### NCC Automotive Technology Tool list by type- Fall 2020

Safety glasses will be required the first day of lab. You can purchase them wherever you like. NCC auto t-shirts, uniform. 30 for 3 shirts, See Program Coordinator

### Wrenches

Metric combination wrench set, long handle, 12 point, none ratcheting (8 – 24mm) Standard combo wrench set ¼ to 1 inch, long handle, 12 point, none ratcheting (5/16-1) 1/2<sup>17</sup> drive click type torque wrench 50-250ft -lbs 8" adjustable wrench Standard flare nut wrench set (¼" –13/16") Metric flare nut wrench set (9 –21mm)

### **Ratchets and Sockets**

¼" drive ratchet and extensions 2", 4" ¼" drive metric socket set (shallow) (5.5, 6-14mm) 6 point ¼" drive metric socket set (deep) (5.5, 6-14mm) 6 point ¼" driver handle ¼" drive swivel adapter 3/8" drive ratchet and extensions (3", 6", 12") 3/8" drive metric socket set (shallow) 6 point (8-19mm) 3/8" drive metric socket set, (deep) 6 point (8-19mm) 3/8" drive standard (chrome) socket set 6 point (shallow) 3/8" drive swivel adapter Torx bit set for ¼" and 3/8" drive (10t to 55t) 3/8 drive metric hex key set 2-10mm 1/2" drive ratchet and extensions (5", 10" suggested) 1/2" to 3/8" adapter, impact 1/2" drive swivel adapter, impact 1/2" drive metric *impact* socket set, shallow, 6 point 12-24mm 1/2" drive metric *impact* socket set, deep, 6 point 12-24mm 6 point 1/2" drive breaker bar 1/2 Impact Gun

# Screw Drivers set

Philips, common sizes Blade, common sizes Pry Bar, 24 inch

## Hammers

Ball-peen hammer, 24 oz Plastic hammer /soft face

#### Pliers

Needle-nose pliers Diagonal pliers (wire cutters) Combination pliers Channel-lock pliers 16" adjustable joint pliers Wire crimper/stripper pliers Vise grip plier set (needle nose, small and large sizes)

### Test equipment

Fluke 115 multimeter, **minimum** Fluke 88 **with** automotive accessory kit, **suggested** 12 volt test light Ignition spark tester (able to test coil over ignition systems)

## Other

10" mill file with handle 10" round file, rough, 3/8 Wire brush, rough, 12-15-inch handle Fender cover Feeler gauge set, angled standard/metric .0015-.030 Feeler gauge set, strait standard/metric .0015-.030 Spark plug gap tool/s 9/16 spark plug socket 5/8 spark plug socket 11/16 spark plug socket 13/16 spark plug socket Tire valve core tool screwdriver handle type Tire air inflation chuck combo, chuck and gauge Blow gun (OSHA approved) Gasket scraper Oil filter wrench/s. must be able to remove various size oil filters Magnetic pick-up tool LED shop light, rechargeable, 200Lums min Hearing protection, ear muff style Leather welding gloves Oxy/acetylene welding glasses Hose removal pick Drum brake shoe hold-down spring tool Drum brake shoe return spring tool Punch and Chicle set Clipboard Small roll cabinet-not to exceed 34" in length

Removed from required but would be great to have it you can afford them.

- 3/8" drive standard (chrome) socket set 6 point (deep)
- ½" drive metric, chrome, deep, socket set, 12-24mm, 6 point, optional due to impact set
- %" drive metric, chrome, shallow, socket set, 12–24mm, 6 point, optional due in impact set

Rubber mallet soft face Snap ring pliers 3/8" click type torque wrench 5-75 ft-lbs Small 4 peice pick set