIMS INFORMATION (continued)**

#### If belt inspection shows signs of belt slip, NG

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
CVT R&R		JD01AA			(2)
CVT TROUBLE DIAGNOSIS	(1)	JX22AA	ZE	32	0.5

- (1) Reference the Electronic Parts Catalog (EPS) or equivalent and use the CVT assembly part number for the vehicle being repaired as the Primary Failed Part.
- (2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

**NOTE:** FRT allows adequate time to access DTC codes. No other diagnostic procedures subsequently required. Do NOT claim any diagnostic OP Codes with this claim.

#### And

DESCRIPTION	OP CODE	FRT
Inspect CVT Belt, Belt = NG (Includes control valve R&I)	JX36AA	1.1

#### And; if TCM requires reprogramming

OPERATION	PFP	OP CODE	SYM	DIAG	FRT
TCM Reprogramming	(3)	JE99AA	ZE	32	(4)

- (3) Refer to the Electronic Parts Catalog (EPS) or equivalent and use the TCM part number (31036 \*\*\*\*\*) as the PFP.
- (4) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

**NOTE:** FRT allows adequate time to access DTC codes. No other diagnostic procedures subsequently required. Do NOT claim any diagnostic OP Codes with this claim.

#### **CVT Assembly Replacement Approval Procedures**

- > If CVT belt inspection indicates CVT assembly replacement is required:
  - a. Complete the PCC CVT Preauthorization Form in ASIST.
  - b. Attach the required video (15 seconds or less) to the CVT Preauthorization Form.
    - Failure to submit a continuous video showing evidence of belt slip and the VIN will cause immediate denial of request for CVT unit replacement.
  - c. Call the PCC for authorization at 800-973-9992 (opt 2).

**IMPORTANT:** Make sure the video has a clear image of the VIN on the F.M.V.S.S. certification label (VIN label).

#### **AMENDMENT HISTORY**

PUBLISHED DATE	REFERENCE	DESCRIPTION
November 8, 2018	NTB18-077	Original bulletin published