## 4. Engine Coolant Temperature Sensor

### A: REMOVAL

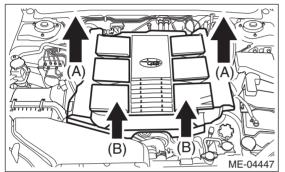
1) Remove the collector cover.

NOTE:

Follow these procedures for removal of the collector cover.

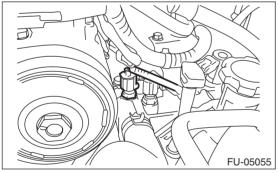
(1) Lift up the rear side holding two positions (A).

(2) Lift up the front side holding two positions (B) while moving it in the forward direction of the vehicle.



2) Disconnect the ground cable from battery.
3) Drain engine coolant. <Ref. to CO(H6DO)-12, DRAINING OF ENGINE COOLANT, REPLACE-MENT, Engine Coolant.>

4) Disconnect the connectors from the engine coolant temperature sensor.

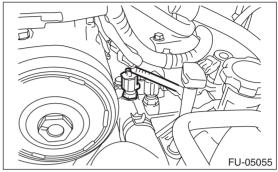


5) Remove the engine coolant temperature sensor.

## **B: INSTALLATION**

Install in the reverse order of removal.

#### Tightening torque: 22 N⋅m (2.2 kgf-m, 16.2 ft-lb)

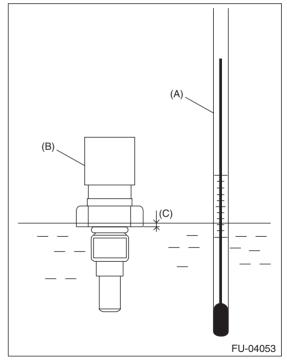


# **C: INSPECTION**

Check that the engine coolant temperature sensor has no deformation, cracks or other damages.
 Immerse the engine coolant temperature sensor and a thermometer in water.

### CAUTION:

Take care not to allow water to get into the engine coolant temperature sensor connector. Completely remove any water inside.

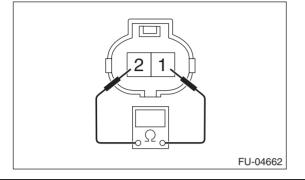


- (A) Thermometer
- (B) Engine coolant temperature sensor
- (C) Hexagonal part height: To approx.<sup>1</sup>/<sub>3</sub>

3) Raise water temperature gradually, measure the resistance between the engine coolant temperature sensor terminals when the temperature is  $20^{\circ}C$  ( $68^{\circ}F$ ) and  $80^{\circ}C$  ( $176^{\circ}F$ ).

### NOTE:

Agitate the water for even temperature distribution.



Water temperature	Terminal No.	Standard
20°C (68°F)	1 and 2	2.45±0.2 kΩ
80°C (176°F)		0.318±0.013 kΩ