

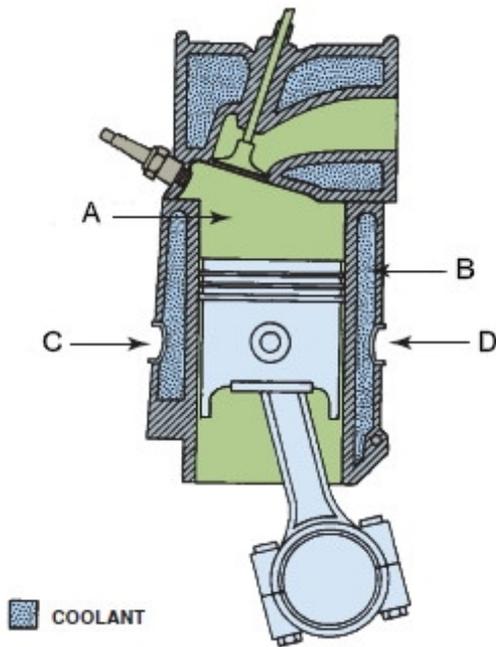
AUTEC 317 HMWK CH-10 & 11

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Water pumps _____ 1) _____
 A) Are driven by the engine crankshaft or camshaft
 B) Disengage during freezing weather to prevent radiator failure
 C) Only work at idle and low speeds and are disengaged at higher speeds
 D) Use engine oil as a lubricant and coolant

- 2) Which statement is TRUE about thermostats? 2) _____
 A) The temperature marked on the thermostat is the temperature at which the thermostat should be fully open.
 B) Thermostats often cause overheating.
 C) The temperature marked on the thermostat is a temperature at which the thermostat should start to open.
 D) Both A and B

- 3) Which one of these areas is the water jacket? 3) _____



- A) A B) B C) C D) D

- 4) The use of a coolant recovery machine is helpful in preventing _____ from entering the cooling system. 4) _____
 A) Oil B) Hose residue
 C) Excessive vibrations D) Air

- 5) Technician A says that cooling fans are designed to draw air through the radiator to aid in the heat transfer process. Technician B says that drawing the heat from the coolant transfers this heat to the outside air through the radiator. Which technician is correct? 5) _____
 A) Technician A only B) Technician B only
 C) Both technicians A and B D) Neither technician A nor B

- 6) After the water pump was replaced and the cooling system refilled with coolant, the heater stopped providing warm air. Which of these is the MOST LIKELY cause? 6) _____
A) A slipping water pump drive belt
B) The wrong concentration of antifreeze was installed
C) An air pocket is trapped in the heater core
D) A defective heater control valve
- 7) Technician A says that faulty heater operation can be caused by a faulty engine cooling system. Technician B says that a complaint of insufficient heat can be caused by someone not filling a cooling system properly. Who is correct? 7) _____
A) Technician A only
B) Technician B only
C) Both technicians A and B
D) Neither technician A nor B
- 8) A scan tool can be used when diagnosing heater problems. The tool can check for all of these EXCEPT _____. 8) _____
A) Coolant flow rate
B) Correct engine temperature
C) Actuator functions
D) DTCs
- 9) The customer concern is poor heater operation, and the top radiator hose and both heater hoses are at 160°F. Technician A says this problem is caused by a plugged heater core. Technician B says the thermostat must be stuck open. Who is correct? 9) _____
A) Technician A only
B) Technician B only
C) Both technicians A and B
D) Neither technician A nor B
- 10) The heater control valve, if used, shuts off the coolant flow to the heater core when what setting is selected? 10) _____
A) Defrost
B) Recirculation
C) Bi-level (both dash vents and floor vents)
D) Max cooling