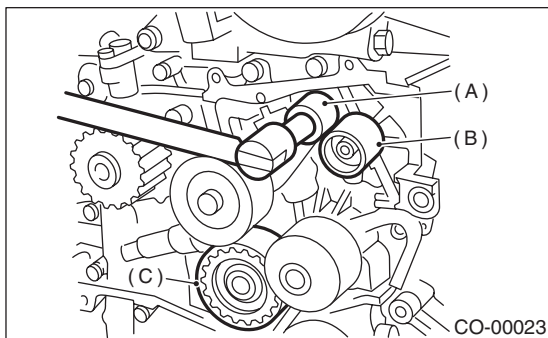


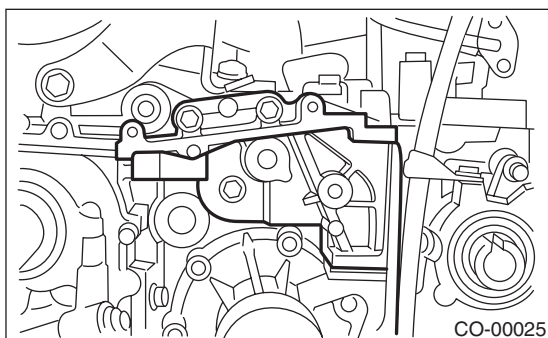
4. Water Pump

A: REMOVAL

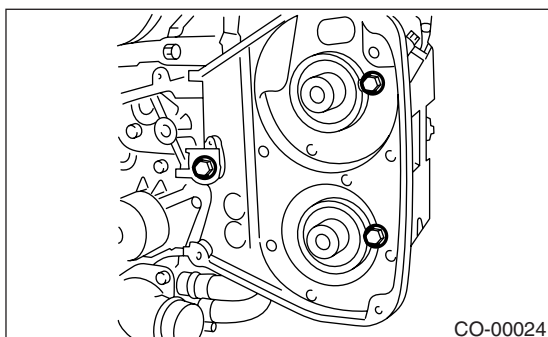
- 1) Remove the radiator. <Ref. to CO(H4DOTC)-19, REMOVAL.>
- 2) Remove the V-belts. <Ref. to ME(H4DOTC)-45, REMOVAL, V-belt.>
- 3) Remove the timing belt. <Ref. to ME(H4DOTC)-49, REMOVAL, Timing Belt Assembly.>
- 4) Remove the automatic belt tension adjuster (A).
- 5) Remove the belt idler (B).
- 6) Remove the belt idler No. 2 (C).



- 7) Remove the camshaft position sensor. <Ref. to FU(H4DOTC)-29, REMOVAL, Camshaft Position Sensor.>
- 8) Remove the camshaft sprockets (LH) by using ST. <Ref. to ME(H4DOTC)-57, REMOVAL, Camshaft Sprocket.>
- 9) Remove the tensioner bracket.

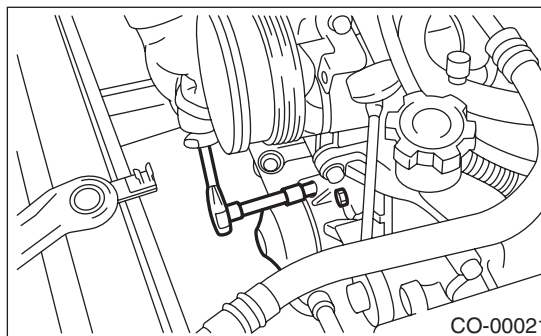


- 10) Remove the belt cover No. 2 (LH).



- 11) Disconnect the hose from water pump.

- 12) Remove the water pump.



B: INSTALLATION

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

NOTE:

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

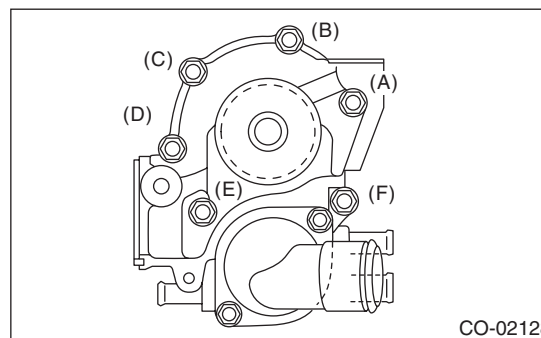
Tightening torque:

First:

12 N·m (1.2 kgf-m, 8.7 ft-lb)

Second:

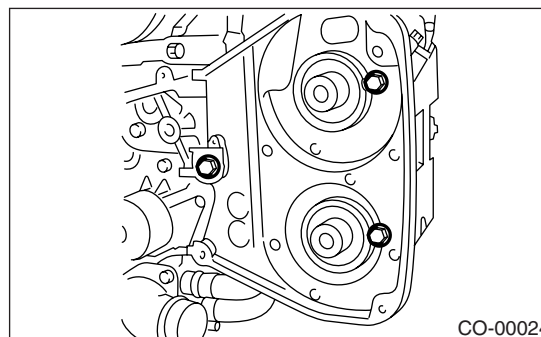
12 N·m (1.2 kgf-m, 8.7 ft-lb)



- 2) Connect the hose to water pump.
- 3) Install the belt cover No. 2 (LH).

Tightening torque:

5 N·m (0.5 kgf-m, 3.6 ft-lb)



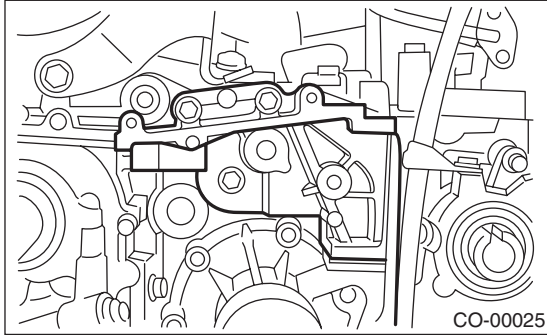
WATER PUMP

COOLING

4) Install the tensioner bracket.

Tightening torque:

24.5 N·m (2.5 kgf·m, 18.1 ft·lb)



5) Install the camshaft sprockets (LH) by using ST. <Ref. to ME(H4DOTC)-57, INSTALLATION, Camshaft Sprocket.>

6) Install the camshaft position sensor. <Ref. to FU(H4DOTC)-29, INSTALLATION, Camshaft Position Sensor.>

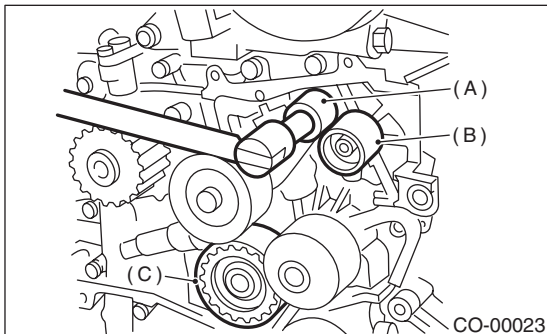
7) Install the belt idler No. 2 (C).

8) Install the belt idler (B).

9) Install the automatic belt tension adjuster (A) which has tension rod held by pin. <Ref. to ME(H4DOTC)-51, INSTALLATION, Timing Belt Assembly.>

Tightening torque:

39 N·m (4.0 kgf·m, 28.9 ft·lb)



10) Install the timing belt. <Ref. to ME(H4DOTC)-52, TIMING BELT, INSTALLATION, Timing Belt Assembly.>

11) Install the V-belts. <Ref. to ME(H4DOTC)-45, INSTALLATION, V-belt.>

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

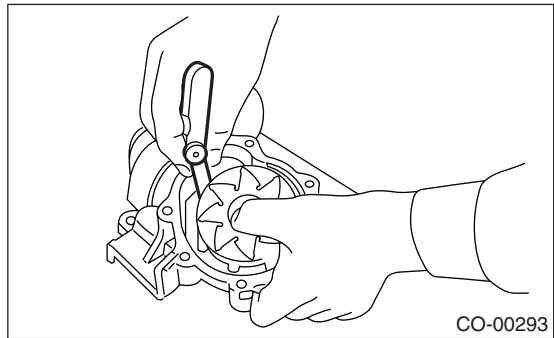
C: INSPECTION

- 1) Check the water pump bearing for smooth rotation.
- 2) Check the water pump pulley for abnormalities.
- 3) Check the clearance between impeller and pump case.

Clearance between impeller and pump case:

Standard

0.5 — 1.5 mm (0.020 — 0.059 in)



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