

February 20, 2014

The following list is a general guide and is to be considered the **minimum** tools and safety equipment a student will need to perform given tasks in the lab and on projects for ACR Courses 101, 105, 106, 107,109, 110,122 130, 131, 140,150,160, 210, 223 and 231. Piedmont Technical College will furnish major tools for student use.

Adjustable Wrench-2- (10"-12")- (1) each
AC & refrigeration reversible ratchet box wrench
Allen wrench set
Assorted screwdrivers (a 6 in 1 type works very well)
Awl (scratch awl)
Combination wrench set ¼" through ¾"
Flaring tool
Flashlight (2D Mag Lite)
Gage manifold set with low loss fittings for R-22-(3) each (Yellow Jacket P# 19109) or FP SMAN3 or 4
Gauges
Gage manifold set with low loss fittings for R-410A – (1) each (Yellow Jacket P# 93844) or FP SMAN3 or 4
4 Gauges
Hammer- 16 oz. ball peen or carpenters claw
Hex key wrench Insert- 3/16" - (liquid line service valve key) - Malco P#RRW 3/16
Hex key wrench Insert- 5/16" - (vapor (suction) line service valve key) Malco P# RRW 5/16
Inspection mirror
Leather work gloves
Lineman pliers (9"most popular) (Klein)
Needle nose pliers (Klein)
Nut drivers – 3/16" through ½" (Klein)
Safety glasses-clear lens-must have side shields or curved for side protection
Schrader valve tool- core storer (Diversitech P# VCR-1)
Schrader valve changing tool/Vacuum Charging- HVAC/R service tool- (Ritchie P# 18975) or Appion P#
MGAVCT
Slip joint pliers (Pump pliers- Klein 10")
Swaging Tool Kit- 3/16" through 1- 1/8" swages with swaging blocks for same (YJ P# 60455 - Large
Swage/flare kit, 3/4 - 1-1/8 P# 60461 - Swaging punches & bar, 3/16 - 5/8)
Tape Rule-25'
Tool bag (extra-large- large enough to carry all tools on list with space to spare)
Tubing cutter (small)
Tubing cutter (standard)
SC 77 Fieldpiece volt meter (**No Substitution**) & Fieldpiece ATC1-K - Temperature Pipe Clamp

AVG2 Digital Vacuum Gauge Fieldpiece (**No Substitution**)* unless built into SMAN 3 or 4 Gauges
Sling psychrometer or Digital psychrometer
Sheet metal hammer
Wire crimpers
Wire strippers
Bulldog snips
RH offset sheet metal snips
LH offset sheet metal snips
Hand Seamer
Hand Crimper
Straight edge – 48”
Plastic Tubing Shear
Black Sharpie Marker

*Students are strongly encouraged to mark or etch their last name on to all their tools. If a class has students with the same last name, a first name or initial is also desirable

* All vendor quotes must be for industry standard, brand tools. The following brands are acceptable: Malco, Yellow Jacket/Ritchie, Klein, Rigid, Imperial, Fluke, Fieldpiece, Robinaire, Bacharach or Craftsman. All other brands must have an instructors’ approval. Sheet metal tools are preferred to be Malco brand.

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