

Product Specifications

Convertible Motor Unit

Permanent Magnet AC Motor
5/16" Stainless Steel Motor Shaft
115VAC / 60Hz, or 230/240VAC / 50Hz
48 oz-in Torque / 2800 RPM

Two Year Full Confidence Warranty

6" Lap Machine

Work Surface: 10" x 11"
Height: 6 1/2"
Maximum Lap Diameter: 6"

Parts and Accessories

Diamond Laps: Our laps are replacement disks which you would use with a Master Lap. Available in 60, 100, 170, 275, 325, 600, 1200, and 3000 grit diamond. They have a 1/2" arbor hole for affixing to the master lap.

6" Master Lap no. 436001: Acrylic blank for added stability to Inland diamond laps. One Master Lap can be used with any number of diamond laps interchangeably. Or, you may choose to set up each diamond grit with its own Master Lap.

6" Felt Polishing Pad no. 436005: Durable wool felt pads accept most polishing media, including cerium, tin, and aluminum oxides, diamond powders, rouges, and more. PSA back to keep them flat on a Master Lap. Pads are approximately .060" thick with a 1/2" arbor hole.

Polishing Powder no. 50037: 4 oz. jar of specially ground cerium oxide, ground to nearly half the size of standard cerium oxide. Simply mix with water in the jar provided, and you can give virtually any of your cabs a high polish. Works great on glass too.

Diamond Compound no. 450614: Highly graded 14,000 grit diamond suspended in a latex base for consistent dispersal and to prevent drying out like water based pastes. Five carats of diamond in a five gram syringe.

DiamondCoolant™ no. 50011: Use this water soluble coolant to grind faster and make your laps last longer by reducing grinding friction.

Trim Saw Conversion Kit no. 10675: Turn your SwapTop™ 6" Lap Machine into an accurate and powerful wet or dry operating trim and table saw for all your lapidary and hobby projects.

Grinder / Shaper Conversion Kit no. 10655: Turn your SwapTop™ 6" Lap Machine into a shaping, edging, and drilling tool for all your lapidary and hobby projects. Have more tools, work better in same space without the cost of buying an entire new machine!

Service

For questions or comments regarding the use of this or any Inland product, visit our website at www.inlandcraft.com; email us at helpdesk@inlandcraft.com; call Inland Customer Service at 1-800-521-8428 9 AM to 5 PM EST or write:

Inland Craft Products, Co.

32052 Edward Drive
Madison Heights, MI 48071
www.inlandcraft.com



SwapTop™ 6" Flat Lap Machine

Users Guide

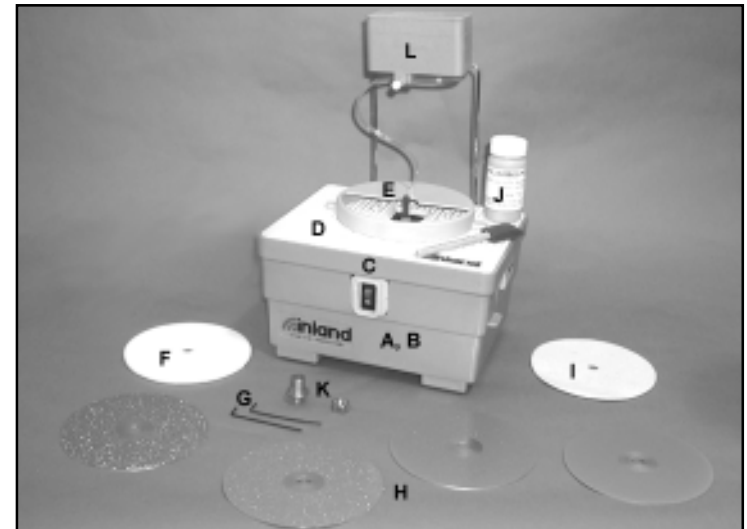
Thank you for buying this Inland product. Please read all the instructions to understand the correct components, set up, and use of your machine.

Safety

- ✓ **Always** wear safety glasses or goggles.
- ✓ Plug into a grounded electrical system. **Do Not** override the grounding system.
- ✓ Always unplug your machine when switching between set ups, installing blades, 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.

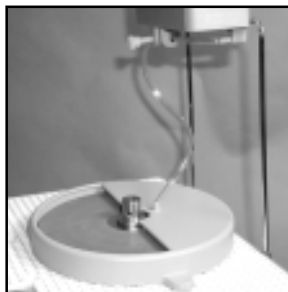
Parts List

<u>Name</u>	<u>Color</u>	<u>Qty</u>	<u>Flat Lap Machine</u>	<u>Conversion Kit</u>
A Machine Base	Grey	1	yes	no
B Motor Unit (shown installed)	Yellow	*	yes	no
C Removable Reservoir	Grey	1	yes	yes
D Reversible Grid Surface	White	1	yes	yes
E Flat Lap Splashguard	Yellow	1	yes	yes
F Master Lap	Varies	2	yes	yes
G 5/64" Allen Wrench	Black	2	yes	yes
H Diamond Laps	Silver	4	yes	yes
I Polishing Pad	White	1	yes	yes
J Polishing Powder & Brush	-----	1	yes	yes
K Brass Arbor & Nut	Brass	1	yes	yes
L WaterDrip System	Grey	1	yes	yes
Drain Tube (not shown)	Clear	1	yes	yes
Blade Arbor Wrench (not shown)	Silver	1	yes	yes



Setting Up the 6" Flat Lap

1. If your machine is set up for sawing, remove the entire table saw top, blade and blade arbor. You should have just the open base with 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.
3. Place the gray reservoir surface onto the base making 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 install the 6" yellow flat lap splash guard.
5. Set up WaterDrip AddOn Kit following the instructions included with it.
6. Insert the clear drain tube onto the Drain Overflow outlet in the back of the gray reservoir surface. This tube must drain into a small cup (not provided) as the reservoir fills with water. Alternately, you can place the entire SwapTop machine into a tray such as you might get at a fast food restaurant to catch all of the overflow liquids.
7. Flat laps are mounted with the brass nut and arbor. Position the diamond lap onto the arbor, add the acrylic Master Lap next, and then the nut is mounted with the unthreaded internal shoulder facing away from the master lap. Make sure the diamond lap and Master lap are properly centered and then tighten the nut.
8. The arbor is then positioned onto the motor shaft with the diamond surface on top, and the arbor is mounted using the 5/64" allen wrench provided to tighten the allen screw against the flat part of the motor shaft.
8. The splashguard is positioned onto the white grid by inserting the two positioning pins so that the center opening is concentric to the motor shaft. The coolant feed hose then plugs onto the nipple of the yellow splash guard.
10. To increase the amount of open diamond area, you can remove one or both of the triangular wedges on the yellow splashguard. Just grab the piece you wish to break off, and rock it back and forth until it breaks free.
11. Your machine has built in speed control unit controlled by the on / off switch found on the front of the machine. Plug the motor unit cord into an appropriate grounded wall outlet.



Grinding with the 6" Flat Lap

1. Never grind any stone without water cooling on the diamond tool. This will keep down dust and debris, and maximize the life of your diamond laps. A water-soluble cutting additive, such as Inland's #50011, Diamond Coolant™, can be added if you wish.
2. Open the white water drip control screw just a little bit, perhaps a quarter turn. You only need a drop of water every second or two to keep the diamond tools clean and cool. However, using "too much" water will not harm a thing.
3. Turn the speed control knob to about '3 o'clock to start grinding. **NOTE:** The machine will pulse at levels which are too slow for proper diamond tooling and using diamond tooling at these low speeds will cause the diamonds to wear out much more quickly.
4. Occasionally check the cup you used to catch overflow water/coolant to prevent it from overflowing itself. If you are using a plastic tray instead (of additionally) watch it for excess liquids as well.
5. For softer materials, that halfway mark might be as fast as you ever go. With harder materials, large stock removal, and more experienced "hands", you can experiment with faster motor speeds. If you increase motor speed, you must also make sure that you are supplying enough water to the diamond tools. If powder is ever noticeable, you should increase the water supply immediately.
6. To get the most out of your diamond laps, remember to utilize the entire surface when grinding. For example, you can go right up to the outside edge of the lap when you are grinding the outside diameter of a cabochon. Because of the higher surface speed on the outside of the lap, you can more quickly shape the outside edge of a cabochon. Alternately, softer materials like silicates (glass), would fare well utilizing the slower surface speeds of the inner "edge" of the diamond laps.



Maintenance

- Always unplug the unit when cleaning. We recommend draining any remaining coolant and rinsing 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 the arbor to the flat side of the motor shaft. Failure to do so can scar the shaft and prevent its removal. If burrs or nicks have formed, polish up the motor shaft. Remove the arbor and laps. 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 (stock #50028) or petroleum jelly.
- Removing the laps and arbor 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.