

# SERVICE BULLETIN

Classification:	Reference:	Date:
AT15-003b	NTB15-037b	February 3, 2017

# VERSA AND SENTRA; CVT VALVE BODY REPLACEMENT WITH CONFIRMED DTC

This bulletin has been amended to update the Applied Vehicles and Parts Information.

Please discard the previous versions of this bulletin.

**APPLIED VEHICLES:** 2012 – 2016 Versa Sedan (N17)

2014 - 2016 Versa Note (E12)

2013 - 2016 Sentra (B17)

**APPLIED TRANSMISSION: CVT** 

#### IF YOU CONFIRM

 If one or more of the DTCs listed in Table A on page 2 are present in the Transmission Control Module (TCM).

# And

No other DTCs are present other than what are in Table A.

#### And

 The diagnostic procedures in the Electronic Service Manual (ESM) for each DTC in Table A, that is present in the TCM, has been performed and indicates that the CVT assembly must be replaced.

NOTE: Do not replace CVT.

### **ACTION**

Replace the CVT valve body assembly (control valve) with a unit from Parts Information using the Service Procedure starting on page 3.

**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.

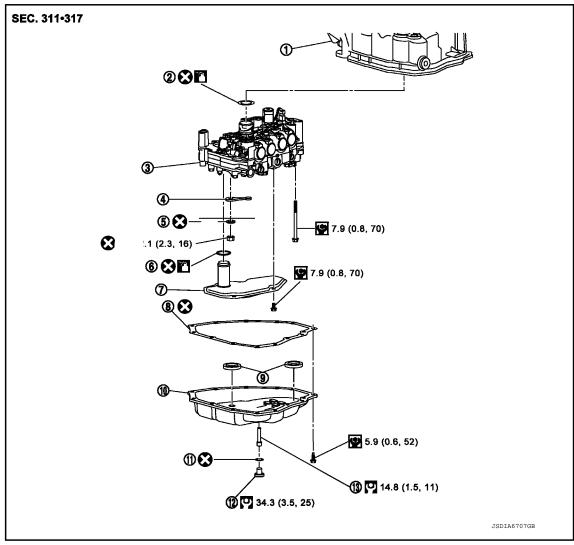
# Table A

DTC CODE	DTC/CIRCUIT DIAGNOSIS
P0711	TRANSMISSION FLUID TEMPERATURE SENSOR A
P0712	TRANSMISSION FLUID TEMPERATURE SENSOR A
P0713	TRANSMISSION FLUID TEMPERATURE SENSOR A
P0740	TORQUE CONVERTER
P0743	TORQUE CONVERTER
P0846	TRANSMISSION FLUID PRESSURE SEN/SW B
P0847	TRANSMISSION FLUID PRESSURE SEN/SW B
P0848	TRANSMISSION FLUID PRESSURE SEN/SW B
P0962	PRESSURE CONTROL SOLENOID A
P0963	PRESSURE CONTROL SOLENOID A
P0998	SHIFT SOLENOID F
P0999	SHIFT SOLENOID F
P0966	PRESSURE CONTROL SOLENOID B
P0967	PRESSURE CONTROL SOLENOID B
P099B	SHIFT SOLENOID G
P099C	SHIFT SOLENOID G

# **SERVICE PROCEDURE**

# OIL PAN, CONTROL VALVE

# **Exploded View**



O-ring

Washer

Oil pan gasket

11. Drain plug gasket

5.

- Transaxle assembly
- Manual plate 4.
- 7. Strainer
- 10. Oil pan
- 13. Overflow tube
- : Apply petroleum jelly
- : Always replace after every disassembly.
- : Apply CVT fluid
- : N·m (kg-m, ft-lb)
- : N·m (kg-m, in-lb.)

# Removal and Installation

# **REMOVAL**

- Disconnect battery negative terminal.
- Remove engine under cover.

Control valve

6. O-ring

9. Magnet

12. Drain plug

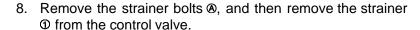
- 3. Disconnect the CVT unit harness connector.
- 4. Remove the drain plug and overflow tube, and then drain the CVT fluid. **CAUTION:**

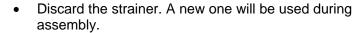
Use caution when looking into the drain hole as there is the risk of fluid entering the eye.

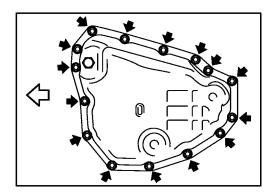
- 5. Remove the drain plug gasket from the drain plug.
- 6. Remove the oil pan mounting bolts (←), and then remove the oil pan and oil pan gasket.

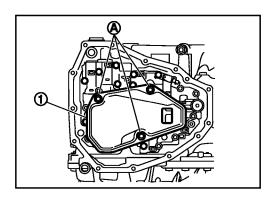
: Vehicle front

- 7. Remove the magnets from the oil pan.
  - · Clean magnets.
  - Clean CVT oil pan.
  - Reinstall magnets to the oil pan.









9. Remove the nut @ and washer @, and then remove manual plate ①.

# **CAUTION:**

To remove nut, fix manual plate with flat-blade screwdriver (B).

10. Press the CVT unit harness connector into the transaxle case.

# **CAUTION:**

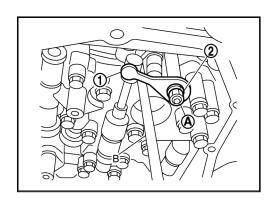
Never damage the CVT unit harness connector. NOTE:

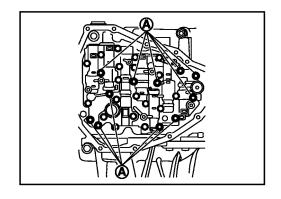
Clean around the CVT unit harness connector to prevent foreign materials from entering into the transaxle case.

11. Remove the control valve bolts **(a)**, and then remove the control valve from the transaxle case.

#### **CAUTION:**

Never drop the control valve and manual valve.



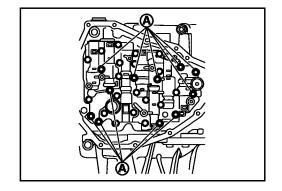


#### **INSTALLATION**

Install the control valve, and then tighten control valve bolts
 to the specified torque.

#### **CAUTION:**

- Never pinch the harness between the control valve and the transaxle case.
- Never drop the control valve and manual valve.

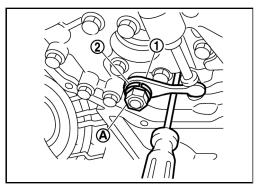


2. Install the manual plate ① and washer ②, and then tighten nut ② to the specified torque.

#### **CAUTION:**

To tighten nut, fix manual plate with flat-blade screwdriver.

- Reassembly Torque: 22.1 N•m (2.3 kg-m, **16 ft-lb**)
- 3. Install the new strainer ①, and then tighten the strainer bolts② to the specified torque.

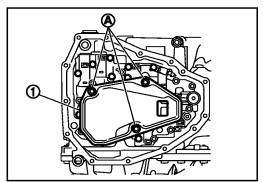


4. Install oil pan (with oil pan gasket) to transaxle case and temporarily tighten oil pan bolts (←).

#### **CAUTION:**

Never reuse oil pan gasket.

: Vehicle front



5. Tighten the oil pan bolts to specification in the order shown.

: Vehicle front

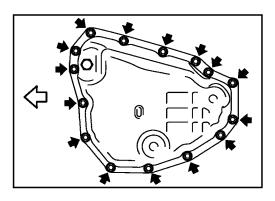
6. Tighten the overflow tube to the specified torque. **CAUTION:** 

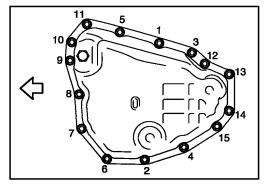
If it is not tightened to the specified torque, the tube may be damaged.

- 7. Connect the CVT unit harness connector.
- 8. Connect battery negative terminal.
- 9. Fill with CVT fluid from overflow tube to the specified level. Refer to ESM for further information.
- 10. Install the drain plug and drain plug gasket to oil pan. **CAUTION:**

Never reuse drain plug gasket.

11. Reinstall engine under cover.





# Inspection and Adjustment

#### INSPECTION AFTER INSTALLATION

- When replacing control valve, perform "ADDITIONAL SERVICE WHEN REPLACING CONTROL VALVE OR TRANSAXLE ASSEMBLY". Refer to ESM for further information.
- Check the CVT fluid level, condition and signs of leakage.

# NOTE: Before performing Clutch Touch Point Learning.

- Erase memory data.
- Refer to the ESM, section **TM Transaxle & Transmission** for further information.

#### **CLUTCH TOUCH POINT LEARNING**

**CAUTION:** If clutch touch point learning is not performed, you may feel shift shock when the auxiliary transmission shifts.

#### **Line Pressure Sensor learning**

Set the parking brake, turn OFF the A/C, and then bring the engine to normal operating temperature range.

- CVT fluid temperature over 122°F (50°C).
- 1. Start engine.
- 2. Shut OFF engine.
- 3. Wait for 30 seconds.
- 4. Repeat steps 1-3 two more times, and then proceed to **Learning of Clutch pressure**.

#### Clutch Pressure Learning (Vehicle with Neutral idle; 2012 Versa Sedan only)

- 1. Start engine.
- 2. Shift the CVT into P or N and allow the engine to idle for 1 min.
- 3. Shift the CVT into D, drive the vehicle to over 6 mph (10 km/h), and then stop vehicle (when safe) and allow it to idle for 30 seconds.

Repeat step 3 one more time and then proceed to step 4.

- 4. Turn OFF engine.
- 5. Start engine.
- 6. Accelerate the vehicle from a stop to 28 mph (0 km/h to 45 km/h) at low throttle (5-10 deg) and then stop vehicle (when safe).
- 7. Shut OFF engine.
- 8. Repeat steps 5-7 four more times.

#### Clutch Pressure Learning (Vehicle without Neutral idle; all other applied vehicles)

- 1. Start engine.
- 2. Shift the CVT into P or N and allow the engine to idle for 1 min.
- 3. Shift the CVT into D and accelerate the vehicle from a stop to 40 mph (0 km/h to 65 km/h) at low throttle (5-10 deg).
- 4. Release the throttle and coast down to 18 mph (30 kp/h) or less and then brake to a stop.
- 5. When at a complete stop turn the engine OFF.
- 6. Repeat steps 3-5 four more times.

# PARTS INFORMATION

DESCRIPTION		PART#	QUANTITY	
VALVE ASSY-CONT (Control Valve)	13-16MY Sentra (B17)	31705 - X429B	1	
	12MY Versa Sedan (N17)	31705 - 3JX8A		
	13-16MY Versa Sedan (N17)	31705 - X429C		
	13-16MY Versa Note (E12)	31705 - X429C		
STRAINER ASSY-OIL		31728 - 3XX0A	1	
GASKET (CVT drain plug)		11026 - 31X00	1	
GASKET-OIL PAN		31397 - 3JX0A	1	
NS-3 CVT Fluid (All vehicles listed above <b>except</b> 12MY Versa Sdn)		999MP - NS300P (1)	as needed	
NS-2 CVT Fluid (12MY Versa Sedan <b>only</b> )		999MP - NS200P (1)	as needed	

<sup>(1)</sup> NS-2 and NS-3 CVT Fluids can be ordered from the Maintenance Advantage website that can be accessed through <a href="https://www.nnanet.com">www.nnanet.com</a> (NNANET.COM, Parts & Service, Maintenance Advantage-Tire/Wiper/Battery/Chemical).

#### **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	(2)	НС	32	(3)

- (2) Reference the Parts Information Table and use the applicable Control Valve Assembly Part Number as the Primary Failed Part
- (3) Reference the current Nissan Warranty Flat Rate Manual and use the indicated flat rate time.