



# SERVICE BULLETIN

Classification: AT15-013a	Reference: NTB15-087a	Date: April 11, 2017
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## CVT WITH 4 CYLINDER ENGINE VALVE BODY REPLACEMENT WITH CONFIRMED DTC

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

**APPLIED VEHICLES:** 2013 – 2016 Altima (L33) with 4 cylinder engine only  
 2014 – 2016 Rogue (T32)  
 2015 – 2016 Juke (F15)

**APPLIED TRANSMISSION:** CVT

### IF YOU CONFIRM

- One or more of the DTCs listed in Table A (on the next page) are stored in the Transmission Control Module (TCM).
- and**
- No other DTCs are stored other than what are listed in Table A.
- and**
- The diagnostic procedure in the Electronic Service Manual (ESM) for each DTC in Table A, that is stored in the TCM, has been performed and indicates that the CVT assembly must be replaced.

**NOTE:** Do not replace the CVT.

### ACTION

Replace the CVT valve body assembly (control valve) with the new one listed in the Parts Information of this bulletin.

**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 the 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.

**Table A**

<b>DTC</b>	<b>DTC NAME</b>
P0740	TORQUE CONVERTER
P0743	TORQUE CONVERTER
P0778	PRESSURE CONTROL SOLENOID B
P0779	PRESSURE CONTROL SOLENOID B
P0847	TRANSMISSION FLUID PRESSURE SEN/SW B
P0848	TRANSMISSION FLUID PRESSURE SEN/SW B
P084C	TRANSMISSION FLUID PRESSURE SEN/SW H
P084D	TRANSMISSION FLUID PRESSURE SEN/SW H
P0962	PRESSURE CONTROL SOLENOID A
P0963	PRESSURE CONTROL SOLENOID A
P0966	PRESSURE CONTROL SOLENOID B
P0967	PRESSURE CONTROL SOLENOID B
P2814	SELECT SOLENOID
P2815	SELECT SOLENOID

## **SERVICE PROCEDURE**

1. Remove the valve body assembly from the CVT.
  - Refer to the appropriate Electronic Service Manual (ESM), section TM – Transaxle & Transmission, for removal information.

### **NOTE:**

- The CVT unit harness connector may be left in place when removing the valve body assembly.
- Only remove those valve body assembly bolts that are marked with a “7” on the head.

2. Flush the CVT cooler(s).

**IMPORTANT:** A CVT Cooler flush is required for all applied vehicles when a valve body is replaced. Refer to NTB15-013 to perform CVT Cooler flush.

3. Follow the installation steps in this bulletin to install the new valve body.
  - Make sure to use all of the new parts listed in the Parts Information section of this bulletin.

## Valve Body Installation

### IMPORTANT:

- 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 all match before installing the control valve** (refer to NTB12-103).

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

**NOTE:** If an oil strainer bracket was removed, discard it. An oil strainer bracket (Figure 1) will not be used with the new oil strainer.

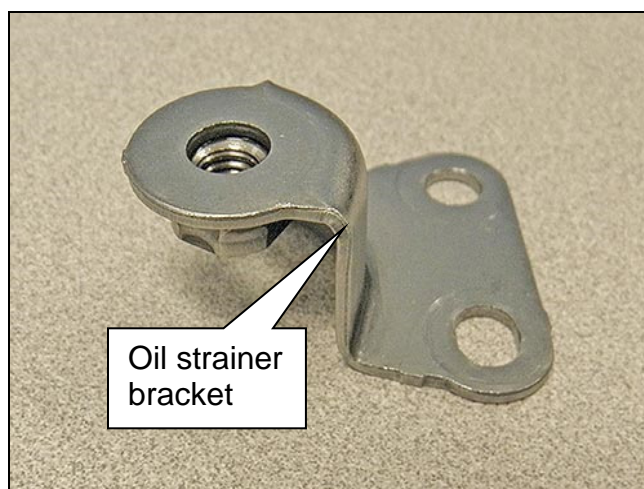


Figure 1

#### 4. Install a new lip seal (Figure 2).

- Do NOT reuse the old lip seal.
- Apply a small amount of petroleum jelly to the lip seal to keep it in place on the CVT.

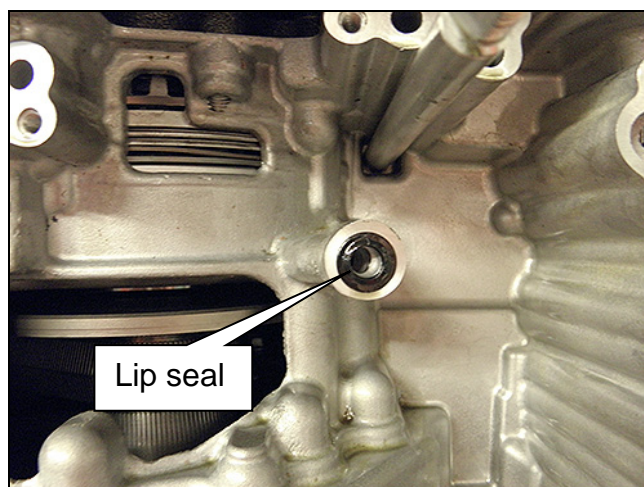






Figure 2

5. Install the Control Valve with eleven (11) mounting bolts (Figure 3).

**IMPORTANT:** Leave Four (4)  bolt holes blank at this step.

**CAUTION:** Make sure the wiring harness does not get pinched (see Figures 4 and 5 for correct routing).

- 54 mm long bolt  – 7 pieces
- 44 mm long bolt  – 2 piece
- 25 mm long bolt  – 2 piece

**CAUTION:** The two 25 mm bolts are installed WITHOUT the strainer bracket.

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

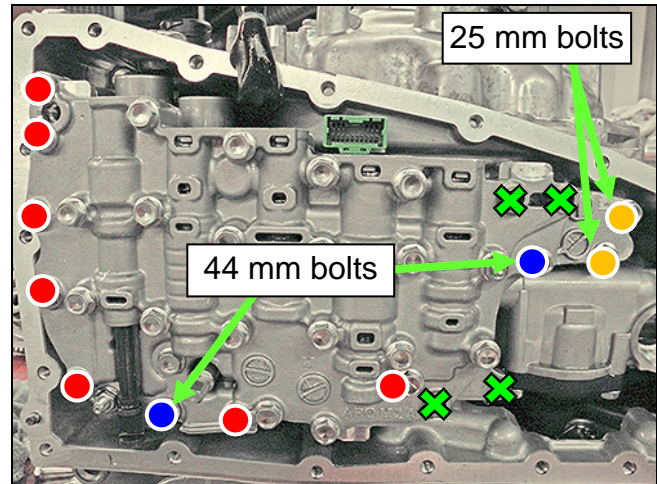


Figure 3

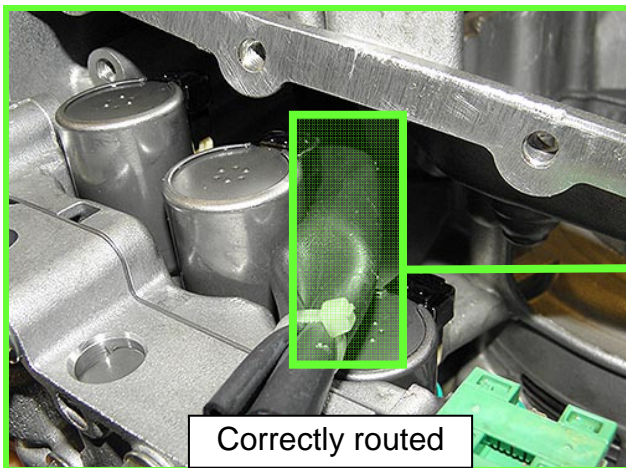


Figure 4

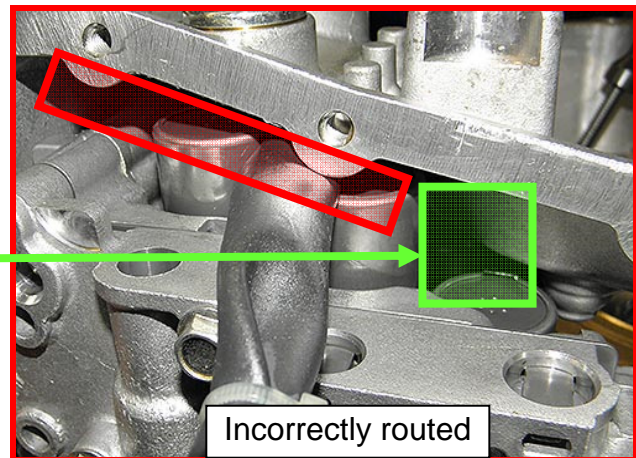


Figure 5

6. Replace the metal bracket of the temperature sensor as follows:

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

- a. Cut the plastic zip tie with an appropriate tool to remove the temperature sensor bracket from the terminal harness assembly (Figure 6).

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

- b. Discard the removed bracket and plastic zip tie.
- c. Use the plastic zip tie, included with the valve body, to attach the new temperature sensor bracket to the temperature sensor of the terminal connector harness.

**IMPORTANT:** Locate the plastic zip tie at the **center notch** of three notches on the temperature sensor.

- d. Cut off excess zip tie.

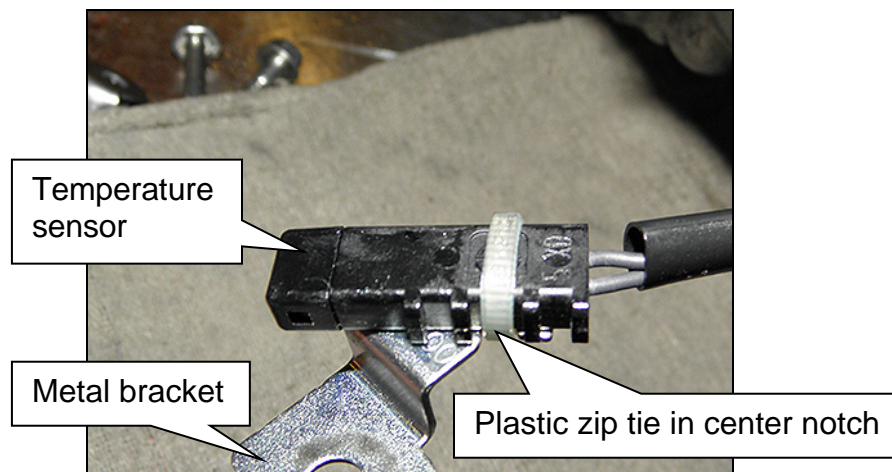


Figure 6

7. Connect the electrical harness connector (Figure 7).

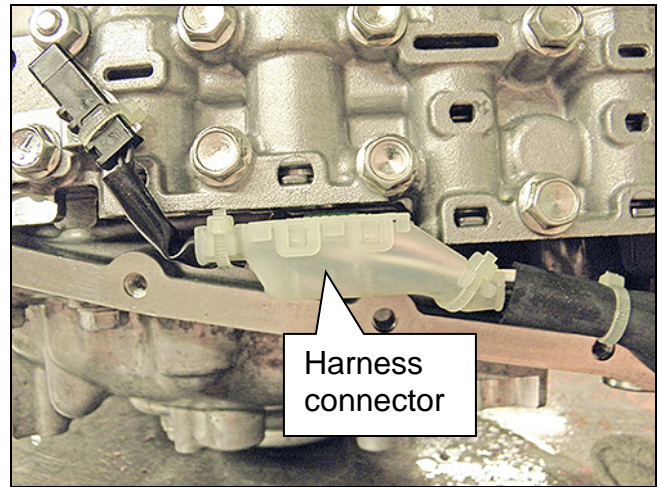


Figure 7

8. Install the CVT fluid temperature sensor bracket to the valve body with one (1) bolt (Figure 8).

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

- Bolt torque: 7.9 N•m (0.81 kg-m, **70 in-lb.**)
- Bolt length: 54 mm

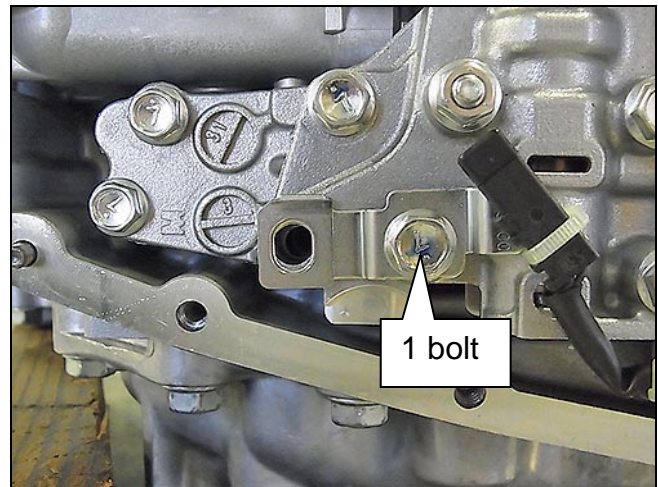



Figure 8

9. Install the new oil strainer with its new O-ring seal with two (2) bolts (Figure 9).

**NOTE:** Replacement strainer maybe a different shape.

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

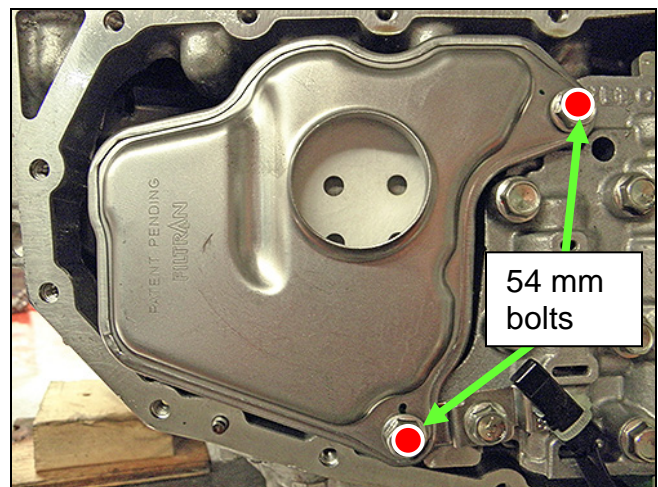


Figure 9

10. Install the manual plate, lock washer, and nut (Figure 10).

**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.**)

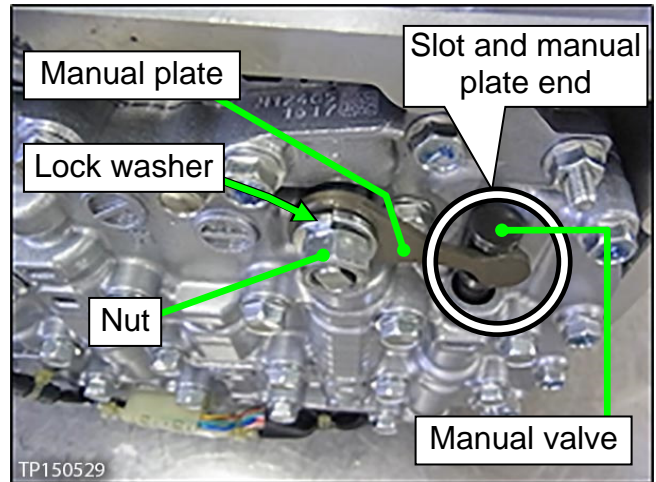


Figure 10

11. Clean the original oil pan and magnets with a suitable cleaner. Visible debris should not be present at re-assembly.

12. Reassemble the original magnets to the pan.

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

13. Install a new oil pan gasket to the pan.

14. Install the oil pan bolts (see Figure 11).

- Reuse the existing pan bolts.
  - Oil pan bolts torque: 7.9 N•m (0.81 kg-m, **70 in-lb.**)

15. Install a new drain washer to the drain plug on the oil pan.

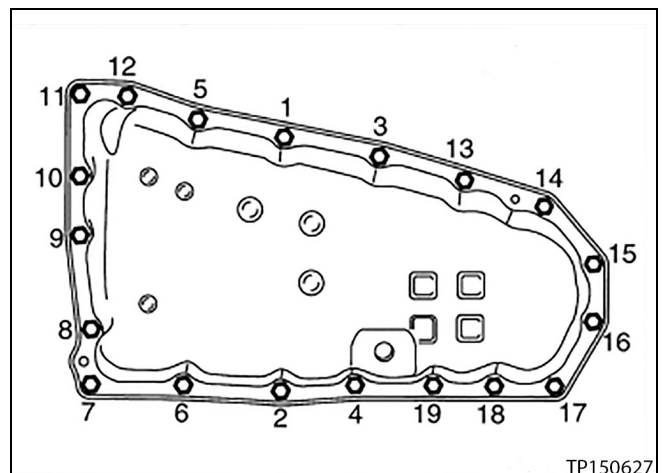


Figure 11

16. Fill the CVT assembly with NS-3 CVT fluid or equivalent.

- Refer to the ESM, section **TM – Transaxle & Transmission** for CVT fluid filling.

17. **IMPORTANT:** Install Write IP Characteristics to the TCM; Refer to NTB12-103.

- Refer to **TM – Transaxle & Transmission / BASIC INSPECTION**, and perform **ADDITIONAL SERVICE WHEN REPLACING CONTROL VALVE**.
  - Check for fluid leakage.
  - Attach the QR label with the new calibration data onto the transmission range switch (inhibitor switch).
    - See Figure 12 and 13 below.
    - A QR Label and CD-R are included with the replacement valve body.

18. Erase DTCs.

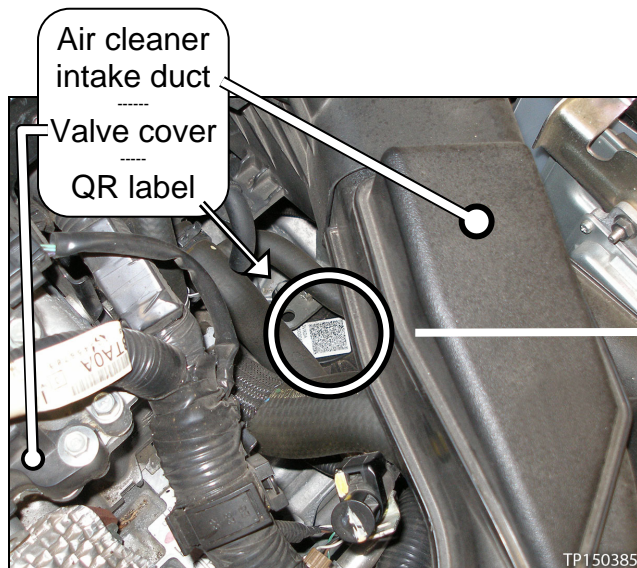


Figure 12

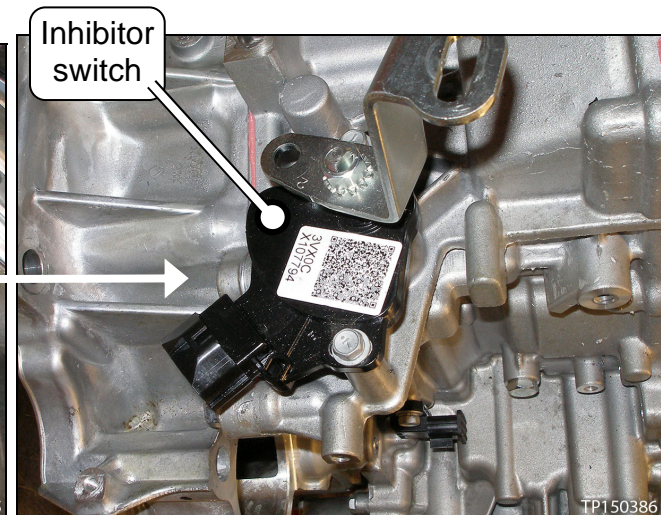


Figure 13



## PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
VALVE ASSEMBLY - KIT CONTROL (valve body kit) (1)	31705-28X9B	1
Valve body kit includes:		
CONTROL VALVE (Valve Body)		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 (2) (3)	999MP-NS300P	As needed

(1) Includes QR Label and CD-R.

(2) For warranty repairs, Nissan NS-3 CVT Fluid must be used. For customer pay repairs, Nissan NS-3 CVT Fluid or an equivalent is recommended.

(3) Order this item through the Nissan Maintenance Advantage program: Phone: 877-NIS-NMA1 (877-647-6621). Website order via link on dealer portal [www.NNAnet.com](http://www.NNAnet.com) and click on the "Maintenance Advantage" link

## CLAIMS INFORMATION

**Submit a Primary Failed Part (PP) line claim using the following claims coding**

OPERATION	OP CODE	PFP	SYM	DIAG	FRT
Replace Control Valve	JD48AA	(4)	HC	32	(5)

(4) Reference the Parts Information Table and use the valve body kit part number as the Primary Failed Part.

(5) Reference the current Nissan Warranty Flat Rate Manual and use the indicated flat rate time.