

# Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

## 20. Control Valve Body

### A: REMOVAL

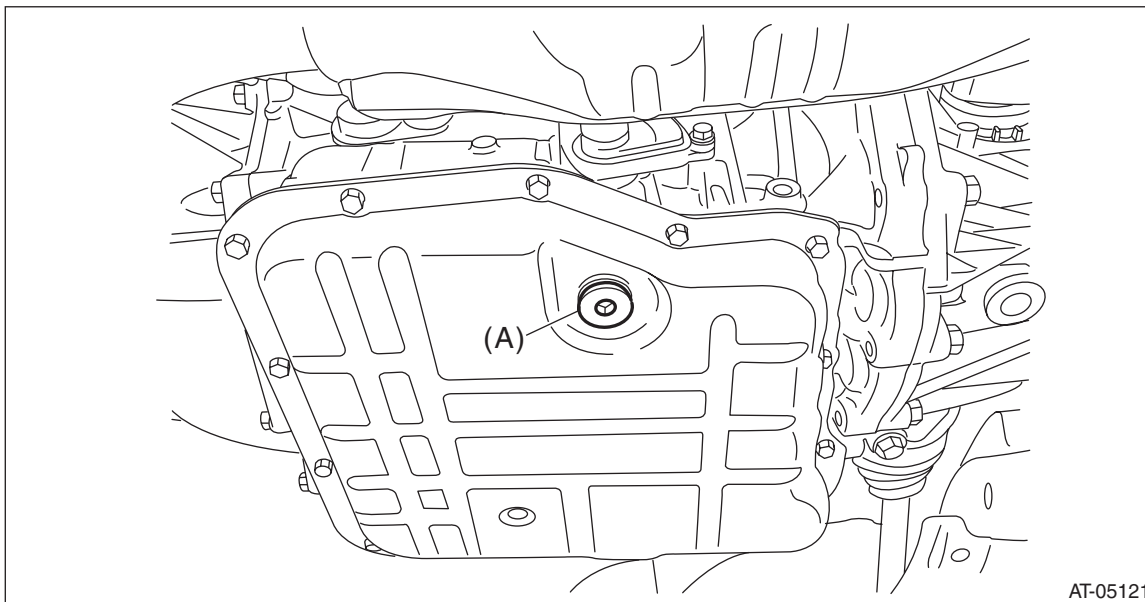
#### CAUTION:

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

#### NOTE:

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

- 1) Lift up the vehicle.
- 2) Clean the transmission exterior.
- 3) Remove the CVTF drain plug to drain CVTF.



(A) CVTF drain plug

- 4) Install the CVTF drain plug.

#### NOTE:

Use a new gasket.

#### **Tightening torque:**

**20 N·m (2.1 kgf·m, 14.8 ft·lb)**

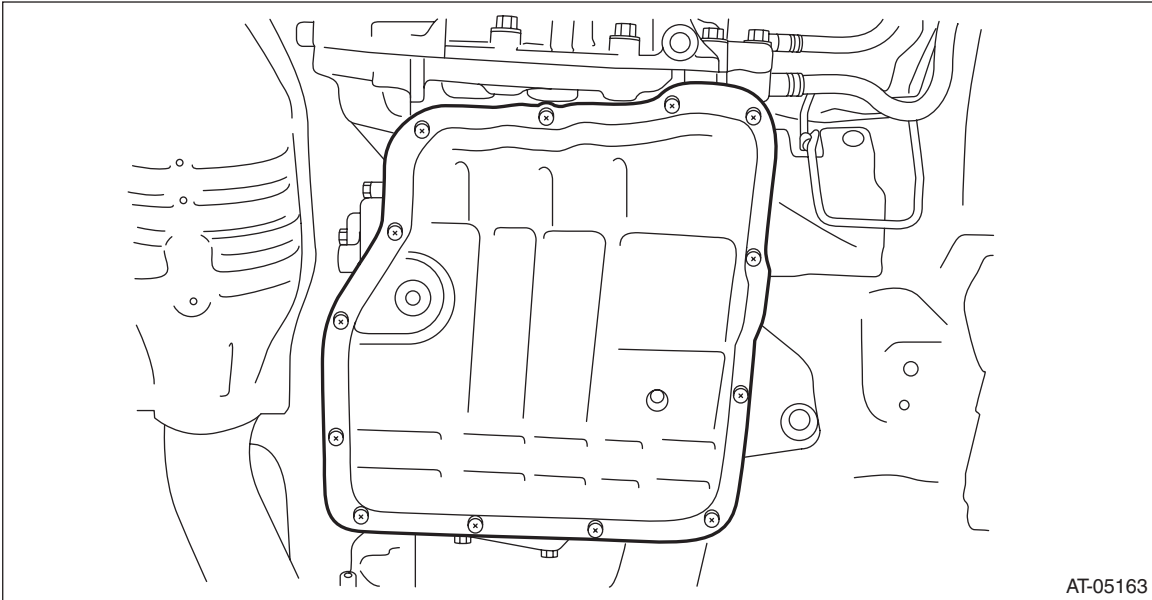
# Control Valve Body

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5) Remove the oil pan.

**CAUTION:**

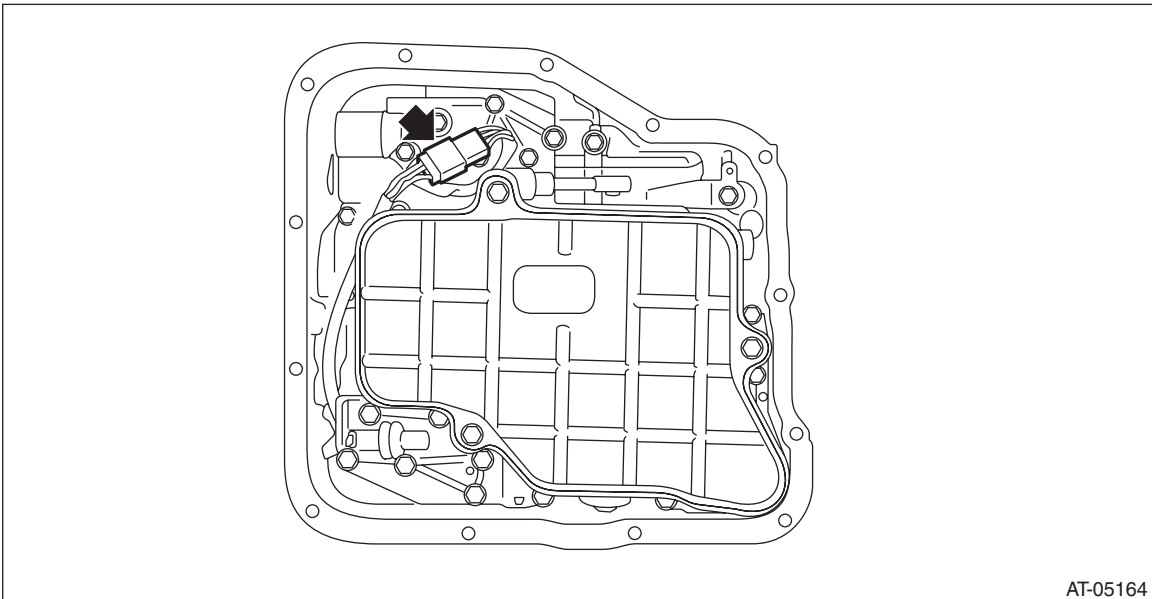
**Be careful not to allow foreign matter such as dust or dirt to enter the oil pan.**



6) Remove the magnet.

7) Completely remove the remaining liquid gasket on the transmission case and oil pan.

8) Disconnect the control valve harness connector.

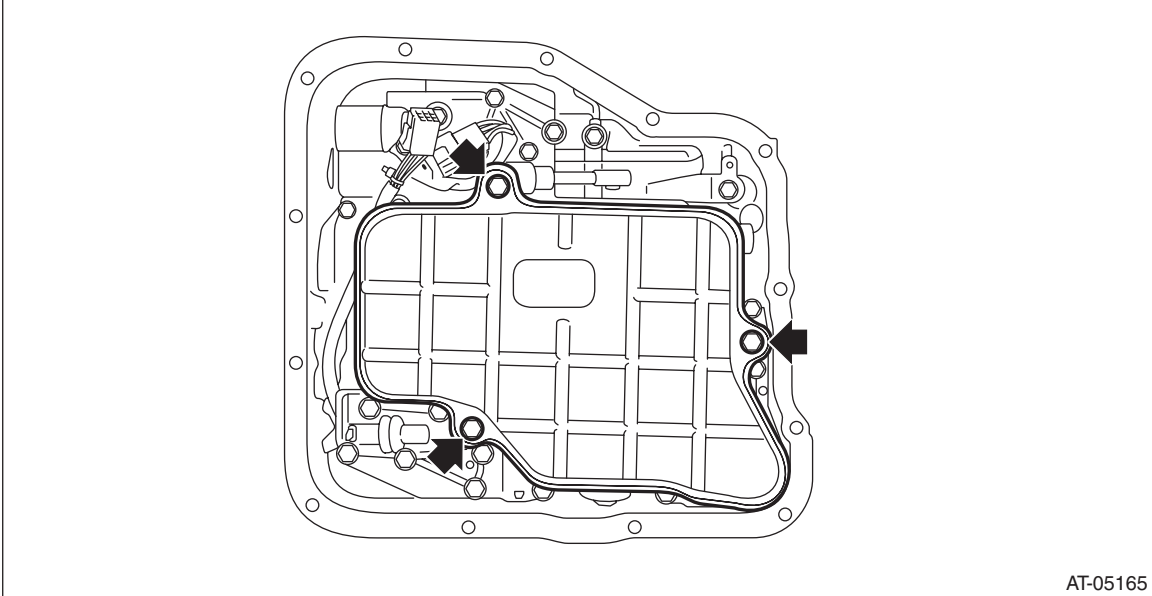


# Control Valve Body

## CONTINUOUSLY VARIABLE TRANSMISSION

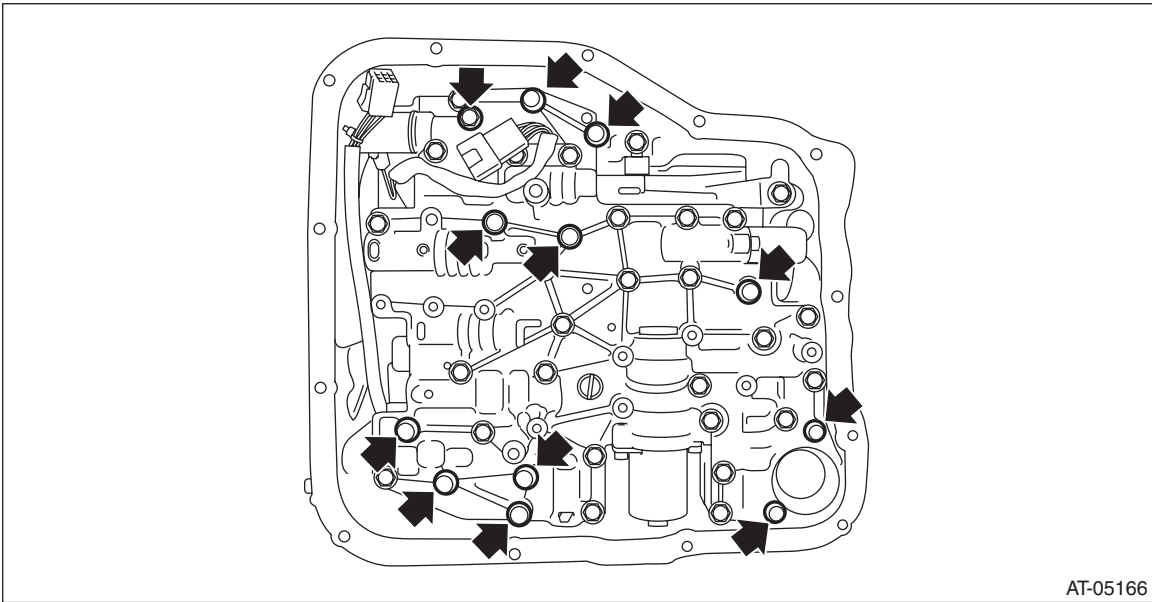
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9) Remove the oil strainer.



10) Remove the control valve body.

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



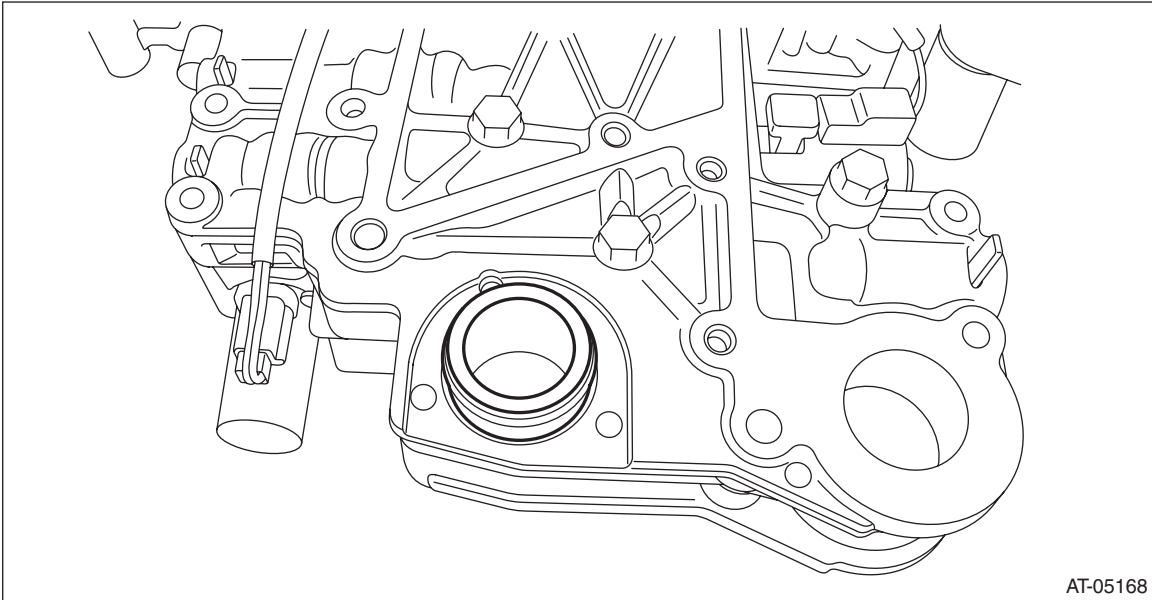
# Control Valve Body

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11) Remove the pressure pipe.

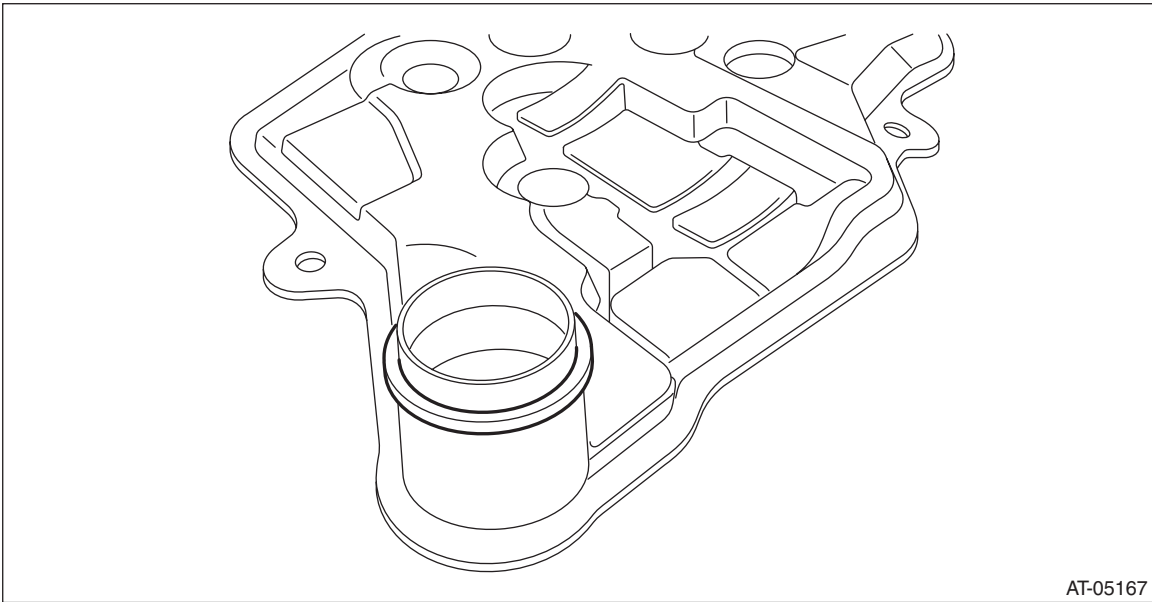
NOTE:

It may be located in transmission case side.



AT-05168

12) Remove the O-ring from oil strainer.



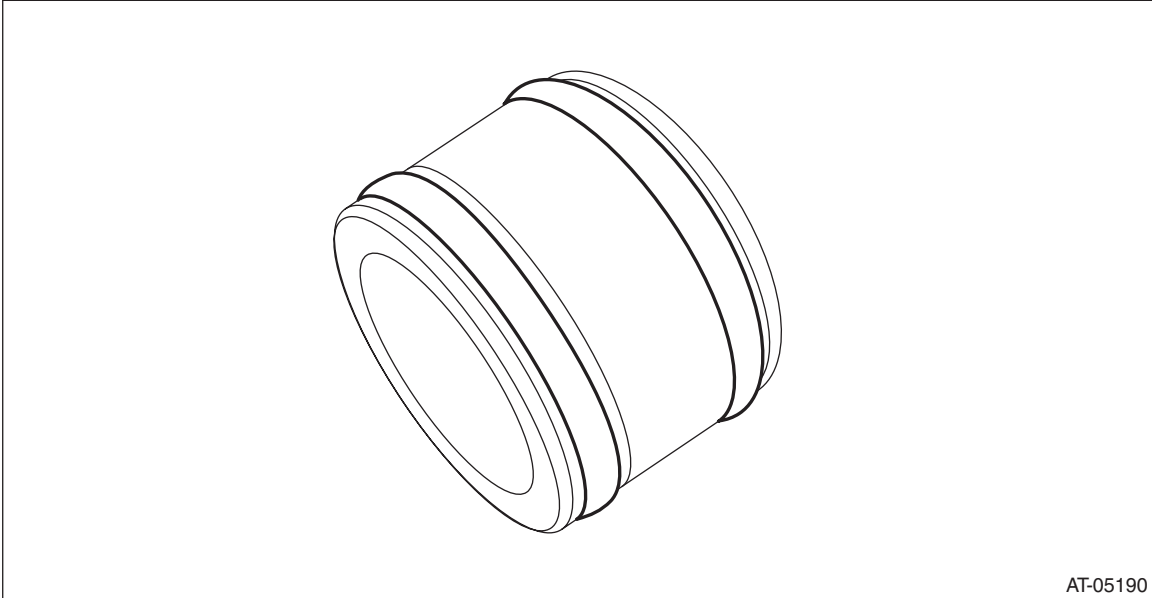
AT-05167

# Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

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13) Remove the O-ring from pressure pipe.



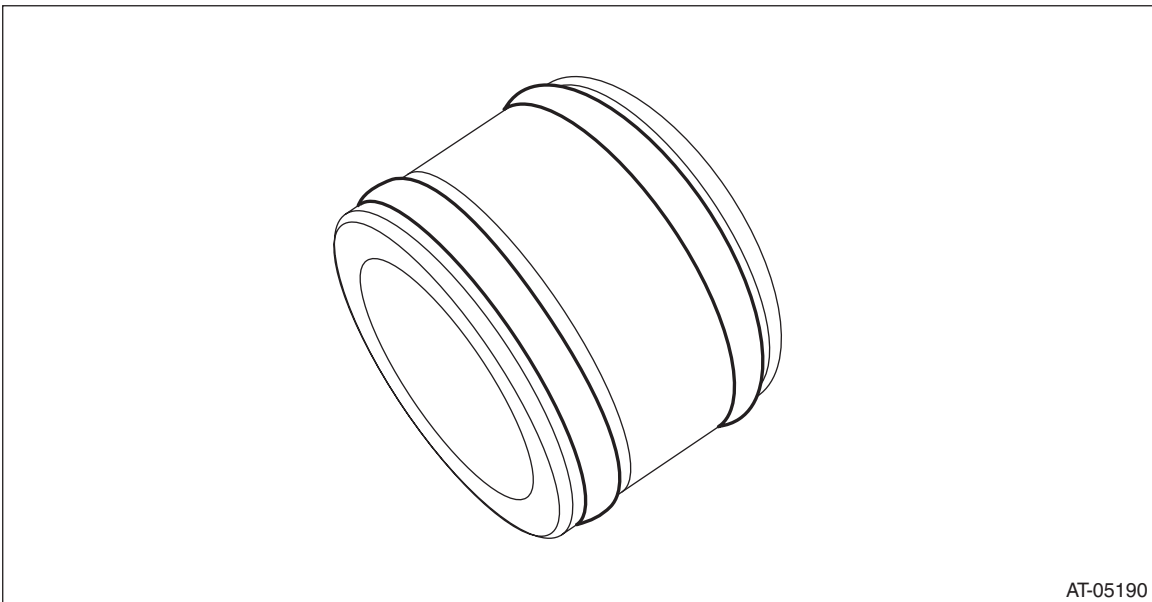
AT-05190

## B: INSTALLATION

- 1) Clean the mating surface of oil pan and transmission case.
- 2) Check the control valve body for dust and other foreign matter.
- 3) Install the O-ring to the pressure pipe.

### NOTE:

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

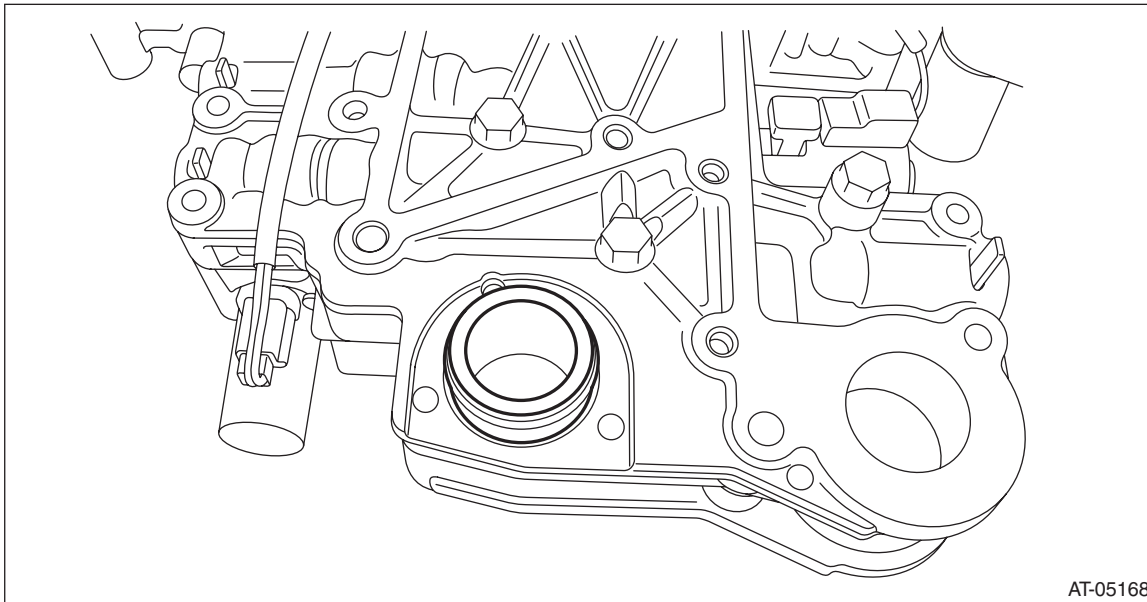


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# Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

4) Install the pressure pipe.



AT-05168

5) Install the control valve body to the transmission.

### CAUTION:

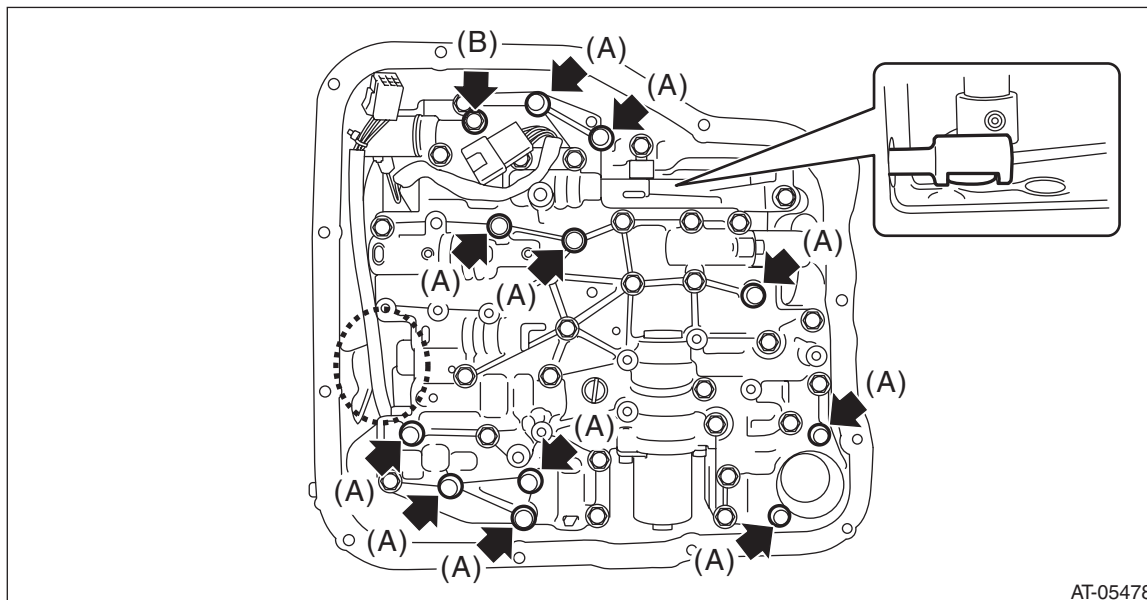
- Beware of the transmission harness getting caught in between.
- Do not impact or bend the transmission harness because it has the oil temperature sensor inside.

### 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)**



AT-05478

(A) Short bolt (11 pcs)

(B) Long bolt (1 pcs)

## Control Valve Body

### CONTINUOUSLY VARIABLE TRANSMISSION

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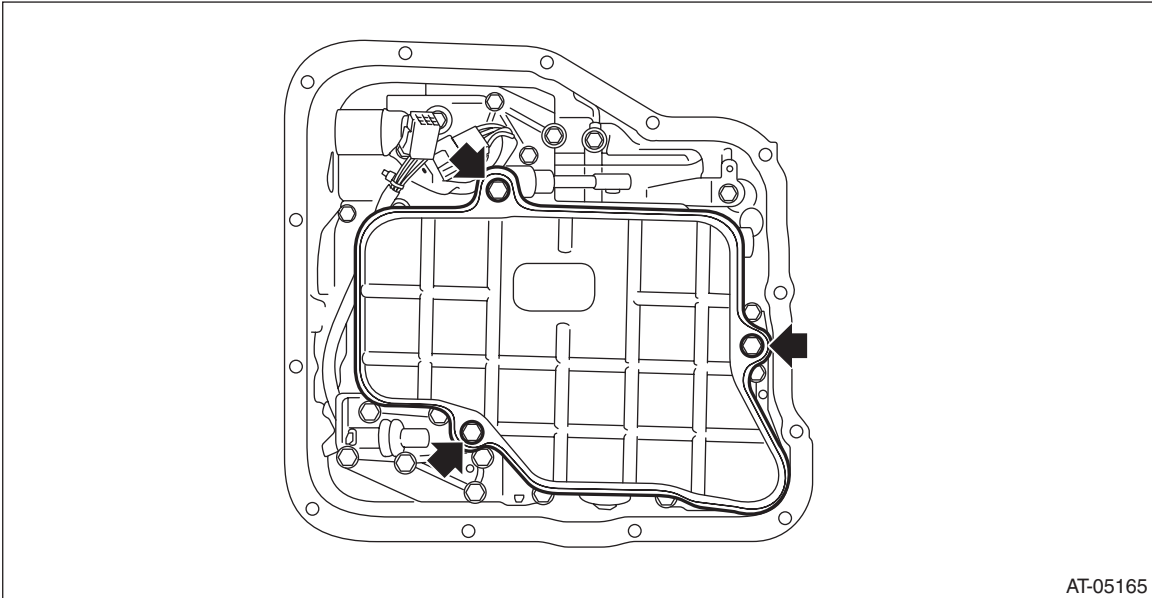
6) Install the O-ring to oil strainer and install the oil strainer.

**NOTE:**

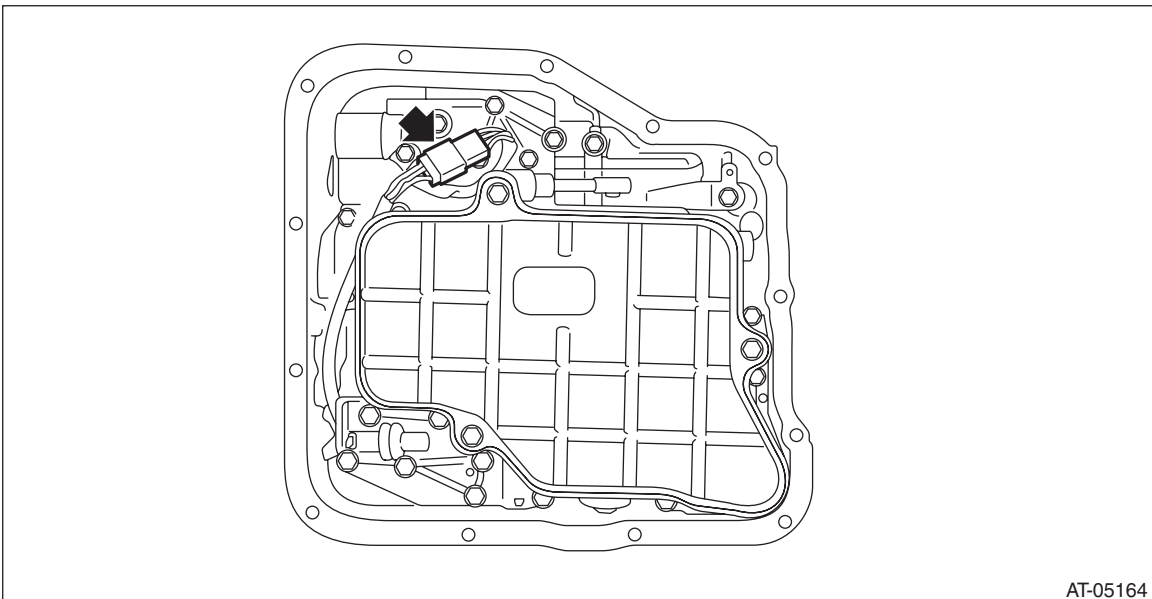
- Use new O-rings.
- Apply CVTF to the O-ring.
- Let the transmission harness run between control valve body and oil strainer.

**Tightening torque:**

**9 N·m (0.9 kgf·m, 6.6 ft·lb)**



7) Connect the control valve harness connector.

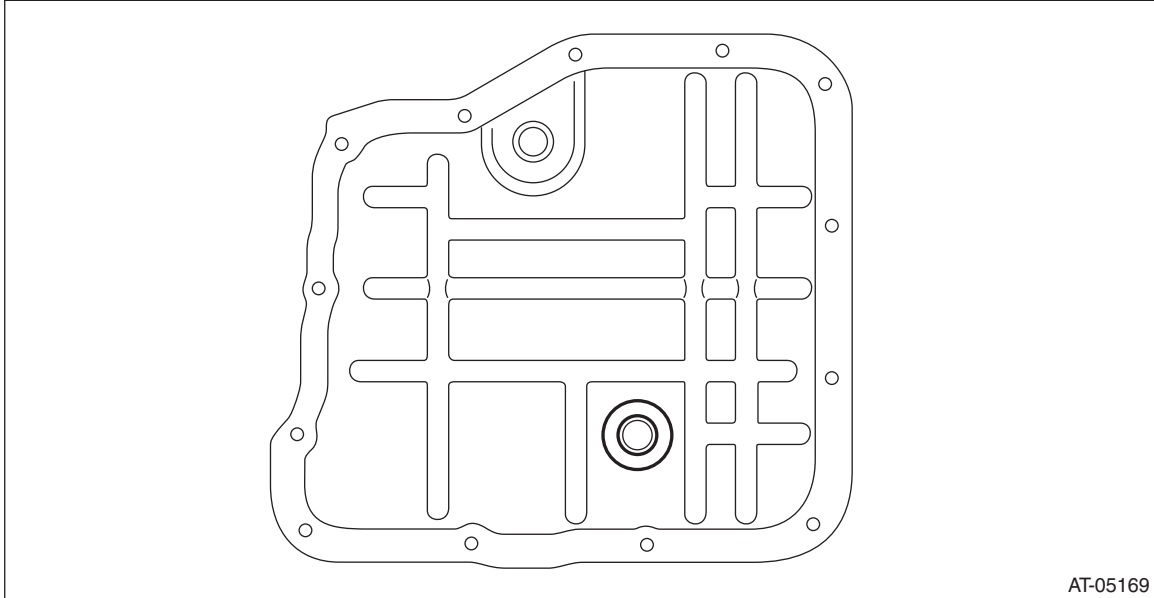


8) Clean the magnet.

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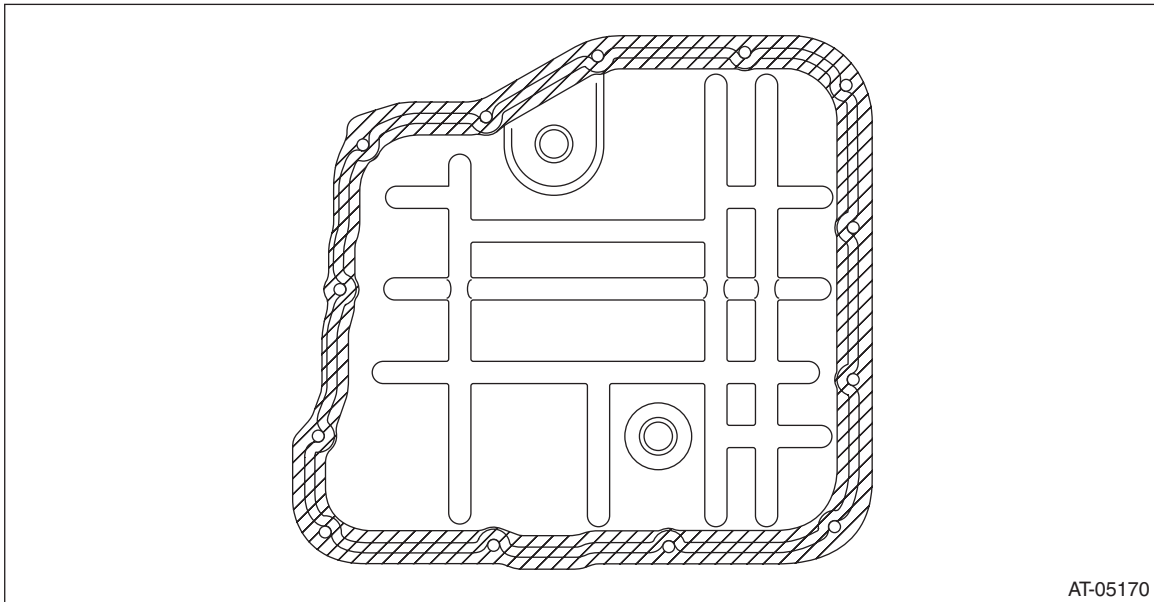
9) Attach the magnet at the specified position of the oil pan.



10) 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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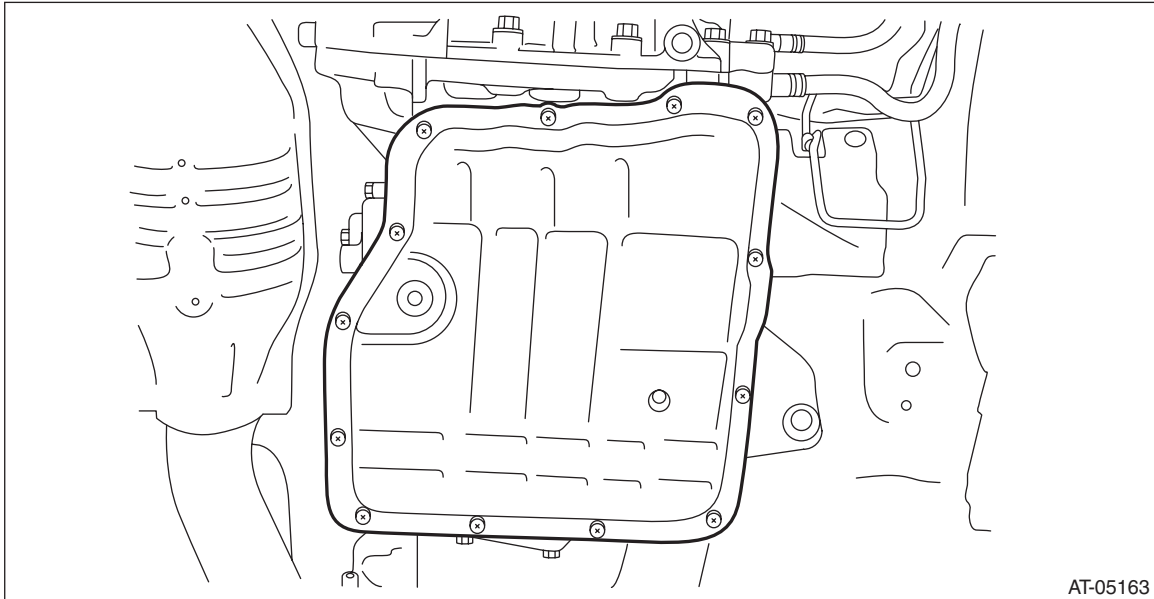
11) Install the oil pan by equally tightening the bolts.

**CAUTION:**

**Beware of the transmission harness getting caught in between.**

*Tightening torque:*

**5 N·m (0.5 kgf·m, 3.7 ft·lb)**



AT-05163

12) Fill with CVTF. <Ref. to CVT-38, REPLACEMENT, CVTF.>

13) Adjust the CVTF level. <Ref. to CVT-37, ADJUSTMENT, CVTF.>

# Control Valve Body

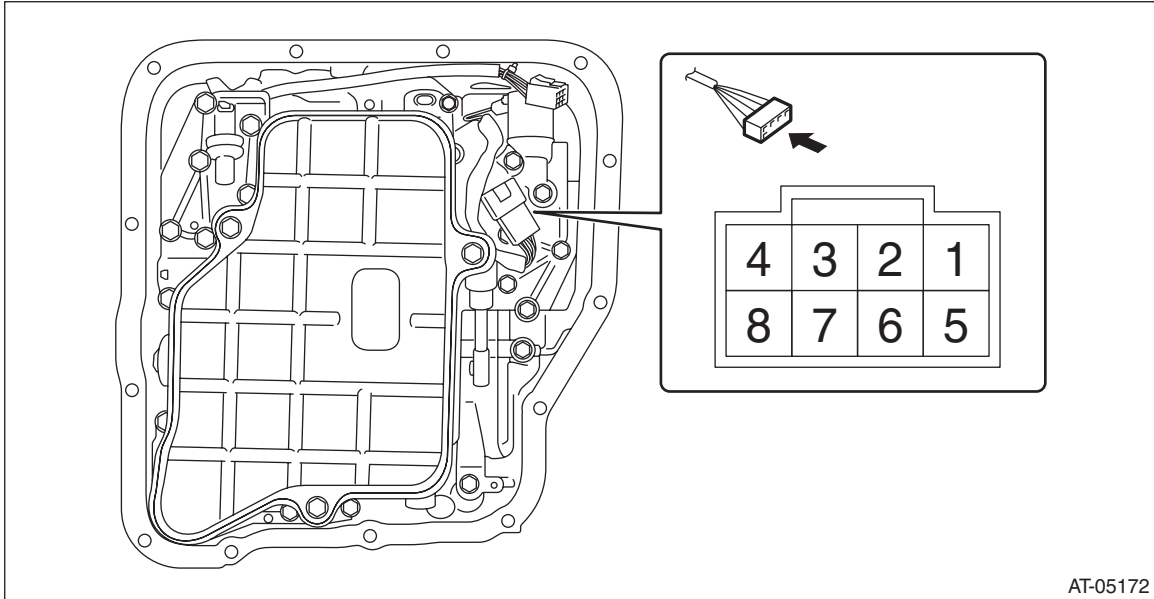
CONTINUOUSLY VARIABLE TRANSMISSION

## 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).



Solenoid	Terminal No.	Specification (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