



Diamond Max™

Two-In-One Grinder Operations Manual



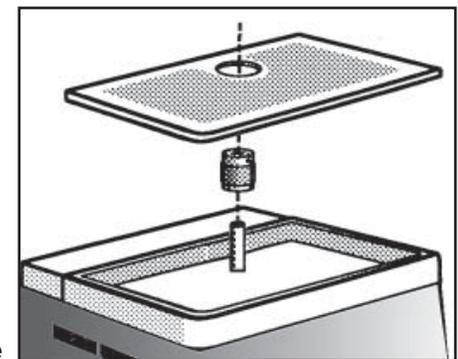
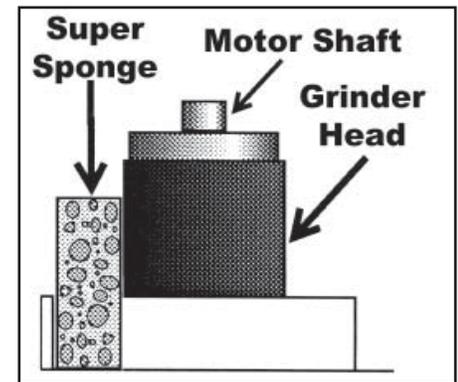
Diamond Tech International

Safety Precautions

1. Read the instruction manual before operating this tool.
2. ALWAYS WEAR FULL EYE PROTECTION.
3. Be sure the power switch is "OFF" before plugging in this tool.
4. Use only with a properly grounded electrical outlets that accept\$ a three prong plug.
5. Unplug grinder before servicing. Always be sure the grinder is proper working condition before use.
6. Keep grinder clean and lubricated for safety and best performance.
7. Avoid dangerous environments. Use in a clean, well lit, and ventilated area away from flammable vapors
8. Wear proper apparel. Remove jewelry neckties and clothing that could become caught in the moving parts.
9. Remove all keys and wrenches before using this tool. Leaving keys and wrenched attached while operating this tool may result in damage to the tool or operator.
10. Never leave grinder running unattended. Turn power off. Don't leave tool until it comes to a complete stop.

Router Operating Instructions

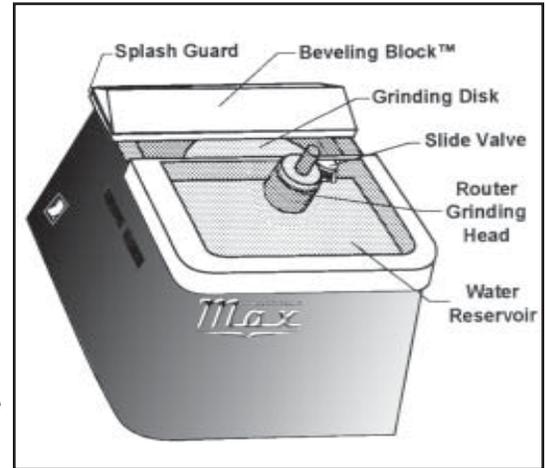
1. Remove the packing included to protect the grinder during shipment.
2. The grinder disk must be installed before initial operation of the grinder. To install the grinder disk use a hex wrench, loosen and remove Grinder Head. Then, remove the grind surface, water tray, Beveling Block™ and splash guard. Line up the pin hole on the bottom of the disk with the pin on the lower support collar and lower the disk into place. Remove the disk retaining nut and install the grinding disk. Grease the threads of the lower support collar, then reattach the disk retaining nut and tighten securely. Push disk down firmly to minimize disk vibration. Installation of the disk is necessary even if no water dripping on the motor housing.
3. Replace the water tray, grid surface, splash guard and Beveling Block™. Grease the motor shaft, then replace and tighten ensuring that the hex screw on the bit is aligned with the flat part of the motor shaft.
4. Fill the water reservoir about 3/4 of the way to the top. You may add special grinding lubricant if desired.
5. Soak the sponge in water, then position it behind the water reservoir and Grinder Head. If the sponge goes dry while grinding add extra water directly to the sponge. NEVER GRIND DRY. Keep the slide valve closed until ready for disk use.
6. Replace the grid cover and the grinder is ready for use. The grinder plugs directly into the Foot switch (recommended for use) or into any outlet.
7. To setup the 1/4" bit and the Step-Up-Work Surface™ (Deluxe Model Only), place the 1/4" bit directly onto the top of the shaft and tighten hex screw. The Step-Up-Work Surface™ has pins on the bottom that fit into the grid cover.
8. When it is time to replace the router head or diamond disk, replace with Diamond Tech Grinder Bits only. Other brands may not properly fit on the Diamond Max.



PLEASE NOTE: Snap 3/4" grinder head adapter into the grid surface before using the 3/4" Grinder Head.

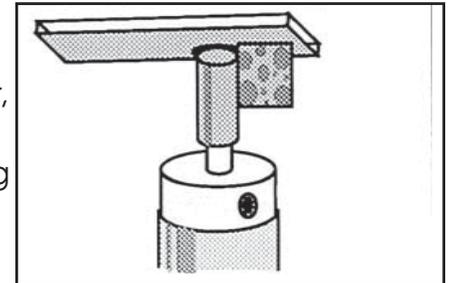
Disk Operating Instructions

1. Fill the water reservoir about 3/4 of the way to the top and when ready to start disk grinding, open the Slide Valve. If needed, you can increase water supply to the grinding disk by slightly enlarging the holes located behind the slide valve. Use caution to prevent over-enlargement of the holes.
2. While grinding, hold glass firmly and move material from side to side over disk. To grind accurate 30° or 45° edges, use the reversible Bevel Block™. To grind an accurate 90° flat edge hold material against the back of the water reservoir.
3. If the material you are grinding rubs against the sides of the grinder, then raising the disk is necessary. To raise the disk, first remove the Grind Head, water reservoir, and retaining nut and the disk. The support collar is secured by 2 hex screws on the side, loosen it and raise the lower collar to the needed height, then retighten.
4. To avoid unnecessary disk vibration, ensure a secure fit between the disk and lower support collar.
5. Minor chipping may occur with new disk. Chipping will stop after a little use.



How To Drill

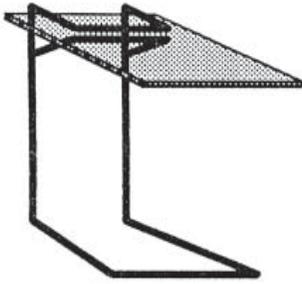
1. Start with the 1/4" grinder head attached to the top of the shaft.
2. Grip the glass firmly using the lower very gently on the top of the drill bit, hold the wet sponge as close as possible to the point of contact.
3. Lighten pressure downward when you near completion of your drilling to avoid chipping.



Use and Care Information

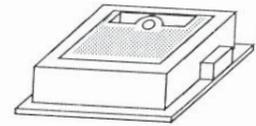
1. NEVER GRIND DRY. Always make sure the sponge for the router bit is wet or that water is dripping on the disk while grinding.
2. DO NOT OPERATE WITHOUT DIAMOND DISK INSTALLED. Disk acts as a cover to keep water from dripping on the motor housing.
3. While using the grinder head, use only light to medium pressure on the head. Do not push material against head using excessive force. Unnecessary pressure will shorten grinder and grinder head life.
4. Clean water reservoir and Super Sponge™ after each use.
5. If the router Grinding Head becomes dry, add water directly to the Super Sponge™.
6. To maintain ease of assembly, disassembly, and to extend the life of the grinder, clean and grease the motor shaft (rod that holds grinder head). Inner disk circle, and set screws every 50 hours of use.
7. Some rust may form onto the Diamond Disk, it does not affect the efficiency or life of the disk.
8. DO NOT GRIND METAL. It will make the surface unsuitable for glass in seconds.

Upgrade Kits and Replacement Parts



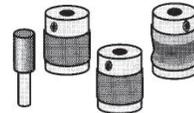
Universal Face Shield™ - Protect eyes and face while grinding.
Fits any grinder or beveler.

Step-Up-Work Surface™ - Second story work surface provides a flat surface when using the 1/4" router bit.



Grinder Disks™ - Replacement disks come in three different grits - 180 coarse, 260 fine and 360 extra-fine.

Silver Bullet Bits™ - DTI manufactures a full line of grinder bits. Sizes include: 1/4" screw, 1/4" screw, 1/4" cap, 1/4" fast grind(cap), 3/4" fast grind, 1" standard, 1" fast grind, Angle Bit and a Reducing Bit.



M3 Conversion Kit - Everything you need to convert your Diamond Max™ into a Bevel Max™ Studio Beveling System.

Kit Includes:

- 5 pack of 60 and 1 micron laps
- Polishing Pad and Compound
- 150/300 Bevel Block™
- Splash Gaurd Booth
- Water Bottle
- "How To Bevel" Video

Warranty

The Diamond Max™ is backed by **6 year** manufacturers warranty. If failure occurs for any reason other than misuse during this period, it will be corrected free of charge when shipped prepaid to our distribution center. Grinder Heads, Disks and Super Sponge™ are not included in this warranty except for manufacturing defects.

If you are having further problems not covered in this manual, call our customer Help Line at

800-937-9593

NOTE: This machine was designed for certain applications only. Diamond Tech International strongly recommends that this machine NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the machine until you have contacted Diamond Tech International and we have advised you.