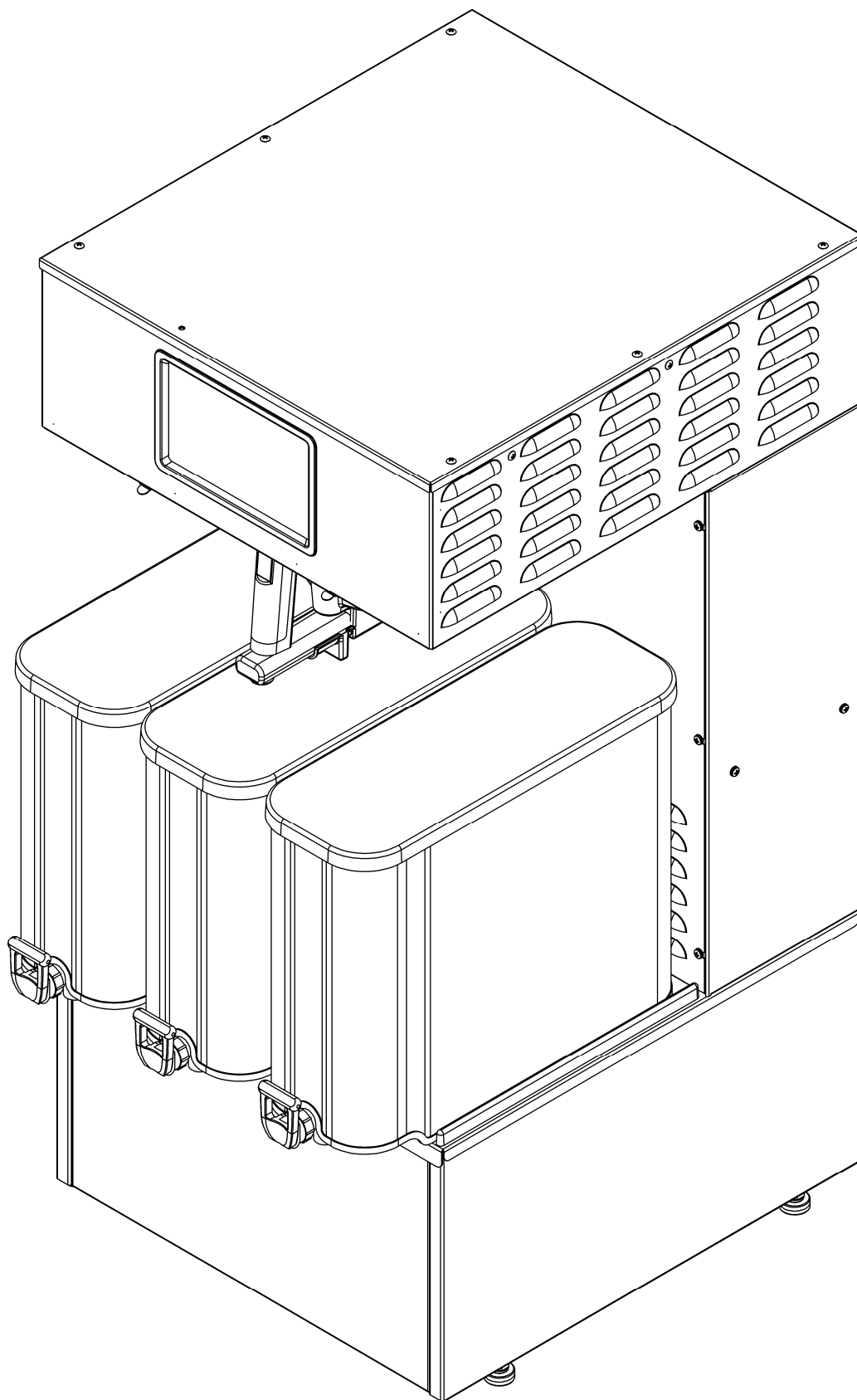


# TSB4 Brewer with Touch Screen

## Installation and Operation Guide



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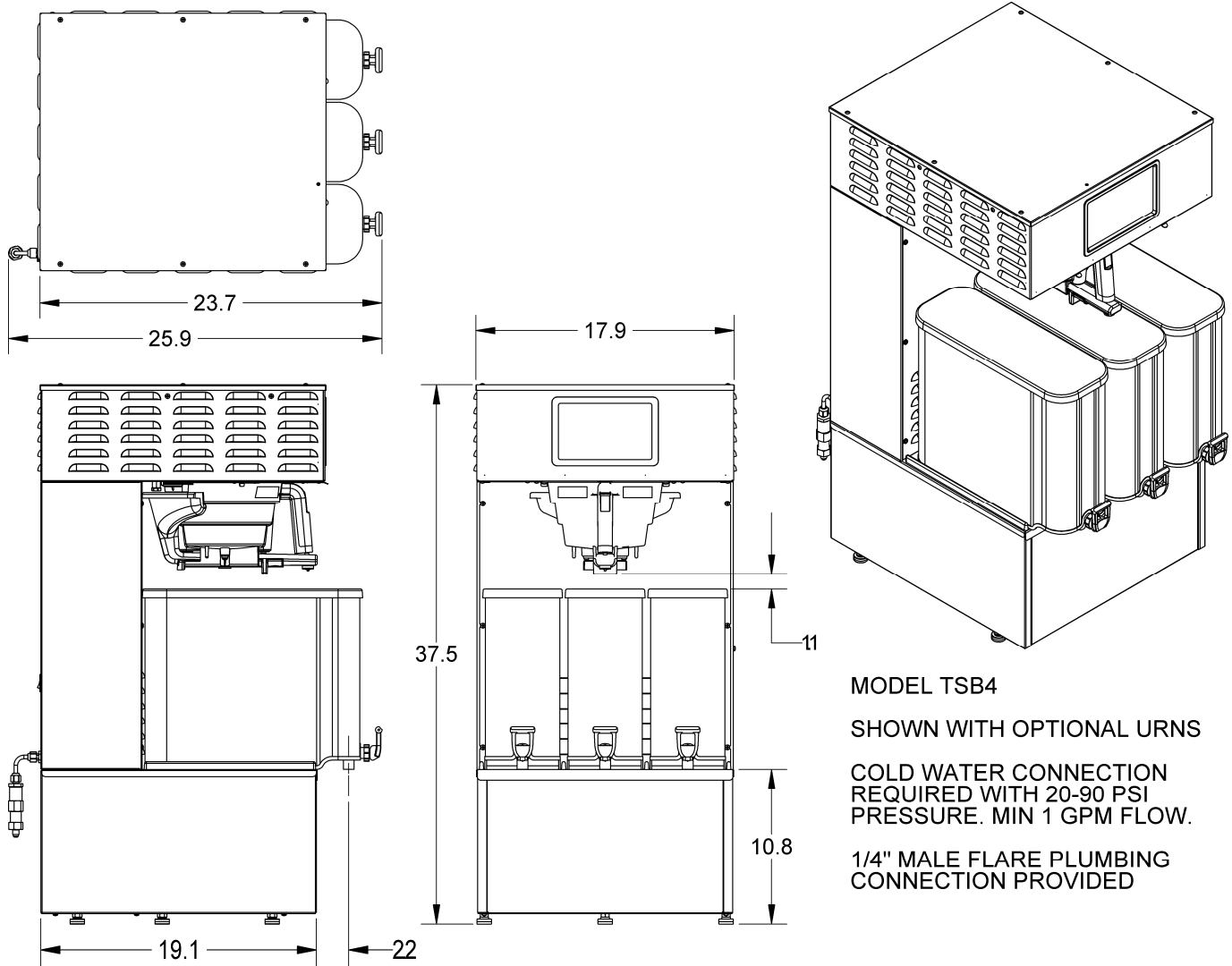
## NOTES:

Passwords:

Brewing Home Screen \_\_\_\_\_

Programming \_\_\_\_\_

## DIMENSIONS



Newco practices continuous product improvement. Product information and illustrations may vary from information contained in this guide.

## ELECTRICAL SPECIFICATIONS

Model	Control	Description	PH	Hz	Wire	Volts	Watts	Amps	US Plug	Canada Plug
TSB4	Touch	Smart Brew	1	60	2+G	120	1650	14.3	5-15	5-20

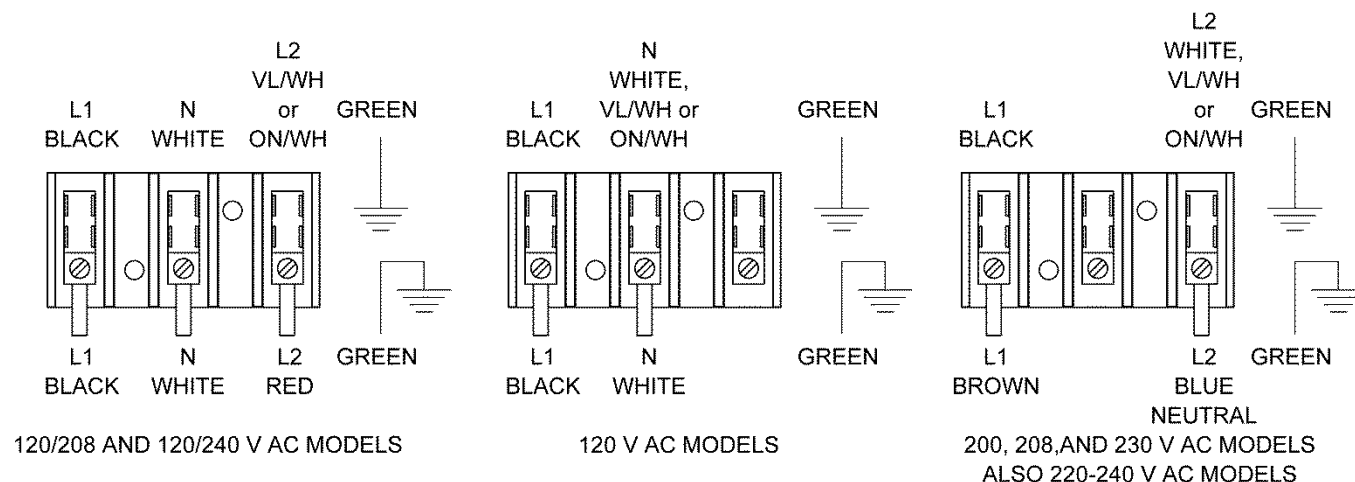
Other power ratings are available. Optional 240 V cord with plug cap may be specified for 240 V units. Units are not voltage convertible without component/wiring changes. For brewers without an attached cord set, use an appropriately sized, UL (CSA in Canada) listed, grounding type power cable. If brewer is hard wired to a junction box, ensure that the length of the power cable is adequate to allow the equipment to be moved for cleaning the counter underneath.

## INSTALLATION INSTRUCTIONS

- Brewer should be installed on a secure, level, surface capable of fully supporting the weight of the brewer, including the water retained in the brewer, and any fully loaded dispenser(s) that may be placed on the brewer.
- A potable water line (cold water) capable of consistently supplying the required minimum flow rate within the noted pressure range is required at the install location.
- A grounded electrical connection to a circuit that meets the electrical specifications of the brewer and is protected by the appropriate size and type of breaker is required.

## ELECTRICAL CONNECTION

**WARNING** – The brewer must be disconnected from the power source until specified in INITIAL SET-UP.



Note: This electrical service consist of 3 current carrying conductors (L1, L2 and Neutral) and a separate conductor for earth ground.

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**CAUTION** – Improper electrical installation will damage electronic components. **Damage caused by incorrect electrical connections is not covered by warranty.**

An electrician must provide electrical service as specified in conformance with all local, state and federal electrical codes.

Use a voltmeter to check the voltage and color coding of each conductor at the electrical source.

For models without a cord, remove the rear top cover then the rear panel and feed the cord through the strain relief. Connect cord to the terminal block as indicated in the appropriate diagram above.

Ensure power switch on rear of brewer is in the off position. Connect brewer to power source and verify voltage at terminal block. Replace rear panel and top cover.

If plumbing has been hooked up, brewer is ready for Initial Set-Up. If not, disconnect brewer from power source.

**WARNING** – Electrical connections must be made as specified above. Failure to follow these instructions can result in personal injury, property or equipment damage.

## PLUMBING CONNECTION

Brewer includes a combination strainer and flow control which **MUST** be attached to the rear plumbing connection. A metal swivel tube assembly is provided for attachment. The fitting plumbing connections are ¼ male flare. Inclusion of a coil of copper tubing in the water line will allow the brewer to be easily moved for cleaning the counter underneath.

## PLUMBER'S INSTALLATION INSTRUCTIONS

### **CAUTION: POWER TO BREWER MUST BE OFF BEFORE PROCEEDING WITH PLUMBING INSTALLATION.**

As directed in the International Plumbing Code of the International Code Council and the Food Code Manual of the Food and Drug Administration (FDA), this equipment must be installed with adequate backflow prevention to comply with federal, state and local codes. For models installed outside the U.S.A., you must comply with the applicable Plumbing /Sanitation Code for your area.

1. Flush water line before installing brewer. Brewer should be connected to **COLD WATER LINE ONLY**.
2. Water pressure should be between 20 and 90 psi (.138 and .620 mPa) . For less than a 25 ft run, use 1/4" copper tubing and connect to 1/2" or larger water line. For longer runs, use 3/8" copper tubing & connect to 1/2" or larger water line and provide an adapter fitting for connection to the brewer. Recommended minimum flow rate from water line is 1 gpm measured at the brewer connection point.
3. The use of saddle valves are not recommended as the size and shape of the hole made in the supply line may restrict flow. However, if installed with saddle valve, the valve should have a minimum of 1/8" port hole for up to 25 ft run, and 5/16" port hole for over 25 ft runs.
4. Connect the strainer/flow control (provided) to brewer plumbing connection using the provided swivel tube assembly. Note directional indication on the flow control.
5. Connect incoming water line to the inlet fitting of the strainer/flow control. Manufacturer recommends connecting to copper tubing.

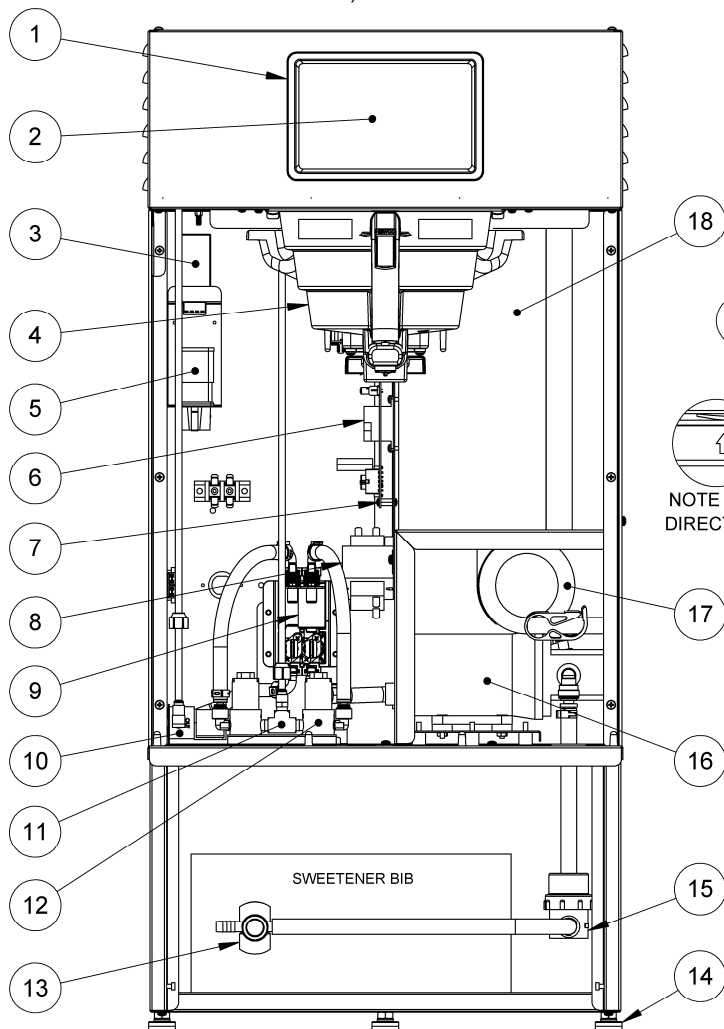
**NOTE:** If a filter is provided for the brewer, follow the filter manufacturer's recommendations for flushing prior to connecting in line with brewer.

## Plumbers Installation Notes

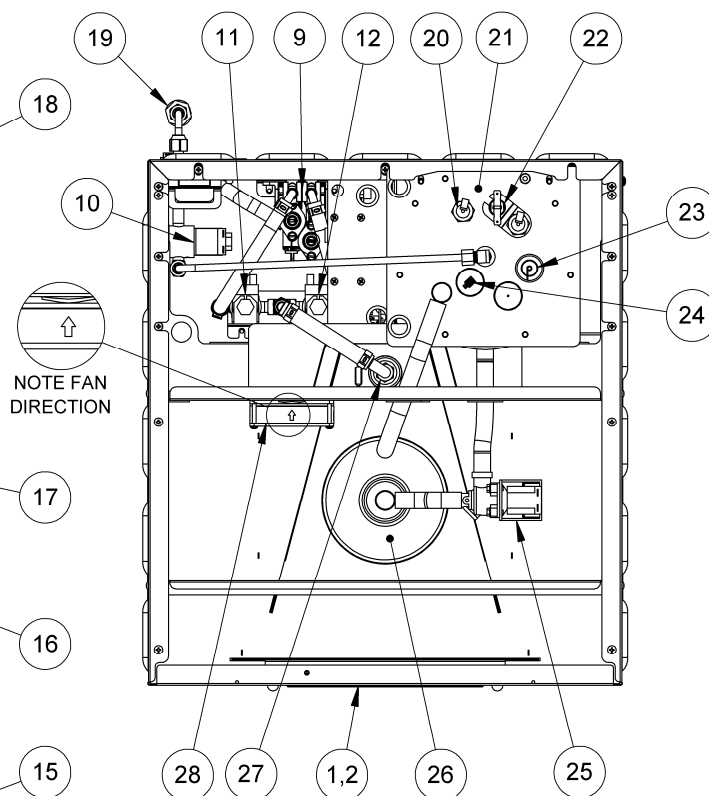
Installed by:			Install date:	
Water pressure:			Flow rate at brewer connection (GPM):	
Flow/strainer attached:	YES	NO		
Filter flushed:	YES	NO		
Other notes:				

**COMPONENT LOCATION**

Front view, covers removed



Top view, cover removed

**Components may vary from those shown**

Item	Part No	Description	Item	Part No	Description
1	757501	FRAME,8:TABLET,TEAZZERS	15	320278	STRAINER,NYL,3/8 BARB,RED
2	757542	TABL,GAL E,8",PROG TEAZZR	16	757557	PUMP ASY,W/BACKET,3XTEA
3	121470	CONVTR,PWR ASY,24AC/12VDC	17	701702	TUBE ONLY, TANK DRAIN
4	500278-CLR	BSK ASY,CL,RD,MP,DV/L.38C	18	757524	TANK ASY W/LID,1650,3XTEA
5		POWER SUPPLY, TABLET	19	202128	FLOW ASY,FL/FL.750(202103
6	110958	RELAY,12VDC,SPST,30A,MECH	20	701695	ELE,1650W/120V
7	757531	BOARD, MAIN, 3XTEA – See note below	21	757528	LID ASY, 1375W, 3XTEA
8	105115	TRANSF,120VP,24VCT 40VA S	22	111593	THERM,MAN,VERTAB,221F,25A
9	757532	FLOW CTRL ASY,3XTEA	23	500398	PROBE 1.818 & BUSHING ASY
10	757567	INLET ASY,TANK FILL,3XTEA	24	151677	PRB,TEMP,DUAL,7.312,THERM
11	757568	VALV ASY,COLD/SWT,3XTEA	25	757549	VALVE,DMP,180,W/VNT,3XTEA
12	100255	KIP SOLENOID VALVE ONLY	26	201208	SPRAYHD, DRILL.086 (Hidden)
13	400137	CONNECTOR,QCD2	27		CHECK VALVE COMPONENTS
14	111377	FOOT,APPLIANCE,(requires 111667 nut)	28	103600	FAN ASSY, MOO

**Note:** Main board firmware and tablet firmware must be maintained with compatible versions of code. Contact Teazzers to verify the proper version for your machine.

## INITIAL SET-UP

Insert an empty brew basket into the brew rails.

Place an empty server or other appropriate vessel on the base below brew basket.

Ensure power switch at lower left of brewer is in the off position.

Connect the brewer to power source prepared previously, see Electrical Connection.

Ensure water supply has been connected and is turned on.

Turn on the power switch on rear of brewer. Water will begin flowing into the brewer tank. Flow will stop when full. Tank will begin to heat.

Water calibration volumes have been set at the factory and do not normally require adjustment.

Install a BIB of sweetener in the lower compartment if sweetener will be used with the brewer.

Select a sweetened brew cycle from the available recipes in the brewer and activate it (See HOW TO BREW if unsure how). This will run all valves and pump to prime water and sweetener lines. Sweetener may also be primed using options in the maintenance section of programming within the touch screen.

If the brewer is up to temperature the cycle will begin right away. If not, heating may complete first dependent on autoarm setting.

Once the test brew cycle completes successfully, the brewer is ready for use as per the instructions.

If adjustments are needed to recipes, max set point, calibrations, or other items, see the appropriate sections of the PROGRAMMING manual.

## HOW TO BREW

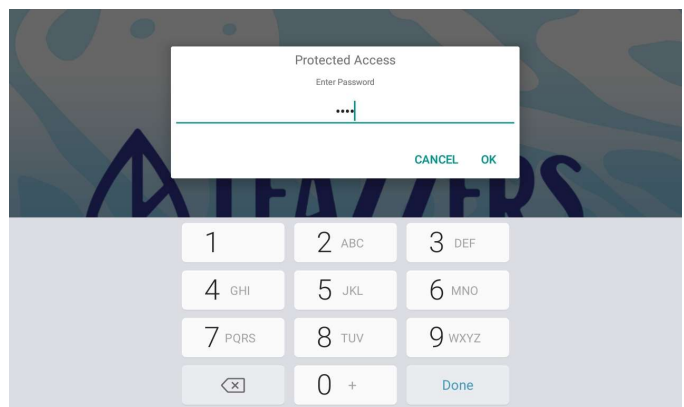
**Important Operational Note** – The brewer has capability of brewing into urns located either directly below the brewbasket or to either side through the use of the brew basket with the extended diverter assembly. Ensure the empty container, with lid removed, is properly placed and that the basket outlet is directed into the desired container prior to initiating a brew cycle. BASKET MUST BE FULLY INSERTED TO ENSURE WATER AND SWEETENER ENTER THE BASKET FUNNEL ATTACHED TO THE REAR OF THE BASKET. The icons on the brew screen represent different brew recipes and do not necessarily correspond to the placement of the urns. The rotation angle of the basket determines which urn will be brewed into. Any recipe may be brewed into any container.

Remove lid from urn.

Place urn into desired position on brewer base.

Add a filter and tea to the brew basket and place it into the brew rails. Position outlet over the urn position to be brewed into and ENSURE BASKET IS FULLY INSERTED INTO BREWER.

If the screen is in idle mode (Teazzers logo displayed, below left), touch the screen to wake brewer up.



Enter the pass code (above right) to access the brewing home screen. Select OK in the password entry box to confirm password.

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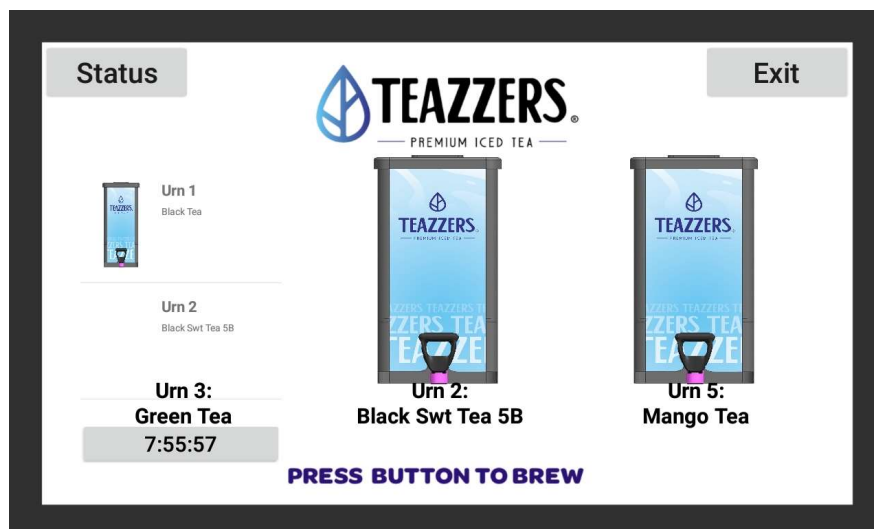
On the brewing home screen (below left), select the desired recipe from the available recipes on the screen and press it to immediately begin the brew cycle. If autoarm has been enabled, the unit may need to heat further before brewing. “Heating” will be displayed in the lower right, in place of the countdown clock, on the brewing screen (below right) during the heating process. Brew dispense will begin immediately after heating. Do not remove container or basket if the brewing screen is showing.



As brewing begins, a counter will appear on the brewing screen (above right) to count down the dispense and drain time programmed for that recipe. A cancel button is on the screen if a recipe needs to be stopped for any reason. Note that any water dispensed prior to cancelling will continue to drain from the brew basket after the cycle is cancelled.

When the cycle is complete, the idle/home screen (Teazzers logo) will reappear.

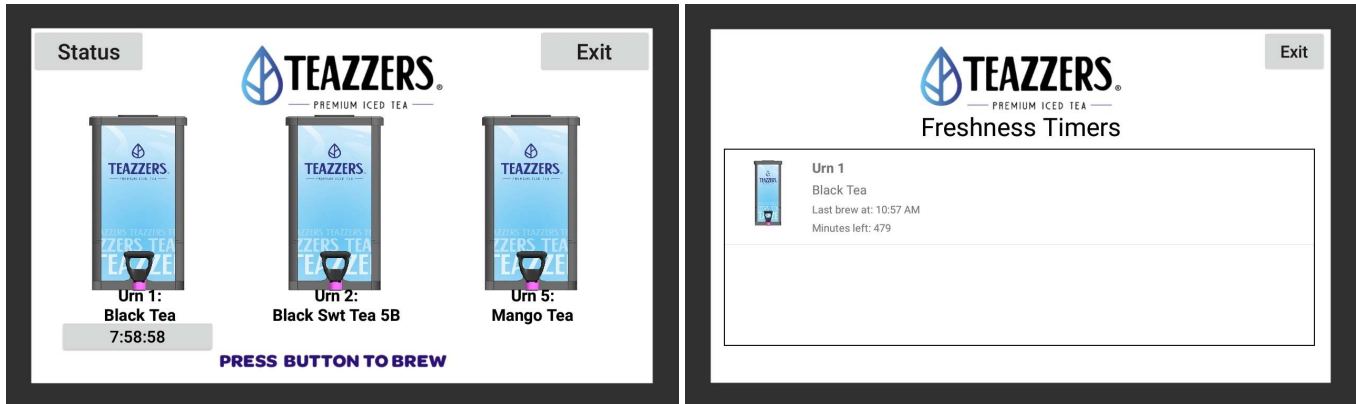
Note: Depending on programming for your equipment, additional recipes, other than those shown may be available. Up to 10 recipes may be available for selection. To access all available recipes, press and hold one of the urn icons. A columnar arrangement of available urns/recipes is presented in place of the urn icon (see below). You may swipe the bar that appears up and down and then select the recipe that you want to brew by tapping the recipe name. After selecting the home brewing screen will appear as before with the newly selected recipe showing. Note the freshness time, if applicable, is still counting down the freshness time for the last urn brewed in that position. It doesn't reset until a new brew occurs. If a different recipe is brewed in that spot, the original freshness time for the previous recipe will be available on the freshness timer screen.





Once brew is complete, a countdown freshness timer will countdown the programmed expiration time for the brewed beverage. The freshness time ensures optimal beverage quality by helping to prevent excessive hold times. The time will appear below the urn position where the recipe was brewed. This time is only visible when the password is used to access the brewing home screen. If additional timers are running, or for more detail on the timer displayed, touch a timer bar to access the freshness timer information screen, below right. All freshness timers will be displayed on this screen.

It is not necessary to wait for the freshness timer to end before starting another brew in a particular urn position.



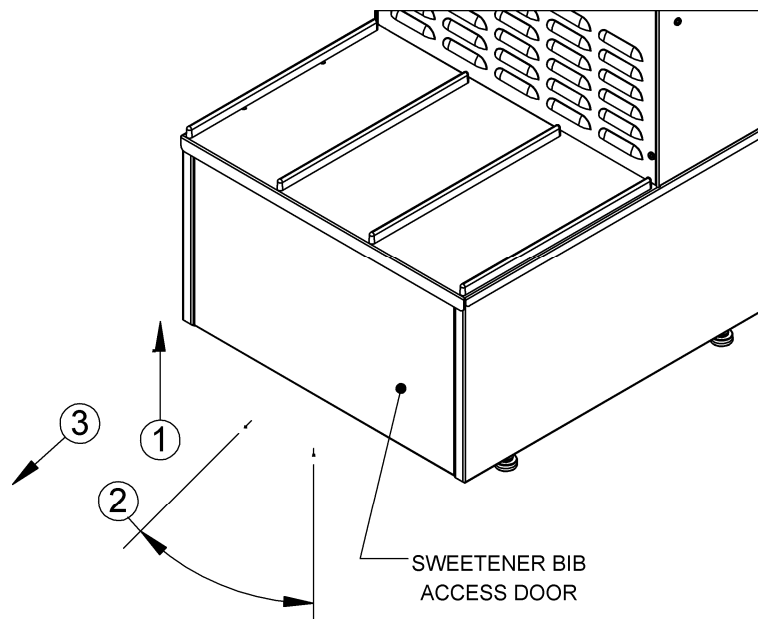
## SWEETENER INSTALLATION

The lower compartment houses the sweetener BIB. It has a “hidden” door with no traditional latches or handles. There is a dogleg notch on each side of the panel that engages with a post to hold the bottom of the panel in. The upper edge of the panel is held in place by seating into a recess at the top of the compartment.

To remove panel:

- 1) Grasp bottom edge of door and lift door by sliding straight up until it stops.
- 2) Rotate/pull bottom edge of door forward a couple of inches.
- 3) Allow top of door to drop below recess and pull door forward to remove

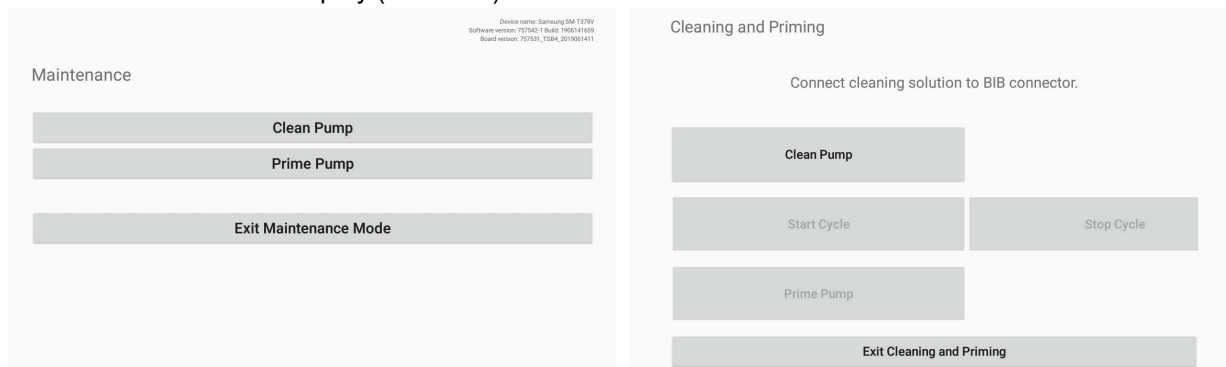
Install by reversing the procedure above.



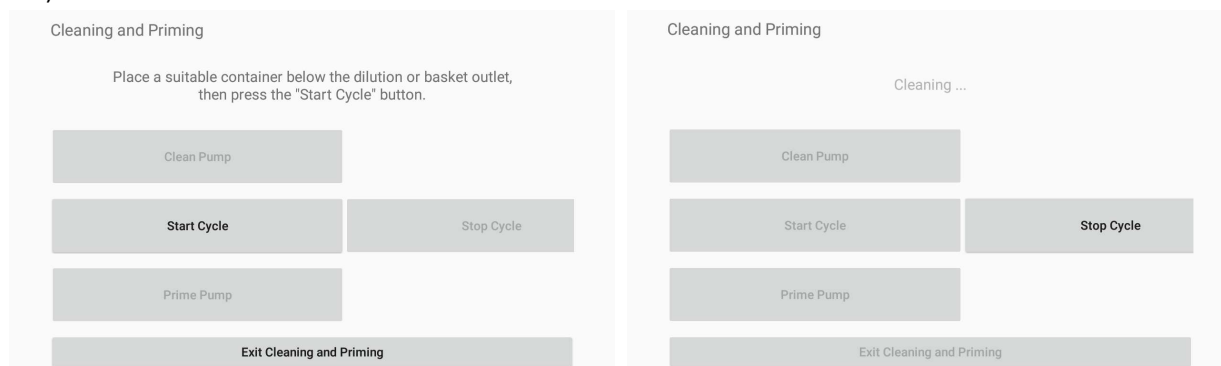
## CLEANING/PRIMING

Regular cleaning/sanitizing of the beverage lines and pump is recommended. To clean lines and pump, follow the procedure outlined below.

You will need the password for the program screen to perform the maintenance functions, clean and prime. You will also need a box of BIB cleaner solution. Touch the idle screen to display the password entry screen and enter then confirm the program screen password. Touch the maintenance bar to access the clean and prime functions. The maintenance screen will display (lower left).

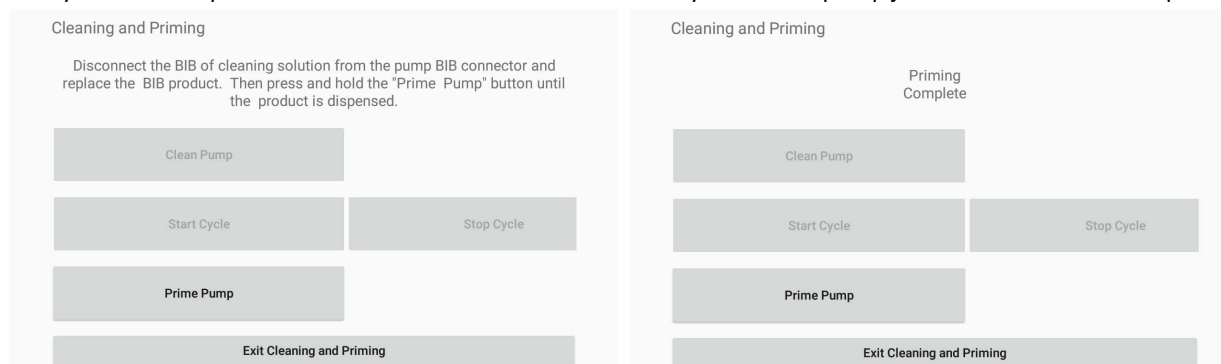


Press the clean pump key and the cleaning screen will appear (upper right). Disconnect the BIB connector from the sweetener and follow the screen prompt to connect cleaning solution to BIB connector. Press the clean pump key. Place a suitable container in place below the basket outlet if cleaning basket at the same time. Press the start cycle key (see below left).



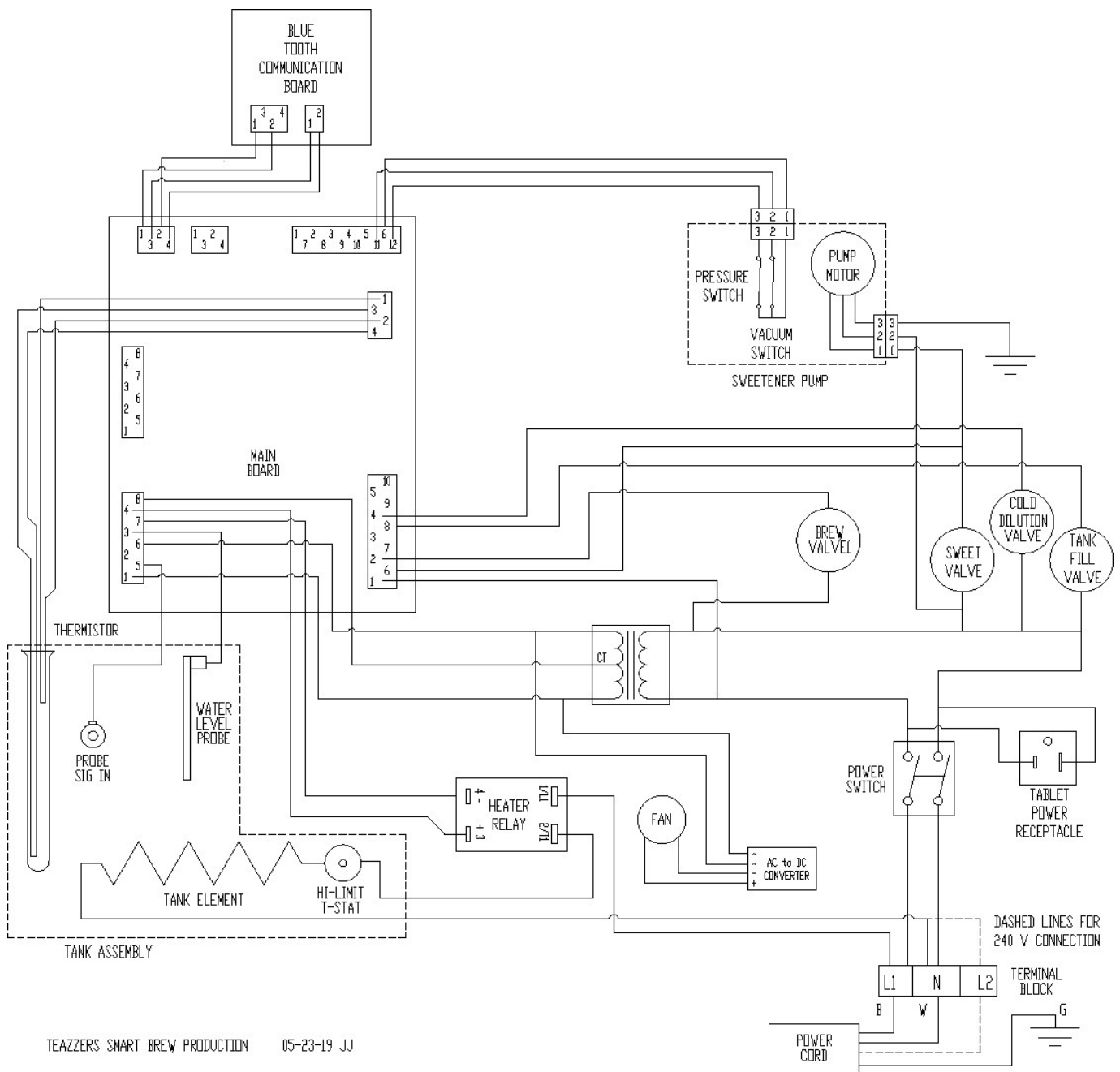
The pump will begin pumping cleaning fluid through the tubing, fittings, pump, flow control and other components in the sweetener system. The pump will continue to flush cleaner through the line and then pause to soak. This process takes about 2-1/2 minutes to complete. "Cleaning" will be displayed while the cycle is active.

After the process is complete, the screen changes to prompt user to disconnect the cleaning solution and reconnect the sweetener BIB prior to priming the pump (see screen at lower left). Use the prime key to run the pump to flush cleaner from the system and to prime the lines with sweetener. Hold the key to run the pump just until sweetener is dispensed.



When priming stops, the screen indicates priming complete (upper right). You can exit the screen using the key at the bottom and then exit maintenance mode and programming screens in the same manner.

# WIRING DIAGRAM



## WARRANTY

Newco warrants equipment manufactured by it for 1 year parts and labor.

Accessories and Dispensers 1 Year parts only.

Electronic Circuit and Control Boards- 3 years parts, 1 year labor.

Equipment manufactured by others and distributed by Newco - Please see original equipment manufacturers warranty, Newco will follow.

These warranty periods run from the date of sale Newco warrants that the equipment manufactured by it will be commercially free of defects in material and workmanship existing at the time of manufacture and appearing within the applicable warranty period. This warranty does not apply to any equipment, component or part that was not manufactured by Newco or that, in Newco's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, relocation or reinstallation, improper maintenance or repair, incorrect voltage applied to the unit at any time, damage or casualty. This warranty does not apply to any equipment failures related to poor water quality, excessive lime and chlorine and non periodic cleaning and descaling. Warranty is null and void if muriatic or any other form of hydrochloric acid is used for cleaning or deliming. In addition, this warranty does not apply to replacement of items subject to normal use including but not limited to user replaceable parts such as faucet seat cups, sight gauge tubes, washers, o-rings, tubing, seals and gaskets.

This warranty is conditioned on the Buyer 1) giving Newco prompt notice of any claim to be made under this warranty by telephone at (800) 556-3926 or by writing to 3650 New Town Blvd, Saint Charles, MO 63301; 2) if requested by Newco, shipping the defective equipment prepaid to an authorized Newco service location; and 3) receiving prior authorization from Newco that the defective equipment is under warranty.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The agents, dealers or employees of Newco are not authorized to make modifications to this warranty or to make additional warranties that are binding on Newco. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

If Newco determines in its sole discretion that the equipment does not conform to the warranty, Newco, at its exclusive option while the equipment is under warranty, shall either 1) provide at no charge replacement parts and/or labor (during the applicable parts and labor warranty periods specified above) to repair the defective components, provided that this repair is done by a Newco Authorized Service Representative; or 2) shall replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST NEWCO FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AT NEWCO'S SOLE OPTION AS SPECIFIED HEREIN, TO REPAIR, REPLACEMENT OR REFUND.

In no event shall Newco be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.