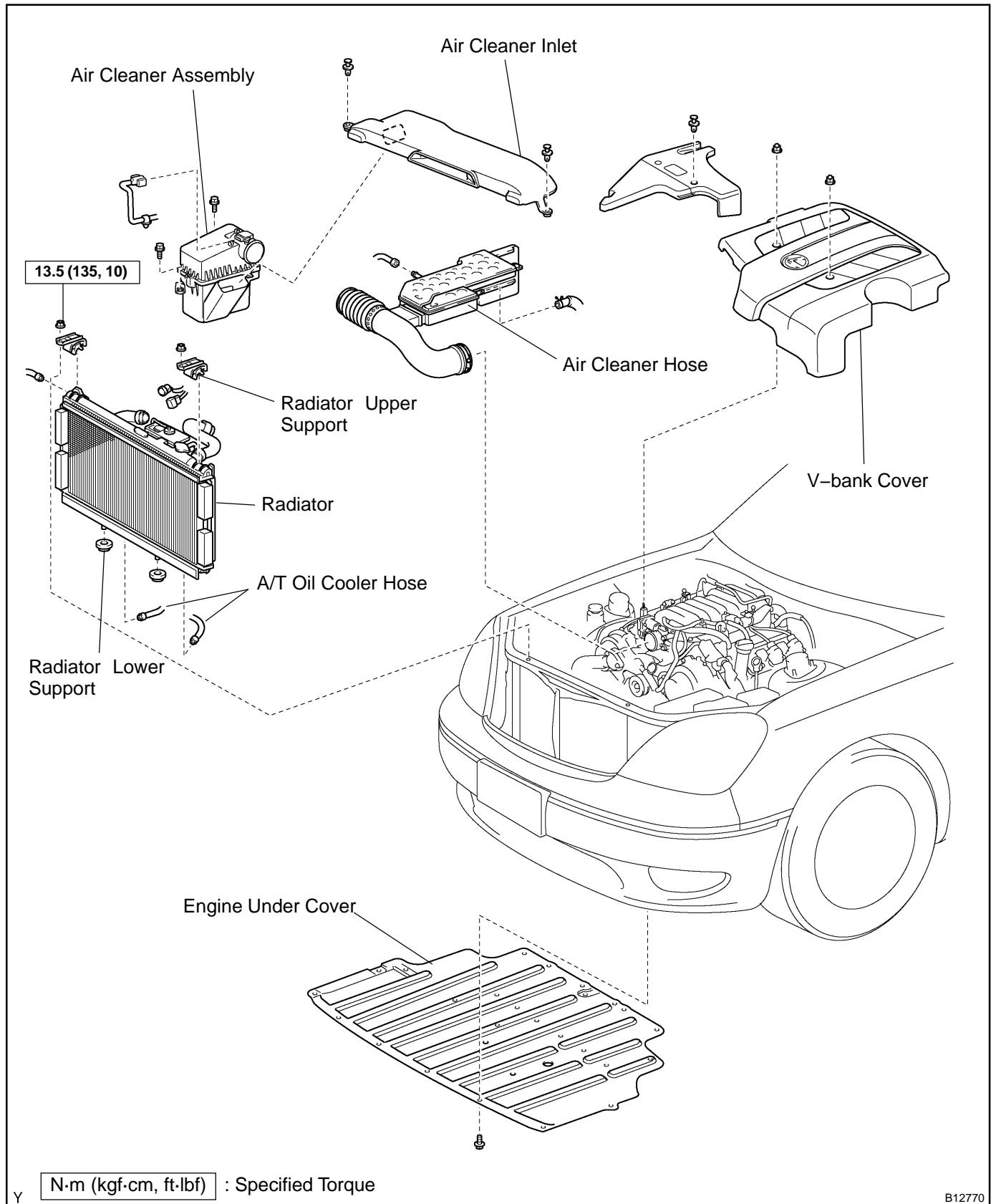
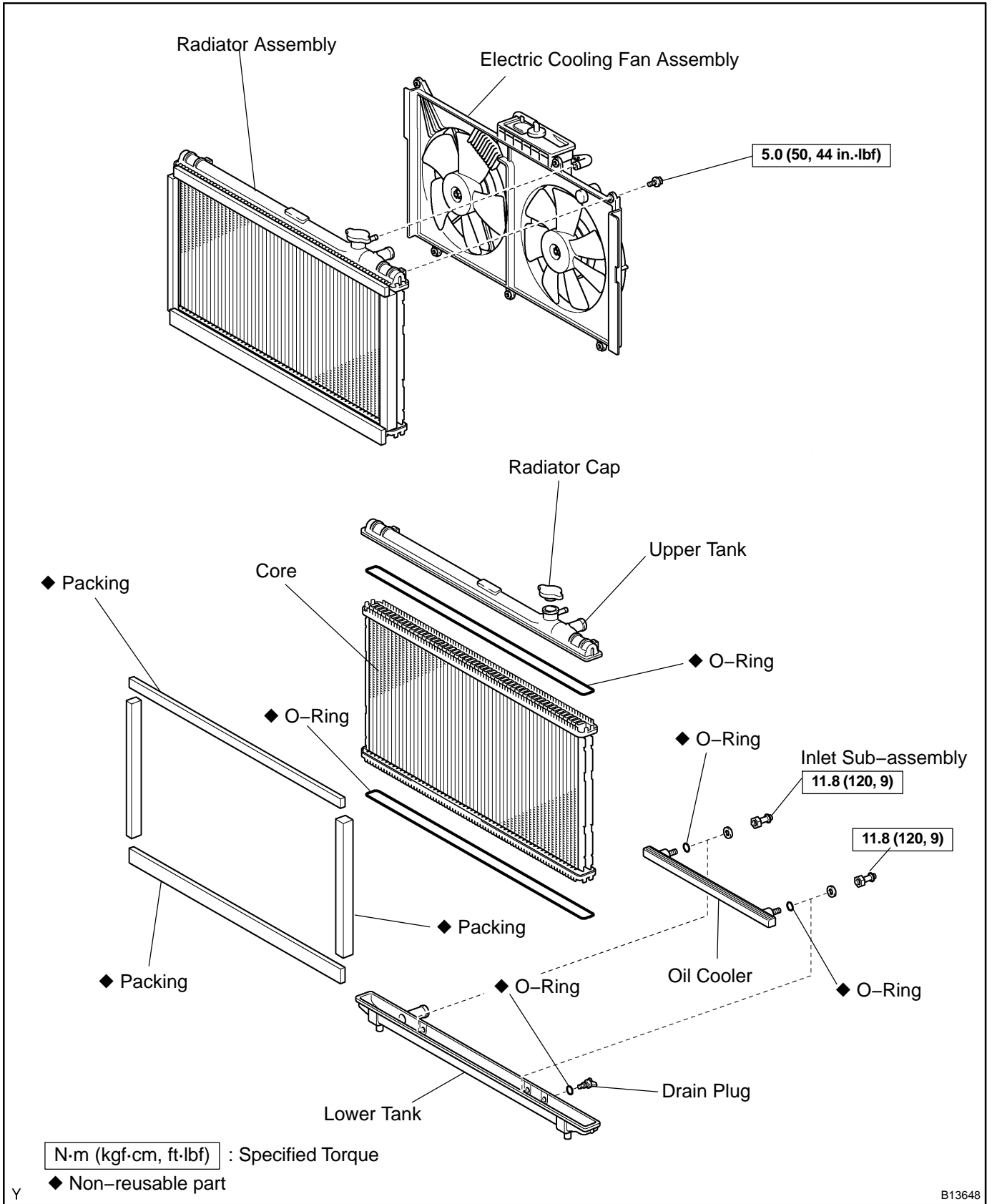


# COMPONENTS

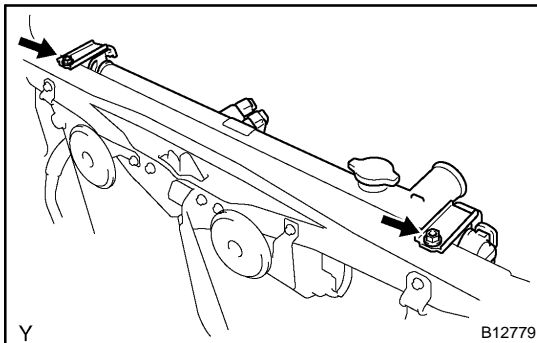


COOLING - RADIATOR



## REMOVAL

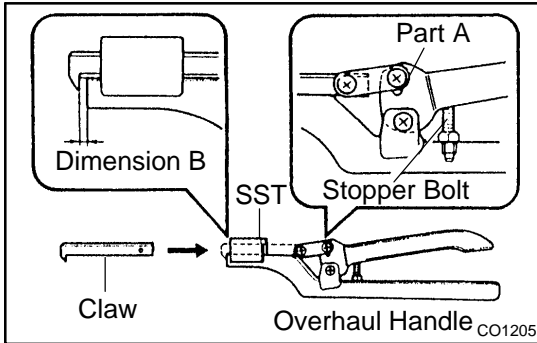
1. REMOVE ENGINE UNDER COVER
2. DRAIN ENGINE COOLANT
3. REMOVE AIR CLEANER INLET
4. REMOVE AIR CLEANER ASSEMBLY
5. REMOVE RADIATOR AND ELECTRIC COOLANT FAN ASSEMBLY
  - (a) Disconnect the Upper radiator hose from radiator.
  - (b) Disconnect the Lower radiator hose from radiator.
  - (c) Disconnect the Engine ECU outlet duct from Engine ECU box.
  - (d) Disconnect the 2 oil cooler hoses for A/T from radiator.
  - (e) Disconnect the cooling fan computer connector.



- (f) Remove the 2 nuts and 2 upper radiator support.
- (g) Lift out the radiator and cooling fan assembly.
- (h) Remove the 2 lower radiator supports.
6. REMOVE ELECTRIC COOLING FAN FROM RADIATOR
  - (a) Disconnect the radiator reservoir hose from the radiator.
  - (b) Remove the 6 bolts and electric cooling fan.

## DISASSEMBLY

1. REMOVE PACKINGS
2. REMOVE RADIATOR CAP
3. REMOVE DRAIN PLUG
  - (a) Remove the drain plug.
  - (b) Remove the O-ring.



### 4. ASSEMBLE SST

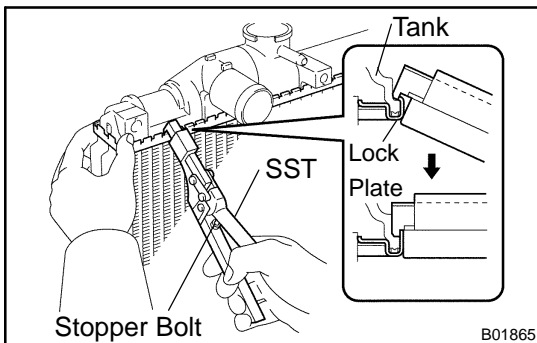
SST 09230-01010

- (a) Install the claw to the overhaul handle, inserting it in the hole in part A as shown in the diagram.
- (b) While gripping the handle, adjust the stopper bolt so that dimension B is as shown in the illustration.

**Dimension B: 0.2 - 0.3 mm (0.008 - 0.012 in.)**

### NOTICE:

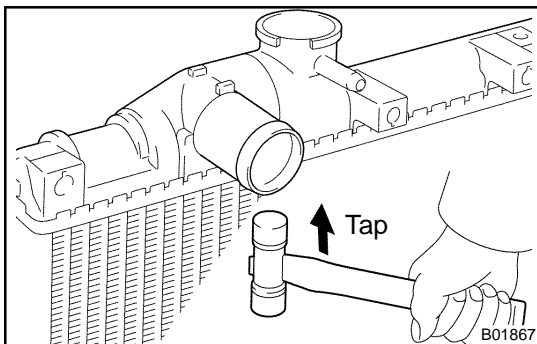
**If this adjustment is not done the claw may be damaged.**



### 5. UNCAULK LOCK PLATES

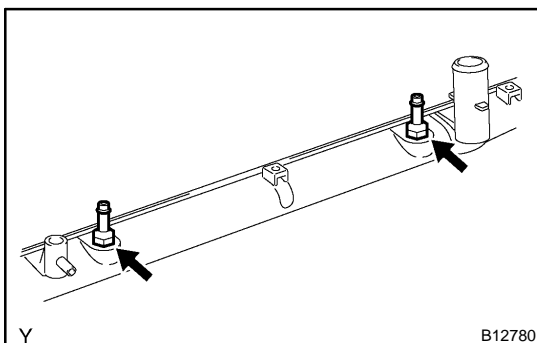
Using SST to release the caulking, squeeze the handle until stopped by the stopper bolt.

SST 09230-01010



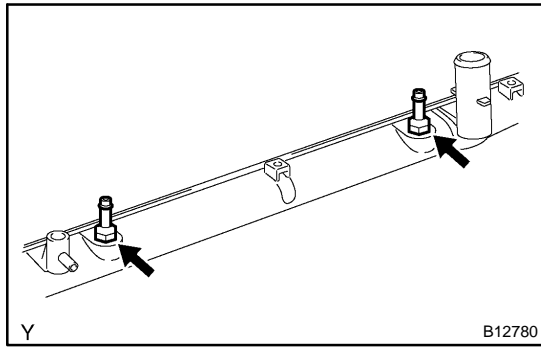
### 6. REMOVE TANKS AND O-RINGS

Lightly tap the bracket of the radiator (or radiator inlet or outlet) with a soft-faced hammer, and remove the tank and the O-ring.



### 7. REMOVE OIL COOLER FROM LOWER TANK

- (a) Remove the 2 inlet sub-assembly.
- (b) Remove the oil cooler and 2 O-rings.

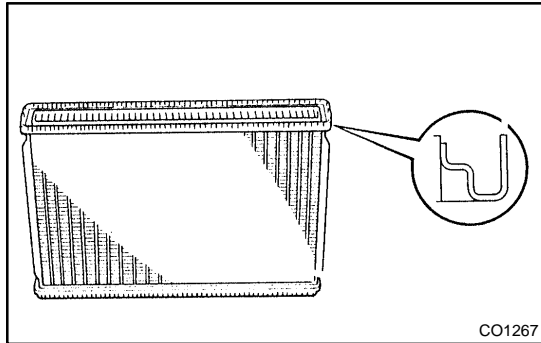


## REASSEMBLY

### 1. INSTALL OIL COOLER TO LOWER TANK

- (a) Install 2 new O rings to the oil cooler.
- (b) Install the oil cooler to the lower tank.
- (c) Install the 2 inlet sub-assembly.

**Torque: 11.8 N-m (120 kgf-cm, 9 ft-lbf)**



### 2. INSPECT LOCK PLATE FOR DAMAGE

HINT:

- If the sides of the lock plate groove are deformed, reassembly of the tank will be impossible.
- Therefore, first correct any deformation with pliers or similar object. Water leakage will result if the bottom of the lock plate groove is damaged or dented.

**NOTICE:**

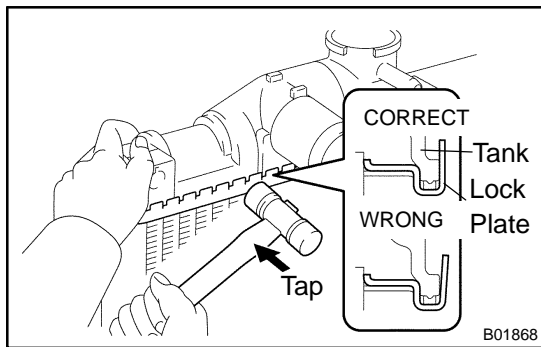
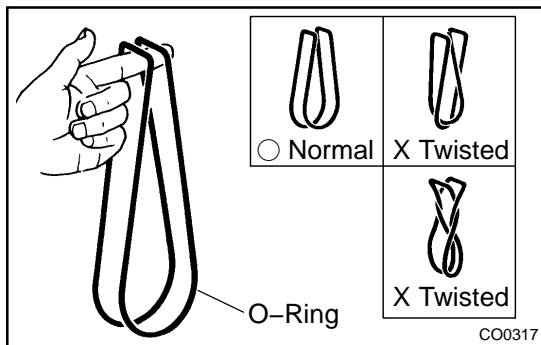
**The radiator can only be recaulked 2 times. After the 2nd time, the radiator core must be replaced.**

### 3. INSTALL NEW O-RINGS AND TANKS

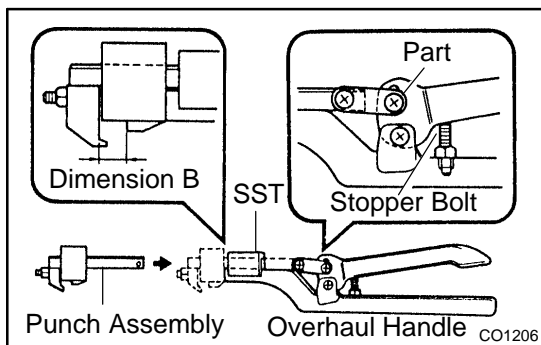
- (a) After checking that there are no foreign objects in the lock plate groove, install a new O-ring without twisting it.

HINT:

When cleaning the lock plate groove, lightly rub it with sand paper without scratching it.



- (b) Install the tank without damaging the O-ring.
- (c) Tap the lock plate with a soft-faced hammer so that there is no gap between it and the tank.

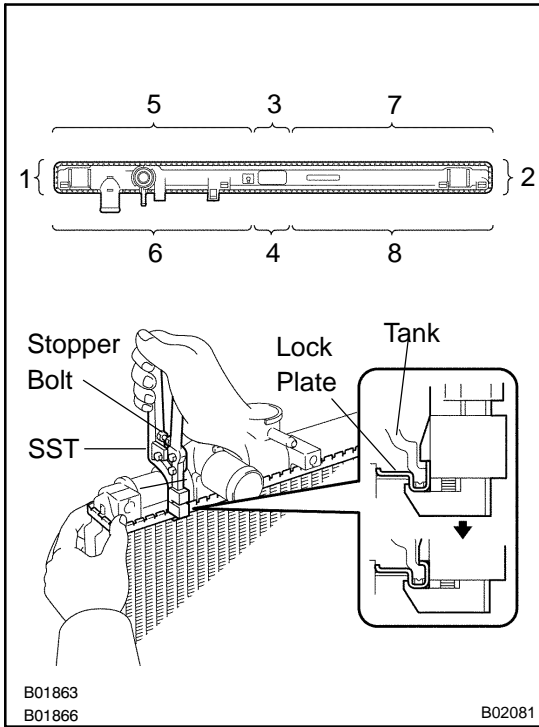


### 4. ASSEMBLE SST

SST 09230-01010, 09231-14010

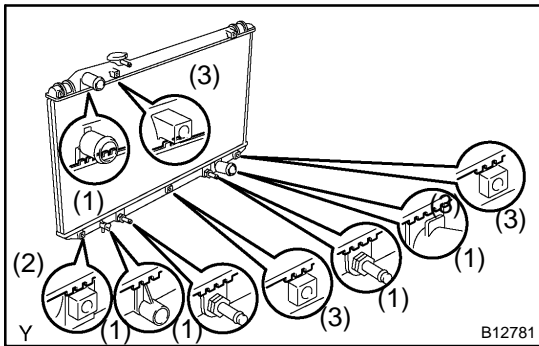
- (a) Install the punch assembly to the overhaul handle, inserting it in the hole in part A as shown in the illustration.
- (b) While gripping the handle, adjust the stopper bolt so that dimension B is as shown in the illustration.

**Dimension B: 8.4 mm (0.331 in.)**



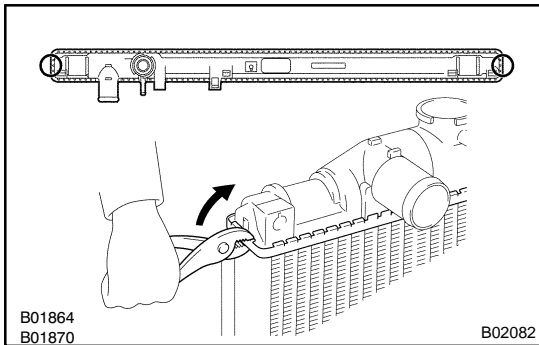
**5. CAULK LOCK PLATE**

- (a) Lightly press SST against the lock plate in the order shown in the illustration. After repeating this a few times, fully caulk the lock plate by squeezing the handle until stopped by the stopper plate.  
SST 09230-01010

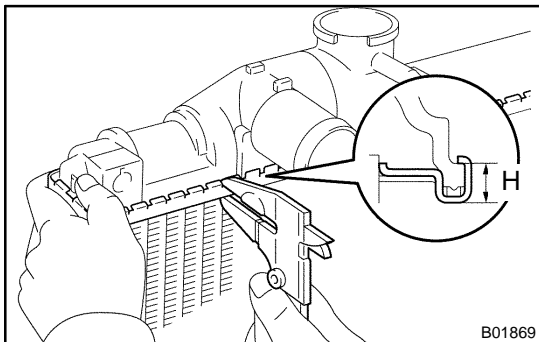


**HINT:**

- Do not stake the areas protruding around the ports (1), flange (2) and bracket (3).



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



- (b) Check the lock plate height (H) after completing the caulking.

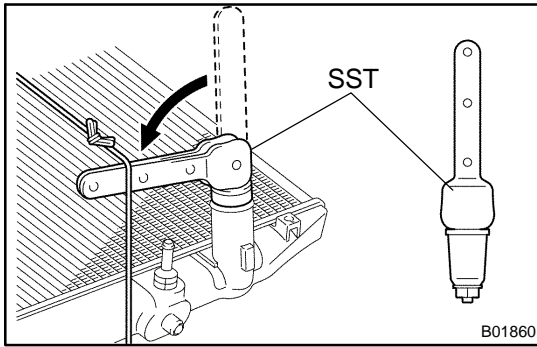
**Plate height (H): 8.8 mm (0.346 in.)**

If not within the specified height, adjust the stopper bolt of the handle again and caulk again.

**6. INSTALL DRAIN PLUG**

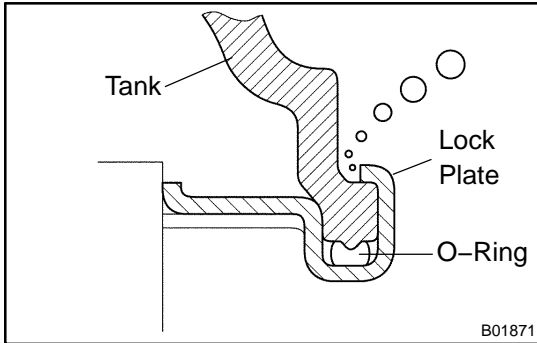
- (a) Install a new O-ring to the drain plug.  
(b) Install the drain plug.

**7. INSTALL RADIATOR CAP**



### 8. INSPECT FOR WATER LEAKS

- (a) Tighten the drain plug.
- (b) Plug the inlet pipes of the radiator with SST.  
SST 09230-01010
- (c) Using a radiator cap tester, apply pressure to the radiator.  
**Test pressure: 177 kPa (1.8 kgf/cm<sup>2</sup>, 26 psi)**
- (d) Submerge the radiator in water.



- (e) Inspect for leaks.

#### HINT:

On radiators with resin tanks, there is a clearance between the tank and lock 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 doing the water leak test, first swish the radiator around in the water until all air bubbles disappear.

### 9. INSTALL NEW PACKINGS

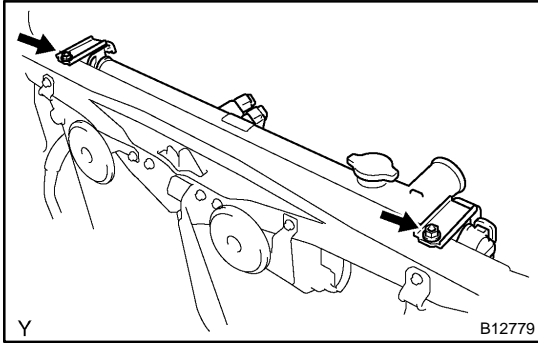
## INSTALLATION

### 1. INSTALL ELECTRIC COOLING FAN TO RADIATOR

- (a) Install the electric cooling fan with the 6 bolts.

**Torque: 5.0 N·m (50 kgf·cm, 44 in.-lbf)**

- (b) Connect the radiator reservoir hose to the radiator.



### 2. INSTALL RADIATOR AND ELECTRIC COOLING FAN ASSEMBLY

- (a) Install the 2 lower radiator supports to the radiator.  
 (b) Attach the 2 lower radiator supports on the radiator to the body bracket.

- (c) Install the radiator and electric cooling fan assembly with the 2 upper radiator supports and 2 nuts.

**Torque: 13.5 N·m (135 kgf·cm, 10 ft-lbf)**

- (d) Connect the Upper radiator hose to radiator.  
 (e) Connect the Lower radiator hose to radiator.  
 (f) Connect the ECM outlet duct to ECM box.  
 (g) Connect the 2 oil cooler hoses for A/T to radiator.  
 (h) Connect the cooling fan computer connector.

### 3. INSTALL AIR CLEANER ASSEMBLY

### 4. INSTALL AIR CLEANER INLET

### 5. FILL WITH ENGINE COOLANT (See page [CO-2](#))

### 6. START ENGINE AND CHECK FOR ENGINE COOLANT AND A/T FLUID LEAKS

### 7. INSTALL ENGINE UNDER COVER