

Name: _____ Date: _____
 Instructor: _____ Period: _____

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Power Tools & Equipment

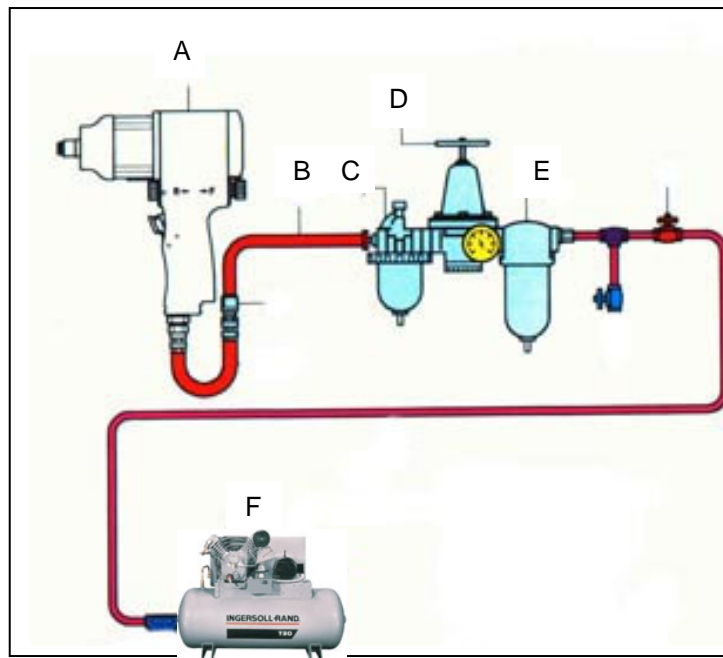


Objective: After studying this chapter, you will be able to select and use power tools properly.

Compressed Air Systems

1. An air compressor is a machine by which _____ is drawn in, _____ into a tank or cylinder, and stored, so that its expansion or release may be utilized as a source of _____ power.
2. What is the recommended maximum operating pressure of a shop air compressor? _____
3. What tools are necessary to disconnect a "Quick Disconnect" coupling? _____
4. A pressure _____ sets and controls the compressor's operating pressure.
5. Identify the six (6) components of an air system:

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____
 F. _____



Air Tools

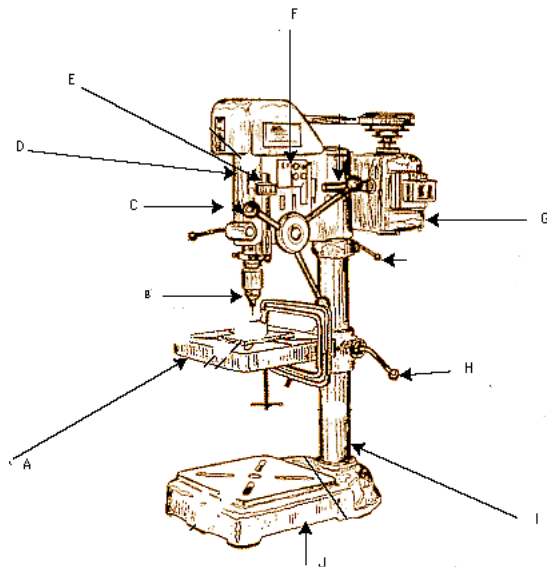
6. _____ tools or air tools are tools driven by _____ air supplied by a _____.
7. Air tools need to be periodically _____ to minimize _____ to assure _____ service life.
8. Air wrenches are designed to remove and install metal _____, _____.
9. Air impact rotation is typically controlled by a _____ or _____.
10. The technician must use great care not to _____ bolts, nuts, or fasteners when using an air wrench.
11. An air ratchet is used to work in _____ - _____ - _____ places where other tools might be _____ or _____ to use.

12. The drive-end of an air ratchet is typically ____ “square, however, they also come in ____” or ____” sizes as well.
13. An air hammer is a device that uses highly pressurized air to drive a hammer into a work piece for _____, _____, and _____.
14. Whatever tip is used, it will be pounded _____ of times per minute into the targeted object, so operators must take _____ and use _____.
15. The air hammer must be placed directly _____ the work _____ to prevent the driven bit from flying out of the end of the tool and causing _____ or _____.
16. A solvent gun is used to clean _____ that do not fit into a solvent _____.
17. An air-powered blow gun is used to _____ or clean out the inside of _____ to _____ areas of _____.
18. List four reasons an air drill is ideal for some drilling jobs: _____, _____, _____, and _____.
19. Rotary _____ and _____ disks can be used with the air drill at _____ speeds to clean heavy _____ deposits and de-burr _____ metal edges easily.

Electric Tools

20. A bench grinder usually has a _____ and a _____ wheel.
21. List three (3) common uses for a bench grinder:
 A. _____ B. _____
 C. _____
22. List the four (4) essential rules to observe when safely operating a bench grinder:
 A. _____ B. _____
 C. _____ D. _____
23. Drill bits are made of _____ - _____ steel or _____ - _____ steel or **titanium**.
24. The drill bits are clamped into the drill _____ using the _____ to tighten it.
25. The drill motor is usually sized by the _____ diameter drill bit that will fit into the drill chuck.
26. The drill press gives you _____ and _____ drilling.
27. List the five (5) essential operating rules for a drill press:
 A. _____
 B. _____
 C. _____
 D. _____
 E. _____
28. Identify the parts of the illustrated drill press shown:

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____
 F. _____
 I. _____
 J. _____



Hydraulic Tools

29. Hydraulic tools used high pressure _____ to exert the necessary forces.
30. List the correct locations under a vehicle to place a floor jack for lifting without damaging the vehicle: A. _____ B. _____ C. _____
31. A _____ jack uses specially designed _____ to hold the transmission securely to the jack and allows the unit to be _____ as necessary to facilitate transmission installation.
32. An Engine Hoist can be used to remove and install engines or other heavy engine parts, such as _____ or cylinder _____.
33. A hydraulic _____ is used to remove, reassemble, and re-install bearings, gears, shafts, and other subassemblies requiring great controlled _____ or _____ force.

Shop Equipment

34. An _____ press is similar to a hydraulic press, but uses a screw type jack to exert force.
35. **Never** work under or around a vehicle that is raised and not supported by _____.
36. Once the engine has been removed from the vehicle, it can be mounted securely to an _____ to facilitate working on the engine.
37. A cold _____ tank contains a cleaning solution used to sanitize automotive parts and subassemblies before repair and reinstallation.
38. A _____ is an engine powered device that uses high-pressure water to remove heavy deposits of dirt and grease from automotive _____ and subassemblies.
39. Oxy-Acetylene torch is used to _____ metals.
40. Oxy- Acetylene welders can also be used for _____ **and** _____ metals.
41. Recharging an automotive battery produces a cloud of gas around the battery that is _____ and _____. To prevent this from happening, unplug the battery charger from the wall _____ disconnecting from the battery.
42. A. portable _____ provides light when working under the hood or under a vehicle.
43. _____ – can be used to start a vehicle with a dead battery by _____ to another vehicle that has a good battery.
44. A _____ is used by a technician to lay on when working under a vehicle, and should **always** be stood up out of the way when not in use.
45. Smaller, portable tool carts are also called _____ - _____ and are used to hold a limited number of tools for easy access for a specific task.
46. To protect the finish and visual appearance on any vehicle being worked on, a technician should **always** use _____.