

Unibräu Assembly Guide

www.brausupply.com

The Unibräu BIAB home brewery is an all-electric home brewing system that allows you to brew all-grain recipes right on your countertop in under 4 hours. This unit is perfect for small-batch home-brewers who are short of space.

The system ships complete with these components, pictured from left to right:

- 1. stainless ball valve
- 2. 90° stainless elbow
- 3. stainless coupling
- 4. 2 quick disconnects male/ MPT
- 5. 1/2" tee
- 6. 2 stainless 1/2" nipples
- 7. 2 quick disconnects male/ FPT
- 8. 1/2" MPT barb fitting
- 9. 4 quick disconnects female/barb
- 10. 2 1/2" mpt locknuts
- 11. 4 stainless steel hose clamps
- 12. roll of teflon tape
- 13. 2 silicone o-rings
- 14. 1 7/8" stainless washer



Also:

- 15. An element enclosure including bolt, washer, nut with power cord strain relief installed. (2x for 120V Unibräu system)
- 16. Bräu pump
- 17. Power adaptor
- 18. 3' power cord
- 19. Stainless mash basket
- 20. Grain Bag
- 21. 40" silicone tubing
- 22. Stainless lid
- 23. 6"x9" nylon boiling hop bag
- 24. stainless steel kettle, pre-punched with non rusting element, locknut and silicone oring pre-installed.
- 25. RTD Sensor

OR

- 26. Stainless thermowell and
- 27. Sensor strain relief









For ease of shipping, this system is sold partially unassembled. The following tools are required to complete the assembly:

- 2 adjustable wrenches
- Tubing cutter or utility knife
- Phillips #2 screw driver
- slotted screw driver
- Robertson #2 screw driver

Note: The system plugs into a common 15A or 20A 120V household plug. Because of the



power requirement of the element(s), please ensure that the brew unit and its controller are plugged into an isolated circuit. The best outlet to plug it into is a ground fault interrupter (GFCI) receptacle, preferably close to a water source.

Warning - Shock Hazard!

This is an all-electric system. Electrical shocks can cause serious injury or death. A ground fault interrupter (GFCI) is highly recommended for use with this system. Always unplug the device before cleaning the unit. Never put your hand inside the brewer while it is plugged into the power supply.

By purchasing this product, you agree to accept all liabilities for any damage or injury that may occur through the use of this equipment.

Assembly:

Element Wiring -repeat steps 1 - 5 for 120V Unibräu double element system

 Slide the power cord into the strain relief of the element enclosure. Do not tighten yet!





2. Remove the nut and washer from the bolt, and slip the green ground wire spade connector over the bolt. Slip the stainless washer over the bolt and retighten the nut. Use a plier and your robertson screw driver to firmly tighten the ground to the element enclosure.



3. Unscrew the bolts from the element. Attach the positive and negative leads to the bolts and re-attach to the element. Ensure that the leads are not contacting the enclosure sides. Polarity is unimportant.



4. Screw the element enclosure together. Ensure that you are not twisting the power wires, and thereby causing strain to the electrical connection. Use caution!





5. Tighten the cord grip nut.





Attach Ball Valve to Kettle

1. Wrap both ends of the 1/2" nipple with 4 layers of Teflon tape. Remember to orient the tape clockwise at each end. Wrap the male-to-MPT quick disconnect with Teflon tape also in a clockwise direction.





2. Thread the 1/2" locknut onto the pipe nipple until it stops at the centre. Ensure that the groove in the locknut is facing towards the centre of the pipe nipple.





3. Thread the pipe nipple into the ball valve on the same side that you threaded the locknut. Finger-tighten it for now. The groove for the silicone washer should be facing away from the ball valve.



4. Wrap the male-to-MPT quick disconnect with 4 layers of teflon tape and thread it into the other end of the ball valve. Tighten the ball valve to the QD fitting using 2 wrenches.





5. Fit the silicone washer into the groove of the locknut.



6. Position the nipple into the cutout of the pot and slide the 1" washer over the nipple. Thread the 1/2" coupling on and finger-tighten it. Using two wrenches, tighten the coupling and the ball valve until they are tight to the pot.







Lid Assembly

1. Wrap both ends of the 1/2" nipple with 4 layers of Teflon tape. Remember to orient the tape clockwise at each end. Wrap the male-to-MPT quick disconnect with Teflon tape also in a clockwise direction.





2. Thread the 1/2" locknut onto the pipe nipple until it stops at the centre. Ensure that the groove in the locknut is facing towards the centre of the pipe nipple.





3. Thread the pipe nipple into the tee as show, with the groove facing away from the tee fitting. Finger tighten only.



4. Wrap the Male/MPT quick disconnect with 4 wraps of teflon tape and screw into the tee as shown. Use 2 wrenches to tighten.



5. Depending on your temperature controller used, wrap either the RTD sensor threads, or the stainless thermowell threads with 4 wraps of teflon tape and screw into the tee as shown. Use 2 wrenches to tighten. Screw the sensor strain relief in to the thermowell.









6. Wrap the 1/2" MPT barb fitting with 4 wraps of teflon tape. Screw the MPT barb fitting into the 90° stainless elbow and tighten with 2 wrenches.



7. Slip the red silicone washer over the stainless nipple and push the nipple of the tee assembly through the hole on the lid. From the underneath of the lid screw the 90° stainless elbow to the nipple. Use two wrenches to tighten.





Pump and Silicone Tubing Assembly

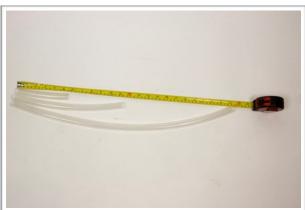
1. Wrap the pump threads with 4 wraps of silicone tape. Screw on to the pump the Male/FPT quick disconnects. Do NOT use a wrench to tighten. Hand tighten only! If after testing you discover that it drips from the pump assembly, you can wrap a few extra wraps of teflon tape to the pump threads and re-attach the quick disconnects.

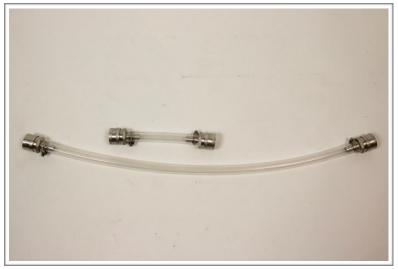




2. Cut the silicone tubing into 4", 12", 24" lengths for the Unibräu mini. Cut into 4", 18", and 26" lengths for the Unibräu. Attach the 4 female-to-barb quick disconnects to the shortest (4") and the longest (24" or 26") length and tighten the hose clamps to each connection point over the barb with a slotted screw driver.







3. Slip the remaining piece of silicone over the hose barb assembly in the lid.



Add Water to the Kettle

To ensure you have a leak-free setup, you need to add water to the brew system. Close the ball valve and add enough water to cover the heating element. Check for leaks around the element and the ball valve. If one of the o-rings is leaking, use a wrench to tighten the nut on the inside, while holding the outside to stop it from rotating. If the leak doesn't stop, dump the water out of the kettle and disassemble the equipment where the leak is occurring. The problem might be that there isn't enough Teflon tape on the part, or that it simply hasn't been tightened enough. Ensure that the threaded element flange has been wrapped clockwise with 4 layers of Teflon tape. Also, inspect the o-ring and make sure that it is properly seated and that it's not being overly compressed. Reassemble the equipment and tighten the nut. Once you have ensured that there are no leaks, add more water to the kettle to ensure that the element is sitting a few inches below the water level.

Warning – Do not plug the heating element cable in unless the heating element is fully submerged in water! Doing so will burn the element out.

You should now be ready to start your very first brew!