

20. Control Valve Body

A: REMOVAL

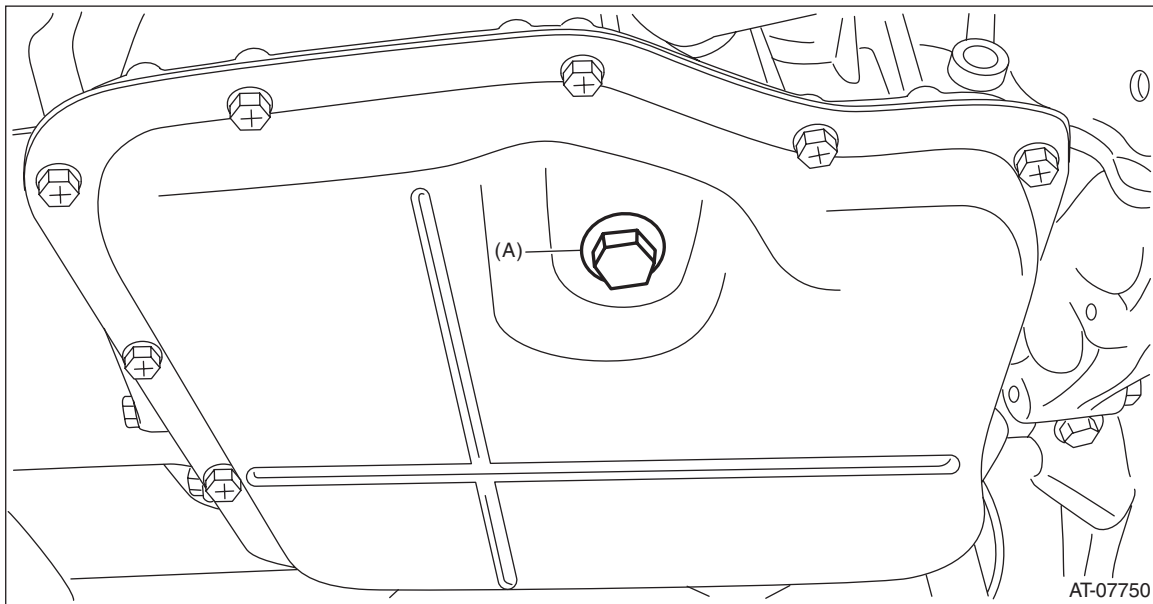
CAUTION:

- 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)

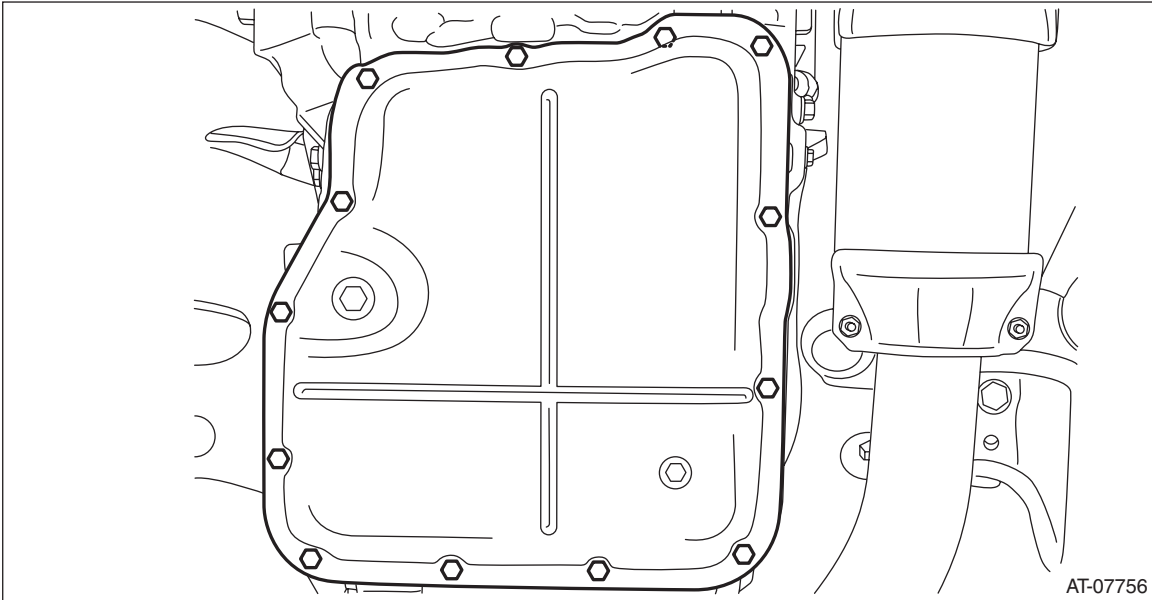
Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

6) Remove the oil pan.

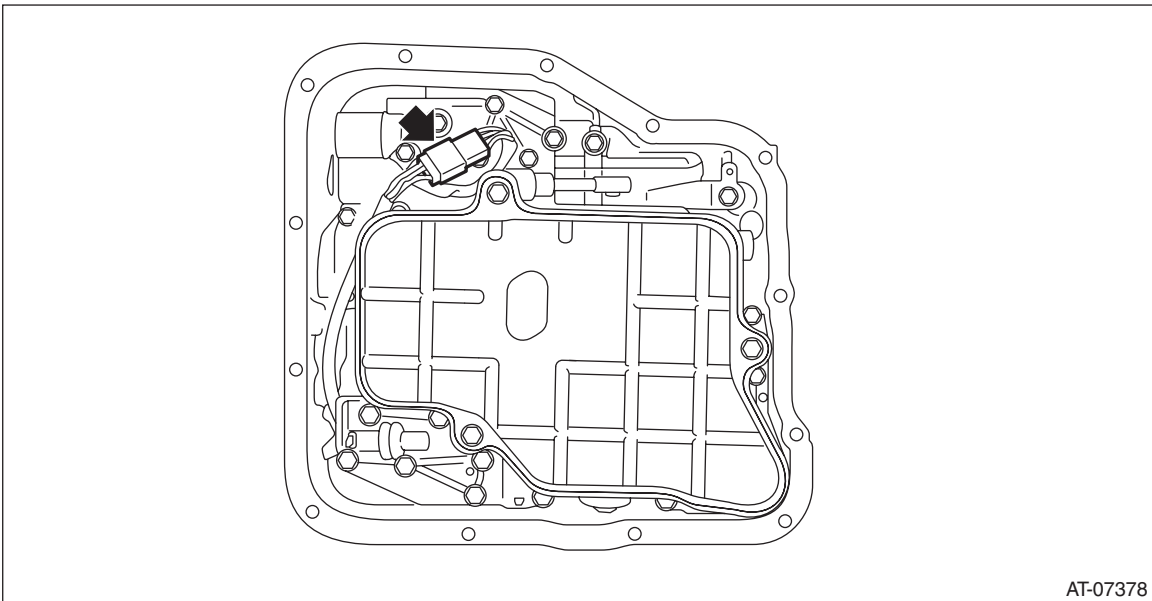
CAUTION:

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



7) Remove the magnet.

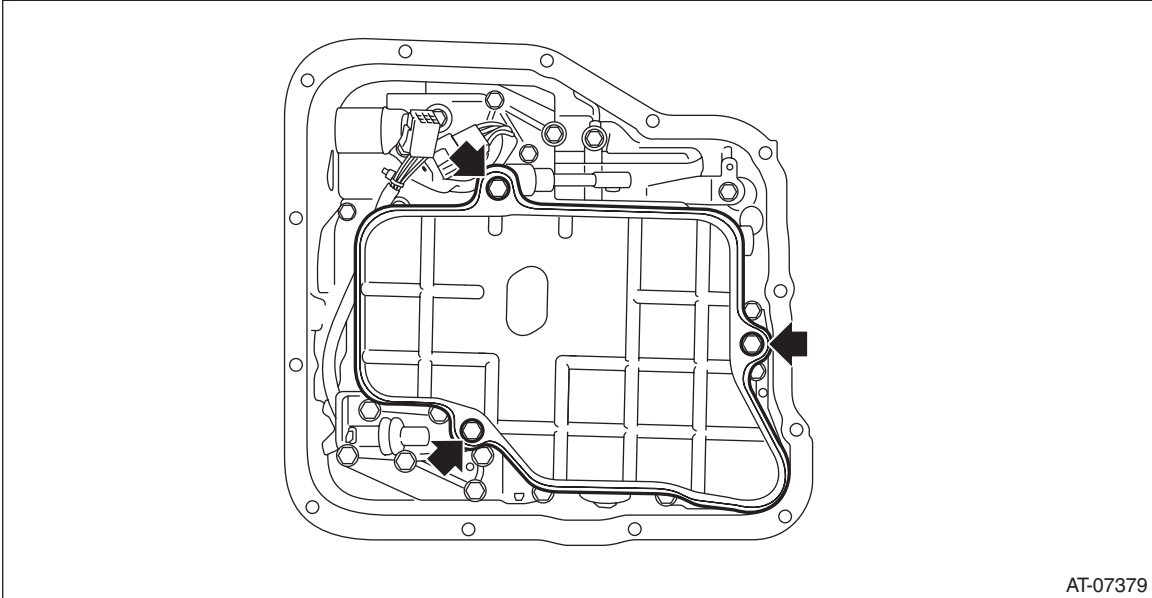
8) Disconnect the control valve harness connector.



Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

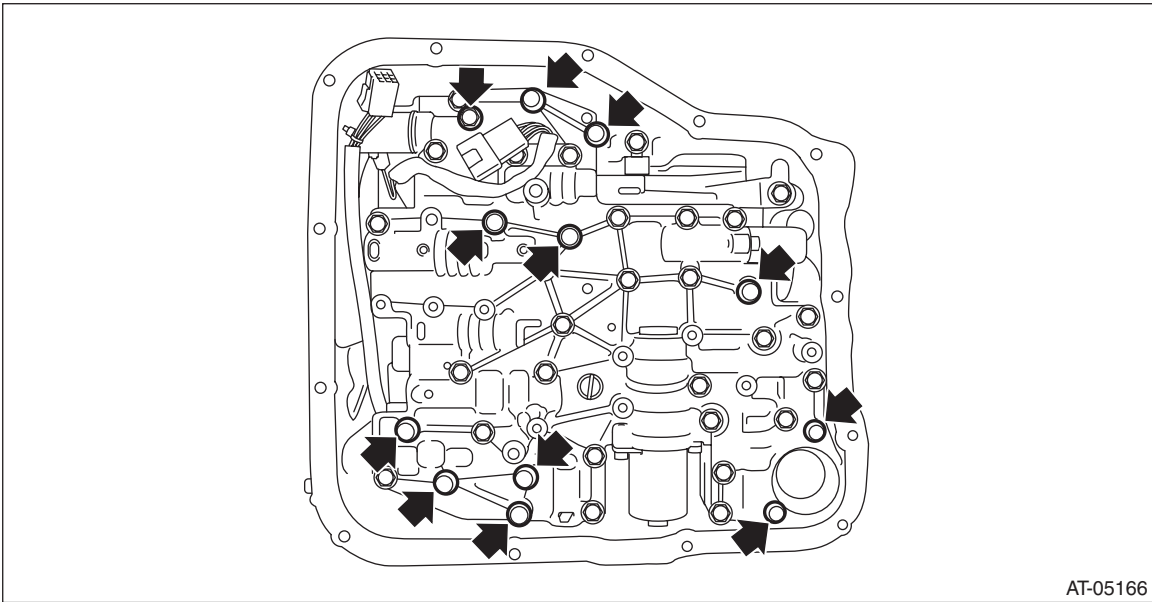
9) Remove the oil strainer.



10) Remove the control valve body.

CAUTION:

Do not let the manual valve drop off.



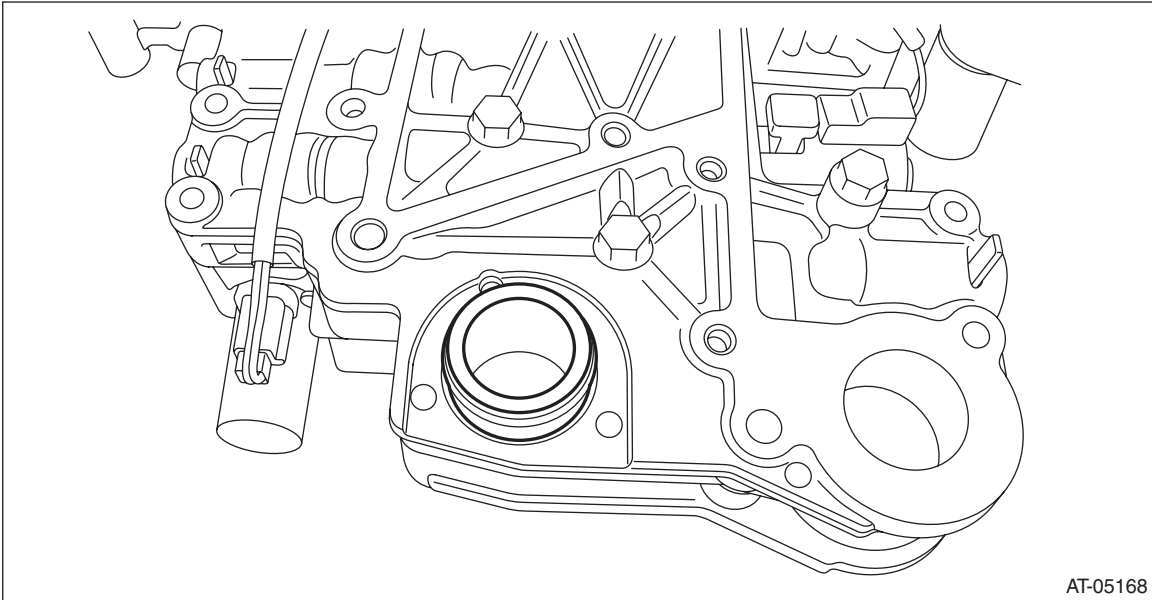
Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

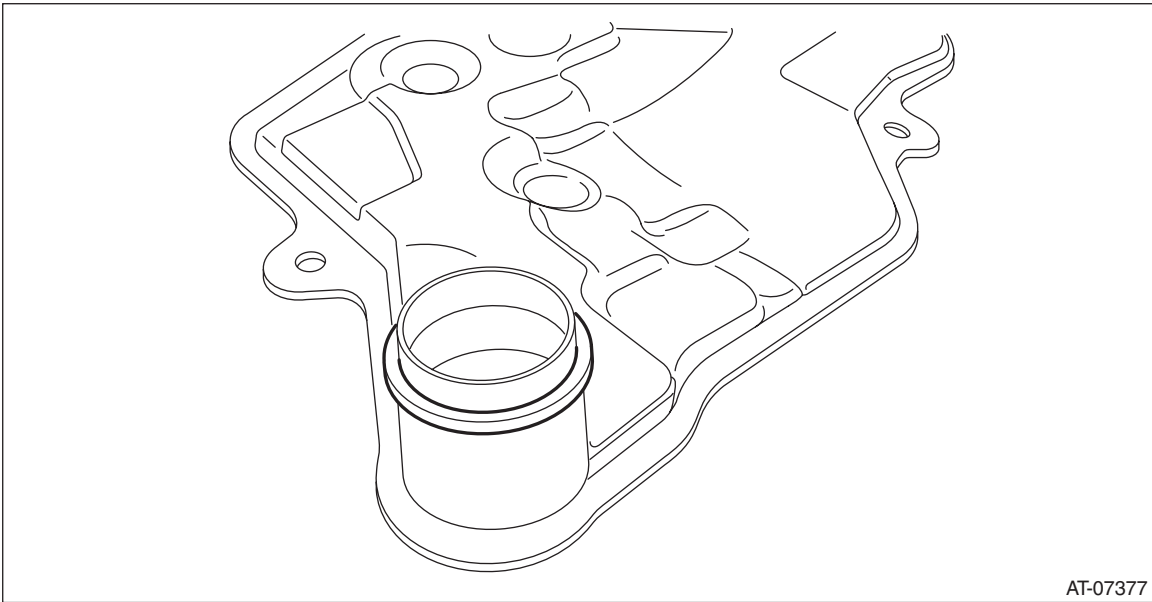
11) Remove the pressure pipe.

NOTE:

It may be located in transmission case side.



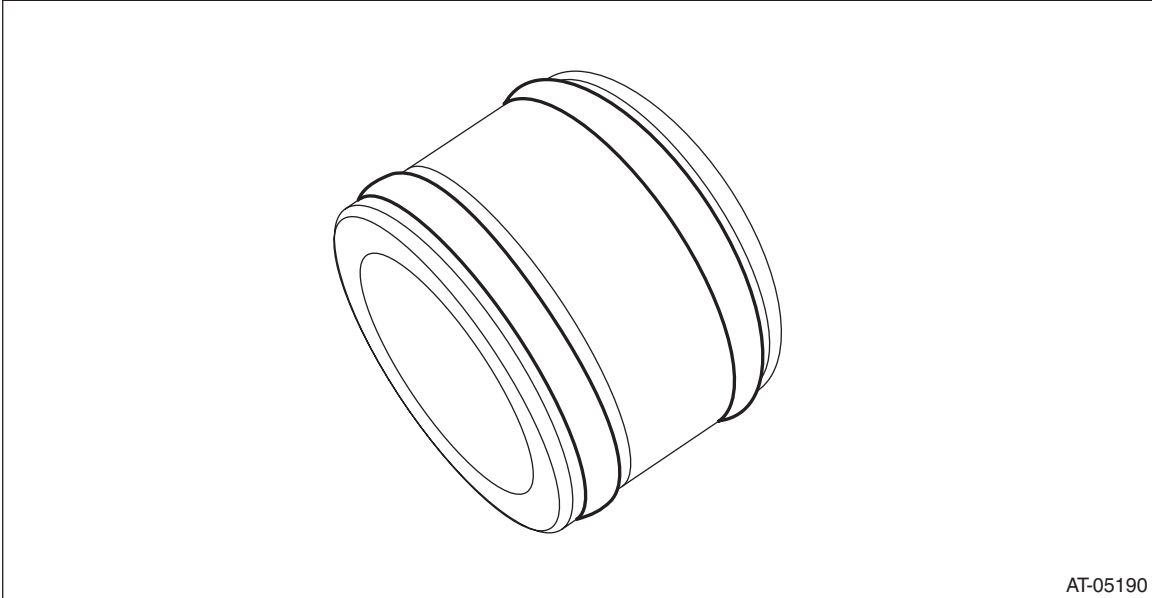
12) Remove the O-ring from oil strainer.



Control Valve Body

CONTINUOUSLY VARIABLE TRANSMISSION

13) Remove the O-ring from pressure pipe.

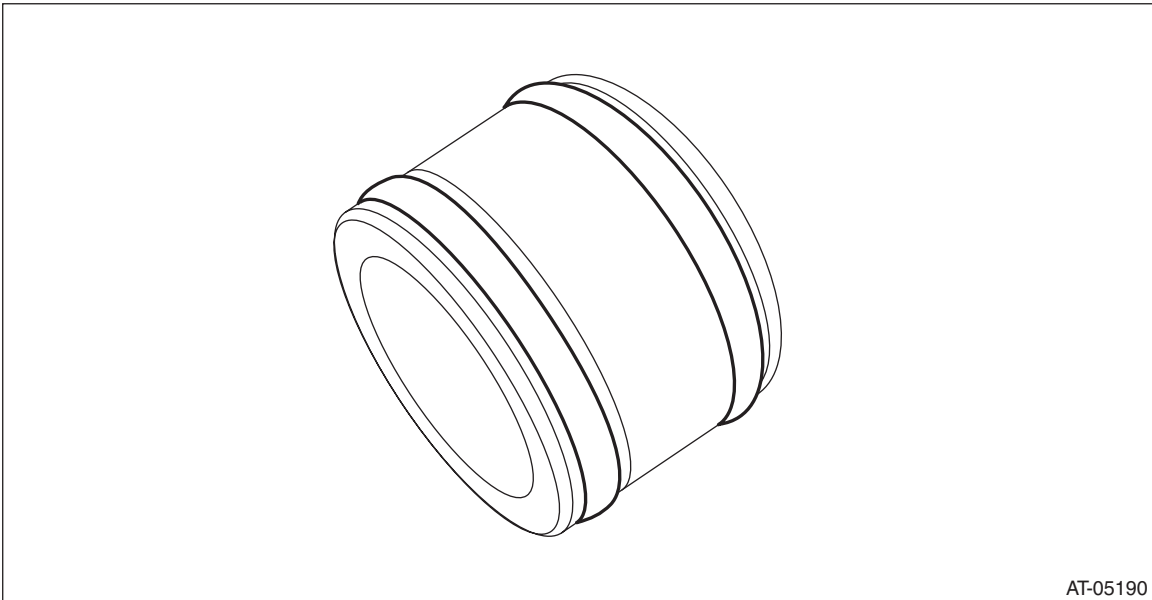


B: INSTALLATION

- 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:

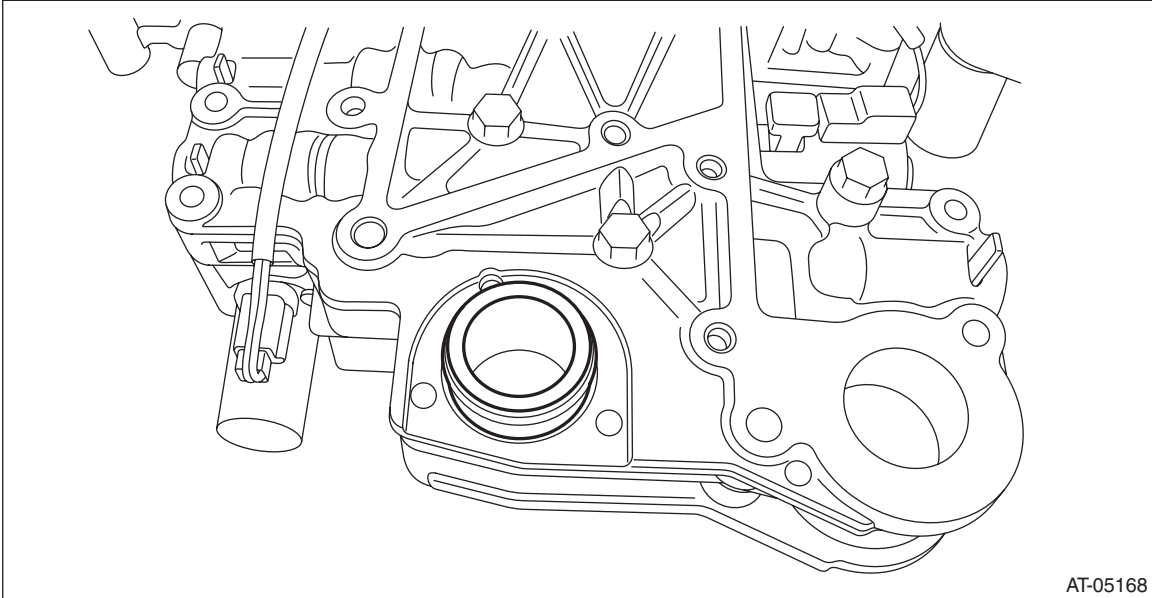
- Use new O-rings.
- Apply CVTF to the O-ring.



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CONTINUOUSLY VARIABLE TRANSMISSION

4) Install the pressure pipe.



5) Install the control valve body to the transmission.

CAUTION:

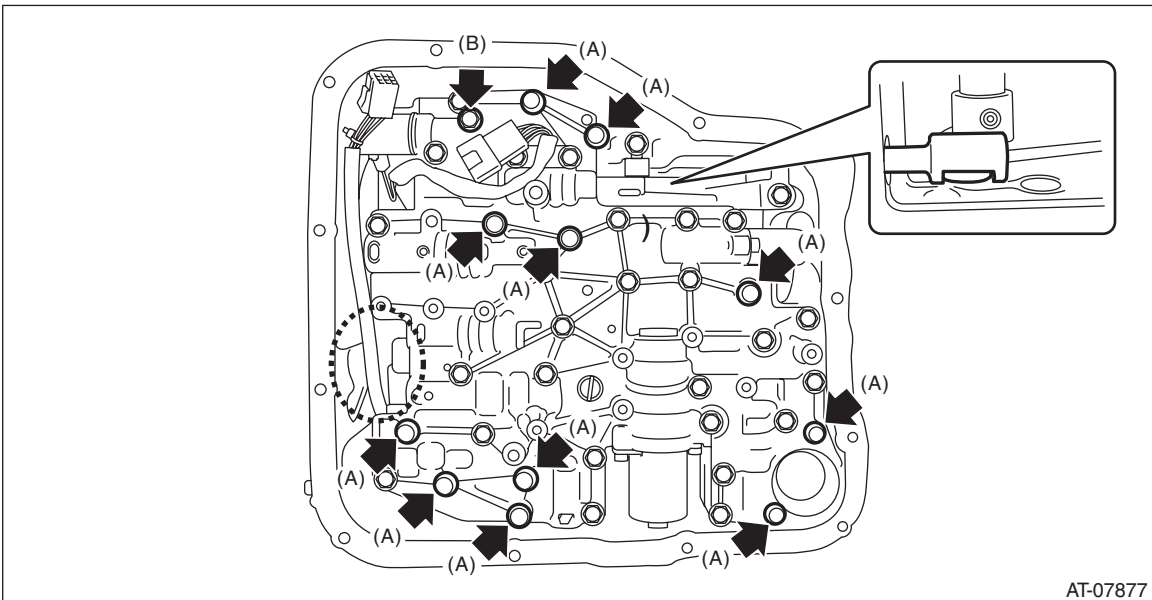
- Beware of the transmission harness getting caught in between.
- Do not impact or bend the transmission harness because it has the oil temperature sensor inside.

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)



(A) Short bolt (11 pcs)

(B) Long bolt (1 pcs)

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CONTINUOUSLY VARIABLE TRANSMISSION

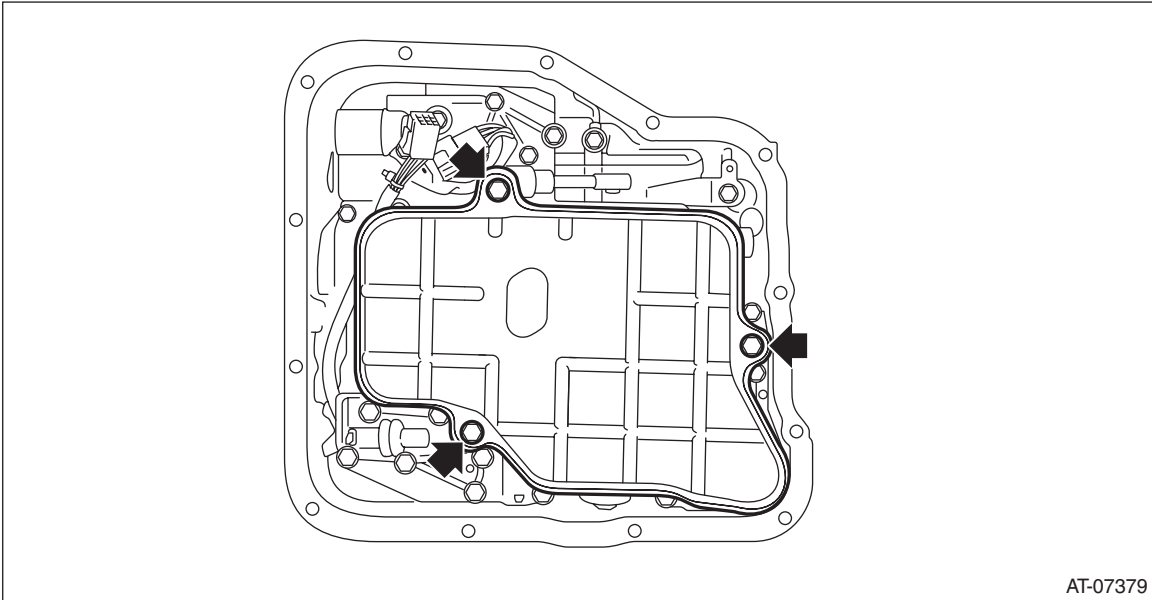
6) Install the O-ring to oil strainer and install the oil strainer.

NOTE:

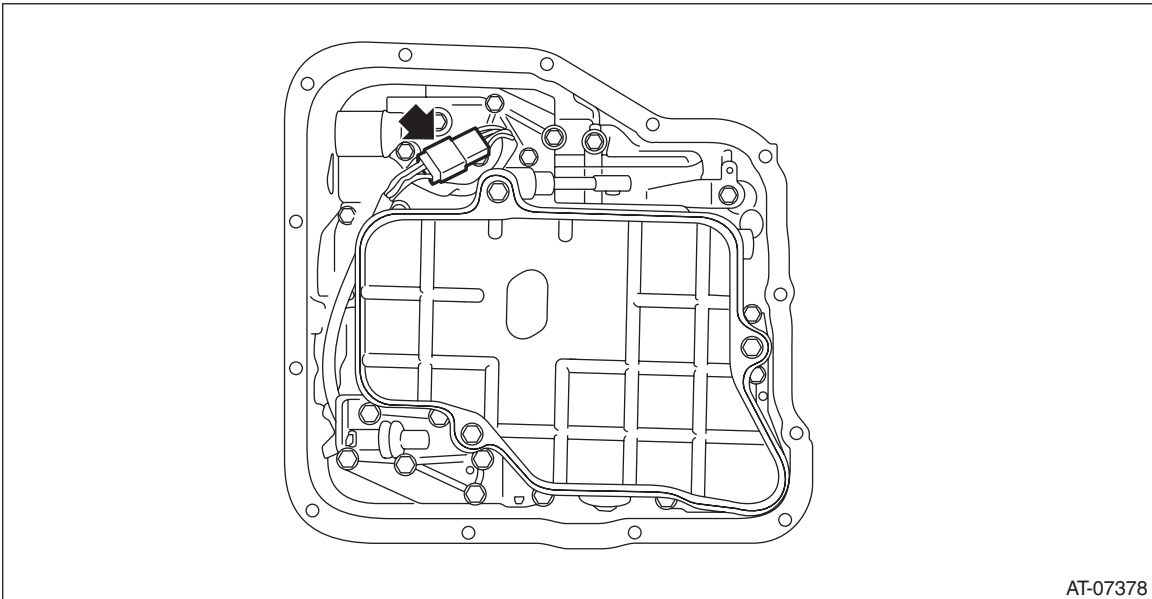
- Use new O-rings.
- Apply CVTF to the O-ring.
- Let the transmission harness run between control valve body and oil strainer.

Tightening torque:

9 N·m (0.9 kgf-m, 6.6 ft-lb)



7) Connect the control valve harness connector.

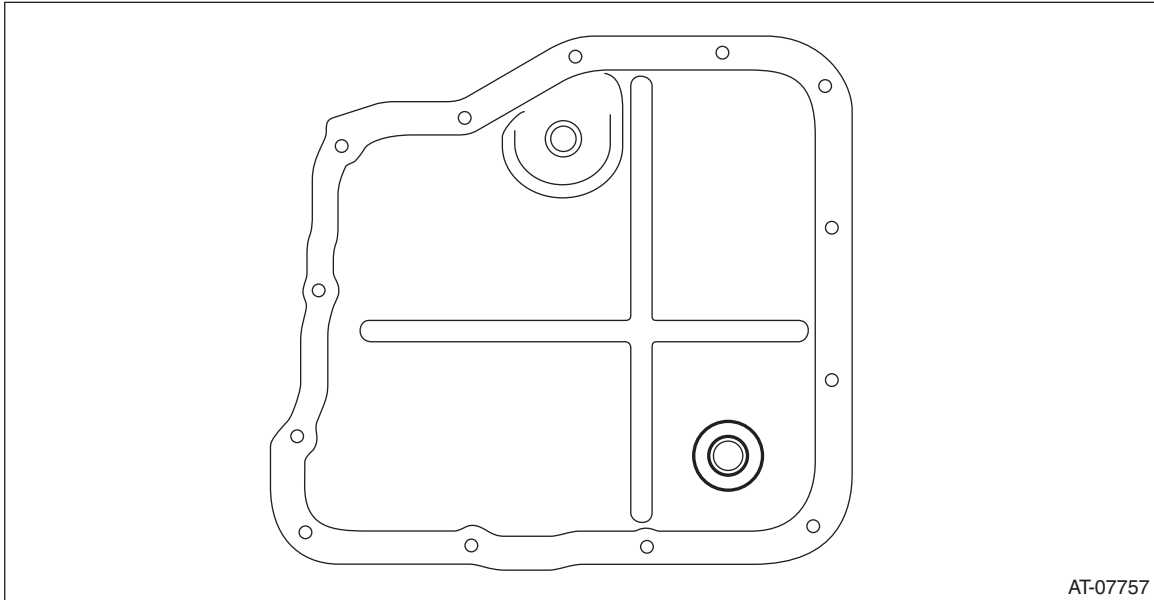


8) Clean the magnet.

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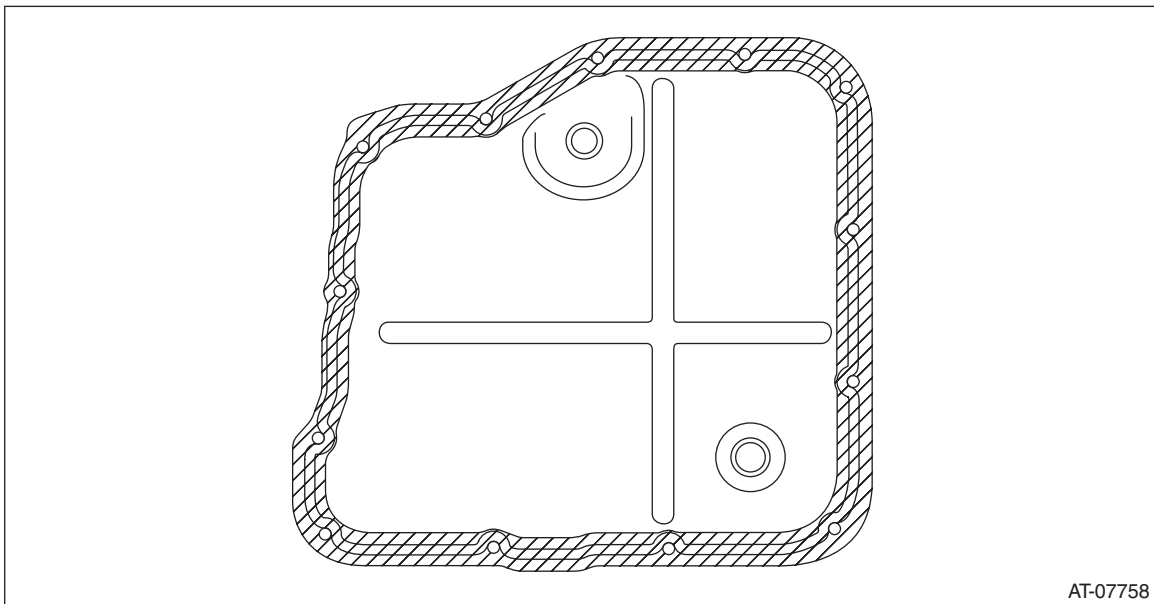
9) Attach the magnet at the specified position of the oil pan.



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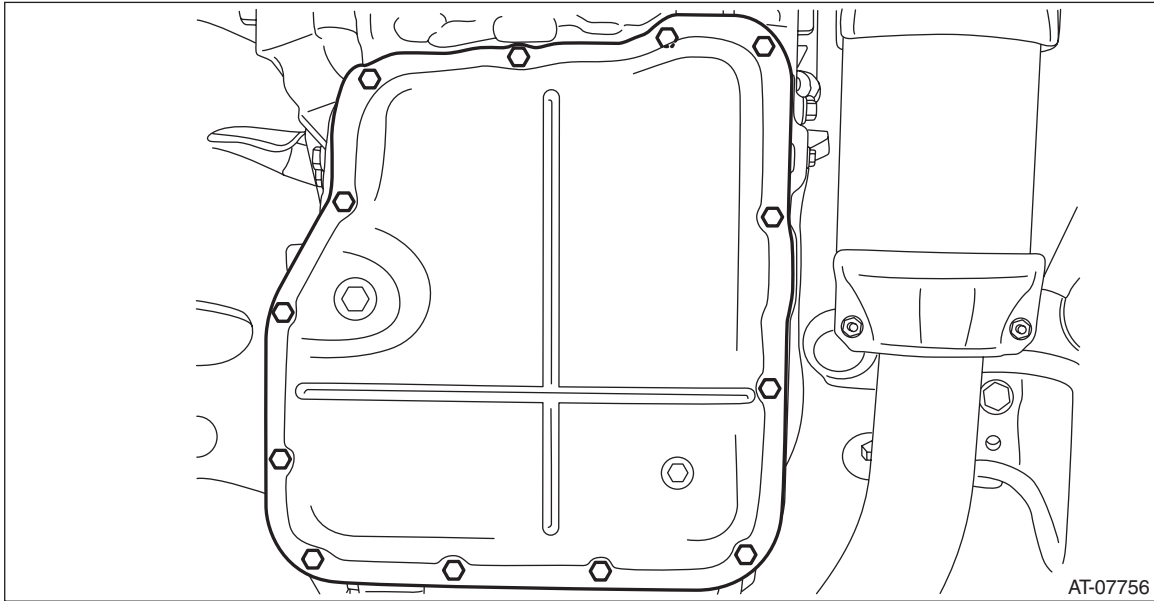
11) Install the oil pan by equally tightening the bolts.

CAUTION:

Beware of the transmission harness getting caught in between.

Tightening torque:

5 N·m (0.5 kgf-m, 3.7 ft-lb)



12) Connect the battery ground terminal.

13) Fill with CVTF. <Ref. to CVT(TR690)-38, REPLACEMENT, CVTF.>

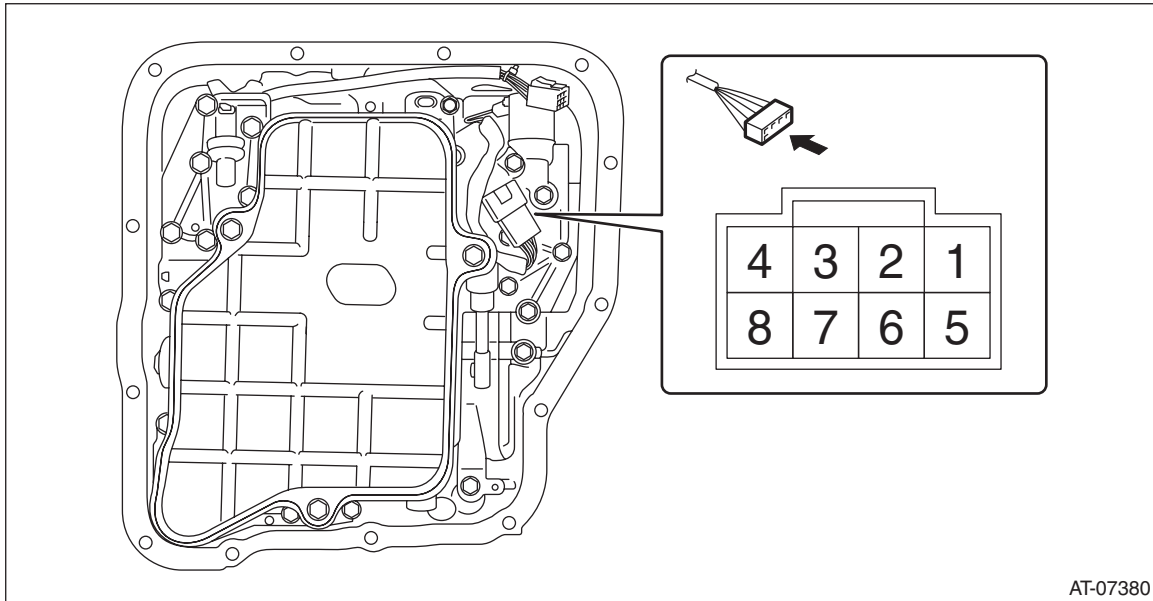
14) Adjust the CVTF level. <Ref. to CVT(TR690)-36, ADJUSTMENT, CVTF.>

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.	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