

## 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.

## **MODEL 66 POWERMATIC TABLESAW**

- 1. Never use this saw without direct permission from the instructor.**
- 2. Never operate the tablesaw without machine guards in place.**
- 3. Always keep the saw table and work area free of scrap materials.**
- 4. All adjustments to the tablesaw are to be made with the power off. Never place your hands near the blade without disconnecting the power at the service box!!!**
- 5. The tablesaw blade should never be more than 1/8 inch above the thickness of the material being cut.**
- 6. Never attempt to saw boards with loose knots, or with nails. Do not attempt to saw twisted, warped, or bowed stock.**
- 7. Always make sure on edge of the board has been jointed and is straight before cutting on the tablesaw.**
- 8. Never crosscut using the ripfence.**
- 9. Never use the miter gauge in combination with the ripfence. (Exception when a gauge block is properly mounted on the ripfence. See instructor.)**
- 10. Do not ever overreach. Always keep your balance. Use a “tailman” to help take stock away from the back of the tablesaw.**
- 11. Never stand directly behind the cutting path of the saw.**
- 12. When ripping narrow pieces under 4 inches in width (distance between the fence and blade) always use a push stick.**
- 13. Keep loose clothing in check. Roll shirtsleeves above the elbow. Never wear gloves when operating the tablesaw.**
- 14. Never ever saw a board free hand with the table saw. The fence, miter gauge or other fixture must always be used.**

## **DELTA RADIALARM SAW**

- 1. Never use this saw without direct permission from the instructor.**
- 2. Never operate the radialarm saw without the machine guards in place.**
- 3. Always keep the saw table and work area free of scrap materials.**

## **Radialarm continued.....**

- 4. All adjustments are to be made with the power off. Never place hands near the blade without unplugging the saw first.**
- 5. Before turning on the radial arm saw, always make sure the blade is not in contact with the board and is free to move. (Very important)**
- 6. Make sure you are holding on to the saw by the handle before turning on the power.**
- 7. Always keep hands and fingers 6 inches from the blades' cutting path.**
- 8. Always use a steady feed. The blade will try to run through the workpiece so expect this and hold back on the handle.**
- 9. Never clear scrap and chips from around the saw blade with it is running or coasting.**
- 10. Always butt the workpiece against the fence before cutting. Keep the fence clear of chips.**
- 11. Always know where your hands and fingers are in respect to the blade and its cutting path. (Pay particular attention to your left thumb.)**
- 12. Keep loose clothing in check. Roll shirtsleeves above the elbow. Never wear gloves when operating the radial arm saw.**

## **MODEL 180 20" POWERMATIC SURFACER**

- 1. Never use the surfacer without direct permission from the instructor.**
- 2. Never stand directly behind the board being fed into the machine. Always stand to the side of the feed path. (Both on in-feed and out-feed sides.)**
- 3. Never stoop down to watch a board being surfaced. (Both on in-feed and out-feed sides.)**
- 4. Never simultaneously feed several pieces of stock with uneven thickness through the machine.**
- 5. Do not remove more than 1/8 inch of material per pass.**
- 6. If a work piece gets hung-up or stuck in the surfacer, disengage the feed and turn the machine off. When the machine comes to a full stop then the piece may be removed.**
- 7. Always keep your hands outside the machine. Never reach under the guards to try and clear stock that stops feeding.**
- 8. Do not let your hands get between the workpiece and the in-feed or out-feed tables.**
- 9. Never surface boards less than 12 inches in length.**

**Surfacer continued...**

- 10. Do not surface boards with loose knots or nails. Twisted or warped boards should first be jointed.**
- 11. The surfacer will not safely plan boards thinner than ¼ inch without a special set up.**
- 12. Keep loose clothing in check. Roll shirtsleeves above the elbow. Never wear gloves when operating the surfacer.**

### **8 INCH POWERMATIC LONG BED JOINTER**

- 1. Never use the jointer without direct permission from the instructor.**
- 2. Never operate jointer without machine guard in place and functioning properly.**
- 3. Students are not allowed to adjust the jointer for any reason without first checking with the instructor.**
- 4. Never face or edge joint any stock with a length less than 12 inches. (Very important.)**
- 5. Never attempt to joint a board with loose knots or nails.**
- 6. Never face joint a board without using the push paddles.**
- 7. Never stand or let anyone stand directly behind and in-line with the in-feed table.**
- 8. Do not overfeed! Use a steady consistent feed with constant down pressure.**
- 9. Always be aware of where your fingers are. A common mistake leading to injury is to allow fingers to trail behind the board within reach of the cutters.**
- 10. Keep loose clothing in check. Roll shirtsleeves above the elbow. Never wear gloves when operating the jointer.**

### **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.**

### **Bandsaw continued.....**

- 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.**

### **Disk and Belt sander continued....**

- 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.**

### **PORTABLE ROUTER**

- 1. Always unplug the cord when changing the router's bits and making adjustments.**

**Portable router continued.....**

- 2. Always clamp down small pieces to a workbench.**
- 3. Always hold the router securely by both handles.**
- 4. Never reach underneath the stock to support it while routing.**
- 5. Take only light cuts to prevent overloading the machine.**
- 6. Always move the router in a counterclockwise direction when making a cut.  
(Counterclockwise is left to right.)**
- 7. Do not rest the router against your body at any time.**
- 8. Always make sure the router is switched off and lying on its side before plugging it in.**

### **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.**

### **POWERMATIC WOOD LATHE**

- 1. Check to see that the stock is free of cracks, knots, and/or poor glue joints.**
- 2. Lock the tailstock, tool rest, and tool post securely before turning on the power to the lathe.**
- 3. After centering the stock and positioning the tool rest, rotate the stock by hand to check and make sure the stock will clear the tool rest.**
- 4. Position the tool rest 3/8 inch or less from the stock.**
- 5. Position the tool rest 1/8 inch above the lathe centers.**
- 6. Always stand to one side of the lathe when turning on the power.**
- 7. Always rotate rough stock at the slowest possible speed.**

**Wood Lathe continued...**

- 8. Turn stock down to a cylinder before using higher speeds.**
- 9. Always hold all lathe chisels firmly with both hands.**
- 10. Rotate large diameter turnings only at slow speeds.**
- 11. Always change speeds gradually to prevent the turnings from spinning off the lathe.**
- 12. Use the calipers only when the stock is not turning.**
- 13. Remove the tool post when the stock is being sanded or polished.**

### **POWER MITER BOX**

- 1. Never cut pieces shorter than 12 inches in length.**
- 2. Always have your hands and fingers outside the 8-inch safety margin.**
- 3. Always check to see that the guard is in place and in working order before using the Power Miter Box.**
- 4. Always use a slow steady feed when cutting through the work.**
- 5. Never reach around the back of the saw when it is plugged in and in use.**
- 6. Always unplug the power cord before removing the blade**
- 7. Never cut more than one piece at a time with the Power Miter Box.**
- 8. Always make use of the laser guiding system if the saw has one installed.**

### **MODEL 26 POWERMATIC SHAPER AND JET SHAPER**

- 1. This machinery will never be used without the instructor being in the immediate location and supervising the operation. (Exception with the smaller Jet Shaper after instructor has checked out that the student is familiar and comfortable with operating the machine.)**
- 2. The instructor will make all tool changes and adjustments to the shaper. No other student or person is authorized to do so.**
- 3. Never shape stock less than 12 inches in length. (6 inches on the Jet Shaper.)**

## **Shaper continued....**

- 4. 12-inch rule. When shaping, never allow your hands to come closer than 12 inches to the cutters. (6 inches on the Jet Shaper.)**
- 5. Always feed the stock opposite to the direction of the cutter rotation.**
- 6. Never back stock out of the cutter once the cut has been started. Instead, pull the stock straight back away from the cutter and begin the cut again.**
- 7. When pattern shaping and collar shaping always use the guide pin.**
- 8. Always be sure of the direction the cutter head is rotating. (Shapers do have forward and reverse capabilities.)**
- 9. Always keep your balance and never over reach.**
- 10. Always keep push sticks near by and use them when needed.**
- 11. Do no attempt to use the shaper on sock that has loose knots, nails, or if the stock is warped and twisted.**
- 12. Keep loose clothing in check. Roll shirtsleeves above the elbow. Never wear gloves when operating the shaper.**

## **PNUEMATIC 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**
- 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.**