



# **CX102**

## **22" 5-HP BAND SAW**

### **User Manual**



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# 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 drill bits, hollow chisels, router bits, shaper heads, blades, knives or making other adjustments or repairs.
- ❖ **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.
- ❖ **ALWAYS** keep the bystanders safely away while the machine is in operation.

# CX102 – 22” BAND SAW

## SPECIFIC SAFETY INSTRUCTIONS

- ⚠ **CX102** is designed to cut wood only. Do not cut metal.
- ⚠ **ALWAYS** inspect the blade for any crack 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 THE 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.
- ⚠ **ALWAYS** ensure 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.
- ⚠ **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 CX102. If you fail to do so, serious injury could occur.

### WARNING

*The safety instructions given above can not be complete because the environment in every shop is different. Always consider safety first as it applies to your individual working conditions.*



## CX102-22" Band Saw

### FEATURES

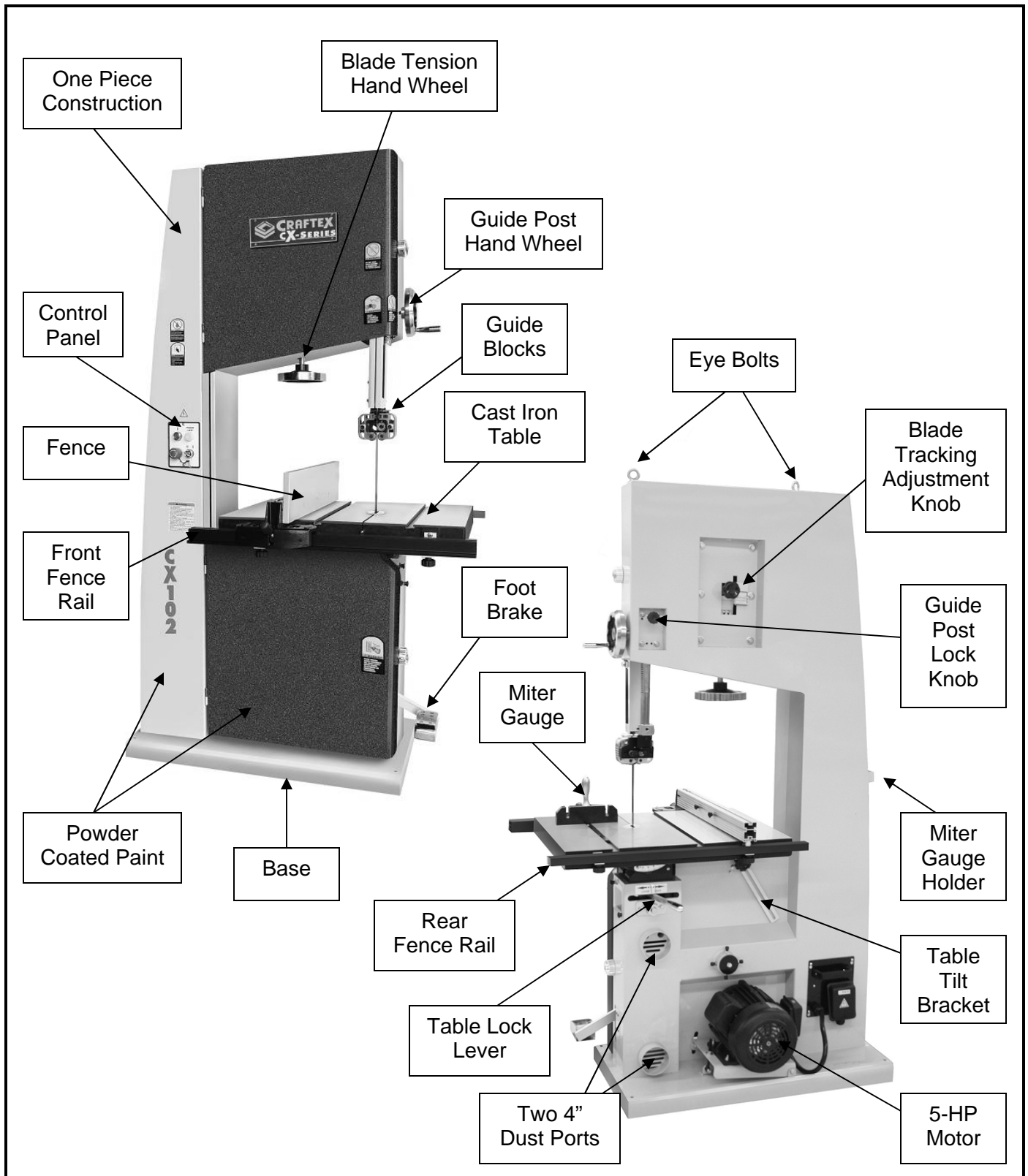
#### MODEL CX102 – 22" BAND SAW

As part of the growing line of Crafttex woodworking equipment, we are proud to offer the CX102 a 22" Band Saw. The Crafttex name guarantees Craft Excellence. By following the instructions and procedures laid out in this owner's manual, you will receive years of excellent service and satisfaction. The CX102 is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

- ⊞ Motor ..... 5-HP, 220-V, 60-HZ, 1725-RPM
- ⊞ Amps ..... 25 Amps
- ⊞ Table Size..... 23" x 30"
- ⊞ Table Tilt..... 0° to 10° Right and 0° to 45° Left
- ⊞ Wheel Size ..... 22"
- ⊞ Maximum Blade Width..... 1-1/4"
- ⊞ Minimum Blade Width..... 1/4"
- ⊞ Floor to Table Height ..... 37"
- ⊞ Cutting Capacity/Throat..... 21-1/2"
- ⊞ Maximum Width of Cut ..... 21-1/2"
- ⊞ Maximum Depth of Cut..... 16"
- ⊞ Dust Collection Ports ..... Two 4" Ports
- ⊞ Base Dimensions..... 38" x 19"
- ⊞ Blade Length & Width..... 171" & 1"
- ⊞ Blade Speed..... 4900 FPM
- ⊞ Bearings ..... Sealed and Permanently Lubricated
- ⊞ Overall Size ..... 42" x 61" x 86"
- ⊞ Approximate Weight ..... 425 Kgs

# CX102 – 22” BAND SAW

## PHYSICAL FEATURES



## SETUP

Before setting up your machine you need to read and understand the instructions given in this manual.

The unpainted surfaces of this band saw are coated with a rust preventive waxy oil that you will want to remove before you begin assembly. Use a solvent cleaner that will not damage the painted surfaces.

### WARNING

*CX102 is a very heavy machine, do not over-exert yourself. For safe moving method use fork truck or get the help of an assistant or friend.*

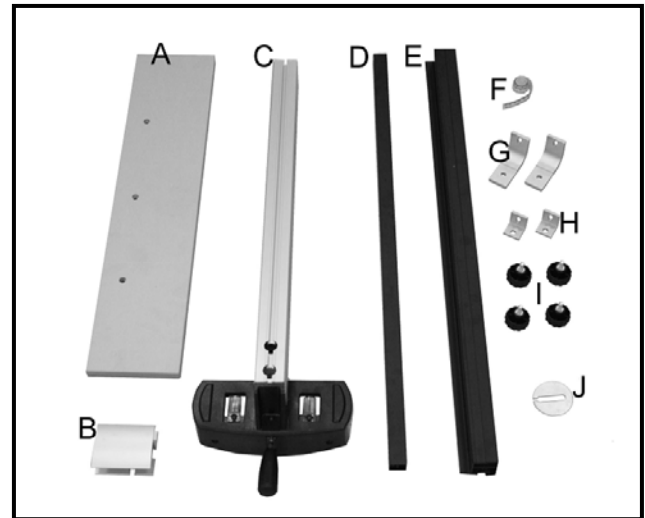


Figure-1 Inventory

## UNPACKING

The machine is properly packaged and is shipped completely crated for safe transportation. When unpacking, carefully inspect the crate and ensure that nothing has been damaged during transit. Open the crate and check that the machine is in a good condition.

Some parts are already attached to the machine because of shipping purposes.

List of Contents	Qty
A. Re-Sawing Fence.....	1
B. Re-Sawing Guide .....	1
C. Fence .....	1
D. Rear Fence Rail .....	1
E. Front Fence Rail.....	1
F. Adhesive Backed Scale.....	1
G. Front Fence Rail Brackets.....	2
H. Rear Fence Rail Brackets .....	2
I. Front & Rear Fence Rails Knobs.....	4
J. Table Insert .....	1

List of Contents	Qty
K. Eye Bolts.....	2
L. Foot Brake .....	1
M. Miter Gauge .....	1
N. Table Tilt Bracket Lock Knob .....	1
O. Hardware Bag .....	1
P. Hand Wheel Handle.....	1



Figure-2 Inventory

## MOVING CX102

Your CX102 is provided with two eye bolts which are installed on the top of the band saw.

When moving the band saw, place the lifting hooks through the eye bolts and lift it using a fork truck.

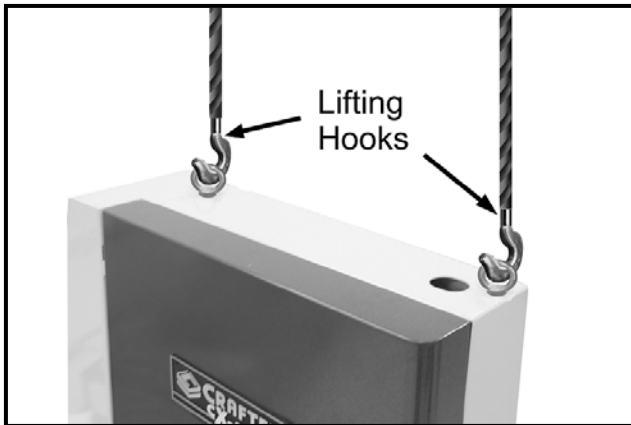


Figure-3 Moving the band saw

## PROPER GROUNDING

Grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

CX102 is equipped with a 220-volts single phase motor.

This appliance is for use on a normal 220-volt circuit and needs to be wired at the junction box. To prevent electrical hazards, have a qualified electrician ensure that the line is properly wired.

It is strongly recommended not to use extension cords with your CX102. Always try to position your machine close to the power source so that you do not need to use extension cords.

In case if you really find it necessary to use an extension cord, make sure the extension cord does not exceed 50-feet in length and the cord is 14-gauge to prevent motor damage.



### **WARNING**

*Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.*



## ASSEMBLY

Some parts of the machine come installed on the machine due to shipping purposes. You will just have to install the parts shown on page-7 (Figure-1 & Figure-2)

Follow the steps below to assemble your CX102.

The CX102 is equipped with two eye bolts, used to move the band saw. Install the bolts as shown in figure-4 and make sure they are threaded all the way in.

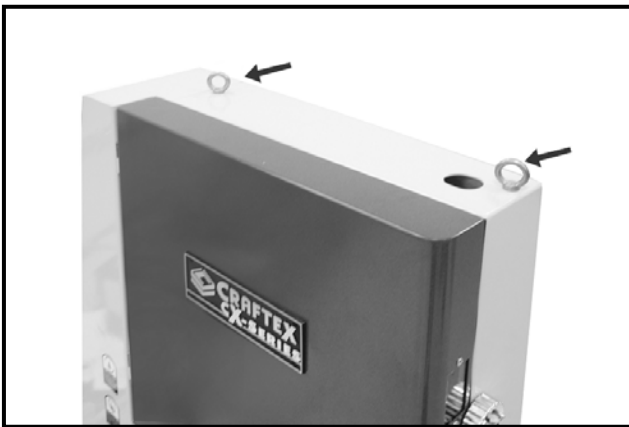


Figure-4 Installing the eye bolts

The CX102 is shipped inside the crate with the table tilted. When assembling, release the table lock lever and position the table on the table stop and adjust the bolt on the table stop so that the table is perpendicular to the blade. See figure-5 (For details see page-17)

### **IMPORTANT**

*The eye bolts are used to place the lifting hooks through it and lift the band saw using a fork lift.*

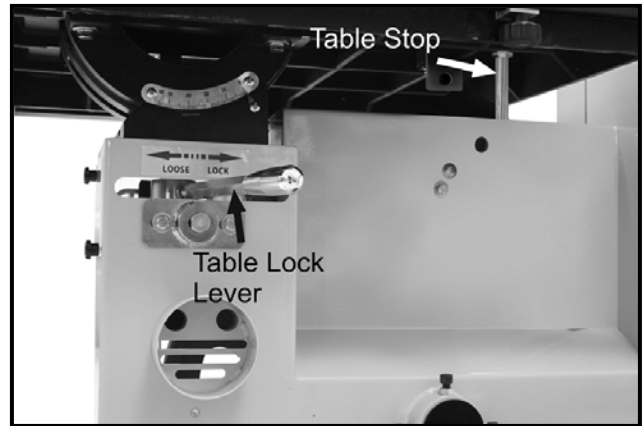


Figure-5 Table sitting on the table stop

Take the table tilt bracket and attach with one end to the bottom of the table using screw and washers provided.

Once the table is in the correct position, lock the bracket using the lock knob, and lock the table as shown in figure-6.

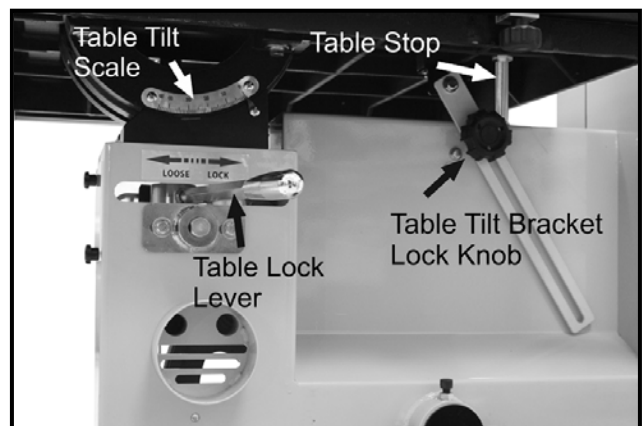


Figure-6 Installing the table tilt bracket

Install the table insert at the center of the table and the table pin into the table slot as shown in figure-7

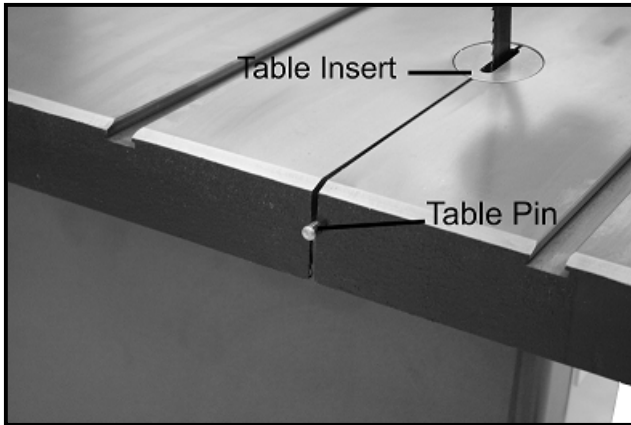


Figure-7 Table insert and table pin

Take the front fence rail brackets and attach them to the table using screws and washers provided. See figure-8.

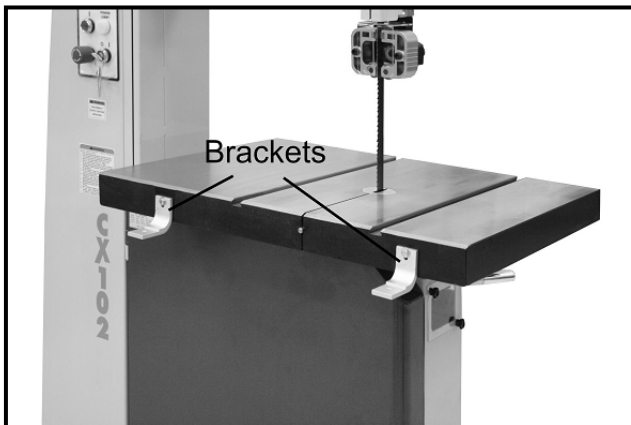


Figure-8 Front fence rail brackets

Once you have attached the rail brackets to the table, place the front fence rail on the brackets and insert the lock knobs through the hole on each bracket and thread the T-nuts onto the ends of the knobs a couple of turns to tighten the fence rail in place. See figure-9.

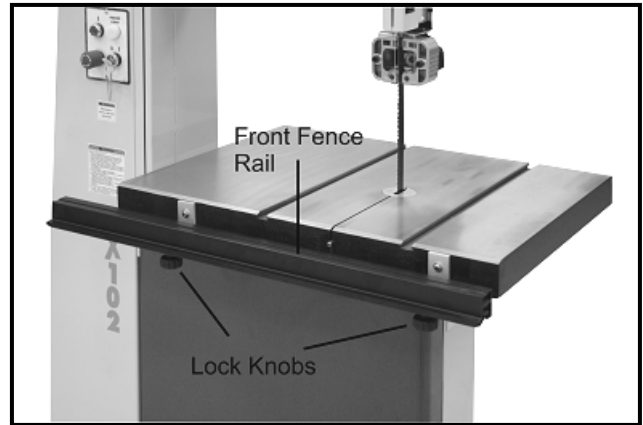


Figure-9 Front fence rail attached

Install the rear rail fence in the same manner.

Now take the fence and pull its handle up. Place the fence on the front fence rail and slide it against the blade.

Use a pencil to mark the fence rail where the fence scale indicator on the right hand side is pointing (there is a gap just behind the indicator plate where you can mark the rail). This mark will indicate where to align the 0" mark when install the scale.



Figure-10 Attaching adhesive backed scale

Once you have attached the adhesive backed scale to the rail, place the fence on the rail and tighten it in place by pushing down the handle. See figure-11

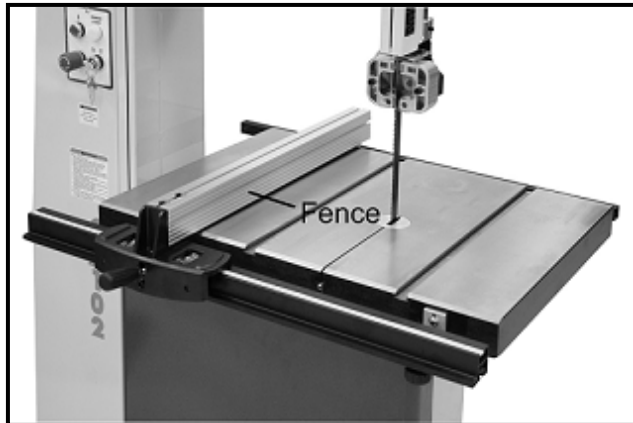


Figure-11 Fence installed on the rails

Take the hand wheel handle and slide it on to the shaft as shown in figure-12. Thread the handle into the hand wheel shaft and tighten it with a wrench.



Figure-12 Threading the hand wheel handle into the shaft

Open the bottom cabinet, and insert the foot brake with one end through the hole inside the cabinet and leaving the other end outside. Attach it to the bracket using

screws and washers provided as shown in figure-13.

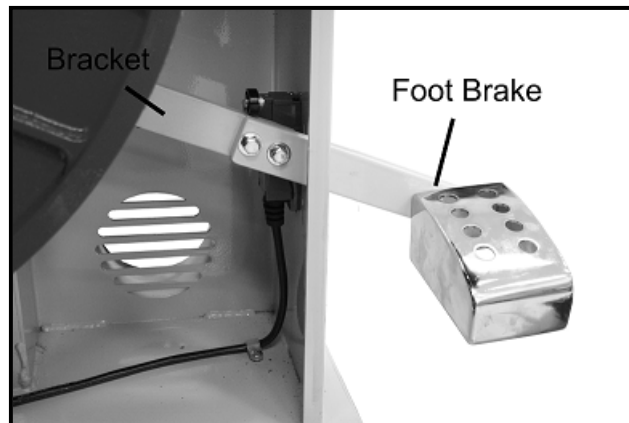


Figure-13 Installing the foot pedal

## BLADE TRACKING ADJUSTMENT

The blade tracking means where the blade rides on the upper and lower wheels. The blade should always be centered on both wheels.

Although the blade tracking of this band saw is factory set, you should check it again to make sure that the blade is centered on the wheels.

To adjust the blade tracking:

Disconnect the machine from power source (if connected) and open the upper wheel cover. Spin the upper wheel by hand slowly and see how the blade rides on the wheel.

If the blade is not properly aligned and needs to be adjusted, loosen the lock nut shown in figure-14 and turn the knob.



Figure-14 Blade tracking adjustment

**Turn the knob clockwise:**

If the blade moves towards the front edge of the wheel. It makes the top of the wheel to tilt back and moves the blade towards the center.

**Turn the knob counter-clockwise:**

If the blade moves towards the back edge of the wheel. It makes the top of the wheel to tilt to the front and moves the blade towards the center.

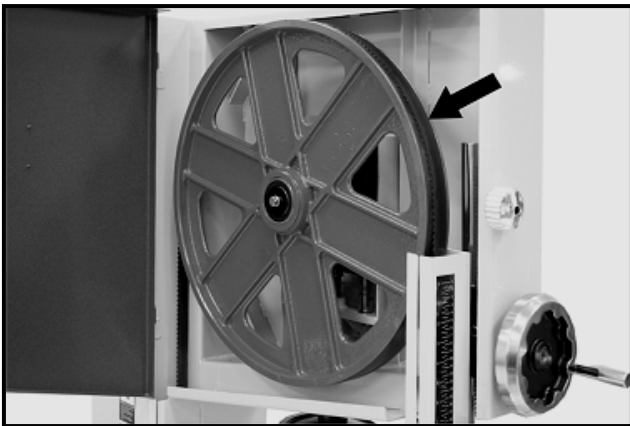


Figure-15 Blade centered on the upper wheel

Once the blade is centered on the wheel, tighten the lock nut.

## **IMPORTANT**

*In very rare cases if the blade tracking is not adjusted by tilting the upper wheel, then you will have to make minor adjustments to the angle of tilt of the lower wheel to get the blade centered on both wheels.*

*Loosen the four lock nuts shown in figure-16 and turn the hex screws to tilt the lower wheel to the desired direction to get the proper angle of tilt and tighten back the nuts.*

*Remember, this adjustment is done only if the blade tracking is not adjusted by tilting the upper wheel.*

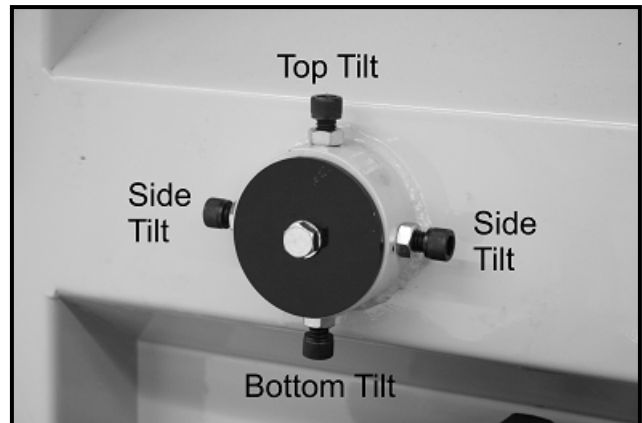


Figure-16 Lower wheel tilting controls

Turning all four hex bolts shown in figure-16, clockwise in equal amount pushes the lower wheel forward while turning them counter-clockwise will bring the wheel backward.

## TEST RUN

Once you have assembled your machine completely, it is then time for a test run to make sure that the machine works properly and is ready for operation.

During the test run if there is any unusual noise coming from the machine or the machine vibrates strangely, stop the machine immediately and disconnect from the power source and investigate to find out the problem with your machine.



### **READ THE MANUAL**

*Before starting the band saw, make sure that you have read and understood the manual and you are familiar with the functions and safety features on this machine. Failure to do so may cause serious personal injury.*

## CONTROL PANEL

The CX102 is equipped with a switch featuring ON & OFF button and a key feature which enables/disables the ON & OFF controls.

To enable the ON & OFF controls, turn the key to “1”.

To disable the ON and OFF controls, turn the key to “0” and you can remove the key if you want.



Figure-17 CX102 control panel

To make sure the control panel on your CX102 is working properly, do the following:

Turn the key to “0” and push the ON button. The key feature is not working properly, if the band saw turns on.

Turn the key to “1” and push the ON button. When the band saw starts, press the OFF button to stop the wheels.

Every time when the band saw is turned OFF, and you want to turn it back on, the stop button will need to be pushed in and turned clock-wise to reset. When the OFF button pops out, the switch is reset and the band saw is ready to be turned on.

### **IMPORTANT**

*When the work is done, turn the band saw OFF, turn the key to “0” to disable the ON & OFF controls and remove the key to prevent any unauthorized operation.*

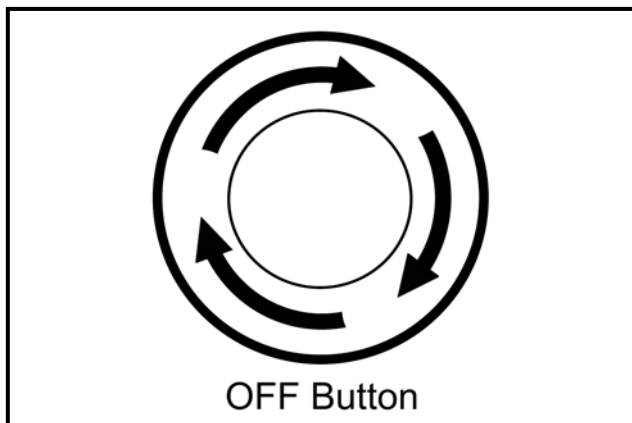


Figure-18 OFF / RESET button

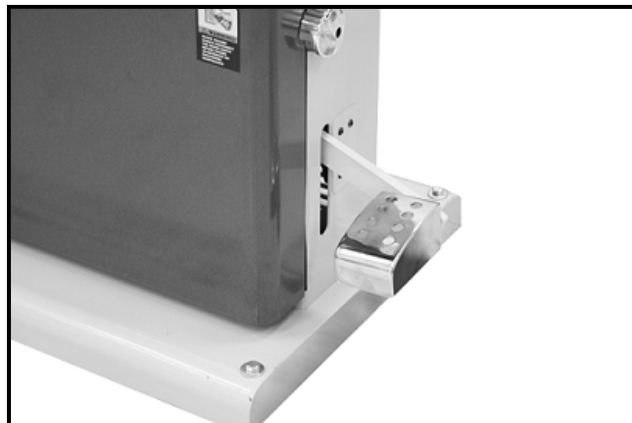


Figure-19 Foot brake

## FOOT BRAKE

The CX102 is equipped with a foot brake used only for emergency to disconnect the power to the motor and to bring the wheels and the blade to a complete stop.

While doing the test run, turn the band saw ON and let it reach to a full speed. Once it is at a full speed, apply the foot brake.

If the band saw stops, the foot brake is working properly and if the band saw does not stop, it means the foot brake feature is not working properly. Investigate the problem and make sure the foot brake feature work before doing any operation on your CX102.

### **WARNING**

*The foot brake does not stop the blade instantly. Do not become over-confident and forget the safety rules because of the foot brake.*

### **WARNING**

*This machine can perform many types of operations which are beyond the scope of this manual and are very dangerous if performed incorrectly. The safety instructions given in this manual can not be complete because the environment in every shop is different. Always consider safety first, as it applies to your individual working conditions.*

## BLADE TENSION

A properly tensioned blade is very important to get the best performance from any band saw. If the blade is too loose, there is a possibility that the blade will slip or drift off the line while in operation and it will be hard to have accuracy in the line of cut. If the blade is tensioned too tightly, it will be very difficult to make tighter radius cuts and there will be a great possibility of blade breakage.

When using a wider blade for making straight cuts, for re-sawing or making wide radius cuts, tighter blade tension is recommended; while using narrower blades for cutting shorter stock or making tighter radius cuts, less blade tension is recommended.

The information above is just a guideline for you to understand to set the blade tension according to the cut. However, understanding the blade tension adjustment comes with the practice.

Look at the blade tension scale located at the back of your band saw. The scale shows the ideal blade tension adjustment according to the width of the blade.

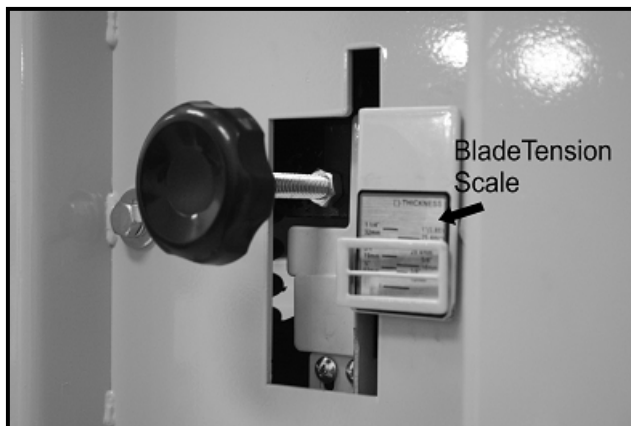


Figure-20 Blade tension scale

## ADJUSTING THE BLADE TENSION

The blade tension on CX102 can be adjusted by turning the hand wheel shown in figure-13. Turning the hand wheel clockwise will tighten the tension on the blade while turning it counter-clockwise will loosen the blade tension.

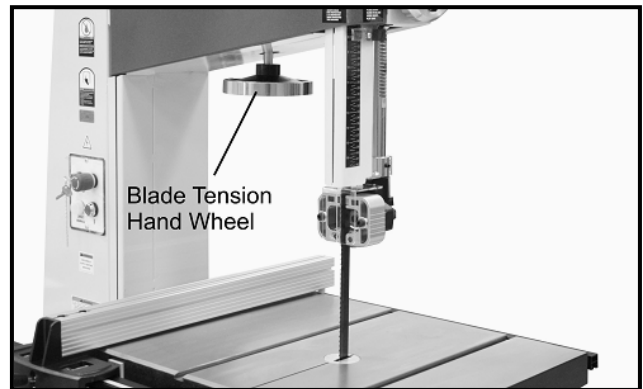


Figure-21 Blade tension hand wheel

### **IMPORTANT**

*All blades stretch with use, and the scale at the back of your band saw (shown in figure-20) is just an approximation. So, do not rely on any adjusted measurement for long period of time as the blades stretch and the tension on the blades changes.*

### **IMPORTANT**

*To prolong the life of the blade & reduce blade stretching, when the machine is not in use for period of 24 hours or more release the tension on the blade.*

## GUIDE BLOCK BEARINGS ADJUSTMENT

The guide bearings (besides), thrust bearing (behind) the blade, support the blade to move in a straight line during cutting operation. Properly adjusted guide bearings play, an important role in getting accurate cuts.

To adjust the guide block bearings, turn the machine off and disconnect the cord from the power source.

Loosen the two screws, holding the guide blocks shown in figure-22. Remove the guide blocks.

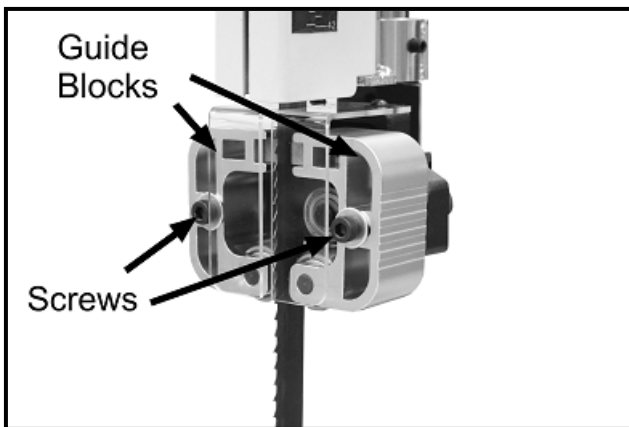


Figure-22 Guide blocks

Now, loosen the thumbs screw holding the guide bearing in place and adjust the thrust bearing by turning the adjustment screw shown in figure-23.

Turning the adjustment screw, moves the thrust bearing, closer or away from the blade.

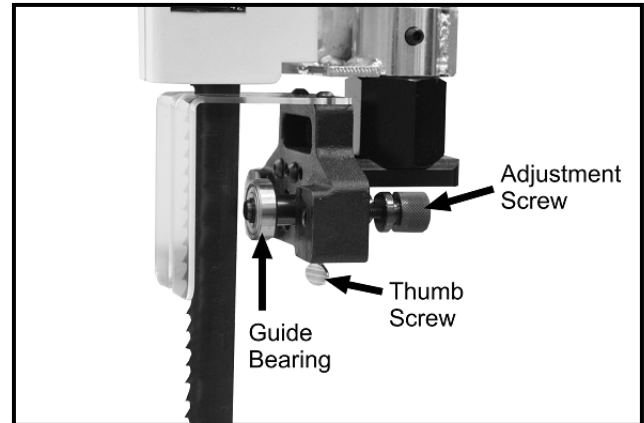


Figure-23 Adjusting the thrust bearing

Adjust the thrust bearing so that the distance between the blade and thrust bearing is 0.016". See figure-24.

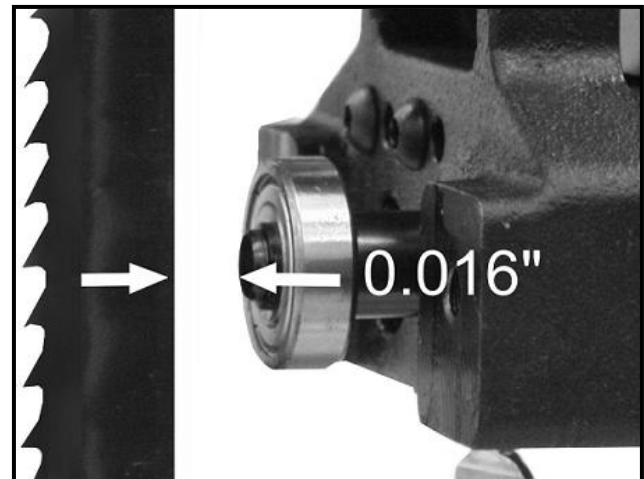


Figure-24 Distance between thrust bearing and the blade

Once you get the desired distance, tighten the thumb screw to lock the thrust bearing in place.

Now, take the guide blocks with the guide bearings and attach them back to the guide post, finger tightening the screws.



Adjust the guide blocks, so that the space between the thrust bearings and the blade should be 0.02" which is thickness of a sheet of paper. See figure-25

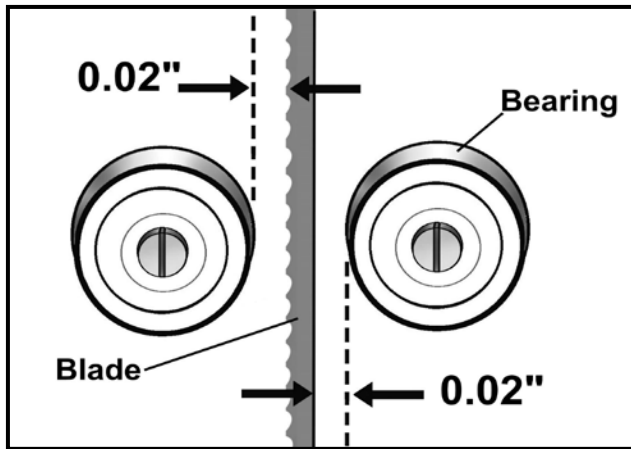


Figure-25 Distance between the guide bearings and the blade

Once you get the desired position, tighten the screws to lock the guide blocks in place.

Open the lower cabinet, remove the two small knobs and open the window located under the table to access the lower bearings. Adjust the lower bearings in the same manner as you did the upper ones and tighten the knobs and close the cabinet.

## TABLE STOP ADJUSTMENT

CX102 features a table stop which allows the table to easily come to a 90° if the table is tilted.

To adjust the table stop so that the table sits at 90° to the blade, you should first make sure the switch is in "OFF" position and the power cord is unplugged.

Loosen the table tilt bracket knob and the table lock lever located under the table.

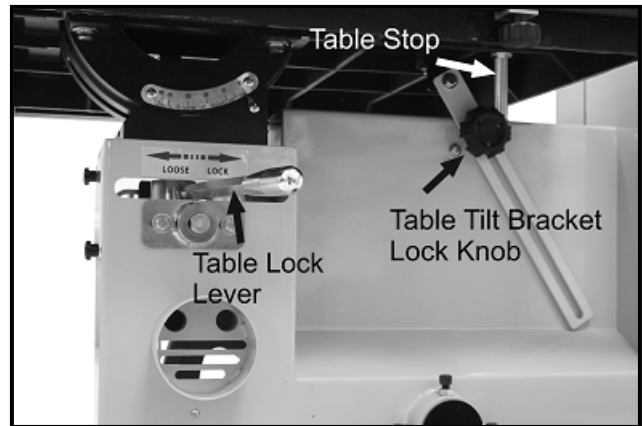


Figure-26 Table lock lever & table tilt bracket lock knob

Now, place a square on the table as shown in figure-27 and adjust the table stop so that the table is at a 90° with the blade.

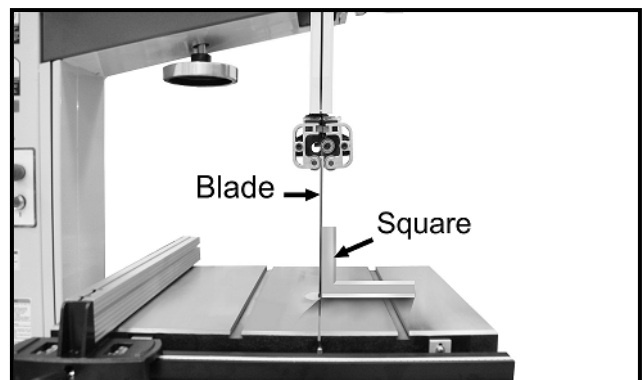


Figure-27 Adjusting table to the blade

Once the table is at the 90° to the blade, tighten the table tilt bracket lock knob and table lock lever to hold the table in position.

## WARNING

*Make sure the switch is in the "OFF" position and the cord is disconnected from the power source while doing any adjustments.*

## TABLE TILT SCALE CALIBRATION

To calibrate the table tilt scale:

Make sure the table is at 90° to the blade and the blade tensioning and tracking is properly set. (See Page 11 & 15 for details)

Disconnect the machine from the power source and loosen the pointer screw shown in figure-28. Align the tip of the pointer with the 0" mark on the table tilt scale and tighten the pointer screw.

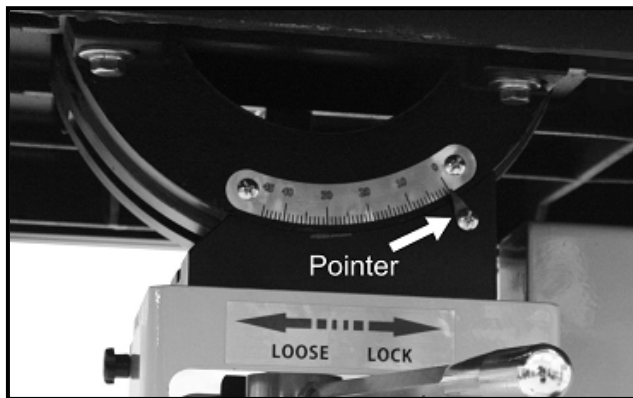


Figure-28 Table tilt scale and pointer screw

## TABLE ALIGNMENT

To make accurate cuts with your band saw, the table should be aligned properly with the blade.

To align the table:

Make sure the blade tension and tracking is adjusted correctly. Disconnect the machine from the power source and loosen table tilt bracket lock knob and screws securing the table to the trunnion as shown in figure-29.

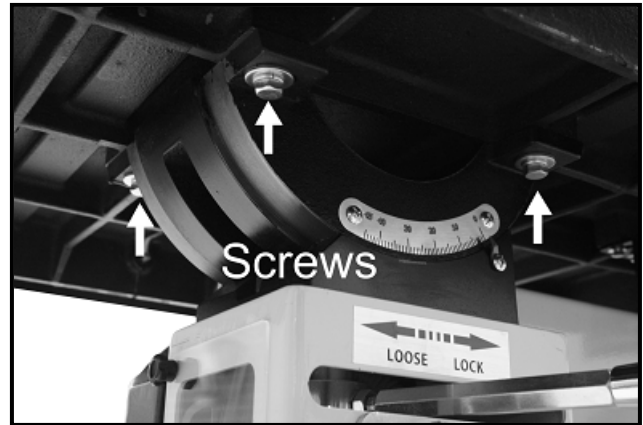


Figure-29 Loosening the screws

Place a straight-edge on the table so that the straightedge touches the blade and is parallel to it as shown in figure-30. Make sure the straight-edge touches only the flat part of the blade, not the teeth.

Now, use a ruler to measure the distance between the miter slot and the straight edge on both sides on the table R & L. See figure-30.

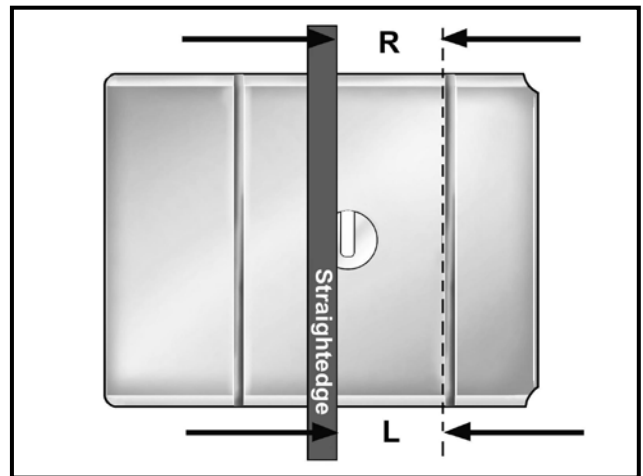


Figure-30 Aligning the table

Adjust the table until the distance on both sides of the table is equal and tighten table tilt bracket lock knob and the screws holding the table.

## GUIDE POST

The guide post assembly can be moved up or down above the work-piece. The movement of the guide post is controlled by rotating the guide post hand wheel shown in figure-31.

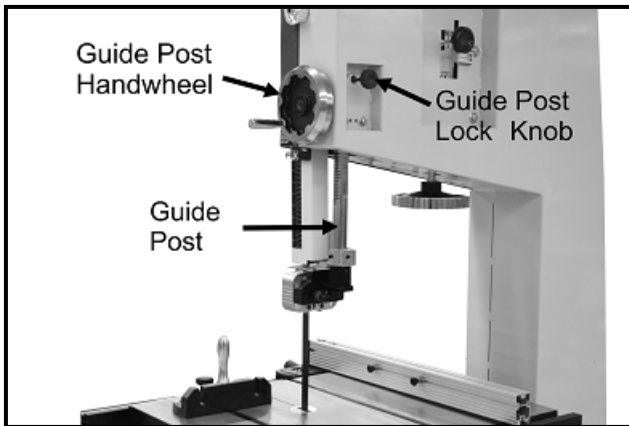


Figure-31 Guide post

To make accurate cuts and to reduce the blade slipping out of position, it is recommended to keep the guide post no more than 1" above the work-piece while cutting operation.

### To Adjust the Guide Post Assembly:

Make sure the switch is turned off and the cord is disconnected from the power source.

Loosen the guide post lock knob on your band saw shown in figure-31 and rotate the hand-wheel to move the guide post assembly up or down.

When the guide post assembly is about 1" above the work-piece, lock the guide post in place using the lock knob.

## CAST IRON WHEELS

The CX102 comes with heavy duty cast iron wheels for added stability and overall performance.

A co-planar shim adjustment is also added for better alignment of the wheels that allow the blade to run as straight as possible ensuring straight and accurate cuts.

This feature will help improve the band saw performance with the wheels working together instead of against each other. The end result will give you less vibration, more power, accuracy and less wandering. This will be noticed most when it comes to re-sawing and making straight cuts with blades larger than 1/4".

## COPLANER ADJUSTMENT

Figure-32 shows the shim for adjusting the front top wheel. To move the wheel out, remove the nut and shims then remove the wheel. Now, you can add shims to the back of the wheels as required. Replace the wheel and any remaining shims and the nut and tighten. To move the wheel in, remove the cast iron wheel as mentioned above and remove the shims from behind the wheel. Replace the wheel, shims and nut and retighten.



Figure-32 Top Wheel front shims

## CONNECTING TO A DUST COLLECTOR

CX102 features two 4" diameter dust ports to connect to a dust collector.

When connecting to a dust collector, use a proper sized hose and make sure all the connections are sealed tightly.

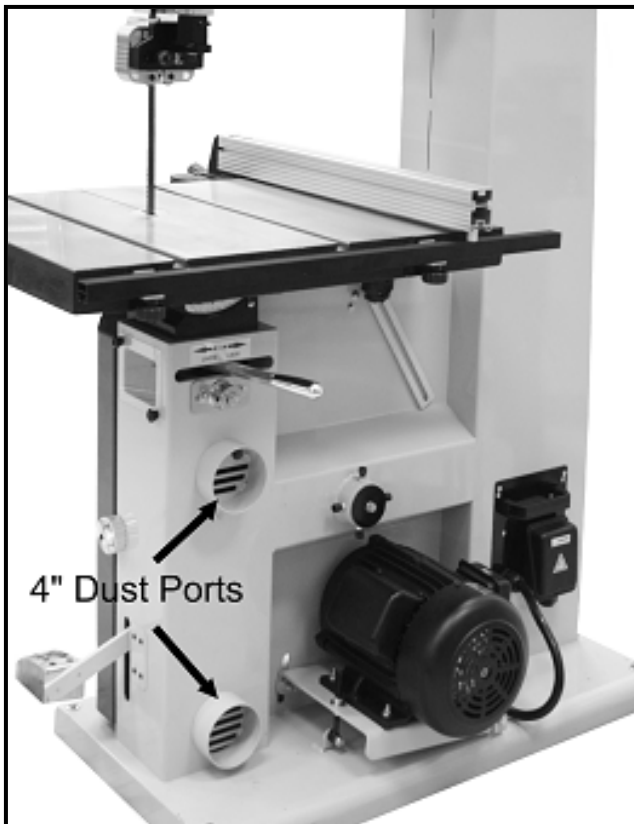


Figure-33 Two 4" dust ports

### **WARNING**

*The fine dust particles produced by the band saw can go into your lungs and cause serious health problems. Make sure to wear a dust mask and connect the band saw to a proper dust collection system while operating it.*

## WORK-PIECE INSPECTION

Before cutting the work-piece, make sure to inspect it for nails, staples, small pieces of stone or metal and any other foreign objects which could come in contact with the blade.

If the wood contains any of these objects and it comes in contact with the blade, the object might fly and hit the operator or damage the blade. For safe cutting method always inspect your work-piece carefully before you cut and wear eye protection.

Some woods with excessive twisting or wrapping are un-stable while cutting and are dangerous to cut because during operation the work-piece can move unexpectedly which either damage the blade or hurt the operator.

If the wood is slightly cupped, make sure the cupped face of the wood is held against the fence. If the bowed side of the work-piece is held against the fence, the work-piece will move while cutting.

### **WARNING**

*The information above is just a guideline for you to understand how to cut a work-piece with slight cupping. If you are not sure and do not have any experience in cutting cupped stock, do not cut it. Failure to follow these instructions might bring personal injuries to the operator or serious damage to the blade.*

Some stock with large knots can damage the blade and wet stock will give a poor result.

## OPERATIONS

Before operating the band saw make sure you have performed the following adjustments:

- ❖ Blade tension adjustment
- ❖ Blade tracking adjustment
- ❖ Guide bearings adjustment

### WARNING

*CX102 produces fine dust particles during cutting operation which is very dangerous for health. Always connect your band saw to a dust collector.*

## RIPPING

Cutting solid wood with the grain cutting down the length of the work-piece is called ripping.

Adjust the fence on the rails, according to the width of the cut on the work-piece and turn the hand-wheel to set the guide post assembly 1" above the work-piece.

Now, turn the band saw ON and use a push stick or the band saw finger protector to push the work-piece through the blade. See figure-34

### WARNING

*Do not use your fingers to feed narrow work-pieces into the blade. If you slip, your fingers might come close the blade. Always use a push stick.*



Figure-34 Ripping on CX102

## CROSSCUTTING

Cutting solid wood across the grain and cutting plywood across the width of the work-piece is called crosscutting.

Mark the work-piece where you want to start the cut from and make sure the miter gauge is at 90° position on the miter slot. Place the work-piece on the table so that the marked point is aligned with the blade and hold the work-piece against the miter gauge.

Turn the band saw ON and feed the work-piece against the blade. See figure-35

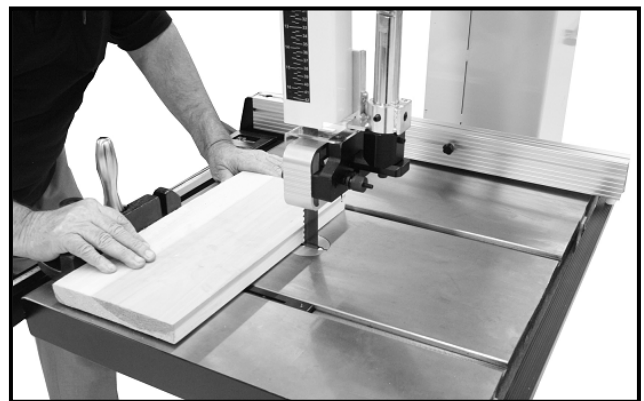


Figure-35 Crosscutting on CX102

## RE-SAWING

Cutting a work-piece into two or more thinner pieces is called re-sawing. Wider blades give better result, when re-sawing.

To re-saw a work-piece make sure that the table is at a 90° with the blade and using a wider blade will give better results.

Adjust the fence according to the width of the cut you want, and lock it in position. Turn the band saw ON and feed the work-piece into the blade using feed paddles until the blade is completely through the work-piece.

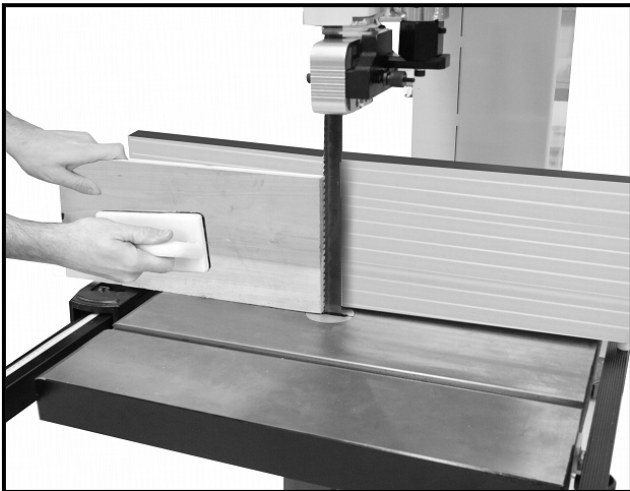


Figure-36 Re-sawing on CX102

## CUTTING CURVES

For cutting curves always try to use narrower blades. When cutting curves feed the stock into the blade and turn it very carefully so that the blade follows the line of cut and make sure the blade does not twist.

Make relief cuts through the waste part of the work-piece which makes the job easier and prevents the blade from twisting.

## TABLE TILT

The CX102 is equipped with a 23" x 30" table that can be tilted 10° right and 45° left providing the user a wide range of cutting options.

To tilt the table:

Turn the switch OFF and disconnect the cord from the power source.

Loosen the table lock lever and the table lock knob.

Tilt the table to the desired angle according to the table tilt scale located under the table.

Adjust the table stop adjustment so the table rests on it.

Tighten the table lock lever and the lock knob to secure the table in position.

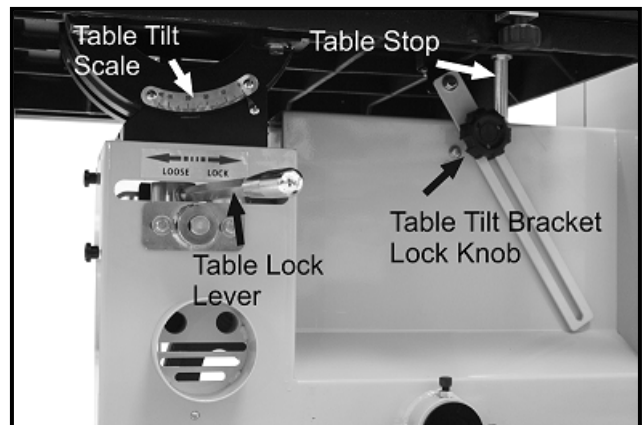


Figure-37 Table tilt controls

## WARNING

*Make sure the power switch is in the OFF position and cord is disconnected from the power source, when making any adjustments. Failure to do so may result in serious personal injury or death.*

## REMOVING THE BLADE

To replace or change the blade, turn the switch OFF and disconnect the cord from the power source.

Remove the fence and rails and release the tension on the blade. Remove the table insert and the table pin.

For the protection of your hands, wear protective gloves.

Open the upper and lower wheel cabinets and carefully slide the blade off the both wheels. Now, slide the blade out, through the slot on the table.



Figure-38 Removing the blade

## INSTALLING THE NEW BLADE

Once the old blade is removed, carefully slide in the new blade through the slot on the table so that the teeth of the blade are pointing downwards.

Position the blade through the upper and lower guide bearings and install it over the wheels.

Adjust the blade tracking (See page-11) and adjust the guide block bearings (See page-16).

Once the blade is in the proper position, turn the hand wheel to tension the blade.

Close the top and the bottom cabinets, install the table insert back, insert the table pin and install the fence rails and the fence back.

## MAINTENANCE

During the life of your machine, you will need to practice some regular maintenance to keep your saw in peak performance condition.

The saw should be daily checked, for damaged blade, loose mounting bolts, damaged wires or any other unsafe conditions and should be monthly checked for loosen or damaged V-belts and dust build ups inside the cabinet or on the motor.

### WARNING

*When installing / removing and servicing any part of the machine, make sure the switch is in the OFF position and the cord is disconnected from the power source. Failure to do so may result in serious personal injury or death.*

## V-BELT

The V-belt stretches with use, and should be re-tensioned periodically. To ensure optimum power transfer from the motor to the blade, the belt must be in good condition and under proper tension.

Check the V-belt at least after every month and more often if the band saw is used daily.

## TO INSPECT THE V-BELT

1. Turn the power switch off and disconnect the cord from the power source.
2. Turn the hand wheel and release the blade tension.

3. Remove the blade (See page-23 Removing the Blade).
4. Loosen the nut securing the wheel to the saw body and remove the wheel.
5. Once the wheel is removed, you will have access to the V-belts. Check if the V-belts are in good condition and tensioned properly.

## TO REPLACE THE V-BELT

Follow the instructions 1-5 to access the V-belt.

Loosen the nut securing the motor bracket to the saw body and loosen the two hex nuts holding the motor bracket up. See figure-39

Once the nuts are loose, slide the motor up to loosen the belt.

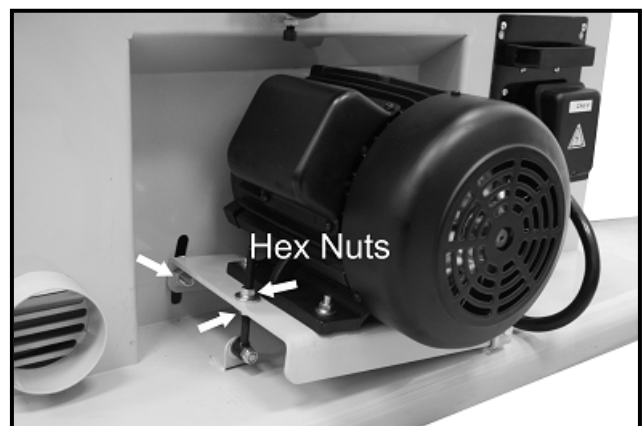


Figure-39 Hex nuts to be loosen to slide the motor

Remove the old belt and install the new one.



## TENSIONING THE V-BELT

Slide the motor down in the shaft and push the V-belt with your finger. There should be 3/4" of deflection when pushing the V-belt.

If deflection is more or less than 3/4" (when applying moderate pressure with your finger) re-tension the belt by sliding the motor up or down.

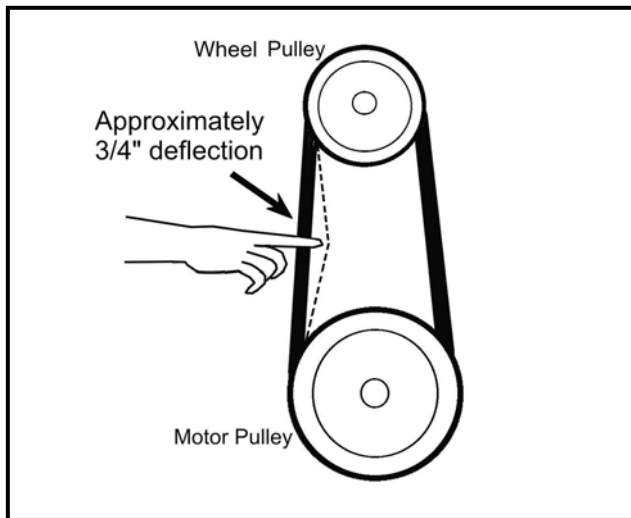


Figure-40 Correct tension on the V-belt

When the V-belt tension is correct tighten the nuts holding the motor bracket.

Install the wheel and the blade back and close the cabinets.

## UNPAINTED CAST IRON

Clean the unpainted cast iron surfaces of the table after every use ensuring that the moisture from the wood not remain on the cast iron surface and cause rust.

## BRUSHES

The CX102 is equipped with a brush located in the bottom cabinet, touching the lower wheel. The brush keeps the blade and the wheel clean from the dust and dirt.

The brush should be daily checked and cleaned and make sure it is touching the blade on the wheel properly, removing dust and dirt.

## LUBRICATION

### Guide Post

Make sure the switch is in the OFF position and the cord is disconnected from the power source.

Lower the guide post as much as possible and wipe the grease and saw dust buildup on it.

Apply a thin coat of light all purpose grease on it.

Move the guide post up and down a few times and remove any excessive grease.

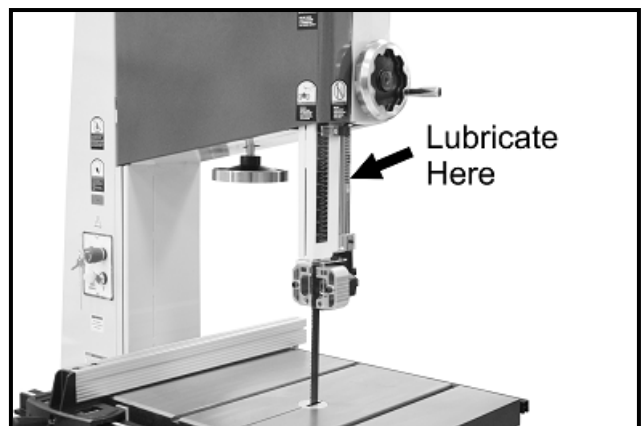


Figure-41 Guide post lubrication

## Table Trunnions

Make sure the switch is in the OFF position and the cord is disconnected from the power source.

Open the table lock lever and tilt lock knob and move the table to its maximum 45° angle and lock the table lever.

Clean the grease and saw dust buildup and apply a thin coat of all purpose grease to the trunnions.

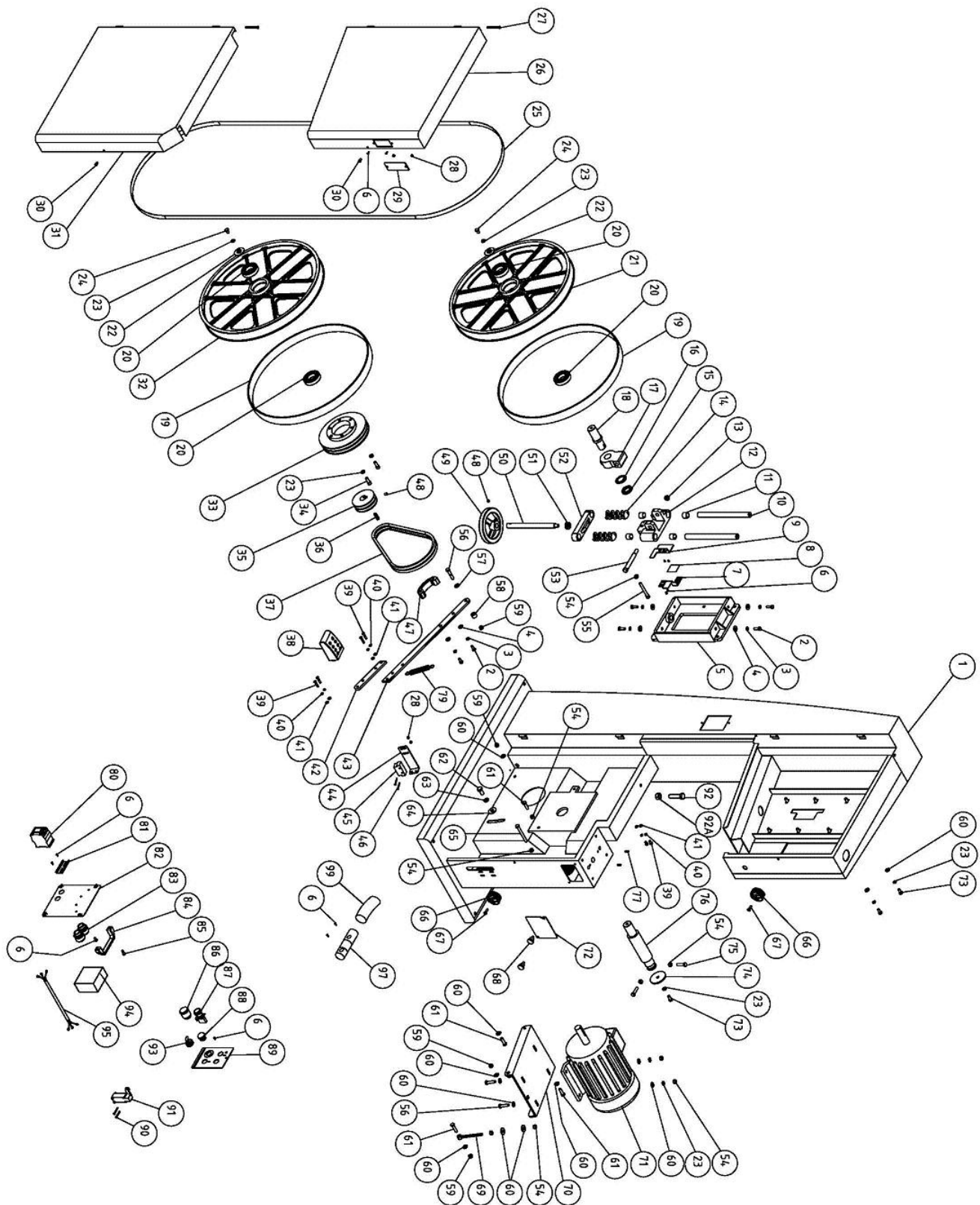
Release the table lock lever and tilt the table up and down a few times to distribute the grease.

Wipe the excessive grease from the trunnions and lock the table in its position.



Figure-42 Table trunnions lubrication

# CX102 PARTS BREAKDOWN



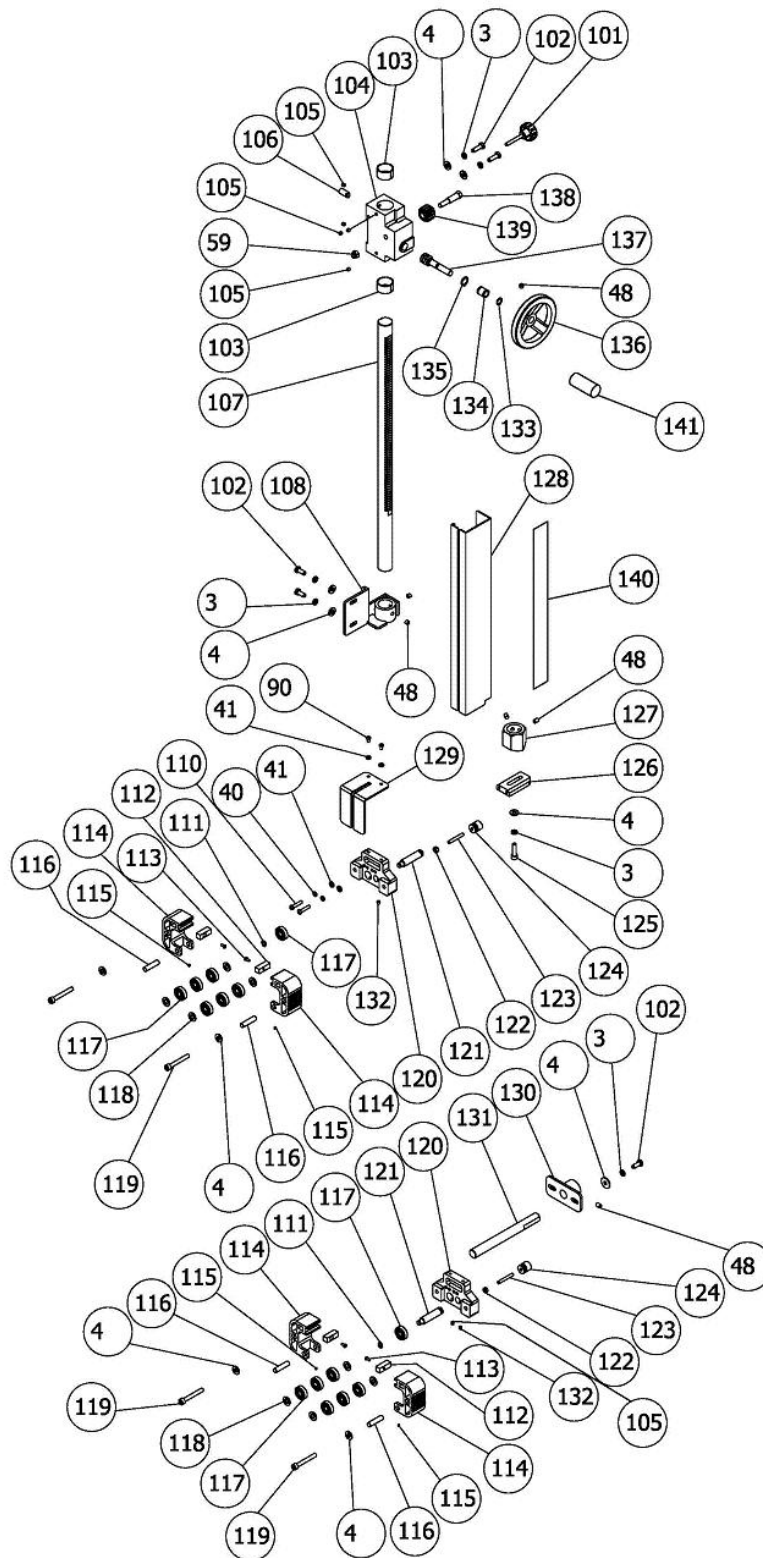
## **CX102 BODY PARTS BREAKDOWN**

<b>REF#</b>	<b>DESCRIPTION</b>
1	BODY
2	HEX BOLT 5/16"*1 1/4"
3	LOCK WAWHER 5/16"
4	FLAT WASHER 5/16"
5	SLIDEING HOUSING
6	PHILLIPS HEAD SCREW 3/16"*1/2"
7	BLADE TENSION POINTER
8	TENSION LABEL
9	POINTER COVER
10	SLIDEING SHAFT
11	SLEEVE BEARING
12	SLIDEING BASE
13	RETAINER NUT
14	SPRING
15	SPINDLE NUT
16	STAR WASHER 30MM
17	UPPER WHEEL SHAFT BASE
18	UPPER WHEEL SHAFT
19	RUBBER TIRE
20	BEARING
21	UPPER WHEEL
22	WHEEL WASHER
23	LOCK WASHER 3/8"
24	HEX BOLT 3/8"*3/4"
25	BLADE
26	UPPER GUARD
27	HINGE PIN
28	HEX NUT 3/16"
29	TRANSLUCENT PIECE
30	CAP SCREW 1/4"*3/8"
31	LOWER GUARD
32	LOWER WHEEL
33	LOWER WHEEL PULLEY
34	CAP SCREW 3/8"*1 1/4"
35	MOTOR PULLEY
36	KEY 8*8*45
37	BELT A36
38	BRAKE STEP PLATE

<b>REF#</b>	<b>DESCRIPTION</b>
39	HEX BOLT 1/4"*3/4"
40	LOCK WASHER 1/4"
41	FLAT WASHER 1/4"
42	BRAKE LEVER(S)
43	BRAKE LEVER(L)
44	BRUSH PLANE
45	BRUSH
46	PHILLIPS HEAD SCREW 3/16"*1 1/2"
47	BRAKE PAD
48	SET SCREW 5/16"
49	HANDLE WHEEL
50	SCREW
51	THRUST BEARING
52	SPRING BASE
53	WIDTHWAYS SHAFT
54	HEX NUT 3/8"
55	HEX BOLT 3/8*3
56	HEX BOLT 3/8"*2"
57	FLAT WASHER 3/8"
58	BUSHING
59	LOCKNUT 3/8"
60	FLAT WASHER 3/8"
61	HEX BOLT 3/8"*1 1/2"
62	HEX BOLT 1/2"*1 1/2"
63	LOCK WASHER 1/2"
64	FLAT WASHER 1/2"
65	HEX BOLT 3/8"*5"
66	GUARD LOCKING KNOB
67	SCREW
68	knob 1/4"*3/8"
69	SCREW
70	MOTOR PLANE
71	5HP MOTOR
72	TRANSLUCENT PIECE
73	HEX BOLT 3/8"*1"
74	SHAFT COVER
75	CAP SCREW 3/8"*2"
76	LOWER WHEEL SHAFT

<b>77</b>	PIN 6*18MM
<b>78</b>	
<b>79</b>	SPRING
<b>80</b>	ELECTRIC CONTACTOR
<b>81</b>	ELECTRIC CONTACTOR PLANE
<b>82</b>	PLANE
<b>83</b>	STRAIN RELIEF
<b>84</b>	HANDLE
<b>85</b>	PHILLIPS HEAD SCREW 1/4"*3/4"
<b>86</b>	STOP BUTTON
<b>87</b>	ON BUTTON
<b>88</b>	POWER LIGHT
<b>89</b>	SWITCH TABLE
<b>90</b>	BUTTON HEAD SCREW 5*10MM
<b>91</b>	LIMIT SWITCH
<b>92</b>	HEX BOLT 1/2"*4"
<b>92A</b>	HEX NUT 1/2"
<b>93</b>	DEY SWITCH
<b>94</b>	TERMINAL BOX
<b>95</b>	CORD
<b>96</b>	
<b>97</b>	TUBE
<b>98</b>	
<b>99</b>	PLASTIC TUBE

# CX102 GUIDE POST ASSEMBLY PARTS BREAKDOWN



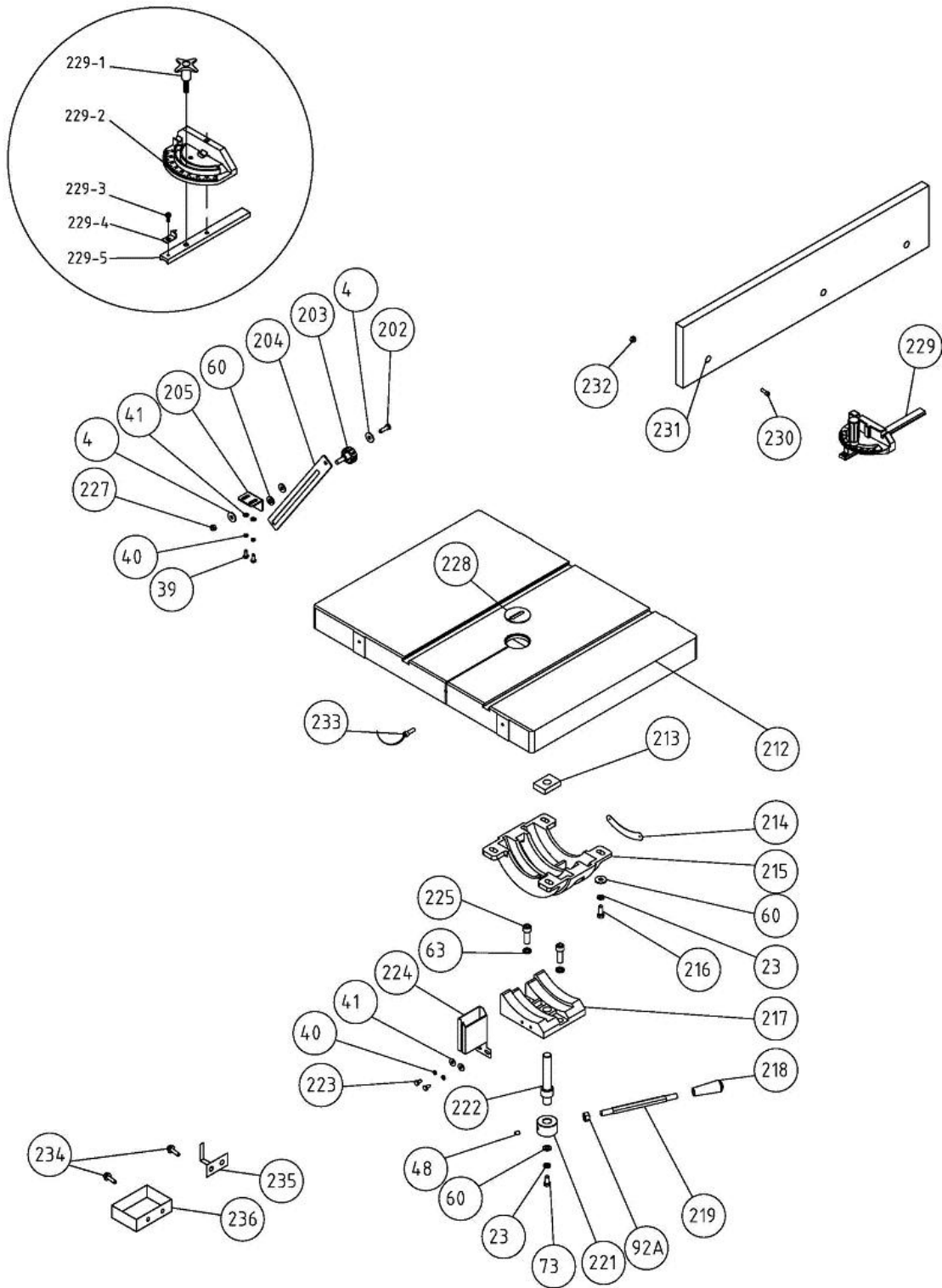
# **CX102 GUIDE POST ASSEMBLY**

## **PARTS LIST**

<b>REF#</b>	<b>DESCRIPTION</b>
<b>101</b>	KNOB 5/16*2"
<b>102</b>	HEX BOLT 5/16"*3/4"
<b>103</b>	SLEEVE BEARING
<b>104</b>	GUIDE BRACKET
<b>105</b>	SET SCREW 1/4"*1/4"
<b>106</b>	PIN
<b>107</b>	UPPER GUIDE SUPPORT SHAFT
<b>108</b>	UPPER BLADE GUARD PLANE
<b>109</b>	
<b>110</b>	BUTTON HEAD SCREW 6*30MM
<b>111</b>	EXTERNAL RETAINING RING S10
<b>112</b>	BAKELITE
<b>113</b>	BUTTON HEAD SCREW 4*12MM
<b>114</b>	C TYPE HOLDER
<b>115</b>	SET SCREW 4mm*4mm
<b>116</b>	BEARING SHAFT
<b>117</b>	BEARING
<b>118</b>	FLAT WASHER 3/8"
<b>119</b>	CAP SCREW 8*55MM
<b>120</b>	HOLDER BASE
<b>121</b>	HLODER BASE SHAFT
<b>122</b>	HEX NUT M6
<b>123</b>	SET SCREW 6*50MM
<b>124</b>	ADJUSTMENT NUT
<b>125</b>	CAP SCREW 5/16"*1 1/4"
<b>126</b>	SLIDEING BLOCK
<b>127</b>	HEX BLOCK
<b>128</b>	UPPER BLADE COVER
<b>129</b>	BLADE GUIDE WINDOW
<b>130</b>	SUPPORT BASE(L)
<b>131</b>	SUPPORT SHAFT (L)
<b>132</b>	THUMBSCREW
<b>133</b>	EXTERNAL RETAINING RING S13
<b>134</b>	WORM BUSHING
<b>135</b>	EXTERNAL RETAINING RING S17
<b>136</b>	HAND WHEEL

<b>REF#</b>	<b>DESCRIPTION</b>
<b>137</b>	WORM
<b>138</b>	GEAR SHAFT
<b>139</b>	GEAR
<b>140</b>	GUIDE POST SCALE
<b>141</b>	HAND WHEEL HANDLE

# CX102 TABLE PARTS BREAKDOWN



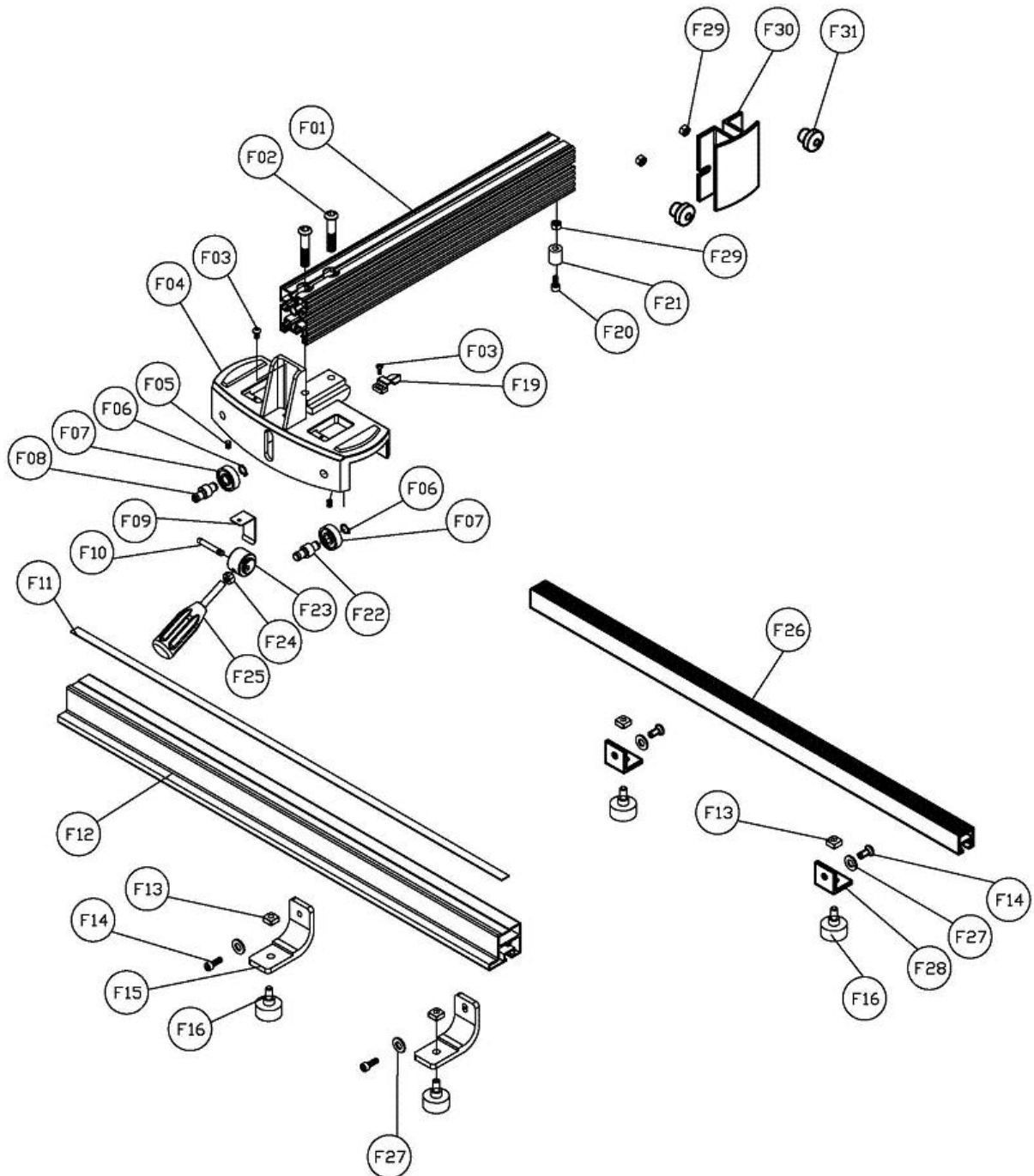


## **CX102 TABLE** **PARTS LIST**

**REF#                      DESCRIPTION**

<b>202</b>	SCREW
<b>203</b>	LOCK KNOB
<b>204</b>	ANGLE ADJUSTMENT PLANE
<b>205</b>	ADJUSTMENT BAR BRACKET
<b>212</b>	TABLE
<b>213</b>	LOCK BLOCK
<b>214</b>	SCALE
<b>215</b>	TRUNNION
<b>216</b>	HEX BOLT 3/8"*1 1/4"
<b>217</b>	TRUNNION BASE
<b>218</b>	1/2" KNOB
<b>219</b>	LOCK SHAFT
<b>220</b>	
<b>221</b>	ADJUSTING RING
<b>222</b>	PRESS SHAFT
<b>223</b>	HEX BOLT 1/4-20*3/8"
<b>224</b>	LOWER BLADE COVER
<b>225</b>	CAP SCREW 1/2"*1 1/2"
<b>226</b>	
<b>227</b>	LOCK NUT 5/16"
<b>228</b>	TABLE INSERT
<b>229</b>	MITER GAUGE ASSY
<b>229-1</b>	MITER GAUGE HANDLE
<b>229-2</b>	Gauge Body W/Pin
<b>229-3</b>	PHILLIPS HEAD SCREW 3/16"*1/4"
<b>229-4</b>	POINTER
<b>229-5</b>	GAUGE BAR
<b>230</b>	FLAT HEAD SCREW 1/4"
<b>231</b>	RESAW PLANE
<b>232</b>	HEX NUT 1/4"
<b>233</b>	TAPERED PIN
<b>234</b>	SCREW
<b>235</b>	HOLDER
<b>236</b>	BOX

# CX102 FENCE ASSEMBLY PARTS BREAKDOWN



# **CX102 FENCE ASSEMBLY**

## **PARTS LIST**

<b>REF#</b>	<b>DESCRIPTION</b>
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<b>F01</b>	FENCE BODY
<b>F02</b>	CAP SCREW 10*16
<b>F03</b>	BUTTON HEAD SCREW 5*10MM
<b>F04</b>	FENCE BASE
<b>F05</b>	SET SCREW 1/4"*1/4"
<b>F06</b>	EXTERNAL RETAINING RING S10
<b>F07</b>	BEARING
<b>F08</b>	ECCENTRIC SHAFT
<b>F09</b>	PRESSURE PLATE
<b>F10</b>	PIN
<b>F11</b>	SCALE
<b>F12</b>	FRONT FENCE RAIL
<b>F13</b>	SQUARE NUT 5/16
<b>F14</b>	CAP SCREW 1/4"*3/4"
<b>F15</b>	L TYPE PLATE
<b>F16</b>	KNOB 5/16*5/8
<b>F19</b>	POINTER
<b>F20</b>	HEX BOLT 1/4"*3/4"
<b>F21</b>	RUNNER
<b>F22</b>	BEARING SHAFT
<b>F23</b>	LOCK MECHANISM
<b>F24</b>	HEX BOLT 8MM
<b>F25</b>	FENCE HANDLE
<b>F26</b>	REAR RAIL
<b>F27</b>	FLAT WASHER 1/4"
<b>F28</b>	L BRACKET
<b>F29</b>	HEX NUT 1/4"
<b>F30</b>	RE-SAW ATTACHMENT
<b>F31</b>	KNOB 1/4"*3/8"
<b>F34</b>	WRENCH 10mm
<b>F34</b>	WRENCH 12mm
<b>F35</b>	ALLEN WRENCH 5MM (L)
<b>F36</b>	ALLEN WRENCH 3mm



## **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.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.