MODEL CX123

9" WOOD BAND SAW WITH LASER

USER MANUAL

Version 1.0

TABLE OF CONTENTS

Specifications:

Electrical:

Power Requirement..... 120V, Single-Phase, 60 Hz
Full-Load Current Rating..... 2.8A
Minimum Circuit Size..... 15A
Connection Type.....Plug
Power Cord Length..... 6 ft.

Motor:

Horsepower..... (320W)
Phase..... Single-Phase
Amps..... 2.8A
Speed..... 1720 RPM
Type..... ODP Induction

Main Specifications:

Band saw
Size..... 9 in.
Max Cutting Width (Left of Blade)..... 9 in.
Max Cutting Width (Left of Blade) Max Cutting Height (Resaw height)..... 3-5/8 in.
Blade Speeds..... 2460 FPM
Wheels.....Balanced Aluminum
Tire..... Rubber
Dust Port Size..... 2 in.
Wheel Diameter..... 9-5/16 in.
Wheel Width..... 3/4 in.
Number of Dust Ports..... 1

Blade Information:

Standard Blade
Length..... 62 in.
Blade Length Range..... 61-13/16 - 62-3/16 in.
Blade Width Range..... 1/8 - 3/8 in.

Blade Guides:

Guides..... Ball Bearing
Guide Post Adjustment Type..... Rack & Pinion

Table:

Table Length..... 12 in.
Table Width..... 12 in.
Table Thickness..... 5/8 in.
Table Tilt..... 0 - 45 deg.
Table Tilt Adjustment Type..... Rack & Pinion
Floor-to-Table Height..... 13 in.
Fence Locking Position..... Front
Table..... Cast Aluminum
Trunnion..... Cast Aluminum
Fence.....Aluminum

GENERAL SAFETY INSTRUCTIONS

Extreme caution should be used when operating all power tools. Know your power tool, be familiar with its operation, read through the owner's manual and practice safe usage procedures at all times.

- **ALWAYS** read and understand the user manual before operating the machine.
- **CONNECT** your machine **ONLY** to the matched and specific power source.
- **ALWAYS** wear safety glasses respirators, hearing protection and safety shoes, when operating your machine.
- **DO NOT** wear loose clothing or jewelry when operating your machine.
- **A SAFE ENVIRONMENT** is important. Keep the area free of dust, dirt and other debris in the immediate vicinity of your machine.
- **BE ALERT! DO NOT** use prescription or other drugs that may affect your ability or judgment to safely use your machine.
- **DISCONNECT** the power source when changing blade and / or making adjustments.
- **NEVER** leave a tool unattended while it is in operation.
- **NEVER** reach over the table when the tool is in operation.
- **ALWAYS** keep blades, knives and bits sharpened and properly aligned.
- **ALL OPERATIONS MUST BE** performed with the guards in place to ensure safety.
- **ALWAYS** use push sticks and feather boards to safely feed your work through the machine.
- **ALWAYS** make sure that any tools used for adjustments are removed before operating the machine.

CX123 Specific Safety Instructions

- **CX123** is designed for cutting wood only.
- **ALWAYS INSPECT** the blade for any cracked or missing teeth before operating the band saw.
- **ALWAYS ENSURE** that the blade tension is properly set for the type and width of blade installed.
- **NEVER** place your fingers or hands in the line of cut. If you slip, your hands or fingers may come into contact with the blade. Always use a push stick when ripping narrow pieces.
- **DO NOT** back the work-piece away from the blade while cutting. Always turn off the machine if you are backing out a cut.
- **ALL GAURDS** must be in place while operating the band saw to ensure safety.
- **ALWAYS FEED** the stock smoothly. Do not force or twist the work-piece while cutting.
- **MAKE SURE** that the band saw blade guard is no more than 1/2" above the stock.
- **MAKE SURE** before making any adjustments, the switch is in the "OFF" position and the cord is un-plugged from the power source.
- **NEVER LEAVE** the band saw unattended while it is running.
- **DO NOT** attempt to remove jammed pieces unless the band saw has come to a complete stop and the power switch has been turned to the **OFF** position.
- **NEVER TURN ON** the band saw if the blade is in contact with your stock.
- **ALWAYS ENSURE** that the guide blocks are properly set to prevent blade wander.
- **ALWAYS MAKE CERTAIN** that the bearings are properly adjusted to guide the blade.
- **MAINTAIN AND SERVICE** your band saw regularly as instructed in the user manual.
- **MAKE SURE** you have read and understood all the safety instructions in the manual and you are familiar with your band saw, before operating the CX123. If you fail to do so, serious injury could occur.

POWER SUPPLY

AVAILABILITY OF POWER

Before Installation of this machine you will need to consider the proximity of your power supply circuit. If available circuits do not meet the requirements for this machine you will have to get a new circuit installed by a licensed electrician. Use of a licensed electrician will minimize the risks of fire, electrocution, damage to equipment, and will insure everything is wired in accordance to the applicable codes and standards.

FULL LOAD CURRENT RATING

This is the amount of Amps a machine draws under 100% of the rated output power.

FULL LOAD RATING FOR 120V 15AMPS

The full load current is not the maximum amount of amps the machine will draw. The machine has potential to draw current beyond the full load rating if it is overloaded. Overloading of the machine for an extended period of time can cause damage, overheating, or even fire. The risk is higher if the machine is on an undersized circuit. To help avoid these issues insure you are connected to a circuit in which meets the specified circuit requirements for this piece of machinery.

WARNING!!!

Do not connect machine to power before setup has been fully completed to avoid risk of personal injury or property damage.

CIRCUIT REQUIREMENTS FOR CX123 Band Saw

The CX123 has been prewired at the factory for operation on an electrical circuit that has a verified ground and meets the below requirements:

Voltage: ..... 110V – 120V
Cycle: 60Hertz
Phase: ..... Single
Circuit Breaker Size: 15Amps

Please Note:

1. An electrical circuit includes all electrical equipment between the breaker panel and the machine. This is why it is important to have the proper circuit size so it can safely accommodate this machine under full load for an extended period of time.
2. The circuit requirements laid out in this manual are for a dedicated circuit in which only one machine will be operational or installed at a time.
3. If you choose to connect to a shared circuit where more than one machine

may be running at a time please consult with a qualified electrician to insure the circuit is properly sized for safe operation.

PLUG AND GROUNDING REQUITEMENTS

This machine must be grounded so that in the event of certain malfunctions it will reduce the chances of electrical shock by providing a path of lesser resistance for the electric current to travel through. For this reason the CX123 comes with a cord equipped with an equipment grounding wire that leads in to the grounding prong on the plug.

NOTE:
The three prong plug is only to be plugged in to the matching receptacle that is properly installed according to the local electrical codes and standards. Under no circumstances should you modify the plug to make it fit in a receptacle that it is not meant for this configuration. (see figure 1)

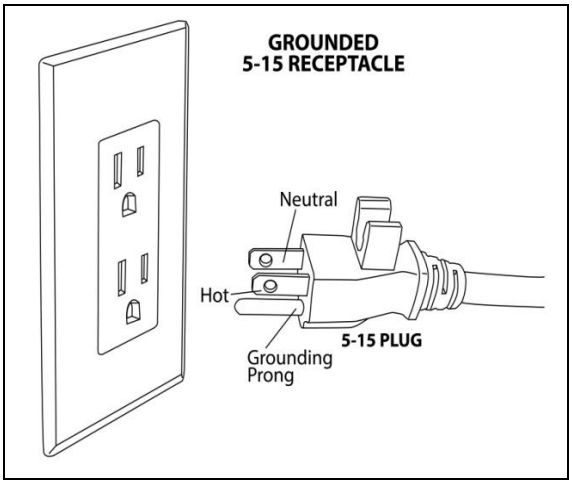


Figure 1

If there is an improper connection of a machine grounding wire it may result in a heightened risk of electric shock. If repair or replacement of the power cord is necessary in the future please consult a licensed electrician.

NOTE:
If ever you notice damage or ware to either the cord or plug disconnect it immediately from the power supply and have it replaced by a licensed electrician or service tech before any further use of the machine.

USE WITH EXTENSION CORDS

If you absolutely must require the use of an extension cord with your machine do so, on a temporary short term basis only.

NOTE:
1. We recommend that you do not use an extension cord with this machine. Also the longer the extension cord the greater the possibility of voltage drop causing the motor to work harder under powered which in turn will cause it to draw more amps. This may cause the thermal overload to trip or even the breaker in your electrical panel. It may also cause the extension cord to heat up which can be a potential fire hazard.

2. If an extension cord is used with this machine it must have a ground wire with a plug that matches the one currently installed on your machine. The extension cord must also meet the following specifications below:

Minimum Wire Gauge:.....16 AWG
Maximum Cord Length:.....50 ft.

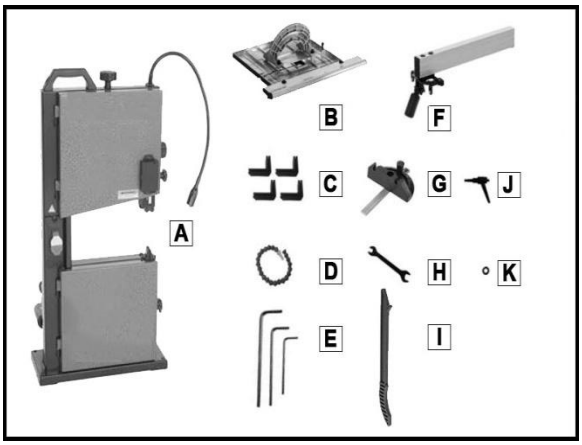
Unpacking

This machine has been carefully packed prior to leaving our warehouse. If you discover the machine has been damaged after you have signed for delivery, please immediately call Customer Service or your local Busy Bee Outlet. Save all containers and packing materials for possible inspection by the carrier or its agent. When completely satisfied with your shipment you should inventory the contents.

Inventory

Before beginning setup, ensure that all of the listed items have been received with your package. If any non-proprietary parts are missing (e.g. a nut or washer), we will gladly replace them; or for the sake of expediency can be purchased from your local hardware store.

Inventory	**QTY**
A. Band Saw Body	1
B. Table Assembly	1
C. Rubber Feet	4
D. Chip Blower Hose	1
E. Hex Wrenches 2.5mm & 4.5mm	1 ea.
F. Fence	1
G. Miter Gauge	1
H. Open End wrench 10 x 12mm	1
I. Push Stick	1
J. Table Lift Lock Lever	1
K. Flat Washer 8mm (Lock Lever)	1



NOTE:

If you cannot find an item on the list, carefully check around/inside the machine and packaging materials. Often, these items get lost in the packaging materials while unpacking or they are pre-installed at the factory.

Setup Tools Needed

- Safety Glasses
- Small Machinist Square
- Dust Collection System
- Dust Hoe 2” Diameter
- Hose Clamps 2”

Site Considerations

Weight Load

The surface that you place your machine on must be able to bear the weight of the machine, accessories that may be attached and the heaviest work piece that may be used. The machine weight can be found on the **Machine Specification Sheet.** For the weight of your accessories consult their manufacturer’s operator’s manuals. Also to

consider is the weight of the operator and dynamic loading when operating the machine.

Space Allocation

When considering the space you need to allocate for a safe and effective operation you must take into account to provide enough space for adequate material handling or the installation of accessories. In a permanent installation, leave enough space around the machine to open or remove doors as required for maintenance etc.

Physical Environment

The physical environment where the machine is operated is important for the safe operation of any machine. Operate the machine in a dry environment, free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this machine are those where the ambient temperature range exceeds 5-40 degrees Celsius; the relative humidity range exceeds 20%-95% (non-condensing); or the environment subject to vibration, shocks or bumps.

Electrical Installation

Make sure to place the machine near an adequate power source. Ensure all power cords are protected from traffic, material handling, moisture, chemicals or other hazards. Leave enough room around the machine to disconnect the power supply or apply a lockout device, if required.

Lighting

Shadows, glare or strobe lighting effects can be distracting to an operator so the sources must be eliminated. Good lighting is essential for a safe operation of any machine.

Bench Mounting

Note:
4 mounting holes each being 3/8” diameter are required.

To prevent the machine from moving during operation it is recommended to fasten the machine to a workbench or other like mounting surface. The machine has 4 pre-drilled mounting holes in the base to accommodate this. The strongest option is a “Through Hole Mount” where holes are drilled all the way through the workbench or surface, securing in place with hex bolts, washers and Hex Nuts. (Figure A)

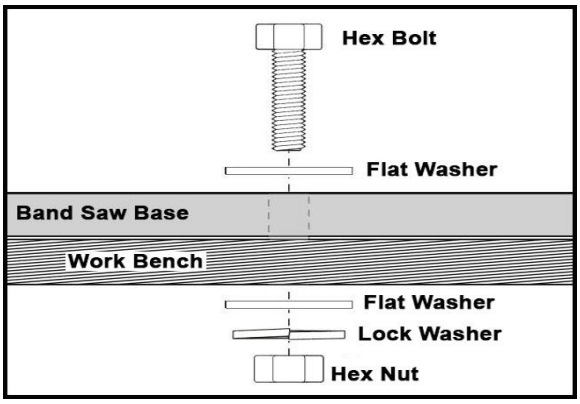


Figure A

The other option is a “Direct Mount” (Figure B) where the machine is secured directly into the workbench with lag screws & washers.

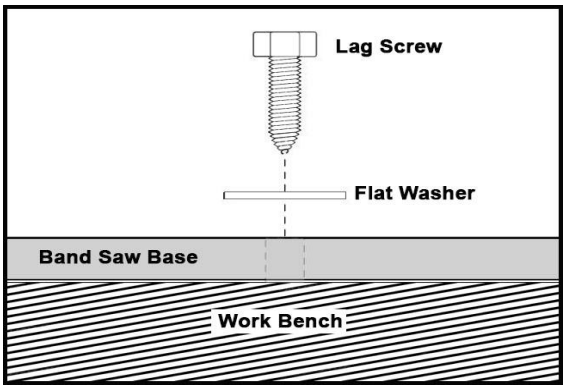


Figure B

Assembly

Before operating the machine it must be completely assembled. Prior to beginning the assembly process refer to **Needed for Setup** and gather the listed items. First clean all of the parts that are coated in heavy-duty rust preventative.

Caution!

Band saw blades and parts are sharp. Wear heavy leather gloves for protection.

1. Attach the (4) rubber feet to the machine base. (Figure C) these rubber feet simply press onto the corners of the base.

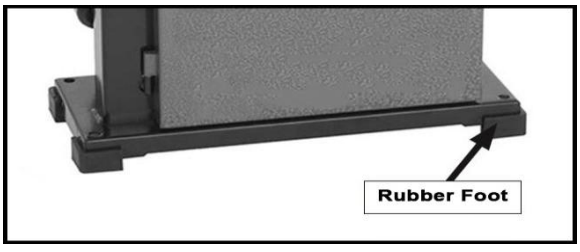


Figure C

2. Loosen the Scale indicator and turn it downwards, then remove the table lock lever, flat washer, table tilt adjustment knob, and shoulder bolt with spring. (Figure D)

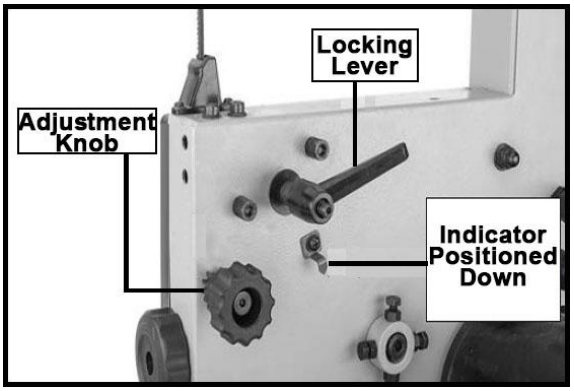


Figure D

3. Turn the guide post adjustment knob (Feg.3) counterclockwise and raise the guide post all the way up.

4. Remove the wing bolt, lock washer, flat washer, and D-nut from the table assembly for reinstallation later.

5. Using the gap in the table (Figure E), slide the table assembly through the blade and rotate the assembly 90 deg. Position the assembly as shown in (Figure F).

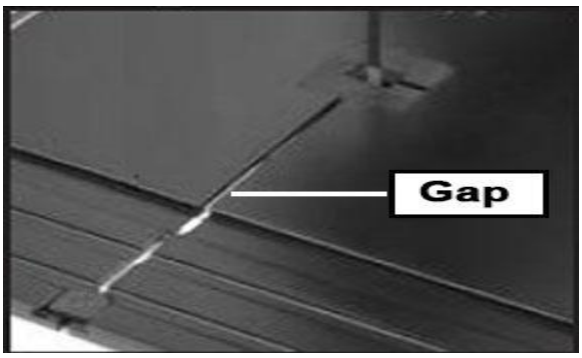


Figure E

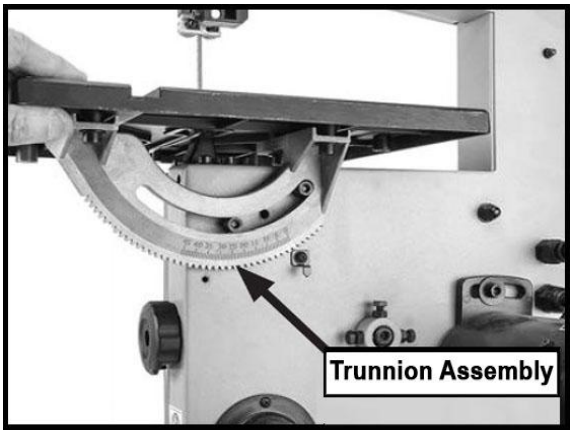
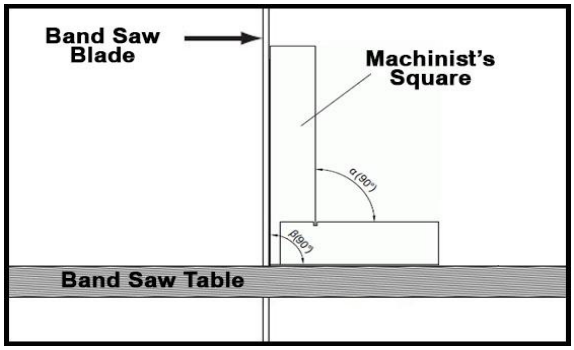


Figure F

6. Re-install the components you removed in step 2. DO NOT fully tighten yet.

7. Completely raise the upper blade guide assembly, then place a machinist's square flat on the table, against the side of the blade. (Figure G)

8. Using the adjustment knob, tilt the table until the square is flat against the side of the blade as in (Figure G).



9. Replace the lock lever to secure the table perpendicular to the blade, then set the scale indicator to "0" on the tilt scale and tighten the screw.

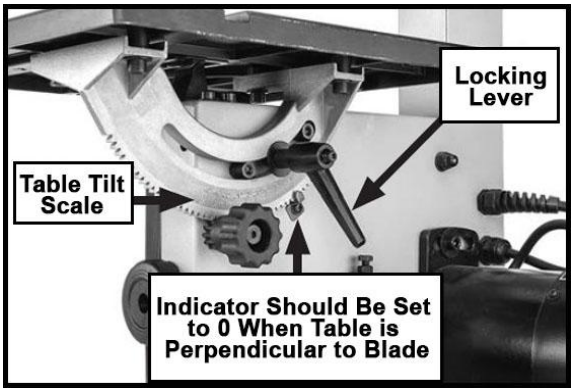


Figure G

10. Re-install the wing bolt, lock washer, flat washer, and D-nut (removed in step 4) on the table assembly.

11. With the fence lock lever in the up position install the fence on the fence rail (Figure H). Once the fence snaps into place, lower the fence lock lever into the down position. This will secure the fence to the rail.

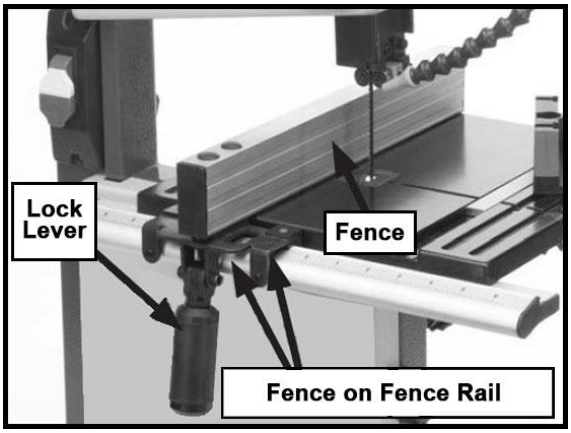


Figure H

12. Snap the chip blower nozzle to the nozzle base (Figure I).

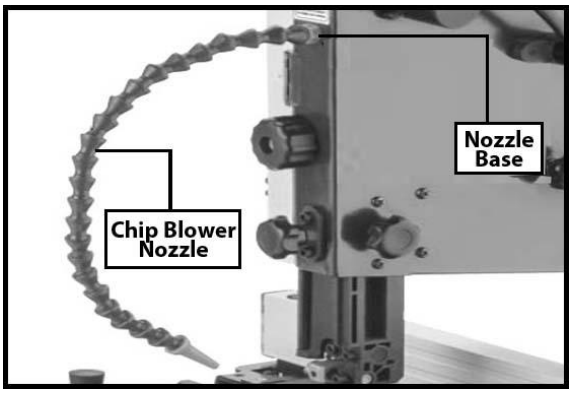


Figure I

The band saw has multiple components that must be properly adjusted for the best cutting results. For practical and safety reasons, some adjustments and test operation must be performed before making other necessary adjustments. Below is an overview of all the adjustments and the order in which they should be carried out.

1. Blade Tracking
2. Dust Collection
3. Test Run
4. Blade Tensioning
5. Blade support Bearing Adjustments
6. Blade Guide bearings Adjustments
7. Table Alignment
8. Fence Alignment

Blade Tracking

"Tracking" is the term for how the blade runs on the band saw wheels. Correct tracking is important to maintain band saw adjustments, achieving the correct blade tension, and to cutting accurately. Incorrect tracking setting can reduce cutting accuracy, cause excess vibration, and place stress on the blade amongst other components. The wheel shape and orientation in relation to each other will determine how the blade tracks.

Band saw wheels are either flat or crowned and both will track differently. This saw has crowned wheels and as the wheels spin, a properly tracking blade will naturally track in the centre of the wheel. (Figure J)

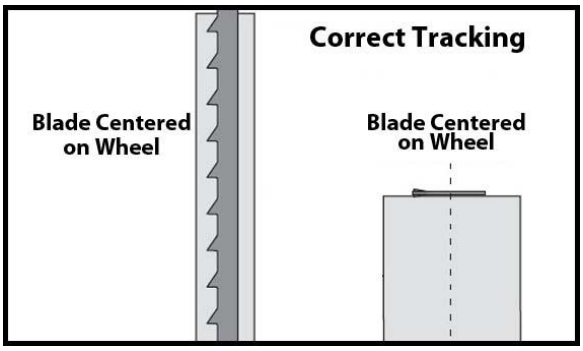


Figure J

Band saw wheels must be aligned with each other for optimal performance. Properly aligned wheels are parallel and coplanar. (Figure K)

Factors negatively affecting blade tracking are improper blade tension, and cutting practices. Familiarize yourself with the ideas and conditions described in (Figure K), as this will help you recognize when your wheel alignment may need adjustment.

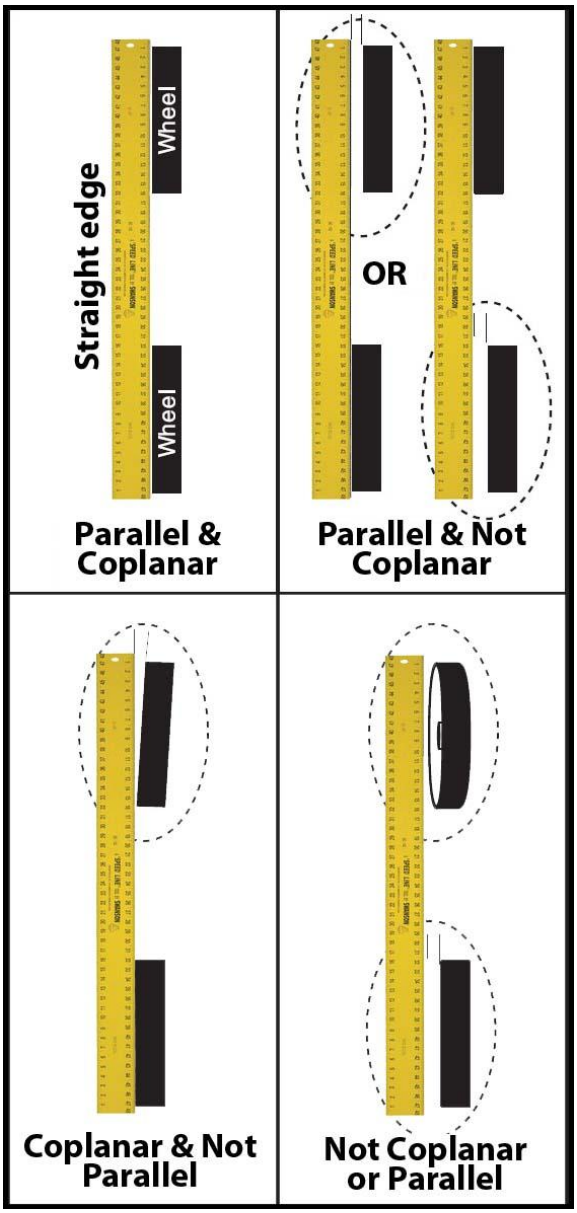


Figure K

The wheels on this machine has been factory set, so centre tracking is the only adjustment that needs to be performed when the saw is new. This adjustment is necessary before turning the saw on or performing other adjustments.

1. DISCONNECT MACHINE FROM POWER

2. Adjust the upper & lower blade guides away from the blade, and raise the upper guides all the way up. (Refer to **Adjusting Blade Guide Bearings** for detailed instructions).

Note:
For this test run, the blade must have approximately the same amount of tension as when under operating conditions. After the test run is successfully completed, you will be instructed on how to more accurately tension the blade for optimum results.

3. Standing at the rear of the machine, turn the quick release lever clockwise to apply tension to the blade.

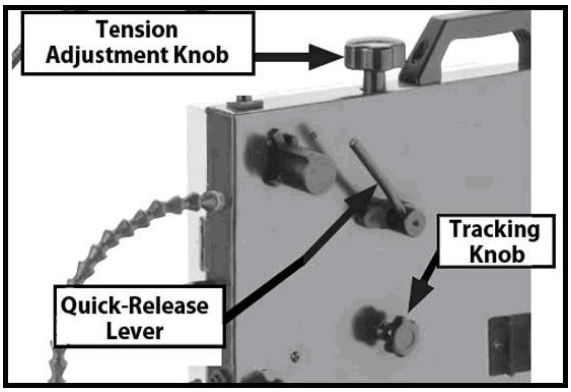


Figure L

4. Open the upper wheel cover.

5. With moderate pressure push the blade toward the fence. There should be approximately ¼" deflection. If not, then rotate the tension adjustment knob as need until the blade is properly tensioned.

6. Manually rotate the upper wheel several times and watch how the blade rides on the wheel (Figure J).

   If the blade rides in the centre of the upper wheel, it is tracking properly and you are done. Now proceed to **Dust Collection** following this section.

   If the blade does not ride in the centre of the upper wheel, it is not tracking properly, then proceed to the next step.

7. Manually spin the upper wheel with one hand while slowly adjusting the tracking knob with the other until the blade consistently tracks in the centre of the wheel.

8. Close and secure the upper wheel cover before operating the band saw.

Dust Collection

CAUTION!
Wood chips and dust is the byproduct of using this machine. Breathing airborne dust may result in respiratory illness. To reduce this risk, wear a respirator and connect the machine to a dust collecting system.

Recommended CFM at the Dust Port: 100 CFM. The CFM recommendation is not to be confused with the dust Collector rating. To determine the CFM at the dust port, there are variables that need to be considered.

a) CFM rating of the dust collector

b) Type and length of hose between the collector and the machine

c) Number of branches and Y connections

d) The amount of other open lines in the system

The calculation of these variables is not covered in this manual however there are a number of excellent books published on this matter that deal specifically with dust collection.

This machine has a 2" dust port. Connect the hose as shown in (Figure L) and secure it in place with a hose clamp. Gently pull on the hose to ensure it does not come off. A tight fit is necessary for proper performance.

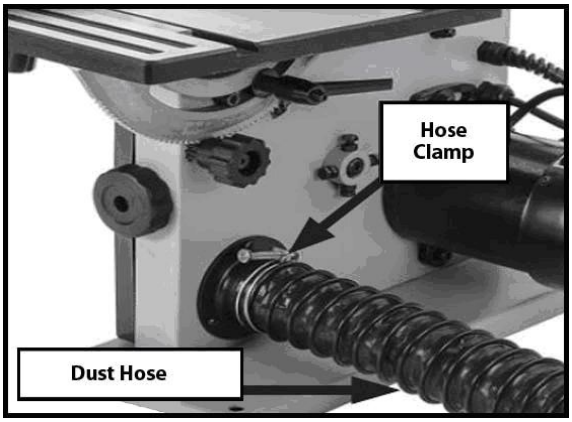


Figure L

Test Run

Once you have completely assembled your machine, test run it to ensure it is properly connected to the power and all safety components are functioning properly.

If you encounter a problem during the test immediately stop the machine, disconnect it from the power, and fix the problem before operating the machine again. Check the **Troubleshooting** table in the **SERVICE** section of this manual for help.

WARNING!

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate or allow others to operate the machine until the information is understood.

WARNING!

DO NOT start the machine until all preceding setup instructions have been carried out. Operating an improperly set up machine may result in a malfunction or unexpected results that can lead to a serious injury, death, or machine /property damage.

1. Clear all tools away from the machine

2. Connect the machine to the power supply

3. Turn the machine *ON,* and verify motor operation, then turn the machine *OFF.*
   The motor should run smoothly, without problems and unusual noises.

4. Remove the key, as shown in (Figure M)

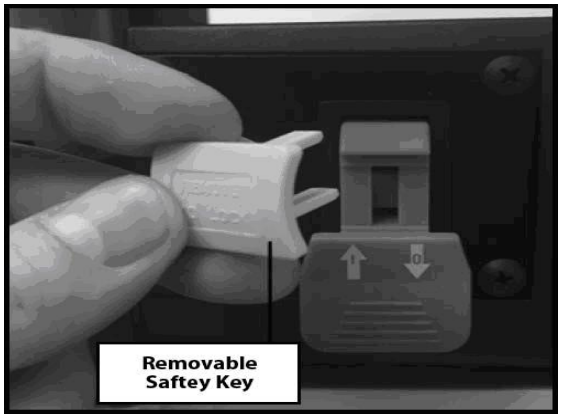


Figure M

5. Try to start the machine with the ON/OFF paddle switch. The machine should not start.

   - If the machine does not start, the switch is working as designed.

   - If the machine starts, immediately stop the machine. The switch is not working correctly. This is a safety feature and it must work properly before proceeding with operations.

Bade Tensioning

A band saw blade when tensioned correctly is essential for making accurate cuts and maximizing blade life. However other

factors such as improper feed rate, hardness, variations between work pieces, and improper blade selection affect the performance of the machine in a negative way.

To achieve the best results on any type of work piece are achieved by proper blade selection, tension, proper blade guide adjustment, along with proper feed rate.
Improper blade tension is not only an unsafe condition but produces inaccurate and inconsistent results. This also can cause unnecessary wear on the band saw components. Over-tensioning increases the chance of blade breakage or wheel misalignment. Under-tensioned blades wander excessively and will not track properly during operation.

Blade tensioning methods can be a matter of preference. We will describe two methods here: the flutter method and the deflection method, both of which will aid in properly tensioning the blade. As you gain experience you can decide which you find preferable.

Note:
Tensioning the blade during the test run was an approximate tension. The following procedures fine-tune the blade tension.

The Flutter Method

With this method, you will loosen the blade until it just passes the point of being too loose (it will begin to flutter). Then you gradually tighten the blade until the proper tension is reached.

1. DISCONNECT THE POWER FROM THE MACHINE
2. Check that the blade is tracking properly (see **Blade Tracking** section)
3. Raise the guide post all the way then move upper and lower guide bearings away from the blade.
4. With the quick-release lever, engage the tension on the blade
5. Connect the band saw to the power and turn it *ON.*
6. Turn the blade tension knob to slowly decrease the blade tension until you see it start to flutter.
7. Slowly increase the tension until the fluttering stops. Then turn the knob an additional 1/8 to ¼ of a turn.
8. DISCONNECT THE MACHINE FROM POWER
9. Adjust the guides as described in **Adjust Blade Support Bearings / Adjusting Blade Guide Bearings** sections.

The Deflection Method

Band saw blades vary in width and thickness therefore this method is more subjective than the flutter method. The user will have to determine what “moderate pressure” means.

1. DISCONNECT THE MACHINE FROM THE POWER

2. Check that the blade is tracking properly (see **Blade Tracking** section)

3. Raise the guide post all the way then move upper and lower guide bearings away from the blade.

4. With the quick-release lever, engage the tension on the blade
5. Using moderate pressure, push the centre of the blade sideways with just one finger.

    - If the blade deflects approximately ¼", it is properly tensioned. Proceed to **Step 6**.

    - If the blade deflects less than ¼", it is over-tensioned. Turn the blade tensioning knob counterclockwise two full turns and repeat **Step 5**.

    - If the blade deflects more than ¼", it is not properly tensioned. Apply tension to the blade incrementally and repeat **Step 5** until properly tensioned.

6. Adjust the guides as described in **Adjust Blade Support Bearings / Adjusting Blade Guide Bearings** sections.

Adjusting Blade Support Bearings

The blade support bearings (located behind the blade near the blade guides) prevent the blade from pushing backward during any cutting operations. When proper adjustment is maintained it helps you make accurate cuts and prevents the teeth of the blade from coming in contact with the Blade Guides when cutting. This can ruin the tooth set on your blade and greatly reduce the blades ability to make a good cut.

There are support bearings on both the upper and lower guide assemblies. Both adjust in the same manner. The following instructions refer to the upper support bearings. Access to the lower support bearings you need to open the lower wheel cover.

Important:
Make sure the blade is tracking and tensioned properly before performing this procedure.

Required Tools

One 4mm Hex Wrench
0.016" Feeler gauge

1. DISCONNECT THE MACHINE FROM THE POWER

2. Open the blade cover and loosen the support bearing adjustment cap screw (Figure N)

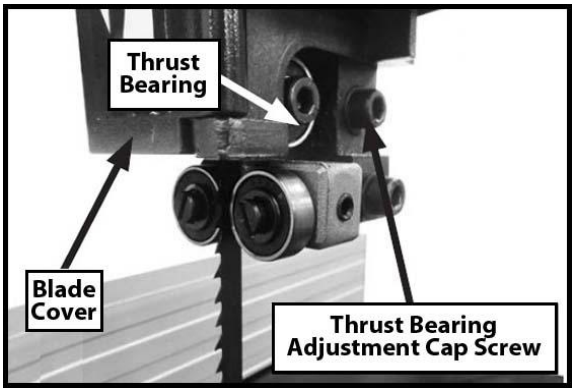


Figure N

3. Using the feeler gauge, position the support bearing approximately 0.016" away from the back of the blade, as in (Figure O)

Note:
The purpose of this adjustment is to prevent the blade from being pushed backward far enough that the blade guides contact (and ruin) the" tooth set" of the blade during cutting operations.

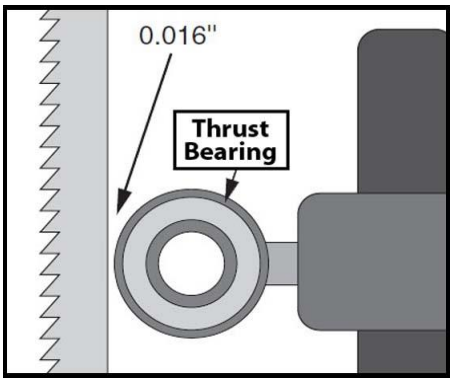


Figure O

4. Tighten the adjustment cap screw to lock the support bearing in place

Note:
When securing the lower support bearing, make sure it is parallel with the blade.

Adjusting the Blade Guide Bearings

Properly adjusted blade guide bearings provide side-to-side support, from just behind the gullets to the back of the blade, to help keep the blade straight while cutting. These bearings can be adjusted left-to-right, as well as front to back.

Both the upper and lower blade guide assemblies have these bearings and both adjust in the same manner. The following refers to the upper bearings.

Important: make sure the blade is tracking and tensioned properly before performing this procedure.

1. DISCONNECT THE MACHINE FROM THE POWER

2. Loosen the guide block cap screw (Figure P), and then laterally position the guide bearings just behind the blade gullets as in (Figure Q), then retighten the cap screw to secure seating.

Note:
The guide bearings should be positioned behind the gullets a distance equal to that of the support bearing behind the blade.

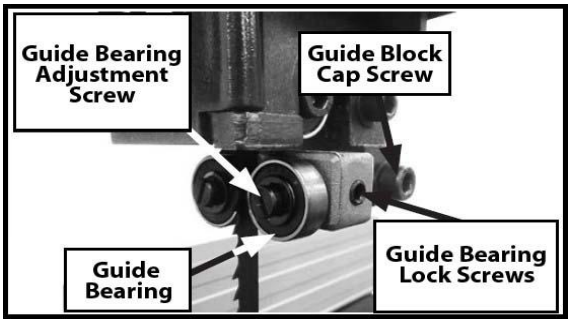


Figure P

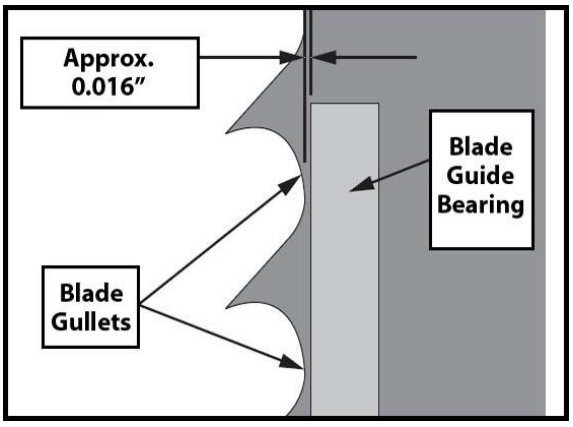


Figure Q

Note:
With wider blades, it may not be possible to bring the guide bearings just behind the blade gullets. Position them as far forward as possible without allowing the guide bearing housing to touch the back of the blade.

NOTICE
The band saw blade teeth are angled out slightly, protruding wider than the blade thickness; this is known as the "tooth set" (Figure R). If teeth contact the guide bearings during operation, damage may occur. Therefore, the support bearing must be set to prevent teeth from contacting the guide bearings during operation.

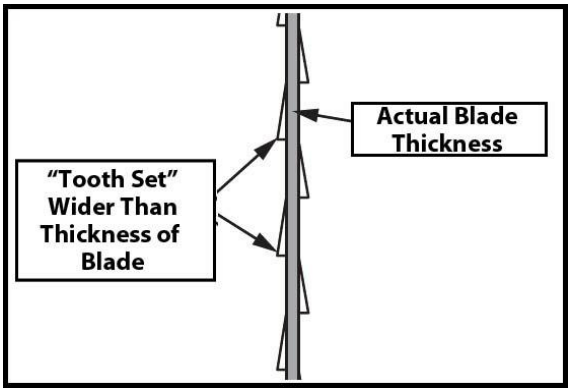


Figure R

3. Loosen the guide bearing lock screws (Figure P)

4. Loosen both guide bearing adjustment screws (Figure P), and then position the guide bearings so they evenly and lightly touch the sides of the blade (Figure S) without deflecting it one way or the other.

Note:
When the blade guide bearings are properly adjusted against the blade, they should lightly rotate as the blade moves.

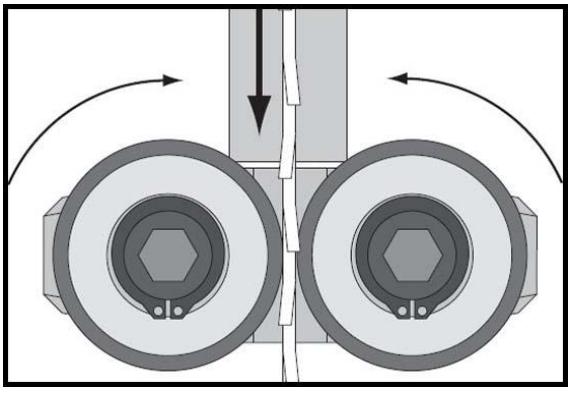


Figure S

5. Tighten the guide bearing lock screws.

6. Re-tighten the cap screws to secure the settings. Re-check the setting after tightening.

NOTICE
When changing the blade or adjusting the blade tension or tracking, the support and guide bearings must be re-adjusted before resuming operation to ensure proper blade support.

Aligning Table

Table alignment is another critical step to ensure cutting accuracy. The table needs to be aligned so the miter slot is parallel to the blade.

Required Tools:

Precision Straightedge
Precision Ruler
6mm Hex Wrench

Adjusting Miter Slot Parallelism

1. Make sure the blade is tracking properly

2. DISCONNECT THE MACHINE FROM POWER

3. Place the straightedge along the blade so it barely touches the front and back of the blade without crossing a tooth

4. Measure the distance between the straightedge and the miter slot as in. The distance should be the same at the front and the back of the table.

   - If the distances at front & back are the same, no adjustment is necessary

   - If the distances are not equal, it will require adjustment, then go to STEP 5.

5. Loosen the trunnion cap screws that secure the table (Figure U).

Figure U

6. Adjust the table until the distance between the miter slot and straightedge are equal at the front and back of the table.

7. Taking care not to move the table, retighten the trunnion cap screws, then repeat STEP 4 to verify adjustment.

Fence Alignment

It is imperative that the band saw fence be parallel to the blade to ensure accurate cuts. This can be achieved by aligning the fence to the miter slot.

Note:
There is a condition that can occasionally arise, even after aligning the fence, a condition known as “blade lead”. When this develops the fence will have to be skewed slightly to compensate for the blade lead problem. Refer to **Blade Lead** section for more information on this and skewing the fence.

1 only 4mm Hex Wrench required

1. DISCONNECT THE MACHINE FROM POWER

2. Make sure the table is aligned with the blade. (refer to **Adjusting Miter Slot Parallelism**)

3. Install the fence on the right side of the blade, aligned with the edge of the miter slot, and then lock it in place.

    - If the fence is parallel with the miter slot, then no adjustment is necessary.
    - If the fence is not parallel with the miter slot, proceed to STEP 4

4. Remove the screw cover caps on top of the fence and loosen the two adjustment cap screws. (Figure V). Adjust the fence parallel to the miter slot, then re-tighten the cap screws and replace the cover caps.

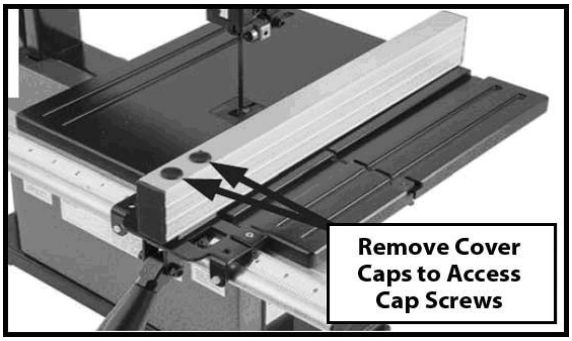


Figure V

SECTION 4: OPERATIONS

Operation Overview

The hopes of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

It is important to note that this overview is not intended to be an instructional guide. You will need to read this entire manual to learn about specific operations. It is helpful to seek additional training from experienced operators, from “how-to” books, trade manuals, or websites.

WARNING!
Read this manual in its entirety before operating the band saw. To reduce the risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.

A typical operation process involves the following:

1. Examination of the work piece suitability for cutting

2. Adjusting the table tilt, if necessary, to the correct angle of the desired cut.

3. If using the fence, adjusts it for the width of the cut and then locks it in place. If using the miter gauge, adjusts the angle and locks it in place.

4. Loosens the guide post lock knob, adjusts the upper blade guide to just clear the work piece (no more than ¼"), then re-tightens the guide post lock knob.

5. Checks to make sure the work piece can safely bypass all the way through the blade without interference from other objects.

6. Puts on safety glasses and a respirator.

7. Starts the dust collector and band saw.

8. If necessary turns on the laser light.

9. Holds the work piece firmly and flatly against both the table and fence (or miter gauge), and then pushes the work piece into the blade at a steady rate until the cut is complete.

   The operator is very careful to keep fingers away from the blade and uses a push stick to feed narrow work pieces.

10. Turns off the laser sight (if necessary) and stops the band saw.

A correctly setup band saw is safer to operate then other saws and can perform a variety of different types of cuts with greater accuracy and ease.

Types of Cuts:

Straight Cuts

- Crosscutting
- Miters
- Ripping
- Angles
- Compound Angles
- Resawing

Irregular Cuts:

- Beveled Curves
- Circles
- Simple and Complex Curves
- Duplicate parts

Basic Cutting Tips:

1. Always use light and consistent pressure while performing any cutting operations. A lighter feeding pressure makes straighter more accurate cuts without adding unnecessary friction or strain on the band saw guides and blade.

2. When cutting around corners try to avoid twisting the blade and allow the blade to saw its way around the corners without forcing. Using relief cuts will help with this if possible.

3. Always replace, sharpen, and clean the blades often to maintain optimal performance. Check guides, tension and alignment setting periodically and make adjustments when necessary to maintain optimal performance.

Disabling Paddle Switch

The paddle switch on you band saw can be disabled simply be removing the yellow safety key as shown below in Figure 1.

Note:
Disabling the paddle switch by removing the safety key only restrict its function. This is not a suitable measure of disconnection for performing any adjustments, service, or maintenance.

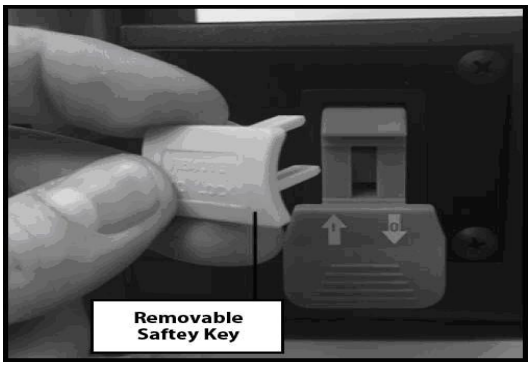


Figure 1

WARNING!
Untrained people or children can be seriously injured by this machine. The risk of injury increases significantly in cases with unsupervised use and operation. Always disable the switch on your machine before leaving it unattended.

Setting Upper Blade Guide Height

When performing any cutting operations on your machine it is important that the blade guides always be positioned so they just clear the top of the work piece. The guide post in the Figure 2 below allows for the upper blade guide assembly to be easily adjusted to the appropriate height.

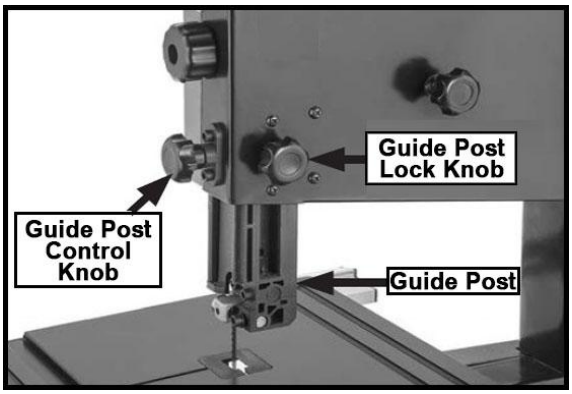


Figure 2

Adjusting the Height of The Upper Blade Guards

1. Make sure that machine is disconnected from its power source.

2. Loosen the guide post lock knob.

3. After loosening the guide post lock knob use the guide post control knob to adjust the height of the blade guard assembly so that the guard clears the work piece by no more than ¼".

4. Tighten the guide post lock knob to secure your settings.

Tilting Table

The table on your CX123 can be tilted to make angled or beveled cuts. There is a simple tilt scale located on the underside the band saws table on the trunnion for a quick gauge. For better accuracy always use a protractor. See Figure 3.

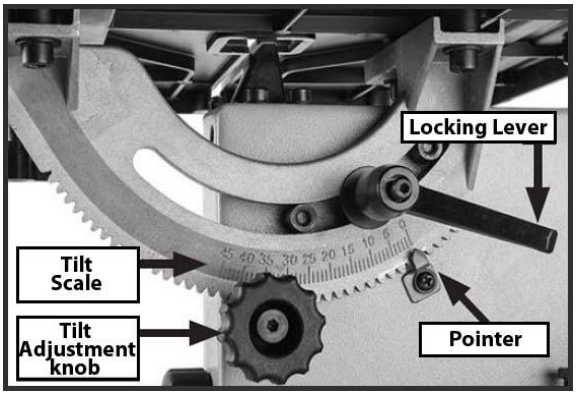


Figure 3

Table Tilting Instructions

1. Make sure that your machine is disconnected from its power supply

2. Carefully loosen the locking lever shown above in Figure 3.

3. Rotate the table tilt adjustment knob until the table reaches the desired angle.

4. Retighten the locking lever to secure your new settings.

Choosing Blades for CX123

CX123 Blade Dimensions

Length Range……..61-13/16" to 62-3/16"
Width Range……1/8" to 3/8"

NOTE:
It is important that you select the appropriate blade for specific cutting operations in order to get optimal results.

Blade Length:

Blade length is usually unique to the brand of band saw. Blade length is measured by the circumference.

Blade Width:

Blade width directly determines the largest as well as the smallest curve that can be cut. Blade width is measured from the back of the blade to the tip of the tooth.

Note:
Always choose the size of blade that best suits the desired application.

- For curve cutting reference Figure 4 below to help determine the largest as well as smallest curve that can be cut using the various blade widths. Always choose the blade that will cut the smallest radius needed dependent on your work piece.

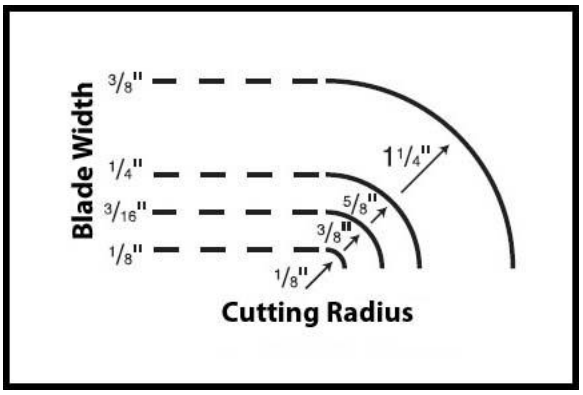


Figure 4

- Straight cutting is best done with the largest width blade that will fit your machine. Larger blades are great for cutting straight as they are less likely to wander.

Tooth Type

The tree most commonly blade styles are described below:

Raker

This type of blade is commonly considered the standard blade because of the tooth size and shape are the same as the tooth gullet. These blades usually have a higher TPI and the teeth have no angle to them. Smoother cuts can be made faster with these types of blades with our generating more heat like other types of blades.

Skip

These blades are similar to blades except for the fact that they are missing every other tooth for this reason skip tooth blades have a much larger gullet. Skip tooth blades cut faster, however they do leave a rougher cut.

Hook

The teeth on these blades are angled downward making them dig in to the material being cut. Gullets on hook tooth blades are usually rounded for better waste removal. Hook type blades are best used for more demanding cutting operations like resawing and cutting thicker stock. (See Figure 5)

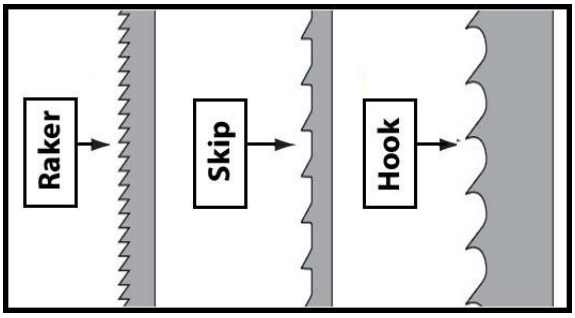


Figure 5

Tooth Pitch

This is measured in TPI which refers to the number of teeth per inch. Fine tooth blades will have more teeth per inch thus cutting slower, however smoother. Coarse blades will have fewer teeth per inch and will cut faster but rougher. Whatever the cutting operation being performed you should choose a blade that will have at least 3 teeth in the material at all times. Generally

fine tooth blades are used on hard woods where coarse tooth blades are used with softer woods.

Blade Care

It is important to remember that band saw blades are just thin pieces of steel that are subjected to an enormous amount of strains and stresses when being used during any cutting operations. This is why it is important to make sure you are using the proper blade for the cutting operation being performed as well as the appropriate feeding sped to keep the blade from heating up and shorting your blade life.

Always remember that if you keep your blade clean it will perform much better than a dirty blade. Dirty blades that are gummed up pass through the material you are cutting with greater resistance causing it to generate unnecessary heat effectively shortening the life span the blade.

Blade Breakage

There are many things that can cause a band saw blade to break. Some blade breakages are unavoidable as they are a result of the tremendous stress and strain put on the blades during cutting operations. That being said, there are some blade breakages that are avoidable as they are caused by poor treatment and bad judgment or an improperly setup machine on the part of the operator.

Some of the more common reasons for blade brakes are:

- Poor alignment or adjustment of the blade guides.
- Over tensioning of the blade
- Leaving the blade under tension when not being used
- Using the wrong blade for the wrong cutting operation.
- Leaving the band saw running continuously when not in use.
- Trying to feed your work piece to fast.
- Cutting with a dull or damaged blade.
- Having the blade guard set to high above the work piece.
- Using a blade with a rough weld or improperly finished braze.

Blade Changing Instructions

WARNING!
Make sure that band saw is disconnected from its power source before attempting to change blades. Failure to do so could result in serious personal injury, should an accidental start up occur.

CAUTION!
Band saw blades are very sharp and can be hard to handle. Heavy gloves should be worn when handling blades to reduce the risk of being cut.

To Change The Blade:

1. Make sure that the machine has been disconnected from its power source.

2. Remove the tension from the blade by moving the blade quick tension lever to the left to release the tension.

3. Move the blade guard assembly so that it is at its highest point and move the blade guides completely away from the blade.

4. Remove the fence, miter gauge, wing bolt, lock washer, flat washer, and D-nut from the band saw table.

5. Open the upper and lower wheel covers then using heavy glove carefully slip the blade off of the heels and slide I thought the opening in the band saw table. (See Figure 6.

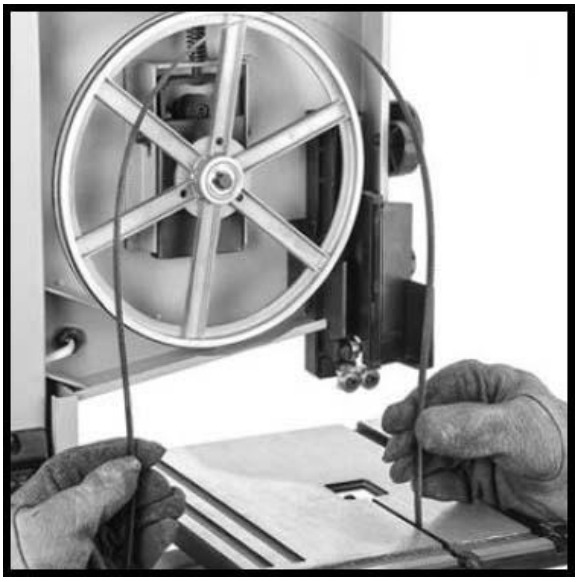


Figure 6

6. Take the new blade and position it so that the teeth are facing towards you and pointing down in your right hand, then carefully slide the blade though the slot in the table.

Note
If the teeth are not pointing or will not point downward the blade is inside out and will need to be twisted so that the correct side is exposed.

7. Carefully slip the new blade over the wheels insuring that it is properly positioned between the blade guards and guides.

8. Use the blade tension quick release lever to tension the blade. Then you may begin to adjust the blade tracking.

9. Adjust the upper and lower blade support guides.

10. Close upper and lower wheel covers then reinstall the fence, miter gauge, and other components that were removed in step 4.
11. Check to make sure that the fence is parallel to the miter slot. Adjust the alignment if necessary.

Ripping

Ripping is when you make cuts to your work piece with the grain. Beveled rip cuts can be made simply by adjusting the angle of your band saws table.

Making a Rip Cut:

1. Start by adjusting the fence to the desired width of cut on your material and lock the fence into place.

2. Adjust the blade guard assembly so that is no higher than ¼' from the top of your material being cut.
3. After all safety requirements have been taken into account, turn on the band saw. Wait for the machine to come up to speed before slowly feeding your material into the blade.

Cross Cutting

Cross cutting is when you are making cuts against the grain of your material. Cross cuts can be made at 90° when using the fence, however angled cross cuts can made when using the miter gauge.

WARNING!

A push stick should always be used when ripping narrow pieces of material. Failure to follow these warnings can result in serious bodily harm.

WARNING!

Never position fingers or hand in your line of cut to avoid accidently slipping and having your hands or fingers contacting the blade.

Resawing

This is when you are cutting the thickness of your material into multiple thinner boards. The resaw height in which any machine can accommodate is limited by the maximum cutting height of your machine.
When performing any resawing operations it is imperative that you take in to consideration the blade in which you will use. Ideally you would choose a blade with fewer teeth per inch generally between 3 and 6 TPI. Also you should take in to account how wide the blade is. Ideally you would want to use the widest blade you machine can accommodate as the blade well be less likely to wander and produce more accurate results.

Cutting Curves

While cutting curves you have to feed the stock into the blade while rotating your workpiece at the same time all while trying not to accidently twist the blade. The sharper and tighter the curve will require a narrower blade with more teeth per inch. Relief cuts are also handy when trying to cut smaller curves as they take the strain of twisting away from the blade.

Always start by making short cuts at the beginning before proceeding to longer cuts. It is always wise to use relief cuts not only to take the strain of the blade as your cutting the curve but also to prevent the blade from getting pinched or twisted. Relief cuts will enable you to back out the work piece safely if needed.

Maintenance

WARNING!
Make sure that your machine has been properly disconnected from its power source before making any adjustments or performing any maintenance.

Ongoing Maintenance:

The following items need to be checked on the regular to insure your machine is maintaining safe and optimal performance reducing the chances of injury. If you notice any of the things mentioned below it is advised that you shut down your machine immediately and fix the problems before continuing use of the machine.

- Worn or damaged electrical wires
- Dirty, dull, or even damaged blade
- Loose mounting bolts

Monthly:

- Remove the band saw blade and thoroughly clean all built up sawdust from the rubber tires on the wheels.
- Clean and vacuum out any remaining sawdust in the body of the machine and motor.
- Check the drive belt for tension, signs of damage, or even wear.

Cleaning and Lubrication

Before lubricating your machine you must clean and remove all sawdust and wood chips. If resin has built up using a resin dissolving solvent to clean.

Remove the blade entirely once a month so that you may clean any built up sawdust of the rubber tires on the wheels.

If the band saw table becomes difficult to tilt and adjust you will need to lubricate the trunnion gear as well as the trunnion base.

Checking and Adjusting Belt Tension

To help ensure optimal performance from your band saw you need to make sure your belt tension is set correctly allowing for the maximum transmission of power from the motor to the blade. As mentioned previously in the maintenance portion of the manual belt tension should be checked on a monthly basis. If the belt shows any sign of wear like cracking or is damaged or frayed, it will require replacement.

Checking Belt Tension

1. Make sure that machine is properly disconnected from its power source.

2. Open lower wheel cover.

3. Inspect belt condition and check belt deflection. If the belt is correctly tensioned there should be approximately ¼" of deflection when moderately pressed with finger in the centre. See Figure 8 below.

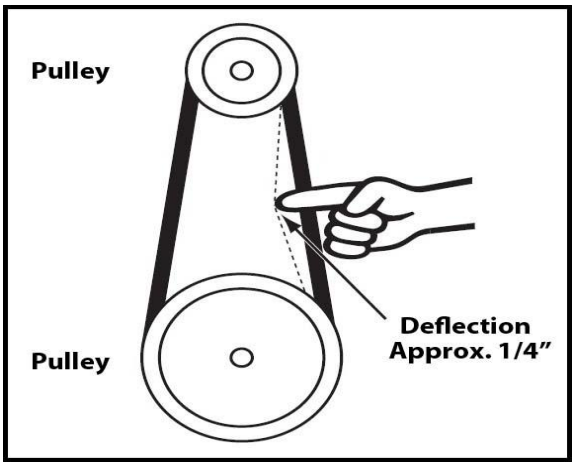


Figure 8
Adjusting Belt Tension

1. Make sure the machine has been properly disconnected from its power source.
2. Loosen cap screw located on the motor mount as shown in Figure 9 below.

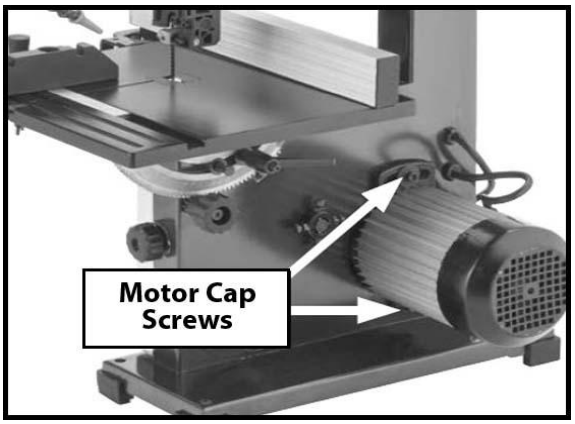


Figure 9

3. Push motor to the right until you feel the tension on the belt increase.

4. Once you have adjusted the tension retighten the cap screws located on the motor mount.

5. Re-check the belt tension. Repeat steps 2-4 as required.

6. Close lower wheel cover when finished.

Belt Replacement

If the drive belt is showing noticeable sign of wear, damage or fraying it is in need of replacement.

To help maintain optimal machine performance the belt must be in good condition.

Item required

6mm Hex Wrench
Replacement Belt
Retaining Ring Pliers
Leather Gloves

Belt Replacement Instructions

1. Make sure machine has been properly disconnected from its power source.

2. Using the leather gloves remove the blade from the machine.

3. Loosen the cap screws located on the motor mount.

4. Move the motor to the left taking the tension of the belt.

5. Open the lower wheel door and remove the belt from the pulley.

6. Using the retaining ring pliers remove the external retaining ring from the lower wheel shaft and remove the lower wheel. See Figure 10.

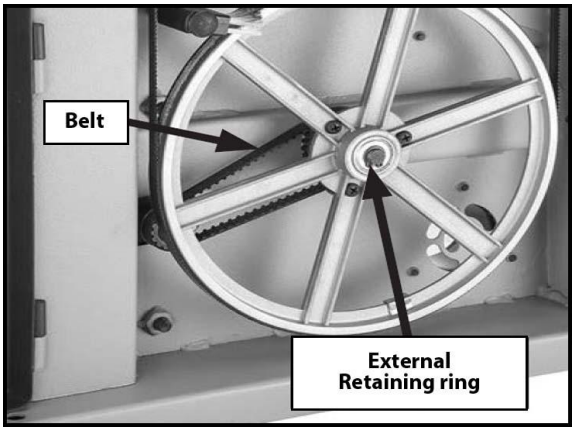


Figure 10

7. Put the new belt on booth pulleys and reinstall the lower wheel along with the retaining ring.

8. Adjust the belt tension as instructed in the Adjusting Belt Tension section of the manual.

9. Carefully replace the blade using leather gloves.

10. Adjust the blade guide and support bearings.

Wheel Alignment

Wheel alignment is imperative for your band saws optimal performance. The wheels are properly aligned when they are parallel to each other, this is known as coplanar.

If the wheels are set correctly and are coplanar it is more likely to cut straighter without the blade wandering. This will also effectively decrease vibration, heat, and wear on the blade as the blade will automatically be balanced.

Make sure the wheels are in alignment may require a combination of shimming a wheel and adjusting the position of the lower wheel shaft.

Items Required:

Fine Ruler
Precision Straight Edge

Inspecting Wheel Alignment

1. Make sure machine has been properly disconnected from its power source.

2. Remove the table from the band saw.

3. With the blade correctly tensioned on the wheels take and hold a straight edge close to the centre point of booth wheels to check for coplanar. The straight edge must be long enough to fully extend across the rims of both wheels. See Figure 11.

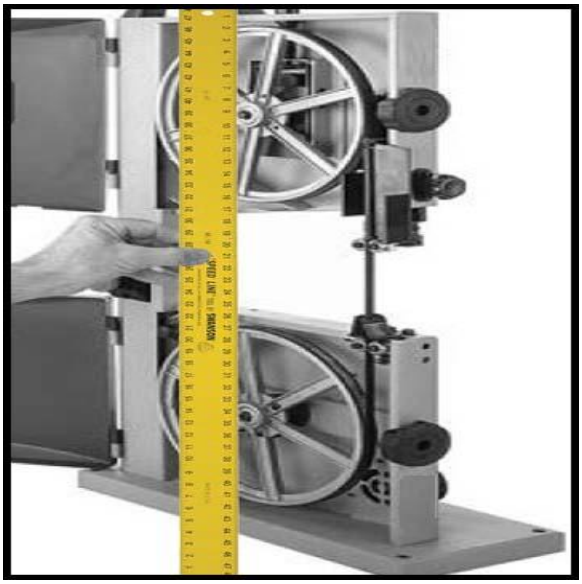


Figure 11

4. Check the wheel alignment and adjust the tracking knob to bring the upper and lower wheel into alignment as much as possible. If both wheels are unable to be adjusted for coplanar see Figure 12 below for more information on how to proceed with alignment adjustments.

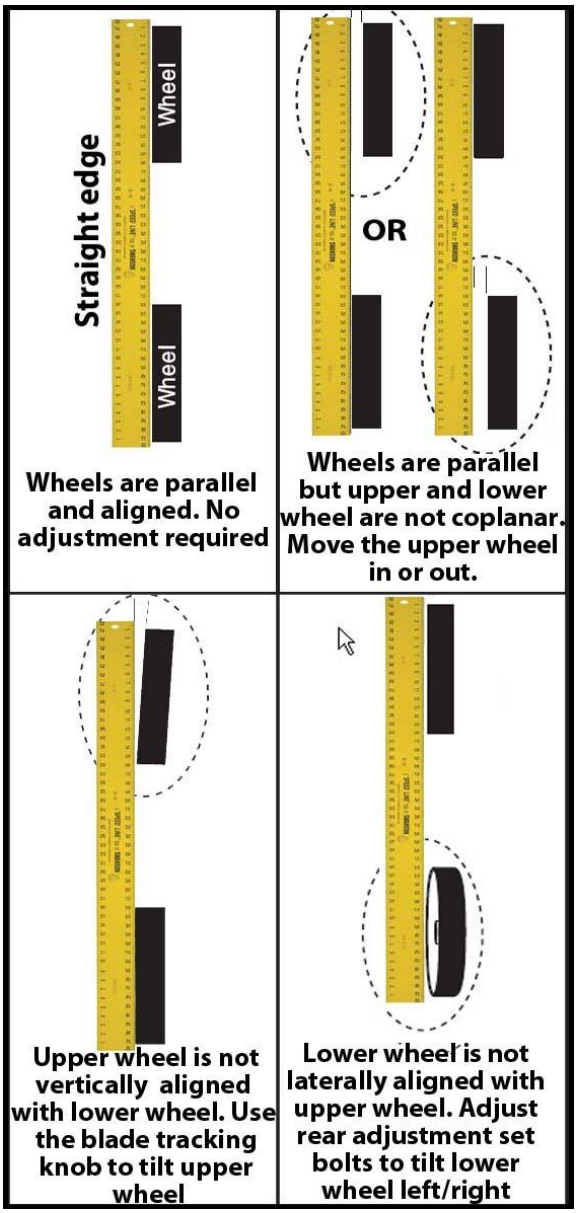


Figure 12

Shimming

If the upper and lower wheels are parallel with each other but not coplanar a wheel must be shimmed by the distance that is not in the same plane with the other wheel.

NOTE
Standard washers can be used to shim the wheel as they can easily be stacked to get the desired height.

How to Shim a Wheel:

1. Make sure that the machine has been disconnected properly from its power source.

2. Adjust the tracking on the upper wheel so that it is parallel with the lower wheel.

3. Take a straightedge and place it on both rims of the wheel that does not require adjustment and then measure the distance away from the other wheel using a ruler. See Figure 13 below. The distance measured with the ruler is the amount the wheel needs to be shimmed.

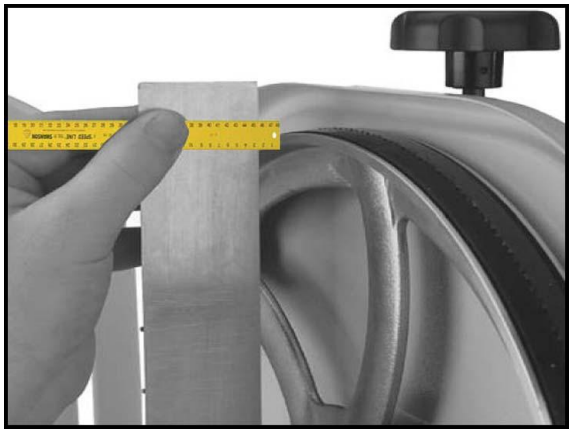


Figure 13

4. Remove the table from the band saw.

5. Remove the wheel that requires shimming and place as many washers necessary to correct the gap measure in step onto the wheel shaft.

6. Reinstall the wheel making sure its secure in place then re-install the blade and tension it correctly.

7. Check the wheel alignment agin and if necessary to make the wheels parallel repeat this procedure.

Note
When you first get both wheels so that they are coplanar mark both wheels exactly where you had placed the straightedge. You can use these position marks in the future again when you need to perform this procedure and to help ensure repeated accuracy whenever you adjust the wheels.

8. Close wheel covers.

Adjusting Shaft Position on Lower Wheel

If the lower wheel is tilted laterally it will require adjustment make it coplanar with the upper wheel.

On the lower wheel bracket there are 4 adjustment bolts with hex nuts that adjust the lower wheel tilt from side to side as well as up and down.

CAUTION
If a mistake is made during the following procedure it can be extremely difficult to correct. Before attempting this adjustment you should first check your wheel alignment and trouble shoot all other possible solutions.

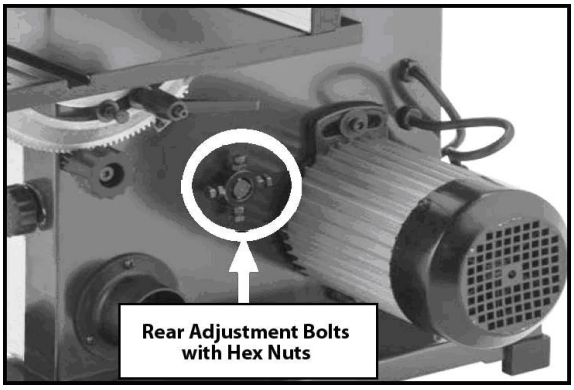


Figure 14

Required Tools

Precision Straightedge
10mm Socket or Open Ended Wrench

Adjusting Lower Wheel Laterally

1. Make sure that the machine has been properly disconnected from its power source.

2. Remove the table from the band saw.

3. Check the upper and lower wheel at both A and B locations as seen in figure 15 below. Both wheels should be aligned. If the wheels do not align they will require lateral adjustment.

If adjustment is required proceed to the next step.

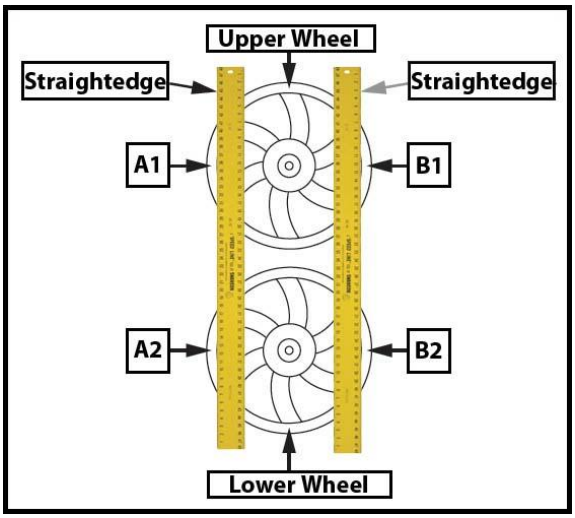


Figure 15

4. Using a pencil mark both the upper and lower wheels to indicate your measuring locations.

NOTE
Marking the wheels will achieve better more accurate results in case there are any irregularities in the wheels.

5. Loosen the hex nuts on the rear left and right adjustment bolts on the lower wheel bracket.

6. Adjust the left and right bolts by rotating them until the lower wheel is coplanar with the upper wheel. See Figure 16.

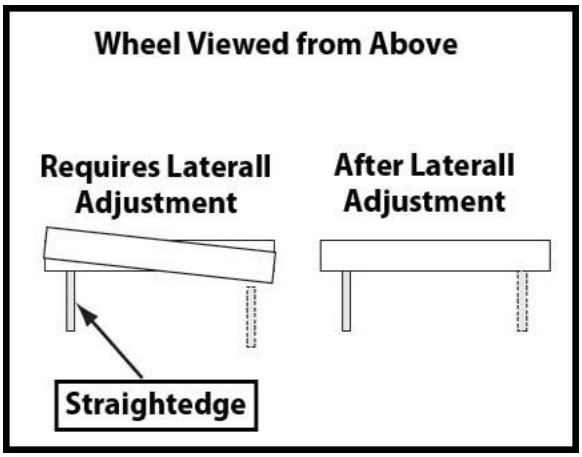


Figure 16

7. Retighten the hex nuts loosened it the previous step.

Blade Wander/Blade Lead

Blade lead is when the band saw blade wanders away from the cut line when sawing.

Blade lead can be caused by a dulled, damaged or worn blade, incorrectly tensioned blade, or even using to fast of a feed rate when making cuts. If your blade is undamaged and you are still experiencing blade late perform the following steps.

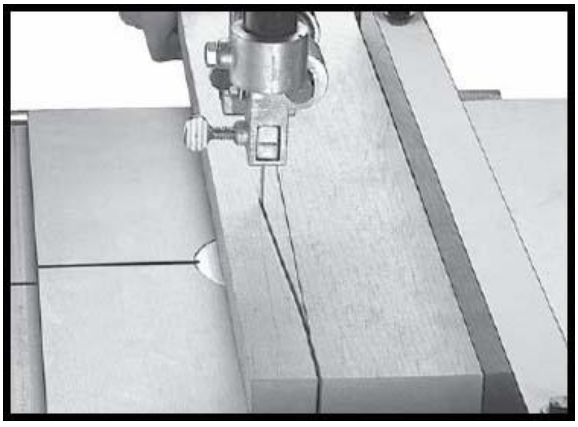


Figure 17

Items Required:

4mm Hex Wrench

Correcting Blade Lead/Wander

1. Insure that the blade is correctly tensioned and that the blade guard has been set properly**.**

2. Try using less pressure when feeding your material through the blade.

3. Check that the miter slot and fence are parallel to the blade line.

4. Perform test cut.

NOTE
If you are still experiencing blade lead or wander you can correct or compensate for this by skewing the fence or shifting the band saw table as detailed in the steps below.

Skewing the Fence

1. Using a piece of scrap wood cut down to approximately ¾" thick x 3" wide x 17" long. On the wide face using a pencil draw a straight line parallel to the long edge.

2. Move the band saw fence out of the way and make a cut along the line halfway through the board. Shut the band saw off and wait for the blade to come to a complete stop. Do not remove the board.

3. Using a clamp secure the board to the band saw table.

4. Move the band saw fence over to the clamped board so that it barely touches one end of the board.

5. Using a 4mm hex wrench loosen the 2 adjustment cap screws located on the top of the fence and skew the fence so that it is parallel with the board clamped to the table.

6. Re-tighten the cap screws securing the adjustment.

7. Make some test cuts using the fence. If still experiencing blade lead or wander repeat the above steps until the blade and fence are parallel.

Laser Sight Adjustments

If the laser sight does not line up directly with the path of the band saw blade it will require adjustment.

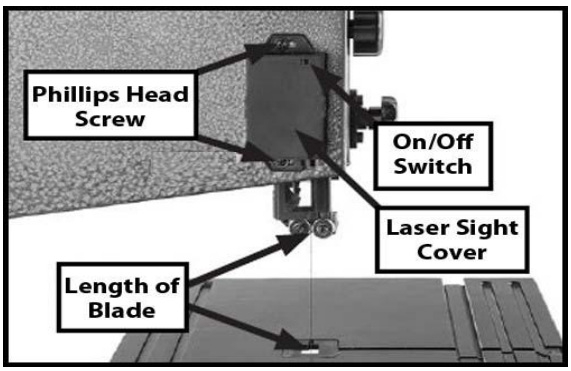


Figure 18

Tools Required

#1 Phillips Screwdriver

Adjusting Laser Sight

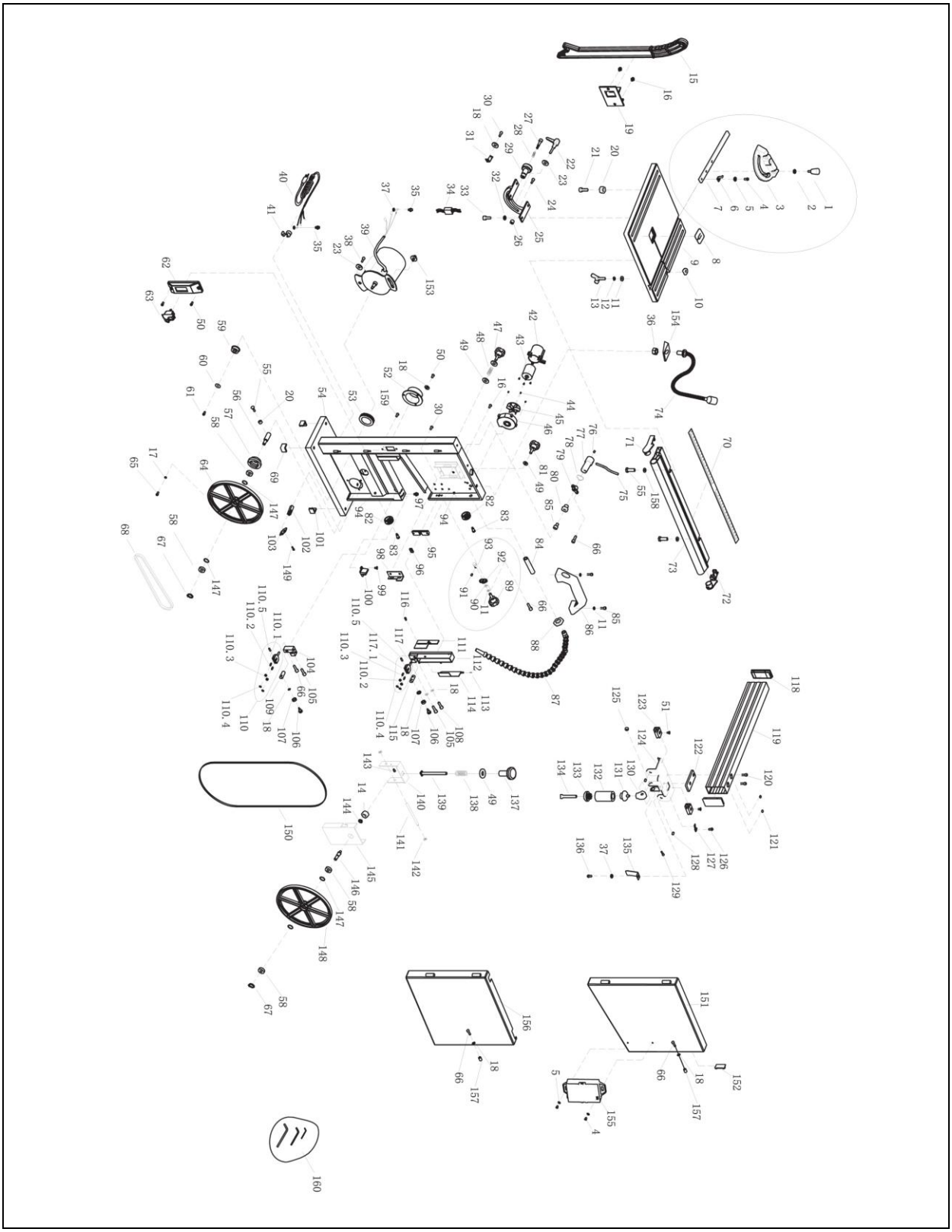
1. Make sure that the machine has been properly disconnected from its power source.

2. Using the screwdriver loosen the Phillips head screws the hold the laser sight in place on the band saw body.

3. Turn the laser sight on and move the laser until it correctly lines up dawn the length of the blade. See Figure 18.

4. Once the laser lines up correctly with the blade retighten the Phillips head screw securing the adjustment and turn the laser off.

PARTS DIAGRAM



CX123 Parts List

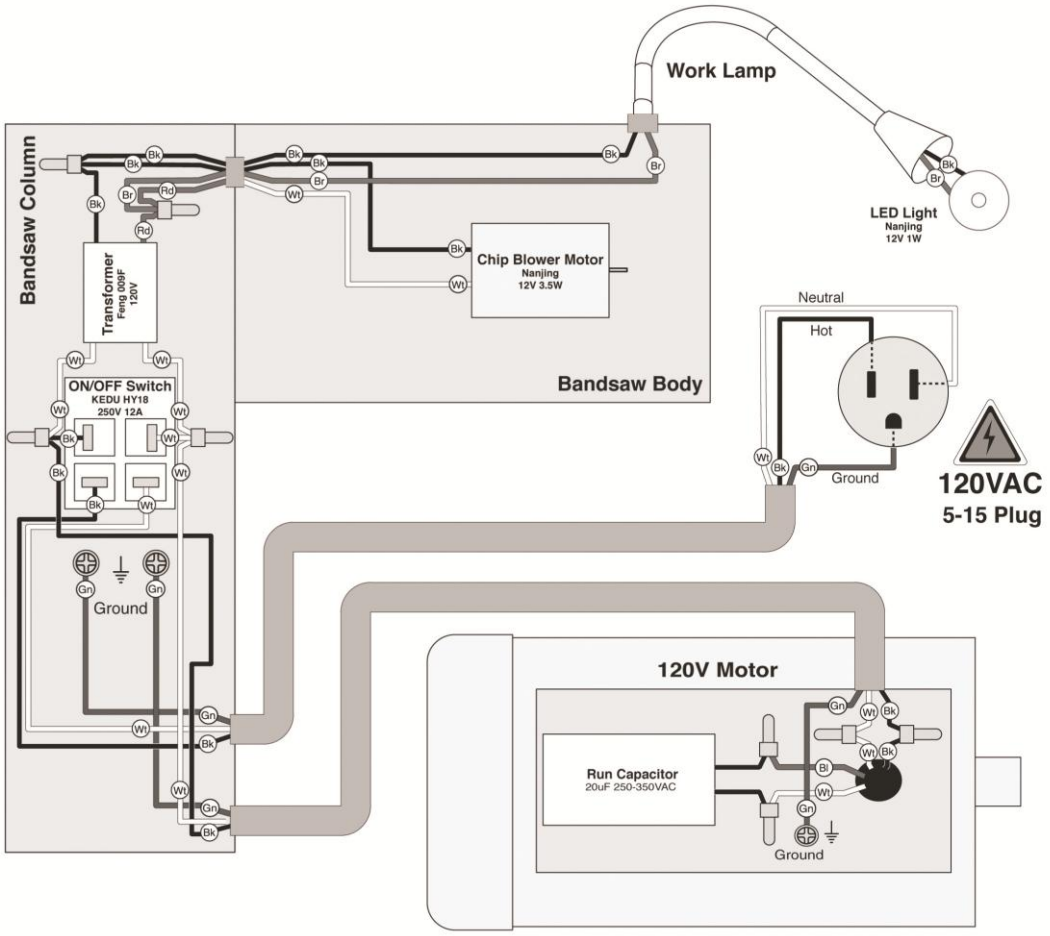
No.	Parts No.	Description	Specification	Quantity
1	PCX123001	Knob Blot		1
2	PCX123002	Flat Washer	Ø6	1
3	PCX123003	Miter Gauge		1
4	PCX123004	PHLP HD Screw	M4×6	3
5	PCX123005	Flat Washer	Ø4	3
6	PCX123006	Pointer		1
7	PCX123007	Miter Bar		1
8	PCX123008	Table Insert		1
9	PCX123009	Table		1
10	PCX123010	Nut		1
11	PCX123011	Flat Washer	Φ6	7
12	PCX123012	Lock Washer	Φ6	1
13	PCX123013	Wing Bolt	6×15	1
14	PCX123014	Hex Nut	M10	1
15	PCX123015	Push Stick		1
16	PCX123016	PHLP HD Screw	M5×12	4
17	PCX123017	Spring Washer	Ø5	3
18	PCX123018	Flat Washer	Ø5	9
19	PCX123019	Push Stick Holder		1
20	PCX123020	Hex Nut	M6	5
21	PCX123021	Cap Screw	M6*23	1
22	PCX123022	Adjustable Handle	M8*25	1
23	PCX123023	Flat Washer	Ø8.4×Ø24x2	2
24	PCX123024	Cap Screw	M6×14	2
25	PCX123025	Trunnion Seat		1
26	PCX123026	Limited Shaft Bushing		2
27	PCX123027	Shoulder Screw		1
28	PCX123028	Compression Screw		1
29	PCX123029	Geared Knob		1
30	PCX123030	PHLP HD Screw	M5*8	5
31	PCX123031	Pointer		1
32	PCX123032	Flat Washer	Ø8	4
33	PCX123033	Cap Screw	M8×14	4
34	PCX123034	Transformer		1
35	PCX123035	Pan Head Screw	M5×8	2
36	PCX123036	Hex Nut	M10	1
37	PCX123037	EXT Tooth Washer	℄5.3*℄10	3
38	PCX123038	Cap Screw	M8×20	1
39	PCX123039	Motor		1
40	PCX123040	Power Cord		1
41	PCX123041	Strain Relief		2
42	PCX123042	Chip Blower Motor Housing		1
43	PCX123043	Chip Blower Motor		1
44	PCX123044	Pan Head Screw	ST2.9×6.5	6
45	PCX123045	Fan		1
46	PCX123046	Fan Cover		1
47	PCX123047	Knob Blot		1
48	PCX123048	Compression Spring		1

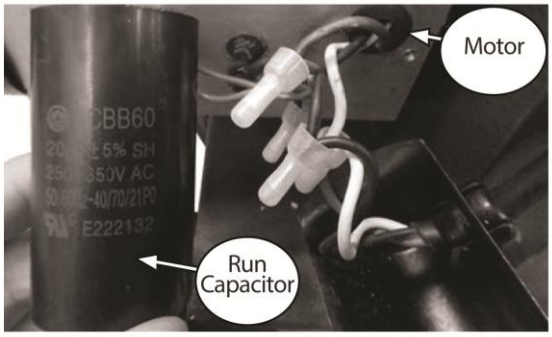
49	PCX123049	Flat Washer	Ø8	4
50	PCX123050	Pan Head Screw	M5*10	5
51	PCX123051	Flat Head Screw	M3x4	2
52	PCX123052	Dust Port		1
53	PCX123053	Sponge	8W×5H×120	1
54	PCX123054	Frame		1
55	PCX123055	Hex Bolt	M6*16	4
56	PCX123056	Wheel Shaft		1
57	PCX123057	Gear		1
58	PCX123058	Ball Bearing	6000-2RS	4
59	PCX123059	Gear		1
60	PCX123060	Flat Washer	Ø5.3×Ø15x1.2	1
61	PCX123061	Pan Head Screw	M5*10	1
62	PCX123062	Switch Box		1
63	PCX123063	Paddle Switch	HY7	1
64	PCX123064	Lower Wheel PU ASSY		1
65	PCX123065	Pan Head Screw	M5X16	4
66	PCX123066	Cap Screw	M5×10	7
67	PCX123067	EXT Retaining Ring	STW10	2
68	PCX123068	Belt	130XL*10.0	1
69	PCX123069	Rubber Foot(Left)		2
70	PCX123070	Scale		1
71	PCX123071	Fence Rail Cap (Left)		1
72	PCX123072	Fence Rail Cap (Right)		1
73	PCX123073	Fence Rail		1
74	PCX123074	LED Light		1
75	PCX123075	Quick-release Handle		1
76	PCX123076	Set Screw	M5*6	1
77	PCX123077	Eccentric Shaft		1
78	PCX123078	Washer	Ø16×Ø21x0.3T	1
79	PCX123079	Quick-release Handle Bracket		1
80	PCX123080	Eccentric Bushing		1
81	PCX123081	Knob Blot		1
82	PCX123082	Door Lock Knob		2
83	PCX123083	Shoulder Screw		2
84	PCX123084	Pipe	φ6*φ8	1
85	PCX123085	Cap Screw	M6*16	3
86	PCX123086	Carrying Handle		1
87	PCX123087	LOC-Line		1
88	PCX123088	Hex Nut		1
89	PCX123089	Lock Knob		1
90	PCX123090	Washer		1
91	PCX123091	Set Screw	M4*4	1
92	PCX123092	Adjustment Knob Seat		1
93	PCX123093	Gear		1
94	PCX123094	Lock Nut	M5	2
95	PCX123095	Upper Blade Guide Block		1
96	PCX123096	Square Nut		1
97	PCX123097	Cap Screw	6×8	2
98	PCX123098	Limited Block		1
99	PCX123099	Flat Head Screw	M4*8	2
100	PCX123100	Blade Cover (Lower)		1
101	PCX123101	Rubber Foot(Right)		2
102	PCX123102	Brush Seat		1
103	PCX123103	Blade Brush		1

104	PCX123104	Lower Blade Guide Block		1
105	PCX123105	Cap Screw	M5×P0.8×12	2
106	PCX123106	Shoulder Screw		2
107	PCX123107	Ball Bearing	606-2RS	2
108	PCX123108	Cap Screw	M5×P0.8×16	1
109	PCX123109	Blade Guide Rod		1
110	PCX123110	Blade Guide ASSY (Lower)		1
110.1	PCX123110.1	Blade Guide Lower		1
110.2	PCX123110.2	Bearing Seat		2
110.3	PCX123110.3	Bearing	696-2RS	2
110.4	PCX123110.4	Washer	Φ4	2
110.5	PCX123110.5	Set Screw	5×5	2
111	PCX123111	Blade Guide Sliding Cover		1
112	PCX123112	Fence Guide		1
113	PCX123113	Compression Spring		1
114	PCX123114	Blade Cover		1
115	PCX123115	Support Rod		1
116	PCX123116	Pan Head Screw	M4×10	1
117	PCX123117	Blade Guide ASSY (Upper)		1
117.1	PCX123117.1	Blade Guide Upper		1
117.2	PCX123117.2	Bearing Seat		2
117.3	PCX123117.3	Bearing	696-2RS	2
117.4	PCX123117.4	Washer	Φ4	2
117.5	PCX123117.5	Set Screw	5×5	2
118	PCX123118	Fence Side Cover		2
119	PCX123119	Fence		1
120	PCX123120	Cap Screw	6×12	2
121	PCX123121	Plug		2
122	PCX123122	Fence Plate		1
123	PCX123123	Friction Plate		2
124	PCX123124	Fence Bracket		1
125	PCX123125	Lock Nut	M6	1
126	PCX123126	Pan Head Screw	M3x4	1
127	PCX123127	Pointer		1
128	PCX123128	Blot	M6x8	2
129	PCX123129	Cap Screw	M6x30	1
130	PCX123130	Eccentric Bushing		1
131	PCX123131	Handle Locking Cam		1
132	PCX123132	Handle		1
133	PCX123133	Handle Cover		1
134	PCX123134	Cap Screw	M8*55	1
135	PCX123135	Spring Plate		1
136	PCX123136	Pan Head Screw	M5x6	1
137	PCX123137	Knob		1
138	PCX123138	Compression Spring		1
139	PCX123139	Carriage Bolt	M8*80	1
140	PCX123140	Adjustable Shaft		1
141	PCX123141	Pivot Shaft	Ø8×90L	1
142	PCX123142	EXT Retaining Ring	Ø7.8×Ø13	2
143	PCX123143	Cap Screw	M5×8	1
144	PCX123144	Washer	Ø10	1
145	PCX123145	Wheel Mount Plate		1
146	PCX123146	Wheel Shaft (Upper)		1

147	PCX123147	INT Retaining Ring	Ø26	4
148	PCX123148	Upper Wheel PU ASSY		1
149	PCX123149	Flat Head Screw	5×10	1
150	PCX123150	Blade	62'L*6mmW*0.3mmT	1
151	PCX123151	Wheel Cover (Upper)		1
152	PCX123152	Blade View Window		1
153	PCX123153	Cap Screw	8×20	1
154	PCX123154	Washer	20×20mm	2
155	PCX123155	Lasher Unit		1
156	PCX123156	Wheel Cover (Lower)		1
157	PCX123157	Pivot Shaft		2
158	PCX123158	Flat Washer	Φ6×Φ16×1.5t	2
159	PCX123159	Flat Head Screw	5×10	2
160	PCX123160	Wrench ASSY		1

Wiring Diagram for CX123 9" Band Saw





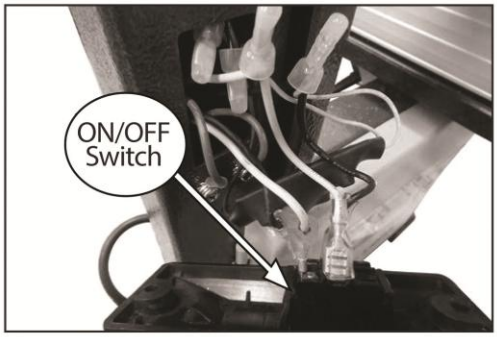


Figure 63. ON/OFF switch wiring.

WARRANTY

CRAFTEX 3 YEARS LIMITED WARRANTY

Craftex warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers **three years** for parts and 90 days for labour (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued. This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etceteras. Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom or call 1-800-461-BUSY. Craftex is a brand of equipment that is exclusive to Busy Bee Tools.
For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY (2879), and have your credit card and part number handy.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- We do not accept *collect* shipments.
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.