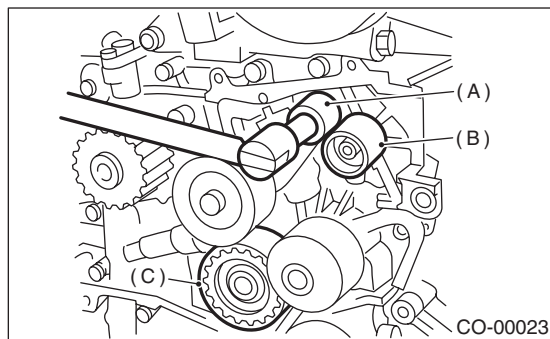


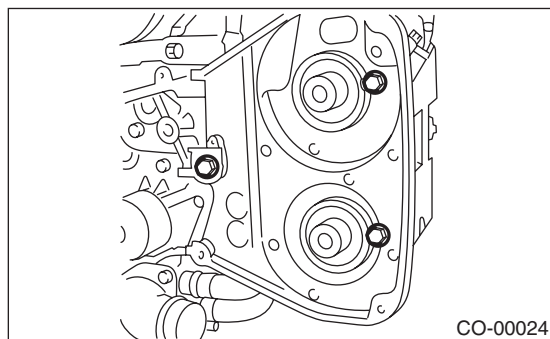
4. Water Pump

A: REMOVAL

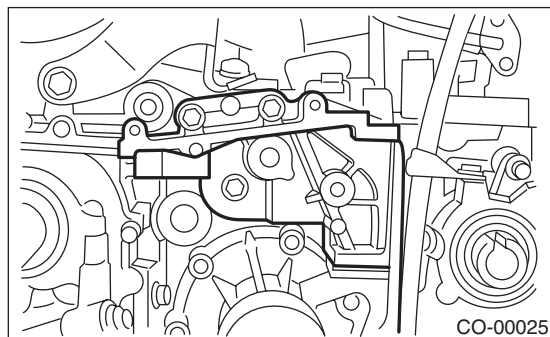
- 1) Remove the collector cover.
- 2) Remove the radiator. <Ref. to CO(H4DOTC)-19, REMOVAL, Radiator.>
- 3) Remove the V-belts. <Ref. to ME(H4DOTC)-37, REMOVAL, V-belt.>
- 4) Remove the crank pulley. <Ref. to ME(H4DOTC)-40, REMOVAL, Crank Pulley.>
- 5) Remove the timing belt. <Ref. to ME(H4DOTC)-43, REMOVAL, Timing Belt.>
- 6) Remove the automatic belt tension adjuster (A).
- 7) Remove the belt idler (B).
- 8) Remove the belt idler No. 2 (C).



- 9) Remove the cam sprocket (LH) using ST. <Ref. to ME(H4DOTC)-51, REMOVAL, Cam Sprocket.>
- 10) Remove the belt cover (LH) No. 2.

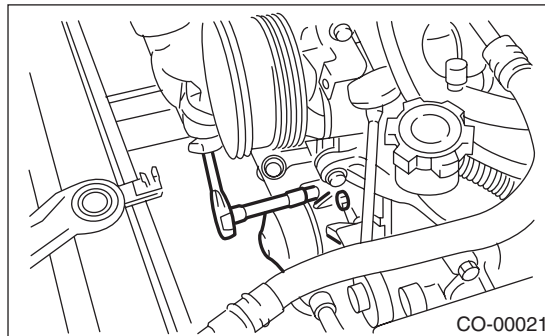


- 11) Remove the tensioner bracket.



- 12) Disconnect the hose from water pump.

- 13) Remove the water pump.



B: INSTALLATION

- 1) Install the water pump onto cylinder block (LH).

NOTE:

- Use a new gasket.
- When installing the water pump, tighten the bolts in two stages in alphabetical sequence as shown in figure.

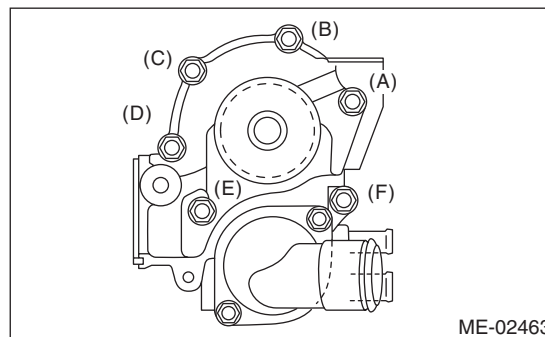
Tightening torque:

First:

12 N·m (1.2 kgf-m, 8.9 ft-lb)

Second:

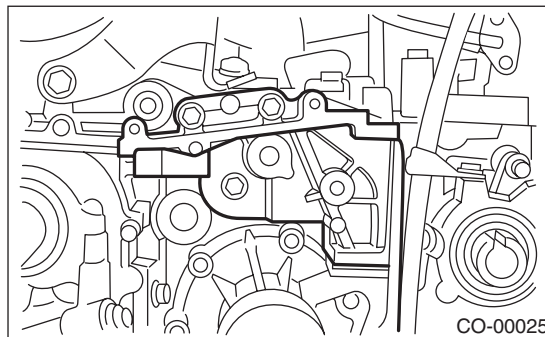
12 N·m (1.2 kgf-m, 8.9 ft-lb)



- 2) Install the hose to water pump.
- 3) Install the tensioner bracket.

Tightening torque:

24.5 N·m (2.5 kgf-m, 18.1 ft-lb)



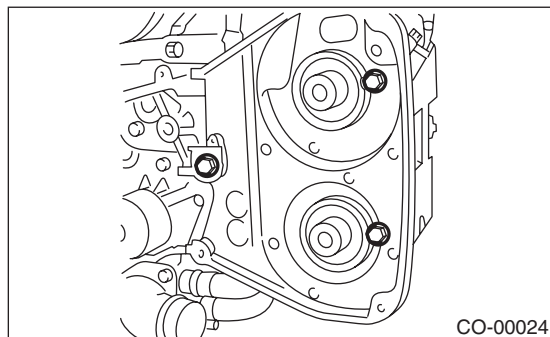
Water Pump

COOLING

- 4) Install the belt cover No. 2 (LH).

Tightening torque:

5 N·m (0.5 kgf-m, 3.6 ft-lb)



- 5) Install the cam sprocket (LH) using ST. <Ref. to ME(H4DOTC)-51, INSTALLATION, Cam Sprocket.>

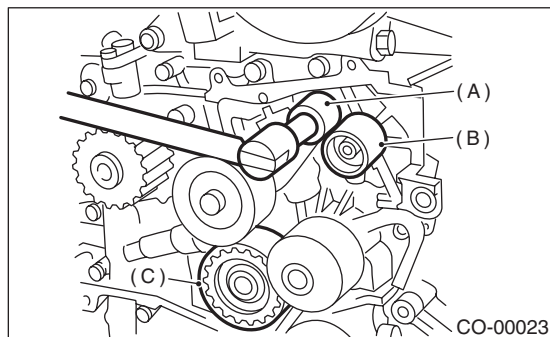
- 6) Install the belt idler No. 2 (C).

- 7) Install the belt idler (B).

- 8) Install the automatic belt tension adjuster (A) which has a tension rod held by a pin. <Ref. to ME(H4DOTC)-45, AUTOMATIC BELT TENSION ADJUSTER ASSEMBLY AND BELT IDLER, INSTALLATION, Timing Belt.>

Tightening torque:

39 N·m (4.0 kgf-m, 28.9 ft-lb)



- 9) Install the timing belt. <Ref. to ME(H4DOTC)-46, TIMING BELT, INSTALLATION, Timing Belt.>

- 10) Install the crank pulley. <Ref. to ME(H4DOTC)-40, INSTALLATION, Crank Pulley.>

- 11) Install the V-belts. <Ref. to ME(H4DOTC)-38, INSTALLATION, V-belt.>

- 12) Install the radiator. <Ref. to CO(H4DOTC)-20, INSTALLATION, Radiator.>

- 13) Install the collector cover.

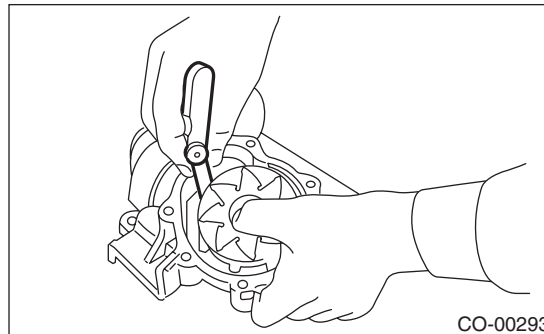
C: INSPECTION

- 1) Check the water pump bearing for smooth rotation.
- 2) Check the water pump pulley for abnormalities.
- 3) Make sure the impeller is not deformed or damaged.
- 4) Inspect the clearance between impeller and pump case.

Clearance between impeller and pump case:

Standard

0.5 — 1.5 mm (0.020 — 0.059 in)



- 5) After water pump installation, check pulley shaft for engine coolant leaks or noise. If leaks or noise are noted, replace the water pump assembly.