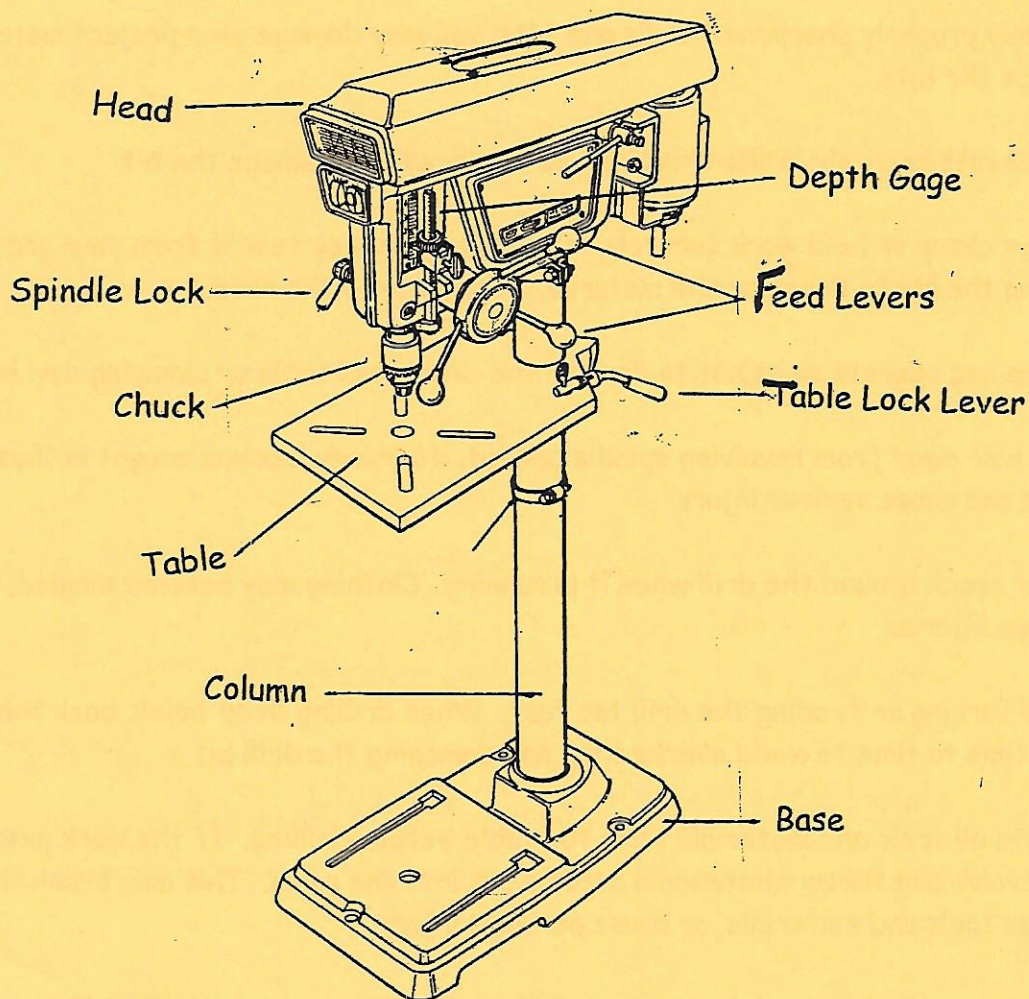


HOLMEN MIDDLE SCHOOL TECHNOLOGY & ENGINEERING
SAFE PRACTICES FOR THE DRILL PRESS

The drill press is a power machine used for drilling accurate holes in wood, metal, plastic, and other materials. They are available in both floor and bench top models and are made by a variety of manufactures. No matter what model or make of drill press you use, you will find that all have the same basic parts and operate in the same way. In addition to drilling, the drill press may also be used for drum sanding.

Looking at a picture of a drill press, you will see that it rests on a metal casting called a base. A large metal column extends from the base. The table on which the work to be drilled is supported, is attached to the column. The table is adjusted for height by loosening the table lock lever and either sliding or cranking the table up and down the column.



The head of the drill press is fastened to the top of the column. The head of the drill press contains all the rest of the working parts of the drill press. The drill bit is fastened in the chuck and tightened with a chuck key. The drill bit is lowered to the work by turning the feed levers. Do not let the feed levers snap back after drilling or you may damage the drill press. A depth gage is usually located on the right hand side of the drill press.

This device allows you to drill holes to a given depth. The depth gage is set by lowering the drill bit to the proper depth and then adjusting the stop nuts which are located on the threaded depth gage. Most drill presses also have a spindle lock which allows you to lower the chuck and then lock it in the down position for such operations as drum sanding.

Listed below are some important rules to follow to prevent injury to yourself, damage to the drill press and damage to your project.

SAFE PRACTICES FOR THE DRILL PRESS

1. Use only properly sharpened drills and bits; you may damage your project material or damage the bits.
2. Fasten bits securely in the chuck or you may break or damage the bit.
3. Always clamp or hold work securely. The drill press may tear it from your grasp causing the bit to break or the material to fly out into the room.
4. Set up and operate so as not to damage the drill press table or clamping devices.
5. Keep hair away from revolving spindle and bit. Hair may become caught in these moving parts and cause serious injury.
6. Never reach around the drill when it is running. Clothing may become tangled, causing serious injuries.
7. Avoid forcing or feeding the drill too fast. When drilling deep holes; back the drill out from time to time to avoid overheating and damaging the drill bit.
8. Remove all tools and materials from the table before drilling. If the work gets loose it will revolve and throw whatever it strikes out into the room. This may break the bit, damage tools and materials, or cause personal injury.
9. Always remove the chuck key before drilling. If not removed, it will be thrown out into the room, possibly causing personal injury.
10. Remove chips with a brush to avoid getting slivers in your hands.