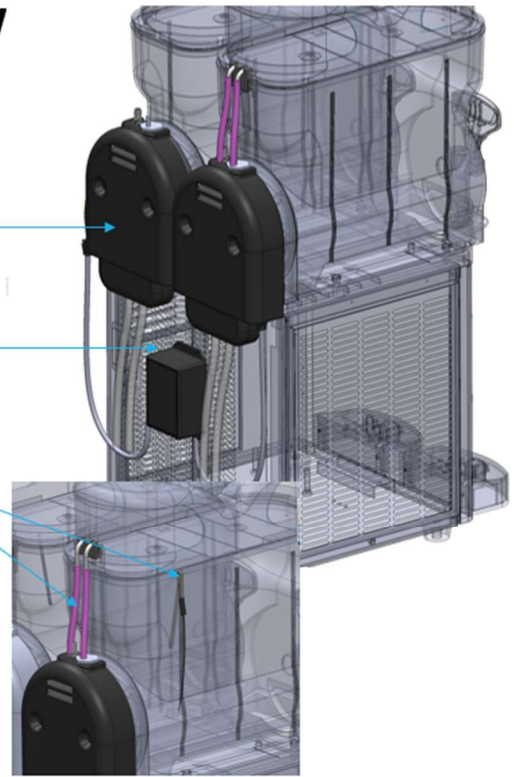




# ICETRO Slush Autofill Retrofit Install Guide

## Autofill Kit Overview

- 3 main components:
  - Backpack
    - Includes valves and controls for dispensing mix and water
  - Electronics Box
    - Provides power to the Backpacks
  - Dispensing tubes and probe
    - Probe detects mix level, dispensing tubes deliver mix and water
- Part Nos.
  - SMA-AF280 (for SSM-280)
  - SMA-AF420 (for SSM-420)



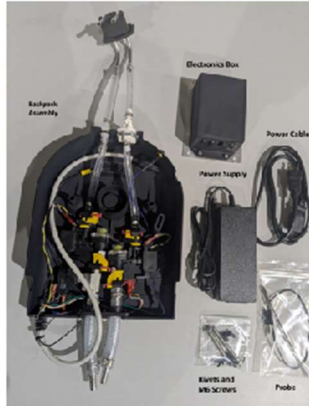
### Included Parts List (Per Assembly)

- Backpack Assembly (2 or 3)
- Electronics Box
- Power Supply
- Power Cord
- M6 50mm Screws (4 or 6)
- Sheet metal screws – TBD - may need help from ICETRO team sourcing

# Included Parts and Requirements

## • Included Parts

- Backpack assembly (2 or 3)
- Dispenser tubing
- Probe
- Electronics box
- Power Supply
- Power Cord
- M6 screws for backpack
- Sheet metal screws for electronics box



## • Requirements

- Syrup/Mix [BiB](#)
- 3/8" ID braided beverage tubing
- [BiB pump and fittings](#)
  - Recommend using [Flojet PN: T5090119](#) if using CO2
  - Recommend using [Flojet PN: BIB5000A](#) for electric (not suitable for pulp or particulates)

Should be black tabs  
or pop screws

## Requirements

- Syrup Bib
- 3/8" ID Braided Beverage Tubing
- BiB Pump and accompanying fittings
  - Recommend using Flojet PN: T5090119 if using CO2
  - Recommend using Flojet PN: BIB5000A for electric (Not suitable for pulp or particulates)

## Installation

### Step 1

- Open package and inspect all items for damage.

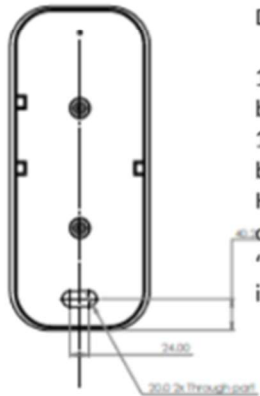
### Step 2 Backpack Install

- Remove screws holding motor cover to motor assembly and remove motor cover.

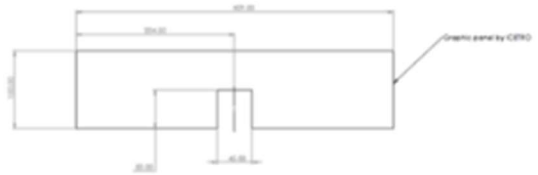


- Use template to cut access in lid merchandiser panel at the rear and bottom of lid.

## Hole Location and Size



Dispenser tube hole:  
 $1 \frac{1}{4}'' \times \frac{1}{2}''$   
 $1 \frac{5}{8}''$  on center from  
 back side  
 $1 \frac{3}{8}''$  from back to  
 bottom edge of hole  
 Helpful hint: mark rear  
 of plastic base with an  
 "R" to know what side  
 it goes on



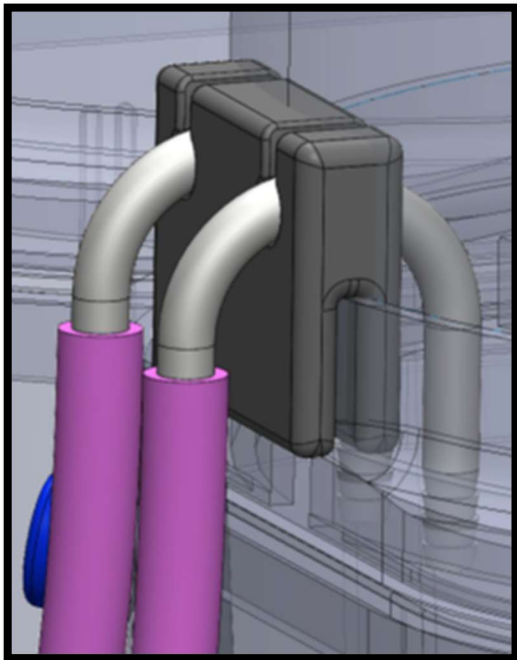
Lens grip hole:  
 $1 \frac{3}{4}'' \text{w} \times 2'' \text{h}$   
 Center is  $8''$  from edge

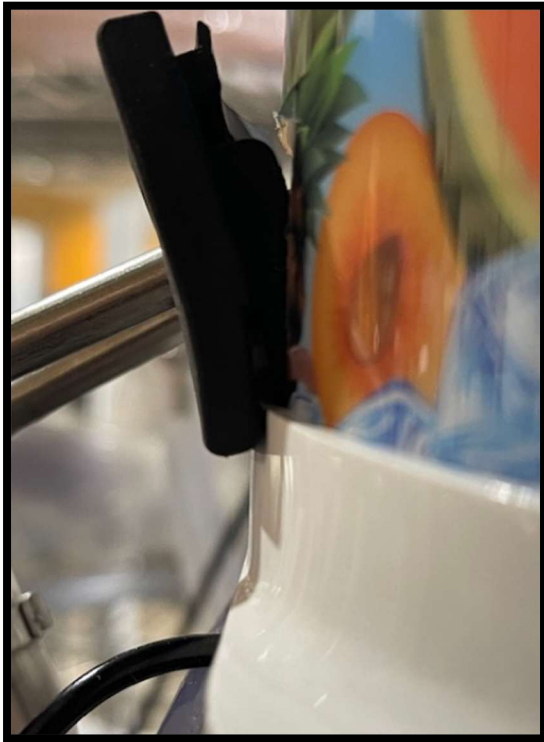


- Place the fluid line grip onto lid.

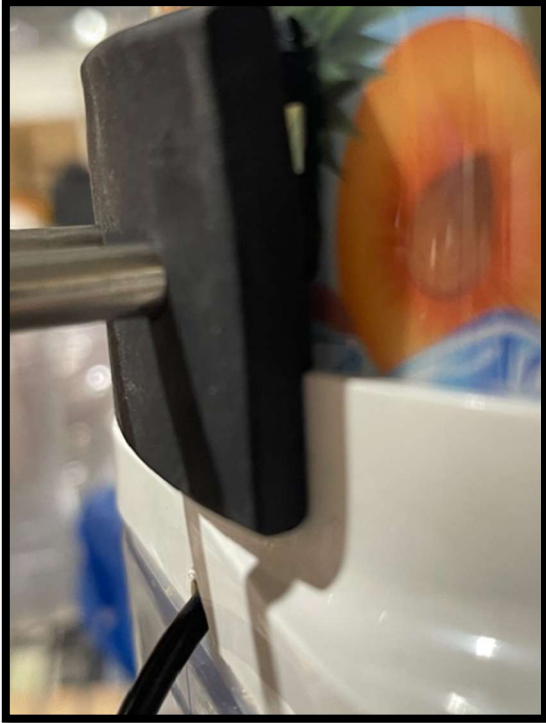


- There is an inner and out flap to the fluid line holder. Place the inner flap inside the merchandiser, and outer flap outside the unit. This will pinch the plastic lid frame.





- Push the fluid line holder down, once inner and outer flaps are aligned. The holder will bottom out into place, once fully pressed and seated.



- Verify that the viscosity indicator is in the proper position and place backpack into position. \*Diagram\*
- Affix with provided M6 50mm screws.

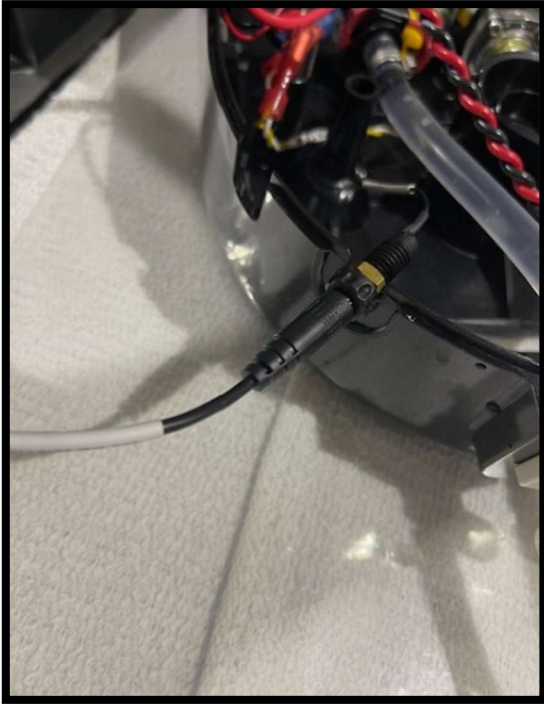


- Obtain conductivity probe from the included hardware pouch.



Inaccurate  
picture of  
probe

- Plug the male end of the probe, into the female end on the backpack.



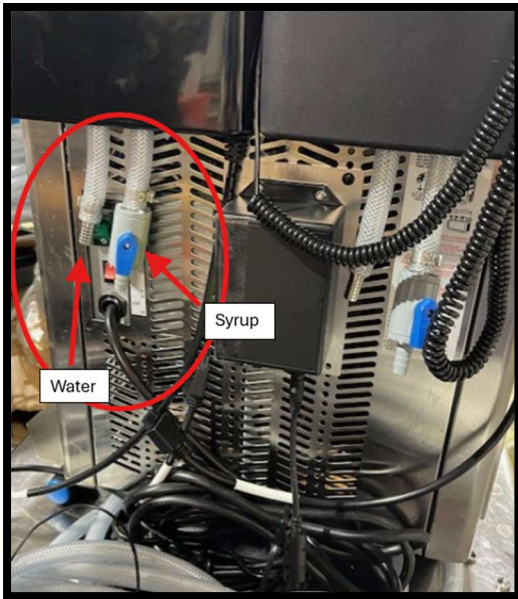
- Place the probe into notch on the left side facing the rear of the hopper making sure probe is inside lid and into tank.



- Repeat above steps for each hopper.

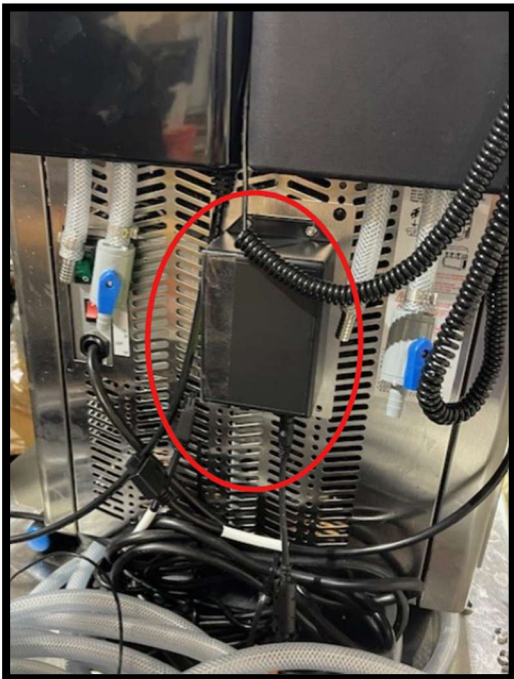
### Step 3

- Hook up syrup, water, and CO2 (optional)

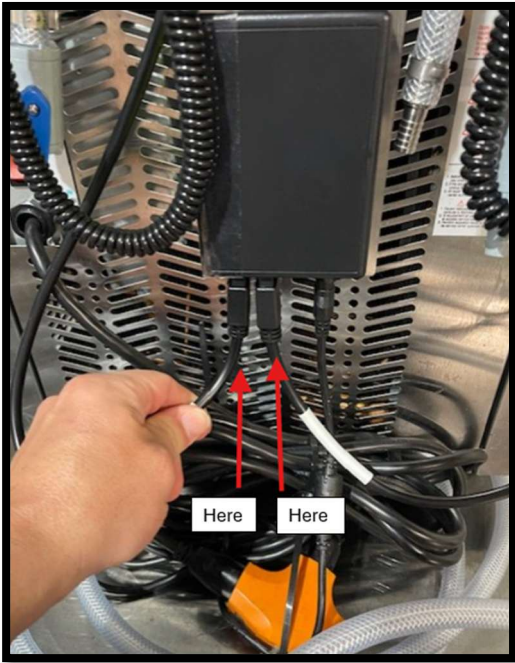


### Step 4 Electronics Box Install

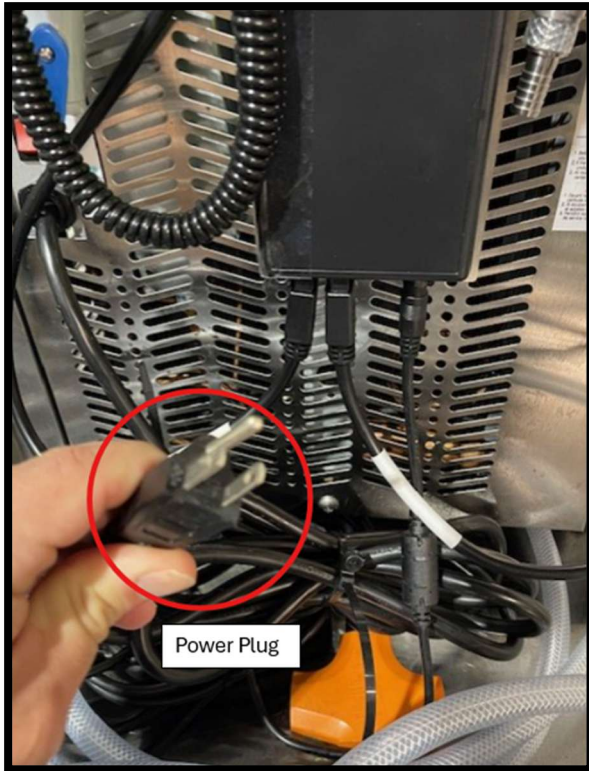
- Mount the electronics box on the rear of the unit with connectors pointing down using provided zip-ties **pop rivets [be sure to confirm proper name for these]**



- Attach connectors from left to right.



- Plug in 110v power supply plug and bowl connectors.
  - The bowl should begin to fill.



- Verify that filling stops when contact is made with the tank probe and slushie mixture.

## Brixing

### Step 1 Slushie Mix Brix Information

- Sugar level (Brix) of the slushie mix should be around 13-15%.
- Do not use mixes or juices that has pulp or other particles in the liquid.
- Do not use low calories mixes as lack of sugar with inhibit proper freezing.

### Step 2 Recording Brix Value

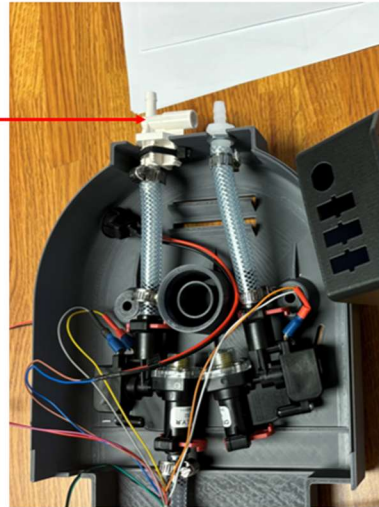
- Pull sample of liquid from tank.
- Using a thermometer, record the temperature of the sample.
- Using a pipet or straw, place an aliquot of the sample on a refractometer.
- Record Brix reading of the sample.
  - Note that the target Brix range is between 13-15%.

## Step 3 Calibrating Auto-Fill Brix

- Are there missing points here?
- 

### How to adjust water volume

- On top of the backpack, there is a connector for the water dispensing tube
- It has a needle valve that can be adjusted using a flathead screwdriver



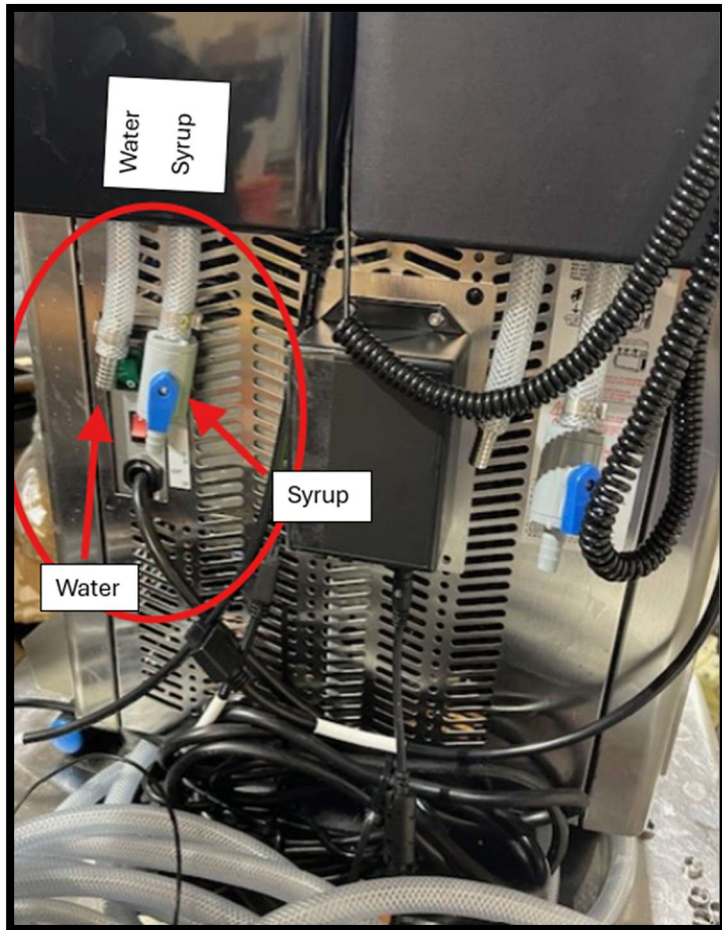
- If Brix is too HIGH (above 15%)
  - Adjust needle valve to add more water.
  - Turn valve counter-clockwise
  - Retest slushie mix to check new Brix level
- If Brix is too LOW (below 13%)
  - Adjust needle valve to add less water.
  - Turn valve clockwise
  - Retest slushie mix to check new Brix level

## Cleaning

### Step 1 Running Cleaning Solution in Hopper

- Refer to main user manual of SSM machine.
  - [Icetro User Manual](#)
- The first step listed in the manual is to remove the lid in preparation for the cleaning solution.

- Shut off ball valve to syrup line.



- Depressurize system as much as possible prior to disconnecting the syrup fitting.
  - Pressurized systems may lead to syrup squirting during the disconnection of the fitting.
- Slowly disconnect Syrup BIB fitting.
  - Remember this was previously pressurized, and cautiously removing is best practice.
  - Having a towel or rag available and covering the fitting during the removal of the tubing is also helpful.
- Connect Syrup BIB to BIB Cleaning Fitting.
- Reopen Syrup Ball valve.
- Allow cleaning of the autofill unit to begin and add cleaner into the hopper.
- Once complete, stop the cleaning cycle.
- Drain cleaning solution from hopper.


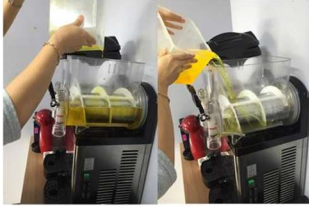
Still a little unclear on how to actually flush tubing

- Disconnect BIB Cleaning Fitting and reattach to syrup BIB.
- Leave ready for re-prime after Hopper Cleaning and Machine Disassembly  
Cleaning steps are completed.


## Step 2 Cleaning the Hopper

- Run the cleaning solution through the hopper as indicated in the manufacturer's manual.

### Before Operation






- **Fill the clear hopper**
- Open the canister cover, fill the canister with cold liquid product



Do not overfill,  
(Maximum Capacity of  
the canister is marked  
on the canister)

### Before Operation

- **Set the switch for Slush or Smoothie production**
- Attach the cover after filling up the canister

- Once complete and drained, wipe off the autofill fill tubes by hand.

## Step 3 Disassembly

- Refer to manual for machine disassembly.
- For the autofill unit, only the fill tubes and fill level probe need to be removed from hopper, prior to the hopper disassembly.



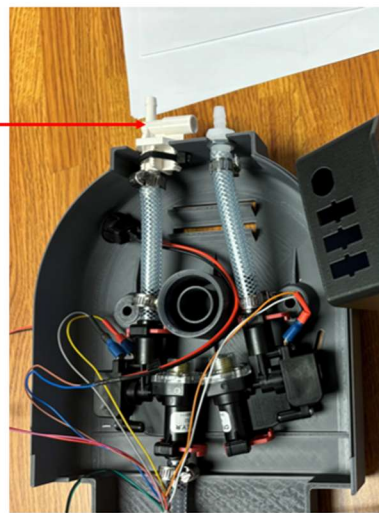
- Re-install in reverse order for the assembly process.
- Reprime system with syrup once cleaning and re-assembly is finished.

## Troubleshooting

### 1 Adjusting for more or less water flow.

#### How to adjust water volume

- On top of the backpack, there is a connector for the water dispensing tube
- It has a needle valve that can be adjusted using a flathead screwdriver



## 2 Installing dummy plug for single tank operation.

To install the dummy plug, for single tank use, simply plug the dummy plug into the port on the box for the tank not in use.

