

### **MODEL CX13HC**

### 13" Bench Top Helical Thickness Planer 2 Speed



Ver. 1 01/15/2021



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#### **GENERAL SAFETY INSTRUCTIONS**

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

- ALWAYS read and understand the user manual before operating the machine.
- CONNECT your machine ONLY to the matched and specific power source.
- ALWAYS wear safety glasses respirators, hearing protection and safety shoes, when operating your machine.
- DO NOT wear loose clothing or jewelry when operating your machine.
- A SAFE ENVIRONMENT is important. Keep the area free of dust, dirt and other debris in the immediate vicinity of your machine.
- BE ALERT!DO NOT use prescription or other drugs that may affect your ability or judgment to safely operate your machine.

- NEVER leave a tool unattended while it is in operation.
- NEVER reach over the machine 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 bystanders safely away while the machine is in operation.

#### **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.



### THICKNESS PLANER SPECIFIC

#### SAFETY INSTRUCTIONS

- If you are not familiar with the operation of a thickness planer, you should obtain the advice and/or instruction from a qualified professional.
- Never reach into or through the throat of the thickness planer. Even with the power turned off, the cutterknives are very sharp.
- Keep the cutter head and knives clean and free of tar and pitch.
- Be sure that the motor switch is properly grounded.
- Check each and every workpiece to be surfaced for loose knots, nails, screws and any other foreign materials and defects before planning.

- Keep hands away from the surface of the wood as it nears the in-feed rollers.
- Make all adjustments with the power OFF
- Always keep the machine clean and free of sawdust and wood chips. They may contain moisture that could cause the metal surfaces to rust.
- Turn Off the power before removing any wood shavings and sawdust from the surface of in-feed & outfeed tables.

#### THINK SAFETY. WORK SAFELY

#### **IMPORTANT!**

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.



### **SPECIFICATIONS**

Motor power input	120 V, 60 Hz, AC Only, 15Amp
Feed speed F/min	16 & 26 FPM
Cutterhead speed	
Motor RPM	23000+/-10% (No Load)
Cutterhead diameter	
Max planer capacity	6" x 13"
Max depth of cut @ 6"	
Max depth of cut @ 12.5"	1/16"
Minimum Length of Stock	7"
Minimum Thickness of Stock	
Cutter inserts qty	26 (2 sided)
Shipping Weight	
Shipping Dimensions	
Dust Port Opening	

#### **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.



#### **WARNING!**

Machine must be properly grounded to avoid risks such as fire, electrocution, shock,or damage to the equipment.

#### **FULL LOAD CURRENT RATING**

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

# FULL LOAD RATING FOR 120V 15AMPS

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

circuit requirements for this piece of machinery.

#### **WARNING!!!**

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

# CIRCUIT REQUIREMENTS FOR CX13HC BENCHTOP PLANER

The CX13HC has been prewired at the factory for operation on an electrical circuit that has a verified ground and meets the below requirements:

Voltage: 110V - 120V

Cycle: 60Hertz Phase: Single

Circuit Breaker Size: 20 Amps

#### Please Note:

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



insure the circuit is properly sized for safe operation.

PLUG AND GROUNDING REQUITEMENTS

This machine must be grounded so that in the event of certain malfunctions it will reduce the chances of electrical shock by providing a path of least resistance for the electric current to travel through. For this reason the CX13HC comes with a cord equipped with an equipment grounding wire that leads in to the grounding prong on the plug.

#### NOTE:

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

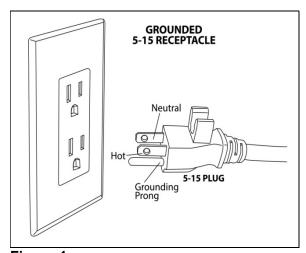


Figure 1

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

#### NOTE:

If ever you notice damage or 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.

#### NOTE:

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.

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:12 AWG Maximum Cord Length:50 ft.



#### **UNPACKING OF THE CX13HC**

This machine has been carefully packed in order to protect it during transport. While unpacking thoroughly go through the box and separate all items from the materials used for packaging. It is always wise to inspect all items for shipping damage. In the event of any damaged items please contact your local Busy Bee Tools.

NOTE:

Please keep all material used in packaging until you are satisfied with your machine and have rectified any issues between Busy Bee Tools or the agent of shipping. (Ex: Shipping damage claim)



#### **WARNING!**

Immediately remove and keep all plastic bags and packaging away from pets and children. Put directly into trash or recycling.

When receiving your planer, check the carton exterior and machine for any shipping damage. Carefully remove the packing materials, accessories and the machine from the shipping carton. Lay out all parts on a clean work surface.

Compare the inventory of items and verify that all items are accounted for. (If possible retain the shipping carton for warranty service if ever needed.) If any parts are missing, do not attempt to plug in the power cord and run the machine.

Carefully clean any protective coatings from the machine parts, accessories and the planer itself. Protective coatings may easily be removed by spraying with WD-40, then wiping them off with a soft cloth.

You may need to repeat this process in order to fully remove all of the protective coating.

After you have cleaned the parts and machine, apply a good paste wax to the unpainted surfaces. Infeed, outfeed and center table included. Be certain to buff out the wax before assembling the planer.



### Inventory



<ol> <li>HEX WRENCH 4mm x 100</li> <li>TORX WRENCH</li> <li>RAISE / LOWER HANDLE</li> <li>HEX SCREW M5*P0.8*20</li> <li>DUST PORT KNOB</li> </ol>	С
4. RAISE / LOWER HANDLE 1 pc 5. HEX SCREW M5*P0.8*20 1 pc	2
5. HEX SCREW M5*P0.8*20 1 po	
·	
6 DUST DODT KNOD 2 no	2
7. Planner Body (Not Shown) 1 po	)



#### **Assembly**

#### **WARNING!**

Make certain that the machine is disconnected from the power source.

# ATTACHING DEPTH ADJUSTMENT HANDLE

Attach the DEPTH DJUSTMENT handle to the shaft located on top of the planer and fasten in place with 1 Hex Socket Head screw. Tighten screw using supplied hex wrench. SEE FIG 1.



Fig. 1

#### ATTACHING DUSTPORT

1. Facing the rear of the machine, locate the dust port on the cutterhead assembly by turning 2 dust port knobs. Position the dust port assembly and secure in place with the 2 supplied dust port knobs. See FIG 2.



Figure 2

- 2. To minimize sawdust accumulation on your work piece, attach either a 2-1/2 in. or a 4 in. vacuum hose to the dust port.
- 3. The dust port must be snapped shut completely or chips may fly out of the front of the planer.
- 4. The dust port can be opened to allow chips to flow out the back of the planer when a vacuum system is not used. See FIG 3A and 3B.



Figure 3A





Figure 3B

## SECURING PLANER TO A TABLE OR WORKBENCH

During operation, if there is any tendency for the planer to tip over, slide or walk, the planer MUST be secured to a supporting surface such as a workbench or table. Four mounting holes are provided in the base of the unit (2 are shown at A below) to securely mount the planer. The surface you are mounting the planer to should be perfectly flat. See FIG 4.



Figure 4

#### **Making Adjustments**

#### **WARNING!**

Make certain that the machine is disconnected from the power source before any adjustments are made.

# LEVELING EXTENSION TABLES

The extension tables must be level with the planer table. To check the extension tables and adjust if necessary:

- 1. Lay a straight edge (A) on the planer table (C) with one end of the straight edge over the infeed table (B). See FIG 5.
- 2. Check to make sure that the infeed table is level with the planer table.
- 3. If an adjustment is necessary, raise table, loosen lock nuts (D) and adjust Hex Head Screws (E) on each side of the table until the infeed table is level with the planer table. This will adjust the outer edge of the table.
- 4. Recheck for level and repeat adjustment if necessary.
- 5. Repeat this process for leveling the outfeed table.



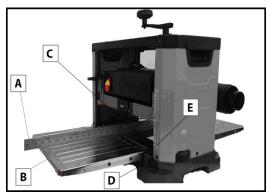


Figure 5

# RAISING AND LOWERING HEAD ASSEMBLY

The head assembly consists of the cutterhead, knives, feed rollers, cutterhead guard, and the motor.Raising and lowering of the head assembly controls the depth of cut on the planer.

#### To adjust:

- 1. To raise the head assembly (A), turn the adjusting handle (B) clockwise. See FIG 6.
- 2. To lower the head assembly, turn the adjusting handle counter-clockwise.

#### NOTE:

One revolution of the handle will move the cutterhead up or down approximately 1/16". You can confirm this by referencing the scale (C) on the front right side of the planer.

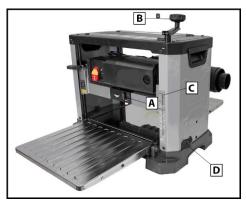


Figure 6

#### NOTE:

The Repeat Cut Thickness Indicator (D), located on the bottom right side of the planer, provides a simple way to preset the finished thickness of a workpiece. Rotate the indicator to the desired finished thickness. Use this feature when thickness planing multiple workpieces to ensure a uniform thickness of all workpieces. See page 20 for more information. Do not attempt to lower the cutterhead assembly below the preset level as damage will occur.

# ADJUSTING / REPLACING INSERTS FOR THE HELICAL CUTTERHEAD

#### **WARNING!**

Be VERY CAREFUL when handling the cutter inserts as they are EXTREMELY SHARP and can cause serious injury!

This 13" cutterhead is equipped with 26 indexable cutter inserts. Each cutter insert can be rotated to reveal one of its two cutting edges. Therefore, if one cutting edge becomes dull or damaged,

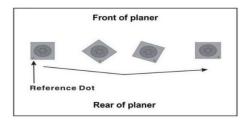


simply rotate it 90° to reveal a fresh cutting edge.

In addition, each cutter insert has a reference dot on one corner. As the cutter insert is rotated, the reference dot location can be used as an indicator of which edges are used and which are new. Inserts are 2 sided only. Inserts should be replaced once both cutting edges have been used.

#### **WARNING!**

Never grasp cutterhead by hand as this will result in serious injury!



# To rotate or change cutterhead inserts:

- 1. Face the rear of the machine. Remove the DustPort. Refer back to the section labeled ATTACHING DUST PORT in the ASSEMBLY section for information on removal.
- 2. Use the handle to lower the cutterhead assembly down to about 1" on the scale.
- 3. Insert the supplied Hex wrench through the hole located on the side of the machine beside the Repeat Cut indicator. Rotate the cutterhead to a position where a cutter tip is visible. See FIG. 7. (You may have to raise or lower

cutterhead to be able to insert the Hex wrench into the cutterhead)

- 4. While holding the hex wrench to prevent cutterhead rotation, remove the cutter tip screw using the provided Torx T-wrench allowing the tip to be removed.
- 5. Carefully clean all dust and dirt off the cutter tip and the cutterhead seat. Replace or rotate the cutter insert so a fresh sharp edge is facing outward. If available, use pitch remover to be sure all wood residue is removed from cutterhead, cutter insert, and screws, before attempting to rotate or replace them. Using a shot of compressed air is also helpful. Be sure to wear safety glasses when using compressed air.
- 6. Lubricate the Torx screw threads with light machine oil and wipe the excess oil off the threads. Install cutter tip insert and torque the Torx screw to 48-50 Inlbs.



Figure 7



#### NOTE:

Proper cleaning of inserts as well as the cutterhead are critical to achieving a smooth finish. Dirt or dust trapped between the cutter insert and cutterhead will slightly raise the cutter insert, and make noticeable marks on your workpiece the next time you plane.

#### THICKNESS SCALE ADJUSTMENT

The thickness scale, located on the right of the planer, shows the thickness of the finished workpiece. To make sure the scale is set properly, run a piece of wood through the planer and measure the thickness of the wood. If the scale is out of alignment, loosen the two round head screws (A) holding the scale indicator (B) and adjust the thickness indicator to the correct setting. Make sure to re-tighten the two screws once the adjustment is complete. See FIG 8.

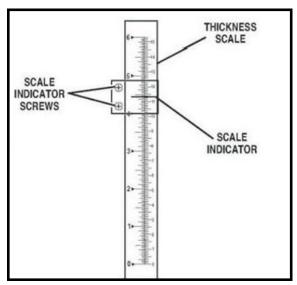


Figure 8

#### NOTE:

This operations section was designed to give instructions on the basic operations of this planer. However, it is in no way comprehensive of every planer operation. It is strongly recommended that you read books, trade magazines, or get formal training to maximize the potential of your planer while minimizing the risks.

#### NOTE:

This planer is designed to process wood ONLY. Planing materials other than wood will void the warranty

#### **POWER SWITCH**

The planer is turned on by flipping the switch into the up position and it is turned off by flipping the switch in the down position. This planer is also equipped with a special lockout switch key that prevents unauthorized use. To prevent unauthorized use of the planer, simply pull out the yellow key (A) located on the face of the switch. See FIG 9.



Figure 9



#### **DEPTH-OF-CUT INDICATOR**

The Depth-Of-Cut Indicator, located on the front of the machine, is a convenient way to quickly determine how much material is being planed off in one pass.

- 1. With the machine OFF, insert your workpiece just under the cut scale (A). See FIG 10
- 2. Crank the raising / lowering handle until the button (B) comes in contact with the workpiece. As you rotate the raise / lower handle, the needle on the depth of cut scale will move showing how much material will be removed in that pass.

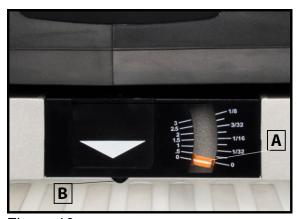


Figure 10

#### REPEAT CUT PRESET

The REPEAT CUT preset, located on the right side of the planer, provides a simple way to preset the finished thickness of a workpiece. The indicator can be set to various thicknesses. Rotate the indicator to the desired finished thickness. Use this feature when multiple thickness planing uniform workpieces to ensure а thickness of all workpieces. SEE FIG 11.

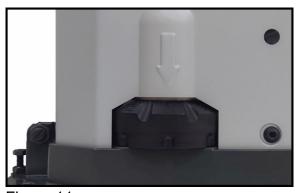


Figure 11

#### NOTE:

When lowering the head assembly, ensure the REPEAT CUT preset is in the lowest desired thickness position. Failure to do so may result in excess downward pressure by the cutterhead assembly onto the mechanism and cause damage to the adjustment rod and upper frame.

#### **FEED RATE**

#### **CAUTION!**

Only switch feed rate selector while planer is running.

Switch feed rate selector (A) to slow feed (16FPM) for finishing or fast feed (26FPM) for thicknessing. See FIG 11-1.



Figure 11-1



#### **GETTING PREPARED**

It is always a good idea to use a piece of scrap wood for your first planing attempt.

#### Warning!

Also, before each use of the planer, make it a habit of checking for loose fasteners, fittings or hardware.

Turn the planer ON and allow it to reach full speed. Pay close attention to any excessively loud noises that may be coming from the planer or any excessive vibration. If either occurs, shut down the planer immediately checking again for loose hardware. Go through the ASSEMBLY and ADJUSTMENTS sections again if necessary.

#### **BASIC OPERATION**

#### **WARNING!**

To avoid serious personal injury, NEVER stand directly in line with the front or rear of the planer. If an object is thrown from the planer, it will travel in this direction.

- 1. Stand to either the left or right side of the planer.
- 2. Flip the switch to the ON position.
- 3. Lift the workpiece onto the infeed table by grabbing the edges of the board at the middle of the length.

#### NOTE:

For longer pieces, be sure to use additional supports or stands.

- 4. Push slightly on the board to start feed and allow the feed rollers to pull the board through the planer. Once the feed rollers start to pull the workpiece through, let go of the board and allow the rollers to do their job. DO NOT push or pull on the workpiece once the rollers have engaged.
- 5. Move to one side of the rear of the planer and receive the planed workpiece by grabbing the edges of the wood like you did when feeding the workpiece in
- 6. It normally takes several passes of varying depths to achieve a smooth finish, so repeat this process as many times as necessary. Remember the less you take off in a pass, the smoother the finish will be, but you may still need to finish the surface by sanding.

#### THICKNESS PLANING

Thickness planning sizes the workpiece to a desired thickness, while at the same time creating a smooth and level surface. The thickness of each cut will depend on the type of wood, width of the workpiece, and condition of the lumber (i.e. dryness, grain composition, straightness, etc). Always make light test cuts on a scrap piece of wood prior to performing final cuts.

#### **GENERAL TIPS AND GUIDELINES**

1. Thickness planing always works best when at least one side of the workpiece has a flat surface. If both sides of the workpiece are rough, feed one face of



the board through the planer until the entire surface is flat.

- 2. ALWAYS plane both sides of the workpiece to reach the desired thickness.
- 3. DO NOT plane workpieces less than 1/8" thick, less than 3/4-in wide, or shorter than 7-in.
- 4. It is not recommended to continuously use the planer at its maximum depth of cut (1/16") and at its full width (13") as this will shorten the life of the motor.
- 5. Light cuts create a smoother finish than heavier cuts.
- 6. If a smooth cut is not obtained, see TROUBLESHOOTING GUIDE.

#### **AVOIDING SNIPE**

Snipe, gouging or depression of the board at the ends, can occur when the board is not properly supported. For workpieces longer than 4 ft, greater care must be taken to reduce the problem because the additional length of the workpiece translates into more unsupported weight pulling down on the end of the board. This unsupported weight will work against keeping the stock flat. Make sure to use supports or stands whenever long pieces are being planed to avoid this problem. Since snipe occurs at the end of the boards, it is good practice to start with a workpiece that is slightly longer than what you need so that you can simply cut off the ends if necessary. Also you may see TROUBLESHOOTING for further information.

#### Maintenance

#### **WARNING!**

Make certain that the machine is disconnected from the power source before performing any maintenance procedures

Your planer should provide you with a long time of service provided you take the time to perform the following maintenance operations.

#### **CLEANING**

Sawdust buildup and other debris can cause the tool to plane incorrectly. Periodic cleaning and waxing is needed for accurate, precision planing. Any moving parts should be cleaned regularly with a penetrating oil and lubricated with a light coating of medium weight machine oil

#### **CAUTION!**

With the machine unplugged, blow off motor with low pressure air to remove dust or dirt. Air pressure above 50 P.S.I. should not be used as high-pressured air may damage insulation. The operator should always wear a respirator and eye protection when using compressed air. Do not allow chips and dust to accumulate under the machine. Keep area clean and in safe order.

Having clean feed rollers is essential for optimal results. Check feed rollers after each use for buildup of pitch, gum, or



resin, and be sure to clean off with a non-flammable tar and pitch remover that is not harmful to rubberized surfaces.

Periodically clean, wax, and buff the tables. This will aid in the prevention of improper feeding of the work piece.

#### HARDWARE TIGHTNESS

Periodically check all nuts, bolts, and screws, for tightness and condition. Stop the machine and recheck the cutterhead screw and knives, or tips, for tightness after about 50 hours of operation. Recheck periodically.

#### MOTOR BRUSH REPLACEMENT

Brush life will vary depending on the load placed on the motor. If the motor operation changes or stops working check the motor brushes. To inspect or replace:

1. Remove the motor brush caps, one of which is shown in Fig. 12 (A). The other is located in the same position on the rear of the motor assembly. The motor brush cap can be removed using a flat blade screwdriver. See FIG 12.

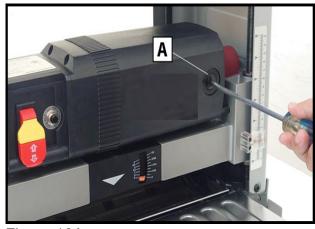


Figure 12A

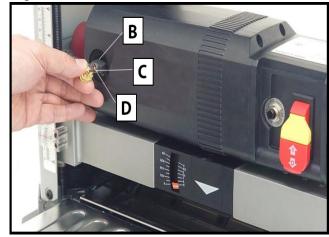


Figure 13

- 2. Once the brush has been removed, inspect the carbon (B), the spring (C), and the wire (D). SEE FIG 13.
- 3. If the carbon of either brush is worn down to 3/16" or less, both brushes should be replaced. Also if the spring or wire are burned or damaged in any way, both brushes should be replaced.

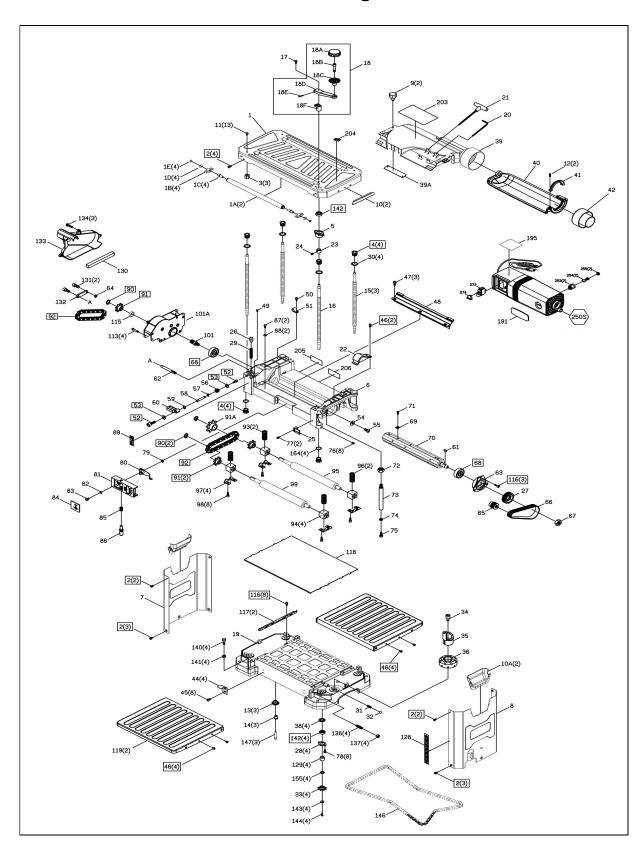


### **Trouble Shooting**

PROBLEM	LIIKELY CAUSE	SOLUTION
Snipe	Dull Blades	Replace or rotate tips. Readjust
(depressions at	Infeed or outfeed tables out of	tables. Feed scrap of same
end of workpiece)	adjustment.	thickness before and after
	Residue on rollers.	workpiece.
		Clean rollers.
Torn grain.	Too deep or shallow blade	Reduce or increase the depth of cut.
	setting.	Feed other end of board first.
	Workpiece being fed against	Replace or turn blades.
	grain.	Try skewing board when feeding.
	Dull cutter blades	VERY slightly dampen work piece.
Fuzzy/rough grain.	High wood moisture content.	Dry wood before planing.
	Dull blades	Replace or turn blades
	Too deep a blade setting.	Reduce depth of cut
Board thickness	Depth scale incorrectly set.	Adjust depth scale.
does not match		
depth scale indicator.		
Will not start.	Not plugged in.	Check the power source.
	Blown circuit.	Replace fuse, reset breaker, or call
	Lockout key removed.	electrician.
	Motor brushes	Replace lockout key.
Interrupted operation	Unit overloaded.	Reduce load.
	Circuit overloaded.	Operate on circuit separate from
		other appliances or motors or
		connect to circuit with adequate amp
		rating.
Planer not feeding	Too much material being	Reduce cut depth.
properly	removed.	Replace knives or tips.
	Knives or tips dull.	Clean tables and apply paste wax.
	Build up on tables.	Clean rollers with a cleaner safe for
	Build up on rollers.	rubber surfaces.



### **CX13HC Diagram**





### **CX13HC Parts List**

KEY	ITEM	DESCRIPTION	QTY
1	PCX13HC01	TOP COVER ASSEMBLY (1, 3, 5, 10, 11, 142, 204)	1
1A	PCX13HC01AS	ROLLER ASSEMBLY (1a, 1B, 1C, 1D, 1E)	2
2	PCX13HC02	SCREW - BTN HD SOC M6-1.0 X 8	14
4	PCX13HC04	ELEVATION NUT (SPECIAL)	8
6	PCX13HC06	UPPER FRAME	1
7	PCX13HC07	LEFT SIDE PANEL	1
8	PCX13HC08	RIGHT SIDE PANEL	1
9	PCX13HC09	KNOB	2
10A	PCX13HC10	HANDLE BAR	2
11	PCX13HC11	SCREW - HEX BTN HD SOC M6-1.0 X 10	13
12	PCX13HC12	SCREW - PH PAN HDR TAP M3-1.0 X 16	2
13	PCX13HC13	IDLER	3
14	PCX13HC14	IDLER SHAFT	3
15	PCX13HC15	SPINDLE	3
16	PCX13HC16	HEIGHT ADJ SPINDLE	1
17	PCX13HC17	SCREW - HEX SOC HD M5-0.8 X 20	1
18	PCX13HC18	HANDLE ASSEMBLY 18A-18F	1
19	PCX13HC19	BASE	1
20	PCX13HC20	WRENCH HEX	1
21	PCX13HC21	WRENCH TORX	1
22	PCX13HC22	BELT GUARD	1
23	PCX13HC23	SPACER	1
24	PCX13HC24	NYLOCK SCREW SOC SET CUP PT M5-0.8 X 5	1
25	PCX13HC25	CURSOR	1
26	PCX13HC26	PLUNGER PIN	1
27	PCX13HC27	PULLEY - CUTTER HEAD	1
28	PCX13HC28	PLATE	4
29	PCX13HC29	SPRING COIL	1
30	PCX13HC30	SPECIAL WASHER 19.95 X 28 X .5T	4
31	PCX13HC31	SPRING	1
32	PCX13HC32	STEEL BALL Φ8	1
33	PCX13HC33	SPROCKET	4
34	PCX13HC34	SCREW - SPECIAL SEMS M8-1.25	1
35	PCX13HC35	STEP BLOCK	1
36	PCX13HC36	STEP BLOCK BASE	1
38	PCX13HC38	SPECIAL WASHER Φ12.5 X 25.8 X 2T	4
39	PCX13HC39S	DUST HOOD ASSEMBLY #9 12 39 42 203	1
40	PCX13HC40	HOOD DOOR	
41	PCX13HC41	DIRECTIONAL HALF RING	
42	PCX13HC42	VACUUM ADAPTER	



4.4	DCV42LIC44	CRRING FLAT	
44	PCX13HC44	SPRING - FLAT	4
45	PCX13HC45	SCREW - PH BTN HD M5-0.8 X 10	8
46	PCX13HC46	SCREW - PH RND HD M4-0.7 X 10	10
47	PCX13HC47	SCREW - PH HD TRUSS M5-0.8 X 8	3
48	PCX13HC48	DUST CHUTE PLATE	1
49	PCX13HC49	SCREW - NYLOCK SOC SET CUP PT M5-0.8 X 8	1
50	PCX13HC50	SCREW - PAN HD M5-0.8 X 8	1
51	PCX13HC51	CORD CLAMP	2
52	PCX13HC52	SCREW - HEX SOC HD LOCK M4-0.7 X 10L	2
53	PCX13HC53	WASHER - FLAT Φ4.1 X 8 X .8t	2
54	PCX13HC54	WASHER - FLAT Φ8 X 18 X 2T	1
55	PCX13HC55	SCREW - HEX BTN HD M8-1.25 X 20	1
56	PCX13HC56	GEAR INTERMEDIATE	1
57	PCX13HC57	RETAINING RING EXT E7	1
58	PCX13HC58	GEAR SPINDLE	1
59	PCX13HC59	RING RETAINING EXT STW8	1
60	PCX13HC60	FEED RATE SELECTOR	1
61	PCX13HC61	KEY 5 X 5 X 12	1
62	PCX13HC62	SPLINED SPINDLE	1
63	PCX13HC63	BEARING RETAINER	1
64	PCX13HC64	WASHER - FLAT 6.5 X 13 X 12T	1
65	PCX13HC65	MOTOR PULLEY	1
66	PCX13HC66	V BELT - 135J6	1
67	PCX13HC67	NUT - HEX M16-2.0	1
68	PCX13HC68	BALL BEARING 6203ZZ	2
69	PCX13HC69	CUTTER INSERT 14 X 14 X 2MM	26
70	PCX13HC70	SPIRAL CUTTER HEAD ASSY (27, 61, 63, 65, 67, 68, 101)	1
71	PCX13HC71	SCREW - TORX M5-0.8 X 15.6	26
72	PCX13HC72	NUT - HEX SPECIAL M8-1.25 X 13	1
73	PCX13HC73	ROD STOP	1
74	PCX13HC74	NUT - HEX M5-0.8	1
75	PCX13HC75	SCREW - HEX HD M5-0.8 X 25	1
76	PCX13HC76	SCREW M5-0.8 X 6	8
77	PCX13HC77	SCREW - PAN HD M3-0.5 X 20	2
78	PCX13HC78	SCREW - HEX SOC BTN HD M5-0.8 X 12 SPECIAL	8
81	PCX13HC81	DEPTH OF CUT INDICATOR ASSEMBLY (79, 86)	1
87	PCX13HC87	SCREW- PH RND HD TRI-LOBULAR THREAD M5-0.8 X 8	2
88	PCX13HC88	LOCK WASHER EXT M5	2
89	PCX13HC89	FEED RATE LABEL	1
90	PCX13HC90	C-RING STW15	4
91	PCX13HC91	SPROCKET	3



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91A	PCX13HC91A	SPROCKET	
92	PCX13HC92	CHAIN	2
93	PCX13HC93	SPRING LEFT	2
94	PCX13HC94	BLOCK BEARING	4
95	PCX13HC95	OUTFEED ROLLER	1
96	PCX13HC96	SPRING RIGHT	2
97	PCX13HC97	RETAINER PLATE	4
98	PCX13HC98	SCREW - HEX SOC HD CAP M5-0.8 X 10	8
99	PCX13HC99	INFEED ROLLER	1
102	PCX13HC101A	GEAR BOX COMBINATION (90, 102, 106, 107, 108, 112, 114, 120, 125, 127)	1
113	PCX13HC113	SCREW - HES SOC SEMS M5-0.8 X 45	
115	PCX13HC115	SPACER 15 X 20 X 8.5	1
116	PCX13HC116	SCREW - HEX SOC HD M5-0.8 X 12	11
117	PCX13HC117	GUIDE RAIL	2
118	PCX13HC118	WEAR PLATE	1
119	PCX13HC119	TABLE	2
128	PCX13HC128	SCALE	1
129	PCX13HC129	SPACER	4
130	PCX13HC130	FOAM SEAL	1
131	PCX13HC131	SCREW - HEX SOC HD SEMS M4-0.7 X 8 WITH 10 X0.8T	2
132	PCX13HC132	CONNECTING ROD	1
133	PCX13HC133	GEARBOX COVER	1
134	PCX13HC134	SCREW - PAN HD M5-0.8 X 10	3
136	PCX13HC136	BOLT - SLOTTED M10-1.5 X	4
137	PCX13HC137	NUT - HEX M8-1.25 X 13	4
140	PCX13HC140	BOLT - HEX HD M6-1.0 X 25	4
141	PCX13HC141	NUT - HEX M6-1.0	4
143	PCX13HC143	WASHER - FLAT Φ4.2 X 15 X 2T	4
144	PCX13HC144	SCREW - HEX SOC HD CAP M4-0.7 X 12	1
146	PCX13HC146	CHAIN	3
147	PCX13HC147	SCREW - HEX SOC HD CAP M5-0.8 X 25	4
155	PCX13HC155	WASHER - FLAT Φ10.0 X 18 X 1T	4
164	PCX13HC164	WASHER - FLAT 19.8 X 23.5 X 0.8T	1
250	PCX13HC250S	MOTOR ASSY (250, 281)	1
253	PCX13HC253	BRUSH HOLDER	2
254	PCX13HC254	BRUSH	2
255	PCX13HC255	BRUSH CAP	2
273	PCX13HC273	SWITCH HY18-49	1
274	PCX13HC274	KEY	1
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#### Craftex Machinery Warranty

Busy Bee Tools warrants every Craftex machine to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers **two years** for Craftex machines and **three years** for Craftex CX-Series Machines 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 Busy Bee Tools reserves the right to inspect and and all itemsbefore a refund or replacement may be issued. A Machinery Return Form must be filled out by the original purchaser requesting a 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 etc...

Busy Bee Tools 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 Machine, a Machinery Return Form must be filled out by the original purchaser requesting a return. 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. You can find the part number in the back of your owners manual under the parts list & exploded diagram.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling
- A Machinery Return Form must be filled out by the original purchaser requesting a return and it
  must be approved by Busy Bee Tools in writing before accepting a return
- 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. Incurred shipping and handling charges are not refundable.
- Busy Bee Tools 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 Tools 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 Tools 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.
- Replacement motors purchased from Busy Bee Tools carry a 90 manufactures defect warranty
- The Busy Bee Tools 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 Tools representative will provide you with the necessary
  information to have this done.

