

AUSTIN COMMUNITY COLLEGE
Heating, Air Conditioning & Refrigeration Technology
HART2449 HEAT PUMPS

16

TITLE: **Puron™ SPLIT-SYSTEM PRODUCTS**

(rev. 02/17/04)

Student Name: _____ Submittal Date: _____

Instructor: _____ Grade (as req'd): _____

This lesson continues to develop our knowledge of installation of heat pumps by focusing on Carrier's Puron™ split system. This type refrigerant (Puron™) has special operating characteristics and installation requirements.

COMPETENCY OBJECTIVES - KNOWLEDGE

- identify the components and features of the Puron heat pump

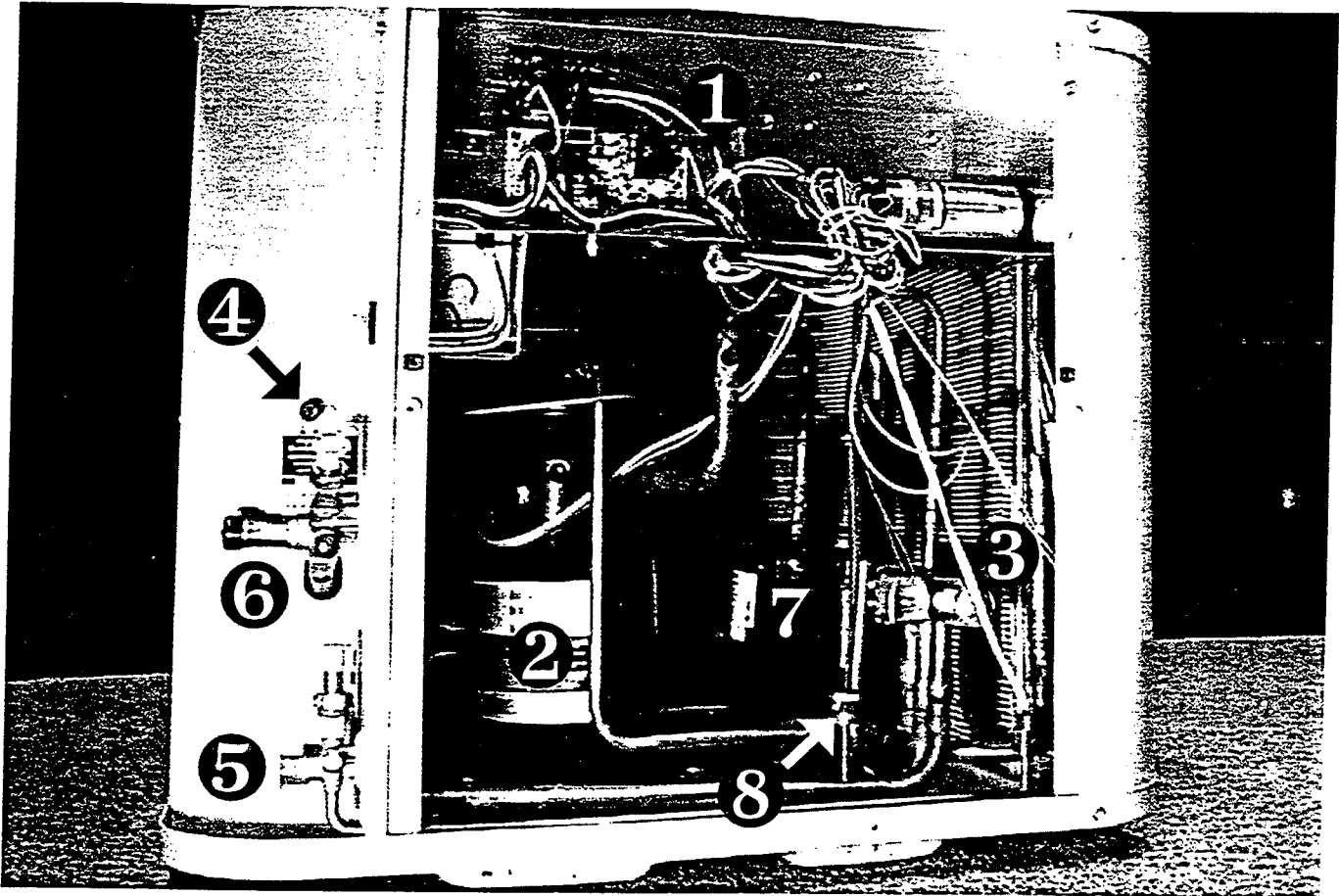
OUTCOMES: the learner will demonstrate competency by -

- identifying the components and features of Carrier Puron™ systems
- describe unique installation requirements of Carrier Puron™ system
- dismantling and cataloging parts of a Carrier Puron™ air-to-air heat pump

GENERAL PROCEDURE

- watch the video program Carrier "PURON™ SPLIT-SYSTEM PRODUCTS"; participate in classroom discussion
- read pages 1-7 of "PURON™ SPLIT-SYSTEM PRODUCTS"
- answer questions 1- 5 (from the booklet) in this lesson. **Do not write in the booklet**
- work in teams to identify, remove and tag various mechanical and electrical parts of a Carrier Puron™ air-to-air heat pump

FAMILIARIZATION EXERCISE



1. Match the components listed below to the items called out in the photo of the heat pump.

- _____ liquid line service valve
- _____ vapor line service valve
- _____ suction service port
- _____ defrost control
- _____ Pressure Guard™ (VPS)
- _____ reversing valve
- _____ scroll compressor
- _____ accumulator

2. All Puron air conditioners except the 14 SEER model are factory supplied with _____
- a. an EPR valve
 - b. a piston with piston ring
 - c. a capillary tube
 - d. a reverse flow TXV
3. This important components is always shipped with each Puron unit and **must** be installed at the time of installation.
- a. TXV
 - b. metering piston
 - c. filter drier
 - d. POE oil
4. When the Pressure Guard™ device (VPS) opens, the most noticeable event that happens is:
- e. the outdoor fans shuts off
 - f. the indoor fan shuts off
 - g. the unit momentarily goes into defrost
 - h. the unit immediately goes into the heating mode
2. 5. Service technicians can “force” the Puron heat pump into a defrost by doing this:
- a. block the indoor fan to raise head pressure
 - b. jumper the DFT and short the speed-up pins
 - c. jumper the speed-up pins and short them to ground
 - d. block the indoor fans to raise head pressure