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<b>Model Year Start:</b> 2014	<b>Model:</b> ES300H	<b>Prod Date Range:</b> [08/2013 - ]
<b>Title:</b> 2AR-FXE COOLING: COOLANT (for Engine): REPLACEMENT; 2014 MY ES300H [08/2013 - ]		

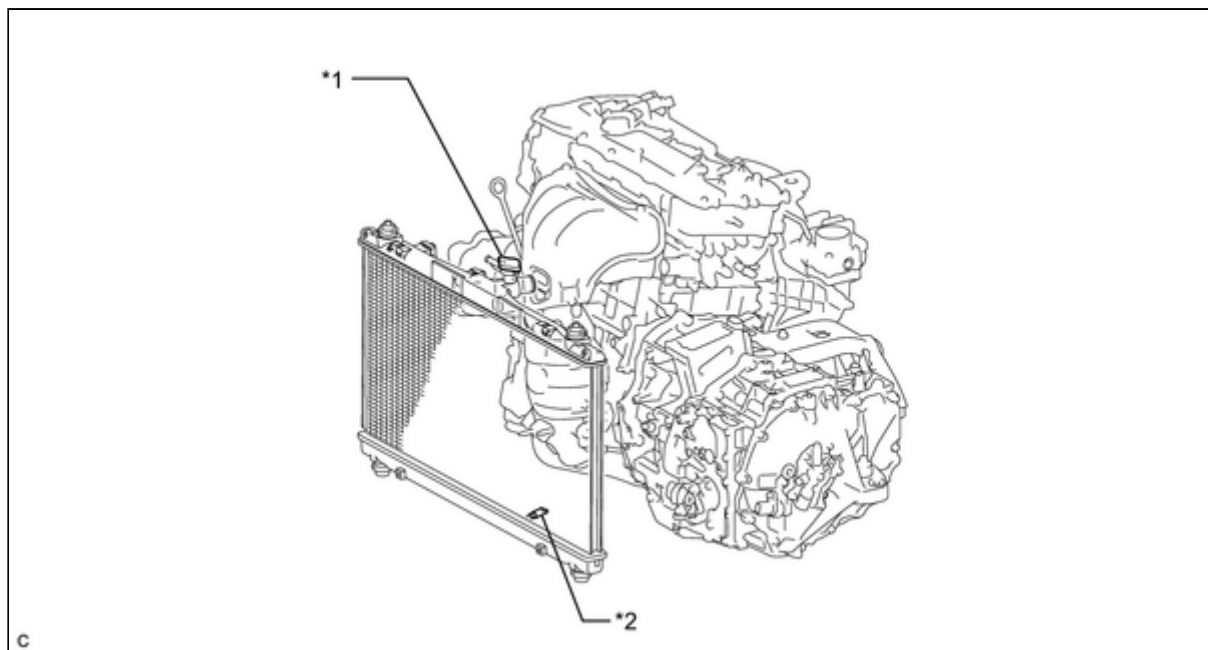
## REPLACEMENT

### 1. DRAIN COOLANT (for Engine)

#### NOTICE:

Do not remove the radiator cap sub-assembly or radiator drain cock plug while the engine and radiator assembly are still hot. Pressurized, hot coolant and steam may be released and cause serious burns.

- (a) Loosen the radiator drain cock plug.
- (b) Remove the radiator cap sub-assembly.



#### Text in Illustration

*1	Radiator Cap Sub-assembly	*2	Radiator Drain Cock Plug
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#### HINT:

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

### 2. ADD COOLANT (for Engine)

- (a) Tighten the radiator drain cock plug by hand.
- (b) Slowly fill the radiator assembly with TOYOTA Super Long Life Coolant (SLLC).

Specified capacity:

7.2 liters (7.6 US qts, 6.3 Imp. qts)


#### NOTICE:

Never use water as a substitute for coolant.

#### 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).

- (c) Slowly pour coolant into the radiator reserve tank assembly until it reaches the full line.
- (d) Squeeze the No. 1 and No. 2 radiator hoses several times by hand, and then check the level of the coolant.  
If the coolant level is low, add coolant.
- (e) Install the radiator cap sub-assembly and reserve tank cap.
- (f) Put the engine in inspection mode  .
- (g) 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 the low setting.

(1) Warm up the engine until the thermostat opens. While the thermostat is open, circulate the coolant for several minutes.

**HINT:**

The thermostat open timing can be confirmed by squeezing the No. 2 radiator hose by hand, and sensing vibrations when the coolant starts to flow inside the No. 2 radiator hose.

(2) Squeeze the No. 1 and No. 2 radiator hoses several times by hand to bleed air.

**CAUTION:**

When squeezing the No. 1 and No. 2 radiator hoses:

- Wear protective gloves.
- Be careful as the No. 1 and No. 2 radiator hoses are hot.
- Keep your hands away from the cooling fans.

**NOTICE:**

- Make sure that the radiator reserve tank assembly still has some coolant in it.
- If the coolant temperature gauge indicates an excessive temperature, turn off the engine and let it cool.
- If there is not enough coolant, the engine may overheat or be seriously damaged.
- If the radiator reserve tank assembly does not have enough coolant, perform the following: 1) stop the engine, 2) wait until the coolant has cooled down, and 3) add coolant until the radiator reserve tank assembly is filled to the full line.

- (h) Stop the engine and wait until the coolant cools down.
- (i) Add coolant to the full line on the radiator reserve tank assembly.

**3. INSPECT FOR COOLANT LEAK (for Engine)**