



Band Saw Safety and Operation Rules

The Band Saw has a thin vertical blade that allows cutting curves, resawing, and large depth cuts on thick material. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Band Saws. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the band saw with attention to the task at hand!
2. A two foot perimeter around the saw should be kept clear of people, debris and sawdust that impairs traction or footing to avoid slips and falls.
3. Keep bystanders away from the right hand area of the saw. Broken blades have a tendency to fly out to the right.
4. Eye and hearing protection is required, dust protection is strongly recommended.
5. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
6. Give the work your undivided attention.

Band Saw Safety and Operational Safety Rules:

1. Always disconnect the power before changing the blade or performing any other maintenance operation.
2. Make all adjustments to the band saws while the machine is off and stopped.
3. Operating instructions vary by make and model of band saw. Always check with the Shop Attendant before using a band saw that you have not used before.
Currently, the Guild Shop has two band saws:
 - a. Felder 21" – Set up for resawing
 - b. Jet 18" – Set up for general use
4. Follow the 3" rule from the blade; always keep fingers 3" from the path of the blade. To control the stock, use push sticks, feather boards, or any other safety device when cutting small or short stock.
5. The teeth of the band saw blade should point down toward the table.
6. See the Shop Attendant if you need to change blades.
7. Check the blade tension and tracking before starting. The blade should be 1/32" from the rear roller bearing behind the blade. See the Shop Attendant if the blade guides need adjustment.
8. The blade alignment tracking should be:
 - a. Felder 21" – Forward on the tire, so that the teeth do not touch the tire
 - b. Jet 18" - At the center of the wheels.
9. Make sure that the upper and lower wheel guard doors are closed when running.

10. Keep the blade guard & guide 1/2" above your stock.
11. Turn on dust collection and open blast gate before starting saw.
12. Don't cut stock that is not flat on the bottom without a jig.
13. Keep a balanced stance at the band saw.
14. Cut at a moderate feed rate into the blade, do not force a cut.
15. Cut relief cuts prior to cutting a long or tight curve. The relief cuts will free the blade of the tension of the tight curve and the wood will fall away. The blade size will dictate the radius of the cut.
16. If you need to back out of a cut, shut the machine off. After the blade stops, back out.
17. If the work is too large for one person, get help holding the stock.
18. When cutting with the table at an angle, clamp a block to the table to prevent your stock from slipping off the table.
19. Never clear small pieces while the blade is moving.
20. Always keep your fingers and hands away from the path of the blade, use a push stick.
21. Use a "V" block when cutting cylindrical stock.
22. Turn the power off immediately and stand clear if you hear a clicking sound or the blade breaks.



Jointer Safety and Operation Rules

Jointers are used to make one edge or face of a board straight. They have high speed rotating knives that remove material as it is pushed past the rotating jointer knives. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Jointer. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the jointer with attention to the task at hand!
2. A two foot perimeter around the jointer should be kept clear of people, debris and sawdust that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Jointer Safety and Operational Rules:

1. Operating instructions are available. Always check with the Shop Attendant before using the jointer if you have not used it before.
2. Always make sure the machine is turned off and stopped before making any adjustments.
3. Make sure all adjusting handles are tight & locked, and check fence for square.
4. Turn on dust collector and open blast gate
5. Move the fence to different positions over the cutter head to avoid dulling the blades.
6. Never operate the jointer without guards.
7. Avoid cuts deeper than 1/8" per pass; 1/16" or less is the ideal depth of cut.
8. Do not joint stock less than 16" in length.
9. Do not joint stock narrower than 3" without a push stick.
10. Do not surface stock wider than the blades are long.
11. Do not face joint stock thinner than 5/8".
12. Never pass your hands directly over the cutter head. When face jointing, use a push block in between your hand and the stock.
13. Avoid tip-in. Never apply pressure to stock directly over the cutter head. This may result in tipping the board or your fingers into the cutter.

14. Always feed toward the out feed table. Start jointing the board with all downward force on the in-feed table until the board has gone at least an inch onto the out-feed table. Finish jointing the board with all downward pressure on the out-feed table as the board leaves the in-feed table.
15. Use the left hand to hold down stock on the outfeed table; use the right hand for pushing stock.
16. Never push a board with your thumb.
17. Position your stance to allow you to walk through the cut with the board, especially on long boards. Never stand flat-footed facing the fence.
18. Always make sure that the exposed cutter head behind the fence is guarded, especially when you are jointing stock near the guard side of the cutter head.
19. Do not back your work out of the cut; keep going in the direction of the out feed table. Lifting your work off the blades is OK as long as you do it with good control. Do not let go or drop the board back into the blades.
20. If you are jointing long or heavy stock, make sure that you have help or use a stand to support the work.
21. Although the fence can be tilted, jointing of the stock at an angle could be difficult and cumbersome to hold. The use of push sticks and hold down devices is highly recommended. If possible, consider another machine for this operation if it cannot be done safely.
22. Before you walk away from the jointer make sure the machine is off & the blade has stopped.
23. Always run wood through the jointer with the grain in the same direction that you are cutting and never across the grain. Always examine the condition of the stock and evaluate the grain direction, warp, twist, burl, swirl, kink, and cup.
24. When straightening a cupped piece of stock, the feet should be down to the table with the concave side down & the humped side up. It may take several passes to get a smooth surface. Then you will need to straighten other side of the stock with the thickness planer.

The Guild jointer, while bigger, is identical to jointers in home shops. The only difference is this machine is hard wired and therefore cannot be unplugged for blade changes. The main power must be on to allow the cutter head to rotate. When changing blades, depress the emergency shutoff button (**The RED pushbutton**). This will prevent the machine from starting.



Miter Saw

Safety and Operation Rules

The Miter Saw is a power tool used to make quick, accurate crosscuts, miters or bevels. These saws cut at a set miter angle. Some also can cut at both a miter and a bevel angle. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Miter Saw. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the miter saw with attention to the task at hand!
2. A two foot perimeter around the miter saw should be kept clear of people and debris that impairs traction or footing to avoid slips and falls.
3. Concentrate on what you are doing and be aware of kickback.
4. Eye and hearing protection is required, dust protection is strongly recommended.
5. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
6. Give the work your undivided attention.

Miter Saw Safety and Operational Rules

1. Always make sure the saw is turned off and the blade is stopped and in the full up position before all adjustments to the miter saw are made, including putting clamps on the work piece.
2. Make sure the blade teeth point down and toward the fence.
3. Never alter a guard or use the tool with a guard missing. Be sure all guards are in place and working properly before each use.
4. Never force a blade onto an arbor or alter the size of an arbor. **If your blade does not have the proper size and shape arbor hole for the arbor, do not use it!**
5. Make sure the arbor and blade are both clean. Buildup on the surface of the arbor and blade will create excessive friction.
6. Use sharp blades. Damaged or dull blades could throw teeth, causing a serious injury.
7. Notify the Shop Attendant if the blade requires cleaning or replacement.

8. Be sure the arbor nut is tight to prevent slipping or loosening of the blade.
9. Bolt or clamp the miter saw securely to a flat, level surface.
10. The miter saw has a dedicated vacuum. Be sure it is activated when the saw is switched on.
11. When you start your saw, allow the blade to reach full speed before cutting; do not force the blade and always start the cut gently.
12. Stop operating the saw immediately if you smell smoke.
13. When using a sliding compound miter saw, remember to pull the blade out and start the saw then push down into the stock and towards fence to make the cut.
14. Always place the work piece securely on the saw table and against the fence when making cuts.
15. Use clamps for pieces that will put your fingers within 3 inches from the saw blade. Never put clamps on when the blade is spinning.
16. **NEVER** make freehand cuts. Holding the work piece by hand is unstable and may lead to loss of control.
17. Support long work pieces at the same height as the saw table.
18. **NEVER** reach under the saw blade or perform 'cross handed' operation.
19. Wait until the blade has completely stopped before removing the cut wood.
20. Don't raise the blade from the work piece until the blade has come to a complete stop.
21. Never try to remove or clamp the work piece to the saw while the blade is rotating.
22. Lock the miter saw in the down position when transporting.



Drill Press

Safety and Operation Rules

The drill press comes in a floor or bench-mounted model. It has a motor driven head with a chuck that accepts bits or cutters. It also has an adjustable table on which the work is mounted. It is operated by pulling a handle which lowers the drill bit into the material. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Drill Press. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the drill press with attention to the task at hand!
2. A two foot perimeter around the drill press should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Drill Press Safety and Operational Rules

1. Make sure the drill press is off before making any adjustments.
2. Keep all guards and covers on the machine when it is on and running.
3. Make sure the size of the bit is equal to or less than the capacity of the drill press.
4. Do not exceed the recommended speeds for the type and size of drill bit being used or composition of the stock being drilled.
5. Center punch the drill-hole location into the stock.
6. Insert bit into drill chuck and tighten with the chuck key. Remove chuck key from the drill chuck before starting the drill press.

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7. Use a clamp or vise to securely fasten small stock (about 6") to the drill press table. Never attempt to handhold small stock while drilling.
8. Drill into cylindrical stock using a "V" block.
9. Long stock should be drilled with the excess to the left of the operator. If the stock rotates it will hit the post, not the operator.
10. Support the underside of the stock to be drilled with a backer board secured to the drill press table.
11. Only start the machine with the table clear of everything except the stock you are drilling.
12. Keep hands and fingers at least 3" from rotating drill bits.
13. When drilling deep holes, frequently raise the drill bit from the hole to remove cuttings and cool the bit.
14. When you begin to break through the underneath side of the stock, ease up on the feed as to not tear the wood from the underneath side.
15. If a drill bit binds, turn off the drill press and carefully turn drill chuck backwards by hand to free the drill bit.
16. **NEVER** reach around or under a rotating drill bit or grab the chuck to stop a drill press. This can result in hand puncture or other serious injury.
17. Turn the drill press off before looking up or walking away from the machine.
18. The drill bit and shavings are hot immediately after drilling, let them cool down.
19. Always clean the drill press table and work area upon completion of the drilling task. Do not use your hands or blow the drill shavings on to the floor, use a bench brush and pan to place them in the trash.



Router Table Safety and Operation Rules

Routers mounted in a table are used to create decorative surfaces on a work piece. The router is a more versatile machine if used in a router table. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Router Table. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the router tables with attention to the task at hand!
2. A two foot perimeter around the router table should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Router Table Safety and Operational Rules

1. Make sure all guards are in place and working properly before using a router in a table.
2. Make sure the router is unplugged before changing a bit in the router.
3. Always use the wrenches provided with the tool to make adjustments.
4. After changing the bit or making any adjustments, make sure the collet nut is securely tightened and the unused portion of the bit is covered by the guard before tool use.
5. Always keep bits sharp and clean of rust and pitch to avoid excessive friction.
6. Maintain proper adjustments for infeed and outfeed fences. Adjust the fence halves so the cutter opening is no more than is required to clear the bit. Lock the fence into position.

7. Take time to examine your work piece and make sure that all necessary precautions have been taken before cutting. Always make sure the work surface is free from nails, knots, and other foreign objects.
8. Clamp a block of wood to the fence over the top of the bit as a bit guard if none is present.
9. When making a freehand cut, use a starting pin and a bearing on the bit.
10. Always keep your fingers and hands away from the path of the bit. Follow the 3" rule; keep your hands and fingers 3" from the router bit.
11. Use push sticks, feather boards, or any other safety device when cutting small or short stock to control the stock and to keep your hands protected from the spinning bit.
12. Shaping thins as well as narrow materials can be hazardous; always use feather boards or push blocks.
13. Do not shape chipboard, panel board, or any stock that has paint or varnish on it. Properly support long lengths of material. Use work supports or stands as needed.
14. Never feed the work piece in the direction of cutting blade rotation. Otherwise, the cutter blade can grab and pull the work piece.
15. Don't ever trap the stock between the fence & the bit.
16. Always use a miter gauge & clamp for end shaping to maintain safe control.
17. Always connect the dust collector to the exhaust port before use.
18. Keep the exhaust port pointed away from you. Don't reach into the exhaust chute to unclog chips. Stop the tool and unplug it from the power source. After making sure the bit has stopped, clear the chute with something other than your bare hand.
19. **NEVER** reach under the table while the tool is running.

Thickness Planer

Safety and Operation Rules

The thickness planer is similar to a jointer in that it removes material from the surface of a board. It is used to make the top surface parallel to the bottom surface. The cutter head is mounted above the feed table. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild planer. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the thickness planer with attention to the task at hand!
2. A two foot perimeter around the thickness planer should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Stand to the side of the machine to avoid kickback or shattering of the wood.
6. Give the work your undivided attention.

Thickness Planer Safety and Operational Rules

1. Make sure the power is off to the machine before making any adjustments other than the depth of the cut and rate of feed.
2. The depth of cut should be set before each pass of feeding the stock through the machine.
3. The planer has two speeds but the slower rate of feed produces the best result, the slower the speed the smoother the cut.
4. Keep all guards and covers on the machine when running the machine.
5. Follow the 3" rule for your hands and fingers at the opening of the infeed and outfeed tables.
6. Always turn on the dust collector and open the dust blast gate before turning on the jointer.
7. Always check the wood before planing for foreign material in the wood. Plane only clear boards or boards with solid knots to avoid kickback
8. Place boards on the bed of the machine so your fingers do not get pinched.
9. The shortest board used in the planer is 16 inches.
10. A typical pass should remove no more than 1/8 inch of material that is soft wood, no more than 1/16 inch for hardwood.
11. When planing thin stock 3/8 inch or thinner, you must use a backer board or sled.
12. Each completed revolution of the hand wheel (if equipped) moves the table 1/8 inch. Do not remove more than 1/16 inch per pass. Be aware that bowed boards will cause inconsistent contact with the blades of the planer. Joint the concave surface first before running the board through the planer.

13. When running multiple pieces of short stock of the same thickness, always butt the ends of the boards against one another as they are fed into the planer.
14. If the board is thicker on one end than the other and jams in the machine, do not shut off the machine. Slowly crank open the height adjustment wheel until the board resumes feeding through the planer.
15. The planer is self feeding.

Bench Grinder

Safety and Operation Rules

A bench grinder is a machine used to drive an abrasive wheel or wheels. Depending on the grade of the grinding wheel, it may be used for sharpening cutting tools. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Bench Grinder. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the grinder with attention to the task at hand!
2. A two foot perimeter around the grinder should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Bench Grinder Safety and Operational Rules:

1. Make sure the grinder is stopped and unplugged before making any adjustments.
2. Make sure the tool and its accessories are in the proper working order before working with a bench grinder.
3. For the individual changing a grinding wheel, "Ring Test" any wheels before mounting them. Suspend the wheel on a pencil held horizontally through the center of the hole. Tap the wheel lightly with a plastic screwdriver handle, in spots 45 degrees from vertical. If it produces a clear ringing tone it is in good condition. If it sounds dull, contact the Shop Attendant to REPLACE it.
4. Inspect the wheels for a hairline crack before using. **DO NOT USE A CRACKED WHEEL.**
5. Make sure the wheel housing guards are in place.
6. New grinding wheels should be balanced by dressing and truing to eliminate vibration.
7. Used wheels should be trued and dressed when worn out of round, or the surface face is clogged or worn smooth. This provides a clean sharp grinding surface and re-balancing of the wheel. Dress the wheel on the face only. Dressing the side of the wheel would cause it to become too thin for safe use.
8. Don't operate a grinder unless it is securely seated on the workbench or floor so that the grinder does not move when used.
9. Adjust tool rests 1/8" from wheel and slightly below center. Re-adjust as the wheels wear down.

10. Stand to one side of the wheel when turning on power. Allow the grinding wheel to run at full operating speed for one minute. **DO NOT** use a wheel that vibrates.
11. **DO NOT** grind on the side of the wheel.
12. Bring the object into contact with the grinding wheel slowly and smoothly avoiding impact or bumping motions.
13. Move the object being ground, back and forth across the face of the wheel only, as this prevents "ruts" or grooves from forming.
14. Never grind small stock. Do not attempt to grind or sharpen anything that cannot be adequately supported by the tool rest. Use clamping pliers when grinding parts that cannot be held easily by hand.
15. Do not touch the ground portion of the work piece until cooled.
16. Turn off grinder and wait until comes to a complete stop. Never stick an object into the wheel to stop the grinder quicker.



Belt / Disc Sander and Spindle Sander Safety and Operation Rules

Note: This document does not address the Guild 20" disc sander. The 20" disc sander is a 3 phase machine and has a separate Safety and Operation document.

These sanders are for surface or edge sanding of nonmetallic materials only. These machines may be used for many types of rough, end grain sanding and simple shaping. The combination belt/disc sander is configured with a sanding disc and belt and some may be individual units. The spindle sander has a cylinder that oscillates vertically. The Guild does not presently have an edge sander with a rotating belt. The safety concepts presented are the same for any size machine. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the sanders with attention to the task at hand!
2. A two foot perimeter around the sanders should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Sanders and Disc Safety and Operational Rules:

1. All power driven sanders and sanding discs can cause serious abrasive skin burns or cut very quickly causing serious injury with incorrect use or from accidental contact with the abrasive belt or cylinder.
2. Ensure that the gap between the sander's table and the moving disc or belt is kept as small as possible.
3. Always make belt adjustments when the sander is off.

4. Make sure the machine is off and the power cord is unplugged before installing or removing belts or discs or when making repairs.
5. Check the integrity of the sanding belt tracking of the machine, as well as the integrity of the disc or cylinder before turning on the machine. Any ripped belts, cylinders or discs should be reported to the Shop Attendant.
6. A dust collector should be connected to the unit, but respiratory protection is very strongly recommended.
7. Allow the machine to reach full speed before feeding material. Similarly, it takes time for the disc or belt to stop moving. There is no way to stop the machine on short notice.
8. Maintain the 3 inch distance between your fingertips and the moving disc or belt.
9. Do not sand pieces of material that are too small to be safely supported.
10. Always hold the work firmly when sanding.
11. Use the backstop, fence, table or other supports when sanding.
12. **ALWAYS** hold the work firmly on the downward rotation side of the table when sanding with the disc.
13. Avoid awkward hand positions where a sudden slip could cause a hand to move into the sanding belt or disc.
14. Always remove scrap pieces and other objects from the table, backstop or belt before turning the machine on.
15. Do not push hard on the sanding media. The sander performs best and safest when it is allowed to remove material at the rate for which it was designed.
16. Sanding on wood or plastic will cause heat buildup due to friction and may cause the wood to burn or plastic to soften rapidly.
17. **NEVER** leave the machine work area when the machine is running or before the machine has come to a complete stop.
18. Shut off power, clean the sander and work area before leaving the area. Use rubber cleaning sticks often on all sanders.



Saw Stop Table Saw

Safety and Operation Rules

Table saws are designed to rip, cross cut, bevel, and cut angles with precision. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Table Saw. The Guild's table saw is a SawStop Industrial cabinet saw that may have features that are different from your personal table saw. This does not include the sliding table saw, which has a separate section. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the table saw with attention to the task at hand!
2. A two foot perimeter around the table saws should be kept clear of people and debris that impair traction or footing to avoid slips and falls. Keep people from the back of the saw in case of kickback.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Table Saw Safety and Operational Rules:

1. Make sure the power to the saw is disconnected before changing the blade or performing any other maintenance operation.
2. Make sure the machine is off and the blade is stopped before making any adjustments.
3. Make sure that the blade is turning free before you turn on the power: this is especially helpful after you make changes or adjustments.
4. Always loosen and tighten the wheel nuts before and after adjusting the blade. Be sure that the locking nut on the blade-tilting hand wheel is secure for angle cuts so the blade does not move.
5. Check alignment of the riving knife, fence, and miter gauge.
6. Follow the 3" rule from the blade; always keep fingers 3" from the blade.

7. Never operate a table saw with the throat insert removed. Use zero clearance inserts when appropriate.
8. The riving knife must be used for all cross cut and rip operations.
9. When cutting across the grain of the stock use a miter gauge or a crosscut sled.
10. When cutting with the crosscut sled, make sure the outfeed table guide slots are in alignment with the sled.
11. Use a stop block clamped to the rip fence when you crosscut multiple pieces to short lengths.
12. When ripping long stock, make sure that you have help, use the outfeed table, or use a stand to support the work.
13. Use a push stick to rip stock that is 3" or less in width.
14. Stand comfortably, with your feet far enough apart for good balance.
15. Be aware of your position at the saw. Position your body to the left of the blade, so that it is **NOT** in line with the blade or kickback alley.
16. Make sure that the blade has stopped turning before you remove scrap pieces from the table or adjust for another operation.
17. Never free hand on the table saw.
18. Do not reach over or behind the blade unless the blade has stopped turning.
19. Never use the miter gauge and fence together while cross cutting without a stop block.
20. Keep the blade only 1/8" to 1/4" above the stock.

SawStop Specific Notes:

1. There is a safety override switch on the SawStop. This should only be used in rare circumstances, most typically if cutting wet wood that would trigger the saw. When it is necessary to make a cut with the safety override on, flip the main power switch to "ON." Wait until the Green light is steady and the "Red" light is off, turn the bypass key "Clockwise" for 2 seconds, while keeping the key turned on, after 2 seconds pull the Start/Stop Paddle and hold for 2 more seconds. Release the key; the "Green" light will blink slowly and the "Red" light will be off in the Bypass Mode.
2. Flipping the Start/Stop Paddle to off reset the saw to normal operation.
3. The Start/Stop switch is adjacent to the main power switch. It must be on for the saw to operate. The Start/Stop switch must always be turned off and the saw unplugged when changing the saw blade or riving knives.
4. If the safety brake triggers, the brake mechanism and saw blade must be replaced.



Router

Safety and Operation Rules

The widespread use of routers is based on their ability to perform an extensive range of smooth finishing and decorative cuts. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Routers. **Failure to follow the safety rules will result in a loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and with the router with attention to the task at hand!
2. A two foot perimeter around the area where you are using the router should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Router Safety and Operational Rules:

1. Make sure router is turned off before plugging it in.
2. Make sure the work surface is free from nails, knots, and other foreign objects.
3. Place the work piece securely in a vise or other recommended clamping device. Holding the work piece by hand is unstable and may lead to loss of control.
4. Sharp bits must be handled with care. Never use dull or damaged bits that can snap during use. Dull bits tend to overload, causing possibility of bit breakage.
5. Never use bits that have a cutting diameter greater than the opening in the router base.
6. Make sure the router is unplugged from the power source before changing a bit.
7. Make certain that the bit shaft is engaged in the collet at least 1”.
8. Never bottom out the router bit, as this will damage the collet.
9. Always use the wrenches provided with the tool to make adjustments. Using the correct wrench enables a more secure grip on the tool and may prevent slipping.
10. If using a bit left in the machine, after changing the bit, or making any adjustments, make sure the collet nut and any other adjustment devices are securely tightened.

Loose adjustment devices can unexpectedly shift causing loss of control; loose rotating components may be violently thrown.

11. After turning on the router, wait until it has reached full speed before starting the cut.
12. Keep your fingers at least 3 inches from the spinning bit.
13. Never start the tool when the bit is touching the work piece. The bit may grab the work piece and cause loss of control. Follow the tool manufacturer's procedure for setting the depth of cut. Tighten adjustment locks.
14. For maximum control, hold the router firmly with both hands. The reaction torque of the motor can cause the tool to twist.
15. Always feed against the direction of rotation.
16. Feeding the tool in the wrong direction causes the cutting edge of the bit to climb out of the work piece and pull the tool toward the operator.
17. Never touch the bit during or immediately after use. The bit is too hot to be touched with bare hands.
18. Never lay the tool down until the motor and bit have come to a complete standstill. The spinning bit can grab a surface and pull the tool out of your control.
19. Return the bit to the tool cabinet after use. Never throw bits into the bottom of a drawer. The bits should be stored in a router bit holder to keep them sharp.
20. Never make freehand cuts. Holding the work piece by hand is unstable and may lead to loss of control.
21. Support long work pieces at the same height as the saw table.
22. Use clamps to secure the work piece to the table and avoid injuries.
23. Never cut small pieces that would require you to put fingers within 3" of the cutting blade without a clamping device.

SAC CS4 Sliding Table Saw Safety and Operation Rules

Introduction:

The sliding table saw is used primarily for cutting panels straight and square. Used properly, it can cut many pieces in an efficient and safe manner. By securing a panel to the sliding carriage and moving it through the blade, a straight line can be safely and accurately cut. This technique may also be used to straighten uneven, solid wood with a rip blade or combination blade. This sliding table saw has many features that are different from your personal table saw. In order to avoid accidents, the following operational safety rules must be strictly observed by anyone working with the Guild's sliding table saw.

The sliding carriage is parallel and in alignment to the saw blade. It holds and supports the work piece as the work piece is moved through the blade. The straight edge created is then placed against the crosscut fence to produce a square cut. Repeating this method can produce a piece with four square corners. Stops on the carriage can be attached to allow repeat cuts to exactly the same length. A separate adjustable fence can be fastened to the carriage to make angled cuts. There is a scoring blade that can minimize tear out on the bottom edge of the cut when properly aligned. Besides coming into contact with a sharp, spinning blade, one potentially lethal hazard of the sliding table saw is binding of the work piece resulting in kick back. (Imagine a 5 pound ninja star hurtling towards your carotid artery.) This can happen during any of the operations and many of the safety rules and procedures are designed specifically to help prevent this from happening. **Failure to follow the safety rules will result in a loss of shop privileges.**

Definitions:

1. Sliding carriage: A platform on which the material being cut is attached. It is used to move that material through the saw blade.
2. Scoring blade: A small saw blade that makes a shallow cut in the underside of a plywood panel prior to that panel reaching the main cutting blade.
3. Riving knife: A thin blade, located behind the saw blade that rises and falls with the movement of the saw blade. The riving knife keeps the material being cut from closing up on the rear of the blade, thus avoiding kick back.
4. Kick back: The material being cut has a tendency to close up as it exits the blade and may be thrown back at the operator by the teeth of the saw blade rising up into the material.
5. Rip blade: The cutting blade has large, squared off teeth and deep gullets designed to cut along the grain of the wood.
6. Combination blade: Has more teeth than a rip blade has and an alternating top bevel to shear across the grain of a board. It is less aggressive in its cutting action than the rip blade but will make a smoother cut across the grain.

Start with a Risk Assessment to ensure a safe work area:

1. Approach all work in the Guild Shop and on the sliding table saw with you're your focused attention to the task at hand.
2. Make sure the entire work area around the sliding table saw is clear of obstructions, especially the path through which the carriage will travel.
3. A perimeter around the area where you are using the saw should be kept clear of anything (including people) that might impair traction or footing and cause slips or falls.
4. Remember, the area behind the saw blade is dangerous due to the constant possibility of kick backs.
5. Eye and hearing protection are required and dust protection is **strongly** recommended.
6. Remove loose fitting clothing, gloves, and jewelry. If you have long hair, make sure it is tied back so it can't fall into moving parts.

Plywood Handling

1. Plywood sheets are heavy and cumbersome. The best way to mount them on the saw is to walk them across the floor by pivoting the bottom corners from side to side. Once in proximity to the saw carriage, lean the panel over on to the carriage and then lift the opposite end up to align the panel with the fence. When squaring a sheet of plywood, begin with a crosscut and rotate the sheet counter clockwise, ending with a rip cut. **Remember to protect your back and use your legs when lifting heavy materials.**

Sliding Table Saw Safety and Operational Rules:

1. Keep yourself and other out of the risk zone when cutting.
2. Be aware of where your hands are as you cut and as you slide the carriage. Keep you eyes on the board against the fence.
3. **NEVER** put your hand in the guard area while the blades are spinning.
4. Make sure the work piece is behind the blade guard when starting the saw.
5. Make sure the scoring blade has been retracted below the surface of the table. If the scoring blade is to be used, test cuts should be performed to assure proper alignment with the cutting blade.
6. Make sure the work piece is flat against the work surface at the blade and maintain contact with the fence as you cut.
7. **NEVER** rip boards less than 10 inches in width on the sliding table saw. If you need to rip a board of that dimension, the Saw Stop will be the best and safest choice. If using the rip fence as a stop, make sure the surface of the fence is retracted behind the cutting blade to avoid catching material between the blade and the fence.
8. A cupped board may be ripped as long as the cup is facing down and it is secured at both ends to the carriage. This allows for two surfaces

to be supporting the board through the cut. **DO NOT** secure so tightly as to flatten the entire surface of the board.

9. Bowed lumber may be ripped with the curve facing down and the leading edge secured to the sled while the trailing end is held in place with an auxiliary hold down. If the bow is severe, it should be flattened first on the jointer before being placed on the sliding table saw.
11. **DO NOT REMOVE THE RIVING KNIFE.**
12. **Dadoing** or **tenoning** operations are not to be performed on this saw.
13. Do **NOT** place objects other than the work piece on the carriage.
14. Do **NOT** leave the machine unattended while it is running.
15. Assess the cut to be performed. Make proper adjustments to the crosscut fence, support, stops, hold downs, and return handle. If making angled cuts, a special angle fence will be made available. Long miters are best performed on the Saw Stop.
Adjust the guard to the proper height as well. Make sure it will clear any hold downs or fences being used to make the cut. **MAKE SURE THAT THE SAW BLADE IS NOT TILTED INTO THE SAW GUARD. THE SAW GUARD/DUST HOOD CAN BE LIFTED OUT OF THE WAY IF NEEDED OR THE WHOLE ARM MAY BE LOOSENED AND THE UNIT SWUNG OUT OF THE WAY. ALL ADJUSTMENTS MUST BE MADE WITH THE SAW TURNED OFF.**
16. Turn on the main power. The switch is located on the opposite side of the cabinet from the operator's side.
17. Make sure the scoring blade is set below the table. If the scoring blade is to be used, test cuts will confirm the proper alignment and depth of cut. This must be checked each time the scoring blade is to be used and it is only to be set by a shop attendant trained on the saw.
18. If cutting plywood and a clean cut with no tear out is desired, a sacrificial piece of plywood can be placed beneath the primary piece and will act as a zero clearance plate avoiding the need for the scoring blade.
19. Adjust the height of the main blade and confirm that it is set at 90 degrees.
20. Lock the sliding carriage (especially when loading large material) by engaging the lock. The lock is located on the end of the carriage and is activated by rotating the lever. Load the work piece onto the saw. Secure the work piece by using the hold down. Once the material is secured and properly supported, disengage the lock.
21. Turn on the dust collector. The blast gate should always be open during saw operation. Once finished, close the gate.
22. Check that the work piece and any falloff are safely away from both blades. The guard can be a good reminder.
23. Turn on the machine with the cabinet switch.
24. Check that the work piece is properly referenced to the fence and carriage surface.

25. Press the work piece down on the carriage and against the fence while walking the piece through the blade. Your front hand should be at the area of the board which will pass through the blade first. Your back hand should push the work toward the fence and have your thumb hooked over the edge of the board and the carriage. Pay attention to the feed rate as you do this.
26. Move your work piece out of the way of the blade before moving the carriage back. Do **NOT** back pieces through the blade.
27. Remove any offcuts that may be in the way before making another cut. Never place hands in the blade area while the blades are spinning. Use a stick or stop the machine. To stop the machine, turn it off with the cabinet switch. **Do not use the emergency red button unless it is an actual emergency.**
28. Turn off the main power.

Above all, if you are not 100% certain of any operation with this saw, ask for help. The attendants are there to make sure you are safe. Failure to strictly follow these guidelines will result in a loss of shop privileges and could subject the Guild to serious liability.

Wide Belt Sander

Safety and Operation Rules

The wide belt sander is similar to a thickness planer in that it removes material from, and smooths the surface of a board or panel. However, instead of using a series of rotating knives and shaving the material, it uses a special wide sanding belt to abrade material from the work piece. Our Bütfering machine is optimized for finishing-- it is not designed to remove a lot of material, or to remove it quickly. For optimal efficiency, let the planer do most of your surface removal before using the wide belt sander.

The sanding belt spins on three rollers above the work piece, which feeds through on a conveyor belt. To avoid accidents, the following operational safety rules must be observed by everyone working on the Wide Belt Thickness Sander. **Failure to follow the safety rules will result in loss of shop privileges.**

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the wide belt sander with attention to the task at hand!
2. Make sure the entire work area around the wide belt sander is clear of obstructions. A perimeter around the area where you are using the sander should be kept clear of people and debris that impair traction or footing to avoid slips and falls. Eye and hearing protection is required, dust protection is strongly recommended.
3. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
4. Give the work your undivided attention.

Wide Belt Sander Safety and Operational Rules:

1. Optimally, the use of this machine is a two-person operation. One person will operate the controls and feed stock into the machine. The other person will serve as a “catcher” returning single pieces to the feeder for the next pass, or stacking multiple pieces on a work cart.
2. The minimum work piece length is 16 inches. Ganging together short pieces to satisfy the minimum length requirement is not allowed.
3. Always operate the sander with the dust collection engaged.
4. **NEVER** put your hand into the machine’s in-feed or out-feed ports while the machine is running.
5. Opening the side hatch during operation will shut down the machine and gouge your work. Keep the door closed at all times.
6. It is vital to follow all of the steps, in the proper sequence, in starting up and in shutting down the wide belt sander. These steps are posted on a clipboard next to the machine on the wall. Failure to follow these instructions will result in the loss of wide-belt privileges.
7. Before starting the machine, set your initial thickness. Always use the thickness gauge next to the machine to measure your work piece. Note that it reads metric. Make an initial pass at a setting equal to your panel thickness, and then reduce thickness for

later passes in increments of no more than .3 mm. Make two passes at each thickness setting.

8. The ammeter should read no more than 5 amperes during a sanding pass.
9. Sanding single narrow boards is not recommended. This tends to imprint on the feed roller, and also to round the sanded surface of your work. Minimum width is 2 inches. If you have multiple narrow strips, they can be ganged to make up the minimum width.
10. Switch to Manual mode for your final passes—one on each side—with the finishing platen engaged. Set the air pressure so that the needle is vertical.
11. When done, repeat steps 1 thru 7 in reverse order to affect correct shutdown. Leave the side hatch ajar.