Safety rules for the Scene Shop

General Power Equipment Safety Rules:

1. Wear appropriate clothing. Be especially careful of loose clothing, neck ties, jewelry or long hair that could get caught in moving parts. *WEAR EYE PROTECTION WHEN USING POWER TOOLS.*

2. You must be wide awake and alert. Never operate a machine when you are over-tired, ill or under the influence of medication.

3. Think through the operation before performing it. Know what you are going to do and choose the appropriate machine.

4. Make all adjustments *before* turning on the machine.

5. Never remove or adjust a safety guard without good reason.

6. Use the proper push-sticks, push blocks, feather-boards and other safety aids. Some operations may require the use of a special jig.

7. Keep machine tables and working surfaces clear of tools and clutter. Keep floor clear of wood scraps. Place a garbage can next to the machine you are using and throw scraps in it.

8. Allow machine to reach its full operational speed before starting to feed the work.

9. Feed the work carefully and only as fast as the machine will cut it.

10. If a machine is dull, out of adjustment or in some way not working properly, shut off the power immediately and consult the technical director.

11. You are the one in control of the operation, start and stop the machine yourself. If someone is helping you, be sure they understand this, know what is expected, and how to do it.

12. Do not allow your attention to be distracted while operating a machine. Also, be certain that you do not distract the attention of others.

13. Stay clear of machines being operated by others. See that others are out of the way when you are operating a machine.

14. When you have completed an operation on a machine, shut off the power and wait until it stops before leaving or setting up another cut. *Never* leave a machine running. Unplug portable tools and return to cabinet when not in use.

15. Machines should not be used for trivial operations, especially on small pieces of stock. Do not play with machines.

16. Safety goggles and hearing protectors are available for your protection; *USE THEM.*
Table Saw:

1. Be certain that the blade is sharp and the right one for your work.
2. The saw is equipped with a guard and a splitter - use them.
3. Set the blade so it extends $1/4\"$ above the stock being cut.
4. Never reach across the operating blade.
5. The stock must be guided by either the fence or the mitre gauge. *NEVER CUT FREE-HAND!*
6. Turn the power off before making any adjustments or removing scraps.
7. Do not let small scraps accumulate around the blade. Use a push-stick to move them away.
8. When helping to “tail-off” the saw do not push or pull on the wood - just support it. The operator must control the feed and direction of cut.
9. When finished, turn off machine and remain until blade has stopped.

*Radial Arm Saw:*

1. Hold stock firmly against the fence.
2. Before turning on power, be certain that all adjustments are tight and that depth of cut is correct.
3. Keep guard and anti-kickback adjustments in position when possible.
4. Always return the saw to the rear of the table after completing a cut. Never remove stock from the table until the saw has been returned.
5. Shut off power and wait for the blade to stop before making any adjustments.
6. Make sure the blade has stopped before you leave the machine.
7. Keep catch table clean and free of scraps and excessive sawdust. *Do not use as a workbench!*
8. When ripping, always feed stock into the side opposite anti-kickback fingers. Adjust guard and anti-kickback fingers properly.
Band Saw:

1. Blade, guides, and rollers must be properly adjusted before turning machine on. If in doubt, ask technical director.

2. Adjust the foot so that it is 1/8" to 1/4" above wood.

3. Make sure that you have chosen the correct blade speed for the material you are using. Only change blade speed while the band saw is running.

4. Allow the saw to reach full speed before starting to feed the work.

5. The stock must be held flat on the table.

6. Feed the saw only as fast as it is capable of cutting. Do not force feed. If saw seems sluggish or does not want to follow your line, check for a dull blade.

7. Plan cuts to avoid backing out of curves whenever possible. Turn off power when backing out of long cuts.

8. Make turns carefully and do not cut radii so small that the blade is twisted.

9. Round stock should not be cut unless mounted securely in a jig.

10. If you hear a clicking noise, turn the saw off at once. This indicates a possible crack in the blade.

11. If blade breaks, shut off power immediately and stand away from saw until it stops. NEVER open the doors until the top wheel has stopped turning.

12. Turn off saw as soon as you are done. Clear away scrap wood, reset saw as it was when you started.

13. Keep a garbage can next to the saw and toss scraps in as you cut. Do not throw scraps on floor.

Sanding Machine:

1. Be certain that the belt or disk is correctly mounted. The belt must track in the center of the drums and platen. Do not operate if sandpaper is loose.

2. Check guards and table adjustments to see that they are in the correct position and locked in place.

3. Use the table, fence and other guides to control the position of the work whenever possible.

4. Small or irregular-shaped pieces should be held in a hand-screw or some special jig.

5. When sanding end grain of narrow pieces, always support the work against the table.
6. Sand only on the side of the disk that is moving down toward the table. Move the work along this surface so that it will not burn.

7. Do not use power sander for an operation that could be better performed on another machine.

8. Sand only clean new wood. Do not sand wood that has excess glue or finish on the surface. These materials will clog the sanding belt or disk.

_Sabre Saws:_

1. Select the correct blade for the job and be sure it is properly mounted.

2. _Unplug_ the saw when changing blades or making adjustments.

3. Place the base of the saw firmly on the stock before starting the cut. Start the motor before blade comes in contact with the work.

4. Do not cut curves so tight that the blade twists or binds.

5. Make certain that the work is well supported. Check under the path of the blade for obstacles such as sawhorses.

_Portable Circular Saws:_

1. Stock must be well supported in such a way that the kerf will not close and bind the blade as you cut. Use sawhorses or benches and clamp or tack nail smaller pieces.

2. Be careful not to cut into the sawhorse or other support. Also avoid cutting your electrical cord.

3. Check base and angle adjustments for correct setting and tightness before starting.

4. This tool generates a lot of sawdust - _use eye protection._

5. Always place the saw base on the stock with blade clear before turning on saw.

6. Do not force the saw as you cut. If you veer off your line, back up and try again. If saw will not cut a straight line or if it burns the wood then the blades needs changing.

7. Always keep both hands on the saw. Use your thumb to hold the safety guard open as you begin cut, then release as soon as blade enters wood.

8. Unplug tool when changing blade or making major adjustments.
Drill Press:

1. Check the speed setting to see that it is correct for your work. The larger the bit, the slower the speed. Change speeds only while machine is running.
2. Use only approved drill bits. DO NOT use bits which have a feed screw at the tip.
3. Mount the bit securely to the full depth of the chuck and remove the chuck key before starting.
4. Position the table and adjust the feed stroke so there is no possibility of the bit striking the table.
5. The work should be placed on a wood pad when the hole will go all the way through.
6. Small or irregular shaped pieces must be clamped to the table or held in some special fixture.
7. Feed the bit smoothly into the work. When the hole is deep, withdraw it frequently to clear the shavings and cool the bit.

Portable Electric Drills:

1. Watch for any loose clothing or hair that might get caught in the turning drill or cooling fan.
2. Be certain that bit is securely tightened using chuck key. For variable speed drills use slower speeds as drill diameter increases.
3. Check what is behind or below what you are drilling. Use scrap wood as a pad when working on the floor or on a bench.
4. Clamp small pieces of stock to a bench so they will not be “grabbed” by the spinning drill bit.
5. Use cutting oil when drilling through steel plates. Drill in “spurts” to avoid over-heating the bit.

Pneumatic Staple Guns:

1. Always disconnect tool from air line when clearing jams, changing staples and at all times when not in use.
2. Check for correct length staples before using gun.
3. Grasp both air line connectors firmly when connecting or disconnecting to avoid kickback.
4. Keep hands and other parts of your body well away from area being stapled.
5. Never move around with the trigger of staple gun squeezed - if safety is brushed it could fire.
6. Never fire gun unless it is shooting into a piece of wood at least 1/8” thicker than staple length. Firing gun into the air can permanently damage its piston.

**Jointer:**

1. Operate machine with blade guard in place whenever possible.
2. Do not joint pieces of stock shorter than 9 inches or thinner than 3/8”.
3. Use push blocks on all stock less than 1” thick. Never pass hands over cutting head.
4. Make sure settings and adjustments are made before turning on machine.
5. Adjust only the in-feed table. Return machine to 0” depth of cut when finished.
6. Always turn power off before leaving machine.

**Planer:**

1. Make sure settings and adjustments are made before turning on machine.
2. Be careful that loose fitting clothing does not get caught between stock and feed table.
3. Always turn power off before leaving machine.
4. Do not allow fingers or other body parts to go under the pressure roller.