

COOLANT (2AZ-FE)(From July, 2003)

16032-07

REPLACEMENT

1. DRAIN ENGINE COOLANT

- (a) Remove the radiator cap.

CAUTION:

Do not remove the radiator cap while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.

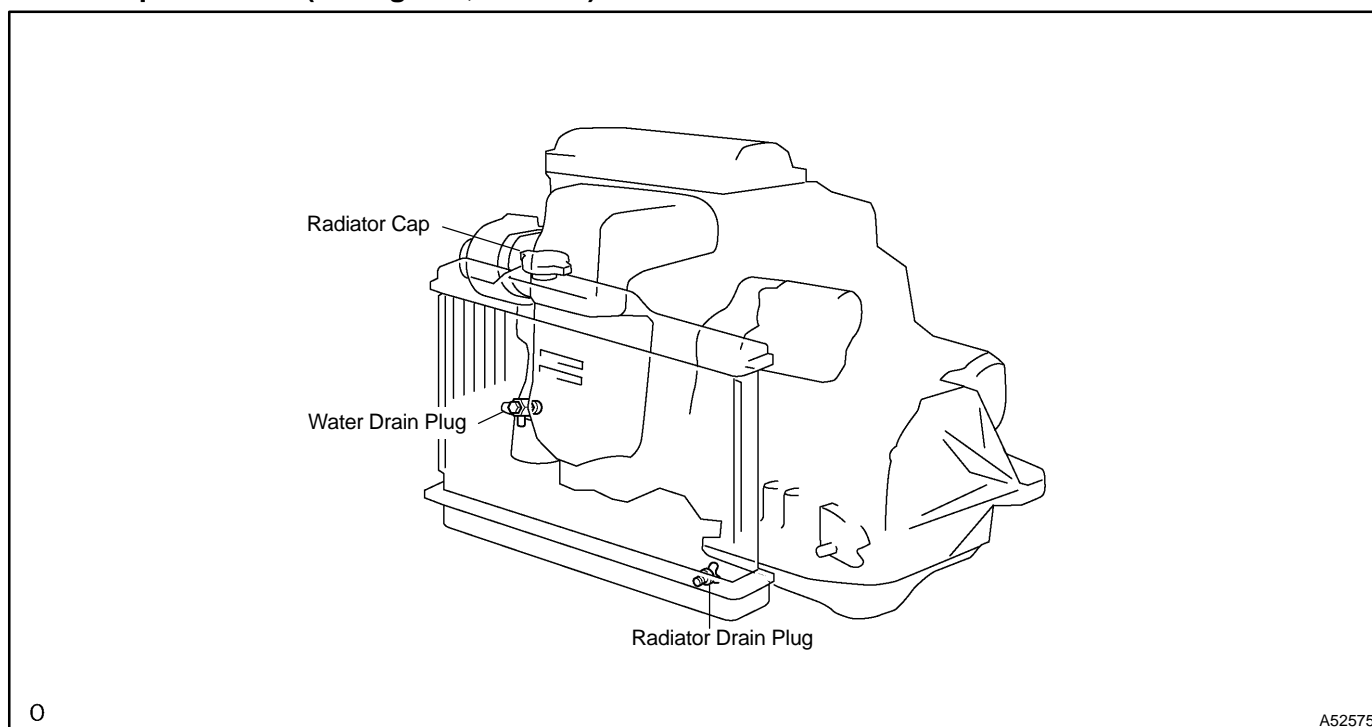
- (b) Drain engine coolant by loosening the radiator drain plug and the engine's water drain plug.

HINT:

Engine coolant inside the radiator is drained from the drain hole located on the bottom of the engine under cover.

- (c) Tighten the cylinder block drain cock plugs.

Torque: 13 N·m (130 kgf·cm, 10 ft·lbf)



2. ADD ENGINE COOLANT

- (a) Tighten the radiator drain plug.
(b) Add engine coolant into the radiator until it overflows.

Capacity: 6.2 liters (6.6 US qts, 5.4 Imp. qts)

HINT:

- Use of improper coolants may damage the engine cooling system.
- Use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology.
- New Toyota vehicles are filled with Toyota Super Long Life Coolant (color is pink, premixed ethylene-glycol concentration is approximately 50% and freezing temperature is -35°C (-31°F)). When replacing the coolant, Toyota Super Long Life Coolant is recommended.
- Observe the coolant level inside the radiator by pressing the inlet and outlet radiator hoses several times by hand. If the coolant level goes down, add the coolant.

NOTICE:

Do not use plain water alone.

- (c) Pour coolant into the radiator reservoir tank until the coolant reaches the full line.

- (d) Install the radiator cap.
- (e) Start the engine and run the engine for 10 seconds.
- (f) Remove the radiator cap after 10 seconds. Pour coolant if the coolant level is lower.
- (g) Repeat (d) to (f) until the coolant level remains the same from steps (d) to (f).

HINT:

Perform the procedures above before the engine warms up. A warmed up engine causes the thermostat valve to open, and the air inside of the engine circulates between the radiator and the engine.

- (h) Install the radiator cap.
- (i) Warm up the engine until the thermostat valve begins to open.

HINT:

As the engine warms up, press the radiator inlet and outlet hose several times by hand.

- (j) Stop the engine and wait until the coolant cools down to room temperature. If the coolant is below the full line, add coolant.
- (k) Install the radiator cap and check the radiator reservoir tank coolant level. If it is below the full line, add coolant.

3. CHECK FOR ENGINE COOLANT LEAKS

- (a) Fill the radiator with coolant and attach a radiator cap tester.
- (b) Pump it to 118 kPa (1.2 kgf/cm², 17.1 psi) and check leakage.