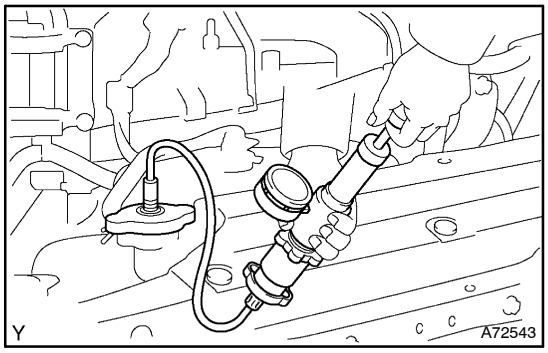
COOLING SYSTEM (1GR–FE)

160J8–02

ON–VEHICLE INSPECTION



1. INSPECT COOLING SYSTEM FOR LEAKS

CAUTION:

To avoid the danger of being burned, do not remove the radiator cap while the engine and the radiator are still hot.

(a) Fill the radiator with a coolant water 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 the hoses, radiator and water pump for leaks. If the coolant has not been leaked outside, check the heater core, the cylinder block and the cylinder head.

2. CHECK ENGINE COOLANT LEVEL AT RESERVOIR

(a) The engine coolant 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:

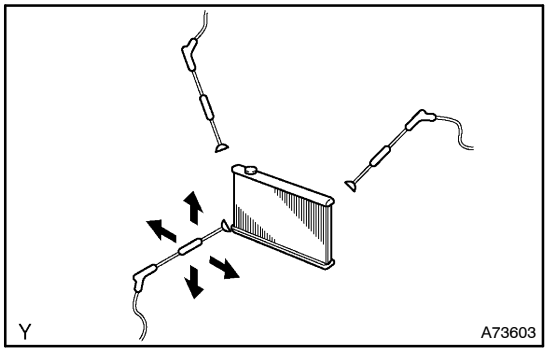
To avoid the danger of being burned, do not remove the radiator cap while the engine and the radiator are still hot.

(b) Check the radiator cap and the radiator filler hole for rust and dirt, the coolant should be free from oil.

HINT:

If the coolant is 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. After the cleaning, dry the fins 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 to 4,903 (30 to 50, 427 to 711)	300 (11.811)
4,903 to 7,845 (50 to 80, 711 to 1,138)	500 (19.685)

- **If the fins are bent, straighten them with a screwdriver or plier.**
- **Ensure that the electronic components are not exposed to water.**