

# MTC AUTOMOTIVE TECHNOLOGY

## Required Tool List as of Fall Semester 2010

By the 10<sup>th</sup> day of classes, each student is required to have an automotive tool set that includes:

### General

1. Safety glasses
2. Ear Plugs
3. Fender cover
4. Air Blow Nozzle With Air Fittings Type "C" required
5. Tire Air Chuck With Air Fittings- Type "C" required
6. Tire Air Gauge
7. Wire Brush (12 inches minimum)
8. Magnetic Pickup Tool
9. Inspection Mirror
10. Air Conditioning Thermometer
11. 12' Extension Tape
12. Pocket Flashlight
13. 6" Steel Machinist Rule
14. 16 oz. Soft Face Hammer (Plastic and Rubber, not a rubber mallet)
15. 32oz. Ball Peen Hammer
16. Punch and Chisel Set (at least 12 pcs.)
17. 8" Brass Drift Punch
18. 4 pc Seal Pick Set
19. Oil and Gas Filter Wrench (Belt Type ½" drive)
20. Hack Saw
21. Spark Plug Gap Gauge Set (wire type: .035-.080)
22. Master Feeler Gauge Set .005 thru .030 w/45 degree blades & Straight Set .0015 thru.035
23. Gasket Scraper

### Brake

24. Brake Hold Down Spring Tool
25. Brake Return Spring Tool

### Screw Drivers

26. Slotted: 3", 6", 9", 12" & 1 Stubby & Pocket Screwdriver
27. Phillips: 6" - #1, 6" - #2, 12" - #3 & Stubby #2
28. Slotted Screw Starter
29. Phillips Screw Starter

### Wrenches

30. Standard Combination Wrenches: ¼" thru 1" (inclusive)
31. Metric Combination Wrenches: 7mm thru 19mm (inclusive)
32. Metric Line Wrench Set: 10mm thru 18mm (inclusive)
33. Standard Line Wrench Set: 3/8 thru 11/16 (inclusive)
34. 10" Adjustable Wrench
35. Standard Hex Key (Allen) Wrench Set (10 piece)
36. Metric Hex Key (Allen) Wrench Set (10 piece)

### Socket Sets

37. ¼ Drive Socket Set Including: Socket Rails or Organizers
  - a. Ratchet
  - b. Extension
  - c. Driver Handle
  - d. Metric Sockets (Short & Deep - 6mm thru 13mm inclusive)

- 38. 3/8 Drive Socket Set Including: Socket Rails or Organizers
  - a. Ratchet
  - b. Speed Handle
  - c. Extension Set: 3", 6", 24"
  - d. Universal Joint
  - e. Standard Sockets: 3/8' thru 7/8' - Deep and Shallow (inclusive)
  - f. Metric Sockets: 10mm thru 19mm – Deep and Shallow (inclusive)
  - g. 3/8 Drive Universal Spark Plug Sockets: 5/8" and 13/16"
  
- 39. 1/2 Drive Socket Set Including: Socket Rails or Organizers
  - a. Ratchet
  - b. Extension Set: 5" and 10"
  - c. Breaker Bar
  - d. Standard Sockets: 1/2" thru 1" (Short or Deep) (inclusive)
  - e. Torque Wrench – click type - 150 ft. lb. capacity (or higher)
  
- 40. 3/8" to 1/2" Adaptor
- 41. 1/2" to 3/8" Adaptor
- 42. Torx Bits: T-8, T-10, T-15, T-20, T-30, T-40, T-45, T-50, T60

Pliers

- 43. 7" Needle Nose Pliers
- 44. 7" Diagonal Pliers
- 45. 9" Interlock Joint Pliers (channel lock)
- 46. 9" Standard Common Pliers
- 47. Vise Grip Pliers (8" to 10")
- 48. Spark Plug Wire Removal Pliers
- 49. Snap Ring Plier Set w/Tips for Internal & External Operations & Flat Tip Trans. Pliers

Electrical

- 50. 12 Volt Test Light
- 51. Battery Side Post Cleaner (Alternate is small brass wire brush 6" min.)
- 52. Battery Top Post Cleaner
- 53. Digital Multi-Meter: 10 Mega-Ohm Impedance-
  - Specs:
  - AC Voltage: 0-750 VAC
  - DC Voltage: 0-1000 VDC- Capable of reading 1 mv,
  - DC Current: 0-10 ADC- Capable of reading 1 mA,
  - AC Current :Same as DC specs
  - Resistance: 0-20 Mega Ohms

Tool Storage

- 54. 28" Tall or Larger Professional Quality Tool Box w/Casters
  - 40" long x 20" wide maximum size allowed
  - (Hand held boxes not allowed)

Students Name: \_\_\_\_\_

SID #: \_\_\_\_\_

Date: \_\_\_\_\_

Instructor Verification: \_\_\_\_\_

Semester: \_\_\_\_\_