

# **3/4" AND 1/4" DIAMOND COMBOBIT**

## User Instructions

This diamond grinding head is a combination of a 3/4" standard grit grinding head and a 1/4" grinding / drilling head to create a multi-tasking single head that is both convenient and cost effective. This Inland grinding head fits all machines with a standard 3/8" (9.52 mm) motor shaft.

### Safety

- It is extremely important to wear proper eye protection. We highly recommend that you wear safety goggles rather than safety glasses. You can also use the Inland [FaceShield™](#) or [MagnaShield™](#) in conjunction with proper eye wear for added protection. **NOTE:** A shield alone is not adequate eye protection.
- DO NOT wear loose clothing or any accessories (long necklaces, bracelets, shirts with long fringes, and similar) that might get caught by the grinder head while it on your machine.
- Gloves are recommended for hole drilling

### Installing

1. It is always a good idea to apply a lubricant such as Inland [Motor Shaft Lubricant](#) to the motor shaft whenever installing or changing heads. This helps prevent the head from seizing on the shaft and keeps ground glass and other debris from getting down into the motor.
2. Loosen the set screw using the allen wrench provided by turning it counterclockwise.
3. Slide the head onto the shaft so that the set screw sits over the flat side of the motor shaft. Do not force! It should slide on easily. Contact [customer service](#) at 1-800-521-8428, ext. 306 if you have problems.
4. Lower it down until the amount of diamond exposed above the work surface is slightly greater than the height of the material you are shaping. Secure the head to the shaft by turning the set screw clockwise with the allen wrench provided. **IMPORTANT:** Always secure the head to the flat side of the motor shaft. Tightening the head to the rounded side can scar the shaft and prevent head removal!
5. When the exposed diamond no longer grinds efficiently, loosen the set screw and move the head on the motor shaft to expose a fresh section of diamond and re-secure.
6. Refer to your machines owner's manual for how to use diamond grinding heads properly on your machine.

### Using the 1/4" Drilling Head

It is advisable to practice on a piece of scrap material to get a feel for the process before you begin drilling on your final project.

1. You will need to apply coolant to this smaller head using another sponge soaked in coolant.
2. Start the machine
3. Begin drilling the hole by bringing the front surface of the material against the upper edge of the head at about a 45° angle with the coolant soaked sponge held against both the head and material as shown at right. You may find it easier to use two hands.
4. Continue to move the material down onto the head to a horizontal position to start the hole.
5. Then apply pressure down as you work the material around the head in a circular motion. You may need to may need to reload the sponge several to ensure the material being drilled and the diamond is properly lubricated at all times.
6. Decrease the pressure as you start seeing the head come through the back of the material to reduce chipping.
7. You can enlarge the hole by continuing to work the material in a circular motion around head.
8. You can also use this section like a standard head to grind and shape more intricate details in your material. Again you will need to keep the area properly lubricated by holding a coolant soaked sponge held against both the head and material as you work.





## Helpful Tips

- If a white powder forms around the head as you grind, check both your sponge placement and the coolant level in the reservoir. If you are using a drilling head check to make sure your sponge is loaded with coolant and you are holding against both the diamond surface and your material.
- You will notice that grinding with smaller heads is slower than standard heads. This is due to the smaller diameter and is normal.
- Always tighten heads to the flat side of the motor shaft. Tightening to the round side can scar the shaft and prevent the head from being removed.
- Remove the grinding heads from your machine if you are not using it for long periods.
- You can use Inland [DiamondCoolant](#)<sup>™</sup> to help increase grinding efficiency and prolong life of your diamond grinding and drilling heads.

## Service

If you have any questions or comments regarding the use of this or any Inland product please call Inland Customer Service at 1-800-521-8428 9 AM to 5 PM EST, email us at [helpdesk@inlandcraft.com](mailto:helpdesk@inlandcraft.com), or write us at:

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