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Super Star II™ & Diamond Star Grinders

Eye Protection

Operation

Diamond Grinding Heads

Maintenance

Straight Edge Guide



DIAMOND GLASS GRINDER MANUAL SUPER STAR II & DIAMOND STAR

**IMPORTANT SAFETY INSTRUCTIONS
READ ALL INSTRUCTIONS
FOR PERSONAL SAFETY THIS MACHINE MUST BE PROPERLY GROUNDED**



The power cord of this machine is equipped with a three-prong (grounding) plug which mates with a standard three-prong (grounding) wall receptacle to minimize the possibility of electric shock hazard. Where a standard two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to have it replaced with a properly grounded three-prong wall receptacle. **DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE THIRD (GROUNDING) PRONG FROM THE POWER CORD.**

Always unplug your machine before cleaning or making any repairs-(NOTE: We strongly recommend that you return the unit to the factory for repair.) USE ONLY IDENTICAL REPLACEMENT PARTS TO REPAIR THIS MACHINE.

SAVE THESE INSTRUCTIONS

OUTSIDE USA (818) 341-0301 · INSIDE USA (800) 423-5635

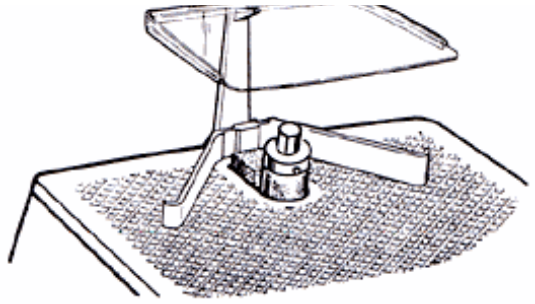
FAX (818) 998-2078 · WEBSITE www.glastar.com

EMAIL: info@glastar.com



EYE PROTECTION

When operating the grinder, always protect yourself against eye injuries from flying glass. Wear safety glasses or use one of the Glastar eye shields. Either the glass or plastic type is available as an option from your dealer. They mount over the grinding head and keep flying chips from hitting the face or hair.



VENTILATION

Openings in the grinder back and bottom are provided for ventilation. To insure reliable operation and to protect the grinder from overheating, these openings must not be blocked or covered. Do not place grinder near or over a radiator or heating vent. If this unit is installed within another enclosure, be sure that adequate ventilation has been provided.

OPERATION

First install the flexible stopper in the drain hole located in the left-front corner of the water basin. Make certain it is pushed in hard; then add water. It is not necessary to completely fill the reservoir. Add enough water - about two cups - so the water level is at least touching the bottom of the grinding head. Then dip the sponge in water and squeeze it several times to make certain it is thoroughly wet. Replace the sponge in its pocket behind the grinding head, and turn on the grinder. As the head turns, water is pumped into the sponge, keeping it soaking wet. The wet sponge keeps the diamond surface clean and cool. never use the machine without first checking the water level and making certain the sponge is in place behind the grinding head. If you notice a white paste or powder building up on the piece of glass being ground, the sponge is not keeping the head wet enough. You should adjust the sponge by raising it a little higher on the head, or you may have to add more water to the machine. If you use the diamond grinding head dry, you will considerably shorten its life.

When you start to grind, push the glass against the grinding head with firm pressure. The diamond surface cuts better with firm pressure against it. Excessive pressure will not hurt the diamond surface, although it may slow or stop the motor. If this happens, don't be concerned. Just back the glass off slightly...and the motor will resume its normal speed.

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 residue from the diamond so that it cuts more efficiently.

Grinder coolant should prolong the life of the diamond head. A solution of 1 part coolant to 64 parts water or 1 tablespoon to 2 cups of water is recommended.

The head slings water as it rotates. The splash guard catches most of this water and returns it to the reservoir. If your finger touches the diamond head when it is rotating, it will feel smooth. The diamond surface is not nearly the hazard to fingers as is a belt sander or a silicone carbide grinding wheel.

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DIAMOND GRINDING HEADS

The diamond cutting surface of the head is 5/8" (15.875 mm) high. Glastar has installed the head so that the full 5/8" (15.875 mm) of diamond extends above the top plate. If all the glass you grind is 1/8" (3.175 mm) thick or less, you will only use the lower one-fifth of the cutting surface. When the diamond cutting surface dulls, lower the head 1/8" (3.175 mm). This will provide a new, sharp grinding surface. When that area dulls, lower the head another 1/8" (3.175 mm) and so forth. This will allow five surfaces; each surface should last approximately 20 to 50 hours, a total of 100 to 250 hours of grinding from one head. If you grind 1/4" (6.350 mm) thick glass, you lower the head 1/4" (6.350 mm) to change to a new, fresh surface. This gives you two grinding surfaces per head.

It is difficult to quote a specific number of hours that the diamond cutting head will last. Like sandpaper, it does not wear out all of a sudden. Instead, the cutting head gradually begins to dull. The head's durability depends on the type of glass you are grinding and your definition of dull. The 20 to 50 hours per surface is an estimate. Some claim more than 100 hours per surface, while others change to a fresh surface after 10 hours. Of course you should expect far less life if you are grinding rocks. **Never grind any metal** (i.e. lead, copper) with the diamond head. This will make the diamond surface unusable for glass in a matter of seconds.

To lower the 3/4" (19.050 mm) head, loosen the set screw near the top of the head with the Allen key. The loosened head will slide up and down on the motor shaft with ease. Each time you re-position the cutting

head, Glastar recommends the application of a lubricant, such as Vaseline, to the motor shaft. When re-tightening the set screw with the Allen key, make certain the screw is set against the flat side of the motor shaft.

TOOL DRAWER

This drawer provides quick access for all those items needed when operating the grinder, such as extra grinding heads, Allen key, sponges, straight edge guide etc.

MAINTENANCE

The grinder's only moving part is the electric motor which has permanently lubricated bearings. No maintenance is required.

After using the grinder for a short period, you will find that a very fine white paste, made up of glass particles, collects at the bottom of the reservoir. This glass will also collect in the sponge and will eventually inhibit the movement of water. Therefore, after every hour of use, remove the sponge, hold it under a water faucet, and squeeze it several times to rinse it clean. Every four hours of use, clean the reservoir of ground glass.

To clean the reservoir, unplug the machine and remove the white plastic work surface. Move the left front corner of the grinder over the edge of your work bench. Place an empty container under the drain hole and unplug the stopper in the basin. After all of the water has drained out, use a large sponge to remove the white paste from the reservoir. Don't forget to replace the stopper before refilling your machine.

For hassle-free reservoir cleaning, use Glastar's disposable reservoir tray. When the tray fills up with glass residue, drain the water as described above, and dispose of the tray. Then, replace with a new tray and be sure to insert stopper.

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GLASS SCRATCHES

Despite the grid-type of work surface, some finely-ground glass may stick to the top plate, and it can scratch smooth, soft glass, such as 3/16" (4.7625 mm) or 1/4" (6.35 mm) plate, and some antique glasses. If you are working with soft glass, it would be wise to place several strips of masking tape on the bottom of the glass to raise it off the table.

Diamond Star

In this carton, along with the grinder, you will find the following items.

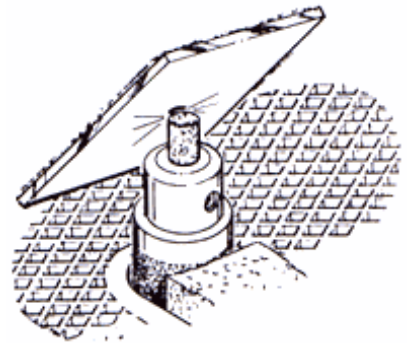
1. A flexible splash guard, which is to be installed on the top plate behind the grinding head.
2. Four adhesive backed rubber feet to be installed on the bottom of the grinder.
3. A one inch sponge which provides water to the grinding head, and two spares.
4. An Allen key to raise or remove the head.
5. An owner's manual and warranty card.
6. A flexible drain stopper.
7. An insert for 1" grinding head.

Super Star II

In this carton, along with the grinder, you will find all of those items listed under DIAMOND STAR as well as a 1/4" (6.350 mm) Grinding Head and Adjustable Straight Edge Guide.

1/4" GRINDING HEAD

This small head allows you to grind very tight inside curves that you otherwise could not get to using the main 3/4" (19.050 mm) head. The 1/4" (6.35 mm) head has one additional feature. It can be used to drill holes in glass. Hold your piece of glass at approximately a 45 ° angle to the work surface as shown. Use a squeeze bottle to keep the head wet.



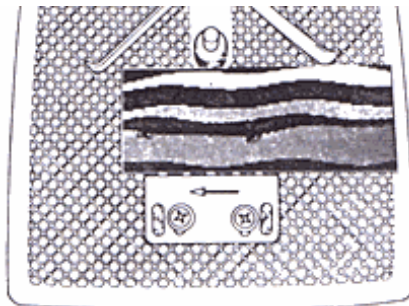
STRAIGHT EDGE GUIDE

This accessory permits one to grind straight-sided rectangles to exact size. The glass is pushed between the



guide and the grinding head. It operates exactly like a fence on a table saw.

To install the guide, turn it upside down and load the five nylon rollers onto the pegs on the guide. Place a piece of paper on top of the rollers. Then turn the guide (paper and all) right side up onto the top plate. Slide the paper out from between the guide and the work surface. Move the guide so that the rollers face the grinding head and it is centered right to left.



Set the guide at the distance from the head you desire. Put the 1" (2.54 cm) #12 screws with washers into holes "B" in the guide and screw them into the available holes in the top plate. BE CAREFUL: Do not over-tighten the screws. It takes very little tension to hold the guide in place.

Push the glass from right to left ONLY. The arrow on the guide indicates the direction of the glass. You may grind pieces up to 6" (15.24 cm) in width.

INPUT POWER

| MODEL | SUPER STAR II | | DIAMOND STAR | |
|-------------------|---------------|----------|--------------|----------|
| | G12 | G121 | G14 | G141 |
| VOLTAGE | 115V | 220/240V | 115V | 220/240V |
| FREQUENCY | 60 hz | 50 hz | 60 hz | 50 hz |
| FULL LOAD CURRENT | 1.3A | .60A | 1.45A | .55A |

5 YEAR NO FAULT WARRANTY

WHAT WE WILL DO

This warranty is extended by GLASTAR CORPORATION to the original purchaser and to any succeeding owner. If your GLASTAR GRINDER fails for any reason within the first 5 years from the date of manufacture, we will repair the product without charge for parts or labor.

To register this product, [click here](#)

HOW TO OBTAIN SERVICE

If you have any problem with your GLASTAR GRINDER call the GLASTAR TOLL FREE NUMBER for an authorization number. Then pack the machine well and return it post-paid to GLASTAR. We will repair your grinder as rapidly as possible and return it to you post-paid.

WHAT IS NOT COVERED

This warranty does not cover wear of the top plate (work surface) or the diamond grinding surface. This warranty applies to U.S. and Canada only.