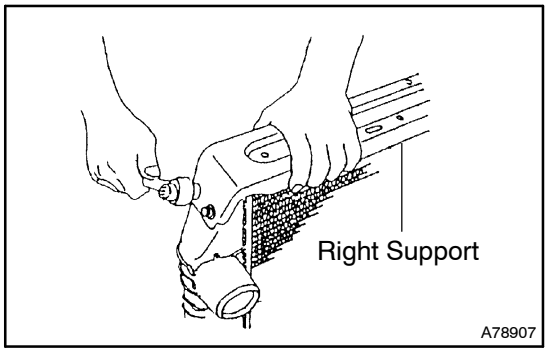
160KQ–01

OVERHAUL

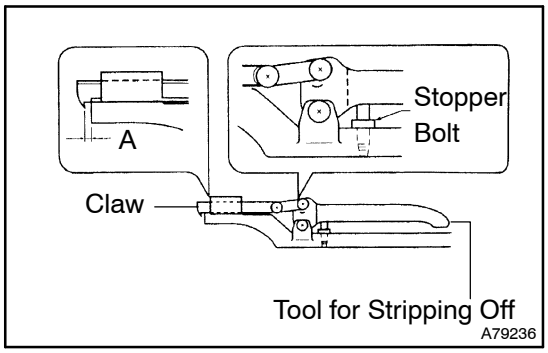


1. REMOVE LEFT AND RIGHT SIDE PLATE

(a) Remove the all square head M8 (4 or 8) bolts to remove the left and the right side plate.

(b) Remove the side seal and radiator packing.

(c) Remove the drain cook.



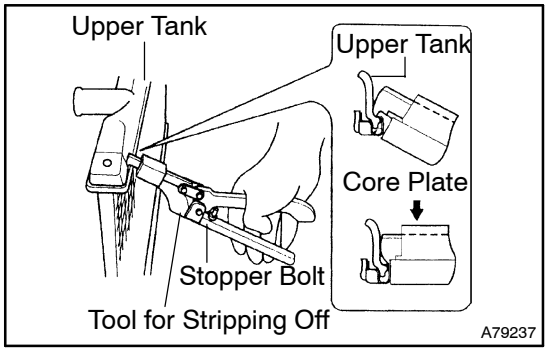
2. REMOVE UPPER AND LOWER TANKS

(a) Adjust the dimension of the portion A of the illustration by means of a stopper bolt so that it may become 0.2 to 0.3 mm under the condition that the handle of the SST is gripped by means of a stopper bolt.

SST 09230–01010 (09231–01010, 09231–01030)

NOTICE:

Be sure to adjust it to prevent an eventual damage of the crow.

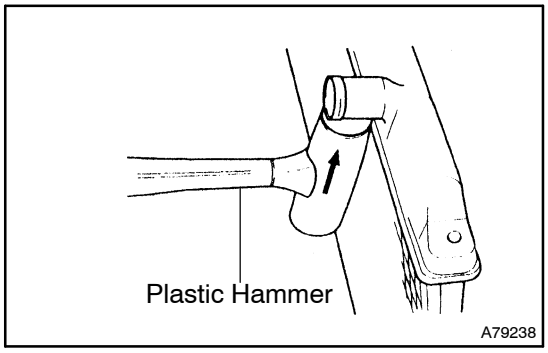


(b) As the aluminum radiator adopts an integral caulking construction by the core plate, remove the upper and the lower tanks by lifting up the core plate in such a way that the latter may not be damaged. Release the calking by using the stripping off tool and by gripping it until it hits the stopper bolt of the handle as shown on the illustration.

SST 09230–01010 (09231–01010, 09231–01030)

NOTICE:

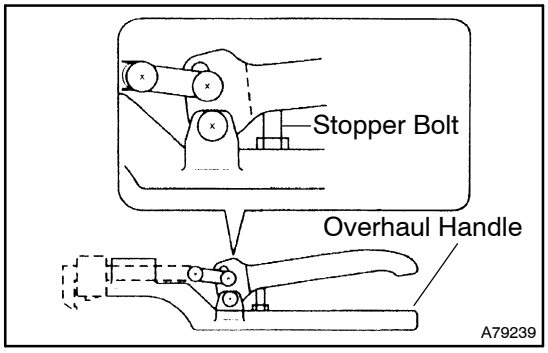
Don't lift up the core plate more than 90°.



(c) Remove the upper and lower tanks by lightly tapping the radiator hose fitting position.

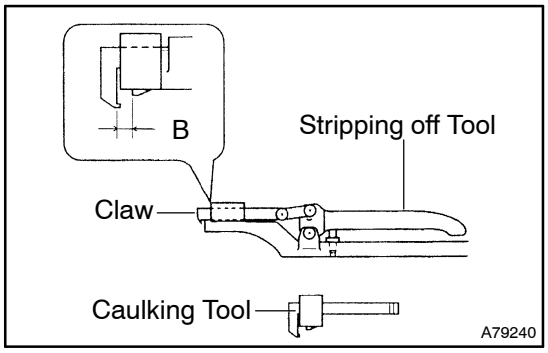
NOTICE:

- **Remember mounting direction of the core sub–assembly.**
- **Remount it in such a way that the original direction can be maintained.**

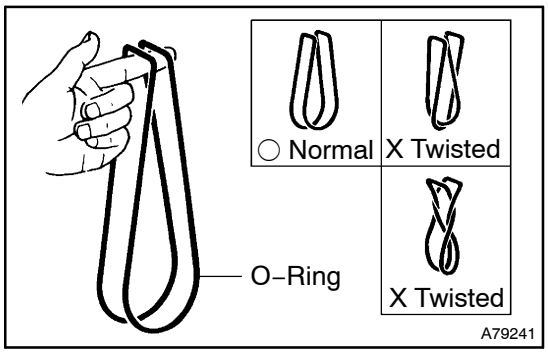


3. FIT CAULKING TOOL ON OVERHAUL HANDLE BY MARKING

(a) Use of the hole of position on the illustration (either of the 2 holes will do).
SST 09230–01010 (09231–01010, 09231–01020), 09231–14010



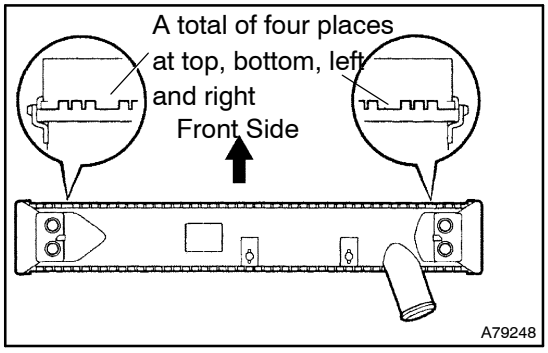
(b) Adjust with the stopper bolt so that the dimention of part B in the figure is within the range of the reference value when the handle is gripped.



4. INSTALL UPPER AND LOWER TANKS

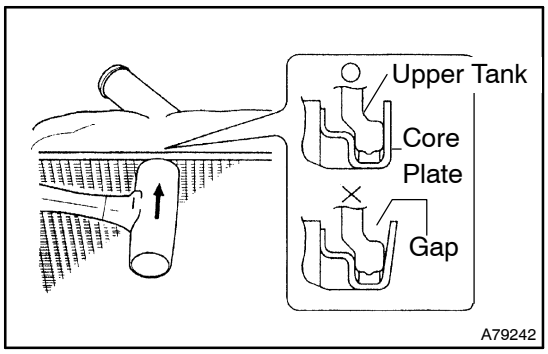
(a) After having checked that there remains no foreign matter on the fitting position, mount a new O–ring in such a way that it will not be twisted.

NOTICE:
When cleaning the fitting position, lightly rub the said portion by using a sand paper, etc.



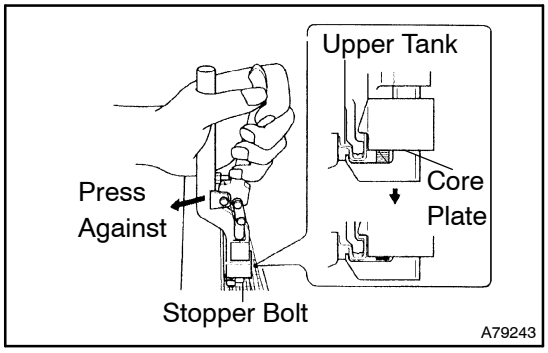
(b) The notch in the radiator core shall be at the front side as shown in the figure.

NOTICE:
As the construction of the core has directionality in front back direction, do not install it with reversed orientation.



(c) Set the upper and the lower tanks so that they will not be damaged.

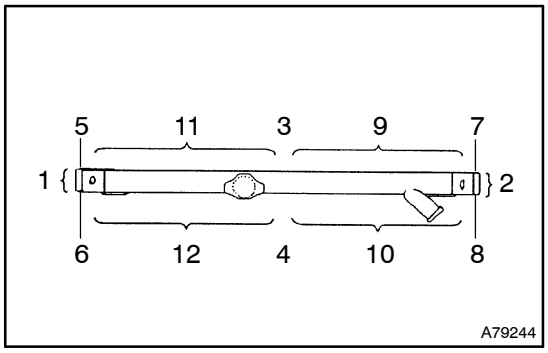
(d) Clap the core plate to obtain a contact with the upper and the lower tanks.



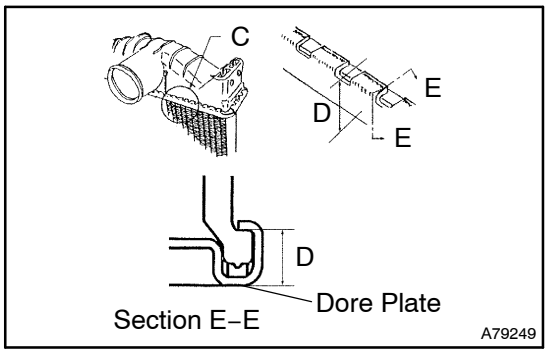
(e) Press the caulking tool against the core plate as shown in the illustration. Perform temporary caulking by griooing the handle until it knocks at the stopper bolt of the handle.

NOTICE:

- **For the positions where the caulking tool is not usable, perform the caulking by using pliers.**



- **Perform the caulking according to the following sequence.**



(f) Check the dimention D after caulking.
Standard dimention: 7.4 – 7.8 mm (0.29 – 0.30 in.)

(g) In the event that the said dimention does not fall within the standard limit, adjust the stopper bolt of the handle once again and perform the caulking again.

NOTICE:

Check the caulking dimentions at both ends of the core plate as well as around the central portion where the caulking has not been applied (under the pipe, etc.).

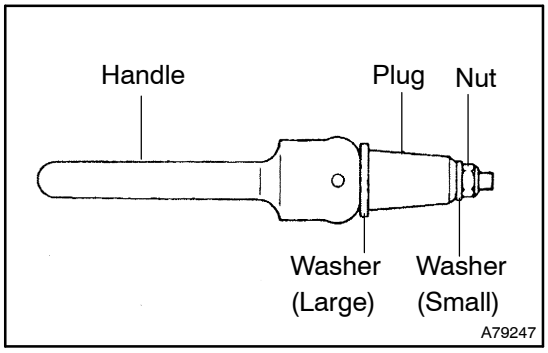
(h) Others:
Mark for the first repair for the second repair at a well visible place in the upper tank.

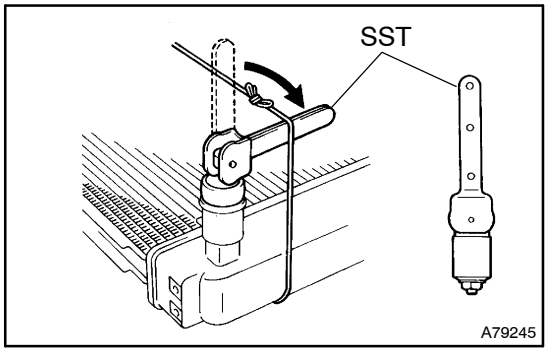
NOTICE:

Re–caulking should be limited to 2 times. If it is necessary to recaulk more than twice, replace the part in question.

5. CHECK FOR WATER LEAKS

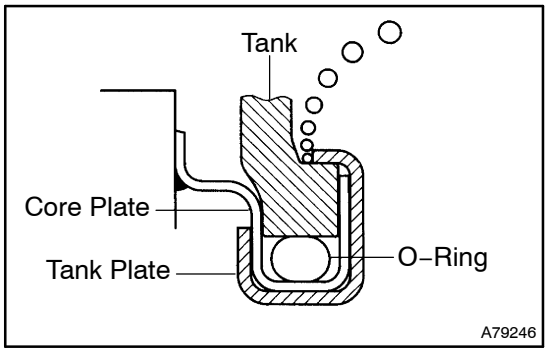
(a) Assemble the plug handle as shown in the illustration and tighten the nut until the washer, the plug and the handle have light contact.





(b) Using SST, plug the inlet and outlet pipes of the radiator.
SST 09230–01010 (09231–00030, 09231–00050)

(c) Using a radiator cap tester, apply pressure to the radiator.
Test pressure (Standard cab type):
177 kPa (1.8 kgf/cm^2, 25 psi)
Test pressure (Wide cab type):
137 kPa (1.4 kgf/cm^2, 20 psi)



HINT:
On the 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 radiator around in the water until all air bubbles disappear.

6. INSTALL RADIATOR COCK

(a) Install a new O–ring.

7. INSTALL LEFT AND RIGHT SIDE PLATE

(a) Install the all square head bolts to remove the left and the right side plate.
Torque: 12.7 N·m (130 kgf·cm, 9 ft·lbf)