

1GR-FE COOLING RADIATOR ON-VEHICLE INSPECTION

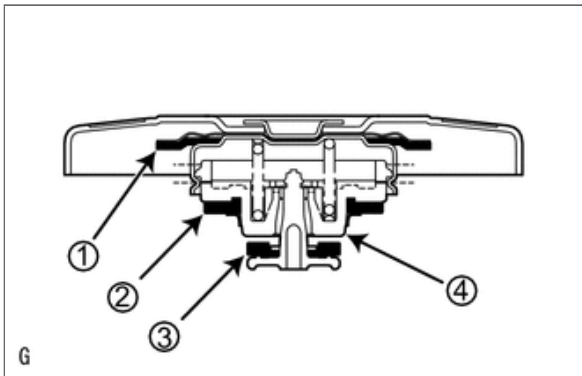
PROCEDURE

1.INSPECT RADIATOR CAP SUB-ASSEMBLY

16401

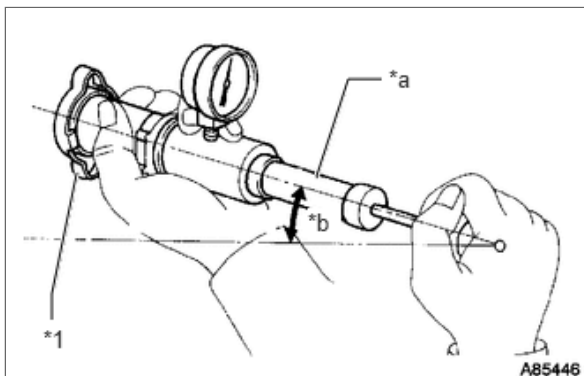
CAUTION:

Do not remove the radiator cap sub-assembly while the engine and radiator assembly are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.



- a. Measure the valve opening pressure.
 - i. If there are water stains or foreign matter on rubber packing 1, 2 or 3, clean it by using water and finger scouring.
 - ii. Check that rubber packing 1, 2 and 3 are not deformed, cracked or swollen.
 - iii. Check that rubber packing 3 and 4 are not stuck together.
 - iv. Apply engine coolant to rubber packing 2 and 3.

v.



*1	Radiator Cap Sub-assembly
*a	Radiator Cap Tester
*b	More than 30°

Prepare a radiator cap tester and tilt it more than 30°.

- vi. Pump the cap tester several times and check the maximum pressure*.
Pumping speed:
1 pump per second

HINT:

*: Even if the cap cannot maintain the maximum pressure, it is not a defect.

Standard Judgment Criterion:

Item	Specified Condition
Standard value (for brand-new cap)	93 to 123 kPa (0.9 to 1.3 kgf/cm ² , 13.5 to 18 psi)

Item	Specified Condition
Minimum standard value (after using cap)	79 kPa (0.8 kgf/cm ² , 11.4 psi)

If the maximum pressure is less than the minimum standard value, replace the radiator cap sub-assembly.



2.INSPECT FINS FOR BLOCKAGE

16400

- a. Check that the fins of the radiator core are not blocked with leaves, dirt, or insects.
If the fins are blocked, wash them with water or a steam cleaner.

NOTICE:

- If the distance between the steam cleaner and core is too close, the fins may be damaged.
- Maintain the following injection distance.

Standard Injection Distance:

Injection Distance	Injection Pressure
300 mm (11.8 in.)	2942 to 4903 kPa (30.0 to 50.0 kgf/cm ² , 427 to 711 psi)
500 mm (19.7 in.)	4903 to 7845 kPa (50.0 to 80.0 kgf/cm ² , 711 to 1138 psi)

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

- b. Dry the fins with compressed air.