

## 20. Control Valve Body

### A: REMOVAL

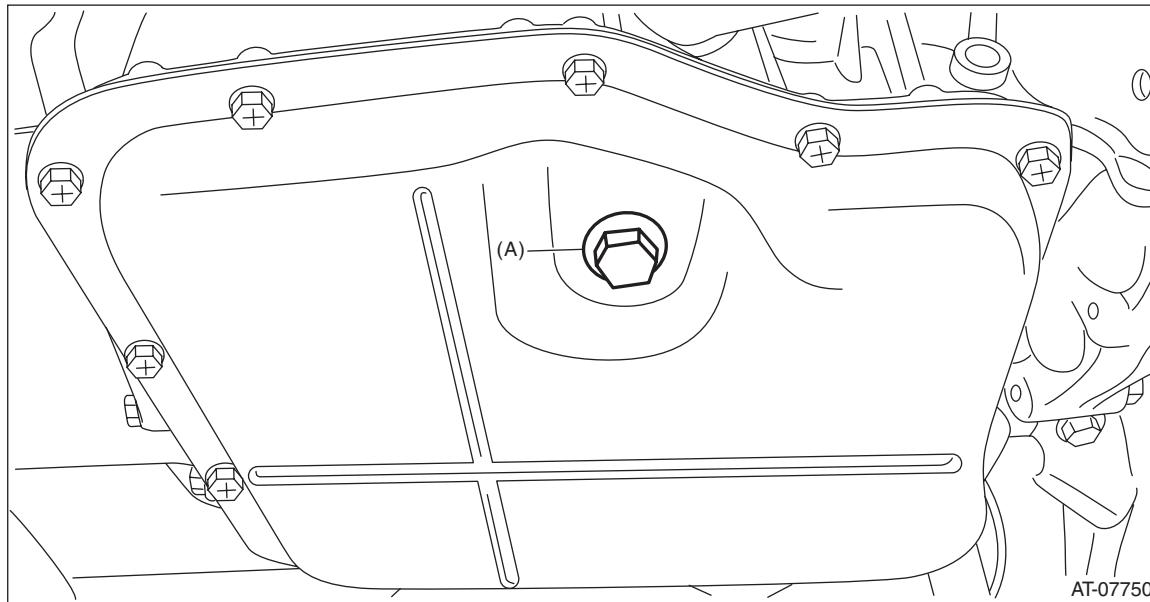
**CAUTION:**

- Directly after the vehicle has been running or the engine has been idling for a long time, the CVTF is hot. Be careful not to burn yourself.
- Be careful not to spill CVTF on the exhaust pipe to prevent it from emitting smoke or causing a fire. If the CVTF adheres, wipe it off completely.

**NOTE:**

The control valve body is replaced as an assembly only, because it is a non-disassembly part.

- 1) Disconnect the ground cable from battery.
- 2) Lift up the vehicle.
- 3) Clean the transmission exterior.
- 4) Remove the CVTF drain plug to drain CVTF.



(A) CVTF drain plug

- 5) Install the CVTF drain plug.

**NOTE:**

Use a new gasket.

***Tightening torque:***

***39.2 N·m (4.0 kgf·m, 28.9 ft-lb)***

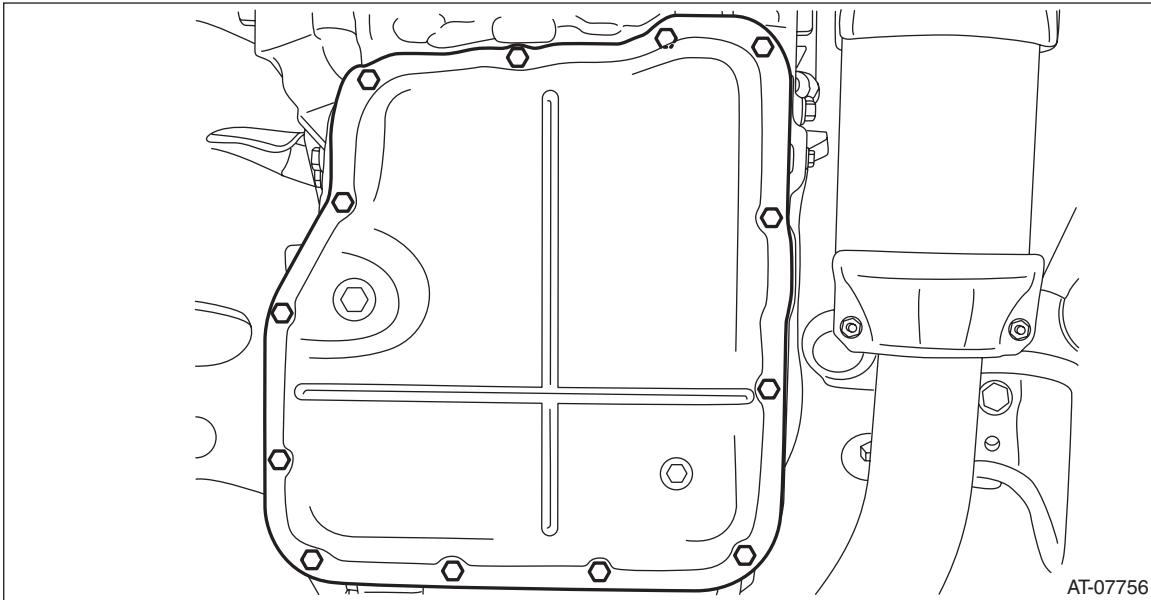
## Control Valve Body

### CONTINUOUSLY VARIABLE TRANSMISSION

6) Remove the oil pan.

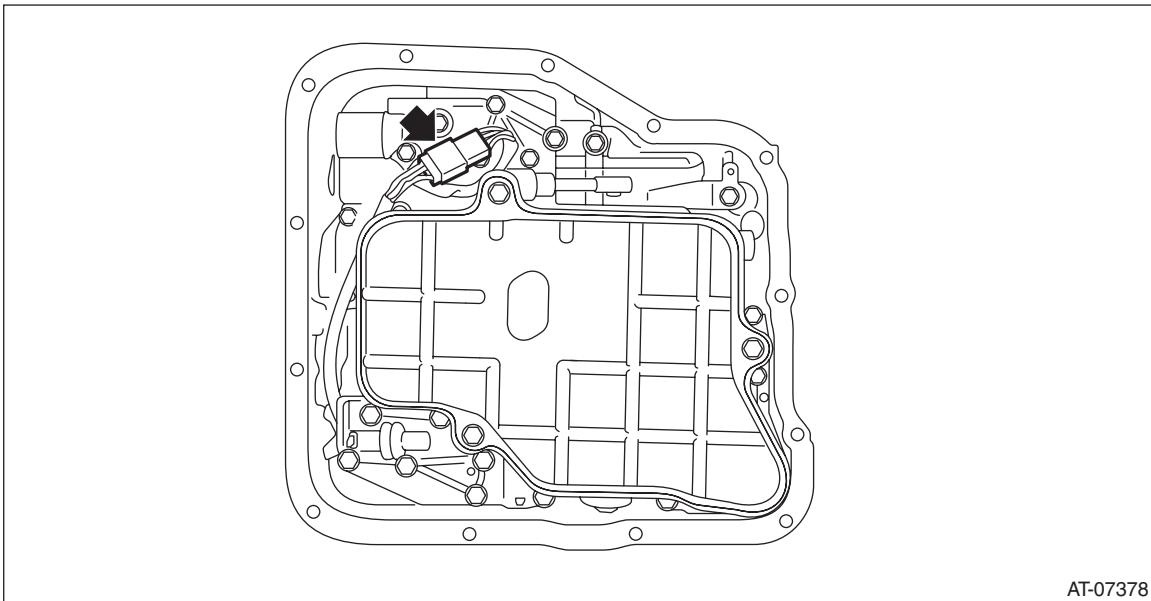
**CAUTION:**

Be careful not to allow foreign matter such as dust or dirt to enter the oil pan.



7) Remove the magnet.

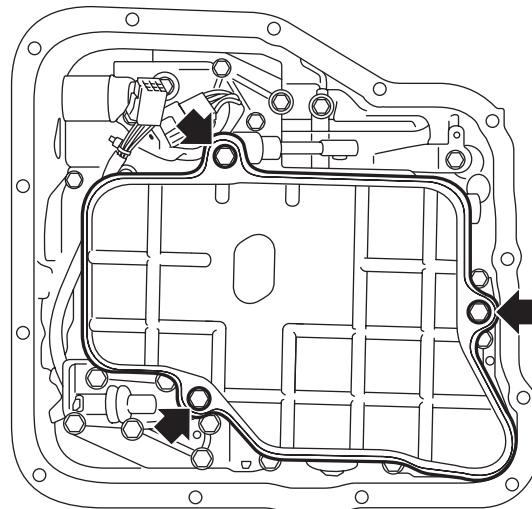
8) Disconnect the control valve harness connector.



# Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

- 9) Remove the oil strainer.

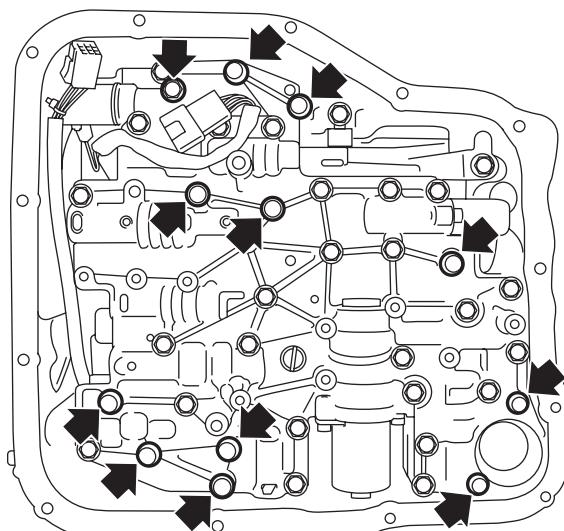


AT-07379

- 10) Remove the control valve body.

**CAUTION:**

**Do not let the manual valve drop off.**



AT-05166

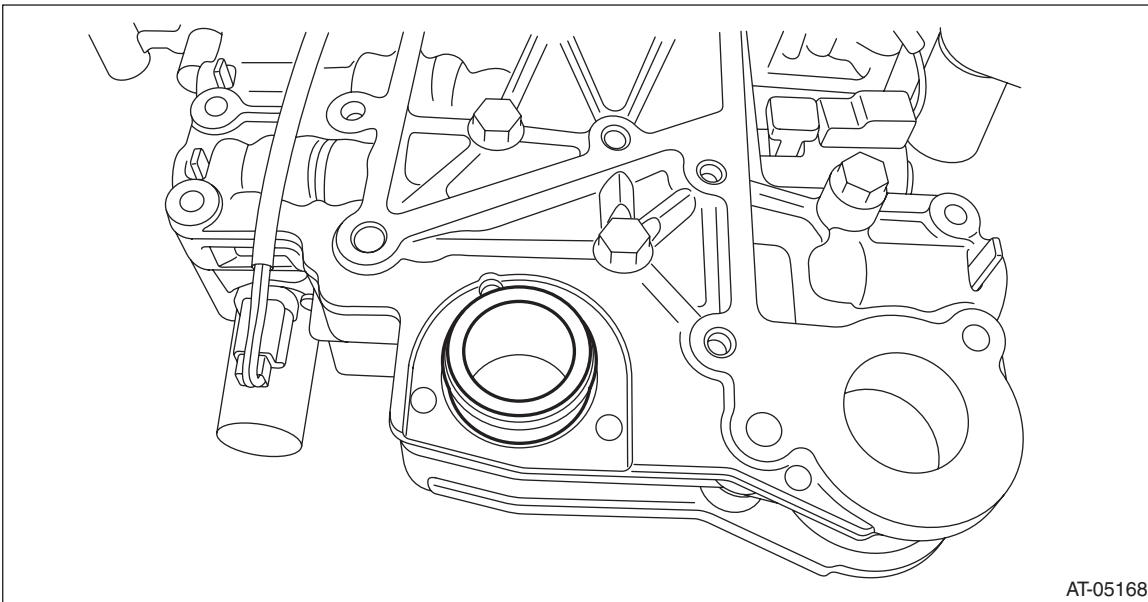
## Control Valve Body

### CONTINUOUSLY VARIABLE TRANSMISSION

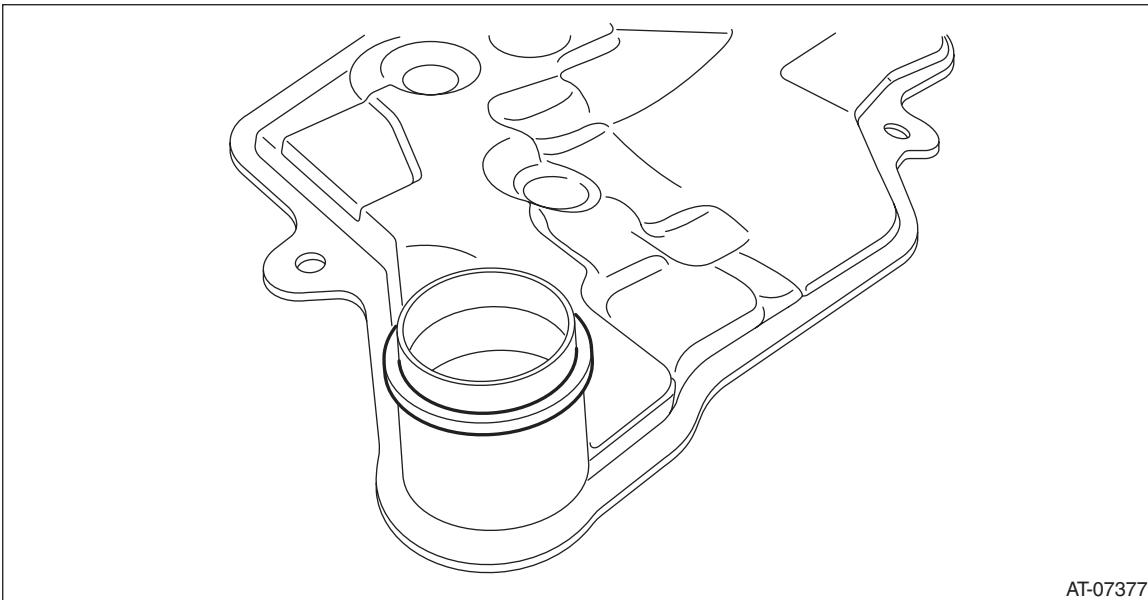
11) Remove the pressure pipe.

NOTE:

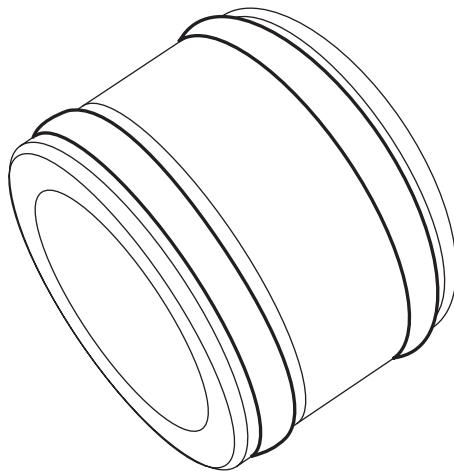
It may be located in transmission case side.



12) Remove the O-ring from oil strainer.



- 13) Remove the O-ring from pressure pipe.



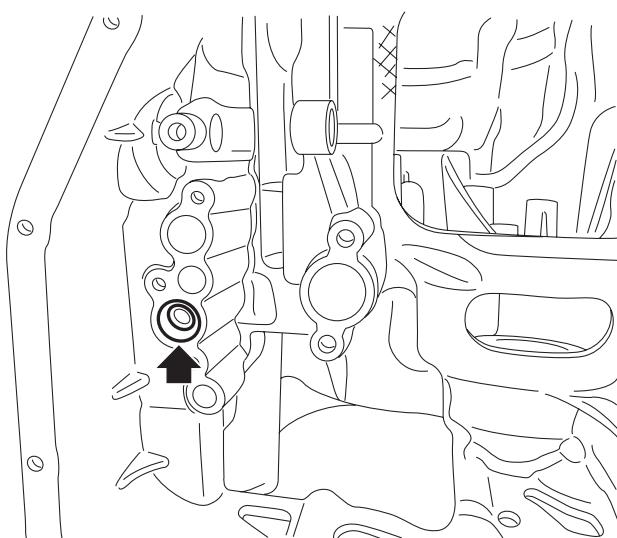
AT-05190

## B: INSTALLATION

- 1) Clean the mating surface of oil pan and transmission case.
- 2) Make sure that the CVTF filter is installed to the transmission case.

### NOTE:

Make sure that the CVTF filter does not protrude from the transmission case.



CVT00582

- 3) Check the control valve body for dust and other foreign matter.

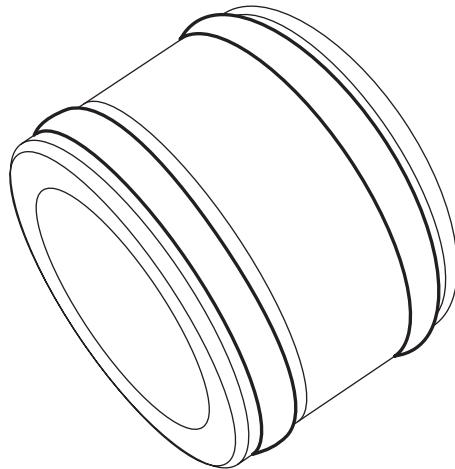
## Control Valve Body

### CONTINUOUSLY VARIABLE TRANSMISSION

4) Install the O-ring to the pressure pipe.

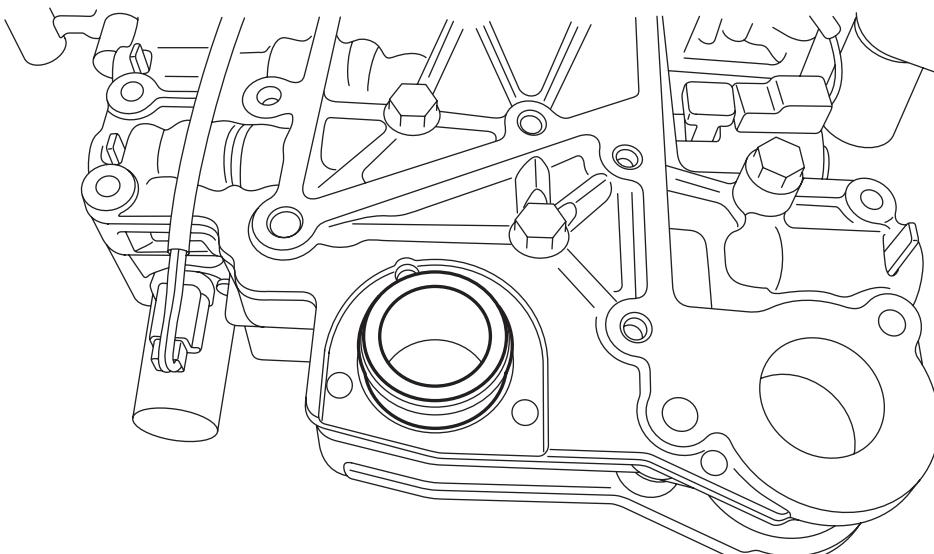
NOTE:

- Use new O-rings.
- Apply CVTF to the O-rings.



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5) Install the pressure pipe.



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# Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

6) Install the control valve body to the transmission.

**CAUTION:**

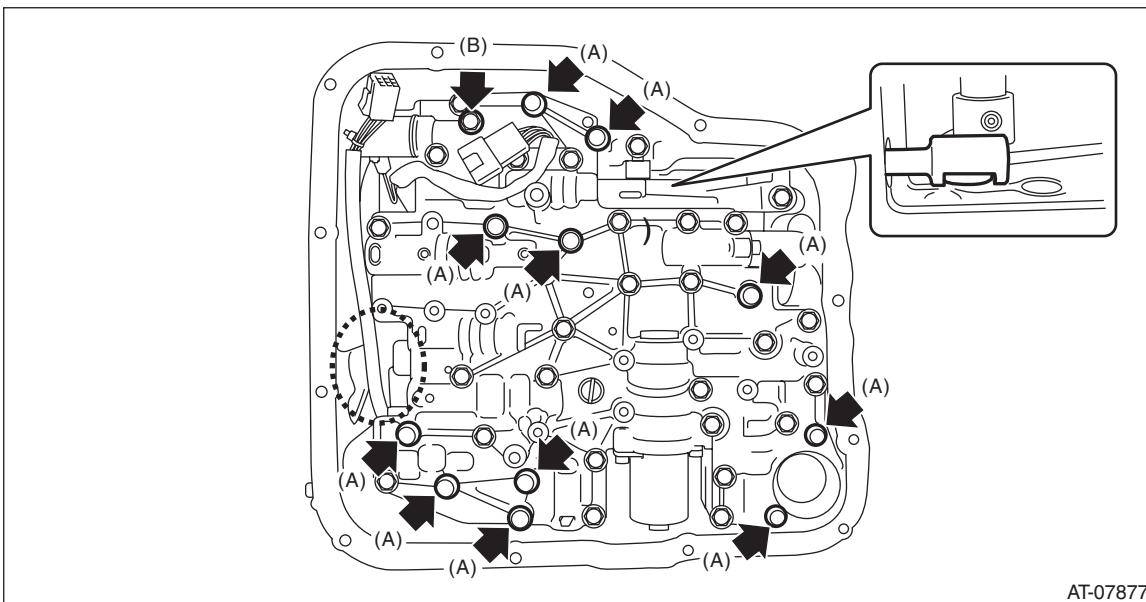
- Beware of the transmission harness getting caught in between.
- Do not impact or bend the transmission harness because it has the oil temperature sensor inside.

NOTE:

- Engage the manual valve to the manual plate.
- Lead the transmission harness through from the point indicated by dashed line in the figure.

**Tightening torque:**

9 N·m (0.9 kgf·m, 6.6 ft-lb)



(A) Short bolt (11 pcs)

(B) Long bolt (1 pc)

## Control Valve Body

### CONTINUOUSLY VARIABLE TRANSMISSION

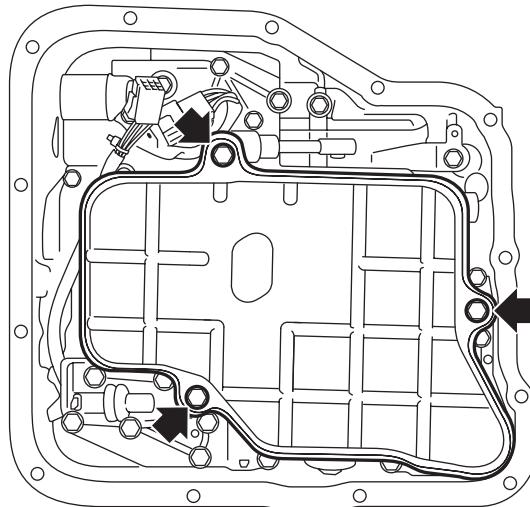
7) Install the O-ring to oil strainer and install the oil strainer.

NOTE:

- Use new O-rings.
- Apply CVTF to the O-rings.
- Let the transmission harness run between control valve body and oil strainer.

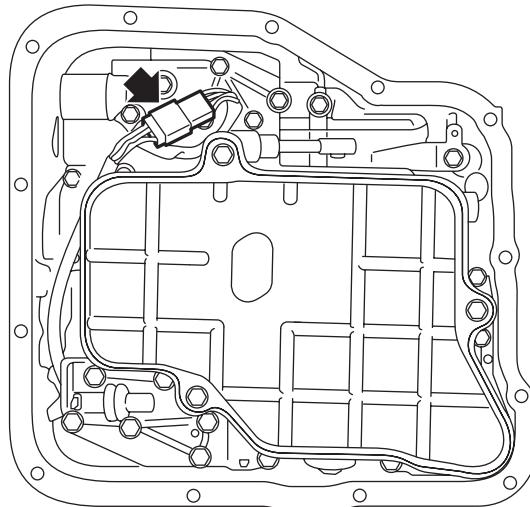
**Tightening torque:**

**9 N·m (0.9 kgf·m, 6.6 ft-lb)**



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8) Connect the control valve harness connector.



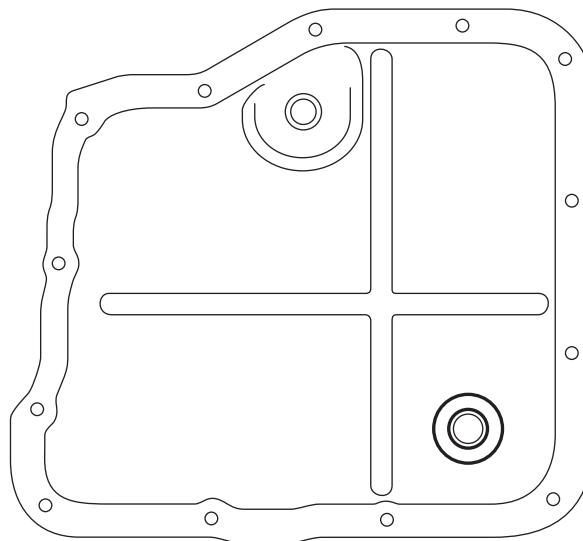
AT-07378

9) Clean the magnet.

# Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

- 10) Attach the magnet at the specified position of the oil pan.

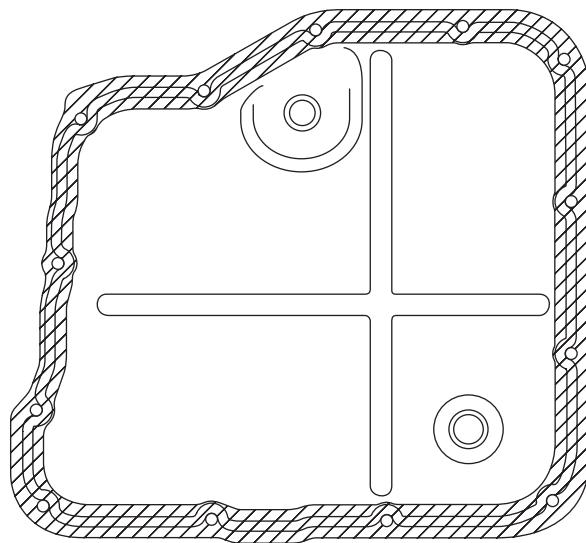


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- 11) Apply liquid gasket all around the oil pan mating surface seamlessly.

**Liquid gasket:**

**THREE BOND 1217B (Part No. K0877YA020) or equivalent**



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## Control Valve Body

### CONTINUOUSLY VARIABLE TRANSMISSION

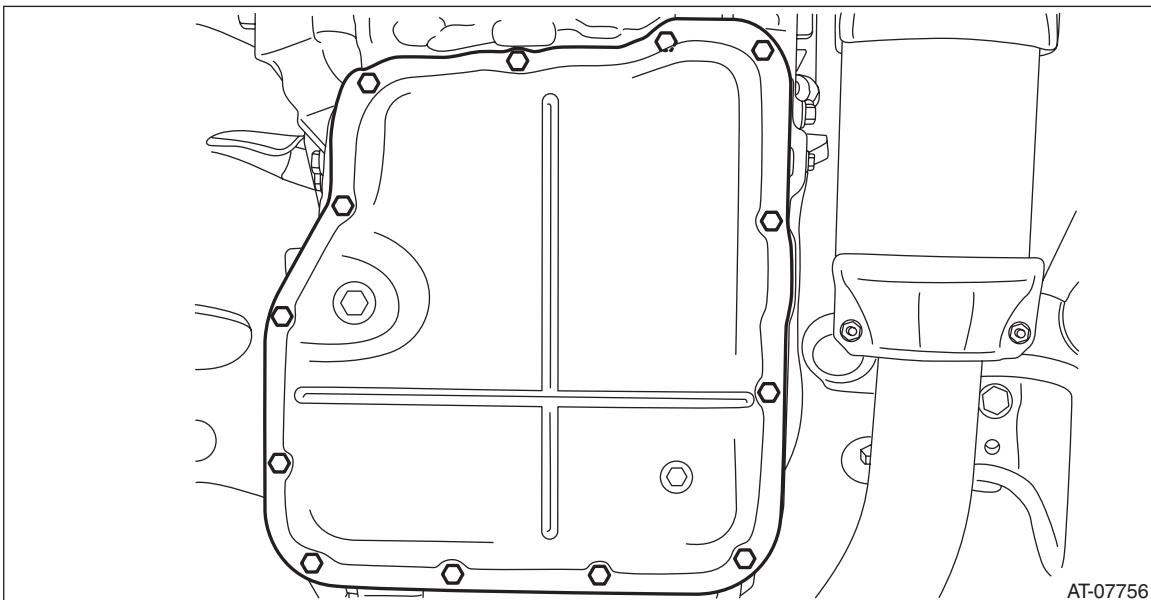
- 12) Install the oil pan by equally tightening the bolts.

**CAUTION:**

Beware of the transmission harness getting caught in between.

**Tightening torque:**

5 N·m (0.5 kgf-m, 3.7 ft-lb)



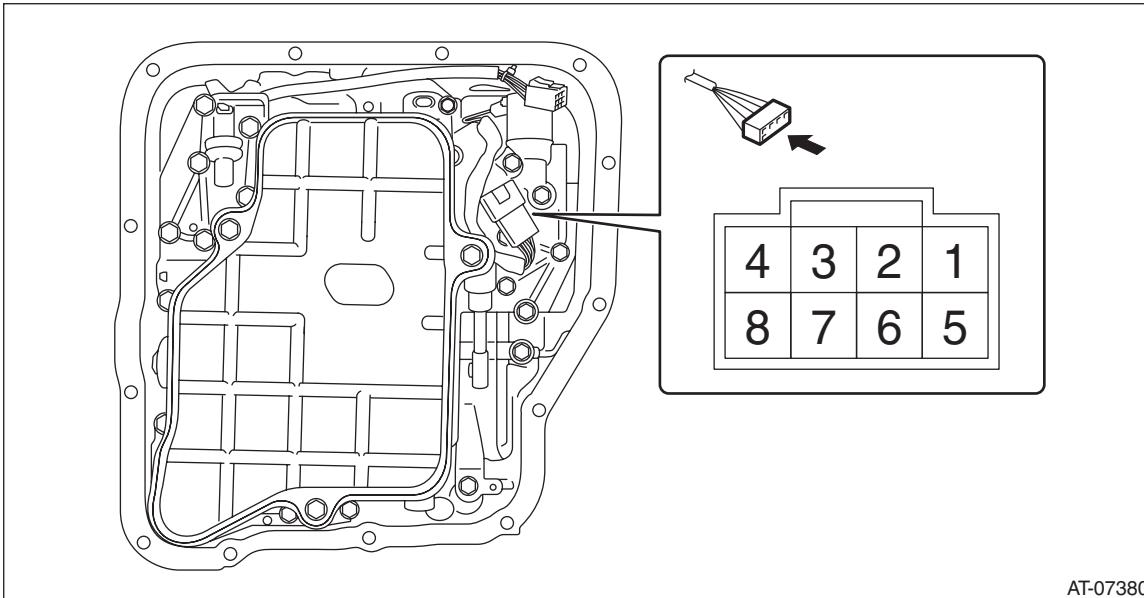
- 13) Connect the battery ground terminal.
- 14) Fill with CVTF.<Ref. to CVT(TR690)-38, REPLACEMENT, CVTF.>
- 15) Adjust the CVTF level.<Ref. to CVT(TR690)-36, ADJUSTMENT, CVTF.>
- 16) Perform the operation of AT learning mode.<Ref. to CVT(diag)-30, Learning Control.>

### C: INSPECTION

- Check each part for damage or dust.
- Check oil strainer for clogging.
- Measure the resistance of each solenoid.

#### NOTE:

Measurement should be performed at a temperature of 20°C (68°F).



AT-07380

Solenoid	Terminal No.	Standard (Ω)
Secondary solenoid	No. 1 — control valve body	Approx. 6.6 Ω
Lock-up duty solenoid	No. 2 — control valve body	Approx. 12 Ω
F&R solenoid	No. 3 — control valve body	Approx. 5.3 Ω
Lock-up ON/OFF solenoid	No. 5 — control valve body	Approx. 16 Ω
Primary DOWN solenoid	No. 6 — control valve body	Approx. 12 Ω
Primary UP solenoid	No. 7 — control valve body	Approx. 12 Ω
AWD solenoid	No. 8 — control valve body	Approx. 3.2 Ω