

# STI PERFORMANCE RADIATOR HOSE INSTRUCTIONS

Thank you for your purchase of SPT Performance Parts.

The following instructions have been provided to you as a courtesy of Subaru of America, Inc.

Installation instructions are intended only for certified trained automotive technicians or those with the necessary automotive knowledge to properly complete the job. In some cases, special tools may be required. Installation should never be undertaken by unqualified persons or by those lacking the necessary tools and facilities.

Subaru of America, Inc. reserves the right to alter these installation instructions at any time without prior notification to customers.

http://www.spt.subaru.com



### STi Performance Radiator Hoses

### **CAUTION**

- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust or dirt.
- Be careful not to burn your hands, because each part in the vehicle is hot after running.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Before disconnecting electrical connectors of sensors or units, be sure to disconnect negative terminal from battery.

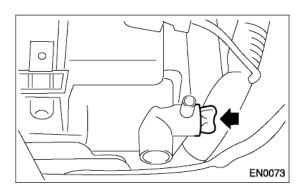
#### **DRAINING OF ENGINE COOLANT**

- 1) Lift-up the vehicle.
- 2) 4) Set the vehicle on the lift.
- 3) Remove the under cover.
- 4) Remove the drain cock to drain engine coolant into container.

#### NOTE:

Remove the radiator cap so that engine coolant will drain faster.

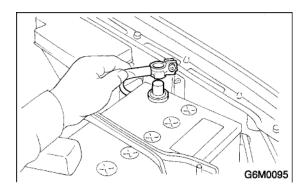
5) Drain the engine coolant completely.



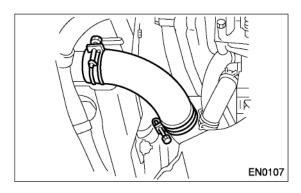
Warning: The radiator is pressurized. Wait until the engine cools down before working on the radiator.

#### REMOVAL AND INSTALLATION OF LOWER HOSE

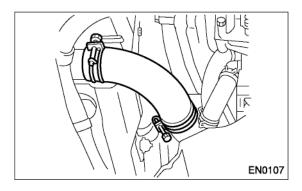
6) Disconnect the battery ground cable.



7) Disconnect the radiator outlet hose from the thermostat cover and the radiator outlet.

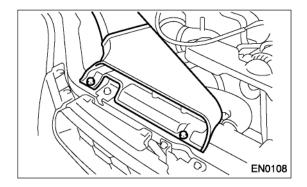


8) Connect the hose to the radiator outlet and to the engine also using clamps provided in the kit. Do not overtighten.

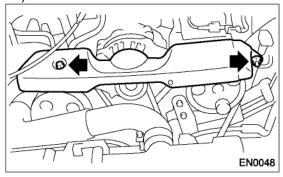


#### REMOVAL AND INSTALLATION OF UPPER HOSE

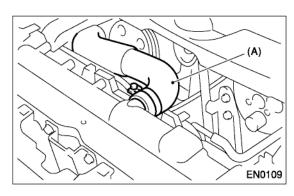
9) Remove the air intake duct.



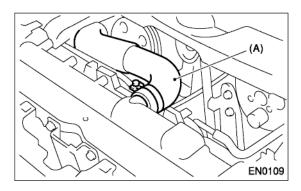
10) Remove the V-belt cover.



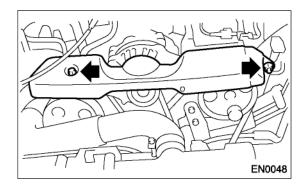
15) Disconnect the radiator hose (A) from the radiator inlet and engine block.



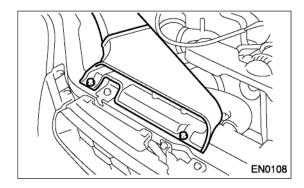
16) Connect the radiator hose (A) to the radiator inlet and engine block using clamps provided in the kit. Do not overtighten.



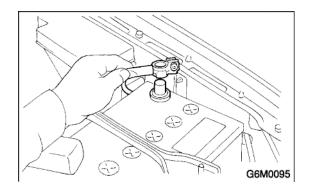
- 17) Lower the vehicle.
- 18) Install the V-belt covers.



19) Install the air intake duct.



20) Connect the battery ground cable.



### **FILLING OF ENGINE COOLANT**

21) Fill engine coolant into radiator up to the filler neck position.

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

Turbo AT model

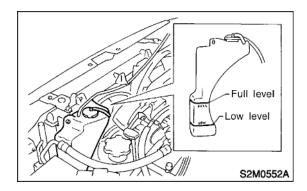
Approx. 7.6 2 (8.03 US qt, 6.69 Imp qt)

Turbo MT model

Approx. 7.7 2 (8.14 US qt, 6.78 Imp qt)

Caution: 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.

22) Fill engine coolant into reservoir tank up to the upper level.

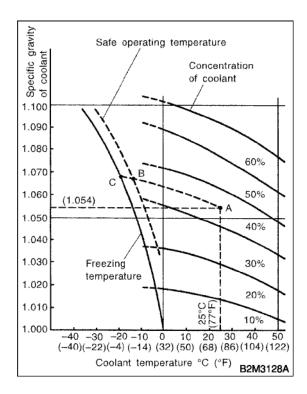


- 23) Warm-up engine completely for more than five minutes at 2,000 to 3,000 rpm.
- 24) If the engine coolant level drops in radiator, add the engine coolant to filler neck position.
- 25) If the engine coolant level drops from upper level of reservoir tank, add the engine coolant to the upper level.
- 26) Attach the radiator cap and reservoir tank cap properly.

# 1. RELATIONSHIP OF SUBARU COOLANT CONCENTRATION AND FREEZING TEMPERATURE

The concentration and safe operating temperature of the 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) and its specific gravity is 1.054, the concentration is 35% (point A), the safe operating temperature is .14°C (7°F) (point B), and the freezing temperature is . 20°C (.4°F) (point C).



## 2. PROCEDURE TO ADJUST THE CONCENTRATION OF THE COOLANT

To adjust the concentration of the 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 liters (2.2 US qt, 1.8 Imp qt). Drain 2.1 liters (2.2 US qt, 1.8 Imp qt) of coolant from the cooling system and add 2.1 liters (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.

