

# **BUNN®**

## ***TITAN DUAL™***

## ***TITAN SINGLE™***



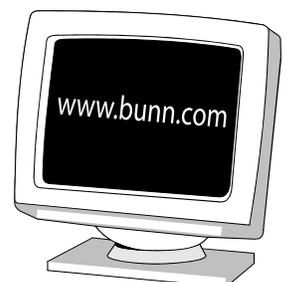
## **PROGRAMMING MANUAL**

**BUNN-O-MATIC CORPORATION**

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## **BUNN-O-MATIC COMMERCIAL PRODUCT WARRANTY**

Bunn-O-Matic Corp. ("BUNN") warrants equipment manufactured by it as follows:

- 1) Airpots, thermal carafes, decanters, GPR servers, iced tea/coffee dispensers, MCP/MCA pod brewers thermal servers and ThermoFresh servers (mechanical and digital)- 1 year parts and 1 year labor.
- 2) All other equipment - 2 years parts and 1 year labor plus added warranties as specified below:
  - a) Electronic circuit and/or control boards - parts and labor for 3 years.
  - b) Compressors on refrigeration equipment - 5 years parts and 1 year labor.
  - c) Grinding burrs on coffee grinding equipment to grind coffee to meet original factory screen sieve analysis - parts and labor for 4 years or 40,000 pounds of coffee, whichever comes first.

These warranty periods run from the date of installation BUNN 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 BUNN or that, in BUNN's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, non periodic cleaning and descaling, equipment failures related to poor water quality, damage or casualty. In addition, the warranty does not apply to replacement of items subject to normal use including but not limited to user replaceable parts such as seals and gaskets. This warranty is conditioned on the Buyer 1) giving BUNN prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois 62708-3227; 2) if requested by BUNN, shipping the defective equipment prepaid to an authorized BUNN service location; and 3) receiving prior authorization from BUNN 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 BUNN are not authorized to make modifications to this warranty or to make additional warranties that are binding on BUNN. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

If BUNN determines in its sole discretion that the equipment does not conform to the warranty, BUNN, 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 BUNN Authorized Service Representative; or 2) shall replace the equipment or refund the purchase price for the equipment.

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

In no event shall BUNN 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.

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## GLOSSARY

**BREW LOCKOUT:** The inability to initiate a brew if the water temperature is less than the ready temperature programmed into the brewer.

**BREW METER:** The setting of a pulse brew routine by entering in the total desired water delivery time. The brewer will then calculate and perform a pulse brew routine using a predetermined formula.

**BYPASS:** The process of diverting a portion of the brew water to the outside of the paper filter so that it does not pass through the coffee grounds. This process is sometimes used to optimize the flavor of the finished brew.

**DRIP TIME:** The length of time from when the water spray over the grounds ends to the time when no water or product drips from the funnel tip.

**ENERGY SAVINGS MODE:** If enabled, the heaters will either shut down or reduce the tank holding temperature to 140°F (60°C) after the set idle time.

**FACTORY DEFAULTS:** The factory preset brew settings that were installed into the brewer's memory.

**FIRST ON-TIME:** During a pulse brew, this is the time set for the initial flow of water over the grounds.

**FRESHNESS TIMER:** If enabled, the brewer will display an alert if a new coffee batch has not been brewed before the set time has expired.

**FUNNEL LOCK:** A solenoid controlled plunger locking mechanism which engages when a brew cycle has begun preventing the removal of the funnel until end of Drip Time.

**FUNNEL SENSING COIL:** A sensor at the front of the brewer that reads what name and batch size of coffee was ground into the funnel and allows for the brewer to automatically set itself to what is read from the funnel handle. Also used to read in recipe and ad card information.

**IDLE TIME (ENERGY SAVINGS MODE):** If ENERGY SAVINGS Mode is enabled, the length of time the brewer is inactive before the heaters turn off or hold at 140°F (60°C).

**LAST ON-TIME:** During a pulse brew, this is the time set for the second on-time and each alternative on-time for the remainder of the brew.

**MAIN SCREEN:** The term used to describe the screen that is displayed when the brewer is not in use. This screen is also displayed after exiting the programming mode.

**MANUAL PULSE BREW SETUP:** The setting of a pulse brew routine by manually entering in the 1<sup>st</sup> on time, off time and last on time.

**SET TEMP:** The temperature at which the tank will heat to and hold.

**OFF-TIME:** During a pulse brew or preinfusion, this is the time set for the length of time that the water is not spraying over the grounds.

**PREINFUSION:** The process of beginning a brewing cycle with an initial spray of water onto the grounds followed by a pause in the spray. After the programmed pause, the spray continues without interruption until the end of the brewing cycle.

**PULSE BREW:** The process that allows the brew water to start, and then stop, repeatedly over the grounds in order to derive the best flavor from the coffee. Pulse brew is also used in some instances to prevent a funnel overflow.

**CLEAN MODE:** If enabled, the brewer will display a message after a set amount of time indicating the machine needs cleaning and sanitizing.

**WARNING TIME (FRESHNESS TIMER):** If the Freshness Timer is enabled, the length of time from when the brew was completed until a "Freshness Alert" message will display, communicating that a fresh batch of product needs to be brewed.

## VIEWING ASSET & SERIAL NUMBER

1. To view the asset number of the machine, press and hold the left hidden switch until the display reads: **ANXXXXXX...ASSET NUMBER**. Release the left hidden switch.
2. After a 5 second delay, the display will read: **DTNXXXXXX**. This is the serial number of the machine.

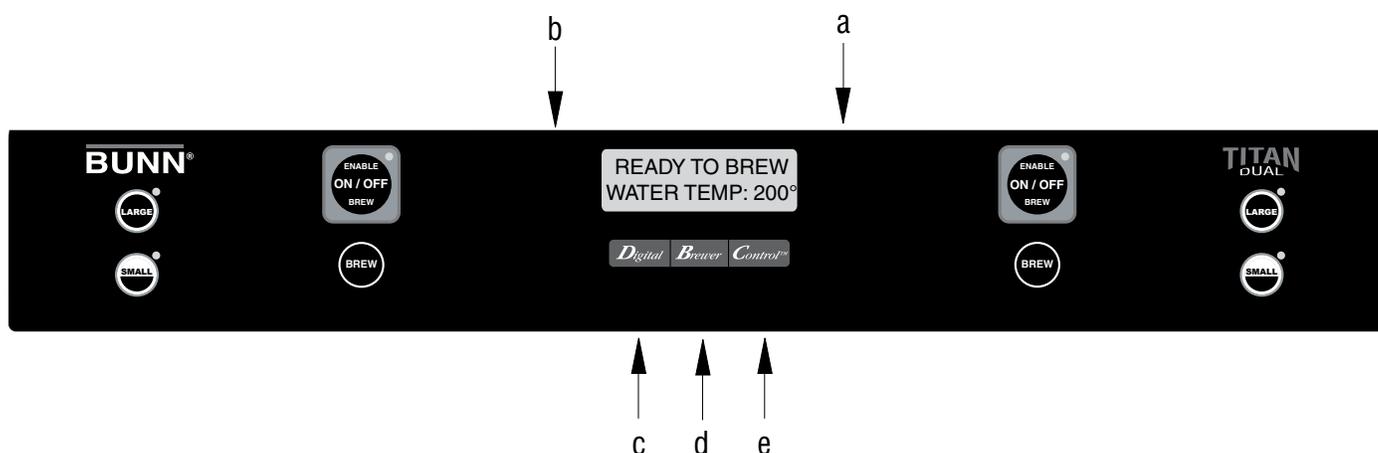
## PROGRAMMING

Using the menu-driven display on the front of the brewer, the operator has the ability to alter or modify various brewing parameters such as brew temperatures, brew volumes, bypass percentages, pulse brew, etc. This allows for the precise brewing of various flavors of coffee.

Programming of the brewer is achieved by entering a certain function. Then, by the use of the hidden programming and function switches, the operator can customize the brewing process to their specifications.

## PROGRAMMING SWITCHES

To access the programming mode, and to scroll through the different function screens, hidden programming switches are used. There are five of these switches that will be used for the setup of the brewer.



- a) Right Programming (hidden) switch** (just to the right of the display): This is used to access the programming mode, and is also used to scroll forward through the function list.
- b) Left Programming (hidden) switch** (just to the left of the display): This is used to scroll backwards through the function list.
- c) Digital:** This is used to select options that appear on the display during programming.
- d) Brewer:** This is used to select options that appear on the display during programming.
- e) Control:** This is used to select options that appear on the display during programming.

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# PROGRAMMING THE BREWER

The programming of the brewer is divided into two levels. There is one function in Level 1. All other functions are accessed in Level 2.

The following function screens are in order of appearance. Each screen will have instructions on how to access and the procedures for programming the various functions of the brewer.

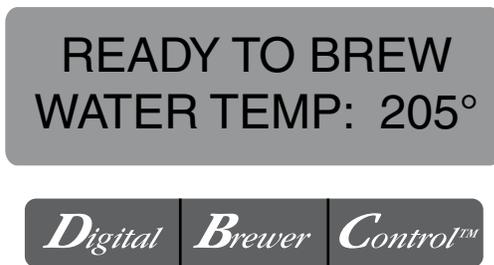
## IMPORTANT PROGRAMMING NOTES - READ CAREFULLY -

To exit the programming mode at any time, press and release the ON/OFF switch (either on DUAL brewers) located on the front switch panel. The display will return to the **MAIN SCREEN**.

If none of the five programming switches are pressed within one minute during the setup of the brewer, the programming of the function screen that is being set will be exited and the display will return to the **MAIN SCREEN**.

Always remember to place a container and funnel under the sprayhead when operating the brewer during the set-up of **CALIBRATE FLOW**, and testing the brew and bypass valves in **SERVICE TOOLS/TEST OUTPUTS**.

### MAIN SCREEN

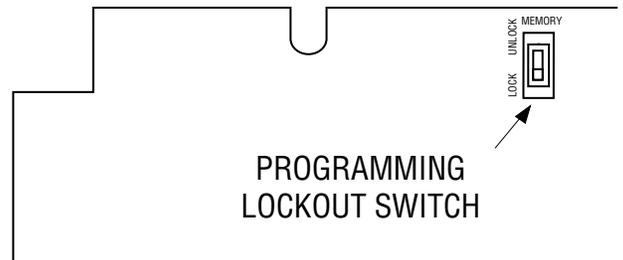


P2426

This screen will be shown when the brewer is ready for use. The screen displays the water temperature in the tank. When the water in the tank reaches the correct set temperature, the display will change from **HEATING** to **READY TO BREW**.

### PROGRAMMING LOCKOUT SWITCH (located on the main circuit board).

This switch can be set to prevent access to the programming settings of the brewer. Once all the correct brew settings are programmed, the operator can set the switch to the "ON" position to prohibit anyone from changing the settings. With the switch in the "ON" position, the programming menus can still be accessed to view the current settings. However, no changes will be saved.



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# PROGRAMMING THE BREWER (cont.)

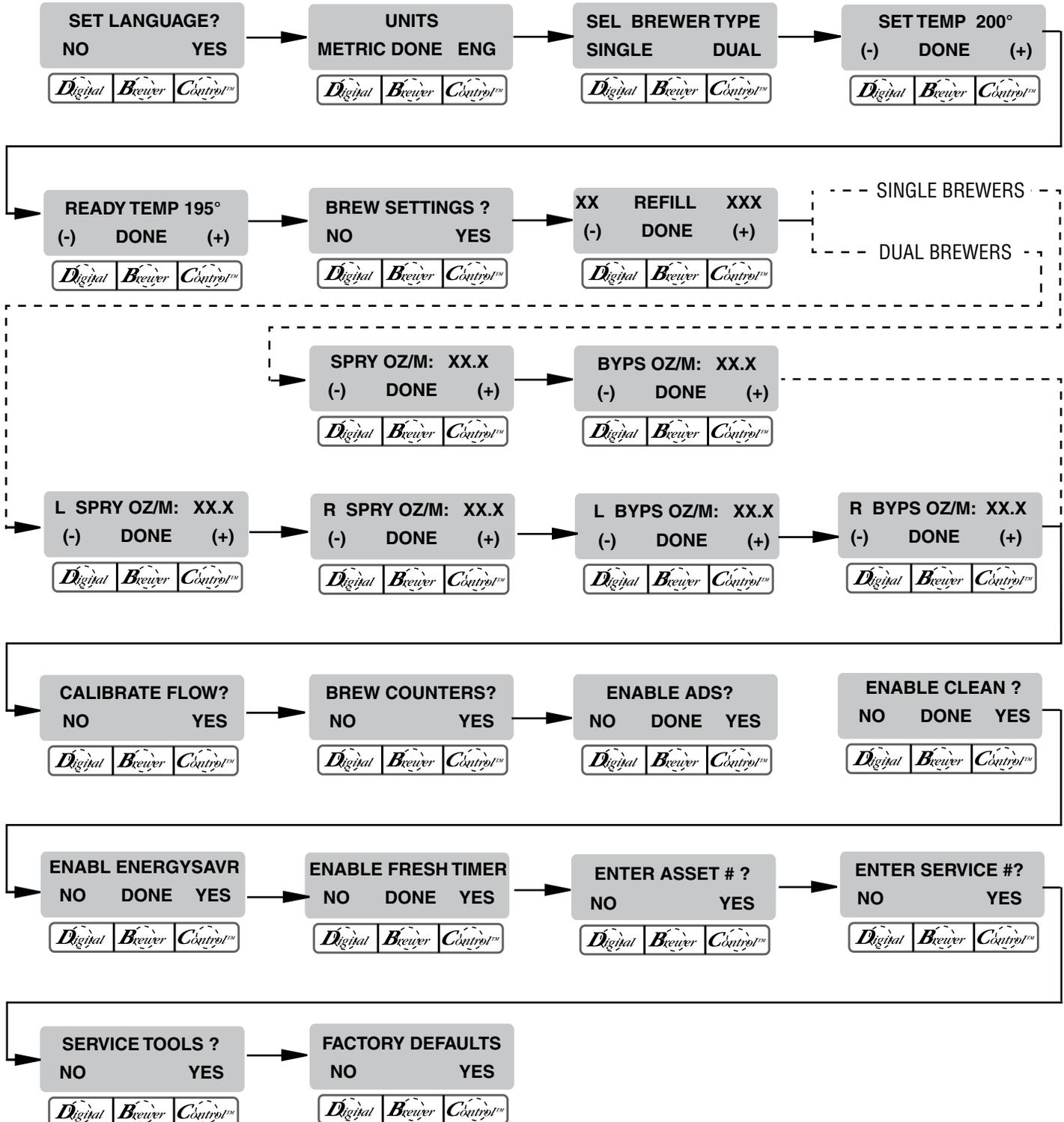
## PROGRAMMING FUNCTIONS - FLOW CHART

### PROGRAMMING FUNCTIONS - LEVEL 1

**BREW LOCKOUT?**  
NO DONE YES

*Digital Brewer Control™*

### PROGRAMMING FUNCTIONS - LEVEL 2



## PROGRAMMING THE BREWER (cont.)

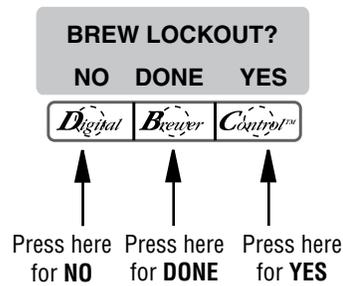
### PROGRAMMING FUNCTIONS - LEVEL I

#### BREW LOCKOUT

This function allows the operator to prevent or allow brewing if the water temperature is less than the set **READY** temperature.

#### Procedure for setting Brew Lockout:

1. To access this function screen press and hold the right hidden switch. Release when the display reads:



2. The **YES** or **NO** should be flashing. Select **YES** to prevent brewing if the water temperature is below the set **READY** temperature. Select **NO** to permit brewing at any water temperature.
3. When finished, press and release **DONE**. This will exit this function screen and return to the **MAIN SCREEN** on the display.

## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

The functions in the second level of programming allow the operator to adjust brew settings and other feature options.

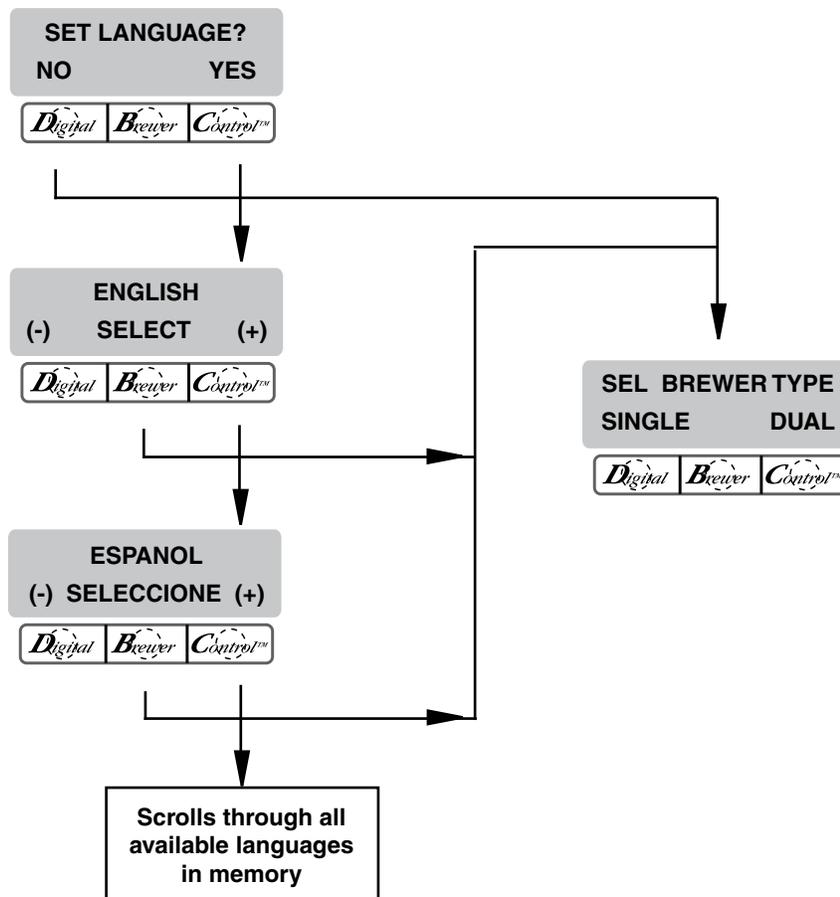
To access the level 2 function screens press and hold the right hidden switch for approximately 5 seconds. Release when the display reads:

#### SET LANGUAGE

This function allows the operator to select the language used for the display.

#### Procedure for setting Language:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE?** and release.
2. Press **YES** to proceed. The display should now read **ENGLISH**. Using **(-)** and **(+)**, scroll through the available languages until the desired language is shown on the display.
3. When finished, press **SELECT**. If the language selected is different from the current settings, the display will read **CHANGE LANGUAGE? ARE YOU SURE?** and then will change to **CHANGE LANGUAGE?** To convert the display to the new language, press **YES**. To retain the current language, press **NO**.
4. The display should now read **SEL BREWER TYPE**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch (either on DUAL brewers).



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### SEL BREWER TYPE

This function allows the operator to select which brewer model this software is installed in.

##### Procedure for setting the Brewer Type:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE?** Press and release the right hidden switch until the display reads **SEL BREWER TYPE**. **SINGLE** or **DUAL** should be flashing.

2. Select the desired brewer type

**NOTE:** Changing the **BREWER TYPE** will restore ALL settings to Factory Default.

3. When done, press right hidden switch to advance to the next programming screen. To exit programming and return to the Main Screen, press and release the ON/OFF switch (either on DUAL brewers).



#### UNITS

This function allows the operator to select if numeric settings are displayed in English or Metric units.

##### Procedure for setting the Units:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE?** Press and release the right hidden switch until the display reads **UNITS**. The **METRIC** or **ENG** should be flashing.

2. Select **METRIC** to have settings displayed in Metric units. Select **ENG** to have setting displayed in English units.

**NOTE:** Changing the **UNIT** settings will restore ALL settings to Factory Default.

3. When done, press **DONE** to advance to the next programming screen. To exit programming and return to the Main Screen, press and release the ON/OFF switch (either on DUAL brewers).

NOTE: This manual is written based on Factory Default Settings (English Units). If brewer is set for Metric Units, displays will be different (ex: Brew oz will become Brew ml).



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

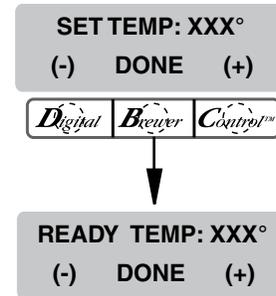
#### SET TEMP

This function allows the operator to adjust the brew water temperature in the tank. This also sets the hot water faucet dispense temperature.

#### Procedure for setting the Set Temp

**Range: 185° to 205° F (85° - 96° C)**

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press and release the right hidden switch until the display reads **SET TEMP: XXX°**.
2. Using **(-)** and **(+)**, adjust the brew and faucet temperature.
3. When finished, press **DONE** to save the new setting and to advance to the next function screen, **READY TEMP: XXX°**. Press and release the ON/OFF switch (either on DUAL brewers) to exit programming and return to the **MAIN SCREEN**.



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

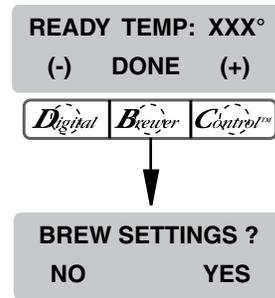
#### READY TEMP

This function allows the operator to set the minimum temperature allowable to start a brew cycle. The range can be from 2° to 20° F within the set temperature. The water must be at the **READY** temperature or higher for the display to indicate **READY TO BREW**. If brew lockout is enabled, the brewing process will not start below this **READY** temperature.

#### Procedure to set ready temperature

Range: 2° to 20° F (2° to 10° C)

1. Press and hold the right hidden switch until display reads **SET LANGUAGE**. Press and release the right hidden switch until display reads **READY TEMP: XXX°**.
2. Using **(-)** and **(+)**, adjust the ready temperature.
3. When finished, press **DONE** to save the new setting and to advance to the next function screen, **BREW SETTINGS ?**. Press and release the ON/OFF switch (either on DUAL brewers) to exit programming and return to the **MAIN SCREEN**.



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

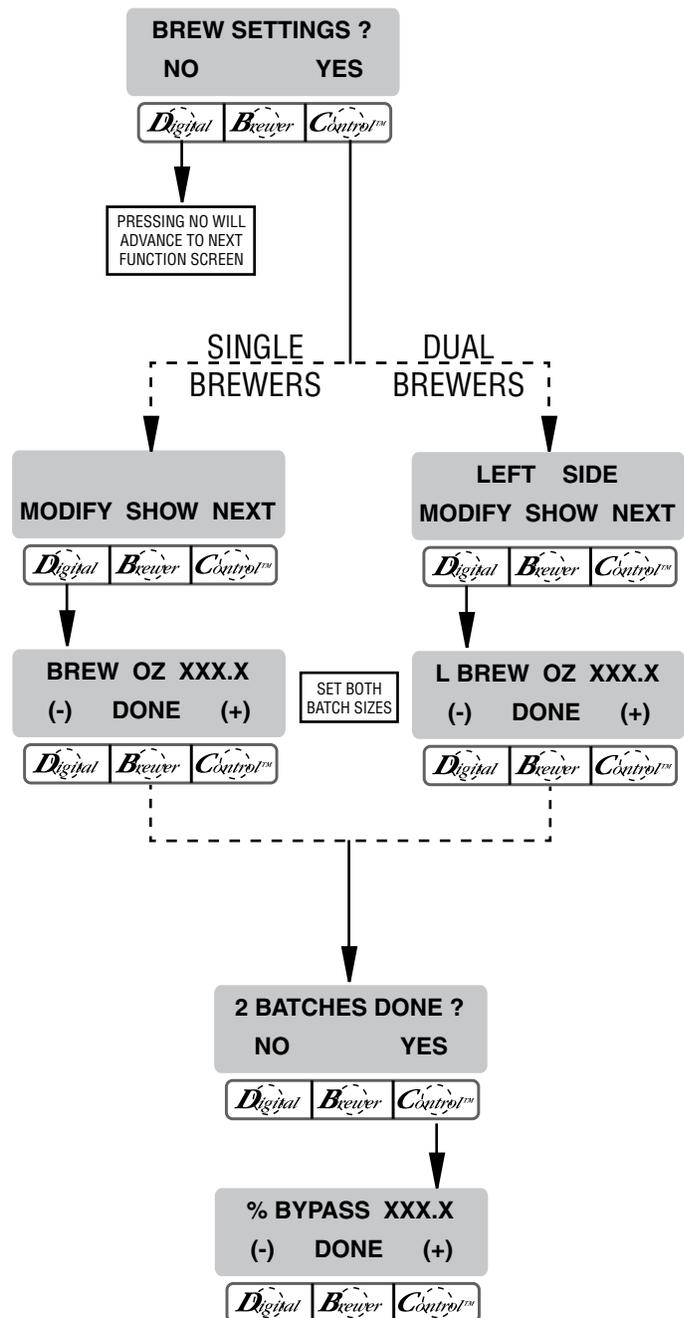
#### BREW SETTINGS

This function allows the operator to modify the **BREW VOLUMES**, **BYPASS PERCENTAGES** and **BREW METER** for each batch size of both brew stations.

#### Procedure to set or modify brew volumes.

Range: 10 to 500 oz.

1. Press and hold the right hidden switch until display reads **SET LANGUAGE**. Press the right hidden switch until display reads **BREW SETTINGS ?**.
2. Press **YES** to proceed. The display should now read:  
**MODIFY SHOW NEXT** (SINGLE Brewers).  
**LEFT SIDE MODIFY SHOW NEXT** (DUAL Brewers).
3. Press and release **MODIFY**. The display should read:  
**BREW OZ XXX.X** and a batch light will be blinking (SINGLE Brewers).  
**L BREW OZ XXX.X** and a batch light will be blinking (DUAL Brewers).
4. Using **(-)** and **(+)**, set the amount of brew water, in ounces, to be dispensed **over** the grounds for that particular batch size.
5. When finished, press the other batch size and repeat step 4.
6. When finished setting both batch sizes, press **DONE**. The display should read **2 BATCH SIZES DONE?**
7. If both batch sizes are not correct, press **NO** to return to:  
**BREW OZ** setup screen and repeat steps 4, 5 and 6 (SINGLE Brewers).  
**L BREW OZ** setup screen and repeat steps 4, 5 and 6 (DUAL Brewers).
8. If both batch sizes are correct, press **YES**. This will advance to the **% BYPASS** function. Another alternative is to press and release the ON/OFF switch (either for DUAL Brewers) to exit the **BREW OZ** setup and return to the **MAIN SCREEN**.



## PROGRAMMING THE BREWER (cont.)

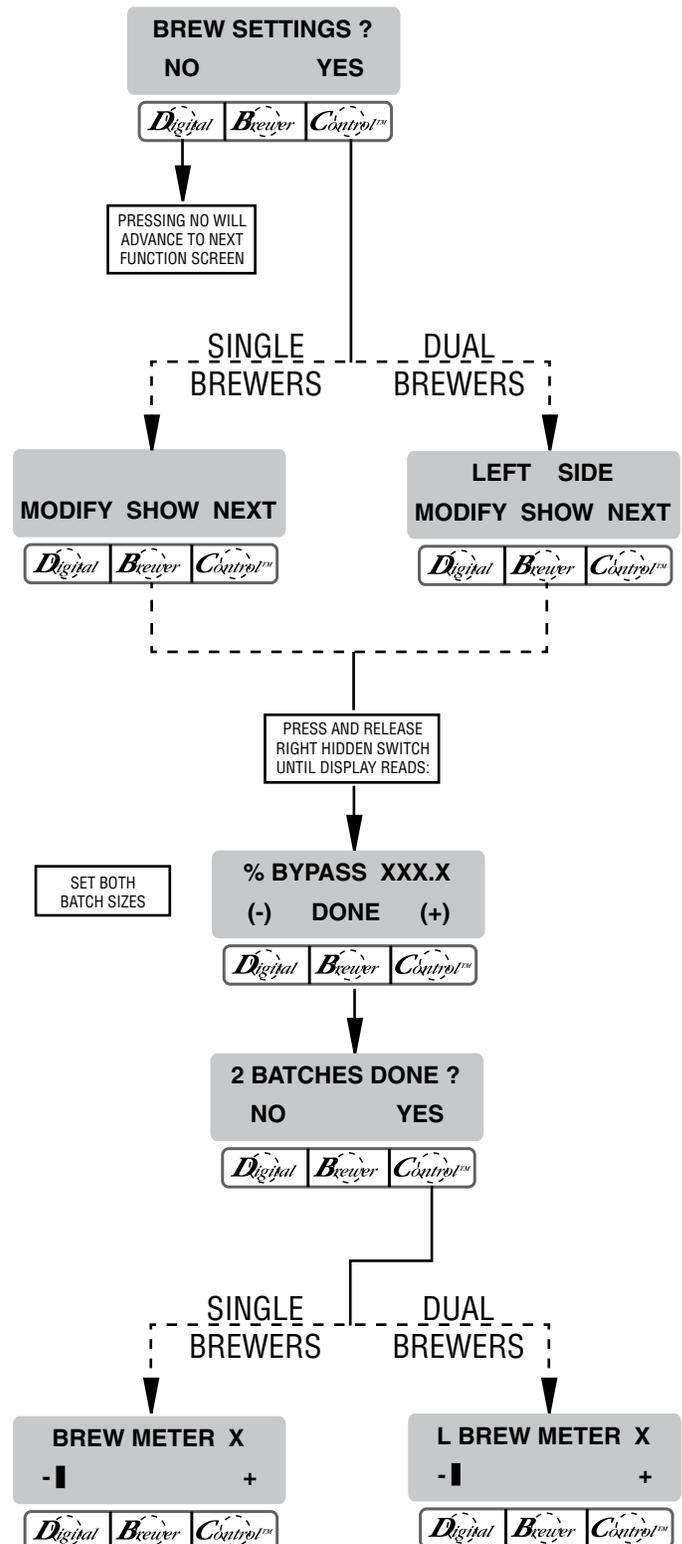
### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### BREW SETTINGS (cont.)

##### Procedure to set or modify % Bypass settings.

Range: 0 to 90% for both batch sizes

1. Press and hold the right hidden switch until display reads **SET LANGUAGE**. Press the right hidden switch until display reads **BREW SETTINGS ?**.
2. Press **YES** to proceed. The display should now read:  
**MODIFY, SHOW** and **NEXT** (SINGLE Brewers).  
**LEFT SIDE, MODIFY, SHOW** and **NEXT** (DUAL Brewers).
3. Press and release the right hidden switch until display reads % **BYPASS XXX.X**. A batch light will be blinking.
4. Using **(-)** and **(+)**, set the amount of bypass water (percentage) to be dispensed around the grounds for that particular batch size.
5. When finished, press the other batch size and repeat step 4.
6. When finished setting both batch sizes, press **DONE**. The display should read **2 BATCHES DONE?**
7. If both batch sizes are not correct, press **NO** to return to the % **BYPASS**: setup screen and repeat steps 4, 5 and 6.
8. If both batch sizes are correct, press **YES**. This will advance to:  
**BREW METER** (SINGLE Brewers).  
**L BREW METER** (DUAL Brewers).  
To exit to the **MAIN SCREEN**, press and release the ON/OFF button (either for DUAL Brewers).



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### BREW SETTINGS (cont.)

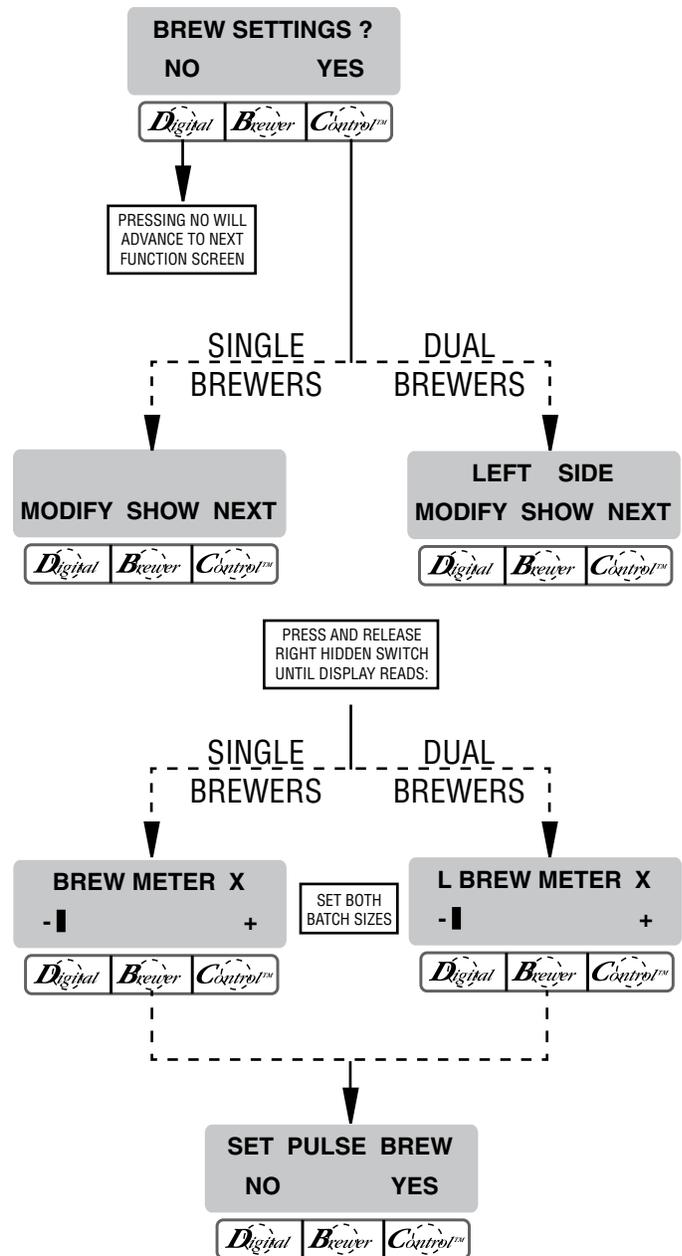
##### Procedure to set or modify BREW METER.

Range: 1 to 14 for both batch sizes

**NOTE:** Using BREW METER will overwrite PULSE BREW settings.

This function allows the operator to program the brewer to a non-pulsed brew cycle (setting 1), or to “pulse” the sprayhead flow on and off during a brew cycle (start and stop the flow of water out of the sprayhead). Settings 2 thru 14 will produce pulsed brew cycles to increase the brew strength with 14 being the highest.

1. Press and hold the right hidden switch until display reads **SET LANGUAGE**. Press the right hidden switch until display reads **BREW SETTINGS ?**.
2. Press **YES** to proceed. The display should now read:  
**MODIFY, SHOW** and **NEXT** (SINGLE Brewers).  
**LEFT SIDE**, along with **MODIFY, SHOW** and **NEXT** (DUAL Brewers).
3. Press and release the right hidden switch until display reads:  
**BREW METER** (SINGLE Brewers).  
**L BREW METER** (DUAL Brewers).  
A batch light will be blinking.
4. Using (-) and (+), set the brew meter time for that particular batch size.
5. When finished, press the other batch size and repeat step 4.
6. When finished setting both batch sizes, press center program switch (Brewer). The display should read **2 BATCHES DONE?**
7. If both batch sizes are not correct, press **NO** to return to:  
**BREW METER** (SINGLE Brewers)  
**L BREW METER** (DUAL Brewers)  
Repeat steps 4, 5 and 6.
8. If both batch sizes are correct, press **YES**. This will advance to **SET PULSE BREW**. To exit to the **MAIN SCREEN**, press and release the ON/OFF button (either for DUAL Brewers).



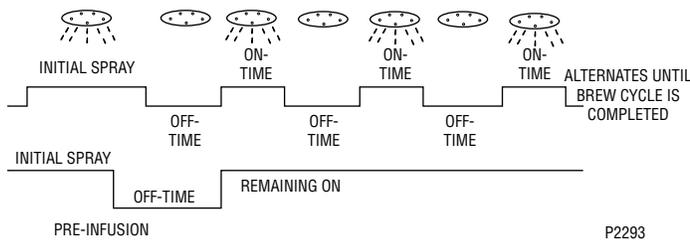
## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### BREW SETTINGS (cont.)

##### SET PULSE BREW/PREINFUSION

This function allows the operator to program the brewer to “pulse” the sprayhead flow on and off during a brew cycle (start and stop the flow of water out of the sprayhead). This feature allows the ability to “fine-tune” the brewer for specific flavor profiles. Pulse brewing can be set up for any and all batch sizes.



- 1<sup>st</sup> ON TIME** – This time is the duration from when the brew button is pressed to when the desired water level in the funnel is reached. (Soaking the grounds)
- OFF-TIME** – This time is the duration from when the water in the funnel reached the desired **ON TIME** to when it drains out of the funnel to a desired lower level.
- LAST ON-TIME** – This time is the duration from when the water in the funnel drains down to the lower level to when it fills the funnel to a desired higher level. (Soaking the grounds)

##### Setting Pulse Brew

Range: **1<sup>ST</sup> ON TIME** – OFF to 4 minutes

**OFF TIME** – OFF to 4 minutes

**LAST ON TIME** – Pre-Infusion to 4 minutes

##### Setting Pulse Brew

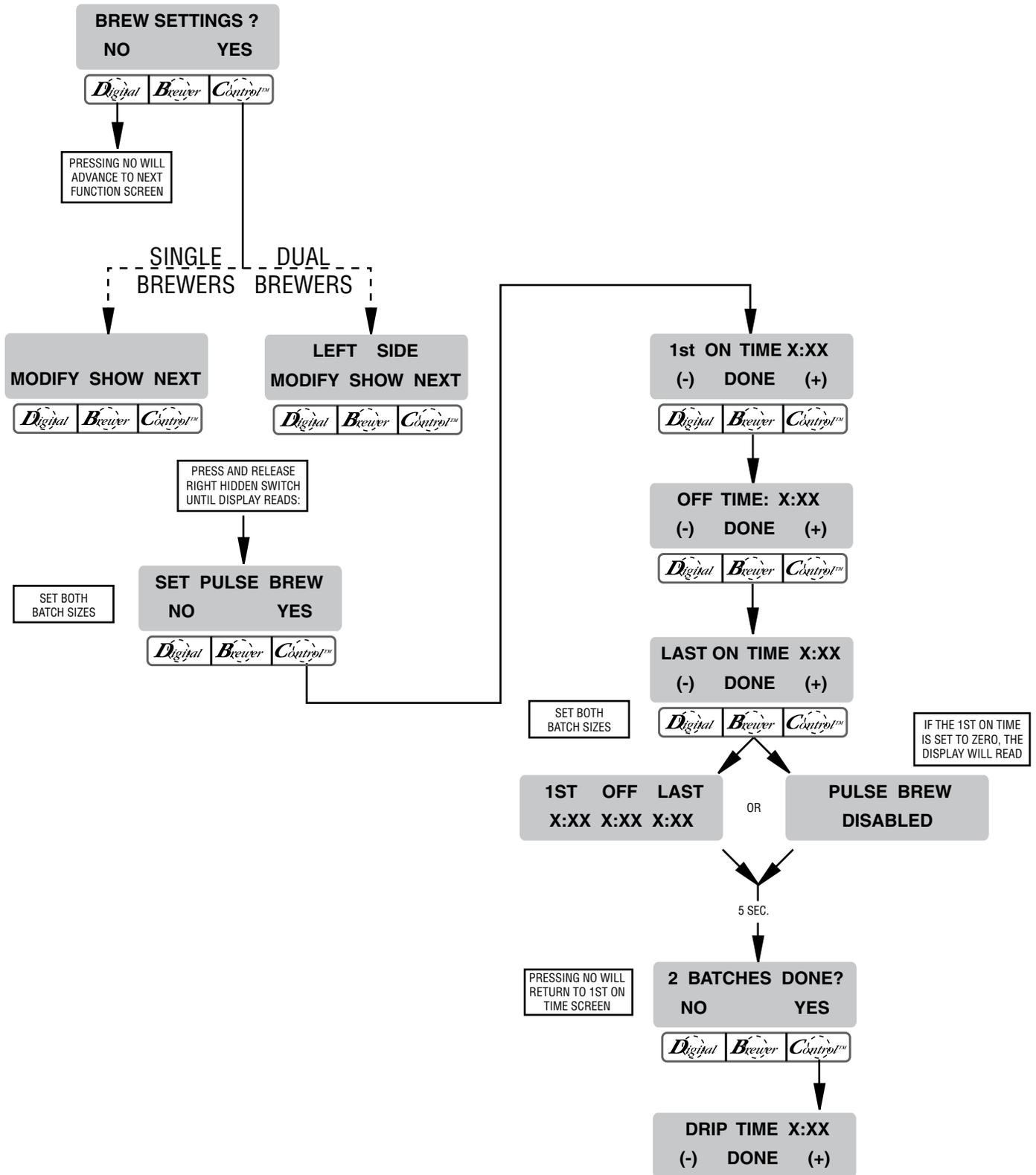
- Press and hold the right hidden switch until display reads **SET LANGUAGE**. Press the right hidden switch until display reads **BREW SETTINGS ?**, along with **NO** and **YES**.
- Press **YES** to proceed. The display should now read:  
**MODIFY, SHOW** and **NEXT** (SINGLE Brewers).  
**LEFT SIDE**, along with **MODIFY, SHOW** and **NEXT** (DUAL Brewers).
- Press and release the right hidden switch until display reads **SET PULSE BREW ?**, along with **NO** and **YES**.

- Press and release **YES**. The display should now read **1<sup>ST</sup> ON TIME X:XX**. and a batch light will be blinking.
- Using **(-)** and **(+)**, set the total brew time desired including spray times and off times.
- When finished, press the other batch size and repeat step 4.
- When finished setting both batch sizes, press **DONE**. The display will show the pulse settings to accommodate the brew time entered. Press each batch size to display the settings for that batch. If the **1<sup>ST</sup> ON TIME** is set to **OFF**, the display will read **PULSE BREW DISABLED**. After a 5 second delay, the display will read **2 BATCHES DONE?**.
- If both batch sizes are not correct, press **NO** to return to the **1<sup>st</sup> ON TIME: setup** screen and repeat steps 5, 6 and 7.
- If both batch sizes are correct, press **YES**. This will advance to **DRIP TIME**. To exit to the **MAIN SCREEN**, press and release the ON/OFF switch (either for DUAL Brewers).

**PROGRAMMING THE BREWER (cont.)**

**PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)**

**BREW SETTINGS (cont.)**



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### BREW SETTINGS (cont.)

##### DRIP TIME

This function allows the operator to adjust the **DRIP TIME** (time from end of sprayhead flow to when liquid stops dripping from the funnel). When the brew cycle is complete, the display will show **DRIPPING** and will countdown the time until the funnel empties.

##### Setting DRIP TIME:

**Range: OFF to 5 minutes for both batch sizes.**

**NOTE:** If the brewer is already in the **DRIP TIME** screen, skip steps 1 through 9 and proceed directly to step 10.

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until display reads **BREW SETTINGS ?**.
2. Press **YES** to proceed. The display should now read:  
**MODIFY, SHOW** and **NEXT** (SINGLE Brewers).  
**LEFT SIDE**, along with **MODIFY, SHOW** and **NEXT** (DUAL Brewers).
3. Press and release the right hidden switch until display reads **DRIP TIME: X:XX**. A batch light will be blinking.
4. Using the **(-)** and **(+)**, set the amount of time from when the brew solenoid shuts off to when drip-out occurs for that batch size.
5. When finished, press the other batch size and repeat step 4.
6. When finished, press **DONE**. The display should read **2 BATCHES DONE?**
7. If both batch sizes are not correct, press and release **NO** to return to the **DRIP TIME** setup screen and repeat steps 4, 5 and 6.
8. If both batch sizes are correct, press **YES**. The display should read:  
**LEFT SIDE SETUP COMPLETE** (DUAL Brewers).  
**SETUP COMPLETE** (SINGLE Brewers).  
After a 5 second delay, the display will advance to **REVIEW SETTINGS ?**.
9. Press **YES** to scroll through all brew settings (left brew settings for DUAL brewers). If all brew settings are correct press **NO**. For SINGLE Brewers this will advance display to **XXX REFILL XXX**. To exit to the **MAIN SCREEN**, press and release the ON/OFF

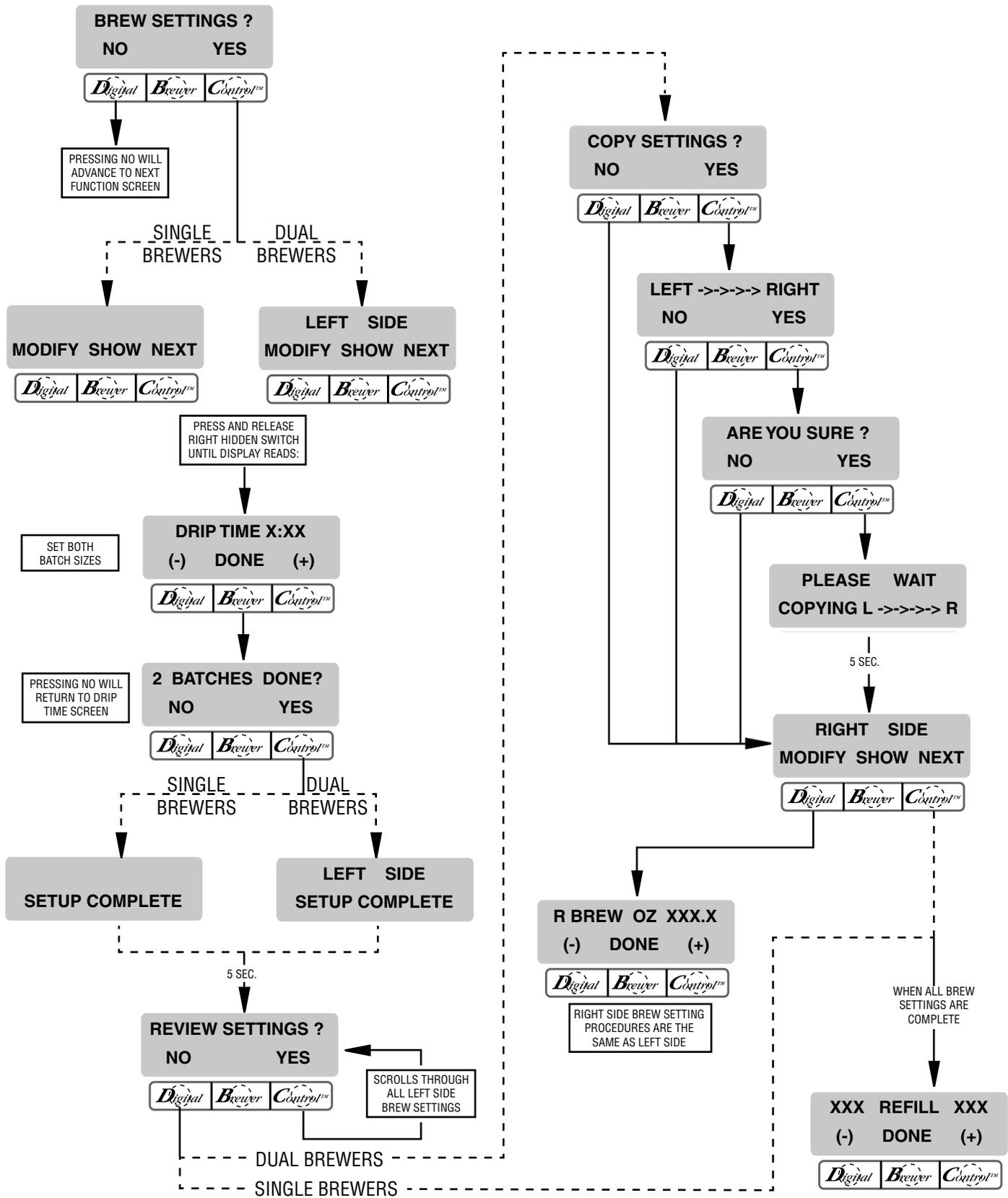
switch. For DUAL Brewers the display should read **COPY SETTINGS ?**

10. If **NO** is pressed, display will advance to **RIGHT SIDE**, along with **MODIFY SHOW NEXT**; proceed to step 13. If **YES** is pressed, display should read **LEFT->->-> RIGHT**
11. If **NO** is pressed, display will advance to **RIGHT SIDE**, along with **MODIFY SHOW NEXT**; proceed to step 13. If **YES** is pressed, display should read **ARE YOU SURE ?**.
12. If **NO** is pressed, display will advance to **RIGHT SIDE**, along with **MODIFY SHOW NEXT**. If **YES** is pressed, display should read **PLEASE WAIT**, along with **COPYING L ->->-> R**. After a short delay display will read **RIGHT SIDE**, along with **MODIFY SHOW NEXT**.
13. If left settings were copied to the right side press **NEXT** to advance display to **XXX REFILL XXX**. If left brew settings were not copied to the right side, press **MODIFY** and repeat the BREW SETTING procedure used to set the left side. To exit to the **MAIN SCREEN**, press and release the ON/OFF switch (either on DUAL brewers).

# PROGRAMMING THE BREWER (cont.)

## PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

### BREW SETTINGS (cont.)



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### REFILL

Range: 0 to 155

This function allows the operator to adjust the sensitivity of the refill circuit. This is mainly a troubleshooting feature. Water in different geographical locations can have different conductivities. By adjusting the sensitivity of the refill circuit, this will allow the brewer to operate under various water conditions.

#### Procedure to set the sensitivity threshold of the refill circuit:

**NOTE:** Make sure the water in the tank is touching the refill probe.

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **REFILL** and shows a number on both sides of the word.
2. To adjust the threshold setting, press **(-)** to decrease or **(+)** to increase the setting.

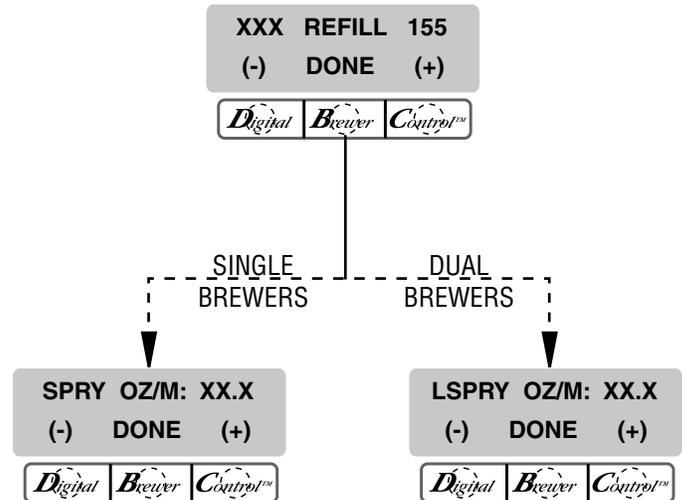
**NOTE:** Always make sure that the number on the right is larger than the number on the left when water is in contact with the refill probe in the tank.

3. When finished, press and release **DONE**. This saves the new setting and advances to the next function screen:

**SPRAY OZ/M** (SINGLE Brewers).

**L SPRAY OZ/M** (DUAL Brewers).

To exit to the **MAIN SCREEN**, press and release the ON/OFF button (either for DUAL Brewers).



## PROGRAMMING THE BREWER (cont.)

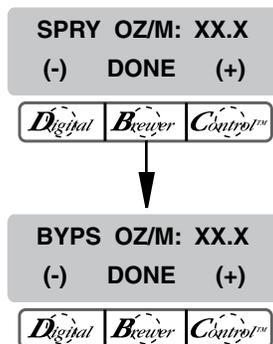
### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### SPRAY OZ/M (SINGLE BREWERS)

This function allows the operator to view or to enter the actual flow rate coming out of the sprayhead of the brewer. This is **NOT** used to control the actual flow rate, but to tell the internal controller how fast the water is flowing.

#### Procedure to adjust the sprayhead flow rate setting:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **SPRY OZ/M**. The number represents what the brewer thinks is the flow rate out of the sprayhead.
2. If the actual flow rate of the sprayhead is known but is different than the number on the display, use the **(-)** and **(+)** to enter the correct flow rate.
3. When finished, press and release **DONE** to advance to the next function screen, **BYPS OZ/M: XX.X**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch.

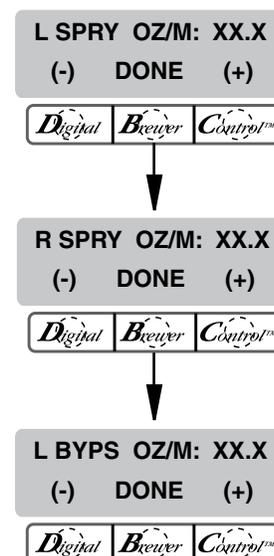


#### L/R SPRAY OZ/M (DUAL BREWERS)

This function allows the operator to view or to enter the actual flow rate coming out of the sprayhead for each side of the brewer. This is **NOT** used to control the actual flow rate, but to tell the internal controller how fast the water is flowing.

#### Procedure to adjust the sprayhead flow rate setting:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **L SPRY OZ/M**. The number represents what the brewer thinks is the flow rate out of the left sprayhead.
2. If the actual flow rate of the sprayhead is known but is different than the number on the display, use the **(-)** and **(+)** to enter the correct flow rate.
3. Press and release **DONE**. The display will now read **R SPRY OZ/M**. The number represents what the brewer thinks is the flow rate out of the right sprayhead.
4. Repeat step #2 for the right sprayhead.
5. When finished, press and release **DONE** to advance to the next function screen, **L BYPS OZ/M: XX.X**. To exit programming and return to the **MAIN SCREEN**, press and release either ON/OFF switch.



## PROGRAMMING THE BREWER (cont.)

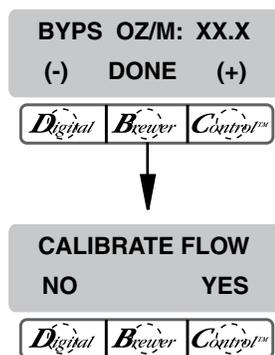
### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### BYPASS OZ/M (SINGLE BREWERS)

This function allows the operator to view or to enter the actual flow rate coming out of the bypass nozzle of the brewer. This is **NOT** used to control the actual flow rate, but to tell the internal controller how fast the water is flowing.

##### Procedure to adjust the bypass flow rate setting:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **BYPS OZ/M**. The number represents what the brewer thinks is the flow rate out of the bypass nozzle.
2. If the actual flow rate of the bypass is known but is different than the number on the display, use the **(-)** and **(+)** to enter the correct flow rate.
3. When finished, press and release **DONE** to advance to the next function screen, **CALIBRATE FLOW**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch.

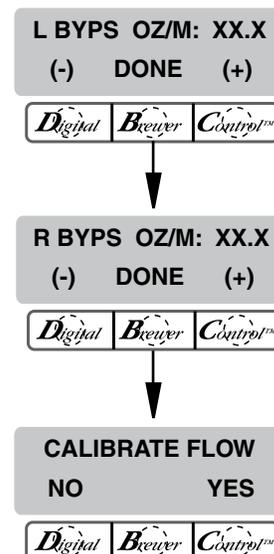


#### L/R BYPASS OZ/M (DUAL BREWERS)

This function allows the operator to view or to enter the actual flow rate coming out of the bypass nozzle for each side of the brewer. This is **NOT** used to control the actual flow rate, but to tell the internal controller how fast the water is flowing.

##### Procedure to adjust the bypass flow rate setting:

1. Press and hold the right hidden button until the display reads **SET LANGUAGE**. Press the right hidden button until the display reads **L BYPS OZ/M**. The number represents what the brewer thinks is the flow rate out of the left bypass nozzle.
2. If the actual flow rate of the bypass is known but is different than the number on the display, use the **(-)** and **(+)** to enter the correct flow rate.
3. Press and release **DONE**. The display will now read **R BYPS OZ/M**. The number represents what the brewer thinks is the flow rate out of the right bypass nozzle.
4. Repeat step #2 for the right bypass.
5. When finished, press and release **DONE** to advance to the next function screen, **CALIBRATE FLOW**. To exit programming and return to the **MAIN SCREEN**, press and release either ON/OFF pad.



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

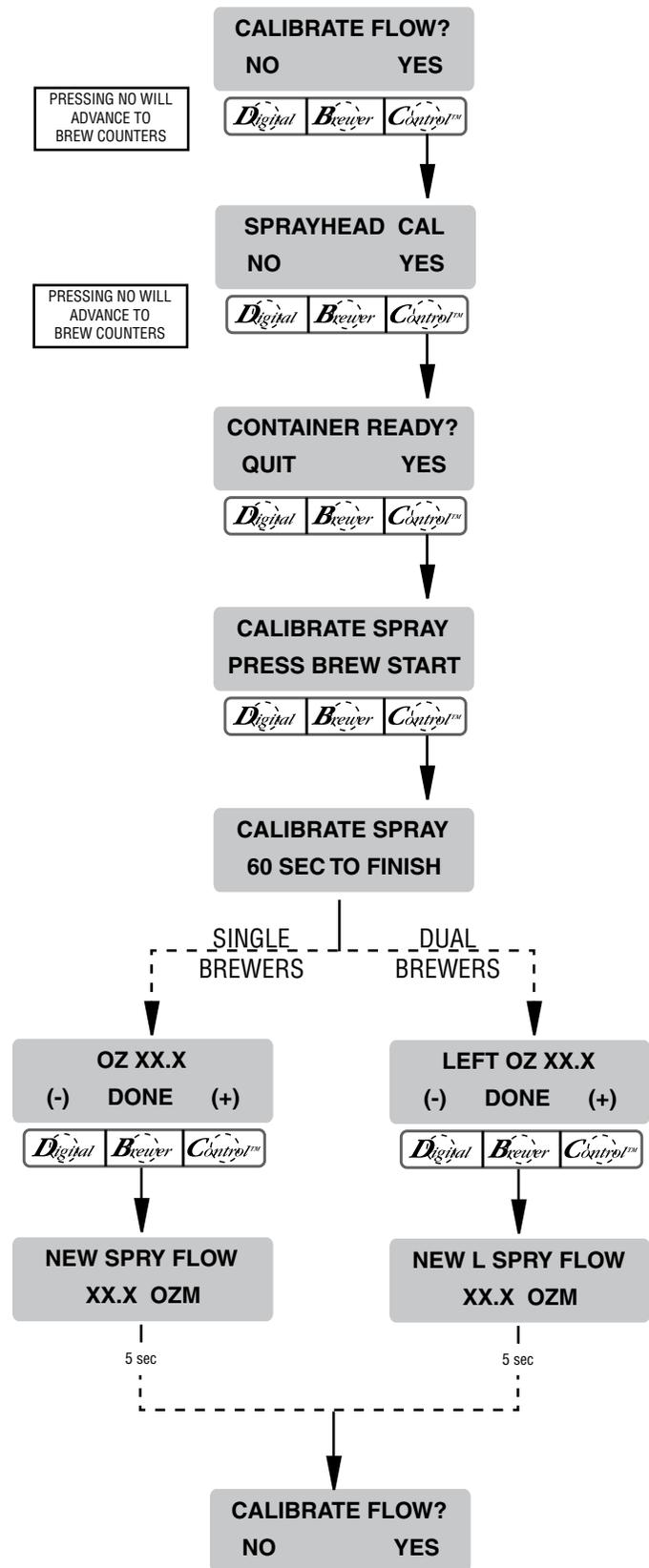
#### CALIBRATE FLOW

This function allows the operator to enter the actual flow rate of the sprayhead and the bypass for each side of the brewer by dispensing both separately for one minute. The volumes are then entered into the brewer.

#### Procedure to calibrate the sprayhead flow rate:

1. Place a container, accurately graduated and with a minimum capacity of 60 ounces, beneath the funnel.
2. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **CALIBRATE FLOW**.
3. Press and release **YES** to advance to the **SPRAY HEAD CAL** function screen. (Pressing **NO** in the **CALIBRATE FLOW** screen will advance to the next function screen, **BREW COUNTERS**).
4. Press and release the **YES** pad. The display should read **CONTAINER READY?** If the container is under the funnel, press **YES**.
5. The display should read **CALIBRATE SPRAY**. Press and release the **BREW** switch (on the side to be calibrated for DUAL brewers) to begin the sprayhead flow for calibration. The display should read **CALIBRATE SPRAY...60 SEC TO FINISH**. The 60-second timer on the display will count down to zero. When the counter reaches zero, the display will change to:  
**OZ**, along with a number (SINGLE brewers).  
**LEFT or RIGHT OZ**, along with a number (DUAL brewers).
6. Measure the amount of water in the container and use the (-) and (+) switches to adjust the amount of the display to match the amount in the container. Then press **DONE**.
7. The display should now read:  
**NEW SPRY FLOW** (SINGLE brewers)  
**NEW L or NEW R SPRY FLOW** (DUAL brewers)  
 along with the correct flow rate of the sprayhead. After about 5 seconds, the display will return to the **CALIBRATE FLOW** screen.
8. Repeat steps 1-7 to calibrate the other side for DUAL brewers.
9. To exit the **CALIBRATE FLOW** function and advance

to the next function screen, press and release **NO**. To exit programming, press and release the ON/OFF switch (either for DUAL Brewers) to return to the **MAIN SCREEN**.



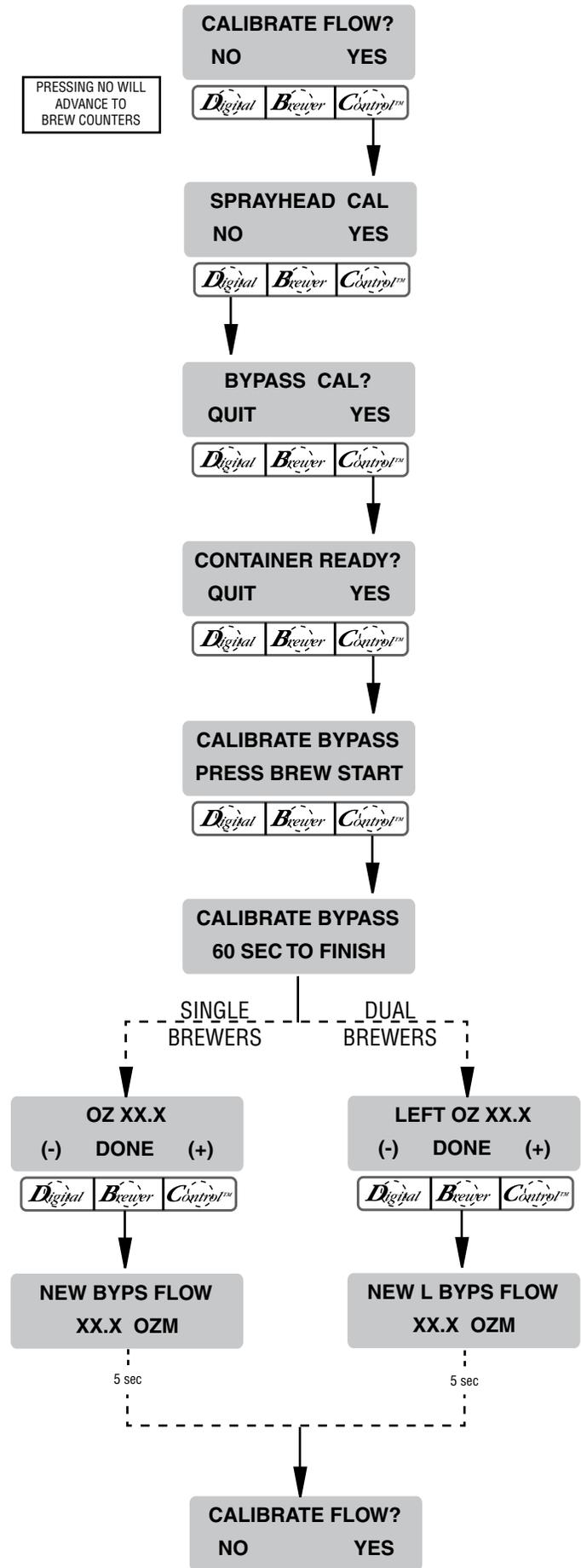
## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### CALIBRATE FLOW (Continued)

##### Procedure to calibrate the bypass flow rate:

- Place a container, accurately graduated and with a minimum capacity of 60 ounces, beneath the funnel.
- Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **CALIBRATE FLOW**.
- Press and release **YES** to advance to the **SPRAY HEAD CAL** function screen. Press and release **NO** to advance to **BYPASS CAL**.
- Press and release the **YES** switch. The display should read **CONTAINER READY?** If the container is under the funnel, press **YES**.
- The display should read **CALIBRATE BYPASS**. Press and release the **BREW** switch (on the side to be calibrated on DUAL brewers) to begin the flow for calibration. The display should read **CALIBRATE BYPASS...60 SEC TO FINISH**. The 60-second timer on the display will count down to zero. When the counter reaches zero, the display will change to: **OZ/M**, along with a number (SINGLE brewers) **LEFT** or **RIGHT OZ/M**, along with a number (DUAL brewers).
- Measure the amount of water in the container and using the **(-)** and **(+)** switches, adjust the amount of the display to match the amount in the container. Then press **DONE**.
- The display should now read:  
**NEW BYPS FLOW** (SINGLE brewers)  
**NEW L** or **NEW R BYPS FLOW** (DUAL brewers)  
 along with the correct flow rate of the bypass. After about 5 seconds, the display will return to the **CALIBRATE FLOW** screen.
- Repeat steps 1-7 to calibrate the other side for DUAL brewers.
- To exit the **CALIBRATE FLOW** function and advance to the next function screen, press and release **NO**. To exit programming, press and release the ON/OFF switch (either for DUAL Brewers) to return to the **MAIN SCREEN**.



## PROGRAMMING THE BREWER (cont.)

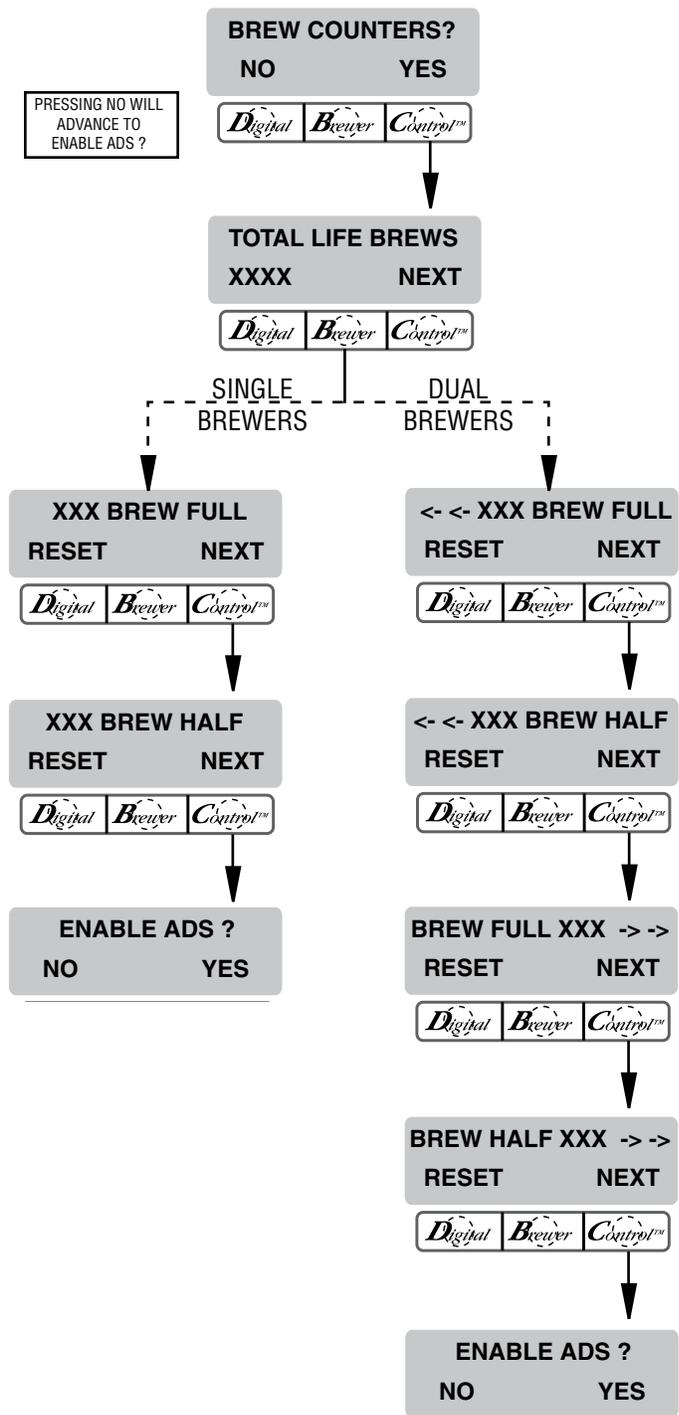
### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### BREW COUNTERS

This function allows the operator to track the total number of brew cycles completed. For DUAL brewers the number of batches brewed for each side can be tracked. There are two resettable counters, and one life counter that is not resettable for SINGLE brewers and four resettable counters, and one life counter that is not resettable for DUAL brewers.

#### Procedure to view/reset the brew counters:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **BREW COUNTERS**.
2. Pressing **NO** will advance to the next programming function, **ENABLE ADS ?**. Press **YES** to view the first brew counter (**TOTAL LIFE BREWS**). This number represents the total number of brew cycles this brewer has completed. This counter is non-resettable. Press **NEXT** to advance to the next brew counter:
  - BREW FULL** (SINGLE brewers)
  - <- <- BREW FULL** (left side DUAL brewers).
3. This counter represents the number of brews for a Full Brew (on the left side on DUAL brewers). To reset the counter to zero, press and release **RESET**. Press and release **NEXT** to advance to the next counter.
4. Repeat step 3 for the remaining counter (left counter for DUAL brewers), **BREW HALF**.
5. For DUAL brewers, repeat step 4 for the two right side brew counters.
6. When finished, press **NEXT** to advance to the next programming function, **ENABLE ADS ?**. To exit programming, press and release the ON/OFF switch (either for DUAL Brewers) to return to the **MAIN SCREEN**.



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### ENABLE ADS

This function allows the operator to choose whether or not to display an advertising message. An ad can be saved to the brewer by either writing the ad using the programming commands, or by entering the ad into the brewer using an **AD CARD**. This message will be displayed when the brewer is not in use.

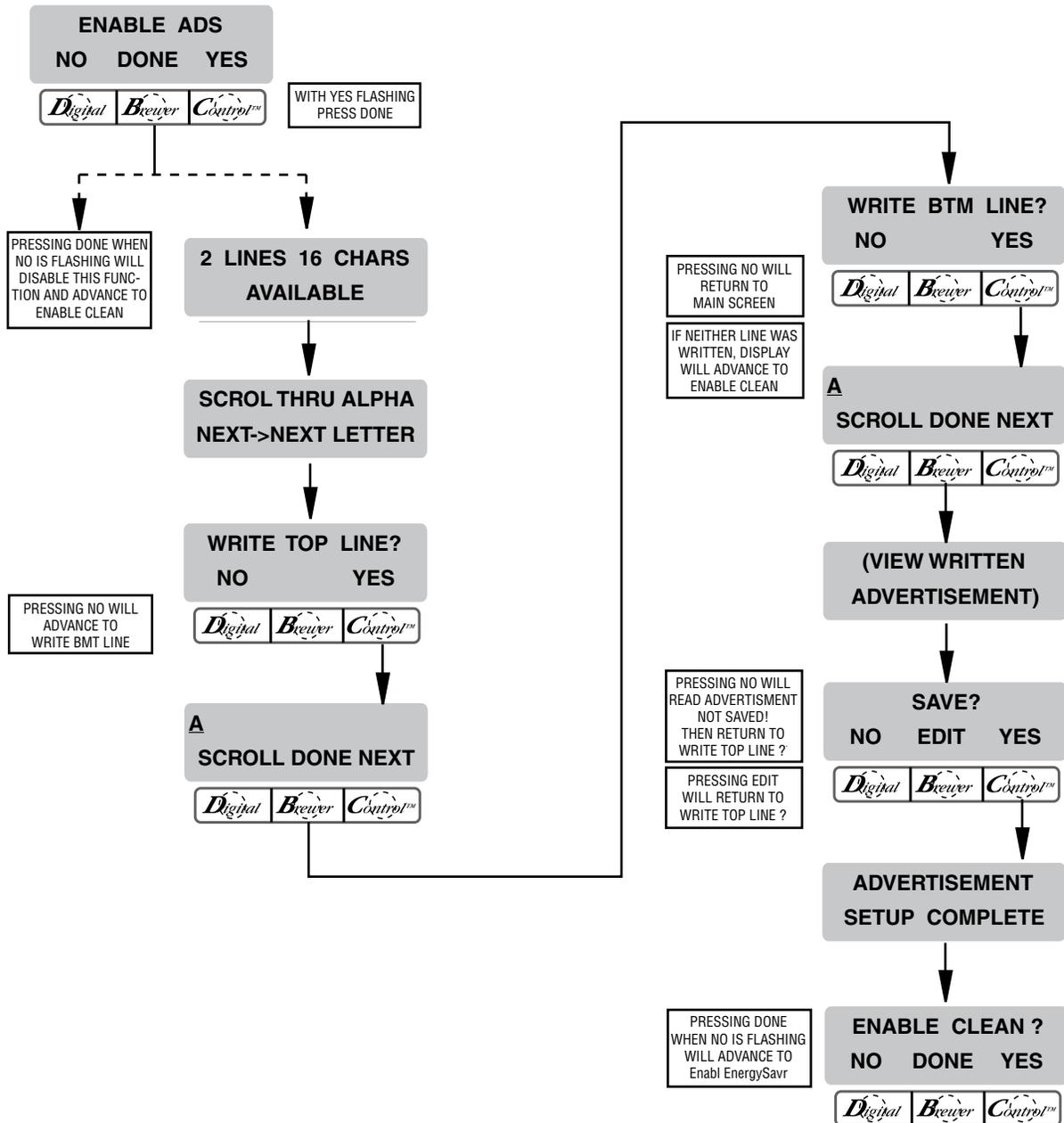
#### Procedure to Enable/Disable Ads:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **ENABLE ADS**. The **YES** or **NO** will be flashing to indicate the current selection.
2. Press and release the **NO** switch to disable this function, or:
3. Press and release the **YES** switch to enable this function.
4. When finished, press and release **DONE** to save the new setting and advance to the next function screen.
5. If **NO** was selected, the display should now read **ENABLE CLEAN**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch (either for DUAL Brewers).
6. If **YES** was selected, the display should now read **2 LINES 16 CHARS AVAILABLE**, and then **SCROLL THRU ALPHA, NEXT -> NEXT LETTER**, and then **WRITE TOP LINE ?**. The ad can be up to 32 characters long, 16 per line. The ad will be written in two steps, first the top line, then the bottom line.
7. To write the top line of a new ad, press and release **YES**. To skip the top line and only write a bottom line, press and release **NO** and proceed to step 13.
8. The display will now read **A** with a flashing cursor below it. Press and hold the **SCROLL** switch to scroll through the alphabet and available characters. When the desired character is shown on the display, press and release **NEXT** to move to the next character in the top line.
9. Repeat step 8 until the top line is complete.
10. Press and release **DONE**. The display should now read **WRITE BTM LINE?**
11. To write the bottom line of the new ad, press and release **YES**.
12. To skip the bottom line, press and release **NO**.
  - a. If neither a top nor bottom line was written, the display should now read **ENABL CLEAN ?**.
  - b. If only a top line was written, the ad will be displayed followed by **SAVE?** Proceed to step 16.
13. The display will now read **A** with a flashing cursor below it. Press and hold the **SCROLL** switch to scroll through the alphabet and available characters. When the desired character is shown on the display, press and release **NEXT** to move to the next character in the bottom line.
14. Repeat step 13 until the bottom line is complete.
15. Press and release **DONE**. The display will now show the written ad, and then **SAVE?**
16. To cancel saving the ad, press and release **NO**. The display should now read **ADVERTISEMENT NOT SAVED!** and then will return to the **WRITE TOP LINE ?** screen.
17. To correct or edit the ad, press and release **EDIT**. The display should now read **WRITE TOP LINE?** Repeat steps 10 through 17.
18. To save the ad as it is shown, press and release **YES**. The display should now read **ADVERTISEMENT SETUP COMPLETE**, and then **ENABL CLEAN**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch (either for DUAL Brewers).

# PROGRAMMING THE BREWER (cont.)

## PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

### ENABLE ADS (Continued)



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### ENABL CLEAN

This function allows the operator to enable the sanitation function and set the time before a cleaning alert will be displayed.

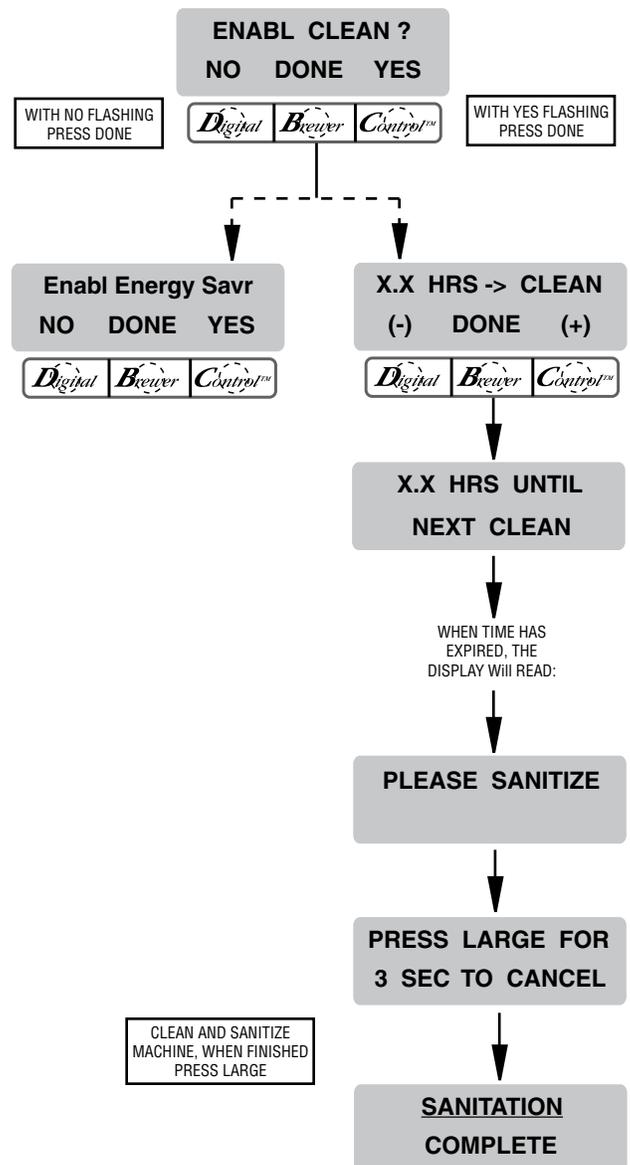
#### Procedure for enabling clean:

Range: 0.0 to 72.0 hrs

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until display reads **ENABL CLEAN?**. The **YES** or **NO** will be flashing to indicate the current selection.
2. Press and release **NO** to disable this function (no clean alert will be displayed on the screen), or:
3. Press and release **YES** to enable this function (a clean alert will be displayed on the screen).
4. When finished, press and release **DONE** to save the new setting and advance to the next function screen.
5. If **NO** was selected, the display should now read **Enabl EnergySavr**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch (either for DUAL Brewers).
6. If **YES** was selected, the display should now read **X.X HRS -> CLEAN**. This screen allows the operator to set the amount of time from when a brew is completed until a clean alert will be displayed. Use **(-)** and **(+)** to adjust the set time. When finished, press and release **DONE**.

**NOTE:** The timer will not begin until after a brew cycle has been completed.

7. The display should now read **X.X HRS UNTIL NEXT CLEAN**, and then advance to the next programming function, **ENABLE ENERGYSAVR**.
8. Once the set time has expired, the display will read **PLEASE SANITIZE**, and then **PRESS LARGE FOR 3 SEC TO CANCEL**.
9. Clean and sanitize the machine.
10. When finished, press and hold the LARGE batch switch to reset the Sanitation timer. The display should now read **SANITATION COMPLETE** and then will return to the **MAIN SCREEN**.



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### ENABLE ENERGYSAVR

This function allows the operator to enable the ENERGY SAVINGS mode function and set the idle time. Once the set idle time has expired, the operator can choose to have the heaters either turn off, or reduce the tank holding temp to 140° F (60° C).

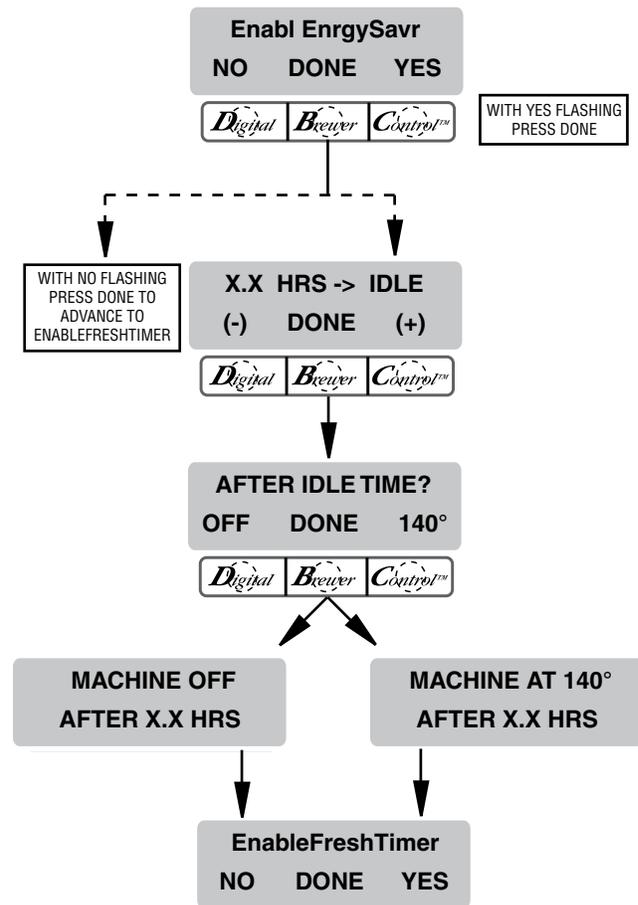
#### Procedure to enable energy savings mode:

##### Range: 0.5 to 24.0 hrs

If enabled, default setting is 140° F (60° C) tank temperature after 4.0 hrs. idle time.

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **Enabl EnergySavr**. The **YES** or **NO** will be flashing to indicate the current selection.
2. Press and release **NO** to disable this function, or:
3. Press and release **YES** to enable this function (the heaters will either turn off or the tank will hold at 140° F).
4. When finished, press and release **DONE** to save the new setting and advance to the next function screen.
5. If **NO** was selected, the display should now read **EnableFreshTimer**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch (either for DUAL Brewers).
6. If **YES** was selected, the display should now read **X.X HRS -> IDLE**. This screen allows the operator to set the amount of time the brewer is not in use before nap mode engages. Using (-) and (+), adjust the idle time. When finished, press and release **DONE**.
7. The display should now read **AFTER IDLE TIME?** Once the set idle time has expired, the heaters can either be shut off or held at a lower temperature of 140° F.
8. To have the machine shut off after the set idle time, press and release **OFF** and then **DONE** to save the settings. The display should read **MACHINE OFF AFTER X.X HRS**, and then **EnableFreshTimer**.
9. To have the heaters hold at the lower 140° F temperature, press and release **140°** and then **DONE** to save the settings. The display should read **MACHINE AT 140° AFTER X.X HRS**, and then **EnableFreshTimer**.
10. Once the idle time has expired, the display will

read either **ENERGY SAVER...NO TEMPERATURE** or **ENERGY SAVER...REDUCED TEMPERATURE**, depending on the settings. This screen will alternate with **PRESS ANY SWITCH TO RE-HEAT**.



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### ENABLE FRESH TIMER

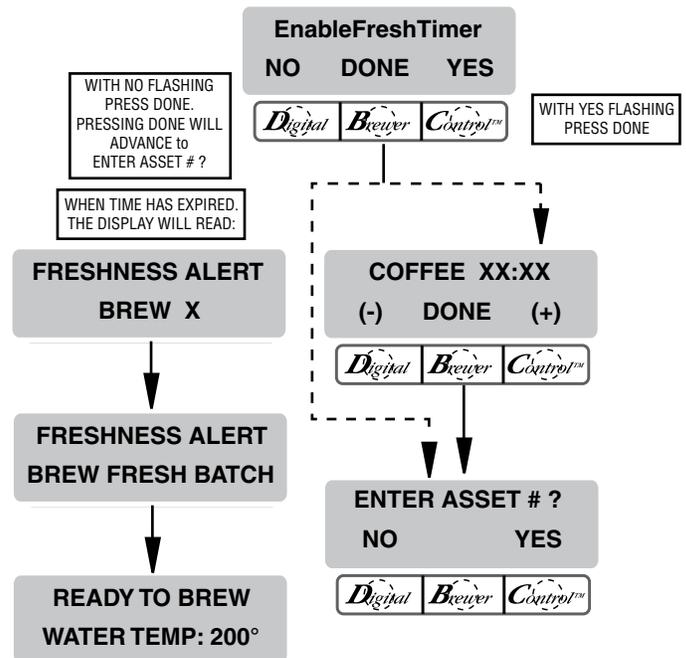
This function allows the operator to enable the Freshness Alert and set the expiration time. The expiration time is the amount of time the product is allowed to sit in the server/dispenser before a fresh batch is brewed.

#### Procedure for enabling/setting the Freshness Timer:

Range: Coffee 0.5 to 4.0 hrs

If enabled, default setting is 2.0 hrs.

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **Enable Fresh-Timer**.
2. Press and release **NO** to disable this function, or:
3. Press and release **YES** to enable this function (the unit will display a message once the set time has expired).
4. When finished, press and release **DONE** to save the new setting and advance to the next function screen.
5. If **NO** was selected, the display should now read **ENTER ASSET # ?**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch (either for DUAL Brewers).
6. If **YES** was selected, the display should now read **COFFEE**. This screen allows the operator to set the amount of time from the end of brewing a batch of coffee until a Freshness Alert message will be displayed. Using **(-)** and **(+)**, adjust the freshness time for coffee. When finished, press and release **DONE**.
7. This display should now read **ENTER ASSET # ?**. To exit programming and return to the **MAIN SCREEN**, press and release the ON/OFF switch (either on DUAL brewers).
8. Once the set time has expired, the display will read **FRESHNESS ALERT BREW**, and then **FRESHNESS ALERT BREW FRESH BATCH** alternating with the **MAIN SCREEN**.
9. Empty the server/dispenser the previous batch was brewed into and replace under the funnel.
10. Brew a new batch
11. The freshness timer will reset. The display should now return to the **MAIN SCREEN**.



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

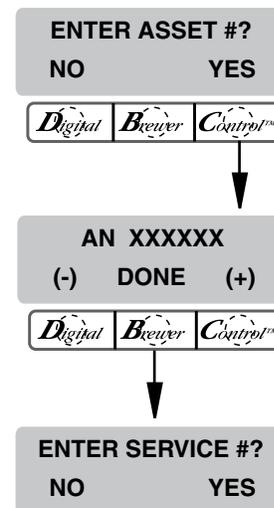
#### ASSET NUMBER

This function allows the operator to enter the machine's asset number. This can be useful for tracking the usage or service of an individual machine within a group.

#### Procedure to enter the asset number:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads:  
**ENTER ASSET #?**
2. Press and release **YES**. The display will now read **ANXXXXXX**.
3. Using **(-)** and **(+)**, set the asset number of the machine.
4. When finished, press and release **DONE**. The display will now read **ENTER SERVICE #?**.

**NOTE:** See page 4 for steps on how to view the Asset Number.



## PROGRAMMING THE BREWER (cont.)

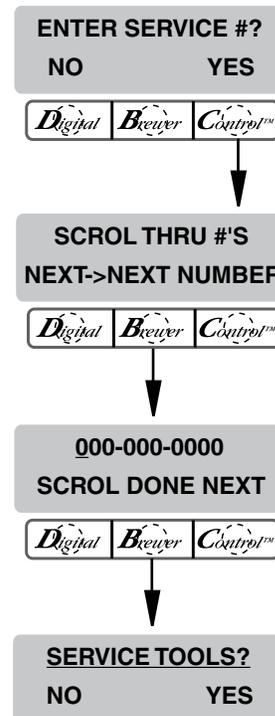
### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### SERVICE NUMBER

This function allows the operator to enter in the telephone number to call if service is needed. The service number will be displayed anytime there is a fault message displayed (see *Troubleshooting* on page 46).

#### Procedure to enter the service number:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads:  
**ENTER SERVICE #?**
2. Press and release **YES**. The display will now read **SCROL THRU #'S NEXT ->NEXT NUMBER**, followed by **000-000-0000**. UP TO 16 CHARACTERS ARE AVAILABLE.
3. Press the **SCROL** switch to scroll through the numbers. When the desired number is shown, press and release **NEXT** to move to the next digit in the phone number.
4. Repeat Step 3 until the entire number is entered.
5. Press and release **DONE**. The display will now read **SERVICE TOOLS?**



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### SERVICE TOOLS

This function allows the testing of individual components and the ability to check switches for proper function. This function also tests the funnel sensor coil's frequency (diagnostic tool for troubleshooting purposes only).

#### Procedure to test components and outputs:

The following components can be individually tested:

(SINGLE)	(DUAL)
Brew Valve	Left Brew Valve
Bypass Valve	Left Bypass Valve
Funnel Lock	Left Funnel Lock
Refill Valve	Right Brew Valve
Tank Heater Relay	Right Bypass Valve
	Right Funnel Lock
	Refill Valve
	Tank Heater Relay

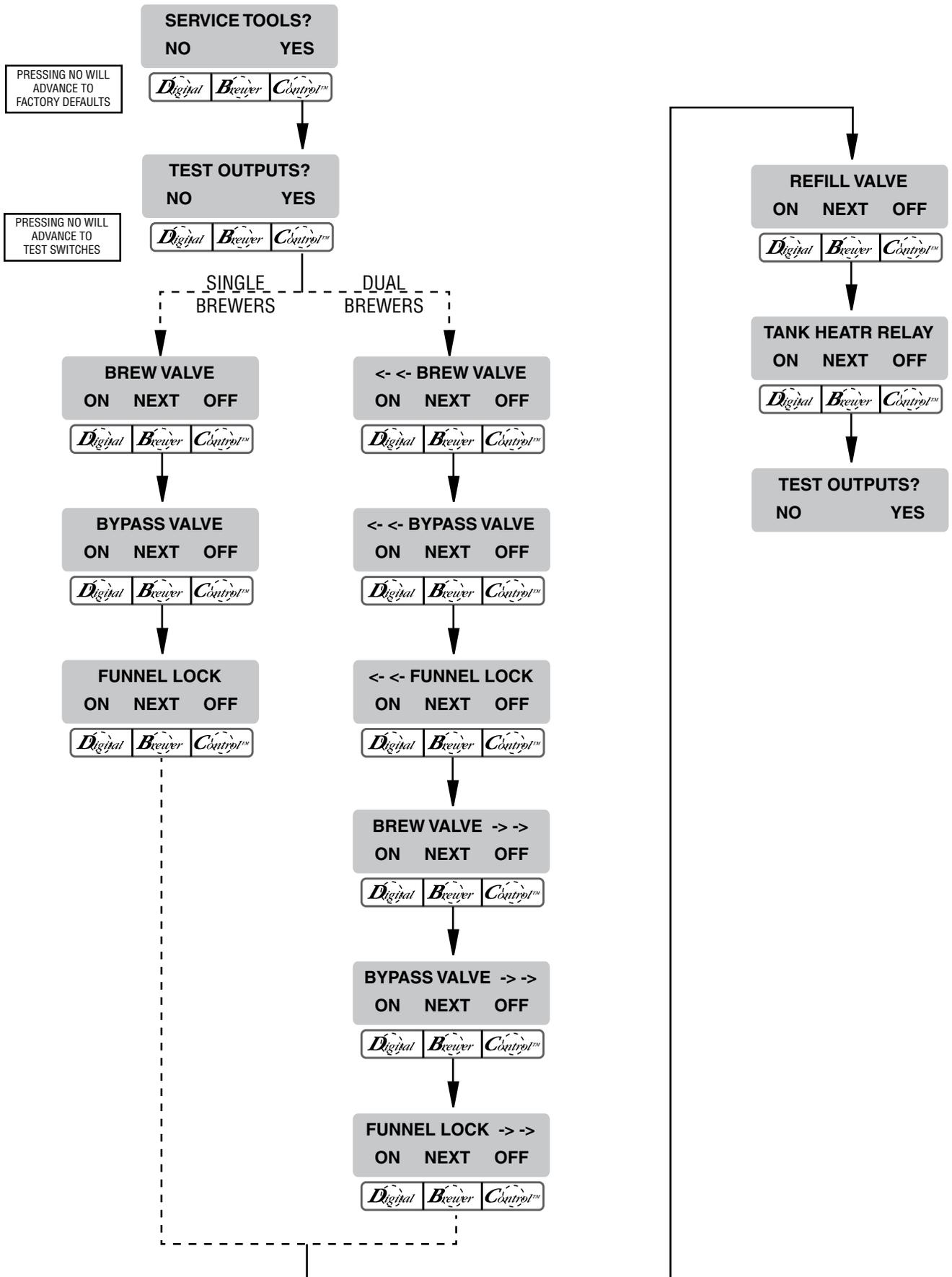
1. Place a funnel into the rails of the brewer (both sides of the DUAL brewer).
2. Place a server beneath funnel (both sides of the DUAL brewer).
3. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **SERVICE TOOLS**.
4. Press and release **YES**. The display should now read **TEST OUTPUTS?** Press and release **YES** to test individual components and outputs. Pressing **NO** will advance to the next programming function, **TEST SWITCHES**.
5. The display should now read:  
**BREW VALVE** (SINGLE brewers)  
**<- <- BREW VALVE** (left side DUAL brewers).  
To test the brew valve, press **ON**. If the brew valve is functional, water should run from the funnel (left for DUAL brewers).
6. Press **OFF** to end the flow of water.
7. Press **NEXT** to advance to the next component to be tested.

**NOTE:** To bypass testing any component, press **NEXT** to advance to the next component without testing the previous one.

8. The display should now read:  
**BYPASS VALVE** (SINGLE brewers)  
**<- <- BYPASS VALVE** (DUAL brewers).  
To test the bypass valve, press **ON**. If the bypass valve is functional, water should run from the funnel (left for DUAL brewers).
  9. Press **OFF** to end the flow of water.
  10. Press **NEXT** to advance to the next component to be tested:  
**FUNNEL LOCK** (SINGLE brewers)  
**<- <- FUNNEL LOCK** (DUAL brewers).
  11. To test the **FUNNEL LOCK**, press **ON**. If the funnel lock is functional, the lock will drop to hold funnel (left funnel for DUAL brewers) in place.
  12. Press **OFF** to retract the funnel lock.
  13. For DUAL brewers, follow steps 5-12 to test the right side components.
  14. To test the **REFILL VALVE**, press **ON**. If the refill valve is functional, the sound of the valve operating will be heard.
  15. Press **OFF** to end testing of the refill valve.
  16. Press **NEXT** to advance to the next component to be tested, **TANK HEATR RELAY**.
  17. To test the tank heater relay, connect a voltmeter across each of the tank heaters to check for voltage.
  18. Press **ON**. The correct voltage should be present at the heater terminals.
  19. Press **OFF** to end testing of the tank heater relay.
- NOTE:** The tank heater will automatically turn off if left on too long.
20. Press **NEXT** to return to the **TEST OUTPUTS** screen. To advance to the next function screen, **TEST SWITCHES**, press **NO**. To exit programming, press and release the ON/OFF switch (either for DUAL brewers) to return to the **MAIN SCREEN**.

# PROGRAMMING THE BREWER (cont.)

## PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### Procedure to test switches:

The following switches can be individually tested:

#### SINGLE Brewers

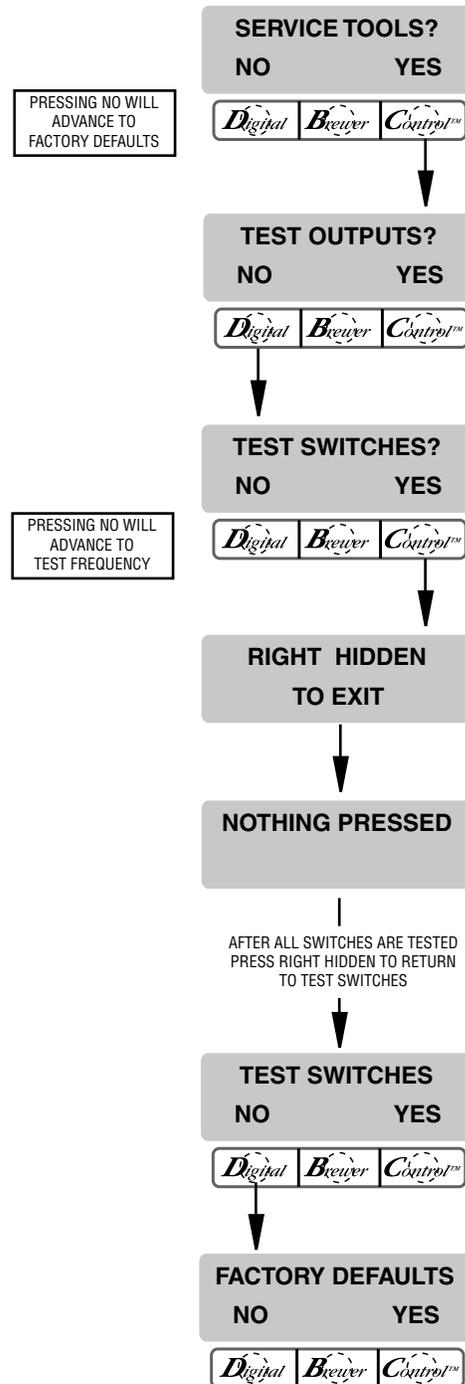
Full Batch  
Half Batch  
Power  
Brew Switch  
Left Hidden

#### DUAL Brewers

<- <- Full Batch	Full Batch -> ->
<- <- Half Batch	Half Batch -> ->
<- <- Power	Power -> ->
<- <- Brew Switch	Brew Switch -> ->
Left Hidden	DONE
(-)	(+)

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **SERVICE TOOLS**.
2. Press and release **YES**. The display should now read **TEST OUTPUTS?** Press and release **NO** to advance to **TEST SWITCHES**.
3. Press and release **YES**. The display should now read **RIGHT HIDDEN TO EXIT**, and then **NOTHING PRESSED**.
4. From this screen, press any of the switches on the front of the brewer. While the switch is pressed, the display shows the name of that switch. If the name does not appear, or if it remains after the switch has been released, the switch is defective. Each switch can be tested in this manner.

After all switches have been tested, press and release the right hidden switch to return to the **TEST SWITCHES** screen. To exit programming, press and release the ON/OFF switch (either for DUAL brewers) to return to the **MAIN SCREEN**



## PROGRAMMING THE BREWER (cont.)

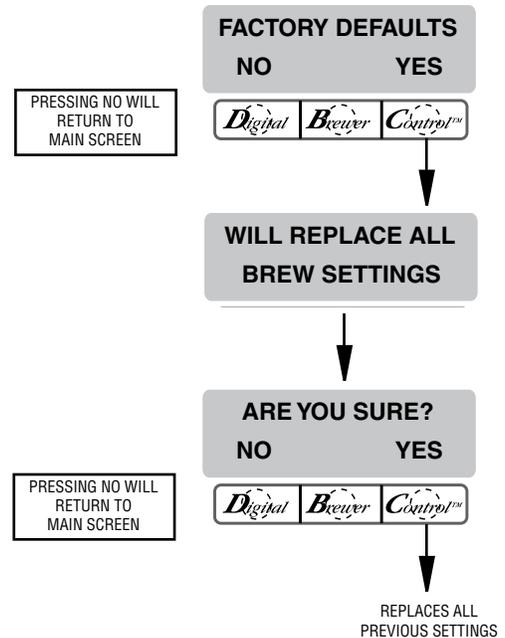
### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### FACTORY DEFAULTS

This function allows the operator to erase **ALL** of the previously entered recipes and ad messages. Factory-set default values will replace **ALL** previous settings.

#### Procedure to set factory defaults:

1. Press and hold the right hidden switch until the display reads **SET LANGUAGE**. Press the right hidden switch until the display reads **FACTORY DEFAULTS**.
2. Pressing **NO** will return to the **MAIN SCREEN**. Press **YES** to restore defaults. The display will read **WILL REPLACE ALL BREW SETTINGS** followed with **ARE YOU SURE?**
3. Pressing **NO** in this confirmation screen will revert to the **MAIN SCREEN** without resetting the brewing setups to the defaults. Press **YES** to load the defaults. After factory defaults have been restored, the display will return to the **MAIN SCREEN**. The factory default valves will have replaced **ALL** previously entered values. It will NOT reset the life brew counter. If factory defaults are restored, it will be necessary to recalibrate the flow rates. Refer to pages 22-23.



## PROGRAMMING THE BREWER (cont.)

### PROGRAMMING FUNCTIONS - LEVEL 2 (cont.)

#### FACTORY DEFAULT VALUES

Brew Lockout - Enabled

Language - English

Units - English

#### BREW VOLUMES

Half Batch – 192 OZ

Full Batch – 384 OZ

#### % BYPASS

Half Batch – 0 %

Full Batch – 20 %

#### PULSE BREW TIMES

Half Batch – Manual :1:00/:10/:12

Full Batch – Manual :Disabled

#### DRIP OUT TIMES

Half Batch – 2:00

Full Batch – 3:00

Set Temp – 205°

Ready Temp 200°

Enable Ads – Disabled

Enable Clean – Disabled

Enable Energy Saver Mode – Disabled

IDLE – 4 HRS, THEN 140°

Enable Freshness Timer

COFFEE – 2 HRS

Spry Oz/m – 75.3

Byps Oz/m – 47.0

L Spry Oz/m – 75.3

R Spry Oz/m – 75.1

L Byps Oz/m – 47.0

R Byps Oz/m – 46.6

SINGLE

DUAL

For 17 Hole  
Sprayhead