

VTC Auto Tech Student Required Tool List

SEMESTER #1 SET- (must be purchased and on premises by first day of lab)

CLOTHING:

- VTC t-shirts: 3 supplied by program first day of lab
- Black jeans or black work pants for labs supplied by student: must be in possession by first lab session. (3 pair suggested)
- Steel/safety toe work boots, or steel/safety toe leather hiking boots. Must be leather, not vinyl or other materials. Supplied by student.

1/4" DRIVE:

- 1/4" drive ratchet
- 1/4" drive extensions- 2" and 6"
- 1/4" drive universal joint
- 1/4" drive driver handle (screwdriver type)-*optional*
- 1/4" drive fractional shallow socket set 6pt- 3/16" thru 9/16"
- 1/4" drive fractional deep socket set 6pt- 3/16" thru 9/16"
- 1/4" drive metric shallow socket set 6pt- 5.5mm thru 14mm
- 1/4" drive metric deep socket set 6pt- 5.5mm thru 14mm
- 1/4" drive to 3/8" drive socket adaptor

3/8" DRIVE:

- 3/8" drive ratchets- standard-*required* and flex handle(long)-*optional*
- 3/8" drive extensions-1", 3", 6" lengths
- 3/8" drive universal joint
- 3/8" drive spark plug sockets-5/8" and 13/16"
- 3/8" drive metric shallow 6pt socket set- 8mm thru 19mm
- 3/8" drive metric deep 6pt socket set- 8mm thru 19mm
- 3/8" drive torque wrench
- 3/8" drive to 1/2" drive socket adaptor

1/2" DRIVE:

- 1/2" drive ratchet- *long handle recommended*
- 1/2" drive breaker bar-*optional*
- 1/2" drive impact extensions- 3", 5" and 11"
- 1/2" drive metric impact shallow socket set 6pt- 10mm-24mm
- 1/2" drive metric impact deep socket set 6pt- 10mm-24mm
- 1/2" drive torque wrench
- 1/2" Impact wrench- 400 ft-lbs in reverse minimum

WRENCHES:

- 8mm combination wrench- 6 or 12pt- *6pt recommended*
- 10mm thru 19mm combination wrench set- 6 or 12pt- *6pt recommended*
- Adjustable wrench-12"

SCREWDRIVERS:

- Flat tip set- 3",6",8",10", and 13" long- these are approximate lengths
- Phillips set- #1(7"),#2(3"),#2(8") long- these are approximate lengths
- Torx screwdrivers- T8, T10, T15, T20, T25 required, can purchase entire set.

PLIERS:

- Needle nose pliers
- Combination slip jaw pliers
- Adjustable slip joint (channel lock type) pliers
- Diagonal cutter pliers
- Small, medium and large size locking pliers with curved jaw (vise grip type)
- Small size needle nose locking pliers (vise grip type)
- Wire stripping/crimping pliers

MISC. HAND TOOLS:

- Punch/chisel set- 5pc minimum
- Plastic tipped hammer
- 16 oz ball peen hammer
- Telescoping inspection mirror
- Telescoping magnet
- Pick set, straight, 45 deg, 90 deg, and curved
- Gasket scraper
- Standard feeler gauge set
- LED flashlight
- 18" pry bar
- Torx drive socket set- T27 thru T55

SPECIALTY TOOLS:

- Battery service kit- terminal pliers, wrench, and cleaner
- Digital multi meter- must be a CATIII 1000v meter
- Fender covers (2 required)
- Tread depth gauge
- OSHA approved blow gun
- Clip board for lab papers

TOOL STORAGE:

- Roll Cab or similar type roll cart with at least 5 drawers- no top chests allowed without instructor permission.
 - 26" minimum width
 - 54" maximum width

SEMESTER #2 SET- must be on premises by first day of lab in the spring semester**WRENCHES:**

- 3/8" thru 3/4" combination wrench set- 6 or 12pt- *6pt recommended*
- Fractional brake tubing wrench set- 1/4" thru 13/16"
- Metric brake tubing wrench set- 9mm thru 21mm

PLIERS:

- Snap ring pliers, fixed tip, small, medium and large 0 degree (straight) Outside/inside type
- Snap ring pliers, fixed tip, small and large 90 degree Outside/inside type

MISC. HAND TOOLS:

- Spark plug gap tool

SPECIALTY TOOLS:

- Hand held vacuum pump kit (mighty vac)
- Brake service set- brake spoon, hold down tools, spring tools, and bleeder wrenches
- Manual brake line flaring tool

SPECIAL SUGGESTIONS: (none required-but highly recommended)

- Oil filter wrenches
- Flat jaw vise grip set
- Pry bar set up to 36"
- Tire gauge/inflator
- Metric hex drive socket set- 4mm thru 10mm
- Metric and fractional hex/allen wrenches
- Ratcheting metric wrenches-10mm thru 19mm
- Fractional 1/2" drive shallow impact socket set 6pt -3/8" thru 1-1/8"
- Fractional 1/2" drive deep impact socket set 6pt - 3/8" thru 1-1/8"
- 3/8" drive inch-pound torque wrench