**Vincennes University**

**Collision Repair Tool List**

Updated 9-13-16

Students entering the Collision Repair and Refinishing Program at VU are **required** to have the tools and supplies listed below. Each student will need the following items to successfully complete the required tasks and training exercises. Vincennes University does not provide insurance coverage of tools/supplies that are the property of the individual student. **It is suggested that student tool sets be added to your homeowner’s insurance policy.**

**Tool Storage 40” minimum to 50” maximum**

 Storage unit must have multiple drawers to securely hold and organize the tools listed below. **Storage unit must be on wheels and lock securely**. A large lower rolling cabinet is recommended as it offers ample storage space and a work surface on top. It can be upgraded with an upper chest to accommodate additional tools. High quality here is a must. Low quality tool storage units will not provide the service life needed by professional technicians.

**Hand Tools**

**1/4” Drive Sockets, Ratchets, Extensions**

 1/4” Drive reversible ratchet

 Universal Joint

 3” extension

 6” extension

 3/16” thru 1/2” six point shallow sockets

 3/16” thru 1/2” six point deep sockets

 5mm thru 13 mm six point shallow sockets

 5mm thru 13 mm six point deep sockets

**3/8” Drive Sockets, Ratchets, Extensions**

 3/8” Drive fixed head ratchet

 Chrome universal joint

 Impact universal joint

 3/8” to 1/4" reducer

 3” extension

 10” extension

 4mm, 5mm, 6mm, 7mm, 8mm, 10mm hex bits

 3/16” through 3/8” hex bits

 5/16” through 7/8” six point shallow chrome sockets

 8mm through 19mm six point shallow chrome sockets

 3/8” through 7/8” deep chrome sockets

 10mm through 19mm deep chrome sockets

**1/2” Drive Sockets, Ratchets & Extensions**

 2” extension

 Fixed head ratchet

 25 to 250 ft/lb **click type** torque wrench

 Universal joint impact

 1/2” through 1 1/4” six point shallow chrome sockets

 10mm through 24 mm six point shallow chrome sockets

 1/2" through 7/8” six point deep impact sockets

 10mm through 24mm six point deep impact sockets

**Wrenches**

 1/4" through 1 1/4" 12 point combination wrench set

 10mm through 21mm 12 point combination wrench set

 10mm through 18mm flare nut wrenches (line wrenches)

 6” adjustable wrench

**Pliers**

 6” slip joint pliers

 7” heavy duty diagonal cutters

 8” long nose pliers (needle nose)

 7” straight jaw locking pliers (vise grip brand recommended)

 7” curved jaw locking pliers (vise grip brand recommended)

6” locking C-clamp pliers (Qty 3, vise grip brand recommended)

**Screwdrivers**

 Minimum eight piece assortment of Phillips and straight (Must include stubby’s)

**Hammers/Chisels**

 Minimum five piece punch set

 Minimum four piece chisel set

 Punch/Chisel holder

 ½” Brass punch

 16 oz ball peen hammer

 Double faced mini sledge hammer

 Dead blow hammer with soft and hard faces

**Air Tools**

 Straight die grinder to accept ¼” carbide bits etc.

 Straight 3” air cut off tool

 **6”** random orbit **palm** **type** sander with **Velcro pad** (high quality a must)

Devilbiss HVLP Finishline or better spray gun **1.4 tip**. Additional **1.8** or larger tip helpful when spraying heavy primers or other heavy bodied coatings (high quality here is a must)

 Paint gun air regulator

 Paint gun cleaning kit (includes brushes, picks, etc.)

 Air blow gun (rubber tip)

 Air tool oil

 Heavy duty twin hammer ½” impact wrench

**Body/Fender Tools**

 Long and short hand file boards (Velcro backed)

 High quality body and fender hammer/dolly set. Min six pieces.

 Straight tin snips

 Tape measure SAE and Metric (16 ft minimum length)

 Auto Darkening welding helmet

 8 inch C-clamp

 Window crank remover

 Body trim removal set (To remove door panels, window trim, moldings, etc.)

**Miscellaneous Tools/Supplies**

3 piece pry bar set

Electric ½” Drill

Electric 4-1/2” Grinder (Dewalt DW802G)

 Flexible retrieval tool (finger type grabber)

 Fender cover

 Razor utility knife

 O-ring pick set

 Test light (non-powered)

 Wire brush

 Type **C** male air nipples Qty 2

 Type **C** female air nipples Qty 2

 Welding gloves

 Heavy duty scissors

 Leather work gloves or equivalent

 Rubber chemical gloves

 Hearing protection ear muffs

 Safety glasses and/or safety goggles (clear)

 High quality activated charcoal respirator (High quality absolute must)

 Tyvek type paint suit

Magnetic or post-type socket organizers

 Wrench organizing racks

7pc (Durablock) sanding block set

**Student Supplied Items** These items will be mandatory for the successful completion of lab objectives.

 Black Sharpie markers

 Professional type work pants (three minimum)

 Heavy leather work boots or shoes (steel toe optional)

 Some type of camera

(This will be needed throughout the 2 year program

 for the creation of a student portfolio that will be made to

 show potential employers the work that the student has

 completed.)

 Supply of pens and paper

 Daily planner

 Textbooks

**NOTE: IT IS INEVITABLE THAT SLIGHT VARIATIONS FROM THIS LIST WILL OCCUR. DO NOT BE ALARMED IF YOUR SET DIFFERS SLIGHTLY FROM THIS LIST.**

**VINCENNES UNIVERSITY DOES NOT PROFIT FROM THE SALE OF TOOL KITS OFFERED TO STUDENTS BY THE VARIOUS TOOL COMPANIES.**

**PLEASE NOTE THAT THE TOOL KITS OFFERED TO STUDENTS ATTENDING THE AUTOMOTIVE PROGRAM AT VINCENNES UNIVERSITY MAY BE PURCHASED AT A GREATLY REDUCED RATE.**

**Optional Tools**  The following tools are frequently purchased by technicians when they first enter the collision repair industry. We have included them as optional tools because VU students have a once in a lifetime opportunity to purchase these items at a greatly reduced price. These tools are not required to successfully complete the Collision Repair and Refinishing Program.

 \*Metric and SAE Gearwrenches (big time saver)

 \*Electric tool engraver

 Rivet gun (for small sheet metal rivets)

15 piece ½’ drive shallow six point SAE impact socket set

 Heavy duty soldering gun with rosin core solder

 Tire valve core remover/installer

 Serpentine belt remover/installer tool

 SAE and metric tap and die sets

 3/8” drive air ratchet

 ¼” drive air ratchet

 Additional Devilbiss HVLP paint gun for primer 1.8 or larger tip

 Electric buffer to accept wool and foam polishing pads

 Internal and external snap ring pliers set (fixed tips)

 ¼” drive Screwdriver type socket handle

 ¼” drive 1.5” extension

 ¼” drive 8mm six point shallow flex socket

 ¼” drive 10mm six point shallow flex socket

 ¼” drive 13mm six point shallow flex socket

3/8” Drive flex head ratchet

3/8” drive 6” extension

 ½” drive 6” extension

 ½” drive 10” extension

 ½” drive Flex head ratchet

 ½” drive Universal joint chrome

 1/2” to 3/8” reducer

 ½” drive 30mm, 32mm, 36mm six point deep impact sockets

½” drive 10mm through 24mm shallow impact sockets

 3/8” through 7/8” flare nut wrenches (line wrenches)

 12” adjustable wrench

 10” rib lock pliers (channel lock pliers)

 10” straight jaw locking pliers (vise grip brand recommended)

 Wire stripping and crimping pliers

 T10 through T60 internal Torx bits

 E6 through E16 external Torx bits

 Carbide burr set (1/4” shank various shapes)

 Torx bit Screwdriver set

 32 oz ball peen hammer

 90 degree die grinder with Roloc disc adapter

Tire inflation chuck with gauge (**one tool**)

 In-line sander (“air file”)

 3/8” drive impact wrench

 Soft and Semi flexible sanding block set

 6” DA style hand sanding pad with velcro

 Left, and right tin snips

 Water Squeegee (Jelly blade, Water blade, etc.)

Stud gun dent puller kit

Telescoping mirror

 Telescoping magnetic retrieval tool

 25 ft heavy duty extension cord

 Fluorescent corded work light

 Flashlight

 Pen light (pocket type)

 Pocket screwdriver

 Magnetic parts tray

 Parts organizer tray with lid (for small parts and fasteners)

 Blair Rotobroach High quality spot weld cutter set

 High speed drill bit set (3/8” shank) 20 piece minimum

Digital Multi-Meter capable of AC/DC volts, 10Amps, and Ohms

Synthetic chamois

All tools should be engraved with some identifying mark. Misplaced tools will be placed in a "lost and found" and every attempt will be made to return the tools to their owner.