



# RipTide<sup>TM</sup>

## Brewing Pump

### Assembly, Operation, & Maintenance

Congratulations on your purchase, and thank you for selecting the RipTide™ brewing pump 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](http://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](http://www.BlichmannEngineering.com)) before use.

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

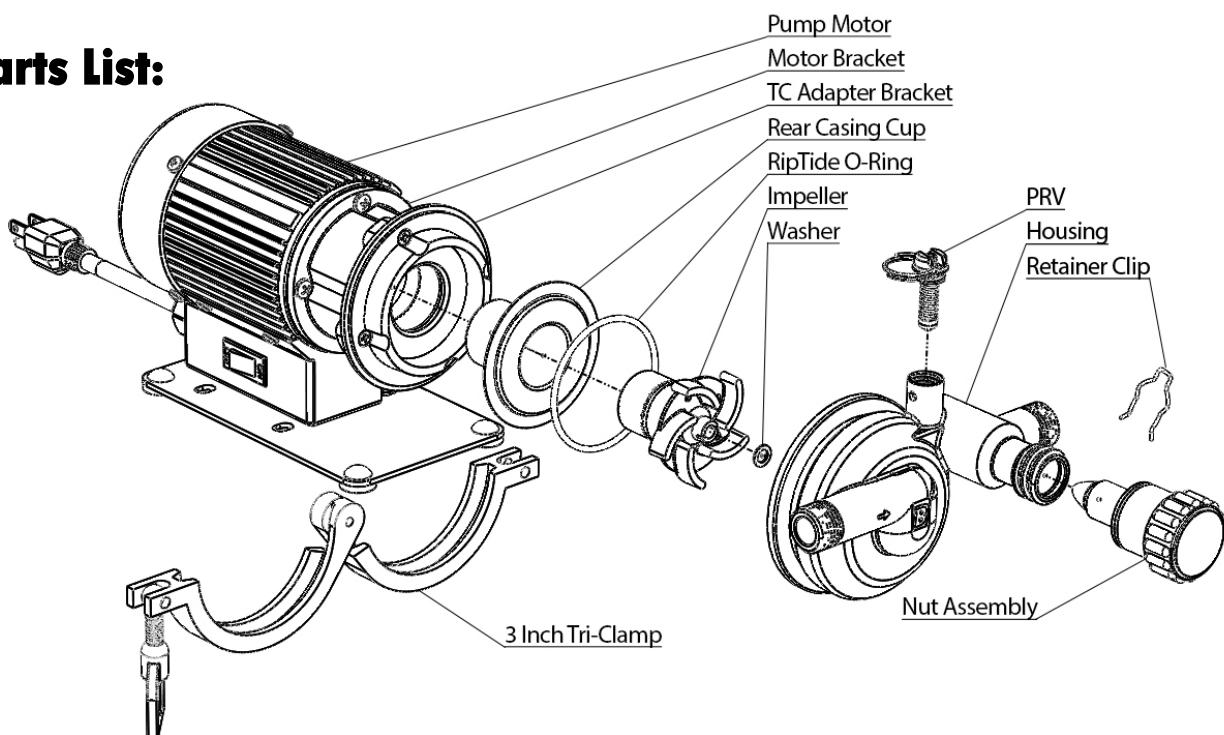
## Assembly:

Your RipTide™ pump comes fully assembled. Prior to first use, disassemble the pump and soak the pump head parts in your favorite non-chlorine based cleaner. We recommend Five Star Chemical's Powdered Brewery Wash (PBW) as a general cleaner for removing soils. Then soak in any non-chlorine based sanitizer. We recommend Five Star Chemical's StarSan.

Reassemble the pump as shown in the exploded view below. Note that the head can be oriented 360° as desired.

**Caution:** Chlorine based cleaners and sanitizer are harmful to stainless steel and over time will pit and erode the surface of the parts. Always use non-chlorine based sanitizers and cleaners.

## Parts List:



Item	Part Name	Part Number	Quantity
1	Pump Motor (US)	BE-000589-01	1
2	Pump Motor (EU)	BE-001222-00	1
3	Motor Bracket	BE-000873-00	1
4	TC Adapter Bracket	BE-000586-01	1
5	Rear Casing Cup	BE-000537-01	1
6	RipTide O-Ring	BE-001130-00	1
7	Impeller	BE-001146-00	1
8	Washer	BE-001106-00	1
9	PRV	BE-001129-00	1
10	Housing	BE-000581-10	1
11	Retainer Clip	BE-000854-02	1
12	3 Inch Tri-Clamp	BE-000950-00	1
13	Nut Assembly (O-ring Seal Kit)	RP-013-02	1

## Operation:

Connect the pump to your system using heavy wall and/or braided hoses. It is highly recommended to use  $\frac{1}{2}$ " ID x  $.125$ " wall silicone tubing. This hose will handle the pressures and temperatures of the beer brewing processes. Secure all hoses with clamps. If using NPT pipe fittings, always wrap the threads in Teflon tape to prevent galling of the threads. Galled threads are not covered under warranty.

Prime the pump with liquid before turning it on. Never run the pump dry! It is easiest to prime the pump when all hoses are empty, particularly hoses downstream of the pump. Open valve on the pump and then the valve on your kettle to let flow begin. If liquid does not readily flow into your pump slowly pull the ring on the vent valve to allow air to escape from the pump head. When you see liquid escape from the vent valve holes release the ring and turn on the pump.

Adjust pump flow by turning the knob on the linear flow valve.

**Tip:** The pump head can be oriented  $360^\circ$  for convenient operation and elimination of extra fittings. However, pump priming is best when operated with the outlet of the pump facing right or straight up when looking at the head of the pump.

**Warning:** Hot liquid will escape from the vent holes in the vent valve when pulled. Wear a thermally insulated glove to prevent burns! DO NOT open the vent when the pump is running.

**Caution:** Never install a throttling valve on the inlet side of the pump. This will cause cavitation on the pump potentially leading to permanent damage to the pump. Use the valve on the outlet of the pump to stop and control the flow through the pump.

**Caution:** Always plug the pump into a GFCI\* protected circuit only! Do not immerse the pump motor in liquids at any time. The enclosed motor housing will protect the motor from drips and splashes only.

**Warning:** Never remove the valve stem or open the housing clamp during use! Doing so may cause hot liquids to spray out of the pump head potentially causing severe burns. Always install the retaining clip on the valve stem prior to use to prevent unintentional removal during operation. Always stop turning if you see the threads!

**Warning:** Always secure hoses with clamps to ensure that they do not come off during use.

**Warning:** Never run the pump dry or permanent damage may result.

**Warning:** This product is intended only for home beer and wine making applications. Do not use in hydronic or other applications. Never apply more than 15 PSI of static pressure. Operating outside of these parameters or using in other applications, could void the warranty, cause equipment damage, or cause personal injury.

**Caution:** As with all motors, exposure to excessive heat reduces the service life of the product. Do not exceed  $125^\circ\text{F}$  ( $52^\circ\text{C}$ ) ambient air temperature. Take care when mounting near heat sources to ensure the exposure to heat is minimized and does not exceed  $125^\circ\text{F}$  ( $52^\circ\text{C}$ ) when heat source is on. You

should be able to comfortably hold your hand on the motor at all times. Failure to comply with this caution will result in damage to the equipment and may void the warranty.

## **After Use Cleaning and Storage:**

After use completely disassemble the pump and soak the parts in PBW. Do NOT soak the motor in any liquid at any time! To clean spilled wort off of the motor, use a gentle spray of warm water and dry with a soft cloth. Then rinse the parts in hot tap water and soak the parts in StarSan. Allow the parts to air dry and reassemble the pump for storage.

### **Note:**

If installing the RipTide™ to the Tower of Power™ LTE you will need to cut the cord of the RipTide™ to 3 Feet. Strip the outer cover 1.5" (40 mm) from the end to reveal 3 wires inside. Strip the green, white, and black wires 3/8" (10 mm) from the end. (Figure 5a)



\*If you're using the European RipTide™ disregard any information about GFCI breakers.

# 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.

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## 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.

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## 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.

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## 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.