



# MODEL CX06Z

## 6" JOINTER 1HP



Ver. 1.0



**COPYRIGHT © 2019 BY CRAFTEX INDUSTRIES INC.**

NO PORTION OF THIS MANUAL MAY BE PRODUCED WITHOUT THE WRITTEN CONSENT OF CRAFTEX INDUSTRIES INC.



# TABLE OF CONTENTS

General Safety Instructions .....	3
Machine Specifications .....	4
Power Supply .....	5
Circuit Requirements.....	6
Plug and Grounding Requirements.....	6
Use with Extension Cords .....	7
Setup & Inventory.....	8
Mounting the Jointer.....	9
Components & Hardware Required .....	10
Carriage Mounting Bracket .....	11
Assembling the Fence.....	12
Dust Port Installation .....	13
Outfeed Table Height Setting.....	14
Test Run & Recommended Adjustments .....	15
Stock Inspection.....	16
Squaring Stock & Surface Planing .....	18
Edge Jointing .....	19
Bevel Cutting.....	20
Rabbet Cutting .....	21
Maintenance & Inspecting the Knives .....	22
Disconnect the Power from the Power Source .....	23
Depth Scale Calibration .....	24
Setting the Fence Stops.....	25
Electrical Components & Service .....	26
Table Parts Breakdown & List.....	30
Warranty .....	36

## 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

### **WARNING!**

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

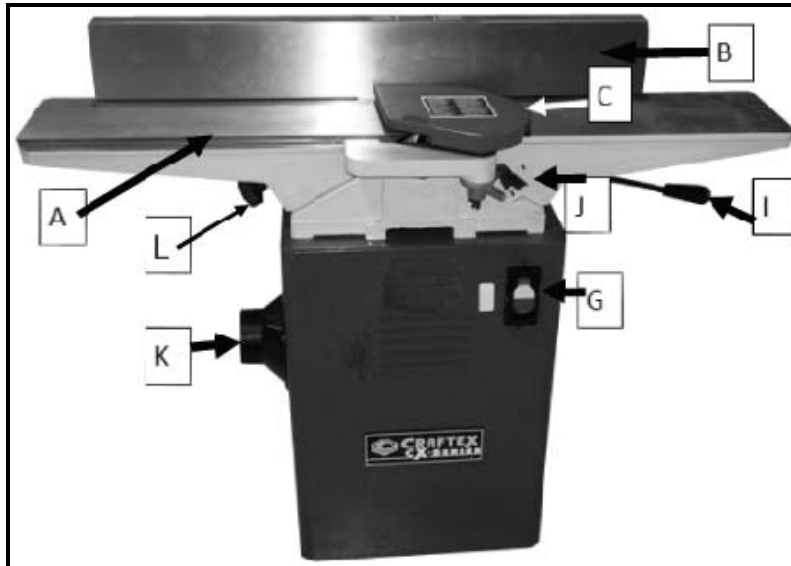
## CX06Z

### MACHINE SPECIFICATIONS

Table Size.....	6" W x 46" L
Table Height.....	32-1/2"
Overall length.....	46"
Overall Width.....	27-1/2"
Shipping weight.....	80 kg
Net Weight.....	74 kg
Box 1 Size.....	48-1/2" x 21" x 15"
Box 2 Size.....	20-1/2" x 15-3/4" x 28-3/4"
Foot Print.....	18" x 13-1/2"
Maximum Depth of cut.....	1/8"
Maximum Width of Cut.....	6"
Cutterhead Diameter.....	2-1/2"
Cutterhead Speed.....	4800 RPM
Cuts Per Minute.....	14,400
Tables.....	Independently Adjustable, Precision Ground Cast Iron
Stand.....	Preformed Steel
Ways.....	Dovetailed, Adjustable
Fence Assembly.....	Cast Iron
Body Assembly.....	Cast iron
Base.....	One Piece Steel Cabinet
Cutterhead.....	3 Knife Slots c/w jack Screws & springs
Guard.....	Die Cast Metal
Bearings.....	Sealed & Permanently Lubricated
Motor:Type TEFC.....	TEFC Capacitor Start Induction
Horsepower.....	1 HP
Phase / Voltage.....	Single – 110Volt
Amps.....	14A
Cycle / RPM.....	60 Hertz / 3450 RPM
Power Transfer.....	V-Belt Drive
Bearings.....	Sealed & Lubricated Ball Bearings
Fence.....	Center Mounted, Positive Stops at 45 Deg & 90 Deg
Table Movement.....	Hand wheel/Lever and infeed & Outfeed tables 1/2" Rebating Capacity Built-In

Specifications, while deemed accurate, are not guaranteed.

## Identification



- A. Outfeed table
- B. Fence
- C. Cutterhead Guard
- D. Fence Lock
- E. Fence Adjustment Knob
- F. Fence Tilt Handle
- G. Switch
- H. Infeed Table
- I. Infeed Table Lever
- J. Depth Scale
- K. Dust Port
- L. Outfeed Table Handwheel

## **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.



## CIRCUIT REQUIREMENTS FOR CX06Z JOINTER

The CX06Z has been prewired at the factory for operation on an electrical circuit that has a verified ground and meets the following requirements:

Voltage:.....110V – 120V  
 Cycle:.....60Hertz  
 Phase:.....Single  
 Circuit Breaker Size:.....20Amps

### FULL LOAD CURRENT RATING

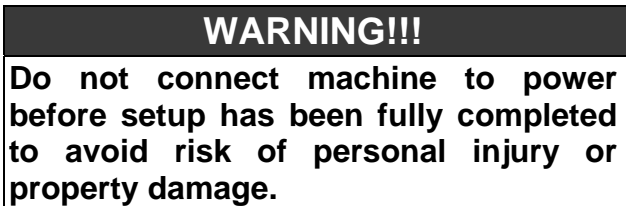
This is the amount of Amps a machine draws under 100% of the rated output power.

### 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.

#### 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 REQUIREMENTS

This machine must be grounded so that in the event of certain malfunctions it will

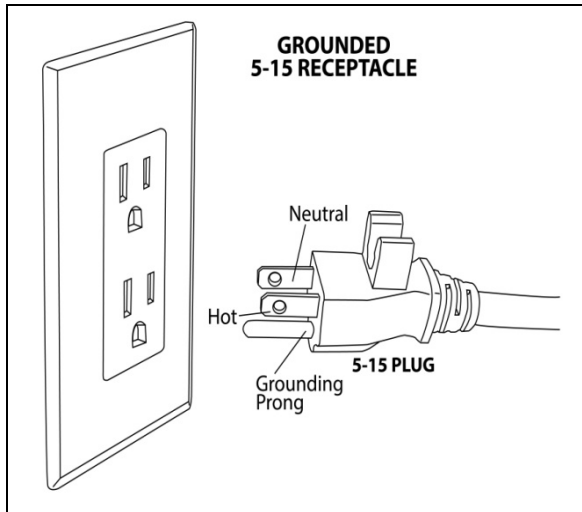
reduce the chances of electrical shock by providing a path of least resistance for the electric current to travel through. For this reason the CX06Z comes with a cord equipped with a grounding wire that leads in to the grounding prong on the plug.

**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)

**NOTE:**  
If ever you notice damage or wear 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.



**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:**  
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.**



## SETUP

### WARNING!

**This machine presents a serious injury hazard to untrained users. Read through this entire manual to become familiar with controls and operations before starting the machine!**

### WARNING!

**Always wear safety glasses during the setup and operation of this machine!**

### WARNING!

**This Machine weighs 80kg. DO NOT over exert yourself while unpacking or moving your machine. GET ASSISTANCE!**

## Tools Required for Setup

The tools listed below are not included with your machine

- 48" Straightedge.....1
- Safety glasses.....1
- Dust Collection System (optional).....1
- 4" Dust Hose (optional).....1
- 4" Hose Clamp (optional).....1
- Phillips Head Screwdriver.....1
- 13mm Wrench.....1
- 17mm Wrench.....1
- 19mm Wrench.....1
- 17mm Socket Wrench.....1
- Level.....1

## 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

Check for the following items packed in the two boxes you received. In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we will replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

Box 1: (Fig. A)

	Qty
<b>A.</b> Table Assembly	1
<b>B.</b> Fence Carriage Assembly	1
<b>C.</b> Carriage Mounting Bracket	1
<b>D.</b> Infeed table Lever	1
<b>E.</b> Fence Tilt Handles	2
<b>F.</b> Cutterhead Guard	1
<b>G.</b> Push Blocks	2
<b>H.</b> Outfeed Table Handwheel	1
<b>I.</b> Fence Assembly	1
<b>J.</b> Knife Setting Gauge	1

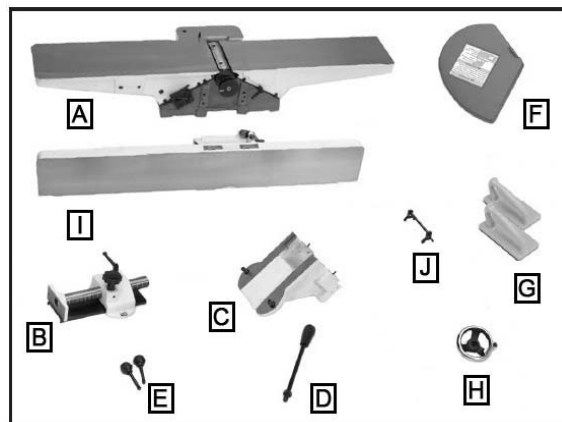


Figure A



## Hardware & Tools

	Qty
• Wrenches 8/10mm & 12/14mm	1 each
• Hex Keys 2.5, 3, 4, 6, & 8mm	1 each
• Cap Screws M10-1.5 x 20	3
• Cap Screws M10-1.5 x 25	2
• Hex Bolts M10-1.5 x 55	2
• Lock washers 10mm	5
• Flat washers 10mm	7
• Hex Nuts M10-1.5	2
• Hex Bolt M8-1.25 x 50	1
• Cap Screws M8-1.25 x 60	4
• Cap Screws M8-1.28 x 25	4
• Cap Screws M8-1.25 x 20	2
• Lock Washers 8mm	8
• Flat Washers	11
• Phillips Head Screws M5-.8 x 15	5
• Flat Washers M5	5

## Box 2: (Fig. B)

	Qty
A. Cabinet	1
B. Power Switch	1
C. V-Belt	1
D. Dust Port	1

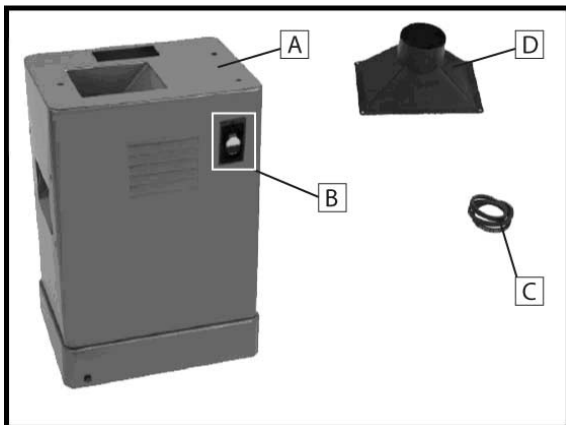


Figure B

## Mounting the Jointer

### Components & Hardware Required:

	Qty
Table Assembly	1
Cabinet	1
Cap Screws M10-1.5 x 20	3
Lock Washers 10mm	3
Flat Washers	3

### Tools required:

	Qty
8mm Hex Key	1
Extra Person for Lifting Help	1

### CAUTION!

**The jointer is heavy. Get assistance when lifting it in place onto the cabinet.**

## Mounting the jointer:

1. Remove the cabinet cover
2. With the help of an assistant, lift the jointer onto the cabinet
3. Align the three bolt holes on the jointer to the three holes on the cabinet (Fig. C)

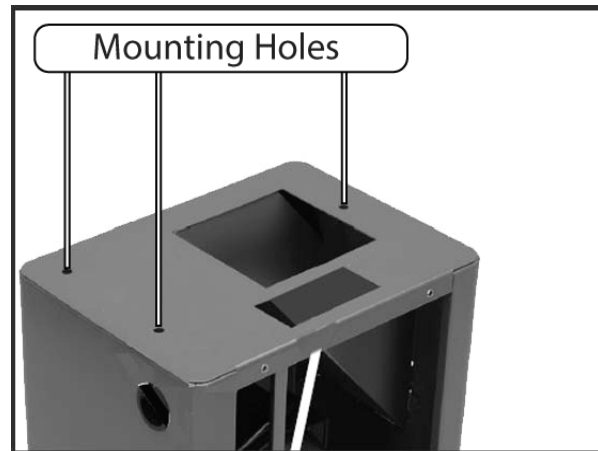


Figure C

4. With the 8mm Hex Key, secure the jointer to the cabinet with the M10-1.5 x 20 cap screws, flat washers and lock washers.

<b>Note:</b>
Reach through the dust vent for access to the forward mounting hole as in (Fig. D)

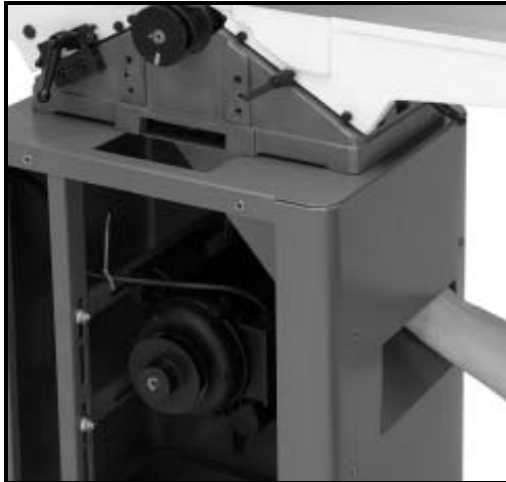


Figure D

## V-Belt

### Components & Hardware Required:

	Qty
V-Belt	1

Tools required:	Qty
13mm Wrench or Socket	1
6mm Hex Key	1

### Installing the V-Belt

1. With the 13mm wrench, loosen but DO NOT remove the motor mount bolts
2. Lift the motor upward far enough to allow the V-belt to be placed around the cutterhead pulley and the motor pulley (Fig. E)



Figure E

3. Carefully allow the motor to slide downward, tensioning the V-belt with the weight of the motor.
4. Looking from the top, sight down the V-belt and pulleys and check that the pulleys are parallel and aligned with each other. (Fig. F)
  - If the pulleys are aligned, retighten the motor mount bolts and proceed to step 7
  - If the pulleys are NOT aligned, proceed to steps 5 & 6.
5. Remove the V-belt, loosen the set screws in the motor pulley and then align the motor pulley with the cutterhead pulley. If needed the motor can be loosened and moved backward and forward slightly to bring the pulleys into alignment.
6. Tighten the set screws and replace the V-belt. Repeat step 4 to check the pulley alignment, they should be perfectly aligned (Fig. F). Now replace the access cover on the cabinet.

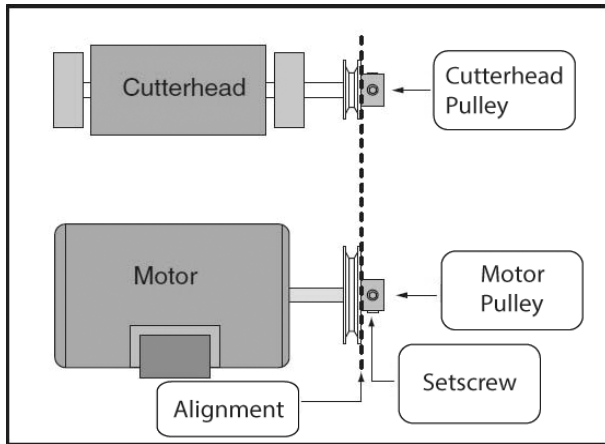


Figure F

## Carriage Mounting Bracket

### Components & Hardware Required:

	Qty
Carriage Mounting Bracket	1
Cap Screws M8-1.25 x 60	4
Lock Washers 8mm	4
Flat Washers	4

### Tools required:

	Qty
6mm Hex Key	1

1. Align the locating pins on the back of the carriage mounting bracket with the sockets on the jointer table as shown in (Fig. G)

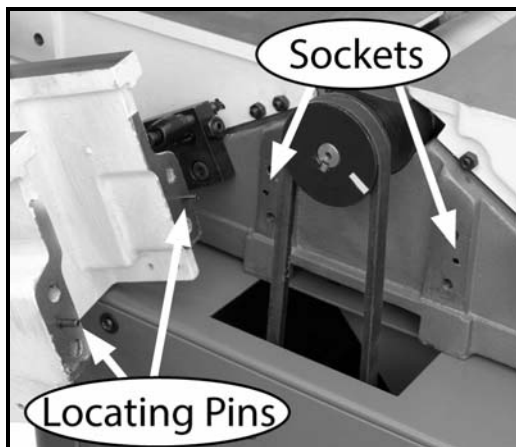


Figure G

2. Tighten the carriage mounting bracket to the jointer table with the cap screws, lock washers & flat washers supplied. (Fig. H)



Figure H

## Assembling the Fence Carriage

### Components & Hardware Required:

	Qty
Fence Carriage Assembly	1
Cap Screws M8-1.25 x 20	2
Lock Washers 8mm	2
Flat Washers	2

### Tools required:

	Qty
6mm Hex Key	1

1. With the fasteners listed above, secure the fence carriage to the Carriage mounting bracket as in (Fig. I)

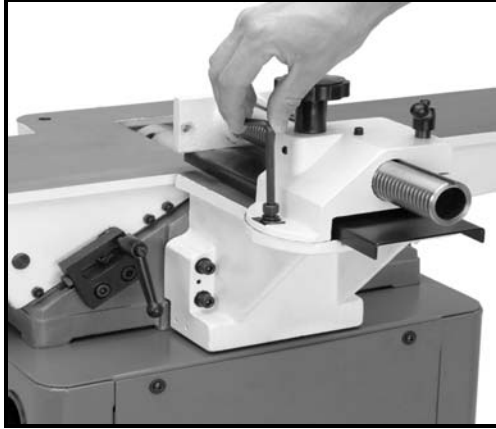


Figure I

## Assembling the Fence

### Components & Hardware Required:

	Qty
Fence Assembly	1
Cap Screws M8-1.25 x 25	2
Lock Washers 8mm	2
Flat Washers	2
Fence Tilting Handles	2

1. Fasten the fence assembly to the fence carriage using the M8-1.25 x 25 cap screws and washers supplied as in (Fig. J)

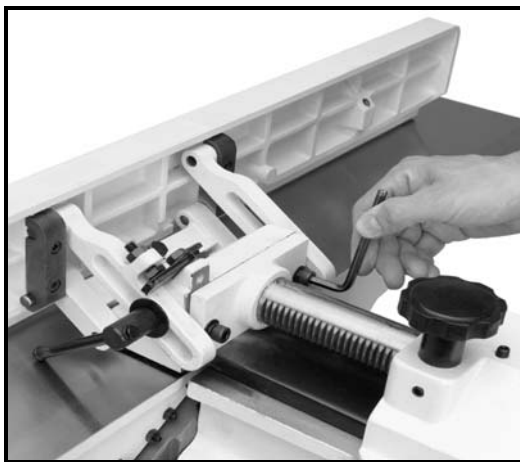


Figure J

2. Thread the fence tilting handle into the fence assembly as in (Fig. K)



Figure K

## Cutterhead Guard

### CAUTION!

The cutterhead guard is a critical safety feature on this jointer and care must be taken in installation. The guard has a torsion spring mounted within it to allow it to return to its proper position after a jointing operation. The spring must have spring pressure during the installation to operate correctly.

### Components & Hardware Required:

	Qty
Cutterhead Guard	1

### Tools required:

	Qty
2.5mm Hex Key	1

1. Remove the set screw in the cutterhead guard shaft as in (Fig. L)

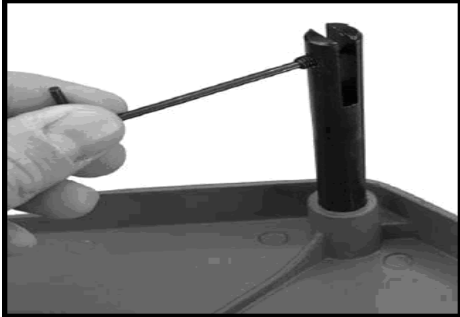


Figure L

2. Wind the torsion spring knob back counterclockwise a half turn, then slide the guard shaft into the casting as shown in (Fig. M) ensuring the slot on the cutterhead guard shaft fits over the pin that is inside the spring knob barrel (hidden from view).



Figure M

3. Test the guard by pulling it back and letting it go
  - The safety guard should snap back quickly covering the cutterhead completely, then re-insert the set screw as in (Fig. N)
  - If the guard is slow to return, remove the shaft and add another half turn to the spring knob and test again. Repeat as necessary.



Figure N

## Dust Port Installation

### Components & Hardware Required:

	Qty
Dust Port	1
Phillips Head Screws M5-.8 x 15	4
Flat Washers 5mm	4

### Tools required:

	Qty
Phillips Head Screwdriver	1

### Note:

If you do not choose to use a dust collector, do not install the dust port. Chips will build up within the cabinet and clog the machine.

1. Place the dust hood over the dust vent on the cabinet and with the four screws & washers secure it to the cabinet (Fig. O). Then attach to the dust collection system.



Figure O

### Table Controls Installation

#### Components & Hardware Required:

Qty	
	Outfeed Table Handle
1	Infeed Table Lever
	Phillips Head Screws M5-.8 x 15
1	Flat Washers 5mm

Tools required:	Qty
Phillips Head Screwdriver	1
19mm Wrench	1

1. Remove the screw & flat washer already mounted in the infeed handle shaft.
2. Mount & secure the handwheel to shaft as in (Fig. P)
3. The outfeed handle is pre-installed

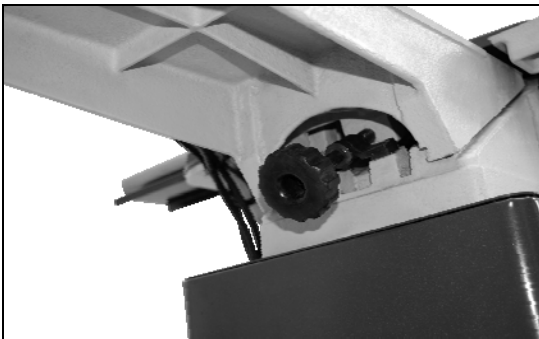


Figure P

## Outfeed Table Height Setting

The outfeed table needs to be at the same height as the cutterhead knives when at top dead centre. This adjustment is preset at the factory but should be checked before you use your jointer. This adjustment must also be made whenever you change the cutterhead knives.

1. Place a straightedge on the outfeed table and extend it over the cutterhead.
2. Rotate the cutterhead until one of the knives is at top dead center (TDC), as shown in (Fig.Q)

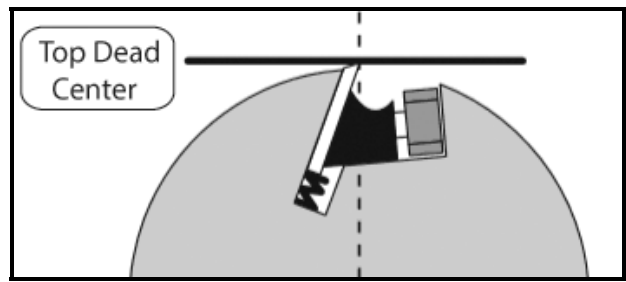


Figure Q

3. Raise or Lower the outfeed table until the knife touches the straightedge

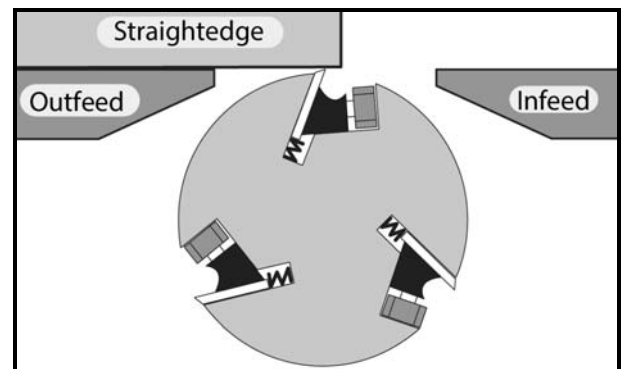


Figure R

4. Lock the outfeed table

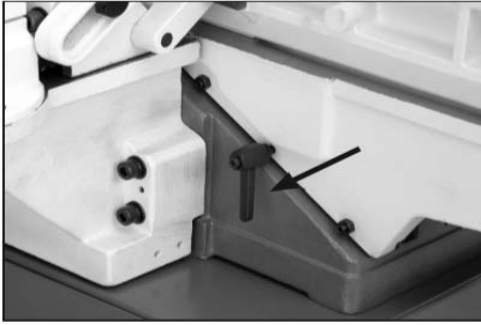


Figure 5

## Test Run

### WARNING!

Long hair, loose clothing and jewelry can get caught up in the moving parts of machinery and result in serious injury. Keep Long hair and loose clothing tied up and away from the machine. Remove jewelry prior to use.

### WARNING!

Chips and pieces of stock may be thrown from the machine. This can cause eye injuries, wear safety glasses at all times.

1. Before starting the machine, read the instruction manual in its entirety.
2. Check that the cutterhead guard has been installed correctly
3. Remove all tools and foreign objects from the machine.
4. Review the section **Circuit Requirements** and connect to the power source
5. Press the START button to turn on the machine.

The jointer should run smoothly with no vibration. Immediately stop the machine if you

suspect any problems and refer to the trouble shooting section of this manual before re-starting.

## Recommended Adjustments

Your machine has been factory preset so very little if any re-adjustments should be necessary, however because of any unforeseen problems in the shipping process we recommend that you verify the following to ensure the best possible results from your machine.

1. Knife setting
2. Depth Scale calibration
3. Fence Stop Accuracy

Step by step instructions for these adjustments can be found in the **SERVICE** section of this manual

## OPERATIONS

### Operation Safety

### WARNING!

Always wear safety glasses, a respirator, and hearing protection when operating this machine, damage to your eyes, lungs, and ears may result without the proper protective gear.

### WARNING!

Long hair, loose clothing and jewelry can get caught up in the moving parts of machinery and result in serious injury. Keep Long hair and loose clothing tied up and away from the machine. Remove jewelry prior to use.

### Note:

For your own safety and experience we recommend that you seek additional training outside of this manual. Books and magazines are also good source materials to gain more experience.

### Infeed Table Adjustment

Before any cut the proper infeed table adjustment must be made to safely and efficiently use this jointer. DO NOT set the infeed table depth greater than 1/16" on your first pass and never greater than 1/8" when rabbeting.

### WARNING!

**Beware of kickback when excessive depths of cut are made. Limit a single pass from 1/16" to 1/8". Serious injury could occur in the event of kickback.**

1. Loosen the infeed table lock (Fig. T)

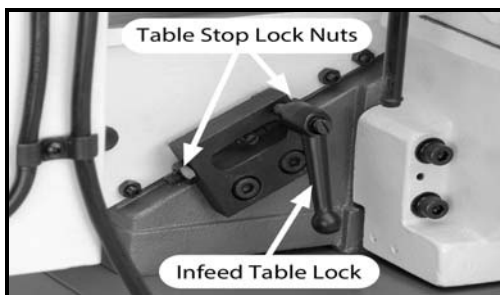


Figure T

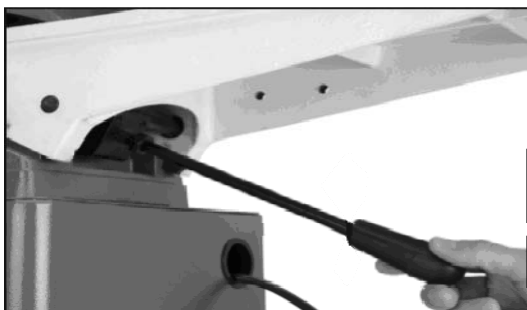


Figure U

2. Use the infeed table lever to raise or lower the table (Fig.U)
3. Set the infeed table to the desired depth of cut on the depth of cut scale and lock the table in position

### Note:

Adjust the infeed table stops to return the table height to the same height every by loosening the lock nuts and adjusting the set screws.

### Stock Inspection

- **DO NOT joint or surface plane stock that contains knots.** If a knot becomes dislodged during the cutting operation it could cause injury to the operator and even damage the workpiece.
- **DO NOT joint or surface plane stock with embedded foreign objects like nails, rocks, etc.** Doing this may cause kickback or damage the workpiece.
- **Jointing or surface planing with the grain will give a superior finish and is safer for the operator,** or feeding the stock on the table so the grain points down and toward you as viewed on the edge of the stock. (See Fig.30). **Note:** If the grain changes direction along the edge, decrease the cutting depth and make additional passes.



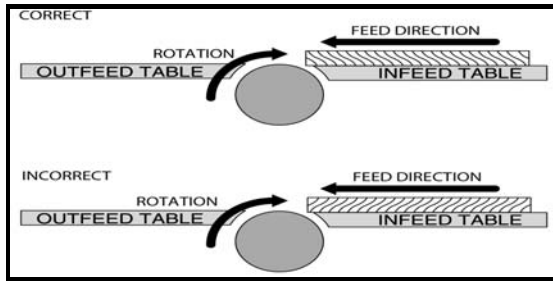


Figure V

- **Your jointer is designed only to cut natural wood fiber products. DO NOT joint MDF, particle board, plywood, laminates or other synthetically made materials.**
- **Scrape all glue off the workpiece before jointing.** Glue deposits, either hard or soft will gum up the blades, produce poor results and may cause kickback.
- **Remove foreign objects from the workpiece.** Always check your workpiece for foreign objects such as nails and staples. Ensure that your workpiece is free of dirt that may damage the planer blades. **NOTE: Wood stacked on dirt or concrete may have small pieces of concrete or stone embedded into the surface.**
- **Use only dry wood when jointing or planing.** Wood with a moisture content of over 20% can cause unnecessary wear to the planer blades, produce poor cutting results and increase the risk of kickback.

### CAUTION:

Your workpiece must exceed the minimum dimensions of stock shown in (Fig. W & X) when edge jointing or surface planing. Stock of smaller dimensions may break or kickback during operations.

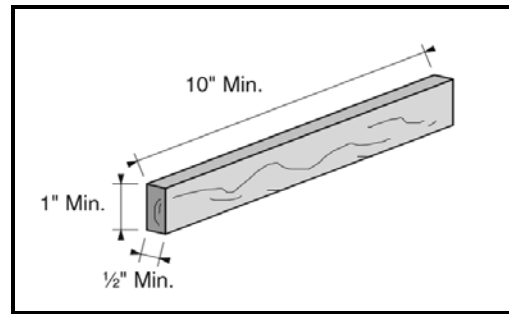


Figure W

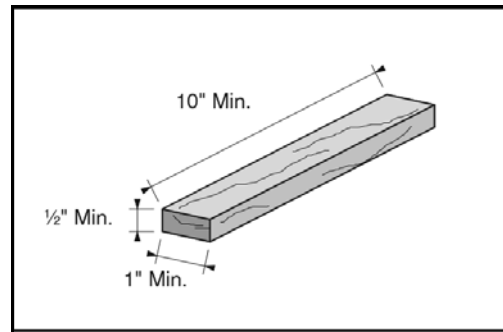
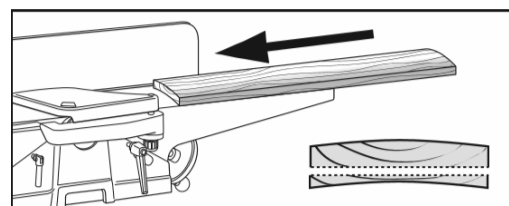


Figure X

### Squaring Stock

Squaring stock is accomplished by performing the following four steps in the order listed.

1. **Surface plane on the jointer** – The concave face of the workpiece is surface planed flat with the jointer.



- 2. Surface plane on a thickness planer –**  
The opposite face of the workpiece is surface planed flat with a thickness planer.

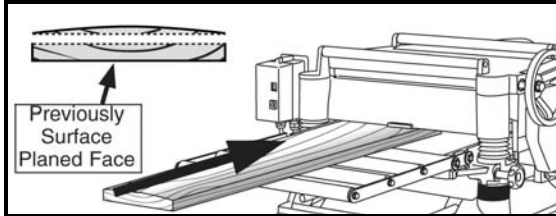


Figure Y

- 3. Edge joint on the jointer -** The concave edge of the workpiece is jointed flat with the jointer.

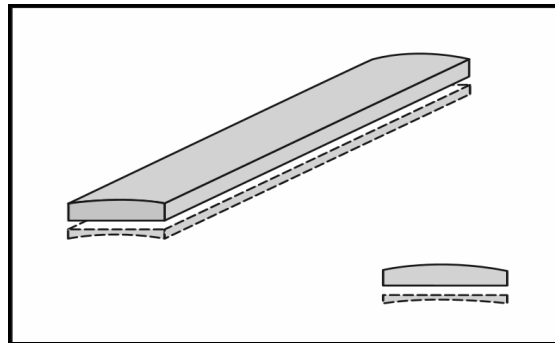
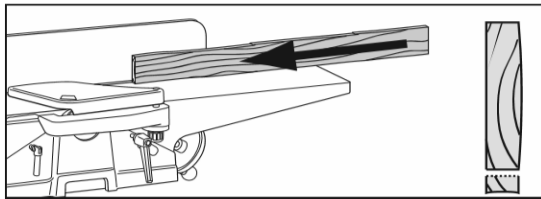
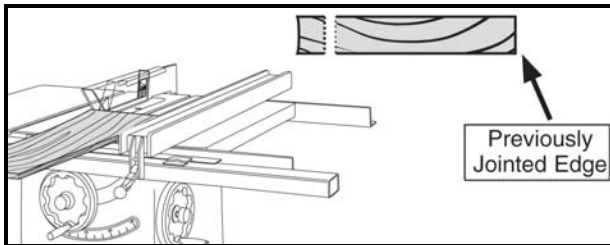


Figure Z

- 4. Rip cut on the table saw –** With the jointed edge of the workpiece against the fence, trim off the opposite edge.



1. Make sure you have inspected your workpiece for knots and or foreign objects before passing it through the jointer.
2. Set the depth of cut required. (1/32" for surface planing, for hardwoods and wide workpieces use a smaller depth of cut.
3. Set the fence at 90 degrees.
4. If you have a cupped or warped workpiece, place the concave side down on the infeed table (Fig. Z)
5. Start the jointer
6. Using a push block in each hand, feed the workpiece over the cutterhead, keeping a constant pressure on the

## Surface Planing

The purpose of surface planing is to make one surface of a workpiece flat ref. (Fig.Y & Z) prepares the piece of stock for surface planing in a thickness planer.

workpiece against the table and the fence. (Fig.Y)

**Note:**

When your leading hand gets within 4" of the cutterhead lift it up and over the cutterhead and place the push block on the portion of the workpiece that is now on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same process with your trailing hand when it gets within 4" of the cutterhead. Keep your hands safe! DO NOT let them get closer than 4" from the cutterhead when it is moving.

7. Repeat step 6 until the entire surface is flat.

**Note:**

If a second edge is jointed it will most likely not be parallel with the first.

## Edge Jointing

Edge jointing is to produce a finished flat surface for joinery or finishing and a necessary step toward squaring rough or warped wood. (Fig. Z & AA)

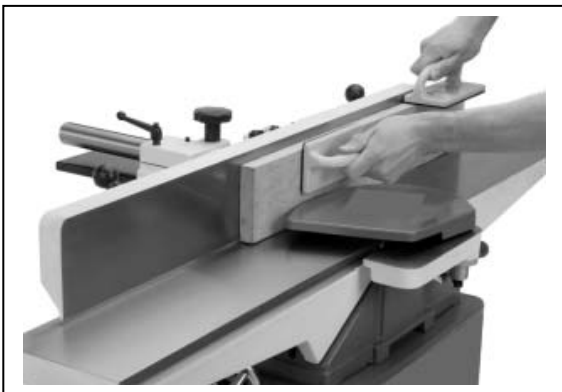


Figure Z

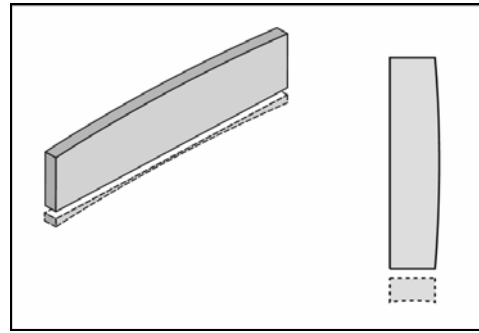


Figure AA

1. Make sure you have inspected your workpiece for knots and or foreign objects before passing it through the jointer.
2. Set the depth of cut required. (Between 1/16" to 1/8" for edge jointing, for hardwoods and wide workpieces use a smaller depth of cut.
3. Set the fence at 90 degrees.
4. If you have a cupped or warped workpiece, place the concave side down on the infeed table (Fig. AA)
5. Start the jointer
6. Feed the workpiece over the cutterhead, keeping a constant pressure on the workpiece against the table and the fence. (Fig. Z)

**Note:**

When your leading hand gets within 4" of the cutterhead. Lift it up and over the cutterhead and place it on the portion of the workpiece that is now on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same process with your trailing hand when it gets within 4" of the cutterhead. Keep your hands safe! DO NOT let them get closer than 4" from the cutterhead when it is moving.

7. Repeat step 6 until the edge is flat.
8. If a second edge is jointed it will not likely be parallel with the first.

## Bevel Cutting

Cutting a specific angle on the edge of a workpiece is called bevel cutting. See (Fig.CC & BB). This jointer has preset fence stops at 45 degrees inward, 90 and 45 degrees outward (135 deg.) If you require a different angle, the preset stops can easily be adjusted to meet your needs.



Figure BB

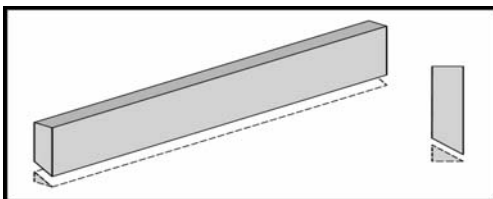


Figure CC

1. Make sure you have inspected your workpiece for knots and or foreign objects before passing it through the jointer.
2. Set the depth of cut required. (Between 1/16" to 1/8" for bevel cutting, for hardwoods and wide workpieces use a smaller depth of cut.
3. Set the fence at your desired angle.
4. If you have a cupped or warped workpiece, place the concave side down on the infeed table (Fig.CC)
5. Start the jointer
6. Using a push block in each hand, feed the workpiece over the cutterhead, keeping a constant pressure on the workpiece against the table and the fence. (Fig.Y)

**Note:**

When your leading hand gets within 4" of the cutterhead. Lift it up and over the cutterhead and place the push block on the portion of the workpiece that is now on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same process with your trailing hand when it gets within 4" of the cutterhead. Keep your hands safe! DO NOT let them get closer than 4" from the cutterhead when it is moving.

7. Repeat step 6 until the angled cut is achieved.

**Note:** if a second edge is jointed it will most likely not be parallel with the first.

## Rabbet Cutting

When you need to remove only a section of the edge on a workpiece it is called rabbet cutting (Fig.DD & EE). When you combine two rabbeted edges, they create a simple yet strong method for joining stock.



Figure DD

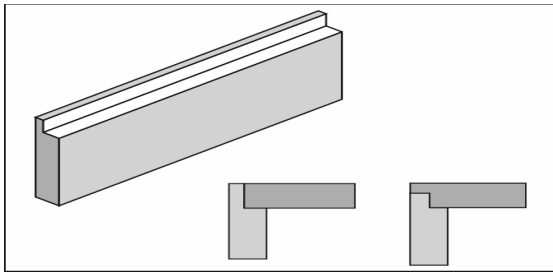


Figure EE

1. Make sure you have inspected your work piece for knots and or foreign objects before passing it through the jointer.
2. Set the depth of cut required. (Between 1/16" to 1/8" for rabbet cutting, for hardwoods and wide work pieces use a smaller depth of cut.

3. Remove the cutterhead guard.
4. Make sure your fence is moved forward, so the amount of infeed/Outfeed table exposed is the same size as your rabbet. Ensure the fence is set at 90 degrees.
5. Start the jointer
6. Using a push block in each hand, feed the work piece over the cutterhead, keeping a constant pressure on the work piece against the table and the fence. (Fig.Y)

### Note:

When your leading hand gets within 4" of the cutterhead. Lift it up and over the cutterhead and place the push block on the portion of the work piece that is now on the Outfeed table. Now, focus your pressure on the Outfeed end of the work piece while feeding, and repeat the same process with your trailing hand when it gets within 4" of the cutterhead. Keep your hands safe! DO NOT let them get closer than 4" from the cutterhead when it is moving.

7. Repeat step 6 until the rabbet cut to your desired depth.

## MAINTENANCE

To ensure the best performance of your jointer please follow the recommended maintenance procedures and schedule and specific instructions laid out in this section. It is important to keep your machine clear of

accumulated dust, moisture, and built up resin.

1. Vacuum all dust on and around the machine after daily use.
2. Wipe down the tables and unpainted surfaces with a metal protectant.
3. Check the V-belt tension and for damage or wear on a monthly basis.
4. Clean and or vacuum any dust buildup inside the cabinet and motor.

There is no **lubrication** regimen necessary for this machine as all bearings are sealed, simply leave them alone until they need to be replaced. **DO NOT** lubricate the fence assembly or table ways. If the tables appear to be stuck, disassemble and clean any foreign materials from the ways. Re-assemble and reset the gibs.

## SERVICE

Some factory settings may need to re-adjustment at various times throughout the life of the machine. If at any time you feel unable to perform these procedures, please contact Customer Service at Busy Bee Tools for technical support.

### Inspecting the Knives

Knife height can be easily checked with the knife setting jig supplied with your jointer. This is usually done before calibrating the outside table or when troubleshooting.

1. **Disconnect the power from the power source.**

2. Remove the cutterhead guard or block it out of the way.
3. Lower the infeed table to the ½" scale mark.
4. Place the knife jig on the cutterhead, directly over the knife as in (Fig.FF)

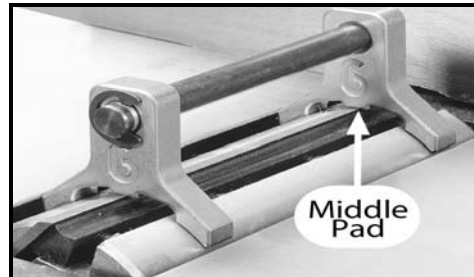


Figure FF

5. Carefully inspect how the jig touches the cutterhead and knife.
  - If both outside legs of the jig sit firmly on the cutterhead and the middle pad just touches the knife, then that knife is set correctly. (Repeat this procedure with all of the other knives).
  - If the jig does not sit firmly on the cutterhead and just touches the knife as described above, then that knife needs to be reset. (Repeat this procedure with the other knives before resetting.)

### Setting the Knives

To get the best out of your jointer, correct knife setting is crucial to the operation of the jointer and keeping the knives sharp. For example if one knife is higher than the others it will be doing the majority of the work, leading to uneven knife wear. A knife setting

jig is supplied with your jointer to allow you to set all the knives to the correct height.

This jointer comes with both jack screws and springs, allowing you two options for cutterhead adjustments (Fig.GG) **Note:** *Only one of these options is required to set the knives –see Step 5 for clarification.*

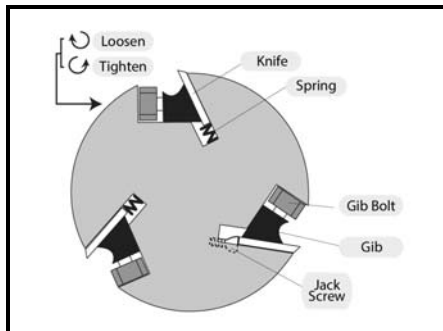


Figure GG

1. **Disconnect the power from the power source.**
2. Remove the cutterhead guard from the table and lower both infeed & Outfeed tables as far as they go, giving you unrestricted access.
3. Remove the cabinet cover, exposing the drive belt.
4. Use the V-belt to rotate the cutterhead to access the cutterhead knives.
5. Loosen the cutterhead gib bolts, starting in the middle, and alternating back and forth until all gib bolts are loose.

### Note:

There are two adjustment methods you can use to accomplish knife settings. You may use one or the other, jack screws or springs. If you decide to use the jack screws, remove the springs from the cutterhead. If you wish to use the springs, you can just thread the jack screws completely into the cutterhead so they do not get lost. Replace the gib and knife.

6. Position the knife jig over the knife (Fig.FF) and loosen the gib bolts until the knife is completely loose.
7. **Jack Screws** – Using a 3mm hex key, find the jack screws through the access holes in the cutterhead (Fig.HH) and rotate the jack screws to raise or lower the knife. The knife should barely touch the middle pad of the setting jig, then snug the gib bolts tight enough to just hold the knife in place. Repeat steps 5 – 7 with the rest of the knives.

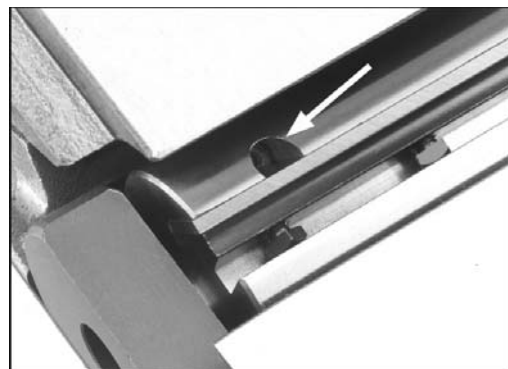


Figure HH

**Springs** – Push the knife down with the jig so the knife edge is touching the middle pad of the jig. Holding the jig down, tighten the gib bolts just tight enough to hold the knife in place.

Repeat steps 5 – 7 with the rest of the knives.

8. Rotate the cutterhead to the first knife you started with, and then slightly tighten all the gib bolts. Start at the ends and work your way to the middle, alternating left and right. Repeat with all the knives.

9. Finally tighten each gib bolt.

10. Adjust the outfeed table to match the new knife heights.

### Depth Scale Calibration

1. Set the Outfeed table height as described in **Setting the Outfeed Table Height** sub-section.
2. Place a straightedge across the infeed and Outfeed tables.
3. Adjust the infeed table until it is level with the Outfeed table. (Fig.II)

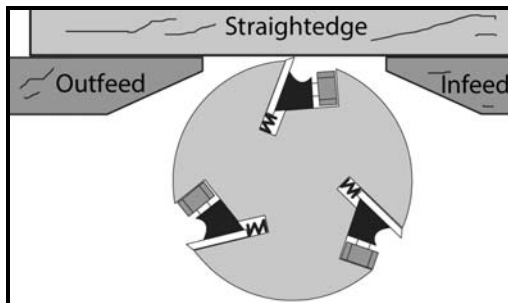


Figure II

4. Using a screwdriver, adjust the scale pointer exactly to "0" (zero) (Fig.JJ)

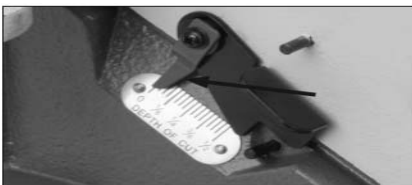


Figure JJ

### Setting the Fence Stops

Fence stops are adjustable nuts and bolts to simplify the task of adjusting the fence to 45 deg. inward, 90 deg., and 45 deg. outward (135 deg.)

#### Setting the 45 deg. Inward Fence Stop

1. With a 45 deg. square, adjust the fence to the 45 deg. inward position.

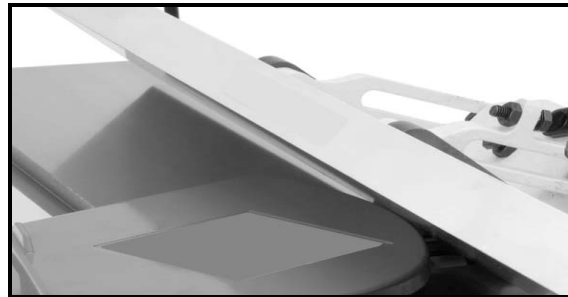


Figure KK

2. Loosen the jam nut (Fig.LL)

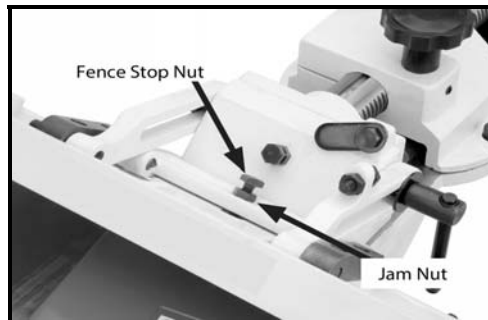


Figure LL

3. Adjust the 45 deg. inward fence stop nut until it makes contact with the back of the fence bracket, then re-tighten the jam nut from **Step 2** and recheck.



### Setting the 90 deg. Fence Stop

1. Flip the 90 deg. swing stop into the position as in (Fig.MM)

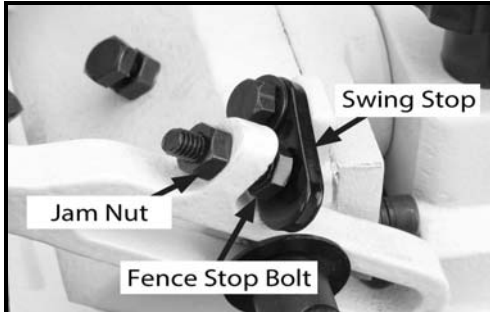


Figure MM

2. With a 90 deg. square, adjust the fence to the 90 deg. position (Fig.NN) using the fence stop bolt and jam nut.

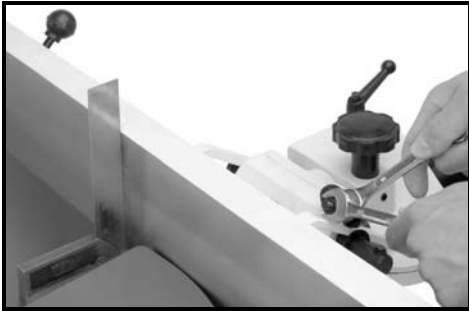


Figure NN

3. Loosen the jam nut on the 90 deg. fence stop bolt (Fig.MM)
4. Adjust the 90 deg. fence stop bolt until it contacts the 90 deg. swing stop, then re-tighten the jam nut from **Step 3** and recheck.

### Setting the 45 deg. Outward Fence stop,

1. Flip the 90 deg. swing stop out of the way (Fig.OO)

2. Using a sliding bevel adjusted to 135 deg., adjust the fence to the 135 deg. (45 deg. outward) position.

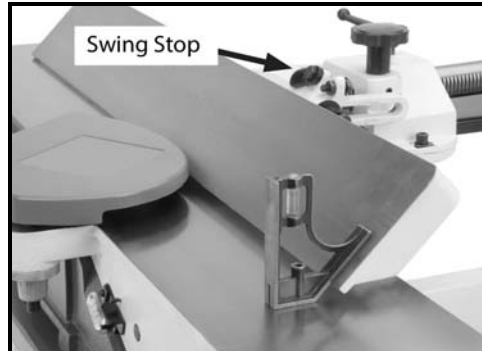


Figure OO

3. Loosen the jam nut on the 45 deg. outward fence stop bolt (Fig.MM)
4. Adjust the 45 deg. outward fence stop bolt until it contacts the 90 deg. swing stop, then re-tighten the jam nut from **Step 3** and recheck.

### Adjusting the Gibs

The purpose of the table gibs is to eliminate excessive play in the table movement. They also control the smoothness of the table movement.

1. With a 10mm wrench, loosen the two outfeed table gib nuts on the side of the jointer base (Fig.PP)

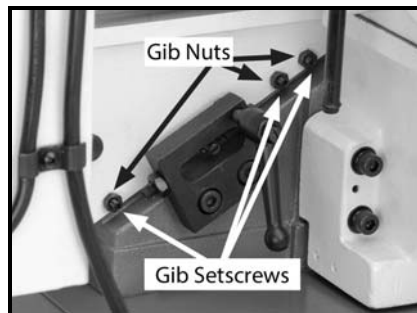


Figure PP

2. With a 3mm hex key, evenly tighten the gib setscrews a small amount, then check the table by moving it up and down. Adjust these setscrews as needed until the friction of the table movement is balanced between minimal play and ease of movement.

<b>Note:</b>
If you over tighten the gibs too it will reduce play but make it harder to adjust the tables.

3. Repeat **Steps 1-2** with the outer table
4. Set the Outfeed table as described in **Setting Outfeed Table Height** section.

## Electrical Components



Figure QQ

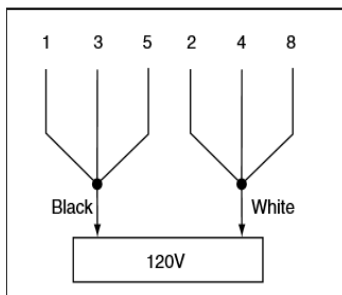


Figure RR

## SERVICE

### Motor & Machine Operation

#### 1) Symptom

Motor will not start

#### Possible Cause

1. Emergency stop button depressed.
2. Low voltage.
3. Open circuit in motor or loose connection

#### Possible Solution

1. Lift the cover on the emergency stop button to allow it to pop out.
2. Check power line for proper voltage.
3. Inspect all led connections on motor for loose or open connections.

#### 2) Symptom

Fuses or circuit breakers blow

#### Possible Cause

1. Short circuit in line cord or plug.

#### Possible Solution

1. Repair or replace cord or plug for damaged insulation and shorted wires.

#### 3) Symptom

Motor fails to develop full power (output of motor decreases rapidly with increase in voltage at motor terminals)

#### Possible Cause

1. Power supply circuit overloaded with lights, appliances, and other motors.
2. Undersized wires or circuits too long.

#### Possible Solution

1. Reduce load on circuit.
2. Increase wire size or reduce length of circuit.

#### 4) Symptom

Motor overheats

#### Possible Cause

1. Motor overloaded during operation.
2. Air circulation of the motor restricted.

#### Possible Solution

1. Reduce load on motor; take lighter cuts.
2. Clean out motor to provide normal air circulation.

#### 5) Symptom

Motor stalls or shuts off during cut

#### Possible Cause

1. Motor overloaded during operation.
2. Short circuit in motor or loose connections.
3. Circuit breaker tripped.

#### Possible Solution

1. Reduce load on motor; take lighter cuts.
2. Repair or replace connections on motor for loose or shorted terminals or worn insulation.
3. Install correct circuit breaker; reduce no. of machines running on the circuit. (circuit overload)

#### 6) Symptom

Blade slows when cutting or makes a squealing noise, especially on start-up

#### Possible Cause

1. V-belt loose.
2. V-belt worn out.

#### Possible Solution

1. Tighten V-belt.
2. Replace V-belt

#### 7) Symptom

Loud repetitious noise coming from machine

**Possible Cause**

1. Pulley setscrews or keys are missing or loose.
2. Motor fan is hitting the cover.
3. V-belts are damaged.

**Possible Solution**

1. Inspect keys and setscrews. Replace or tighten as necessary.
2. Adjust fan cover mounting position, tighten fan, or shim fan cover.
3. Replace V-belts.

**8) Symptom**

Vibration when running or cutting

**Possible Cause**

1. Loose or damaged blade.
2. Damaged V-belt.
3. Worn cutterhead bearings

**Possible Solution**

1. Tighten or replace blade.
2. Replace V-belt.
3. Check/replace cutterhead bearings.

**Tables****1) Symptom**

Tables are hard to adjust

**Possible Cause**

1. Table lock is engaged or partially engaged.
2. Table gibs are too tight.

**Possible Solution**

1. Completely loosen the table lock.
2. Re-adjust the table gibs.

**2) Symptom**

Excessive play in table movement

**Possible Cause**

1. Table gibs are too loose.

**Possible Solution**

1. Re-adjust the table gibs.

**Cutting****3) Symptom**

Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut)

**Possible Cause**

1. Outfeed table is set too low.
2. Operator pushing down on the end of the workpiece.

**Possible Solution**

1. Align outfeed table with cutterhead knife at top dead centre.
2. Reduce/eliminate downward pressure on the end of that workpiece.

**4) Symptom**

Workpiece stops in the middle of the cut.

**Possible Cause**

1. Outfeed table is set too high.

**Possible Solution**

1. Align outfeed table with cutterhead knife at top dead centre.

**5) Symptom**

Chipping

**Possible Cause**

1. Knots or conflicting grain direction in wood.
2. Nicked or chipped blades.
3. Feeding workpiece too fast.
4. Taking too deep of a cut

**Possible Solution**

1. Inspect workpiece for knots and grain; use only clean stock.
2. Adjust one of the nicked knives sideways, or replace knives.

3. Slow the feed rate down.
4. Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods)

**Symptom**

Fuzzy grain

**Possible Cause**

1. Wood may have high moisture content. Or surface wetness.
2. Dull knives.

**Possible Solution**

1. Check moisture content and allow to dry, if moisture is too high.
2. Replace knives.

**Symptom**

Long lines or ridges that run along the length of the board

**Possible Cause**

1. Nicked or chipped knives.

**Possible Solution**

1. Adjust one of the nicked knives sideways; or replace knives.

**Symptom**

Uneven cutter marks, wavy surface, or chatter marks across the face of the board

**Possible Cause**

1. Feeding workpiece too fast.
2. Knives not adjusted at even heights in the cutterhead.

**Possible Solution**

1. Slow the feed rate down.
2. Adjust the knives so they are set up evenly in the cutterhead.

**Symptom**

Board edge is convex or concave after jointing

**Possible Cause**

1. Board not held with even pressure on infeed and outfeed table during cut.
2. Board started too uneven.
3. Board has excessive bow or twist along its length.
4. Insufficient number of passes.

**Possible Solution**

1. Hold board with even pressure as it moves over the cutterhead.
2. Take partial cuts to remove the extreme high spots before doing a complete pass.
3. Surface plane one face to be sure there is a good surface to put against the fence.
4. It may take 3 to 5 passes to achieve a perfect edge, depending on the starting condition of the board and the depth of cut

**Symptom**

Uneven cut or breakout when rabbeting

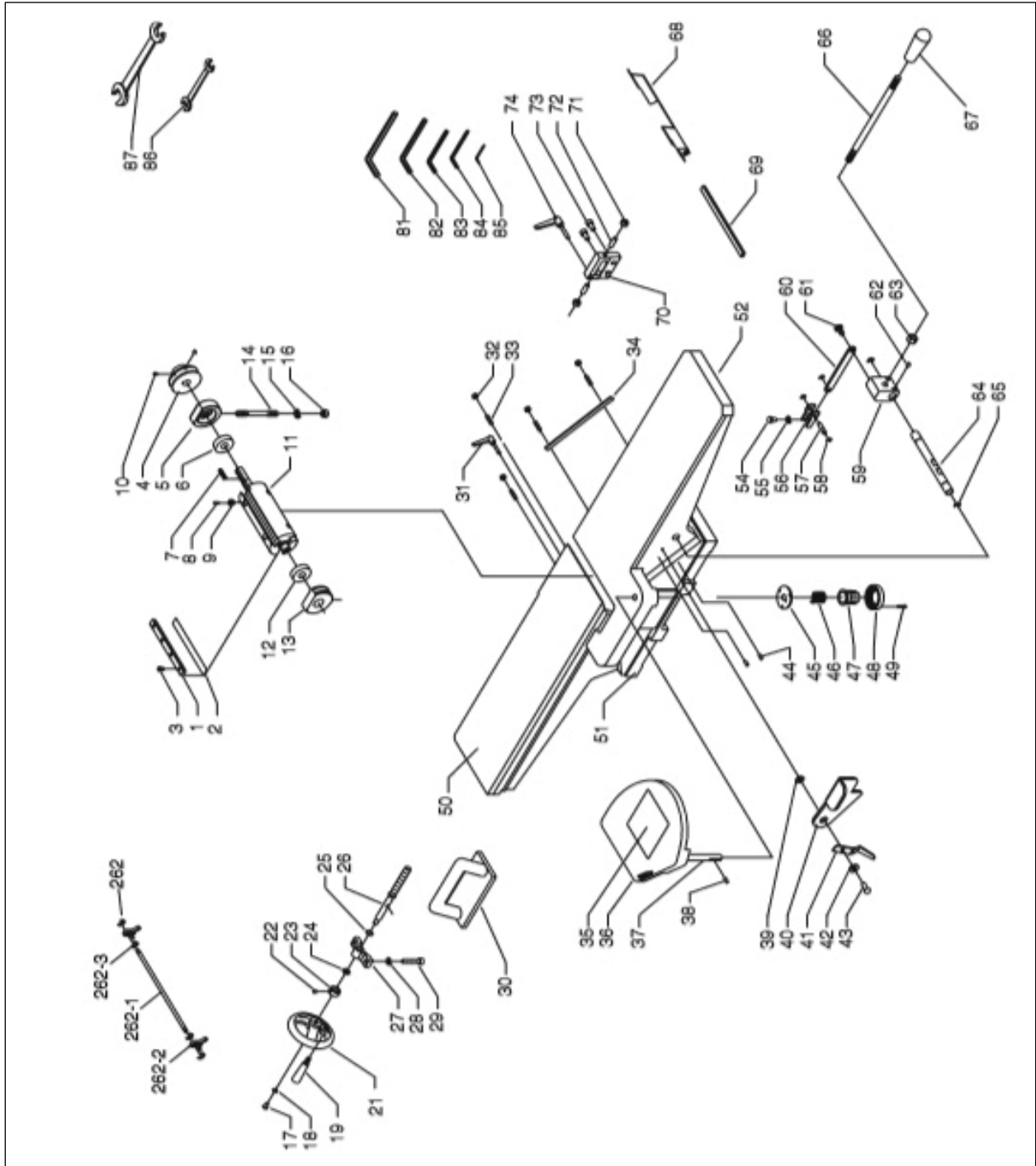
**Possible Cause**

1. Uneven feed rate.
2. Depth of cut too deep.
3. Knives not adjusted evenly with each other in the cutterhead.
4. Nicked or chipped knives.

**Possible Solution**

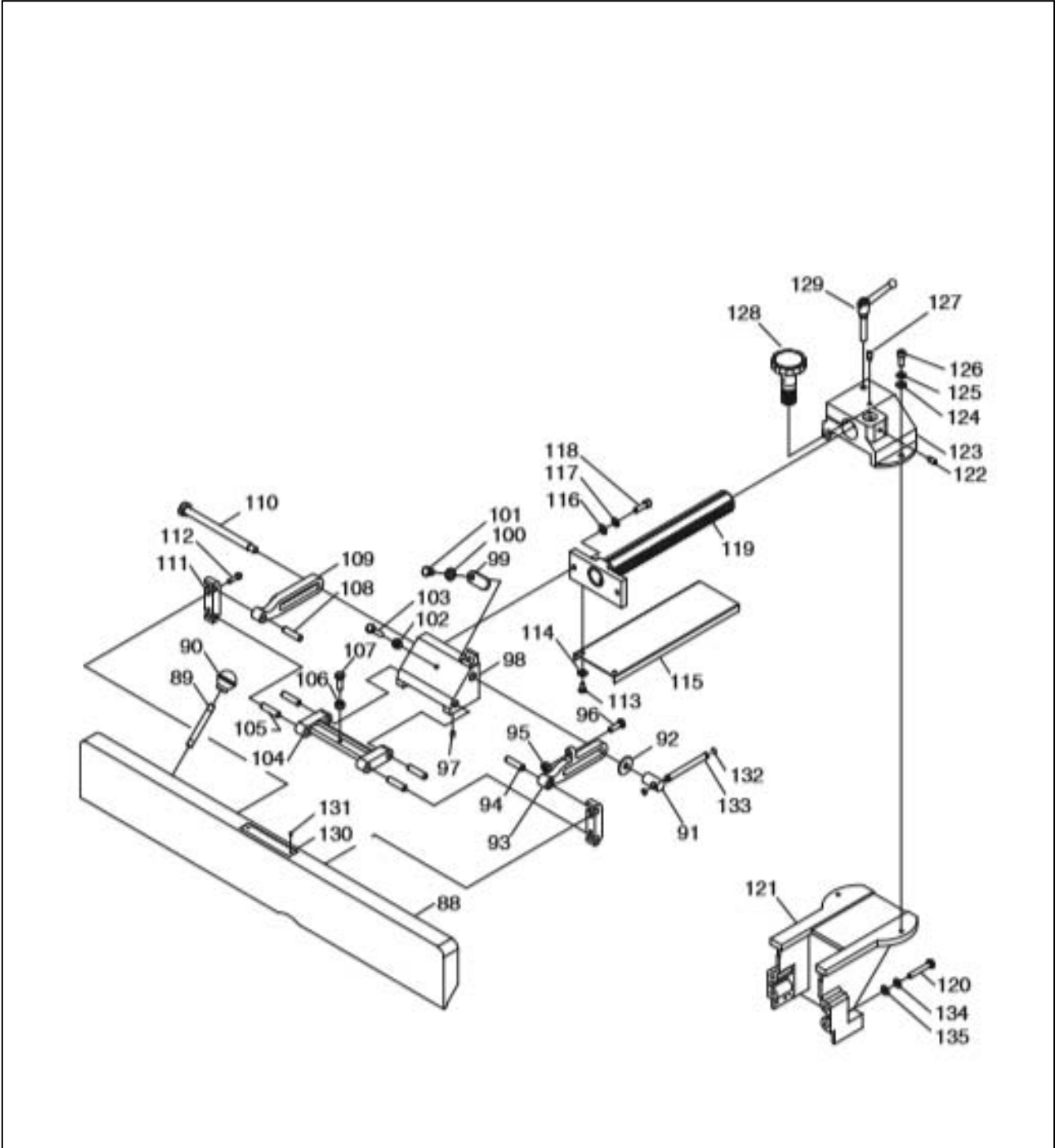
1. Feed the board evenly and smoothly through the cut.
2. Raise the infeed table to take a smaller depth of cut. Never exceed 1/16" per pass when rabbeting..
3. Adjust the knives so they are set up evenly with the cutterhead.
4. Adjust one of the nicked knives sideways; replace knives.

# TABLE PARTS BREAKDOWN





# FENCE PARTS BREAKDOWN



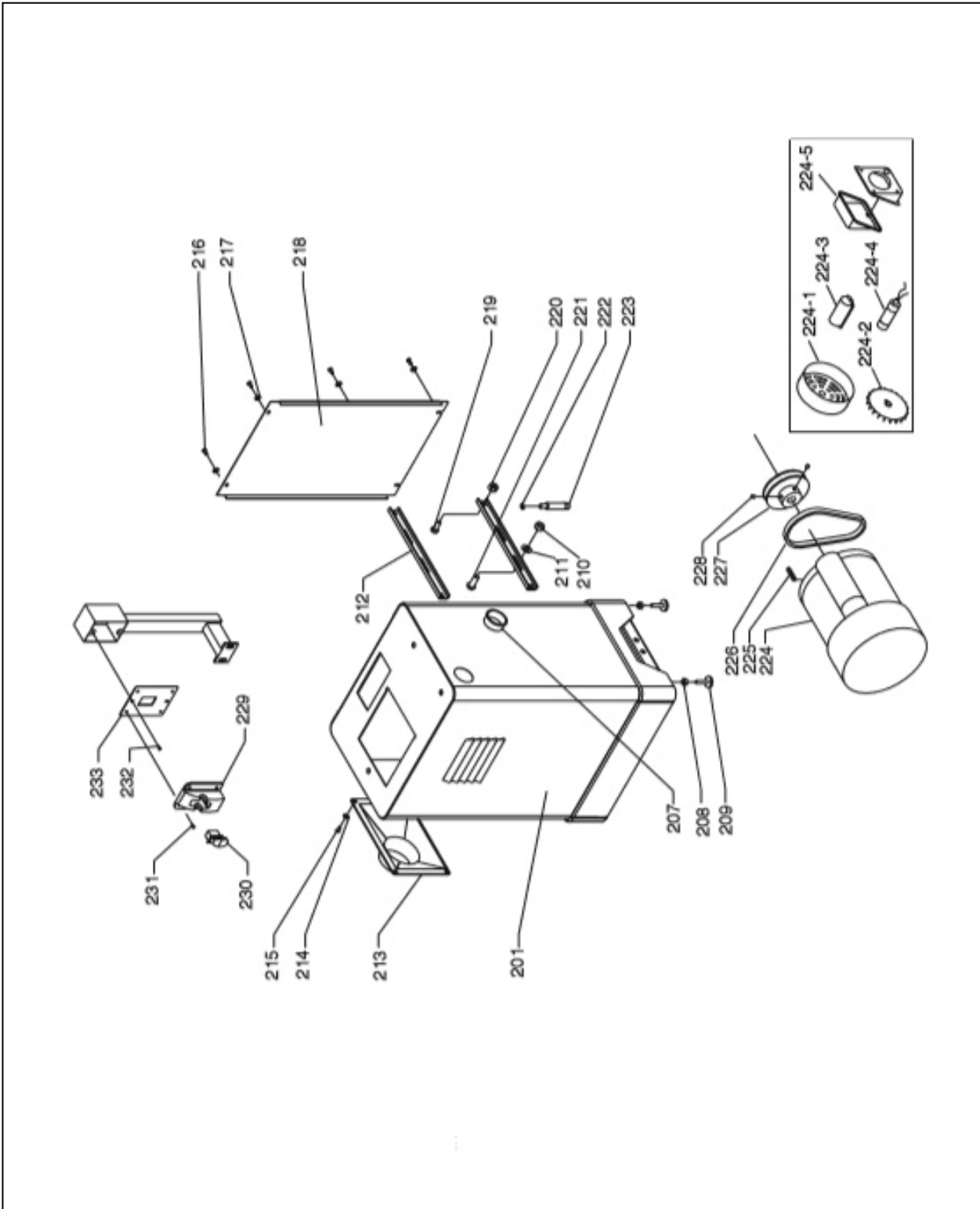


## FENCE PARTS LIST

Item	Part #	Description
88	PCX06Z88	FENCE
89	PCX06Z89	LEVER ROD
90	PCX06Z90	BALL KNOB
91	PCX06Z91	HANDLE HUB
92	PCX06Z92	WASHER - FLAT 10MM
93	PCX06Z93	RIGHT BRACKET
94	PCX06Z94	PIN - ROLL 4 X 20
95	PCX06Z95	NUT HEX M8-1.25
96	PCX06Z96	BOLT - HEX HD M8-1.25 X 25
97	PCX06Z97	SCREW - SET M6-1.0 X 10
98	PCX06Z98	FENCE BRACKET
99	PCX06Z99	STOP
100	PCX06Z100	WASHER - FLAT 10MM
101	PCX06Z101	BOLT - SHOULDER M8-1.25 X 15
102	PCX06Z102	NUT - HEX M8-1.25
103	PCX06Z103	BOLT - HEX HD M8-1.25 X 25
104	PCX06Z104	SUPPORT
105	PCX06Z105	PIN
106	PCX06Z106	NUT - HEX M8-1.25
107	PCX06Z107	BOLT - HEX HD M8-1.25 X 25
108	PCX06Z108	PIN
109	PCX06Z109	LEFT BRACKET
110	PCX06Z110	SPECIAL SCREW
111	PCX06Z111	REAR CLAMP

Item	Part #	Description
112	PCX06Z112	SCREW - CAP M6-1.0 X 20
113	PCX06Z113	SCREW - PHLP HD M6-1.0 X 12
114	PCX06Z114	WASHER - LOCK 8MM
115	PCX06Z115	GUARD
116	PCX06Z116	WASHER - FLAT 8MM
117	PCX06Z117	WASHER - SPRING 8MM
118	PCX06Z118	SCREW - CAP M8-1.25 X 25
119	PCX06Z119	RAM
120	PCX06Z120	SCREW - CAP M8-1.25 X 60
121	PCX06Z121	BRACKET
122	PCX06Z122	SCREW - SET M8-1.25 X 12
123	PCX06Z123	BRACKET
124	PCX06Z124	WASHER - FLAT 8MM
125	PCX06Z125	WASHER - SPRING 8MM
126	PCX06Z126	SCREW - CAP M8-1.25 X 20
127	PCX06Z127	SCREW - SET M8-1.25 X 12
128	PCX06Z128	HANDWHEEL
129	PCX06Z129	LEVER ASSEMBLY
130	PCX06Z130	FENCE WARNING LABEL
131	PCX06Z131	ALUMINIUM RIVET
132	PCX06Z132	O RING
133	PCX06Z133	LOCK BAR
134	PCX06Z134	WASHER - LOCK 8MM
135	PCX06Z135	WASHER - FLAT 8MM

# BASE PARTS BREAKDOWN







## 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.