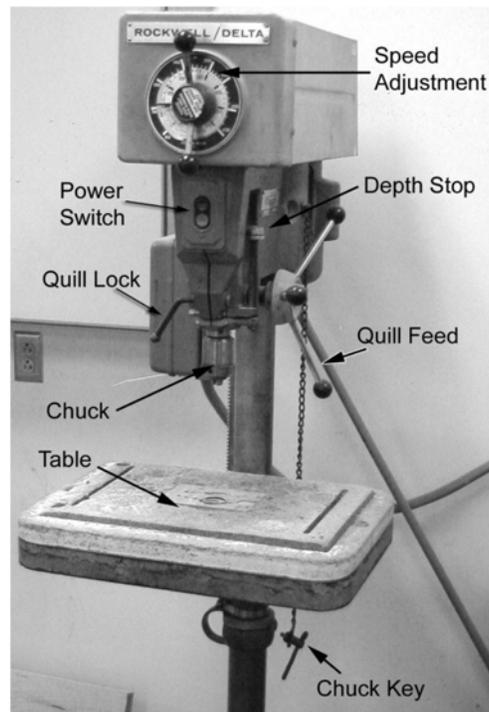


DRILL PRESS



The drill press is an excellent machine for drilling accurate holes and is invaluable when drilling large holes. It consists of a motor/head assembly, chuck, and work table. Any uses other than drilling holes are **special setups** and must be approved by the supervisor.

1. The procedure of changing spindle speed varies from drill press to drill press. Check with your supervisor to making speed adjustments.
2. Be certain that the table and head of the drill press are secure.
3. Select the proper drill bit for the job and avoid dull bits.
4. Insert the drill bit in the chuck properly and tighten it securely before starting the drill press.
5. Remove the chuck key before turning on the power and before leaving the area of the drill press. If the chuck key is not removed it will be thrown out from the chuck at a tremendous speed when the power is turned on.
6. Use clamps or a drill vise whenever necessary to secure small or odd shaped work firmly.
7. Larger bits should be run at slower speeds and smaller bits at higher speeds. This keeps the cutting edge of the bit at a reasonable speed.
8. Use a backer board under the work or be sure the bit is over the center hole in the table when boring completely through your work.
9. Keep hands away from the rotating spindle.
10. Operate the feed lever so that drill cuts at a consistent feed rate into work.
11. Ease up on feed pressure when the bit begins to break through the work.
12. Back the bit out often to clear chips from the hole.

13. When boring to a given depth, use the depth adjustment nut or feature.
14. Stop the drill press before removing your work.
15. If work comes loose and is seized by the drill press, shut off the power immediately if you can do so without endangering yourself. If it is impossible to shut off the power, move away from the machine and move others away. Notify the supervisor immediately.

DRILL PRESS TEST

1. Small work should be held on the drill press:
 - a. in your hands.
 - b. in a vise or firmly clamped.
 - c. by an assistant.
 - d. never; it should be cut with a hand-held drill.

2. When operating the drill press you should:
 - a. keep your head away from your work, so an eye shield is not necessary.
 - b. always use eye protection.
 - c. wear an eye shield only if aluminum is being drilled.
 - d. All of the above.

3. Remove the chuck key from the chuck to prevent:
 - a. the chuck from being damaged.
 - b. breaking the chuck key.
 - c. the chuck key from being thrown out at a tremendous speed.
 - d. the chuck from becoming unbalanced.

4. If a drill bit catches in your work causing the work to revolve:
 - a. exert more feed pressure.
 - b. stop the machine immediately if possible without endangering yourself. Otherwise, move away from the machine.
 - c. grab the work piece with your hand.
 - d. decrease feed pressure.

5. Large bits should be run at:
 - a. Higher speeds.
 - b. Lower speeds.
 - c. It doesn't matter.
 - d. None of the above.