

## Heating, Ventilation, and Air Conditioning (HVAC) Program Tool List

The following is a list of tools each student is required to obtain and maintain. This list is only a minimum; you might wish to add to it for your convenience. With proper care, these tools will help you earn a living for a long time. You may already have some of the tools on this list. If so, bring them in and your lab instructor will advise you if they meet the requirements. Remember that value is not price alone; a good quality tool with proper care will last years longer than a cheap tool and will pay for itself many times over. These tools need to be ordered in advance so that you have them by the first day of school. Most of these are specialty tools, which require you to buy them at wholesale suppliers. If there are any questions at all about the tool list, contact Scott or Paul (HVAC Instructors).

Quantity	Description
1	10" adjustable crescent wrench (Crescent #AC110V)
1	7 piece nut driver kit 3/16" to 1/2" (Vaco #K7-12 or SK #631)
1	Combination wrench set 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", and 3/4"
1	1/4" and 3/8" drive socket set 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", and 3/4" with extensions and ratchet
1	Flare and swage set with case (Yellow Jacket #60440)
1	Three corner slim tapered file (Nicholson #14224)
1	Inspection mirror (extendable)
1	Vernier caliper with depth gauge (General #721)
1	One pair of approved safety glasses or goggles
1	8 oz. ball peen hammer (Stanley #54-008 or Plumb #11-496)
1	Refrigeration ratchet wrench (Imperial #60613)
1	Valve core tool – removes valve cores <b>(with valve cores)</b> (J/B #A32004 or Robinair #40536)
1	Little "Imp" tube cutter 1/8" – 5/8" OD (Imperial #TC-1050SP)
2	Rolls Scotch 33+ electrical tape (3M #33)
1	Regular size tube cutter 3/8" – 1 1/8" OD (Imperial #TC-1000SP)
1	Digital thermometer – 40 to 300 degrees (UEI #PDT550)
1	Clamp-on digital ammeter 0-600 amps, ohms 0-4 MegaOhms, AC volts 0-600, DC volts 0-60, with temperature probe and capacitance tester (Fieldpiece #SC76 or UEI #DL250)
1	Refrigeration gauge manifold with permeation resistant hoses (J/B #41215)
3	Shut off ball valves with hoses – red, blue, yellow (J/B #CCLV6)
1	Quick coupler hose gaskets pkg. of 10 (Yellow Jacket #19020)
1	25' tape measure (1 inch wide) (Lufkin #SV125)
1	10" tongue and groove pliers (Channel Lock #430)
1	7" vise grip pliers (Vise Grip #7WR)
1	7 1/8" long nose pliers (Klein #D203-7)
1	7" diagonal pliers (not lineman pliers) (Klein #D228-7)
1	Solderless crimp tool with bolt cutter (Klein #1001)
1	Wire stripper (Klein #11045)
1	6 pc. screwdriver set Phillips and straight (SK #86007 or Vaco #89005)
1	9 pc. long arm hex key kit, at least 6" long min. (Allen #56034)
1	Tool boxes (one of them for sheetmetal tools and other box for the rest of the tools) (Waterloo #HM2050 or Plano #651003)
1	Punch and chisel set includes pin punch, center punch, and cold chisel (Mayhew #751-K or Allen #25676)
1	13 pc. drill bit kit 5/64", 3/32", 7/64", 1/8", 9/64", 5/64", 11/64", 3/16", 15/64", 7/32", 15/64", 7/32", 15/64", 1/4"
1	Insta-charge (Liquid low-side charger) (Wagner #RC-1)

<b>Quantity</b>	<b>Description</b>
1	Match holder (telescoping holder for pilot lights) (Wagner #R1J)
3	Padlocks (2-tool boxes, 1-locker) (Master #3008D)
1	Friction lighter (Lighting torches)
1	Pair of work gloves
1 each	Magnetic nutsetters (chucks) 1/4", 5/16" (for drill)
1	Hack saw 10" or 12" adjustable blade (Stanley #15-265 or Lenox #2012)
1	12" crescent adjustable wrench (Crescent #AC112CV)
1	Flashlight (MagLite #M2A01H)
1	Pocket level (Malco L5)
1	14" aluminum pipe wrench (Rigid #31095)
	<b>Sheet Metal Tools</b>
1	Aviation snips right cuts (Malco #M2002)
1	Aviation snips left cuts (Malco #M2001)
1	Bulldog aviation snips (Malco #M2005)
1	Combination snips (Malco #MC14N)
1	Hand seamer (Malco #S2)
1	Folding tool (Malco #12)
1	5 blade crimper (Malco #C5)
1	Hand notcher (Malco #N1)
1	Dividers (Malco #18)
1	Setting hammer (Malco #SH3)
1	<b>Adjustable</b> scribe (Malco #A60)
1	Scratch awl (Malco #A20)

**NOTE: Tools need to be ordered by June 13, 2008 to guarantee delivery by August 18, 2008.**