

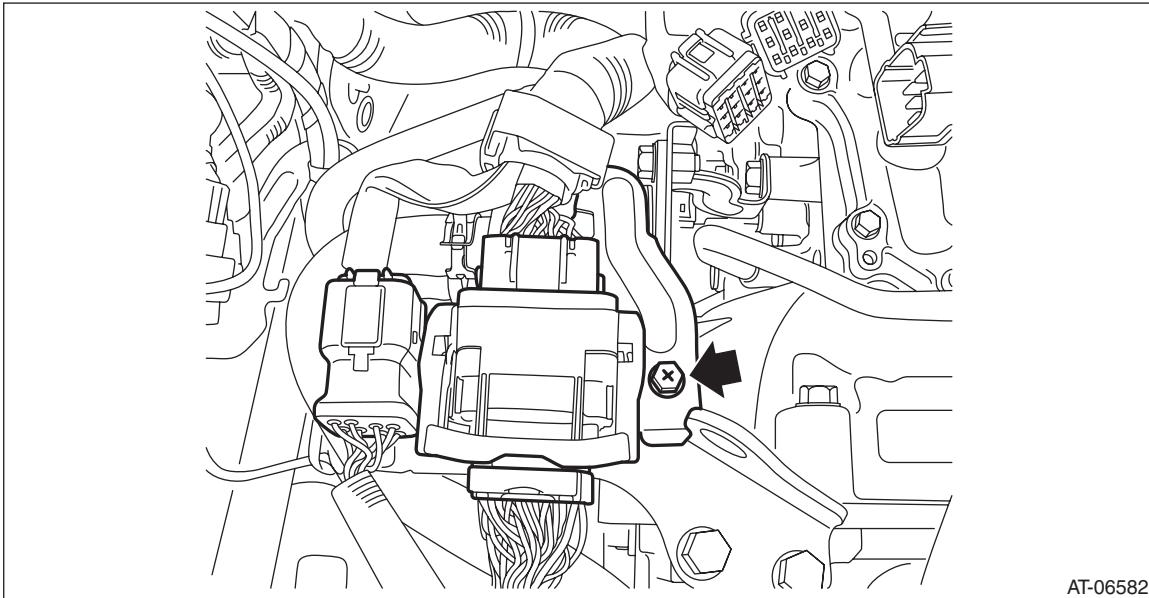
## 23. CVTF Cooler (With Warmer Function)

### A: REMOVAL

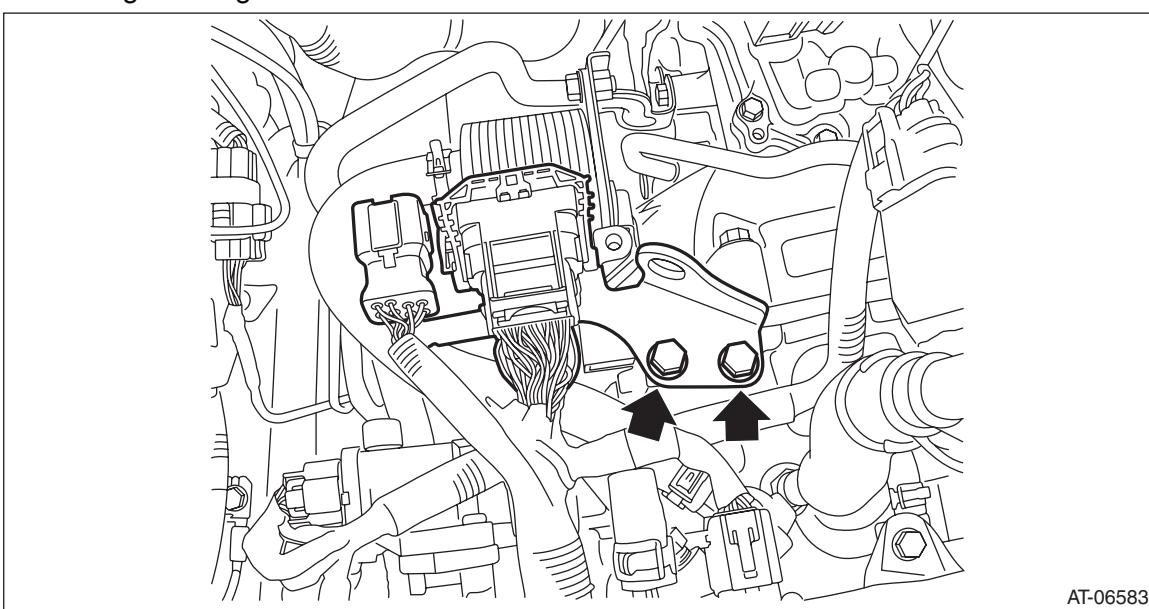
**CAUTION:**

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)-13, REPLACEMENT, Engine Coolant.>
- 3) Remove the air intake boot assembly. <Ref. to IN(H4DO)-12, REMOVAL, Air Intake Boot.>
- 4) Remove the harness bracket, and then remove the engine harness.



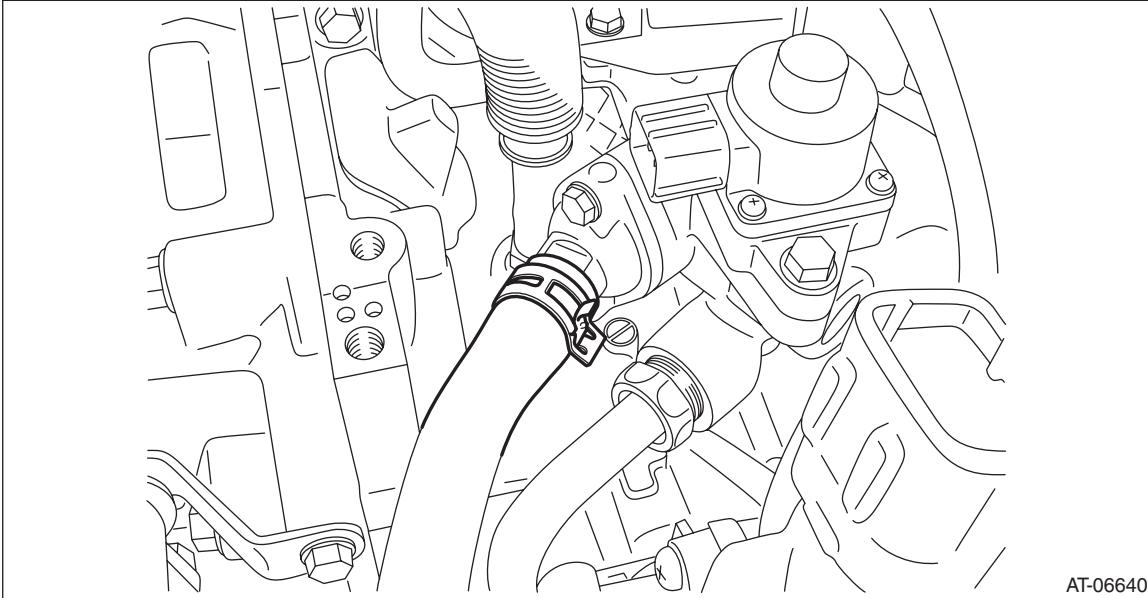
- 5) Disconnect the EGR control valve harness connector, throttle position sensor harness connector and manifold pressure sensor harness connector.
- 6) Remove the engine hanger rear.



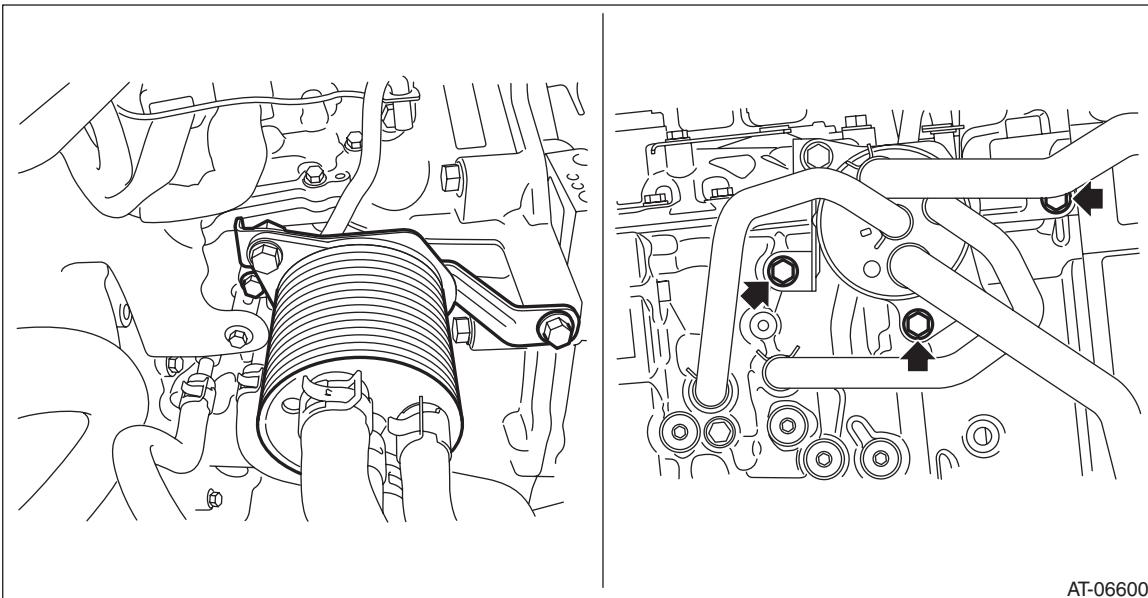
## CVTF Cooler (With Warmer Function)

CONTINUOUSLY VARIABLE TRANSMISSION

7) Disconnect the engine coolant outlet hose.



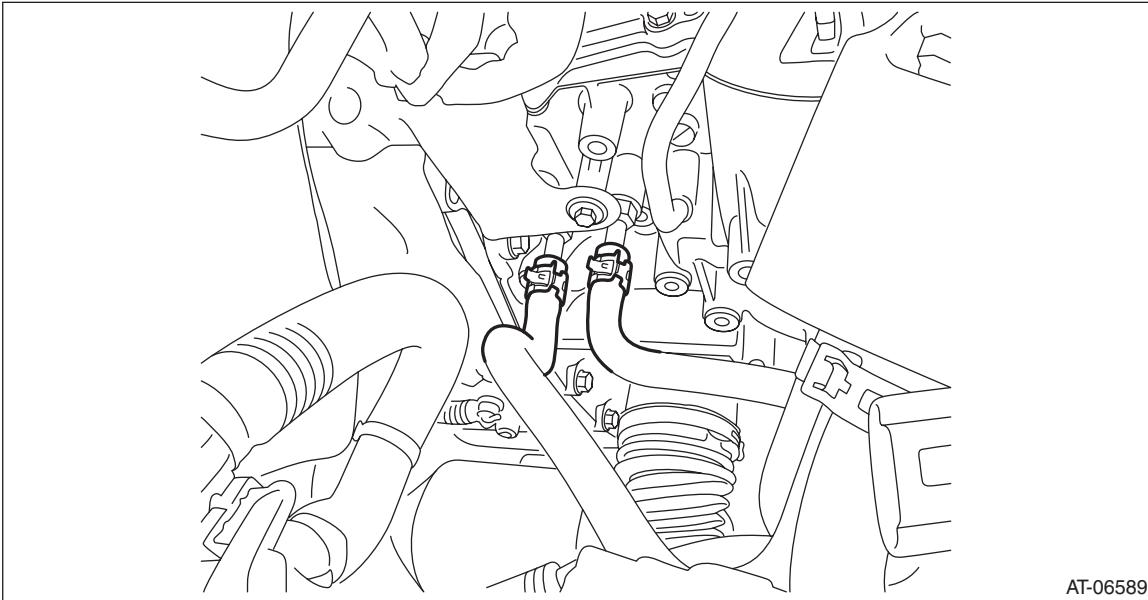
8) Remove the CVTF cooler (with warmer feature) from the transmission.



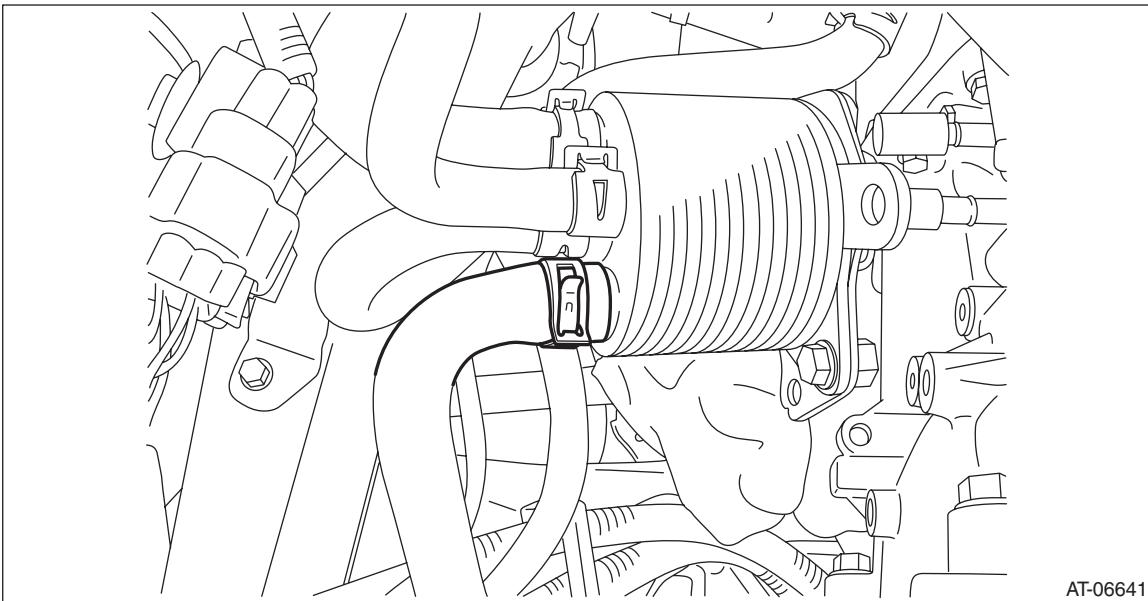
## CVTF Cooler (With Warmer Function)

### CONTINUOUSLY VARIABLE TRANSMISSION

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



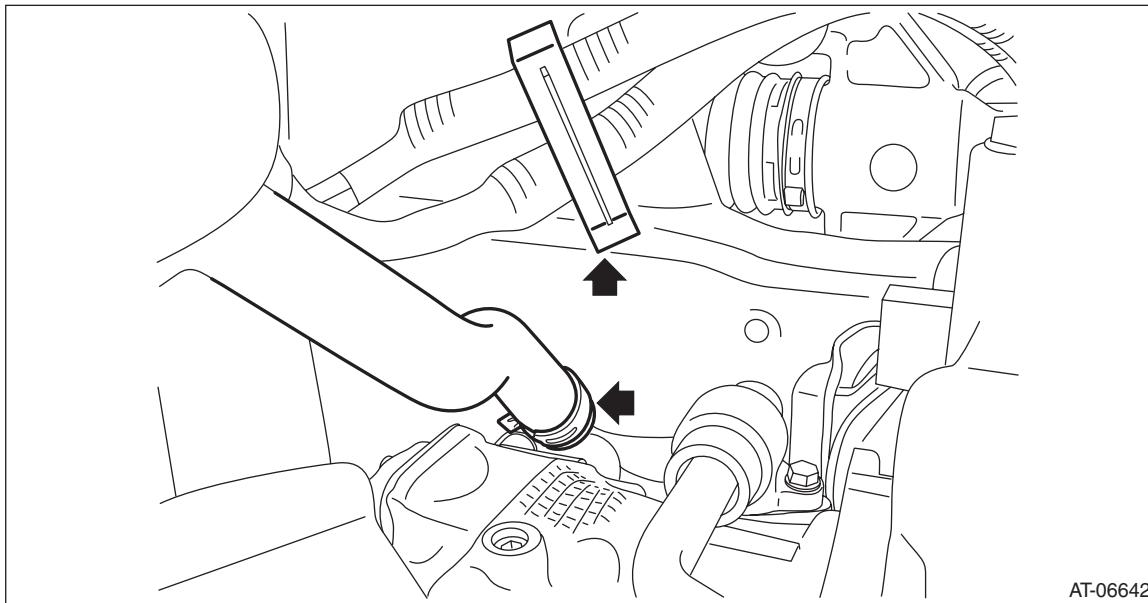
10) Disconnect the engine coolant inlet hose from the CVTF cooler (with warmer feature) assembly.



# CVTF Cooler (With Warmer Function)

CONTINUOUSLY VARIABLE TRANSMISSION

11) Remove the electric power steering harness from the clip, and remove the engine coolant inlet hose from the engine coolant pipe.

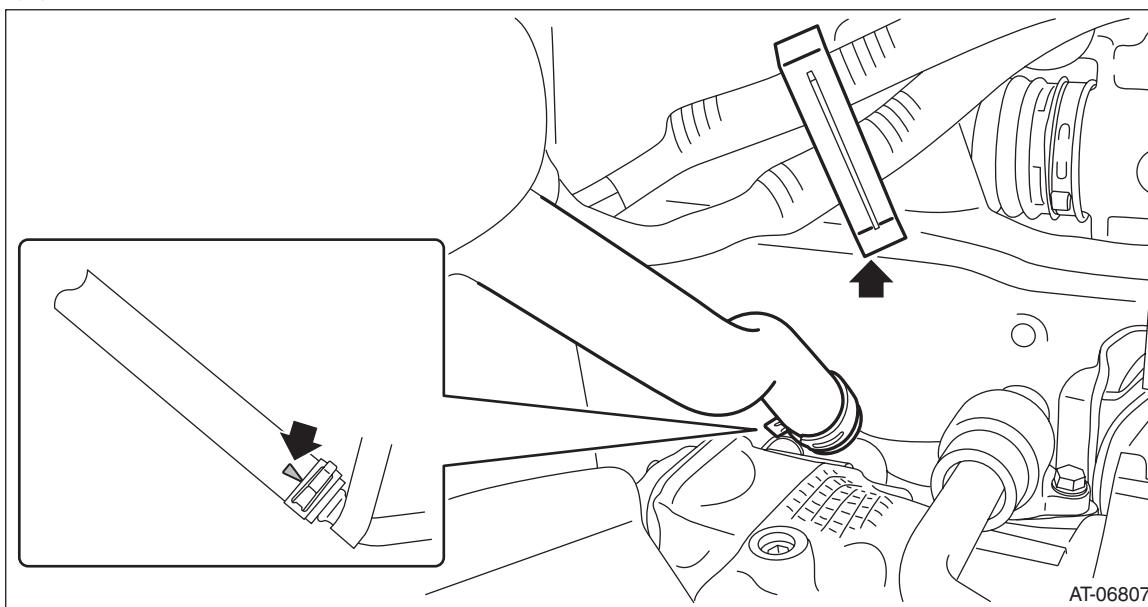


## B: INSTALLATION

1) Install the engine coolant inlet hose to the engine coolant pipe, and secure the electric power steering harness to the clip.

**NOTE:**

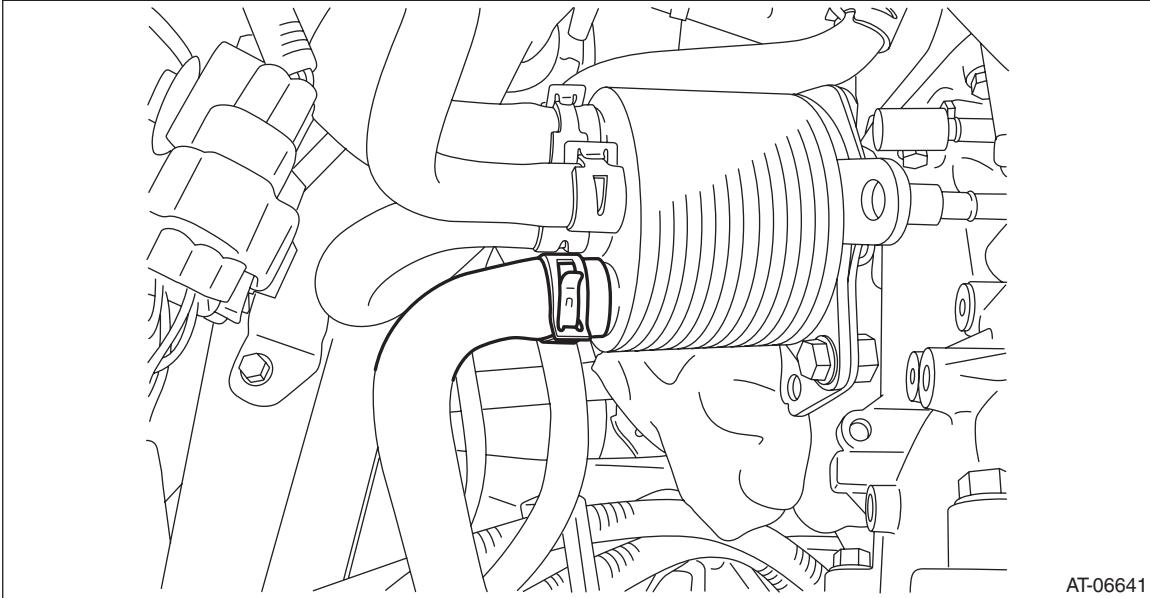
With the triangle mark on the engine coolant inlet hose facing the vehicle outside, install the hose to the engine side pipe.



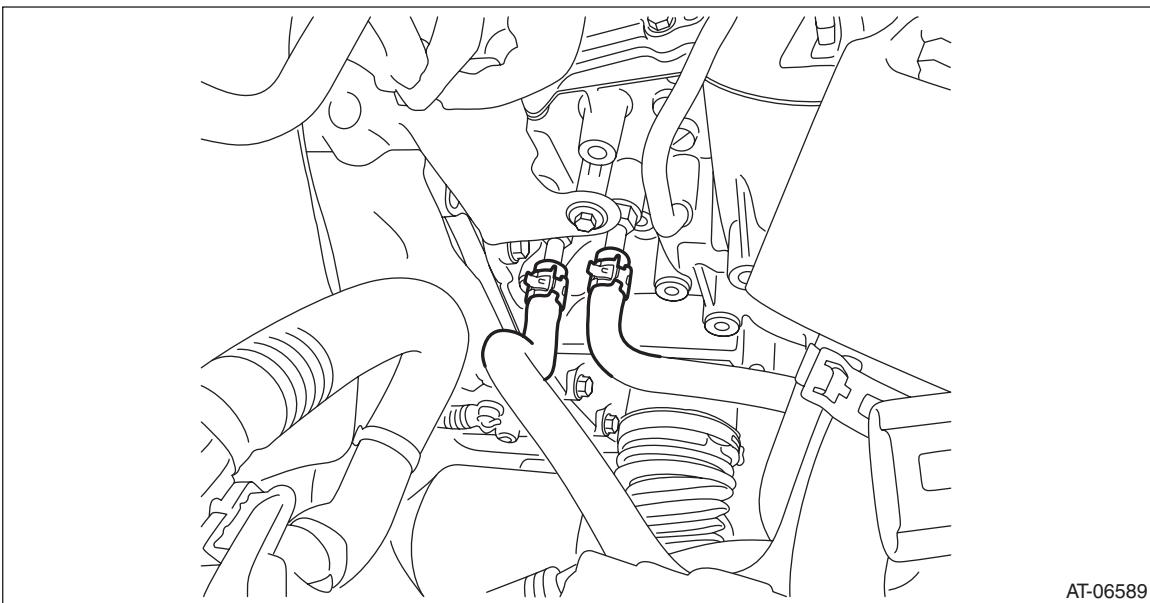
## CVTF Cooler (With Warmer Function)

### CONTINUOUSLY VARIABLE TRANSMISSION

- 2) Install the engine coolant inlet hose to the CVTF cooler (with warmer feature) assembly.



- 3) Install the CVTF inlet hose and CVTF outlet hose to transmission.



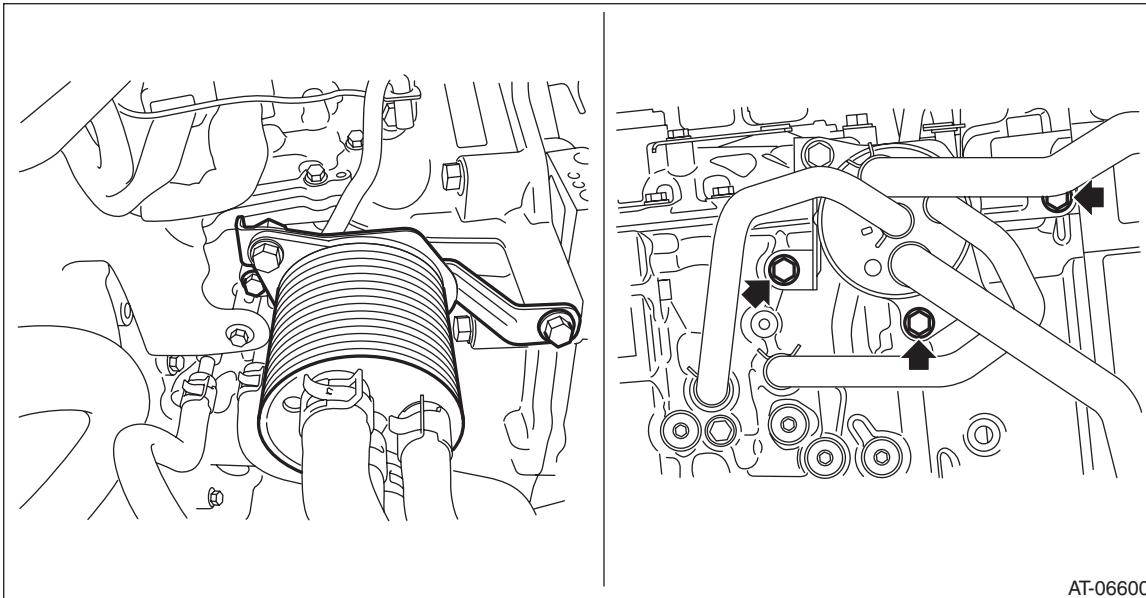
## CVTF Cooler (With Warmer Function)

CONTINUOUSLY VARIABLE TRANSMISSION

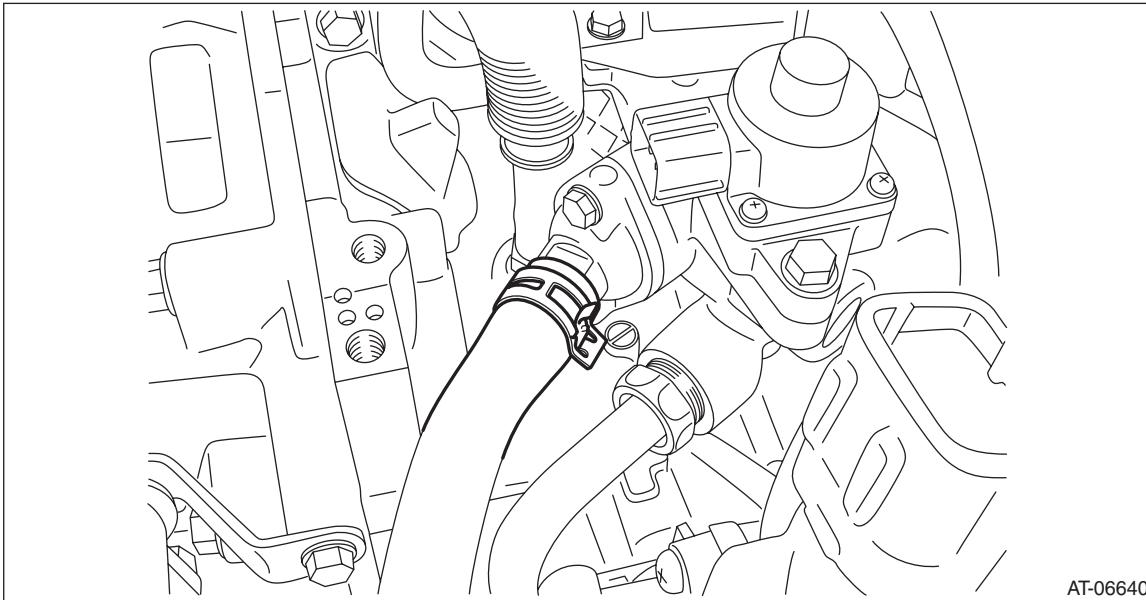
- 4) Install the CVTF cooler (with warmer feature) to the transmission.

**Tightening torque:**

23 N·m (2.3 kgf·m, 17.0 ft-lb)



- 5) Connect the engine coolant outlet hose.



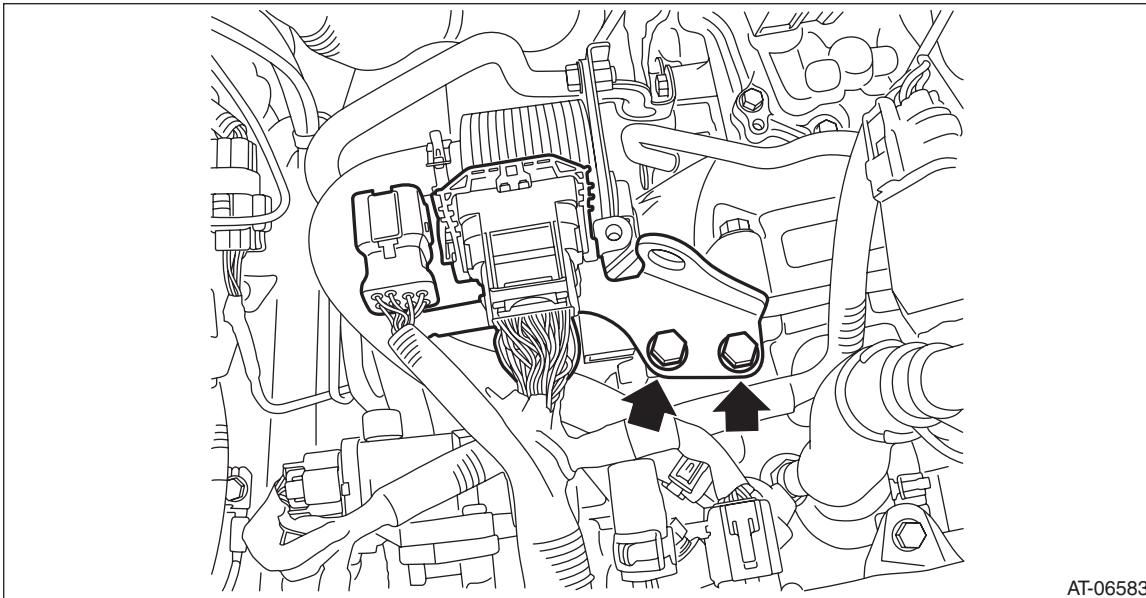
# CVTF Cooler (With Warmer Function)

## CONTINUOUSLY VARIABLE TRANSMISSION

- 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 pressure sensor harness connector.

**Tightening torque:**

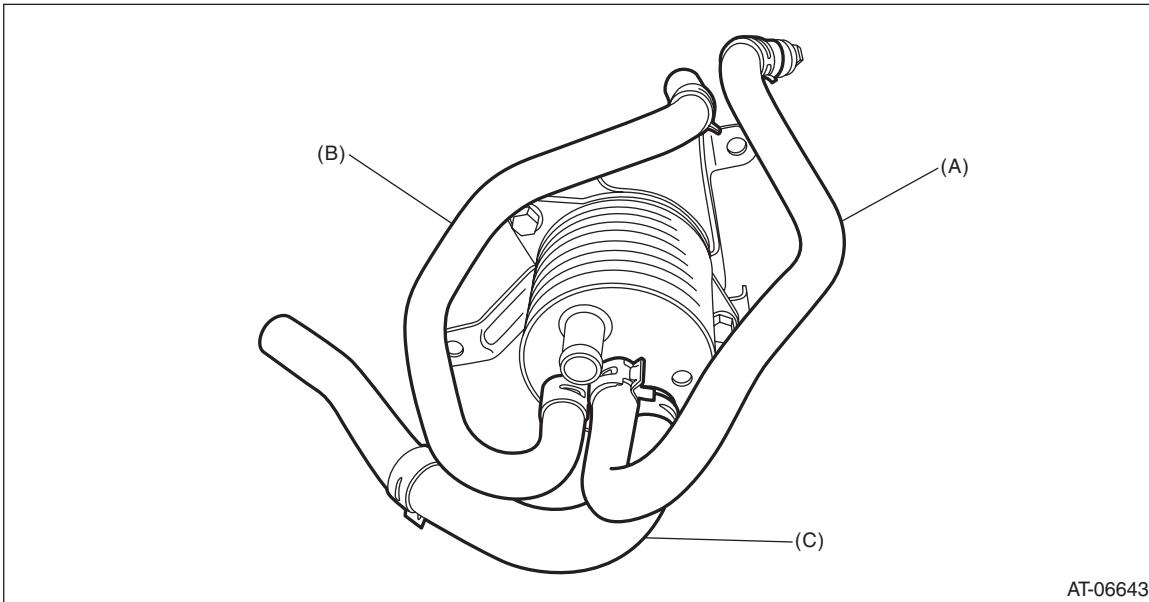
**Bulkhead harness connector bracket**

**7.5 N·m (0.8 kgf·m, 5.5 ft-lb)**

- 8) Install the air intake boot assembly. <Ref. to IN(H4DO)-12, INSTALLATION, Air Intake Boot.>
- 9) Connect the battery ground terminal.
- 10) Fill engine coolant. <Ref. to CO(H4DO)-13, REPLACEMENT, Engine Coolant.>
- 11) Adjust the CVTF level. <Ref. to CVT-36, ADJUSTMENT, CVTF.>

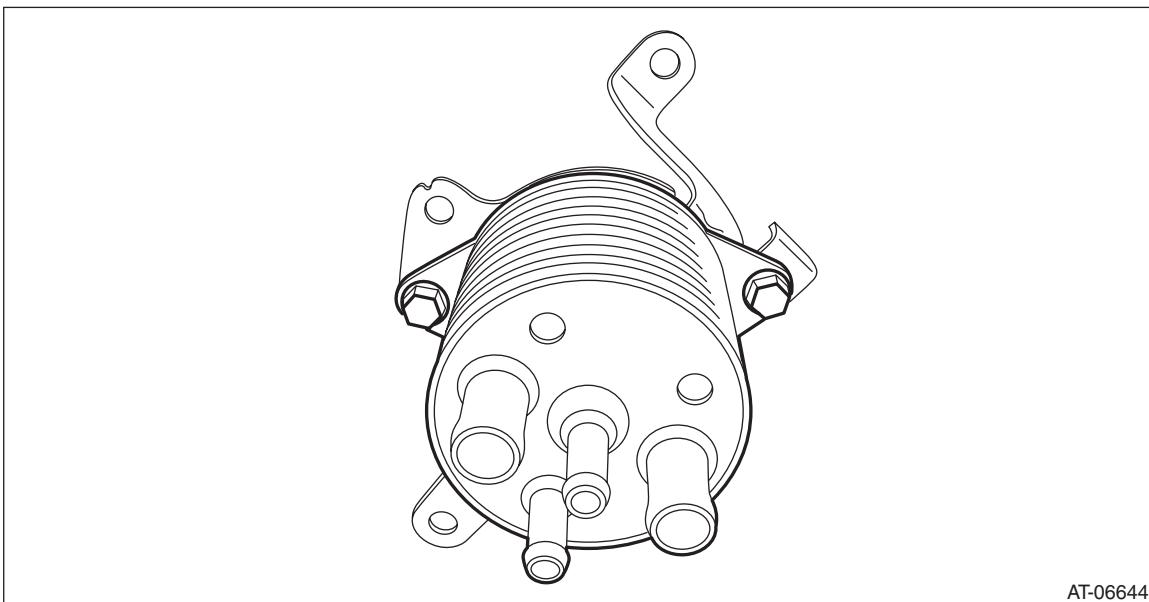
### C: DISASSEMBLY

- 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

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



# CVTF Cooler (With Warmer Function)

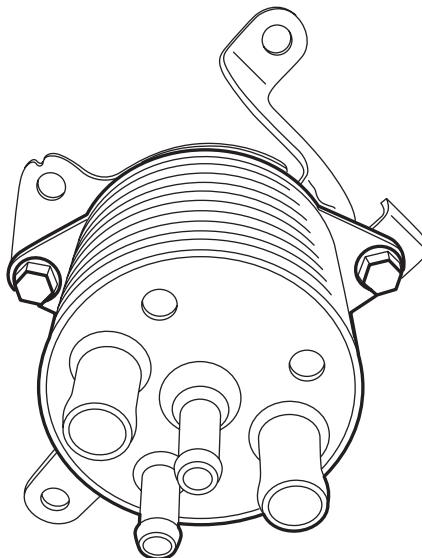
CONTINUOUSLY VARIABLE TRANSMISSION

## D: ASSEMBLY

- 1) Attach the bracket.

**Tightening torque:**

23 N·m (2.3 kgf·m, 17.0 ft-lb)

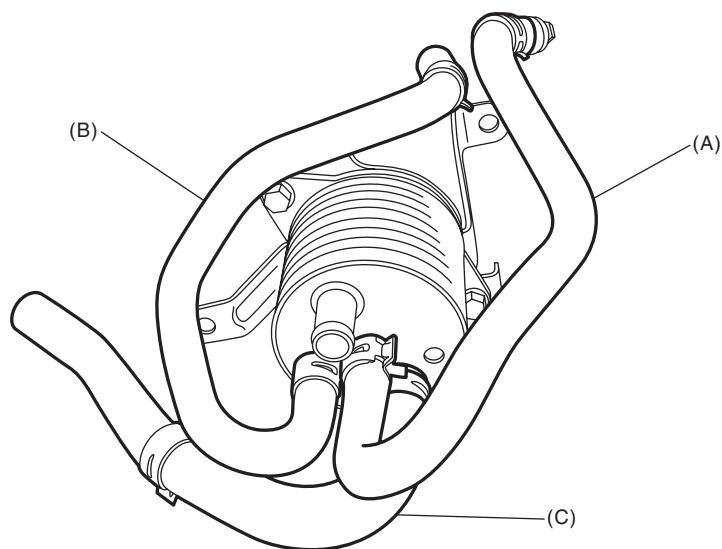


AT-06644

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

**NOTE:**

- Use a new CVTF cooler hose.
- Align the painting marks on the hose and the CVTF cooler (with warmer feature).



AT-06643

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