CARBIDE WHEEL CUTTERS & HEADS

User Instructions

Safety

- **ALWAYS** wear proper eye protection when scoring or breaking any material. We highly recommend that you wear safety goggles rather than safety glasses.
- **NEVER** leave glass hanging off the edge of your cutting surface. Place glass completely on a flat, firm surface when scoring.
- **NEVER** hold a sheet of glass by its sides. Hold sheets from the top. If they slip out of your hand, you'll still have your fingers.
- **NEVER** lift a sheet above you "see what it looks like."
- **ALWAYS** keep glass safely stored away when not working.

Finding the Right Cutter for You

It's important to use a quality glass cutter that is comfortable to hold. Try out different handle styles to find the one that's easiest to hold and control. Look for a cutter with a carbide steel cutting wheel and axle. These wheels hold their cutting edge longer and produce a cleaner score.

Filling Oil Feed Cutters

Most quality stained glass cutters have an oil feed system. Using cutting oil not only keeps the cutter head lubricated and free rolling; it also deposits a thin line of oil along the score which makes it easier to break. Inland manufactures a variety of cutter styles with an oil feed system. We recommend using a cutting fluid like Inland RinsesOff™ to properly lubricate and maintain the carbide cutting wheel but they can be used without cutting fluid.

1. Remove the brass oil chamber cap being careful to leave the black “O” ring in place on the stem.
2. Use the provided bulb syringe to fill the chamber about 1/3 to 2/3 full with a quality cutting fluid such as Inland RinsesOff.
3. Replace the cap making sure the black "O" ring is in place. Tighten until snug.
   NOTE: Over tightening the cap can crack the acrylic style barrels.
4. You regulate the flow of oil by opening the cap slightly, a half to a full turn. Loosening the cap too much makes the oil run out too fast and if fully closed you will have little or no oil at all. Experiment with your cutter to find the right flow rate for your cutter and cutting speed. When your cutter is not in use, tighten the cap so that oil doesn't leak out.

An alternative to filling the cutter with oil is to keep it in a small container (a glass jelly jar or old coffee mug works well) with a bit of paper towel, sponge or cloth in the bottom and fill with enough cutting fluid to just saturate it. Roll the wheel over the oil soaked sponge / cloth before every few scores to keep the wheel lubricated. This is also a great way to store your cutter and protect your cutting head.

Scoring Tips

1. Make sure the glass surface is clean and dry. Any surface grime will keep you from achieving a good score.
2. Make sure you position the material so you can comfortably complete the entire score in one complete motion. Stopping and then starting creates an imperfect score that may not break properly.
3. Make sure your work surface is absolutely flat and keep it free of small glass chips. Use a bench brush to clear your cutting area and prevent the temptation to sweep away glass chips with your hands.
4. Always score on the smoothest side of the material. This may or may not be the “front” side of the glass. This is usually the shinier, fire polished side except for glasses like granite and rippled texture. These have the texture on the front of the glass but are scored on the back, the smoother side (Don't forget to turn your pattern piece over!). If you can’t visually tell the front from the back, then it shouldn’t matter which side you score.
5. For barrel cutters, often called pencil style, hold it just like a pencil with the screw on the cutting head facing up or forward. You want the cutter to be as close to perpendicular to the material as possible as you make the score. For the Pistol Style cutter, wrap your hand around the cutter body and it will automatically be in the best cutting position.
6. Start at the edge and apply consistent light to medium pressure while you push the cutter across the material you are scoring. It should sound like an ice skater going across the ice. Lift your cutter off just as you reach the opposite side. A good score appears as a continuous scratch across the surface. Pushing too hard (a common mistake) makes popping or snapping sounds as you make the score and in the score you may see slivers, grit, and furrows. All are indications you pressed too hard. Here is an easy test to see if you over score:

- Make a series of scores on a piece of scrap glass about 1/2" apart, applying less pressure each time. When you think you haven't pushed hard enough, make 5 more scores using less pressure each time.
- Use your running pliers to break out the scores in the same order that you made them. Discard any pieces that didn't follow the score and any that wouldn't break. If they all followed the score then do some more and lighten up!
- Look at the edge of the pieces. A good score has a smooth cut edge. An over-scored piece has a rough edge with pits and looks kind of like a zipper.
- Practice until you consistently get a clean edged break.

7. Break each score as you make it.
8. It's generally easier to follow a pattern line if you push the cutter. This allows you to look ahead and see where you are going offering more control and better accuracy.
9. When scoring along a ruler or straight edge, it is often easier to ride the cutter head along the edge if you pull toward yourself.

Replacing a Cutter Head

Replacing a worn head is simple. Simply loosen the Phillips screw and the old head will slide off. Slide a new head on and tighten the screw to secure.

Cutter Maintenance

- Avoid letting the cutting wheel clunk off the glass edge at the end of a score. This dulls and can chip the wheel. Stop at the glass edge or gently drop the cutter over the edge.
- Do not remove the wick from your cutter; it is what feeds oil to the cutting wheel! The wick looks like a fine white thread and you will see it when the cutter head is removed. Once the wick is out you no longer have a self-oiling cutter as it is impossible to replace.
- Store your glass cutter upright rather than lying on its side. The cotton wick that runs from the oil chamber to the head of the cutter lubricates the cutting wheel. Storing the cutter upright will keep the wick saturated and your cutter ready to go. If the wick gets dry, it takes a minute or two for the wick to saturate and begin self oiling the cutting wheel.
- Periodically check the space between the wheel and the head for accumulated grit and glass slivers that can prevent your wheel from rolling smoothly. Use an old toothbrush to push out any debris you find.
- Periodically examine your score and cutter wheel for wear. Hold your cutter up to the light and examine the wheel and look for nicks and chips, a sign that it is time to replace the cutting head. If you notice that your score looks dotted, has skips in it or it seems like you need to apply more pressure, then your wheel is dull and it is time to replace the head. Scoring a piece of mirror is an easy way to examine your score line for defects.
- Cutting oil will deteriorate over time. If you notice your oil turning color or thickening, remove any from the barrel and refill with new. Filling the barrel only partially full will help avoid this problem.

Replacement Parts

Our wheels hold an edge longer and are constructed with close tolerances for smooth rolling, chatter free wheels.

- Narrow Carbide Cutter Head, Inland no. 50090: Our standard size head that fits all styles of Inland cutters.
- Wide Carbide Cutter Head, Inland no. 50091: Fits all styles of Inland cutters. Wide heads are often helpful when making straight line cuts along a ruler or cutting bar.

Accessories

RinsesOff™, Inland no 50057**:** Our water soluble cutting fluid will help to properly lubricate and maintain the carbide cutting wheel for longer head life and better breaking scores.

StripMaker / CircleMaker™, Inland no. 50060**:** The fast and easy way to make accurate straight line cuts, create duplicate strips, and make perfect circles every time. It can be used with glass cutters, razor knives, marking pens, and pencils, making it the perfect design and construction tool for all of your hobby needs.

Service

If you have any questions or comments regarding the use of this or any Inland product please call Inland Customer Service at 1-800-521-8428 9 AM to 5 PM EST, email us at helpdesk@inlandcraft.com, or write us at:

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