



## A800 / DIAL-O / HYDRO DIE CARE

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### **DIE CLEANING**

Clean dies are paramount to successful dough pressing. The use of heat and the fat component of dough can result in a fat “varnish” on your die. This coating can build up to a point where dough release is compromised and sticking can occur. Additionally, fats can travel up into the head, and if not cleaned can build up internally and cause shorting of the heater.

To combat this situation, we recommend wiping your dies periodically during overly messy / high heat production runs in addition to deep cleaning between pressing cycles.

To deep clean the die heads, you must remove them from your dough press and disassemble them. The dies CANNOT be submersed in water with the electronic components still in place.

Dies should be ideally cleaned with SOAP AND HOT WATER. Avoid harsh chemicals not rated for aluminum which can result in harm to your die. Always confirm that your cleaning agent is safe for 6061 Aluminum.

Take care with dies coated in Teflon. You should never use harsh chemicals or abrasive materials to wash. The Teflon is FDA approved but should it become scratched or damaged, and the Teflon starts to flake you should repair it. The die can be stripped and re-coated. Please contact us for a quote.

### **DISASSEMBLY**

We recommend taking pictures of your die for reference as you get familiar with the assembly process.

#### Process

- 1) Loosen and remove the screws that attach the flat springs to the punch. Remove flat springs.
- 2) Lift off ring.
- 3) Loosen and remove the screws that attach retainer to punch.
- 4) Gently lift-up the retainer part way. Your electrical wires go through the retainer and attach to a heater inside and you will need to disconnect them to fully remove the retainer.
- 5) Unscrew the wires that are attached to the heater and bi-metallic switch. The retainer can now be lifted completely off the die.
- 6) There is also an item called “seal punch” that is in the top inside perimeter of the punch. It is high temperature Teflon tubing. This serves as a wiper to stop fats from getting into the head. Remove this for cleaning. Replace damage or clogged seal punch.
- 7) The heater is typically held down with clips (and sometimes a straight bracket). These can be removed or loosened to release the heater
- 8) Remove bi-metallic switch and corresponding hi-temp wire
- 9) Use this time to review all wires and make sure there is no fraying or damaged wires. Replace if necessary.
- 10) For dies with air release, remove the air disk from punch bottom and make sure the holes have not become plugged with fat. This can block exiting air.

- 11) If you need to immerse your die in water, then you will need to REMOVE ALL ELECTRICAL COMPONENTS such as the bi-metallic switch, heater, electrical wires, and electrical plug.
- 12) If necessary to remove fat varnish, we recommend Scotch-Brite (red) pads to buff the punch. NOT for use on Teflon coated dies. Please refer to the Teflon Die care instructions for specific care.

#### **RE-ASSEMBLY**

1. Put all electrical components back in place on the punch and retainer. When you re-attach the wires to your heater (and bi-metallic switch), always ensure that the screws are tight and the metal spade connector cannot move and touch the roof of the retainer, or the sidewall of the electrical pocket. This will result in arcing and cause a massive electrical short in your die.
2. Replace Teflon seal back in punch cavity.
3. Position retainer on punch and screw in place.
4. Place ring on die, coming in from the top. The washers will keep the ring in place.
5. Next inset the stripper pins. Ensure they are sliding smoothly.  
REPLACING STRIPPER PINS. Always ensure your stripper pins slide smoothly and are not bent. Bent pins will continue to jam and enlarge the hole they are in, which is a vicious cycle and will ruin your die.
6. Add the flat springs. They will form a "V" pattern with 1 long & 2 short or 2 long & 1 short. The long /short combo should be positioned over the lifter pin. The remaining spring forms the V and extends out over the ring. This second spring helps push the ring back down after the press has commenced.
7. When die is complete, use a continuity meter set to tone. Check the plug by putting a connector on the two outside prongs of the plug. This circuit should beep. For small dies on some continuity meters, they will not beep but you will register Ohms. Then check each outer prong separately with the die body. This circuit should NOT beep. Confirmation of these tests will tell you that nothing has come loose in the re-assembly process and that you do not have unwanted connections or shorts.

If you have any questions on your die -- assembly, care, or use, do not hesitate to reach out to us. Care, cleanliness, and regular maintenance will extend the life of your die and ensure the best press for your product.