

# SIUC AUTOMOTIVE TECHNOLOGY

## Required Tools List

On the first day of automotive classes, each student is required to have an automotive tool set that includes:

### General

1. Safety glasses \* (must be stamped with a Z 87 specification). Prescription glasses should have impact resistant lenses & side shields.
2. Locking toolbox (Roll Cabinet/Cart) with at least three main drawers
3. Metric/English 6" steel rule (mm & 64ths graduations) \*
4. Soft face hammer
5. Ball peen hammer, 24-32 oz.
6. Punch and chisel set (at least 9 piece)
7. Blade type feeler gauge (.0015 - .035)
8. Pick or Pick set \*
9. Pickup magnet
10. Inspection mirror
11. Tire pressure gauge
12. Tire air chuck (Note: The Automotive Department uses the Milton 777 air adapter for all labs. This adapter is available from the SIUC Automotive Parts Store \*)

### Wrenches

14. Metric hex key sets (at least 10 piece set)
15. Metric combination wrenches, 6mm thru 19mm

### Sockets

16. 1/4" drive ratchet, extension bars & driver handle
17. 1/4" drive, shallow sockets, 6mm thru 13mm
18. 1/4" drive, deep sockets, 6mm thru 13mm
  
19. 3/8" drive ratchet, extensions, & universal joint
20. 3/8" drive, shallow sockets, 9mm thru 19mm
21. 3/8" drive, deep sockets, 9mm thru 19mm
  
22. 1/2" drive ratchet, extensions, universal joint, & breaker bar
23. 1/2" drive, deep sockets, 10mm thru 19mm
  
24. Spark plug socket, 5/8" with protective inner sleeve, 3/8" drive. (extra length preferred)
25. Torx T-10 to T-50, (tamper-proof suggested)

### Screwdrivers

26. At least 3 Slotted
27. At least 3 Phillips

### Pliers

28. Slip joint pliers, 6" to 8"
29. Diagonal cutters, 6" to 8"
30. Long nose pliers, 6" to 8"
31. Arc joint pliers, 9" to 10" (Channel Lock)
32. Vise grip pliers, 8" to 10"
33. Brake spring pliers

**See other side**

## Electrical

34. Jumper wires \*
35. 12 volt test light (not high impedance) \*
36. T-pins (Typically available in sewing or craft department of discount stores) \*
37. Adjustable (or electronic high energy) ignition spark tester \*
38. Spark plug gauge (wire type) with sizes through .080"
39. Digital Multimeter

Features should include:

Diode check function, continuity test, fused overload protection, and spare fuses.  
(Optional features may include: Hz and duty cycle measurement, Min/Max, and protective case)

Minimum Specifications:

Input impedance (10 mega ohms for DCV/ACV)  
DC Volt accuracy:  $\pm 0.5\%$  of reading

Range specifications:

AC/DC Voltage	200 mV	200 V
DC Amperage	200 mA	10 A
Resistance	200 Ohms	2 Mega ohms

Meters meeting or exceeding above specifications can be found at:

Radio Shack  
Craftsman/Sears  
Snap-on Tools  
Matco Tools

## Optional Items:

1. Hacksaw with replacement blades
2. Dial caliper, 6" metal, .001 accuracy
3. 18mm spark plug socket
4. Metal gasket scraper
5. Plastic gasket scraper
6. Double end brake bleeder wrenches, sizes 3/8"-5/16" and 8mm-10mm
7. Rubber tip air nozzle (blow gun)
8. Tire tread depth gauge
9. Standard hex key sets (at least 10 piece set)
10. Standard combination wrenches, 1/4" thru 1"
11. 1/4" drive, shallow sockets, 3/16" thru 1/2"
12. 1/4" drive, deep sockets, 3/16" thru 1/2"
13. 3/8" drive, shallow sockets, 3/8" thru 13/16"
14. 3/8" drive, deep sockets, 3/8" thru 13/16"
15. 1/2" drive, shallow sockets, 1/2" thru 1"
16. Chain or cable (5'-6') with lock to secure toolbox within shop building

The SIUC Automotive Parts Store can assist in obtaining student discounts with various tool vendors. In addition, the on campus parts store stocks many of the specialty items listed above.

**Southern Illinois University Carbondale  
Automotive Technology**

**Fastenal**



Student discounted price for the entire package: **\$1815.76**.  
 PRICES ARE SUBJECT TO CHANGE.  
 Make money order or check payable to: Fastenal.  
 Tool delivery takes 6 to 8 weeks. *Early orders are encouraged.*  
 Include student's name in memo portion of check or M.O. and send to:

Erica Hallman, Fastenal  
 317 E. Main St  
 Carbondale, IL 62901  
 Fax: 618-457-8799  
 Phone: 618-457-0035

*Students must pick up their tools from the parts store at the TEC campus. Additional telephone inquiries concerning Fastenal Tool purchases may be directed to Cay Gerlock, SIU Automotive Parts Manager at 618-453-9142.*

**NOTE: YOU WILL NEED YOUR TOOLS BY THE FIRST DAY OF SCHOOL.**

Clear/Black Tomahawk Safety Glasses	02814387	3/8" Drive 6" Extension	0257916
Drawer Roll Cabinet	0220017	3/8" Drive Universal Joint	0257846
6" Stainless Steel Rule	0245742	3/8" Drive Metric Socket Set, 14 piece 6pt	0257847
12 oz Softface Hammer	0224609	3/8" Drive Metric Deep Socket Set, 14 piece	0257848
32 oz Ball Pein Hammer	0224602	1/2" Drive Ratchet	0227548
Punch and Chisel Set, 12 piece	0224613	1/2" Drive 5" Extension	0227550
Deluxe Feeler Gauge	0245714	1/2" Drive 10" Extension	0257931
Hook and Pick Set, 7 piece	0233587	1/2" Drive Universal Joint	0227485
Inspection Mirror	0267364	1/2" Drive 15" Breaker Bar	0207882
Pick-up Tool	0267365	1/2" Drive Metric Deep Socket Set, 10 piece	0257869
Tire Pressure Gauge	11580-00234	3/8" Drive 5/8" Spark Plug Socket	0257748
Hex Key Set, Long Arm 15 piece	82827	Torx Bit Socket Set, 13 piece	0257873
Metric Wrench Set, 15 piece	0257999	Combination Screwdriver Set, 12 piece	0257631
Combination Wrench, 6mm	0220796	8" Slip Joint Plier	0227625
Combination Wrench, 7mm	0223491	7" Diagonal Cutting Plier	0227623
1/4" Drive Ratchet	0257884	8" Long Nose Plier	0227624
1/4" Drive 3" Extension	0256905	9 1/2" Tongue and Groove Plier	0227622
1/4" Drive 6" Extension	0256907	10" Straight Jaw Locking Plier	0266227
1/4" Drive Spinner Handle	0238694	Heavy Duty Circuit Tester	0267839
1/2" Drive Metric Socket Set, 13 piece 6pt	0257740	HEI Ignition Tester	0245717
1/2" Drive Metric Deep Socket Set, 13 piece	0257742	Deluxe Feeler Gauge	0245714
3/8" Drive Ratchet	0257913	Fluke 77-4	0712581
3/8" Drive 3" Extension	0257915		

*Note: This offer does not include the following: Jumper Wire Kit or T-pins sold at the SIU Parts store.*

**Southern Illinois University Carbondale  
Automotive Technology**

**SNAP ON TOOLS**



Student discounted price for the entire package: **\$2252.10**. PRICES ARE SUBJECT TO CHANGE. Make money order or check payable to: Snap On Tools. Tool delivery takes 6 to 8 weeks. *Early orders are encouraged.* Include student's name in memo portion of check or M.O. and send to:

Tom Riffey, Snap-On Industrial  
10367 N. 22<sup>nd</sup> Ave.  
Harvel, IL 62538

Fax: 217-229-3183  
Cell: 314-443-6233

*Students must pick up their tools from the parts store at the TEC campus. Additional inquiries concerning Snap-On Tool purchases may be directed to Cay Gerlock, SIU Automotive Parts Manager at 618-453-9142.*

**NOTE: YOU WILL NEED YOUR TOOLS BY THE FIRST DAY OF SCHOOL.**

**9100AGMO:**

1/4" Dr. Metric Starter Set (17pc)  
1/4" Dr. Extension, 6" long  
1/4" Dr. Metric Deep Skt. Set, 6- Point (12pc)  
3/8" and 1/4" Dr. Torx Driver set (12pc)  
3/8" Dr. Sealed Ratchet  
3/8" Dr. Flex Head Sealed Ratchet  
3/8" Drive Adaptor Set  
3/8" Drive Extension, 11"  
3/8" Drive Metric Socket Set, 6pt (12pc)  
3/8" Drive Metric Deep Socket Set.  
1/2" Drive Metric Gen. Service Set, 6 pt (17pc)  
Metric Combination Wrench Set, 12pt (10pc)  
Metric Flare Nut Wrench Set, 6pt (6pc)  
Metric Hex Wrench Set (11pc)  
Pliers/Cutters (3pc)  
Adjustable Point Pliers  
Needle Nose Pliers  
Locking Pliers, 10" long  
Wire Stripper/Cutter Pliers  
Prybar, 16" long  
Punch and Chisel Set, (11pc)  
Plastic Tip Hammer  
Ball Peen Hammer, 16 oz  
Hacksaw  
Ignition/Spark Plug Gauge Set, 18 blades  
Metric Feeler Gauge Set, 20 blades  
Feeler Gauge Set, 6 blades  
Gapper Gauge  
Mirror  
Telescopic Pick Up Tool  
Carbon Scraper  
Scraper  
Circuit Tester

Battery Service Kit, (4 pc)  
Radiator Hose Tool  
Wire Brush  
Square Dr. Adapter  
Standard Shank Driver  
Hex Wrench Set, L shaped (10pc)  
Combination Screwdriver Set  
Ratcheting Magnetic Screwdriver  
Miniature Awl/Pick Set  
Spark Plug Retention Socket, 6 pt 13/16"  
Spark Plug Retention Socket, 6 pt 5/8"  
Retaining Ring Pliers, Convertible  
Metric Tape Rule, 5 M  
Adjustable Wrench, Cushion Handle 12"  
Pliers, Retaining Ring, Convertible  
Telescopic Pick-up Tool  
Wire Stripper with Cutter  
Flare Nut Wrench Set, 3/8" -13/16"  
Spark Plug Socket, 13/16", 3/8" Drive  
Spark Plug Socket, 5/8", 3/8" Drive  
Screwdriver Set  
Screwdriver, Ratcheting  
Long Shank Drive, 1/4" Drive  
Extension 1/4" Drive, 6"  
Pliers, Locking  
Tape Measure  
1/4" Drive, Deep Metric Socket Set  
1/4" Drive, Metric Starter Set  
1/2" Drive General Metric Service Socket Set  
Feeler Gauges, 3  
Feeler Gauge, Metric  
Extension 3/8" Drive, 12"  
Metric Flare Nut Wrench Set, 9-21mm

**KRA2007FPBO**

**Roll Cab, 7 Drawers, Red – included in price (subject to change)**

**EEDM503D**

**Multi Meter Manual Ranging**

*This offer doesn't include: Jumper Wire Kit, 6" Ruler, or T-pins sold at the SIU Parts store.*

**Southern Illinois University Carbondale  
Automotive Technology**

**NAPA Tool Set**



A sales representative of NAPA auto parts has offered NAPA hand tools listed below for about **\$1477.00**, tax and shipping included. PRICE IS SUBJECT TO CHANGE. This set can be tailored to suit your needs. Items you may already have can be omitted, and additional tools may be included. Total cost will be adjusted accordingly.

Sales contact is:           NAPA Auto Parts  
                                       Josh Stroud, District Manager  
                                       Ph# (618)924-1096  
                                       Email: jstroud@voglerford.com

Students must pick up their tools from the Automotive Parts Store at the Tec Campus. Telephone inquiries concerning NAPA hand tools may be directed to C.a.y. Gerlock, Parts Manager at (618)453-9142 or the sales rep listed above.

*Note: This offer does not include the following: Jumper wire kit or T-pins sold at the SIU Parts store.*

**YOU WILL NEED YOUR TOOLS BY THE FIRST DAY OF SCHOOL.**

**1/4" Sockets and Drive tools**

3" Extention  
Ratchet

**Six Point Metric Sockets**

6mm-13mm

**Six Point Metric Deep Sockets**

6mm-13mm

**Pliers**

8" Slip Joint  
10" Rib Lock  
8" Long Nose  
7" Vise Grip  
Brake Spring  
7" Diagonal

**Screwdrivers**

1/4"x4" Square Blade  
1/4"x6" Square Blade  
1/4"x8" Square Blade  
#1x3" Phillips  
#2x4" Phillips  
#3x6" Phillips

**3/8" Sockets and Drive Tools**

3" Extention   Ratchet  
6" Extention   Uni Joint

**Six Point Metric Sockets**

9mm-19mm

**Six Point Metric Deep Sockets**

9mm-19mm

**Punches and Chisels**

4pc. Chisel Set  
3/8"x5" Center Punch  
1/8"x5x5/16" Pin Punch  
3/16"x5-1/2"x5/16" Punch  
3/16"x9"x1/2" Long Taper  
5/32"x5"x3/8" Taper

**1/2" Sockets and Drive Tools**

6" Extention   Uni Joint  
15" Flex       Ratchet

**12 Point Metric Sockets**

10mm-19mm

**Metric Combination Wrenches**

6mm-19mm

**Misc. Tools**

Metric Hex Keys   Fluke Multi  
24oz. Ball Pen Hammer   Torx Set  
Soft Face Hammer   Pickup Mag  
Test Light   Pick Set  
Feeler Gauge   Inspect Mirror  
Saftey Glasses   Tire Gauge  
Spark Plug Gap   Tool Cart  
6" Steel Ruler

**All NAPA Hand Tools have a LIFETIME WARRANTY.  
 And can be replaced at any of our four local stores.  
 Carbondale 549-5700   Murphysboro 565-2200  
 Marion 993-2100   Herrin 942-6602**

**Southern Illinois University Carbondale  
Automotive Technology**

**Grainger**



Student Discounted Tool Offering: **\$1296.16** (Prices Subject To Change\*)

Checks & Credit Card Accepted (Please provide Students Name and checks payable to Grainger)

Tool Delivery time: 1 Week (Early orders are encouraged)

Nick Redington, Government Account Manager

Mobile: 573.823.8203

Email: Nicholas.redington@grainger.com

Students must pick up tools from SIUC Parts Store. Additional questions concerning Grainger purchases may be directed to Grainger rep above or Cay Gerlock, SIU Automotive Parts Manager. (618.453.9142)

*Note: This offer doesn't include the Jumper Wire Kit or T-pins sold at the SIU Automotive Parts Store.*

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Required Safety Glasses	3/8" Drive Sock Set 39pcs. (All Attachments)
Project Center Tool Chest (Rolling)	1/2" Drive Socket Set 17pcs. (All Attachments)
Metric/English 6" Rule	Spark Plug Socket 3/8" Drive, 5/8" inch 6 Pt.
Soft Face Hammer 12 oz.	Torx T10-T50/Non Tamper 3/8" Drive
Ball Pein Hammer 24 oz.	Screwdriver Set 8pc. (4 Slotted & 4 Phillips)
Punch & Chisel Set 12 pc.	Slip Joint Pliers 2pc. 6"-8"
Feeler Gauge Set 25 pc.	Diagonal Cutter 2pc. 6"-8"
Pick Set 2 pc.	Long Nose Pliers 2pc. 6"-8"
Magnetic Pickup 2lbs. Pull	Arc Joint Pliers 9 1/2"
Inspection Mirror 30"	Vise Grip Pliers 2pc. 9"-10"
Tire Press Gauge 10-75psi	Brake Spring Pliers
Clip on Ball Foot Air Chuck 0-150psi	Circuit Tracer Kit 18/24/36V
Hex Key Set 1.5mm-10mm L-Shaped	Spark Plug Wire Tester
Metric Wrenches, 6mm-20mm	Spark Plug Gauge (Wire Type)
1/4" Drive Socket Set 33 pc. (All Attachments)	Digital Multimeter Kit

**Southern Illinois University Carbondale  
Automotive Technology**

**MAC TOOLS**



Student discounted price (excluding taxes): **\$1541.16**. Free Shipping.  
Prices are subject to change.

All applicable contract terms and conditions apply.  
Tool delivery takes 6 to 8 weeks. *Early orders are encouraged.*

Bob Zubik, MAC Tools                      Cell    708-937-5325  
Bid Number: 750-2                        Fax    614-755-7177  
(Reference when placing order)

Students must pick up their tools from the parts store at the TEC campus. Additional telephone inquiries concerning MAC Tools purchases may be directed to Cay Gerlock, SIU Automotive Parts Manager at 618.453.9142.

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Ball Peen Hammer, 24 oz	BH24AV	Safety Glasses	S4500
Brake Spring Pliers	BSP4590P	½" Drive Spark Plug Socket, 5/8"	SC179RA
Multi Meter	EM710	Screwdriver Set, 6 pc	SDRB24APT
6/12 V Circuit Tester	ET111X	Soft Faced Hammer, 16oz	SFHF13
Adjustable Ignition Spark Tester	ET96019	Hex L-wrench Set, 9pc	SHKM9APA
Universal Feeler Gauge Set, 25 blade	FG002	¼" Dr. Metric Socket Set, 6pt (20pc)	SMM206BR
Spark Plug Gap Gauge w/ handle	FG4450	Metric Ratchet Wrench Set, 12pc	SRWM212K
¼" Dr. Extension, 2" long	M2EK	Tamper Proof Torx Set, 12 pc	ST12HB
Long Nose Pliers, 6"	M326G	½" Drive Metric Deep Skt Set, 6pt (10pc)	SVDM106TR
Arc Joint Pliers, 10"	M326G	3/8" Drive Metric Socket Set, 6pt (19pc)	SXM196BR
Curved Diagonal Pliers, 7 ¾"	M447G	Pencil Tire Gauge, 2-120psi	TG110
¼" Dr. Extension, 6" long	M6EK	Locking Straight On Chuck	TG400
Magnetic Pick Up	MHT1	½" Flex Handle, 18"	V18SF
Telescoping Mirror	MHTE2	½" Drive Extension, 3"	V3E
Machinist Rule, 6"	MPR6	½" Drive Extension, 5"	V5E
Slip Joint Pliers, 8"	P28A	Straight Jaw Vise Grip, 10	MLP10SJ
Punch and Chisel Set w/ handle	PCS1000K	½" Drive Metric Knurl Ratchet, 11"	VR11K
Mini Pick Set, 4 pc	PSM4	7 Drawer Roll Cabinet	MB4220B

*Note: This offer doesn't include the Jumper Wire Kit or T-pins sold at the SIU Automotive Parts store.*

**Make money order or check payable to: MAC Tools.**

**Please do not send credit card numbers via the internet.**

If paying by credit card, you will be charged for items when they ship. If any items are on backorder or ship from different warehouses, you will be charged for them as they ship. This may result in multiple charges to your card.

Fax to: 614-755-7177 or e-mail to [MTDE@stanleyworks.com](mailto:MTDE@stanleyworks.com) (if PO only)

Please include bid # 750-2 and applicable sales tax.