Aviation Program Toolkit

Students in the Aviation Maintenance programs are required to have a toolkit for lab activities. This document provides a list of the minimum requirements. A Snap-On toolkit may be purchased directly from the IWCC cashier. It is best to purchase it prior to the beginning of the semester as students are required to have their tools by the beginning of the second semester of classes (January) or they may be excluded from these lab classes. If you currently own some tools of professional quality, you can purchase what you need to fill out your set. We do insist that the tool storage, box or cart, not exceed the size listed due to space constraints in the hanger.

* Tool kits will be kept in the program area and must not be removed until the student has completed the program. Program staff and the student will inspect their box and contents when the student leaves the program.
* Toolbox should no larger than 4,300 cubic inch carrying cap all drawers must be shadowed for tools below.

The cost of the preferred tools is estimated to be $2,900. If you have financial aid and expect a refund this semester, you may be able to apply the refund toward the purchase of your tools. Contact your College Success Advisor to see about those arrangements. See your instructor for further details and other options available to you.

Toolkit Minimum Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **----------Item--------** | **Size** |  | **----------Item--------** | **Size** |
|  | |  | |
| 1/4-inch Drive, 12 Point Shallow Universal Sockets | 1/4” | 1/4-inch Drive Ratchet | Overall length 4 7/16” |
| 5/16” | 3/8 Inch Drive Ratchet | Overall length 10 5/16” |
| 3/8” | Universal Joint | 1/4” Drive |
| 7/16” | Universal Joint | 3/8” Drive |
| 1/2” | 1/4” Drive Extension | 2 inches long |
| 9/16” | 1/4” Drive Extension | 4 inches long |
|  | | 1/4” Drive Extension | 6 inches long |
| 1/4-inch Drive,  12 Point Deep Sockets | 3/16” |  | |
| 7/32” | 3/8” Drive Extension | 3 inches long |
| 1/4” | 3/8” Drive Extension | 6 inches long |
| 9/32” | 3/8” Drive Extension | 11 inches long |
| 5/16” |  | |
| 11/32” | Half Round File | 10 inches long |
| 3/8” | Mill File | 10 inches long |
| 7/16” | Adjustable Jaw File Handle | standard 4 1/2” long 1” dia. |
| 1/2” |
| 9/16” | File cleaner brush | std. 7 1/2” long |
|  | |  | ‘ |
| **----------Item--------** | **Size** | **----------Item--------** | **Size** |
|  | | Long Nose Pliers with cutter | 2 1/4” Jaw-- 8” overall length |
| 1/4-inch Drive, 12 Point Shallow Sockets | 3/16” |
| 7/32” | Combination Slip Joint Pliers | 6 7/16” long |
| 1/4” | Duck Bill Pliers | Overall length 7  3/4” |
| 9/32” |
| 5/16” | Diagonal Cutting Pliers | Overall length 5” |
| 11/32” | Diagonal Cutting Pliers | Overall length 6 5/16” |
| 3/8” |
| 7/16” | Standard Needle Nose Pliers | Overall length 6” |
| 1/2” |  | |
| 9/16” | Standard Hex Wrench Set  “Allen Wrenches” consisting of the following sizes | 0.028” |
| 3/16” | 0.035” |
|  | | 0.050” |
| 3/8-inch Drive 12 Point Shallow Sockets | 1/4” | 1/16” |
| 5/16” | 5/64” |
| 3/8” | 3/32” |
| 7/16” | 7/64” |
| 1/2” | 1/8” |
| 9/16” | 9/64” |
| 5/8” | 5/32” |
| 11/16” | 3/16” |
| 3/4” | 7/32” |
| 13/16” | 1/4” |
| 7/8” | 5/16” |
|  | | 3/8” |
| Aviation Style Cutting Shears “Aviation Snips” | Red Handle—left hand cut | Ball Peen Hammer | 8 oz |
| Green Handle—right hand cut | Plastic Tipped Hammer | 16 oz wt. |
| Pin Punch | 3/32” |
| Yellow Handle--straight cut | 1/8” |
|  | | 5/32” |
| Ignition 15˚/60˚ Offset Wrench Set | 1/8—1/8” | 3/16” |
| 5/32—5/32” | 7/32” |
| 3/16—3/16” | 1/4” |
| 15/64—1/4” | 5/16” |
| 1/4—15/64” | Center Punch | 5/16 hex size 5” long |
| 9/32—5/16” | Pocket Magnifier | Multi Lens |
| 5/16—1/4” | Reversible Wire Twister/Cutters | 6- or 9-inch pliers with overall  length of 8 1/2” to 10 1/2” |
| 11/32—3/8” | Open end Angled 30˚ and 60˚  Wrenches | 3/8” |
| 3/8—11/32” | 7/16” |
|  | | 1/2” |
| True Flush Cut  (tapered head)  Electrical Service Cutter | Overall length 4 7/16 inches  Cutting capacity AWG#17 | 9/16” |
| 5/8” |
| 11/16” |
| 3/4” |
| Scribe/pick | straight end and 90˚ end |  |
| **----------Item--------** | **Size** | **----------Item--------** | **Size** |
| Ratcheting Soft Grip Stubby Screwdriver Handle | Overall (total) length 4 1/2”  shank length 2” | Combination Wrench with 12-point box end |  |
| 7/32” |
| 1/4” |
| Hex Shank Screwdriver Bit | No. 2 Phillips | 5/16” |
| 11/32” |
| Hex Shank Screwdriver Bit | Standard size flat bit | Short handle Combination  Wrench with Ratcheting Box end | 3/8” |
| 7/16” |
| Reversible Blade Screwdriver | 9/32 and 13/64 flat tip rev. bit  #1 and #2 Phillips rev. bit | 1/2” |
| 9/16” |
| 5/8” |
| Combination Measuring Set | 12-inch Rule with Square/90 head—Center Head  and Protractor Head | 11/16” |
| 3/4” |
| 3/8-inch Drive Crowfoot Wrenches | 3/8” |
| 7/16” |
| 6” Steel Rule | Graduated in 1/32 and 1/64” | 1/2” |
| 9/16” |
| Inspection Mirror  1 ¼” dia. | closed length 10” ext. length 14” | 5/8” |
| 11/16” |
| Feeler Gauge | 25 blades .0015, .002 to  .025”  .001” increments. |  | 3/4” |
|  | 13/16” |
|  | 7/16” |
| Explosion Proof Flashlight | |  | 15/16” |
| Telescopic Magnetic Pen-style pick up tool | |  | 1” |

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| Tool Box  **No larger than**  **4,300 cubic inch carrying cap.**  all drawers must be **shadowed** for above tools. | Recommended: Snap-On **KMC18062N**  with eight (8) drawers |  | http://farm7.static.flickr.com/6063/6210837989_143b32ebaf_m.jpg |
| The Snap-On Aircraft Maintenance Kit with Portable Chest # KMC18AVTK with additional 211FCOA 3/8-inch Drive Crowfoot wrenches and OXIR707 Flank Drive Combination Ratcheting Box/Open End Wrenches **is recommended.** | | | |

Tool list updated 2/2024