In-Line Oxygenation Kit

Assembly, Operation, & Maintenance

Congratulations on your purchase, and thank you for selecting the In-Line Oxygenation Kit 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 use, assembly, and the sanitation procedures for the product.

PLEASE READ AND THOROUGHLY UNDERSTAND THIS MANUAL PRIOR TO USE FOR IMPORTANT SAFETY INFORMATION!

About This Manual:

Warning: Sections labeled "Warning" can lead to serious injury or death if not followed. Please thoroughly read these sections 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.

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" should specifically be followed to ensure satisfactory results with the product.

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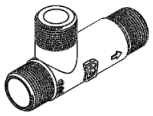
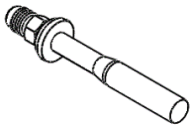
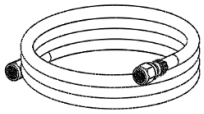
Assembly:

A list of components included with your In-Line Oxygenation Kit follows as well as the basic tools required for assembly. Please carefully review the lists below to ensure you received all of the correct parts and have the required tools prior to assembly.

Parts List:

Item		Quantity
SS Infusion Tee		1
Gas Diffusion Stone		1
½" Straight QuickConnector™		2
5 ft. 1/4" ID Vinyl Hose w/fittings (O2 supply hose)		1
O2 Gas Regulator		1

Required Tools:

Two Adjustable Wrenches	

Warning: Do not operate near open flame, glowing embers, while smoking, or exposure to sparks. Operate at least 6 feet away from open flames or heat sources such as candles, gas pilot lights, etc. Ensure all flames used for brewing are extinguished before operating the In-Line Oxygenation Kit. Ensure automated spark devices are disconnected, depowered, and removed from the area. Verify propane bottles or natural gas supplies are completely turned off before operation. Petroleum-based products (petroleum jelly, etc) should not be used in the area or on equipment with the product. Operating the Oxygenation Kit near flame or spark could cause fire that can result in property damage, injury, or death.

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Operation:

1. Clean and sanitize all hoses including the O2 supply hose, the Infusion Tee, diffusion stone, QuickConnectors™, and all lines used to supply wort to the assembly.
2. Assemble the In-Line Oxygenation kit as shown in Figure 1.
3. Connect the O2 Supply line to the included regulator, or a regulator of your own, and tighten O_2 supply hose fittings with wrenches.
4. Ensure all sources of spark or open flame are extinguished and follow all gas cylinder manufacturer's safety precautions.
5. Begin pumping or draining chilled wort through the In-Line Oxygenation Kit as shown in Figure 2.
6. Turn the knob on the O2 regulator counterclockwise until a fine stream of bubbles form in the wort flow to the fermentor.
7. Maintain a fine stream of O_2 bubbles until all of the wort has been transferred to the fermenter
8. Turn the knob on the O2 regulator clockwise until gas flow stops.
9. Close all valves, disconnect hoses and proceed to after use cleaning and storage.

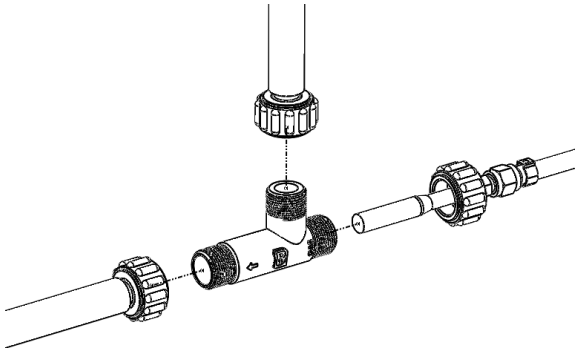

Figure 1.

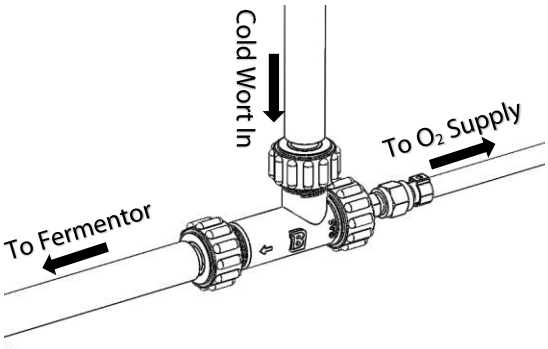

Figure 2.

Required Equipment:

Oxygen Supply

The In-Line Oxygenation Kit requires an O2 bottle available at a local hardware or weld gas supply store. Any O2 supply can be adapted to the diffusion stone with a ¼" female tapered flare fitting.

After Use Cleaning and Storage:

Rinse immediately after use in hot water. Allow the diffusion stone to soak for at least 30 minutes in hot water and a mild detergent, such as Five Star™ Powdered Brewery Wash (PBW). After cleaning, rinse off any detergent hot water and allow to dry completely. Reinstall the diffusion stone in the infusion tee fitting to protect it from damage during storage.

Tips for Success

- If using a pump, install the In-Line Oxygenation Kit downstream of the outlet.
- Sanitize the QuickConnectors™, diffusion stone, Infusion Tee, and the O2 supply line. Wort may travel into the diffusion stone and into O2 supply line momentarily before applying gas to the unit.
- Boiling the diffusion stone in water is an optional method of sanitation.
- A thick head of oxygenated wort may take up extra volume in the fermenter during filling. Decrease the O2 flow to reduce the excess head.
- Clear vinyl hose makes adjusting the stream of O_2 bubbles easiest. Always adjust the gas pressure to create a small, fine stream of bubbles.
- Clean the unit with Five Star™ Powdered Brewery Wash (PBW) and air dry for best results.

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Blichmann Engineering Product Warranty

A. Limited Warranty

1. Blichmann Engineering warrants to the original purchaser that this product will be free from manufacturing defects in material and workmanship for a period of one (1) year from the date of purchase by the customer. Proof of purchase is required. Blichmann Engineering's obligation to repair or replace defective materials or workmanship is the sole obligation of Blichmann Engineering under this limited warranty.
2. This product is for home use only. The limited warranty covers only those defects that arise as a result of normal use of the product and does not cover any other problems, including, but not limited to, those that arise as a result of:
   a. Improper maintenance or modification;
   b. Damage due to incorrect voltage or improper wiring by customer;
   c. Operation outside of the product's specifications;
   d. Carelessness or neglect to operate the product in accordance with instructions provided with the product;
   e. Damaging the tamper label on the product;
   f. Damage by over-tightening the fasteners;
   g. Failure to follow cleaning and / or maintenance procedures; or
   h. Exceeding published operational temperatures.
3. Blichmann Engineering reserves the right to request delivery of the defective component for inspection before processing the warranty claim. If Blichmann Engineering receives, during the applicable warranty period, notice of a defect in any component that is covered by the warranty, Blichmann Engineering shall either repair or replace the defective component with a new or rebuilt component at Blichmann Engineering's option.
4. Blichmann Engineering must be notified within seven (7) days of the delivery date of any shipping damage. Customer is responsible for shipping damage outside of this time period. Approval for return must be provided by Blichmann Engineering prior to any return. Customer is responsible for keeping all original packaging material for warranty returns. Blichmann Engineering is not responsible for damage from improperly packaged warranty returns, and these repair costs will be the sole responsibility of the customer. Shipping costs for warrantee returns are covered only for the contiguous United States.
5. Blichmann Engineering's limited warranty is valid in any country where the product is distributed.

B. Limitations of Warranty

1. Any implied warranty that is found to arise by way of state or federal law, including any implied warranty of merchantability or any implied warranty of fitness, is limited in duration to the terms of this limited warranty and is limited in scope of coverage to this warranty. Blichmann Engineering disclaims any express or implied warranty, including any implied warranty of fitness for a particular purpose or merchantability, on items excluded from coverage as set forth in this limited warranty.
2. Blichmann Engineering makes no warranty of any nature beyond that contained in this limited warranty. No one has authority to enlarge, amend, or modify this limited warranty, and Blichmann Engineering does not authorize anyone to create any other obligation for it regarding this product.
3. Blichmann Engineering is not responsible for any representation, promise, or warranty made by any independent dealer or other person beyond what is expressly stated in this limited warranty. Any selling or servicing dealer is not Blichmann Engineering's agent, but an independent entity.

C. Limitations of Liability

1. The remedies provided in this warranty are the customer's sole and exclusive remedies.
2. Except for the obligations specifically set forth in this warranty, in no event shall Blichmann Engineering be liable for direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory and whether or not advised of the possibility of such damages.
3. This warranty does not cover, and in no event shall Blichmann Engineering be liable for, travel, lodging, or any other expense incurred due to manufacturing defects in material and workmanship, or any other reason.
4. Any performance of repairs after the warranty coverage period has expired or performance of repairs regarding anything excluded from coverage after this limited warranty shall be considered good-will repairs and they will not alter the terms of this limited warranty, or extend any warranty coverage period.
5. Venue for any legal proceedings relating to or arising out of this warranty shall be in Tippecanoe County, Indiana, United States, which courts will have exclusive jurisdiction.

D. Local Law

1. This warranty gives the customer specific legal rights. The customer may also have other rights that vary from state to state in the United States or other countries.
2. To the extent that this warranty is inconsistent with local law, it shall be deemed modified, only to the extent necessary to be consistent with such local law.

This product uses food grade materials anywhere the product touches the beverage.
Warning: This product contains or may contain chemical(s) known to the State of California to cause cancer, birth defects, or other reproductive harm.

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