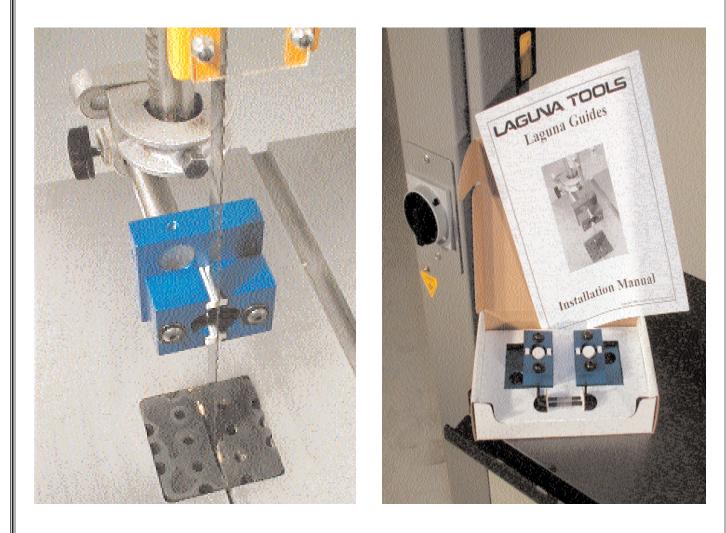
LAGUVA TOOLS Laguna Guides



Installation Manual

Copyright© 2001, Laguna Tools, all rights reserved.

Safety Rules

As with all machinery there are certain hazards involved with the operation and use. Using it with caution and respect will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. If you have any questions relative to the installation and operation, do not use the equipment until you have contacted your supplying distributor.

<u>Read carefully before operating the</u> <u>Laguna Guides</u>

- 1. Keep working area clean, and be sure adequate lighting is available.
- 2. Do not wear loose clothing, gloves, bracelets, necklaces or ornaments. Wear face, eye, ear, respiratory and body protection devices as indicated for the operation or environment.
- 3. Be sure the power is disconnected from the machine before tools are serviced or an attachment is to be fitted or removed.
- 4. Never leave the machine with the power on.
- 5. Do not use a bent, dull, gummy or cracked cutting tool.
- 6. Be sure the keys and adjusting wrenches have been removed, and all nuts and bolts are secured.

<u>Warranty</u>

All of the surround guides are constructed under the strictest quality controls during production and have undergone a final check before shipping. The guarantee is valid for a period of 12 months from date of purchase and will be rendered null and void in the case of unauthorized intervention, tampering or misuse other than instructions specified in this manual.

IMPORTANT: Once fault has been verified, inform the seller (Laguna Tools) of the problem or defect. Depending on the problem, the seller will ship a replacement part or authorize the necessary repairs.

Introduction

Welcome to a new era in band sawing. You have purchased a revolutionary blade guide system (patent pending) that is designed to give you many years of safe, high-quality band sawing.

Most blade guide systems are designed to support the blade on the sides and either above or below the side guides to support the back of the blade. This can allow the blade to twist as pressure from the wood being cut pushes against the back blade guide.

The surround guide eliminates this by supporting the blade above and below the back blade guide, giving the blade unsurpassed stability. The surround guide also incorporates patented ceramic as the blade support material. The advantage of this material is its ability to resist wear and, with care, should give years of safe service.

Please read the following notes, as they will assist you in getting the optimum performance from your Surround Guide System.

1. As with the roller guide systems, the Surround Guide System will damage your band-saw blade if it is not adjusted correctly. The guide blocks must not come in contact with the blade teeth. It is advised you run the blade by hand with the guide blocks completely clear of the blade, and only when you are completely sure that the blade is running consistantly in the correct position, then adjust the surround guide blocks as detailed in this manual.

2. When fitting a new blade to your band saw, adjust the guide blocks and run the blade by hand through the guide blocks for at least 2 complete revolutions.

NOTE the weld on a new blade may not be perfectly aligned and the misalignment could hit the ceramic blocks (side and back), causing damage to the blocks and or the blade. If the blade has a bad weld, return it to your blade supplier, or side dress and file the rear edge as needed.

3. The back blade guide is manufactured from ceramic, so as the blade is pushed against it, friction between the blade and ceramic occurs. This action generates a certain amount of sparks. This is normal and will reduce as the back blade guide smoothes out the back of the blade.

4. The back blade guide will slowly form a small grove as the blade is used. It is recommended that for approximately every 8 hours of use the guide be rotated 15 degrees. This will insure that the groove does not become too deep and will greatly extend the life of the guide.

5. The Surround Guide System can be used on blades $\frac{1}{4}$ "-1".

6. The Surround Guide System uses ceramic to support and guide the blade.

This has many advantages, (very poor conductor of heat, very resitant to wear, etc.) The disadvantage is that it is brittle, so the guides must never be dropped, exposed to hard knocks or hit with hard objects. Any of the above actions may cause the ceramic to chip or break and will detract from the performance of the surround guide system. Any mistreatment of the guide system will render the warranty and void.

The side guide blocks must be tightened before running the machine to avoid jamming the blade and damaging the machine and/or guide blocks. 7. When cutting gummy or green wood, the blade can become covered with resin. You will find that with the Surround Guide System the ceramic blocks remove the resin as the blade is moved through the guide blocks and keep your blade clean over that part of the blade. For this reason it is recommended that the blocks be adjusted close to the teeth of the blade, but must not contact them as the ceramic will break or dull the teeth.

8. The Surround Guide System is designed as a replacement for the GL456 band-saw guide system. Certain GL456 guide systems may have been modified to suit the various types of band saws. Laguna Tools does not accept any responsibility if the Surround Guide System will not fit, or if there are any modifications that may be needed to be conducted to make the Surround Guide System fit band saws.

9. The Surround Guide may increase the resaw height of your band saw. This will depend on the type of saw that you have, but it must be noted that in certain cases the blade guard may have to be modified. Laguna Tools is not responsible for any costs that may be incurred in modifying the guard or any safety aspects, should the guard be modified.

10. Be sure to release the blade tension when finished working or at night.

Assembling the Surround Guide to your band saw (ACM)

UPPER GUIDE

1. DISCONNECT THE POWER FROM YOUR MACHINE.

2. Move the blade guard up away from the existing blade guide system. See Figs. 2A and 2B. This will allow you access to the guides.

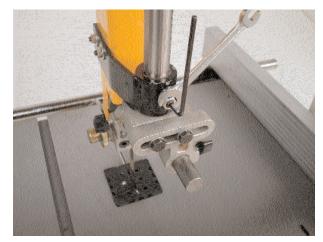


Fig. 2A



Fig. 2B

3. Remove the GL456 blade guide by loosening the bolt as shown in Fig. 3.

4. Remove the lower GL456 bearing holder as shown in Fig. 4. This will leave only the shaft attached to the adjustment bracket. See Fig. 4.

6. Fit the Surround Guide to the shaft ensuring that the shaft does not protrude through past the front of the support block as it will interfere with the adjustment of the side guide blocks. See Fig. 5.



Fig. 3



Fig. 4

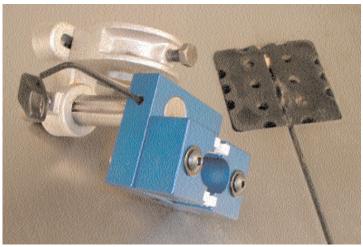


Fig. 5

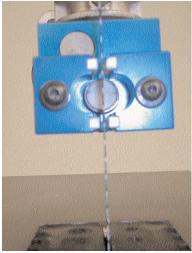
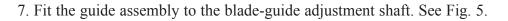


Fig. 7



8. Adjust the side guide blocks out as far as they will go and clamp finger tight. Make sure that the back blade guide is as far back as it can go and is clamped finger tight. See Fig. 7. This will ensure that the guides will not interfere with the blade while you do the adjustments.

9. Because the Surround Guide may increase the resaw height of your band saw, it may not reach the table of the band saw. To square the Surround Guide to the table, place a piece of parallel wood or something similar on the table and bring the Surround Guide down slowly so that it just touches the block. Tighten the Allen set screw. See Fig. 8.



Fig.8

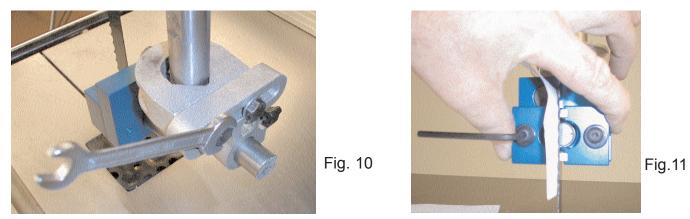


Fig.9

10. Loosen the side guides. Push them down on to the wood block and tighten. This will ensure that the side guide blocks are square to the table. See Fig. 9.

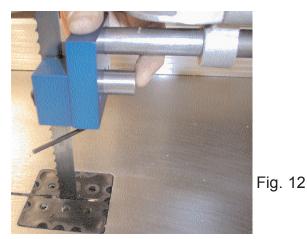
11. Install a blade (a 1" blade will give best results when initially adjusting the guides). Loosen the bolts in the sideways adjustment bracket. See Fig. 10. Loosen the clamp bolt shown in Fig. 3. Rotate the guide assembly while moving the guide sideways until it contacts the side of the blade. The side ceramic block must be parallel to the blade. Once this has been achieved, the clamping bolt shown in Fig. 3 must be fully tightened.

12. Move the guide assembly sideways until the blade is in the center of the back blade guide. Tighten the bolts in the sideways adjustment bracket. See Fig. 10.



13. We are now ready to adjust the guide to the blade. Rotating the blade by hand ensures that it is tracking consistently in the correct position. Loosen the side guide blocks. Loosen the clamp on the shaft and then move the guide assembly forward until the ceramic blocks are just behind the guilet of the band-saw blade. Place a dollar bill or a piece of paper of similar thickness between the guide block and the blade. Gently bring both side guide blocks towards the blade so that a slight pressure is exerted on the blade. Tighten the clamp screws and remove the paper. Rotate the blade by hand to ensure that the weld of the blade does not hit the ceramic blocks. If the weld does hit the ceramic, it may cause damage to the ceramic and/or the blade and must be returned to your blade supplier (see Fig. 11.), or dress the weld with a file or grinding block.

14. Loosen the back blade guide screw and move it forward until it just touches the blade. Tighten the guide in position. See Fig. 12.



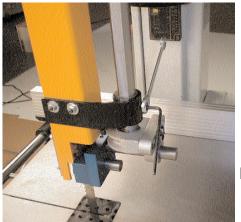


Fig. 13

Note: Rotate the back blade guide by approximately 15 degrees after every 8 hours of use. This will greatly extend the life of the back blade guide, as it will even out the wear. Rotate the blade by hand to ensure that the weld at the back of the blade does not hit the back blade guide ceramic block. If the weld does hit the ceramic, it may cause damage to the ceramic and/or the blade and must be returned to your supplier.

15. Move the blade guide down and clamp in the correct position. See Fig. 13.

16. As your blade guide may not reach the table, it is recommended that you cut a piece of wood as shown in 28, 28B). When your machine is not in use, position the wood around the blade with the machine in the OFF position to avoid accidents caused by leaving the blade exposed.

LOWER GUIDE



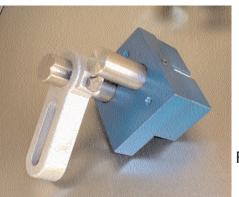


Fig. 15

1. Remove the lower GL456 blade guide. See Fig. 14.

2. Remove the GL456 bearing assembly and assemble the Surround Guide to the adjustment bracket. See Fig. 15.

3. Assemble the adjustment bracket to the band saw. See Fig. 16.

Ensure that the back blade guide is free to move back and is not obstructed by the band saw. See Fig. 16.

Ensure that the support block is parallel to the band saw. See Fig. 19.

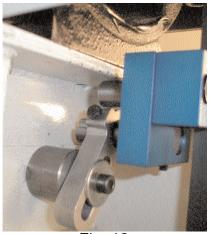


Fig. 16

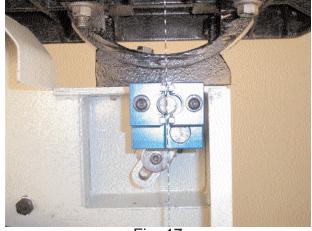
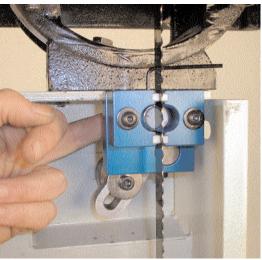


Fig. 17

Ensure that the blade is in the center of the back blade guide. See Fig. 17.



Fig. 18





4. We are now ready to adjust the guide to the blade. Rotating the blade by hand ensures that it is tracking consistently in the correct position. Loosen the side guide blocks. Loosen the clamp on the shaft, and then move the guide assembly forward until the ceramic block is just behind the gullet of the band-saw blade. Place a dollar bill or a piece of similar thickness paper between the guide block and the blade. Gently bring both side guide blocks towards the blade so that slight pressure is exerted on the blade. Tighten the clamp screws and remove the paper. Rotate the blade by hand to ensure that the weld of the blade does not hit the ceramic blocks as this will cause damage. If damage occurs, then the blade will need to be returned to your blade supplier. See Fig. 18.

5. Loosen the back blade guide clamp screw and push it forward so that it just touches the back of the blade. Tighten the guide in position. See Fig. 19.

Note: Rotate the back blade guide approximately 15 degrees after every 8 hours of use. This will greatly extend the life of the back blade guide, as it will even out the wear. See Fig. 19.

Your bandsaw is now ready to cut wood using your new blade guides.

Assembling the "Surround Guide" to your Meber band saw

Disconnect the power from your machine.

1. Assembling the upper guide:









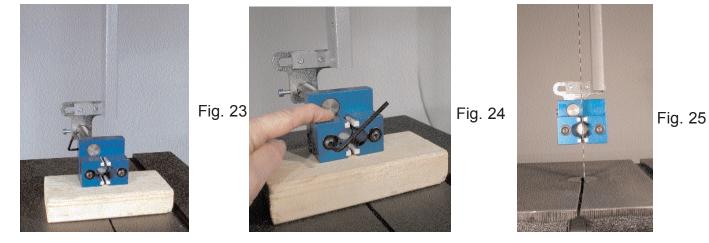
- 2. Remove the guard as shown in Figs 20 & 21.
- 3. Remove the blade guide as shown in Fig 21.
- 4. Fit the support bar into the side adjustment bracket as shown in Fig 22 with the groove in the bracket.
- 5. Fit the Surround Guide as shown in Fig 23.

Note: It may be necessary to remove the side and back blade supports and reassemble them on the other side of the main plate.

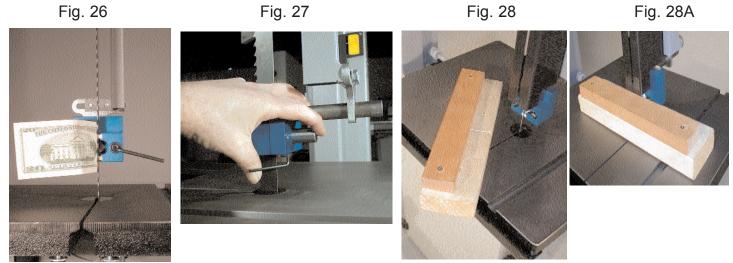
6. Because the Surround Guide may increase the resaw height of your band saw, it may not reach the table of the band saw. To square the Surround Guide to the table, place a piece of parallel wood or something similar on the table and bring the Surround Guide down slowly so that it touches the block. Then tighten the Allen screw. See Fig 24.

7. Loosen the 2 bolts that clamp the sideways adjustment and move the guides so that the back blade guide is on the center line of the blade. See Fig 25.

8. We are now ready to adjust the guide to the blade. Rotating the blade by hand, ensure that it is tracking con-



sistently and in the correct position. Loosen the side guide blocks. Loosen the clamp on the shaft, and then move the guide assembly forward until the ceramic blocks are just behind the gullet of the blade. Place a dollar bill or a piece of paper of similar thickness between the guide blocks and the blade.



Gently bring the side guide blocks towards the blade so that a slight pressure is exerted on the blade. Tighten the clamp screws and remove the paper. Rotate the blade by hand to ensure that the weld of the blade does not hit the ceramic blocks. If the weld hits the ceramic, it may cause damage to the ceramic and the blade and must be returned to your blade supplier. See Fig 26.

9. Loosen the back blade guide and move it forward until it just touches the blade. Tighten the guide in position. See Fig 27.

10. As your Surround Guide may not reach the table, it is recommended that you cut a piece of wood as shown in fig 28. When you leave your machine you should push the wood protector around the blade with the machine shut off. See Fig. 28A. This will ensure that accidents caused by leaving the blade exposed will not happen.

11. The blade guard will need to be modified to suit the Surround Guide. Figs 29, 30, 31 and 31A show one set of dimensions, but depending on the machine that you have, you may have to modify your guard differently.

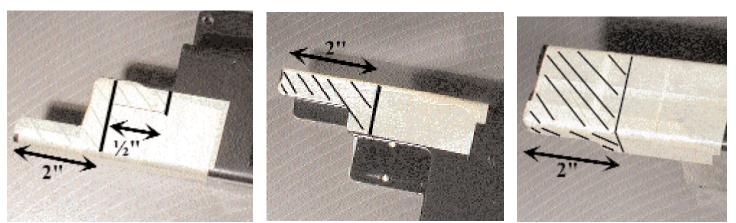
Assembling the lower guide

- 1. Remove the existing guide. See Fig. 32.
- 2. Assemble the guide on to the support post. See Fig. 33. The guide must be parallel to the table. This can be



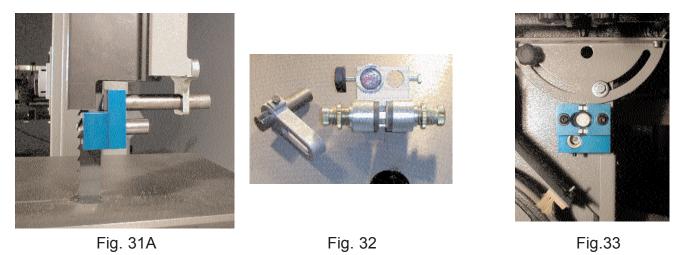
Fig. 30

Fig. 31



done by eye or with a spirit level.

Note: If the hole that fits the support post is on the wrong side for your machine, simply take the side and back guides off and reassemble on the other side of the main plate.



3. We are now ready to adjust the guide to the blade. Rotate the blade by hand to ensure that it is tracking consistently and in the correct position. Loosen the clamp on the shaft, and then move the guide assembly forward until the ceramic block is just behind the gullet of the band-saw blade. Place a dollar bill or a piece of paper of similar thickness between the blade and the side guide. Gently bring both side guides towards the blade so that a slight pressure is exerted on the blade.

Tighten the clamp screws and remove the paper.

Rotate the blade by hand to ensure that the weld of the blade does not hit the ceramic blocks. If the weld does hit the ceramic, it may cause damage to the ceramic and/or the blade, and the blade must be returned to your blade supplier (see Fig 34.), or dress accordingly.

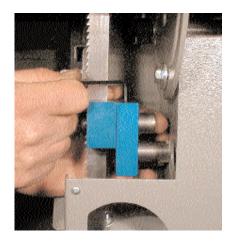
4. Loosen the back blade guide screw, and move the back guide forward until it touches the blade. Tighten the guide in position. See Fig 35.

5. Your band saw is now ready to cut wood using your new guides.

Fig. 34







Maintenance

All tools require maintenance, and although only a few things will need to be checked from time to time, if the checks are completed at regular intervals, they will greatly extend the life of your Surround Guides and keep your Surround Guide System performing at peak performance.

1. Ensure that the side guide blocks are parallel to the blade. If the side blocks are not parallel, they may exert a twist to the blade causing excessive wear on both the guide blocks and the blade.

2. The side guide blocks may become gummed up and need to be cleaned. Should they need cleaning, any commercial solvent available can be used. Do not soak guides in solvent as the solvent may negatively effect the epoxy used to hold the ceramic to the guide.

3. To ensure that the guides are easy to adjust, it is recommended that the Surround Guide be lubricated using a Teflon-based lubricant.

Help us improve our products.

Here is your perfect chance to have a direct impact on the tools you use. Please take a few minutes to return this feedback with your comments and suggestions.

Thank you for purchasing a set of the new Laguna Surround Guides; we would appreciate your taking a few moments to complete and return this document, which will enable us to evaluate our product. Your assistance in completing the sheet will help us improve the product and the service that we supply to our customers.

Your name: City: Telephone number: Hm () Your machine type and model:	State: Work: ()	Zip: E-mail:	
Did the guides fit the machine? Upper guide (circle one Lower guide (circle one			No No
User manual is comprehensive (circle one). User manual is easy to follow (circle one). The upper-guide was easy to fit to the band saw. The lower-guide was easy to fit to the band saw. The upper-guide is easy to adjust forward/backward. The lower-guide is easy to adjust forward/backward. The upper-guide is easy to adjust side-to-side. The lower-guide is easy to adjust side-to-side.	Yes Yes Yes Yes Yes Yes Yes		No No No No No No
Blade performance (circle one) Blade stablity (circle one) Blade life (circle one) Cutting speed (circle one) Surface finish of cut (circle one)	Improved Improved Improved Improved Improved	No improvement No improvement No improvement No improvement No improvement	Worsened Worsened Worsened Worsened

General comments:

List the three most important things that you would like to see improved on the guide.

- 1. ______
- 3.

I would like to thank you for taking the time to complete this form and assure you that any information contained in this document will be used solely for product improvement and development by Laguna Tools and will not be used and/or sold to any third parties. Our continued commitment is to bring you, our customers, high-quality products and improved service.

Torben Helshoj

Tul Hes Company President

Laguna Tools. 17101 Murphy Ave, Irvine, CA 92614 Tel 1(800) 234-1976, 1(949) 474-1200 Visit our web site http://www.lagunatools.com, E-mail mail@lagunatools.com