

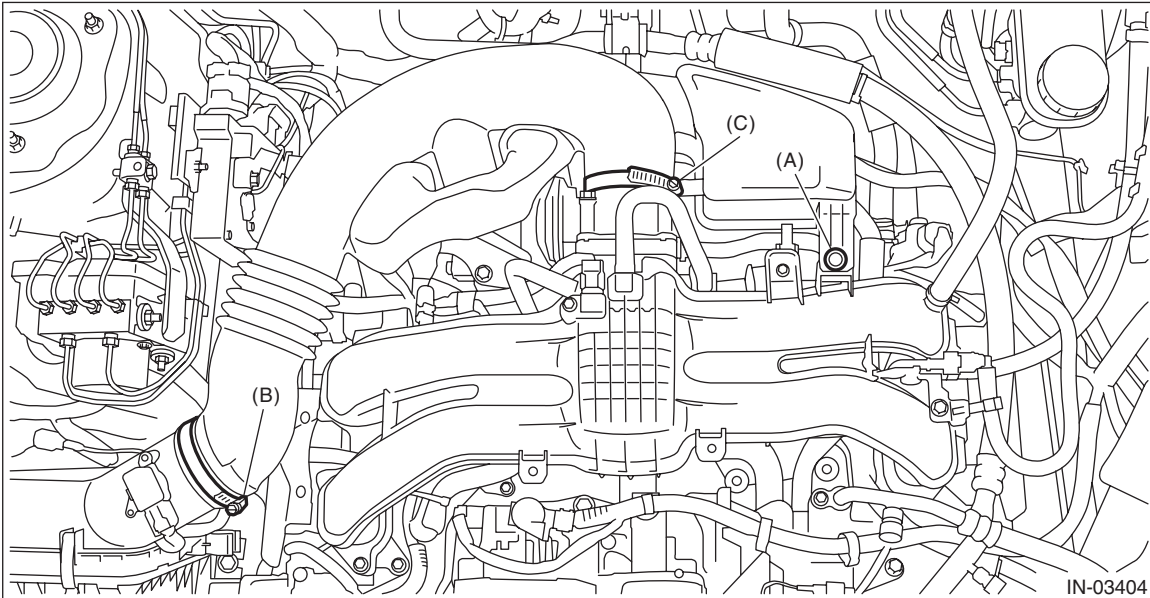
23.CVTF Cooler (With Warmer Function)

A: REMOVAL

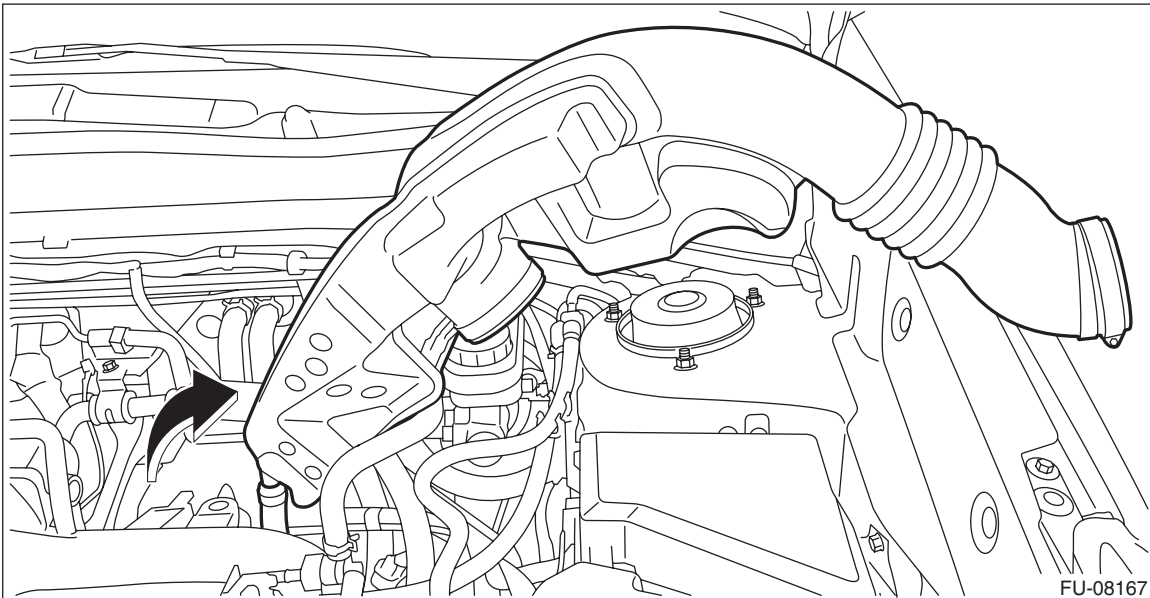
CAUTION:

If the CVTF and engine coolant is spilt over exhaust pipe, wipe it off with cloth to avoid emitting smoke or causing a fire.

- 1) Disconnect the ground cable from battery.
- 2) Drain engine coolant. <Ref. to CO(H4DO(w/o HEV))-16, REPLACEMENT, Engine Coolant.>
- 3) Remove the clip (A) from the air intake boot.
- 4) Loosen the clamp (B) connecting the air intake boot and air cleaner case (rear).
- 5) Loosen the clamp (C) which connects the air intake boot and throttle body.



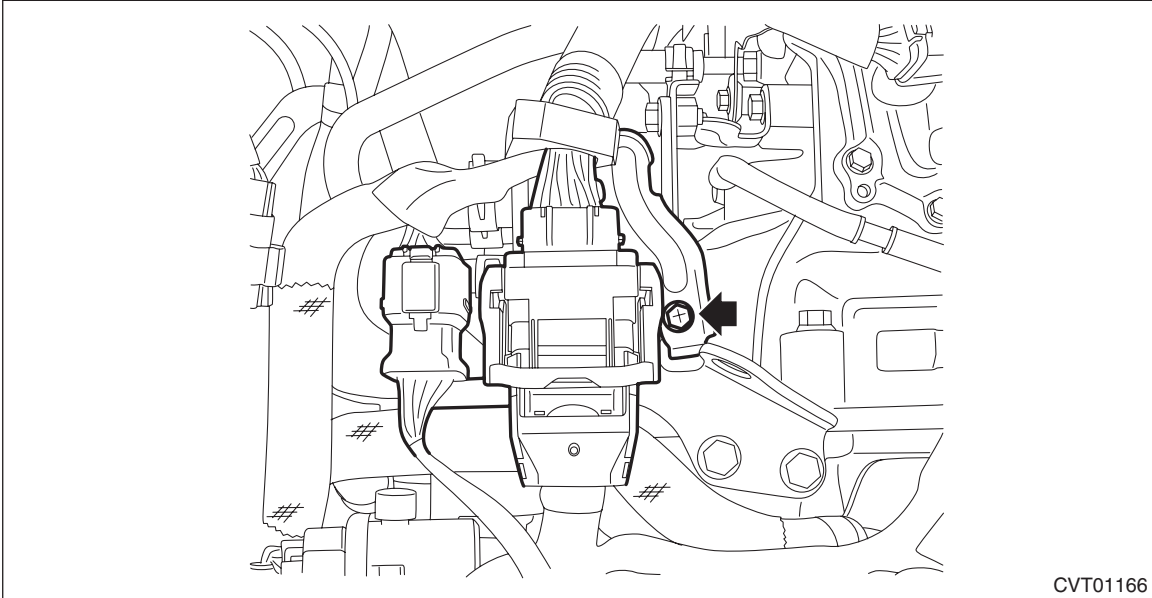
- 6) Remove the air intake boot from the throttle body, and move it to the left side wheel apron.



CVTF Cooler (With Warmer Function)

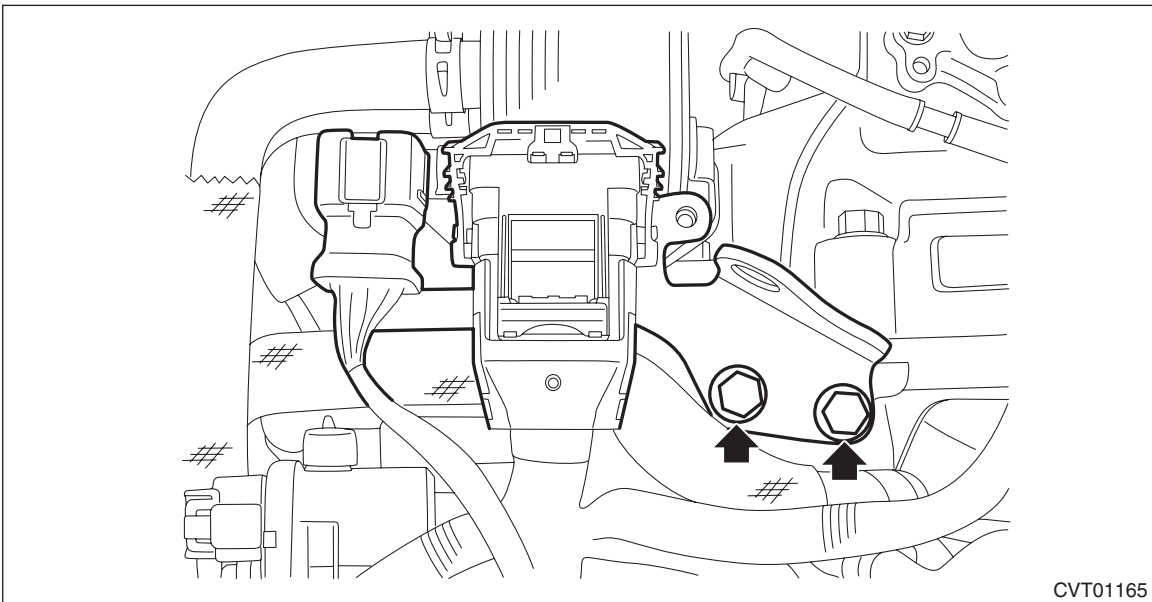
CONTINUOUSLY VARIABLE TRANSMISSION

7) Remove the harness bracket, and then remove the engine harness.



8) Disconnect the EGR control valve harness connector, throttle position sensor harness connector and manifold absolute pressure sensor harness connector.

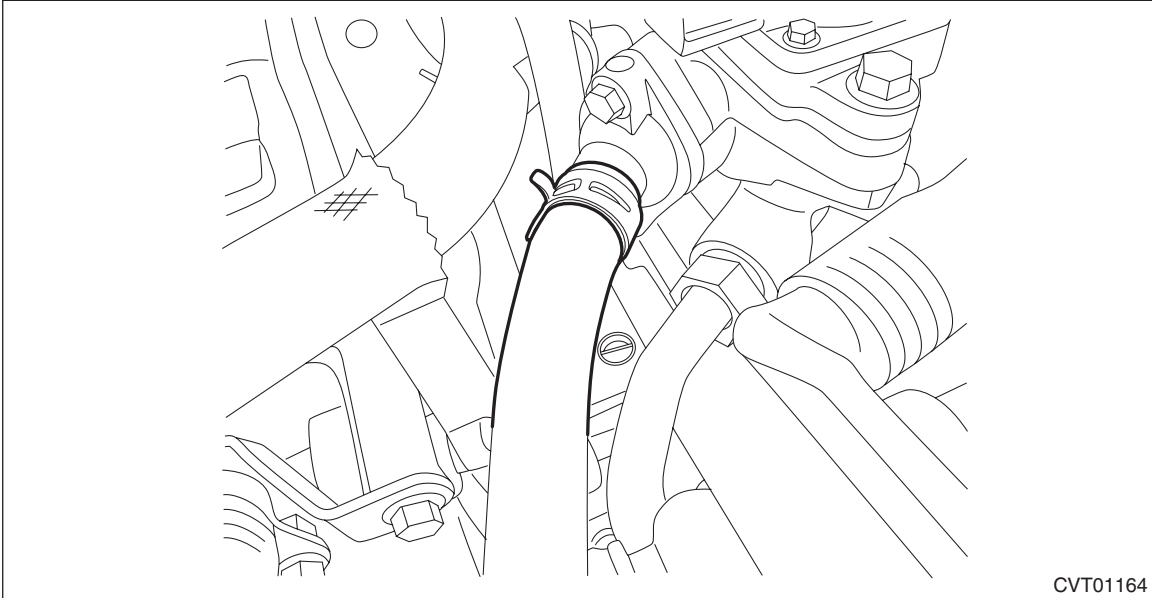
9) Remove the engine hanger rear.



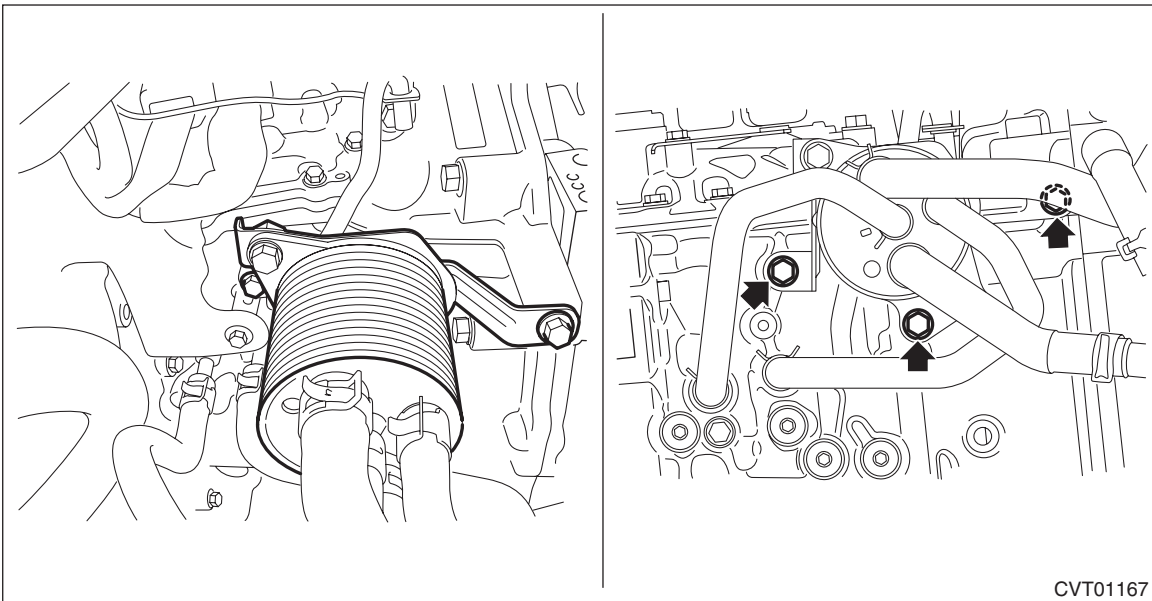
CVTF Cooler (With Warmer Function)

CONTINUOUSLY VARIABLE TRANSMISSION

10) Disconnect the engine coolant outlet hose.



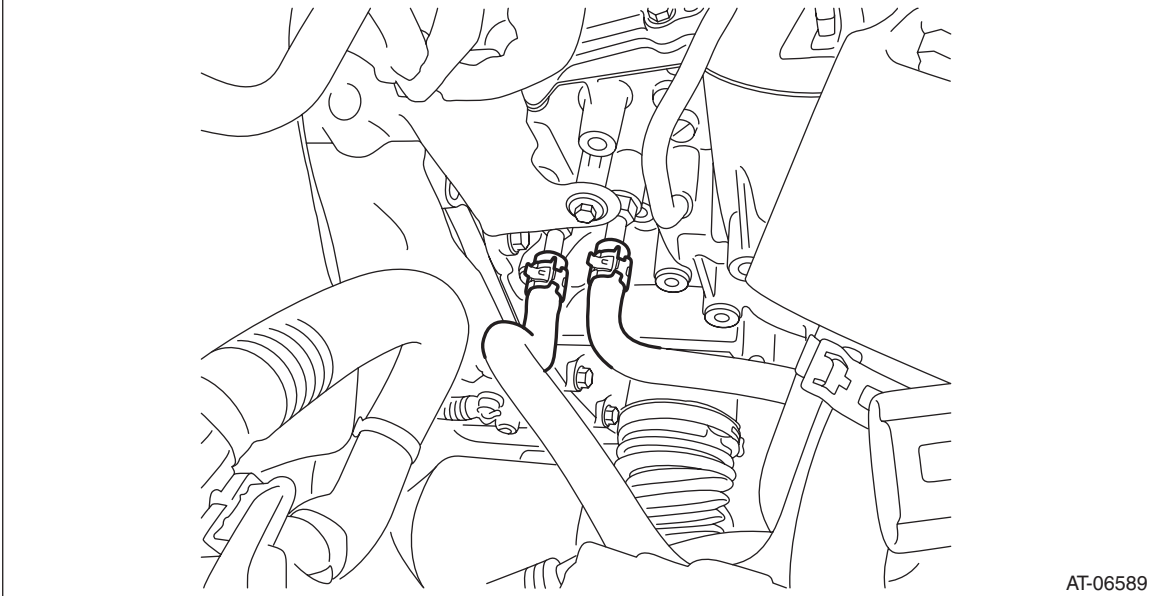
11) Remove the CVTF cooler (with warmer feature) from the transmission.



CVTF Cooler (With Warmer Function)

CONTINUOUSLY VARIABLE TRANSMISSION

- 12) Remove the CVTF inlet hose and outlet hose from the pipe on the transmission side.



AT-06589

- 13) Remove the engine coolant inlet hose from the EGR cooler.

CVTF Cooler (With Warmer Function)

CONTINUOUSLY VARIABLE TRANSMISSION

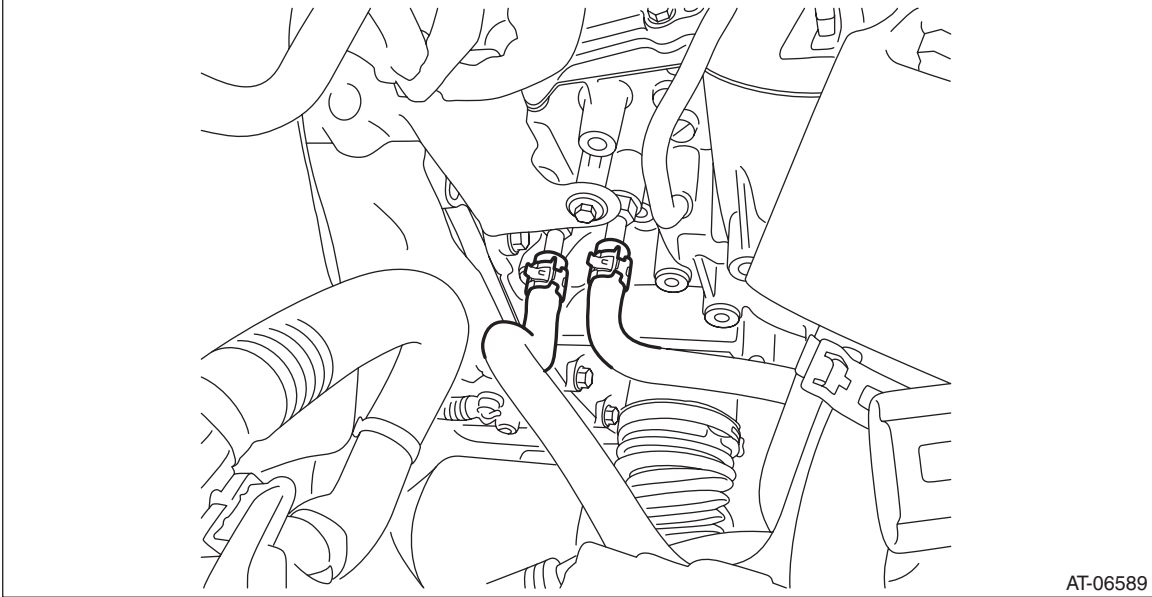
B: INSTALLATION

1) Install the engine coolant inlet hose to the EGR cooler.

NOTE:

With the triangle mark on the engine coolant inlet hose facing the vehicle outside, install the hose to the EGR cooler.

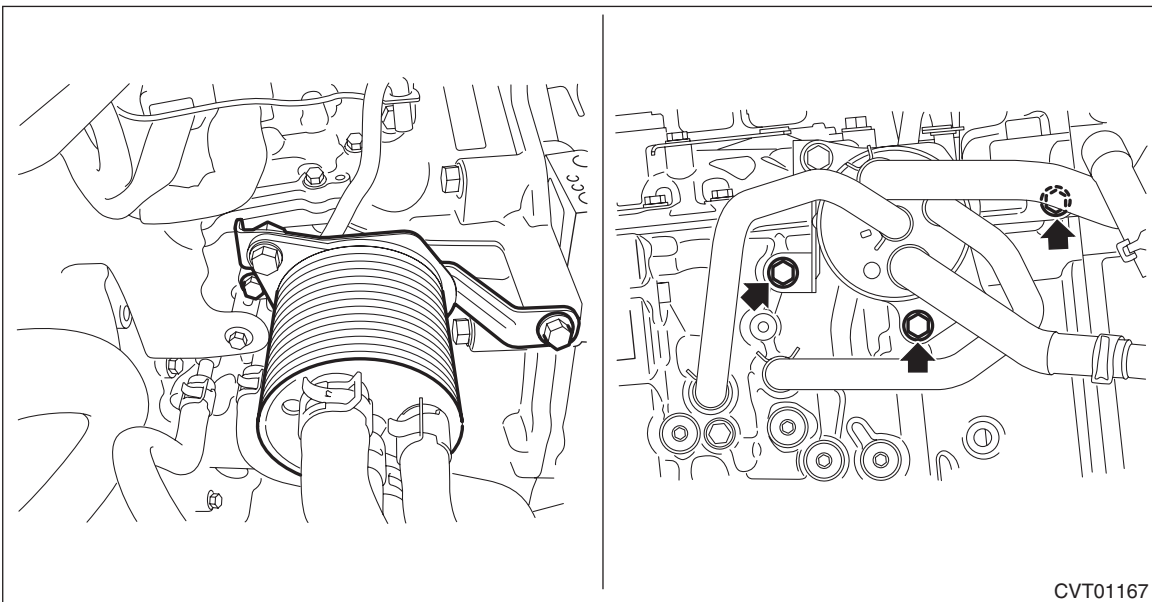
2) Install the CVTF inlet hose and CVTF outlet hose to transmission.



3) Install the CVTF cooler (with warmer feature) to the transmission.

Tightening torque:

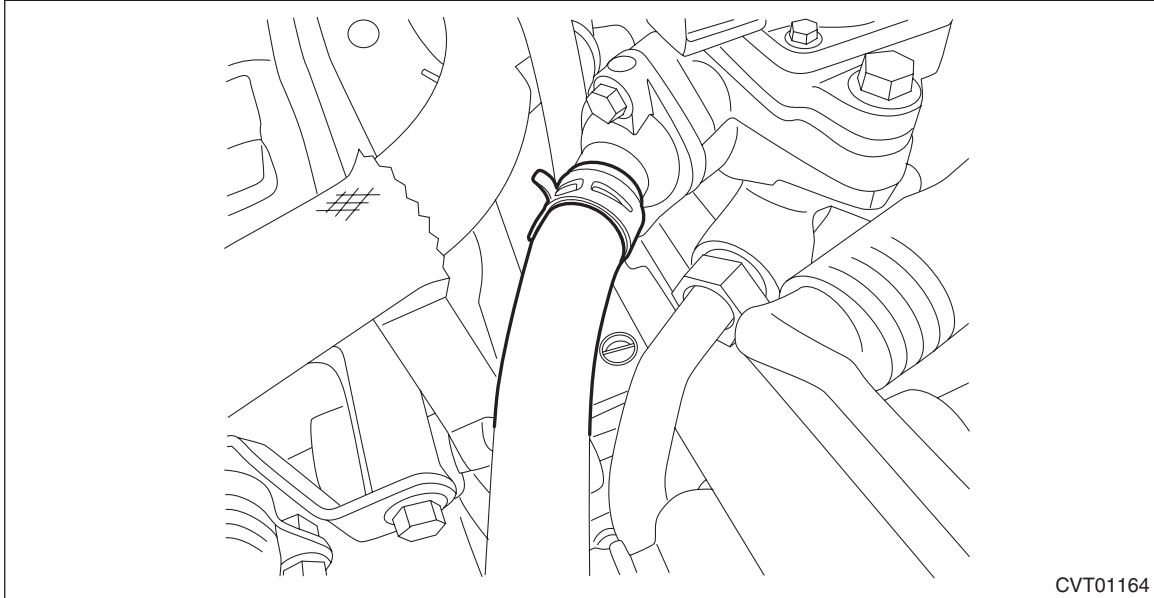
23 N·m (2.3 kgf-m, 17.0 ft-lb)



CVTF Cooler (With Warmer Function)

CONTINUOUSLY VARIABLE TRANSMISSION

4) Connect the engine coolant outlet hose.



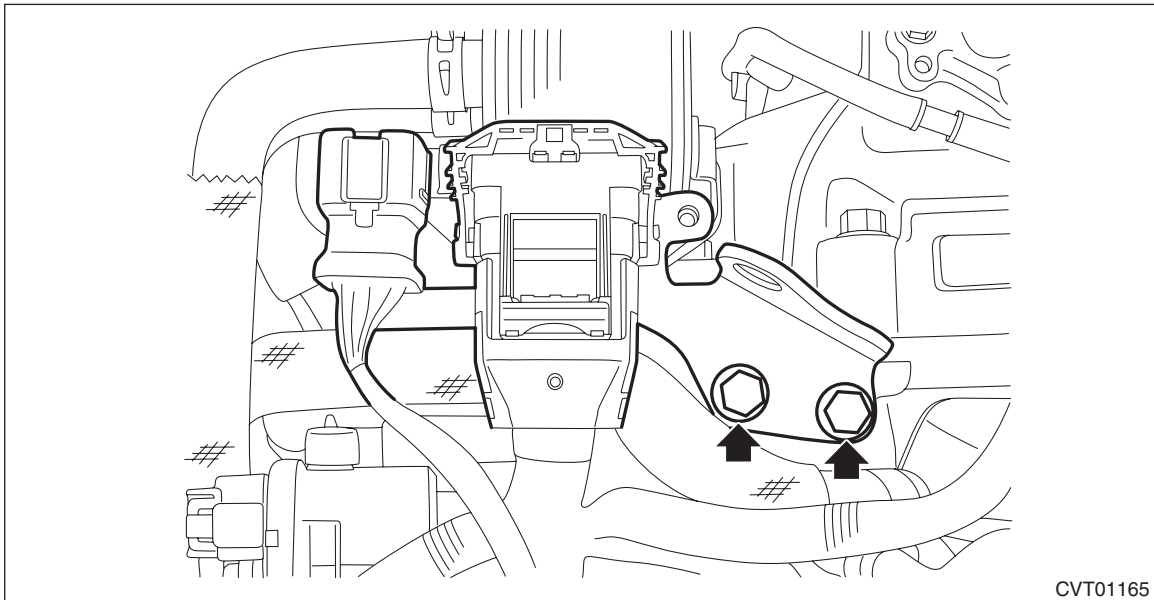
5) Check installation condition of each hose.

- Make sure the hoses do not interfere with each other or with other components.
- Check each hose for bent, excess curve, and twisting conditions.

6) Install the engine hanger rear.

Tightening torque:

21 N·m (2.1 kgf-m, 15.5 ft-lb)



7) Connect the EGR control valve harness connector, throttle position sensor harness connector and manifold absolute pressure sensor harness connector.

8) Connect the engine harness connectors, then install the harness connector bracket.

Tightening torque:

7.5 N·m (0.8 kgf-m, 5.5 ft-lb)

9) Install the air intake boot assembly. <Ref. to IN(H4DO(w/o HEV))-12, INSTALLATION, Air Intake Boot.>

10) Connect the battery ground terminal.

11) Fill engine coolant. <Ref. to CO(H4DO(w/o HEV))-16, REPLACEMENT, Engine Coolant.>

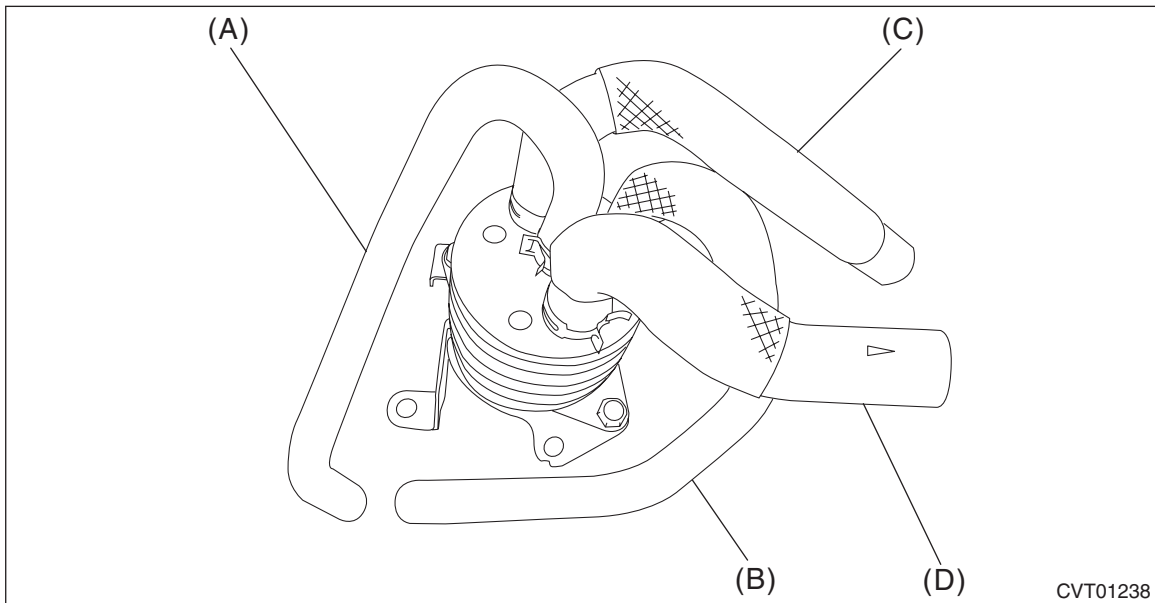
12) Adjust the CVTF level. <Ref. to CVT(TR580)-36, ADJUSTMENT, CVTF.>

CVTF Cooler (With Warmer Function)

CONTINUOUSLY VARIABLE TRANSMISSION

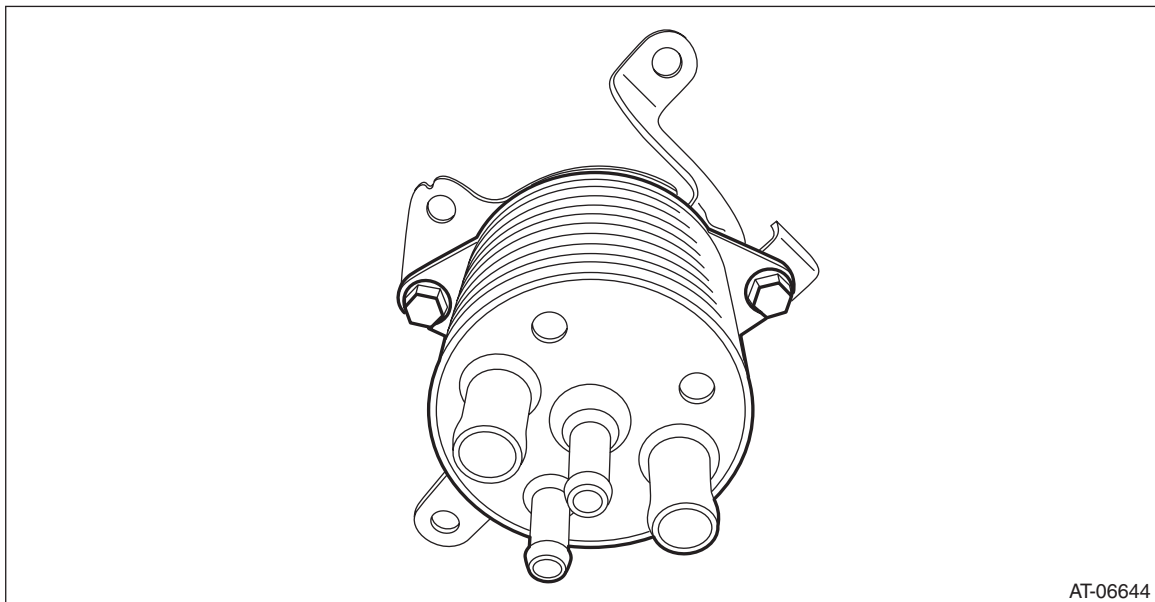
C: DISASSEMBLY

1) Remove the hoses from the CVTF cooler (with warmer feature).



- (A) CVTF cooler inlet hose
- (B) CVTF cooler outlet hose
- (C) Engine coolant outlet hose
- (D) Engine coolant inlet hose

2) Remove the bracket from the CVTF cooler (with warmer feature).



CVTF Cooler (With Warmer Function)

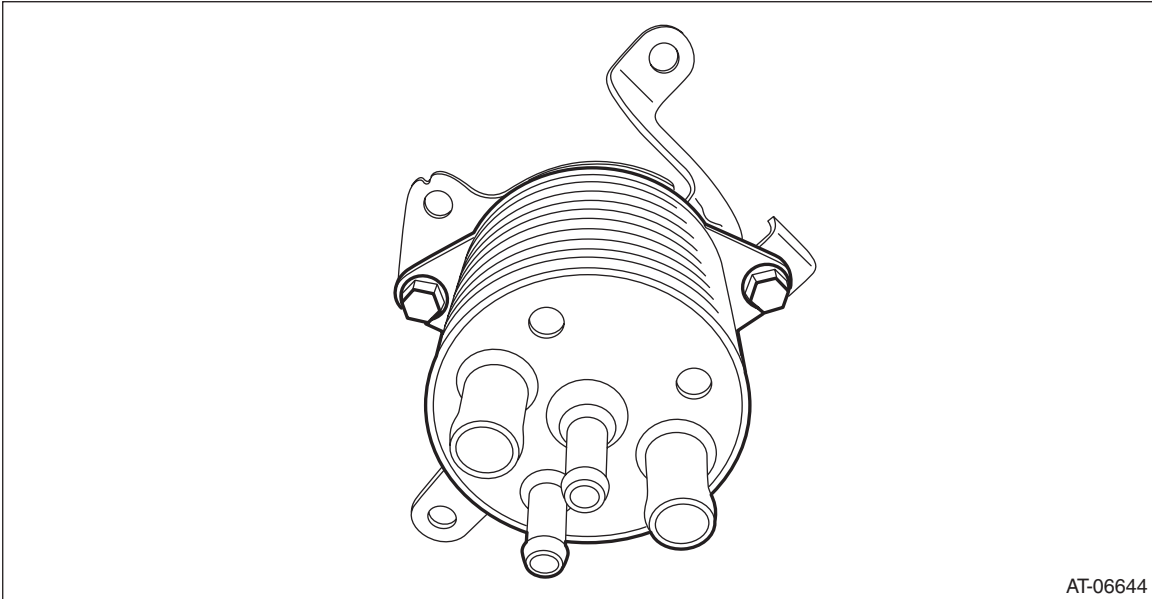
CONTINUOUSLY VARIABLE TRANSMISSION

D: ASSEMBLY

1) Attach the bracket.

Tightening torque:

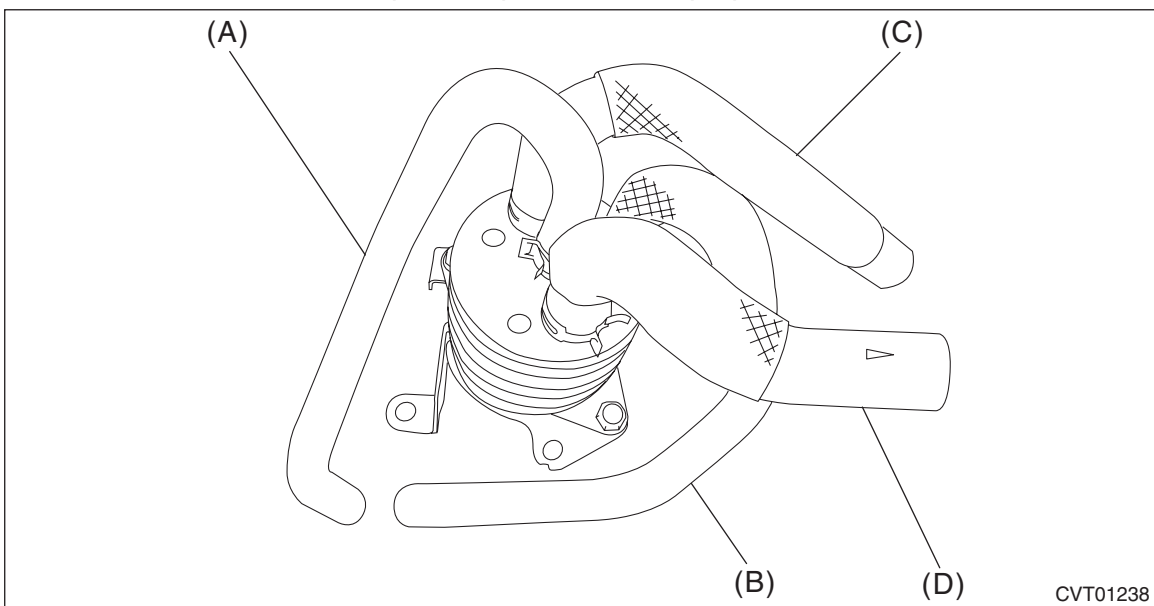
23 N·m (2.3 kgf-m, 17.0 ft-lb)



2) Attach hoses to the CVTF cooler (with warmer feature).

NOTE:

- Use a new CVTF cooler hose.
- Install so that the CVTF cooler hose is not folded over, excessively bent or twisted.
- Insert the CVTF cooler hose to the specified position in the proper direction.



- (A) CVTF cooler inlet hose
- (B) CVTF cooler outlet hose
- (C) Engine coolant outlet hose
- (D) Engine coolant inlet hose

E: INSPECTION

Replace any faulty CVTF cooler hoses, CVTF cooler pipes and clamps found in the inspection below.

- 1) Check that there are no CVTF or engine coolant leaks from the connections.
- 2) Check the clamp for deformation.
- 3) Lightly bend the CVTF cooler hose and check for cracks in the surface or other damages.
- 4) Pinch the CVTF cooler hose with your fingers and check for poor elasticity. Also check for poor elasticity in the parts where the clamp was installed by pressing with your fingernail.
- 5) Check for peeling, cracks, and deformation at the tip of the hose.
- 6) Check the CVTF cooler (with warmer feature) for any damage.