# Faurpment Maukee, Mi

BREWING

### Spike System Product Guide CONTENTS:

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### **BREWING CONTROL PANEL**

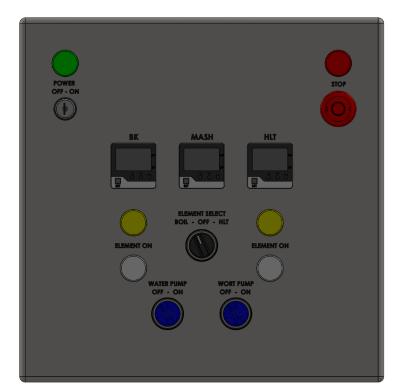


### **Autotune your HLT PID**

Before you get started, make sure that you autotune your HLT PID controller. This insures proper calculations resulting in efficient use of the heating element. You only need to do this for your HLT PID before your first brew.

To auto-tune, bring your kettle to approximately 150 degrees, once close to this temperature follow the bellow steps:

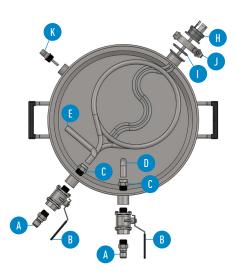
- Hit set and < (scroll left) and the same time
- Hit ^ x3, then < x1, then ^ x3 to get 0033. Hit set
- This will bring up FØØ
- Hit ^ x2 to get FØ2 and hit set
- This will bring up "at" on top with "no" in green at the bottom
- Hit ^ x1 to change "no" to "yes"
- Hit set and < at the same time
- ATU will blink on the bottom left of the screen



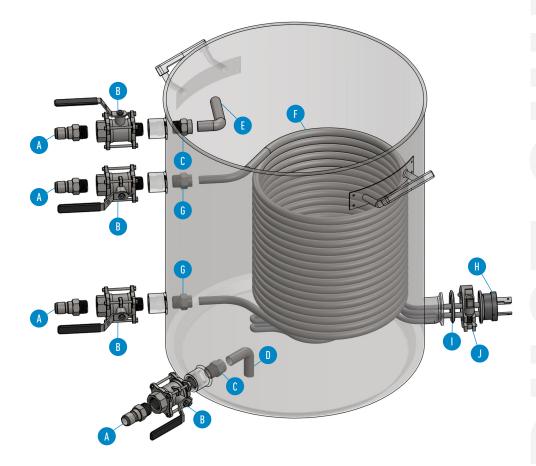
### **PRO TIP:**

If mounting your panel on the wall we recommend attaching to a piece of plywood and then affixing that to the wall or using a TV mount designed for the weight of the panel.

### HOT LIQUOR TANK

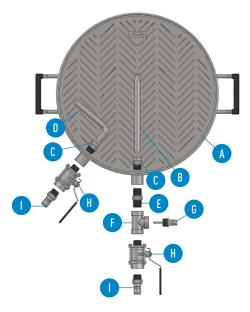


ITEM	DESCRIPTION	QTY
A	Quick Connect Fitting - MQC x MNPT	4
В	Stainless Steel Valve	4
C	5/8" Quick Connect Fitting	2
D	Shorty Pick Up Tube	1
E	Side Pick Up Tube	1
F	HERMs Coil	1
G	HERMs Coil Quick Connect	2
H	Heating Element	1
I.	Gasket	5
J	Tri-Clamp	1
K	RTD Sensor	1

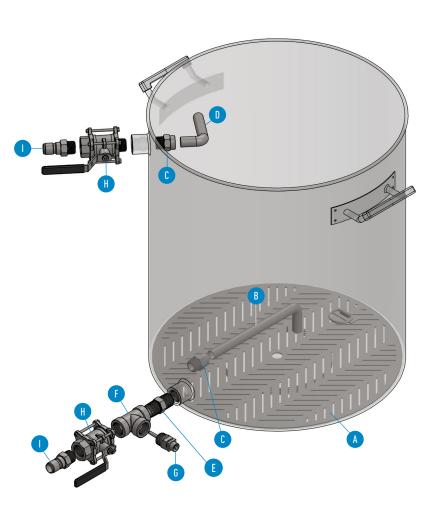


- Make sure the elements are plugged in and the power cords are fully twisted into position, otherwise the resistance is increased which will cause the plug to melt.
- All threaded NPT fittings require pipe tape for a leak free seal. You'll want to put 3-4 wraps of pipe tape on the threads in a clockwise direction. If your fitting is not oriented correctly after tightening a combination of tightness and amount of pipe tape will need to be adjusted.
- Before installing parts into quick connect fittings, be sure to lubricate them with water. This will allow them to slide into the QC fitting easily and prevent tearing the o-ring.

## MASH TUN

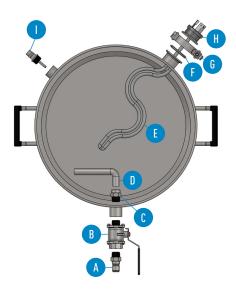


ITEM	DESCRIPTION	QTY
A	False Bottom	1
В	Center Pick Up Tube	1
C	5/8" Quick Connect Fitting	2
D	Side Pickup Tube	1
E	Hex Nipple	1
F	Tee Fitting	1
G	Temperature Probe	1
H	Stainless Steel Ball Valve	2
I	Quick Connect Fitting - MQC x MNPT	2

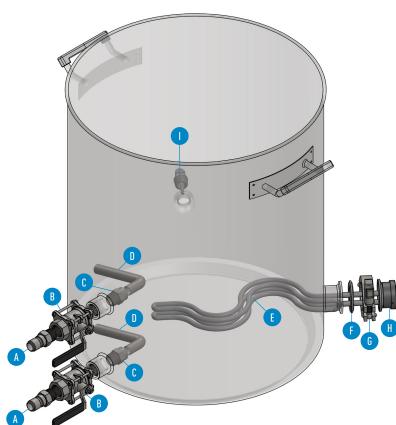


- We recommend using 2 feet of the silicone tubing to the side pickup tube on the mash tun. The tubing will float on top of the grain bed allowing for a nice, even recirculation over the grain bed.
- All threaded NPT fittings require pipe tape for a leak free seal. You'll want to put 3-4 wraps of pipe tape on the threads in a clockwise direction. If your fitting is not oriented correctly after tightening a combination of tightness and amount of pipe tape will need to be adjusted.
- Before installing parts into quick connect fittings, be sure to lubricate them with water. This will allow them to slide into the QC fitting easily and prevent tearing the o-ring.

## **BOIL KETTLE**

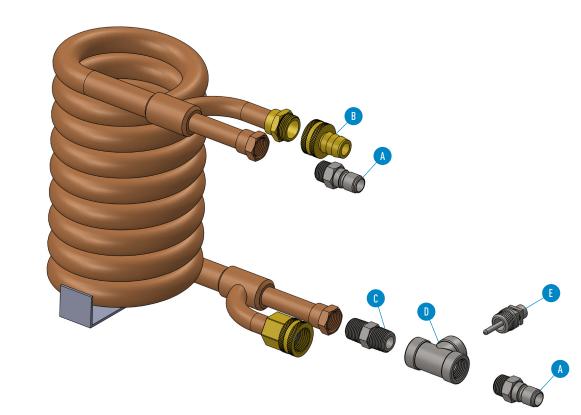


ITEM	DESCRIPTION	QTY
A	Quick Connect Fitting - MQC x MNPT	2
В	Stainless Steel Ball Valve	2
C	5/8" Quick Connect Fitting	2
D	Side Pickup Tube	2
E	Electric Element	1
F	Gasket	3
G	Tri-Camp	1
H	Heating Element	1
l I	RTD Sensor	1



- Make sure the elements are plugged in and the power cords are fully twisted into position, otherwise the resistance is increased which will cause the plug to melt.
- Before installing parts into quick connect fittings, be sure to lubricate them with water. This will allow them to slide into the QC fitting easily and prevent tearing the o-ring.
- All threaded NPT fittings require pipe tape for a leak free seal. You'll want to put 3-4 wraps of pipe tape on the threads in a clockwise direction. If your fitting is not oriented correctly after tightening a combination of tightness and amount of pipe tape will need to be adjusted.
- The BK PID is set as a % output control as opposed to temperature control. This allows you to dial in the perfect rolling boil.

### WORT CHILLER

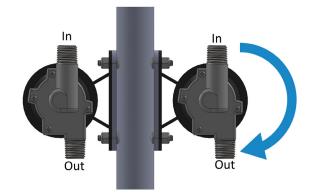


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ITEM	DESCRIPTION	QTY
A	Quick Connect Fitting - MQC x MNPT	2
В	Hose Barb	1
C	Hex Nipple	1
D	T-Fitting	1
E	Temperature Probe	1

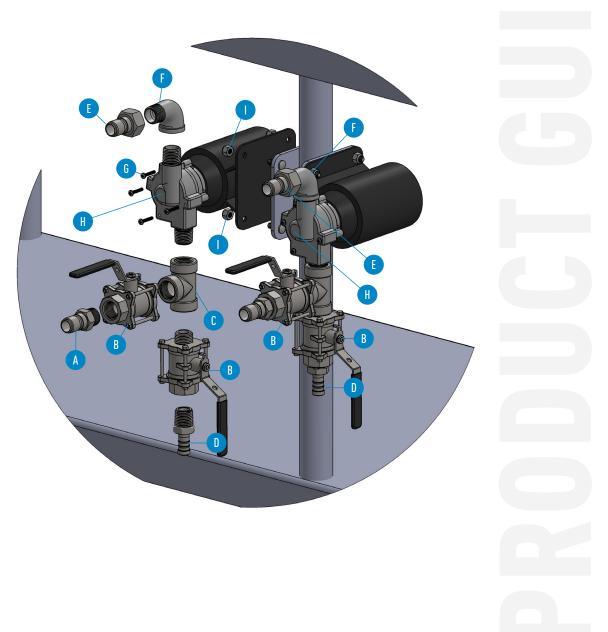
- Our chiller is a counterflow chiller design made from super conductive copper. All this adds up to fast chilling speeds. Our chiller comes with QC fittings so you can quickly connect to the rest of your system. It also includes a tee fitting and additional temp probe so you can monitor inline chilling temps going into your fermenter. Simply attach the temp probe cable from your mash tun to the tee on the chiller. You'll be able to see the chiller exit temp via the control panel and adjust the flow rate to achieve your perfect yeast pitch temp.
- If you have high ground water temps we recommend submerging your chiller in an ice water bath for the last leg of chilling.
- All threaded NPT fittings require pipe tape for a leak free seal. You'll want to put 3-4 wraps of pipe tape on the threads in a clockwise direction. If your fitting is not oriented correctly after tightening a combination of tightness and amount of pipe tape will need to be adjusted.

### PUMPS

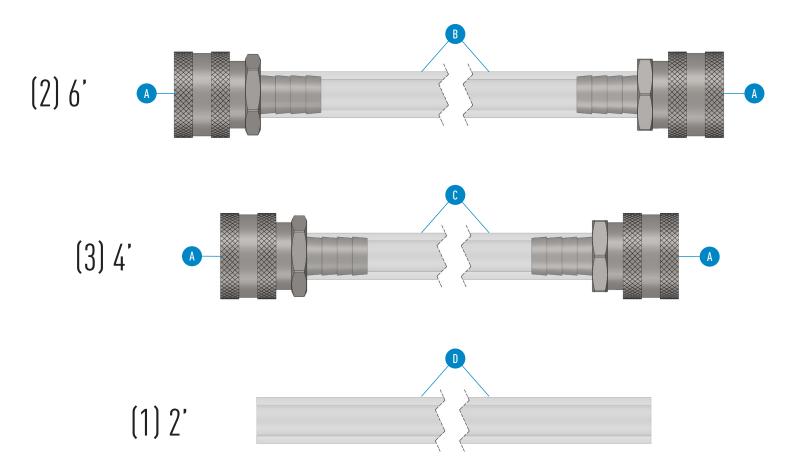


- One pump will need to be rotated 180° if using our Spike System table leg mount. To rotate the pump head, remove the 4 screws, rotate the head 180° and then tighten the screws. This will have both pump heads with the 'In' at the top and 'Out' at the bottom.
- When setting up your pumps for the 30 gallon and 50 gallon kettle systems, ensure that you mount the pumps to the center leg so that your hoses will reach from the kettles to the pumps.

ITEM	DESCRIPTION	QTY
A	Quick Connect Fitting - MQC x MNPT	2
В	Stainless Steel Valve	4
C	Tee Fitting	2
D	Barbed Fitting	2
E	Quick Connect Fitting - MQC x FNPT	2
F	90° Street Elbow	2
G	Screws	8
H	Pump Head	2
I.	Mounting Nut	8



### HOSES



ITEM	DESCRIPTION	QTY
Α	FQC x Barb	10
В	Long Hose – 6'	2
C	Short Hose – 4'	3
D	Mash Tun Recirculate Hose – 2'	1

### **PRO TIP:**

We use oversized barbs so the silicone tubing will be securely attached without a need for hose clamps. Also, this oversized barb creates a full port which doesn't restrict flow.