



CT169N
8" BENCH GRINDER
with 28" x 2" BELT SANDER
User Manual



COPYRIGHT © 2012 BY CRAFTEX INDUSTRIES INC.

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



TABLE OF CONTENTS

General Safety Instructions for Machines	3
Specific Safety Instructions	4
CT169 Features	5
Physical Features	6
Proper Grounding	7
Un-Packing	8
Mounting	8
Eye Safety Shield.....	8
Tool Rests.....	9
Belt Tracking.....	9
Dust Port.....	10
Sanding Arm Angle	10
Test Run	10
Grinding Wheel Inspection.....	11
Grinding Wheel Replacement	11
Sanding Belt Replacement	12
Maintenance	12
Parts Breakdown.....	13
Parts List.....	14
Warranty	15

GENERAL SAFETY INSTRUCTIONS FOR MACHINES

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** wears loose clothing or jewelry when operating your machine. Wear protective hair covering.
- ❖ **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** allow unsupervised or untrained personnel to operate the machine
- ❖ **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 bystanders safely away while the machine is in operation.
- ❖ **NEVER** attempt to remove jammed cutoff pieces until the blade has come to a full stop.

CT169N - 8" BENCH GRINDER w/BELT SANDER SPECIFIC SAFETY INSTRUCTIONS

- ❖ **ALWAYS** read and understand the user manual before operating the grinder.
- ❖ **MAKE SURE** you are wearing safety glasses while operating the grinder or sander. The small particles becoming airborne during operation can seriously damage your eyes.
- ❖ **ALWAYS** wear a dust mask or a respirator while grinding or sanding. The dust produced during operation can lead to serious respiratory problems if inhaled.
- ❖ **MAKE SURE** before making any adjustments, servicing or installing parts, the switch is in the "OFF" position, and the cord is un-plugged from the power source.
- ❖ **MAKE SURE** the RPM of the wheel you are installing on the grinder is equal or higher than the speed of the grinder. Operating wheels at a higher speed than rated for may cause the wheel to lay apart, fly or break and may cause accident.
- ❖ **MAKE SURE** to keep your hands at a safe distance from the wheel.
- ❖ **NEVER LEAVE** the machine unattended while it is running.
- ❖ **MAKE SURE** to do a "ring test" on the grinding wheels before installation. Wheels that do not pass the test are not safe to use. See "page-11 for details.
- ❖ **ALWAYS** stand to the side of the grinder when turning it ON and let the wheel reach full speed. Stand at least one minute to the side of the grinder after startup. A damaged wheel can break apart and fly shortly after starting the grinder.
- ❖ **DO NOT** grind on the side of the wheel, unless the wheel is rated for side grinding.
- ❖ **DO NOT** over-tighten the grinding wheel. Excessive tightening can cause the wheel to crack during operation.
- ❖ **MAKE SURE** you have read and understood all the safety instructions in the manual and you are familiar with your grinder, before operating it. If you fail to follow the instructions given in this user manual, 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.



CT169N – BENCH GRINDER w/BELT SANDER

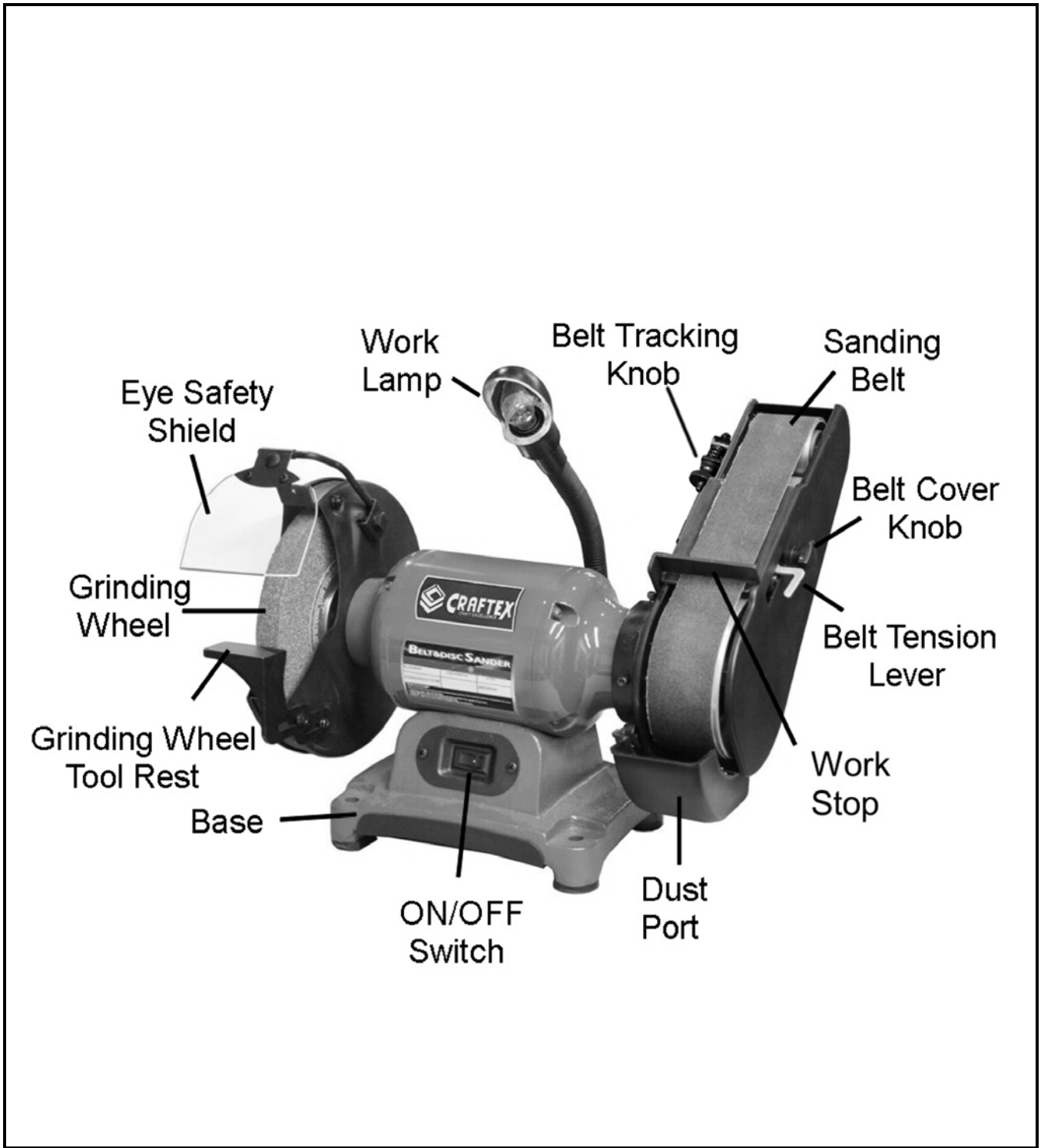
FEATURES

MODEL CT169N – 8” BENCH GRINDER with BELT SANDER

As part of the growing line of Craftex woodworking equipment, we are proud to offer the CT169N, an 8” Bench Grinder with Sander. The Craftex name guarantees Craft Excellence. By following the instructions and procedures laid out in this user manual, you will receive years of excellent service and satisfaction. The CT169N is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

- ❖ Motor 1/2-HP, 120-Volts, Single Phase, 60-Hz
- ❖ No Load Speed..... 3450 RPM
- ❖ Amps 2.5 Amp
- ❖ Grinding Wheel Diameter 8”
- ❖ Grinding Wheel Material Aluminum Oxide
- ❖ Grinding Wheel Grit A 36
- ❖ Sanding Belt Size Length 28” x Width 2”
- ❖ Belt Angle 0 – 90°
- ❖ Dust Port..... 1-1/8”
- ❖ Light Bulb..... 12-V, 10-W
- ❖ Weight 38 lbs
- ❖ Warranty 2 Years

CT169N - 8" BENCH GRINDER WITH BELT SANDER PHYSICAL FEATURES



PROPER GROUNDING

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

Make sure the cord is plugged into a properly installed and grounded power outlet. To prevent electrical hazards, have a qualified electrician ensure that the line is properly wired.

Make sure that the appliance 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.

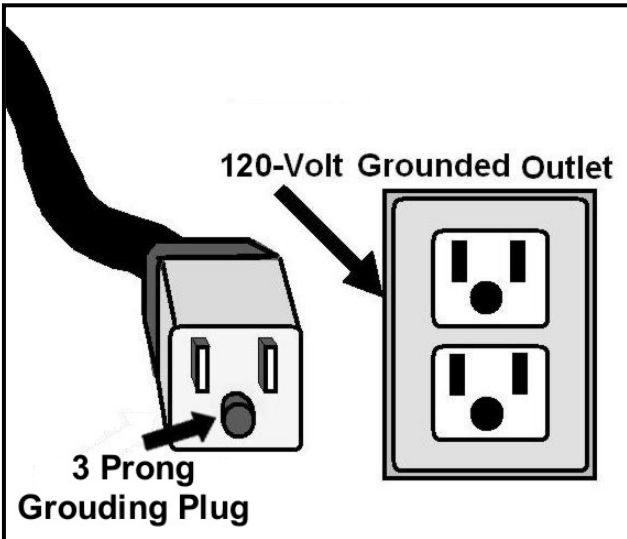


Figure-1 120-Volts outlet for CT169N

It is strongly recommended not to use extension cords with your CT169N. Always try to position your machine close to the power source so that you do not need to use extension cords.

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

WARNING

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

UNPACKING

The machine is properly packaged and shipped complete in a carton for safe transportation. When unpacking, carefully inspect the carton to ensure that nothing has been damaged during transit. Open the carton and check that the grinder and the parts are in good condition.

While doing inventory, if you can not find any part, check if the part is already installed on the machine. Some of the parts come preassembled.

MOUNTING

The CT169N Grinder with Belt Sander weighs 38 lbs. When mounting it on a workbench, make sure the workbench is capable of holding the weight of the machine and the surface of the workbench is level.

The CT169N is provided with 4 pre-drilled holes on its base to allow it to be mounted on a workbench.

To mount the CT169N on a workbench:

Remove the rubber feet from the four mounting holes on the base of the machine.

Place the machine on the workbench and mark using a pencil on the bench surface through the 4 holes on the base.

Remove the machine and drill the 4 holes on the marked points using a proper size drill bit.

Position the machine on the table with the holes on the base aligned with the holes on the workbench.

Use bolts (not provided) that exceed the thickness of the base plus the thickness of the bench top and secure the machine to the workbench.

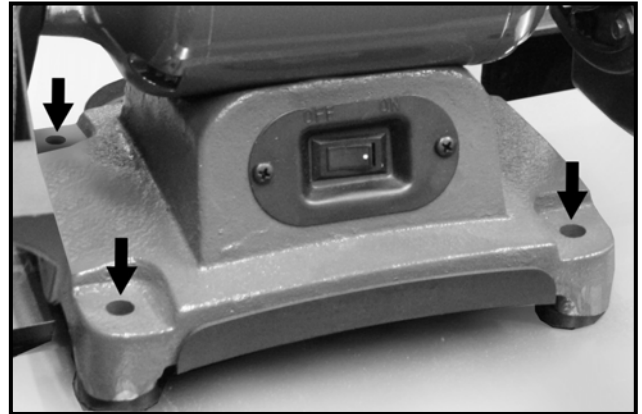


Figure-2 Mounting holes

EYE SAFETY SHIELD

The CT169N is provided with an eye safety shield which is positioned at 1/8" from the grinding wheel to protect the operator's face from the sparks produced on the grinding wheel during grinding.

To install the eye safety shield:

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

Attach the support bracket to the grinder using screw and washer provided. See figure-3.

Attach the eye safety shield to the support bracket as shown in figure-3 using two screws and two nuts provided.

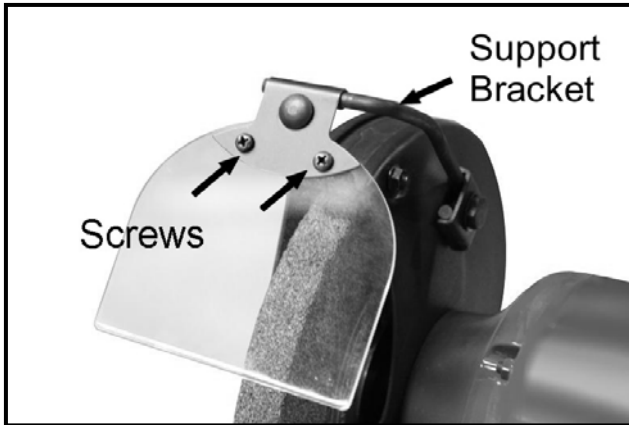


Figure-3 Installing the eye safety shield

TOOL REST / WORK STOP

The tool rest provides a surface that supports the tool during operation. The CT169N is provided with a tool rest for grinding and a work stop for belt sanding.

To install the tool rests:

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

Attach the tool rest/work stop to the grinder so that the tool rests are perpendicular to the belt and to the grinding wheel. Do not tighten the screws at this time. See figure-4.

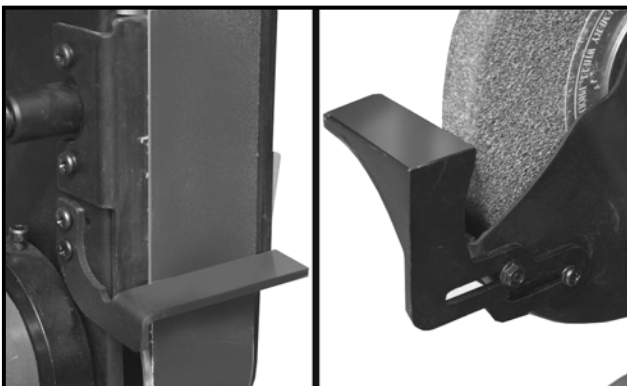


Figure-4 Installing the tool rests

Adjust the tool rests 1/8" to 1/16" away from the belt and the wheel and tighten the screws.

BELT TRACKING

Belt tracking means to adjust the belt so that it rides on, the center of the rollers and does not come in contact with the side covers.

To check if the sanding belt is riding on the center of the wheels, make sure the switch is in the OFF position and the cord is disconnected from the power source.

Turn the grinder wheel with your hand (which moves the sanding belt at the same time) and check where the sanding belt rides on the top roller.

The belt should always be riding on, the center of the rollers. While turning the grinding wheel, turn the belt tracking adjustment knob clockwise or anti-clockwise shown in figure-5 to center the sanding belt on the wheels.

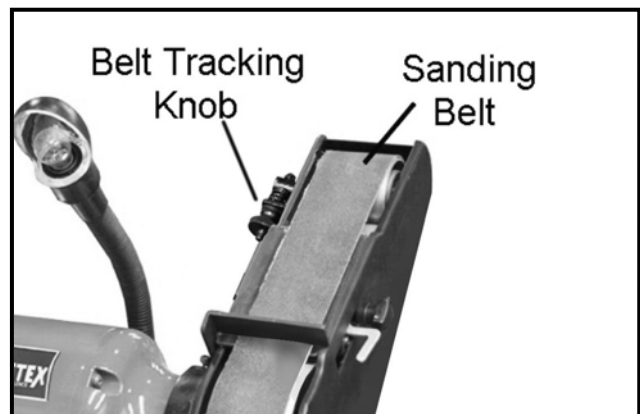


Figure-5 Sanding belt tracking

DUST PORT

CT169N features a 1-1/8" dust port located under the rollers. When connecting to a dust collector, use a proper sized hose and make sure all the connections are tightly sealed.

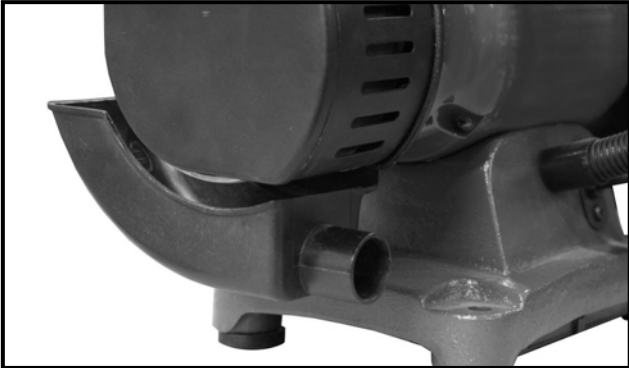


Figure-6 Dust port

SANDING ARM ANGLE

The sanding arm can be tilted through 90° from horizontal to a vertical position.

To move the sanding arm to the desired position:

Turn the switch OFF and loosen the two screws shown in figure-7 and move the sanding arm to the desired position and retighten the screws.

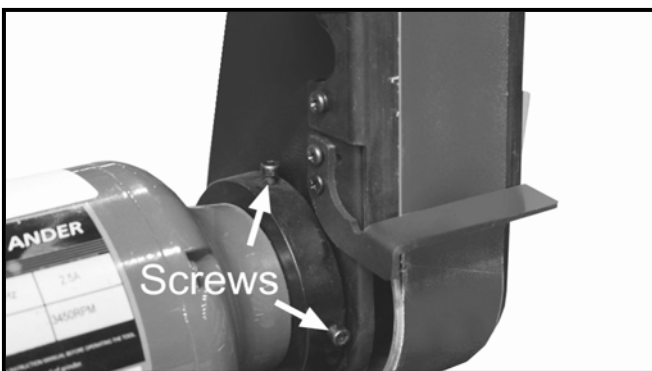


Figure-7 Loosening the screws

TEST RUN

Once you have assembled the machine and verified that grinding wheel is secured and belt is tensioned and tracking properly, it is then time to do a test run and see that the machine powers up and runs properly.

All the tools and objects used for assembling the machine should be removed and cleared away during test run.

During the test run make sure the start/stop button and all the safety features on the machine are working properly.

Connect the machine to the correct power source. Stand to the side of the grinding wheel and start the machine. During the test run if there is any unusual noise or vibration, disconnect the machine from the power source immediately. Check all the parts you have assembled, once again and try to find out the problem.

WARNING

Do not make any adjustments while the machine is running. Turn the machine OFF and un-plug from the power source before making any adjustments. Failure to do so may cause serious personal injury.

GRINDING WHEEL INSPECTION

The CT169N comes with an 8" diameter, A36 grit aluminum oxide grinding wheel. The grinding wheel should be inspected properly before installation.

Clean the dust and/or dirt from the surface of the wheel and inspect it for any cracks, dents, chips, or any kind of external damage.

To inspect the wheel for any internal damages:

Hold the wheel up with a finger through the hole located in the middle of the wheel and tap it using a wooden mallet or a light non metallic object as shown in figure-8.

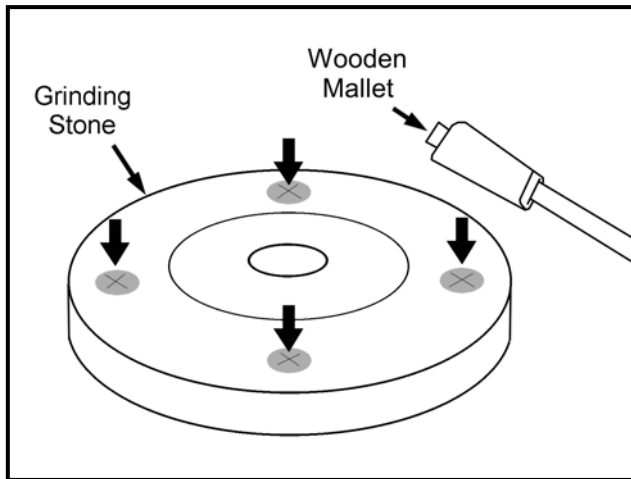


Figure-8 Tapping locations on the grinding stone when inspecting for internal damage

WARNING

Tapping the wheel with heavy or metallic objects can damage the grinding wheel.

GRINDING WHEEL REPLACEMENT

To replace the grinding wheel:

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

Loosen the three screws securing the wheel guard and remove the wheel guard to expose the wheel.

Loosen the nut (shown in figure-9) securing the grinding wheel by holding the wheel with one hand.

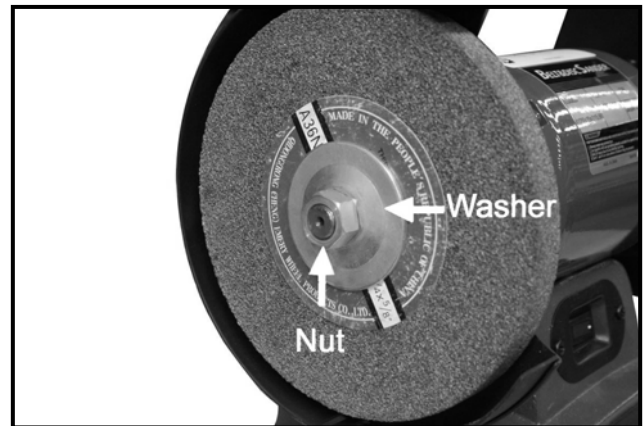


Figure-9 Loosening the nut securing the grinding wheel

Remove the nut, washer, and grinding wheel and replace the wheel with a new one.

Make sure to inspect the new grinding wheel properly before installation.

SANDING BELT REPLACEMENT

To remove and replace the sanding belt:

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

Remove the belt guard by removing the knob securing the belt cover. See figure-10.

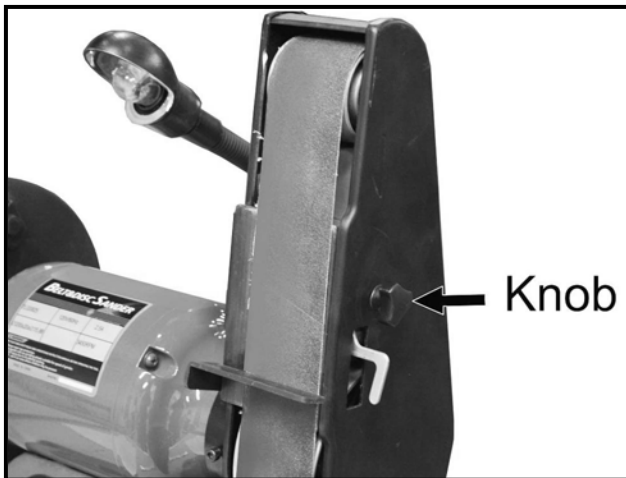


Figure-10 Removing the sanding belt cover

Now, move the belt tension lever up as shown in figure-11 to loosen the tension on the belt.

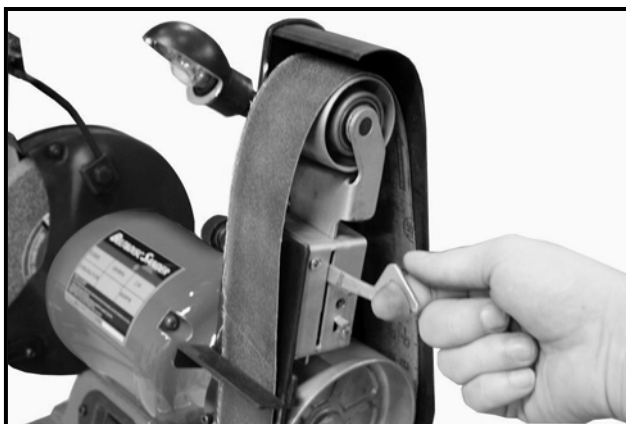


Figure-11 Loosening the tension on the belt

Take the belt off the rollers and replace with a new one.

Move the belt tension lever down to tension the belt and reinstall the belt cover.

Make sure to perform belt tracking adjustment on the when the new belt is installed. For details see “BELT TRACKING” page-9.

MAINTENANCE

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

Check your machine routinely for damaged or loose grinding wheel, worn power cord or worn switch and any loose hardware.

The grinding wheel should be checked regularly from any internal or external damages.

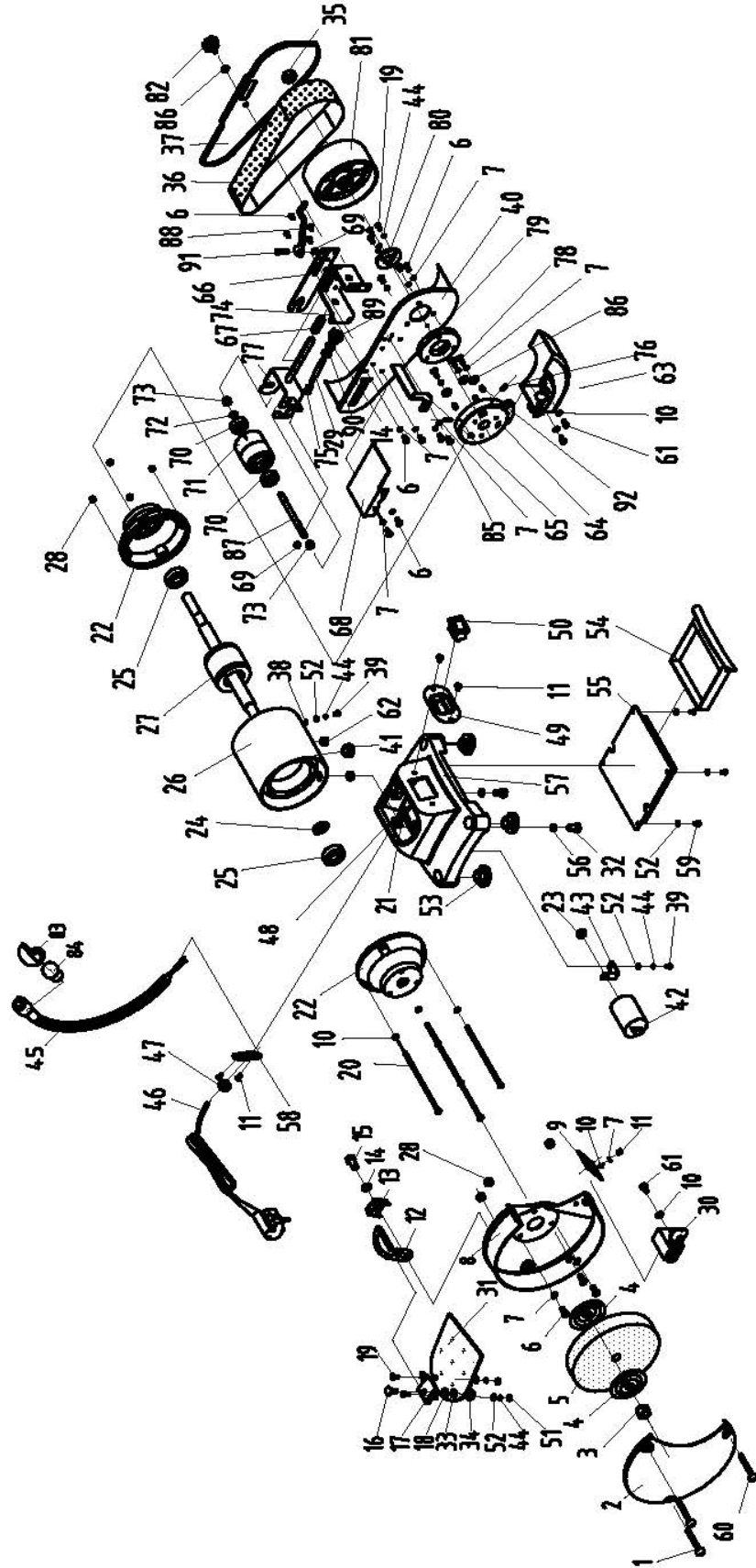
The bearings are pre-lubricated and needs no lubrication.

Clean the wood dust from the sanding belt by using abrasive cleaner against the sanding belt when the machine is moving.

WARNING

Turn the switch OFF and un-plug the cord from the power source before installing, servicing, or doing any adjustments. Failure to do so may cause serious personal injury.

CT169N Parts Breakdown



CT169N Parts List

No	DESCRIPTION	QTY.
1	phlp hd scr M5x42	2
2	left wheel cover	1
3	hex nut type M16 (left side)	1
4	wheel flange	2
5	(36#) grinding wheel 200x20x15.88	1
6	phlp hd scr M5x10	16
7	standard spring ring D5	18
8	left wheel guard	1
9	spark deflector	1
10	flat washer D5	8
11	phlp hd scr M5x8	5
12	left eyeshield mounting rod	1
13	bracket	1
14	flat washer D8	2
15	hex bolt M8x14	1
16	dome screw	1
17	eyeshield plate	1
18	flat washer d6	1
19	phlp hd scr M4x10	5
20	phlp hd scr M5x148	4
21	nut M10x1	1
22	end bell	2
23	hex nut type M8	1
24	wavy washer	1
25	ball bearing	2
26	stator	1
27	rotor	1
28	nut M5	7
29	belt tracking rod	1
30	left work rest	1
31	eyeshield	1
32	hex bolt M8x22	2
33	standard spring ring D6	1
34	hex nut type M6	1
35	nut M12	1
36	sanding belt	1
37	right wheel guard cover	1
38	ext tooth washer D4	1
39	phlp hd scr M4x8	2
40	right wheel cover	1
41	cord bushing	1
42	capacitor	1
43	capacitor support	1
44	standard spring ring D4	7
45	lamp support	1
46	cord & plug	1

No	DESCRIPTION	QTY.
47	cord collar	1
48	standard spring ring D10	1
49	switch plate	1
50	switch	1
51	hex nut type M4	2
52	flat washer D4	8
53	rubber foot	4
54	coolant tray	1
55	plate	1
56	standard spring ring D8	2
57	base	1
58	cord plate	1
59	phlp hd scr M4x6	4
60	phlp hd scr M5x45	1
61	hex bolt M5x10	3
62	sapecial nut	2
63	dust port	1
64	fixed tray	1
65	work table deflector	1
66	fix plate	1
67	compression spring	1
68	work table	1
69	special hex nut M5	2
70	bearing	2
71	drive roller	1
72	circlip for shaft	1
73	driven spindle sleeve	1
74	support assembly	1
75	pullback spring	1
76	set screw M5 x12	2
77	support frame	1
78	phlp hd scr M5x15	3
79	dial	1
80	pressing plate	1
81	driver	1
82	knob M5x18	1
83	lampshade	1
84	bulb	1
85	inner hex head screw M5x12	2
86	big flat washer	4
87	driven shaft	1
88	belt tension handle	1
89	knurl nut M8	1
90	flat washer D8	1
91	iner hex head bolt M5x20	1
92	inner hex head set screw M6x6	3



WARRANTY

CRAFTEX 2 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 **two years** for parts and 90 days for labor (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etceteras.

Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom or call 1-800-461-BUSY. Craftex is a brand of equipment that is exclusive to Busy Bee Tools.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY (2879), and have your credit card and part number handy.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- We do not accept *collect* shipments.
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.

