

## Mini/Axe Poppet Manual



### **Introduction:**

The Lurker delrin poppet is designed to respond more quickly than stock to changing pressure conditions in the marker, while providing superior flow. The net effect is to reduce the need to compromise between a low pressure operation for smoothness and a shorter back cap setting for efficiency.

### **Installation:**

1. Remove the stock poppet and spring
2. Lightly lube the o-ring on the lurker poppet
3. Very lightly lube the face (where the white bit on the stock poppet is) of the Lurker poppet to help initial seating.
4. Insert the spring from the stock poppet into the Lurker poppet.
5. Insert the poppet backwards (grab the nose) to evaluate the friction inside of the bolt guide. The ideal seal is nearly friction free, but fully sealing. A light tug should be able to move the poppet in the rear bore. If the friction is too light or incompletely sealing, velocity will be very low.
6. If the seal is ok, install the poppet in the normal position and begin tuning.

### **Tuning and Tinkering:**

Ideal settings for this product are 140psi, with 1-1.25 turns out, and the dwell minimized (4ms). Higher pressures (>170psi) should be avoided.

The friction of the single, rear o-ring is paramount to performance in this part. Some tuning of the fitment may be required. Included with your package are 2x10mm (installed), a 2x11mm (larger), and a 013 size (medium).

It is also very possible to modify either your o-ring or your groove for an absolutely ideal fit. **The rear o-ring is not a critical seal, so you don't need to worry about breaking anything.** In the case of an o-ring that is too thick or larger than it needs to be, a very light treatment with sandpaper or metal polish will significantly improve frictions. With material removal techniques, a thorough washing after completion is a necessity.

In the case of an o-ring that is too small (all 013s fit the bill) then modifications to the groove floor are possible. In particular, a simple wrap with Teflon™ Tape brings the o-ring to the direct correct fit. A similar solution that has been historically popular is a thin coating of clear nail polish in the groove bottom.