- 12. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand, and it frees both hands to operate tool.
- 13. DON'T OVERREACH. Keep proper footing and balance at all times.
- 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.
- 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. Don't leave tool until it comes to a complete stop.

- 10. PORTEZ DES VÊTEMENTS APPROPRIÉS. Ne portez pas de vêtements amples, des gants, des colliers, des bracelets, ou tout autre bijou ou accessoire qui pourrait être entraîné par des pièces mobiles. Des souliers à semelle antidérapante sont également recommandés. Attachez les cheveux longs et portez un bonnet pour contenir la chevelure trop abondante.
- 11. PORTEZ DES LUNETTES DE PROTECTION. Portez également un masque contre la poussière si le travail exécuté dégage de la poussière. Veuillez prendre note que les lunettes de prescription ordinaire ne résistent pas aux impacts et qu'elles ne sont pas homologuées à titre de lunettes de sécurité.
- 12. IMMOBILISEZ VOTRE TRAVAIL. Utilisez des serres ou un étau pour immobiliser votre travail lorsque c'est possible. C'est plus sécuritaire que d'utiliser votre main, et ça permet de libérer vos deux mains pour opérer l'outil confortablement.
- 13. NE VOUS ÉTIREZ PAS AU-DESSUS DE LA MACHINE. Demeurez solidement en équilibre sur vos pieds en tout temps.
- 14. ENTRETENEZ LES OUTILS AVEC SOIN. Gardez les outils de coupe tranchants et propres pour en tirer les meilleures performances. Suivez les instructions du fabricant pour la lubrification et l'entretien des accessoires.
- 15. DÉBRANCHEZ LES OUTILS avant d'en effectuer l'entretien ou lors du changement d'accessoires tels que lames ou couteaux.
- 16. RÉDUISEZ LES RISQUES DE DÉMARRAGE NON INTENTIONNEL. Assurez-vous que l'interrupteur est en position fermée avant le branchement d'un outil.
- 17. UTILISEZ LES ACCESSOIRES RECOMMANDÉS. Consultez le manuel d'instruction pour connaître les accessoires recommandés. L'utilisation d'accessoires inappropriés pose des risques de blessures aux utilisateurs.
- 18. NE VOUS TENEZ JAMAIS DEBOUT SUR UNE MACHINE. Des blessures graves pourraient survenir si la machine bascule ou si les outils coupants sont touchés accidentellement.
- 19. VÉRIFIEZ LES PIÈCES ENDOMMAGÉES. Avant de poursuivre l'utilisation d'un outil, tout dispositif de protection ou toute pièce endommagée devra être inspecté pour déterminer si elle peut fonctionner correctement et selon l'utilisation qui en est prévue. Vérifiez l'alignement des pièces mobiles à savoir s'il y a blocage, un bris, ou toute autre condition qui nuirait à son utilisation. Une pièce ou un protecteur endommagé doit être réparé ou remplacé.
- 20. SENS D'ALIMENTATION. Alimentez la pièce vers la lame ou le couteau dans le sens contraire de sa rotation seulement.
- NE LAISSEZ JAMAIS UN OUTIL FONCTIONNER DANS SURVEILLANCE – ÉTEIGNEZ L'OUTIL. Ne laissez pas l'outil sans surveillance jusqu'à ce qu'il s'arrête complètement.



Location of warning signs



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Woodk cf_]b['VUbX'gUk

The woodworking band saw is a saw with a long, sharp blade consisting of a continuous band of toothed metal stretched between two wheels to cut material. They are used principally in woodworking and lumbering. These bandsaws have two wheels rotating in the same plane, one of which is powered. The blade itself can come in a variety of sizes and tooth pitches (teeth per inch, or TPI), which enables the machine to be highly versatile and able to cut a wide variety of wood materials.

Electrical supply conditions

- Voltage: Steady state voltage: 0,9 to 1,1 of nominal voltage.
- Frequency: 0,99 to 1,01 of nominal frequency continuously; 0,98 to 1,02 short time.
- Harmonics: Harmonic distortion not exceeding 10 % of the total r.m.s. voltage between live conductors for the sum of the 2nd through to the 5th harmonic. An additional 2 % of the total r.m.s. voltage between live conductors for the sum of the 6th through to the 30th harmonic is permissible.
- Voltage unbalance: Neither the voltage of the negative sequence component nor the voltage of the zero sequence component in three-phase supplies exceeding 2 % of the positive sequence component.
- Voltage interruption: Supply interrupted or at zero voltage for not more than 3 ms at any random time in the supply cycle with more than 1 s between successive interruptions.
- Voltage dips: Voltage dips not exceeding 20 % of the peak voltage of the supply for more than one cycle with more than 1 s between successive dips.

Physical environment and operating conditions

- Ambient air temperature: Between air temperatures of +5 °C and +40 °C.
- Humidity: The relative humidity does not exceed 50 % at a maximum temperature of +40 °C.
- Altitude: Up to 1 000 m above mean sea level
- Transportation and storage: Within a range of -25 °C to +55 °C and for short periods not exceeding 24 h at up to +70 °C.

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New woodworking machines sold by Laguna Tools carry a one-year warranty effective from the date of shipping. Machines sold through dealers must be registered with Laguna Tools within 30 days of purchase to be covered by this warranty. Laguna Tools guarantees all new machine sold to be free of manufacturers' defective workmanship, parts and materials. We will repair or replace, without charge, any parts determined by Laguna Tools, Inc. to be a manufacturer's defect. We require that the defective item/part be returned to Laguna Tools with the complaint. Any machines returned to Laguna Tools must be returned with packaging in the same manner in which it was received. If a part or blade is being returned it must have adequate packaging to ensure no damage is received during shipping. In the event the item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges. This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, lack of or inadequate dust collection, misuse/abuse or damage caused where repair or alterations have been made or attempted by others.

Laguna Tools, Inc. is not responsible for additional tools or modifications sold or performed (other than from/by Laguna Tools, Inc.) on any Laguna Tools, Inc. wood-working machine. Warranty maybe voided upon the addition of such described tools and/or modifications, determined on a case-by-case basis.

Normal user alignment, adjustment, tuning and machine settings are not covered by this warranty. It is the responsibility of the user to understand basic woodworking machinery settings and procedures and to properly maintain the equipment in accordance with the standards provided by the manufacturer.

Parts, under warranty, are shipped at Laguna Tools, Inc.'s cost either by common carrier, FEDEX ground service or a similar method. Technical support to install replacement parts is primarily provided by phone, fax, e-mail or Laguna Tools Customer Support Website. The labor required to install replacement parts is the responsibility of the user.

Laguna Tools is not responsible for damage or loss caused by a freight company or other circumstances not in our control. All claims for loss or damaged goods must be notified to Laguna Tools within twenty-four hours of delivery. Please contact our Customer Service Department for more information.

Only **new** machines sold to the original owner are covered by this warranty. For warranty repair information, **call 1-800-332-4094**.



Noise Emission

Equivalent A-weighted Sound pressure level according to EN ISO 3746: 73.56 dB(A) Uncertainty, K in decibels: 4.0 dB (A) according to EN ISO 4871 The figure quoted is emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of the workforce include

characteristics of the work room, the other sources of noise, etc. i.e. the number of machines and other adjacent processes. Also the permissible exposure level can vary from country to country, This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.



Specification Sheet

Motor voltage/hp	230V, 1-3/4HP,) 0Hz, %D\ ž, "+A
Breaker	15 amp
Throat	13 5/8" (346mm)
Table cast iron	16" x 21 1/2" (406.4mm x 546mm)
Table tilt	- 7 degrees + 45 degrees
Miter slot	3/8" x 3/4" (9.525mm x 19.05mm)
Table height	38" (965mm)
Fly wheel	Cast iron
Resaw Capacity	12" (305mm)
Minimum Blade length	114 3/4" (2,914mm)
Maximum blade length	116" (2,946mm)
Maximum blade width	3/4" (19mm)
Minimum blade width	1/8" (3mm)
Guides	Laguna ceramic
Height	70 1/4" (1,784mm)
Machine Dimensions (W x D)	31 1/2" x 26 7/8" (800mm x 683mm)
Stand Footprint	25 1/4" x 18 1/8" (642mm x 460mm)
Machine Dimensions with	34 3/4" x 27 1/4" (882mm x 692mm)
mobility kit (W x D)	
Stand Footprint with mobility	33 3/16" x 20 1/2" (843mm x 521mm)
kit	
Weight gross	275 lbs (125 kg)
Weight net	258 lbs (117 kg)
Package size	22 7/8" x 22 7/8" x 55" (581mm x
	581mm x 1397mm)
Mobility kit	Optional
Industrial work-light	Optional



Receiving Your Machine

It is probable that your machine will be delivered by a third party. Before you unpack your new machine, you will need to first inspect the packing, invoice and shipping documents supplied by the driver.

Ensure that there is no visible damage to the packing or the machine. You need to do this prior to the driver leaving. All damage must be noted on the delivery documents and signed by you and the delivery driver. You must then contact the seller within 24 hours.

Introduction to Bandsaws



This bandsaw is designed to give you years of safe service. Read this owner's manual in its entirety before assembly or use.

The bandsaw is generally defined as a saw blade in the form of an endless steel band that rotates around two or more wheels. This blade is a continuous metal band with teeth on one side. As the wheels rotate, so does the band, which creates the



continuous sawing action. Because the direction of the blade is always downward toward the table, there is little danger (except for special cuts) that the wood will be thrown back at the operator, which is called a kickback. There is always danger of kickback when a circular saw is being used.

For safety reasons many woodworkers prefer the bandsaw especially when cutting small pieces. The unique feature of the bandsaw is that the work piece can be rotated around the blade creating a curve. It is the tool most often used when curves have to be cut in wood. Because the bandsaw blade is fairly thin, it can cut thick stock with a minimum of horsepower. For this reason the bandsaw is often used when valuable pieces of wood are made into a thin piece of veneer.

What you will receive with the bandsaw.



Stand side plates

Stand plates

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Fence guide bar

Fence parts and hand wheel



Note: The mobility kit and light are optional



Parts of the Bandsaw



1. Tension indicator window	10. Rip fence assembly
2. Switch	11. Dust port 4"
3. Motor	12. Quick-release blade tension lever
4. Frame	13. Blade tracking knob
5. Blade tension handle	14. Optional mobility kit
6. Blade tracking window	15. Optional light
7. Cast iron table	16. Blade guide shaft lock knob
8. Blade guide adjustment hand wheel	17.
9. Blade guide	18. Flywheel

The bandsaw does not have many parts. The major parts are discussed in this manual. If you are not familiar with the bandsaw, take the time to read this section and become familiar with the machine.



1. Tension indicator/window

Tension indicators are designed to indicate the compression of a spring. As a rule, the greater the spring compression, the greater the tension on the blade. The tension scale does not register until the blade is relatively taut and is located on the inside of the body of the bandsaw. The tension scale is a general reference and not a rule. The tension indicator is visible with the upper door closed by looking through the tension indicator window.

2. Switch

The start-stop switch activates the motor when it is pulled out and deactivates the machine when pressed in. The switch can be deactivated by removing the yellow safety plug.

3. Motor

The bandsaw is supplied with a 1 3/4 hp, GH€V motor. It drives the lower flywheel through a drive belt.

4. Frame

The frame of the bandsaw is a U-shaped frame, which houses all the parts of the machine. This is the heart of the bandsaw and has to be very rigid, as it takes the strain of the blade being tensioned.

5. Blade tension handle

The blade tension handle moves the blade tension and tilt assembly vertically. The vertical action compresses a spring that ensures that the blade tension is constant and will not change dramatically as the blade length increases due to the heat generated by the cutting action.

6. Blade tracking window

There is a blade tracking window on the side of the frame that allows the edge of the upper flywheel to be viewed. This allows the tracking of the blade to be achieved with the door closed.

7. Cast iron table

The table supports the work piece and can tilt to produce cuts at various angles. It has a groove to the right-hand side of the blade, which is used to guide the miter gauge. In the centre there is a table insert which the blade passes through. Should the blade wander off center, this table insert will protect the blade from damage, as it is soft and should not damage the blade. The table also supports the adjustable fence, which is used for parallel cuts. There is a nut and bolt that join both sides of the table and stops the table from warping. The nut and bolt must always be fitted in the table and only removed when removing or fitting a blade.



8. Blade guide adjustment hand wheel

The upper blade guides are attached to the blade guide shaft. The shaft is vertically adjustable with a hand wheel. The guides should be adjusted so the guides are just above the wood being cut. This gives the blade maximum stability and is also the safest way to operate the bandsaw.

9. Blade guides

There are two sets of blade guides, one above and one below the table. The function of the guides is to give the blade stability and ensure that the blade movement left/right, forward/back is kept to a minimum. The guides above the table are fitted to a shaft that has vertical adjustment. The upper guides are adjustable so that the guides are held just above the job being cut. This gives the blade the maximum amount of stability and also keeps the amount of blade that is exposed to a minimum. The guides have ceramic inserts that can be adjusted for almost zero clearance.

10. Rip fence assembly

The rip fence assembly consists of a guide rail, cast knuckle, fence attachment casting, rule and a high-low fence. The guide rail is attached to the table side. It guides the fence assembly across the table. The cast knuckle slides on the guide rail and is lockable in any position to suit the width of cut. The fence attachment casting is attached to the cast knuckle with three screws that when loosened allow the fence to be adjusted for drift. The fence is attached to the fence attachment casting with two studded 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.

There is a rule that 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.

Note. The rule will have to be adjusted each time the fence is adjusted for drift, as this will change the distance the fence is from the blade.

11. Dust port 4"

The bandsaw produces a lot of sawdust, so extraction is very important. This is achieved by connecting a 4" dust extraction hose to the dust ports located at the side of the machine with a minimum capacity of 1,000 CFM. The stronger the suction from the dust collector, the better for you and the machine.

12. Quick-release blade tension lever

There is a quick-release tension lever at the back of the bandsaw. The lever is a convenient way of quickly releasing the tension on the blade and speeds up blade change dramatically.

13. Blade-tracking knob

The blade-tracking knob is located at the back of the bandsaw and is used to adjust the blade tracking. The knob must be locked once the adjustment is completed.



14. Optional mobility kit

The optional mobility kit is fitted to the stand and consists of two fixed wheels at the back of the bandsaw and a swiveling wheel at the front of the band saw. The swivel wheel is activated and deactivated with a foot lever.

With the swivel wheel deactivated, the bandsaw sits on two feet.

15. Optional light

The optional light is fitted with four screws through pre-drilled holes at the top of the bandsaw.

16. Blade guide shaft lock knob

The upper blade guide is fixed to the blade guide shaft, which is vertically adjustable. Once the guides have been adjusted vertically, the shaft is locked in position with the lock knob.

17.

18. Flywheel

The blade is suspended over two wheels that are covered with rubber called a tire. The tire cushions the blade and protects the teeth from coming in contact with the metal of the flywheel. The lower wheel is the drive wheel and is attached to the motor with a rubber drive belt. The lower flywheel powers the blade and pulls the blade down through the work piece. The top wheel has two functions. One function is to balance or track the blade on the wheels, and the second one is to tension the blade. Both functions are adjustable.

Guards

When running, the blade can be very dangerous, and the amount of blade that is exposed must be kept to a minimum. The machine is supplied with a number of guards, all of which **MUST** be installed and used while the machine is running. There is a guard that is attached to the lower door and is adjustable vertically once the door is closed. There is a guard on the guide vertical adjustment shaft.

Tilt and tension mechanism

The upper wheel is attached to the tilt and tension mechanism. This mechanism adjusts the wheel so that the bandsaw blade can be adjusted for tracking. This is achieved by a screwed handle at the back of the machine that pushes on the mechanism and adjusts the axis of the wheel so that it runs true with the lower wheel. The second function is to tension the blade, which is achieved by adjusting the upper flywheel vertically. A handle is located below upper flywheel and, when



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rotated, will move the wheel up or down. The machine has a quick-acting blade release mechanism that is located at the back of the machine and will remove the tension from the blade to speed the removal and fitting of blades. The mechanism has a spring, which helps to keep the tension constant as the blade expands and

contracts with the heat generated by the cutting action.

Electrical connection

The bandsaw is provided with a cable and] lug.

Identification

There is a plate at the back of the machine listing all the manufacturing data, including the serial number, model and blade length.

Where to Locate Your Bandsaw

Before you remove your bandsaw from the pallet, select the area where you will use your machine. There are no hard-and-fast rules for its location, but below are a few guidelines.

- **1.** There should be an area at the front and back of the machine suitable for the length of wood that you will be cutting. If you intend to use your saw for scrollwork, this may not be important but should be considered at this stage.
- 2. Adequate lighting. The better the lighting, the more accurate and safely you will be able to work
- **3.** Solid floor. You should select a solid, flat floor, preferably concrete or something similar.
- 4. Close to power source and dust collection.

Unpacking Your Machine

To unpack your machine, you will need tin snips, knife and a wrench.

Note: The machine is heavy, and if you have any doubt about the described procedure, seek professional assistance. Do not attempt any procedure that you feel is unsafe or that you do not have the physical capability of achieving.

Using the tin snips, cut the banding that is securing the machine to the pallet (if fitted).

WARNING: EXTREME CAUTION MUST BE USED BECAUSE THE BANDING WILL SPRING AND COULD CAUSE INJURY.

Your bandsaw will be shipped in custom packaging consisting of a heavy-duty cardboard box and Styrofoam internal packaging.

1. Open the cardboard box and remove the loose parts and top Styrofoam.





- **2.** Lift the bandsaw out of the packaging. You will need two or more people, as the bandsaw is heavy.
- **3.** Lift the bottom Styrofoam out and remove the parts that are packaged under the bandsaw and packaging.

Assembly and Set Up

Assembling the bandsaw stand

Fixing bolts



Stand viewed from inside

The stand consists of two sets of panels. Two side panels and two back/front panels.

- **1.** Assemble the panels with the fixings supplied.
- **2.** Turn the assemble upside down and fit the feet one per corner and tighten the lock nuts.

Note. If you have purchased the optional mobility kit, it should be fitted now (detailed below).





Feet

Note. If a mobility kit is being fitted, only two feet will be required, as the back wheels are used to stabilize the bandsaw.



Assembling the mobility kit to the stand



Optional mobility kit

Support bracket fixing screw



Front mobility wheel with spring fitted



Mobility front wheel screwed onto the shaft

The mobility kit consists of a front swivel wheel and two wheels at the back of the bandsaw.

1. Fit the support bracket (item 20) to the inside of the stand with the one top screw. This will hold the bracket in position.



- 2. Fit the front swivel wheel on the stand as shown by bolting in position through the stand onto the support bracket. Do not fully tighten the screws, as the height of the wheel will have to be adjusted to suit the stand.
- 3. Fit the spring onto the shaft and then screw the wheel onto the shaft



Back mobility wheel assembly

5. Fit the back mobility wheel bracket level with the base of the stand as shown.

Note. Do not fit the two leveling feet to the back of the stand.

6. Turn the stand the correct way up so

that it sits on the wheels and the leveling feet.





Fitting the stand to the bandsaw (shown with opitional mobility kit).





Motor supported



You will probably find that it is easier to fit the stand to the bandsaw with it in the horizontal position and then lifting it to the vertical position as shown in the above photographs. If you lay your bandsaw down as shown, it must be a minimum of 8" off the ground. The motor must be supported, or the bandsaw will tip over. Other people find it easer to lift the bandsaw onto the assembled stand. Regardless of the option that you choose, you will need more than one person to complete the assembly. The machine is heavy, and if you have any doubt about the described procedure, seek professional assistance. Do not attempt any procedure



that you feel is unsafe or that you do not have the physical capability of achieving, as the bandsaw is heavy.

You will probably find it easier to assemble the stand to the bandsaw prior to fitting the other part (table, etc.), as it is lighter.

With the stand aligned to the bandsaw, fit the fixing screws and fully tighten.



Trunion clamp stud



Tilt stop bolt

It is possible to fit the table to the bandsaw with one person but far easier if you have two people, one to lift the table and one to guide the trunion clamp studs.



Tilt stop bolt





The table has a reference stop bolt that is used to quickly align the table after tilting. The stop bolt hits the tilt-blanking disc when it is positioned over the table tilt hole. When the tilt blanking disc is moved away from the hole, it allows the tilt stop bolt to pass through the table tilt hole, and the table can be moved to the maximum amount of tilt (7 degrees).

Fitting the table to the bandsaw



Table mounted to the bandsaw



Trunion clamp stud

With the table fitted to the trunions, assemble the two ratchet handles. Adjusting the table for square to the blade is covered latter in the manual.

Fitting the guide vertical shaft adjustment handle

Loosen the clamping screw so that the handle can slide on the shaft. Align the screw with the flat on the shaft and fully tighten the screw.



Ratchet handle



Vertical shaft adjustment handle.

