REPLACEMENT

- 1. REMOVE FRONT SPOILER COVER (w/ Front Spoiler)
- 2. REMOVE ENGINE UNDER COVER (w/ Cover)
- 3. DRAIN COOLANT (for Engine)

NOTICE:

Do not remove the reservoir tank cap, cylinder block drain cock plugs and radiator drain cock plug while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.

(a) Loosen the radiator drain cock plug and drain the coolant.

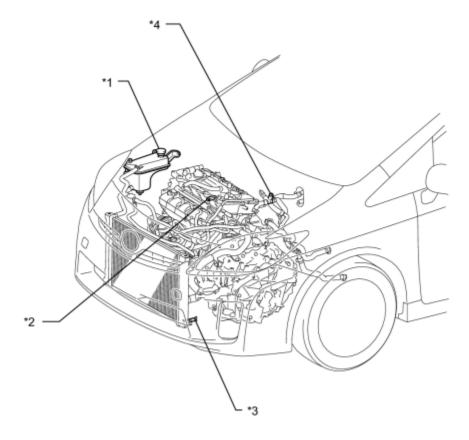
HINT:

Collect the coolant in a container and dispose of it according to the local regulations.

(b) Loosen the cylinder block drain cock plug.

HINT:

The plug is on the back of the generator on the exhaust manifold side.



Text in Illustration

| *1 | Reservoir Tank Cap | *2 | Cylinder Block Drain Cock Plug |
|----|--------------------------|----|--------------------------------|
| *3 | Radiator Drain Cock Plug | *4 | Air Release Valve |

4. ADD COOLANT (for Engine)

- (a) Tighten the radiator drain cock plug.
- (b) Tighten the cylinder block drain cock plug.

Torque: 13 N·m (130 kgf·cm, 9ft·lbf)

- (c) Remove the reservoir tank cap.
- (d) Connect the hose to the air release valve.
- (e) Loosen the air release valve.
- (f) Add TOYOTA Super Long Life Coolant (SLLC) to the reservoir tank filler opening until coolant overflows from the air release valve. Then tighten the air release valve.

c

Standard Capacity:

| Item | Capacity |
|----------------|---|
| | w/ Exhaust Heat Recirculation System: 7.3 liters (7.7 US qts, 6.4 lmp. qts) |
| Engine coolant | w/o Exhaust Heat Recirculation System: |
| | 6.5 liters (6.8 US qts, 5.7 lmp. qts) |

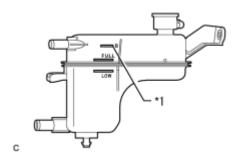
HINT:

- TOYOTA vehicles are filled with TOYOTA SLLC at the factory. In order to avoid damage to the engine cooling system and other technical problems, only use TOYOTA SLLC or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, non-borate coolant with long-life hybrid organic acid technology (coolant with long-life hybrid organic acid technology is a combination of low phosphates and organic acids).
- Contact your TOYOTA dealer for further details.

NOTICE:

Never use water as a substitute for engine coolant.

(g) Disconnect the hose from the air release valve.



(h) Add coolant to B line of the reservoir tank.

Text in Illustration



(i) Squeeze the inlet and outlet radiator hoses several times by hand, and then check the level of the coolant.

If the coolant level is low, add coolant.

- (j) Put the engine in inspection mode ...
- (k) Install the reservoir tank cap, and warm up the engine sufficiently.
- (1) Bleed air from the cooling system.

NOTICE:

- Before starting the engine, turn the A/C switch off.
- Adjust the heater control to the maximum hot setting.

- Adjust the blower speed to low setting.
- (1) Warm up the engine until the thermostat opens. While the thermostat is open, allow the coolant to circulate for several minutes.

HINT:

The thermostat opening timing can be confirmed by squeezing the inlet radiator hose by hand, and sensing vibrations when the engine coolant starts to flow inside the hose.

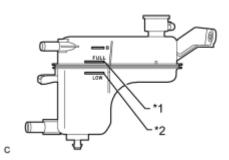
When squeezing the radiator hose:

- Wear protective gloves.
- Be careful as the radiator hoses are hot.
- Keep your hands away from the radiator fan.
- (2) After the engine is warmed up, let it idle for 7 minutes or more.
- (3) Squeeze the inlet and outlet radiator hoses several times by hand to bleed air from the system.

When squeezing the radiator hose:

- Wear protective gloves.
- Be careful as the radiator hoses are hot.
- Keep your hands away from the radiator fan.

(m) After the engine has cooled down, check that the coolant level is between full and low.



Text in Illustration

| *1 | Full Line |
|----|-----------|
| *2 | Low Line |

If the coolant level is low, add coolant to the full line on the reservoir tank.

- 5. INSPECT FOR COOLANT LEAK (for Engine)
- 6. INSTALL ENGINE UNDER COVER (w/ Cover)
- 7. INSTALL FRONT SPOILER COVER (w/ Front Spoiler)