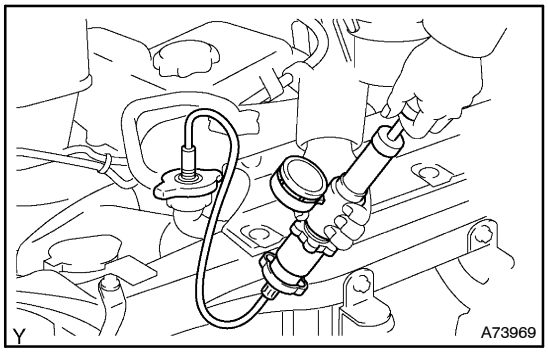
COOLING SYSTEM (3RZ–FE)

160HM–01

ON–VEHICLE INSPECTION



1. INSPECT COOLING SYSTEM FOR LEAKS

CAUTION:

To avoid the danger of being burned, do no remove the radiator cap while the engine and radiator are still hot, as fluid and steam can be blown out under pressure.

(a) Fill the radiator with coolant and attach a radiator cap tester.

(b) Warm up the engine.

(c) Pump it to 118 kPa (1.2 kgf/cm^2, 17.1 psi), and check that the pressure does not drop.

HINT:

If the pressure drops, check to hoses, radiator or water pump for leaks. If no external leaks are found, check the heater core, cylinder block and head.

2. CHECK ENGINE COOLANT LEVEL AT RESERVOIR

(a) The engine coolant level should be between the ”LOW” and ”FULL” line.

HINT:

If low, check for leaks and add ”Toyota Long Life Coolant” or equivalent up to the ”FULL” line.

3. CHECK ENGINE COOLANT QUALITY

(a) Remove the radiator cap.

CAUTION:

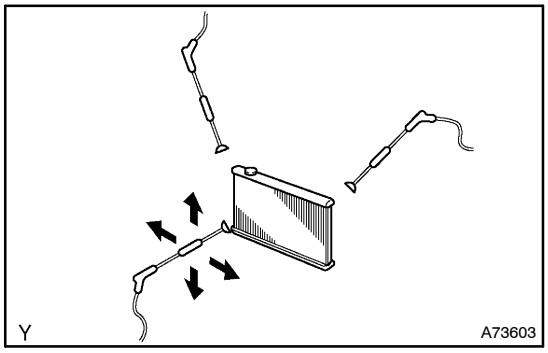
To avoid the danger of being burned, do not remove the radiator cap while the engine and radiator are still hot, as fluid and steam can be blown out under pressure.

(b) Check if there is any excessive deposits of rust or scale around the radiator cap and radiator filler hole; the coolant should be free from oil.

HINT:

If excessively dirty, replace the coolant.

(c) Reinstall the radiator cap.



4. INSPECT FINS BLOCKAGE

(a) If fins are clogged, wash them with water or a steam cleaner and dry with compressed air.

NOTICE:

- **If the distance between the steam cleaner and the core is too close, there is a possibility of damaging the fins, so keep the following injection distance.**

Injection Pressures kPa (kg/cm^2, psi)	Injection Distance mm (in.)
2,942 – 4,903 (30 – 50, 427 – 711)	300 (11.811)
4,903 – 7,845 (50 – 80, 711 – 1,138)	500 (19.685)

- **If the fins are bent, straighten them with a screwdriver or pliers.**
- **Never apply water directly onto the electronic components.**