

Automotive Technology 7<sup>th</sup> Edition  
Chapter 61: A/C System Components, Operation, and Service  
Short Answer Quiz

Name:

Date:

1. Describe the problems associated with metal aluminum tubing in an A/C system
2. What are the typical hose sizes in terms of ID for the suction line, liquid line, and discharge line in an A/C system?
3. Explain the difference between early R-12 hoses and the hoses designed for R-134a in terms of permeation.
4. What is the significance of O-ring colors in A/C systems, and what do the colors black, blue, and green typically indicate?
5. Describe the function of a relay in an A/C system and explain why it is essential.

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6. What are the typical functions of various electrical switches used in A/C systems?

7. Explain the potential problem created when the rear TXV shuts off the flow through the rear evaporator in an A/C system.

8. When replacing certain components in the A/C system, such as the compressor, evaporator, or TXV, what other component should also be replaced and why?

9. Describe the difference between a manifold-type connector and a spring-lock fitting in an A/C system.

10. What are the typical amounts of oil removed when certain A/C components are taken out, such as the accumulator, condenser, evaporator, each hose, and receiver–drier?