

Instructions

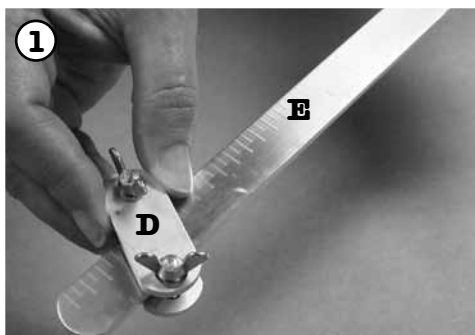
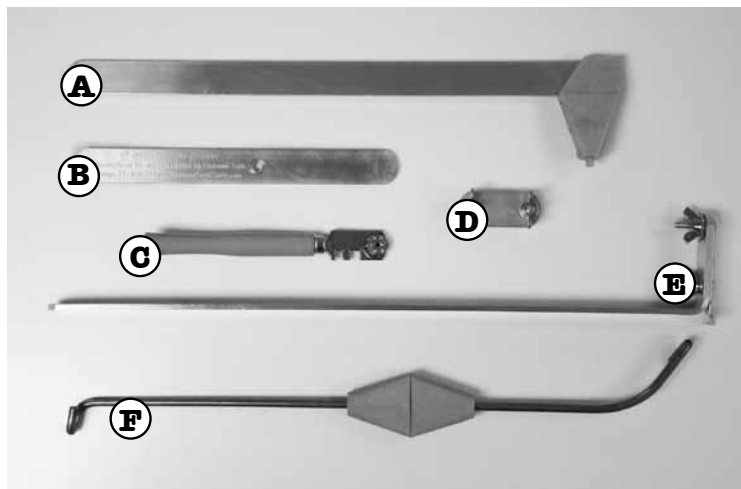
(g2) Generation Green Bottle Cutter

Before You Begin

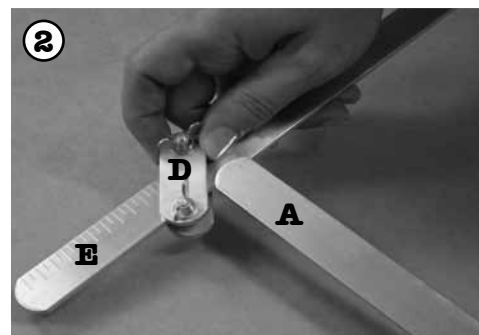
Read and carefully following the instructions contained within this manual. If you do, you will have success in scoring and separating nearly any round bottle or jar! Your kit should contain (1) bottle cutter, (1) tapper, (1 each) 60 and 120 grit emery paper, (1) instruction booklet.

- After unpacking all components, assemble the **Generation Green (g²)** bottle cutter on a firm level surface.
- Always wear safety goggles when using glass crafting tools. Everyday eyeglasses do not have impact resistant lenses.
- Kit contains small parts, keep out of reach of children.
- To ensure top performance keep your bottle cutter blade oiled.

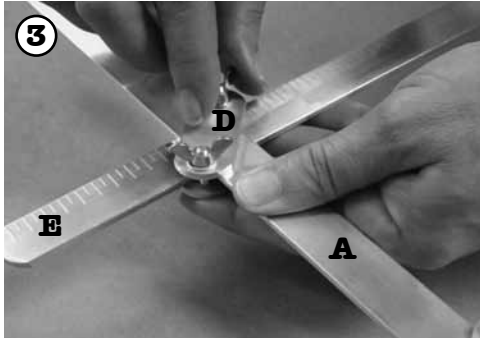
Assembly



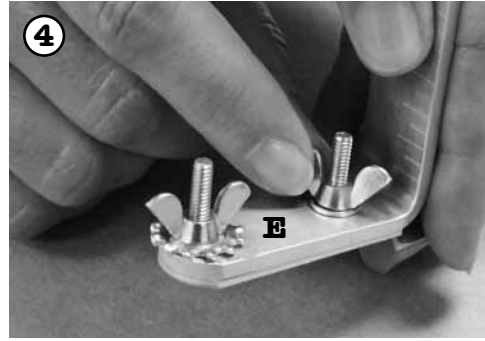
Loosen both wing nuts on part D and slide it onto the shaft of part E.



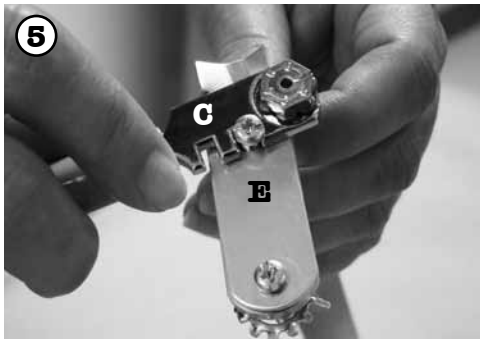
Slide part A into part D.



Tighten wing nuts to secure in place.



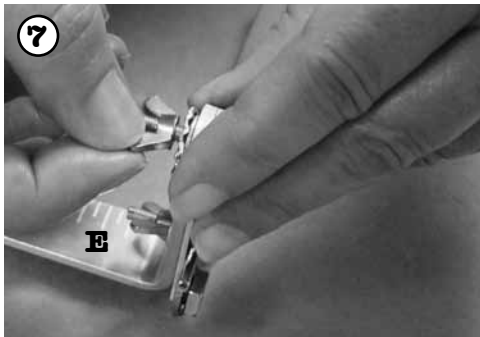
Loosen the wing nuts at the base of part E.



Slide cutter underneath screw head into the slot closest to the cutting head.



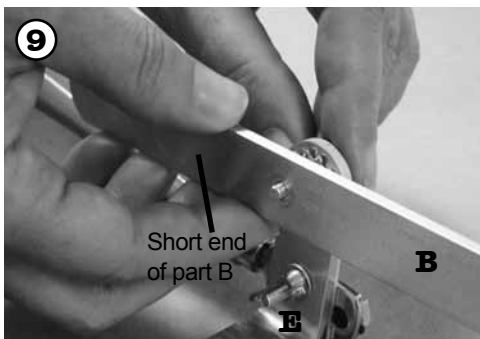
Tighten wing nut to lock cutter in place.



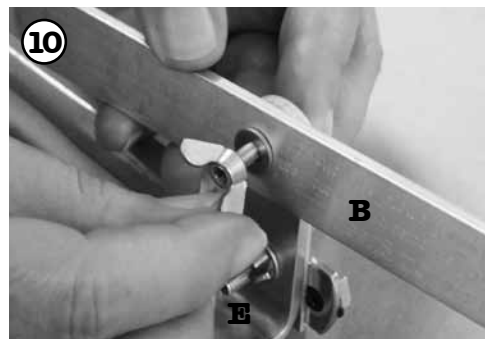
Loosen and remove the second wing nut from the base of part E.



Slide the locking washer onto the screw with the teeth facing down.



Slide part B onto the screw so that it rests on top of the locking washer. The shortest end part B should be parallel to the cutter handle.



Replace washer, wing nut and tighten.

Oil

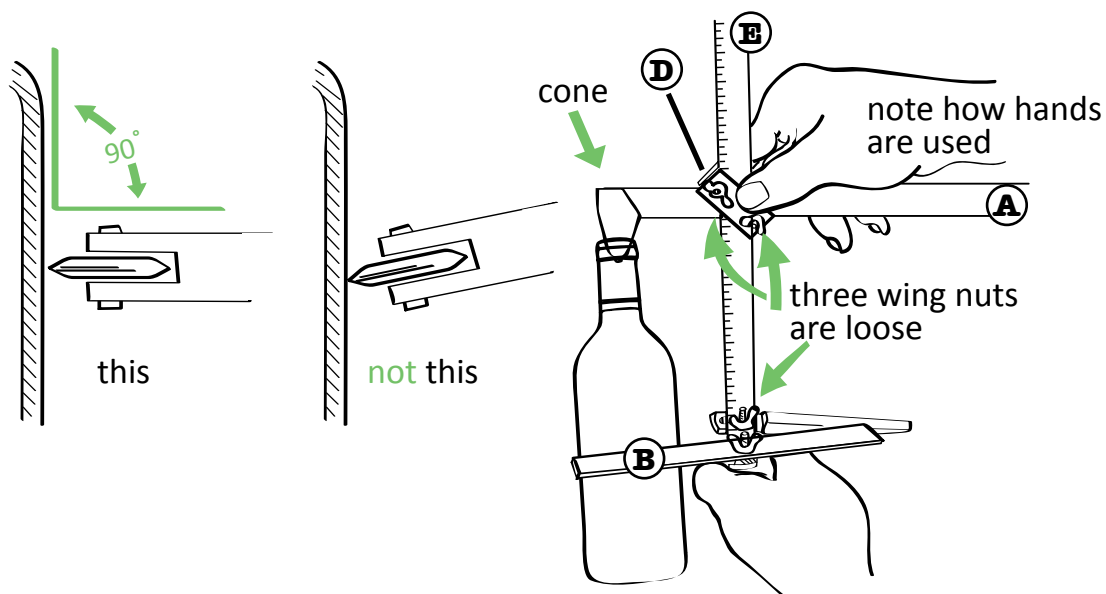
The glass cutter wheel must be oiled with A SMALL AMOUNT OF any light oil. This is essential to insure a good score. Re-oil wheel every 2 or 3 cuts. The oil is necessary for proper cutting action.

Clean Glass

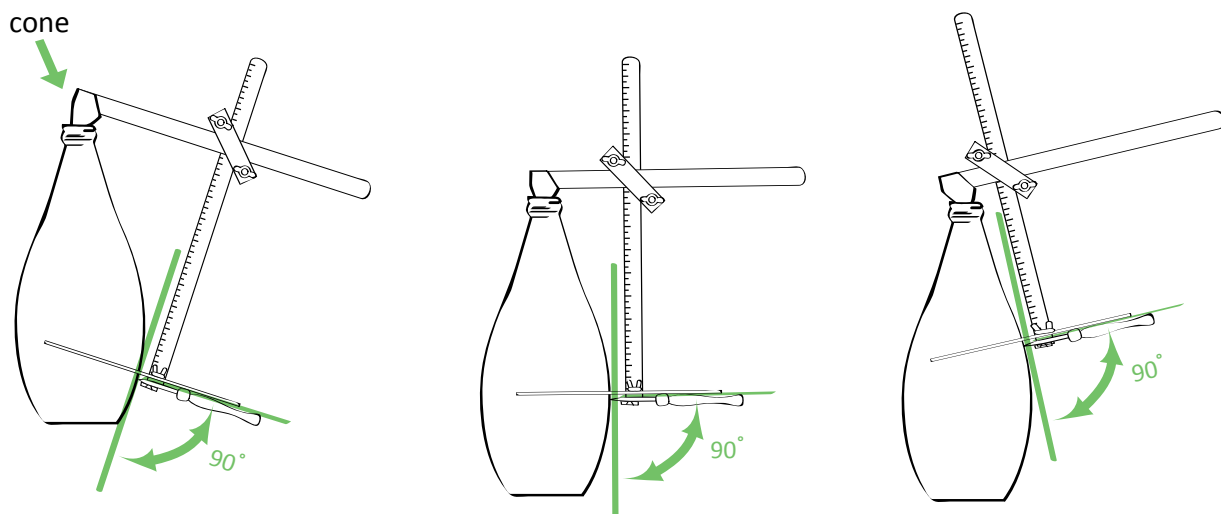
Remove all labels. Remove dirt and glue residue using a glass cleaner or a mixture of vinegar and water before cutting. Dirt or glue residue will dull the glass cutter and prevent a good score.

Adjusting Cutter To Bottle

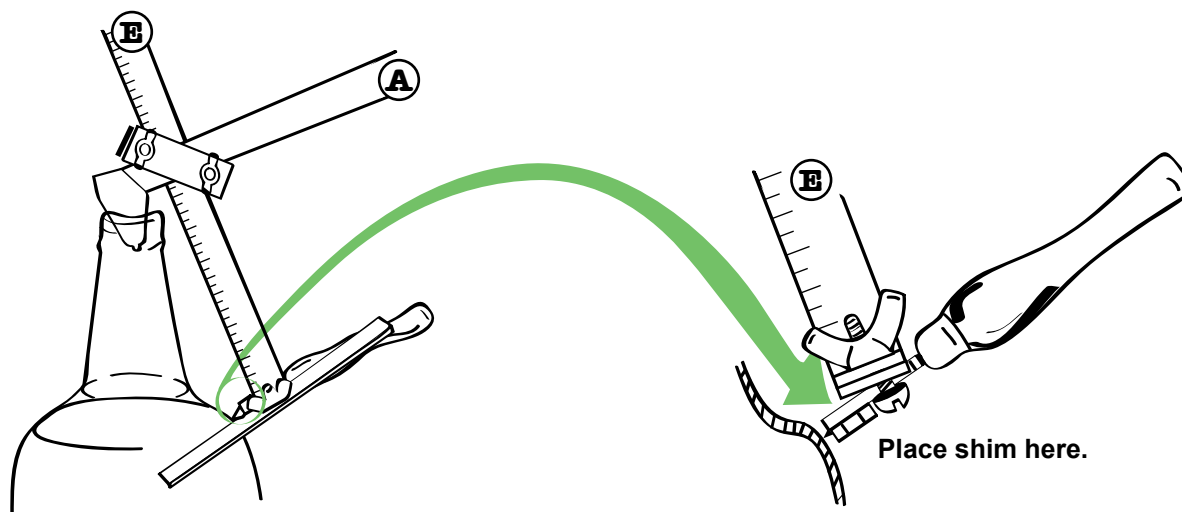
Place the **Generation Green (g²)** bottle cutter cone into the neck of the bottle, loosen the wing nuts on part D. Slide the glass cutter wheel along part A until it rests against the bottle. Next, slide part E up or down to the height desired - the glass cutter should be at a 90° angle to the glass. Tighten the double wing nuts (part D) to secure in place.



Correct Bottle Cutter Positioning



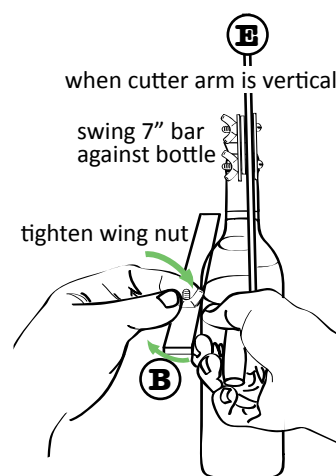
If the built-in adjustments are not sufficient to allow you to cut at 90° to the glass surface – loosen the small bolt holding the glass cutter and inset a match stick (or a similar shimming item) between the cutter and the base of part E, as shown in drawing below.



For cuts on the body of the bottle where the sides are straight; the cutting wheel must be perpendicular (90° angle) to the side of the bottle. The shaft holding the glass cutter (part E) should be lined up vertically to the bottle. This angle is regulated by the adjustment of the 7" bar (part B).

To make this adjustment, place the bottle cutter into the bottle so the glass cutter handle is pointed directly at you, as seen in drawing. Place your hands on the cutter as shown in drawing. While in this position, the glass cutter arm must be exactly at a 90° angle to the bottle. You may be sure it is vertical if it lines up with the seam of the bottle.

Swing the 7" bar (part B) against bottle and tighten the wing nut to secure in place. This is very important - as this adjustment will cause the cutter to travel correctly around the bottle.



Score The Glass

In glass cutting, the lighter the score, the better the separation. The score, if done correctly, will produce a continuous, barely audible, scratching sound. Whether left handed or right, place your hands as shown in the images to the left.

If you grasp the cutter as a pair of pliers, you will have a tendency to squeeze it during the cutting process, forcing the cutter out of alignment. The right hand should not move. Press down with right hand toward the bottle. Rotate the bottle with left hand counter-clockwise, pressing the left hand toward the right hand.

Press hands together with the least amount of pressure that produces a continuous, barely audible, scratching sound. You cannot successfully cut a bottle amid noise, as you will not hear the score. A deep frothy cut cannot be separated.

Sweep the bottle around in a smooth continual manner (try not to start and stop). A loud gravelly sound will indicate you have completely circled the bottle. STOP!

DO NOT GO OVER THE SCORE

Examine your cut, it should be continuous, thin and hair-like.

If you discover a skip in your score, reposition cutter and re-score that area only. This instrument is designed to cut nearly any round glass bottle or wide-mouth jar from 6 ounces to 5 gallons at nearly any place up or down the main section of the container.

Separating The Glass

Be safe, wear protective glasses. To separate the bottle at the score use a hot/cold water bath. Heat a large container of water on a hot plate or stove top until boiling. Once water boils turn temperature down to a simmer. In another large container, fill with water and ice. Both containers should be in close proximity to one another.

To run the score or separate the bottle, dip the bottle into the hot water bath until the water covers the score line. Hold approximately five seconds, then remove and quickly submerge bottle into the cold bath, hold for another 5 seconds. You should be able to hear and see the score run. Continue the dipping process until bottle separates. This method produces a nice smooth separation.

CAUTION: Bottle may separate at the score while in the hot or cold water containers. Use tongs to remove the piece from the container. A bottle that has been in the hot water will be very hot; do not touch and allow to cool. If after several dippings the score does not run, use the enclosed taper to finish separating the score. Follow all directions for using this technique.

Do all tapping well below eye level. NEVER tap the score line directly at your face. The taper provided in your kit is shaped to work on most bottles; however, should it become necessary, you may easily bend the rod to fit the bottle. Move the green plastic triangle up or down on the taper shaft until the tip of the taper is positioned at the score line.

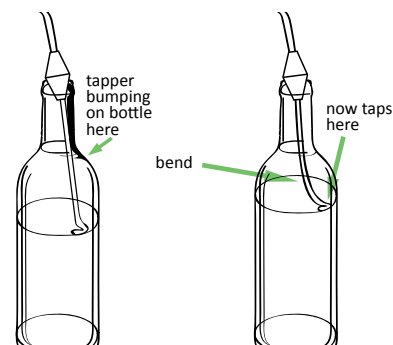
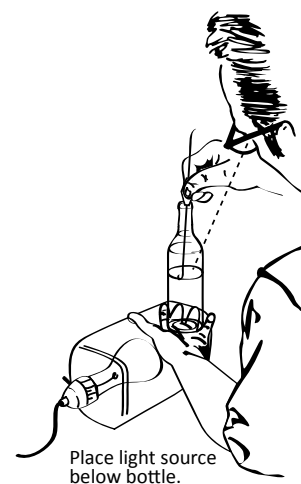
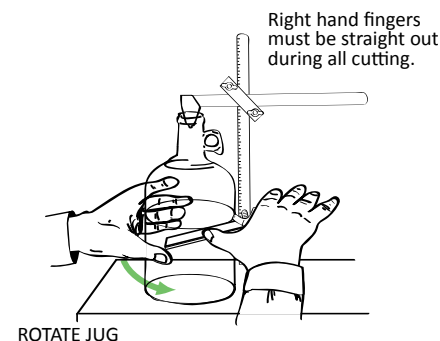
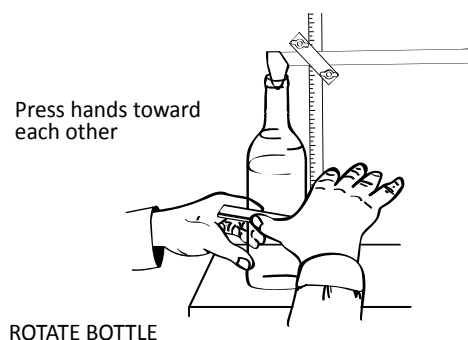
Insert the taper into the bottle. Once adjusted, lightly use it to tap the score line. When you see the score run (it will look like a tiny crack along the score line), move the taper 1/8" in front of the run. Continue to tap along the score until the bottle separates. Try not to tap behind the front point of the fracture, this will cause a fissure that will run off and down the bottle (FIG. 1). Tapping too hard will cause a fissure to run up (FIG. 2).



FIG. 1



FIG. 2



Glass Cutter

The **Generation Green (g²)** bottle cutter is equipped with six cutting blades. Should a blade dull during use, remove the cutter from shaft (part E) by loosening the wing nut and sliding the glass cutter away from part E.

To change the cutting blade, loosen the small screw on the side of the glass cutter and rotate the blade wheel so a fresh blade appears at the top of the cutter. Tighten screw and return cutter into position following instructions found on page 3. Glass cutter may be removed from the base and used for straight cuts. Simply loosen wing nut and remove cutter.

Smoothing Rough Edges

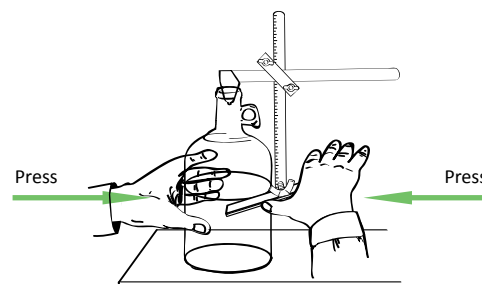
Cover the bottom of a shallow dish or pan with water, approximately 1/8". Place the 60 emery paper into the pan, rough side up. Rub the edges of the cut glass or jar on the surface of the emery paper to grind off any rough spots. Rub glass on pad in a circular motion until somewhat smooth. Tilt bottle at an angle to smooth edges. Finish with the fine 120 emery paper which should result in a smooth edge.

Wide Mouth Jars

Secure the lid to the top of the jar; punch an opening in center of the lid with ice pick or nail, approximately the same size of the cone tip. BE CAREFUL! Insert the narrow tip of cone into the hole, proceed with normal cutting instructions.

Tips and Techniques

1. Do not cut too deeply. Deep cuts require very hard tapping, which leads to bottle breakage.
2. Proper light is required so you can see the fracture advance. Tap just hard enough 1/8" ahead of fracture to advance fracture 1/2" at most.
3. Insure the 7" bar (part B) is adjusted properly.
4. If in tapping the bottle it becomes difficult to fracture, this usually indicates you have come to a thick area in the glass. Switch direction. To force your fracture through the thick portion will result in a run-a-way advance of the fracture.



Rings From Bottles

Ring sections can be cut from bottles of various sizes. To aid you in obtaining rings of a given height, use the ruler marks on the surface of the vertical cutter arm. Make your first cut at the bottom and raise the cutter equal amounts after each cut. When sufficient rings have been cut, separate the rings at the score using the hot/cold bath method mentioned on page 7.

Glass Adhesives

To adhere bottle pieces together and create a project, there are many glass adhesives on the market. If you plan to put your glass creation in the dishwasher, make sure the adhesive you use is dishwasher safe. We strongly recommend that you start with a clear silicon adhesive. Silicones are known to be dishwasher safe. Whichever adhesive you choose to use, read the manufacturer's directions carefully. Before applying any adhesive to glass, roughen the surfaces with 60 grit emery paper.