

11.Engine Coolant

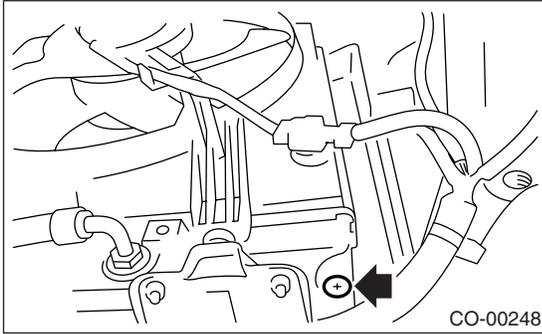
A: REPLACEMENT

1. REPLACEMENT OF COOLANT

WARNING:

The radiator is of the pressurized type. Do not attempt to open the radiator cap immediately after the engine has been stopped.

- 1) Lift-up the vehicle.
- 2) Remove the under cover.
- 3) Place a container under drain pipe.
- 4) Remove the drain cock to drain engine coolant into container.



- 5) For quick draining, open the radiator cap.

NOTE:

- For turbo model, be sure to open the radiator cap on the filler tank side.
 - Be careful not to spill coolant on the floor.
- 6) Drain the coolant from reservoir tank.
 - 7) Tighten the radiator drain cock securely after draining coolant.
 - 8) Pour cooling system conditioner through the filler neck.

Cooling system protective agent:

Cooling system conditioner (Part No. S0A635071)

- 9) Slowly pour the coolant into radiator. Pour the coolant up to air bleeder hole, and then install the cap. (Turbo model)
- 10) Pour the coolant from radiator filler port to neck of filler. Then, pour the coolant into reservoir tank up to "FULL" level.

Recommended engine coolant:

Refer to "RM" section. <Ref. to RM-4, COOLANT, RECOMMENDED MATERIALS, Recommended Materials.>

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

AT model

2.5 L model (without ATF cooler (with warmer))

Approx. 6.3 ℓ (6.7 US qt, 5.5 Imp qt)

2.5 L model (with ATF cooler (with warmer))

Approx. 6.7 ℓ (7.1 US qt, 5.9 Imp qt)

3.0 L model (without ATF cooler (with warmer))

Approx. 7.2 ℓ (7.6 US qt, 6.3 Imp qt)

3.0 L model (with ATF cooler (with warmer))

Approx. 7.7 ℓ (8.1 US qt, 6.8 Imp qt)

MT model

2.5 L model

Approx. 6.4 ℓ (6.8 US qt, 5.6 Imp qt)

NOTE:

The SUBARU Genuine Coolant containing anti-freeze and anti-rust agents is especially made for SUBARU engine, which has an aluminum crank-case. Always use SUBARU Genuine Coolant, since other coolant may cause corrosion.

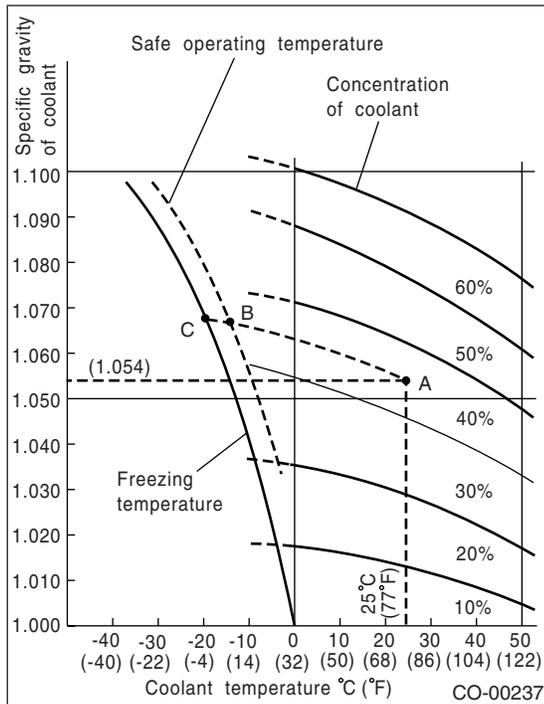
- 11) Securely install the radiator cap.
- 12) Run the engine for more than five minutes at 2,000 to 3,000 rpm. (Run engine until radiator becomes hot in order to purge air trapped in cooling system.)
- 13) Stop the engine and wait until coolant temperature lowers. Then open the radiator cap to check coolant level and add coolant up to radiator filler neck. Next, add coolant into reservoir tank up to "FULL" level.
- 14) After adding coolant, securely install the radiator and reservoir tank caps.

2. RERATIONSHIP OF SUBARU COOLANT CONCENTRATION AND FREEZING TEMPERATURE

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°C (77°F), its specific gravity is 1.054 and the concentration is 45% (point A), the safe operating temperature is -14°C (7°F) (point B), and the freezing temperature is -20°C (-4°F) (point C).



3. PROCEDURE TO ADJUST THE CONCENTRATION 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 ℓ (2.2 US qt, 1.8 Imp qt). Drain 2.1 ℓ (2.2 US qt, 1.8 Imp qt) of coolant from the cooling system and add 2.1 ℓ (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.

