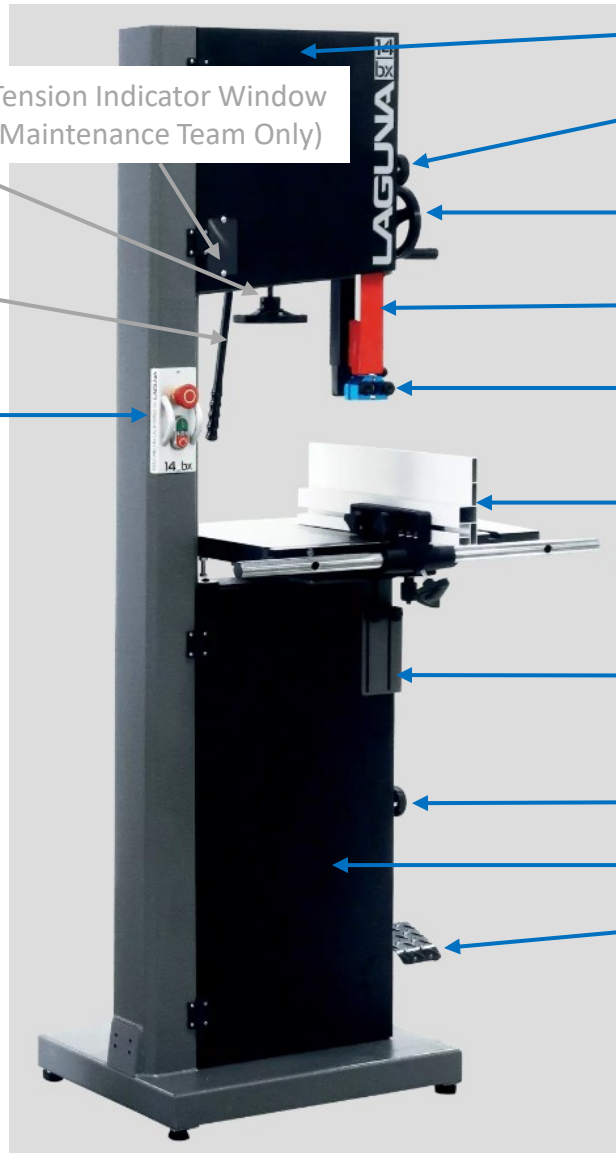


Introduction To The Laguna Bandsaw

Bandsaw Best Practices

Overview (Front View)



Upper Door (Closed when operating the saw)

Upper Door Lock Knob

Blade Guide
Adjustment Hand Wheel

Upper Blade Guard With Door
(Door closed when operating the saw)

Blade Guide

Rip Fence
(May Be Mounted Vertical Or Horizontal)

Lower Blade Guard
(Up When Operating The Saw)

Lower Door Lock Knob

Lower Door (Closed when operating the saw)

Footbrake (Turns Off Power And Slows The Blade)
Apply Light Pressure To Avoid Breaking The Cable

Tension Indicator Window
(Maintenance Team Only)

Blade Tension
Adjustment Wheel
(Maintenance Team Only)

Quick-Release Blade Tension Lever
(Maintenance and Monitors Only)

Switch



EMERGENCY ONLY

Stop

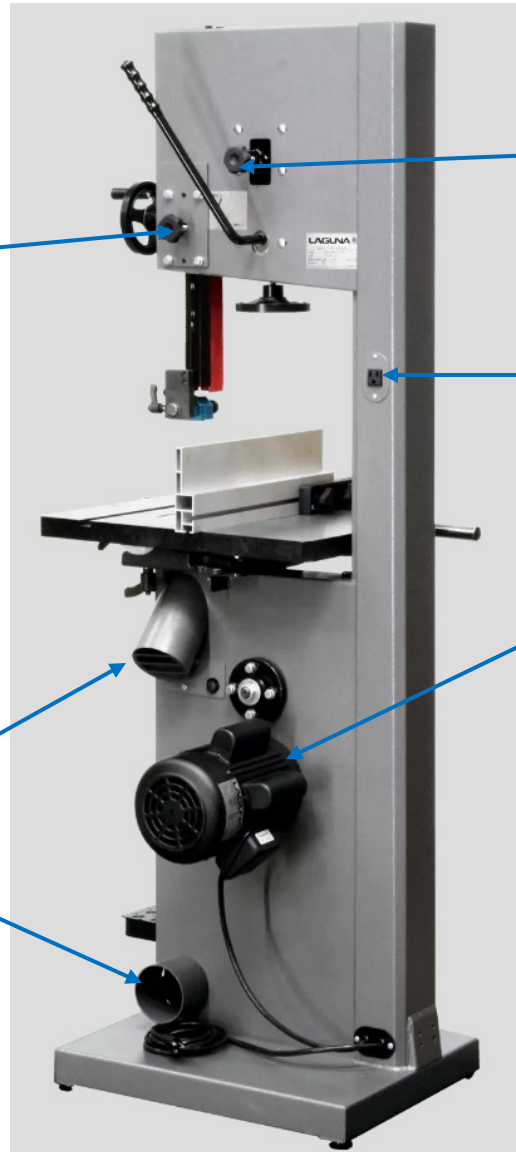
Start

Stop

Use the Footbrake or Stop button to turn off the saw under normal operations.

When the Emergency Stop Button is pressed it disconnects power to the motor. To reset, twist and it will pop out and allow power to be supplied to the motor.

Overview (Rear View)



Blade Guide Shaft Lock (Do Not Over Tighten)
Always Lock The Blade Guide Shaft Before Cutting

Blade Tracking Knob
(Maintenance Team Only)
**CAUTION: Turning This Knob
May Cause The Blade To
Come Off The Internal Fly
Wheels Resulting In Injury
Or Damage To The
Equipment**

110V Power Socket

Motor

Dust Port

Adjustment Screws
(Maintenance Team Only)

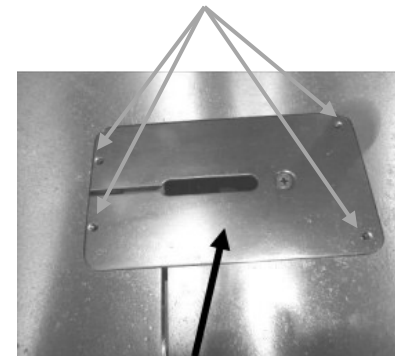
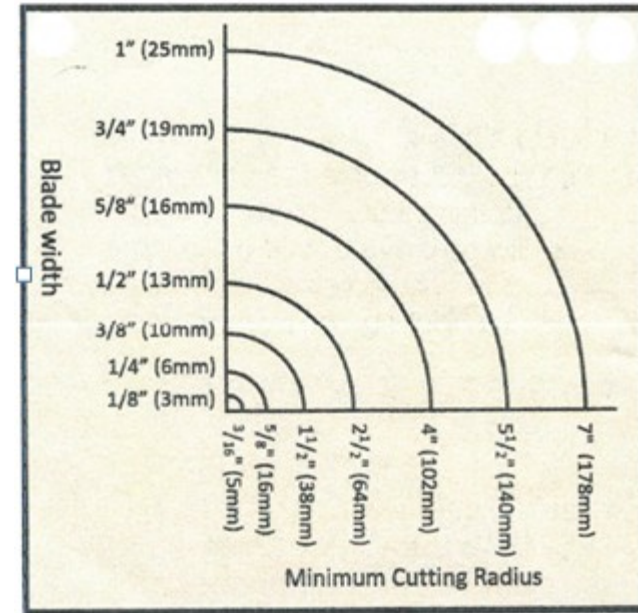


Table Insert

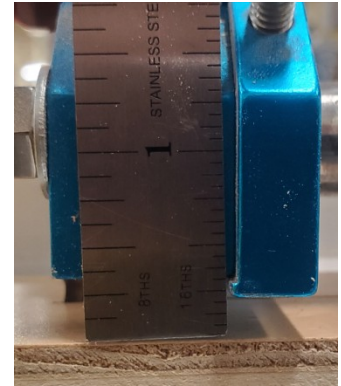
Blade Sizes

- The VWC provides three bandsaws at each location
 - 1/4" blade – MAXIMUM RADIUS CUT 5/8"
 - 3/8" blade - MAXIMUM RADIUS CUT 1-1/2"
 - 1/2" blade - MAXIMUM RADIUS CUT 2-1/2"
- Use the appropriate saw based on the radius of the cut
 - Use the 1/2" blade for all straight cuts greater than 18"
 - Resawing on the 1/4" and 3/8" blades is prohibited
 - The 1/2" blade may be used to resaw boards less than 6" when measured vertically from the saw's table
 - Do not use another saw just because the appropriate saw is in use
 - Using the wrong blade may result in injury or damage to the equipment

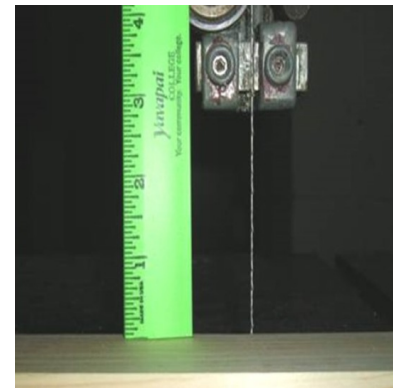


Blade Guides

- Give the blade stability and ensure that the blade movement left/right, forward/back is kept to a minimum
- Two sets of blade guides, one above and one below the table
- The guides above the table
 - Fitted to a shaft that has vertical adjustment
 - The upper guides are adjustable so that the guides are held just above the workpiece being cut
 - Use the blade guide shaft lock to secure the blade guide prior to cutting to lock the blade guide in place
 - This gives the blade the maximum amount of stability and keeps the amount of blade that is exposed to a minimum
 - Blade guide should be 1/8" to 1/4" above workpiece
 - **Over 1/4" may lead to injury and reduce the accuracy of your cuts**



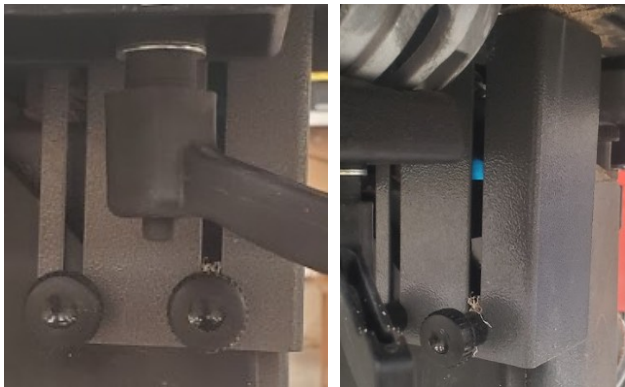
1/8" to 1/4" above the workpiece
(Be careful: the back of the guide is slightly lower than the front of the guide)



Over 1/4" may lead to accidents and reduce the accuracy of your cuts

Blade Guards

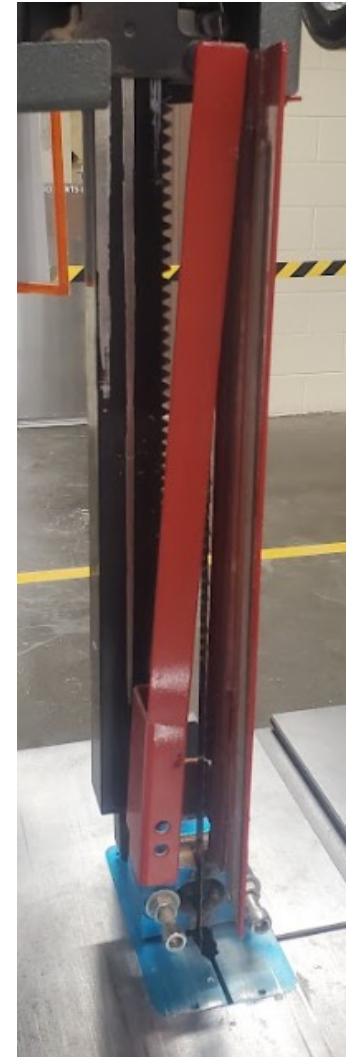
- Protects hands and fingers from the blade
- Automatically raises and lowers with the blade guides
- Integrated Scale
- Door is for maintenance use only
 - **MUST BE CLOSED FOR OPERATION**
- Lower blade guard is for maintenance use only
 - **MUST BE UP FOR OPERATION**



Lower Blade Guard
(Maintenance Team Only)



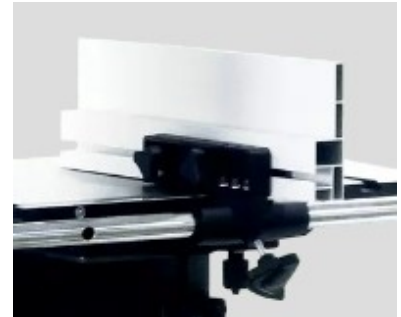
Upper Blade Guard



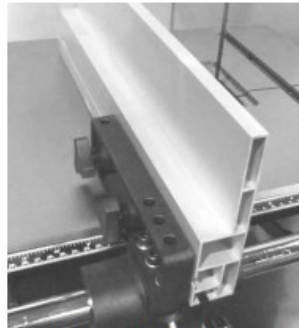
Upper Blade Guard (Door Open)
(Maintenance Team Only)

Rip Fence Assembly

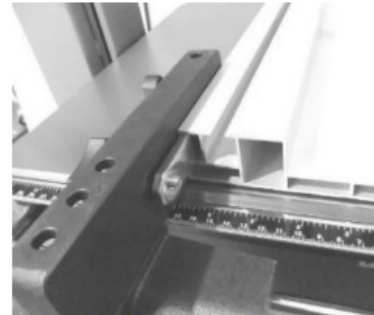
- Consists of a steel tube guide bar, fence head, fence body, scale, and a high/low aluminum fence
- The fence head slides on the guide bar and is lockable in any position to suit the width of cut
 - **The guide bar may be used for balance when applying the foot brake to turn the saw off and slow the blade**
- The fence body is attached to the fence head with two lock knobs that allow the fence to be adjusted laterally across the table to suit the job being cut
- The fence can be fitted in the low (1/2") or high (5 1/2") position
- A scale is fitted to the side of the table and can be used as a quick guide on the distance that the fence is from the blade



Fence support
Fence support lock knob



Fence in high position



Fence in "low" position

Table

- Steel Table enables magnetic feather boards
- Groove for miter gauge and sleds
- Table tilts -7 to 45 degrees
 - Locking knobs in front and rear

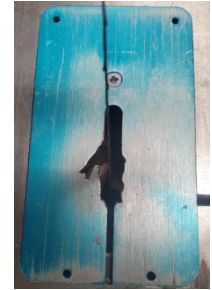


Table Insert
(Maintenance Team Only)

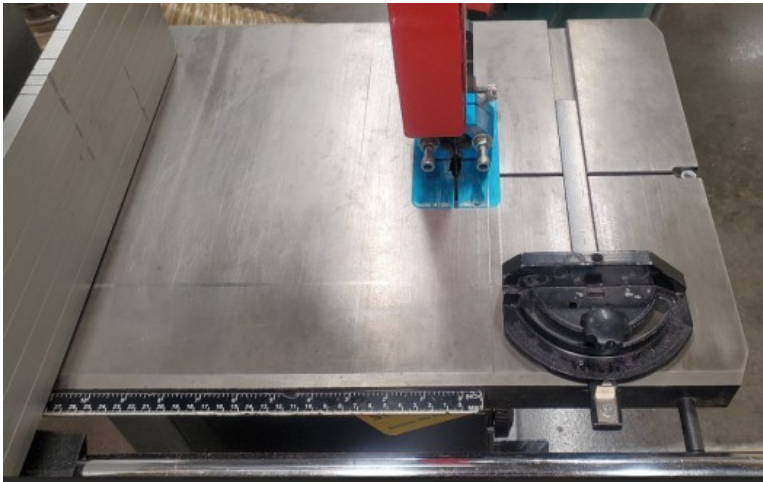


Table With Groove



Table Tilt (Front Side)



Table Tilt (Rear Side)

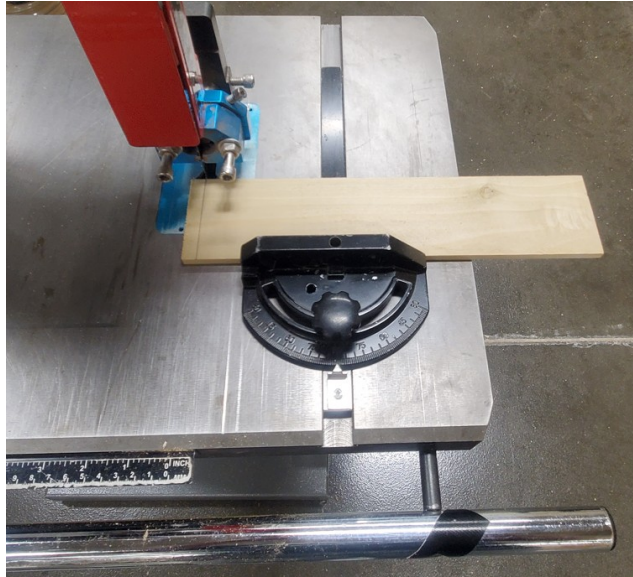
Before Turning On The Bandsaw

- Verify the blade tension is on (tension lever is up)
- Always place the workpiece flat against the table
- Set the blade guard to be 1/8" to 1/4" above workpiece
- Ensure the blade guard door is closed
- Ensure the lower blade guard is up
- Verify the workpiece to be cut is not touching the blade
- Keep your hands away from the blade
 - Never place your hand directly in the cut line
 - One hand should be on each side of the workpiece, easing it through the blade
- Never reach across the blade
 - Use your left hand to turn the bandsaw on
 - Use the footbrake to turn the bandsaw off and slow the blade

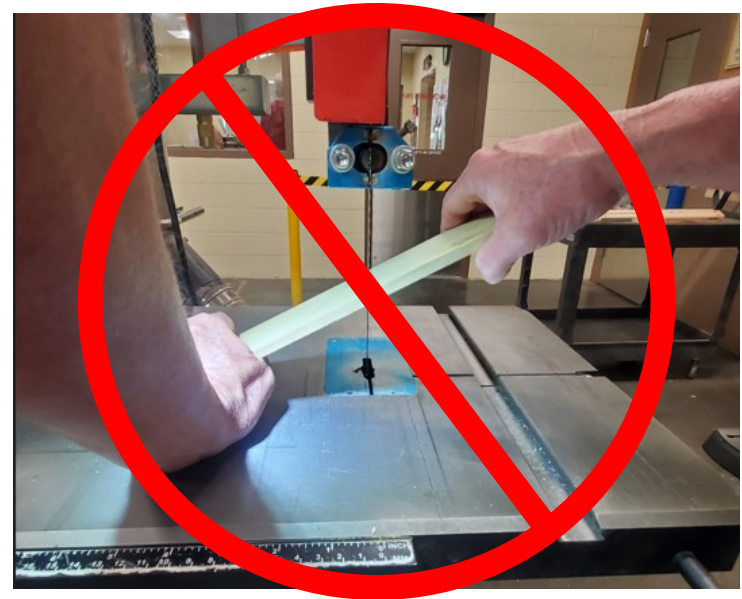


Do not turn on the bandsaw if you see the blade tension lever – the blade will come off the fly wheels resulting in injury or damage to the equipment

Handling The Workpiece



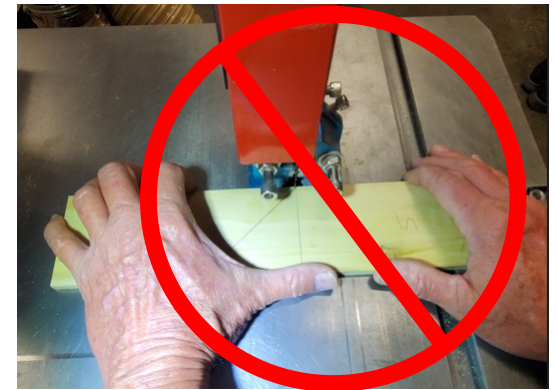
Place the workpiece flat on the table



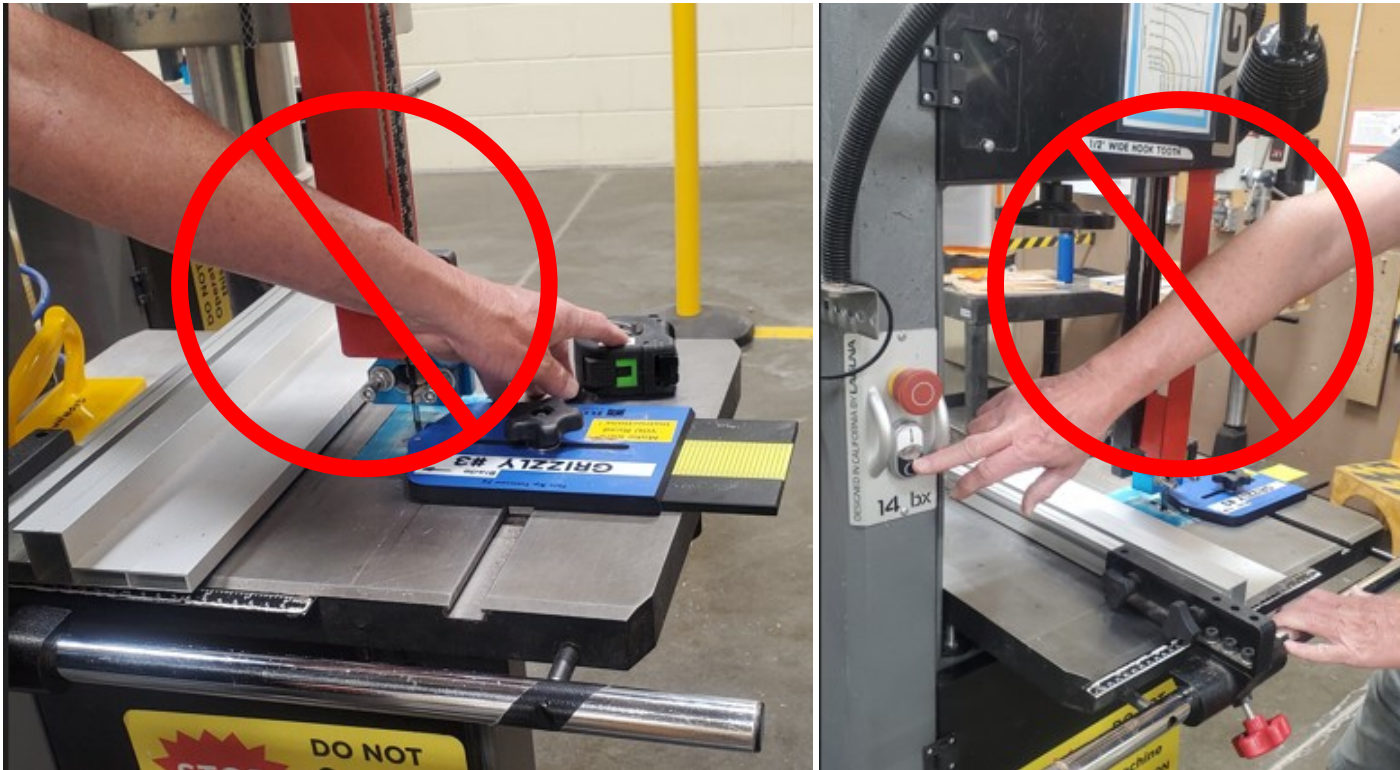
Never hold the workpiece above the table

Proper Hand Positioning

- Whenever possible, anchor your hands on the table and push with your fingers only
 - Keep shifting and planting your hands as you move through the cut
 - Repositioning fingers to keep them away from the blade
 - You'll also find this technique provides better control in intricate cuts since you're not using your upper body to guide the workpiece
- Keep your hands away from the line of cut
 - Never push the workpiece directly into the blade with your fingers or hand in line with the cut
 - A slip of the hand could send it into the blade
- Remember to keep the blade guard set 1/8" to 1/4" above the workpiece

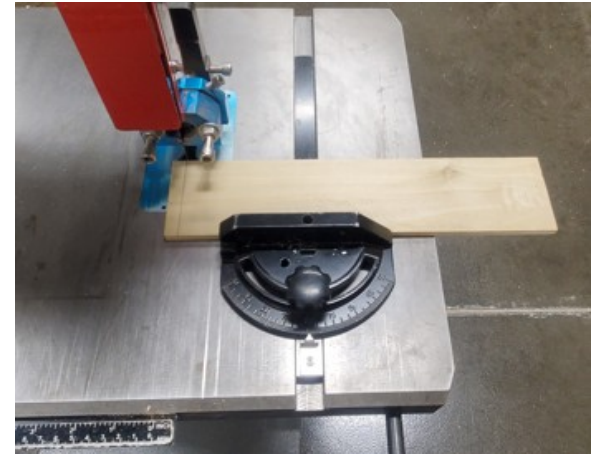


Never Reach Across The Blade



Cross Cuts – Milled Lumber

- Turn the power off
- Use a miter gauge
- Set the distance from the blade
- Turn the power on
- Make the cut



Use a miter gauge to secure the workpiece

Cross Cuts – Rough Cut Lumber

- Rough Cut Lumber may not be cut on the table saw
 - Using the bandsaw is one of the recommended alternatives
 - Use the radial arm saw for larger pieces
- Workpiece without a straight edge
 - Draw a line on the workpiece to act as a guide during the cut
 - Or attach a straight edge to the top of the workpiece to act as a guide along the miter gauge fence
- Position the cup so the workpiece rests on the interior of the board instead of the edges
 - This allows the workpiece to release away from the blade when cut

Characteristics of rough cut lumber



bow crook kink cup twist

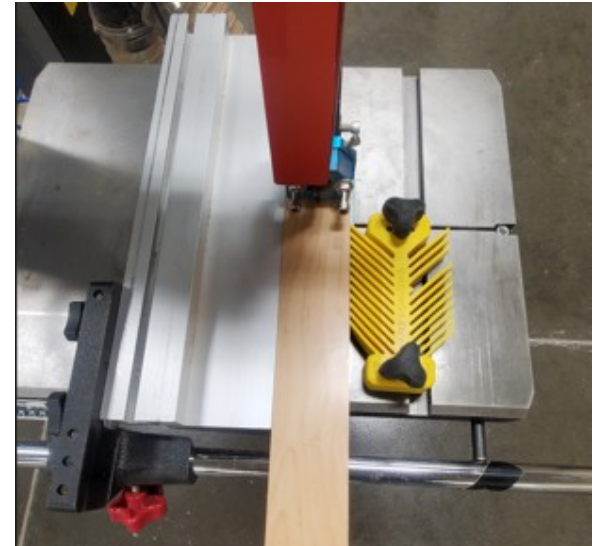


Live edges on rough cut lumber

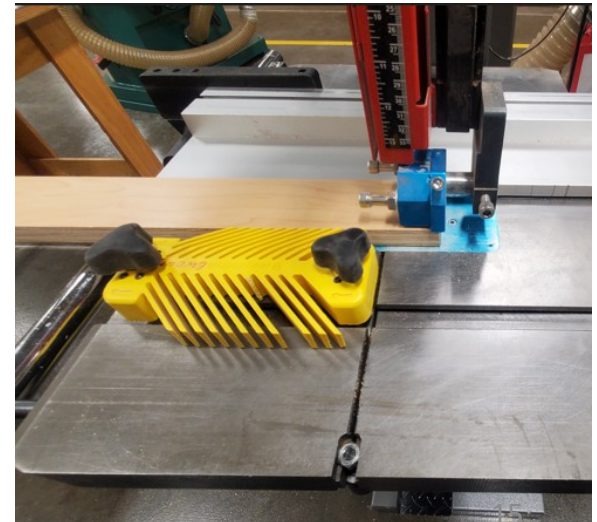


Rip Cuts – Milled Lumber

- **Use The 1/2” bandsaw for straight rip cuts longer than 18”**
- Use the 1/4”, 3/8”, or 1/2” bandsaws for contour cuts based on the radius of curvature
- Turn the power off
- Set the distance from the fence to the blade
- Use a feather board to hold the workpiece firmly against the fence
- Turn the power on
- Make the cut



Use a feather board to secure the workpiece against the fence



Rip Cuts – Rough Cut Lumber

- Rough Cut Lumber may not be cut on the table saw
 - Using the bandsaw is one of the recommended alternatives
- Workpiece without a straight edge
 - Draw a line on the workpiece to act as a guide during the cut
 - Or attach a straight edge to the top of the workpiece to act as a guide along the fence
- Position the cup so that the workpiece rests on the interior of the board instead of the edges
 - This allows the workpiece to release away from the blade when cut



Characteristics of rough cut lumber



bow crook kink cup twist



Live edges on rough cut lumber



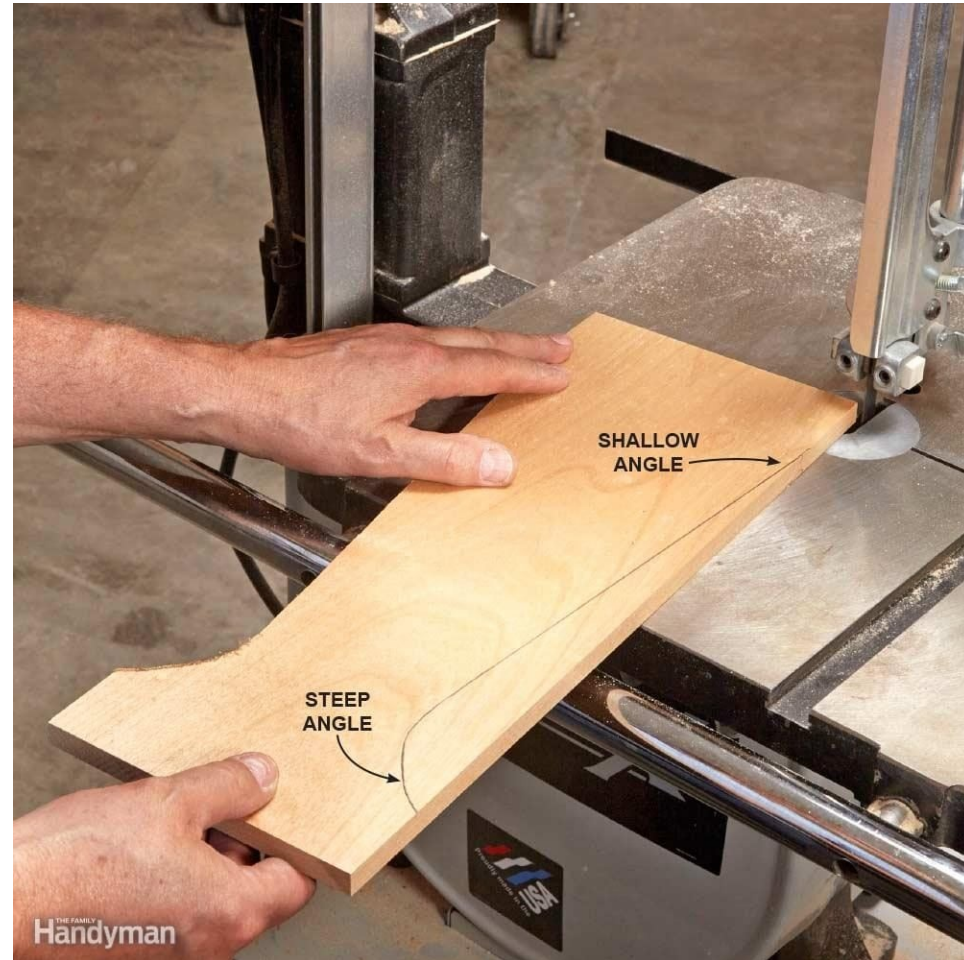
Contour Cuts - Outside Edge of the Line

- Bandsaw cuts usually leave saw marks, so it's good practice to allow extra space for sanding
- Cutting on the outside edge of the line minimizes the amount of sanding to be performed
 - However, accurately following the edge of a line—especially a curved line—takes practice. So until you've mastered this skill, it's best to start far enough away to leave a bit of wood showing between the line and the blade's kerf
 - Remember: the oscillating spindle sander is a bandsaw's best friend
- When cutting curves, always move slowly and methodically
- When bandsawing, plan your exit before you start your cut
 - If you must back out of a cut, hold the workpiece firmly in place with one hand and turn the motor off using the footbrake or the other hand
 - Do not attempt to back the workpiece out of the cut until the blade has come to a complete stop



Contour Cuts - Start at the Shallow Angle

- Always start a contoured cut at its shallowest angle
- Cutting in the opposite direction—so the cut ends with the shallow angle—can result in a ragged edge, because the blade can veer off the line at the last second and pop out
- If the angles are shallow at both ends of a contour, start at each end and cut to the middle



Use Relief Cuts When Cutting Contours

- Cutting a contoured profile is easier if you first cut in to the line along the curves and at the transition points
- When you saw the profile, the waste falls away whenever you reach one of these relief cuts
- Frees the blade to continue and effectively reduces each contour to a series of short, manageable cuts
- Significantly reduces the probability of breaking a blade
- Do not attempt to flick away small pieces from the blade with your fingers. Use another piece of material or a push stick, preferably with the blade stopped. Often this is not necessary, as the next cut will push the piece safely away from the blade. Once it is clear, push it off of the table. Never leave loose pieces on your table that could impede your cut.



Relief Cuts For Bowl Blanks



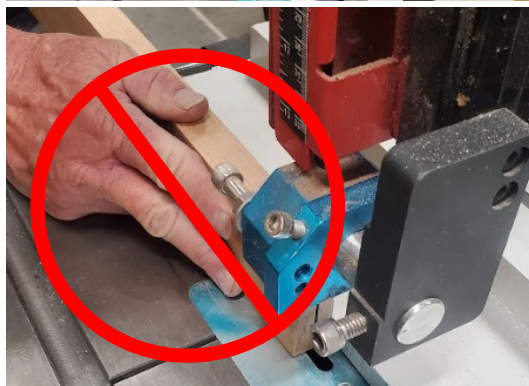
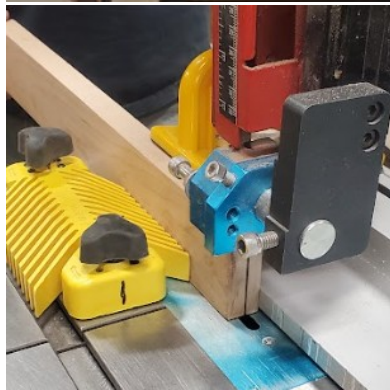
When cutting bowl blanks, **the preferred method is NOT cutting a curve.** Make a straight line cut to avoid injuries or damage to the equipment



Use relief cuts when preparing bowl blanks or when the radius is too tight for the blade width

Resawing

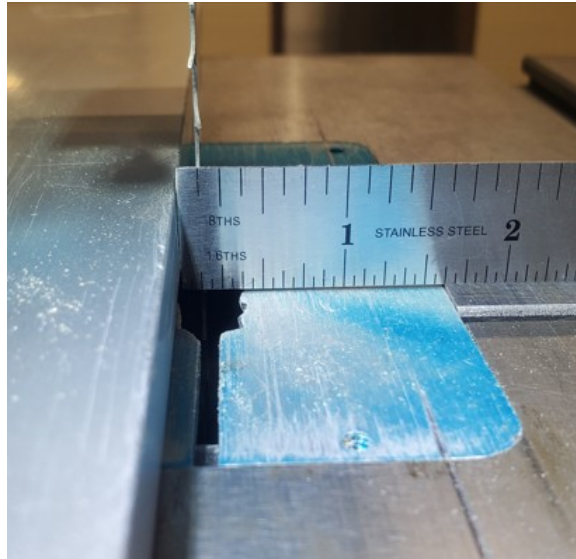
- Resawing is the process of cutting a workpiece along its height (reducing its thickness)
- **Resawing is prohibited using the 1/4" and 3/8" blades**
- The 1/2" blade may be used to resaw **small** workpieces no taller than 6"
 - Advance the workpiece slowly through the blade
 - Longer or harder workpieces should be resawed on the 1" bandsaw
- Ask an authorized member to assist you with the 1" bandsaws
 - When resawing larger pieces
 - Cutting logs
- **CAUTION: When using the fence in the vertical position, a large section of the blade may be exposed**



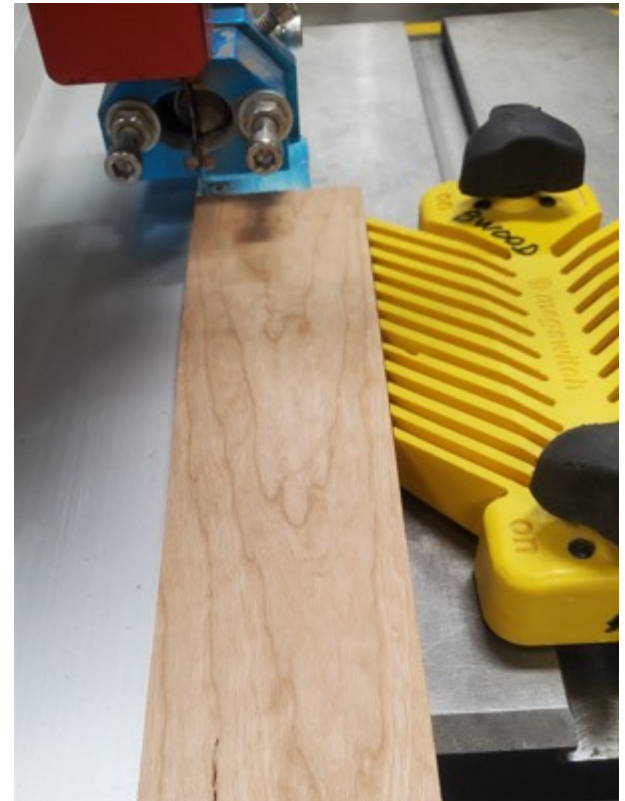
Never use your fingers as a feather board

Making Thin Cuts (Without Thin Cut Jig)

- Turn the power off
- Set the distance from the fence to the blade
- Use a feather board to hold the workpiece firmly against the fence
- Turn the power on
- Make the cut



1. Measure from the fence to the blade



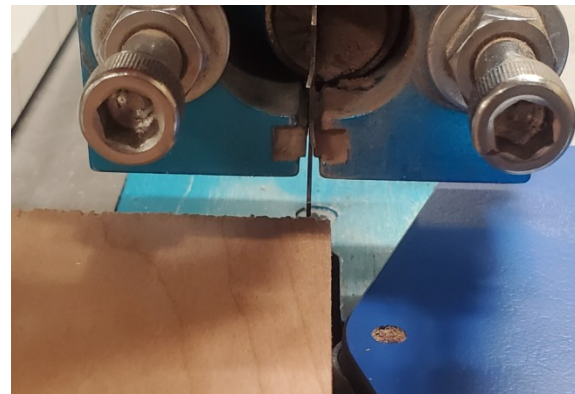
2. Use a feather board to secure the workpiece against the fence

Making Thin Cuts (With Thin Cut Jig)

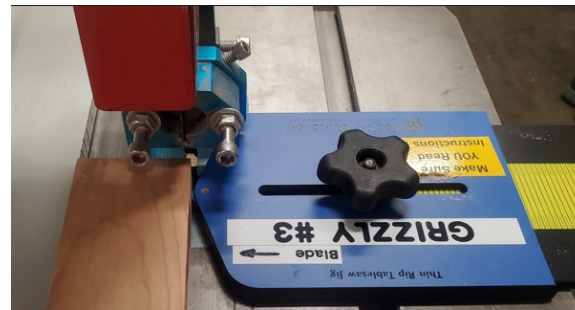
- Use the same thin cut jig used on the table saw
 - **Detailed instructions are with the jig in the table saw drawer**
 - Ask for help when using the jig for the first time
- Turn the power off
- Set the distance from the blade to the jig's bearing
- Snug the knob to secure the measurement
- Slide the jig towards you to be in front of the blade
- Tighten the knob to secure the jig in place
- Adjust the fence to secure the workpiece against the bearing
- Turn the power on
- Make the cut



1. Measure with the jig's bearing at the blade



2. Move the bearing before the blade

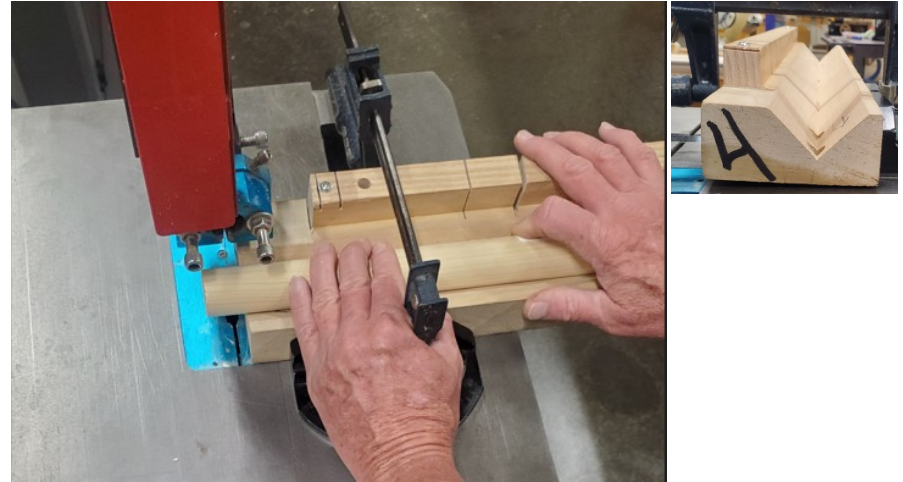


3. Position the fence to secure the workpiece against the bearing

Cutting A Round Workpiece



Avoid cutting round material on the bandsaw without the proper accessory. The round material might roll into the blade causing an injury or damage to the equipment

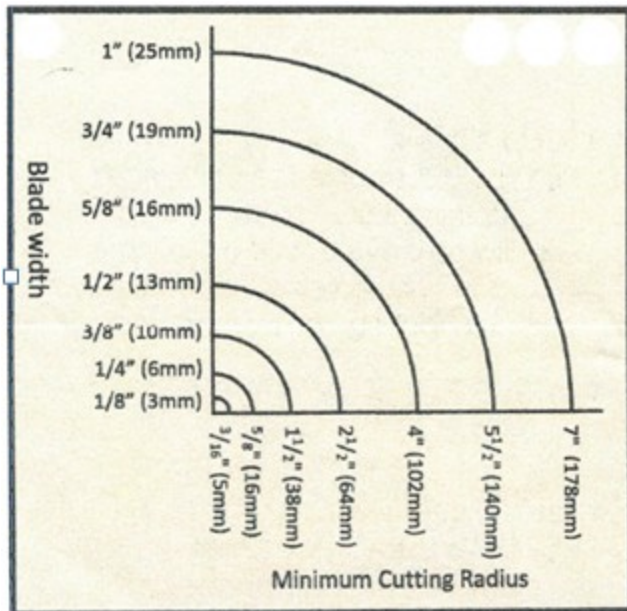


Use the correct accessory to stabilize the workpiece and keep it from binding, twisting, or causing injury or equipment damage

Circular Cuts

- **Circular Cuts**

- Cutting perfect circles is one of the many influential bandsaw uses. If you mark a circle on the piece of wood, you can easily cut a perfectly circular piece from it. Find the central point of the circle and make a hole there. At the starting point of your cut, draw a long tangent with the saw. Use something simple to hold the wood piece down easily where you have carved the hole, such as a nail. This will allow the bandsaw to rotate around the pin easily. The best circular cuts can be made using smaller blades.



Cutting Logs Is Prohibited



Logs may only be cut on the 1" bandsaw with the assistance of an authorized member



Safety Rules: Laguna Tools 14 | bx Bandsaw
User Manual

Safety Rules: Laguna Tools 14|bx Bandsaw User Manual

WARNING: For your own safety, read instruction manual before operating bandsaw

1. Wear eye protection.
2. Do not remove jammed cut off pieces until blade has stopped.
3. Maintain proper adjustment of blade tension, blade guides and thrust bearings.
4. Adjust upper guide to just clear workpiece.
5. Hold workpiece firmly against table.
6. **ALWAYS USE A PUSH STICK.** Never allow your hands/ fingers to come close to the bandsaw blade.

Safety Rules: Laguna Tools 14|bx Bandsaw User Manual

1. KEEP GUARDS IN PLACE and in working order.
2. REMOVE ADJUSTING KEYS AND WRENCHES. Form a habit of checking to see that the keys and adjusting wrenches are removed from tool before turning it on.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
4. DON'T USE IN DANGEROUS ENVIRONMENT. Do not use power tools in damp or wet locations or expose them to rain. Keep work area well lighted.
5. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
6. MAKE WORKSHOP KID PROOF with padlocks, master switches or by removing starter keys.
7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL. Do not force tool or attachment to do a job for which it was not designed.
9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Safety Rules: Laguna Tools 14|bx Bandsaw User Manual

10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact-resistant lenses; they are NOT safety glasses.
12. SECURE WORK. Use clamps or a vise to hold work when practical. It is safer than using your hand, and it frees both hands to operate tool.
13. DON'T OVERREACH. always Keep proper footing and balance
14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. DISCONNECT TOOLS before servicing, when changing accessories such as blades, bits, and cutters.
16. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.

Safety Rules: Laguna Tools 14|bx Bandsaw User Manual

18. NEVER STAND ON TOOL Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
20. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
21. NEVER LEAVE TOOL RUNNING UNATTENDED TURN POWER OFF. Do not leave tool until it comes to a complete stop