

## Maintenance Continued

formed, polish up the motor shaft. Remove all heads and hold a piece of 0000 or finer) steel wool up to the motor shaft while the unit is running. Work down the imperfections and then wipe the shaft clean and apply a thin coating of Inland MotorShaft Lubricant™ (Inland no. 50028) or petroleum jelly.

- Removing grinding heads after use will prevent them from seizing.
- Check the power cord periodically for cuts or damage.
- Check all coolant lines and tubes to see that they are not clogged.

## Product Specifications

### Convertible Motor Unit

Variable Speed Motor Unit  
Permanent Magnet DC motor, rectified for AC outlets  
Max Torque: 48 oz-in  
Max RPM: 2800  
Shaft OD: .312" (5/16") Stainless Steel  
Available in 115V or 230/240V models

### Grinder/Shaper

Work Surface: 9" x 11"  
Height: 6 ½"  
Max Bit Diameter: 1"  
Max Sanding Thickness: 5/8"

## Two Year Full Confidence Warranty

### Parts and Accessories

**50084 SwapTop Grid:** Reversible work surface with BitSert™

**10675 Trim Saw Conversion Kit:** Convert the SwapTop Grinder / Shaper into a wet operating trim saw with a 6½" diamond blade.

**10885 8" Flat Lap Conversion Kit:** Convert the SwapTop Grinder / Shaper into a flat lap machine for shaping and polishing. Includes 4 graduated grit diamond laps, master lap, polishing pad, and compound.

**69971653 Straight Edge Guide Kit:** Use to even edges and create uniform width strips and pieces.

**Diamond Heads:** Available in a wide range of diameters (1/8" to 1"), grits (coarse to fine), and in a number of specialty profiles for every grinding or shaping need.

**50011 DiamondCoolant™:** Use this water soluble coolant to grind faster and make your bits last longer by reducing grinding friction.

**50017 FaceShield™:** A 8.5" x 10" acrylic shield for added eye protection.

**50018 MagnaShield™:** A 8.5" x 10" acrylic shield with optical quality convex magnifying surface built in to reduce eye strain and make detail work easier.

## Service

So that we can offer you the highest level of service possible, please take a moment to register your product by going to [www.inlandcraft.com](http://www.inlandcraft.com) or mailing in the registration card.

Questions about your grinder can be answered by visiting the Inland Craft web site at [www.inlandcraft.com](http://www.inlandcraft.com), watching our online videos at [www.inlandcraft.com/videos](http://www.inlandcraft.com/videos), by emailing Customer Service at [helpdesk@inlandcraft.com](mailto:helpdesk@inlandcraft.com) or by calling Inland Customer Service at 1-800-521-8428 Monday through Friday, 9:00 am to 5:00 PM EST.



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# inland SwapTop™ Grinder / Shaper

## Users Guide

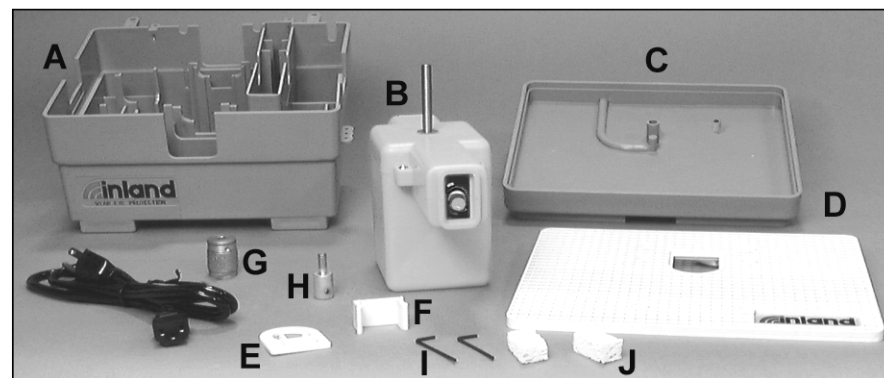
Thank you for buying this Inland product. These instructions cover assembly and use of the SwapTop™ Grinder/Shaper (models 10620, 10640, 10650) and the SwapTop™ Grinder/Shaper Conversion Kit (10655). Please read all instructions to understand the correct components, set-up, and use of your machine.

## Safety

- ✓ **Always** wear safety glasses or goggles. You can use a FaceShield™ or MagnaShield™ for *additional* protection.
- ✓ Plug into a grounded electrical system. **Do Not** override the grounding system.
- ✓ If your motor unit has a speed control feature, make sure that you set it at the maximum speed for proper operation.
- ✓ **Always** unplug your machine when switching between set-ups, installing bits, and making adjustments.
- ✓ Place on a sturdy, level, water tolerant surface at a comfortable working height.
- ✓ **Never** operate with guard covers and safety features removed or disabled.

## Parts List

Use the chart and picture to verify you have the parts needed for your model



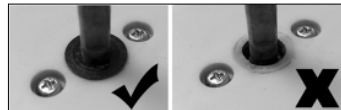
Name	Qty	10620	10640	10650	10655
A Machine Base	1	yes	yes	yes	no
B Motor Unit	1	yes	yes	yes	no
C Removable Reservoir	1	yes	yes	yes	yes
D Reversible Grid Surface	1	yes	yes	yes	yes
E BitSert™	1	yes	yes	yes	yes
F Splash Guard	1	yes	yes	yes	yes
G Diamond Head	1	3/4"	1"	1"	1"
H 1/4" Diamond Head	1	-	-	yes	-
I 5/64" Allen Wrench	2	yes	yes	yes	yes
J Sponge	2	yes	yes	yes	yes

## Swapping the Tops

1. Unplug the machine
2. Remove all grinding heads you have installed.
3. Remove the grid work surface.
4. Drain any coolant from the reservoir and wipe dry.
5. Push in on the spring loaded latches to release the top from the base and then lift straight up to remove.
6. Follow the instructions provided in the conversion kit to install it onto the base.

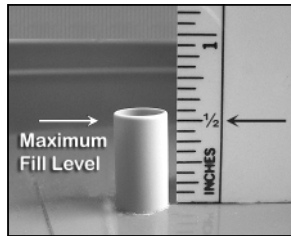
## Setting Up the SwapTop Grinder/Shaper

1. Make sure the machine is unplugged. If you were set up as a saw or flat lap, remove all diamond tools, work surfaces, and reservoirs. You should have only the open machine base and yellow motor unit.
2. Position the yellow motor unit in the base with the motor shaft vertical. Press down on the unit slowly, yet firmly, until you feel it seat into the base.



**NOTE:** There is a brown disk friction-fitted to the motor shaft called a "slinger." It must be in place and stay fixed to the motor shaft. Its purpose is to spin away stray drips of water or condensation from the motor workings.

3. Place the gray reservoir surface onto the base checking to make sure the reservoir overflow drain protrudes up into the well. Make sure the spring loaded latches on each side snap into place. You should be able to lift the entire unit by the top.
4. Place the white grid surface onto the reservoir and insert the white BitSert™.



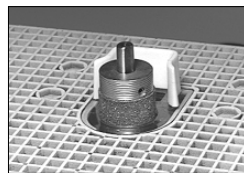
5. Use the 5/64" allen wrench to secure the grinding head to the flat side of the motor shaft. The amount of bit surface showing needs to be slightly more than the thickness of the material you are shaping. Depending on the thickness of the material, there are multiple sections of usable diamond/abrasive. As one section wears, loosen the head, move the bit to expose a new section and re-secure to the motor shaft.



## Wet Grinding and Shaping

You can shape the full spectrum of hard materials using your SwapTop grinder and Inland diamond heads following these steps:

1. Fill the reservoir with water to just below the top of the drain stem, approximately 1/2" deep. You can add a capful of Inland DiamondCoolant™ (Inland no. 50011) to the water at this time. It helps your diamond heads grind more efficiently and last longer.



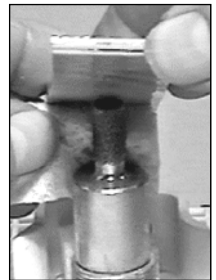
2. Insert the splash guard into the holes in the BitSert, behind the grinding head.
3. Insert a sponge into the rectangular hole of the BitSert behind the grinding head. Make sure the sponge contacts the water in the reservoir and the diamond surface. The sponge supplies coolant from the reservoir to the bit while grinding. If you ever see a white powder appear when wet grinding, immediately stop and check your coolant level and/or sponge position. Using diamond heads without sufficient coolant will severely affect their performance and life span.
4. Place a small scrap of material onto the work surface and start the machine. Slowly move the material into the grinding head. Get a feel for the grinding action by trying different amounts of pressure against the head. Never press so hard that you bog or stall the grinding head. With a little practice you will get a feel for the optimal grinding action and pressure.



## Drilling Holes

You can safely drill holes in all types of material using the 1/4" grinding head (optional on some models). Place the bit on top of the 3/4" or 1" grinding head and secure to the flat side of the motor shaft. (You may need to lower the bottom grinding head) For glass, tile, stone, and similar materials you need to hold a coolant soaked sponge against the bit to keep it wet while drilling. Drilling wood or plastics is done without any coolant.

Turn on the machine and begin the hole by holding the material at a 45° angle and then slowly bring it down flat onto the bit. Work the material around the bit while keeping the wet sponge against the head (if required). Continue working until you see the bit start to come through the back. Ease up on the pressure to help prevent chipping as the bit comes through. You can then enlarge the hole by grinding the inside of the existing hole to the desired size.



## Speed Control Motor Feature

The integrated speed control feature on the front of the motor allows you to adjust the bit's speed. We recommend running at full speed to maximize bit life and performance unless you are grinding softer materials like mirror, dichroic or flashed glass that might chip less acceptably. Turning the speed down may reduce this and can mimic the effect of using a finer grit bit to a small extent.

## Maintenance

- **Always** unplug the unit when cleaning.
- We recommend after wet use to drain any remaining coolant: The debris from many materials has a tendency to harden. Rinse and dry the reservoir and removable work surface.
- After dry use empty or vacuum the reservoir of debris and then wipe down and dry the reservoir and removable work surface.
- **Never** allow the yellow motor unit to get wet or immerse it in water. Use a vacuum to remove any debris from the bottom air vents on the unit.
- **Always** secure grinding heads to the flat side of the motor shaft. Failure to do so can scar the shaft and prevent its removal. If some burrs or nicks have