COOLING SYSTEM

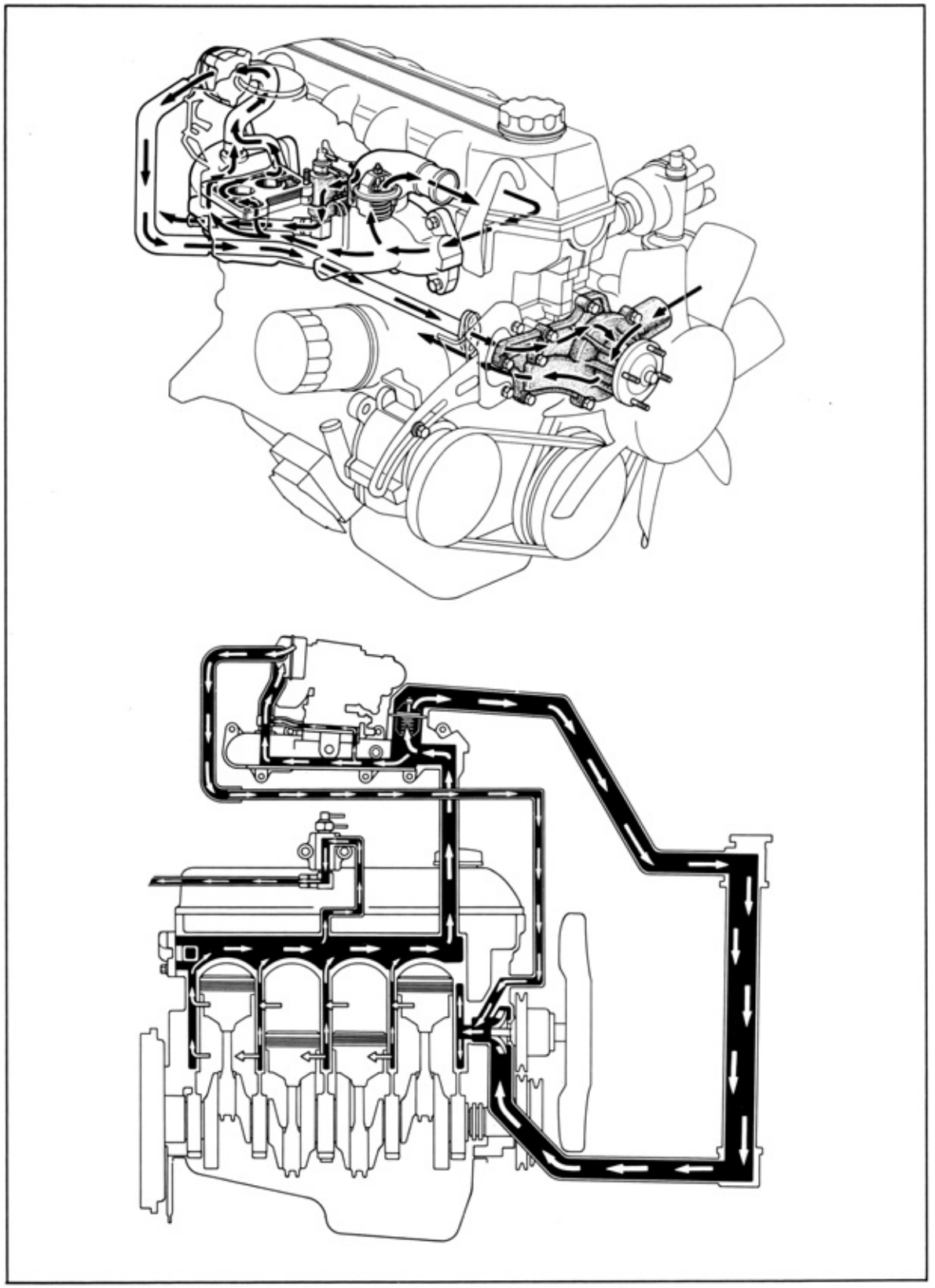
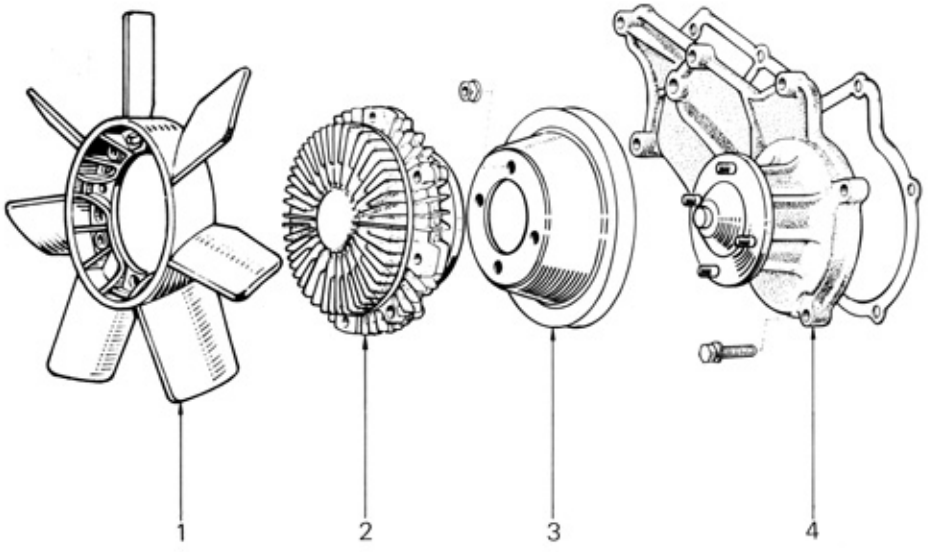


Fig. 6-1 Engine Cooling System Circuit

WATER PUMP



1. Fan
2. Fluid coupling
3. Water pump pulley
4. Water pump assembly

Fig. 6-2 Component Parts

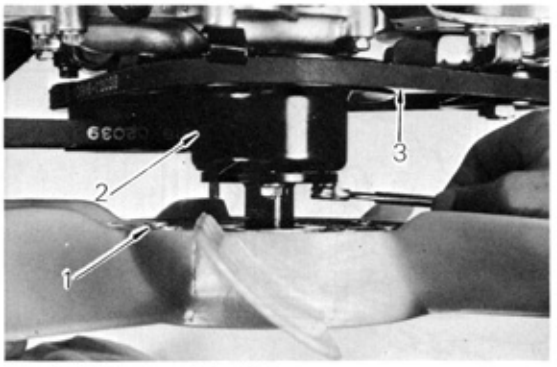


Fig. 6-3 Remove Fan Pulley

DISASSEMBLY

1. Loosen fan drive belt.
2. Loosen four nuts from the pulley flange and remove the fluid coupling assembly (1), water pump pulley (2) and fan drive belt (3).
3. Remove the fan from fluid coupling.

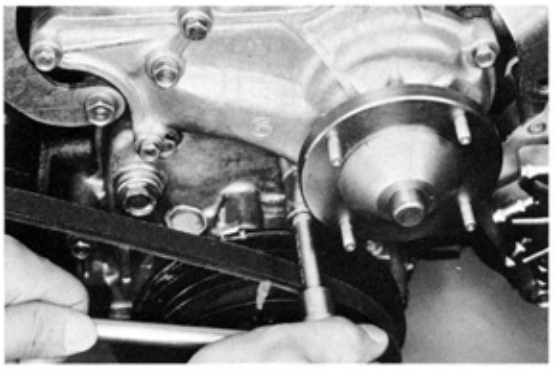


Fig. 6-4 Remove Water Pump

4. Remove 8 bolts from the water pump, and remove the water pump assembly.

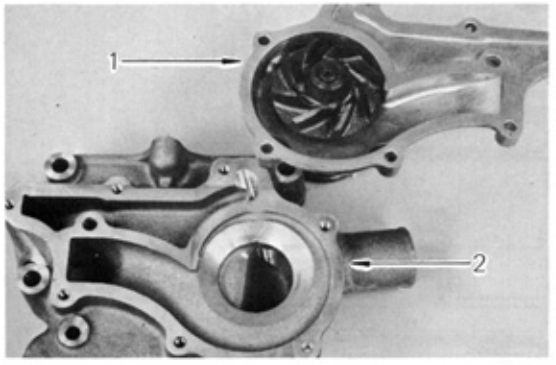


Fig. 6-5 Inspect Pump Body

INSPECTION

1. Check the water pump body (1), and timing chain cover (2), for cracks, and damaged gasket surfaces, and replace as necessary.

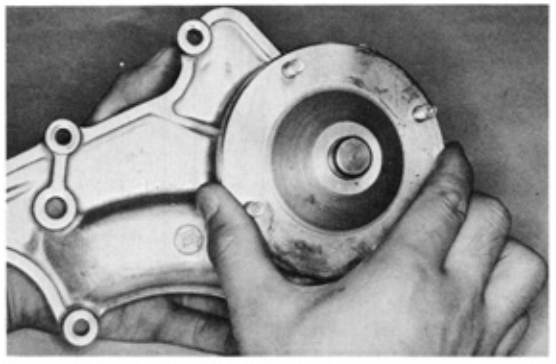


Fig. 6-6 Inspect Pump Bearing

2. Inspect the water pump bearing for roughness, noise, and replace pump assembly, if necessary.

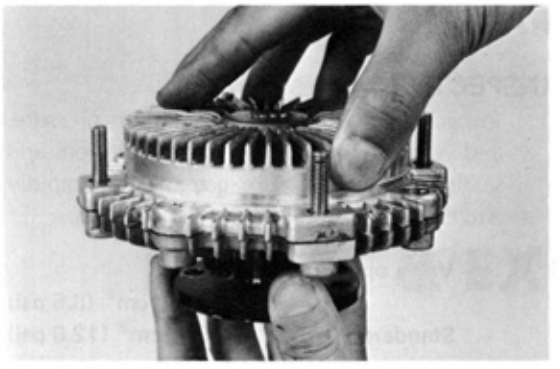


Fig. 6-7 Inspect Fluid Coupling

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

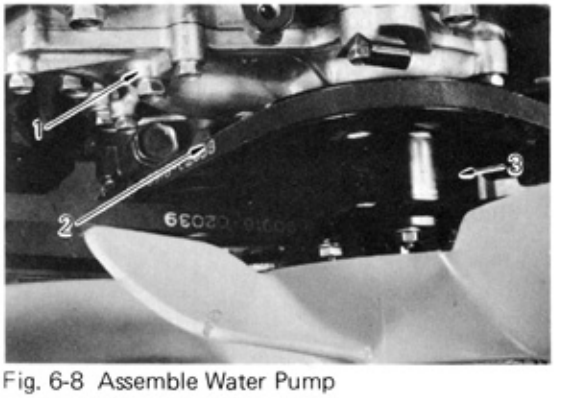


Fig. 6-8 Assemble Water Pump

ASSEMBLY

1. Bolt water pump (1) over new gasket.
2. Put fan belt (2) in place with pulley (3).
3. Bolt fluid coupling with fan to pulley flange.
4. Adjust fan belt tension.

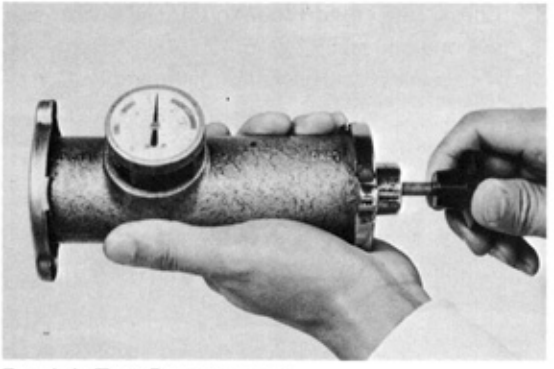


Fig. 6-9 Test Radiator Cap

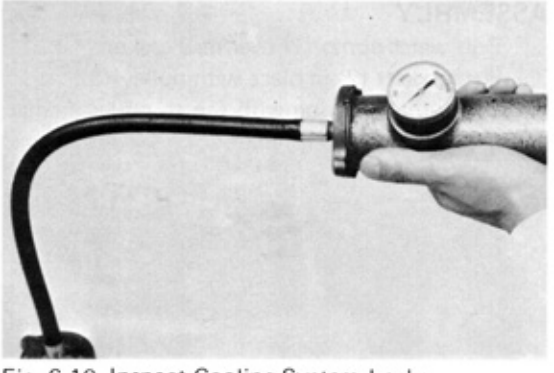


Fig. 6-10 Inspect Cooling System Leaks

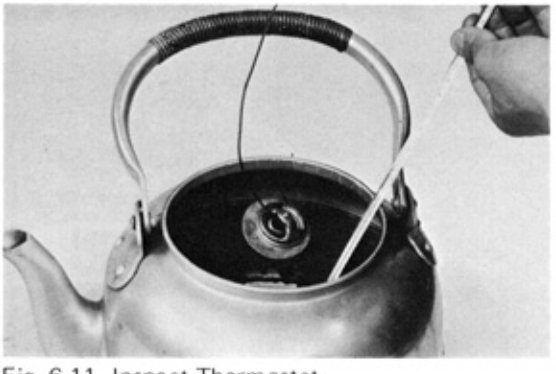


Fig. 6-11 Inspect Thermostat

RADIATOR

INSPECTION

1. Inspect the radiator cap regulation pressure, and vacuum valves for spring tension and seating. If the pressure gauge drops rapidly and excessively, replace the radiator cap.

Valve opening pressure limit	
	0.6kg/cm^2 (8.5 psi)
Standard	0.9kg/cm^2 (12.8 psi)

2. Inspect the cooling system for leaks. Attach the pressure tester to the radiator, pump the tester to the specified pressure.
   If the pressure gauge drops, inspect all hoses and fittings for an external leak. If no external leak is found an internal intake manifold, block or heater core leak should be suspected.

THERMOSTAT

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 80.5° to 83.5°C (177° to 182°F) and opens to more than 8mm (0.32 in.) at 95°C (203°F).
   Replace if necessary.