



# TOWER of POWER™

## Control Module Stand

### Operation, Assembly & Maintenance Manual

Congratulations on your purchase, and thank you for selecting the TOWER of POWER™ Control Module Stand 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, installation procedures, and use of the TopTier™ brew stand and accessories.

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

#### IMPORTANT !!

**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](http://www.BlichmannEngineering.com)) **before** use. Do NOT at ANY time operate the product until you have thoroughly read and understood these instructions!

**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" are critical to the proper performance and life of the product.

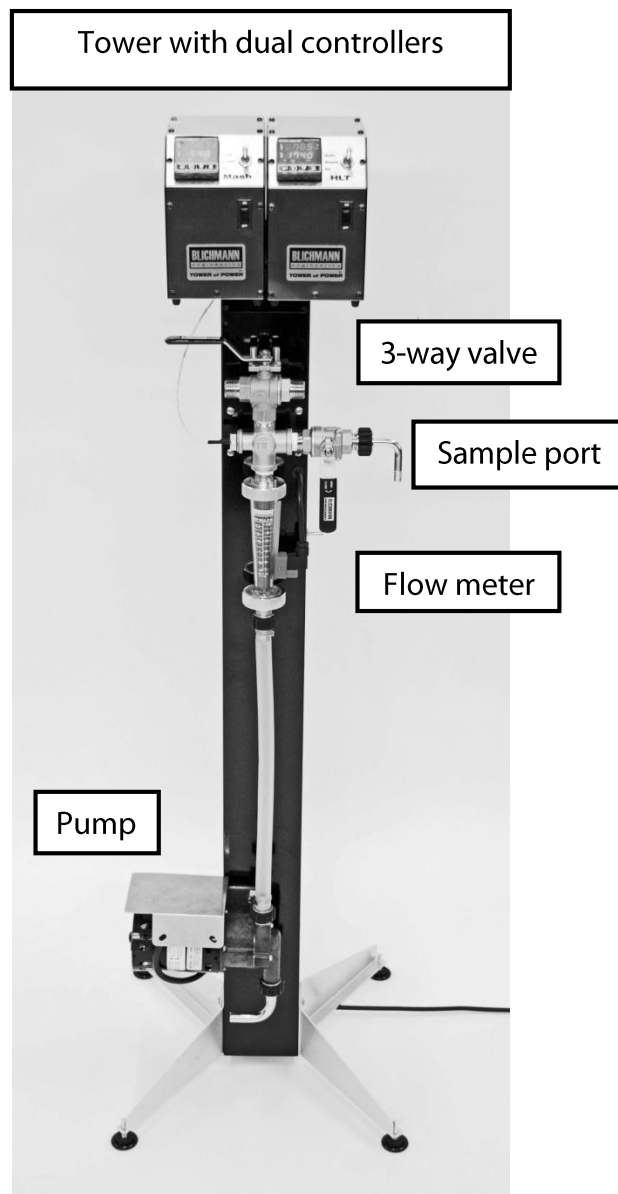
**Service & Support:** **Please thoroughly read this manual and view our online videos before contacting your retailer with questions.** If after reading this manual and viewing the videos you still have questions please contact your RETAILER for support. Note that the pump is warranted and supported through March Manufacturing directly, not through your retailer or Blichmann Engineering™.

Advanced features (automatic ramping) are accessible through software only and requires the purchase of an optional communication cable. Due to the advanced nature we do not provide direct factory support. Please work through your RETAILER if you have any questions after reading the manuals or viewing the online tutorial.

## Overview of Tower and Control Modules:

The TOWER of POWER™ Control Module Stand is modular in nature. The user can purchase a single or dual control module separately and mount and integrate into their brewing system plumbing. Or if the user does not have the necessary valving, pumps etc., they can purchase the Tower module that provides all the needed plumbing and provides a convenient stand for the control module(s). If you already own a March 809/815 pump you can purchase the Tower without the pump.

**Note:** the hoses that connect from the Control Module Stand to the pots are not included. If you are a TopTier™ owner, an optional mounting kit is available to mount it permanently to the stand.



## Requirements of Your System:

**IMPORTANT!** Read before unpacking or using this product!

**For the TOWER of POWER™ control system to function properly, your brewing system must meet some basic requirements. If your system is unable to meet these requirements please contact your RETAILER for guidance. We cannot guarantee the performance of the product if these basic minimums are not met.**

Hot liquor tanks perform well on nearly any system that can maintain a moderate flame. Mash Tuns require a couple basic performance parameters to be met for proper performance.

**Important!** Do not use or install the TOWER of POWER™ equipment until you verify that your equipment is capable of the requirements below. If you are using Blichmann Engineering BoilerMaker™ mash tun with our false bottom, and a TopTier™ burner you will not have equipment limitations. However, it is still important that you verify that your crush will allow adequate wort flow! Most stuck mashes are caused by too fine of a crush. It is also expected that

Your mashing system must have the capability to continuously recirculate your wort using a pump for the duration of the mash without sticking. The flow rates in the chart below are minimum values.

Finished Batch Size gal (L)	Min Flow GPM (LPM)
5 (19)	0.5 (2.8)
10 (38)	0.75 (3.8)
15 (57)	1.25 (4.75)
20 (76)	1.5 (5.7)
32 (121)	2.25 (8.5)

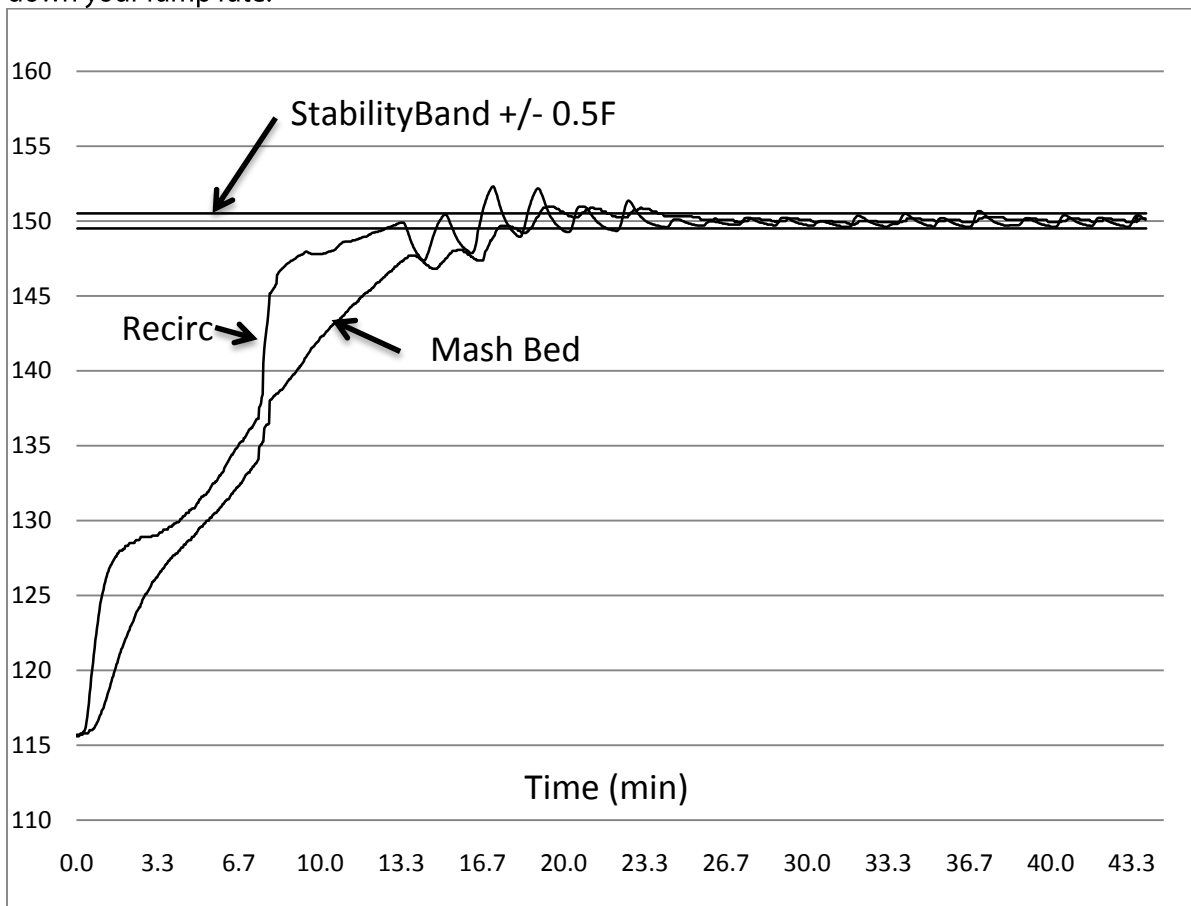
**Important:** Grain bed flow rates are highly dependent on crush quality. Move to a coarser crush if you are not able to flow at the above rates. It is also recommended that you allow a 10 min dough-in prior to turning on the pump to allow the air to purge from the grain and for the grain to fully absorb the water.

## What to Expect From the TOWER of POWER™:

The TOWER of POWER™ control system is a very precise instrument that has been developed to provide exceptional control over a very broad range of batch sizes, flow rates, and input heat values without the need to re-tune as each individual condition changes. However, it DOES require a reasonable set of parameters to be met to achieve these results. When operated within the parameters listed in the previous section, your system should be able to maintain your mash and HLT temperature to within 0.5 F (0.25C) of your set point. Please note that in the case of mash control, we are controlling the temperature of the wort into the top of the mash bed, not the temperature of the mash itself. The large mass of the mash will dampen out the fluctuations of the recirculation temperature and provide incredible stability. If you are not able to achieve the conditions above with your system that is OK, but it must be expected that stability and control will be compromised.

**Note:** A slight overshoot of the recirculation temperature is normal and will NOT harm the mash enzymes. Enzymes are denatured over a period of time, not instantaneously. We have tuned this system to offer the best match of ramp speed and stability.

**The chart below shows a typical response curve from an actual brew session.** Note that the mash temp will lag behind the recirculation temp by a few degrees as you ramp, but will settle in quickly as you reach the set point. Also note that the recirculation temperature (displayed on your controller) will overshoot by a few degrees. This is NORMAL. Also note that the actual mash temp overshoots very little and settles in quickly to set point, drifting slightly within the +/- 0.5F tolerance band. While we could eliminate the recirculation temp overshoot it would severely slow down your ramp rate.



It is expected that control stability will change slightly as you change your batch size, flow rate, or heat input.

**In general:**

- Faster flow rates reduce oscillation and overshoot
- Lower heat input reduces oscillation and overshoot, but increases heating time
- Higher heat rates increase overshoot and oscillation – shoot for 1.5F/min
- Larger batch sizes generally exhibit less oscillation and overshoot

That said, doing small batches on a system intended for large batch sizes will usually be difficult to control. If this is unavoidable, use the largest water to grist ratio possible, and use the lowest heat setting on your burner, and be ready to accept control outside the +/- 0.5F band.

**It is also expected that you will need to do a few experimental batches** to dial in your specific system and become familiar with the operation and control of your system. You will quickly learn the flame height that results in a 1.5 F/min average ramp rate in your mash bed. You will also discover what flow rates you can achieve without sticking your mash. Note that rice hulls can aid in increasing recirculation rates.

## Assembly:

The TOWER of POWER™ Modular Brewing Control ships partially assembled to allow it to be shipped more economically via ground carriers, and to protect it from shipping damage.

## Parts List:

The following items are shipped with the product. Please check to verify that you received all the parts. Contact your RETAILER if any parts are missing. Blichmann part number is in parentheses.

### Tower Stand

- 1 – Tower assembly (enclosure, plumbing manifold, valves, flow meter)
- 1 – Grommet – pump wire, installed McMaster 9600K33
- 1 – Grommet – flow switch wire, installed McMaster 9600K15
- 2 – Legs, LH (TOP-003-03-LEGSET, one RH and one LH per set)
- 2 – Legs, RH
- 4 – Leveling feet BE5000012-00
- 2 – Leg stiffening plates (3" X 2-1/4" plate with 2 holes)
- 1 – Pump mounting bracket (replacement order: aTopTier\_Pump\_Bkt Includes plate, drip shield, hardware)
- 1 – Pump drip shield
- 8 – 1/4-20 X3/4" L hex bolts, nuts and washers
- 2 – 5/16 X 3/4" hex bolts
- 4 - #10-24 X 3/8" L pan head screws
- 1 – Hose assembly (silicone hose and 2 QuickConnector aQC\_12\_S)
- 1 – 3/8" 90 deg QuickConnector fitting (aQC\_38\_EL)
- 1 – 1/2" 90 deg QuickConnector fitting (aQC\_12\_EL)
- 1 – Pump – March 815 (if ordered with Tower)

### Optional Dual Controller Mounting Plate (reqd for mounting two controllers onto the tower)

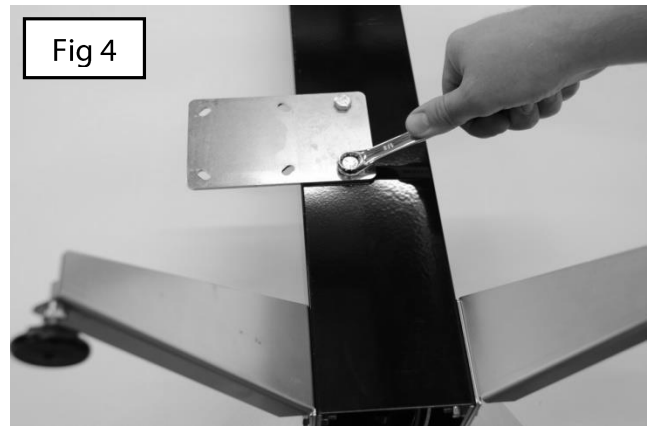
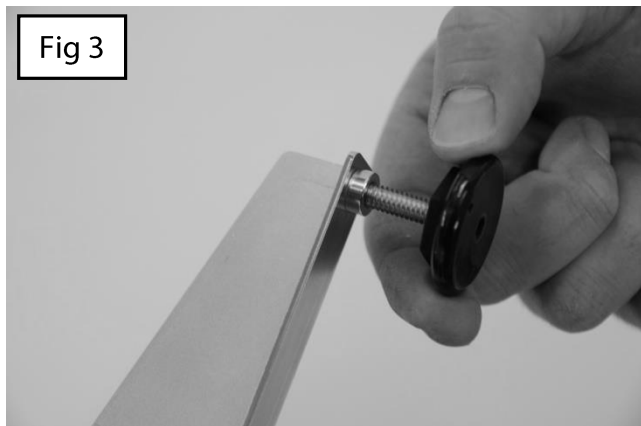
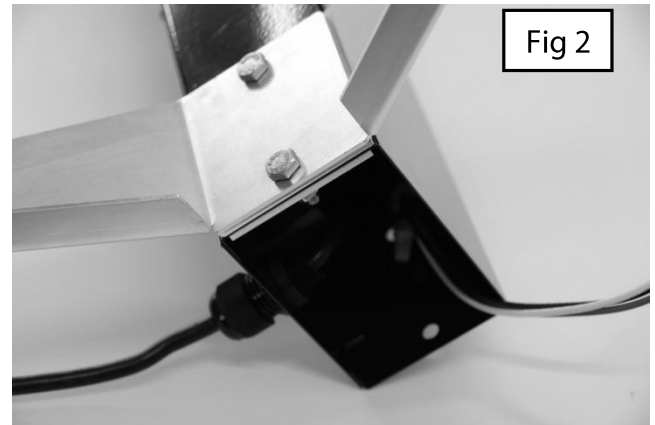
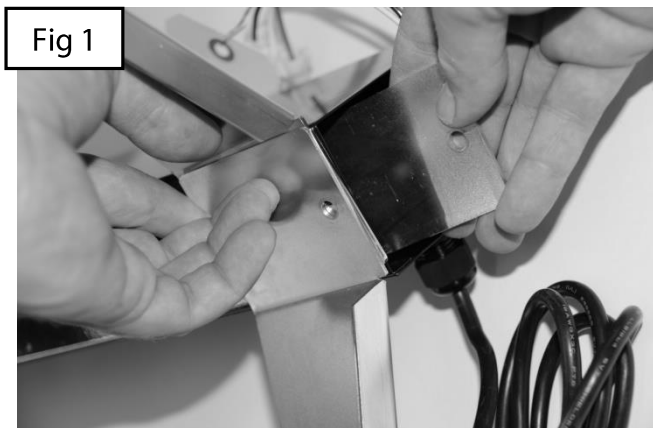
- 1 - Plate (model aCon\_plate\_TOP)
- 4 - #10-24 X 3/8" long pan head screws

## Assembling the Tower

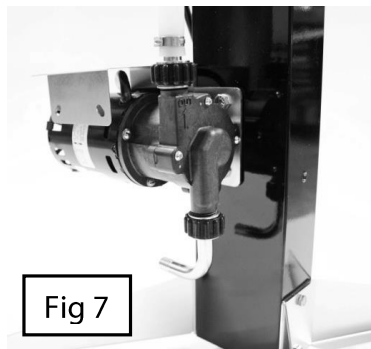
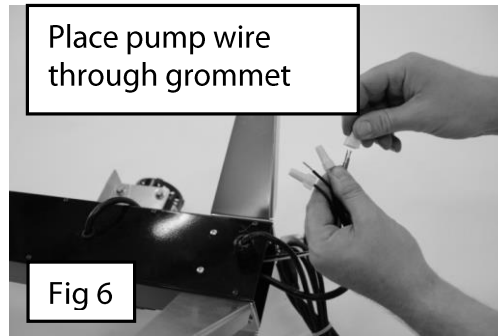
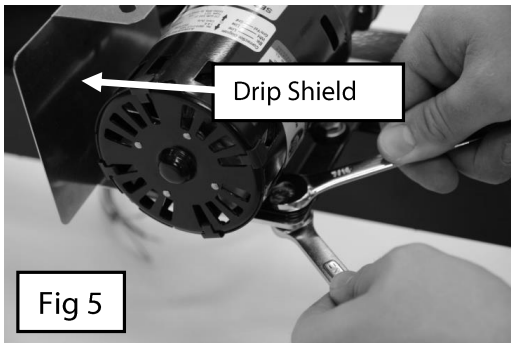
Prepare a work area with a soft pad to protect the tower enclosure from getting scratched during assembly.

**WARNING!** – Make sure that the tower is NOT plugged in until you have fully completed the assembly! Electric shock is possible while wiring the pump!

Begin by unpacking and spreading out the parts. Install the legs to the bottom of the tower using the ¼-20 bolts, nuts and washers as shown in Fig 1 and Fig 2. Please note that there are two LH legs, and two RH legs. One of each leg is installed on each side of the enclosure. Make sure to install the rectangular leg stiffening plate on the INSIDE of the enclosure. Next thread a leveling foot into the end of each leg as shown in Fig 3.



Install the pump bracket using the 5/16" bolts as shown in Fig. 4. Then using the 1/4-20 X 1/2" bolts, nuts and washers, install the drip shield and pump as shown in Fig. 5.



**Important:** Referencing Fig. 7, it may be necessary to re-orient the pump head to so that the inlet faces down and the outlet faces up (flow arrow faces up). Simply remove the 4 mounting screws, rotate the head, and reinstall the pump head. Consult the March manual if needed.

To wire the pump, insert the pump lead wire through the rubber grommet in the back of the enclosure and feed it out the bottom of the enclosure (Fig. 6).

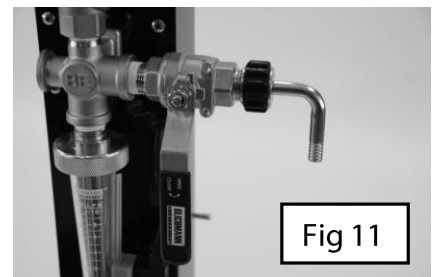
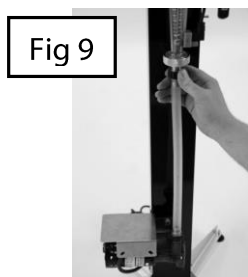
**TIP!** It may be helpful to use needle nose pliers or use the end of a coat hanger to pull the wire out if you cannot reach it with your fingers. Spray the pump wire with a little Windex so that it slides easily through the grommet.

Remove the wire nuts from the green, black and white wires that are labeled "pump power" and connect them to the matching color leads on the pump lead using the wire nuts as shown in Fig 8. Then push the remaining wire up into the bottom of the tower.

Install the pump hose between the pump and the bottom of the flow meter as shown in Fig. 9.

Install the 1/2" 90 degree QuickConnector onto the bottom of the pump. Fig. 10

Install the 3/8" 90 degree QuickConnector onto the sampling port valve. Fig. 11

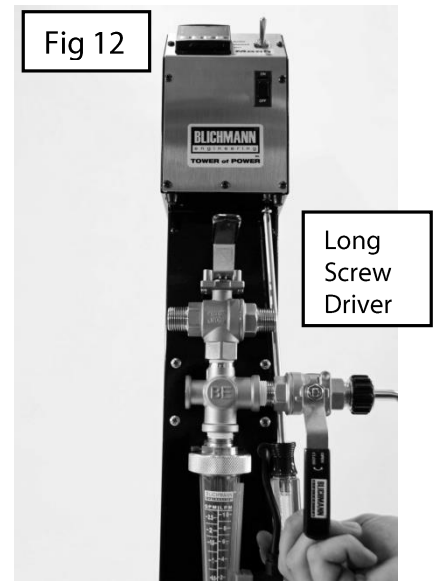


## Installing Single Control Module On The Tower

Using 4 #10 X 3/8" screws install the control module as shown in Fig 12 installing the screws through the through the mating holes in the angle brackets on the top of the Tower.

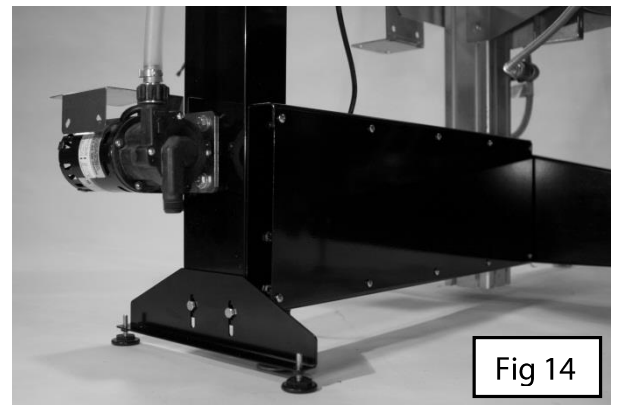
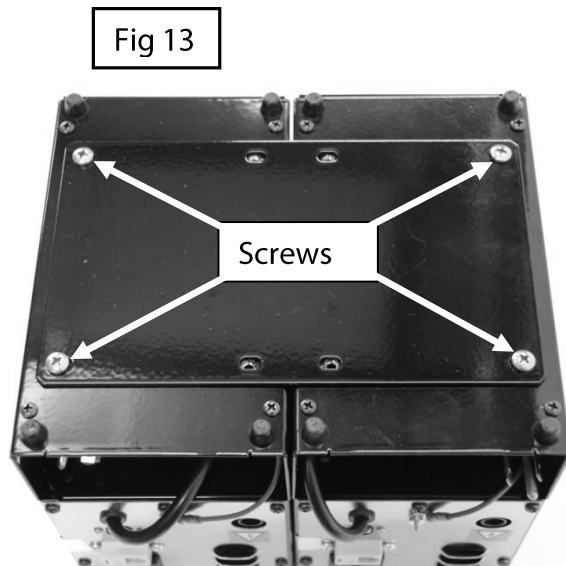
**TIP!** Using a long Phillips screwdriver or a ratcheting or 90 deg screwdriver makes accessing the front two screws easier.

Plug the controller into the GFCI receptacle on the back of the tower.



## Installing Dual Control Module Onto The Tower

Using 4 #10 X 3/8" screws install each control module onto the adapter plate as shown in Fig 13 using the outer most 4 screw holes. Then use an additional 4 screws to mount the assembly onto the tower as shown in Fig 12 using the inner 4 screw holes and placing the screws through the mating holes in the angle brackets on the top of the Tower.



Plug each controller into the GFCI receptacle on the back of the tower.

**WARNING!** – Make sure that the tower is NOT plugged in until you have fully connected the ignition and ground wires or electric shock could occur from the ignition wire!

**NOTE:** An optional mounting kit is available for installing the TOWER of POWER™ onto the TopTier™ modular brewing stand as shown in Fig 14.

That completes the assembly of the tower and control modules!



## Connecting the Controllers to Your System:

**WARNING!** – Make sure that the tower is NOT plugged in until you have fully connected the ignition and ground wires or electric shock could occur from the ignition wire!

**CAUTION! – Heat damages electronics.** Locate the control units, solenoid valves, tower and wiring as far from heat sources (burners) as possible. You should never feel your control modules getting warm to the touch. If they do, they are too close to heat sources! The maximum surface temperature should never exceed 125F (52C). While the solenoid valves will get somewhat warm during operation they should never be uncomfortably hot to the touch. Locate them as far from the heat source as possible.

**Caution!** Always route wires away from heat sources and hot surfaces to prevent burning and short circuits.

**Important Warranty Information!** Electronics damaged from excessive heat are not covered under warranty! We have installed a non-reversible heat detector inside the control enclosure to detect excessive heat. There are no user-serviceable components inside of the enclosure. Tamper labels that have been removed or damaged will void your warranty.

## Never Do These Things!

**NEVER** LEAVE THIS EQUIPMENT UNATTENDED

**NEVER** ALLOW CHILDREN NEAR THIS EQUIPMENT

**NEVER** Expose to heat or moisture. If it is warm to the touch it is too close to heat source.

**NEVER** HEAT COOKING OIL WITH THIS EQUIPMENT

**NEVER** operate on soft, combustible or uneven surfaces like dirt, gravel, wood or asphalt

**NEVER** operate indoors, in a garage, under an overhang, porch, deck, carport or similar structure

**NEVER** use near and combustible chemicals, gasoline or other flammable vapors or liquids

**NEVER** Bypass the GFCI circuit protection

**NEVER** Exceed 125F (52C) surface temperature

**NEVER** use the gas solenoid valve as a normal shutoff

## Always Do These Things!

**ALWAYS** OPERATE OUTSIDE ONLY, AT LEAST 30FT FROM OTHER STRUCTURES

**ALWAYS** USE ONLY ON LEVEL AND STABLE CONCRETE, BRICK OR SIMILAR HARD NON-FLAMMABLE SURFACES.

**ALWAYS** Connect to a GFCI circuit

**ALWAYS** Check that all fasteners are properly tightened prior to each use

**ALWAYS** Ensure that the base of the tower is resting on a hard surface

**ALWAYS** Use the propane tank shutoff valve or a separate valve when not in use

**ALWAYS** Use genuine Blichmann Engineering replacement parts

## Installing Sensor & Plumbing For Mash Control:

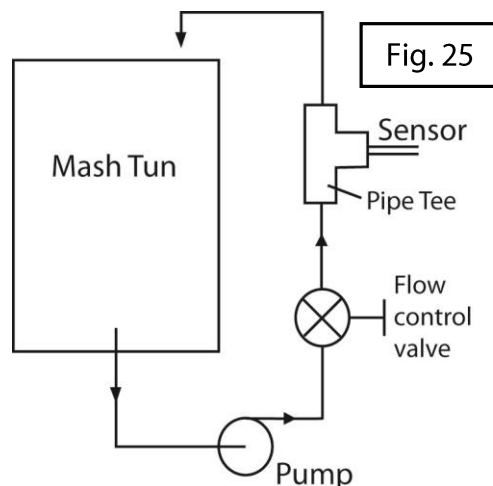
**Important!** Do not install the sensor directly into a mash tun! The grain greatly impedes the convection and transfer of heat. It is VITAL to the performance of the product that the sensor be installed so that it is measuring the temperature of the wort returning to the top of the mash bed. Installing the sensor directly into the mash tun will cause severe overshooting, oscillation, scorched wort, and possibly equipment damage!!

**If you have purchased the Tower stand:** install the sensor for the MASH controller in the port indicated in Fig. 24. Note that the HLT sensor will be mounted directly in the hot liquor tank.

**Tip!** We recommend ½" (12mm) ID hose for connecting the Tower to your system. Silicone hose, while expensive, will last a lifetime and can withstand continuous use at boiling temperatures. We recommend ¾" OD thick wall hose.

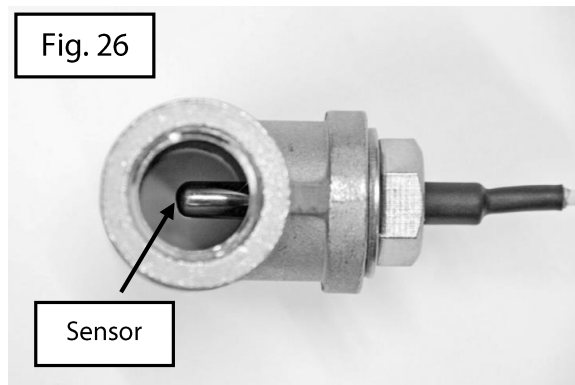
**Warning!** ALWAYS use hose clamps on all hoses!

**Connecting to other systems:** Refer to the schematic of Fig 25. It is VITAL to the performance of the system to connect it in this manner. Connect the outlet valve of your mash tun to the inlet of the pump. Install a flow control valve after the pump. Then plumb through the sensor, and lastly back to the TOP of the mash bed. Note – it is also acceptable to switch the order of the flow control valve and the sensor.

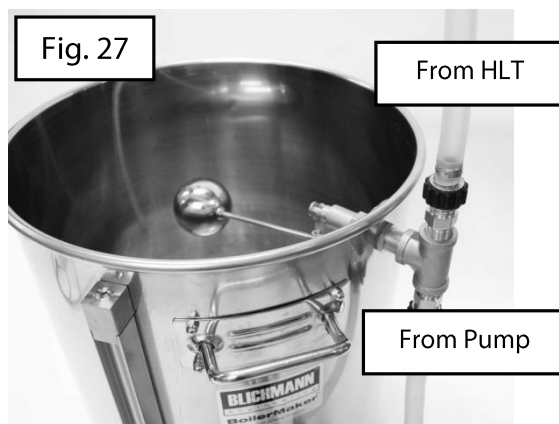


**Installing the sensor in your own system:** locate the sensor according to the schematic in Fig. 25. A close-up of the sensor installed in a pipe T (not included but available through McMaster.com 4464KK51 if needed) is shown in Fig 26. Note that the tip of the sensor must protrude into the middle of flow cavity for it to accurately measure the wort temperature.

**Installing an AutoSparge™ in your system:** We highly recommend using the Blichmann Engineering AutoSparge™ for this application (Fig 27) which is available separately. Lastly, connect the remaining fitting on the 3-way valve to the inlet of your brew pot.



**Tip!** As shown in Fig 27 place a pipe T (not included but available through McMaster.com 4464KK51 if needed) on the inlet of the AutoSparge™. This will allow you to connect it to the HLT and the mash recirculation simultaneously with no need to switch hoses at sparge time! A valve is not needed on the elbow since the valve on the HLT will stop wort from flowing that direction.



# Tower Operation

**Flow Meter/Stuck Sparge/Low Flow Alarm:** The Blichmann Engineering™ Tower is equipped with a very high quality flow meter to allow you to accurately and repeatably set your recirculation rate to avoid a stuck mash, to ensure you have adequate flow to maintain a stable system, and for batch-to-batch repeatability. Simply read the flow rate at the top of the red float as shown in Fig 31.

**Low flow switch:** the flow meter is equipped with a low-flow switch and alarm horn that will notify you in advance that your flow is dropping and your mash is beginning to stick. Simply slide the switch assembly up or down to the desired low flow setting.

**Important:** It is possible for bits of grain to become lodged in the valve or in the flow meter. This may give a false indication that the mash is sticking. Simply open the throttling valve quickly to dislodge the particles and then return to the original flow. Re-evaluate if the problem has been resolved. Once your mash bed has been set this is generally not a problem.

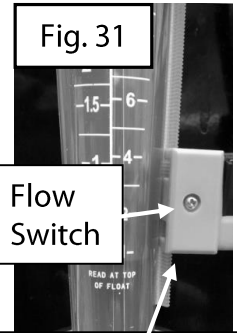
If this is a chronic problem, you may need to install a pre-filter after the mash tun, or improve the sealing of your false bottom or manifold assembly to reduce grain passage.

**The pump selector switch** is mounted on the RH side of the Tower. It has a SILENCE position to silence the alarm if desired (Fig 32). In "Silence" mode the alarm will be disabled, but the pump will continue to run. In "Off" mode, both the pump and the alarm will be disabled. Since the lautering rate is generally much lower than the recirculation rate this is a convenient feature.

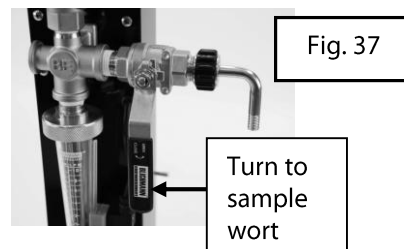
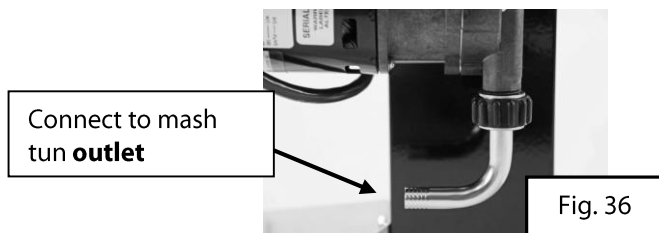
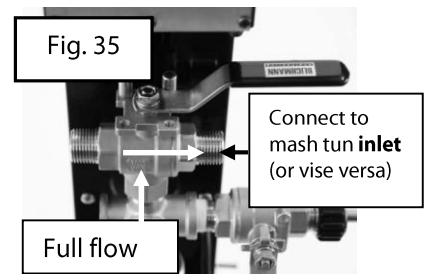
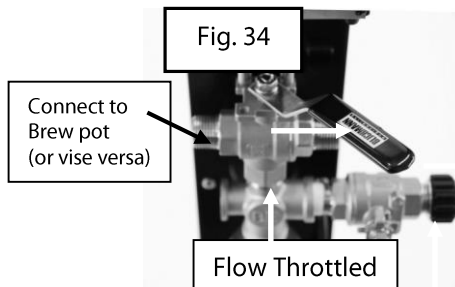
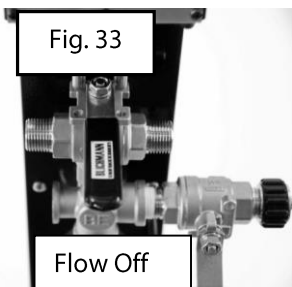
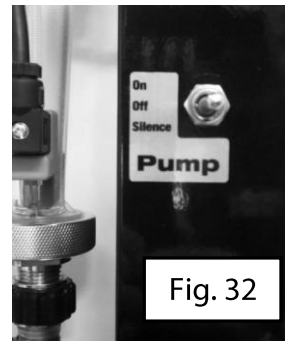
**Valve Operation** for the Tower is quite intuitive. The 3 way valve will begin to flow to the right when the handle is moved to the right, (similarly to the left), and will be blocked from flowing left or right when facing you.

Depending on the orientation of your brew system, you will connect one outlet of the valve to the mash tun, and the other outlet to your brew pot. When you are ready to sparge, simply divert the flow to the brew pot.

**Note:** The three way valve is also used to throttle the flow which can be measured at the flow meter.



Align at bottom



## Brew Day Process

It is recommended that you use plain water initially to test your system and become familiar with the response and operation of your new system. Expect to do a couple actual brew sessions to dial in and master your new system and process.

- (1) Calculate your desired strike temperature using any of the available calculators or brewing software.
- (2) Fill your mash tun and hot liquor tank with the appropriate volume of water.
- (3) Open all valves on your mash system. Open the sample port to purge air and fill your lines with water.  
**TIP:** make sure the hose running into your mash tun is empty and the AutoSparge (if used) is open to avoid an airlock.
- (4) Turn on your pump and adjust the flow to your desired setting using the handle on the 3-way valve (or your flow control valve) to throttle it back if needed. NEVER throttle the flow to the INLET of the pump. ALWAYS on the OUTLET of the pump!
- (5) Place all controller mode selector switches to RESET.
- (6) Turn on the controllers and enter the desired strike water and HLT temperature into the controller.
- (7) Place both controllers in AUTO mode. The burners will ignite and control your tanks to the desired temperature.
- (8) DO NOT ADD GRAINS AT THIS TIME!
- (9) When your mash water has reached the desired temp, turn the Mash controller to RESET, turn the pump off and close all the valves.
- (10) Add your grains at this time stirring gently

**Important!** During dough-in always turn the pump OFF or you will airlock your pump and stick your mash. It is important for the water to absorb and the air to purge from the grains. 10 min is usually adequate.

- (11) After dough-in, turn the valves back on, turn on the pump, and place the controller back to AUTO and the burner will ignite as needed.
- (12) To ramp to another temperature simply use the up arrow and press enter to accept. The burner will ignite accordingly.

**Tip!** Wort samples to monitor starch conversion and specific gravity are easy – just open the sample port valve and draw off a sample!

- (13) When your mash is done (usually at 168F (75.5 C)) you may begin the sparge process.

**Caution!** During sparging ALWAYS put BOTH controllers into RESET and turn the gas off! Failure to do so could result in a warped/damaged HLT or mash tun!

- (14) If you are using the Blichmann Engineering™ Tower with an AutoSparge™, simply rotate the 3-way valve toward your boil kettle hose and then open your HLT valve. You may use the 3-way valve to throttle your lauter rate which can be read on the flow meter. The AutoSparge will automatically adjust to the lauter rate into your boil kettle if you are using this option. Again, putting the pump selector switch in the “Silence” position will turn off the alarm horn but leave the pump running.

## Cleaning

Always clean your system immediately after use to flush wort out of the hoses, pump and other cavities. While wort making equipment does not need to be sanitized, it DOES need to be clean. We recommend recirculating PBW (Powdered Brewery Wash) and then StarSan through your system immediately after each use.

Simply use a bottling bucket filled with PBW, elevate it above your pump, and connect with a hose to the inlet of the pump. Place the outlet hose (return hose to your mash tun) in the top of the bucket. Open the valves and start the pump. If using the Tower, opening the sample port will vent air out of your pump. Run for about 15 min, drain, and then repeat with StarSan, then drain and allow to dry. Periodically, you may wish to remove the pump head and disassemble for cleaning. Refer to the March manual for instructions.

## Maintenance

The TOWER of POWER™ temperature control system requires little maintenance. Inspect fasteners, wires and hoses regularly and replace as needed ONLY with genuine Blichmann Engineering™ parts. Parts can be ordered through your retailer. After brewing, wipe any drips off with ordinary soap and a soft sponge.

## Trouble-shooting

This section provides suggestions for trouble-shooting problems that may arise with the equipment. Please see our FAQ tab on the TOWER of POWER page for additional updated suggestions.

**IMPORTANT:** Please use this guide for the fastest resolution of your problem. Your retailer is your point of contact for product questions, and your fastest way to resolve your issues if the chart below does not resolve your problem. Your retailer will contact Blichmann Engineering if they are unable to resolve your issues.

Pump Won't Flow	<ul style="list-style-type: none"><li>• Check that all appropriate valves are open</li><li>• Check that mash is not stuck (compacted). See below</li><li>• Check that all hoses downstream of the pump are empty. Install a bleed valve after the pump to vent air and allow the pump to fill with liquid. For Tower users, the sample port can be used.</li></ul>
Mash is sticking	<ul style="list-style-type: none"><li>• Reduce flow rate</li><li>• Ensure you have done a dough-in WITHOUT the pump on to allow air to purge from the grain bed.</li><li>• Check that grain crush is not too fine. Husks should be intact. Use rice hulls if crush is OK.</li><li>• Ensure that lauter hardware (piping, slots, perforations) are not plugging</li></ul>

# 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.