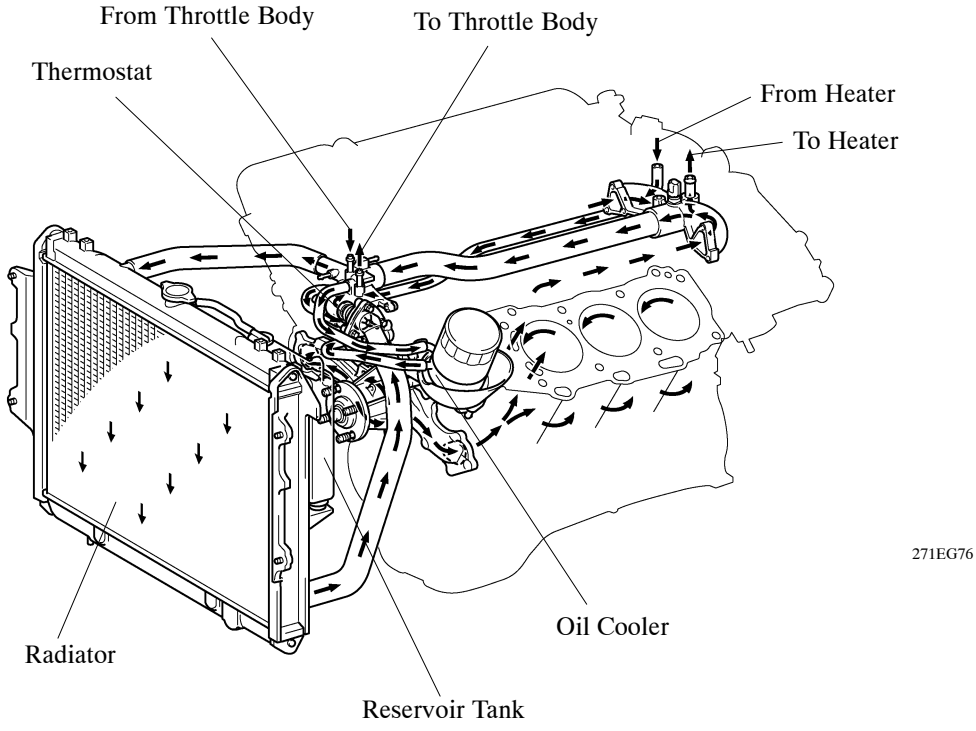
## ■COOLING SYSTEM

### 1. General

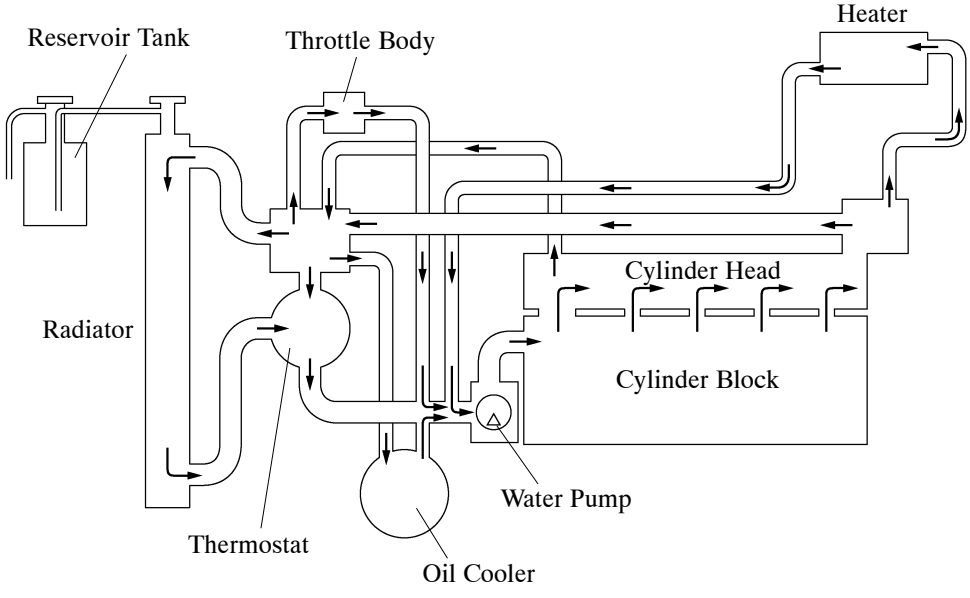
- The cooling system uses a pressurized forced-circulation system with an open air type reservoir tank.
- A thermostat with a bypass valve is located on the water inlet housing to maintain suitable temperature distribution in the cooling system.
- An aluminum radiator core is used for weight reduction.
- A 3-stage linear temperature-controlled coupling fan is used.
- A water-cooled engine oil cooler is standard equipment.
- TOYOTA genuine Super Long Life Coolant (SLLC) is used. As a result, the maintenance interval has been extended.






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**▶ System Diagram ◀**




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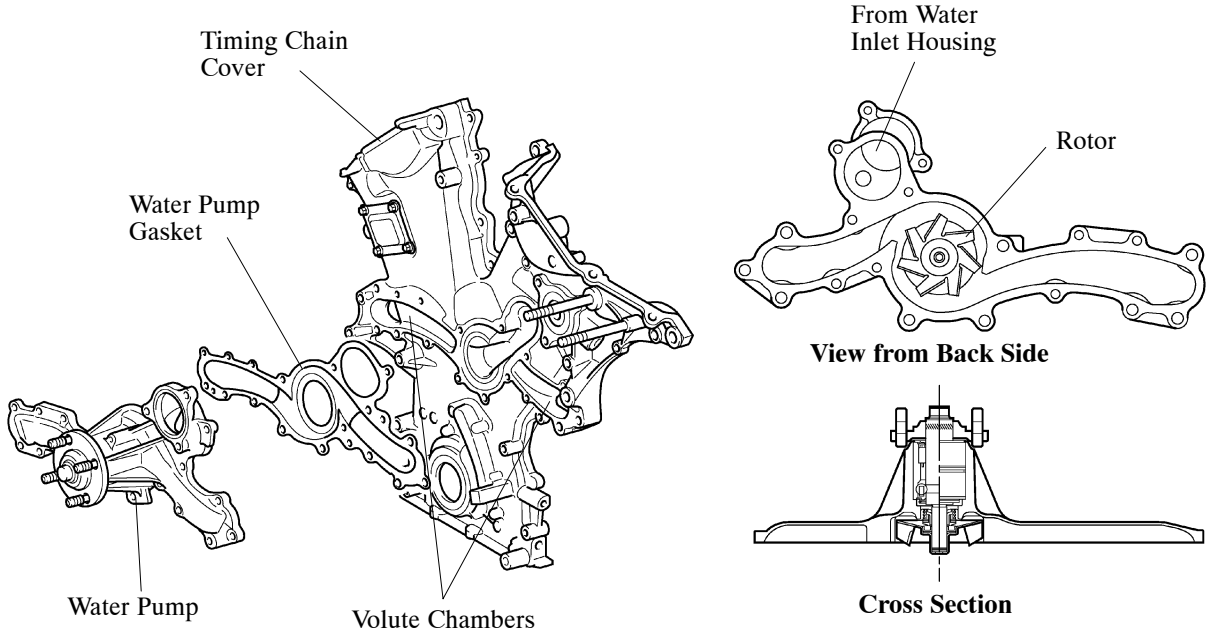
**▶ Specifications ◀**

| | | | |
|---|---|---|---|
| Engine Coolant | Type | | TOYOTA genuine SLLC or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite and non-borate coolant with long-life hybrid organic acid technology (coolant with long-life hybrid organic acid technology is a combination of low phosphates and organic acids). Do not use plain water alone. |
| | Color | | Pink |
| | Maintenance Intervals | First Time | 160000 km (100000 mile) |
| | | Subsequent | Every 80000 km (50000 mile) |
| Thermostat | Opening Temperature | | 80 - 84°C (176 - 183°F) |

- SLLC is pre-mixed (50% coolant and 50% deionized water). Therefore, no dilution is needed when SLLC in the vehicle is added or replaced.
- If LLC (red-colored) is mixed with SLLC (pink-colored), the interval for LLC (every 40000 km/25000 miles or 24 months whichever comes first) should be used.

## 2. Water Pump

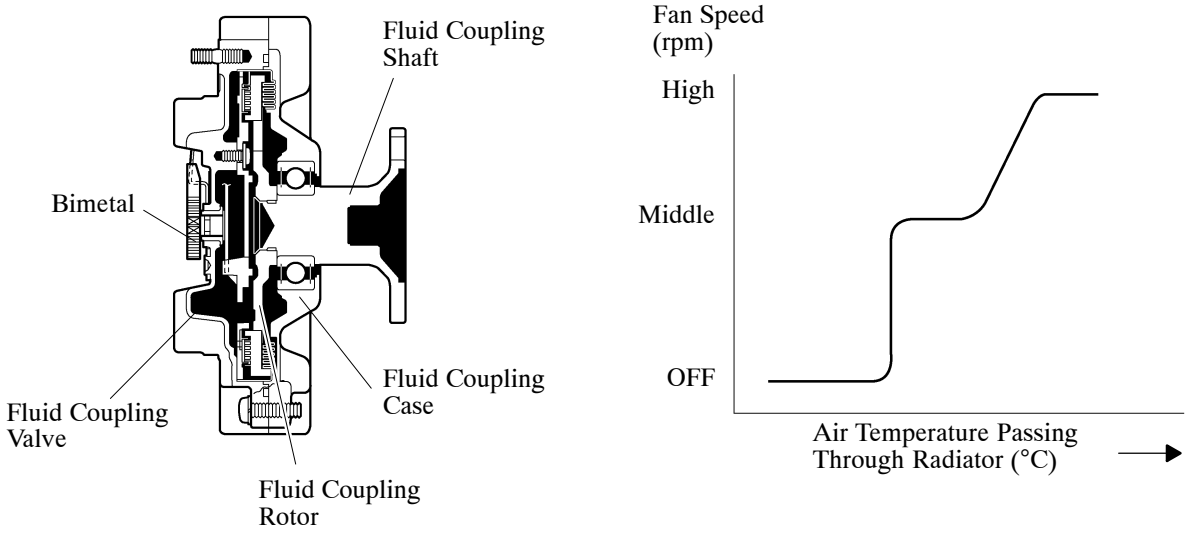
The water pump has two volute chambers, and circulates coolant uniformly to the left and right banks of the cylinder block.




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## 3. Coupling Fan

A 3-stage linear temperature-controlled coupling fan is used. This coupling fan utilizes the characteristics of a bimetal to switch the fluid passages and appropriately control the silicon oil, in order to change the fan speed in three stages: off, middle, and high. The fan speed from middle to high is controlled linearly.




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