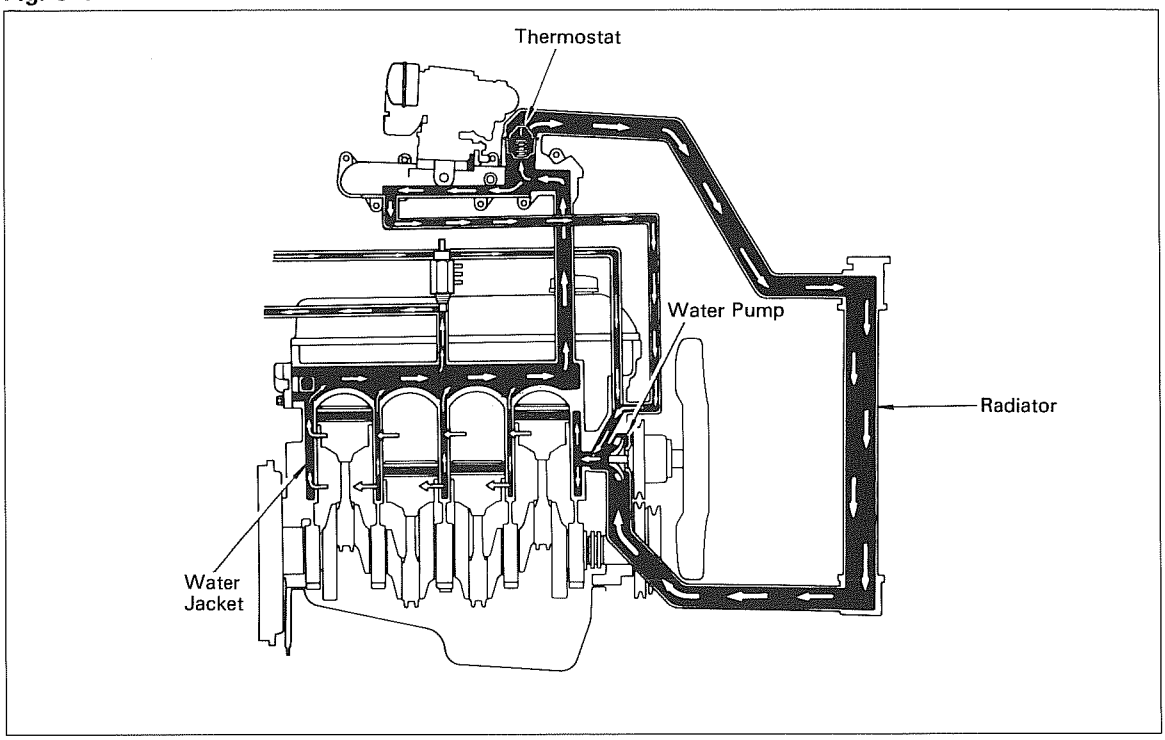
COOLING SYSTEM

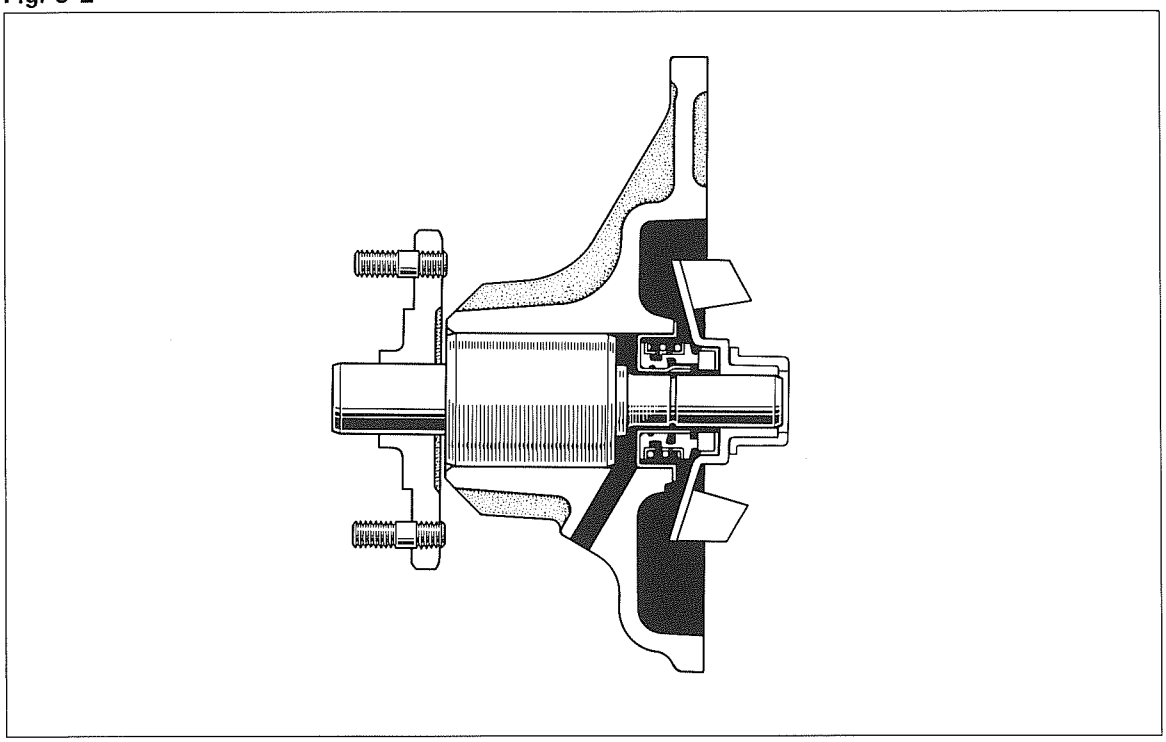
COOLING SYSTEM CIRCUIT

Fig. 5-1



WATER PUMP CUTAWAY VIEW

Fig. 5-2

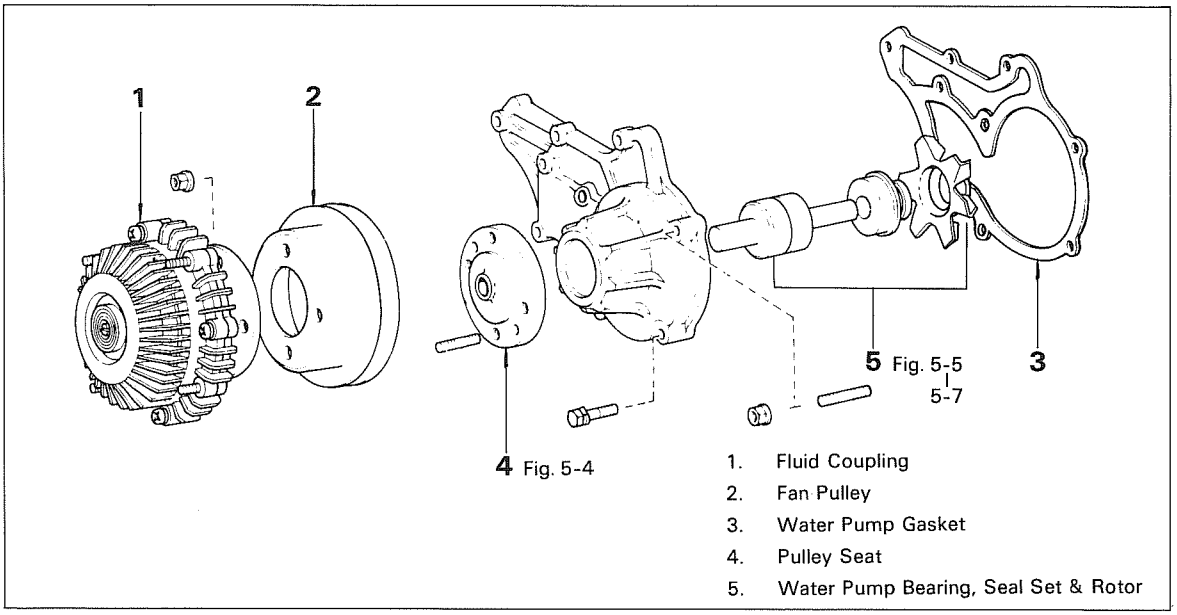


WATER PUMP

DISASSEMBLY

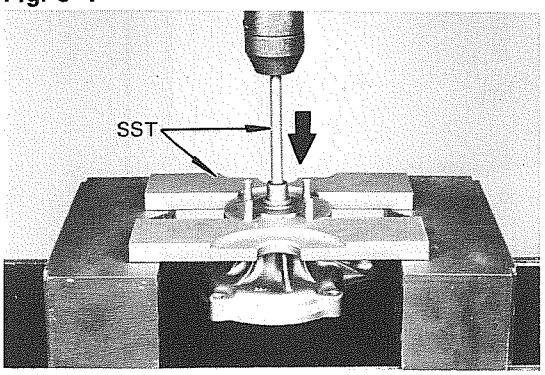
Disassemble the parts in the numerical order shown in the figure.

Fig. 5-3



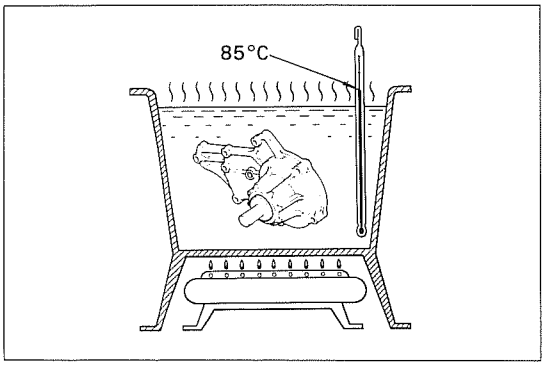
1. Fluid Coupling
2. Fan Pulley
3. Water Pump Gasket
4. Pulley Seat
5. Water Pump Bearing, Seal Set & Rotor

Fig. 5-4



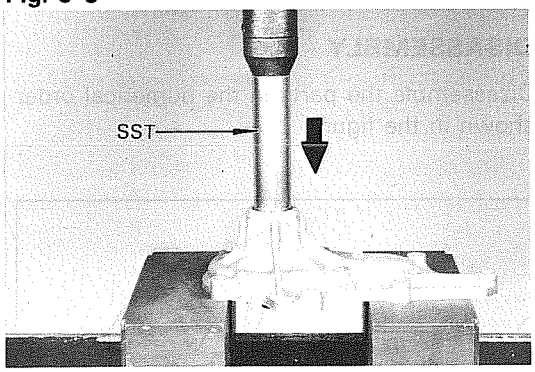
While supporting the pulley seat, press the shaft with SST.
SST (09236-36010) of set [09236-00100]

Fig. 5-5



Heat the water pump body to about 85°C (185°F).

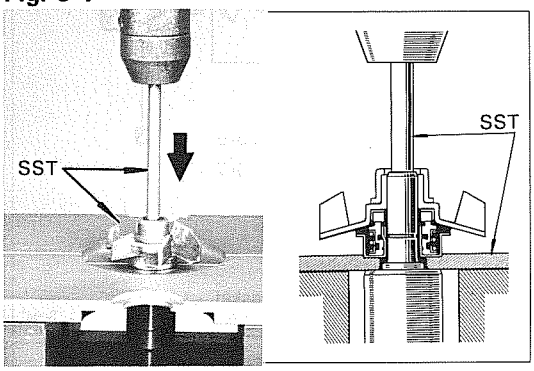
Fig. 5-6



Using SST, press out the bearing together with the rotor.
SST (09236-28011) of set [09236-00100]

— Note —
Use a new seal set for assembly.

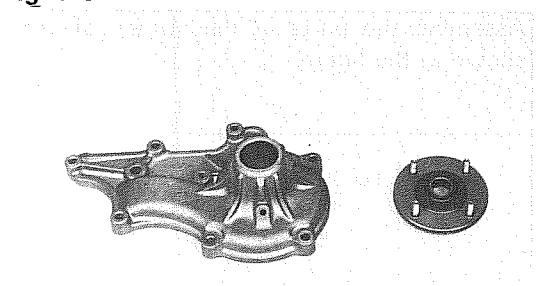
Fig. 5-7



Press out the bearing with SST.
SST (09236-28011) and
(09236-36010) of set [09236-00100]

— Note —
Use a new rotor for assembly.

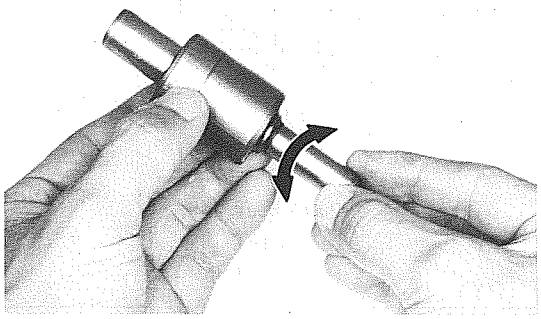
Fig. 5-8



INSPECTION

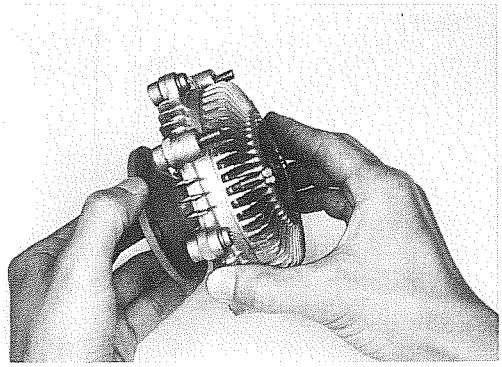
1. Check the water pump body and pulley seat for cracks, wear or damage.

Fig. 5-9



2. Check the operating condition of the bearing.
   If damaged, produces noise or does not turn properly, replace.

Fig. 5-10



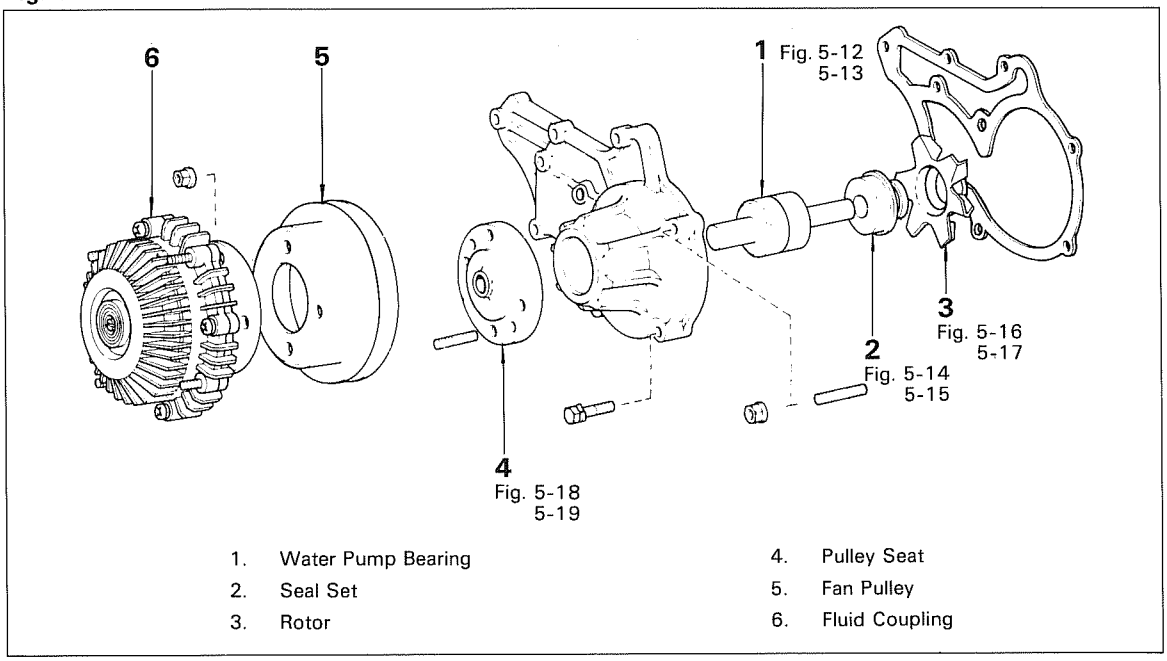
3. Check the fluid coupling for damage and silicone oil leak. If necessary, replace the coupling assembly.

— Note —
Do not press on the bi-metal.

ASSEMBLY

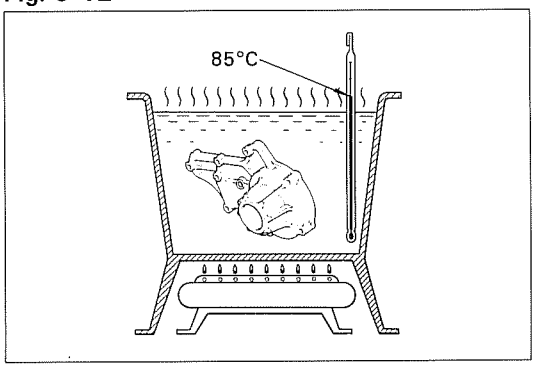
Assemble the parts in the numerical order shown in the figure.

Fig. 5-11



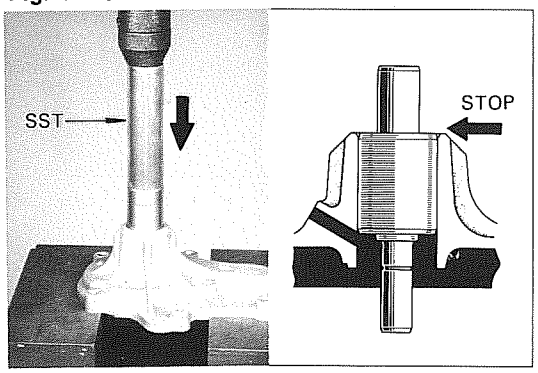
1. Water Pump Bearing
2. Seal Set
3. Rotor
4. Pulley Seat
5. Fan Pulley
6. Fluid Coupling

Fig. 5-12



Heat the water pump body to about 85°C (185°F).

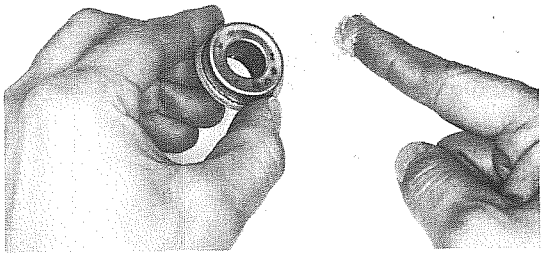
Fig. 5-13



Press in the bearing with SST.
SST (09236-28011) of set [09236-00100]

— Note —
The bearing end face should be flush with the body top surface.

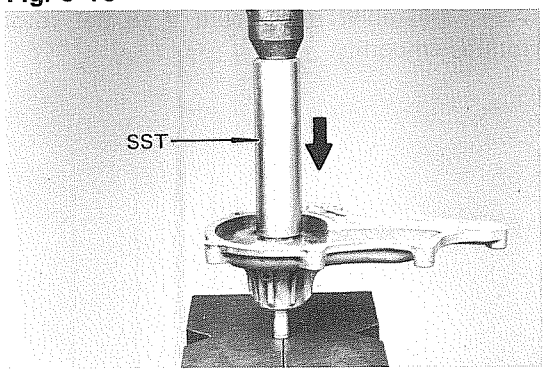
Fig. 5-14



Apply a little liquid sealer to the seal set.

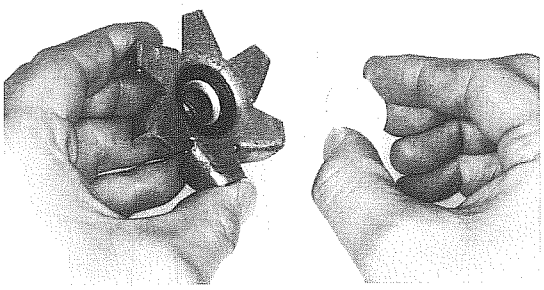
– Note –
Always replace the seal set with a new one when reassembling.

Fig. 5-15



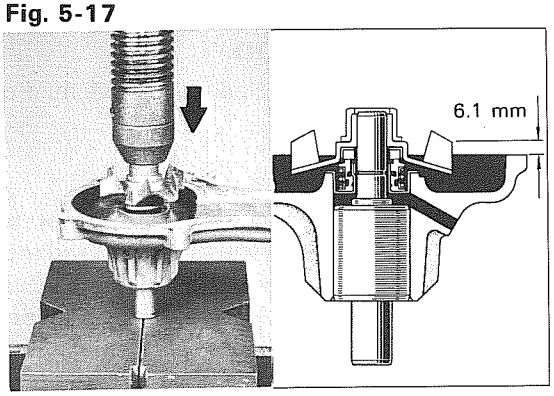
Press the seal set into the pump body with SST.
SST [09236-36010]

Fig. 5-16



Install the packing and seat into the rotor.

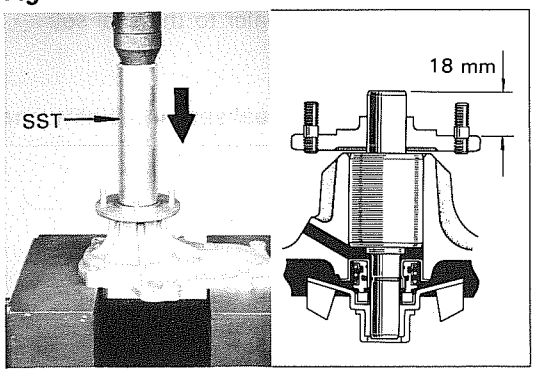
Fig. 5-17



Press in the rotor.

– Note –
1. **Use a new rotor for assembly.**
2. **As shown in the figure, the distance from the rotor edge to the pump body should be 6.1 mm (0.240 in.).**

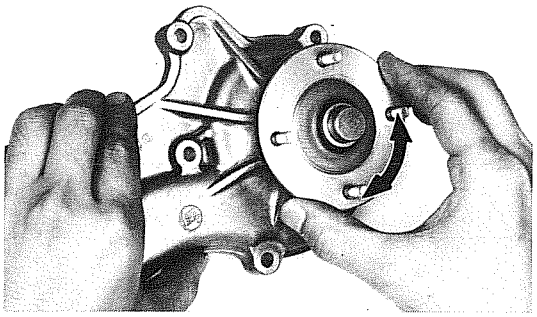
Fig. 5-18



Press in the pulley seat with SST.
SST (09236-36010) of set [09236-00100]

— Note —
As shown in the figure, the distance from the bearing shaft end to the pulley seat should be 18 mm (0.71 in.).

Fig. 5-19



After assembly, make sure that the rotor rotates smoothly.

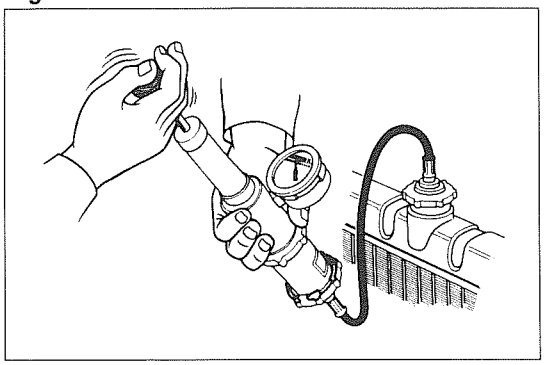
RADIATOR

CLEANING METHOD

Using water or steam cleaner, remove mud or dirt from the cores.

— Caution —
If using a high pressure type cleaner be careful not to deform the fins of the radiator core. For example, keep a distance of at least 40 — 50 cm (16 — 20 in.) between radiator core and cleaner nozzle when cleaner, nozzle pressure is 30 — 35 kg/cm^2 (427 — 492 psi.)

Fig. 5-20



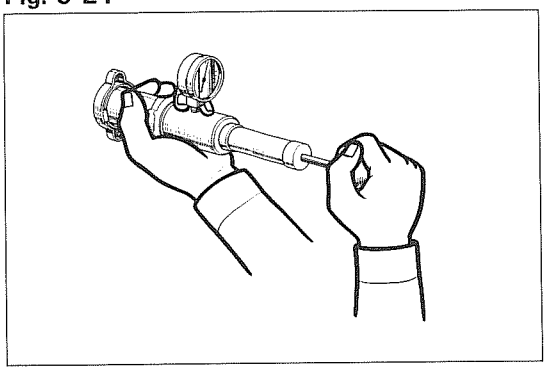
INSPECTION

1. Install the radiator cap tester to the radiator, apply pressure and check for leakage in the cooling system under normal operating temperature.

Applicable pressure:

Previous type	**1.5 kg/cm² (21 psi)**
Resin tank type	**0.9 kg/cm² (12.8 psi)**

Fig. 5-21



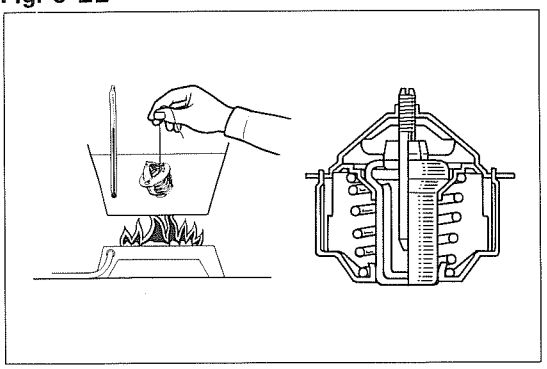
2. Check the pressure sealing and vacuum relief operation.

Valve opening pressure:

STD	**0.75 — 1.05 kg/cm² (10.7 — 14.9 psi)**
Limit	**0.6 kg/cm² (8.5 psi)**

3. If readings are not within specification, replace the radiator cap.

Fig. 5-22



THERMOSTAT

INSPECTION

1. Immerse the thermostat in water and check the valve opening temperature by gradually heating the water.
2. Replace the thermostat if the valve remains open at normal temperature or is not very tight when fully closed.

Low temperature type:

Valve starts to open at 80 — 84°C (176 — 183°F).

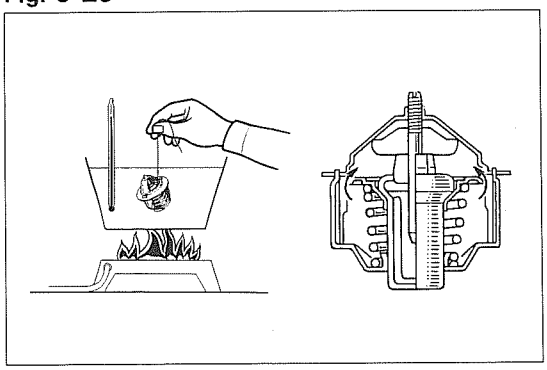
Valve opens by more than 8 mm (0.31 in.) at 95°C (203°F).

High temperature type:

Valve starts to open at 86 — 90°C (187 — 194°F).

Valve opens by more than 8 mm (0.31 in.) at 100°C (212°F).

Fig. 5-23



MEMO