



## Spike+ Trio Product Guide

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# PRODUCT GUIDE

# BREWING CONTROL PANEL

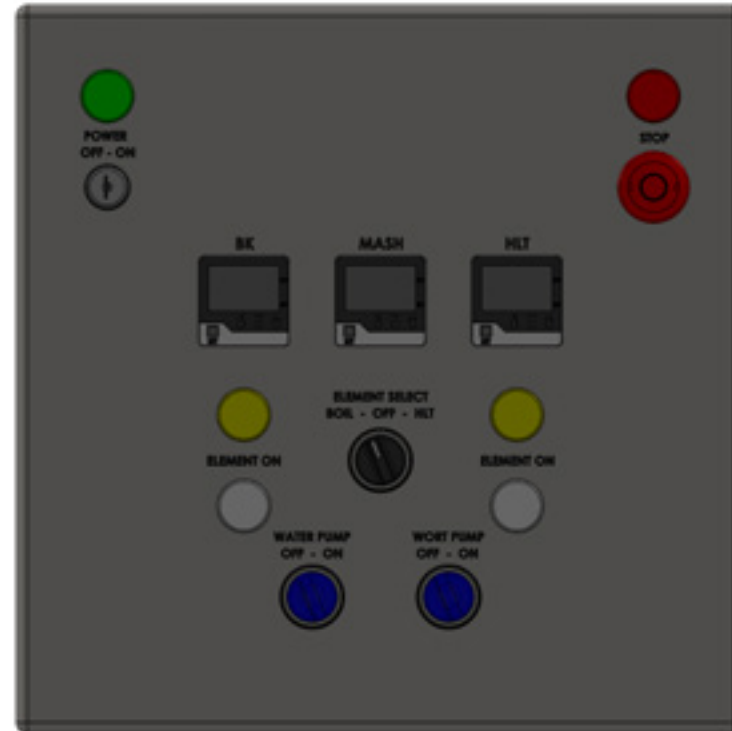


## Autotune your HLT PID

Before you get started, make sure that you auto-tune 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:

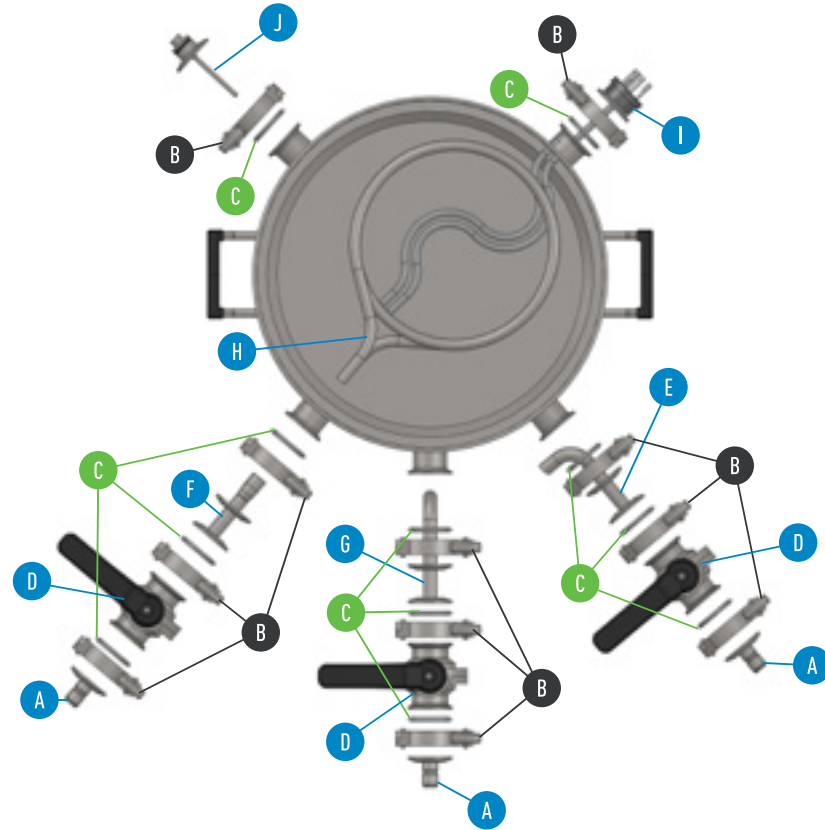
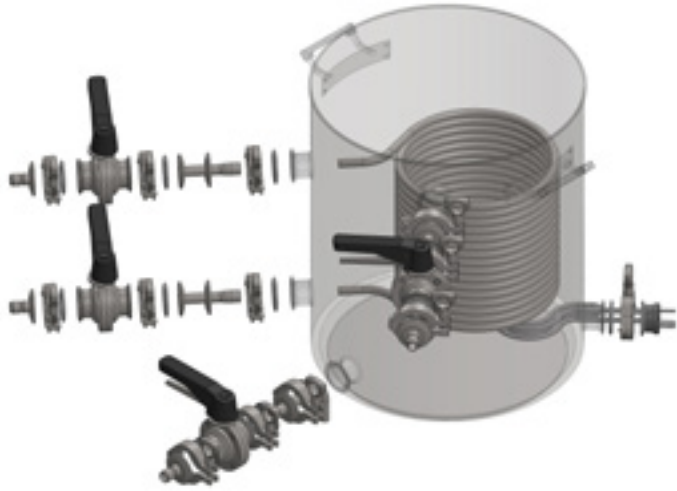
- Hit set and < (scroll left) and the same time
- Hit ^ x3, then < x1, then ^ x3 to get 0033. Hit set
- This will bring up F00
- Hit ^ x2 to get F02 and hit set
- This will bring up "at" on top with "no" in green at the bottom
- Hit ^ x1 to change "no" to "yes"
- Hit set and < at the same time
- ATU 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

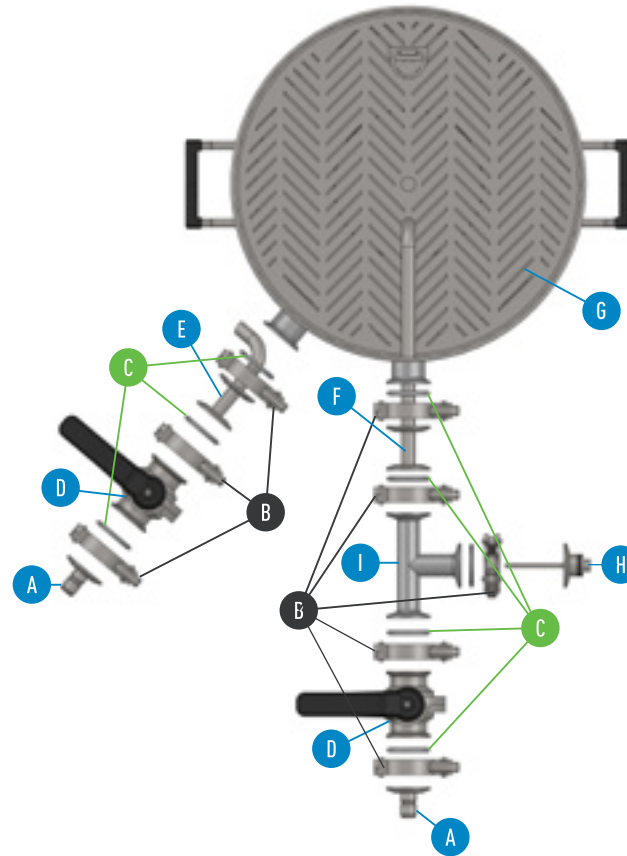


ITEM	DESCRIPTION	QTY
A	1.5" TC X QC	4
B	1.5" TC Clamp	14
C	1.5" Gasket	14
D	1.5" TC Butterfly Valve	4
E	Spike+ Pickup Tube - Side	1
F	1.5" TC HERMS QC	2
G	Spike+ Pickup Tube - Shorty	1
H	HERMS Coil	1
I	1.5" TC Element	1
J	1.5" TC Temp Probe	1

## PRO TIPS:

- The clamps only need to be hand tightened to be leak free
- 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 the HERMS coil into the 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.
- Install the bottom of the HERMS coil first and then the top. Firmly seat into the lubricated fitting to avoid any leaking

# MASH TUN

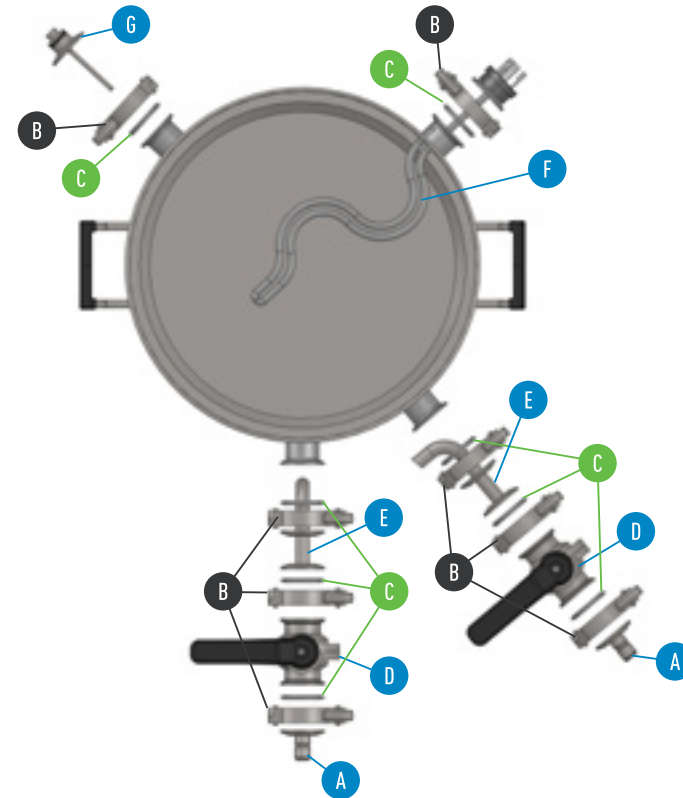


ITEM	DESCRIPTION	QTY
A	1.5" TC X QC	2
B	1.5" TC Clamp	8
C	1.5" Gasket	8
D	1.5" TC Butterfly Valve	2
E	Spike+ Pickup Tube - Side	1
F	Spike+ Pickup Tube - Center	1
G	False Bottom	1
H	1.5" TC Temp Probe	1
I	1" TC Tee	1

## PRO TIPS:

- The clamps only need to be hand tightened to be leak free
- 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.

# BOIL KETTLE



ITEM	DESCRIPTION	QTY
A	1.5" TC X QC	2
B	1.5" TC Clamp	8
C	1.5" Gasket	8
D	1.5" TC Butterfly Valve	2
E	Spike+ Pickup Tube - Side	2
F	1.5" TC Element	1
G	1.5" TC Temp Probe	1

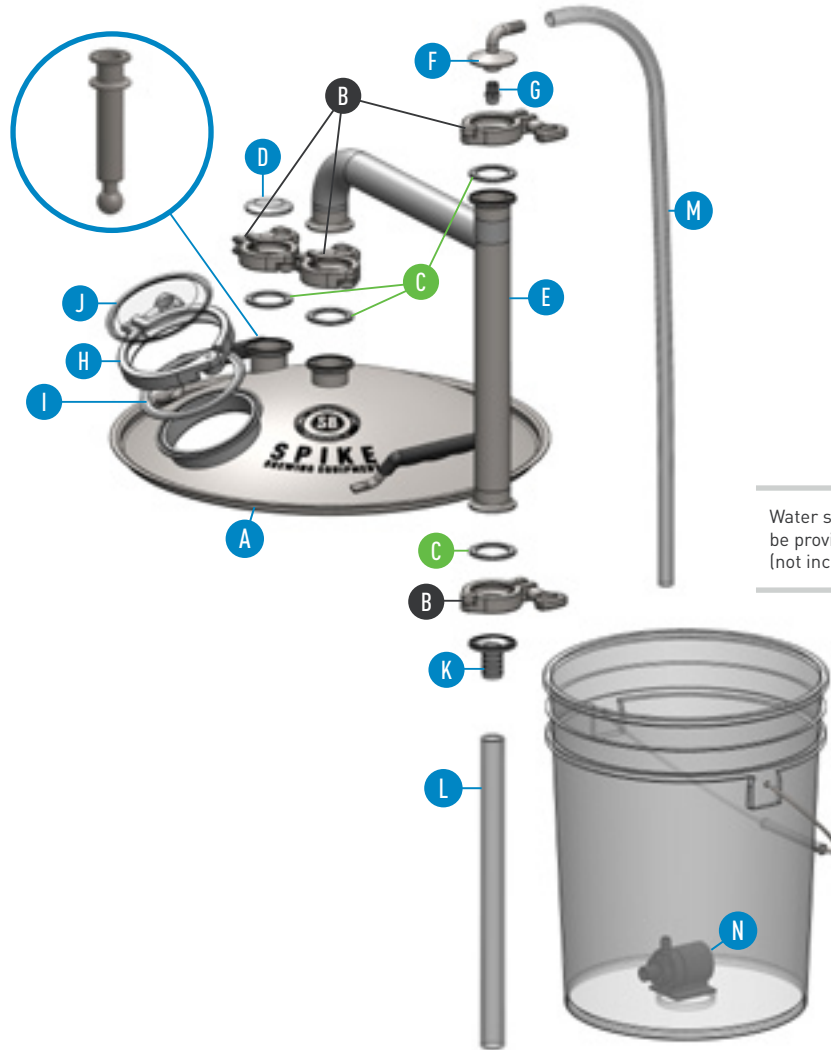
## PRO TIPS:

- The clamps only need to be hand tightened to be leak free
- 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.
- The BK PID is set as a % output control as opposed to temperature control. This allows you to dial in the perfect rolling boil.
- When installing, the drain pickup should be facing down and whirlpool should be facing counter-clockwise parallel to the bottom of the kettle.

# STEAM CONDENSER



1.5" tri-clamp port can be used for cleaning with a [CIP ball](#). (sold separately)



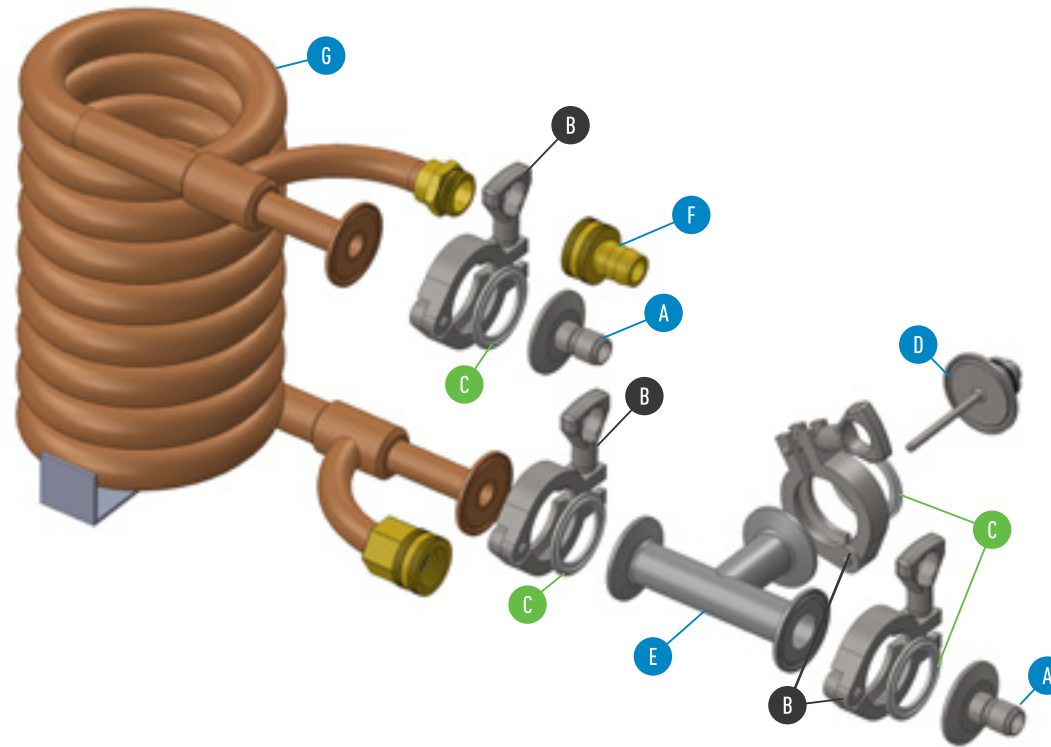
Water supply bucket to be provided by brewer (not included).

ITEM	DESCRIPTION	QTY
A	Condenser Lid	1
B	1.5" TC Clamp	4
C	1.5" TC Gasket	4
D	1.5" TC Cap	1
E	Condenser Piping	1
F	90° Barb	1
G	Condenser Mister	1
H	4" TC Clamp	1
I	4" TC Gasket	1
J	4" TC Clear Cap	1
K	1.5" TC Barb - 3/4"	1
L	Drain Hose	1
M	Supply Hose	1
N	Water Pump	1

## PRO TIPS:

- The Steam Condensing Lid is placed on the Boil Kettle during the boiling step. Follow the Process Guide for specific instructions on how to use it.
- Make sure you keep the drain hose above the water line if using a bucket for drainage. If not, back pressure will be created and the system will not work properly.
- Water from drain hose will be very hot. This can be collected and used for cleaning. For this reason do not reuse drain water. The system needs a cool water supply to function properly.

# WORT CHILLER

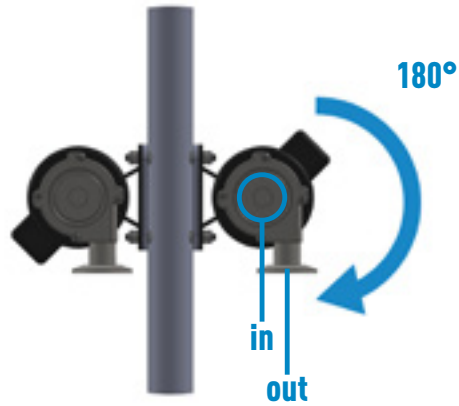


ITEM	DESCRIPTION	QTY
A	1.5" TC X QC	2
B	1.5" TC Clamp	4
C	1.5" Gasket	4
D	1.5" TC Temp Probe	1
E	1" TC Tee	1
F	1/2" Hose Barb	1
G	Counterflow Chiller	1

## PRO TIPS:

- 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.

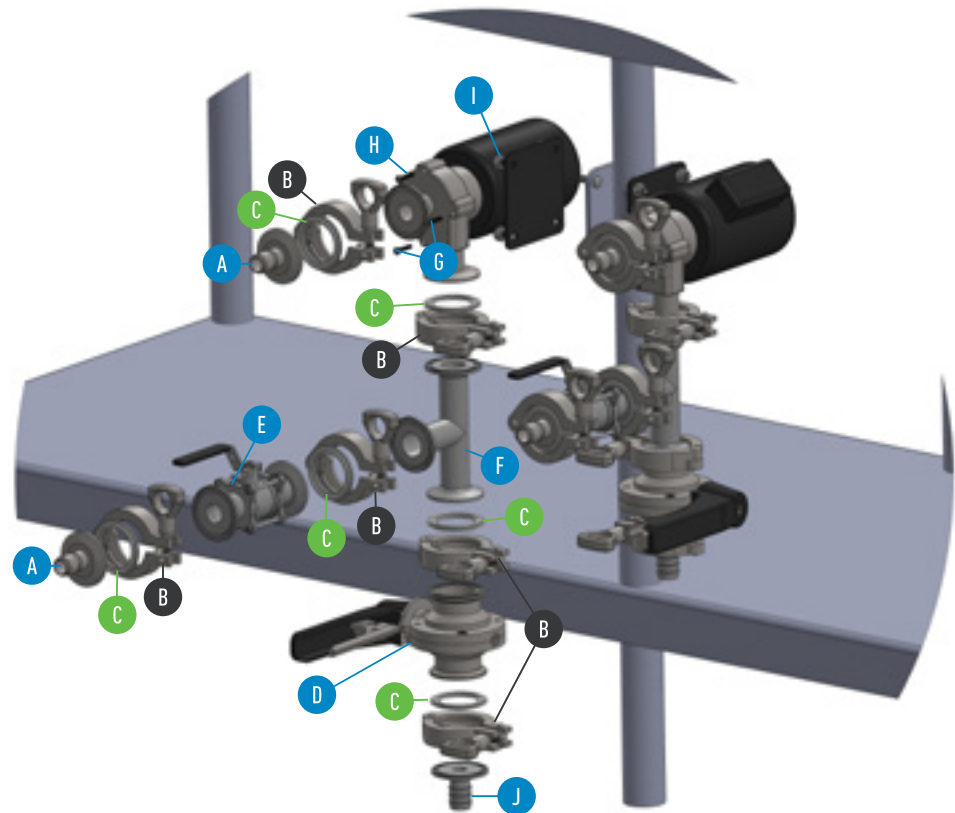
# PUMPS



## PRO TIPS:

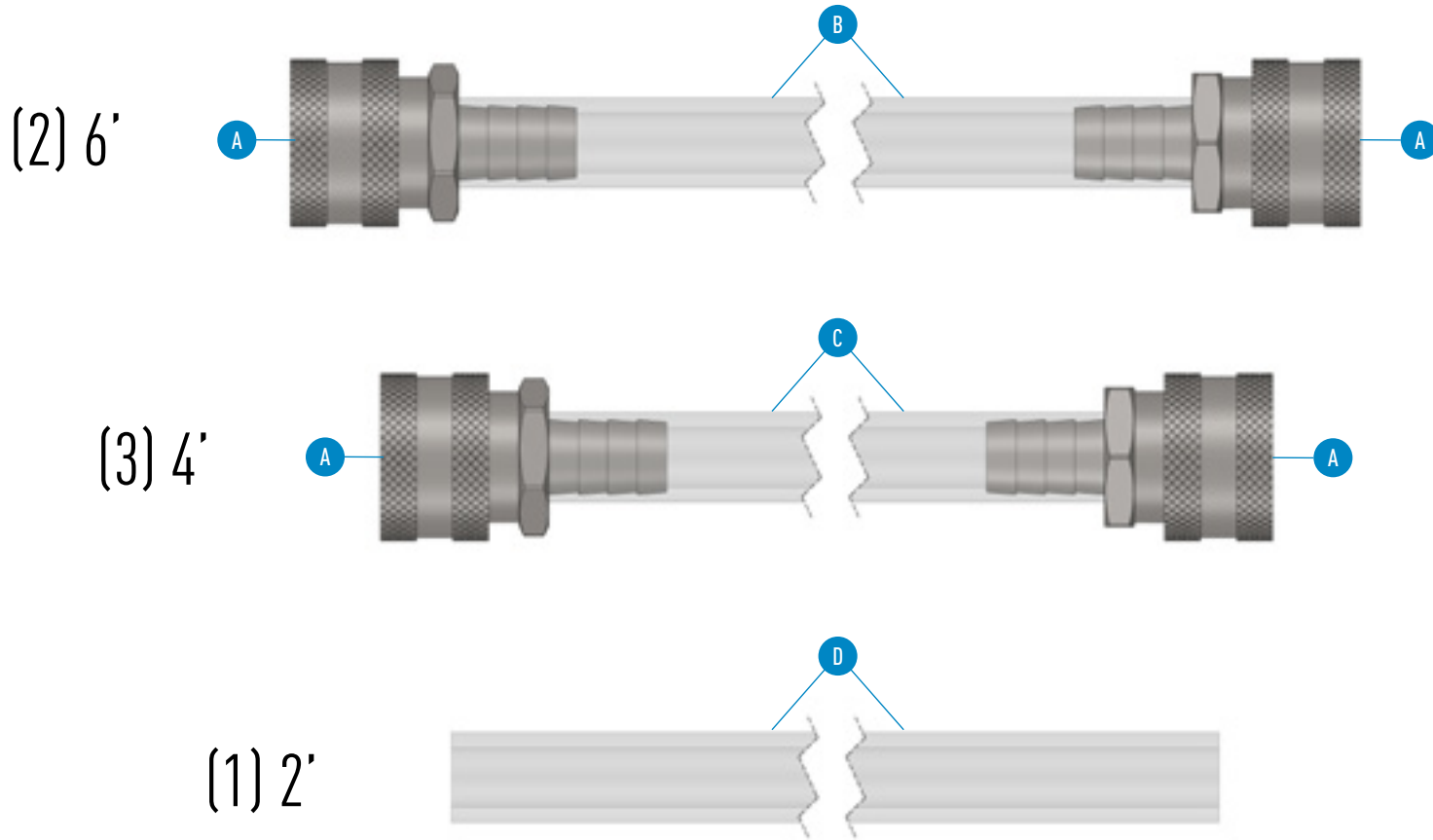
- One pump will need to be rotated 180° if using our Spike System table leg mount. To rotate the pump head, remove the 4 screws, rotate the head 180° and then tighten the screws. This will have both pump heads with the 'Out' at the bottom.
- When setting up your pumps for the 30 gallon and 50 gallon 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	1.5" TC X QC	4
B	1.5" TC Clamp	12
C	1.5" Gasket	12
D	1.5" TC Butterfly Valve	2
E	1.5" TC 3pc Valve	2
F	1" TC Tee	2
G	Pump Head Screws	8
H	Pump Head	2
I	Mounting Nut	8
J	1.5" TC Barb	1





# HOSES



ITEM	DESCRIPTION	QTY
A	FQC x Barb	10
B	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.