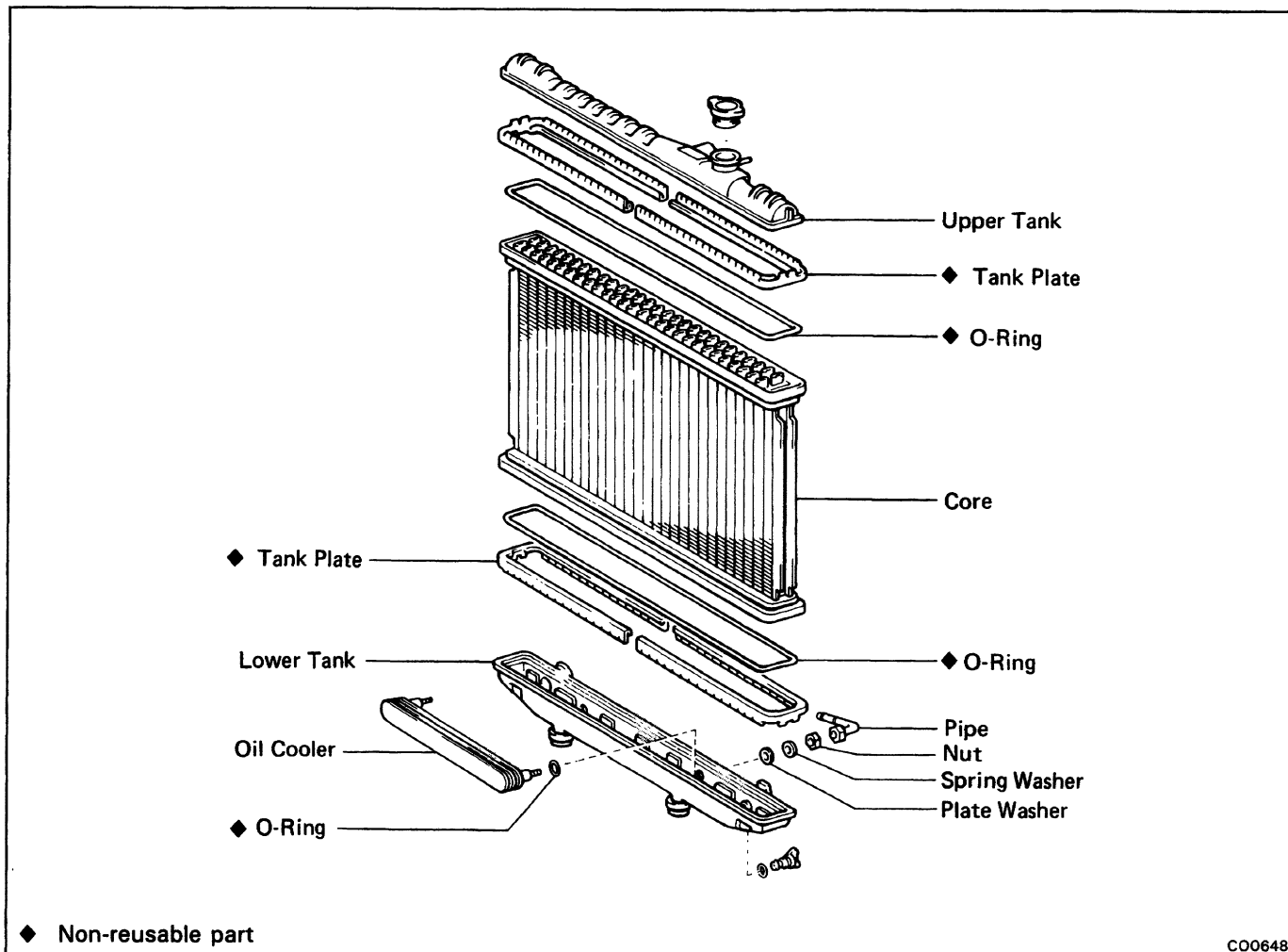


RADIATOR COMPONENTS



CLEANING OF RADIATOR

Using water or a steam cleaner, remove any mud and 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 30 – 35 kg/cm² (427 – 498 psi, 2,942 – 3,432 kPa), keep a distance of at least 40 – 60 cm (15.75 – 19.69 in.) between the radiator core and cleaner nozzle.

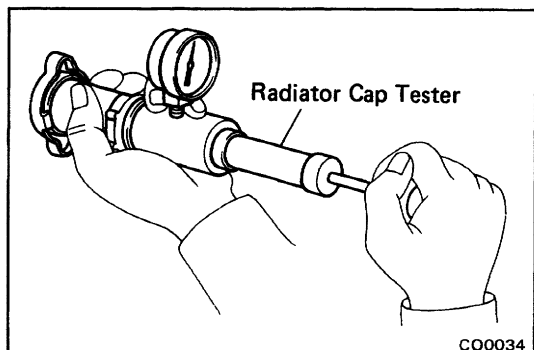
INSPECTION OF RADIATOR

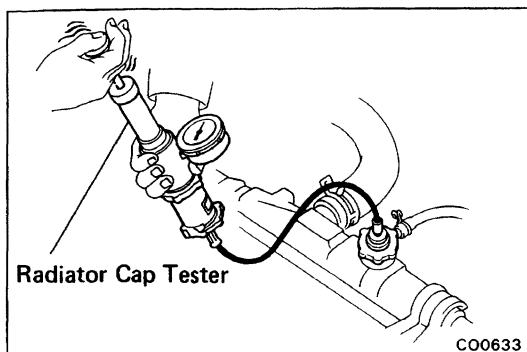
1. INSPECT RADIATOR CAP

Using a radiator cap tester, pump the tester until relief valve opens. Check that the valve opens between 0.75 kg/cm² (10.7 psi, 74 kPa) and 1.05 kg/cm² (14.9 psi, 103 kPa).

Check that the pressure gauge does not drop rapidly when pressure on cap is below 0.6 kg/cm² (8.5 psi, 59 kPa).

If either check is not within limits, replace the radiator cap.





2. 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 1.2 kg/cm² (17.1 psi, 118 kPa), and check that the pressure does not drop. If the pressure drops, check for leaks from the hoses, radiator or water pump. If no external leaks are found, check the heater core, cylinder block and head.

REMOVAL OF RADIATOR

1. DRAIN ENGINE COOLANT (See page [CO-5](#))
2. REMOVE NO.2 FAN SHROUD
3. DISCONNECT COOLANT RESERVOIR HOSE
4. DISCONNECT RADIATOR HOSES
5. DISCONNECT A/T OIL COOLER HOSES

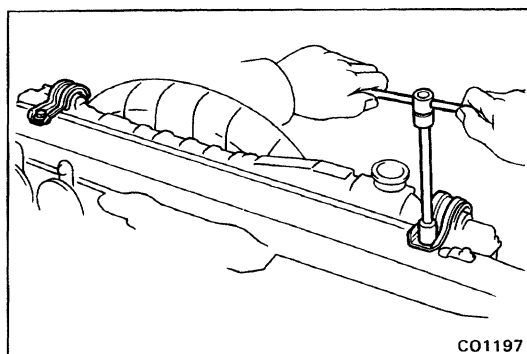
HINT:

- Be careful as some oil will leak out. Catch it in a suitable container.
- Plug the pipe to prevent oil from escaping.

6. REMOVE RADIATOR

Remove the two bolts, supports and radiator.

7. REMOVE FAN SHROUD FROM RADIATOR



DISASSEMBLY OF RADIATOR

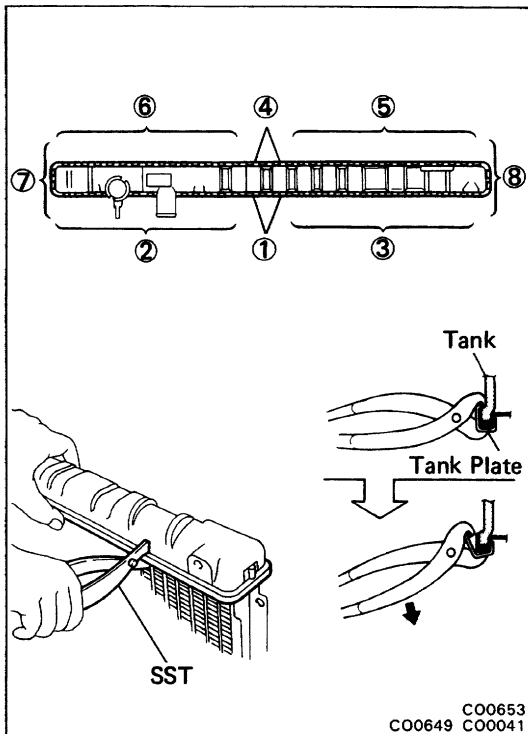
(See page [CO-10](#))

1. REMOVE TANK PLATE

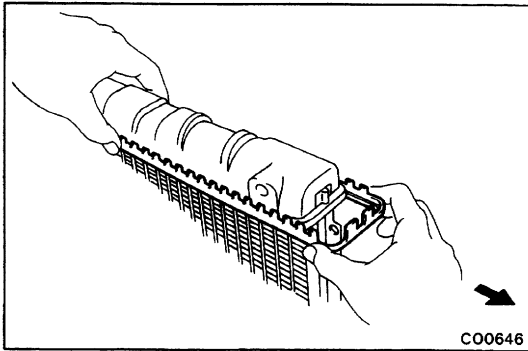
(a) Raise the claws of the tank plates with SST in the numerical order shown in the illustration.

SST 09230-00010

HINT: Be careful not to damage the core plate.



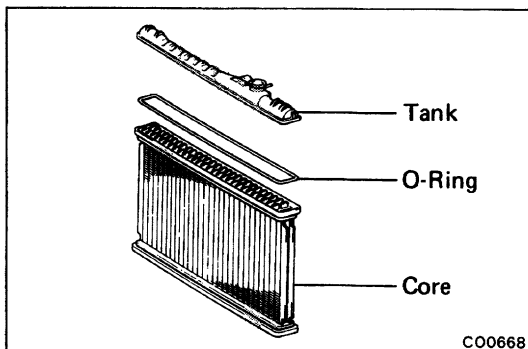
(b) Pull the tank plates outward.



2. REMOVE TANK

(a) Pull the tank upward.

(b) Remove the 4-ring.



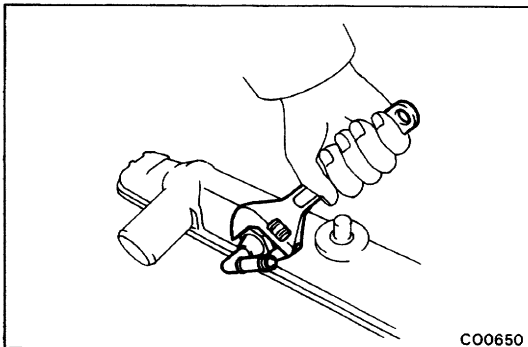
3. REMOVE OIL COOLER FROM LOWER TANK

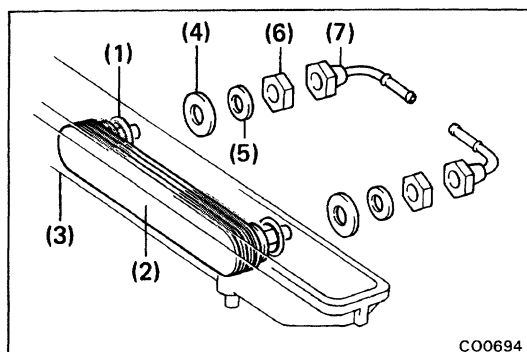
(a) Remove the pipes.

HINT: Make a note of the direction the pipes face.

(b) Remove the nuts, spring washers, plate washers and oil cooler.

(c) Remove the O-rings from the oil cooler.





CO0694

ASSEMBLY OF RADIATOR

(See page CO-10)

1. INSTALL OIL COOLER TO LOWER TANK

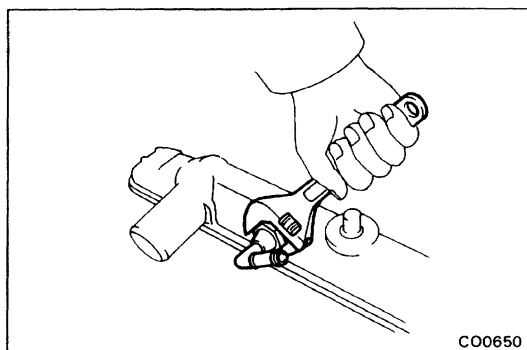
- Clean the O-ring contact surface of the lower tank and oil cooler.
- Install new O-rings (1) to the oil cooler (2).
- Install the oil cooler (2) to the lower tank (3).
- Install the plate washers (4), spring washers (5) and nuts (6). Torque the nuts.

Torque: 220 kg-cm (16 ft-lb, 22 N-m)

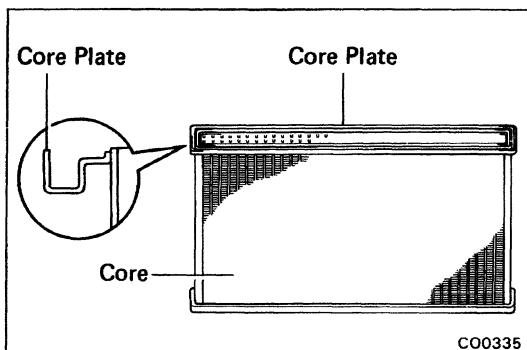
- Install the pipes (7).

Torque: 150 kg-cm (11 ft-lb, 15 N-m)

HINT: Face the pipes in the same direction as they were before disassembly.



CO0650

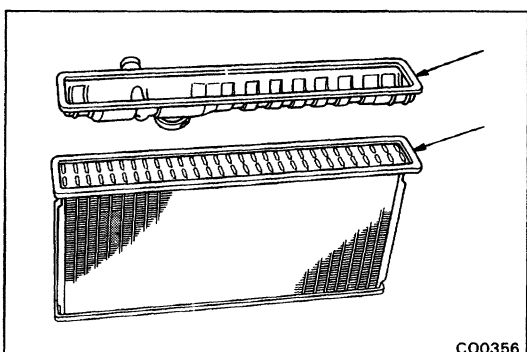


CO0335

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.



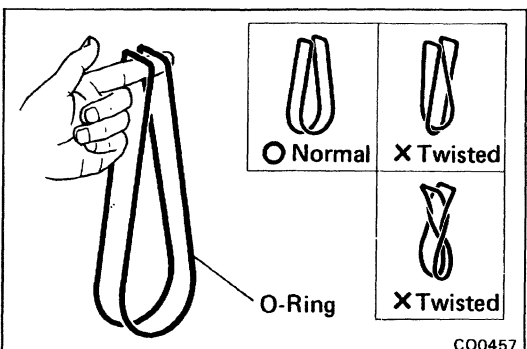
CO0356

3. INSTALL TANK

Install a new O-ring and the tank.

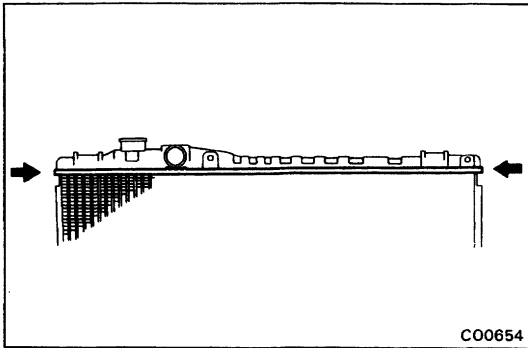
HINT:

- Clean the tank and core plate.



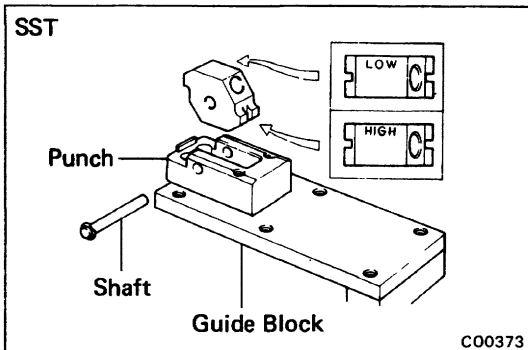
CO0457

- 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.

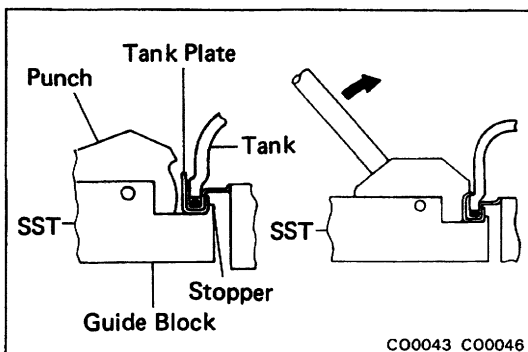
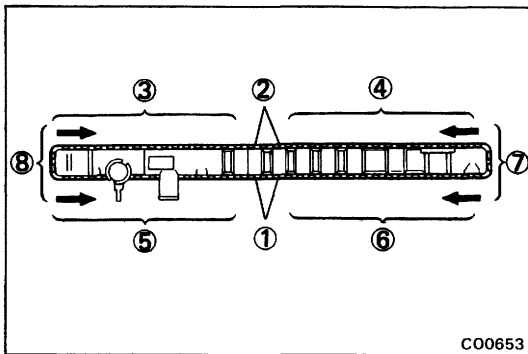


5. STAKE CLAWS OF TANK PLATES

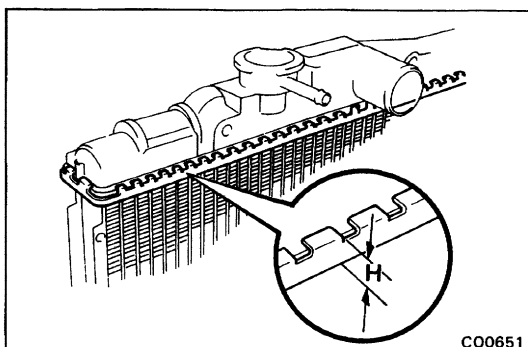
(a) Set the punch of SST to "LOW".

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.

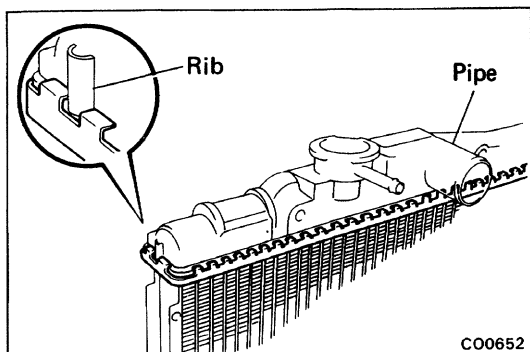


HINT:

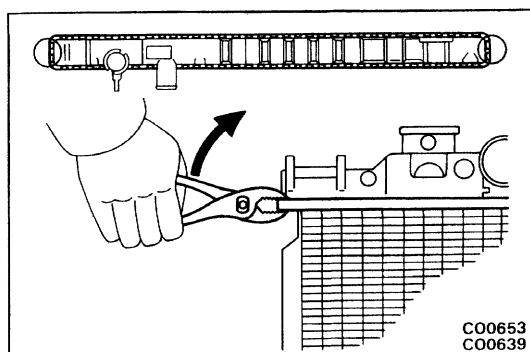
- Stake with just enough pressure to leave a mark on the claw. The staked plate height (H) should be as follows:

Plate height (H):

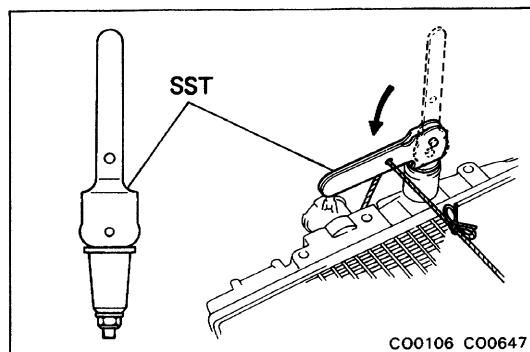
9.18 – 9.53 mm (0.3614 – 0.3752 in.)



- Do not stake the areas protruding around the pipes, brackets or tank ribs.

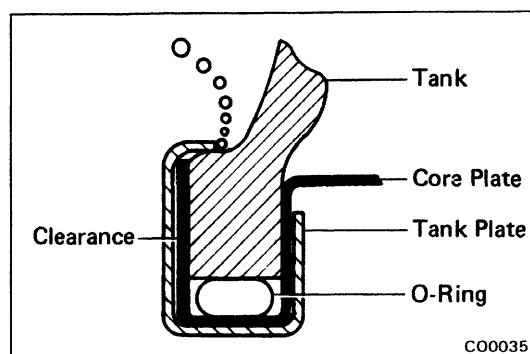


- The points shown in the illustration cannot be staked with the SST. Use pliers and be careful not to damage the core plates.



f . CHECK FOR WATER LEAKS

- Tighten the drain plug.
- Plug the inlet and outlet pipes of the radiator with SST.
SST 09230-00010
- Using a radiator cap tester, apply pressure to the radiator.
Test pressure: 1.5 kg/cm² (21 psi, 147 kPa)

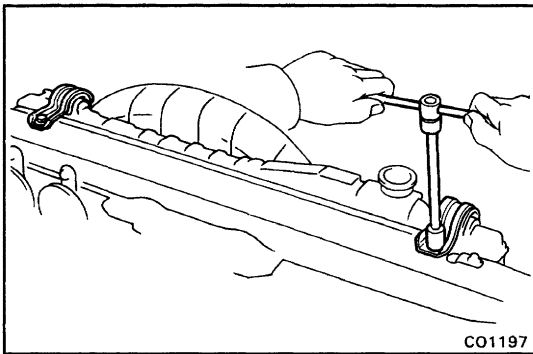


- Check for water leaks.

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 swish the radiator around in the water until all air bubbles disappear.

7. PAINT TANK PLATE

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



INSTALLATION OF RADIATOR

1. INSTALL FAN SHROUD TO RADIATOR

2. INSTALL RADIATOR

Place the radiator in position, and install the two supports with the two bolts.

3. CONNECT A/T OIL COOLER HOSES

4. CONNECT RADIATOR HOSES

5. CONNECT COOLANT RESERVOIR HOSE

6. INSTALL NO.2 FAN SHROUD

7. FILL WITH ENGINE COOLANT

(See step 3 on page [CO-5](#))

8. START ENGINE AND CHECK FOR LEAKS

9. CHECK AUTOMATIC TRANSMISSION (A/T) FLUID

LEVEL (See page [AT-18](#))

NOTICE: Do not overfill.