# 3. Engine Coolant

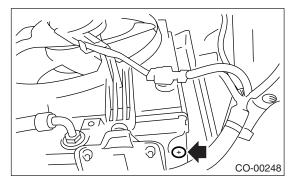
# A: REPLACEMENT

## 1. DRAINING OF ENGINE COOLANT

- 1) Lift-up the vehicle.
- 2) Remove the under cover.
- 3) Remove the drain plug to drain engine coolant into container.

#### NOTE:

Remove the coolant filler tank cap so that engine coolant will drain faster.



4) Install the drain plug.

# 2. FILLING OF ENGINE COOLANT

- 1) Remove the collector cover.
- 2) Pour cooling system conditioner through the filler neck.

# Cooling system protective agent: COOLING SYSTEM CONDITIONER (Part No. \$0A635071)

3) Fill the engine coolant into coolant filler tank up to the filler neck position.

Coolant capacity (fill up to "FULL" level):

MT model

Approx. 7.3 ℓ (7.7 US qt, 6.4 Imp qt)

AT model

Approx. 7.2 0 (7.6 US qt, 6.3 Imp qt)

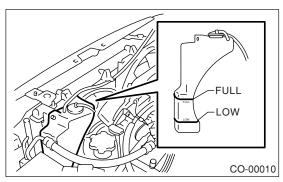
#### **CAUTION:**

Do not confuse the cap of coolant filler tank and cap of radiator.

#### NOTE:

- When pouring the engine coolant, the radiator side cap must not be removed.
- The SUBARU Genuine Coolant containing antifreeze and anti-rust agents is especially made for SUBARU engine, which has an aluminum crankcase. Always use SUBARU Genuine Coolant, since other coolant may cause corrosion.

4) Fill engine coolant into the reservoir tank up to "FULL" level.



- 5) Warm up the engine completely for more than five minutes at 2,000 to 3,000 rpm.
- 6) If the engine coolant level drops in coolant filler tank, add engine coolant to filler neck position.
- 7) If the engine coolant level drops from "FULL" level of reservoir tank, add engine coolant to "FULL" level.
- 8) Attach the coolant filler tank cap and reservoir tank cap properly.
- 9) Install the collector cover.

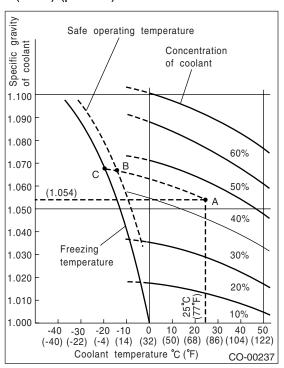
# **B: INSPECTION**

# 1. RERATIONSHIP OF SUBARU COOLANT CONCENTRATION AND FREEZING TEMPERTAURE

Concentration and safe operating temperature of SUBARU coolant is shown in the diagram. Measuring the temperature and specific gravity of the coolant will provide this information.

#### [Example]

If the coolant temperature is  $25^{\circ}$ C ( $77^{\circ}$ F) and its specific gravity is 1.054, the concentration is 45% (point A), the safe operating temperature is  $-14^{\circ}$ C ( $7^{\circ}$ F) (point B), and the freezing temperature is  $-20^{\circ}$ C ( $-4^{\circ}$ F) (point C).



## 2. PROCEDURE TO ADJUST THE CON-CENTRATION OF THE COOLANT

To adjust the concentration of coolant according to temperature, find the proper fluid concentration in the above diagram and replace the necessary amount of coolant with an undiluted solution of SUBARU genuine coolant (concentration 50%).

The amount of coolant that should be replaced can be determined using the diagram.

#### [Example]

Assume that the coolant concentration must be increased from 25% to 40%. Find point A, where the 25% line of coolant concentration intersects with the 40% curve of the necessary coolant concentration, and read the scale on the vertical axis of the graph at height A. The quantity of coolant to be drained is 2.1  $\, \varrho \,$  (2.2 US qt, 1.8 Imp qt). Drain 2.1  $\, \varrho \,$  (2.2 US qt, 1.8 Imp qt) of coolant from the cooling system and add 2.1  $\, \varrho \,$  (2.2 US qt, 1.8 Imp qt) of the undiluted solution of SUBARU coolant.

If a coolant concentration of 50% is needed, drain all the coolant and refill with the undiluted solution only.

