RADIATOR

RADIATOR CLEANING

E0074-01

Using water or a steam cleaner, remove any mud or dirt from the radiator core.

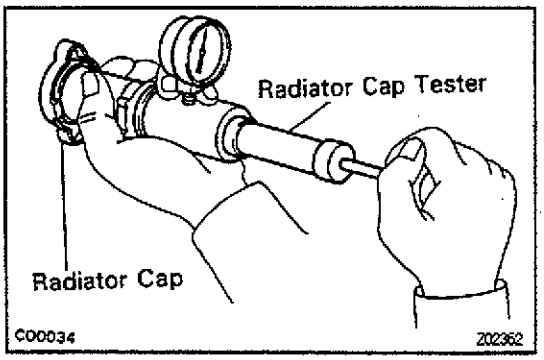
NOTICE: If using a high pressure type cleaner, be careful not to deform the fins of the radiator core. If the cleaner nozzle pressure is 2,942 — 3,432 kPa (30 — 35 kgf/cm², 427 — 498 psi), keep a distance of at least 40 cm (15.75 in.) between the radiator core and cleaner nozzle.

RADIATOR INSPECTION

E0425-01

1. **REMOVE RADIATOR TANK 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.



2. **INSPECT RADIATOR CAP**

Using a radiator cap tester, pump the tester and measure the relief valve opening pressure.

Standard opening pressure:

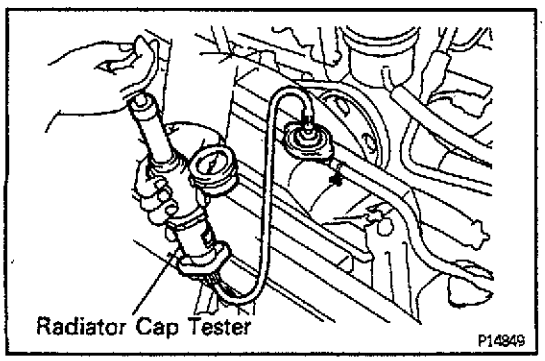
74 — 103 kPa

(0.75 — 1.05 kgf/cm², 10.7 — 14.9 psi)

Minimum opening pressure:

59 kPa (0.6 kgf/cm², 8.5 psi)

If the opening pressure is less than minimum, replace the radiator cap.



3. **INSPECT COOLING SYSTEM FOR LEAKS**

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

(b) Warm up the engine.

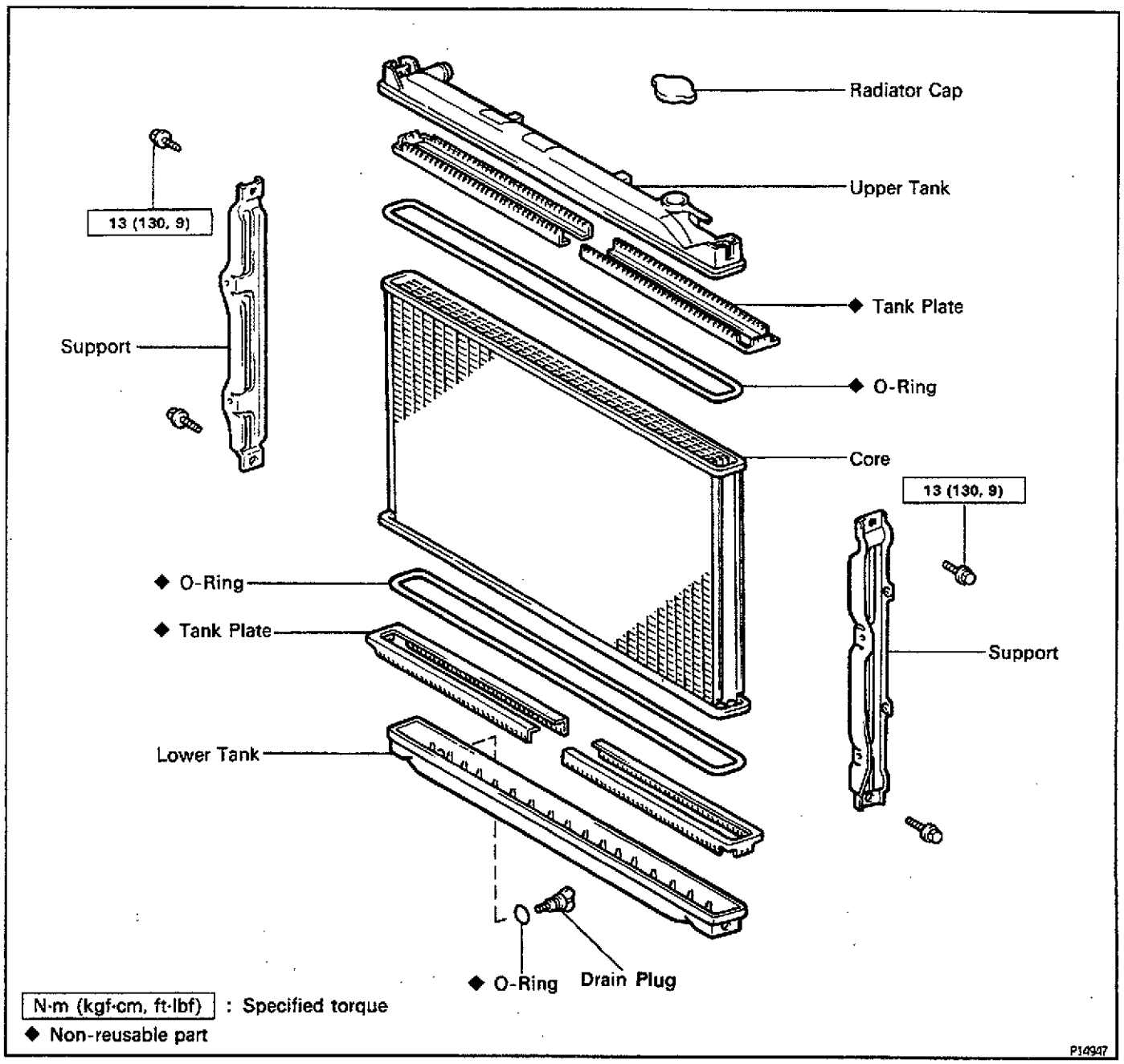
(c) Pump it to 118 kPa (1.2 kgf/cm², 17.1 psi), and check that the pressure does not drop.

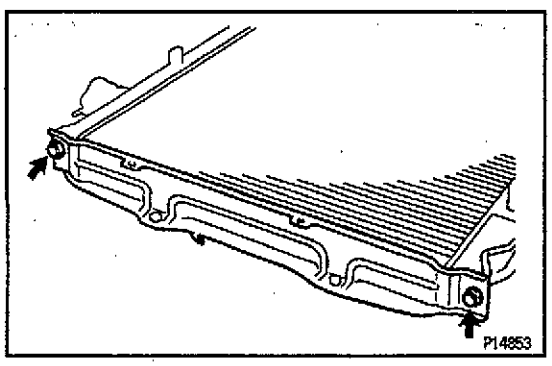
If the pressure drops, check the hoses, radiator or water pump for leaks. If no external leaks are found, check the heater core, cylinder block and head.

4. **REINSTALL RADIATOR CAP**

EG

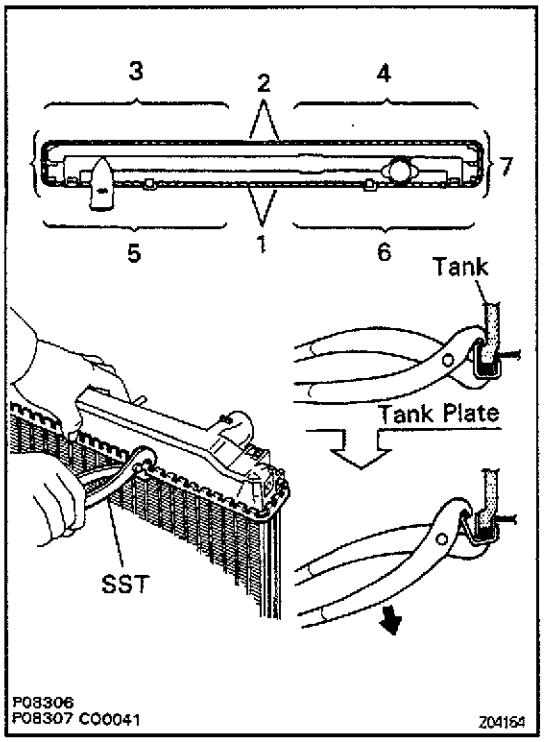
COMPONENTS FOR DISASSEMBLY AND ASSEMBLY (RCK Series only)





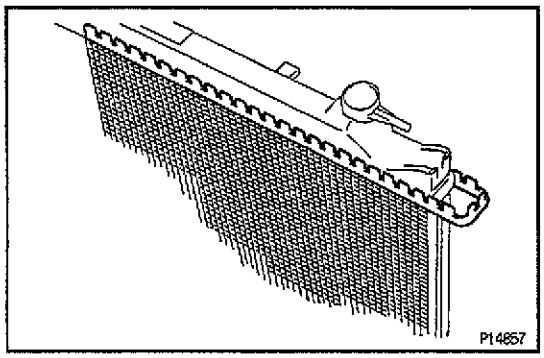
RADIATOR DISASSEMBLY

1. **REMOVE SUPPORTS**
   Remove the 4 bolts and 2 supports.

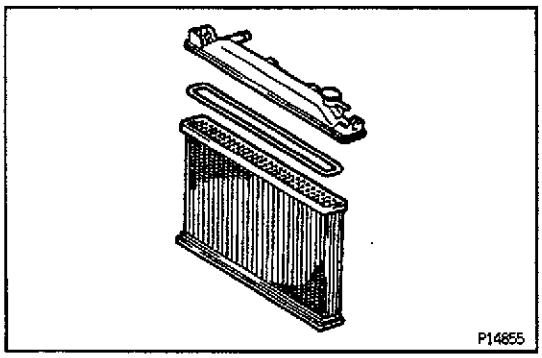


2. REMOVE TANK PLATE

(a) Raise the claws of the tank plates with SST in the numerical order shown in the illustration.
SST 09230—00010
NOTICE: Be careful not to damage the core plate.



(b) Pull the tank plates outward.



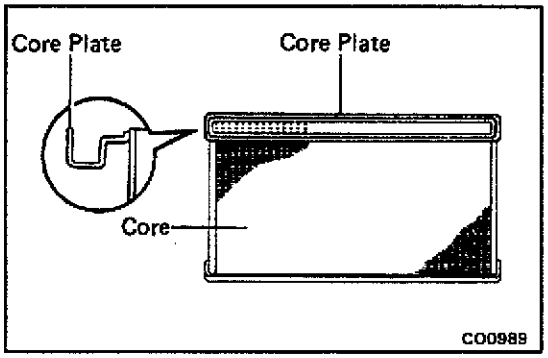
3. REMOVE TANK

(a) Pull the tank upward.
(b) Remove the O—ring.

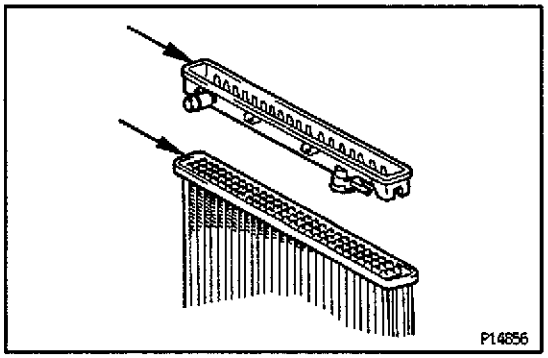
RADIATOR ASSEMBLY

(See Components for Disassembly and Assembly)

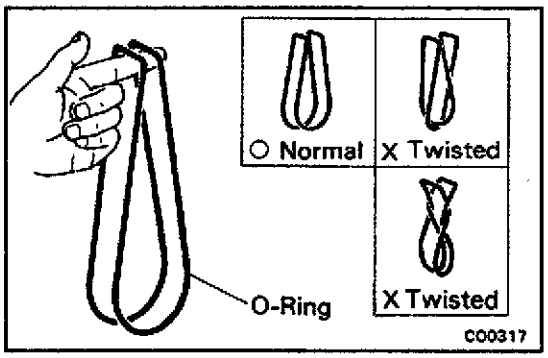
1. **INSTALL OIL COOLER TO LOWER TANK**
   Clean the O–ring contact surface of the lower tank.



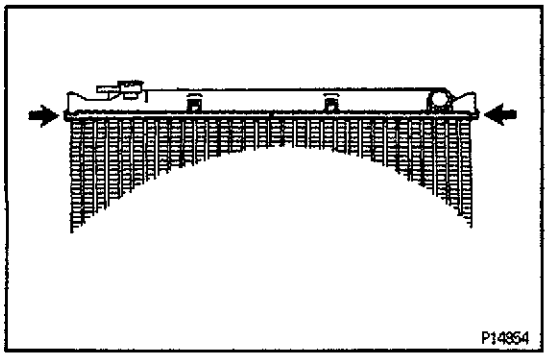
2. **CHECK CORE PLATE FOR DAMAGE**
   HINT:
   - If the sides of the core plate groove are deformed, reassembly of the tank will be impossible. Therefore, first correct any deformation with pliers.
   - Water leakage will result if the bottom of the core plate groove is damaged or dented. Therefore, repair or replace if necessary.



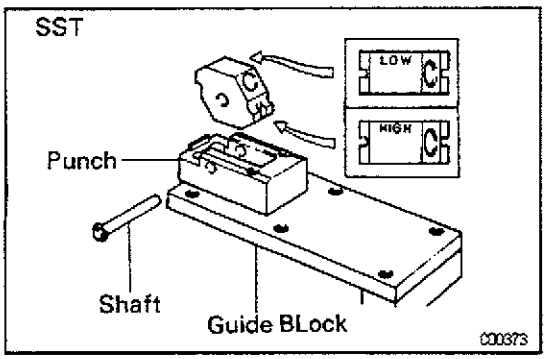
3. **INSTALL TANK**
   Install a new O–ring and the tank.
   HINT:
   - Clean the tank and core plate.



   - Take out any twists.

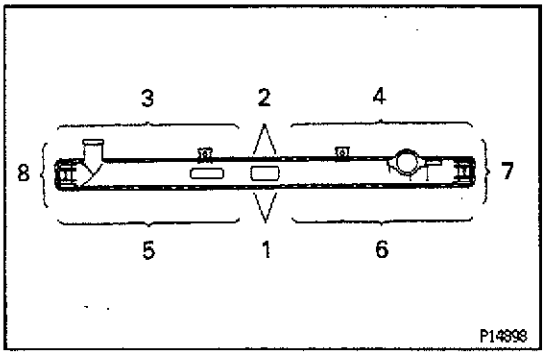


4. **INSTALL TANK PLATE**
   Insert new tank plates from both ends in the direction of the arrows. Firmly set the tank plates in the core plate.

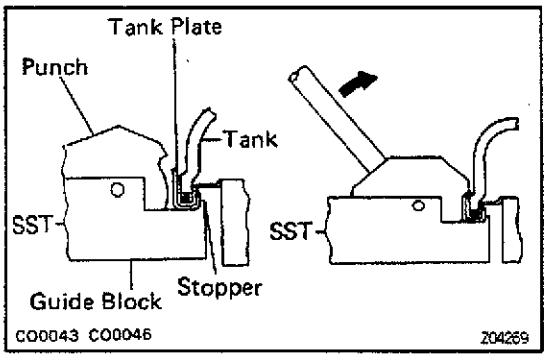


5. STAKE CLAWS OF TANK PLATES

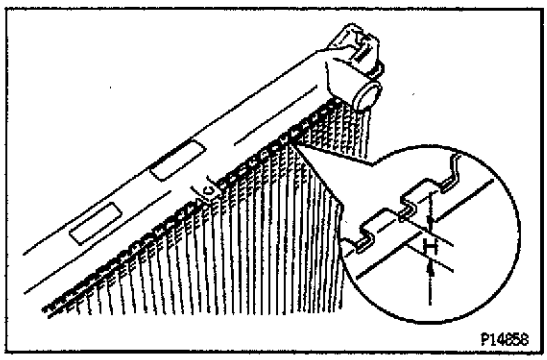
(a) Set the punch of SST to "LOW".
SST 09230–00010



(b) Stake the claws of the tank plates with SST in the numerical order shown in the illustration.



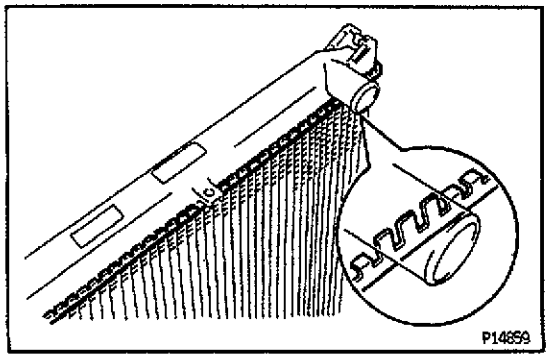
NOTICE: If the bottom of the core plate is staked with the SST on the guide block stopper, it may result in water leakage.



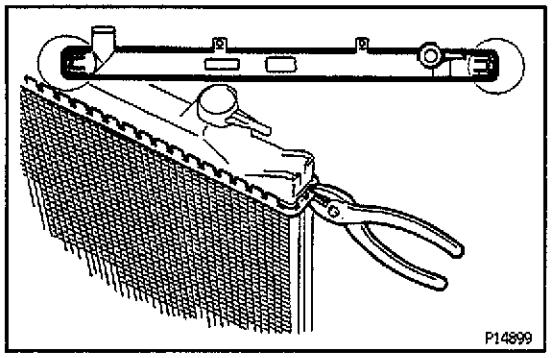
HINT:

- Stake with just enough pressure to leave a mark on the claw. The staked plate height (H) should be as follows:

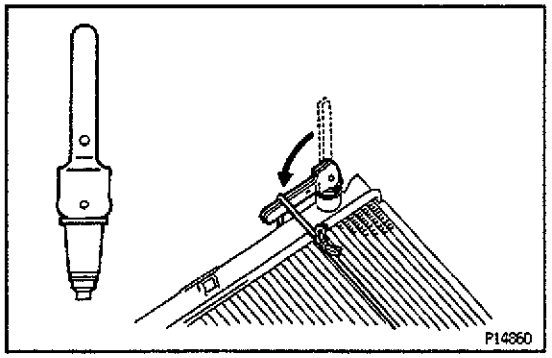
Plate height (H):
9.2 – 9.6 mm (0.362 – 0.378 in.)



- Do not stake the areas protruding around the pipes.



- The points shown in the illustration cannot be staked with the SST. Use pliers and be careful not to damage the core plates.

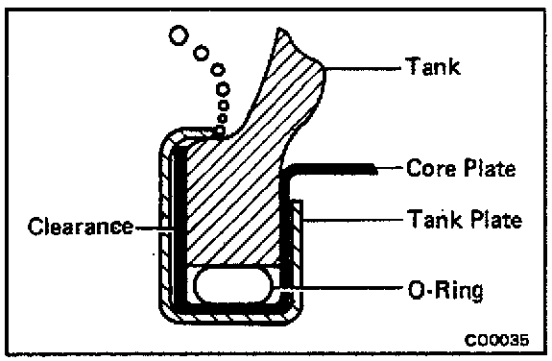


6. CHECK FOR WATER LEAKS

(a) Tighten the drain plug.

(b) Plug the inlet and outlet pipes of the radiator with SST.
SST 09231 – 00060

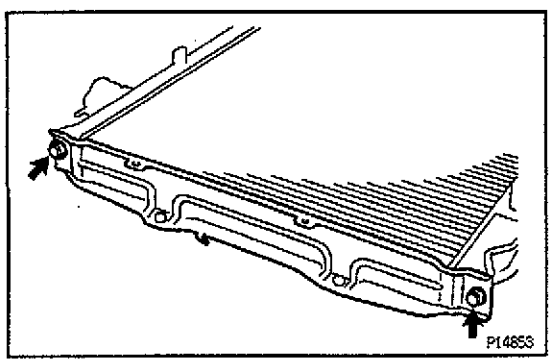
(c) Using a radiator cap tester, apply pressure to the radiator.
Test pressure:
147 kPa (1.5 kgf/cm², 21 psi)



(d) Check for water leaks.
HINT: On radiators with resin tanks, there is a clearance between the core plate and tank plate where a minute amount of air will remain, giving the appearance of an air leak when the radiator is submerged in water. Therefore, before performing the water leak test, first swirl the water around in the radiator until all air bubbles disappear.

7. PAINT TANK PLATE

HINT: If the water leak test checks out okay, allow the radiator to dry completely and then paint the tank plate.



8. INSTALL SUPPORTS

Install the 4 bolts and supports.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)