



CX504

26" DRUM SANDER

USER MANUAL



TABLE OF CONTENTS

General Safety Instructions	3
Specific Safety Instructions.....	4
Features	5
Physical Features.....	6
Unpacking	7
Setup	7
Proper Grounding.....	7
Crank Handle.....	8
Control Panel.....	8
Pressure Rollers.....	8
Pressure Rollers.....	8
Sand Paper Replacement	9
Conveyor Belt.....	9
Basic Controls	10
Test Run.....	10
Table Height Adjustment	11
Connecting to a Dust Collector	11
Sanding Tips.....	11
Maintenance	12
Cleaning	12
Lubrication.....	12
Parts Diagram.....	13-16
Parts List	17-20
Warranty.....	21

GENERAL SAFETY INSTRUCTIONS

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

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

CX504 - 26" DRUM SANDER

SPECIFIC SAFETY INSTRUCTIONS

- ⚠ **MAKE SURE** the sander is connected to the matched and specific power source instructed in the manual.
- ⚠ **ALL THE GUARDS** must be in place while operating the sander to ensure safety.
- ⚠ **MAKE SURE** before making any adjustments, the switch is in the "OFF" position and the cord is un-plugged from the power source.
- ⚠ **NEVER** sand more than one work piece at a time on this sander.
- ⚠ **DO NOT** wear loose clothing and jewelry while operating this sander.
- ⚠ **KEEP YOUR WORK AREA CLEAN.** Cluttered areas and workbenches increase the chance of accident.
- ⚠ **NEVER LEAVE** the sander unattended while it is running.
- ⚠ **KEEP CHILDREN AWAY.** All visitors should be kept at a safe distance from the work area.
- ⚠ **DO NOT** force the sander. It will do the job better and will be safer at the operating rate for which it is designed.
- ⚠ **ALWAYS** wear a dust mask and safety glasses while operating the sander. The tiny dust particles produced by the sander can cause serious health problems.
- ⚠ **ALWAYS** inspect stock for staples, nails knots or any other foreign material before sanding.
- ⚠ **ALWAYS** operate the sander in a well-ventilated area and use a dust collection system for dust removal whenever possible.
- ⚠ **ALWAYS** hold the work piece firmly when sanding. When not using the table, i.e. sanding free-hand, grip the work piece with both hands.
- ⚠ **USE THE STOP FENCE** when performing horizontal sanding on the belt sander.
- ⚠ **MAINTAIN AND SERVICE** your sander regularly as instructed in the user manual.
- ⚠ **MAKE SURE** you have read and understood all the safety instructions in the manual and you are familiar with your CX504 sander, before operating it. If you fail to do so, serious injury could occur.

WARNING!

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



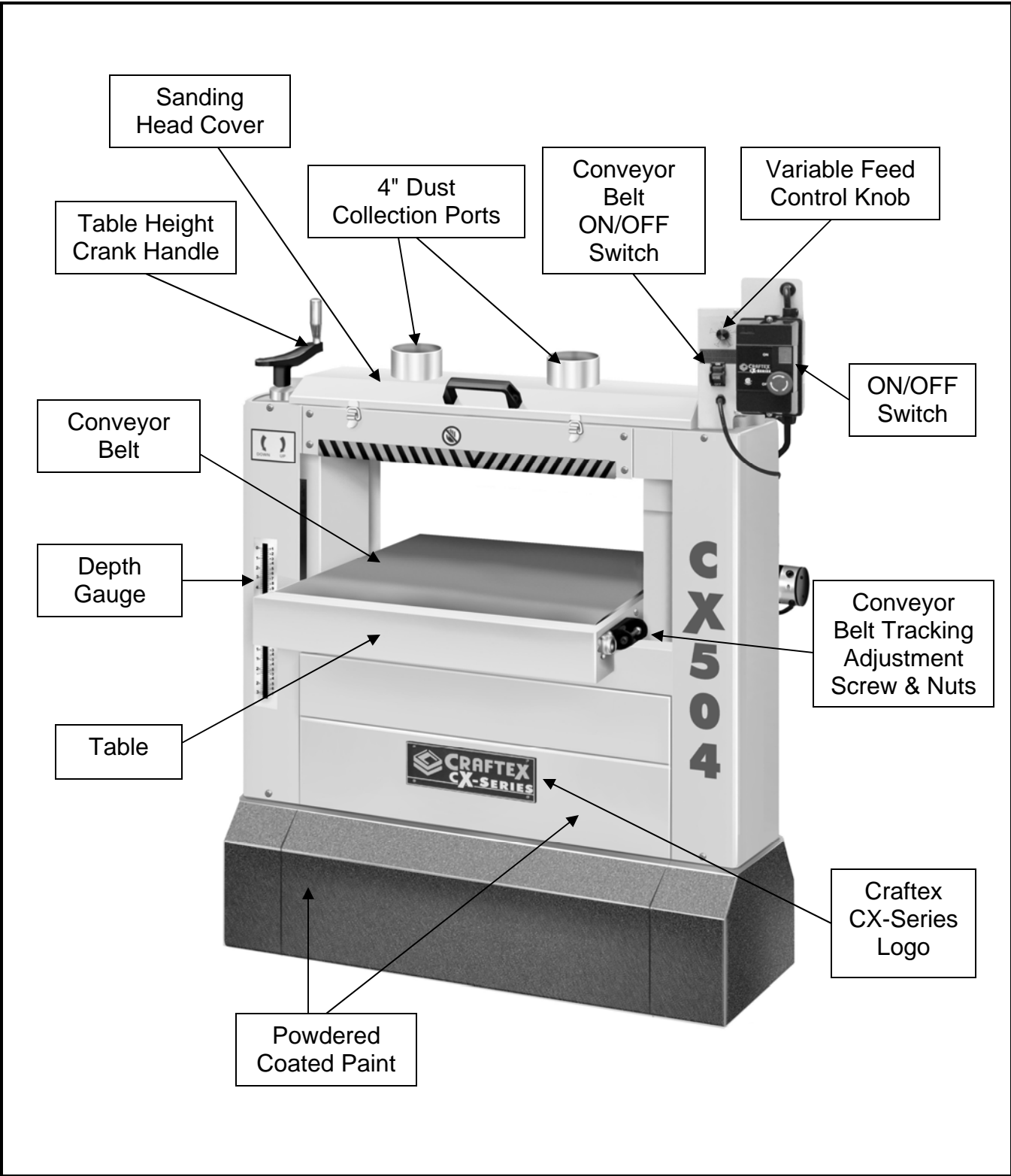
CX504 FEATURES

MODEL CX504 – 26” DRUM SANDER

As part of the growing line of Crafter CX-Series woodworking equipment, we are proud to offer CX504 a 26” Drum Sander. By following the instructions and procedures laid out in this user manual, you will receive years of excellent service and satisfaction. The CX504 is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

- ❖ Motor 3-HP 220-Volt, 60-Hz, Single Phase
- ❖ Belt Feed Motor 1/4-HP, 220V, Single Phase
- ❖ Maximum Sanding Width..... 26"
- ❖ Maximum Board Thickness . 12"
- ❖ Minimum Board Thickness .. 1/4"
- ❖ Minimum Board Length 5"
- ❖ Feed Speed 3, 8, 12, 16 and 20 SFPM
- ❖ Number of Sanding Drums .. Two
- ❖ Drum Speed 1,600 RPM
- ❖ Dust Ports..... Two 4" Each
- ❖ Dimensions..... Length 46" x Width 30-1/2" x Height 49"
- ❖ Weight 486 lbs
- ❖ Powder Coated Paint..... Yes
- ❖ Warranty 3 Years

CX504 –DRUM SANDER PHYSICAL FEATURES



UNPACKING

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

SETUP

The unpainted surfaces of the tables are coated with a protective coating which prevents rust. Clean this protective coating using a rag with kerosene or painter thinner before starting assembling the machine.

When setting up your machine, you will want to find an ideal spot where your planer will most likely be positioned most of the time. Consider your complete work environment as well as working comfortable with the sander before placing your machine in the ideal spot.

WARNING!

The CX504 is a heavy machine. Do not over-exert yourself. Use a fork truck or a lifting hook when lifting the machine.

PROPER GROUNDING

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

CX504 is for use on a normal 220 volt circuit. Make sure that the machine is connected to an outlet having the same configuration as the plug. If an adaptor plug is used, it must be attached to the metal screw of the receptacle. To prevent electrical hazards, have a qualified electrician ensure that the line is properly wired.

The sander should be wired with a plug having 3 prongs to fit a 3 prong grounded receptacle as shown in figure-1. Do not remove the grounding prong to fit it into a 2 pronged outlet.

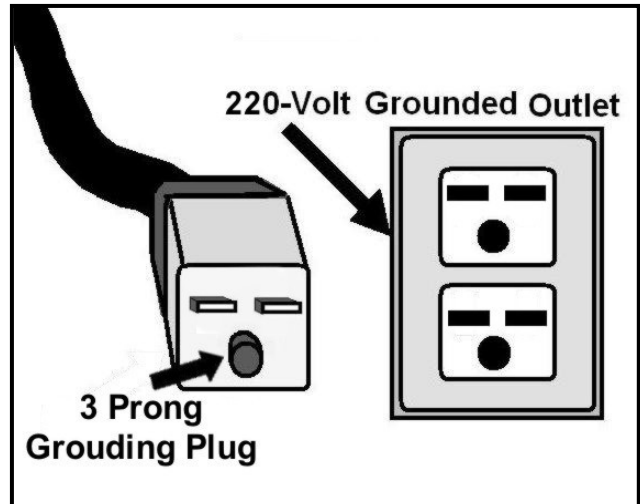


Figure-1 220-Volts outlet for CX504

WARNING!

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

It is strongly recommended not to use extension cords with your CX504. Always try to position your machine close to the power source so that you do not need to use extension cords.

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

CRANK HANDLE

The crank handle can be installed on either right side or left side of the machine but we recommend installing the crank handle on the left side of the machine. If you install the handle on the right side of the machine, it will come in contact with the control panel.

Attach the crank handle on the left side of the machine and secure it by tightening the set screw shown in figure-2.



Figure-2 Installing the crank handle

CONTROL PANEL

The CX504 control panel is installed on the right side of the machine. Attach the control bracket to the machine and secure it using screws and washers provided. See figure-3.



Figure-3 Installing the control panel

PRESSURE ROLLERS

The CX504 features 3 pressure rollers located beside the drums. The pressure on the rollers is also effected by the drum height. Make sure the pressure rollers are adjusted according to the height of the drums.

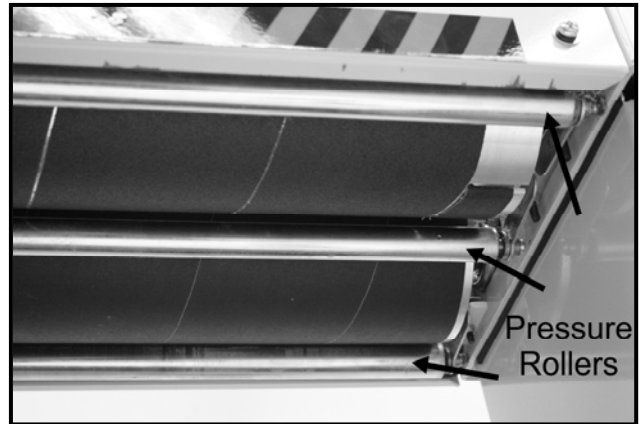


Figure-4 Pressure rollers

To adjust the pressure rollers:

Make sure the cord is disconnected from the power source.

Remove the sanding head cover. Use a Philips screw driver and rotate the adjustment screws shown in figure-5 to adjust the pressure on the rollers.

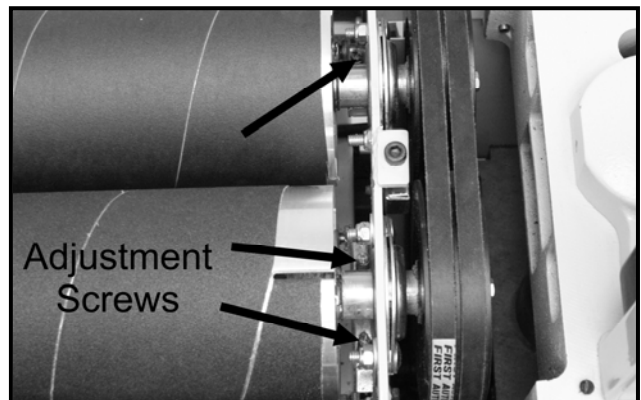


Figure-5 Adjusting the pressure rollers

SAND PAPER REPLACEMENT

The CX504 is designed for 6" wide sand paper rolls. When installing sanding paper, make sure the clip is holding the sanding paper properly providing a smooth sanding surface.

To change the sand paper roll:

Disconnect the machine from the power.

Remove the sanding head cover.

Push and open the spring clip on both sides of the drum and remove the old sand paper.

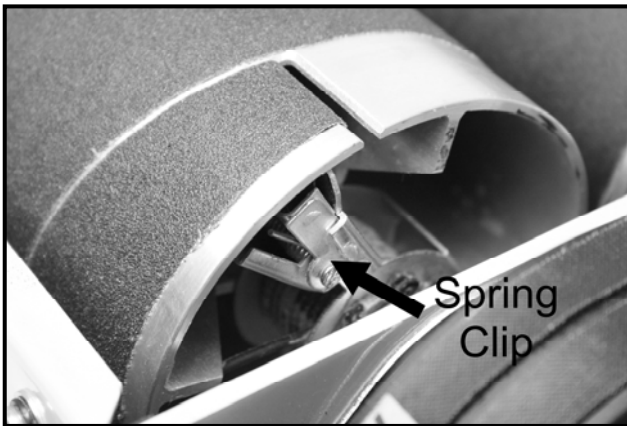


Figure-6 Spring clip holding the sand paper

Cut a pieces of 6" sand paper of the desired grit and fold the corner of the sand paper into the spring clamp.

Get the help of an assistant to roll the drum and tightly spiral the sand paper onto the drum. Try to leave a space of 3/16" between the spirals and make sure there are no bubbles or overlapping edges.

Secure the other corner of the sand paper into the spring clip. Repeat the above steps for the second drum.

CONVEYOR BELT

Conveyor belt tension and tracking are controlled by the adjustment screws located on the conveyor rollers, on front of the machine shown in figure-7.

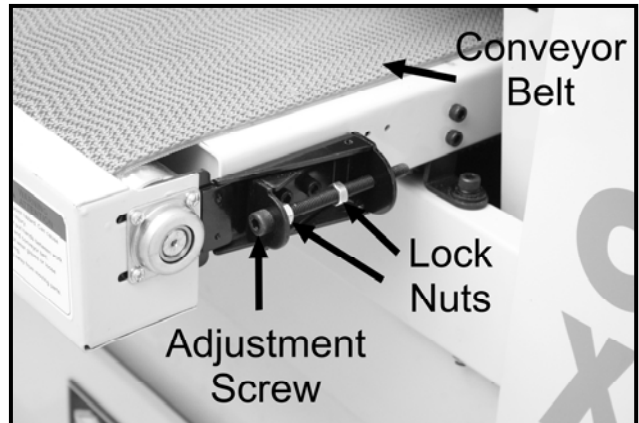


Figure-7 Conveyor belt controls

To adjust the conveyor belt:

Loosen the lock nuts shown in figure-7.

Connect the cord to the power outlet and turn the sander ON.

Turn the adjustment screws on both side of the conveyor belt clockwise to move the belt to the right and anti-clockwise to move the belt to the left.

Let the machine run for a few minutes and carefully observe the conveyor belt. If the belt is slipping, repeat the steps above until the belt is tracking on the center of the rollers.

CONTROL PANEL

This section tells you about the control panel on your CX504. The control panel is installed on the front side of the machine to the right. Make sure to familiarize yourself with the control panel on your machine before operating it.

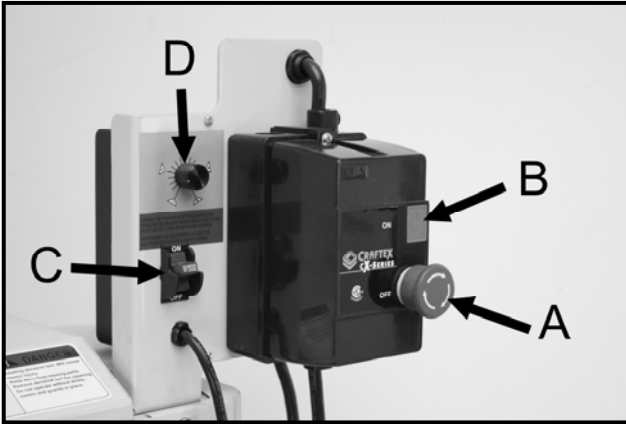


Figure-8 Control panel

A. OFF BUTTON

Turns the sander OFF.

B. ON BUTTON

Turns the sander ON.

C. CONVEYOR BELT ON/OFF SWITCH

Turns the conveyor belt ON and OFF.

D. VARIABLE FEED CONTROL KNOB

Allows you to control the feed rate from 3 to 20 FPM.

WARNING!

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

TEST RUN

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

TO TEST RUN THE CX504:

1. Make sure you have read the manual and understood all the safety instructions given in it.
2. Remove all the tools and objects from the machine, used during set up and assembly.
3. Connect the power cord to the matched outlet and push the ON button (green) on the switch box.
4. Turn the conveyor belt ON/OFF switch to ON position and turn the variable feed control knob slowly from 3 to 8 and then to 12 and verify that the conveyor belt is speed is increasing.

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

5. Now, push the red button and it should turn the machine OFF.

TABLE HEIGHT ADJUSTMENT

The CX504 features a table height crank handle which allows you to raise or lower the table to desired height.



Figure-9 Table height crank handle

The table height scale shows the height of the table and helps setting the depth of cut.



Figure-10 Table height scale

CONNECTING TO A DUST COLLECTOR

The CX504 is equipped with two 4" diameter dust chutes to connect to a dust collector. When connecting to a dust

collector, use a proper sized hose and make sure all the connections are sealed tightly. It is recommended to use a proper sized dust collector with the CX504 to ensure adequate dust collection.

WARNING!

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



Figure-10 Dust ports on CX504

SANDING TIPS

Sanding with CX504 is very simple and easy. When sanding, a normal cut under most sanding conditions is not more than 1/64". If you adjust the table to remove more than that, it can cause jamming, tear outs, belt slippage and etc. When sanding a wide stock, send it two or three times without adjusting the table height to ensure a smooth and clean finish.

MAINTENANCE

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

WARNING!

Make sure the machine's power switch is OFF and the cord is disconnected from the power source when installing / removing any part or servicing the sander.

Check your machine daily for the following before use:

- Damaged or worn sanding belt
- Damaged or worn power cord
- Loose mounting nuts, bolts, and parts
- Any other unsafe condition

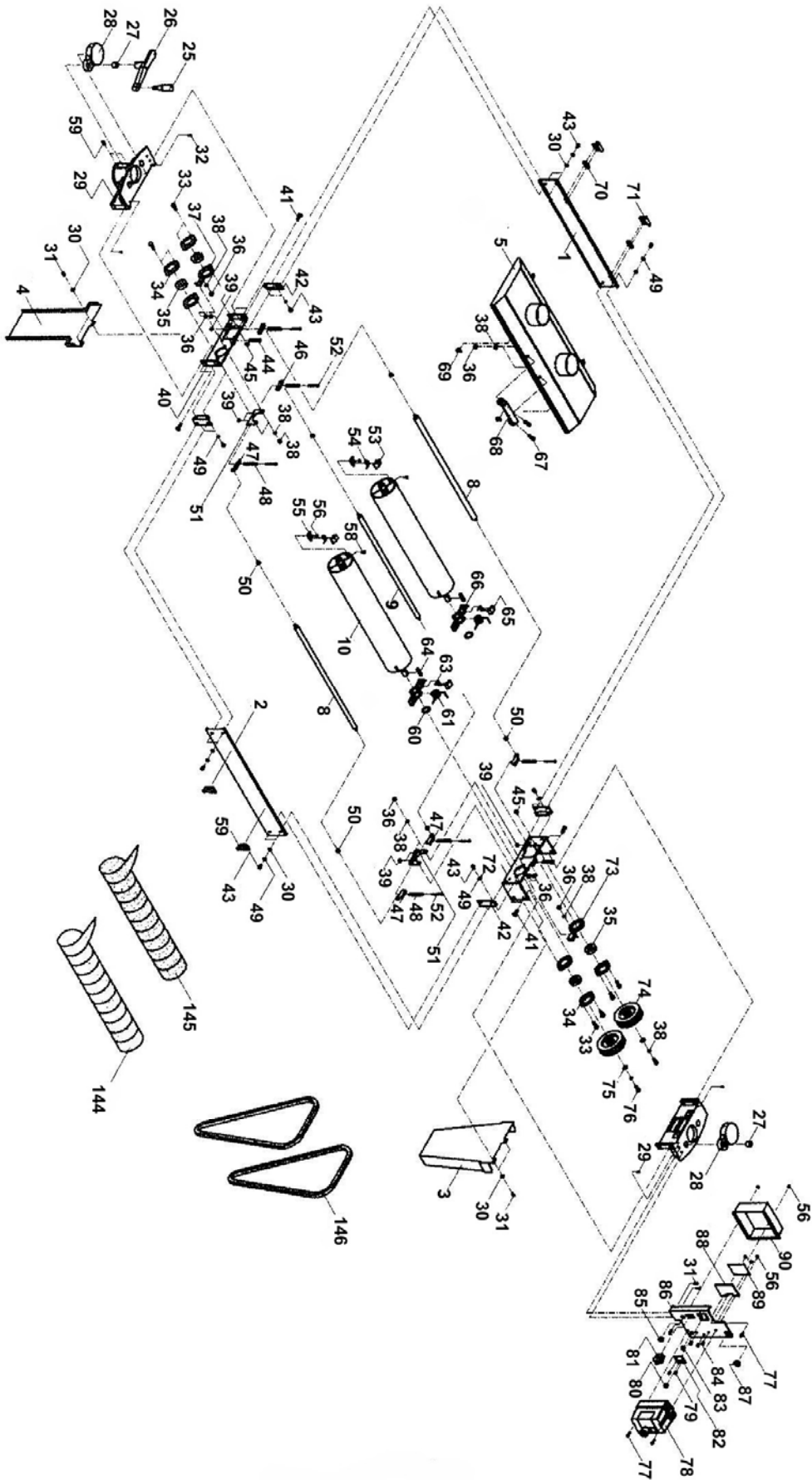
CLEANING

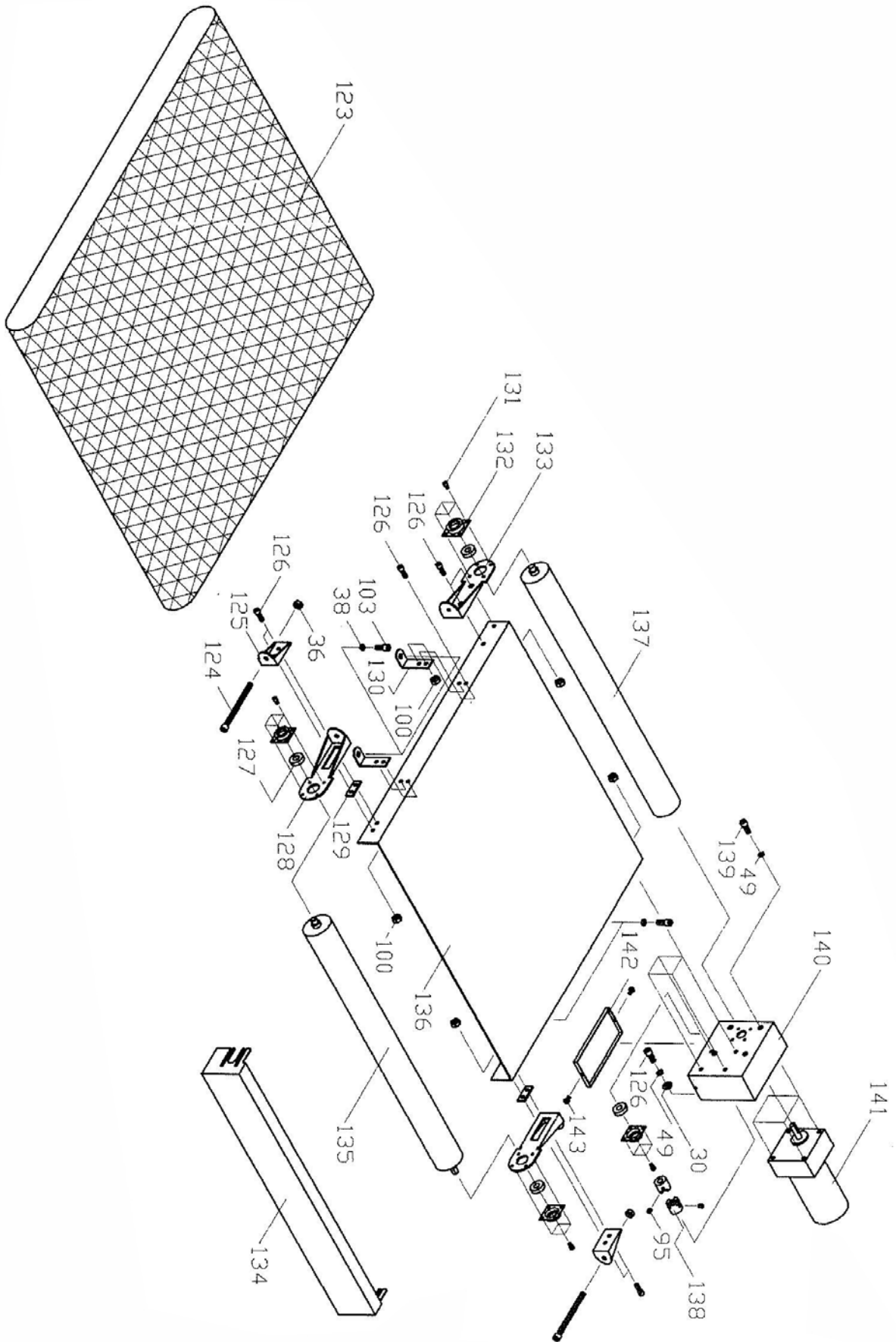
The moisture from the wood dust remaining on the conveyor belt and other parts of the machine. The table and other unpainted surfaces of the machine should be cleaned and wiped after every use to make sure there is no moisture against bare metal surfaces.

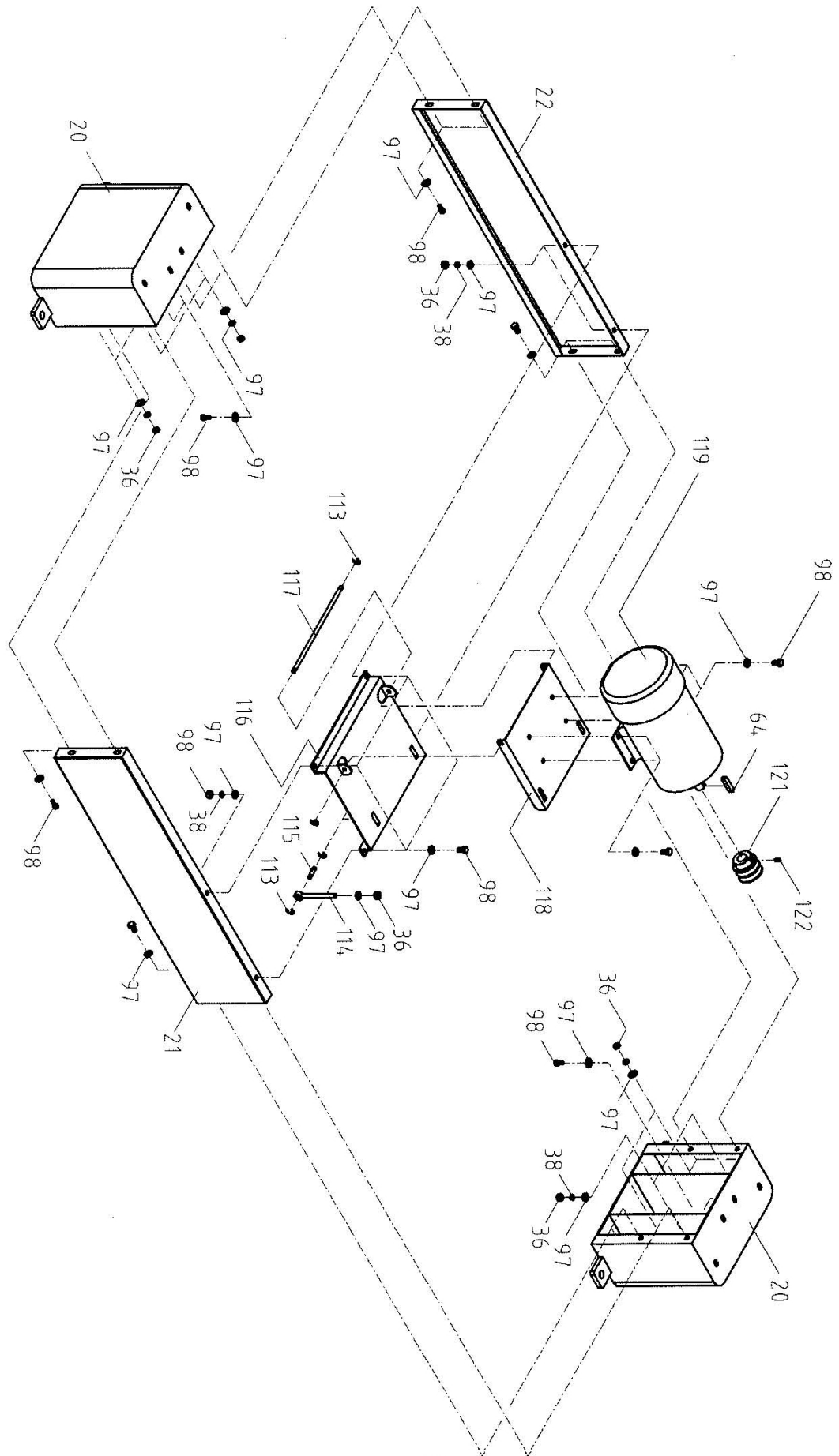
LUBRICATION

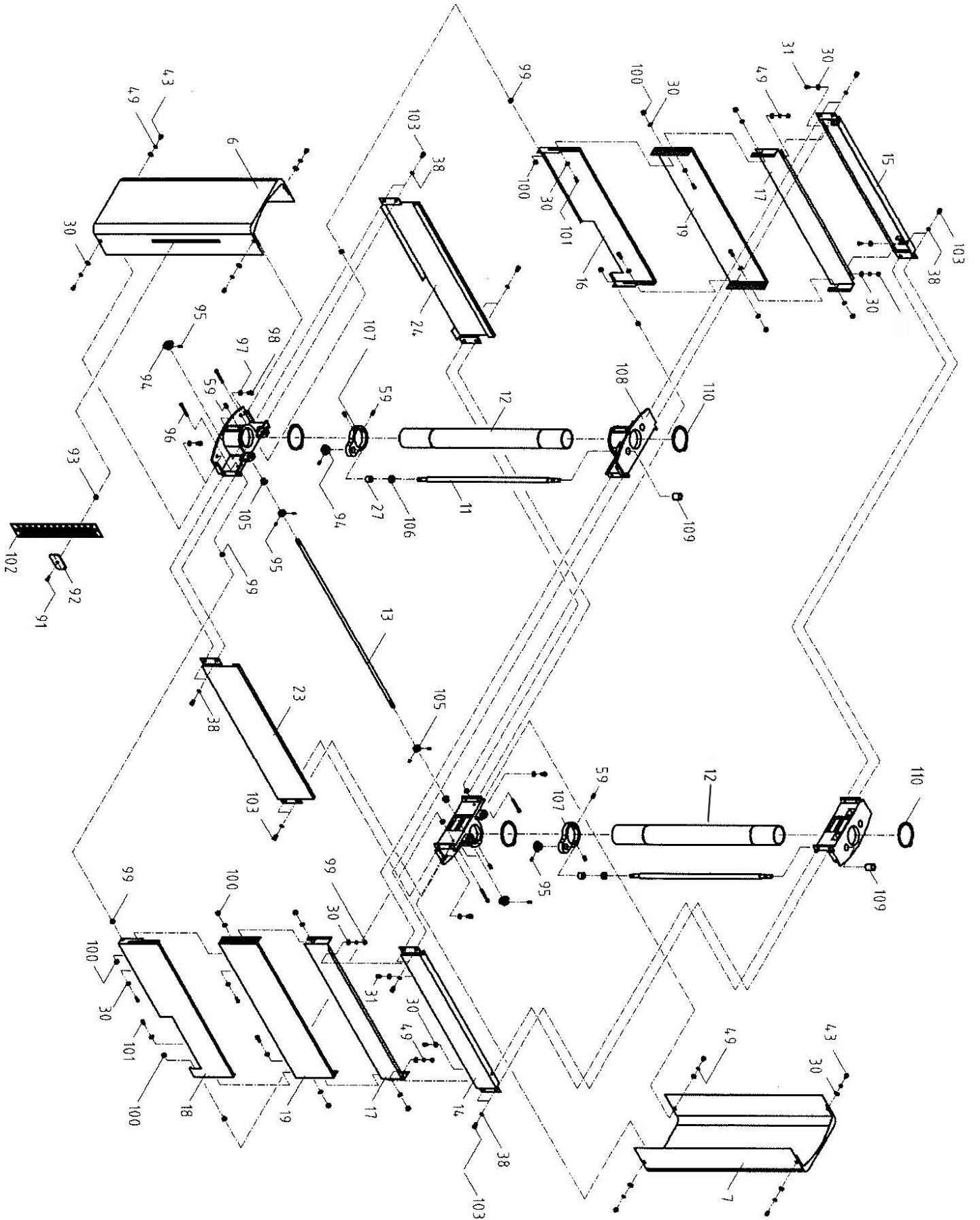
The height adjustment screw shafts, located on either end of the machine must be well lubricated with grease at all times.

CX504 PARTS DIAGRAM









CX504 PARTS LIST

Part No.	DESCRIPTION	Ref No.	QTY.
1	Dust Hood Fix Plate	21500001	1
2	Stopper	21500002	1
3	Pulley Guard	21500003	1
4	Post Guard	21500004	1
5	Dust Guard	21500005	1
6	Cover (Left)	21500006	1
7	Cover (Right)	21500007	1
8	Pressure Shaft	21500008	1
9	Shaft	21500009	2
10	Drum	21500010	2
11	Screw	21500011	2
12	Post	21500012	2
13	Transmission Roller	21500013	1
14	Table Support (Front)	21500014	1
15	Table Support (Rear)	21500015	1
16	Bottom Shield Plate (Rear)	21500016	1
17	Shield Plate	21500017	2
18	Bottom Shield Plate (Front)	21500018	1
19	Movable Shield Plate	21500019	2
20	Stand	21500020	2
21	Portition Plate (Rear)	21500021	1
22	Portition Plate (Front)	21500022	1
23	Front Cover	21500023	1
24	Rear Cover	21200024	1
25	Handle Knob	10105056a	1
26	Handle	20900029	1
27	Bronze Collar Cover	20900028	1
28	Post Cover	20900026	2
29	Upper Bracket	20900014	2
30	Flat Washer 1/4"x13x1	S0210401	40
31	Hex. Head Bolt 1/4"-20UNCx3/4"L	S0020412	10
32	Buffer	10101002	2
33	Carriage Bolt 5/16"-18UNCx1"L	S0060510	8
34	Bearing Cap	20703002	6
35	Bearing	C1206205	4
36	Nut 5/16"-18UNC	S0120500a	46
37	Left Micro-Adjusting Bearing Cap	20900006	1
38	Spring Washer ϕ 5/16"	S0230506	58

Part No.	DESCRIPTION	Ref No.	QTY.
39	Nylon Nut M5x0.8	S1020500M	16
40	Left Bearing Housing	20900004	1
41	Flat Cross Hed Screw 5/16"-18UNCx1"L	S0040307	8
42	Angle Plate	20900009	4
43	Round Head Screw 1/4"-20UNCx3/8"L	S0030405	24
44	Micro-Adjusting Screw	20900007	2
45	Nylon Nut ϕ 5/16"-18UNC	S0120201	2
46	Right Pressure Plate	20702026	3
47	Left Pressure Plate	20702027	3
48	Spring	20900069	6
49	Spring Washer ϕ 1/4"	S0230400	22
50	Pressure Shaft Bronze Cover	20701006	6
51	Pressure Plate Bracket	20900002	2
52	Round Head Screw M5x0.8x80L	S0030580M	6
53	Fixed Clamp	20703014B	2
54	Fixed Clamp Spring	20703014C	2
55	Fixed Clamp Bracket	20703014	2
56	Nut 3/16"-24UNC	S0110300	4
58	Flat Cross Hed Screw 3/16"-24UNCx3/8"L	S0040300	2
59	Hood Latches	20900071	2
60	Ring S28	S0520028	2
61	Pull Clamp Big Spring	20703010A	2
63	Pull Clamp Small Spring	20703014A	2
64	Key 6x6x40	S0430640	3
65	Pull Clamp	20703010B	2
66	Pull Clamp Bracket	20703010	2
67	Hex. Socket Hed. Screw 5/16"-18UNCx3/4"L	S0010502	2
68	Dust Guard Handle	20703016	1
69	Upper Buckle	21200025	2
70	Pad SS41	20900068	2
71	Cover Hinge	20702019	2
72	Right Bearing Housing	20900003	1
73	Right Micro-Adjusting Bearing Cap	20900005	1
74	Driven Roller	20900008	2
75	Flat Washer ϕ 3/8"x23	S0210623	2
76	Left Threaded Screw 5/16"-18UNCx1"L	S0020512L	2
77	Screw 3/16"-24UNCx3/4"L	S0030318	7
78	Magnetic Switch	W0000000	1

Part No.	DESCRIPTION	Ref No.	QTY.
79	Flat Cross Head Screw M5x0.8x15L	S0010515M	2
80	Regulator Knob	40501019	1
81	Safty Switch	W0000001	1
82	Electrical Insulation Board	20701011	1
83	Cord Collar	10401008	1
85	Strain Relief	S1017W-2	1
86	Switch Mounting Plate	20900030	1
87	Strain Relief 6R-3	S1006R-3	1
88	PC Board Fix Plate	40501018	1
89	PC Board	20900073a	1
90	Switch Rear Guard	20900066	1
91	Flat Cross Head Screw 3/16"-24UNCx3/4"L	S00040301	1
92	Indictor	20900045	1
93	Ring	20900081	1
94	Bevel Gear	20900022	4
95	Screw 1/4"-20UNCx1/4"L	S0050404N	10
96	Hex. Head Screw 1/4"-20UNCx2 1/2"L	S0020427	4
97	Flat Washer ϕ 5/16"	S0210500	28
98	Hex. Head Screw 5/16"-18UNCx3/4"L	S0020512a	20
99	Nut 1/4"-20UNC	S0110400	16
100	Nylon Nut 1/4"-20UNC	S0120200	16
101	Hex. Head Screw 1/4"-20UNCx1"L	S0020416	8
102	Graduated Scale	J2120002	1
103	Hex. Socket Head Screw 5/16"-18UNCx1/2"	S0110300	16
105	Positioning Collar	20900024	2
106	Bearing 51102	C5151102	2
107	Screw Holder	20900020	2
108	Slide	20900015	2
109	Screw Bushing	20900019	2
110	Ring S80	S0520080	4
113	Ring E6	S05ETW06	6
114	Screw	20900036	2
115	Positioning Shaft	20900035	2
116	Motor Base	20900031	1
117	Base Shaft	20900034	1
118	Motor Adjustment Plate	20900032	1
119	Motor	M0000000	1
121	Drive Pulley	20900033	1

Part No.	DESCRIPTION	Ref No.	QTY.
122	Screw 1/4"-20UNCx3/8"L	S0050404	1
123	Conveyor Belt	20900061	1
124	Hex. Socket Head Screw 5/16"-18UNCx4"L	S0010503a	2
125	Micro Adjustment Block	20900047	2
126	Hex. Socket Head Screw 1/4"-20UNCx3/4"L	S0010615M	4
127	Bearing 6202	C1206202	4
128	Micro Adjustment Fix Block	20900048	2
129	Pad	20900053	2
130	Table Bracket	20900067	4
131	Round Cross Head Screw 3/16"-24UNCx1/4"	S0030304	16
132	Bearing Cap 6202	20900049	4
133	Positioning Plate	20900051	1
134	Table Guard	20900064	1
135	Conveyor Belt Roller	20900050	1
136	Sanding Belt Platen	20900046	1
137	Conveyor Belt Roller	20900052	1
138	Shaft Joint	20900054	2
139	Hex. Socket Head Screw M6x1.0x16	S0010616M	4
140	Electric Control Box	20900055	1
141	Speed Reduction Motor	M2090002	1
142	Bottom Cover, Electric Control Box	20900056	1
143	Screw 3/16"-24UNCx3/8"L	S0030306	2
144	Sanding Belt P80 5 1/8"x85"L	21500057	1
145	Sanding Belt P120 5 1/8"x85"L	21500058	1
146	Belt 17-650C	V2150001	2
147	Wrench 10/12	S0911012	1
148	Wrench 6mm	S0910104	1
149	Wrench 5mm	S0910103	1
150	Motor Cord	L000000M	1
151	Cord	L000000	1
152	Switch Cord	L2090001	2
153	Two Ends Terminal Cord	L2090002	2
154	Manual	I2150001	1



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.