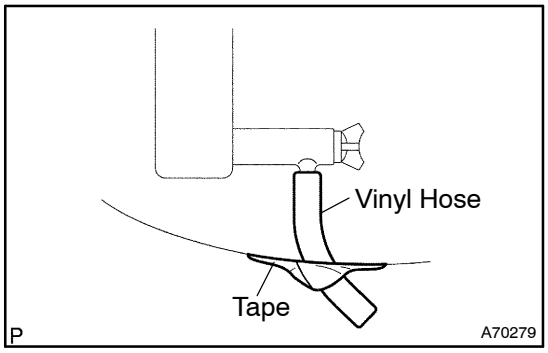
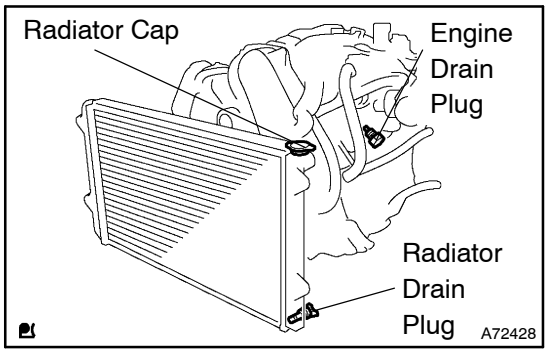
COOLANT (1KD–FTV)

REPLACEMENT

160HI–01





1. DRAIN ENGINE COOLANT

CAUTION:

To avoid the risk of burn injury, do not remove the radiator cap while the engine and radiator are on heat. It is a probable result that heated fluid and steam are spewed by pressure inside the radiator.

(a) Remove the radiator cap.
(b) Remove the service hole cover for the engine under cover No. 1.
(c) Install a vinyl hose to the drain the radiator side.
(d) Loosen the radiator drain plug and engine drain plug, and drain the coolant from the radiator.
(e) Drain the coolant from the reserve tank.
(f) Close the drain plugs.
Torque: 8 N·m (82 kgf·cm, 71 in.·lbf)
(g) Remove the vinyl hose from the radiator.

2. ADD ENGINE COOLANT

(a) Fill the radiator with a coolant carefully.

HINT:

- Use Toyota Long Life Coolant (LLC) or equivalent one. Accordance with an instruction by the manufacture, mix it with demineralized water.
- It is recommended that use of a coolant contains ethylene glycol. Preferred its content ratio is 50 % and more, up to 60 %. Beyond that, 70 % and more would deteriorate its cooling effectiveness of the coolant.
  For your information, a freezing point depression in a mixture to 50 % ethylene glycol is –35 °C (–31 °F), and it will down to –50 °C (–58 °F) with 60 % ethylene glycol mixture.

NOTICE:

Do not use an alcoholic coolant and plain (non–demineralized) water alone. Otherwise, it may cause damage to engine cooling system.

	w/ Viscous heater	w/o Viscous heater
A/T	10.8 liters (11.4 US qts, 9.5 Imp. qts)	11.0 liters (11.6 US qts, 9.7 Imp. qts)
M/T	11.1 liters (11.8 US qts, 9.9 Imp. qts)	11.3 liters (11.9 US qts, 9.9 Imp. qts)

(b) Reset the radiator cap.
(c) Fill the radiator reservoir with the coolant until it reaches to the FULL line.
(d) Start the engine to circulate the coolant.
(e) Wait until the coolant gets cold, then 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. INSPECT CHECK FOR ENGINE COOLANT LEAKS (See page 16–38)