

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

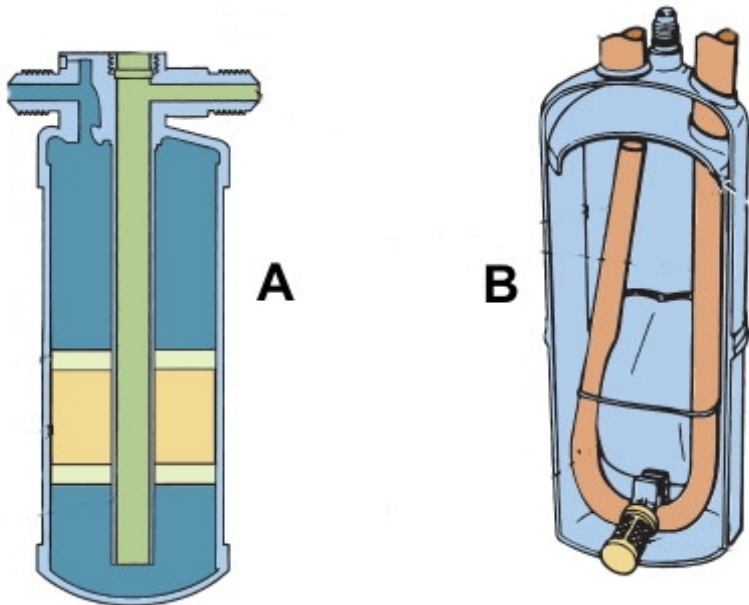
- 1) Which of the following can result from evaporator freeze-up? 1) _____
 A) Air is not drawn over the fins
 B) The refrigerant may not properly evaporate.
 C) The air-conditioning system produces little or no cooling.
 D) All of the above.

- 2) In which component is heat added to the refrigerant? 2) _____
 A) Condenser
 B) Evaporator
 C) Thermostatic expansion valve
 D) None of these is correct

- 3) The material used to absorb moisture inside an AC system is called _____. 3) _____
 A) Drier
 B) Ester
 C) PAG
 D) Desiccant

- 4) What is the state of the refrigerant in the accumulator-drier? 4) _____
 A) Vapor
 B) Liquid
 C) Both A and B
 D) Neither A nor B

- 5) Which of these is the receiver-drier? 5) _____



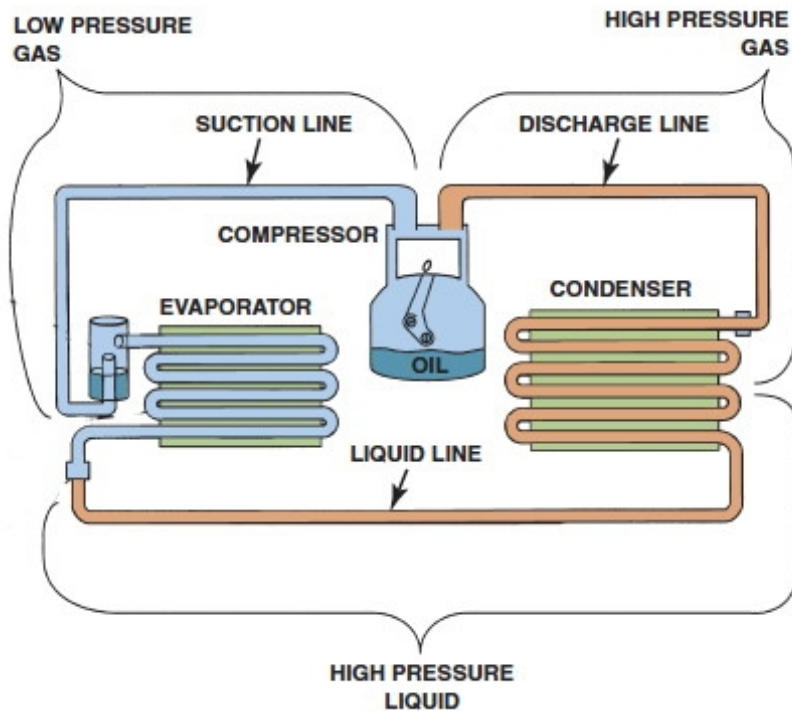
- A) A
 B) B
 C) They are both receiver-driers
 D) Neither A nor B

- 6) Most rigid refrigerant lines are made of _____. 6) _____
 A) Steel
 B) Aluminum
 C) Titanium
 D) Copper

- 7) Which of the following is used in modern automobiles to transfer heat energy? 7) _____
 A) Refrigerant
 B) Engine coolant
 C) Both A and B are correct
 D) Neither A nor B are correct

14) Identify this type of air condition system.

14) _____



- A) Receiver -type system
- B) Hi -type system
- C) Expansion valve System
- D) Orifice tube system

15) When heating a substance, latent heat is _____

15) _____

- A) The heat added that causes a change in temperature.
- B) The number of calories needed to raise the temperature 1 degree Celsius.
- C) The heat added to cause a change of state while the temperature stays the same.
- D) The amount of heat given off without changing state.

16) What is the function of the desiccant bag inside an accumulator?

16) _____

- A) It captures and stores moisture.
- B) It stores and releases ice.
- C) It captures excess R 134a.
- D) All of the above.

17) The three states of matter are _____

17) _____

- A) Solid, liquid, and vapor.
- B) Solid, vapor, and gas.
- C) Solid, liquid, and fluid.
- D) Liquid, vapor, and fluid.

18) Technician A says that any technician that handles automotive refrigerant must be certified in knowledge of regulations by an EPA approved agency. Technician B says that recycling equipment must be properly approved. Who is correct?

18) _____

- A) Technician A
- B) Technician B
- C) Both technicians
- D) Neither technician

19) Humidity is removed from the air in an air-conditioning system by _____.

19) _____

- A) Heating the air using the heater core
- B) Cooling the air
- C) Filtering by the cabin filter
- D) Having the moisture to condense on the cool surface of the evaporator

- 20) What component moves the refrigerant through the air-conditioning system? 20) _____
 A) Orifice tube B) Expansion valve
 C) Compressor D) All of the above
- 21) What is the purpose of the expansion device located at the evaporator inlet? 21) _____
 A) Provide a restriction to create pressure in the refrigerant high side
 B) Meters the correct amount of refrigerant flow into the evaporator
 C) Both A and B
 D) Neither A nor B
- 22) Where in the air conditioning system is the refrigerant a low pressure gas? 22) _____
 A) Condenser inlet B) Condenser outlet
 C) Evaporator inlet D) Evaporator outlet
- 23) The orifice tube divides the high pressure side of the system from the low pressure side. 23) _____
 A) True B) False
- 24) The ozone layer is in which of earth's atmospheric layers? 24) _____
 A) Stratosphere B) Mesosphere
 C) Thermosphere D) None of these is correct
- 25) Which position on the climate control panel should the driver select to avoid having the air-conditioning compressor turn on? 25) _____
 A) Heat B) Defrost C) AC D) Both A and B
- 26) A main source of heat used to warm the passenger compartment is _____ 26) _____
 A) Ambient air. B) Humidity.
 C) The vehicle engine. D) Sunlight.
- 27) Which part should be warm or hot in a normally functioning air-conditioning system? 27) _____
 A) The receiver-drier B) The outlet of the compressor
 C) The condenser D) All of the above
- 28) A fixed-orifice tube _____. 28) _____
 A) Has a temperature sensing capability
 B) Has an internal valve
 C) Has a pressure sensing capability
 D) Is usually located in the evaporator inlet or line to the evaporator
- 29) Which type of refrigerant hose is used with an R-134a system? 29) _____
 A) Copper type hose B) Barrier hose
 C) Flexible, porous hose D) Rigid hose
- 30) Technician A says that an orifice tube system uses an accumulator to store excess refrigerant. Technician B says that excess refrigerant in an expansion valve-type system uses a receiver-drier. Which technician is correct? 30) _____
 A) Technician A only B) Technician B only
 C) Both technicians A and B D) Neither technician A nor B