

# MANCHESTER COMMUNITY COLLEGE

1066 Front Street | Manchester, NH 03102 | Phone (603) 206-8000 | Fax (603) 668-5354

## HVAC PROGRAM

## REQUIRED TOOLS/SUPPLIES

1. Steel toed leather boots
  2. Safety glasses
  3. Leather work gloves
  4. Electrical Clamp Meter (Recommend UEI model 389)
  5. Tube cutter - (Ridged or equivalent)
  6. Air cond. Wrench (4-way wrench)
  7. 4-way manifold gauges with ball valve environmental hoses (Non 410 Gauges)
  8. 25ft. measuring tape
  9. Nozzle wrench (see instructor for specifications)
  10. Hacksaw
  11. Hammer
  12. 8" adjustable wrench
  13. 12" adjustable wrench
  14. Wire stripper/cutter/crimper (Klein or equivalent)
  15. Lineman's pliers
  16. Long nose pliers
  17. Diagonal Cutters
- Note items 14, 15, 16 and 17 may come as a set
18. Open end /box end wrench set (ratchet type set is recommended)
    - i. 5/16" – 1"
  19. 1-1/8" open end/box end wrench (doesn't come with most sets)
  20. Metal file with handle
  21. Nut driver set
    - i. ¼" – ½"

22. 9" cable ties
  - i. Can be 11". Pack of 25 minimum
23. 12" pipe wrench
24. 10" end pipe wrench (angle)
25. "T" handle Allen wrench set
  - i. or "L" shaped long Allen wrenches
26. Solder less terminals (25 each)
  - i. Size 10,12,14 female spade
  - ii. size 10 fork terminals
27. Flaring and swaging tool
  - i. Sold as a set
28. Sheet metal snip set
  - i. red & green handles
29. Turbo torch tip A-3
30. Flashlight (mini mag or equivalent non LED)
31. Phillips screwdrivers - #1 and #2
32. Flat tip screw drivers – 3/32 and 1/4
33. Pocket size flat tip screw driver
34. Utility knife
35. Flint lighter (striker)
36. Tool bag
37. 1/4" ID x 18" clear plastic tubing
38. Set of Jumpers
  - i. used for troubleshooting electrical circuits
39. 8" Tongue and groove pliers (Channel locks or equivalent)
40. 10" Tongue and groove pliers (Channel locks or equivalent)
41. Tubing bender for 1/4, 5/16, 3/8 (lever type)
- 42.\* Small mini tubing cutter (imp)
- 43.\*\* Turbo torch tip A-5

44. \*\* Manifold gauge set for R-410a

\* needed second semester (Fundamentals of Refrigeration II)

\*\* needed third semester (Fall senior year)

Recommend purchasing tools with a lifetime warranty

Recommend: Professional membership: RSES

Recommend obtaining State of NH Gas Fitters Trainee License (See instructor or Admission Office for forms)