

 **inland WizardTM**

Users Guide

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Introduction

The Inland “Wizard™” was engineered to be simple to operate and highly durable. Years of experience with diamond tool technology have gone into the development of the finest glass routers available.

Please take time to read all of the instructions and helpful hints listed. By following them you will enjoy hundreds of hours of trouble-free use from your “Wizard™”.

Safety Precautions- Read Carefully

Any grinding operation can cause a hazard to your eyes. Small particles of glass can be a nuisance or damaging to your eyes. Therefore, it is essential that you wear adequate safety glasses while using your “Wizard™”. There is absolutely no reason not to wear eye protection. Do not rely on eye shield devices. *Safety glasses are a must!*

Great care was taken to manufacture your “Wizard™” as an electrically grounded machine. When used as designed, it is completely safe. Under no circumstances should the three prong electrical plug system be overridden. *Only use the “Wizard™”* with a properly grounded electrical outlet that accepts the three prong electrical plug.

Setting Up Your “Wizard™”

Your “Wizard™” comes to you with no assembly required. The unit should be used on a flat, rigid surface. A desirable surface table height is 42". Set up your “Wizard™” in an area that would normally be used as a workshop. After the “Wizard™” has been set up, place the splash guard in the water coolant reservoir behind the diamond bit.

Before the unit is plugged into an electrical outlet, add 8 to 10 ounces of water to the reservoir. We highly recommend the use of a water soluble coolant. Inland “Wizard™” Coolant has been designed specifically for use with the “Wizard™”. It is available from your “Wizard™” dealer.

The “Wizard™” is manufactured with a three prong grounded electrical system. Under no circumstances should you remove the third (ground) prong from the electrical cord. The unit should only be used with a properly grounded 110 volt electrical outlet. The grounded electrical system was established for your protection; under no circumstances should it be overridden or eliminated

Operating Your “Wizard™”

Now that the grinder is properly set up, you are ready to grind. If you have never used a diamond router, grind slowly at first. Develop speed after you feel comfortable using your “Wizard™”.

Start with a scrap piece of glass to test the cutting action of the diamond bit. Before grinding, lightly push the sponge into the grinding head to insure that it is adequately flooded with water and coolant. (Repeat this procedure whenever you begin to grind after the machine has been shut off or at any time that you notice a white build-up of ground glass on bit.)

As you begin to grind, use light pressure at first. Gradually increase pressure until you get a feel for the grinding action. Generally speaking, stock removal will be much faster and easier if the glass being ground is moved back and forth across the face of the grinding head.

If you have to make a deep cut into the glass in one specific area, it is best to use intermittent pressure. By using this technique, you will allow the sponge to clean the glass swarf from the diamond section and allow it to cut efficiently.

Each bit supplied with your “Wizard™” has over 1/2” inch of usable diamond surface. This is the greatest amount of usable diamond provided with any grinder available on the market today. Most stained glass is approximately 1/8 inch thick. Since the bit grinding surface is over four times larger than the average thickness of your glass you should, by adjusting the bit up and down the shaft, be able to get four usable grinding surfaces out of each bit.

To adjust the bit up or down on the shaft, simply loosen the set screw in the bit with the allen wrench provided with the unit. The bit should slide freely on the shaft.

When grinding with a WB-5, WB-6, or WB-7 diamond bit that has a 1/4” upper diamond section, follow these suggestions. The 1/4 inch bit portion can be used either for delicate grinding or for hole drilling. In either case it is important to keep the diamond cooled. Do this by dabbing the bit with a sponge or actually holding a sponge against the bit while you grind.

To drill a hole, present the glass to the upper edge of the 1/4 inch bit at a 45° angle. Continually dab the bit with a coolant soaked sponge. In a short period of time you will have ground a 1/4 inch hole in your work piece.

Changing Grinding Bits

Changing bits is a fast, simple procedure. Your “Wizard™” motor shaft is stainless steel and the bits are pure brass. As a result, and especially if you use Inland “Wizard™” Coolant, the bit should never seize on the shaft.

To remove the bit, simply loosen the set screw on the side of the bit with the allen wrench provided with your “Wizard™”. It is not necessary to remove the set screw. Before putting on a new bit or reusing the original bit, we recommend that you grease both the motor shaft and the inside diameter of the bit.

Maintenance Of Your Router

A great deal of consideration was given the simplicity of maintenance of these units.

It was designed with a permanently lubricated ball bearing motor. Therefore, it should never be necessary to work on the interior of the unit. Maintenance is limited to changing the sponge and cleaning the unit.

The sponge can be used for long periods of time. It is recommended that the sponge be washed out frequently to remove ground glass particles. When the sponge is frayed and no longer contacts the bit, it should be replaced.

Ground glass can, under certain circumstances, dry to almost the consistency of concrete. It is important to keep your “Wizard™” free of ground glass, especially if it is going to be unused for several days.

Cleaning is very simple, the work surface has been designed to simply lift off for cleaning. After removing the work surface, use paper towels or a rag to clean the reservoir.



Your “Wizard™” and Coolants

As indicated earlier, we highly recommend that a water soluble coolant be used in your “Wizard™”. Inland “Wizard™” Coolant is a high concentrate material with a high lubricity factor.

- 1) By using this coolant you will:
- 2) Make the bit cut freely and more efficiently by reducing friction
- 3) This will increase the life of your diamond bit.
- 4) The use of coolant will make clean up easier.
- 5) By using coolant you will further insure against the seizure of the bit to the motor shaft because the coolant will act as a corrosion inhibitor.

Specifications and Parts Listing

Your “Wizard™” grinder is constructed of heavy duty glass filled polymers. The motor is a 3400 RPM, 115 volt, 60 cycle split capacitor unit. It has permanently lubricated ball bearings and a stainless steel shaft.

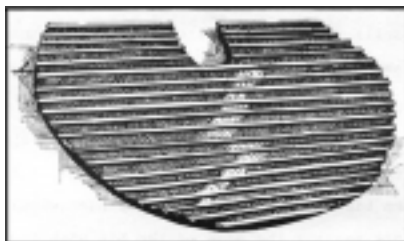
Each “Wizard™” stained glass router is provided with the following parts:

- (1) Standard aluminum work surface
- (1) Removable splash guard
- (1) WB-1 grinding bit
- (1) Allen wrench
- (2) “Wizard™” Sponges
- (1) Instruction Guide.

Optional Accessories

The following accessories are available for your “Wizard™” grinder:

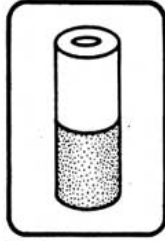
- Choice of seven grinding bits (See the *Replacement Bit Selection* section of this booklet)
- Straight Edge Guide
- Foot Pedal Switch
- Soft Rubber Work Surface for working with antique and soft glass
- Inland “Wizard™” Coolant



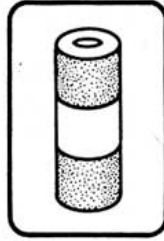
Replacement Bit Selection

Inland is the only router manufacturer that is also a diamond products manufacturer. As a result, we offer you a wide selection of high quality diamond bits. Each bit is designed to run within a tolerance of two-one thousandths of an inch (.002")

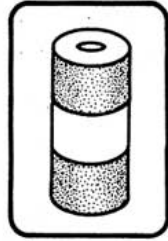
Wizard Router Bits



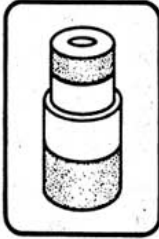
WB-1
5/8"
100/120
Grit



WB-2
5/8" (any grit)
Reversible for
double life!



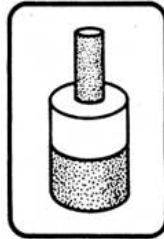
WB-3
3/4" (any grit)
Reversible for
double life!



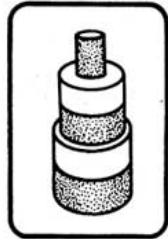
WB-4
3/4" x 5/8" (any grit)
Reversible for
double life!



WB-5
5/8" x 1/4" (any grit)
Suitable for
drilling!



WB-6
3/4" x 1/4" (any grit)
Suitable for
drilling!

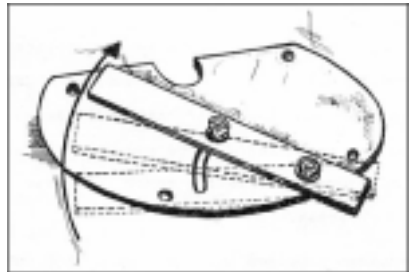


WB-7
3/4" x 5/8" x 1/4"
(any grit)

STRAIGHT EDGE GUIDE

An important and useful accessory that the "Wizard™" is available with is the straight edge guide or border cutter. This device illustrated below is a "lift off" work surface in and of itself. It can be purchased as a option in place of the standard "lift off" work surface or it can be purchased at a slightly higher cost as an accessory.

The "straight edge guide consists of (1) one specially slotted "lift off" work surface; (2) one lower screw bar; (3) one guide; and (4) two thumb screws. The guide will accommodate a piece of to four inches in width. With the easy to use thumb screws the guide



firmly locks in an infinite range of positions for precision cuts. Note that since the slotting is the the work surface and not in the guide. this straight edge guide is less cumbersome and more accurate than guides on any competitive unit.