

# **HopBlocker**<sup>tm</sup>

# Operation, Assembly & Maintenance Manual

Congratulations on your purchase, and thank you for selecting the HopBlocker<sup>tm</sup> boil kettle filtration system from Blichmann Engineering. We are confident that it will provide you years of service and many gallons of outstanding beer. This manual will familiarize you with the assembly and use of the filter system.

#### \*\*\*\* PLEASE READ THOROUGHLY PRIOR TO USE FOR IMPORTANT SAFETY INFORMATION \*\*\*\*

#### Caution:

Brew pots and the HopBlocker<sup>tm</sup> are obviously hot during use and scalds and burns are an ever-present hazard. Always use protective gloves, long sleeve shirts, long pants, and protective footwear when brewing.

If you do not understand the proper use of the product or have any questions, contact your retailer or Blichmann Engineering (www.BlichmannEngineering.com) before use.

# **Assembly & Installation:**

Ensure you have the main filter body, and the sliding shield with finger pull as shown in Fig 1. Please contact your Retailer if any parts are missing.



#### **Installation Procedure**

The HopBlocker<sup>tm</sup> was specifically designed for use in Blichmann Engineering BoilerMaker<sup>tm</sup> brew pots. However, the product can be adapted by the customer for use in other pots and keg based kettles, but filtration performance may be reduced.

# Installation in a BoilerMaker<sup>tm</sup> brew pot:

To install the HopBlocker<sup>tm</sup> in your BoilerMaker<sup>tm</sup> brew pot, simply remove the dip tube and place it in the hole in the side of the HopBlocker<sup>tm</sup> as show in Fig 2. Note that the gap in the shield faces the drain fitting (the finger pull faces the center of the pot). Then simply insert the tube into the drain fitting as shown in Fig 3. It is helpful to lubricate the tube with a bit of water to make insertion easier.

**Important:** ensure that the shield grips the sides of the screen sufficiently so that it will hold itself up when moved to the top of the screen. If it does not, gently bend the shield in slightly so it grips more firmly as shown in Fig 4.







## Installation into a non-Blichmann Engineering<sup>tm</sup> pot:

You will need to provide a  $\frac{1}{2}$ " diameter dip tube in your pot with a fairly sharp 90 degree bend 3" above the bottom of the pot. The bottom of the dip tube should sit above the bottom of the pot about 3/8" to  $\frac{1}{2}$ ". Since you cannot rotate the tube to install it, you will need to provide a compression or flare fitting adapter on the inside of the pot to accommodate installation of the HopBlocker<sup>tm</sup>. The closer you can get the HopBlocker<sup>tm</sup> to the sidewall of the pot the better the performance will be. For kegs, you will need to center the HopBlocker<sup>tm</sup> in the middle of the keg so that it sits flat. However, this will negatively affect the performance of the filter.

## Removal in a BoilerMaker<sup>tm</sup> brew pot:

To remove the HopBlocker<sup>tm</sup> in your BoilerMaker<sup>tm</sup> brew pot we recommend using a flat blade screw driver between the shaft collar and the drain fitting (ref Fig 5) to get the tube out of the o-ring seat. You only need to open a gap of about 1/8" to pop the tube out of the grip of the o-ring and from there it can be removed by hand by pulling straight out.

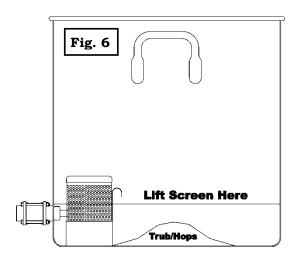


# Operation:

The HopBlocker<sup>tm</sup> is very simple to operate. The basic process that makes the HopBlocker<sup>tm</sup> work so well is leaving the fine break material undisturbed at the bottom of the pot while draining the majority of the wort through the coarse filter first. When the wort level is a few inches from the bottom of the pot, the fine filter element is then exposed by lifting the shield and only has to filter the remaining wort. Used as described below, the HopBlocker<sup>tm</sup> will filter 90-95% of the break material and hops out of your wort without plugging.

## These steps are VITAL to ensure that you maximize the efficiency of the filter and avoid plugging:

- (1) Ensure that the shield is pushed all the way to the bottom of the screen and both are resting flat on the bottom of the pot. If you are using a keg (which has a rounded bottom), you will need the filter centered on the bottom. Note that this does decrease the effectiveness of the HopBlocker<sup>tm</sup>.
- (2) At the end of the boil use your stir paddle to feel for the HopBlocker<sup>tm</sup> and confirm that it is still sitting properly on the bottom of the pot and not at an angle. Use the paddle to right it if needed. Normally this is not a problem and the product rights itself after being bumped.
- (3) Stir the wort vigorously with a stir paddle to create a whirlpool. This causes the hops and trub particulates to settle to the bottom center of the pot away from the HopBlocker<sup>tm</sup>. Allow 15-20 min for the thermal convection currents to slow and allow the break material and hop particulates to settle. Alternately, stirring gently continuously for 10 min followed by a 5-10 min rest works very well. Failure to whirlpool and allow time to settle will limit the filtration efficiency of the product and lead to plugging!
- (4) Drain your pot until you see the top of the kettle drain fitting (ref Fig 6).
- (5) Reduce the drain flow rate to about 1/3 the initial flow rate. Failure to reduce the flow rate will cause the settled particulates to be sucked into the filter causing it to plug!
- (6) Use your stir paddle (ref Fig 7) to hold the filter down and quickly pull the shield up with a gloved finger or a racking cane (or similar) so that it is out of the wort completely. It is important to move quickly through steps 6-7 so you do not lose the siphon which will stop flow.





**Tip:** Allowing adequate time for the break material to settle is necessary for proper performance. In addition, draining slowly at the end is vital to allow the wort to filter through the break material and move toward the filter. If it is drained too quickly you will draw the particulates with it toward the filter and increase the likelihood of plugging it. Draining slowly allows the wort to permeate the sediment and move to the filter. At all times be careful not to disturb the sediment!

**Whole Hop Tip:** The HopBlocker<sup>tm</sup> was developed specifically for pellet hops. Whole loose hops will likely plug the unit and prevent the wort from draining. If you are using whole hops we highly

recommend that you place them in a large muslin grain steeping bags in the boil. Whole hops absorb a lot of wort and this translates into significant wort loss. Bagging your hops will facilitate removal, and since you can gently squeeze out the wort at the end of the boil you will get a much better yield from your batch. Since the muslin grain bags are so porous and freely move in the boil, hop utilization is not noticeably affected.

#### **Maintenance**

Clean the HopBlocker<sup>tm</sup> with any stainless compatible cleaner and allow it to dry thoroughly. Chlorine based cleaners and sanitizers must not be used as they will permanently damage (pit) stainless steel.

# Warranty

The HopBlocker<sup>tm</sup> is warranted to be free of defects in materials and workmanship for a period of 1yr from the date of purchase (proof of purchase required).

Specifically EXCLUDED from this warranty are normal wear and tear, damage from abuse and misuse.

Performance in non Blichmann Engineering pots cannot be guaranteed.

Blichmann Engineering is not responsible for incidental or consequential damages or injury arising from use or misuse of this product.