For Additional Kits Contact:

Stanford Outdoors 918-251-7983 405 N Walnut Suite #9 Broken Arrow, OK 74012 1- (866)- 305- 5690

If you have any problems or questions regarding this product, please contact the manufacturer: Toll Free 1-866-305-5690

EMAIL: stanfordoutdoors@valornet.com Website: www.stanfordoutdoors.homestead.com Instructional Movie is on our website for extra help and tips.

The warranty on this product is completely unconditional. Our most important goal is customer satisfaction. We are not liable for injuries or accidents. So please read and follow the instructions if you need further help please call us Central Standard Time Mon- Fri 9 am to 6 pm.

Your safety is our concern Please read and follow directions before using this product. Maximum speed is 3600 rpm!

Brought to you by: Stanford Outdoors

Manufactured by: Stanford Outdoors makers of Slicing Edge Sharpening System

Instructions:

You too can put a great burr- free edge on any tool and/ or blade.

Please be sure to read all instructions before using your new sharpening system for safety and ease of operation. Please do not hesitate to call Toll Free at :1-866-305-5690 if you have any questions or concerns about this product.

This system will put a polished razor sharp edge on all your knives and tools in seconds. Made to be used on any ordinary bench grinder motor not to exceed 3600 rpm!

If you purchased the wheel kits with adapters you will need to take a sheet of sandpaper and sand edges of adapter. This will make it easier to insert into the hole. Then turn into wheel clockwise. Do not hammer in. Just push it in If you are using a grinder with guards you will need to remove them before adding your new system. They do not have to be used with this sharpening system. You will be able to sharpen 4-5 hundred knives before needing to re-surface the grit wheel.

Instructions Please read before using

Preparation:

1. Take lube (colored wax) out of the cup and apply a light coat around the entire grit wheel don't apply it heavily. The wax is to keep the friction down and to keep the blade from getting to hot. Install the wheel on the motor, turn it by hand to see if there are any bumps on nodules, if there are, take something blunt like the corner of a flat file and , with the motor running, just touch the wheel to remove any bumps. You will see a bit of grit.

2. Using a scrap piece of metal with a flat side turn on the grinder motor.

- 3. Place SAFETY GLASSES ON!
- 4. With the motor on place the flat side of the metal against the cutting wheel for 2 or 3 seconds. This melts the lube into the grit and de-burs the cutting grit. The wheels are now functional.
- 5. Then each time you start to buff, take a chunk of the rouge (white chunk) and just touch it a little while running on the slotted wheel. Do not over-tighten the nuts. Spin the wheels by hand. If a wheel wobbles from side to side you probably have a bent washer. Washers get bent when a stone wheel is put on and the nut is tightened too tight. To get rid of the wobble, loosen the nut and turn the washer, or washers, just a little. Turn one washer one way and the other washer the other way. If a wheel is exposed to heat or dampness the moisture will cause it to warp. Be sure to keep wheels in a cool dry place and cover with a towel to keep moisture out.

Truing of Wheels: When you have the wheels running "true" don't remove them unnecessarily, because when you put them back they will be in a different position and you have to adjust again. Sometimes, the wheels may be a little "out of round". The grit wheel, out of round, can be fixed at a time of re-surfacing. If the "slotted" wheel seems out of round, it can be trued at any time. Also you man "round" the corners of the slotted wheel if you sharpen a lot of serrated knives. Correcting "out of roundness" is easy. Take a piece of 60 grit sandpaper, wrap it around a flat piece of metal, a flat file works fine, hold it lightly against the face of the wheel, you will feel the "high" spot. Keep holding it lightly against the wheel until it feels smooth. Now the "high" spot is gone, the wheel is nice and clean and flat across the face!

Do not exceed 3600 rpm!

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Reconditioning Grit Wheel: After approximately 100 sharpening (an average only) the cutting grit will start to dull, NOT TO WORRY, now we will refurbish the cutting surface and recondition the wheels as new.

PUT ON YOUR EYE PROTECTION NOW BEFORE YOU TURN ON THE GRINDER MOTOR.

- Use a 40 Grit piece of floor sanding paper available at most hardware stores. Using a piece of wood with a flat surface wrap the emery cloth around the wood block or use plywood. Now keeping the emery cloth (sanding paper) flat with the cutting edge of the wheel cut off the old grit and glue. The polishing wheel will not need to be cleaned every time the cutter is, use your judgment but not often.
- Now take the necessary kit and remove the 220 or 400 grit whichever you purchased. You will need some wood Elmer's glue (yellow). Any hardware store will carry this. DO NOT USE WHITE GLUE AS IT WILL CHIP OFF. Remove the wheel and put a piece of newspaper down.
- 3. Lay the paper flat and sprinkle the grit in the fold of the paper. Then put a light bead of Elmer's wood glue on the wheels surface and smooth with finger evenly. Roll the wheel through the grit using a pencil or dowel rod or your fingers in the arbor hole of the wheel. Wait one minute and then roll second time through the grit. After it is completely covered set aside allow to dry for 24 hours. There should be enough grit left to recondition the wheel several more times.
- 4. Then prepare them for de-burring and use. Return to page 2 for Preparation of wheels instructions.

If for any reason you need to enlarge the arbor hole use a drill press and put the wheel on the press with a board under it. Center the wheel by lowering a bit the size of the existing hole thru the hole. With this bit in the hold, clamp the wheel and the board securely, change to desired size bit, put another board on top of **the wheel**, **clamp it in place**, **and carefully run your bit thru the board and the wheel**. Lots of caution so as not to get your hole off center.

Note: The sharpening system is available with any size

Wood carving tools: Hold tool sideways, (horizontal, right angle to the wheel), and adjust to the desired angle. Keep the edge flat, you do not want a convex surface on the tool. The flatter the surface the better it will cut the wood. The wheel is flat across the face, so holding the tool on a horizontal plane, the sharpened surface will be flat. There are many different shapes of cutting edges on carving tools, it is not practical to try to describe here, how to hold each one. Gouges, need to be rotated. Chisels and V tools will require going up and down on the wheel as you hold the tool horizontal. Soon as you acquire a burr, go to the slotted wheel and polish off the burr. You may want to polish the sharpened side also, a mirror finish is nice. For gouges and some other shapes, your burr is inside and you can't take it off on the slotted wheel, even on the corner. Take a piece of leather and pull the burr to the outside, work it back and forth, use the slotted wheel when you can. Get rid of the burr and your tool is sharp.

Leather Punches: hold punch horizontal, adjust your angle, follow the edge, (on the grit wheel), until you acquire a burr. Again you may need to remove the burr, using a piece of leather or the like. In case of a round punch, your buss is on the inside, so take a leather shoe string and rotate it around, pulling it out at the same time, this will bring the burr out so you can polish it off on the slotted wheel.

Do not exceed 3600 rpm NEVER TURN KNIFE INTO BLADE DO NOT TALK OR KID AROUND WHILE SHARPENING.

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You are now ready to sharpen: Time to think about the angle you want on your knife or tool. Proper angel depends on what you are going to use the edge for. Generally, if you are going to chop, dig or scrape with a blade you will want a 35-40 degree angle. For razors or little rotary cutting wheel, a flat angle is best 10 -15 degrees. Most knives are 18-22 degrees. With practice you will be able to see what

angel works best for you.

Here is a diagram of different angles:



Hold your blade or tool the wheel, the edge facing of

Now you are 90 degrees in relation to the axis of the motor. Half of 90 degrees is 45 degrees. 45 degree angle is best for shovels, machete, axe. Half of 45 degree angle is 22.5 that is best for knives. Half of 22.5 g the wheel and about halfway down the face is 11.5 which is best for broad heads, razor blades, rotary cutting wheels. Just remember 90 degrees, 45 degrees and 22.5 are your three basic angles.

Now turn on the motor. Touch the slotted wheel with rouge each time you begin to sharpen. Carefully hold your knife up there and pick the angle, (90,45,22.5 or 11.5) BE SURE NOT TO TURN THE BLADE INTO THE WHEEL!!

- 1. Always start at the shank (at handle) not the tip. Firmly grip the knife at the top and bottom edge with three fingers on top and the thumb on the bottom of the handle.
- 2. Hold the blade at a 18-22 Degree angle to the wheel.
- 3. Make 3-4 passes on the cutting wheel starting at the shank of the knife on each side, making sure to move the knife back from the wheels when turning the knife in the hands.
- 4. Use only light pressure as the cutter will do the work, continue until a false edge turns up on the edge of the blade, (you can see and feel it).

The aim is to feel a "Burr or Wire edge" which means both sides or "tapers' of the edge have come together. You need the "burr" all the way from the hilt to the tip. Just a little "burr" is all you need. A couple of other things, when making the passes across the grit, start at the hilt and go to the tip without stopping. Also pull the tip away from the wheel when it is about the middle of the grit. If you pass the tip clear across the wheel, you may round the tip of the blade, so stop your pass when the tip is about half way across the grit. It is a good idea to have a paper towel handy to wipe the wax off the blade. This makes it easier to feel the "burr or wire edge." This burr tells you that enough metal has been removed. Occasionally a knife will not develop a "burr" instead there is a "hair" on the edge that you can see. We call this "feathered edge". You might want to have a light handy so you can see it better.

- 6. Keep the blade flat against the flat of the cutter wheel as you draw the blade back and forth on the wheel surface.
- 7. DO NOT PULL THE POINT OF THE BLADE MORE THAN HALF WAY ACROSS THE CUTTER WHEEL BEFORE STARTIN THE RE-TURN MOVE.
- 8. Always try and make the same amount of strokes on each side of the blade to keep the edge angle even.
- 9. Once the false edge can be seenor felt (across not down the blade). You are ready to use the polishing wheel.

Now that you have acquired a "burr or feathered edge" it is now time to switch to the slotted wheel.

- 1. Move the blade to the Polishing Wheel (with slots) and take the rouge polish out of the cup and touch it to the wheel while the motor is on, but only for a second no more otherwise you will waste the polish.
- 2. Now make three passes with the blade flat against the wheel polishing surface, then three more on the opposite side.
- 3. Your knife should be sharpen than a razor now, if not check your instructions and try again until you get the edge you want.
- 4. Now you ready to start, but first a reminder we at Slicing Edge want you to be safe so remember to NEVER EVER TURN A EDGE INTO A MOVING WHEEL INJURY OR DEATH COULD OC-CUR. DO NOT TALK OR KID AROUND WHILE SHARPENING!

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Don't be discouraged if your first try does not seem to work. It takes a little practice, but the results are worth it. You can also fix nicks or bad spots on your knife including even putting a new tip on if the old one is broken by using your grit wheel.

Remember: Always use eye protection And never turn the blade Into the whee!!



How to sharpen scissors: Use only the grit wheel, have the cutting edge facing down, (never into the wheel), try to hold the blade at the existing angle, start as close to the hinge as you can and work towards the tip, usually it only takes a couple of passes to acquire a "burr". Do the same thing with the other edge. Now you should have a burr on both edges. Do not go to the slotted wheel, just close the scissors, holding the edges together. The burr is gone and the scissors are sharp! Wipe them off with a paper towel. In case there are nicks or bad spots you will have to take off enough metal to fix these spots. Lots of later model scissors have one blade serrated, with these do nothing with the serrated, just work on the smooth blade.

How to sharpen knives with serrated blades: On most serrated knives, one side of the blade is flat. Hold this side almost flat against the grit wheel, drawing it from one end of the serrations to the other, hardly any pressure is needed, and you will have small burrs on each of the scallops on the other side. (Sometimes you have to hold just a slight angle, 4 or 5 degrees, it depends on the knife). Now go to the slotted wheel and use the corner of the wheel, hold the serrated side, where the burr is, toward the wheel and draw it lightly across the corner of the wheel, then turn it over and run the smooth side, (flat against the wheel), and polish that side. Now the burrs are gone and the serrations are sharp!