

Diesel Technology

Tool List

The following is a generic list of the tools **required** for the LATI-Diesel Technology program. It is important that students begin their professional diesel technician career by purchasing **professional, mechanic grade tools**. Questions regarding the suitability of specific tools should be directed to the diesel technology staff.

- OSHA approved safety glasses or OSHA approved prescription glasses with side shields (Z-87)
- Tool Box-roll around cabinet (5 to 12 drawer) not to exceed 55" wide, 39" high, 25" deep
- Wrench set – combination (5/16" – 1 1/4")
- Wrench set – flare nut (1/4" – 3/4")
- Wrench set – metric combination 12 pt (8, 9, 10 and-19 mm)
- 12" Adjustable wrench
- 1 1/16" combination wrench
- Torx driver set 1/4 and 3/8 drive T8-T55
- Socket set – 1/4" dr., with ratchet and extensions (3/16" – 1/2") including standard and metric (4 – 13mm), deep set 6 pt
- Socket set – 3/8" dr. (3/8" – 3/4") shallow 12 pt and deep, with ratchet and extensions
- Socket set – 1/2" dr. (7/16" – 1-1/4") shallow 12 pt, with long ratchet, breaker bar and extension
- Socket set – metric, 3/8" dr., (8-19 mm), shallow and deep 12 pt
- Socket set 12 pt – metric, 1/2 dr., (19-22 mm)
- Socket set 12 pt – standard deep socket, 1/2 dr., 3/4-1 1/4
- Sockets – 1/2" dr. shallow impact 6 pt. 3/8"-1 1/4 "
- Socket adapter set 1/4 - 3/8, 3/8 – 1/2 3/4" deep well socket 12 pt
- Spark Plug Socket 13/16" 6-Point
- Spark Plug Socket 5/8" 6-Point
- Standard Shallow Impact Sockets 3/8"-1 1/8"
- Standard Deep Impact Sockets 3/8"-1 1/8"
- Metric Shallow Impact Sockets 8mm-22mm
- Metric Deep Impact Sockets 8mm up to 32mm
- 1/2" – 3/4" male square adaptor socket
- 3/8"-1/2" Male Square Adaptor Socket
- 1/2" Drive Flex Head Ratchet
- 1/4" Driver Handle
- 3/8" Drive Flex Head Ratchet
- 3/8" Drive Universal joint
- 1/2" Drive Universal Joint
- Hammer – ball peen (16 oz.)
- Hammer – cross peen (32 oz)
- Hammer – dead blow (32 oz)
- Pliers – standard
- Pliers – needle nose
- Pliers – diagonal cutter
- Pliers – wire stripper, crimper
- Pliers – retaining ring, fixed tip, convertible .070 tip 5 pc set including 90 degree pliers
- Vise Grip – 7" curved jaw
- Vise Grip - 10" curved jaw
- Screwdriver set (straight & phillips)
- Hex key set with ball-end (.050" – 3/8")
- Hex key set with ball-end (1.5mm to 10 mm)
- Gasket scraper (Innovative Tools Super Scarper SS1)
- Carbon scraper, Rigid
- Rolling head pry bar (16")
- Punch & chisel set (including center punch)
- Cold rolled drift (3/4" x 18" long)
- Brass drift (3/4" x 18" long)
- File – 6" single cut
- File – 12" single cut mill file, bastard cut
- File – 10" round, bastard cut
- Hacksaw – with 12" x 24T blades
- Wire brush, full size
- Wire brush, small stainless steel
- Blow gun (heavy duty)
- Feeler gauge (.0015" - .035") offset
- Feeler gauge U.S./Metric, 35 Blades (.0015"- .035")
- O-ring pick
- Lock ring tool 18"-20" (Ken-tool T-27)
- Magnetic pickup tool
- Tape measure – 12'
- Inspection mirror
- Air hose – 3/8" x 50' (1/4" NPT) with universal female coupler
- Radiator hose pick
- Dual foot air chuck
- Trouble light – fluorescent, non-metallic
- Mechanic's creeper
- Tire tester – 120 psi capacity
- Circuit tester 9-12-24 volt
- Fluke 115 multi-meter
- Multi-meter, Temp Adapt & Probe
- Penlight (2 AAA cell pocket flashlight) Stylus
- Battery terminal cleaner
- Lock out tag
- Ear plugs on a band

Electric engraving tool	OTC Lifting Brackets (OTC7100)
Creeper hanger	50FT. EXT. Cord
Soldering electric gun 25/45W	Race Punch, Oval Bearing Punch 20"
Grease gun	Seal & O-Ring Removal Set 4 pcs.
Tube of grease for the grease gun	Miniature O-Ring Pick Set 4pcs.
Quart of oil	Welders Glove
Pry bar set	Supercuff Impact Glove
6" dial caliper	Certified Lifting Chains QTY 2 (Can Be
Drill bits 1/16" – 1/2"	Purchased From The Book Store)
Oil can, flexible spout	Punch, Drift Pin, 5/16"
Dial Indicator	Rim Tool (for split rims and rim lock rings)
Magnetic base	
Wrench, oil filter, strap, (1"-6" filter diameter)	
Channel Lock Oil Filter Wrench set #CHAOF2	
Eaton Fitting Card (Can be purchased at the	
Book Store)	
Pliers – 14" lock ring	
*Safety Toe Boots are required	

Complete diesel technician tool sets **may be** purchased from the LATI bookstore. Tools may also be purchased individually from many other sources. You are encouraged to shop around. Visit with area diesel technicians for additional information regarding tool selection.

REMEMBER – A career as a diesel technician starts with a set of *professional grade* tools. *Hobby grade* tools are NOT satisfactory for this occupation. Buying tools is a career long process necessitated by changing technology and the desire to do a job better and/or faster. As a tool set moves from basic to more complete, personal preferences regarding such things as brand, size, shape, and design play an increasingly important role in tool selection.

Questions regarding the purchase of a basic tool set through LATI may be directed to the LATI-Bookstore. Phone (605) 882-5284 Ext. 336.

Note: The composition of tool sets available from the various tool suppliers typically vary somewhat. A particular tool set may include "extra" tools, while a similar set may be "lacking" some tools listed on the LATI Diesel Technology tool list. Generally, the various tool sets will all provide satisfactory service to diesel technology students. If you have questions regarding the suitability of a particular tool set, contact the LATI Diesel Technology department (605) 882-5284 ext. 266.

Additional tools may be purchased throughout the year to "personalize" a tool set. For more diesel technology tools information, visit www.lakeareatech.edu.

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