

Exploration in Technology --- GENERAL SHOP RULES

- 1. Always take off jewelry before working in the lab.**
- 2. Never run or horseplay in the lab.**
- 3. Never use a tool that is broken or dull.**
- 4. Wear safety glasses in the lab at all times.**
- 5. Never wear open toed shoes or sandals in the lab area.**
- 6. Always wear a hat or tie up long hair.**
- 7. Never test the sharpness of cutting tools on your hand or skin.**
- 8. Never leave oily or finishing rags out in the open. Place them in the proper receptacle.**
- 9. Always use a vise or a clamp to hold down a work piece before cutting or sawing it.**
- 10. Never leave scrap wood laying around on the floor, benches, or equipment.**
- 11. Never cut toward your body or hands with a knife or other sharp tools.**
- 12. Report all accidents to the instructor immediately no matter how small.**
- 13. Never carry more than two tools at a time even if they are not sharp.**
- 14. Always carry sharp pointed tools such as screwdrivers and chisels away from your body with the point down.**
- 15. Never carry sharp pointed tools such as chisels and screwdrivers in your pockets.**
- 16. Never talk with another student when either one of you is operating a power tool.**
- 17. After using a bench vise, always make sure the vise is closed with the handle pointed down.**
- 18. Always obtain permission from the instructor before using any power tool.**
- 19. Never enter unauthorized areas without permission from the instructor.**

- 20. Never use any tools or equipment without first being trained, informed, and passing the safety test.**
- 21. Always unplug portable power tools when not in use.**
- 22. Never carry portable power tools by the cord or abuse the cord in any other manner.**
- 23. Never leave clamps of any kind loose on the floor.**

POWERMATIC 18 INCH BANDSAW

- 1. Always make sure all guards are in place and closed before starting the saw.**
- 2. Never cut a work piece without first marking the cut in pencil.**
- 3. Use “relief-cuts” on tight curves.**
- 4. Make sure to use the correct blade width for the radius of curve being cut.**
- 5. Never have the upper blade guide more than ¼ inch above the work.**
- 6. Never back out of curves while the saw is running.**
- 7. Always check and make sure the guides and the throat plate are clear of chips before turning on the saw.**
- 8. Never clear wood and chips from the saw while it is running.**
- 9. Never stand to the right of the saw while it is under operation. (Very important.)**
- 10. Never have your fingers inline with the cutting path of the blade.**
- 11. Never “overfeed” the work through the bandsaw.**
- 12. When a bandsaw blade breaks quickly get away from the machine and turn the power off at the service box.**

24 INCH POWERMATIC SCROLLSAW

- 1. Always make sure the teeth on the blade are pointed down.**

2. **Never make a curve tighter than the blade width can handle.**
3. **Always mark the cut on the board with a pencil before cutting.**
4. **Always adjust the top guide so it is just touching the workpiece.**
5. **Never bend or bind the saw's blade by "overfeeding" or turning too tight of a radius.**
6. **Always keep your fingers out of the path of the saw's blade. (Any tool can cut you if you put your finger in contact with the blade or cutter.)**
7. **Never clean chips from around the blade without first turning the saw off.**

POWERMATIC FLOOR MODEL BELT AND DISK SANDER

1. **Never leave tools or materials on the machine.**
2. **Never dig sharp corners of materials into the moving belt of the sander.**
3. **Inside curves maybe sanded on the end of the belt sander. Place the piece over the drum portion, which is located at the opposite of the disk end.**
4. **Always make gentle contact with the workpiece on the belt or disk.**
5. **Never sand sharp pointed objects on the belt portion of the sander.**
6. **Only sand on the half of the disk, which turns down against the table. (Left half)**
7. **Never have more than one person at a time using the sanding machine.**
8. **Never stand directly behind and inline with the sanding belt.**
9. **Never use the sander with a damaged belt or disk.**
10. **Always make sure the sanding belt is tracking correctly.**
11. **Never sand pieces of materials that are so small that they cannot be held with your fingers located more than 2 inches from the belt or disk.**

12. Never push hard against the belt or disk with your work. This will cause your material to be burned and wear on the belt or disk causing early replacement and unnecessary costs.

PORTABLE ELECTRIC HAND DRILL

- 1. Always unplug the drill before changing the bit.**
- 2. Before drilling always check and make sure the adjusting key is removed from the drill's chuck.**
- 3. Never leave the drill plugged in after it has been used. Idle power tools should always be unplugged.**
- 4. Never carry the drill around with your finger on the trigger.**
- 5. Always tighten the bit in the chuck using the adjusting key in all three holes.**
- 6. Never abuse the power cord.**
- 7. Always remove the bit before storing the drill.**
- 8. Never force or "overfeed" the drill to cut through the work faster.**
- 9. Never hold the workpiece up in the air with one hand and drill with the other. The work piece should always be clamped to the workbench first.**
- 10. Never use a dull, broken, or bent drill bit to drill with.**

DRILL PRESS

- 1. Always keep your hands and fingers outside the 4-inch danger zone while the machine is in operation.**
- 2. Clamp small wood pieces and all metal pieces to the drill press table or in a drill press vise.**
- 3. Always remember to remove the adjusting key from the chuck before turning the drill press on.**
- 4. Always clamp cylindrical stock in a v-block before attempting to drill.**

5. **Disconnect the power before changing or working near any cutting tool's blades or bits.**

PNEUMATIC NAIL GUN

1. **Always ask for permission before using this tool.**
2. **Never plug in the nail gun to the air hose until you are absolutely ready to use the tool.**
3. **Never aim the nail gun at anyone.**
4. **Always make sure you are using the correct size of fastener.**
5. **Never load fasteners without first unplugging the air hose from the tool.**
6. **Always makes sure the pieces of material that you are fastening are secure and clamped before using the nail gun.**
7. **Make sure the gun is completely in contact with the work piece before squeezing the trigger.**
8. **Be aware that nails could shoot completely through the wood and do not have any part of your body in position to be shot with the nail if this situation were to occur.**
9. **The Pneumatic nail gun will only fasten wood material. Do no shoot nails into clamps, bench tops, metal vices, concrete floor, etc. as this will damage the nail gun.**

AIR HOSE / BLOWGUN

1. **Having an air blowgun is a privilege not a necessity in the lab. Abuse this tool and it will be removed from student use.**
2. **Never point blowgun at anyone.**
3. **You may use the blowgun to clean yourself off from the "neck down". Never point the blowgun at your face or head.**
4. **Always keep the blowgun 4 inches away from your skin and body.**
5. **The blowgun may be used to clean off tools, bench tops, projects, etc. but it is the operator's responsibility to minimize the creation of air born dust.**

6. **When finished using the air hose and/or blowgun it is the operator's responsibility to roll the hose back up off the floor. Never leave the air hose out on the floor**

HOLLOW CHISEL MORTISER

1. **Never turn the machine on without first making sure the table is clear of all objects and scraps.**
2. **Always keep hands, fingers and hair away from the rotating bit.**
3. **Do not attempt to mortise material that does not have a flat surface, unless a suitable support is used.**
4. **Always position holddown directly over workpiece to prevent workpiece from lifting during operation.**
5. **Always support workpiece securely against fence to prevent rotation**
6. **Adjust the depth stop to avoid drilling into the table.**
7. **For your own safety never wear glove or loose clothing when operation the machine.**