5. Thermostat
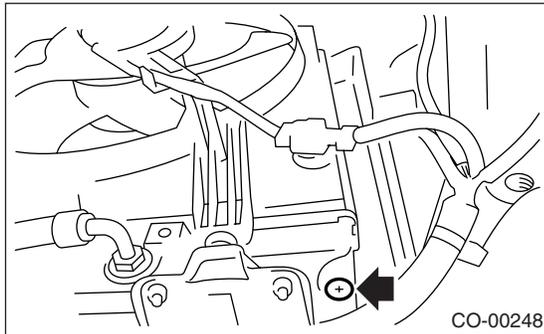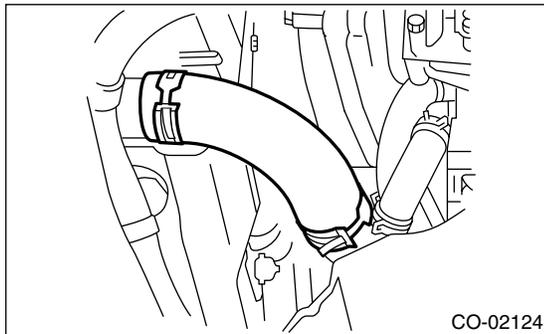
A: REMOVAL
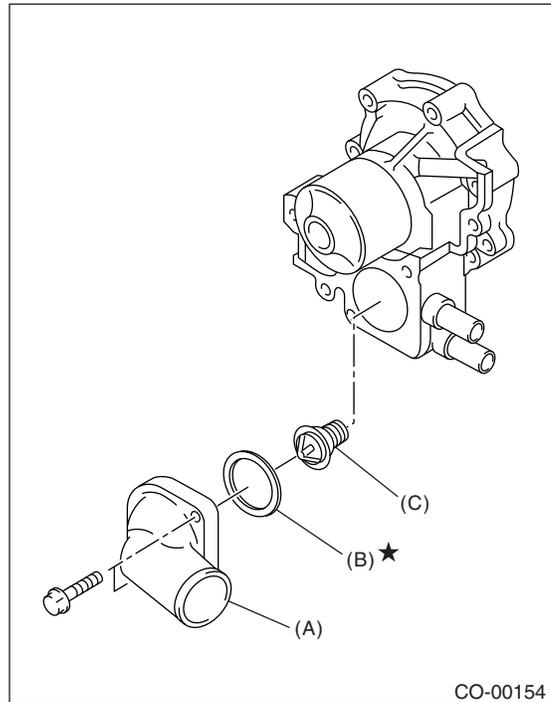
1) Set the vehicle on a lift.
2) Lift-up the vehicle.
3) Remove the under cover.
4) Drain engine coolant completely.
<Ref. to CO(H4DOTC)-13, DRAINING OF EN-GINE COOLANT, REPLACEMENT, Engine Coolant.>

CO-00248

5) Disconnect the radiator outlet hose from the thermostat cover.

CO-02124

6) Remove the thermostat cover, and then remove the gasket and thermostat.

CO-00154

(A) Thermostat cover
(B) Gasket
(C) Thermostat

B: INSTALLATION

1) Install the gasket to thermostat, and install the thermostat and gasket to water pump as a unit. Then, install the thermostat cover.
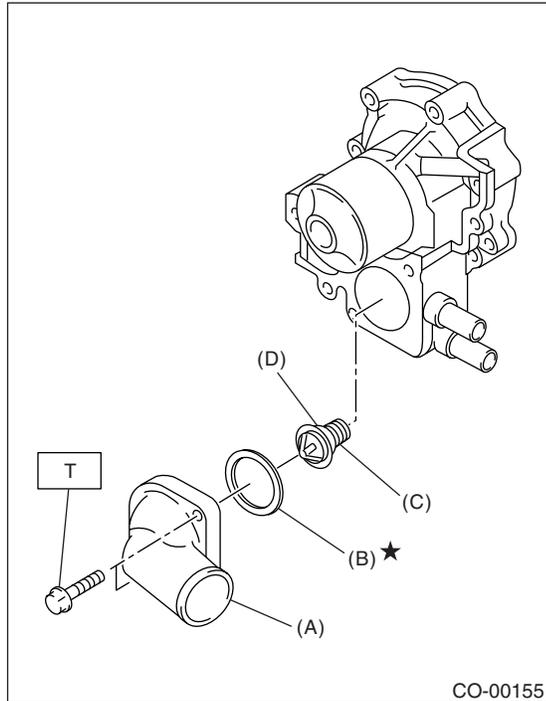
NOTE:
• When reinstalling the thermostat, use a new gasket.
• The thermostat must be installed with the jiggle pin facing upward.

Tightening torque:
  12 N·m (1.2 kgf-m, 8.9 ft-lb)

CO-00155

(A) Thermostat cover
(B) Gasket
(C) Thermostat
(D) Jiggle pin

2) Connect the radiator outlet hose to thermostat cover.
3) Install the under cover.
4) Lower the vehicle.
5) Fill with engine coolant. <Ref. to CO(H4DOTC)-13, FILLING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

C: INSPECTION

Replace the thermostat if the valve does not close completely at an ambient temperature or if the following test shows unsatisfactory results.
• Inspection method
Immerse the thermostat and a thermometer in water. Raise water temperature gradually, and measure the temperature and valve lift when the valve begins to open and when the valve is fully opened. During the test, agitate the water for even temperature distribution. The measurement should be to the specification.

NOTE:
• Leave the thermostat in a boiled water for more than five minutes before measuring the valve lift.
• Hold the thermostat with a wire or the like to avoid contacting with the bottom of container.

Starting temperature to open:
  76 — 80°C (169 — 176°F)

Fully opens:
  91°C (196°F)

Valve lift:
  9.0 mm (0.354 in) or more

CO-00033
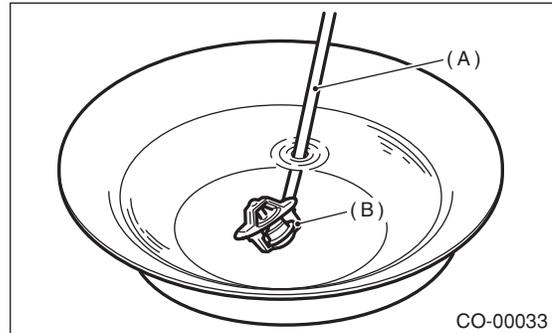
(A) Thermometer
(B) Thermostat