COOLING SYSTEM

1. General

- A sealed type reservoir tank is adopted. In addition, the coolant flow volume is increased to correspond to the heat radiation needs of the engine.
- An engine coolant distribution pathway is provided between the left and right banks of the engine block.
- A thermostat with a bypass valve is located in the plastic water inlet housing to maintain suitable temperature distribution in the cooling system.
- A cooling fan control system in which the ECM optimally controls cooling fan speed is used. For details, see page EG-107.
- TOYOTA genuine SLLC (Super Long Life Coolant) is used as the engine coolant.



► Water Circuit ◄



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2. Water Pump

- A corrosion resistant water pump rotor made of stainless steel is used.
- The water pump assembly sends the engine coolant to the engine coolant distribution pathway located between the left and right banks of the engine block.



3. Engine Coolant Distribution Pathway

The water pump discharges the engine coolant and directs it to the engine coolant distribution pathway located between the left and right banks. From there, the engine coolant is discharged to the cylinder heads and the cylinder block.



4. Cooling Fan and Fan Shroud

- A ring-shaped electric fan is used to ensure efficient cooling performance and quieter operation.
- Both quietness and cooling capacity were secured by adopting a new cooling fan shape.



Cooling Fan and Cooling Fan Motor Specifications

Item	Main	Sub
Outer Diameter mm (in.)	340 (13.4)	←
Number of Blades	5	7
Rated Output W	240	240

5. Engine Coolant

• TOYOTA genuine SLLC (Super Long Life Coolant) is used. Maintenance intervals are as shown in the table below:

Type TOYOTA Genuine SLLC or equiv		TOYOTA Genuine SLLC or equivalent*	
Maintenance Intervals	First Time	160,000 km (100,000 miles)	
	Subsequent	Every 80,000 km (50,000 miles)	
Color		Pink	

- *: 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 hybrid organic acid technology consists of a combination of low phosphates and organic acids.)
- SLLC is pre-mixed (50 % coolant and 50 % deionized water), so no dilution is needed when adding or replacing SLLC in the vehicle.
- The new maintenance interval (every 80,000 km/50,000 miles) can be applied to vehicles initially filled with LLC (red-colored), if SLLC (pink-colored) is used when the engine coolant is changed.