

MODEL CXR1000

ROUTER TABLE w/LIFT



Ver.1 11/20/20

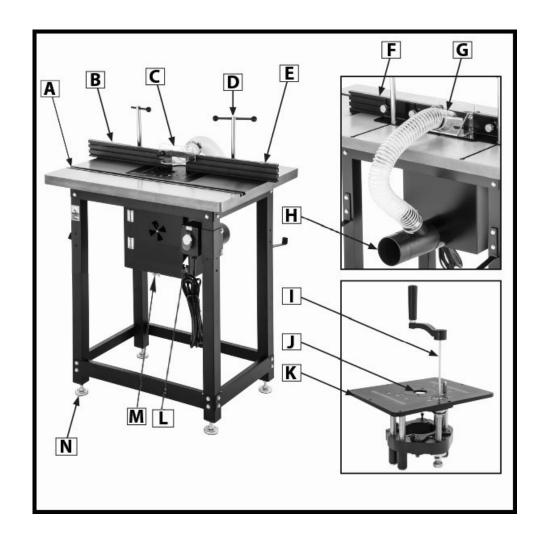




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Identification

- A. Cast Iron Table with 3/8"T-Slots
- B. Outfeed fence
- C. Router Bit Guard
- D. Fence Lock (1 of 2)
- E. Infeed Fence
- F. Fence base
- G. Dust Port 2-1/2"

- H Dust Port 4"
- I. Router Lift Crank Handle
- J. Plate Insert Ring
- K. Insert Plate
- L. ON/OFF paddle switch
- M. Dust Box
- N. Levelling feet (1 of 4)



WARNING!

Read this manual in its entirety before using the Router table. Wear eye protection. Always keep the router bit guard in place and in good condition. Feed the workpiece AGAINST the rotation of the router bit. Keep your fingers away from the revolving bit. Use fixtures when necessary. Avoid not use awkward hand positions.

Controls & Components

To become familiar with the basic controls and components of this machine, refer to the following figures and descriptions.

Understanding these items and how they work will help you to understand the rest of the manual and minimize your risk of injury when performing operations on the router table.

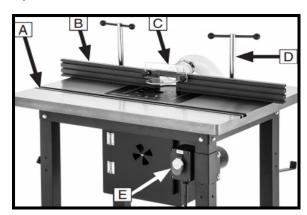


Figure 1

- **A.** 3/8" T-Slot. Used for attaching router table accessories, such as miter gauges, jigs and feather boards, etc.
- **B.** The fence on the router table provides support for the workpiece when performing routing operations. The ¼" T-Slots allow the attachment of hold-downs, feather boards. Etc.
- **C.** Router Bit Guard. Enables visibility of the router bit and workpiece while protecting the user during operations.
- **D.** Fence Locks. For securing the fence assembly to the table.
- **E.** ON/OFF Switch. Turn the power on or off. Remove key to disable the switch.

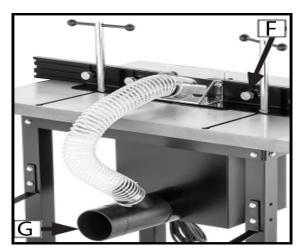


Figure 2



- **F.** Fence Locks. For securing the infeed/outfeed fence positions (side to side adjustment).
- **G.** Dust Port. To attach a 4" diameter dust extraction hose and connect to the users dust collection system.

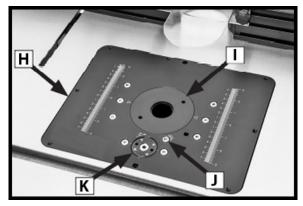


Figure 3

- **H.** Insert Plate (router lift). Mounts in the router table opening.
- **I.** Router lift Insert Ring. Provide additional workpiece control and safety near the router bit.
- J. Carriage Lock. To secure the carriage position and prevent movement during operations.
- K. Index Ring. Insert the crank handle to raise the carriage up or down.

Router Table Safety

WARNING!

Machinery with cutting bits turning at high speeds can be very dangerous in certain circumstances and can cause very serious injuries, such as cuts, amputation, entanglement or death. Router bits that are not properly installed can fly off at very high speeds, striking nearby operators or bystanders. Flying dust and debris can also cause eye injuries and blindness. To minimize risk, anyone operating a router must heed the hazards and warnings below.

AVOIDING AMPUTATION: Never place your hands directly over or in front of any spinning router bit. When feeding the workpiece your hand approaches near the bit, move one hand away and over to the outfeed side. Keep hands a minimum 6 inches away from a spinning router bit.

securing Levers & KNOBS: Before any router table operation, ensure that all lock levers and knobs are tight and all fences and guide rails are secure. Workpieces that slip out of alignment can cause an injury through kickback.



DO NOT FORCE WORKPIECE: A rule of thumb is to always "let the router bit do the work". Never force stock through the router bit. This will likely result in poor cutting results and cause kickback conditions, resulting in personal injury.

BLIND CUTTING: Keep the router bit on the underside of the workpiece when making blind cuts. This will decrease the risk of accidental contact with the spinning bit.

ROUTER BIT ROTATION: Always feed the workpiece against the rotation direction of the bit. Otherwise the stock could be aggressively pulled from your hands, drawing them into the spinning bit.

BIT ROTATION TEST: With the power source disconnected, rotate the router spindle to test any new setup. This is to ensure proper bit clearance before starting the router.

ROUTER BIT HEIGHT: Only expose as much of the router bit above the table surface that is needed to make the cut. This will help minimize the risk of your hand contacting the bit.

ROUTER BIT SPEED: Do not exceed the recommended speed of any

router bit. Doing so can cause the bit to fracture and cause injury.

CUTTING SUPPORT: Always use a fence, jig or miter gauge as a support or guide when making your cuts. Otherwise the stock could be aggressively pulled from your hands, drawing them into the spinning bit.

WORKPIECE SIZING: Workpieces shorter than 6" should never be used without a special fixture or jig. Stock of this size can become trapped between the fence and the router bit, which could draw your hand into the spinning bit.

APPRORIATE WORKPIECES: Avoid stock with knots, holes or other foreign objects embedded within as they can cause kickback resulting in injury. Warped stock should be flattened in a planer/jointer before being shaped in the router.

SAFETY GUARD USE: To prevent serious injury or amputation always use a guard. For special circumstances, fabricate a guard or jig. When the fence is removed use an overhead guard.

POWER CORDS: When the router is not in use, always disconnect and store the power cord away properly so as not to create a tripping hazard in your shop.



SET UP

Tools Required	QTY		
Phillips #1 Screwdriver	1		
12mm socket or wrench	1		
36" Straightedge			
36" Level			
3mm, 5mm, and 12mm Hex All	en		
Keys	1		
2 x 4 x 12" Wood Block	2		
24" Fine Ruler			

Component Inventory

Box 1 Contents (Fig.5)

QTY

A. Table 1



Figure 5

Box 2 Contents (Fig.7)

		QTY
В.	Dust Box	1
C.	Y-Fitting 4"x4"x2.5"	1
D.	110V Electrical Switch	

& Bracket 1

E. Dust Hose 2-1/2" x 28" 1

F. Router Lift Assembly 1

G. Table Insert 1

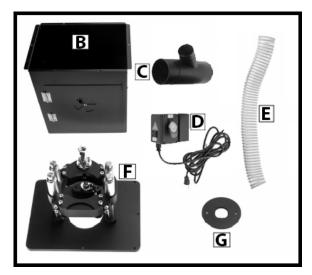


Figure 7



Box 3 Contents

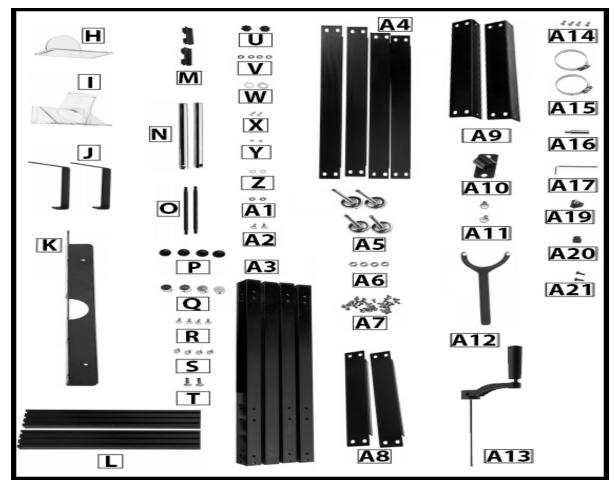


Figure 8

		QTY	S.	Flange Bolts 5/16-18 x ½	4
H. I. J. K.	Router Bit Guard Dust Port Fence Storage Brackets Fence Base	1 1 2 1	T. U. V. W.	T-Bolts 5/16-18 x 1 Star Knobs ¼-20 Flat Washers ¼ Flat Washers 5/16 Flat HD Screws ¼-20 x 5/	2 2 4 2 /8
L.	Infeed/Outfeed Fences	2		, , , , , , , , , , , , , , , , , , ,	2
M. N. O.	Fence End-caps Fence Lock Shafts Fence Lock Handles	4 2 2	Y. Z.	Hex Nuts ¼-20 Flat Washers ¼	2
О. Р.	Ball Knobs 5/16-18	4	A1.	Flat Washers ¼	2
Q.	Steel Knobs ¼-20	4	A2.	Carriage Bolts ¼-20 x ¾	2
R.	Carriage Bolts ¼-20 x ¾		A3. A4.	Legs Long Braces	4 4



A5.	Adjustable Feet	4
A6.	Hex Nuts ½-12	4
A7.	Flange Bolts 5/16-18 x ½	36
A8.	Lower Short Braces	2
A9.	Upper Short Braces	2
A10.	Router Lift Crank Holder	1
A11.	Flange Bolts 5/16-18 x ½	2
A12.	70mm Spanner Wrench	1
A13.	Router Lift Crank Handle	1
A14.	Phillips HD Screws	
	10-24 x 3/8	6
A15.	Hose Clamps	2
A16.	Starting Pin	1
A17.	Hex Wrench 3mm	1
A19.	Star Knob ¼-20x ½	1
A20.	Strain Relief ½"	1
A21.	Soc. Cap Screws	
	M47 x 16 (Insert Plate)	2

NOTICE

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

Clean Up

The unpainted surfaces of your CXR1000 are coated with a heavy-duty rust preventative to protect it during shipment and storage. This

preventative works very well but will take a little time and effort to clean.

Be patient and do a thorough job. The time you spend doing this will give you a better understanding of the proper care of your CXR1000.

Listed below we have outlined steps that work well in a variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and be sure to work in a well-ventilated area to minimize exposure to toxic fumes.

Cleaning Aids:

Disposable rags Cleaner/Degreaser Safety glasses Plastic Paint scraper

Basic cleaning steps:

- 1. Wear safety glasses
- Coat the rust preventative liberally with your cleaner and or degreaser and let it soak for 10-15 minutes
- 3. Wipe off the surfaces. The rust preventative should come off easily at this point. A plastic paint scraper will help greatly to remove the heavier coated areas, wipe the rest off with a clean rag.



Sometimes a second application may be necessary in some heavily coated areas.

4. We recommend you coat all unpainted surfaces with a quality metal protectant to prevent rust.

WARNING!

Avoid using gasoline and petroleum products to clean machinery, they have low flash points and can explode or cause fire.

CAUTION!

Work in a well-ventilated area, some cleaning solvents are toxic when inhaled.

NOTICE:

Avoid harsh solvent like acetone or brake parts cleaner that may damage painted surfaces. Always test on a small inconspicuous area first.

Site Considerations:

Weight Load

The surface that you place your machine on must be able to bear the weight of your CXR1000, accessories that may be attached and the heaviest workpiece that may be used.

The machine weight can be found on the Machine Data Sheet. For the weight of your accessories consult their manufacturer's operator's manuals. Also to consider is the weight of the operator and dynamic loading when operating the machine.

Space Allocation

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

Physical Environment

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



environment subject to vibration, shocks or bumps.

Electrical Installation

Make sure to place the machine near an adequate power source. Ensure all power cords are protected from traffic, material handling, moisture, chemicals or other hazards. Leave enough room around the CXR1000 to disconnect the power supply or apply a lockout device, if required.

Lighting

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



MACHINE SPECIFICATIONS

Product Dimensions:	
Weight Width x Depth x Height Footprint	44"x 32"x 44-1/2"
Shipping Dimensions:	
Box 1	
Type Content Weight Length x Width x Height Must Ship Upright	Table 38.7 Kg (85.3 lbs) 26.5"x 36"x 5"
Box 2	
Type Content Weight Length x Width x Height Must Ship Upright	5.24 Kg (11.5 lbs) 15"x 17"x 15"
Box 3	
Type Content Weight Length x Width x Height Must Ship Upright	20.6 Kg (45.5 lbs) 11"x 34"x 6"
Electrical:	
Connection Type Power Cord Included	



Power Cord Length......6 ft.

Power Cord Gauge	14 AWG
Plug Included	Yes
Plug Type	Nema 5-15
	ON/OFF Paddle Switch w/Removeable Key
Main Specifications:	
Suitable Routers for Mounting	3.25" -4.2" Non-Plunge Routers
Floor to Table Height	36-39"
Table Size	32 x 24 x 1-1/2"
Number of Table T-Slots	2
Table T-Slot Size	3/4", 3/8"
Plate Size	9-1/4 x 11-3/4 x 3/8"
Plate Insert Size	3-3/4"
Plate Opening Size	3-3/4"
Plate Insert Opening Size	1-1/4"
Router Lift Travel	2-3/4"
Router Lift Index Ring Increment	0.05" Per Full Turn
Fence Length	32-1/2 – 44"
Fence Dimensions	³ / ₄ x 2-3/4"
Fence Board Size	16-1/4 x 2-3/4 x ¾"
Fence T-Slot Size	
Dust Port Type	Y-Fitting
Dust Ports Sizes	4"
Dust Shroud Size	2-1/2"
Construction:	
Table	Cast Iron
Stand& Dust Box	Steel
Stand & Dust Box Paint/Finish Type	Enamel
Fence	Anodized Aluminum
Router Lift	Aluminum, Steel
Insert Plate	Anodized Aluminum Plate
Insert	Polycarbonate
Router Guard & Dust Port	Clear Polycarbonate



Other Specifications:

Country of Origin	Taiwan
Warranty	3 Years
Assembly & Setup Time	1 Hour
ISO9000 Factory	Yes
Certification (NRTL)	No

Features:

Precision-machined Router Lift
Index Ring for Fine Lift adjustment of Router
Precision-Ground Cast-Iron Table
Clear Polycarbonate Router Guard & Dust Port
Fence Assembly with Adjustable fences
Enclosed Dust Box
Adjustable feet

Accessories:

Table Insert with 1-1/4" Diameter Hole Table Insert Wrench
Starting Pin
3mm Hex key



Assembling Your Router Table

Before beginning this process, consult the Router Table Inventory section to ensure all components are available and the Required Setup Tools section to aid in the assembly of the table. Be sure to clean any parts that are coated in rust preventative.

Assembly Steps:

- 1. Locate the four table legs and two lower braces. Using the 5/16 -18 x ½" flange bolts, attach the lower braces to the legs as shown in (Fig.12).
- 2. Install the (4) adjustable feet to the bottom of the table legs, as per (Fig.12).

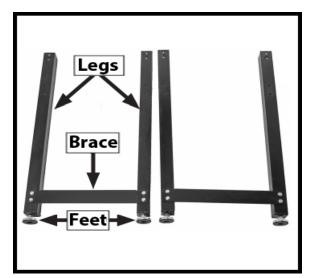


Figure 12

3. Connect the leg assemblies with the (4) long braces supplied with the 5/16-18 x ½" flange bolts as shown in (Fig.13 & Fig.14)

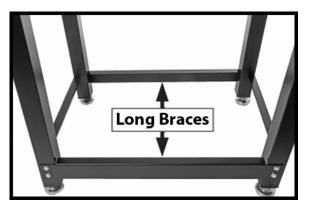


Figure 13



Figure 14

4. Place the tabletop upside down on a flat surface and using 5/16-18 x ½" flange bolts attach the upper short braces to the table as in (Fig.15).



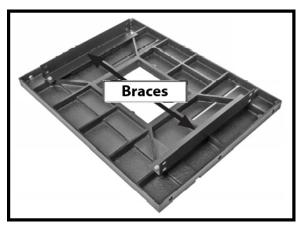


Figure 15

5. Set the table on the stand as in (Fig.16) and attach using the 5/16-18 x ½" bolts.

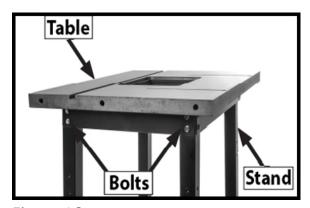


Figure 16

6. Set the Router Lift Assembly into the table opening with the mounting plate flush with the top surface. (Fig.18)

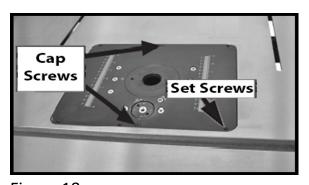


Figure 18

7. To align the Router Lift Assembly to the table surface, lay a straightedge across the plate insert and table surfaces in a pattern shown in (Fig.19). Then adjust the set screws (Fig.18) so that the ends of the straight edge lay flat on the surface in all positions of the pattern in (Fig.19).

It is IMPORTANT that this procedure is done correctly to ensure the workpiece does not catch on the edges of the table insert or table surface and cause kickback.

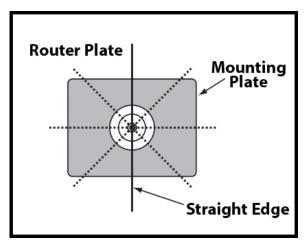


Figure 19

- 8. After step (7) is completed, secure the position with the (2) M4-.7 x 16 cap screws shown in (Fig.18).
- 9. Secure the Dust Shroud to the back of the Fence Base with (2) 1/4-



20 x 5/8 flat head screws, washers and hex nuts. (See Fig.20).

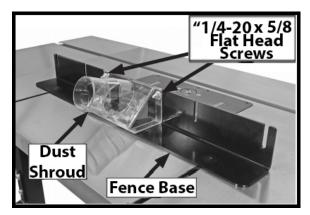


Figure 20

10.Insert (2) ¼-20 x ¾" carriage bolts into the centre slot of the infeed fence. (Fig.21), then align the carriage bolts to the vertical slots in the fence base (Fig.22) and secure with (4) ¼" flat washers and ¼-20 steel knobs as in (Fig.23)

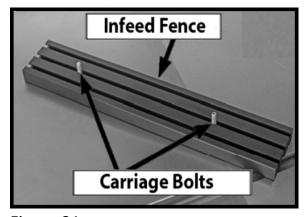


Figure 21

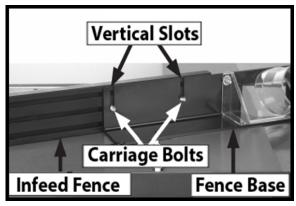


Figure 22

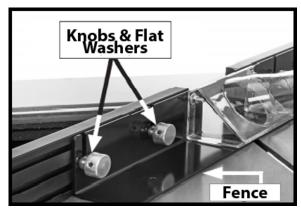


Figure 23

- 11.Repeat Step 10 to install the outfeed fence on the opposite side of the fence.
- 12. Align the two holes in the fence base with the slots in the table and insert (2) 5/16-18 T-Bolts through the table and fence base, as in (Fig. 24). The T-Bolts must sit flush in the T-Slots beneath the table.



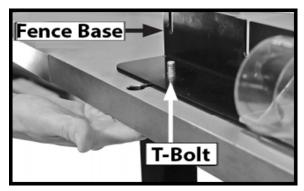


Figure 24

- 13. Assemble the fence locks as in (Fig. 25) by removing one ball knob on each handle. Slide it through the hole at the top of the shaft then re-install the ball knobs.
- 14.Install the fence lock and 5/16 flat washers on each of the T-Bolts installed in step 12. (See Fig.25).

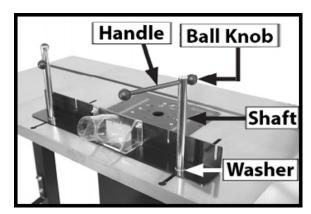


Figure 25

15. Slide (1) ¼-20 x ¾" into the top slot of both the infeed & outfeed fences (Fig. 27) and press in the (4) fence end caps into the fences (Fig. 26)

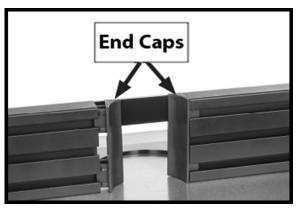


Figure 26

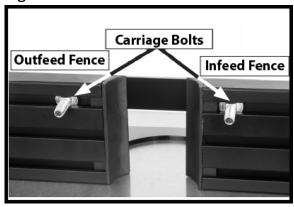


Figure 27

16.Attach the router bit guard to the carriage bolts in the fence with the (2) 1/4-20 plastic knobs supplied (Fig.28)

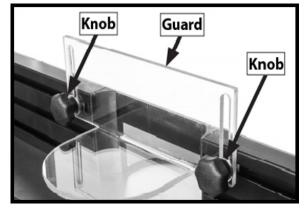


Figure 28



17. Attach the ON/OFF switch assembly to the front RH leg of the stand with (2) ¼-20 x 1-1/2" hex bolts and (2) ¼" flat washers as in (Fig. 29).



Figure 29

18.Install the dust box underneath the table as in (Fig.30) with the (4) 10-24 x 3/8 Phillips head screws. Note: The vent should be facing the front of the machine.

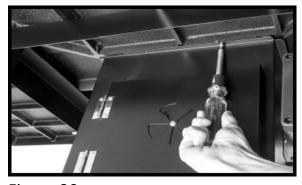


Figure 30

19.Install the Y-dust fitting as in (Fig.31) over the dust port and secure it with (1) 1/4-20 knob bolt.

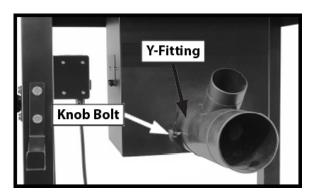


Figure 31

20. Attach the 2-1/2" dust hose on the dust shroud and connect to the Y-Dust Fitting. Secure with the 2-1/2" hose clamps supplied. (See Fig. 32).

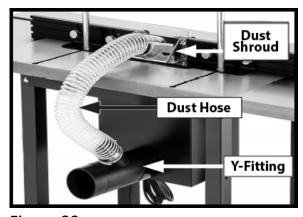


Figure 32

21.Install the fence storage brackets and crank handle storage bracket with (6) $5/16-18 \times \frac{1}{2}$ " flange bolts as in (Fig.33).



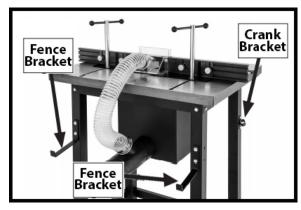


Figure 33

Router Installation

The Model CXR1000 Router Table will accept Routers with body diameters from 3.25" to 4.25". It is equipped with four clamping plates, each having curved edges, one deep and one shallow (Fig.34). It will take a process of trial and error to determine which curvature holds your router in position. Do not mix and match shallow and deep curve otherwise your router may not centre over the hole in the table insert and may run the risk of hitting the table insert with a bit during operations.

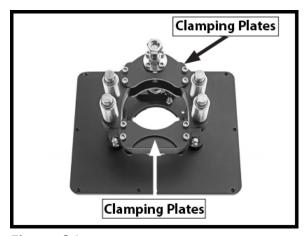


Figure 34

Larger router bodies may need to remove the clamping block altogether (Fig.35). Use the clamp and slide blocks to secure the router in this case.

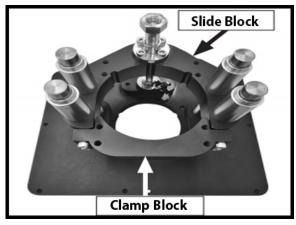


Figure 35

- 1. Insert the crank handle into the index ring on the insert plate as in (Fig.3) and turn clockwise until the lift just touches the bottom of the plate.
- 2. Remove the lift assembly from the router table and place it upside down on two blocks of wood (Fig.36) so the router collect is able to extend through the hole in the insert plate.
- 3. Loosen the (4) cap screws that secure the clamp block to the slide block. (Fig.36)



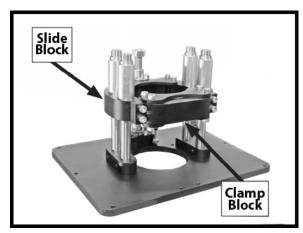


Figure 36

IMPORTANT!

When positioning the router in the clamping plates, take into account access to router controls, such as variable speed dial, depth adjustments, and other locks or levers.

4. Secure the router with the best configuration of clamping plates that will hold it. Then retighten the cap screws (Fig.37) Note: The router body should just touch the back of the insert plate.

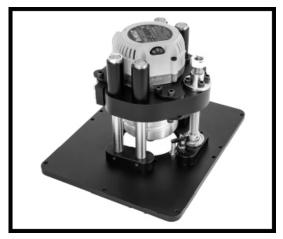


Figure 37

5. Re-install the lift assembly into the router table.

CAUTION!

If the router unexpectedly moves or the router bit contacts the insert plate or fence during operation, serious personal injury could result from the router bit or flying debris.

ALWAYS make sure the Router is firmly secured in the clamping plates before beginning any operations.

CAUTION!

To reduce the risk of injury from accidental contact with a spinning router bit, ALWAYS make sure the router table is placed on a flat clean surface and then leveled before operations.



Leveling The Router Table

The CXR1000 router table is equipped with adjustable feet in order to allow you to level the table. Follow the following instructions to keep your table steady during operations.

- 1. Place the router table on a clean and level surface.
- 2. Loosen the (4) ½-12 hex nuts on the router table feet. (Fig.38)

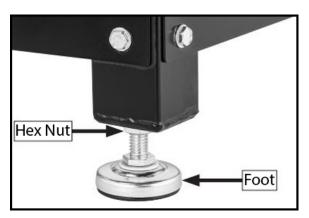


Figure 38

- 3. Adjust the feet to ensure the table is stable and will not rock.
- 4. Tighten the hex nuts to lock the table feet into place.

Power Cord Connections

For ease of operation the CXR1000 router table electrical box comes equipped with a 3 prong grounded

receptacle (Fig.39). The power cord from the router can be plugged directly into the electrical box allowing the operator to switch the power ON of OFF from the front of the machine rather than at the router itself. The power cord on the electrical box can be plugged into a 110V outlet.

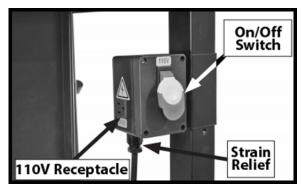


Figure 39

- 1. Set the paddle switch to the OFF position
- 2. Loosen the (2) 10-24 x 3/8 Phillips head screws on the side door of the Dust Box, and feed the router power cord through the opening.
- 3. Plug the router power cord into the 110V receptacle on the table electrical box.
- 4. Plug the router table cord directly into a matching power supply outlet.



5. Install a ½" strain relief on the router power cord where it emerges from the dust box and secure by tightening the screws.

Dust Collection

CAUTION

This machine creates a lot of wood chips or dust during operation. Breathing airborne dust on a regular basis can result in permanent respiratory illness. Wearing a respirator with a dust collection system will reduce this risk.

1. Fit a 4" dust hose over the dust port and secure with a wire hose clamp. (See Fig. 40)

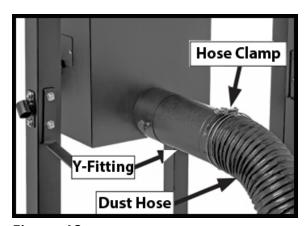


Figure 40

Test Run Procedure

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

If you encounter a problem during the test, immediately shut down the router and disconnect it from the power source. Fix the problem BEFORE operating the router again. Consult the Troubleshooting table in the SERVICE section for help.

- 1. Clear all tools away from the router.
- 2. Ensure the power ON/OFF paddle switch is set to the OFF position.
- 3. Ensure the router power cord is connected to the electrical box on the router table.
- 4. Connect the router Table power cord to a power source.
- 5. Reach into the dust box and turn the router switch to ON.
- 6. Using the paddle switch, turn the Router Table to ON, verify that the router powers up, and then turn the router table switch to OFF.



7. Remove the switch-disabling key, as in (Fig.41)

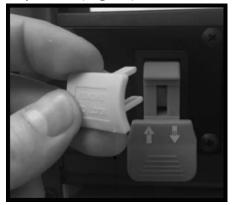


Figure 41

- 8. Attempt to restart the router using the paddle switch and the key removed. The router should not start.
- If the router does not start the disabling feature is working
- If the router starts, immediately stop the router. This means the disabling feature is not working correctly. Do not restart or operate the machine before this is corrected. See Troubleshooting for help.
- 9. Re-install the disabling key in the paddle switch. The test run is now complete and the router table should be ready for operation.



OPERATIONS

Operation Overview

WARNING:

To help prevent serious injury, read this manual in its entirety before using the machine.

WARNING:

Wear personal protective equipment to reduce your risk of eye injuries, respiratory problems and hearing loss.

WARNING: Keep hair, loose clothing and jewelry away from moving parts. These can become entangled and result in death, amputation, or severe crushing injuries.

NOTICE: 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.

A typical operation workflow could be as follows:

1. Select and examine workpiece for suitability.

- 2. Set fence adjustments close to the router bit for maximum workpiece support, then secure in place.
- 3. Set the router bit height.
- 4. Set the depth of cut by adjusting the fence position and ensure it is parallel with the tables T-Slot.
- 5. Wear appropriate personal safety equipment, safety glasses, respirators etc. Locate push sticks and or blocks as needed.
- 6. Check router bit rotation and ensure is correct for the operation and then start the router. IMPORTANT: For small odd shaped workpieces, a zero clearance jig is used.
- 7. Holding the workpiece firmly and flatly against the table and fence, push the workpiece into the router bit at a steady and controlled rate until the workpiece has moved through and beyond the router bit.
- 8. Stop the router when the operation is complete.



Stock Inspection

- DO NOT cut stock that contain large or loose knots. If a knot becomes dislodged during the cutting operation it could cause injury to the operator and even damage the workpiece.
- DO NOT cut against the grain.
 Doing this may cause kickback or damage the workpiece.
- Routing 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.43). Note: If the grain changes direction along the edge, decrease the cutting depth and make additional passes.

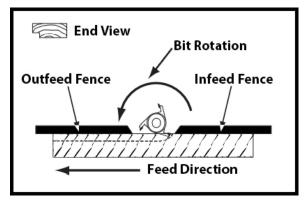


Figure 43

• Your router is designed only to cut natural wood fiber products. It is

NOT designed to cut metal, glass, stone, tile, products containing lead-based paint, or products containing asbestos. Cutting these products could be dangerous for the operator.

- Scrape all glue off the workpiece before jointing. Glue deposits, either hard or soft will gum up the router bit, 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 router bit. NOTE: Wood stacked on dirt or concrete may have small pieces of concrete or stone embedded into the surface.
- Use only dry wood when routing. Wood with a moisture content of over 20% can cause unnecessary wear to the router bit, produce poor cutting results and increase the risk of kickback.

Table T-Slots

The CXR1000 has a 3/8" and a 3/4" T-Slot in the table, for use with accessories such as a miter gauge, jig or feather board. (Fig.44)



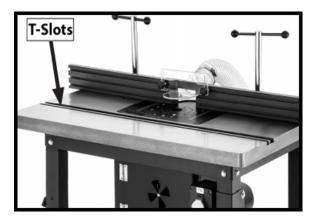


Figure 44

Fence, Miter Gauge & Bit Guard

The fence should always be parallel with the table slots when using a miter gauge. This will help to ensure that kickback does not occur in during this operation. With an accurate ruler make sure the fence is at an equal distance between the fence and the table slot along the entire length. (Fig.45)

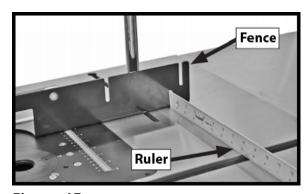


Figure 45

The fence is comprised of the infeed fence and the outfeed fence, both of which can be moved to the side to increase/decrease the clearance around the router bit. They are secured to the fence base with T-Bolts and knobs (Fig.46).

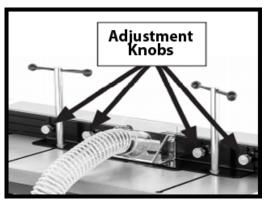


Figure 46

A clear bit guard is included with the CXR1000 to provide additional safety under operations. Secured to the fence with two knobs and T-bolts and can adjust up, down or side to side. The guard should be positioned about 1/8" above the workpiece and centered horizontally on the gap between the infeed and outfeed fences. (Fig.47)

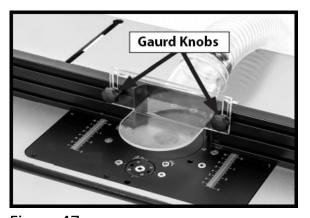


Figure 47



Router Height Adjustment

Beneath the table insert the CRX1000 is equipped with a manually operated router lift which is operated by a crank handle inserted into the index ring on the top of the insert plate.

- 1. DISCONNECT THE MACHINE FROM THE POWER SOURCE!
- 2. Insert the crank handle into the index ring (Fig.48) on the table insert.

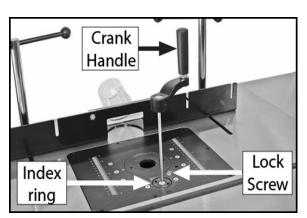


Figure 48

- 3. To raise the router, turn the crank handle clockwise and counter clockwise to lower it. The router will lift 0.05" on one complete rotation.
- 4. To secure the height setting, turn the lock screw clockwise until it engages the rocker arm beneath the insert plate (Fig.48). Be sure it is snug but do not overtighten.

5. Tighten the lock screw jam nut beneath the insert plate against the plate to secure its position. (Fig.49)

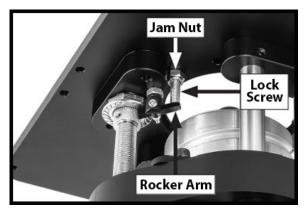


Figure 49

Table Insert Plate

The CXR1000 table insert plate (router lift) comes with a 1-1/4" diameter insert ring which snaps into the center of the table insert plate, providing additional safety and control near the router bit during operations. (Fig.50)

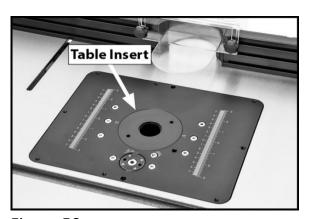


Figure 50

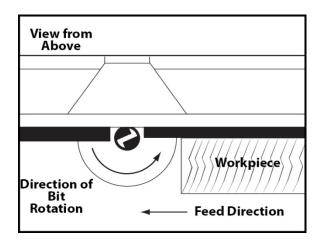


Edge Jointing

In edge jointing the aim is to get a perfectly flat and square edge on your board. This requires using a straight cutting router bit.

WARNING!

Always feed the workpiece against the router bit rotation direction, as illustrated below. Otherwise the workpiece be aggressively pulled out of your hands, drawing them into the spinning router bit.



- 1. DISCONNECT THE MACHINE FROM POWER!
- 2. Install a straight cutting router bit into the router.
- 3. Install the table insert ring.

4. Insert a spacer (Not included) between the outfeed fence and the fence base. The spacer width will determine the amount of material that will be removed on each pass.

IMPORTANT

DO NOT take any more than 1/16" off on each pass. This will reduce the risk of kickback and possible injury.

- 5. With the router lift handle, raise the router bit to just above the top of the workpiece, and then rotate it by hand until the cutting flute is perpendicular with the fence.
- 6. Place a straightedge against the outfeed fence and adjust the fence base so the straightedge is also against the flute of the router bit. (Fig.51)

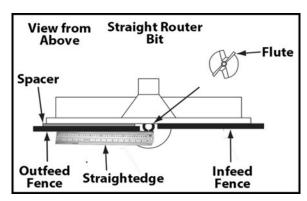


Figure 51

7. Make sure the fence is square with the table T-slot (see instructions re Fig.45)



8. Connect the table to the power source and then perform your cut. (Fig.51)

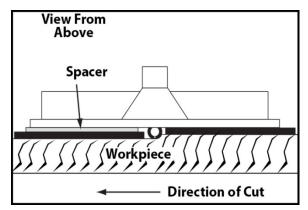


Figure 52

CAUTION!

ALWAYS make sure the fence and router bit guard are properly positioned and secured before connecting power. Failing to do so increases the risk of personal injury.

Profile Routing

- 1. DISCONNECT THE MACHINE FROM POWER!
- 2. Install a router bit into the router.
- 3. With the router lift handle, raise the router bit to the desired height, then adjust the fence to the desired depth of cut (Fig.53A)(Fig.53B)

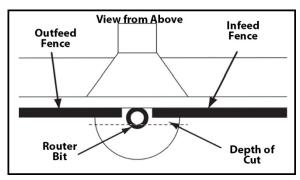


Figure 53A

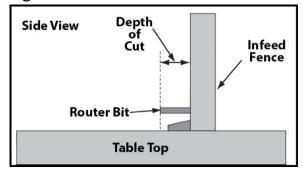


Figure 53B

- 4. Both infeed and outfeed fences must be parallel if using the T-slot.
- 5. Lock the fence in place, tighten all knobs, reconnect the power and make your cut.

Routing Small Stock

When feeding small stock through the router, use a zero-clearance fence board. This will better support the workpiece, reduce tear-out and help to prevent kickback. Kickback can occur when the workpiece slips into the space between the fence and the bit.



Making a zero-clearance fence

- 1. DISCONNECT THE MACHINE FROM POWER!
- 2. Remove the infeed and outfeed fences from the fence base.
- 3. Select a piece of straight, smooth stock that is the same height and thickness as the infeed/outfeed fences and approximately 36" in length.
- 4. Cut the outline of the spindle and router bit from the center of the stock in Step 3, as shown in (FIG.54) Note: Make the outline as close as possible to the router bit and spindle without interfering with rotation.
- 5. Create countersunk mounting holes in the zero clearance fence board (Fig.54) to secure the new fence and router bit guard to the base.

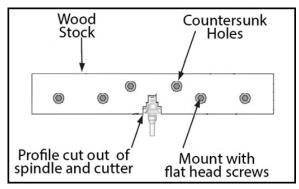


Figure 54

CAUTION!

ALWAYS use hold downs or featherboards and push sticks when shaping small or narrow stock. These devices keep your hands away from the spinning router bit and sufficiently support stock to allow a safe and effective cut, reducing the risk of personal injury.

- 6. Secure the zero-clearance fence board & router bit guard to the fence base, then ensure the fence is parallel with the table T-slot.
- 7. Check for proper clearance, reconnect the router to the power source and make a test cut to verify the results.

Free-Hand Routing

Free hand routing, done without the protection or aid of the fence &



router bit guard, takes a high degree of skill and dexterity. Starting the cut is the most dangerous part of this operation. As the router bit first contacts the workpiece, it tends to jerk or kickback representing an injury hazard to the operator.

WARNING!

The free-hand routing operation greatly increases the chances the operator may lose control of the workpiece and can result in personal injury. Therefore, a starting pin or block and a custom guard or workpiece holding jig MUST be used.

A starting pin or block (Fig.56 & 57) can reduce the likelihood of kickback when free-hand routing and will allow you to anchor and slowly pivot the workpiece into the router bit at the start of the cut.

- 1. DISCONNECT THE MACHINE FROM POWER!
- 2. Fabricate a jig that matches the desired shape of your workpiece, and then attach it to the workpiece (Fig56)

Note:

Ensure that any fasteners used will not come into contact with the router bit during operation. Hot glue is a effective alternative to fasteners when applicable.

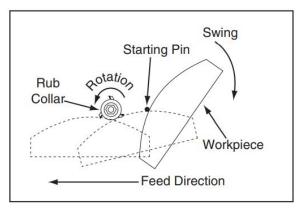


Figure 56

- 3. Remove the table fence completely.
- 4. If possible fabricate and mount a custom guard over the bit that safely protects your hands from the spinning router bit.
- 5. Insert a starting pin in the hole provided on the insert plate (Fig.57) or clamp a starting block to the table (Fig.56)



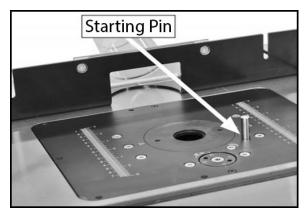


Figure 57

6. Install a router bit with a bearing guide as directed by the router manufacturer's instructions, then with the router lift, raise it to the desired height. (Fig. 58)

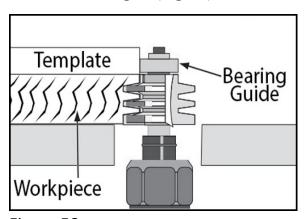


Figure 58

7. Rest the workpiece against the starting pin, reconnect the power and turn on the router. Slowly pivot and feed the workpiece into the router bit. After the cut is started, move the workpiece against the guide bearing and away from the starting pin.

MAINTENANCE

For a clean and safe router table operation you should vacuum off excess sawdust, wipe down the table with a dry cloth to remove any residual dust not captured by the vacuum. And check weekly for the following possible problems:

- Loose router clamping plates
- Loose table insert fasteners
- Loose stand and table fasteners
- Worn or damaged cords/plugs (replace if necessary)



Toubleshooting

Symptom: Machine will not start.

Possible Causes:

- 1. Switch disabling key removed
- 2. Router not connected to router table switch
- 3. ON/OFF switch at fault.

Possible Solutions:

- 1. Install switch disabling key.
- 2. Connect router to router table switch.
- 3. Test/replace switch.

Symptom: Workpiece catches on insert plate.

Possible Cause:

1. Insert plate and table not evenly aligned.

Possible Solutions:

1. Align mounting plate.

Symptom: Workpiece catches on infeed/outfeed fences.

Possible Causes:

1. Fence & table T-slot not square.

Possible Solution:

1. Square fence and table T-slot

Symptom: Workpiece catches on gap between infeed/outfeed fences.

Possible Cause:

1. Workpiece too small for fence.

Possible Solution:

1. Create zero-clearance fence for operation.

Symptom: Workpiece is burned when cut.

Possible Causes:

- 1. Router bit is dull.
- 2. Feeding workpiece too slow
- 3. Router bit spinning in wrong direction.



4. Depth of cut too deep.

Possible Solutions:

- 1. Replace router bit
- 2. Increase feed rate.
- 3. Reverse router direction.
- 4. Take smaller depth of cut (especially with hardwoods)

Symptom: Fuzzy Grain.

Possible Causes:

- 1. High moisture content in wood.
- 2. Router bit is dull.

Possible Solutions:

- 1. Inspect workpiece moisture content; allow to dry if more than 20% moisture content.
- 2. Replace router bit.

Symptom: Chipping.

Possible Causes:

1. Knots or conflicted grain direction in wood.

- 2. Nicked or chipped router bit.
- 3. Feeding workpiece too fast.
- 4. Depth of cut too deep.
- 5. Cutting against the grain.

Possible Solutions:

- 1. Inspect the workpiece for knots, grain direction, use clean stock only.
- 2. Replace router bit.
- 3. Decrease feed rate.
- 4. Take a smaller depth of cut (especially with hardwoods).
- 5. Cut with the direction of the grain.

Symptom: Divots in edge of cut.

Possible Cause:

- 1. Inconsistent feeding speed
- 2. Inconsistent pressure against the fence.
- 3. Fence not adjusted properly

Possible Solutions:



- 1. Use a consistent feed rate
- 2. Apply constant pressure
- 3. Adjust fence correctly

Aligning The Insert Plate

To prevent a workpiece will not catch on the insert plate and cause kickback, it must be aligned evenly with the table surface. To do this you will need the following tools: 3mm Hex Key, 12mm open end wrench and a 48" straightedge.

- 1. DISCONNECT THE MACHINER FROM POWER!
- 2. Remove the fence assembly from the table.
- 3. Remove (2) M4-.7 x 16 cap screws that secure the insert plate to the table.
- 4. Lay the straightedge across the insert plate, plate rings and table surfaces in the pattern shown in (Fig.63)

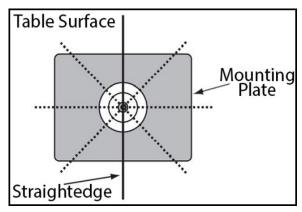


Figure 63

5. Adjust the set screws (Fig.64) in the insert plate as necessary so that the straightedge lies flat on the table surface at all positions of the pattern.

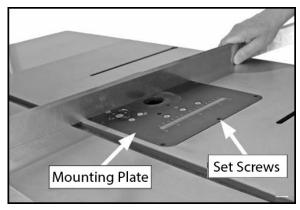
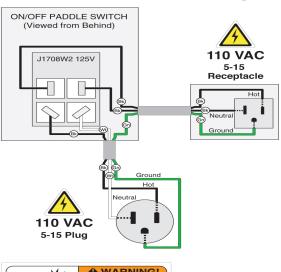


Figure 64

- 6. Repeat steps 4 thru 5 as needed until the insert plate is aligned with the table surface.
- 7. Secure the insert plate to the table with the cap screws removed in step 3.



Wiring Diagram





SHOCK HAZARD!
Disconnect power
before working on
wiring.

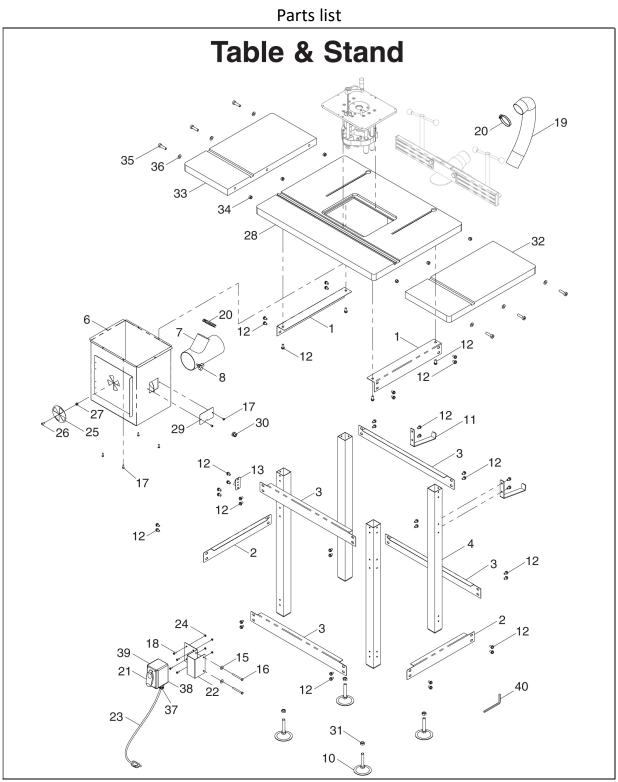
Figure 65. ON/OFF switch and 110V outlet wiring.

NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.



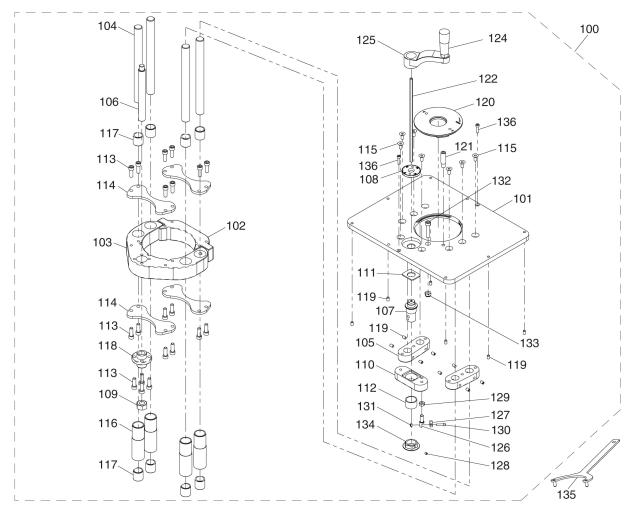






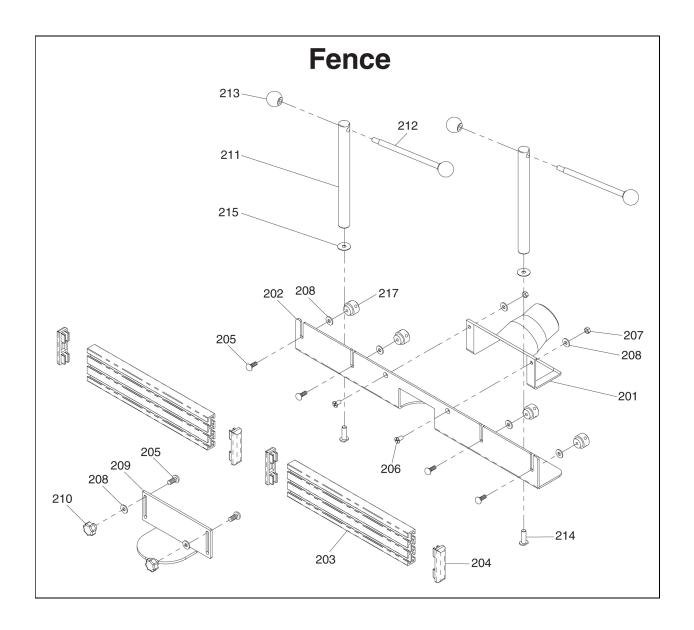
KEY	ITEM	DESCRIPTION
1	PCXR100001	SHORT BRACE UPPER
2	PCXR100002	SHORT BRACE LOWER
3	PCXR100003	LONG BRACE
4	PCXR100004	LEG
6	PCXR100006	DUST BOX
7	PCXR100007	Y-FITTING 4 X 4 X 2 1/2"
8	PCXR100008	KNOB BOLT 1/4-20 X 1/2 - 3 LOBE
10	PCXR100010	ADJUSTABLE FOOT 1/2 X 1/2 X 4
11	PCXR100011	FENCE STORAGE BRACKET
12	PCXR100012	FLANGE BOLT 5/16-18 X 1/2
13	PCXR100013	ROUTER LIFT CRANK HOLDER
15	PCXR100015	WASHER - FLAT 1/4
16	PCXR100016	BOLT - HEX HD 1/4-20 X 2 1/2
17	PCXR100017	SCREW - PH HD 10-24 X 3/8
18	PCXR100018	SCREW - PH HD 10-24 X 5/8
19	PCXR100019	DUST HOSE 2 1/2" X 28"
20	PCXR100020	WIRE HOSE CLAMP 3"
21	PCXR100021	PADDLE SWITCH J1708W2 125VAC
22	PCXR100022	SWITCH BRACKET
23	PCXR100023	POWER CORD 14AWG 72" 5-15P
24	PCXR100024	NUT - LOCK 10-24
25	PCXR100025	DUST BOX VENT PLATE
26	PCXR100026	SCREW - BTN HD CAP 1/4-20 X 1/2
27	PCXR100027	NUT - LOCK 1/4-20
28	PCXR100028	TABLE
29	PCXR100029	CORD CLAMP PLATE
30	PCXR100030	STRAIN RELIEF TYPE - 1 1/2
31	PCXR100031	NUT - HEX 1/2-12
32	PCXR100032	EXTENSION WING RIGHT
33	PCXR100033	EXTENSION WING LEFT
34	PCXR100034	NUT - LOCK 3/8-16
35	PCXR100035	SCREW - CAP SOC HD 3/8-16 X 1 1/2
36	PCXR100036	WASHER - FLAT 3/8
37	PCXR100037	STRAIN RELIEF TYPE -3 M16-2
38	PCXR100038	SWITCH BOX
39	PCXR100039	ELECTRICAL OUTLET 15a 125v
40	PCXR100040	WRENCH - HEX 3MM

Router Lift



100	PCXRLIFTT100	ROUTER LIFT ASSEMBLY	118	PCXRLIFTT118
101	PCXRLIFTT101	MOUNTING PLATE	119	PCXRLIFTT119
102	PCXRLIFTT102	CLAMP BLOCK	120	PCXRLIFTT120
103	PCXRLIFTT103	SLIDE BLOCK	121	PCXRLIFTT121
104	PCXRLIFTT104	CLAMP GUIDE	122	PCXRLIFTT122
105	PCXRLIFTT105	CLAMP GUIDE MOUNT	124	PCXRLIFTT124
106	PCXRLIFTT106	LEADSCREW M14-1.5 X 135	125	PCXRLIFTT125
107	PCXRLIFTT107	LEADSCREW CONNECTOR	126	PCXRLIFTT126
108	PCXRLIFTT108	INDEX RING	127	PCXRLIFTT127
109	PCXRLIFTT109	NUT - HEX M14-2	128	PCXRLIFTT128
110	PCXRLIFTT110	LEADSCREW MOUNT	129	PCXRLIFTT129
111	PCXRLIFTT111	COPPER PLATE	130	PCXRLIFTT130
112	PCXRLIFTT112	BUSHING 20 X 24 X 12 (COPPER)	131	PCXRLIFTT131
113	PCXRLIFTT113	SCREW - CAP 1/4-20 X 3/4	132	PCXRLIFTT132
114	PCXRLIFTT114	ROUTER COAMP PLATE	133	PCXRLIFTT133
115	PCXRLIFTT115	SCREW - FLAT HD CAP 1/4-20 X 1/2	134	PCXRLIFTT134
116	PCXRLIFTT116	GUIDE TUBE ALUMINUM	135	PCXRLIFTT135
117	PCXRLIFTT117	BUSHING 16 X 20 X 20	136	PCXRLIFTT136

118	PCXRLIFTT118	LEADSCREW PILOT NUT M14-1.5
119	PCXRLIFTT119	SCREW - SET M6-1.0 X 6
120	PCXRLIFTT120	INSERT 1 1/4"
121	PCXRLIFTT121	STARTING PIN
122	PCXRLIFTT122	HEX SHAFT 5 X 175
124	PCXRLIFTT124	FIXED HANDLE 22 X 77, M10-1.5 X 14
125	PCXRLIFTT125	CRANK M10-1.5 X 95
126	PCXRLIFTT126	ROCKER ARM MOUNT 1/4-20 X 1/2
127	PCXRLIFTT127	ROCKER ARM
128	PCXRLIFTT128	SCREW - SET M4-0.7 X 5
129	PCXRLIFTT129	NUT - HEX 1/4-20
130	PCXRLIFTT130	SCREW - CAP SOC HD M35 X 16
131	PCXRLIFTT131	NUT - LUCK M35
132	PCXRLIFTT132	SCREW - CAP 1/4-20 1 1/4
133	PCXRLIFTT133	NUT - LOCK 1/4 X 20
134	PCXRLIFTT134	BRAKE DISC
135	PCXRLIFTT135	SPANNER WRENCG 70MM PIN TYE
136	PCXRLIFTT136	SCREW - CAP M45-0.7 X 16



201	PCXR1000F201	2 1/2" DUST PORT	209	PCXR1000F209	ROUTER BIT GUARD
202	PCXR1000F202	FENCE BASE	210	PCXR1000F210	KNOB - 1/4-20 7 LOBE 1" DIA
203	PCXR1000F203	FENCE BOARD	211	PCXR1000F211	FENCE LOCK SHAFT 5/16-18 X 1/2, 8 1/2
204	PCXR1000F204	END CAP (PLASTIC)	212	PCXR1000F212	STUD 5/16-18 X 1/2 6 1/4
205	PCXR1000F205	BOLT - CARRIAGE 1/4-20 X 3/4	213	PCXR1000F213	KNOB - BALL 5/16-18 X 1" DIA
206	PCXR1000F206	SCREW - FLAT HD 1/4-20 X 5/8	214	PCXR1000F214	T-BOLT 5/16-18 X 1
207	PCXR1000F207	NUT - HEX 1/4-20	215	PCXR1000F215	WASHER - FLAT 5/16
208	PCXR1000F208	WASHER - FLAT 1/4	217	PCXR1000F217	KNOB 1/4-20 1" DIA ROUND





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. Return authorization may take up to 72 hours for inspection and approval.

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.

