## **Useful Tools for CIE-44**

Sierra College MECH-44
Tuesdays TTC Campus 5:15 – 9:30
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- a. **DRILL PRESS**: A tall upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, splattering it against that freshly painted part you were drying.
- b. **WIRE WHEEL**: Cleans paint off bolts and then throws them somewhere under the workbench with the speed of light. Also removes fingerprint whorls and hard-earned guitar calluses in about the time it takes you say, "Ouch...."
  - c. ELECTRIC HAND DRILL: Normally used for spinning pop rivets in their holes until you die of old age
  - d. PLIERS: Used to round off bolt heads.
- e. **HACKSAW**: One of a family of cutting tools built on the Ouija board principle. It transforms human energy into a crooked, unpredictable motion, and the more you attempt to influence its course, the more dismal your future becomes.
- f. **VISE-GRIPS**: Used to round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.
- g. **OXYACETYLENE TORCH**: Used almost entirely for lighting various flammable objects in your shop on fire. Also handy for igniting the grease inside a wheel hub you're trying to get the bearing race out of.
- h. **WHITWORTH SOCKETS**: Once used for working on older British cars and motorcycles, they are now used mainly for impersonating that 9/16" or 1/2" socket you've been searching for the last 15 minutes.
- i. **HYDRAULIC FLOOR JACK**: Used for lowering an automobile to the ground after you have installed your new disk brake pads, trapping the jack handle firmly under the bumper.
  - j. EIGHT-FOOT LONG DOUGLAS FIR 2X4: Used for levering an automobile upward off a hydraulic jack handle.
  - k. **TWEEZERS**: A tool for removing wood splinters.
  - I. **PHONE**: Tool for calling your neighbor to see if he has another hydraulic floor jack.

- m. **SNAP-ON GASKET SCRAPER:** Theoretically useful as a sandwich tool for spreading mayonnaise; used mainly for getting dog-doo off your boot.
  - n. E-Z OUT BOLT AND STUD EXTRACTOR: A tool that snaps off in bolt holes and is ten times harder than any known drill bit.
- o. **TWO-TON HYDRAULIC ENGINE HOIST**: A handy tool for testing the tensile strength of bolts and fuel lines you may have forgotten to disconnect.
- p. **CRAFTSMAN 1/2 x 16-INCH SCREWDRIVER**: A large motor mount prying tool that inexplicably has an accurately machined screwdriver tip on the end without the handle.
- q. AVIATION METAL SNIPS: See hacksaw.
- r. **TROUBLE LIGHT**: The home builder's own tanning booth. Sometimes called drop light, it is a good source of vitamin D, "the sunshine vitamin," which is not otherwise found under cars at night. Health benefits aside, it's main purpose is to consume 40-watt light bulbs at about the same rate that 105-mm howitzer shells might be used during, say, the first few hours of the Battle of the Bulge. More often dark than light, its name is somewhat misleading.
- s. **PHILLIPS SCREWDRIVER**: Normally used to stab the lids of old-style paper-and-tin oil cans and splash oil on your shirt; can also be used, as the name implies, to round out Phillips screw heads.
- t. **AIR COMPRESSOR**: A machine that takes energy produced in a coal-burning power plant 200 miles away and transforms it into compressed air that travels by hose to a Chicago Pneumatic impact wrench that grips rusty bolts last tightened 70 years ago by someone at Ford, and rounds them off.
- u. **PRY BAR**: A tool used to crumple the metal surrounding that clip or bracket you needed to remove in order to replace a 50 cent part.
- v. **HOSE CUTTER**: A tool used to cut hoses 1/2 inch too short.
- w. **HAMMER**: Originally employed as a weapon of war, the hammer nowadays is used as a kind of divining rod to locate expensive parts not far from the object we are trying to hit.
- x. **MECHANIC'S KNIFE**: Used to open and slice through the contents of cardboard cartons delivered to your front door; works particularly well on boxes containing seats, chrome and plastic parts.