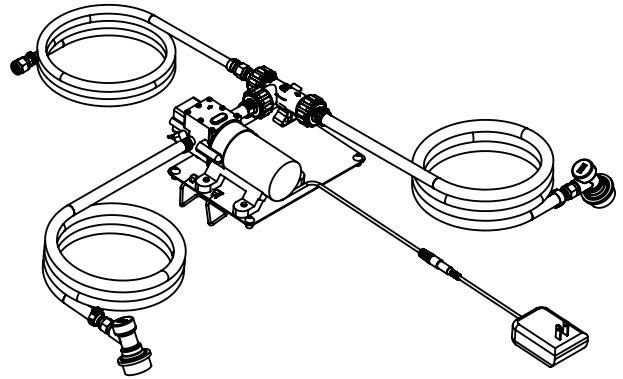


QuickCarb™

Assembly, Operation, & Maintenance



Congratulations on your purchase, and thank you for selecting the QuickCarb™ 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.



IMPORTANT INFORMATION

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

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. Do not use this product in any other way than as described in the instructions. This product is intended for the carbonation of beer at no more than 50psi or 140F ; no other liquids should be pumped through the QuickCarb™. The QuickCarb™ is intended for home use only.

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.

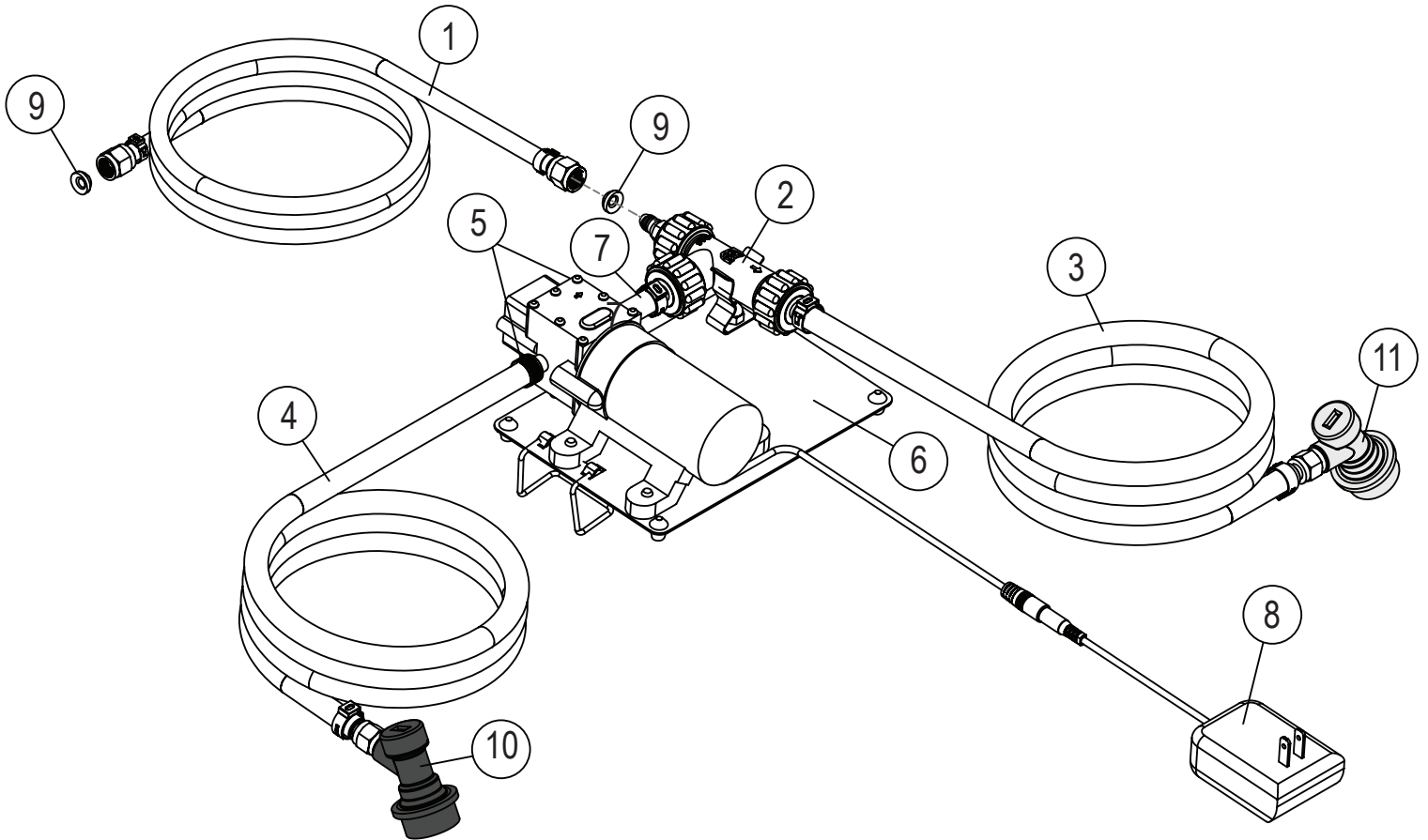
IMPORTANT: Sections labeled "Important" should specifically be followed to ensure satisfactory results with the product.

What's In the Box?

#	Part	Quantity
1	C02 Hose	1
2	Infusion Tee Assembly	1
3	Saturation Hose & Fittings	1
4	Liquid-Out Hose & Fittings	1
5	Compression Fitting	1
6	Pump and Base	1

#	Part	Quantity
7	Intermediate Hose	1
8	Power Adapter	1
9	Flare Fitting Gasket	3
10	Ball Lock Disconnect (Black)	1
11	Ball Lock Disconnect (Grey)	1

CAUTION: Do **NOT** use any cleaner or sanitizer containing chlorine such as bleach. Over time, this will pit and erode stainless steel.
Recommended but not included: Fittings and hose connections going from fermentor to pump. Available on our parts page, visit: blichmannengineering.com/genuine-replacement-parts



ASSEMBLY

Required Tools: Two Adjustable Wrenches, or one 7/16" and one 9/16" open ended wrench

1. Connect the carbonation stone, short intermediate hose, and long saturation hose to the Stainless Steel Infusion Tee and tighten (Figure 1).
2. Connect the CO2 Supply hose to CO2 regulator and tighten CO2 supply hose fittings with wrenches (Figure 2). Install the flare fitting gasket in the CO2 hose fitting
3. Install the tee fitting into the mounting clip, use the compression fitting to secure the intermediate hose with the discharge of the pump.
4. Use the compression fitting to attach the liquid out hose to pump inlet.
5. Loosely attach the grey ball lock fitting to the saturation hose and the black ball lock fitting to the liquid out hose for easy disassembly and sanitation before use.
6. The pump can easily be removed from the plate for cleaning and pressed back into place without using tools. The wire hanger clip can be removed for cleaning by pulling one side out of the plate at a time and reinstalled in a similar fashion.

CAUTION: Do not disassemble the pump for any reason. Evidence of disassembling the pump or pump head will void the warranty. .

IMPORTANT:

Follow the cleaning and storage instructions prior to first use to ensure product is free of dirt and debris from manufacturing. See special instructions with the Coupler Adaptor Kit if using Sanke style kegs .

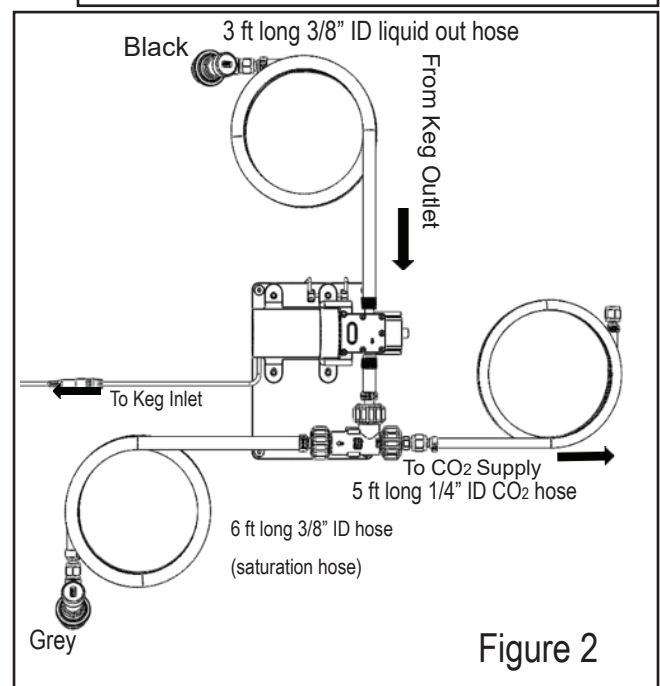
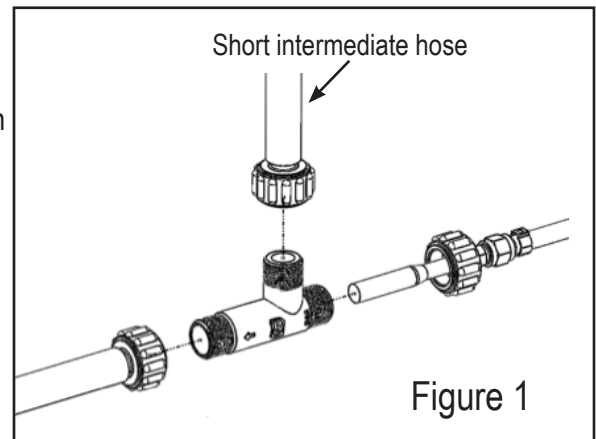
Sanitizing

It is Recommended that all hoses and fittings including the CO2 supply hose, the infusion tee, carbonation stone, QuickConnectors™, Pump and all hoses used to supply beer to the assembly be cleaned and sanitized prior to and after each use. We recommend to use FiveStar StarSan™ for sanitation and Five Star PBW™ for cleaning detergent.

Follow their directions for contact times and safety precautions.

1. Remove both ball locks from the beer hoses
2. Disassemble ball locks and sanitize
3. Immerse open ends of all hoses into a bucket of sanitizer
4. Turn on pump and recirculate
5. To drive sanitizer through the carbonation stone and hose, momentarily kink the saturation hose until sanitizer is forced through the carbonation stone and hose
6. Remove hoses from bucket and allow pump to expel sanitizer from hoses
7. Kink the saturation hose to drive the sanitizer out of the CO2 hose and carbonation stone
8. Turn off pump

(Note: take care not to touch the carbonation stone with bare hands as oil from the skin may obstruct the small pores.) Perform this sanitization process before and after each use.



OPERATION

For a quick overview of the operation and use of the QuickCarb™, follow the link to the YouTube™ video: <http://tinyurl.com/TheQuickCarb>

1. Refer to the carbonation chart included with your QuickCarb™. Measure the temperature of your kegged beer to determine the required CO2 pressure. NOTE: For a given carbonation level the required CO2 pressure is highly dependent on the temperature of the kegged beer. We do not suggest carbonating kegged beer at a temperature above 65 °F or (18 °C). For best results chill kegged beer to 40 °F (4 °C).
2. Assemble the QuickCarb™ without ball lock connectors on hoses. Disassemble ball locks and sanitize.
3. Immerse open ends of all hoses into a bucket of sanitizer.
4. Plug in and recirculate. **(with European adapter if necessary)**
5. To drive sanitizer through the carbonation stone and hose, momentarily kink the saturation hose until sanitizer is forced through the CO2 stone and hose.
6. Remove hoses from bucket and allow pump to expel sanitizer from hoses.
7. Kink the saturation hose to drive the sanitizer out of the CO2 hose and stone and turn off the pump.
8. Connect CO2 hose to the regulator and purge the system for 5 seconds.
9. To purge the rest of the hoses and pump of oxygen, de-pressurize the keg and connect the black ball lock to the keg. Turn on the pump until beer begins to flow through the saturation hose into a waste bucket.
10. Turn off the pump and tighten the grey ball lock to the saturation hose.
11. Connect the grey ball lock to the gas inlet post on the keg.
12. To overcome the pressure drop from the carbonation stone, set the CO2 pressure to 1-2 PSI above the recommended pressure as shown on the carbonation chart.
13. Turn the pump on, open the CO2 valve, and check for proper flow through the hoses. Check for leaks in the system. CO2 bubbles should be flowing into the saturation hose rather vigorously in the beginning, and diminish as carbonation is reached near the end.
14. In 30 to 45 minutes your beer should be 90% carbonated and very palatable. The QuickCarb™ can be ran up to and over an hour to achieve full carbonation. The beer will not over carbonate as long as the proper pressure is reset as the flow of CO2 diminishes.

Required Equipment:

CO₂ Supply

The QuickCarb™ requires a CO2 cylinder and pressure regulator.

Cleaning and Storage:

Caution: Do not exceed 140°F (60°C) with any fluid in the pump. Failure to follow this caution could result in equipment damage.

1. Turn off pump, CO2, and disconnect ball locks from keg.
2. Disconnect CO2 hose from CO2 tank and remove ball locks from hoses.
3. Immerse open ends of all hoses into a bucket of warm PBW and turn on pump to recirculate.
4. Kink saturation hose to drive cleaner through the stone and CO2 hose.
5. Repeat step 3 & 4 with sanitizer to rinse.
6. Turn off pump, remove all hoses, carbonation stone, and tee fitting and hang hoses to dry.
7. Use a soft towel and mild detergent to wipe off the mount plate and the rest of the assembly.

Tips for Success

- Sanitize the QuickConnectors™, diffusion stone, infusion tee, beer hoses and the CO2 supply hose. Beer may travel into the diffusion stone and into CO2 supply hose momentarily before applying gas to the unit.
- Boiling the diffusion stone in water is an optional method of sanitation.
- If you've purchased an oxygen regulator and wish to assemble the In-Line Oxygenation Kit using the QuickCarb™ SS Infusion Tee, you can access the In-Line Oxygenation Kit owner's manual at www.blichmannengineering.com/products/line-oxygenation-kit
- Clean the unit with Five Star™ Powdered Brewery Wash (PBW), rinse with sanitizer, and air dry for best results.
- Ensure the pump is at the same level as the keg. Priming happens automatically, but can only achieve prime at a maximum of 40" above the liquid level.
- In the case that a vacuum is created in the keg and a positive prime of the pump cannot be achieved, carefully apply a few PSI of CO2 to the keg to move beer out of the keg to the pump
- If you wish to use finings to clarify your beer such as Biofine™ chill your keg to serving temperature, add the finings to the keg, and then carbonate. The pump will distribute the finings evenly throughout the beer.
- If you plan to dry-hop your beer with whole or pelletized hops it is highly recommended that you bag the hops to prevent hop particulates from entering and potentially clogging the QuickCarb™ pump. Muslin hop bags are normally adequate for whole hops, but you'll want to use a fine nylon bag for pelletized hops.

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 FDA and/or NSF approved 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.