CTE Frameworks - Power Equipment Technology Equipment List

March 2025



## Suggested Equipment

### Health and Safety

* First Aid Kits
* Fire Extinguisher
* Fire Blanket
* Hard Hats
* Work Gloves
* Safety Boots
* Safety Goggles/Face Shields
* Hearing Protection
* Respirators or Face Masks
* Knee Pads
* Protective clothing
* Chemical Spill Kits
* Lockout/Tagout Kits
* Safety Signs & Labels
* Eye Wash Station

### Classroom Technology and Instructional Tools

* Projector or Interactive Whiteboard
* Computers or Tablets
* Document Camera
* Diagrams and Posters
* Engine Diagnostic Simulators, software available from John Deere, Caterpillar Education
* Computerized Maintenance Management Systems (CMMS) e.g., **UpKeep** or **Fiix** simulates the maintenance process
* Small engine models and training kits, e.g., Circuit and Electrical Simulation Boards, Hydraulic and Pneumatic Training Kits, Fuel System and Carburetor Trainers, Cutaway Models of Common Machinery, Chainsaw and Mower Model Kits

### Hand Tools

* Adjustable wrenches
* Combination wrenches (various sizes)
* Socket wrenches with ratchets and extensions
* Torque wrenches
* Basin Wrench
* Flathead screwdrivers (various sizes)
* Phillips screwdrivers (various sizes)
* Precision screwdrivers (for smaller fasteners)
* Needle nose pliers
* Channel lock pliers
* Slip-joint pliers
* Wire cutters and crimping pliers
* Locking pliers (C-clamps)
* Claw hammer
* Ball-peen hammer
* Rubber mallet (for non-marring applications)
* Utility knives
* Hacksaw (with extra blades)
* Tin snips
* Pipe cutters (for certain piping systems)
* Hand files: Flat, round, and half-round files
* Crowbar
* Scraper
* Pry bars (for disassembling parts)
* Flashlight or headlamp
* Lubricating tools (oil cans, grease guns)
* Soldering tools
* Spring Scales
* Toolboxes or Tool Carts

### Measuring Tools

* Tape measure (metric and imperial)
* Calipers (digital or dial)
* Micrometer
* Feeler gauges
* Pin Gauges
* Digital Depth Gauge or Vernier Depth Gauge
* Bore Gauge
* Protractor (Angle Gauge)
* Thread Pitch Gauge
* Digital Thermometer or Infrared Thermometer
* Laser Alignment Tools (Optional)
* Laser Measurement Tools (Optional)

### Power Tools

* Cordless drill
* Corded drill (for heavy-duty applications)
* Drill bits (assorted sizes, including specialized bits for metal and wood)
* Angle grinder
* Bench grinder
* Die grinder
* Circular saw
* Reciprocating saw (sawzall)
* Jigsaw
* Chop saw
* Cordless impact wrench
* Air impact wrench
* Orbital sander
* Belt sander
* Palm sander
* Cordless electric screwdriver
* Pneumatic ratchet
* Pneumatic impact wrench
* Pneumatic grinder
* Heat Gun
* Blower or Compressed Air Tool
* Power Washer

### Specialty Tools

* Valve Spring Compressor
* Impact Driver
* Carburetor cleaning kit (with brushes and cleaning solvents)
* Carburetor synchronizer
* Gear pullers
* Steering wheel puller
* Bearing Puller
* Bearing Separator
* Pilot Bearing Puller
* Clutch Alignment Tool
* Flywheel Puller
* Hydraulic Press or Puller
* Trim Puller
* Exhaust Pipe Cutter
* Spark Plug Wrench
* Stud Extractor
* Torque Angle Gauge
* Compression Tester
* Bearing Press
* Fuel Line Disconnect Tool
* Chain Breaker Tool
* Flaring Tool
* Spring Compressor
* Tire changing equipment and tools

### Engine Diagnostic Tools:

* Engine compression tester
* Coil Tester
* Spark plug tester
* Multimeter
* Tachometer
* Dynamometer
* Fuel pressure gauge
* Timing Light
* Smoke Machine
* Fuel Injector Tester

### Hoisting Equipment

* Hoists: Mechanical or Electric (e.g., chain hoists, electric hoists, and manual hoists, engine hoists)
* Jacks
* Hydraulic Jacks
* Hydraulic Lift
* Engine Lifting Straps
* Chains
* Pulleys and Blocks
* Trolley Jack or Hand Truck
* Creeper

### Welding Equipment

* TIG or MIG welder or Stick welder
* Welding helmet and gloves
* Welding clamps
* Cutting Torch
* Angle Grinder