

**PORTLAND COMMUNITY COLLEGE  
AVIATION MAINTENANCE TECHNOLOGY**

**TOOL AND SUPPLIES LIST**

- This list is for a minimum Tool Set for use during the AMT program.
- Keep a separate copy of this list, with quantity and cost, as an inventory checklist for insurance purposes.

**SOCKET WRENCH SET, 1/4" DRIVE - (12 point) Must contain at least the following items:**

- \_\_\_\_\_ RATCHET HANDLE, 1/4" Drive (*fine tooth preferred – 72 tooth*)
- \_\_\_\_\_ EXTENSION, 1/4" Drive, 3" Long
- \_\_\_\_\_ EXTENSION, 1/4" Drive, 6" Long
- \_\_\_\_\_ ADAPTER, 1/4" To 3/8" Drive
- \_\_\_\_\_ SPEEDER HANDLE, 1/4" Drive
- \_\_\_\_\_ DRIVE BIT HOLDER, (Apex-style) 1/4" Drive, 1/4" Hex, non-magnetic  
(*for replaceable screwdriver bits*)
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 3/16"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 7/32"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 1/4"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 9/32"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 5/16"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 11/32"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 3/8"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 7/16"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 1/2"
- \_\_\_\_\_ SOCKET, 1/4" Drive, Shallow 9/16"

**SOCKET WRENCH SET, 3/8" DRIVE - (12 Point) Must contain at least the following items:**

- \_\_\_\_\_ RATCHET HANDLE, 3/8" Drive (*fine tooth preferred – 72 tooth*)
- \_\_\_\_\_ EXTENSION, 3/8" Drive, 3" Long
- \_\_\_\_\_ EXTENSION, 3/8" Drive, 6" Long
- \_\_\_\_\_ UNIVERSAL JOINT, 3/8" Drive
- \_\_\_\_\_ ADAPTER, 3/8" to 1/4" Drive
- \_\_\_\_\_ ADAPTER, 3/8" to 1/2" Drive
- \_\_\_\_\_ SOCKET, 3/8" Drive, Shallow 3/8"
- \_\_\_\_\_ SOCKET, 3/8" Drive, Shallow 7/16"
- \_\_\_\_\_ SOCKET, 3/8" Drive, Shallow 1/2"
- \_\_\_\_\_ SOCKET, 3/8" Drive, Shallow 9/16"
- \_\_\_\_\_ SOCKET, 3/8" Drive, Shallow 5/8"
- \_\_\_\_\_ SOCKET, 3/8" Drive, Shallow 11/16"
- \_\_\_\_\_ SOCKET, 3/8" Drive, Shallow 3/4"

**SPECIAL SOCKET and WRENCH**

- \_\_\_\_\_ SOCKET, Spark Plug, 3/8" Drive, (ATS 950 or equivalent)
- \_\_\_\_\_ WRENCH, 6-point, Combination, (Brake Bleeding tool)

## COMBINATION WRENCH SET, 12 Point, open - box end

- \_\_\_\_\_ WRENCH, Combination, 5/16"
- \_\_\_\_\_ WRENCH, Combination, 11/32"
- \_\_\_\_\_ WRENCH, Combination, 3/8"
- \_\_\_\_\_ WRENCH, Combination, 7/16"
- \_\_\_\_\_ WRENCH, Combination, 1/2"
- \_\_\_\_\_ WRENCH, Combination, 9/16"
- \_\_\_\_\_ WRENCH, Combination, 5/8"
- \_\_\_\_\_ WRENCH, Combination, 11/16"
- \_\_\_\_\_ WRENCH, Combination, 3/4"
- \_\_\_\_\_ WRENCH, Combination, 13/16"
- \_\_\_\_\_ WRENCH, Combination, 7/8"

## PLIERS

- \_\_\_\_\_ "CHANNEL LOCK" style - 10"
- \_\_\_\_\_ DUCK BILL - 8"
- \_\_\_\_\_ NEEDLE NOSE - 6"
- \_\_\_\_\_ DIAGONAL CUTTER, Flush type - 8"
- \_\_\_\_\_ DIAGONAL CUTTER, Full-flush type- 6"
- \_\_\_\_\_ COMMON SLIP JOINT - 8"
- \_\_\_\_\_ "VICE GRIP" style - 6"
- \_\_\_\_\_ SAFETY-WIRE PLIERS, Milbar® Model 25W or equivalent

## MEASURING TOOLS

- \_\_\_\_\_ OUTSIDE MICROMETER, 0-1" range (Vernier scale graduated to .0001")  
(not digital).
- \_\_\_\_\_ DIAL CALIPER, graduated scale to .001" (not digital or plastic)
- \_\_\_\_\_ MACHINIST'S SQUARE, sliding head with spirit level,  
includes 12" scale with 1/8", 1/16" and 1/32", 1/64"  
graduations.
- \_\_\_\_\_ SCALE, 6" specification 5R (1/10", 1/100", 1/32", and 1/64" graduations)
- \_\_\_\_\_ STEEL TAPE RULE, 24 ft. minimum
- \_\_\_\_\_ MULTIMETER, (FLUKE™ Model 115 or 117, better preferred)  
*(If purchasing new, wait until attending AMT 102 for specification details)*

## INSPECTION TOOLS

- \_\_\_\_\_ INSPECTION MIRROR (approx. 2" size; round or rectangular)
- \_\_\_\_\_ FLASH LIGHT, with holster – Single LED only
- \_\_\_\_\_ 10 POWER MAGNIFYING GLASS \*
- \_\_\_\_\_ 3 to 5 POWER MAGNIFIER should be 2-to-3-inch diameter

## SCREWDRIVERS

- \_\_\_\_\_ MAGNA TIP or equivalent - approx. 8" long with four replaceable 1/4" hex Apex-style tips. Ratcheting recommended. Tips should be the following:
  - \_\_\_\_\_ #1 Phillips
  - \_\_\_\_\_ #2 Phillips (4 or more extra bits),
  - \_\_\_\_\_ small straight slot
  - \_\_\_\_\_ medium straight slot
- \_\_\_\_\_ DZUS (special fastener) Quarter turn tool
- \_\_\_\_\_ SCREWDRIVER SET - 9 Piece minimum (must include straight slot and Phillips)
- \_\_\_\_\_ STRAIGHT SLOT STUBBY- approx. 1" long blade, 1/4" blade width (may be included in above set)
- \_\_\_\_\_ PHILLIPS STUBBY- approx. 1" blade length with #2 tip (may be included in above set)

## METAL WORKING TOOLS

- \_\_\_\_\_ Automatic CENTER PUNCH
- \_\_\_\_\_ SCRIBE (one 90-degree end & one straight end)
- \_\_\_\_\_ HACK SAW FRAME, 12"
  - \_\_\_\_\_ Blade, 18 tpi (*teeth per inch*)
  - \_\_\_\_\_ Blade, 24 tpi
  - \_\_\_\_\_ Blade, 32 tpi
- \_\_\_\_\_ FILE, flat, smooth, single cut, 8"
- \_\_\_\_\_ FILE, flat, medium, double cut, 8"
- \_\_\_\_\_ FILE, Round, smooth, 8"
- \_\_\_\_\_ FILE HANDLES, Wood or plastic (One for each file)
- \_\_\_\_\_ FILE CARD and BRUSH
- \_\_\_\_\_ PIN PUNCH, sized in inches - 1/16, 3/32, 1/8, 5/32, 3/16, 1/4, 5/16.

## SAFETY EQUIPMENT

- \_\_\_\_\_ MECHANIC'S GLOVES
- \_\_\_\_\_ WELDING GLOVES, all leather, gauntlet-type \*
- \_\_\_\_\_ RESPIRATOR, Half-face, Organic Vapor/Dust, activated charcoal type, similar to Honeywell North RU8500, with re-sealable storage bag. (sized for your face without beard)
- \_\_\_\_\_ DUST MASKS, disposable (similar to 3M Multi-purpose, N95)
- \_\_\_\_\_ HEARING PROTECTION, Ear-muff style and Ear Plugs \*
- \_\_\_\_\_ EYE PROTECTION must meet ANSI Z87 in frames.
  - Clear lens, non-tinted. Over glasses style for prescription lens/frames or prescription lens/frames meeting ANSI Z87.

## OTHER TOOLS

- \_\_\_\_\_ BALL PEEN HAMMER - 12 oz.
- \_\_\_\_\_ DEAD-BLOW HAMMER - 10 to 16 oz., soft faced, (no exposed metal)
- \_\_\_\_\_ MAGNETIC PICK-UP TOOL, Telescoping
- \_\_\_\_\_ MECHANICAL FINGERS (flexible pick-up tool with spring jaws)
- \_\_\_\_\_ HEX KEY WRENCH SET (Allen wrench) fractional, .050" to 3/16" range
- \_\_\_\_\_ WIRE STRIPPERS, 10 – 22 AWG range, (heavy duty, automatic)
- \_\_\_\_\_ TERMINAL CRIMPING TOOL, 10 – 22 AWG, (ratcheting style)
- \_\_\_\_\_ TIRE VALVE CORE TOOL, Low profile
- \_\_\_\_\_ O-RING EXTRACTION Tool, Brass ONLY (similar to PARKER®)

## TOOL BOX

- \_\_\_\_\_ TOOL BOX - Top box ONLY (NO Bottom or Roller box)  
MAXIMUM dimensions
  - Width - **26"**
  - Height - **20"**
  - Depth - **12"**
- \_\_\_\_\_ CLOTH TOOL BAG, small (for transporting tools to projects)
- \_\_\_\_\_ CABLE or CHAIN with LOCK (used to secure box in designated toolbox storage areas.)

## COMPUTER

- \_\_\_\_\_ LAPTOP or TABLET, Windows or Android OS recommended  
Capable of running full browser AND MS Office 2016+.
  - PC - Windows 11 or 10
  - Mac - macOS 10.15 to 14.0+
  - iPad - iOS 12.0+
  - Chromebook

## SUPPLIES

- \_\_\_\_\_ 1/4" GRAPH PAPER
- \_\_\_\_\_ COLORED HIGHLIGHTING MARKERS
- \_\_\_\_\_ COLORED PENCILS
- \_\_\_\_\_ #2 PENCILS (for Scantron tests)
- \_\_\_\_\_ "ULTRA FINE POINT" PERMANENT MARKER, "Sharpie" style  
(used to mark sheet metal) \*
- \_\_\_\_\_ CLIP BOARD
- \_\_\_\_\_ PENCIL COMPASS
- \_\_\_\_\_ PLASTIC PROTRACTOR
- \_\_\_\_\_ CALCULATOR, must be non-programmable (scientific, with inverting capability) for use during tests

\* Indicates tools or supplies that are available in the Rock Creek Bookstore.