BLICHMANN
ENGINEERING™

AutoSparge™

Operation, Assembly & Maintenance Manual

Congratulations on your purchase and thank you for selecting the AutoSparge™ lauter tun level control 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, operation, and maintenance of the AutoSparge™ lauter tun level control.

IMPORTANT!!

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

Warning: Sections labeled "Warning" can lead to serious injury or death if not followed. Please read these thoroughly and understand them completely before use. If you do not understand them or have any questions, contact your retailer or Blichmann Engineering™ (www.BlichmannEngineering.com) before use. <u>Do NOT at ANY time operate the product until you thoroughly read and understand these instructions!</u>

Caution: Sections labeled "Caution" can lead to equipment damage or unsatisfactory performance of the equipment. Please read these sections thoroughly. If you have any questions, contact your retailer or Blichmann Engineering™ (www.BlichmannEngineering.com) before use.

Important: Sections labeled "Important" are critical to the proper performance and life of the product.

NPT Assembly & Installation:

If you ordered the NPT version of the AutoSparge, ensure you have all the parts as shown in Fig. 1. This product is shipped disassembled.

Fig. 1

Installing the Float Ball

Pinch hose

Push hose in ball

Pull hose

Ready to use

The AutoSparge™ lauter tun level control can be installed in nearly any kettle or cooler with a minimum of 12" of inside clearance for the float to move. Installation requires a 13/16" mounting hole be drilled or punched in the vessel.

NPT Installation in a brew kettle:

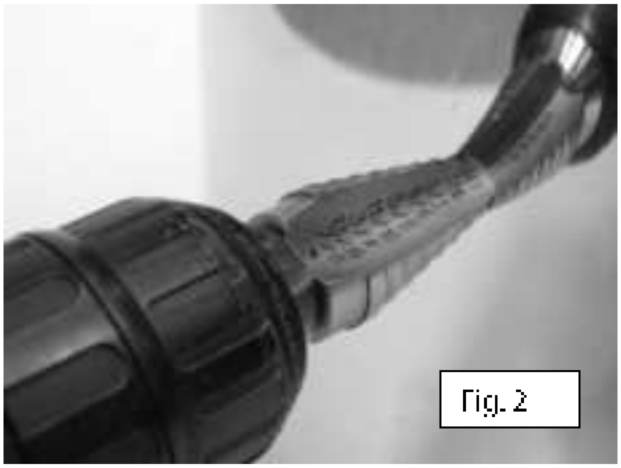


Fig. 2

Step One:

Drill 3/16" pilot hole 2" from rim of kettle.

Used step drill and enlarge hole to 13/16" as shown in Fig. 2. Step drills are available through most hardware/home improvement centers or through McMaster.com (part# 8841A24 or 89315A42 for TiN coated).

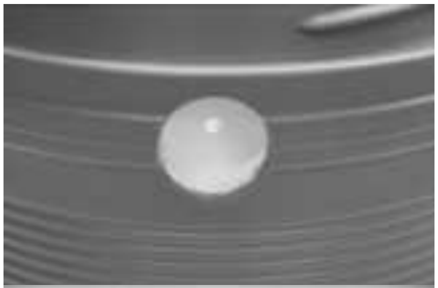
Alternately, a 13/16" knockout punch (McMaster.com part 3449A999) can be used.

NPT AutoSparge™ Installation into a cooler:

1. Drill a ¼" pilot hole all the way through the cooler from the outside. It is important to drill completely through the cooler so all holes are concentric.

2. Using a 2" to 2-1/4" hole saw, cut through the OUTER wall of the cooler ONLY. DO NOT drill all the way through. This will allow clearance for your hose fittings.

TIP: Use the hole saw in REVERSE (counterclockwise) to prevent it from grabbing the plastic and sawing through too quickly.



3. After drilling, remove the foam. If desired, you can put a layer of silicone sealant on the foam to keep liquids from soaking into the foam insulation.

4. Use a step drill and enlarge the pilot hole on the inside wall to 13/16".

5. Install the AutoSparge™ lauter tun level control as shown here. Tighten finger tight, and then rotate the valve assembly from the inside of the cooler while holding the nut still with your fingers to tighten it. Alternately, a 1-1/16" deep well socket wrench can be used to tighten the nut.

6. This figure shows the AutoSparge™ lauter tun level control installed in a 10 gal Rubbermaid cooler.

7. At this time, install your preferred hose fitting. Shown here is a Blichmann Engineering™ QuickConnector™, but any ½" NPT connector will work.

Tri-Clamp AutoSparge™ Installation

Note: The Tri-Clamp version of the AutoSparge™ can only be installed into a 1-1/2" Tri-clamp port with a minimum 1-3/8" inside diameter port. Please see step 3. for an installation example.

1. Remove the barb from the side of the body.

2. Install the triclamp gasket over the body of the AutoSparge™ and install into the triclamp port on the kettle.

3. Secure the AutoSparge™ with a 1-1/2" triclamp clamp.

4. Pinch the hose and pull it through the small float ball as shown on Page 2.

5. Install the hose barb into the body and install the hose onto the barb.

6. Attach the shuttle valve arm to the body of the AutoSparge™ as shown.

Operation:

The AutoSparge™ lauter tun level control distributes the hot liquor over the grain bed while maintaining 1-2" of hot liquor over the grain bed. The stainless steel float opens and closes the valve to maintain the proper liquid level in the mash tun.

Connect the hot liquor to the inlet of the AutoSparge™ lauter tun level control via gravity feed or a pump. Do not exceed 10 PSI to prevent leaking past the float valve.

Caution: Make sure the valve on your vessel is closed or the pump is in the OFF position prior to filling Hot Liquor Tank.

Prior to doughing in, loosen the adjustment knob thumb screw (see Fig. 3) and move the float to the fully upward position and hang the hose on the outside of the kettle so they aren't in your way while you add your grains.

Allow grains to settle 10 minutes to release entrained air. Loosen wing nut and position float to maintain 1-2" of liquor above mash bed by lifting float until valve closes liquid level will be in the middle of float. If you require more precise positioning the float arm can be flipped, the teeth are offset ½ tooth on the opposite side to allow for more adjustments in 7.5" increments. Tighten wing nut to set float position.

Caution: If the stainless float ball hits the lid of your mash tun it will prevent the float from shutting off the flow and will overflow your kettle!

AutoSparge™ lauter tun level control can be used for RIMS systems as shown in Fig. 4 or used to control the lauter. The hose float is placed on top of the grain bed.

Tip: While it is not very common due to the large passages in the valve, grain particles may, on occasion, get stuck. To clear them, simply press down on the ball momentarily with a spoon to fully open the valve and the flow will eject the grain particles.

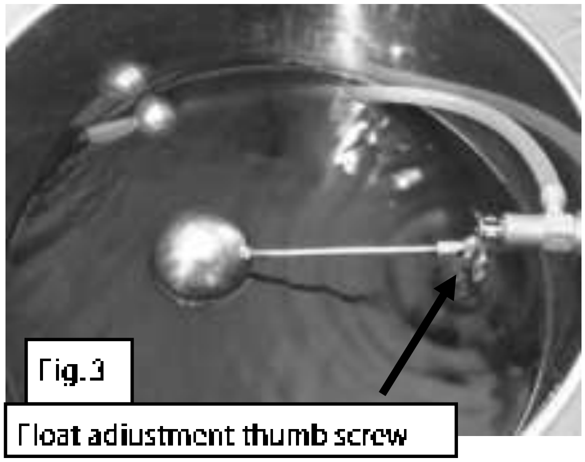


Fig. 3

Float adjustment thumb screw

Tip: We do recommend that you periodically rake the top 1/3 of the mash during lauter about every 15 minutes to increase efficiency. Raking the top of the mash will not disturb the lower 2/3 of the grain bed and the wort will remain clear throughout the lauter.

When you have finished your mash, simply turn on the hot liquor tank valve and/or pump to the full open position. Then open the mash/lauter tun valve to the desired wort drain rate.
Caution: The AutoSparge™ lauter tun level control is NOT intended for unattended operation or for use as automated kettle filler. City/well water pressure will NOT be shut off by the AutoSparge™ lauter tun level control!! 10 PSI is maximum operating pressure

Maintenance

Rinse immediately after use with hot water. To clean use hot water and Five Star Chemical's Powdered Brewery Wash or similar detergent with a scrub brush or ScotchBrite™ scouring pad to remove any heavy soil deposits.

Before and after each use, inspect AutoSparge™ lauter tun level control for wear or damage. If any parts of the AutoSparge™ lauter tun level control show signs of wear or damage, discontinue use and contact your Blichmann Engineering™ authorized retailer for replacement parts.

Blichmann Engineering Product Warranty

A. Limited Warranty

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2. [illegible]
   a. [illegible]
   b. [illegible]
   c. [illegible]
   d. [illegible]
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B. Limitations of Warranty

1. [illegible]
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C. Limitations of Liability

1. [illegible]
2. [illegible]
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D. Local Law

1. [illegible]
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