Hibbing Community College
1st Year Diesel and Heavy Equipment Mechanics

Required Tool List

The following tools list represents a starter set of mechanics tools. Additional items may be purchased as the student sees a need for them. Sockets may be 6 or 12 point. The 6 point is preferred by many mechanics because they hold better on worn cap screws and nuts. Deep sockets and flex sockets are required by the mechanic, these can be added later during your second year.

1/4" Drive set in a plastic box (Standard and Metric)

3/8" Drive Ratchet
3/8" Extension
3/8" 12" Extension
3/8" 6" Extension
3/8" 2" Extension
3/8 U-Joint
3/8" Drive sockets from 3/8 to 1/2
Metric 3/8 Impact Sockets From 8-19 mm 12 pt.
3/8 Impact Wrench
3/8" Drive Allen sockets (standard and metric)
3/8" Torque Wrench

1/2" Drive Ratchet
1/2" Drive Breaker Bar 18" 1/2" Extension 10"
1/2" Extension 6"
1/2" Extension 2" 1/2-3/8" Adapter
1/2" U-joint
1/2" Drive Sockets from 1/2" to 1 1/8"
Metric 1/2" Impact Drive Sockets from 12-24 mm 12pt.
1/2" Impact Wrench
1/2" Torque Wrench
1/2" Impact Wrench
Combination Wrenches from 1/4" to 1 5/16"
Metric Combination Wrenches 8 mm 10mm 11mm 13mm 14mm 15mm 16mm 17mm 18mm 19mm 20 mm 22mm 24mm
Short Handle Combination Wrenches Standard and Metric

Flat Chisels with 3/8" 1/2" & 5/8" Blade Widths
Starter Punches with 3/32" 1/8" &1/4" Point Diameter
Pin Punches with 3/32" 1/8" & 1/4" Point Diameter
Center punch
Pry Bar with a roll head one end and a point on the other
Flat pry Bars 4 piece set
Screw Drivers:

<table>
<thead>
<tr>
<th>Blade Tip Width</th>
<th>Blade Length</th>
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<tbody>
<tr>
<td>1 @ 1/4&quot;</td>
<td>1 1/2&quot;</td>
</tr>
<tr>
<td>1 @ 3/16&quot;</td>
<td>2 1/2&quot;</td>
</tr>
<tr>
<td>1 @ 1/4&quot;</td>
<td>4&quot;</td>
</tr>
<tr>
<td>1 @ 5/16&quot;</td>
<td>6&quot;</td>
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</tbody>
</table>
1 @ 3/8" 8"

Philips Bit size #2 1 1/2"
Philips Bit Size #1 3"
Philips Bit Size #2 4"
Torx Bit Set Could be bought as a set with screw drivers
Allen Wrenches (standard and Metric)

Misc. Tools:
Seal Picks
Flat files, 3 Round files 3
Thomas & Betts terminal pliers WT-2000 or equivalent
Butane torch
Tape Measure
Snap ring plier set
Extendable magnet
0-1 Micrometer
Test Light

Diagonal Side Cutters Jaw Length 3/4” Overall length 7”
Needle Nose Jaw length 2 1/4” Overall length 7”
Combination Pliers—over all length 8”
Interlocking Joint Pliers – overall length 12”
Ball Peen Hammer—2 pounds
Ball Peen Hammer—1 pound
Dead Blow Hammer 16oz and 48oz
Pipe Wrenches 10” & 18”
50’ Air Hose
50’ Extension Cord
Feeler Gauge – blades ranging in size from .0015 to .035
Adjustable Wrench –12”
Adjustable Wrench –10”
Gasket Scraper
Hack saw Frame
Vise Grips
Flashlight
OSHA approved Blow Gun
Pocket Knife

Fluke 87 Digital Multi Meter/No equivalent Fluke Only
Drill Bits (all three Number, Letters and Fractions up to 1/2”)
Tap and Die set 1/4- 1/2 SAE and USS
Lifting Brackets: OTC 7100 or Equivalent
Inhered Heat/Temp Gun
Striker
Cutting Goggles
Tip cleaner
Digital calipers