

SINGLE SERVING AUTOMATIC POD MACHINE

FKP-4T

**NEWCO ENTERPRISES INC,
3650 NEW TOWN BLVD
SAINT CHARLES, MO 63301
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Features/ Specifications

- **AUTOMATIC POD REMOVAL**
- **TOUCHSCREEN OPERATION**
 - **FLOWMETER**
 - **UP TO 20 OZ TRAVEL MUG**
- **LARGE POD WASTE TRAY / THRU COUNTER OPTION**
 - **ADJUSTABLE DRINK STRENGTH**
 - **ADJUSTABLE DRINK VOLUME**
 - **USB INTERFACE**

LEFT BLANK INTENTIONALLY

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SPECIFICATIONS

TANK WATTAGES

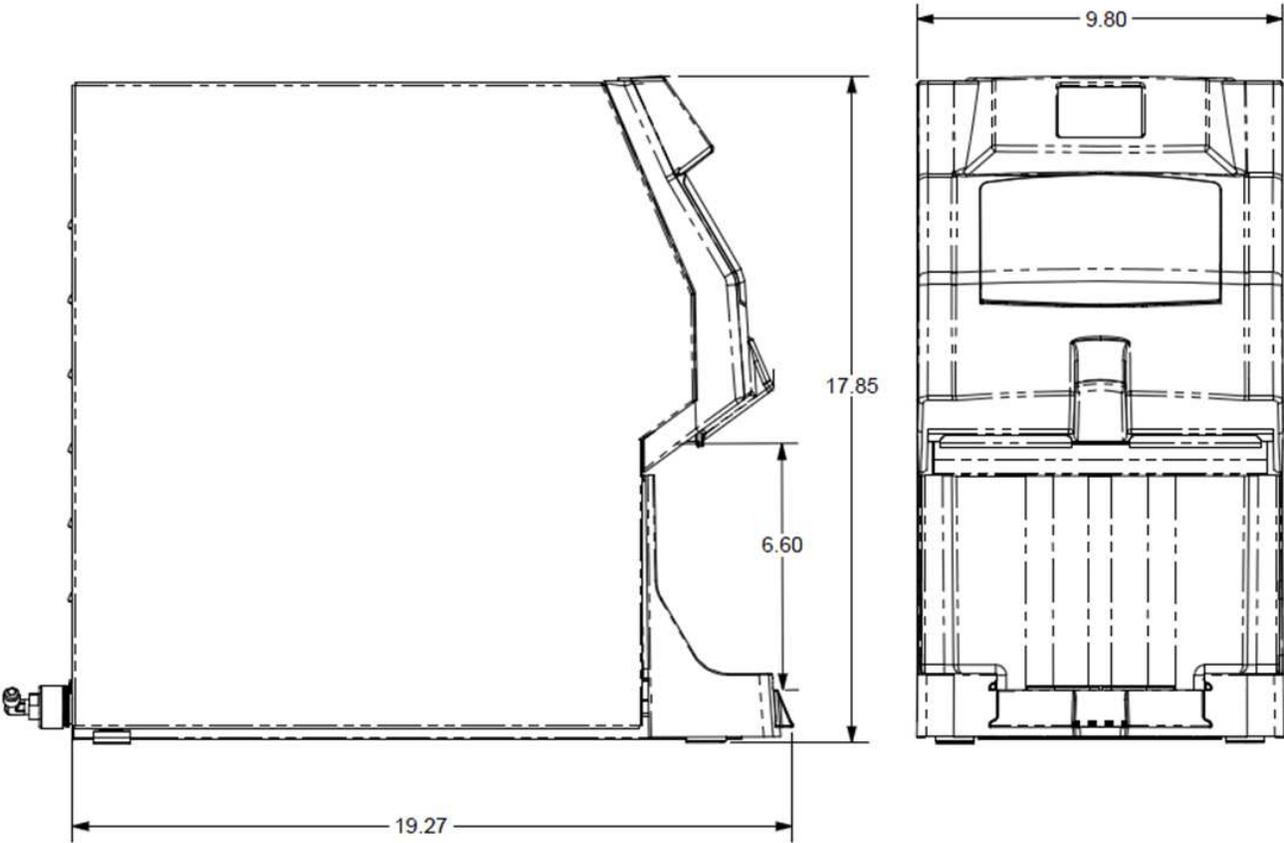
US 1700W 120V- CANADA 1400W 120V- INTERNATIONAL 1700W 220V

TANK CAPACITY-1 US GALLON

DRIP TRAY CAPACITY 8 OUNCES

POD WASTE TRAY CAPACITY 40 PODS

UP TO 20 OZ CUP SIZE



SHIPPING WT-APPROX 35 LBS

WARRANTY

Applies to all equipment manufactured after 2/1/2017. This warranty supersedes all other previous warranties that are currently in manuals.

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.

MACHINE SET-UP

NOTE: The FRESH CUP machine weighs approximately 35 LBS. Use CAUTION when unpacking and lifting machine. LIFT MACHINE FROM MACHINE BOTTOM ONLY. DO NOT MOVE MACHINE UNLESS THE HOT WATER TANK IS DRAINED AND EMPTY.

1. Open and install the drip tray grill and place drip tray into waste bin.
2. Connect water fitting with strainer on the rear of machine next to the power switch.

Plumber's Installation Instructions

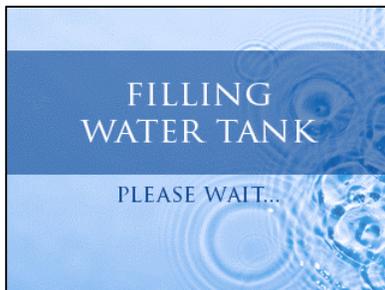
- 1) Brewer must be installed to comply with all applicable federal, state and local plumbing codes and ordinances.
- 2) Plumb brewer in to water supply using 1/4 inch copper tubing. Flush water line before installing brewer to remove sediment. Brewer should be connected to **COLD WATER LINE** for best operation.
- 3) Water pressure should be at least 20 lbs. For less than a 25 ft. run, use 1/4" tubing and connect to 1/2" or larger water line. The inlet water fitting on the back of the brewer is a 1/4" flare fitting. It may be necessary to remove the plumbing cover box on the rear of brewer to access water connection point.
- 4) If installed with saddle valve, the valve should have a minimum of 1/8" porthole for up to 25 ft. run, and 5/16" porthole for over 25 ft. runs.
- 5) Turn on water supply and check for leaks.

WARNING: - Read and follow installation instructions before plugging or wiring in machine to electrical circuit. Warranty will be void if machine is connected to any voltage other than that specified on the serial tag.

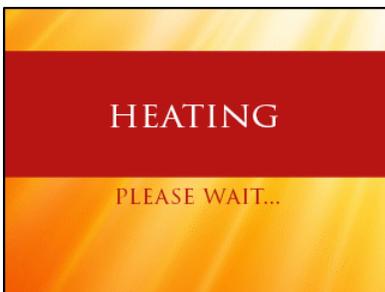
Turn the power switch to the “OFF” position and plug the machine into a properly installed and grounded electrical circuit. Turn on power switch to start the initial WATER FILL CYCLE.



This screen will display momentarily with hardware and software revision levels.



This will be displayed until water level reaches the liquid level probe. When tank is filled, the heater circuit will turn on - allow up to 20 min for the tank to reach brewing temperature.



This will be displayed while tank is heating.



When the tank temperature reaches its set point, the selection screen will be displayed.

Machine is now ready for programming or operation.

BREW OPERATION

- 1. PLACE CUP UNDER BREW NOZZLE ON DRIP TRAY**
- 2. SELECT COFFE, TEA, OR ESPRESSO**
- 3. UNWRAP THE POD & PLACE IN CENTER OF BREW CHAMBER**
- 4. MAKE SELECTIONS AND PRESS THE BREW BUTTON- DRAWER WILL CLOSE & BREW CYCLE WILL START**
- 5. ONCE THE POD DRYING CYCLE IS COMPLETE, THE POD WILL EJECT & THE CUP CAN BE REMOVED**

MACHINE OPERATION

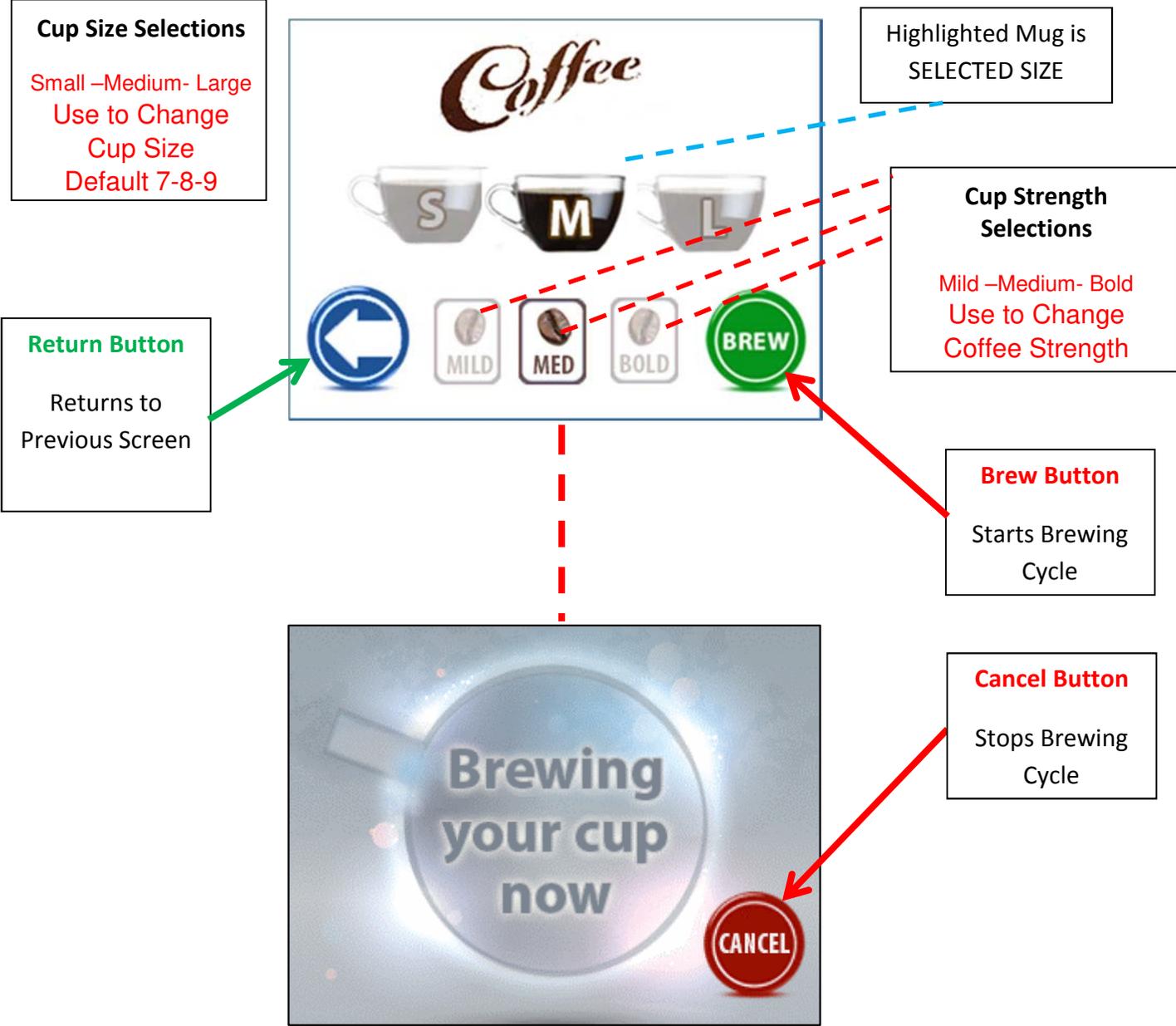
To dispense a drink, place a cup under the brew nozzle, press a brew selection and place a pod flat side up (not necessary if the drink selection does not use a pod)

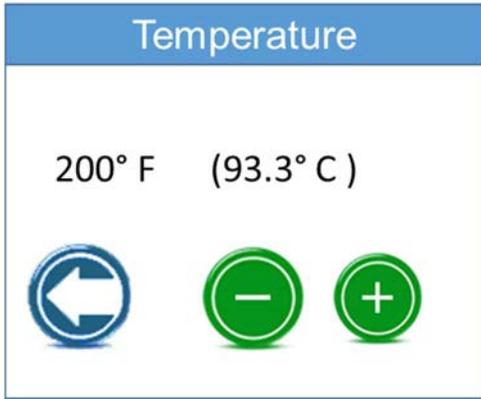
Once a selection is made a Submenu for Drink Settings will appear.

BREWER MESSAGE DISPLAY



DRINKS SUB-MENUS





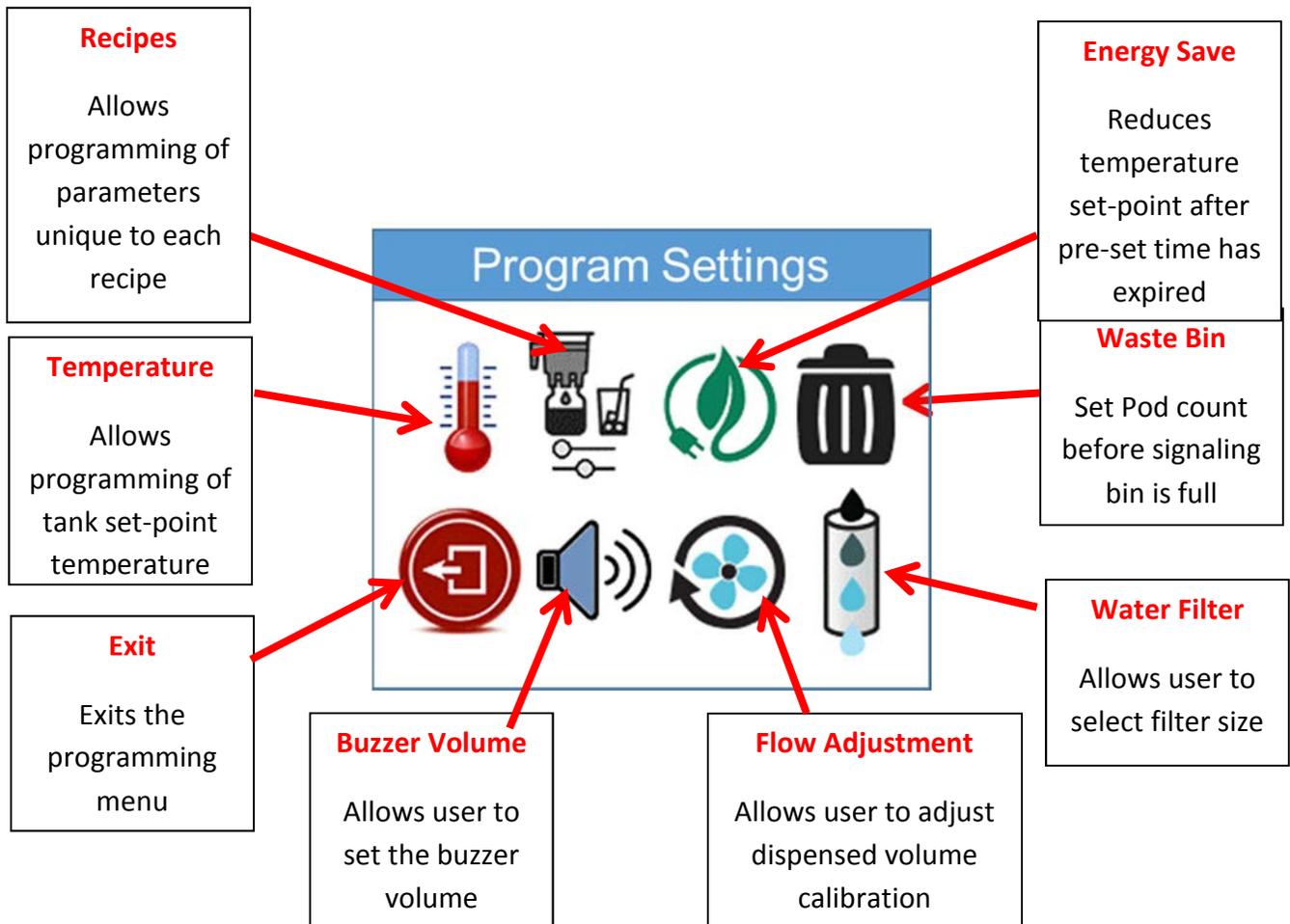
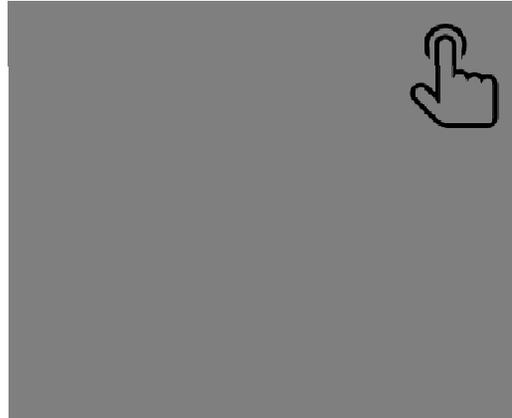
MACHINE PROGRAMMING

Fig 1: Program Settings

To enter a programming setting, press and hold the upper right hand corner of the touch screen when powering up machine The Fresh Cup pod brewer has a programming menu that consists of eight icons.

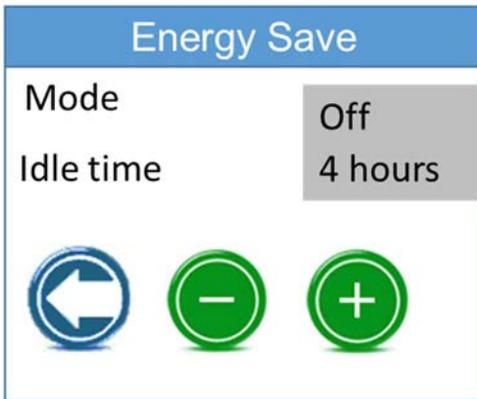
The current entries in the Main menu are as follows:

- Temperature
- Recipes
- Energy Save
- Waste Bin
- Water Filter
- Flow Adjustment
- Buzzer Volume
- Exit



Set Temperature: In this entry the user may set the tank temperature in the range of 180 to 203 degrees Fahrenheit with the default at 200 degrees F. Pressing the green (+) and (-) buttons will change the set point, incrementing or decrementing by one. Pressing the Blue “Return” button will exit.

Set Energy Save Mode: This entry allows the user to select the Power Save mode. Pressing the green (+) and (-) buttons will change the entry then press the Blue “Return” button to exit.



Off Mode (default) –No Energy Save

Energy Save– Partial Power Save Mode. After the user selected Idle Time is reached, the tank temperature set point is reduced to 180 until a key is pressed.

Full Energy Save – Full Power Save Mode. After the user selected Idle Time is reached, the tank heater is disabled until a key is pressed.

Set Idle Time: This entry sets the time the machine will operate normally until the power save function is activated. The user can choose 1 through 4 hours in 1-hour increments with the default set to 4 hours. As with most of the entries, pressing the green (+) and (-) buttons will change the entry then press the Blue “Return” button to exit.

Set Buzzer Volume: The range is from 0 to 100. The default is 20.

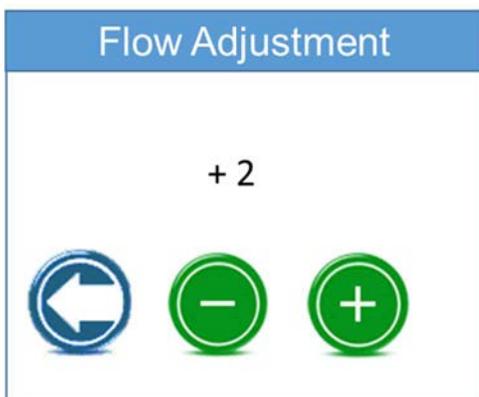




Set Pod Count: In this entry the user may set the number of pods the brewer will hold before signaling that the bin is full. The range is 10 to 100 pods, with the default at 30. Setting the pod count under 10 turns off the counter so the empty waste bin message will not display. As with most of the entries, pressing the green (+) and (-) buttons will change the entry then press the Blue “Return” button to exit.

THESE MACHINES ARE EQUIPPED WITH A FLOWMETER- Please run your Fresh Cup pod brewer a few times. If the volume dispensed is comparable to the amount expected from your Button Settings (which are set in the programming menu as described BELOW) and consistent and the pulsing is acting as expected **you are done.** However if your dispensed volume is larger or smaller than expected the easiest way to adjust it is to adjust the “OZ PER TICK” using the FLOWMETER ADJUST feature in the programming menu.

NOTE: THE MACHINE HAS BEEN CALIBRATED AT THE FACTORY AND HAS BEEN ADJUSTED TO BREW INTO AN 8 OUNCE CUP WITH APPROX 7 OUNCES OF COFFEE FOR BREW STRENGTHS OF MILD, MEDIUM AND BOLD. NO FURTHER ADJUSTMENTS ARE NECESSARY IF THE FACTORY DEFAULTS ARE USED.



Flowmeter Adjustment: This entry displays the value used to represent the amount of liquid for one tick of the flow meter count. Each tick adjusts the value approximately 2/10th of an ounce. While in this entry, pressing the green (-) key will decrement and the green (+) key will increment this value. This can be used to fine-tune the amount of liquid that is dispensed.



Recipe Settings: This entry takes the user into a sub menu to program the parameters unique to each recipe.

There are six entries in the RECIPE Parameters sub menu:

SET BREW VOLUME: This entry sets the volume in ounces for this key to dispense. The Range is from 2.0 to 16 ounces with the default set to 7 ounces for small, 8 ounces for medium, and 9 ounces for large.

SET PRE-INFUSION VOLUME: This entry sets the volume in ounces of the pre-infusion pulse of water. Range is 0 to 3.0

SET COFFEE PUMP SPEED: In this entry the user may set the dc pump strength in the range of 10% to 100% with the default at 35. As with most of the entries, pressing the green (+) and (-) buttons will change the entry then press the Blue "Return" button to exit. (Note that high pump speed can negatively affect extraction and can be noisy)

SET AIR PUMP SPEED: In this entry the user may set the air pump strength in the range of 30% to 100% with the default at 80. As with most of the entries, pressing the green (+) and (-) buttons will change the entry then press the Blue "Return" button to exit.

SET AIR PUMP TIME: In this entry the user may set the air pump time in the range of 2 to 15 seconds with the default at 10. As with most of the entries, pressing the green (+) and (-) buttons will change the entry then press the blue "Return" button to exit.

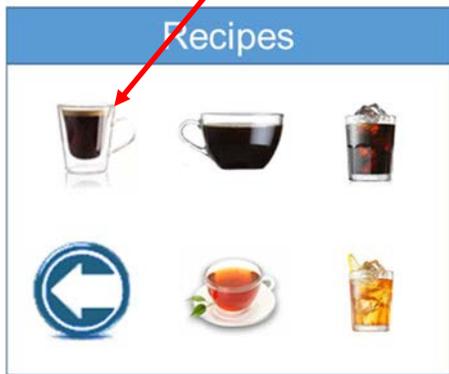
SET BREW PULSE TIME: This entry sets the brew time off in seconds for a 7-ounce cup of coffee with on/off pulses. The range is from 0 to 30 seconds.

EXIT: Exit to Main Programming Menu.

RECIPE GUIDE



Step 1 – Make drink selection

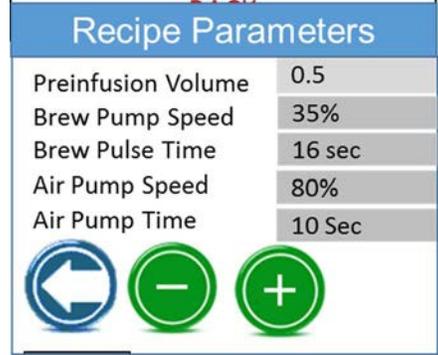


Step 2 – If desired, change drink volume using the green buttons. Then, press **NEXT**



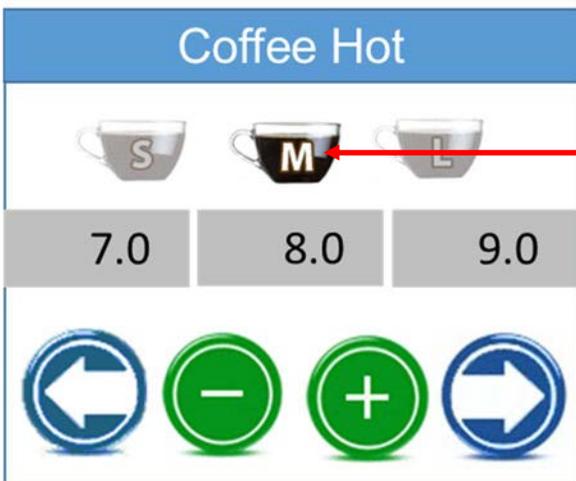
NEXT

Step 3 – If desired, change recipe parameters using the green buttons. Then, press **BACK**

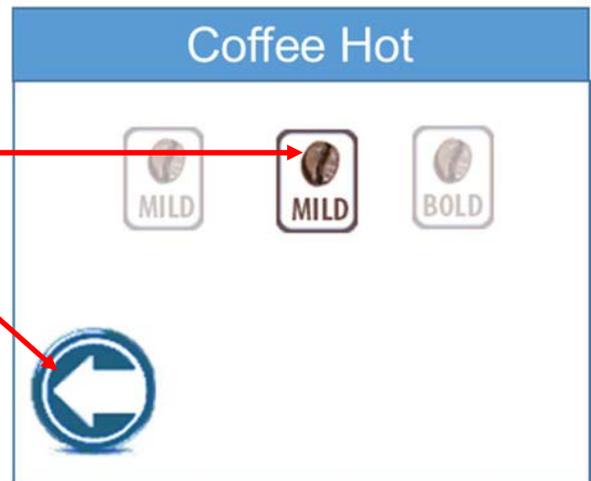


BACK

Note: For recipes other than Espresso, drink size and strength must be selected before access to recipe parameters will be allowed.



Select, then press **BACK**





Select Water Filter: This entry allows the user to select the filter size for the filter used on the inlet for the water. Choices include OFF, 500 GAL UP TO 3000 GAL. These set the counter for the filter warning. Whenever water is dispensed the counter is incremented to account for the water dispensed. When the counter is above 90% of the capacity of the chosen filter a warning message, "CHECK FILTRATION", is displayed in place of the "READY" message. To reset the counter the user must enter the programming menu and enter the RESET FILTER entry described below. If the filter selection is OFF then following entries are not available. As with most of the entries, pressing the green (+) and (-) buttons will change the entry then press the Blue "Return" button to exit.

GAL. REMAINING: This entry scrolls the number of Gallons left before the filter should be replaced. As with most of the entries, pressing the green (+) and (-) buttons will change the entry then press the Blue "Return" button to exit.

RESET FILTER: Press and hold the Reset, button

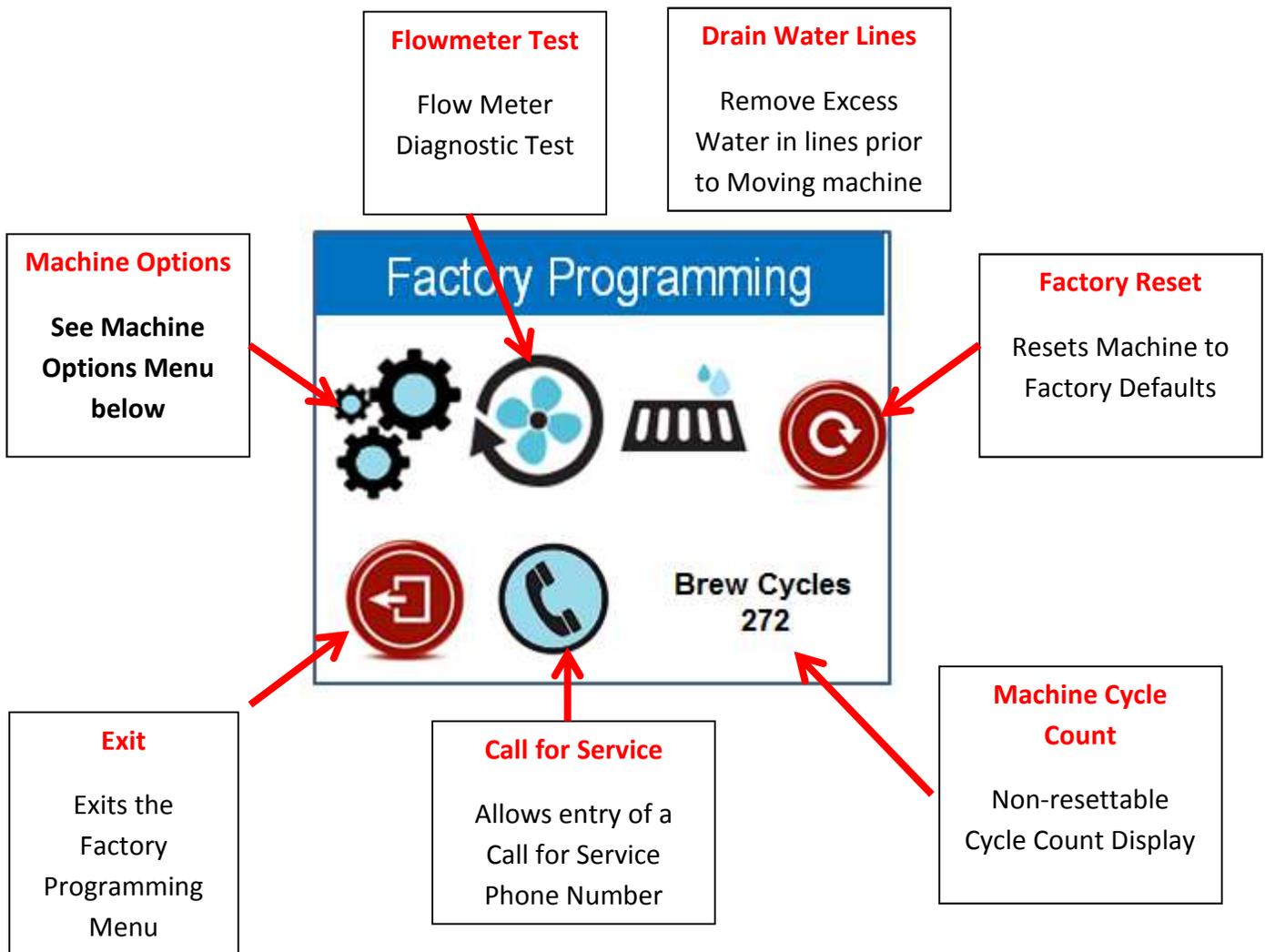


timer will count down to Reset the counter.

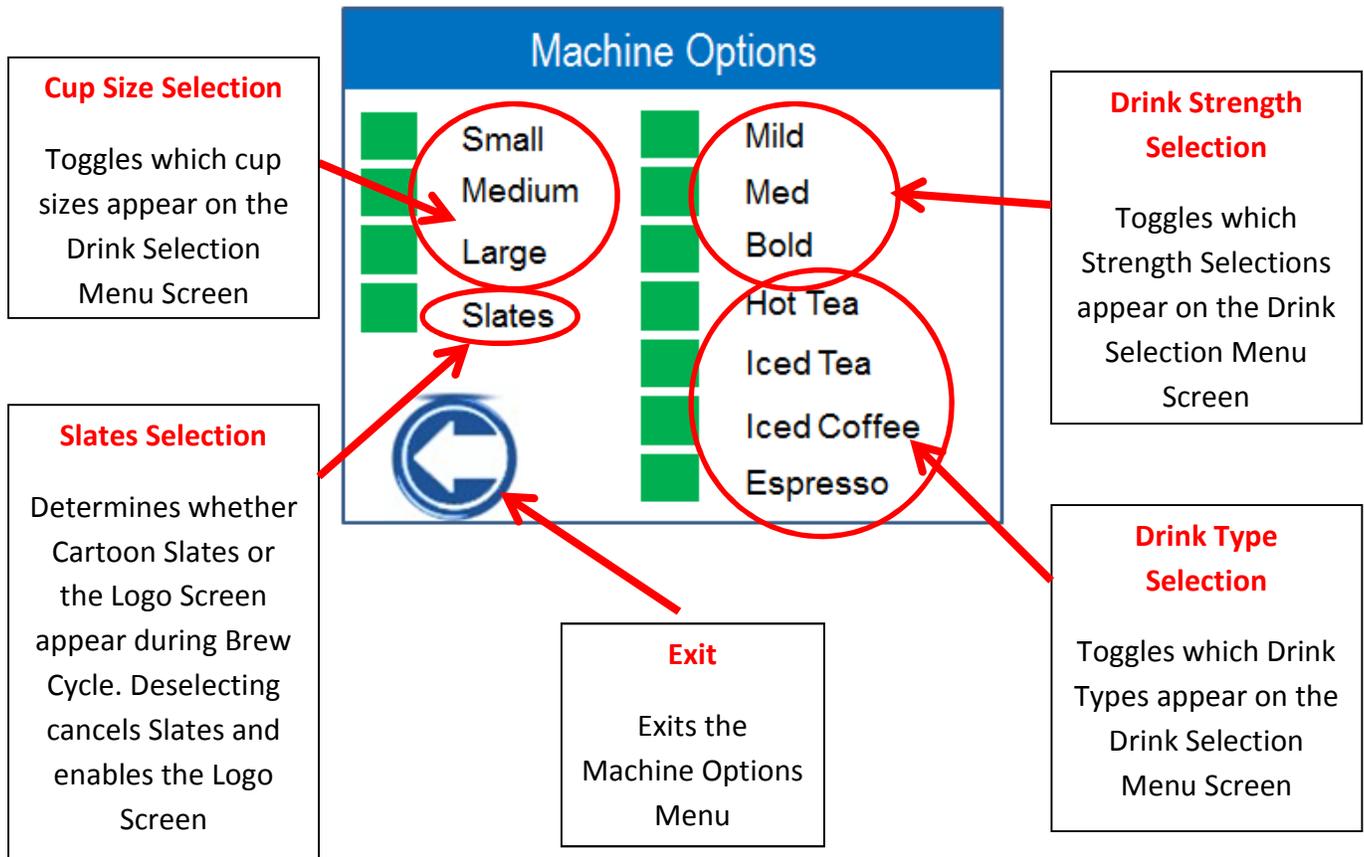
EXIT MENU: – Exit to Ready to Brew Mode and save parameters.

Fig 2: Factory Programming Settings

This menu is accessed by holding the lower right corner of the touchscreen when cycling power to the machine. Continue to hold until the Factory Programming Menu Appears



Machine Options: This Menu determines which items are displayed on the Main Program Menus. Green buttons indicates that the selection is active, grey buttons are inactive



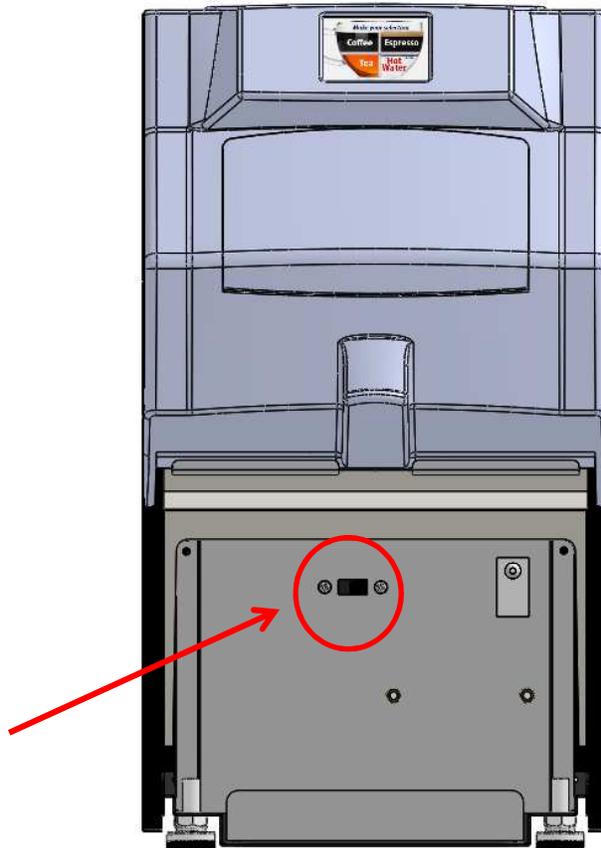
**Note: The Cup size and Drink Strength Selections are Global.
The selections affect all drink types.**

USB INTERFACE CONNECTION

The Fresh Cup 4 Touch Machine utilizes a built in USB connection for updating files in the field. Several types of files can be updated using this interface.

1. User generated graphics files. These include a User Logo, Background Splash, and Call for Service screen.
2. User generated Drink Recipes. A custom Drink Recipe file can be generated and loaded to customize the Drink Recipes.
3. Future Firmware Updates. Any future Firmware or Graphics updates will be e-mailed from Newco with instructions on how to load.

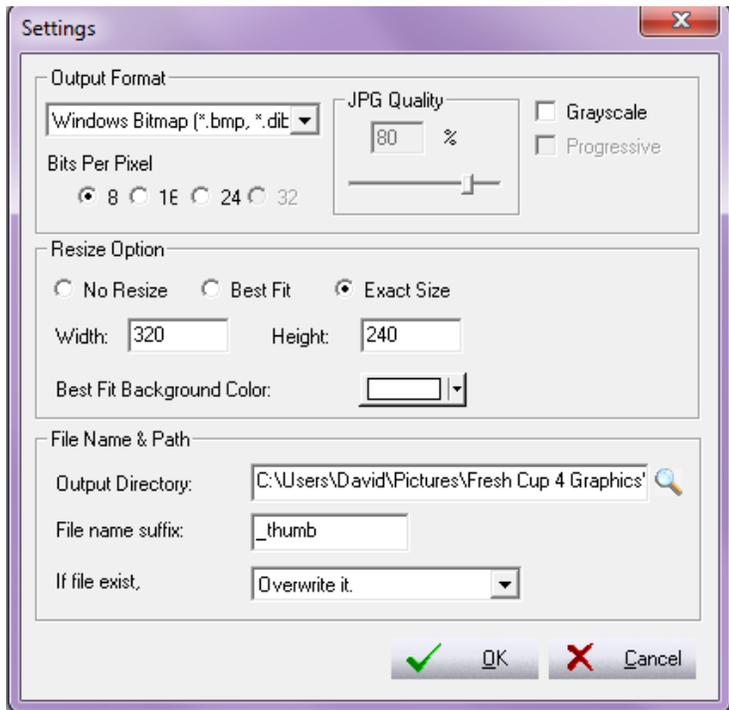
The connection is located behind the waste bin, next to the waste bin detection switch, and is accessed by removing the waste bin assembly and protective plug from the USB socket.



USER GRAPHICS USING THE USB HEADER INTERFACE

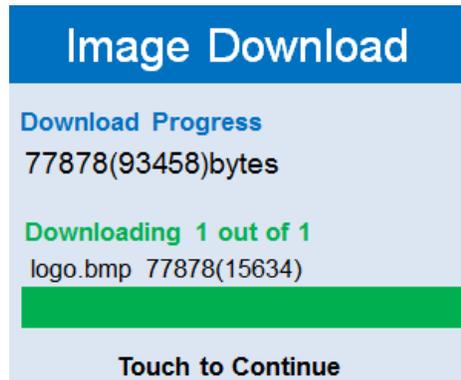
User generated graphics files:

- Three Specific Bitmap files (BMP) can be loaded directly from a USB Flash Drive into the Fresh Cup 4 Display. These files must be 8 bit 320 x 240 pixel format and Landscape oriented, and output as a Window Bitmap file. An image conversion program should be used to convert landscape graphics images to the correct format. This example setup screen is shown from a shareware program- -Easy Graphic Converter V1.2 --available from Etrusoft.com, a link is provided in the .pdf file named “Graphics” on the USB flash drive included with the machine.



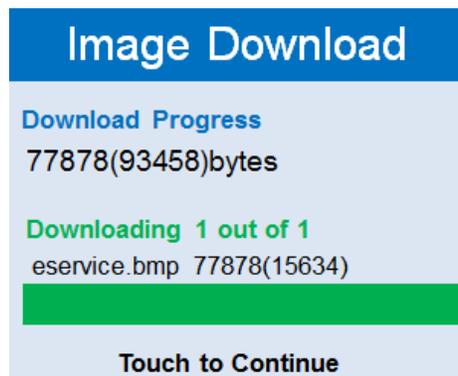
1. Custom Logo Graphic—Use the image conversion program to convert a landscape image (such as a Customer Brand Logo) and note where the file is saved in the output directory. This file will have _thumb suffix to show that it has been converted. **Rename the converted file logo.bmp** and copy it onto a USB Flash drive (ensure that the Flash drive does not already have a file named logo.bmp).

To load the file into the Fresh Cup 4 Touch, turn off the power switch, insert the Flash drive into the USB outlet, and switch the power back on. The screen will remain blank and the Blue Cup light will begin to flash. A message will then be displayed that indicates the new file has been transferred as displayed by the green status bar. Touch the screen to return to normal mode.



2. Custom Call For Service Graphic—Use the image conversion program to convert a landscape image (such as a Service Co Logo) and note where the file is saved in the output directory. This file will have _thumb suffix to show that it has been converted. **Rename the converted file eservice** and copy it onto a USB Flash drive (ensure that the Flash drive does not already have a file named eservice.bmp).

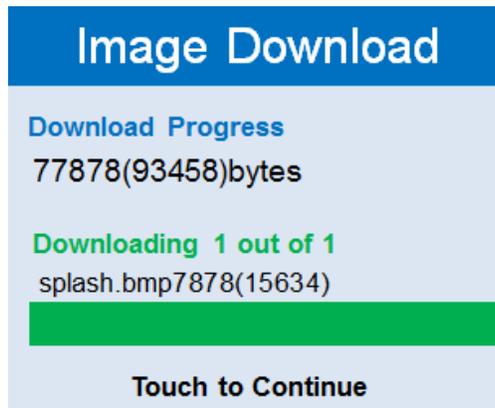
To load the file into the Fresh Cup 4 Touch, turn off the power switch, insert the Flash drive into the USB outlet, and switch the power back on. The screen will remain blank and the Blue Cup light will begin to flash. A message will then be displayed that indicates the new file has been transferred as displayed by the green status bar. Touch the screen to return to normal mode.



NOTE: IF A PHONE NUMBER HAS BEEN ENTERED UNDER THE CALL FOR SERVICE MENU OPTION IT WILL BE DISPLAYED ON THE ESERVICE SCREEN.

3. Custom Splash Screen Graphic—this graphic image is displayed when the power to the machine is cycled on. This is the only place this graphic is seen. Use the image conversion program to convert a landscape image (such as a Coffee Co Logo) and note where the file is saved in the output directory. This file will have _thumb suffix to show that it has been converted. **Rename the converted file splash and copy it onto a USB Flash drive** (ensure that the Flash drive does not already have a file named splash.bmp).

To load the file into the Fresh Cup 4 Touch, turn off the power switch, insert the Flash drive into the USB outlet, and switch the power back on. The screen will remain blank and the Blue Cup light will begin to flash. A message will then be displayed that indicates the new file has been transferred as displayed by the green status bar. Touch the screen to return to normal mode.



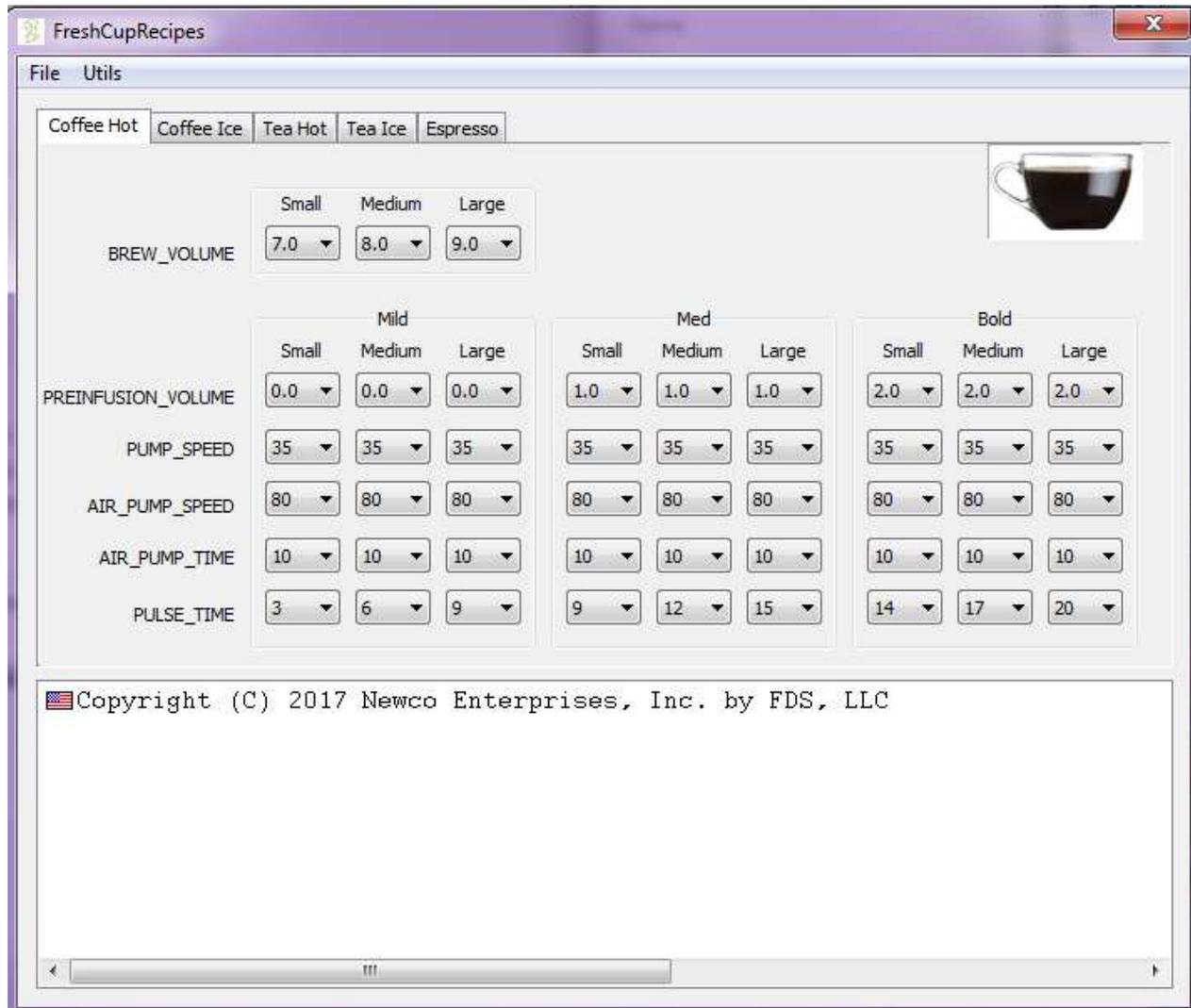
User generated Drink Recipes file:

An application named Fresh cup recipes.exe is also included on the USB Flash storage device. Use it to develop custom recipe values and then transfer the new values to the Fresh Cup 4 touch machine using the USB interface on the machine.

Adjustments to the recipe values can be made using the drop down tabs and selecting the desired values. **Once the new recipe set has been selected, the file should be**

saved as filename, **recipes**. When viewed in a file browser the filename should appear as **recipes.txt** and saved or transferred to the USB flash storage device.

Recipe selection Screen from the Application Recipes.exe



Note—use the Utils Menu to reset the recipe values to the Factory Defaults.

DRAINING THE HOT WATER TANK

THE DRAIN TUBE IS CLIPPED TO THE TANK PLATE IN FRONT OF THE TANK. THE HOT WATER TANK CAN BE DRAINED FROM THE FRONT OF THE MACHINE – UNPLUG MACHINE FROM POWER SOURCE. REMOVE POD WASTE TRAY.

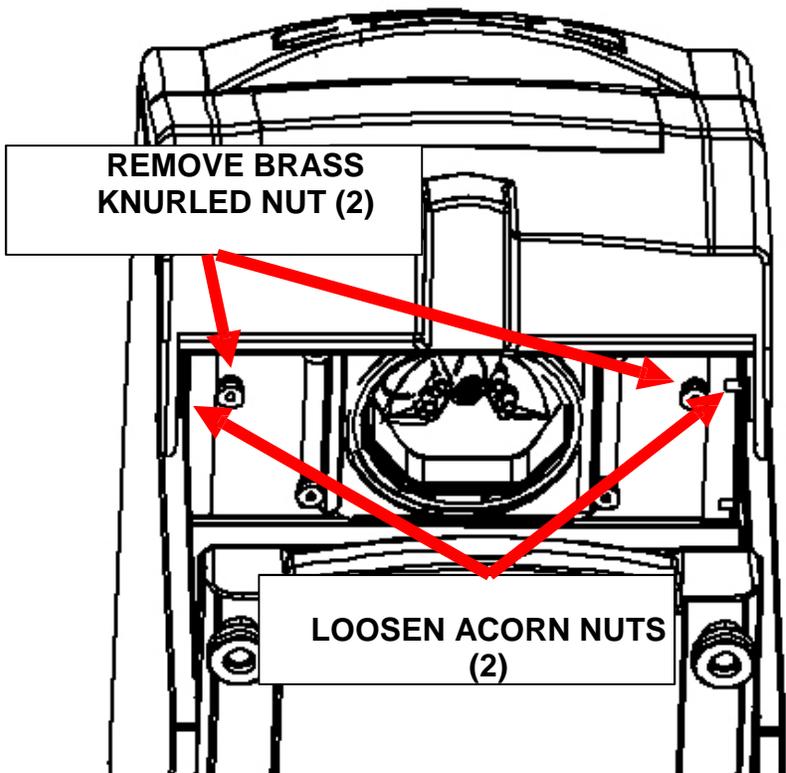
CAUTION-UNLESS THE TANK IS LEFT TO COOL THE WATER IS EXTREMELY HOT AND CAN CAUSE HARMFUL BURNS. REPLACE DRAIN PLUG, ENSURE HOSE CLAMP IS TIGHT AND REPOSITION DRAIN HOSE BEFORE RE-FILLING THE HOT WATER TANK.

SERVICING THE MACHINE

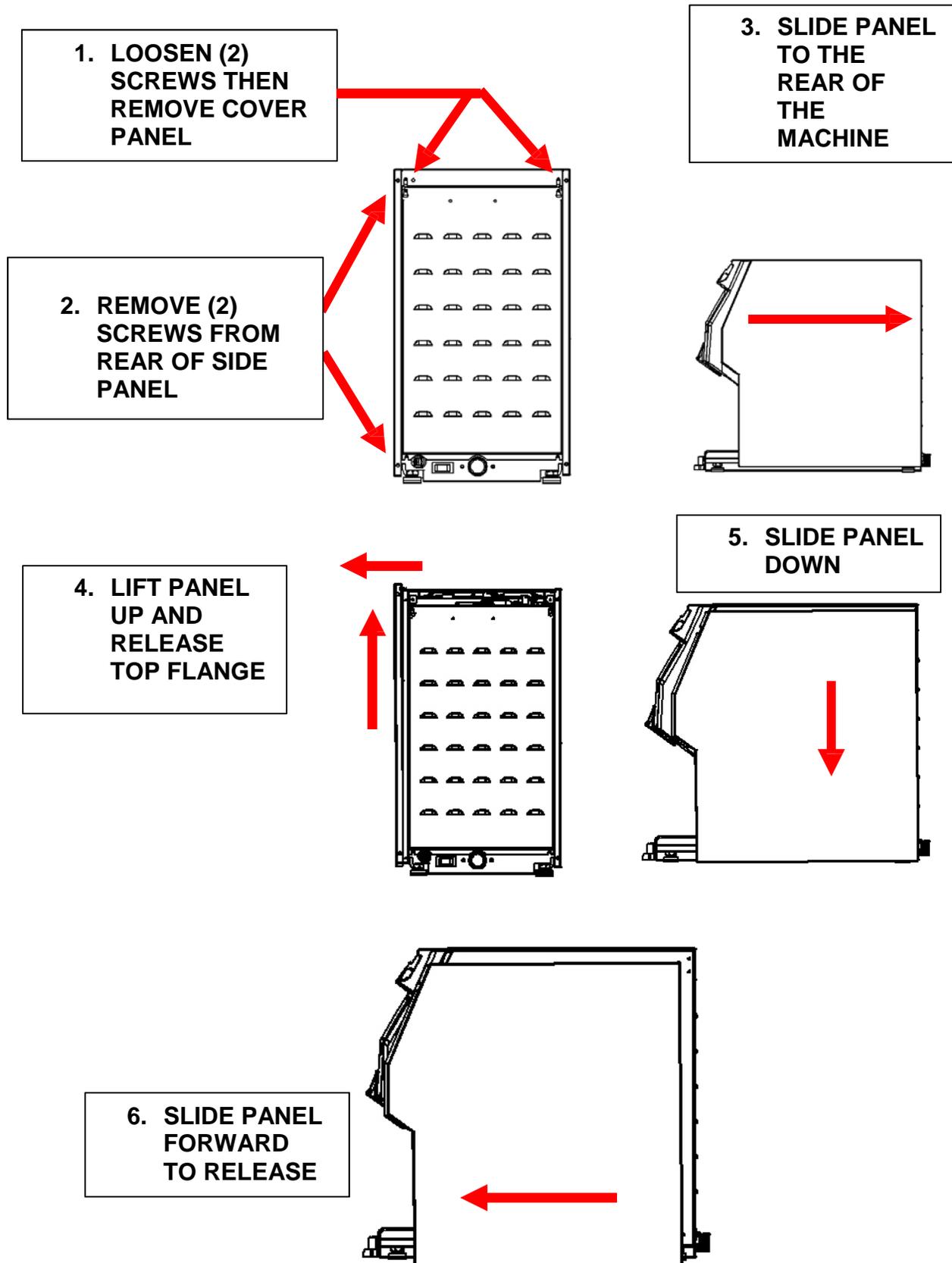
The Fresh Cup machine has a modular Water Tank Assembly and Brew Mechanism. These assemblies can be easily removed from the machine by removing or loosening Machine nuts as noted in drawings below:

REMOVING THE BREW MECHANISM

BREW MECHANISM ACCESS SCREWS (VIEW FROM BOTTOM OF MACHINE)



SIDE PANEL REMOVAL



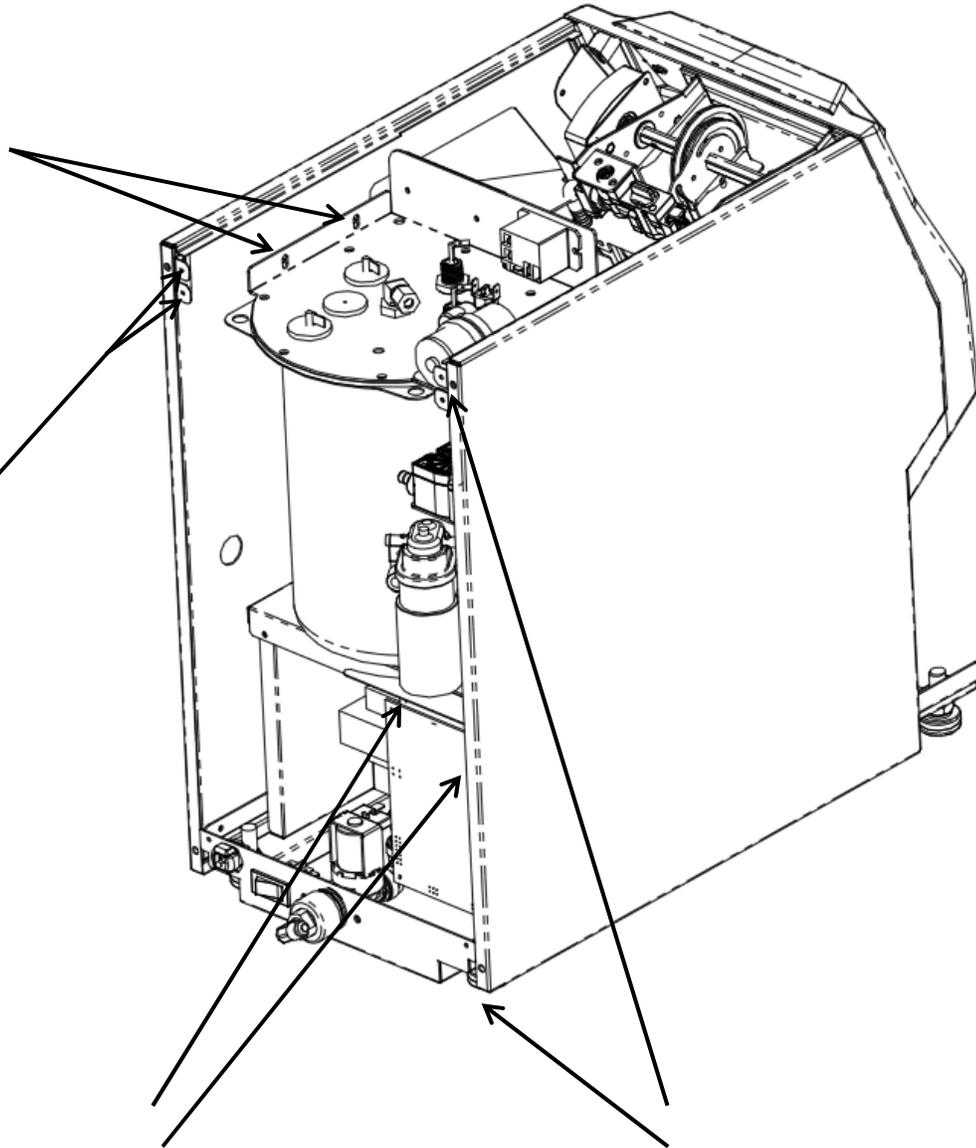
TANK REMOVAL & ACCESS AREAS

REMOVE (3) 8-32
NUTS TO
PREPARE TANK
FOR REMOVAL
(TWO ON TOP
OF TANK & ONE
ON BOTTOM OF
PUMP BRACKET)

LOOSEN
SCREWS
BOTH SIDES TO
REMOVE TOP &
BACK COVERS

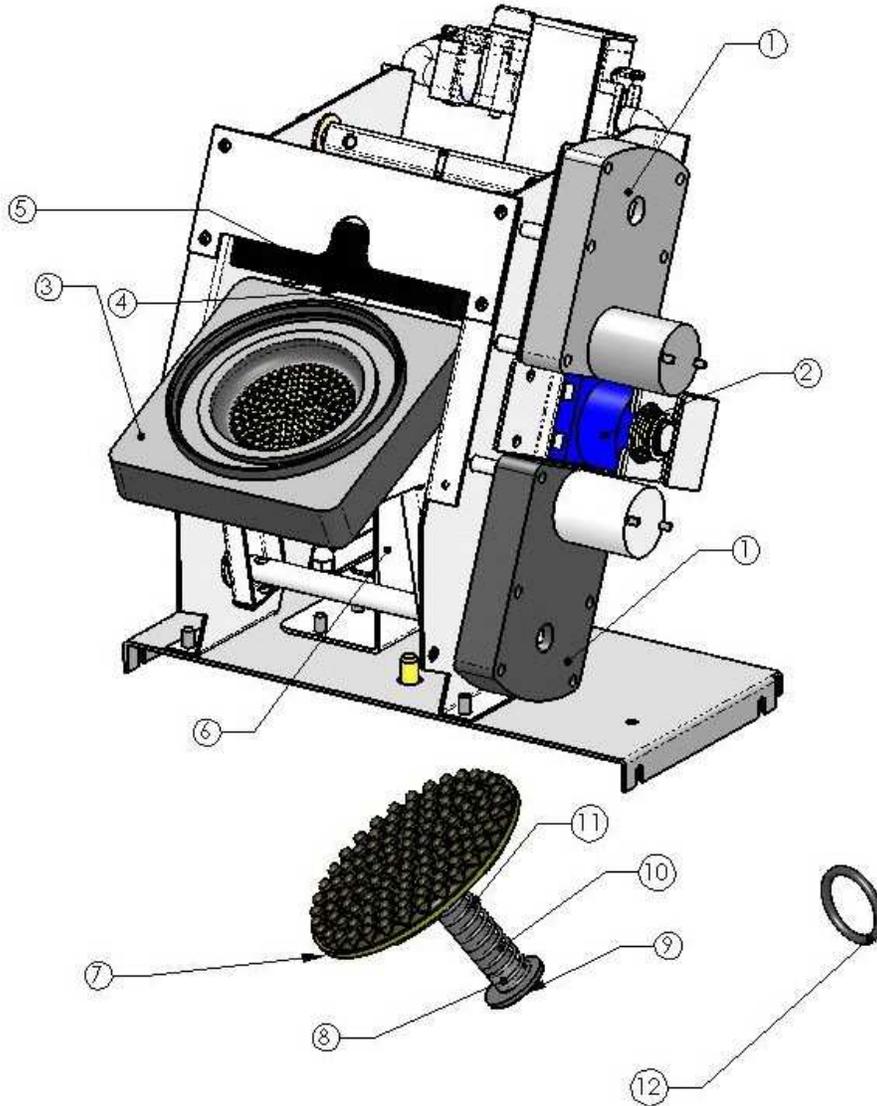
LOOSEN BUT DO NOT
REMOVE THESE 2
SCREWS THEN LIFT &
PULL CONTROL BOARD &
BRACKET OUT OF
MACHINE TO ACCESS
TRANSFORMER

REMOVE (2) 6-32 SCREWS
TO REMOVE SIDE PANEL
FOR PUMP ACCESS
(REMOVE TOP COVER
BEFORE REMOVING
SIDE PANELS)



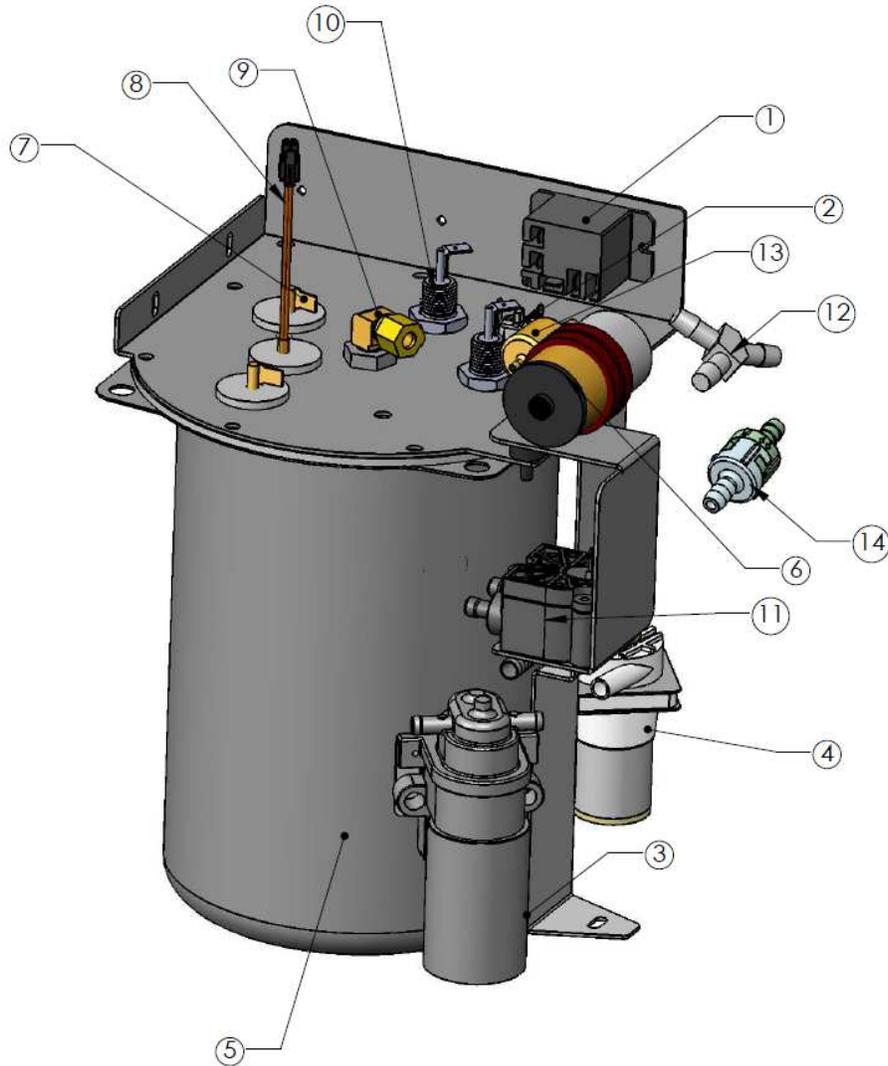
POD BREWING MECHANISM

780585-UNIV 2



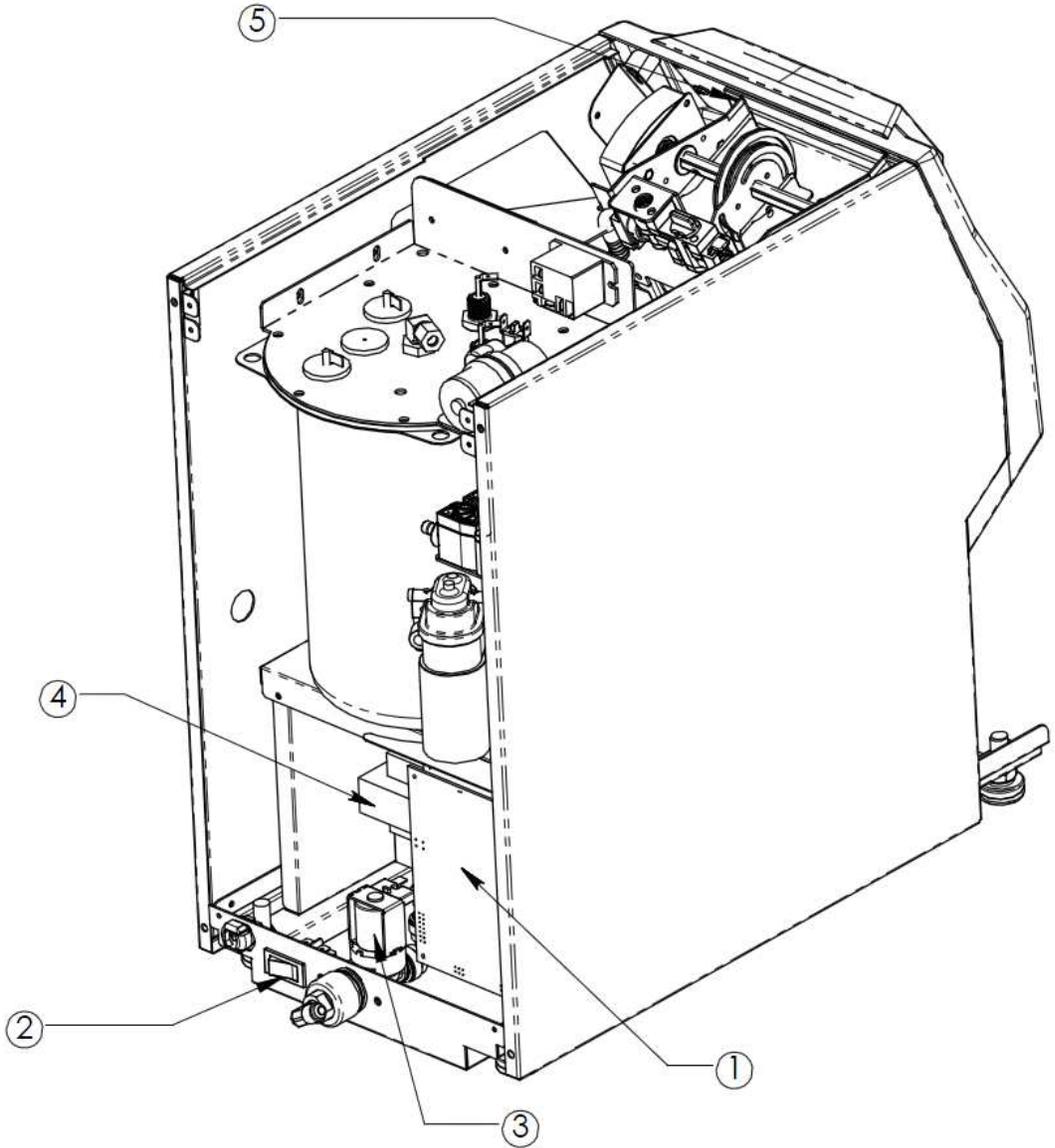
| ITEM # | PART NUMBER | DESCRIPTION | QTY/EA |
|--------|-------------|-----------------------------------|--------|
| 1 | 780230 | BREW MECH MOTOR | 2 |
| 2 | 780231 | DELTROL SOLENOID | 1 |
| 3 | 780587 | LOWER BREW CHAMBER UNIVERSAL 2 | 1 |
| 4 | 773246 | U-CUP SEAL RING | 1 |
| 5 | 780539 | UPPER BREW CHAMBER | 1 |
| 6 | 780554 | EJECT SLOPE CAM ASS'Y | 1 |
| 7 | 780588 | MOLDED BUMP DISC PAD | 1 |
| 9 | 780546 | KICKER SLIDE WASHER | 1 |
| 10 | 780536 | ¼" X 1" STAINLESS STANDOFF SPACER | 1 |
| 11 | 780541 | COMPRESSION SPRING | 1 |
| 12 | 780264 | LOWER BREW CHAMBER O-RING | 1 |

TANK ASS'Y 780609



| ITEM # | PART NUMBER | DESCRIPTION | QTY/EA |
|--------|--|---|--------|
| 1 | 110958 | RELAY, 12 VDC SPST 30A | 1 |
| 2 | 111593 | HI-LIMIT THERMOSTAT | 1 |
| 3 | 109937 | GEAR PUMP ASS'Y | 1 |
| 4 | 781772 | PUMP ASS'Y W/ELBOW (HOT WATER) | 1 |
| 5 | 780253 | TANK ONLY | 1 |
| 6 | 773056 | AIR PUMP, POD | 1 |
| 7 | 500396 | LIQUID LEVEL PROBE& BUSHING | 2 |
| 8 | 151677 | DUAL TEMP THERM PROBE | 1 |
| 9 | 100149 | ELBOW ¼ C X 1/8 NPT | 1 |
| 10 | 704166-10 (1700W) 704161-10 (1400W) | TANK HEATING ELEMENT (US) TANK HEATING ELEMENT (CAN) | 1 |
| 11 | 120682 | FLOWMETER | 1 |
| 12 | 767281 | "WYE" HOSE FITTING | 1 |
| 13 | 202165 | AIR PUMP CHECK VALVE | 1 |
| 14 | 202166 | WATER PUMP CHECK VALVE | 1 |

ELECTRICAL COMPONENTS



| ITEM # | NEWCO PN | DESCRIPT | QTY/EA |
|--------|----------|----------------------------|--------|
| 1 | 7821 | CONTROL BOARD & BRACKET | 1 |
| 2 | 1106 | SWITCH, DPST, ON/OFF | 1 |
| 3 | 1023 | SOLENOID FILL VALVE | 1 |
| 4 | 1051 | TRANSFORMER 120VAC-24VAC | 1 |
| 5 | 7821 | TOUCH SCREEN DISPLAY BOARD | 1 |

ERROR MESSAGES



**THERMISTOR IS OPEN –
REPLACE PN 151677**



**THERMISTOR IS SHORTED –
REPLACE PN 151677**



**NO FLOWMETER SIGNAL. CHECK
CONNECTIONS. RUN FLOWMETER TEST –
COUNT SHOULD BE 200 - 215**



**BREW CHAMBER DRIVE MOTOR ERROR-
CHECK FOR JAM OR OBSTRUCTION IN
BREW CHAMBER**



**BREW CHAMBER DRIVE MOTOR ERROR-
CHECK FOR JAM OR OBSTRUCTION IN
BREW CHAMBER**



**WATER NOT REACHING LEVEL PROBE-
CHECK WATER SUPPLY OR CHECK FOR
WATER LEAK**



**WATER NOT HEATED DURING TIMEOUT
PERIOD-CHECK HEATER RELAY PN 110958
OR HEATING ELEMENT PN704166-10 (1700W
US) OR 704161-10 (1400W CANADA) OR HI-
LIMIT THERMOSTAT PN 1115**

WIRING DIAGRAM

