

FERRIS STATE UNIVERSITY

Heavy Equipment Technology Required Tool List

WRENCHES

1 1/2" Drive socket set:

- Sockets, 3/8" to 1-1/16", 6 point, shallow well
- Sockets, 7/16" to 1-1/8", 6 point, deep well
- Sockets, 7/16" to 15/16", Impact, 6 point, shallow well
- Sockets, 7/16" to 15/16", Impact, 6 point, deep well
- Sockets, 10mm to 32 mm, 6 point, shallow well
- Sockets, 10mm to 19mm, 6 point, deep well
- Sockets, 10mm to 25mm' Impact, 6 point, deep well
- Ratchet
- Breaker Bar
- Drive Extensions: 1-1/2", 3", 5", 10", and 15"
- Drive Adapter: 1/2" to 3/8"
- 250 lb. Torque Wrench, Micrometer adjust
- Impact Wrench, 3/4 or 1/2, Pneumatic or Battery
- Universal Joint

1 3/8" Drive socket set:

- Sockets, 1/4" to 15/16", 6 point, shallow well
- Sockets, 6mm to 19mm, 6 point shallow well
- Universal Sockets, 3/8" to 3/4", 6 point shallow well
- Sockets, T30 to T55, Drivers
- Spark plug Sockets, 5/8" and 13/16"
- Ratchet
- Breaker bar
- Drive extensions: 1-1/2", 3", 6", 10"
- Universal Joint

1 1/4" Drive socket set:

- Sockets, 3/16" to 9/16", 6 point, shallow well
- Sockets, 3/16" to 9/16", 6 point, deep well
- Sockets, 5.5mm to 14mm, 6 point, shallow well
- Sockets, 5.5mm to 14mm, 6 point, deep well
- Sockets, T8 to T27, Drivers
- Ratchet
- Drive extensions: 2", 4", 6"
- Universal Joint

1 Combination End set:

- 1/4" to 1-1/4", Long
- 6mm to 24mm, Long

1 Flare Nut set:

- 1/4" to 13/16"
- 9mm to 21mm

1 Ratcheting Box End:

- 1/4" x 3/8" and 3/16" x 5/16", Square, Air Conditioning

1 8" Adjustable Wrench

1 14" Pipe Wrench

1 Hex Key set:

- 5/64" to 3/8", Long Arm
- 1.5mm to 13mm, Long Arm

SCREWDRIVERS

1 Flat Tip Screwdriver set:

- 1/4" x 1-1/2"
- 3/16" x 3"
- 1/4" x 4"
- 5/16" x 6"
- 3/8" x 8"

1 Phillips Screwdrivers set:

- #1 x 3"
- #2 x 1-1/2"
- #2 x 4"
- #2 x 6"
- #4 x 8"

PLIERS

1 Needle Nose Pliers, 8"

1 Diagonal Cutting Pliers, 8"

1 Multi-purpose, Tongue & Groove pliers (Channel-Lock style), 10"

1 Oil Filter Pliers 2-1/2"-5-1/4" diameter

1 Knipex External Retaining Split Ring Pliers

1 Slip Joint pliers, 10"

1 Vise Grip Pliers, 10" curved jaw

1 Internal/External Snap Ring Pliers set:

- .038" x 6"
- .047" x 6"
- .070" x 8"
- .090" x 10"

HAMMERS, CHISELS, & PUNCHES

1 Ball Peen Hammers:

- 16 oz.
- 48 oz.

1 Dead Blow Hammer, 42 oz.

1 Punch and Chisel Holder

1 Center Punch, 1/4"

1 Brass Punch, 1/2" x 10"

1 Pin Punch set:

- 1/8" x 5"
- 3/16" x 5"
- 1/4" x 6"
- 5/16" x 6"

1 Cold Chisel:

- 5/16" x 5"
- 3/8" x 5"
- 1/2" x 6"
- 5/8" x 7"

BRAKE TOOLS

- 1 HD Air Brake Adjusting Tool
- 1 HD Brake Spring Pliers

MEASUREMENT

- 1 25' Steel Tape Measure
- 1 Feeler Gauges, all purpose, "Go-No-Go" blades
- 1 6" Steel Ruler
- 1 Tire Gauge, 120psi
- 1 Anti-Freeze Tester
- 1 6" Dial Caliper

TEST & ELECTRICAL

- 1 Digital Multimeter: Fluke 88V Kit
- 1 Battery Service Kit:
 - Battery Pliers
 - Battery Clamp puller
 - Terminal Cleaner
- 1 Remote Starter Switch
- 2 Jumper wires (can be made by using 24" of #12 gauge wire & alligator clip ends)
- 1 Long Probe Test Light
- 1 Electrical Connector Test/Jumper Kits

MISCELLANEOUS

- 3 Male Stems for ARO Quick Couplings
- 1 Dual Straight-on Air Chuck
- 1 Air Blow Gun, OSHA Safety Tip
- 1 File set:
 - Flat, with handle, 10"
 - Round, with handle, 10"
 - Half-round, with handle, 10"
- 1 Telescoping Inspection Mirror, 2-1/4"
- 1 Rolling Head or Lady Foot Pry Bar, 21"
- 1 Pry Bar Set: 8", 12", 18", & 24"
- 1 Welders Gloves
- 1 Welders Goggles
- 1 Welding Chipping Hammer
- 1 Leather Work Gloves
- 1 Steel Toed Boots
- 1 Pair Safety Glasses
- 1 Cordless Personal shop light (LED)

TOOL CABINET

- 1 Base Cabinet, 13 Drawers, 41" Wide