

4. Water Pump

A: REMOVAL

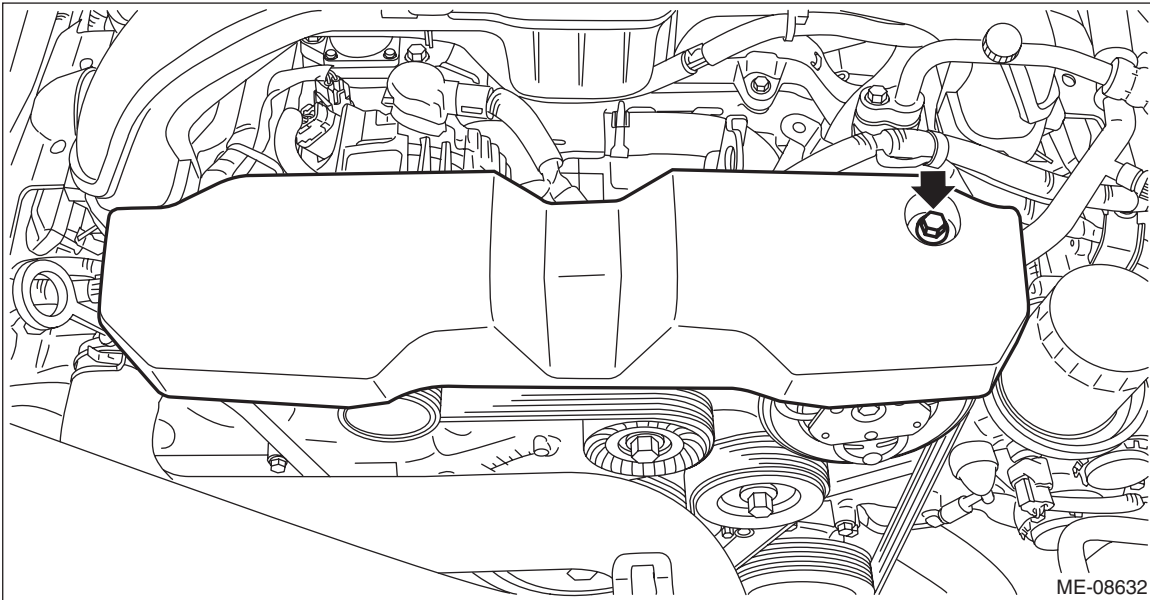
1. WATER PUMP PULLEY

1) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

2) Remove the V-belt covers. (Gasoline engine model)



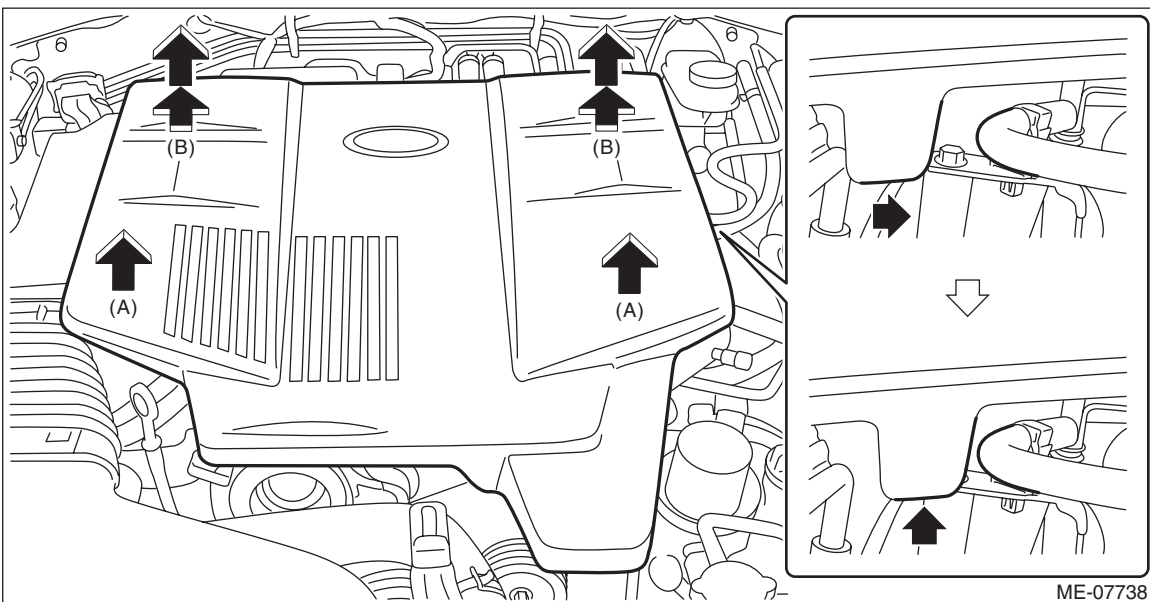
3) Remove the collector cover. (HEV model)

(1) Carefully pull up the front of collector cover at two positions (A).

(2) Carefully pull up the rear of collector cover at two positions (B) while moving it backward.

NOTE:

Be careful not to contact the fuel delivery tube when moving the collector cover rearward.



4) Remove the V-belts. (Gasoline engine model) <Ref. to ME(H4DO(w/o HEV))-122, GASOLINE ENGINE MODEL, REMOVAL, V-belt.>

Water Pump

COOLING

5) Loosen the V-belt, and remove the V-belt from the water pump pulley. (HEV model) <Ref. to ME(H4DO(w/o HEV))-124, HEV MODEL, REMOVAL, V-belt.>

NOTE:

It is not necessary to remove the V-belt tensioner assembly and the V-belt from ISG.

6) Remove the radiator main fan & fan motor assembly. <Ref. to CO(H4DO(w/o HEV))-89, REMOVAL, Radiator Main Fan and Fan Motor.>

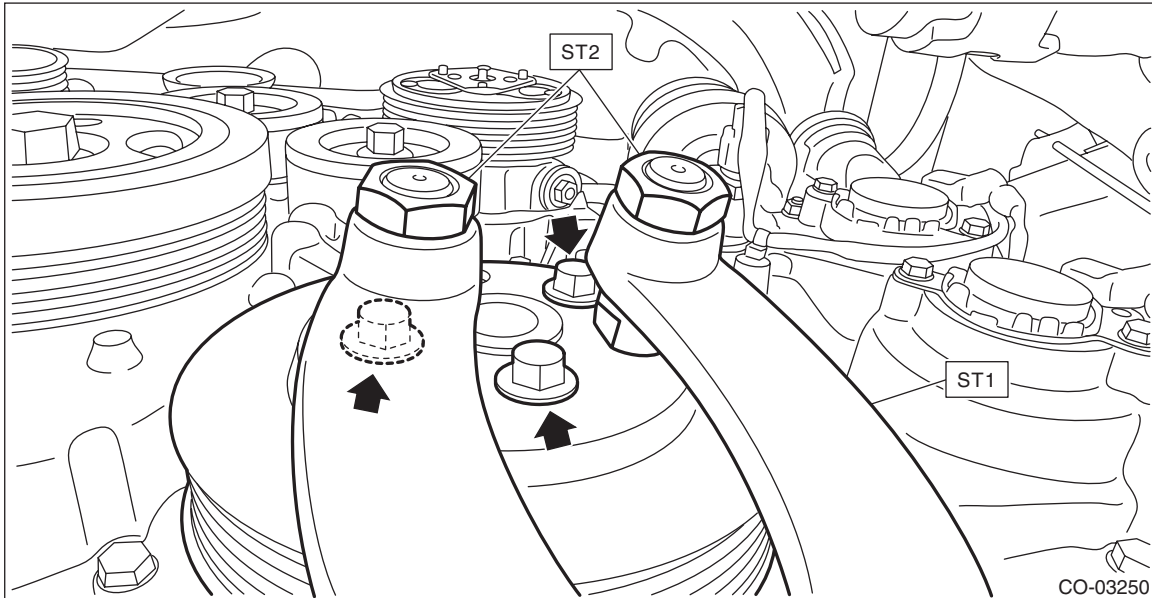
7) Lift up the vehicle.

8) Remove the under cover. <Ref. to EI-32, REMOVAL, Front Under Cover.>

9) Remove the water pump pulley using the ST.

ST1 18355AA000 PULLEY WRENCH

ST2 18334AA030 PULLEY WRENCH PIN SET



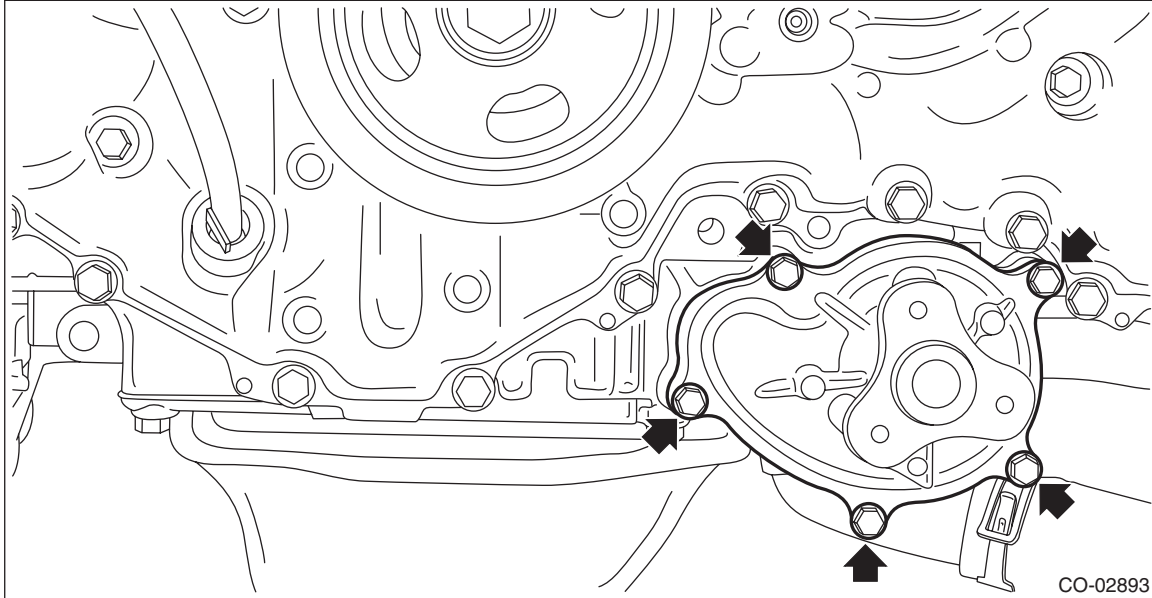
2. WATER PUMP

1) Drain engine coolant. <Ref. to CO(H4DO(w/o HEV))-16, DRAINING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

2) Remove the water pump pulley. <Ref. to CO(H4DO(w/o HEV))-19, WATER PUMP PULLEY, REMOVAL, Water Pump.>

3) Remove the front exhaust pipe. <Ref. to EX(H4DO(w/o HEV))-6, REMOVAL, Front Exhaust Pipe.>

- 4) Remove the water pump from the oil pan upper.



B: INSTALLATION

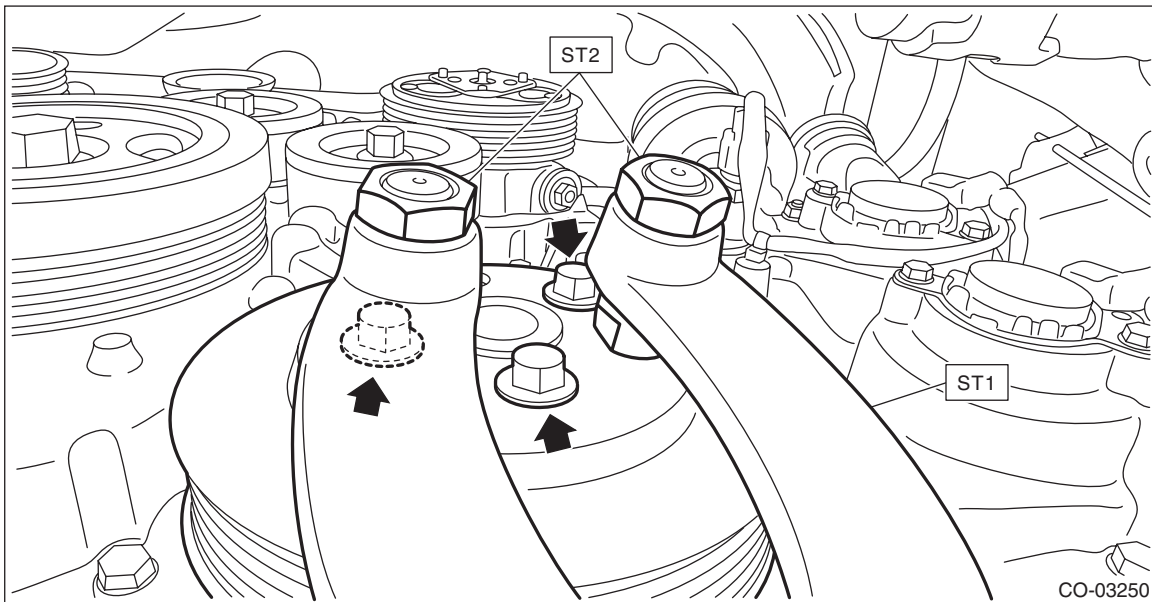
1. WATER PUMP PULLEY

- 1) Using the ST, install the water pump pulley.

ST1 18355AA000 PULLEY WRENCH
ST2 18334AA030 PULLEY WRENCH PIN SET

Tightening torque:

14 N·m (1.4 kgf-m, 10.3 ft-lb)



- 2) Install the under cover. <Ref. to EI-32, INSTALLATION, Front Under Cover.>
3) Lower the vehicle.
4) Install the radiator main fan & fan motor assembly. <Ref. to CO(H4DO(w/o HEV))-90, INSTALLATION, Radiator Main Fan and Fan Motor.>
5) Install the V-belts. <Ref. to ME(H4DO(w/o HEV))-130, INSTALLATION, V-belt.>

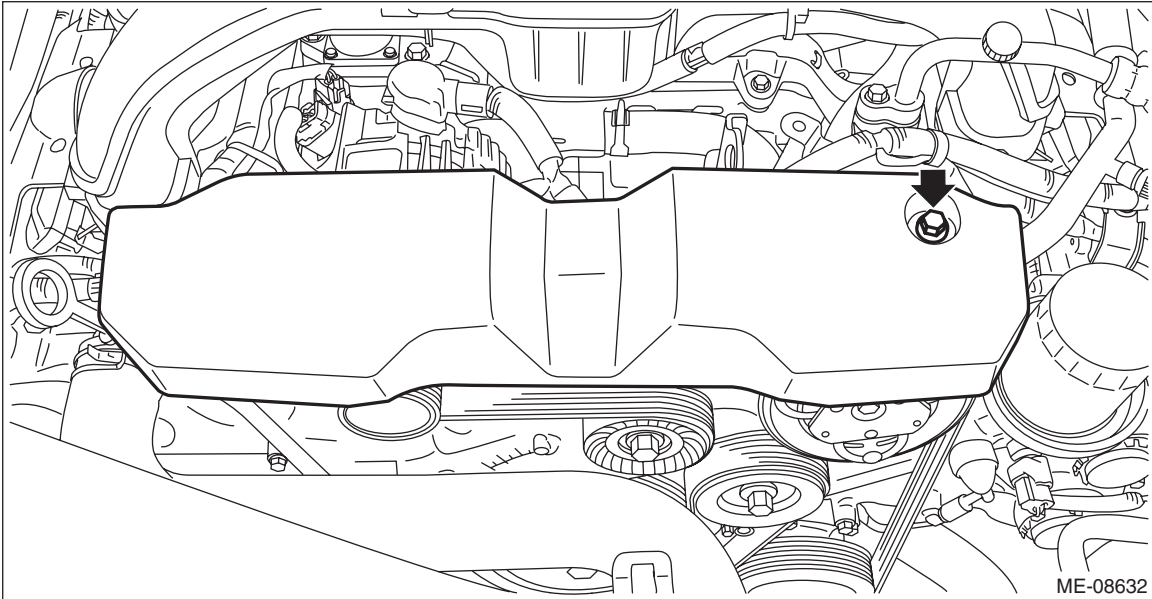
Water Pump

COOLING

6) Install the V-belt cover. (Gasoline engine model)

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



7) Install the collector cover. (HEV model)

8) Connect the battery ground terminal. <Ref. to NT-5, BATTERY, NOTE, Note.>

2. WATER PUMP

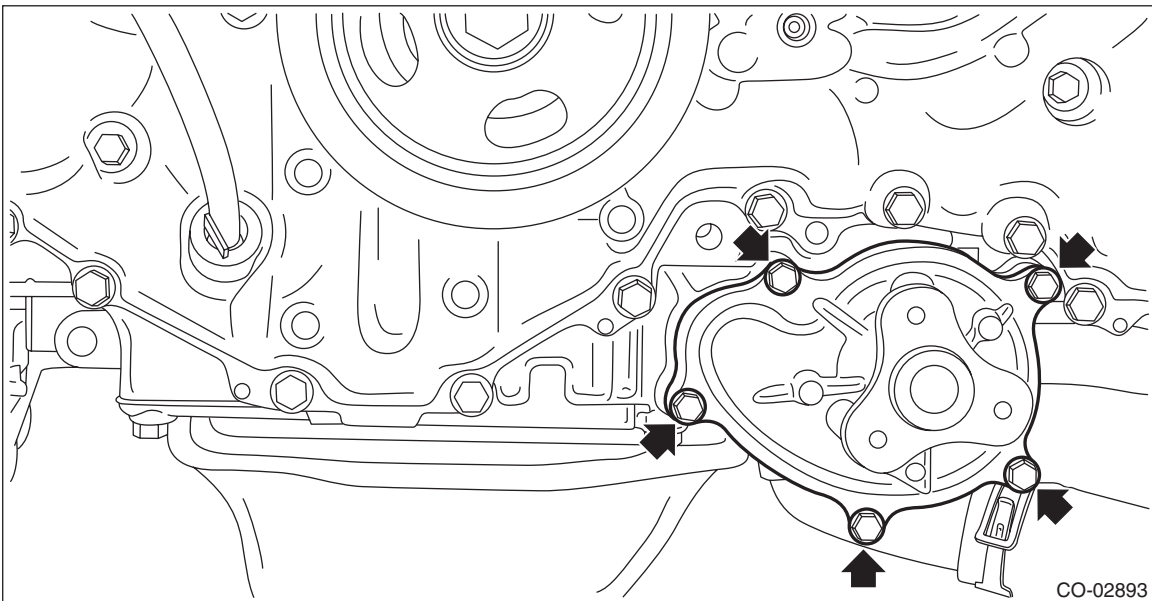
1) Install the water pump to oil pan upper.

NOTE:

Use a new gasket.

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



2) Install the front exhaust pipe. <Ref. to EX(H4DO(w/o HEV))-8, INSTALLATION, Front Exhaust Pipe.>

3) Install the water pump pulley. <Ref. to CO(H4DO(w/o HEV))-21, WATER PUMP PULLEY, INSTALLATION, Water Pump.>

4) Fill engine coolant. <Ref. to CO(H4DO(w/o HEV))-16, FILLING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

C: INSPECTION

- 1) Check the water pump bearing for smooth rotation.
- 2) Check the water pump pulley for abnormalities.
- 3) Make sure the impeller is not abnormally deformed or damaged.