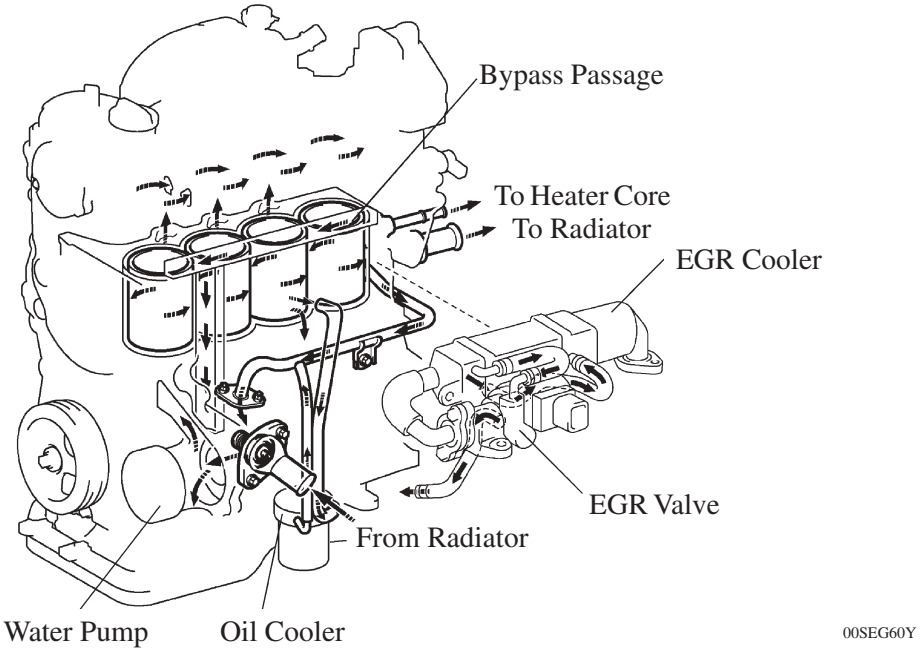
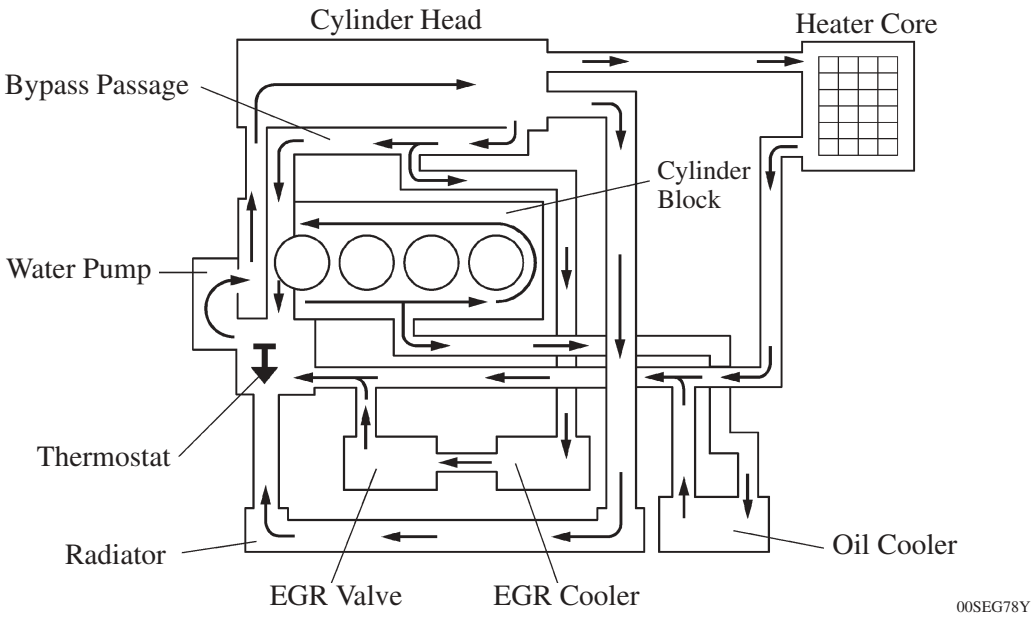
■COOLING SYSTEM

- The cooling system is a pressurized, forced-circulation type.
- A thermostat with a bypass valve is located on the water inlet housing to maintain suitable temperature distribution in the cooling system. This prevents sudden jumps in temperature while the engine is warming up.
- The flow of the water makes a U-turn in the cylinder block to ensure a smooth flow of the water. In addition, a bypass passage is enclosed in the cylinder head and cylinder block.
- Water-cooled type oil cooler has been installed between the oil pan and oil filter.
- The TOYOTA genuine Super Long Life Coolant (SLLC) is used.
- A water passage is provided for cooling the EGR valve.
- A water-cooled type oil cooler and water-cooled type EGR cooler are provided.



▶ System Diagram ◀



▶ Specifications ◀

Engine Coolant	Type		TOYOTA genuine Super Long Life Coolant (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
	Capacity Liters (US qts, Imp. qts)	With Heater	4.7 (5.0, 4.1)
		Without Heater	5.0 (5.3, 4.4)
	Maintenance Intervals	First time	160,000 km (100,000 miles)
		Subsequent	Every 80,000 km (50,000 miles)
Thermostat	Opening Temperature °C (°F)		80 – 84 (176 – 183)

- 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 is mixed with SLLC, the interval for LLC (every 40,000 km/24,000 miles or 24 months) should be used.