

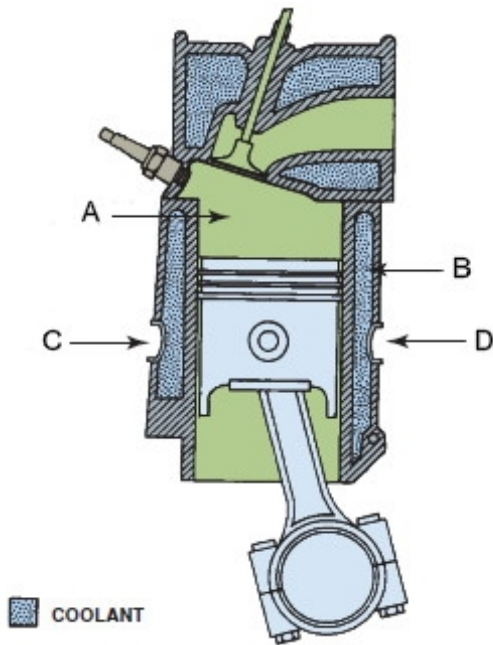
AUTEC 317 HMWK CH-10 & 11

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