SMART CUP
POD BREWING SYSTEM

Operating Manual

Power up your Smart Cup while pressing the corresponding button to reach different program modes.

1

+ 

Power switch on back of brewer

= **Heat Exchange fill/Tank Drain Page:**

2

+ 

Power switch on back of brewer

= **Calibration of Smart Cup**
Calibration of Side Car
Page: 4

3

+ 

Power switch on back of brewer

= **Pod Holder Programmin**
Page: 13

4

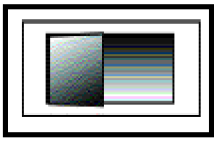
+ 

Power switch on back of brewer

= **Product Usage Page:**

5

Power switch on back of brewer

+ 

Side Car Start switch

= **Programming of Side Car Page:**

Installation and Operation Instructions: SMART CUP Brewing System

INSTALLATION INSTRUCTIONS:

1. Flush water line before installing brewer. Brewer should be connected to COLD WATER LINE for best operation.
2. Water pressure should be at least 20 psi up to a maximum of 90 psi and have a minimum flow rate of 1.5 gallons per minute.
3. Mechanical connector on brewer is ¼"male flare connector. For less than a 25 ft. run, use ¼" copper tubing and connect to ½" or larger water line. For longer runs, use 3/8" copper tubing connected to ½" or larger water line and provide an adapter fitting for connection to the brewer.
4. If installed with saddle valve, the valve should have a minimum of 1/8" port hole up to 25 ft. run, and 5/16" port hole for over 25 ft. run.

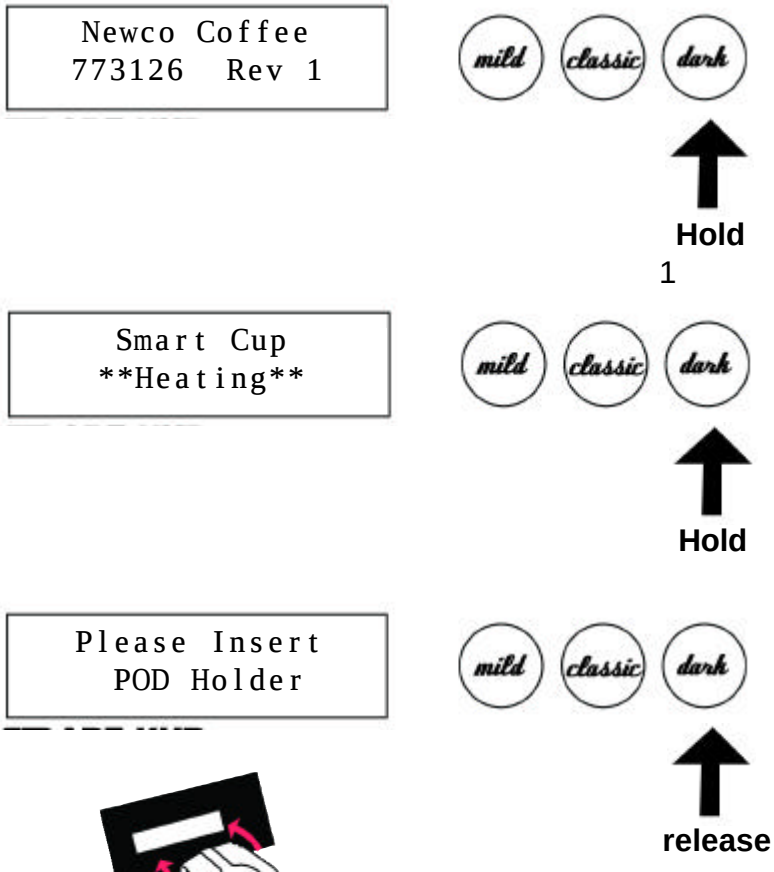
PRE-FILL FUNCTIONS: Main Water Tank & Heat Exchange Reservoir

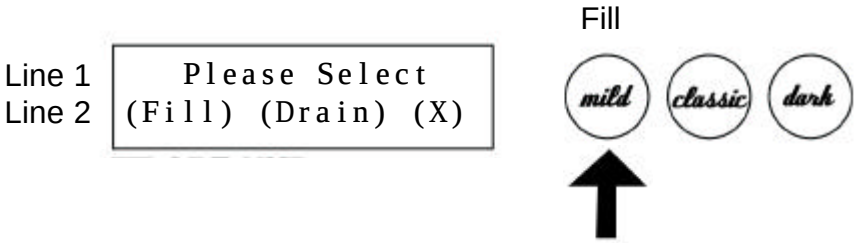
1. Main Hot Water Tank Pre-fill: When the brewer is plugged in, and the master on-off switch is turned on, the main hot water tank will start to fill automatically. The fill process will take approximately 2 to 3 minutes to complete. Note: The function of the main hot water tank is to supply hot water to the faucet and the Side Car only.

2. Upon completion of filling the main tank, power down the brewer.

Heat Exchanger Pre-fill

1. Heat Exchanger Pre-fill: Press the Dark button, on the faceplate, and power up the brewer. Do not release the Dark button until the display scrolls to " Insert POD Holder." *The POD brewing system runs independently through a heat exchanger for its source of hot water.*



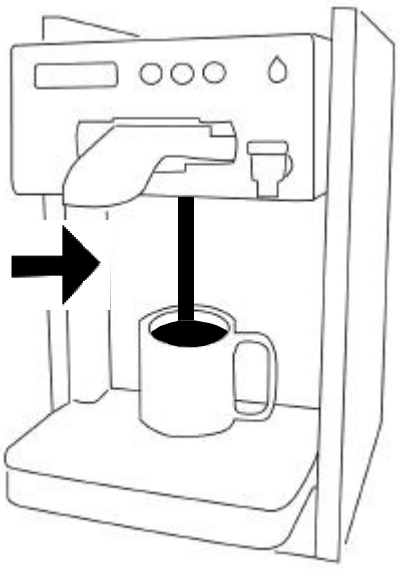


2. Put a cup underneath the cup stand.

3. Insert empty POD Holder.

4. The display will read "Please Select
“(Fill) (Drain) (X)"

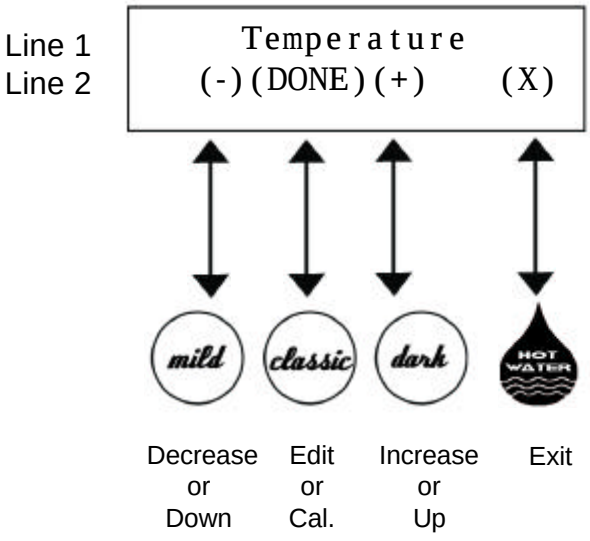
5. Press the Mild button to fill the heat exchange. When there is a steady stream of water push <u>any button</u> to cancel this function. The heat exchange is full and ready to use.
Note:Heat exchanger and coil holds approximately 30 ounces of water



Note: If the POD holder is not inserted within 20 seconds the program will default back to its original setting and the process will have to be started over again.

Interpreting The Display:

The LCD has two lines of information. First Line is the programming function. Second line is the programming interface. Each symbol or word has a corresponding button to interact to that specific step and they are:



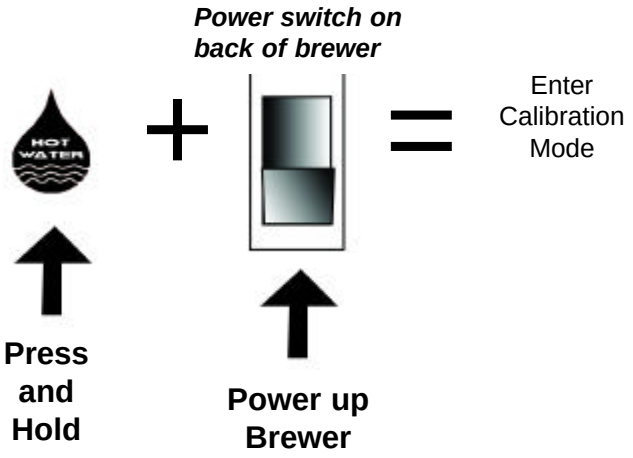
Example:
Line 1 = Temperature
Line 2 = Programming buttons

Push **Mild** Button to decrease temperature
Push **Classic** Button to finish editing temperature
Push **Dark** Button to increase temperature
Puch **Hot Water** Button to exit

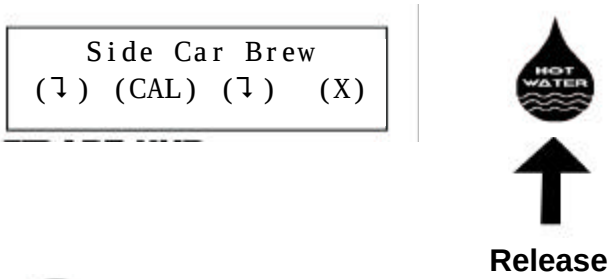
Calibration Side Car & Smart Cup Overview

Calibration: Hold down the hot water button and power the brewer up until the display reads **"Side Car Brew"**. Release the hot water button when **Side Car Brew** Screen appears Use either the **Mild** or **Dark** button to scroll through the calibration functions. The functions are: A.) **Side Car Brew** (Bulk Brew) calibration B.) **Coffee POD** calibration C.) **Tea POD** calibration D.) **Faucet** calibration. E) **Smart Cup** -*Text Editing*.

1. Press and hold "**Hot Water**" button and power up brewer

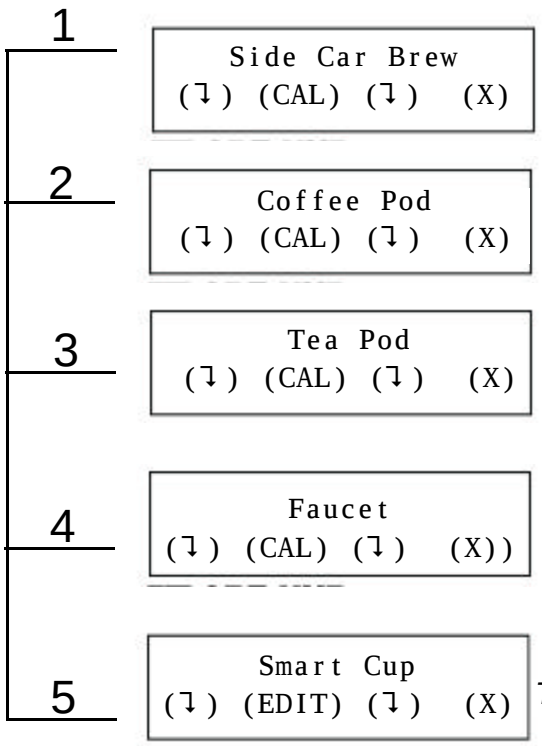


2. Release Hot Water Button when "Side Car Brew" screen appears.



3. Use the **Mild** or **Dark** button to scroll through the calibration functions

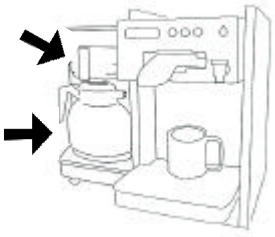
Calibration Function Screen Sequence



Calibration Functions:

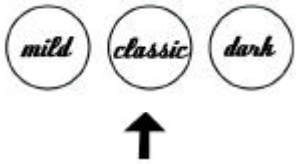
Side Car (Bulk Brew): Put a container underneath brew basket. Push the **Classic** button (Calibrate). Enter pump speed from 10 through 20 by using the left (**Mild**) or right (**Dark**) arrow. Pump speed of 16 is the recommended default. Push the **Classic** button (Done). At this point, the Side Car will run for 1 minute delivering water into the container placed underneath the brew basket. Once this cycle has finished, remove the container and measure the amount of water. Next, input the "Measured Amount" of water by pushing the **Mild** (-) or **Dark** (+) button to the measured volume. Push the **Classic** (Done) button and the calibration process is finished for the Side Car. Next prompt will be the **Coffee Pod Holder**.

1. Put brew basket and carafe in place



2. Press "**Classic**" button to begin calibration

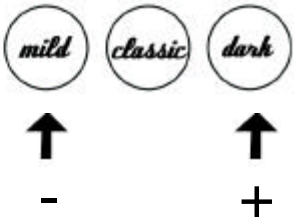
Side Car Brew
(↴) (CAL) (↴) (X)



Press to Calibrate

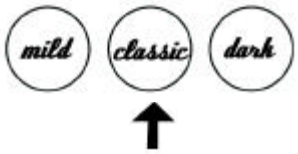
3. Enter pump speed by using the "**Mild**" or "**Dark**" (10-20)
(*16) is recommended*

Speed = 16
(-) (Done) (+) (X)



4. Push the "**Classic**" button. Side Car will run for 1 minute delivering water into container

Calibrating: = 0:59
Press any button to abort



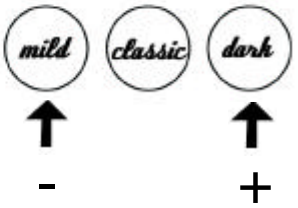
Done

5. Measure Volume of water in fluid ounces

Measure Volume of water

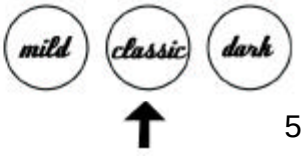
6. Input measured amount by Pressing the "**Mild**" or "**Dark**" buttons
Scroll up or down to set the measured volume.

Amount = 15oz
(-) (Done) (+) (X)



7. Press the "**Classic**" button and the Side Car calibration is complete. Prompting to "**Coffee Pod** "

Amount = 19oz
(-) (Done) (+) (X)

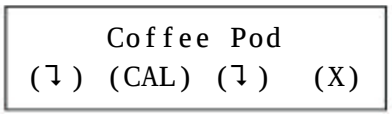


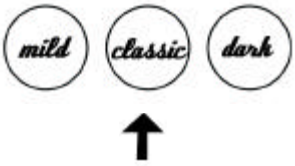
Press to finish

Coffee Pod Calibration:

Coffee POD Holder: Insert the Coffee POD Holder: Press **Classic** button to calibrate coffee pod holder.~ with **a "Coffee POD" in place** into the brew chamber. Place a cup or measuring container on the cup stand minimum size of 10 ounces. Push the **Classic** button (Calibrate). At this point, the Coffee POD Holder will run 45 seconds delivering water into the cup placed on the cup stand. Once this cycle is finished, remove the cup and measure the amount of water. Next, input the "Measured Amount" of water by pushing the **Mild** (Left Arrow) or **Dark** (Right Arrow) button to the measured volume. Push the Classic (Done) button and the calibration process is finished for the Coffee POD Holder. Next prompt will be the **Tea POD** holder.

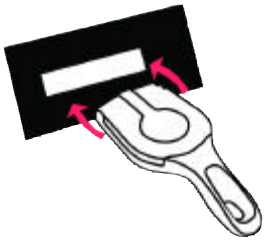
1. Press "**Classic**" button to calibrate





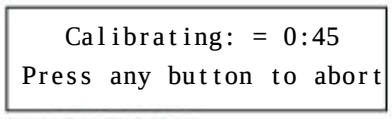
Press Calibrate

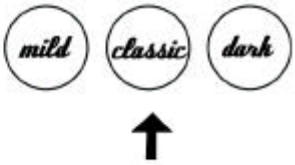
2. Insert Coffee Pod Holder **with a coffee pod in place** into Brew chamber



3. Place 10oz cup or measuring container on cup stand

4. Push the "**Classic**" button. Water will run for :45 seconds into the cup



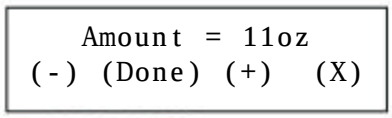


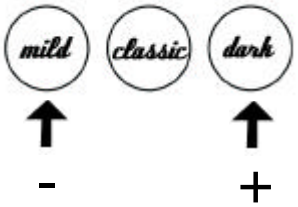
5. Measure Volume of water in fluid ounces

Measure Volume of water

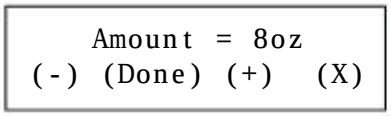
6. Input measured amount by Pressing the "**Mild**" or "**Dark**" buttons

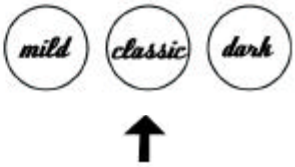
Scroll up or down to set the measured volume.





7. Press the "**Classic**" button and the calibration is complete. Prompting to "**Tea POD**"



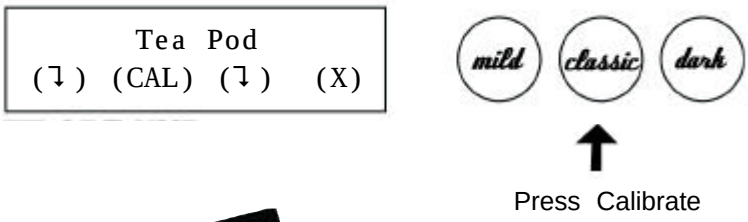


Press to finish

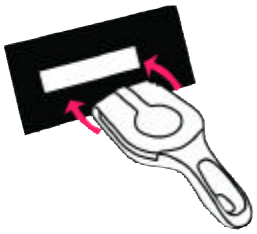
Tea Pod Calibration:

Tea POD Holder: Insert the Tea POD Holder ~ with a "Tea POD" into the brew chamber. Place a cup or measuring container on the cup stand minimum size of 10 ounces. Push the **Classic** button calibrate tea pod holder Insert the tea pod holder **with a tea pod in place** into the brew chamber. At this point, the Tea POD Holder will run 45 seconds delivering water into the cup placed on the cup stand. Once this cycle is finished, remove the cup and measure the amount of water. Next, input the "Measured Amount" of water by pushing the **Mild** (Left Arrow) or **Dark** (Right Arrow) button to the measured volume. Push the **Classic** (Done) button and the calibration process is finished for the Tea POD Holder. Next prompt will be the **Faucet** Calibration.

1. Press "**Classic**" button to calibrate

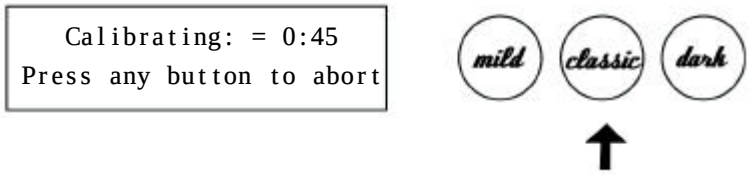


2. Insert Tea Pod Holder **with a tea pod in place** into Brew chamber



3. Place 10oz cup or measuring container on cup stand

4. Push the "**Classic**" button. Water will run for :45 seconds into the cup

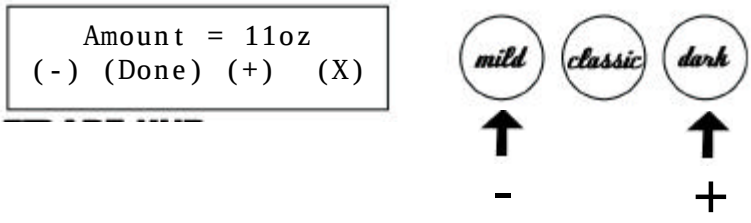


5. Measure Volume of water in fluid ounces

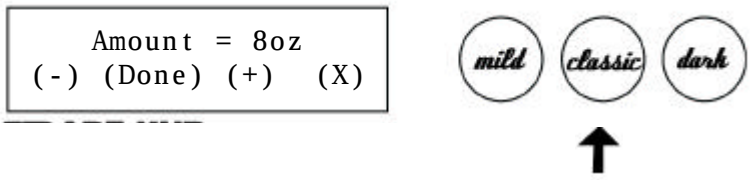
Measure Volume of water

6. Input measured amount by Pressing the "**Mild**" or "**Dark**" buttons

Scroll up or down to set the measured volume.



7. Press the "**Classic**" button and the calibration is complete. Prompting to "**Faucet**" calibration



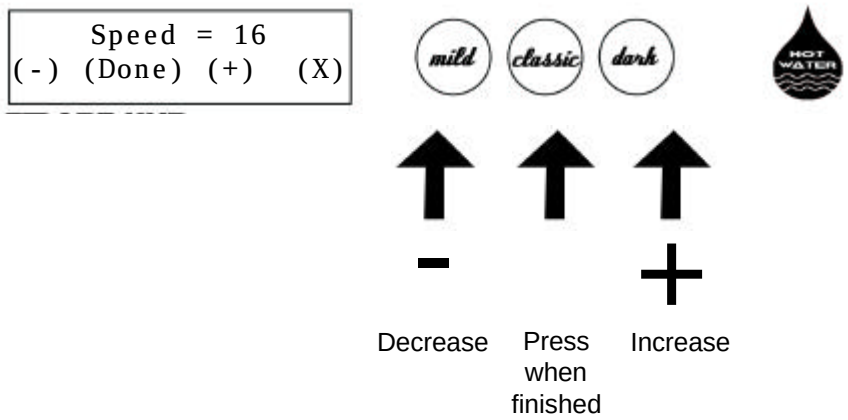
Hot Water Faucet Calibration

Hot Water Faucet: The pump speed can be changed to increase or decrease flow from the hot water faucet. Press the "**Classic"** button to calibrate. Enter pump speed from 10 through 20 by using the left (**Mild**) or right (**Dark**) arrow. (Maximum Pump Speed: 20 Minimum Pump Speed: 10.) Higher the pump speed the flow rate will increase accordingly. Press the **Classic** (Done) button and the calibration process is finished for the Faucet. Next prompt will be the Text Editing -**Smart Cup**.

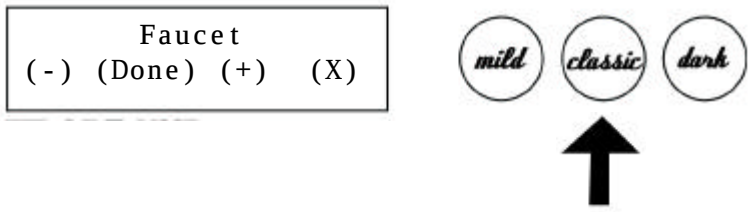
1. Press "**Classic**" button to calibrate.

2. Enter pump speed

Pump speed of 16 is the recommended default

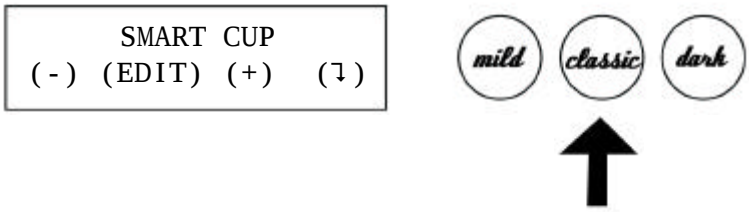


3. Press the "**Classic**" button and the calibration is done. Prompting to "**Text Editing**"

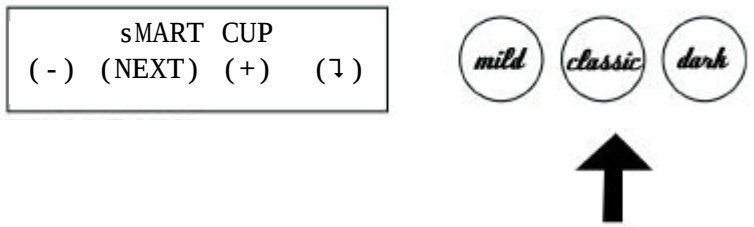


Text Editing: To edit text press the **Classic** (Edit) button. Use the **Mild** (-) or the **Dark** (+) to scroll through the alphabet & numbers 0 thru 9. Upper case letters are accomplished by pressing the **Hot Water** button and the **Classic** (Next) button at the same time. When the two buttons are pressed simultaneously the flashing icon will move to the next letter/number position leaving the last letter in upper casing. *(Note: There are hidden symbols located in the numbers 0 thru 9. To access them, simply push the **Hot Water** button shifting between the number and symbol.)* Repeat the process again by using the **Mild** (-) or **Dark** (+) buttons to select the desired letters/numbers and then press the **Classic** (Next) button to continue the preferred text. When the text is finally entered continue to push the **Classic** (Next) button until it exits out to the next parameter, which is **Temperature** setting.

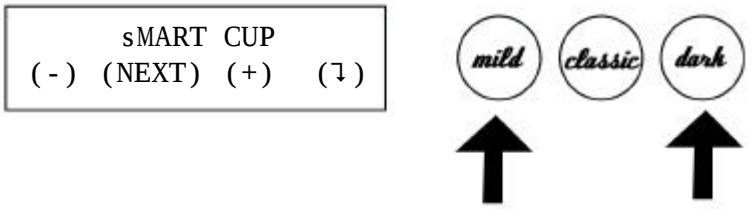
1. Press "**Classic**" button to edit text.



2. Upon pressing the "**Classic**" button the first letter will begin to flash and change in lower case. Also the word "EDIT" changes to "NEXT"

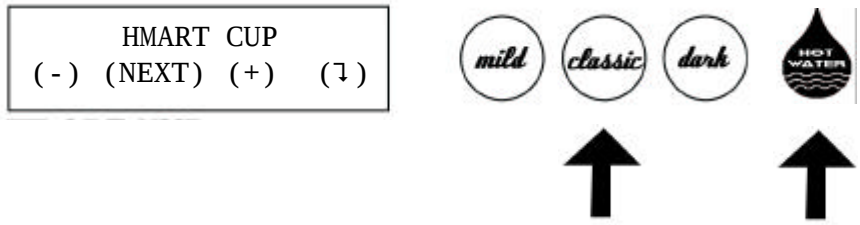


3. To change letters or numbers press the "**Dark**" button or the "**Mild**" button to scroll though the alphabet and numbers. Press the "Classic" button to jump to the next letter

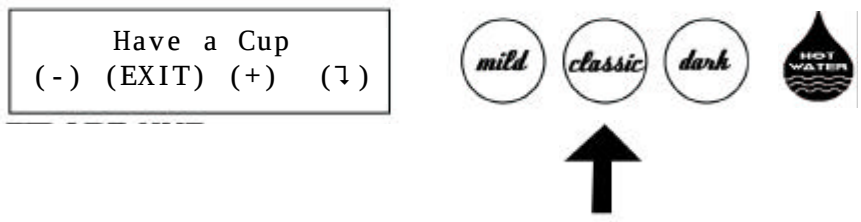


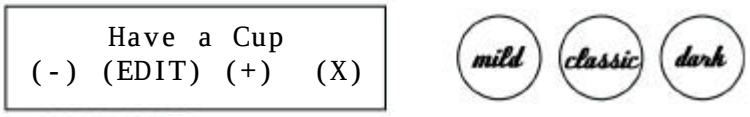
4. Upper casing is accomplished by pressing the "**Hot Water**" button while curser is on that letter. Once the "Classic" button is pressed it will move to the next letter

Continue to press and hold the "Hot Water" button to stay in "ALL CAPS" mode.



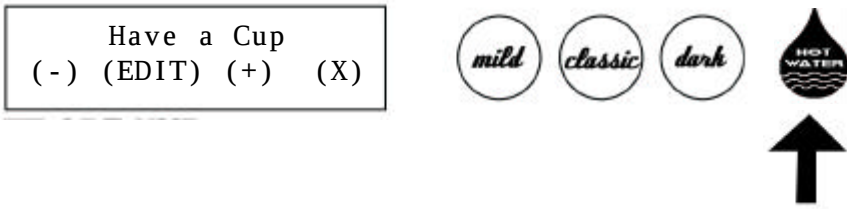
5. When the text is completed, continue to press the "**Classic**" button until (EXIT) is displayed. Press the "**Classic**" button one more time to complete the task and exit out of **Text Editing**.





NOTE: The word (EXIT) will default back to (EDIT) once the "**Classic**" button is pressed on (EXIT)

To exit out of calibration mode, press the "**Hot Water**" button.



Helpful hints:

Change "Smart Cup" to any text you choose.

To make a correction press the classic (next) button and scroll through the characters to start over at the beginning. There is no backspace feature.

Decrease z-a | Next letter | Increase a-z

After the number "9" and before the letter "a" is the blank space selection.

Side Car Programming:

Hold the Side Car start button in and power up the brewer until Temperature is displayed on the LCD screen. Release the start button. To scroll through the different parameters press the Mild button to scroll down or the Dark button to scroll up. There are four different programmable parameters:

Side Car Programming Parameters

- Temperature Setting: Maximum 205 degrees Fahrenheit/Minimum 170 degrees Fahrenheit.
- Volume Setting: Maximum 150 ounces/Minimum 10 ounces.
- Brew Time Setting: Maximum 15 minutes/Minimum based on Pump Speed, Volume, & Calibration.
- Drain Time Setting: Maximum 4 minutes/Minimum 30 seconds.

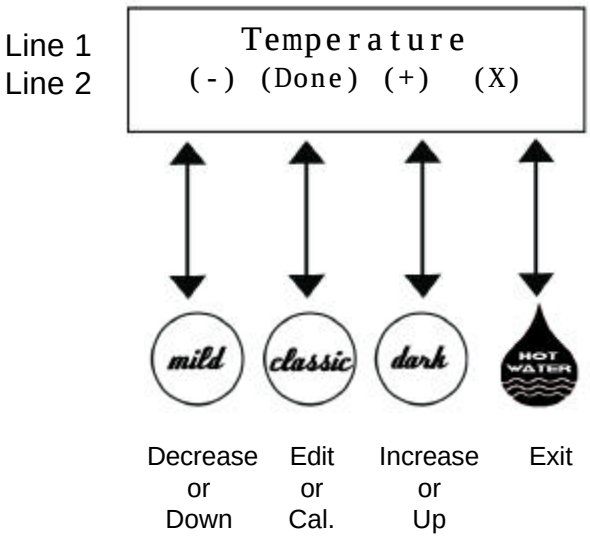
(Note: The brewing process can be aborted at anytime by pressing the Side Car start button a second time.)

Interpreting The Display:

The LCD has two lines of information. First Line is the programming function. Second line is the programming interface. Each symbol or word has a corresponding button to interact to that specific step and they are:

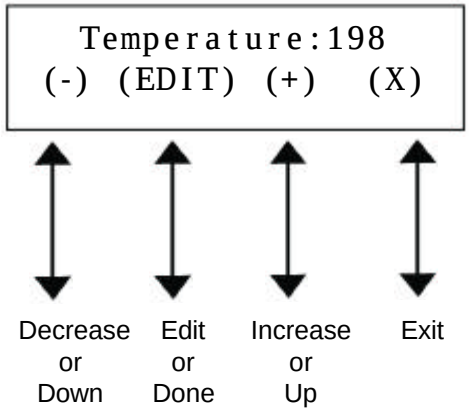
Example:
Line 1 = Temperature
Line 2 = Programming buttons

Push **Mild** Button to decrease temperature
Push **Classic** Button to edit temperature
Push **Dark** Button to increase temperature
Puch **Hot Water** Button to exit



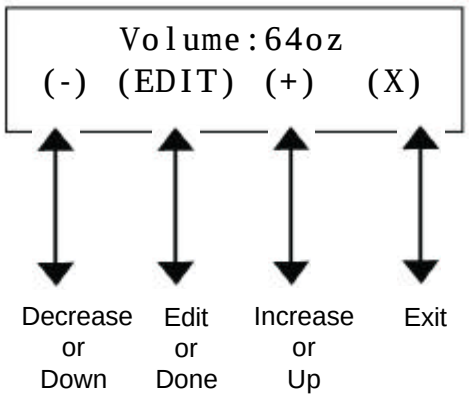
Temperature Setting: Press the Classic **(Edit)** button. Enter the desired temperature by pressing the **Dark** (+) button to increase the temperature setting or press the **Mild** (-) button to decrease the temperature setting. Press the Classic **(Done)** button to "set" the temperature and move on to the next prompt.

Temperature Setting:
Maximum 205 degrees Fahrenheit
Minimum 170 degrees Fahrenheit



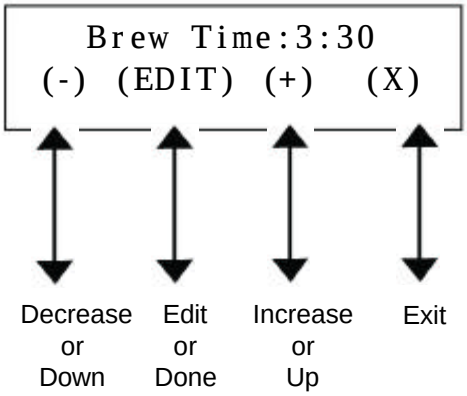
Volume Setting: Press the Classic **(Edit)** button. Enter the desired volume by pressing the **Dark** (+) button to increase the volume setting or press the **Mild** (-) button to decrease the volume setting. Press the Classic **(Done)** button to "set" the volume and move on to the next prompt.

Volume Setting:
Maximum 150 ounces
Minimum 10 ounces



Brew Time Setting: Press the Classic **(Edit)** button. Enter the desired brew time by pressing the **Dark** (+) button to increase the time setting or press the **Mild** (-) button to decrease the brew time setting. Press the Classic **(Done)** button to "set" the brew time and move on to the next prompt.

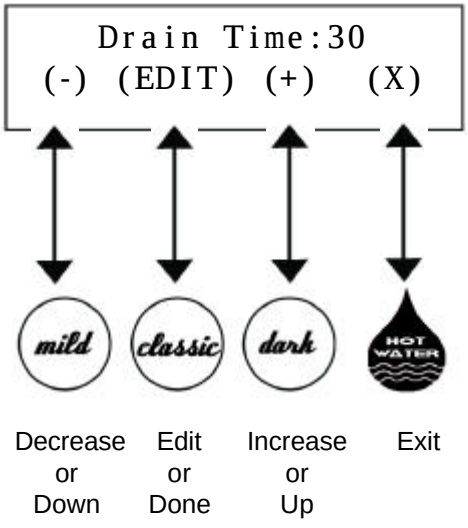
Brew Time Setting:
Maximum 15 minutes
Minimum based on Pump Speed, Volume, & Calibration.



Drain Time Setting: Press the Classic **(Edit**) button. Enter the desired drain time by pressing the **Dark** (+) button to increase the drain time setting or press the **Mild** (-) button to decrease the drain time setting. Press the Classic **(Done)** button to "set" the drain time. Press the **Hot Water** (X) button to exit Side Car programming.

Drain Time Setting:
Maximum 4 minutes
Minimum 30 seconds.

Note: The total of the Brew Time and Drain Time (combined) will be displayed during the Side Car brewing process. Example: Brew Time: 2 minutes 45 seconds + Drain Time: 30 seconds = 3 minutes 15 seconds total brewing time.

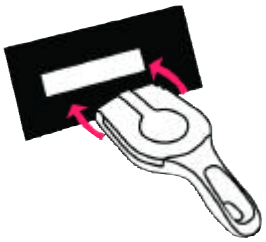


POD Holder Programming

Hold the **Mild** button in and power up the brewer until **"Insert Pod Holder"** is displayed on the LCD screen. Release the **Mild** button. Insert the pod holder and select the strength button you would like to change. To scroll through the different parameters press the **Mild** button to scroll down or the **Dark** button to scroll up. There are five different programmable parameters:

- Text Editing.
- POD Holder Identifier: Coffee or Tea.
- Temperature Setting: Maximum 205 degrees Fahrenheit/Minimum 170 degrees Fahrenheit.
- Volume Setting: Maximum 25 ounces/Minimum 4 ounces.
- Brew Time Setting: Maximum 4 minutes/Minimum based on Volume and Calibration.

Insert the desired POD Holder

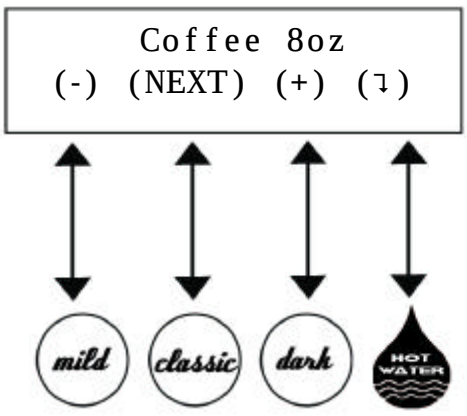


Strength Selection: Select one of brewing profile buttons Mild, Classic, or Dark. Once the selection is made the program will immediately prompt to the next parameter, which is Text Editing. Hint: It would be advisable to write down the strength selection so that confusion does not set in as to the one being modified.

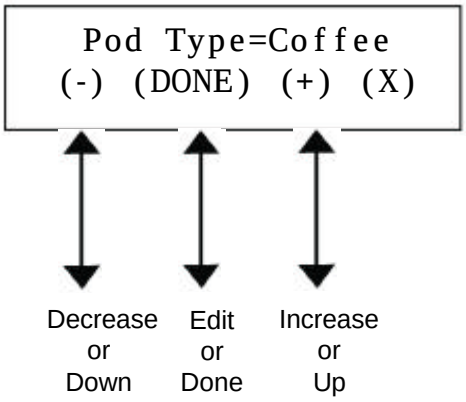
Select the strength you want to program and write it down.

Text Editing: If the display is blank there will be a flashing icon to begin adding text to the LCD display. To enter letters/numbers press the **Classic (Edit)** button. Use the **Mild** (-) or the **Dark** (+) to scroll through the alphabet & numbers 0 thru 9. Upper casing is accomplished by pressing the Hot Water button and the Classic **(Next)** button at the same time. When the two buttons are pressed simultaneously the flashing icon will move to the next letter/number position leaving the last letter in upper casing. *(Note: There are hidden symbols located in the numbers 0 thru 9. To access them, simply push the Hot Water button shifting between the number and symbol.)* Repeat the process again by using the **Mild** (-) or **Dark** (+) buttons to select the desired letters/numbers and then press the **Classic (Next)** button to continue the preferred text. When the text is finally entered continue to push the **Classic (Next)** button until it exits out to the next parameter, which is Temperature setting.

Note: If you change the text setting of "8oz" to "6oz" you must also change the Brew Volume to match.

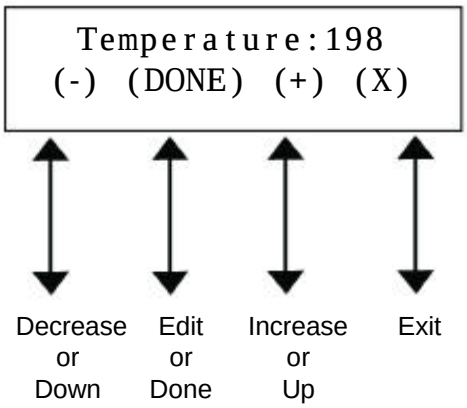


POD Holder Identifier: Press the **Classic (Edit)** button. Enter the desired POD Holder description (Coffee or Tea) by pressing the **Dark (+)** button or **Mild (-)** button to toggle between Coffee and Tea. Press the **Classic (Done)** button to "set" the POD Holder description and move on to the next perameter.



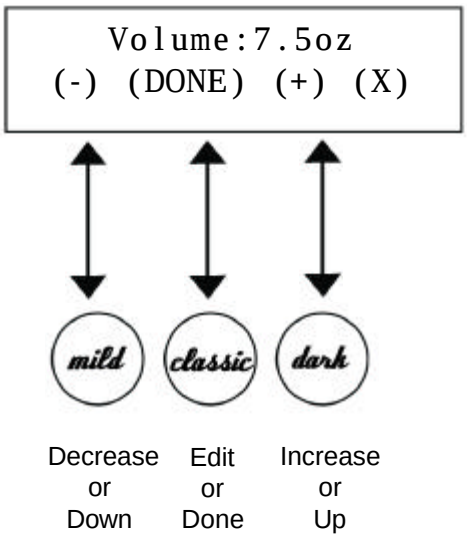
Temperature Setting: Press the **Classic (Edit)** button. Enter the desired temperature by pressing the **Dark (+)** button to increase the temperature setting or press the **Mild (-)** button to decrease the temperature setting. Press the **Classic (Done)** button to "set" the temperature and move on to the next parameter.

Temperature Setting:
Maximum 205 degrees Fahrenheit
Minimum 170 degrees Fahrenheit

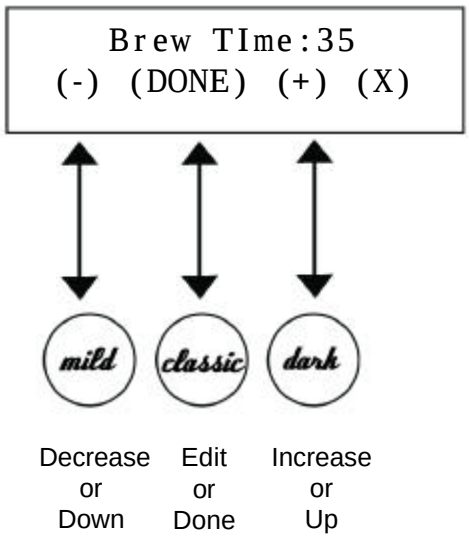


Volume Setting: Press the **Classic (Edit)** button. Enter the desired volume by pressing the **Dark (+)** button to increase the volume setting or press the **Mild (-)** button to decrease the volume setting. Press the **Classic (Done)** button to "set" the volume and move on to the next parameter.

Volume Setting:
Maximum 25 ounces
Minimum 4 ounces.



<u>Brew Time Setting:</u> Press the **Classic (Edit)** button. Enter the desired brew time by pressing the **Dark (+)** button to increase the time setting or press the **Mild (-)** button to decrease the brew time setting. Press the **Classic (Done)** button to "set" the brew time and move on to the next parameter.



Brew Time Setting:
Maximum 4 minutes
Minimum based on Volume and Calibration.

Note: For coffee Pods 8 seconds is added automatically for purging of the POD Holder by the air valve, and 5 seconds for Tea. Another 4 seconds is added for both Tea and Coffee pods for pre-infusion

Coffee Pods have 12 seconds added
Tea Pods have 9 seconds added

To exit out of the program press the Hot Water (X) button. Now the brewer is ready to operate.

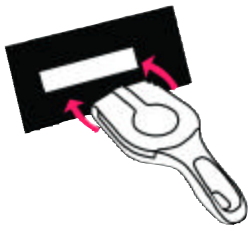
Draining the Tank and Heat Exchanger: SMART CUP Brewing System

Tank and Heat Exchanger: The water line from the water source must be disconnected, but leave the water line attached to the brewer inlet fitting for draining. Place the line either in a drain or container and proceed with the draining procedure. Place any POD holder in the brew chamber but do not push it all the way in. With the power switch on the back of the brewer off, Press the **Dark** button on the faceplate, and power up the brewer. Do not release the **Dark** button until the display scrolls to **" Insert POD Holder."** Release the Dark button. Push the POD holder all the way in immediately or the function will default back to its original setting. The display will read "**Please Select (Fill) (Drain) (X)**" press the **Classic** button to drain the heat exchanger.

CAUTION: Hot Water will drain from the water line that is extremely hot! It is recommended to use a flexible hose with fittings to drain the heat exchange. (During the draining process the tank element is automatically turned off by default.)

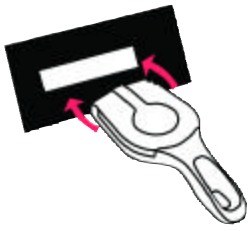
1. Disconnect water line from inlet source.

2. Insert any POD holder but don't push it all the way in

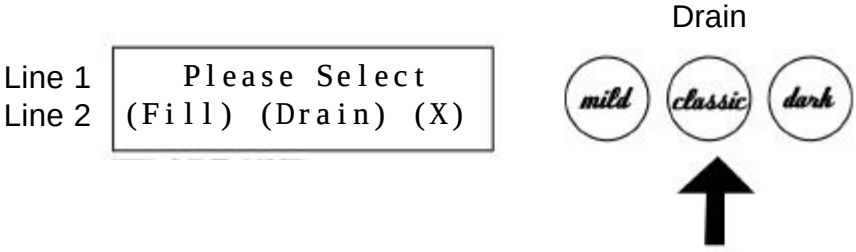


3. Press the **Dark** buttonon the faceplate, and power up the brewer. Do not release the Dark button until the display scrolls to **" Insert POD Holder."** Release the Dark button.

4. Push the POD holder all the way in immediately



5. Press **Classic** button to drain the tank and heat exchanger



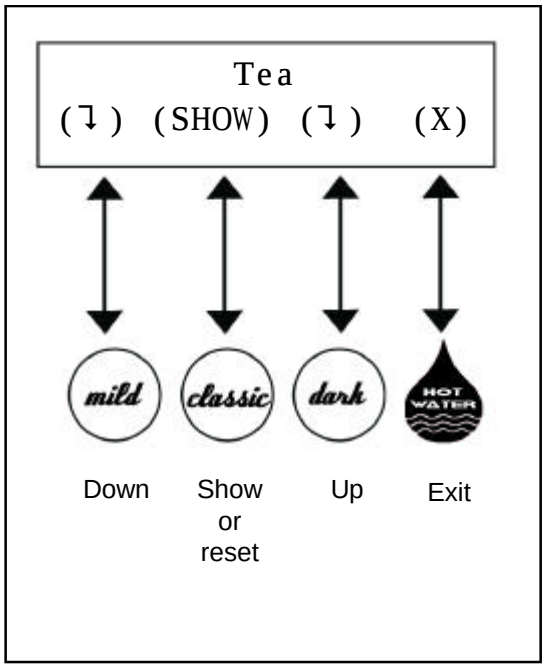
The Sales Management System program is a feature that allows the vendor to monitor the product usage. In this case, up to 15 POD Holders can be monitored identifying each POD Holder by name, and count. Also the program will store the Total Number of PODS used, from the 15 different Holders, along with a Master Accumulative Total of PODS. Each individual POD Holder and the Total Number POD count can be reset, but the Master Accumulative Total count cannot. When an individual POD Holder count is reset, it does not affect the Total Number of POD count until it is reset by itself. How to use programming feature:

1. Press the **Classic** button and power up the brewer until the display shows "Tea 8 oz." Release the **Classic** button. The LCD display will show the POD Holder name on the first line. The second line will display (-) = Scroll Down is the **Mild** button, Show/Reset is the **Classic** button, (+) = Scroll Up is the **Dark** button, and X = Exit is the **Hot Water** button.

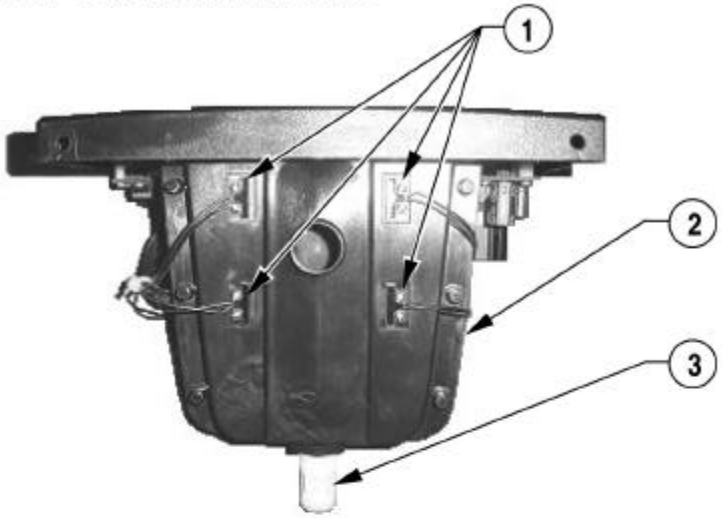
2. To Show or Reset the count of a particular POD Holder press the **Classic** button, which goes into the Show count mode. Press the **Classic** a second time (Reset) to clear the count or the **Dark / Mild** buttons to scroll up or down to the next POD Holder without changing the POD holder count. Note: When any of the buttons are pressed - in the show mode - it will automatically prompt to next POD Holder, Total Number of PODs, or Master Accumulative Number of PODS.

3. The Total Number of PODS can be reset, however the Master Accumulative Number cannot be unless the motherboard is replaced.

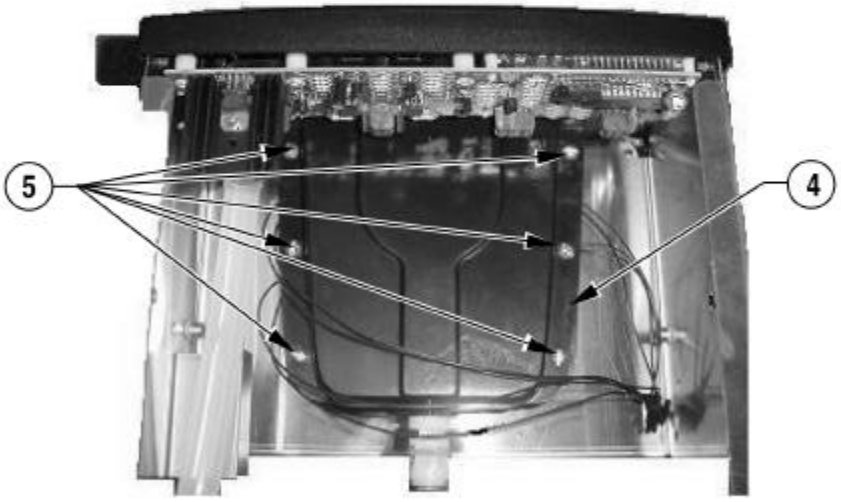
4. To exit out of the program press the **Hot Water** (X) button.



HOUSING ASSEMBLY - Part Number 773038

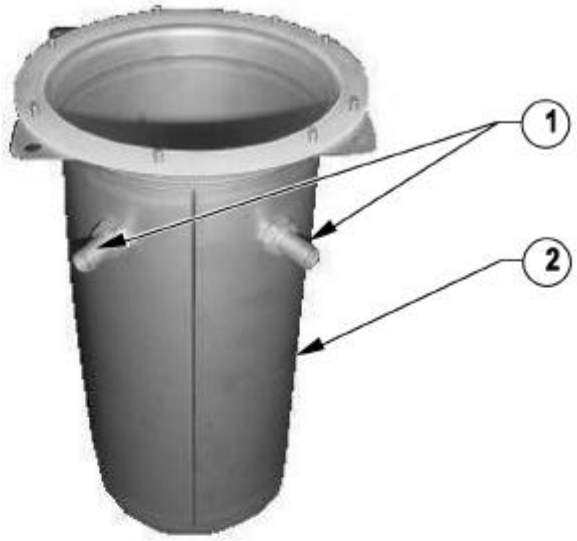


Item #	Part #	Description
1	773044	#2 Magnet Sensor Screw
2	773040	Housing Bottom
3	773042	Fitting With "O" Ring

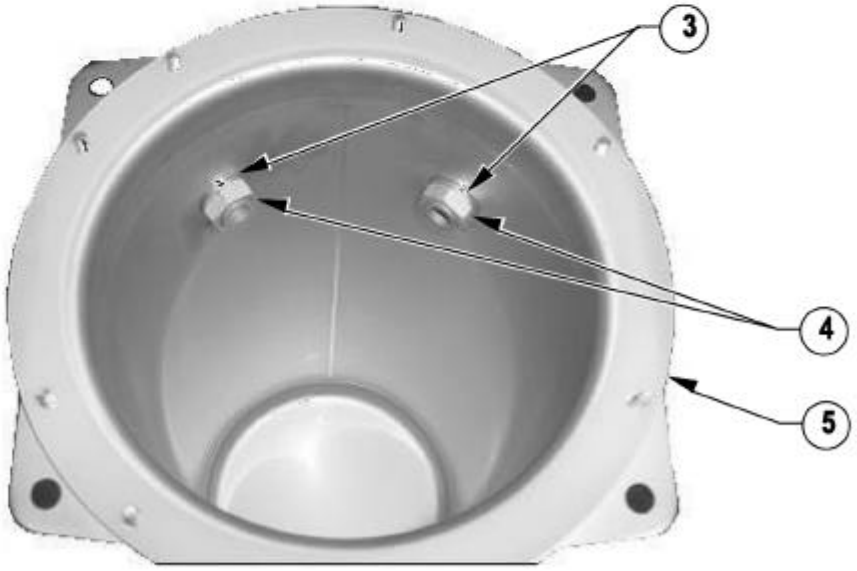


Item #	Part #	Description
4	773039	Housing Top
5	773041	#8 Screw Housing
6	773041	Screw (housing to faceplate, not shown)

TANK ASSEMBLY - Part Number 773069

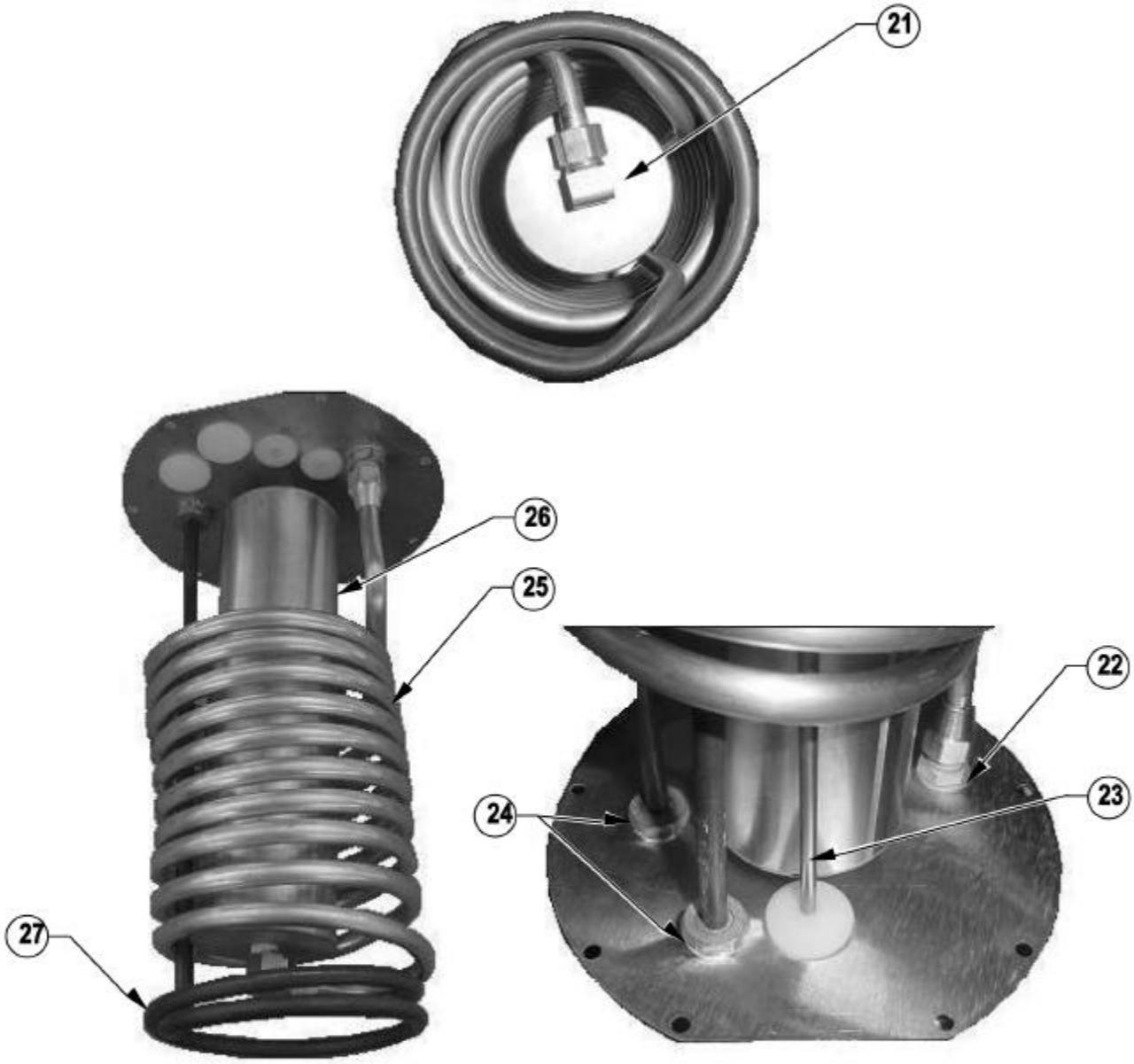


Item #	Part #	Description
1	102835	Bulkhead Fitting
2	773070	Tank Pod



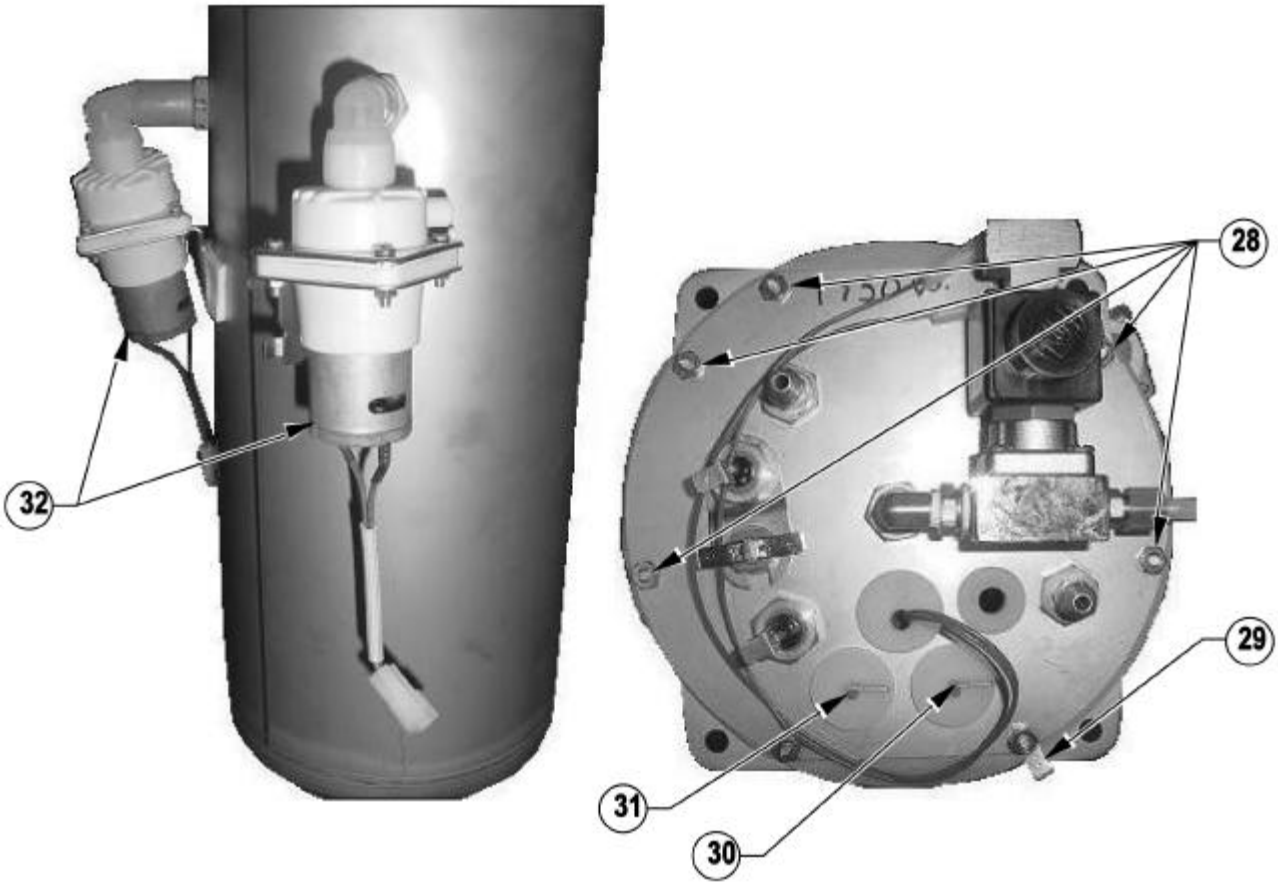
Item #	Part #	Description
3	100030	Gasket .566 ID
4	100431	9/16-24 Nut
5	704221	Tank Gasket

TANK ASSEMBLY (Continued)
Lid Assembly - Part Number 773071



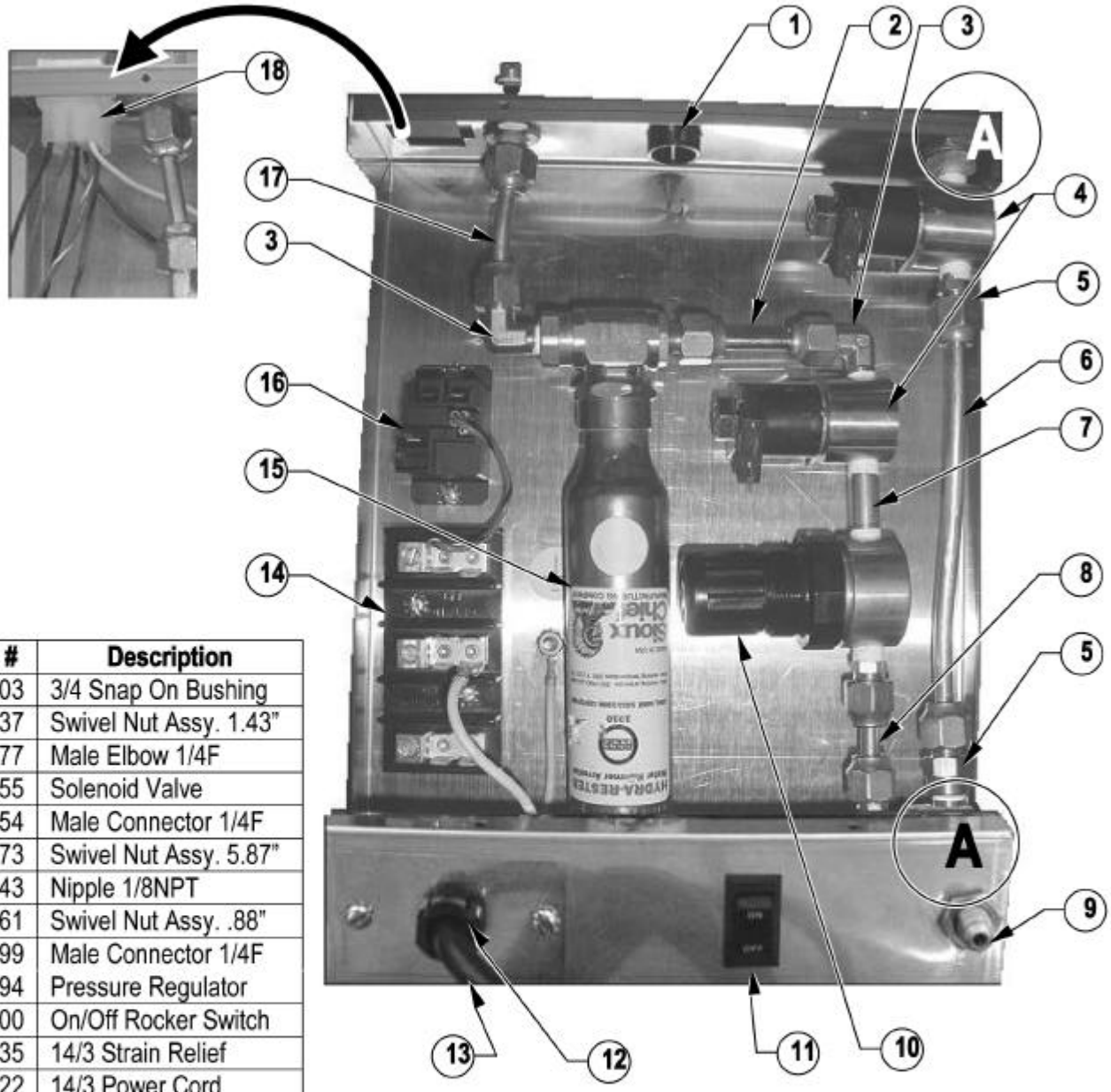
Item #	Part #	Description
21	773130	Male Elbow 3/8C
22	100030	.566ID Gasket
23	151800	Thermistor
24	100409	.520 ID Gasket
25	773073	Coil Assy.
26	773046	Heat Exchange
27	202025-10	Element 1750W

TANK ASSEMBLY - Continued
Lid Assembly: Part Number 773071

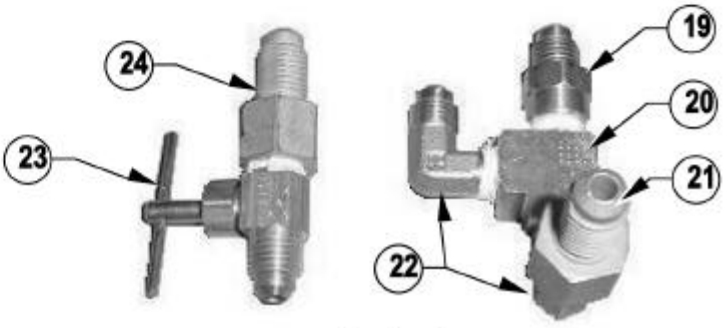


Item #	Part #	Description
28	100061	8-32 Hex Nut S/S
29	110767	Ring Tab
30	773185	Probe 1.0"
31	102801	Probe 1.437"
32	781690	Water Pump W/Elbow

COMPONENT PANEL - Part Number 773075



Item #	Part #	Description
1	100003	3/4 Snap On Bushing
2	705337	Swivel Nut Assy. 1.43"
3	100177	Male Elbow 1/4F
4	100255	Solenoid Valve
5	100154	Male Connector 1/4F
6	773173	Swivel Nut Assy. 5.87"
7	800043	Nipple 1/8NPT
8	100161	Swivel Nut Assy. .88"
9	110299	Male Connector 1/4F
10	773194	Pressure Regulator
11	100500	On/Off Rocker Switch
12	101035	14/3 Strain Relief
13	100022	14/3 Power Cord
14	511053	Terminal Block 240V
15	773133	Hydra – Arrestor
16	110958	Relay 12V DC
17	773174	Swivel Nut Assy. 1.87"
18	773148	9 Pin Harness
19	100152	Female Connector 1/4F
20	767105	Street Tee 1/8NPT
21	110299	Male Connector 1/4F
22	701482	Male Elbow1/8 Pipe
23	767115	Needle Valve 1/4F
24	110299	Male Connector 1/4F



Parts A

MISCELLANEOUS PARTS

Item #	Part #	Description
1	773068	Plastic Face Plate
2	773057	Face Plate Label
3	106017	Faucet Assy.
4	111445	1.9L Thermal Server
5	773126	Control Board
6	110985	Brew Basket Black