

12.Engine Coolant

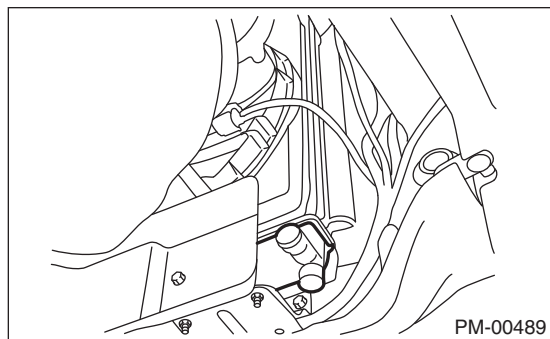
A: REPLACEMENT

1. REPLACEMENT OF ENGINE COOLANT

WARNING:

The radiator is of the pressurized type. Do not attempt to remove 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) Loosen and remove the drain cock to drain engine coolant into container.



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

CAUTION:

- Be careful not to spill coolant on the floor.
- For turbo model, always open the radiator cap on the filler tank side.

- 6) Drain the coolant from reservoir tank.
- 7) Tighten the drain cock securely after draining coolant.
- 8) Pour cooling system conditioner through the filler neck.

Cooling system protecting agent:

Cooling system conditioner

(Part No. SOA635071)

- 9) Slowly pour the coolant from radiator filler port to neck of filler. Then, pour the coolant into reservoir tank up to "FULL" level.

Coolant level:

<Ref. to SPC-4, CAPACITY, Forester.>

NOTE:

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

CAUTION:

Be careful not to spill engine coolant on the exhaust pipe to prevent it from emitting smoke or causing a fire. If engine coolant spilled, wipe it off completely with a clean rag.

- 10) Close the radiator cap (on non-turbo models) or the coolant filler tank cap (on turbo models), start the engine and race 5 to 6 times at less than 3,000 rpm, then stop the engine. (Complete this operation within 40 seconds.)

- 11) Wait for one minute after the engine stops, then open the radiator cap (on non-turbo models) or the coolant filler tank cap (on turbo models). If the engine coolant level drops, add engine coolant into the radiator filler neck (on non-turbo models) or the coolant filler tank filler neck (on turbo models) up to the filler neck position.

- 12) Perform the procedures 10) and 11) again.

- 13) Close the radiator cap (on non-turbo models) or the coolant filler tank cap (on turbo models), and the reservoir tank cap.

- 14) Start the engine and operate the heater at maximum hot position and the blower speed setting to "LO".

- 15) Run the engine at 2,000 rpm or less until radiator fan starts and stops.

NOTE:

Be careful with the engine coolant temperature gauge to prevent overheating.

- 16) Stop the engine and wait until the engine coolant temperature lowers to 30°C (86°F).

- 17) Open the radiator cap (on non-turbo models) or the coolant filler tank cap (on turbo models). If the engine coolant level drops, add engine coolant into the radiator filler neck (on non-turbo models) or the coolant filler tank filler neck (on turbo models) up to the filler neck position.

Then, pour the coolant into reservoir tank up to "FULL" level.

- 18) Close the radiator cap (on non-turbo models) or the coolant filler tank cap (on turbo models), and the reservoir tank cap.

- 19) Set the heater setting to maximum hot position and the blower speed setting to "LO" and start the engine. Perform racing at less than 3,000 rpm. If the flowing sound is heard from heater core, repeat the procedures from step 15) again.

B: ADJUSTMENT

1. PROCEDURE TO ADJUST THE SUPER COOLANT CONCENTRATION

CAUTION:

Use the Subaru Super Coolant with a 50 — 60% concentration in order to obtain maximum anti-freeze and anti-rust performance.

To adjust the concentration of Subaru Super Coolant according to temperature, find the proper Subaru Super Coolant concentration in the table, and add diluting water to the Subaru Super Coolant (undiluted type) until it reaches the proper dilution.

RELATIONSHIP OF SUBARU SUPER COOLANT CONCENTRATION AND FREEZING TEMPERATURE			
Subaru Super Coolant concentration	50%	55%	60%
Freezing temperature	−36°C (−33°F)	−41°C (−42°F)	−50°C (−58°F)

Recommended engine coolant and dilution water:

For the recommended engine coolant and dilution water, refer to “RM” section. <Ref. to RM-4, ENGINE COOLANT, RECOMMENDED MATERIALS, Recommended Materials.>