

# GTCC Automotive Systems Technology Program

## Required Tools List

Each student must purchase the tools listed below as a requirement to participate in the Automotive Systems Technology Program – Ford ASSET. (Tools need to be available for the first co-op session in November.)

### 1/4" Drive

- 1- Complete Socket Set-Metric

### 3/8" Drive

- 1- 3/8" Drive Ratchet- approximately 12" in length
- 1- 3/8" Drive Extension- 1" in length
- 1- 3/8" Drive Extension- 3" in length
- 1- 3/8" Drive Extension- 6" in length
- 1- 3/8" Drive Extension- 12" in length
- 1- 3/8" Drive Universal Joint
- 1- 3/8" Drive Spark Plug Socket, 5/8" (Deep well)
- 1- 3/8" Drive Deep Metric Sockets- 6-19mm
- 1- 3/8" Drive Shallow Metric Sockets- 6-19mm
- 1- Set Torx Drive Bits 10-55 - inside
- 1- Set Torx Drive Bits 10-55 - outside
- 1- Set Metric Hex (Allen) Sockets

### 1/2" Drive

- 1- 1/2" Drive Impact Socket Set- Metric (Deep well)
- 1- 1/2" Drive Impact Wrench

### Wrenches

- 1- Set Metric Combination Wrenches 7-19mm
- 1- Adjustable Wrench- 12"

### Pliers

- 1- Pair Slip Joint
- 1- Pair Diagonal Side Cutting
- 1- Pair Needle Nose-Long
- 1- Pair Adjustable Joint (Channel Lock) 12"
- 1- Pair Locking (Vise Grips) 10"

### Screwdrivers

- 4- Straight Blade- 1 each: Stubby, small, medium, large
- 4- Phillips Screwdrivers- #1, #2, #2 Stubby, and #3

### Miscellaneous

- 1- Tool Cabinet or Cart, Lockable with Drawers
- 1- Ball Pein Hammer-Large (24oz)
- 1- Safety Goggles/Glasses (Instructor Approved)
- 1- Gasket Scraper
- 1- Set Feeler Gauges- Metric and Standard Graduations
- 1- Oil Filter Removal Tool (Plier-type)
- 1- Measuring Tape
- 1- Spark Plug Gap Adjusting Tool
- 1- Pry Bar (24-36")
- 1-Tire pressure gauge
- 1-Air chuck (tire inflation tool)
- 1-Valve core tool
- 1-Flashlight with spare batteries and spare bulb
- 1-Digital Volt Ohm Meter (Instructor Approved)

### Optional Tools

(Recommended but not required)

- 1- 3/8" Drive Impact Wrench (cordless recommended)
- 1- Cordless Drill/Driver
- 1- Razor Scraper
- 1- 3/8" Drive Spark Plug Socket, 13/16"
- 1- 3/8" Drive Deep Socket Set- 1/4"-7/8" 6 pt.
- 1- 3/8" Drive Shallow Socket Set- 1/4"-7/8" 6 pt.
- 1- 3/8" Drive Universal Metric Socket Set-Impact
- 1-1/2" Drive Socket Set Metric-13mm to 24mm
- 1- 1/2" Drive Ratchet- approximately 12" in length
- 1- 1/2" Drive Socket Set Standard- 7/16" to 1"
- 1- 1/2" Breaker Bar approximately 24"
- 1- 1/2" Drive Extension 3"
- 1- 1/2" Drive Extension- 10"
- 1- Set Allen Wrenches- Standard
- 1- Set Allen Wrenches- Metric
- 1- Set Torx Screwdrivers
- 1- Universal Snap Ring Pliers
- 1- Set Std. Combination Wrenches (1/4" - 1")
- 2- Drum Brake Spring Tools- Return and hold-down
- 1- Brass Punch
- 1- Center Punch
- 1- Pin Punch
- 1- Cold Chisel