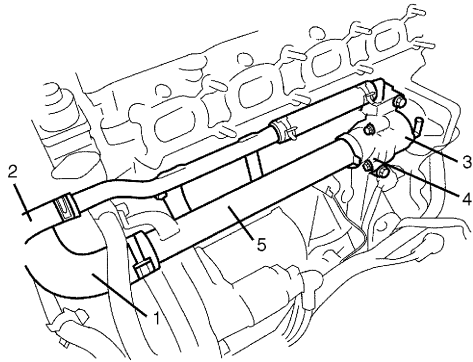


Thermostat Removal and Installation

S7RW0A1606007

Removal

- 1) Drain coolant referring to "Cooling System Draining".
- 2) Remove intake manifold referring to "Intake Manifold Removal and Installation in Section 1D".
- 3) Disconnect water hose (1) and heater hose (2) from each pipe.
- 4) Remove thermostat case (3) with thermostat cap (4) and water inlet pipe (5).
- 5) Remove water inlet pipe with thermostat cap from thermostat case.
- 6) Remove thermostat from thermostat case (3).

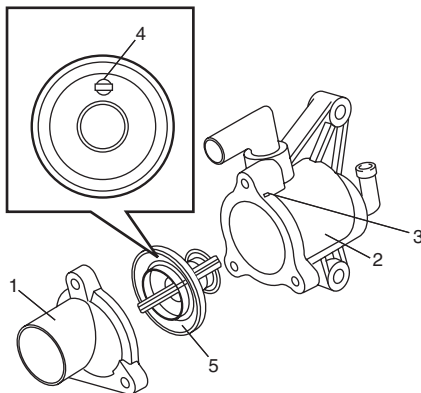


I6RW0B160007-01

Installation

Reverse removal procedure for installation noting the following points.

- Install thermostat (5) to thermostat case (2) by aligning air bleed valve (4) of thermostat with mark (3) of thermostat case and, then install thermostat cap (1) to thermostat case.



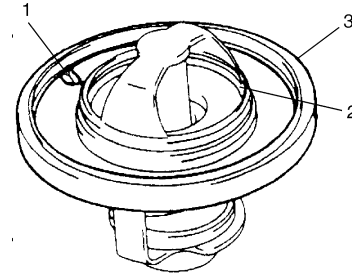
I6RW0B160008-01

- Use new O-rings when installing.
- Refill cooling system referring to Step 7) to 17) of "Cooling System Flush and Refill".
- Verify that there is no coolant leakage at each connection.

Thermostat Inspection

S7RW0A1606008

- Make sure that air bleed valve (1) of thermostat is clean.
- Check to make sure that valve seat (2) is free from foreign matters which would prevent valve from seating tight.
- Check thermostat seal (3) for breakage, deterioration or any other damage.



I3RM0A160008-01

- Check thermostatic movement of wax pellet as follows:
 - a. Immerse thermostat (1) in water, and heat water gradually.
 - b. Check that valve starts to open at specific temperature.

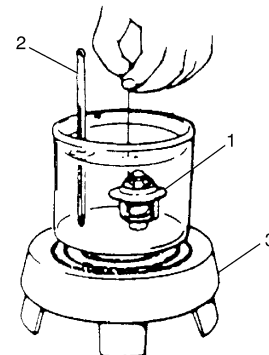
Temperature at which valve begins to open
80 – 84 °C (176 – 183 °F)

Temperature at which valve become fully open
95 – 97 °C (203 – 206 °F)

Valve lift

More than 8 mm (0.31 in.) at 95 °C (203 °F)

If valve starts to open at a temperature substantially below or above specific temperature, thermostat unit should be replaced with a new one. Such a unit, if reused, will bring about overcooling or overheating tendency.



I2RH01160012-01

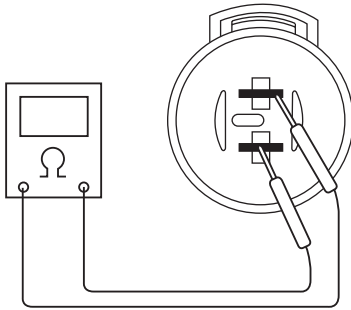
2. Thermometer

3. Heater

Radiator Cooling Fan Assembly On-Vehicle Inspection

S7RW0A1606009

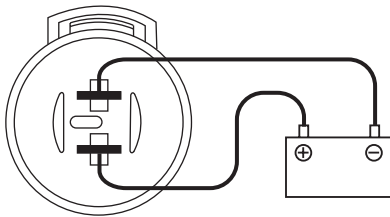
- 1) Check continuity between terminals. If there is no continuity, replace radiator fan assembly.



I5RW0A160004-01

- 2) Connect battery to radiator fan motor coupler as shown in figure, then check that the radiator fan motor operates smoothly. If radiator fan motor does not operate smoothly, replace radiator fan assembly.

Reference: Fan motor specified current at 12 V : 5.7 – 7.7 A

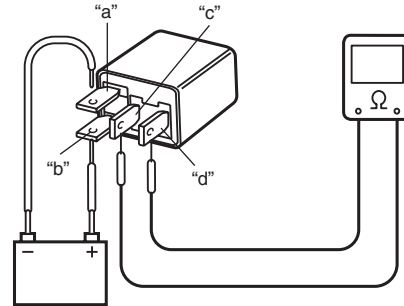
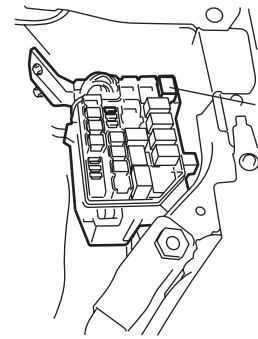


I5RW0A160005-01

Radiator Cooling Fan Relay Inspection

S7RW0A1606010

- 1) Disconnect negative (-) cable from battery.
- 2) Remove radiator cooling fan relay (1) from main fuse box.
- 3) Check that there is no continuity between terminal "c" and "d". If there is continuity, replace relay.
- 4) Connect battery positive (+) terminal to terminal "b" of relay and battery negative (-) terminal to terminal "a" of relay, and then check continuity between terminal "c" and "d". If there is no continuity, replace relay.



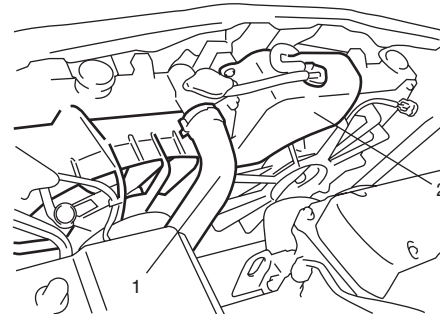
I5RW0A160008-02

Radiator Cooling Fan Assembly Removal and Installation

S7RW0A1606011

Removal

- 1) Disconnect negative (-) cable at battery.
- 2) Disconnect connector of cooling fan motor.
- 3) Drain coolant referring to "Cooling System Draining".
- 4) Remove radiator inlet hose (1) and reservoir (2).



I6RW0B160004-02