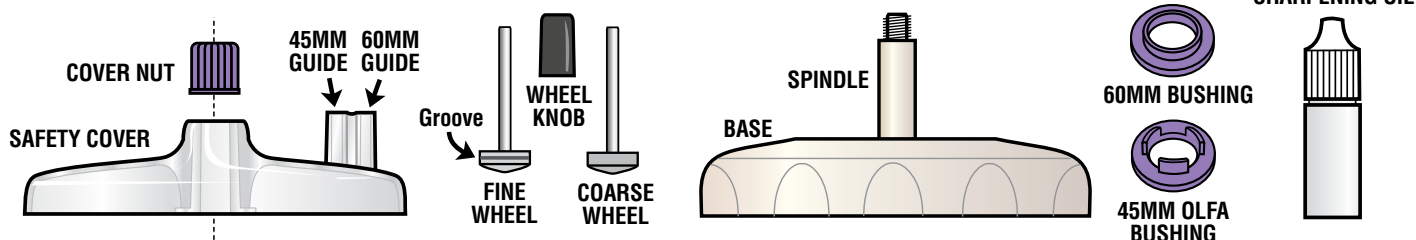


INSTRUCTIONS – 45mm and 60mm ORBITAL SHARPENER

WARNING! Use extreme caution when handling rotary cutter blades. Keep this sharpener and all blades out of the reach of children.

A word about rotary blades. . . . High quality rotary blades are made from hardened tungsten/carbon tool steel. They can hold a precision cutting edge far longer than cheaper “generic” blades that are usually made of low-grade steel. Combined with your Orbital Rotary Cutter Blade Sharpener, a quality brand blade will sharpen more quickly, cut more smoothly, and last far longer.

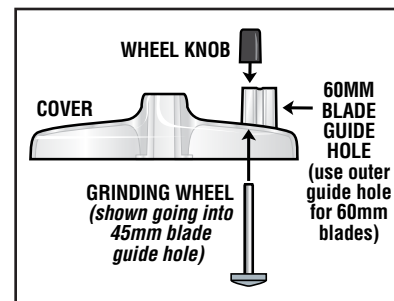
PARTS DIAGRAM



STEP 1 Install Correct Grinding Wheel

Use the coarse diamond wheel the first time **on all blades** to establish the best cutting angle or to remove nicks, followed by the fine diamond wheel to finish and remove burrs. The fine wheel can also be used to maintain blades that have been previously sharpened with the coarse wheel. Remove the safety cover and insert grinding wheel into the guide hole that matches the blade size you wish to sharpen (45mm or 60mm – see diagram at right). Press the wheel knob onto the grinding wheel shaft until it stops. The shaft should spin freely (if not, the shaft may be slightly bent).

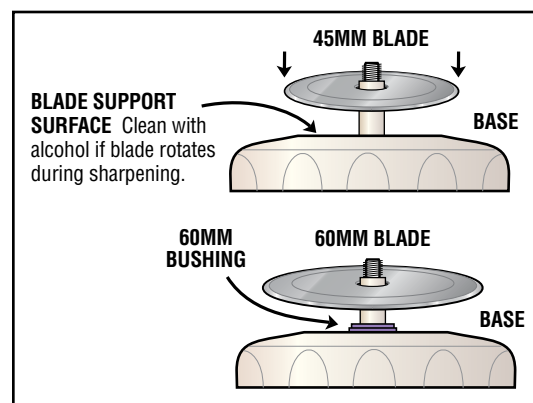
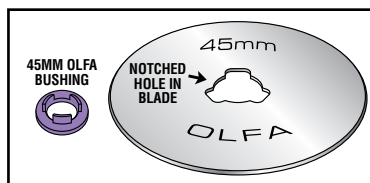
NOTE: Your sharpener comes with two wheels (1 coarse and 1 fine) which are stored under the base. The fine wheel has a groove around the outer edge of the grinding head. You can also tell the difference between the coarse and fine wheel by feeling the grinding head with your fingertip.



STEP 2 Install Blade For Sharpening

The center holes of most 45mm blades fit the Orbital Sharpener perfectly, so just drop the blade over the spindle. Other blades have center holes that may require one of the two adapter bushings stored under the base. The smooth bushing fits all 60mm blades. The broad, flat side of the adapter bushing goes first and seats into the recess in the base. After installing adapter (if required), drop blade down over spindle.

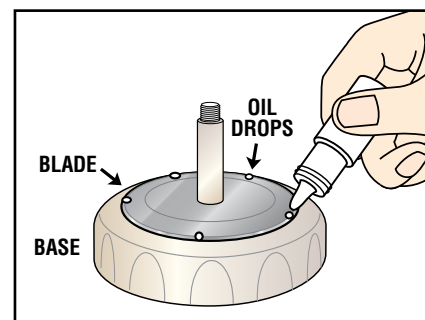
SPECIAL INSTRUCTIONS FOR OLFA 45MM BLADES:
The bushing with three upright tabs fits OLFA™ brand 45mm blades and compatible brands as shown at right.



STEP 3 Apply Sharpening Oil

ALWAYS USE SHARPENING OIL! The “Stay Sharp” Sharpening Oil provided with your sharpener is essential in creating a razor sharp edge and maximizing the life of your diamond sharpening wheels. Apply 4 to 6 drops evenly around the cutting edge of your blade just before sharpening. After sharpening, wipe the blade clean with a soft, dry cloth or paper towel. Then repeat for the other side of the blade.

NOTE: For Sharpening Oil refills, order online at www.USASharpener.com



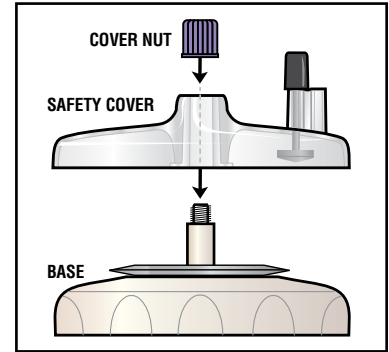
CONTINUED NEXT PAGE

INSTRUCTIONS – 45mm and 60mm ORBITAL SHARPENER – PAGE 2

STEP 4 ▶ Replace Safety Cover

Slide the safety cover over the spindle and secure it to the base with the cover nut. Tighten gently but firmly with your fingers. Do not over-tighten.

*NOTE: If the cover is sufficiently tight, the blade will not move when you rotate the sharpening wheel (you can see if the blade is moving by looking through the clear cover). If the nut is tight but the blade still moves, see “Tips for Cleaning and Maintenance” below. In some cases, rotating the sharpener in a counter clockwise direction can loosen the tightening nut, allowing the blade move. To prevent this, rotate the safety cover and sharpening wheel in the **CLOCKWISE DIRECTION ONLY**.*



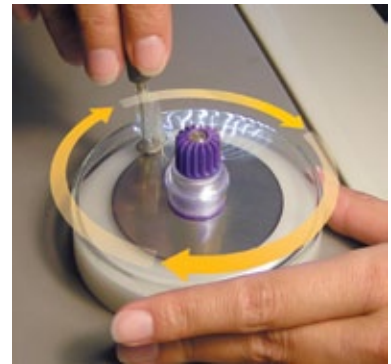
STEP 5 ▶ Sharpen Blade

Hold the sharpener in your palm or place it on a firm surface and hold down. To sharpen, rotate the wheel knob in a steady, circular motion, putting a light downward pressure on the wheel knob so that you feel the diamond head against the steel blade.

• **How much downward pressure should I use?** Begin with light pressure and increase until you both feel and hear grinding along the edge of the blade. At that point you are in the right pressure range. Avoid forceful downward pressure – too much pressure reduces performance.

• **How many rotations are enough?** There is no simple answer since it depends on: 1) the condition of the blade; 2) the amount of downward pressure; and 3) the condition of the diamond wheel. Routine maintenance should only require about 15 seconds per side (about 30-50 rotations) with the fine wheel. For very dull, nicked or “first time” blades, about 30-50 rotations with the coarse wheel should suffice. More rotations may be needed to remove larger nicks.

Tips: Don't forget to flip the blade and sharpen both sides. Always remember to use sharpening oil. Avoid letting the blade become too dull and it will be easier to sharpen, which will serve your precision cutting needs more effectively.



NOTE: Avoid rotating the cutting wheel without a blade in place as the diamond surface of the grinding wheel can rub against the plastic base and cause it to become clogged with plastic. (If this happens, see “Tips for Cleaning and Maintenance” below.)

Tips For Cleaning and Maintenance

1. Keep the blade contact surfaces clean: During sharpening, the cover nut clamps the blade against the base to prevent it from rotating as you sharpen. If the surfaces that clamp the blade on the base and safety cover become fouled with grit, blade filings, or oil the blade may slip and not sharpen properly. (See Step 4) Prevent slippage by keeping the two contact surfaces clean. Rubbing alcohol, a household cleaner (Windex; 409) or ordinary dish soap and water will clean fine.

2. Keep the grinding wheel shafts free of oil and grease: The rubber wheel knob is designed to grip the grinding wheel shaft tight enough to prevent it from spinning. The fit should be firm and the knob should not spin easily on the shaft. Oil from your fingers or contamination may get on the shaft and prevent the wheel knob from gripping the shaft. In which case, the grinding wheel shaft should be cleaned with rubbing alcohol, a household cleaner (Windex; 409) or ordinary dish soap and water.

3. Keep the diamond cutting head clean: The diamond coated wheels are designed to be self-cleaning, but can become clogged with metal shavings or other foreign matter, which may impair performance. Any of the following methods will remove impurities and re-expose the diamond surface.

- **For basic cleaning**, simply rubbing the head with a pencil eraser works wonders.
- **For severely clogged grinding heads:** Try using fine Scotch Bright® (as found on the back of a scrubbing sponge), fine steel wool, or a fine brass or steel brush. You can also use an old toothbrush and a common solvent like fingernail polish remover, paint thinner, rubbing alcohol, or acetone. (WEAR SAFETY GLASSES WHEN WORKING WITH SOLVENTS!)

Troubleshooting

- Make sure you have the sharpening wheel inserted into the correct guide slot for the blade size (45 or 60mm) you are sharpening (see Step 1).
- Make sure the blade is not spinning as you are rotating the sharpening wheel (see Step 4 and Cleaning & Maintenance Tips #1).
- If when sharpening you do not notice the “feel” and “sound” of the wheel grinding, and the grinding wheel seems to be “skating” around the blade, check Cleaning & Maintenance Tips #2.
- Sharpening can leave a fine burr on the blade edge. One easy way to remove the burr is to reinstall the blade in your cutting tool and lightly slice a couple of times through a stack of old newspapers.
- If problems persist email us at info@USASharpener.com

THANK YOU FOR PURCHASING OUR PRODUCT!

Visit our website at: www.USASharpener.com to learn more about our other fine sharpening products or see a demonstration video.