WizCG grinder

WizlingCG grinder

INSTRUCTION MANUAL
SAFETY INSTRUCTIONS

IMPORTANT! READ FIRST

For your own safety be sure to read, understand and follow all warnings, safety rules and instructions in this instruction manual before using this machine. Failure to do so can result in serious personal injury. This instruction manual is intended for the WizCG and WizlingCG grinders. SAVE THESE INSTRUCTIONS.

⚠️ WARNING: This machine includes a product that can expose you to chemicals including nickel, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov. This warning applies to the diamond grinder bits.

Setup

Intended for indoor use only.

Avoid dangerous environments. Do not use this machine near gasoline or other flammable liquids.

Make sure machine is securely placed on a sturdy, level surface with ample working area and away from open electrical outlets.

Do not place grinder in a pan, on a towel, or on carpeting.

Check for damaged parts. Before use, always check for any damaged parts to determine that it will operate properly and perform its intended function. Check for proper alignment of moving parts, binding of moving parts, breakage of parts, and any other conditions that may affect operation. Damaged parts must be replaced through the manufacturer of this machine to avoid risk of injury.

Use only Inland WizCG and WizlingCG grinder parts for replacement parts. Use of any other parts not originally intended for these machines may create a hazard or cause product damage.

Know your power tool. Read this instruction manual carefully. Learn the correct applications and limitations as well as specific warnings and hazards related to this machine.

Usage

Always wear proper eye protection to protect you from any debris that may fly out while you’re grinding. We recommend wearing safety goggles or safety glasses with side shields. Everyday glasses are not safety glasses. If anyone is around the machine while it’s in use, they must also wear safety glasses.
SAFETY INSTRUCTIONS

Always wear proper apparel. Do not wear any loose clothing, gloves, neckties or jewelry that can get caught in the machine’s moving parts. Secure long hair with a rubber band or hair tie.

Keep work area well lit and clean. Make sure your work area is not cluttered.

Do not operate unattended. Adult supervision is required at all times. Never leave the machine running unattended.

Do not operate this machine while under the influence of drugs, alcohol or any medication.

Never run diamond grinder bits dry. Diamond grinder bits are designed to be used with a lubricant, such as water, and will be ruined immediately if used dry. Always make sure you are using adequate water while grinding so that the material’s dust doesn’t form. This dust contains chemicals that can be hazardous to your lungs if inhaled and is known to cause cancer, birth defects or other reproductive harm. To reduce your exposure to these chemicals, work in a well ventilated area and wear a face or dust mask.

Never grind more than one workpiece at a time.

Some materials contain poisonous elements. Avoid grinding materials that contain uranium, mercury, lead, arsenic, etc. Make sure you know the material you are grinding.

Do not allow water to run down the shaft and into the motor. This will cause the motor to instantly burn out. This machine is designed in such a way that this does not occur with normal use.

Do not overfill the water reservoir. Overfilling can create electrical shock and damage the motor.

Do not force the tool or attachment to do a job it is not designed to do.

Avoid awkward operations and hand positions. Make sure you have good balance while working on this machine. A sudden slip could cause your hand to move into the moving grinder bit.

Always stay alert. You must be focused while working on this machine. Your grinding material can catch on the grinder bit and eject out of the area.

Maintenance

Always disconnect from power before servicing. Disconnect machine from power source before making any adjustments and when not in use.

Do not abuse the power cord. Never carry the machine by the cord or yank it to disconnect from receptacle. Keep cord away from heat, oil and sharp edges.

Do not open the motor housing. There are no user serviceable parts inside.

Clean and dry machine after use.
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**Register your product**

So that we can offer you the highest level of service possible, please take a moment to register your WizCG or WizlingCG at inlandcraft.com/product-registration. You can also register by mailing us the enclosed registration form. Complimentary mailing envelope is included for your convenience. Registration of your grinder also helps facilitate any warranty-related requests.
WARRANTY INFORMATION

We stand by the quality of our grinder machines. The Inland Craft WizCG and WizlingCG grinders are covered by a 5-year warranty from the date of purchase. Registering your grinder machine helps facilitate any warranty-related requests.

What does this warranty cover?
If your Inland machine fails under appropriate use during the warranty period, Inland Craft will repair or replace it at our discretion. Inland Craft guarantees to replace (after receipt and inspection) your included grinder bit, if the diamond cutting surface peels off due to any manufacturing defect.

What does this warranty not cover?
This warranty does not cover problems resulting from abuse, misuse, intentional damage, incorrect usage, failure to adequately take care of the machine or improperly following the instructions.

Who is covered under this warranty?
This warranty covers the original purchaser of the equipment and is non-transferable.

Whom should I contact if I need a warranty service?
Contact Inland Craft directly by phone at (248) 583-7150 or by email at info@inlandcraft.com and we will assist you through our warranty service. You must prove that you are under warranty by providing us with the original invoice of your machine or by registering your product in order to receive our warranty service.
MACHINE DETAILS

The image below shows parts included with your grinder machine (WizCG grinder pictured)

1. Grinder housing
2. Coolant reservoir tray
   *WizlingCG reservoir is maroon color
3. Work surface
4. 3/4" grinder bit
5. 1/4" grinder bit
   *Included with WizCG ONLY
6. BitSert
7. Splash guard
8. Coolant sponge (2)
9. Allen wrench (2)
Filling the coolant reservoir

A water/coolant mixture prevents airborne glass dust, increases grinding speed, and prolongs the life of the diamond surface on the grinder bits. Coolant is also required when using any diamond tool. Remove the work surface, then pour 12 ounces (1½ cups) of clean water into the coolant reservoir. Only fill to the ridge on the coolant level indicator located in the middle of the reservoir (Fig. A). Optionally, you can add a capful of Inland Craft diamond coolant (not included) to increase diamond bit life and grinding speed. Replace the work surface.

*IMPORTANT NOTES: Never pour water directly onto the grinder bit or down the motor shaft. Do not overfill the coolant reservoir; overfilling can create an electrical shock and damage the motor. Do not use antifreeze as a coolant.

Installing the grinder bit

In chronological order, install the grinder bit according to the steps below and Fig. B on page 8.

1. Insert the BitSert into the work surface.
2. Insert the splash guard into the installed BitSert.
3. Before installing the grinder bit, apply a thin coat of Inland Craft motor shaft lubricant (not included) to the motor shaft. This is to prevent the set screw from seizing to the motor shaft. Metal against metal, under pressure and over time can bond. Loosening the set screw between uses also prevents this. If you do not have the Inland Craft motor shaft lubricant, use a small amount of Vaseline.
4. Take the included 3/4" grinder bit and loosen the set screw using the included Allen wrench, turning counterclockwise.
5. Slide the 3/4" grinder bit onto the motor shaft, positioning the set screw over the flat side of the motor shaft. Bits should slide onto the motor shaft easily, do not force!
6. Lower the bit until just over 1/8" of the diamond is exposed above the work surface. Secure the bit using the Allen wrench, turning clockwise.

Fig. A

*WizCG reservoir is pictured, WizlingCG reservoir is maroon
Sponge placement

The included yellow sponge is what feeds the coolant to the grinding bit while you work. It is held in place by the BitSert. To install, first wet the sponge by running it under clean water. Insert the sponge into the rectangular hole behind the BitSert, so that the bottom of the sponge makes contact with the coolant in the reservoir, and the top of the sponge makes contact with the diamond surface of the bit (Fig. C). The sponge must always have contact with the bit while grinding. If a white paste develops on the head or on your glass while grinding, either the sponge is not properly positioned or the water/coolant level in the reservoir is low. Periodically rinse out the sponge to remove accumulated grinding residue. When the sponge becomes worn, replace it.

Fire it up!

Make sure the power cord is plugged into a grounded electrical outlet. Put on safety goggles (not included) and turn on power by flipping the two-way power switch located on the right side of the machine.
**Grinding**

Turn on the machine and start grinding a piece of scrap glass to get a 'feel' for the grinding action. 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. 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 head. If you ever have a white paste form on the bit, it is not getting enough coolant. Stop, turn off the machine, and check the sponge placement and coolant level. Grinding without coolant greatly reduces the life of your grinding heads.

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. Loosen the set screw using the included Allen wrench and move the grinding head up on the shaft to expose a new 1/8" section of diamond. Secure the bit back in place making sure to tighten the set screw against the flat side of the motor shaft. Reposition the sponge if needed. You have up to 5, 1/8" sections of exposed diamond on a standard grinding bit to use before you need to consider replacing the entire head.

**How to drill a hole in glass**

The WizCG comes with a 1/4" grinding/drilling bit. It is not included with the WizlingCG. This 1/4" grinder bit is useful for drilling holes and intricate grinding. The 1/4" bit is placed onto the motor shaft and sits on top of the 3/4" grinder bit. Loosen the set screw with the included Allen wrench, then slide the bit onto the shaft, securing the set screw to the flat side of the motor shaft. You need to supply the coolant to the 1/4" bit while drilling by using the other included sponge soaked in coolant. Begin drilling the hole by holding the front surface of the glass against the upper edge of the bit at about a 45° angle, while holding the coolant soaked sponge against the bit and glass (Fig. D). You will want to use two hands. Slowly move the glass down onto the bit in a horizontal position. Continue to work the glass down and around the top of the bit in a circular motion, making sure to keep the glass and diamond wet at all times. You may need to stop and soak the sponge with coolant several times. Reduce pressure as you begin to see the bit come through the back of the glass to avoid chipping. Practice before you drill your final project.

*Fig. D*
MAINTENANCE

Maintenance to WizCG and WizlingCG grinders is minimal but important. Follow these guidelines to prolong the life and performance of your machine.

Motor
The motor bearings are permanently sealed and lubricated. There is no internal maintenance required.

Motor shaft
Apply Inland Craft motor shaft lubricant (not included) or a small amount of Vaseline to the motor shaft whenever you change or remove the grinding bits. Remove the bit if you won’t be using the grinder for more than a week.

Water reservoir
Remove and clean the reservoir every four hours of use, more often if grinding heavily. Remove the water reservoir by first removing any grinding bits. Lift off the work surface, then lift the reservoir tray off the grinder housing. Scrape the glass sludge into the trash and rinse clean. Reassemble, referring to the assembly section on page 7.

Work surface
The work surface is reversible. When one side becomes worn, simply flip it over. Replacement work surfaces are available online.

Coolant sponge
Periodically rinse out the coolant sponge to remove any accumulated grinding residue. Squeeze several times while holding the sponge under running water to rinse and clean it. When the sponge becomes worn, replace it.

Keep your switch clean
Water and glass slurry may slop over the sides of the grinder and onto the switch. Wet hands handling the switch will also get glass slurry into the switch. Over time, this glass slurry builds up in the switch contacts. Because colored glass contains metal oxides, when significant quantities are there, the dried glass dust will make a live connection across the switch contacts.

Check out our YouTube channel for WizCG and WizlingCG grinder maintenance videos and usage tutorials at youtube.com/ICPVids
ACCESSORIES

Optional accessories and additional grinder bits available at inlandcraft.com

**Jewelry bit**
Use to grind grooves around the outside of glass, cabochons, beads and buttons for wire wrapping projects. Available in 220# diamond grit. Choose from 1 mm and 1.4 mm thickness.

SKU
1 mm: 40190, 1.4 mm: 40194

**Diamond drill bit**
Use to drill precision holes and create fine, intricate details in your glass pieces. Available in 1/8", 1/4" and 3/8" diameters. Bits require the grinding/drilling adapter on the right.

SKU
1/8": 40318, 1/4": 40314, 3/8": 40338

**Grinding/drilling bit adapter**
This adapter is used with the diamond drill bits. Drill precision holes and create fine, intricate details without having to remove your 3/4" or 1" grinding head!

SKU
40317

**FaceShield**
Large, 10" x 8-3/4" acrylic face shield provides added protection from grinding debris. Quick and easy installation.

SKU
50017

**MagnaShield**
Same as the FaceShield except with a built-in optical convex magnifying surface to reduce eye strain, making it easier to see.

SKU
50018

**SecondStory work surface**
Elevated work surface that makes it easier to grind and drill holes with small diameter drilling heads.

SKU
50001