

EdgeCrafter for Glass

Glass Discs

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The Alpha EdgeCrafter is now able to polish straight and beveled edges on glass. Edges up to 1 ½ inches can be beveled and polished with ease. Since the EdgeCrafter is a small hand held machine, it is easily transportable and can be readily set up in the field or on location or in a shop setting. Use of specific abrasives designed for working with glass allows the EdgeCrafter to perform efficiently while providing excellent results. The Alpha EdgeCrafter for Glass can be used with the new Alpha Vacuum Hold Down System (P/N VHS-5C) for best results.

EdgeCrafter for Glass Polishing System

- EdgeCrafter P/N CB-T4S (or CB-9 for 220V)
- Grinding Wheel P/N CBG0140M
- Diamond Abrasives P/N CBG0300R
P/N CBG0500R
P/N CBG1000R
P/N CBG2000R
- Bonded Abrasive P/N CBG0220N
P/N CBG0280N
- Final Polish P/N CBFP-GX

The grinding wheel is for initial shaping of bevels. The diamond abrasives are for polishing of straight edges and bevels thicker than 3/8 inch or 10mm. The bonded abrasives are for narrow edges and bevels up to 3/8 inch or 10mm. The final polish is a Cerium Oxide based final polishing wheel. The EdgeCrafter edge polishing system for glass is based upon the three part polishing system

System Requirements

- 110V Electrical Outlet with GFCI
- Work Bench
- Straight Edge at least 10 inches longer than the work piece.
- Sturdy work surface
- Vacuum Hold Down System (P/N VHS-5C) – optional

- Reset the machine for the straight edge and work with the 220 and 280 grit wheels if the edge is less than 3/8 inch thick. Use the 300 through 1500 diamond abrasives for edges thicker than 3/8 inch. Follow the same basic set up steps for each abrasive and adjust the height accordingly. Make sure that the water is on before you start to polish.
- Switch to the final polish wheel. The set up is basically the same except you want to add a ½ turn to the depth of the wheel to ensure good contact. With the final polish wheel you should use a little water to provide some lubrication. You also need to watch how dry you run the wheel as too much heat can cause the glass to crack. Add water periodically to provide lubrication and cooling affect. Note: you may experience some shredding of the material off the wheel. This is normal – the wheel is hitting one of the sharp edges.
- Now adjust the EdgeCrafter for the same bevel that you shaped earlier and follow the same steps for polishing. When complete, the glass edge with be completely clear and have no flaws.
- Now proceed to polish your beveled edge with the diamond abrasives (CBD0300R, CBG0500R, CBG1000R, CBG1500R). Remember to adjust your depth dial setting for each abrasive as each abrasive wears at a different rate. Polish in the same manner described above.
- Use the final polish wheel as described above to bring out an excellent polish.
- After final polish, turn your work piece over and do an eased edge with the CBG0220N and CBG0280N. If a high polish is desired – use the Final Polish Wheel as instructed above.

Basic Maintenance

Because the EdgeCrafter is used inside a shop environment, dust can become a major factor and will affect the EdgeCrafters' performance. Here are a few tips on how to maintain your EdgeCrafter operating at its maximum performance.

- Unplug your unit from the outlet/power supply for your safety. Blow dry air inside the intake air vent and exhaust air vent. Do not blow wet air, as you risk damaging the electric components besides being exposed to the risk of electric shock.
- If both guiding springs get weak or overstressed, take the springs apart by pulling out the E ring located on the left guide bar. The entire motor assembly will slide out exposing both guiding bars. Grease both guiding bars and slightly stretch both springs. Reinstall the motor assembly in reverse order.
- Check carbon brushes located on both sides of the motor. Do not attempt this while the EdgeCrafter is plugged into the power supply.

Common questions

What is the warranty for the EdgeCrafter?

Alpha Professional Tools warrants the EdgeCrafter for 90 days from the date of purchase. You should complete the registration card once you receive the EdgeCrafter and mail it in immediately to insure prompt service for warranty repairs. The warranty for tool repair is 30 days for parts and labor. Please enclose a copy of your receipt of purchase.

If my EdgeCrafter breaks down, whom should I contact for repair?

You can contact the dealer where you purchased the tool from or you can send it to Alpha Professional Tools directly.

What shall I do if my EdgeCrafter breaks down and I need to complete the job immediately?

Check the carbon brushes first and replace if necessary. If you continue to have difficulties even after replacing the brushes, you should call Alpha's Tool Repair Department at 800-648-7229.

Is there any maintenance program for the EdgeCrafter?

No. Alpha doesn't provide a maintenance program, however, we do provide preventive maintenance for your EdgeCrafter. If you hear any abnormal noises during the operation of the EdgeCrafter, you should return it immediately for preventive maintenance. Usually the bearings inside the tool are the first items to fail. Therefore, it is better to care for this problem before it spreads throughout the entire tool.

What is the maximum thickness of the glass that can be polished by the EdgeCrafter?

We advise that the maximum thickness should be 1 ½" (40mm) thick.
See helpful hints related to this question in the "helpful hints section"

What if after I properly attached the wheel into the one touch joint, the grinding/polishing wheel still comes out? Why doesn't it stay locked into the one touch joint assembly?

This might occur due to lack of lubrication, or too much dirt accumulating in the joint assembly. If you run into such a problem, blow the dirt with compressed air and lubricate the balls with tool oil. If you still are experiencing this problem, it might be due to external impact in the one touch joint assembly. Therefore, we recommend returning your EdgeCrafter to Alpha Professional Tools for professional repair.

I have set the depth dial for initial grinding. While grinding, I've noticed that my grinding settings have changed. Why is this happening?

- Set your dial to slightly touch the work piece.
- Engage the EdgeCrafter in grinding process.
- Carefully observe the depth-adjusting dial.

If the depth-adjusting dial rotates by itself, the spring is overstressed. Since the spring is loose or weak it causes a lack of pressure applied to the depth-adjusting dial. You can easily repair this problem by taking out the M6X75 screw, that holds the depth adjusting assembly, and simply stretch the spring. (Please refer to our educational video, in the maintenance section.)

While working with the final polish wheel, I noticed some material shredding off the wheel. Is this normal and will it affect the polish?

This is a normal condition and is caused by the sharp edges of glass. It will not damage the glass but actually improves the quality of polish. To reduce the amount of material, once the straight edge of the glass is calibrated, ease both the top and bottom edges. This will reduce the sharpness of the edge and therefore the amount of shredded material. Using a pencil edge easement works best. This is best accomplished with the CBG0220N.

I've followed all of the steps but my polish looks hazy. What can I do?

Examine your finished work piece. If there are still some scratches visible, most likely one of the middle steps was rushed. You will need to go back to either the 300 grit (Diamond) or 220N (for narrow glass less the 3/8") and start over. Spend extra time with the middle grits and make sure all scratches from the preceding grits are covered.

When I used the Final Polish the glass got very hot and cracked. I now have to restart with a different edge for my application. What caused this to occur and what can I do to prevent this from occurring again?

Too much heat was the culprit here. When you run the final polish wheel, it is necessary to use water to provide lubrication. However, if too much water is used, the wheel will not have any effect on the polish. It is best to make sure that the wheel has water at the start of polishing then shut it off. If the wheel feels like it is grabbing, then you should add water immediately. While polishing keep your thumb on the water control valve. This will allow you to add more water easily during polishing and keep the glass somewhat cooler. Remember that heat is a necessary element for the final polishing process but you need to control it.

HELPFUL HINTS

1. To reduce the excess material removal, set your work piece as parallel as possible with the guide. When you grind, grind just enough to create a parallel surface with the guide.
2. The coarser residue left over from the early stages of grinding may scratch your work piece. To avoid scratching the surface of your piece, apply a protective sheet of plastic or Plexi glass on it and rinse work piece between grits .
3. Always dry the edge you're working on before switching grits to check your work.
4. If you use the EdgeCrafter on a daily basis, we recommend that you grease most of the moving parts such as: both guide bars and the depth-adjusting dial screw at least once a week.
5. To avoid unexpected electrical shocks while working, always use a GFCI (Ground Fault Circuit Interrupter).
6. To increase the performance on wide bevels, we recommend cutting the bevel first to avoid excessive grinding with the EdgeCrafter. After the bevel is cut, you can calibrate the bevel to your desired width and polish it.
7. For fabricating "Hollywood" (wide bevels), we recommend that you should have a designated station just for this particular project. It will assist you when you have to do production work.
8. When working on straight edges, it is more comfortable to have the work piece higher. When you work on bevels, have the work piece lower. You can do this by using a pallet to raise and lower yourself or the work piece