



Task Title: Learning About Capillary Tubing

OALCF Cover Sheet – Practitioner Copy

Learner Name: _____

Date Started: _____

Date Completed: _____

Successful Completion: Yes ☐ No ☐

Goal Path: Employment ☐ Apprenticeship ☐

Secondary School ☐ Post Secondary ☐ Independence ☐

Task Description: The learner will conduct internet searches to learn about capillary tubing used by Heating, Ventilation and Air Conditioning (HVAC) mechanics.

Main Competency/Task Group/Level Indicator:

- Find and Use Information/Read continuous text/A1.2
- Use Digital Technology/D.2

Materials Required:

- Pen/pencil and paper
- Computer or digital device

Learner Information

Heating, Ventilation and Air Conditioning (HVAC) mechanics install and repair equipment in homes and industrial settings. It is important for mechanics to understand system parts, why they need to be installed properly, and what can happen if installation is done incorrectly.

Work Sheet

Task 1: Conduct an internet search for “HVAC capillary tubing”. In two or three sentences, explain what it is and how it is used in HVAC equipment.

Answer:

Task 2: Conduct an internet search for “HVAC incorrect size of capillary tubing”. In two or three sentences, describe what happens if the tubing is the wrong size.

Answer:

Task 3: Conduct an internet search for “HVAC capillary tubing correct installation”. List three things that must be considered to ensure correct installation of capillary tubing.

Answer:

Answers

Task 1: Conduct an internet search for “HVAC capillary tubing”. In two or three sentences, explain what it is and how it is used in HVAC equipment.

Answers will vary. A sample answer is as follows: A capillary tube is designed to maintain the temperature of the cooling system. It is installed between the condensing unit and the evaporator, and it supplies the refrigerant from the condenser to the evaporator in a regulated amount, depending on the fixed length of the tube and its diameter.

Task 2: Conduct an internet search for “HVAC incorrect size of capillary tubing”. In two or three sentences, describe what happens if the tubing is the wrong size.

Answers will vary. A sample answer is as follows: An incorrectly sized capillary tube can lead to various performance issues, including insufficient cooling, high energy consumption and potential equipment damage. The capillary tube’s size (diameter and length) is critical for proper refrigerant flow and pressure drop, which is necessary for the system to operate efficiently.

Task 3: Conduct an internet search for “HVAC capillary tubing correct installation”. List three things that must be considered to ensure correct installation of capillary tubing.

Answers will vary. A sample answer may include three of the following:

- ensure correct sizing (based on manufacturer’s specifications)
- proper length
- straight and level installation
- ensure system is properly charged with the correct amount of refrigerant
- when soldering, insert the capillary tube past the soldering point to prevent solder blockage
- after installation, test the system for refrigerant leaks

Performance Descriptors

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
A1.2	scans text to locate information			
	reads more complex texts to locate a single piece of information			
	makes low-level inferences			
	follows the main events of descriptive, narrative, and informational texts			
	obtains information from detailed reading			
	begins to identify sources and evaluate information			
D.2	selects and follows appropriate steps to complete tasks			
	locates and recognizes functions and commands			
	makes low-level inferences to interpret icons and text			
	begins to identify sources and evaluate information			
	performs simple searches using keywords (e.g. internet, software help menu)			

This task: Was successfully completed ☐ Needs to be tried again ☐

Task Title: LearningAboutCapillaryTubing_A_A1.2_D.2

Learner Comments:

Instructor (print):

Learner (print):