

Automotive Technology 7th Edition
Chapter 61: A/C System Components, Operation, and Service
Matching Quiz

Name: _____ Date: _____

Matching: Choose the item in column 2 that best matches each item in column 1.

- | | | |
|---|--|-----------|
| 1. Component that circulates and increases refrigerant pressure | A. Used in refrigeration systems to connect components and transport refrigerant, often with barrier construction to prevent refrigerant escape. | 1. _____ |
| 2. Heat exchanger that cools hot refrigerant vapors into liquid | B. A fixed metering device that restricts the flow of liquid refrigerant into the evaporator, causing a pressure drop. | 2. _____ |
| 3. Component where liquid refrigerant absorbs heat and evaporates | C. A heat exchanger used to get rid of the heat removed from the passenger compartment, cooling hot refrigerant vapors into high-pressure liquid. | 3. _____ |
| 4. Metering device controlling liquid refrigerant flow based on evaporator outlet temperature | D. A component found in orifice tube systems, located in the suction line, that stores excess liquid refrigerant and prevents it from entering the compressor. | 4. _____ |
| 5. Fixed metering device restricting liquid refrigerant flow into the evaporator | E. A metering device that controls the flow of liquid refrigerant into the evaporator, based on the temperature of the refrigerant vapor leaving the evaporator. | 5. _____ |
| 6. Component in TXV systems storing liquid refrigerant and removing moisture | F. The low-pressure line connecting the evaporator to the compressor. | 6. _____ |
| 7. Component in orifice tube systems storing excess liquid refrigerant before the compressor | G. The pump in the A/C system that circulates the refrigerant and increases its pressure. | 7. _____ |
| 8. High-pressure line connecting the condenser to the metering device | H. The high-pressure line connecting the condenser to the metering device (TXV or orifice tube). | 8. _____ |
| 9. Low-pressure line connecting the evaporator to the compressor | I. The component where liquid refrigerant absorbs heat from the air inside the passenger compartment, causing it to evaporate into a low-pressure vapor. | 9. _____ |
| 10. System components used to transport refrigerant between parts | J. A component found in TXV systems that stores liquid refrigerant and removes moisture from the system. | 10. _____ |

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Answer Key

Answer Key:

1. G
2. C
3. I
4. E
5. B
6. J
7. D
8. H
9. F
10. A