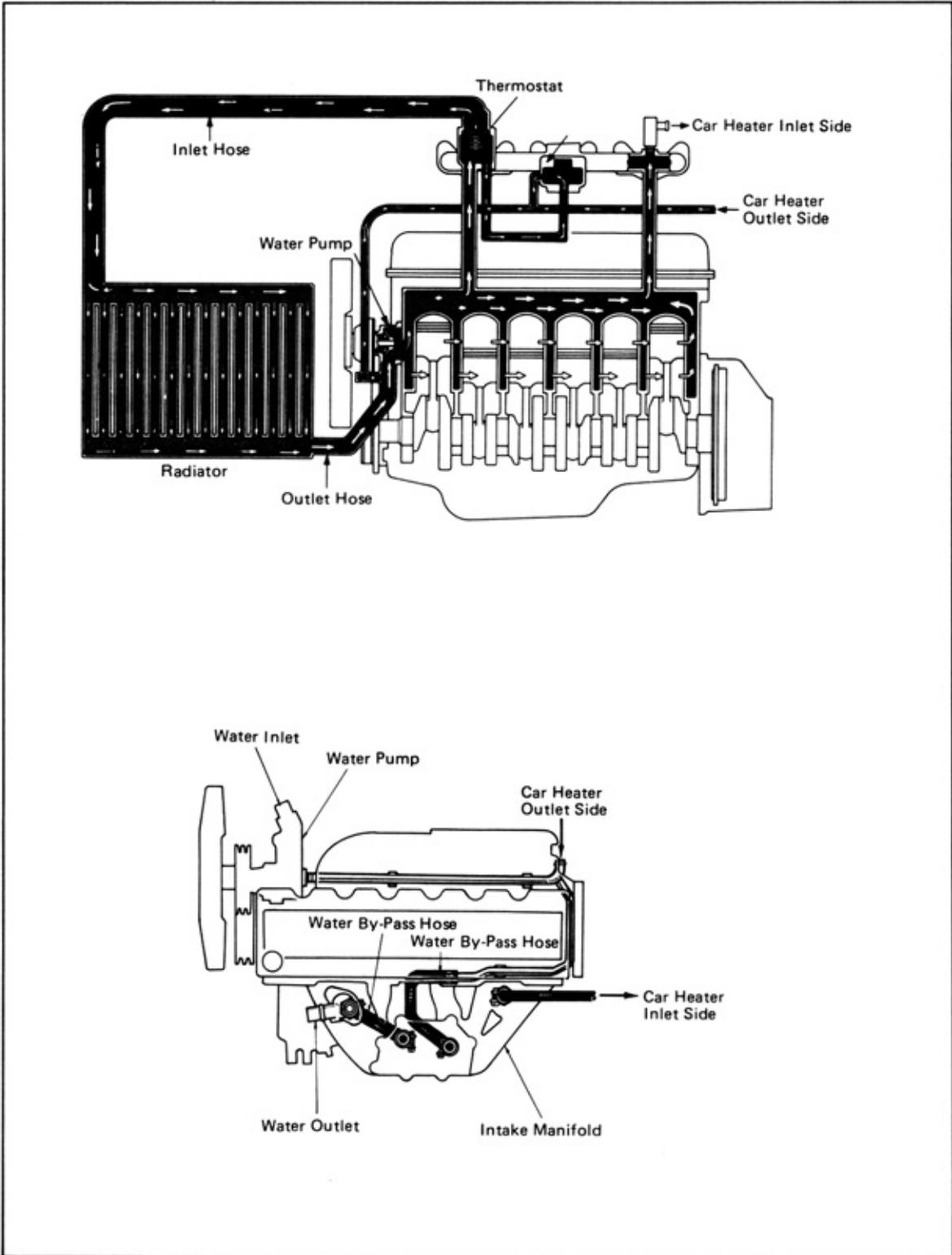


COOLING SYSTEM

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COOLING SYSTEM CIRCUIT

Fig. 5-1



RADIATOR

Fig. 5-2

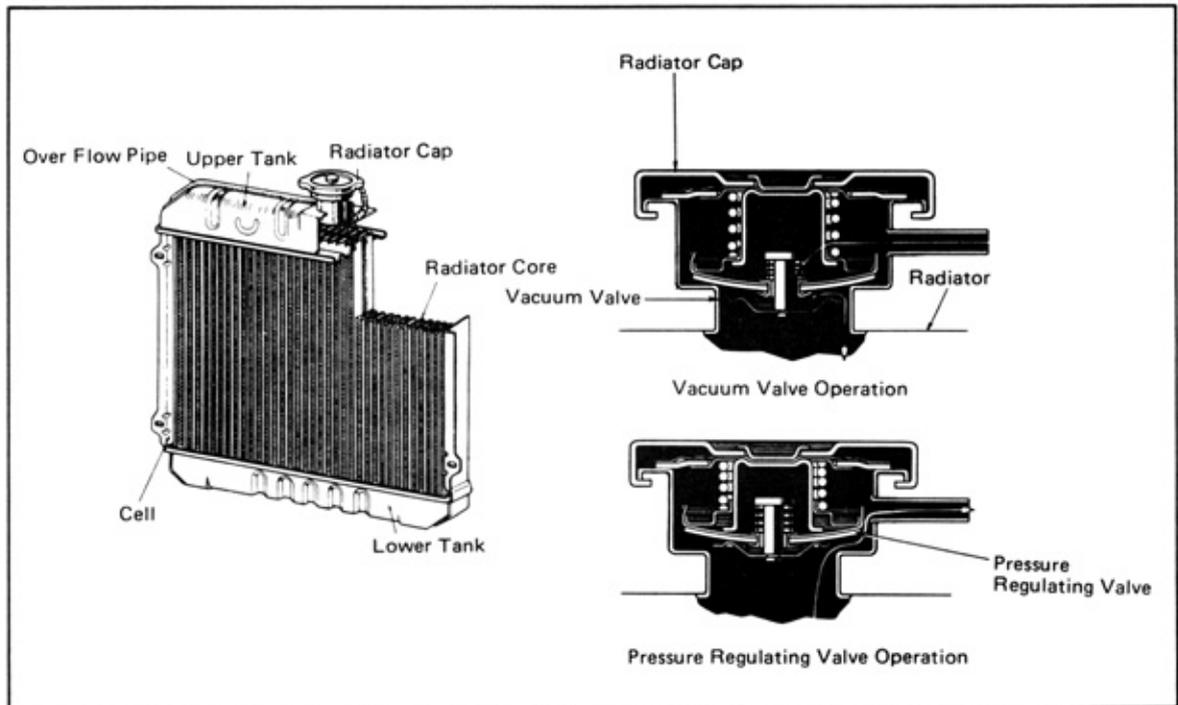


Fig. 5-3



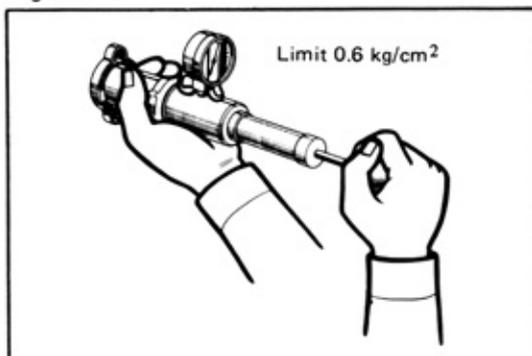
INSPECTION



Radiator Cap

1. Inspect the pressure regulating valve and vacuum valve in the radiator cap for spring tension and for damage and tightness of seal packing, and replace cap if defective.

Fig. 5-4



2. Using the cap tester, measure the valve opening pressure. If lower than the limit, replace cap.

Valve opening pressure limit

	0.6 kg/cm ² (8.5 psi)
Standard	0.75 – 1.05 kg/cm ² (10.6 psi – 14.9 psi)

– Note –

Clean the seal packing and valve before measurement.

Fig. 5-5

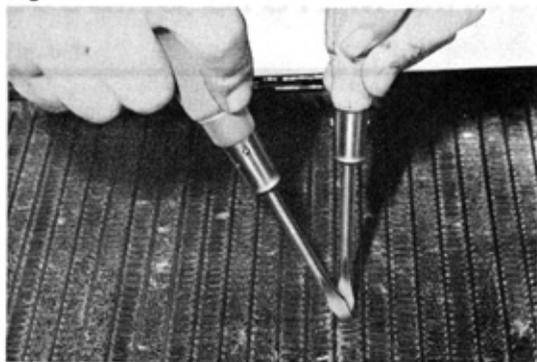


Fig. 5-6

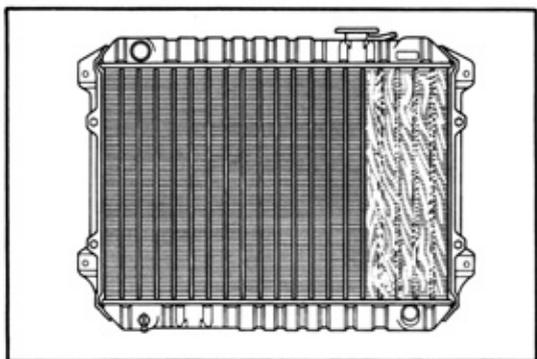


Fig. 5-7

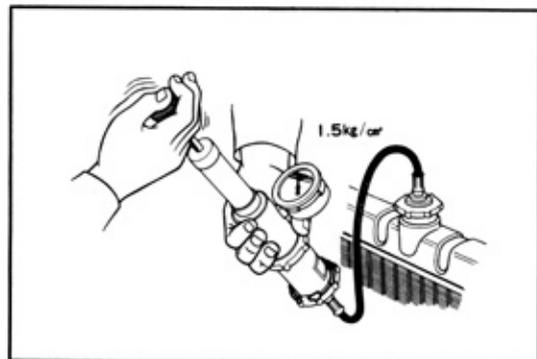
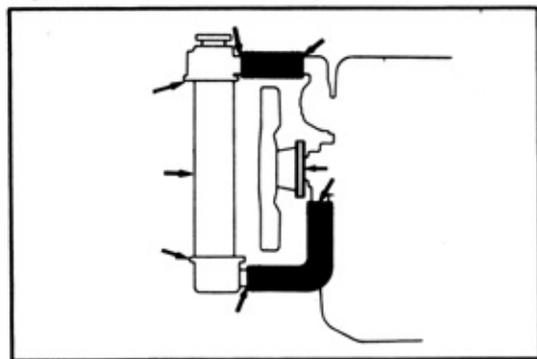


Fig. 5-8



Radiator & Hose

1. Inspect the radiator core fins. If any of the fins are obstructing free passage of air, repair by the method illustrated.

2. If the clogging in the radiator core exceeds 20 percent of the total radiation surface, replace the radiator assembly.
3. Inspect the radiator hoses, and replace if damaged or excessively hardened.

– Precautions on Installing Radiator –

1. When filling anti-freeze in winter, be sure to use the ANTI-RUST type ETHYLENE GLYCOL base coolant.
2. In models equipped with Automatic Transmission, check and replenish the transmission fluid.

4. Inspect for leakage, using cap tester.
 - (1) Fully supply the radiator with water.
 - (2) Warm up engine and turn engine off.
 - (3) Install cap tester and pump to a pressure of 1.5 kg/cm² (21.3 psi).

- (4) Inspect for leakage and hoses for excessive inflation.

– Caution –

Use care in removing tester.

THERMOSTAT

Fig. 5-9

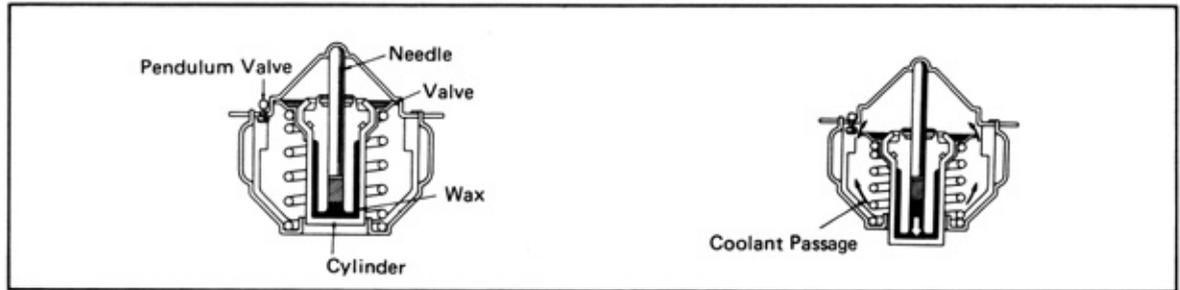
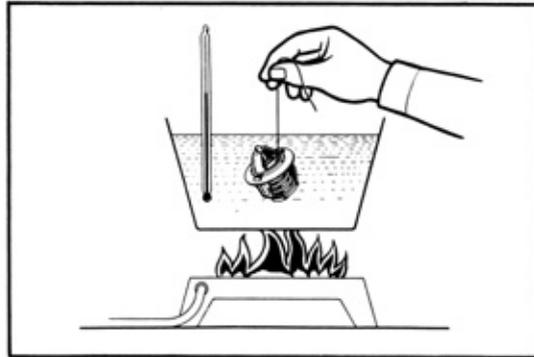


Fig. 5-10



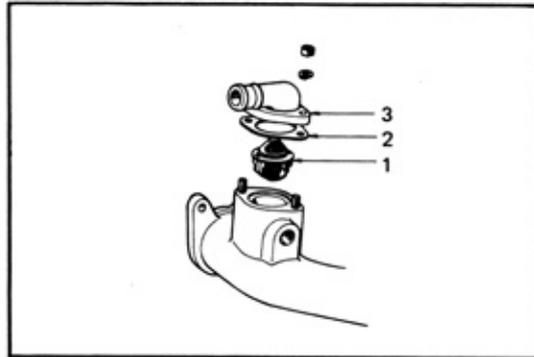
INSPECTION

1. Replace if the valve remains open at normal temperature or does not have proper tightness when fully closed.
2. Immerse the thermostat in the water, and check the valve opening temperatures by heating the water gradually.

The valve is satisfactory if it starts to open at 80° to 84°C (176° to 183.2°F) and opens to more than 8 mm (0.32 in.) at 95°C (203°F).

Replace if defective.

Fig. 5-11



INSTALLATION

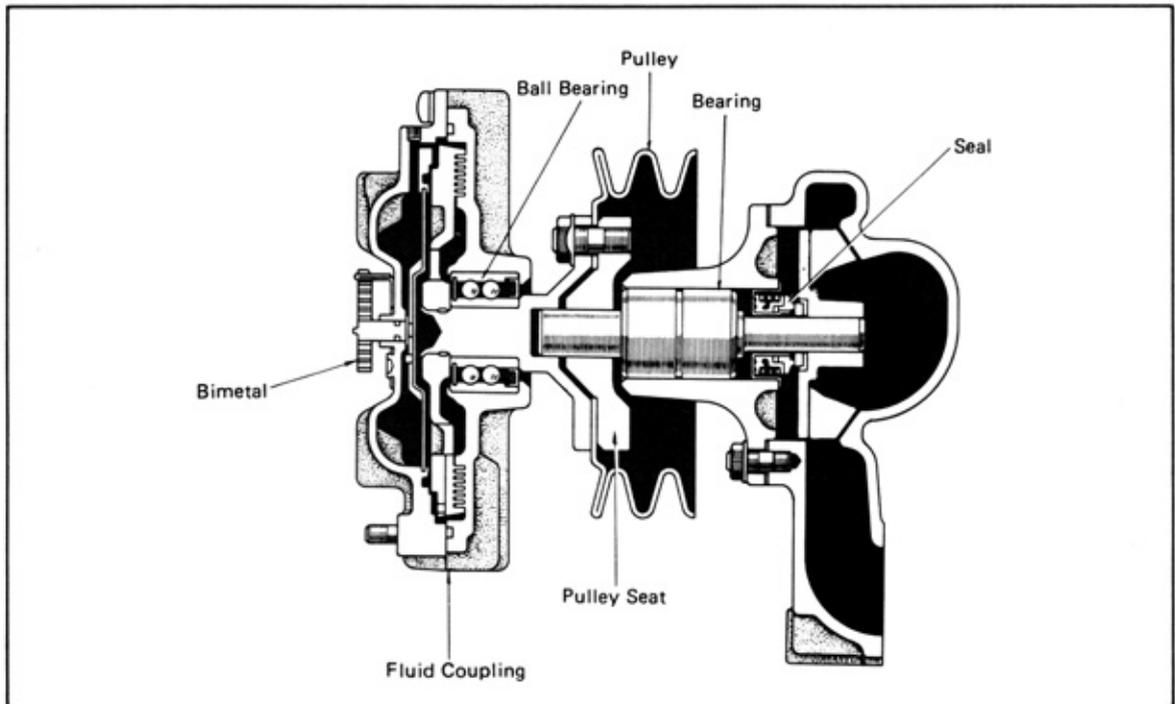
Fit in the thermostat, and install the water outlet over a gasket.

— Note —

Always use a new gasket.

WATER PUMP

Fig. 5-12



DISASSEMBLY

Disassemble in numerical order.

Fig. 5-13

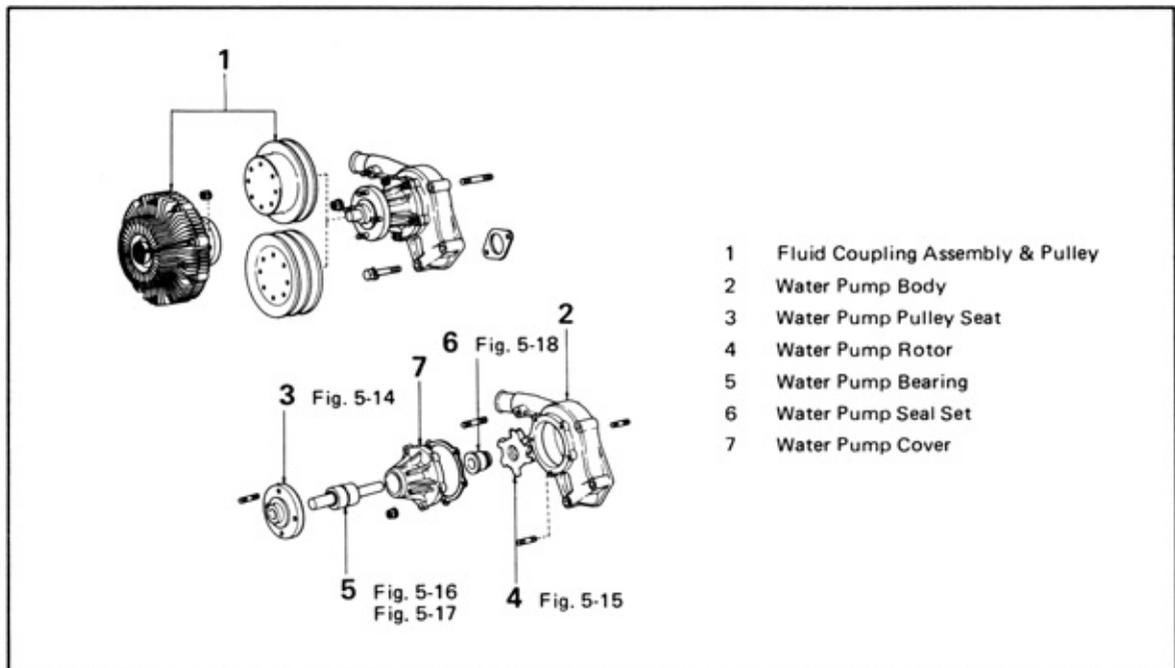
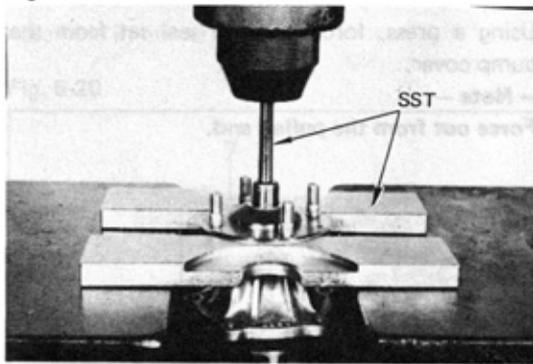
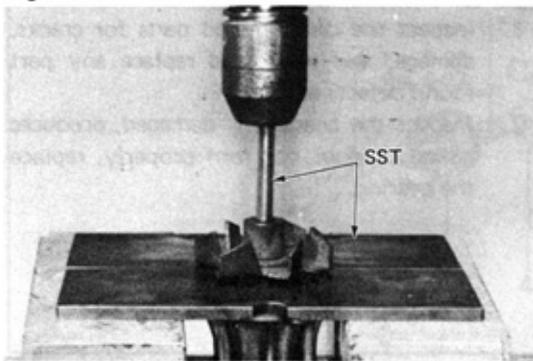


Fig. 5-14



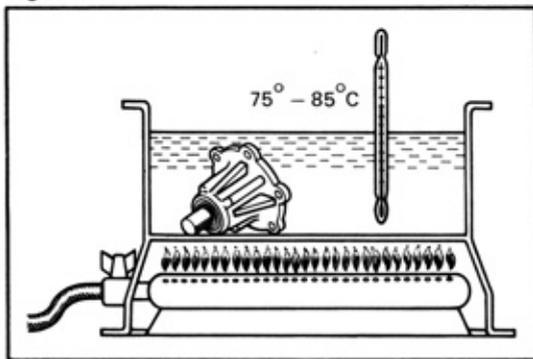
Using SST [09236-36010] and a press, force out the bearing shaft from the pulley seat.

Fig. 5-15



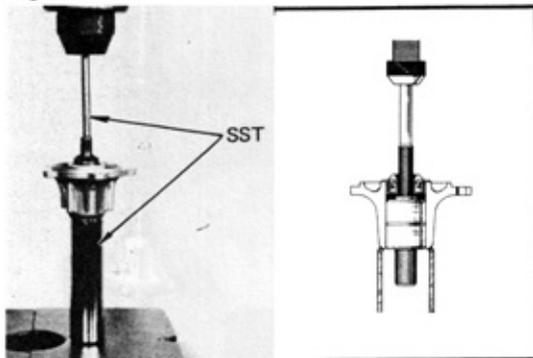
Using SST [09236-28011], [09236-36010] and a press, force out the bearing shaft from the rotor.

Fig. 5-16



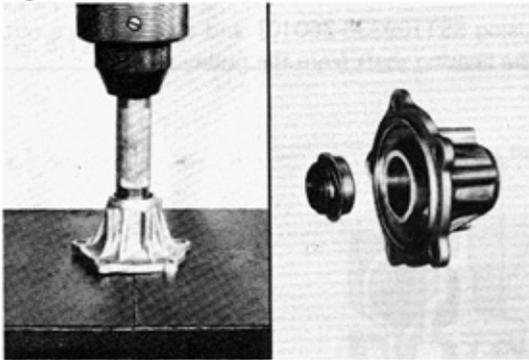
Heat the water pump cover up to around 75° to 85°C (167° to 185°F).

Fig. 5-17



Using SST [09236-36010] and a press, force out the bearing from the pump cover.

Fig. 5-18

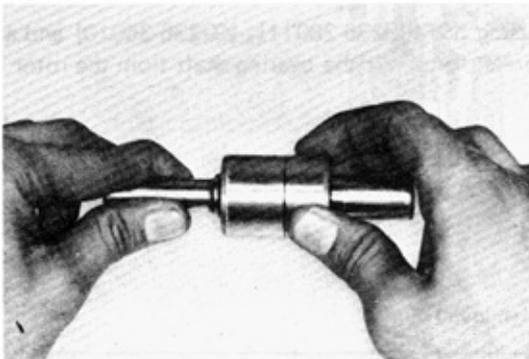


Using a press, force out the seal set from the pump cover.

– Note –

Force out from the pulley end.

Fig. 5-19



INSPECTION

1. Inspect the disassembled parts for cracks, damage, and wear, and replace any part found defective.
2. Inspect the bearing. If damaged, produces noise, or does not turn properly, replace the bearing.

ASSEMBLY

Assemble in numerical order.

Fig. 5-20

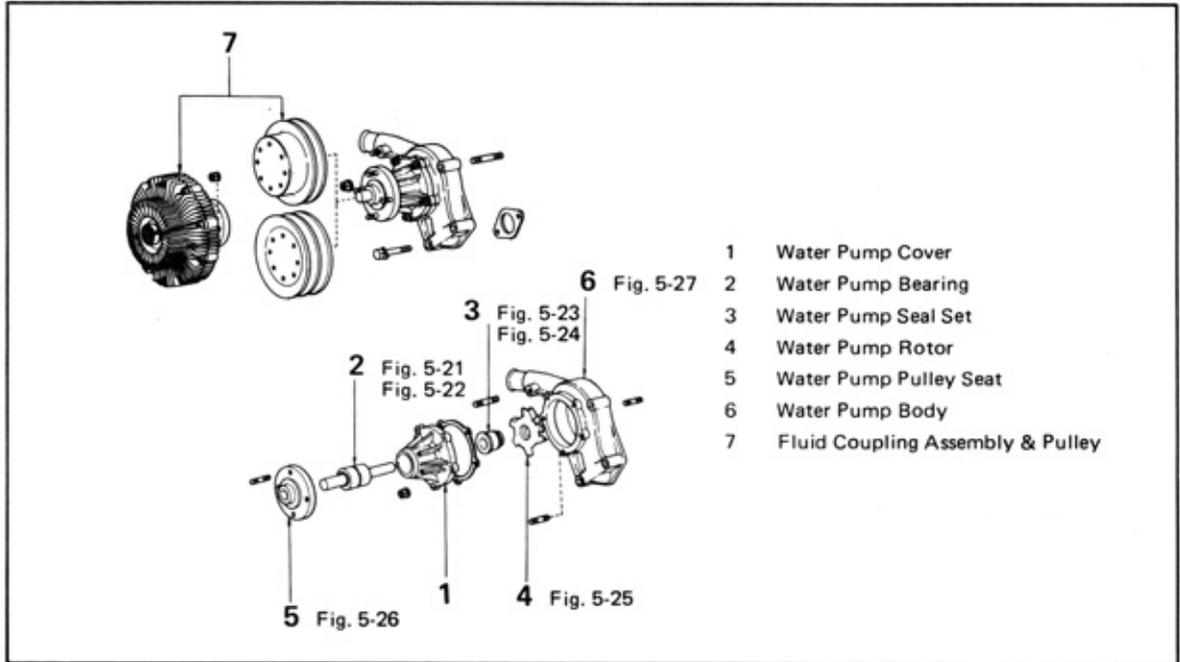
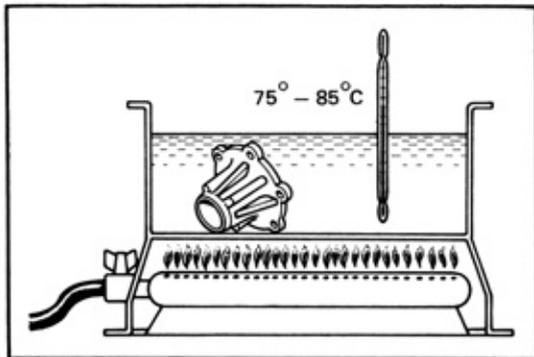
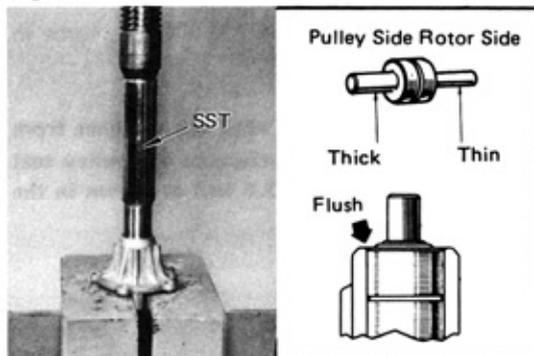


Fig. 5-21



Heat the pump cover to around 75° to 85°C (167° to 185°F).

Fig. 5-22



Force in bearing with SST [09236-36010] and press.

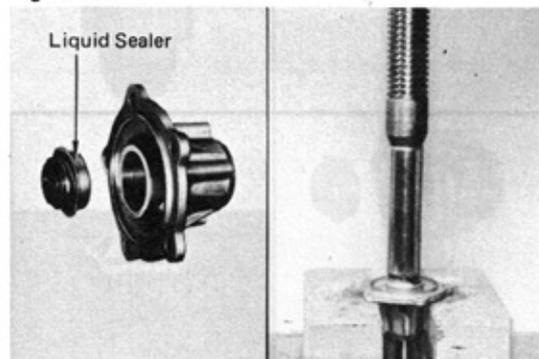
– Note –

Press in the bearing until its end surface is flush with cover surface.

– Caution –

1. Use new bearing.
2. Apply the lock tightener between bearing and pump cover.

Fig. 5-23



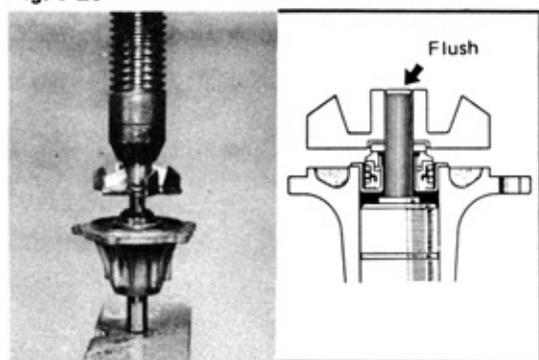
Coat liquid sealer on the seal set, and press seal set into the pump cover.
Use SST [09236-36010]

Fig. 5-24



Install seal and cover on rotor.

Fig. 5-25

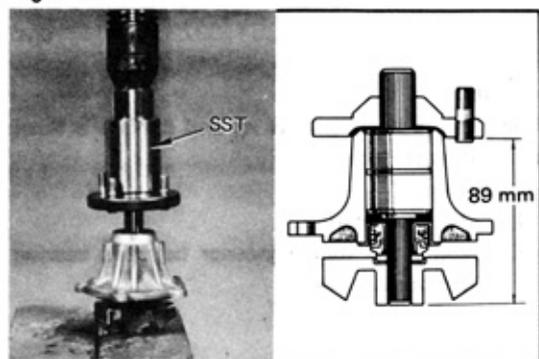


Using a press, force in rotor.

– Note –

Press in the rotor until it is flush with the shaft end.

Fig. 5-26

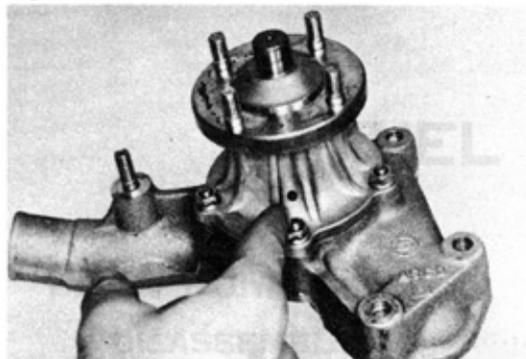


Using a press and SST [09238-40010], force in the pulley seat.

– Note –

Press in the pulley seat until the distance from the bearing shaft end surface to the pulley seat end surface is 89 mm (3.5 in.) as shown in the illustration.

Fig. 5-27



Install the water pump cover to the body with the water drain hole positioned downward.

MEMO
