Kristall Glass Grinders

Kristall 2000S slipmaskin

Set-Up

Fill the reservoir with water - All Models A water / coolant mix prevents airborne glass dust, increases grinding speed, and prolongs the life of the diamond surface. Remove the white grid work surface and fill the reservoir with water to just below the overflow notch in the rear of the machine. Be careful not to overfill! IM-PORTANT: Never pour water directly onto the grinding bit or motor shaft! You can then add a capful of Inland Diamond Coolant (#50011) to increase bit life and grinding speed if desired. Replace the grid surface.



Grinding Head Placement (cross section view)

Installing the Grinding Bit - All Models

Apply a thin coating of Inland Motor Shaft Lubricant (#50022) to the motor shaft. Our Teflon based lubricant helps prevent the bit from seizing on the shaft and seals out ground glass particles. In a pinch, you can use a bit of petroleum jelly. Loosen the setscrew on the diamond-grinding bit by turning it counterclockwise with the allen wrench. Slide the bit down onto the motor shaft, positioning the setscrew over the flat side of the motor shaft. Lower the bit down until just over an 3 mm of silver diamond is exposed above the grid work surface. Secure the bit to the shaft by turning the setscrew clockwise with the allen wrench.

IMPORTANT: Always secure the bit to the flat side of the motor shaft. Tightening the bit to the rounded side will scar the shaft and prevent bit removal!

Integrated Coolant Pump - Kristall 2000 and Kristall 2000S

These models have a built in coolant pump in the reservoir that supplies coolant to the diamond-grinding bit while in use.

Splash Guard - All Models

The splashguard installs into the grid surface directly behind the grinding bit. Simply insert into the two square holes in the back row of the grid surface. The splashguard helps contain water spray from the grinding bit.

Grinding

Start with a scrap piece of glass to get a 'feel' for the grinding action. Turn on the machine and begin by pushing the glass into the grinding bit using light pressure and moving the glass back and forth across the bit. Slowly increase the pressure until you feel comfortable with the grinding speed and your control. Uniform, gentle pressure of the glass on the grinding bit will produce the best results. Too much pressure will cause bit rotation to slow down and grinding speed will rapidly decrease. You'll quickly learn the optimum grinding pressure for the types of glass you use. When grinding out deep cuts, use intermittent pressure to allow coolant to rinse ground glass from the bit. If you ever have a white paste form on the bit, it is not getting enough coolant. Stop and check the sponge placement and coolant level. Grinding without coolant greatly reduces the life of your diamond bits. As the diamond surface wears, you will feel it grind less effectively. When this happens, it is time to expose a new portion of the diamond surface. Turn page >>



Västeråsen 828 830 24 OVIKEN Tel 0643-100 65 Fax 0643-102 25 E-mail mail@nordickiwi.nu Loosen the setscrew using the allen wrench and move the grinding bit up on the shaft to expose a new 3 mm section of diamond. Secure the bit back in place making sure to tighten against the flat side of the motor shaft. Reposition the sponge if needed. You have up to five 3 mm sections of diamond on a standard grinding bit to use before you need to consider replacing the entire bit.

How To Drill A Hole

The extended motor shaft allows you to work simultaneously with a smaller, drilling and grinding bit like the Inland

1/4" (6mm) WB-8. This smaller bit is placed onto the motor shaft so it sits on top of the 3/4" (19mm) bit that came with your machine.

Installing Drilling Bits

Loosen the setscrew and place the bit onto the shaft, securing it to the flat side of the motor shaft like any other bit. You may need to lower the 3/4" (19mm) bit if you are using the bottom section of diamond.

Drilling

You will need to apply coolant to the bit while drilling using another sponge soaked in coolant. Even better, purchase the nozzle attachment which sprays water upward onto the drilling bit. Read our instruction sheet on drilling a hole.

Begin drilling the hole by holding the front surface of the glass against the upper edge of the bit at about a 45° angle, with the coolant soaked sponge held against both the bit and glass. (You may want to use two hands). Start the machine and slowly move the glass down onto the bit to a horizontal position. Continue to work the glass down and around the bit top in a circular motion, making sure to keep the glass and bit surface wet at all times. You may need to stop and reload the sponge several times. Ease up on the pressure as you begin to see the bit come through the back of the glass to help reduce chipping.



Maintenance

Maintenance to your grinder is minimal but important to prolonging the life and performance of the machine.

- 1. Apply Inland Motor Shaft Lubricant (#50022) to the shaft whenever changing or removing grinding heads. Remove the head if you won't be using the grinder for more than a week.
- 2. Tighten grinding head set screws **ONLY** to the flat side of the motor shaft to prevent scaring the shaft which makes removing the head nearly impossible. Never force a bit onto the shaft and never pry off a bit. If the bit is stuck, contact Inland Customer Service for instructions at 800-521-8428, ext.306
- 3. Remove and clean the reservoir tray after every 4 hours of use (or more often if grinding heavily). Ground glass accumulates in the reservoir and can slow down the bit and hard-ened residue is difficult to remove. To remove the reservoir, first remove any grinding heads. Lift off the work surface and pour the used water out. Remove any remaining residue with clear water and a sponge or rag. Kristall 2000 and 2000S owners need to make sure to clean the pump chamber with water so that residue does not clog the pump.
- 4. After every hour of use you need to remove accumulated glass residue from the sponge in the BitSert. Remove the sponge and hold it under running water and squeeze it several times to rinse it clean. Replace in the BitSert.
- 5. Replacement grids are available.
- 6. Motor bearings are permanently sealed and lubricated.
- 7. It is also very important not to overfill the water reservoir. Fill only until the water is level with the fill line. Over filling can cause shocking and motor damage.