

**Plumbing, Heating and Air Conditioning**

Beloit Campus

2023-2024

Following are the required tools for **the Plumbing, Heating and Air Conditioning (PHAC) program**. These tools can be purchased from the vendor of your choice. All tools are to be of the finest quality. Tools will be inspected prior to being used in the department. The department reserves the right to refuse the use of worn or defective tools or tools which do not conform to the specifications of this list and the department chairperson.

**Required Tools and Equipment**

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|  | MFG | MFG # |
| ANSI Z87.1 Rated Safety Glasses |  |  |
| Neoprene Work Gloves (2 Pair) |  |  |
| Hard Hat |  |  |
| Utility knife with Locking Blade |  |  |
| Jab Saw |  |  |
| 6" Torpedo Level |  |  |
| 16 oz. Hammer |  |  |
| 25 Ft. Tape Measure |  |  |
| Fieldpiece Dual Port Digital Monometer | Fieldpiece | SDMN5 |
| Fluke 116/323 HVAC Combo Kit | Fluke | 116/323 |
| Brute II Test and Charging Manifold w/ Hoses | Yellow Jacket | 46022 |
| 2- Robinair Quick Seal connectors | Robinair | 10292 |
| C&D Valve Core Removal Tool | C&D Valve | CD3930 |
| Husky 7 Piece SAE Nut Driver Set | Husky | 74500 |
| 1/4 Magnetic Nut Driver Long and Short | Klein | 635-1/4 & 646-1/4M |
| 5/16 Nut Driver Long and Short | Klein | 635-5/16 & 646-5/16M |
| 10" Crescent | Crescent  | AC210CVS |
| 6" Crescent | Crescent  | AC26CBK |
| Combination Wrench Set SAE | Husky | HRW7PCSAEN |
| Allen Wrench Set, Standard and Metric | Eklind | 13222 |
| HVAC Service Wrench  | Klein | 68310 |
| 3/16 and 5/16 Hex Adapter for Refrigeration Wrench | Klein | 86939 |
| wiss 5 Blade Crimper | Wiss  | WC5L |
| Wiss 3 Piece Snip Set | Wiss  | M123R |
| 12" Straight Pipe Wrench | Ridgid | 47057 Model 812 |
| 14" Straight Pipe Wrench | Ridgid | 31095 Model 814 |
| 2- 10" Straight Jaw Tongue and Groove Pliers | Channel Lock | 430 |
| Ridgid 101 Tubing Cutter | Ridgid | 101 |
| Ridgid 150 L Tubing Cutter | Ridgid | 150 L |
| Milwaukee Hackzall M18 ( Optional/ Recommended)  | Milwaukee  | 2719-20 |
| Milwuakee Hammer Drill/ Impact  | Milwaukee  | 2997-22 |
| Milwaukee 40 piece bit kit | Milwaukee  | 48-32-4024 |
| PVC Saw | Lenox | 20985HSF12 |
| 12" Hacksaw | Stanley | 20-036M |
| 8" Bastard File | Nicholson | 03566N |
| TS99T Berzomatic Torch Head | Bernzomatic | TS99T |
| Husky 15 Piece Screw Driver Set  | Husky | 246340150 |
| 1 1/4" Ratcheting PVC Cutter  | Husky | 16PL0101-1 |
| Lenox 20908908 Close Quarter Hand Saw | Lenox | 20908908 |
| General Tools 151 Flaring Tool | General | 151 |
| 52420 Ridgid Swage Kit | Ridgid | 52420 |
| Klein 1001 Multi Tool | Klein | 1001 |
| Telescoping Basin Wrench | Ridgid | 1017 |
| Tool Boxes/bags |  |  |
| Linemans Pliers |  |  |
| Diagonal Cutters |  |  |

**Estimated Cost: $2700.00
Note: Estimated costs reflect current market value and are subject to change.**

**Vendor Information:**
Tools may be purchased at Boettcher Supply or the supplier of student choice. Please contact the Department Chair, Robert Chitty; rchitty@ncktc.edu, with questions or for further information.