



CT171

10" WET BENCHTOP GRINDER

User Manual



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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** wear 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.

CT171 - 10" WET BENCHTOP GRINDER

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. The small particles becoming airborne during grinding operation can seriously damage your eyes.
- ❖ **ALWAYS** wear a dust mask or a respirator while grinding. The dust produced during grinding process 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 to or higher than the speed of the grinder. Operating wheels at a higher speed than rated for may cause the wheel to lie apart, fly or break.
- ❖ **MAKE SURE** to keep your hands at a safe distance from the wheel.
- ❖ **NEVER LEAVE** the grinder unattended while it is running.
- ❖ **MAKE SURE** to do a test on the grinding wheels before installation. Wheels that do not pass the test are not safe to use. See page-8 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.
- ❖ **ALWAYS** keep the tool rest within 1/8" distance from the wheel while operating the grinder.
- ❖ **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.



CT171 – WET BENCHTOP GRINDER

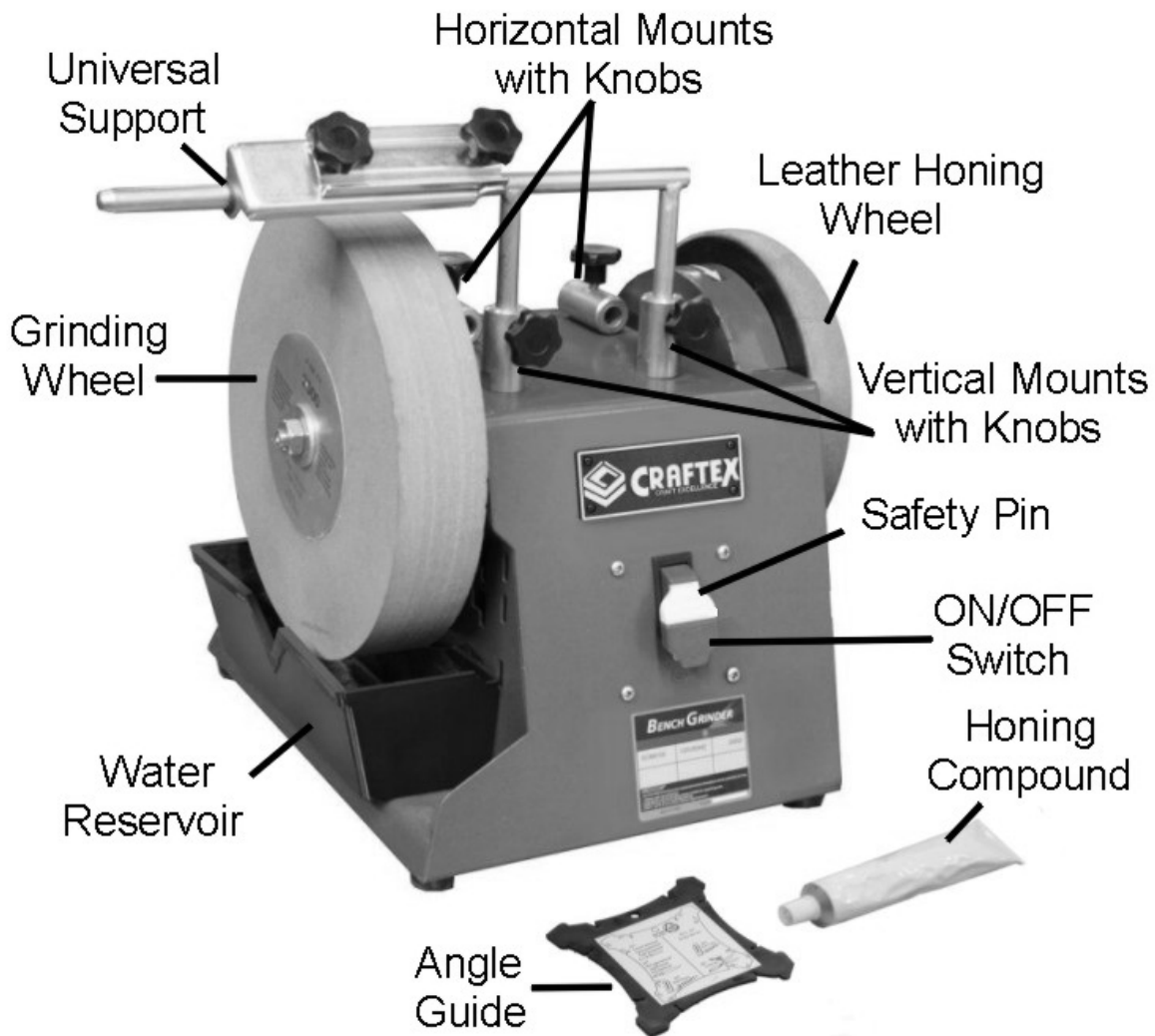
FEATURES

MODEL CT171 - 10" WET BENCHTOP GRINDER

As part of the growing line of Craftex woodworking equipment, we are proud to offer the CT171, a 10" Wet Benchtop Grinder. 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 C171 is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

- Motor 1/4-HP, 110-Volts, Single Phase, 60-Hz, 1725 RPM
- Amps 3 Amps
- Grinding Wheel Diameter 10"
- Grinding Wheel Thickness... 2"
- Grinding Wheel Material Aluminum Oxide
- Grinding Wheel Grit 220
- Arbor Diameter 1/2"
- Stropping Wheel Diameter... 8"
- Stropping Wheel Thickness . 1-3/16"
- Stropping Wheel Material Leather
- Wheel Speed 70 RPM
- Width 17"
- Height 13"
- Weight 42 lbs
- Warranty 2 Years

CT171 - 10" WET BENCHTOP GRINDER 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.

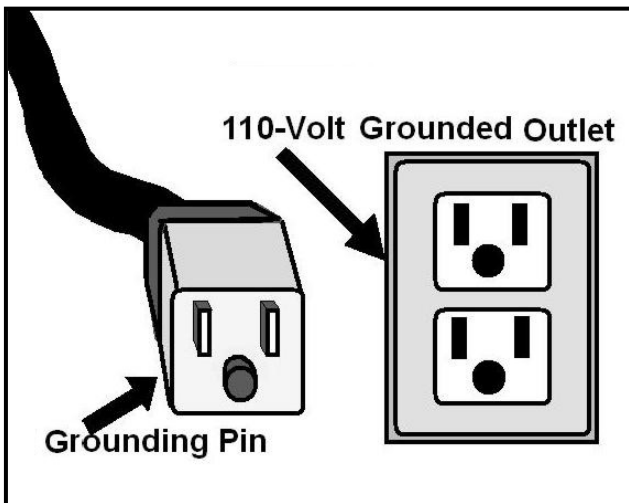


Figure-1 110-Volts outlet for CT171

It is strongly recommended not to use extension cords with your CT171. 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 completely in carton for safe transportation. When unpacking, carefully inspect the carton and 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 with the machine because of shipping purposes.

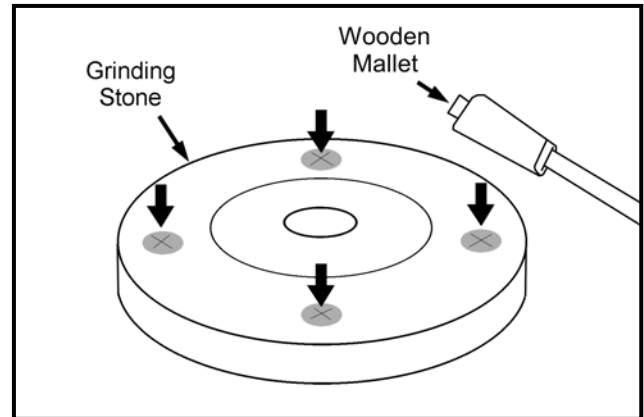


Figure-2 Tapping locations on the grinding stone when inspecting for internal damage

GRINDING WHEEL

The CT171 comes with a 10" diameter, 220 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:

Take 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-2.

WARNING

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

Tapping the wheel with the mallet will create a sound, based on which you will be able to know if the wheel is damaged or not.

If the wheel is undamaged, the sound omitted will have a clear or "ping" sound. If the wheel is damaged the sound will have no clear tone.

GRINDING SURFACE

The grinding surface of the wheel should be parallel with the universal support.

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

Lower the universal support 1/8" above the grinding wheel and check if the grinding surface of the wheel is parallel to the universal support by rotating the wheel slowly with your hands.

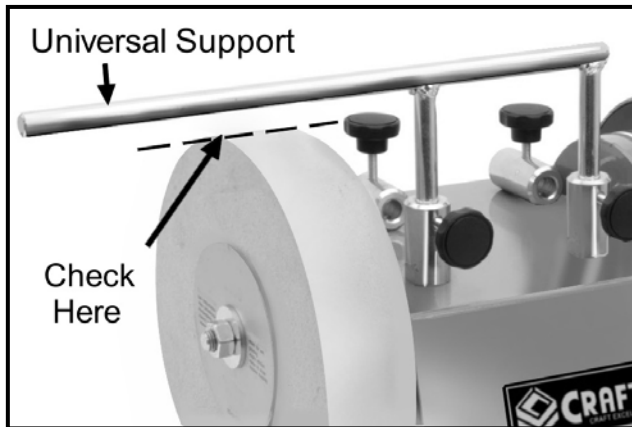


Figure-3 Checking the grinder wheel surface parallelism with universal support

TEST RUN

Once you have assembled and inspected the machine it is then time to do a test run and see if 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.

Connect the machine to the correct power source 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.

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

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.

WATER RESERVOIR

The CT171 is a wet grinder and is equipped with a water reservoir. Do not attempt to perform grinding on this machine without water. If the grinder is used without water, it will either damage the grinding wheel or the tool you are grinding.

The water reservoir is equipped with mounting tabs used to hook to the slots on the grinder body.

The water reservoir can be attached to the lower slots of the grinder body when the grinder is not in use while it is attached to the upper slots, (filled with clean water) when in use.

Make sure not to keep the grinding wheel inside the water when the grinder is not used for a long period of time. Failure to do so, can cause the wheel become unbalanced and break off easily while grinding. The reservoir should be emptied and attached to the lower mounting slots when the grinder is not used.

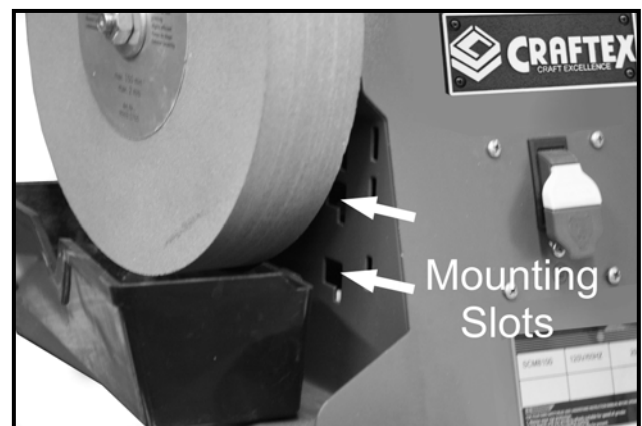


Figure-4 Installing the water reservoir

UNIVERSAL SUPPORT

The CT171 is equipped with a universal support which can be mounted on the grinder in horizontal or vertical position depending on the grinding job. The vertical and horizontal position of the universal support allows grinding with the hand against the rotation of the wheel.

GRINDING WITH THE ROTATION OF THE WHEEL

Grinding with the rotation of the wheel removes small amount of material and provides a smooth result. This method is used for blades, chisels, knives, etc...

To set the universal support for grinding with the rotation of the wheel:

Turn the switch to OFF position and make sure the cord is unplugged from the power source.

Install the universal support through the horizontal mounts on the grinder and secure it by tightening the knobs properly as shown in figure-5.

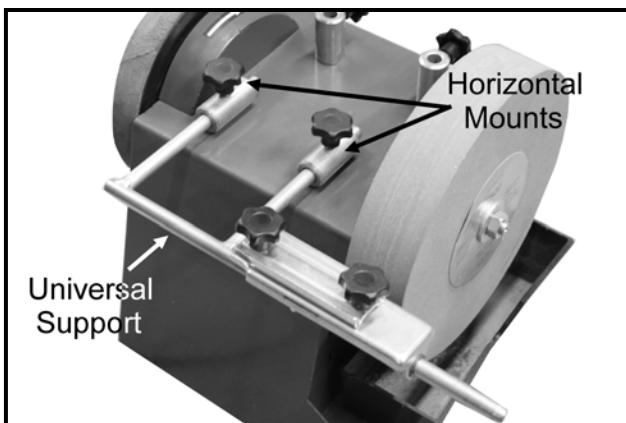


Figure-5 Installing the universal support horizontally for grinding with the rotation of the wheel

GRINDING AGAINST THE ROTATION OF THE WHEEL

Grinding against the rotation of the wheel removes a large amount of material in a very short time and finally the result will not be very smooth. Coarse tools are sharpened against the rotation of the wheel.

To set the universal support for grinding against the rotation of the wheel:

Turn the switch to OFF position and make sure the cord is unplugged from the power source.

Install the universal support through the vertical mounts on the grinder and secure it by tightening the knobs properly as shown in figure-6.

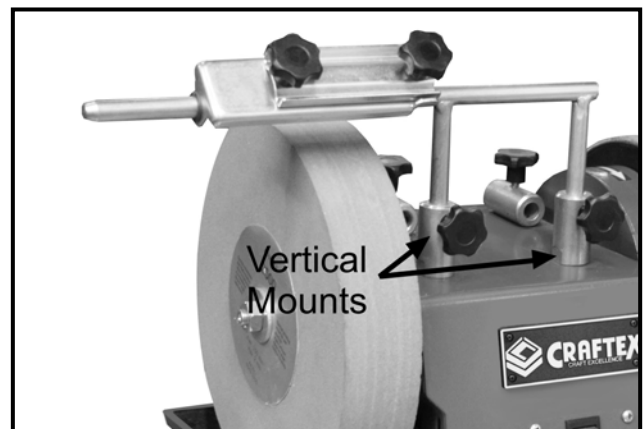


Figure-6 Installing the universal support vertically for grinding against the rotation the wheel

WARNING

Do not perform any sharpening job on the leather honing wheel against its direction of rotation. Failure to do so will seriously damage the leather honing wheel.

ANGLE GUIDE

Your CT171 grinder comes with an angle guide allowing you to find the cutting angle of your tools.

Using the angle guide is simple and easy. It features 2 angle measuring notches on each side.

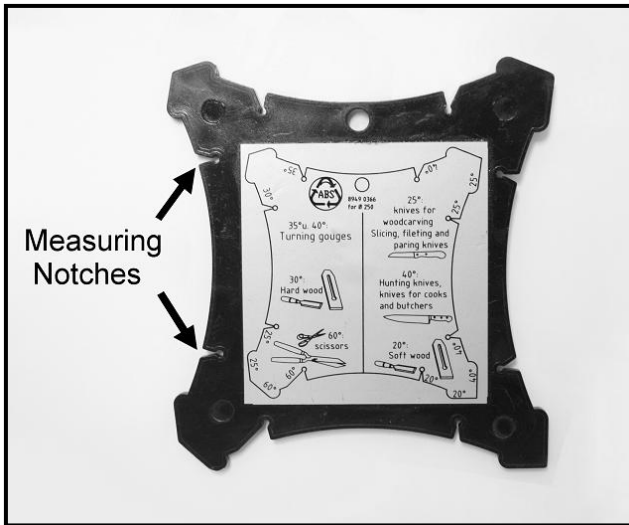


Figure-7 Angle guide measuring notches

To find the cutting angle on your tool using angle guide:

Place the sharpened edge of the tool into each measuring notches and find the notch best fits the tool you want to grind.

Position the angle guide on the grinding wheel with the side having the best fit measuring notch as shown in figure-8.

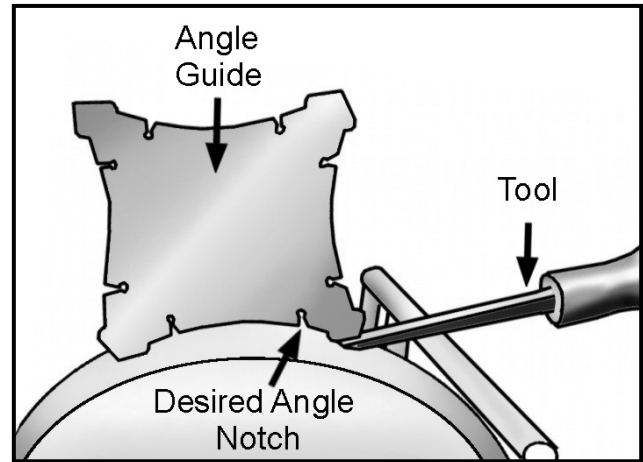


Figure-8 Using angle guide

Adjust the universal support or the tool so that the sharpened edge of the tool is flat against the grinding wheel and the angle guide.

HONING COMPOUND

The CT171 comes with honing compound used on the leather honing wheel to give smooth and razor sharp edge results when sharpening tools.

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

First, apply a light coat of machine oil on the leather honing wheel and then apply a thin coat of the abrasive honing paste. Spread the paste on the wheel properly with your hand.

Plug the cord into the power source and turn the machine ON distributing the paste evenly on the wheel using a spreader.



Figure-9 Honing compound

REPLACING THE GRINDING WHEEL

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

Loosen the nut (shown in figure-10) securing the grinding wheel by holding the wheel with one hand.

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. For details see “GRINDING WHEEL” on page-8.

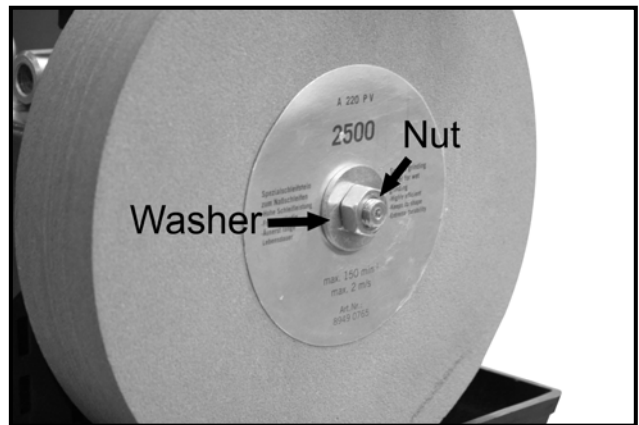
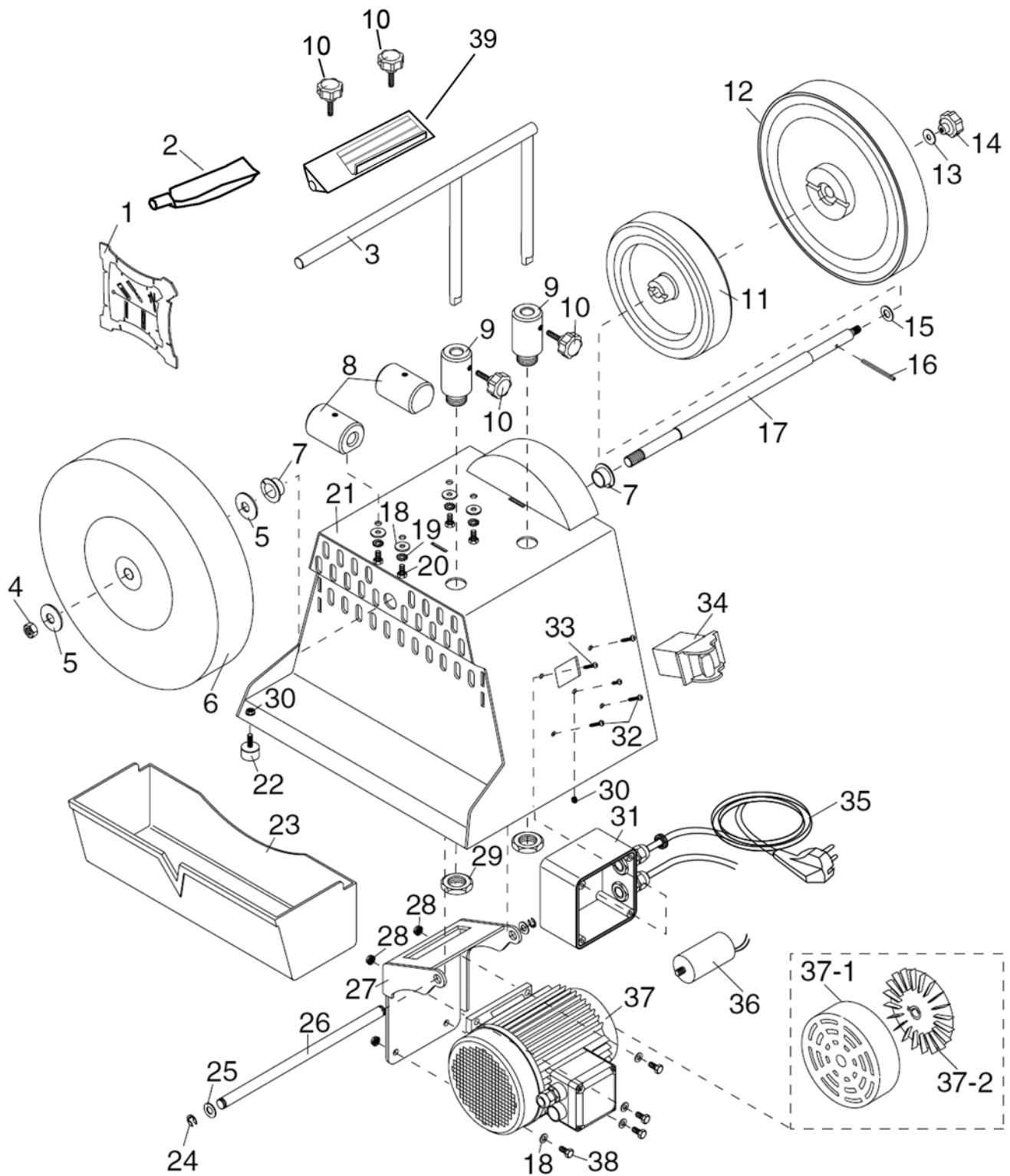


Figure-10 Nut and washer holding the wheel

CT171 PARTS BREAKDOWN



CT171 PARTS LIST

REF#	DESCRIPTION
1	ANGLE GUIDE
2	HONING COMPOUND
3	UNIVERSAL SUPPORT
4	HEX NUT M12-1.75
5	FLAT WASHER 12MM
6	GRINDING WHEEL
7	BUSHING 15MM ID/17MM OD
8	HORIZONTAL MOUNTS
9	VERTICAL MOUNTS
10	KNOB BOLT M6-1 X 16
11	DRIVE WHEEL
12	LEATHER STROPPING WHEEL
13	FLAT WASHER 8MM
14	KNOB NUT M8-1.25
15	FLAT WASHER 12MM
16	ROLL PIN 4 X 44
17	ARBOR SHAFT
18	FLAT WASHER 6MM
19	EXT TOOTH WASHER 6MM
20	HEX BOLT M6-1 X 10

REF#	DESCRIPTION
21	GRINDER CASE
22	FOOT
23	WATER RESERVOIR
24	E-CLIP 8MM
25	FLAT WASHER 10MM
26	MOTOR BRACKET SHAFT
27	MOTOR BRACKET
28	HEX NUT M6-1
29	SPECIAL NUT
30	HEX NUT M4-.7
31	SWITCH HOUSING
32	TAP SCREW M4 X 20
33	PHILLIPS HD SCR M4-.7 X 10
34	SWITCH with SAFETY PIN
35	POWER CORD
36	S CAP 10M 250V 1-3/16 X 1-5/8
37	MOTOR 1/4HP 110V 1650RPM
37-1	MOTOR FAN COVER
37-2	MOTOR FAN
38	TAP SCREW M4 X 10
39	TOOL REST



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.