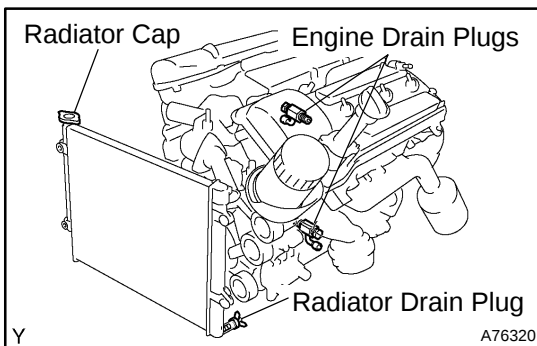
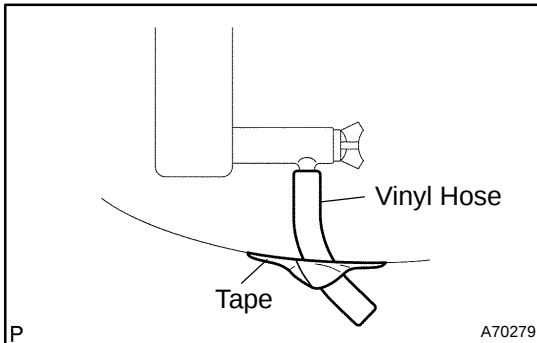


COOLANT (1GR-FE) REPLACEMENT

160F0-03



1. DRAIN ENGINE COOLANT

CAUTION:

The hot engine coolant and steam will blow out from the radiator by thermal expansion themselves. To avoid a danger of scalding yourself, do not remove the radiator cap while the engine and radiator are still hot.

- Remove the service hole cover of the engine under cover.
- Install a vinyl hose to the drain on the radiator side.
- Fix the vinyl hose with tape.
- Remove the radiator cap.
- Loosen the 3 drain plugs on the engine and radiator, and drain the coolant.
- Drain the coolant from the reservoir tank.
- Close the 3 drain plugs.
- Torque: 13 N·m (130 kgf·cm, 9 ft·lbf) for engine**
- Remove the vinyl hose from the radiator.

2. ADD ENGINE COOLANT

- Fill the radiator with engine coolant carefully.
 - Using a high grade ethylene-glycol base coolant. When mixing ethylene-glycol with water, read a manufacturer's instruction carefully.

Grade:
"TOYOTA LONG LIFE Antifreeze Coolant" or equivalent
- Using the coolant which includes more than 50 % ethylene-glycol (but not more than 70 %) is recommended.

NOTICE:

- Do not use an alcohol type coolant.
 - The coolant should be mixed with demineralized water or distilled water.
- Capacity: 9.8 liters (10.4 US qts, 8.6 Imp. qts)**
- Install the radiator cap.
 - Fill the reservoir tank with the coolant until it reaches to the FULL line.
 - Bleed the cooling system.
 - Start the engine, and open the heater water valve.
 - Sustain the engine speed at 2,000 - 2,500 rpm, and warm up the engine.
 - Stop the engine, and wait until the engine coolant cools down.
 - Remove the radiator cap again, and so check the coolant level inside the radiator.

HINT:

- Refill the radiator with the coolant if the coolant level is low.
- Refill the radiator reservoir with the coolant if it is lower than the FULL line.

3. CHECK FOR ENGINE COOLANT LEAKS (See page 16-1)