COOLANT (1GR–FE)(From August, 2004)

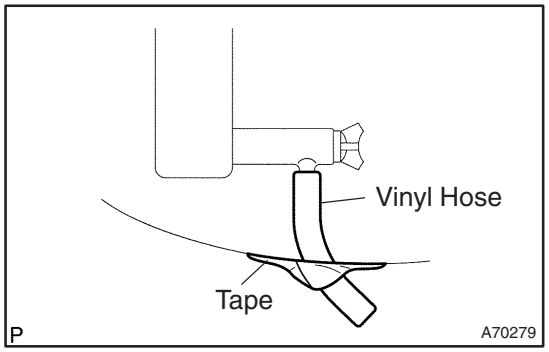
160JE–05

REPLACEMENT

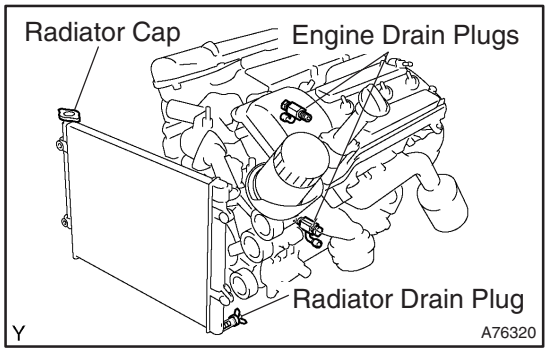
1. DRAIN ENGINE COOLANT

CAUTION:

To avoid the danger of being burned, do not remove the radiator cap while the engine and radiator are still hot. Thermal expansion will cause hot engine coolant and steam to blow out from the radiator.



(a) Remove the service hole cover of the engine under cover.
(b) Install a vinyl hose to the drain on the radiator side.
(c) Fix the vinyl hose with tape.
(d) Remove the radiator cap.



(e) Loosen the 3 drain plugs on the engine and radiator, and drain the coolant.
(f) Drain the coolant from the reservoir tank.
(g) Tighten the 2 engine drain plugs.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf) for engine
(h) Tighten the radiator drain plug.
(i) Remove the vinyl hose from the radiator.

2. ADD ENGINE COOLANT

(a) Tighten all plugs and fill the radiator with ”Super Long Life Coolant”.
Capacity:

A/T	9.8 liters (10.4 US gts, 8.6 Imp. gts)
M/T	9.0 liters (9.5 US gts, 7.9 Imp. gts)

NOTICE:

Do not use plain water by itself.

HINT:

- Use of improper coolant may damage the engine cooling system.
- Use only ”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. (Coolant with long–life hybrid organic acid technology consists of the combination of low phosphates and organic acids.)
- ”Super Long Life Coolant” is premixed with 50 % coolant and 50 % deionized water. This coolant provides protection down to about –35 °C (–31 °F).
- Observe the coolant level inside the radiator by pressing the inlet and outlet radiator hoses several times by hand. If the coolant level is low, add coolant.

(b) Install the radiator cap.
(c) Fill the radiator reserve tank with coolant to the full level.
(d) Warm up the engine until the valve of the thermostat is open.
(e) Stop the engine and wait until the coolant cools down. Remove the radiator cap and check the coolant level.
(f) If the coolant level becomes lower, repeat steps (a) to (e).
(g) When the coolant level stops going down, adjust the amount of the coolant in the radiator reserve tank.

3. CHECK FOR ENGINE COOLANT LEAKS (SEE PAGE 16–1)