

Banquet Brewer and Banquet Holder







Banquet Holder

READ AND SAVE THESE INSTRUCTIONS

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Due to continued product improvement, the products illustrated/photographed in this guide may vary slightly from the actual product.

For more information, please call Tech Support at 800-995-0417 or visit www.wilburcurtis.com

BB/BH, CONTENTS LIST 012417NC

Key Features

- G3 Digital Control Module Provides precise control for all critical brewing functions.
- G3 Enhanced Flavor and Clarity With digital accuracy, precision pumps provide unsurpassed control over brewing.
- Intuitive Scroll-Through Precision Programming Large, brightly lighted display communicates functions at a glance. Easily adjust time, volume, temperature, brew functions and more.
- On-Board Self Diagnostics G3 continually senses proper brewing operation. A service phone number and error code will be displayed in the rare event technical assistance is required, reducing downtime.
- Cold Water Brew Lock-Out Prevents brewing when water temperature is below set level.
- Industry's most effective mineral tolerant design.
- Encapsulated control boards Protect against steam, water and impact.

Specifications

Electrical Supply Requirements

MODEL#	DESCRIPTION	PHASE	VOLTS	AMPS	HEATING CONFIG	WIRE	WATTS	HERTZ	GAL/HR
ВВ	Banquet Brewer	3PH	220 V	39.4 A	3 X 5000 W	3W + G	15000 W	50/60 Hz	30.0
ВН	Banquet Holder	1 PH	120 V	14.2 A	2 X 850 W	2W + G	1700 W	50/60 Hz	NA

Dimensions

Water Supply Requirements

MODEL#	HEIGHT	WIDTH	DEPTH	SHIP WEIGHT	SHIP CUBE	WATER CONNECTOR	WATER PRESSURE	MIN. FLOW RATE
ВВ	41.72"	40.36"	26.28"	245.0 lbs	50.0 cu ft	3/8" flare	20 - 90 psi	3.0 gpm
ВН	51.19"	34.54"	27.85"	206.0 lbs	50.0 cu ft	3/8" flare	20 - 60 psi	0.5 gpm

Additional Requirements

The counter where the banquet brewer is installed must be capable of supporting at least 600 lbs. An additional 600 lbs. of capacity is required if installing the optional banquet holder.

Following are the factory default settings for the brewer:

- Brew Temperature = 200°F
- Water Bypass = 20% on Large Brew and 10% on Half Brew

- Brew Volume = Full-Half
- Energy Save Mode = Off

Symbols



This is the safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER - Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING - Indicates a hazardous situation which, if not avoided, <u>could</u> result in death or serious injury.



CAUTION - Indicates a hazardous situation which, if not avoided, <u>could</u> result in minor or moderate injury.



NOTICE - Indicates a situation which, if not avoided, <u>could</u> result in property damage.



IMPORTANT - Provides information and tips for proper operation.



SANITATION REQUIREMENTS



WARNING - This product can expose you to chemicals including Acrylamide and Bisphenol A (BPA), which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information visit www.P65Warnings.ca.gov.

Important Safeguards/Conventions



WARNING:

- Make sure that this appliance is installed and grounded according to the INSTALLATION
 INSTRUCTIONS by qualified personnel before attempting to use it. Failure to follow the INSTALLATION
 INSTRUCTIONS could result in personal injury or void the warranty.
- This appliance is designed for commercial use. Any service other than cleaning and preventive maintenance should be performed by an authorized Wilbur Curtis service technician.
- To reduce the risk of fire or electric shock, DO NOT open the service panels. There are no user serviceable parts inside.
- Keep hands, arms and other items away from hot surfaces of the unit during operation.
- Clean the appliance and any dispensers completely before using them for the first time according to the CLEANING INSTRUCTIONS. Clean them regularly as instructed in the CLEANING INSTRUCTIONS.
- Use this appliance only for its intended use, brewing/dispensing hot and/or cold beverages/water.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- Avoid spillage onto the power (mains) connector.

CE Requirements

- This appliance must be installed in locations where it can be overseen by trained personnel.
- For proper operation, this appliance must be installed where the temperature is between 5°C to 35°C.
- This appliance is not suitable for outdoor use.
- This appliance shall not be tilted more than 10° for safe operation.
- An electrician must provide electrical service as specified in conformance with all local and national codes. For safe use, an all-pole disconnection must be incorporated into the fixed wiring in accordance with the wiring rules outlined in clause 7.12.2 of IEC 60335 for meeting the minimum electrical safety of this standard.
- This appliance must not be cleaned by water jet.
- This appliance can be used by persons aged from 18 years and above if they have been given supervision or
 instruction concerning use of the appliance in a safe way and if they understand the hazards involved.
- Keep the appliance and its cord out of reach of children aged less than 18 years.
- Appliances can be used by persons 18 years and above with reduced physical, sensory or mental
 capabilities or lack of experience and knowledge if they have been given supervision or instruction
 concerning use of the appliance in a safe way and understand the hazards involved.
- Children under the age of 18 years should be supervised to ensure they do not play with the appliance.
- If the power cord is ever damaged, it must be replaced by the manufacturer or authorized service personnel with a special cord available from the manufacturer or its authorized service personnel in order to avoid a hazard.
- Machine must not be immersed for cleaning.
- Cleaning and user maintenance shall not be made by children unless they are older than 18 years and supervised.
- This appliance is intended to be used in household and similar applications such as:
 - staff kitchen areas in shops, offices and other working environments;
 - by clients in hotels, motels and other residential type environments;
 - bed and breakfast type environments.
- This appliance not intended to be used in applications such as:
 - farm houses
- Access to the service areas permitted by Authorized Service personnel only.
- The A-Weighted sound pressure level is below 70 dBA.

Disposal of Equipment

This product contains plastic, metal and electronic components and is considered e-waste. At the end of
its life, this product must not be disposed of in normal household waster but can be instead delivered to a
collection point for recycling electric and electronic appliances, consult with the local municipality for proper
disposal guidelines.



WARNING: Installation is to be performed only by a qualified installer.



WARNING: Improper electrical connection may result in an electric shock hazard or damage the unit. This appliance must be properly grounded.



NOTICE: DO NOT connect this appliance to a hot water supply. The water inlet valve is not rated for hot water. Do not exceed the maximum water pressure stated in the *SPECIFICATIONS* section.



IMPORTANT: Observe all governing codes and ordinances.

Installation Instructions

Installation Requirements

- A secure surface capable of supporting the weight of the appliance.
- For units without an attached cord set attached or dual voltage units set up for use with 220 240 Volts: Appropriately sized, UL listed, grounding type power cable to meet the electrical specifications for the appliance. If you have questions about the correct cable size and length, consult a qualified installer. If the appliance will be hard wired to a junction box, the power cable must be long enough so that the unit can be moved for cleaning underneath.
- A grounded electrical connection to an electrical circuit that meets the electrical specifications of the appliance (see *SPECIFICATIONS*). The circuit must be protected by the appropriate sized circuit breaker. If you are not certain that the existing circuit meets the requirements for your unit, consult a licensed electrician.
- A water filtration system is required to maintain trouble-free operation. Wilbur Curtis Co., Inc. recommends a
 Wilbur Curtis approved water filter. See the Curtis Equipment Catalog for a full line of Wilbur Curtis approved
 water filters.
- Potable water supply line connection from the water filter capable of supplying the minimum flow rate required
 by the specifications. The water supply line must be able to connect to the flare fitting on the back of the
 unit. See the SPECIFICATIONS section for the correct size. The water line should also be capable of being
 controlled by a shut off valve. Do not connect the water line to a saddle valve or needle valve.

IEC requires the following water connection:

- 1 A quick disconnect or additional coiled tubing (at least two times the depth of the appliance) is required so that it can be moved for cleaning underneath.
- 2 This equipment is to be installed with adequate back-flow protection to comply with applicable federal, state and local codes.
- Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained in accordance with federal, state and local codes.

The International Plumbing Code of the International Code Council and the Food and Drug Administration (FDA) Food Code manual, direct that this equipment must be installed with adequate back-flow prevention in compliance with federal, state and local codes. For units installed outside of the U.S.A., make sure that the installation is in compliance with the applicable plumbing/sanitation code for your area.

Installation

Prepare the Location - Banquet Brewer and Banquet Holder



WARNING: DO NOT place the banquet brewer or banquet holder closer than six inches from wall. Both units must have adequate crossventilation.

- Determine the location. Make sure that the counter is capable of supporting at least 600 lbs. to allow for the brewer weight at full capacity. Also allow 600 lbs. of additional capacity if using the optional banquet holder.
- 2 If installing the banquet holder, it must be installed to the right of the banquet brewer, when facing the front. Doing so allows for routing of the transfer lines. The maximum distance between the two units is 12 inches to allow for the length of transfer lines.

Level the Unit(s) - Banquet Brewer and Banquet Holder

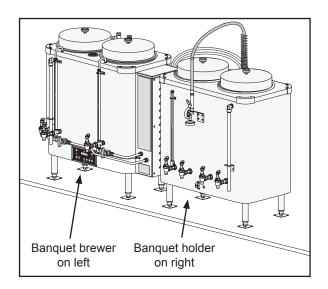


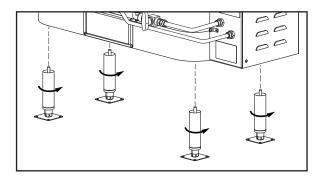
WARNING: Use the leveling legs to level the brewer only. Do not use them to adjust brewer height. Do not extend them higher than necessary.

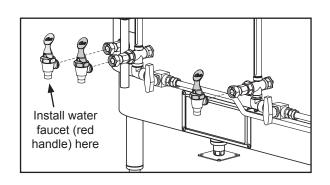
- 3 Remove the unit(s) from the shipping carton and install the legs. Screw them firmly into place on the bottom of the unit.
- 4 Position the unit(s) on the counter top. Level them left to right and front to back by turning the feet at the bottom of the legs. NOTE: The feet are equipped with mounting holes so that the unit can be secured to the counter top if necessary.

Install the Faucets - Banquet Brewer and Banquet Holder

Install the coffee and hot water (red) faucets on the front of the unit. On the banquet brewer, the hot water faucet installs on the far left. Be careful not to over tighten the faucet mounting nuts.





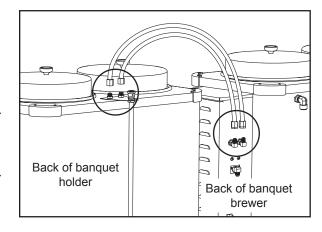


Connect the Transfer Lines and Spray Arm - Banquet Holder

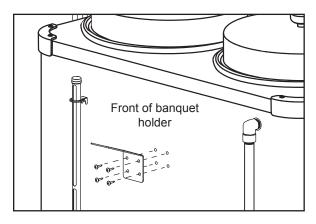
6 Remove the protective caps from the transfer line fittings on the back of the banquet brewer. Connect the transfer hoses between the brewer and the holder.



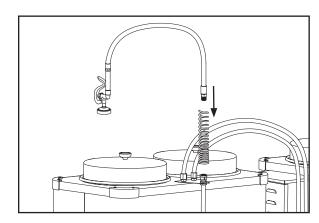
IMPORTANT: The hoses must be installed in an arc as shown, with NO sagging in between for proper transfer pump operation.



7 Attach the spray arm bracket to the front of the banquet holder.



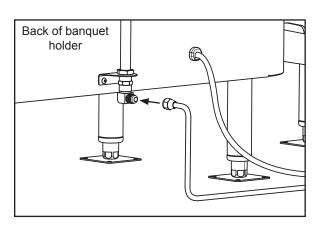
8 Attach the spray arm to the spray arm fitting on the top back of the banquet holder.



- 9 Flush the holder water supply line prior to installation to purge air and debris from the tubing.
- 10 Connect the water supply line to the flare fitting on the back of the holder. Leave the water supply valve closed until power is connected.



NOTICE: maximum water pressure: 60 psi.



Connect the Water Supply - Banquet Brewer

- 11 Flush the water supply line prior to installation to purge air and debris from the water filter and tubing.
- 12 Connect the water supply line to the flare fitting on the back of the brewer. Leave the water supply valve closed until power is connected.

Connect the Wiring - Banquet Brewer



WARNING: Turn off power to the junction box at the circuit breaker panel before connecting the power cable to the brewer. Lock out and tag the circuit breaker.

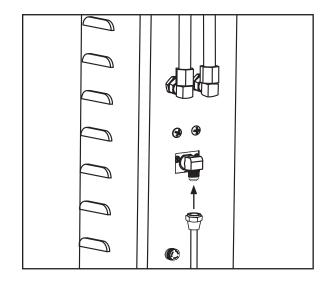
- 13 Remove the 220 Volt power access cover on the left side of the brewer.
- 14 Loosen the strain relief under the electrical access hole and feed the power cable into the brewer.
- 15 Connect the wires on the power cable to the terminal block inside the brewer. Use the proper wire gauge, plus 25%.
- 16 Tighten the strain relief.
- 17 Replace the access cover.
- 18 Connect the power cable wires to the terminals in the junction box. See the *ELECTRICAL SCHEMATIC* for the power supply requirements.

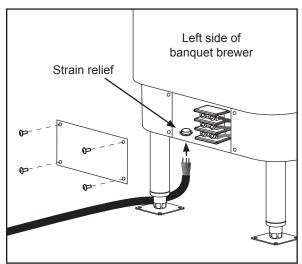
Connect the Power Cord - Banquet Holder

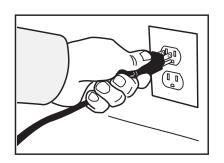
19 Connect the 120 volt power cord to a dedicated electrical outlet protected by a 15-20 Amp. circuit breaker.



WARNING: Connect the power cord to the appropriate type and size electrical outlet. If the electrical outlet is not compatible with the power cord, have it upgraded by a licensed electrician. Do not modify the power plug. Do not use an extension cord. Do not use a power cord/plug that is damaged.







Power Up the Banquet Brewer

- 20 Turn on the water supply valves.
- 21 Make sure that the circuit breaker supplying power to the unit is on.
- 22 Turn the toggle switch on the back of the banquet brewer to the ON position. The water tank will start to fill. While the tank is filling, inspect the water supply lines for leaks. During the initial water tank fill and whenever the filter is replaced, you may hear the sounds of air being purged from the filter and water supply tubing. When the water level in the tank rises to the correct volume, the heating elements will turn on automatically. Depending on the incoming water temperature and the electrical specifications, the water tank typically requires 45 minutes to reach the factory set operating temperature.



IMPORTANT: When operating the brewer at higher elevations, reduce the factory set operating temperature by 2°F for each 1000 feet of elevation above 4000 feet. See *PROGRAMMING GUIDE*.

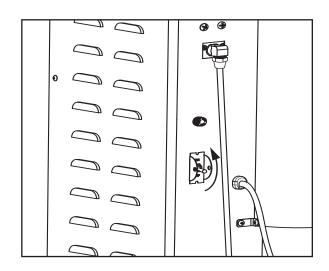
- 23 Press the ON button on the universal control module. When the water has finished heating, "Ready to brew" will appear on the display.
- 24 Perform a small brew cycle in both liners to purge any remaining air from the system. See *OPERATING INSTRUCTIONS*. During the initial brew cycle, you may hear the sounds of air being purged from the tubing inside the brewer.

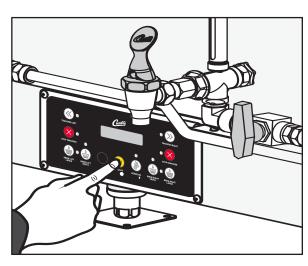


NOTICE: If the optional banquet holder IS NOT being used, consult the *PROGRAMMING GUIDE* section to turn off the transfer function to avoid accidental spillage.

Prep Transfer and Spray Head Lines - Banquet Brewer and Banquet Holder

- 25 Purge air from the banquet holder spray arm by spraying water into the holder for several seconds. Inspect the spray arm assembly and water inlet for leaks. Be sure to drain the water before using the holder for the first time.
- 26 When transferring coffee to the banquet holder for the first time (each side), inspect the transfer lines for leaks. See *OPERATING INSTRUCTIONS*.



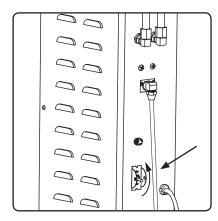


Brewing Instructions

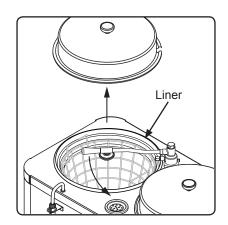


WARNING - TO AVOID SCALDING, AVOID SPLASHING. AVOID HOT SURFACES. Keep body parts clear of the brewer during brewing. Keep body parts clear of the outside surfaces of the brewer. Do not remove the brew basket while **Brewing** appears on the display.

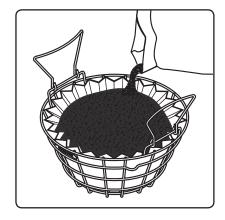
The G3 Banquet Brewer is factory preset for optimal performance.



1 The brewer should be ON.
Confirm this at the rear toggle switch. "Ready to brew" should be on the display.

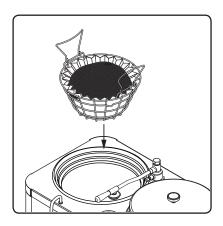


Remove the lid for the liner on the desired side and rotate the spray arm to the side.

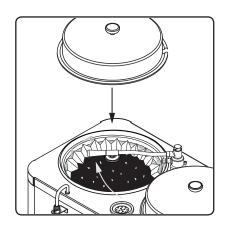


3 Remove the brew basket and insert a clean paper filter. Fill the basket with the proper amount of ground coffee.

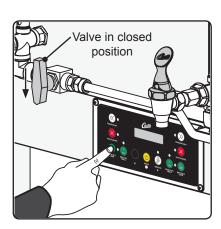
Make sure that the coffee is level in the filter.



4 Make sure that the liner is empty. Insert the filled brew basket into the top of the liner.



5 Rotate the spray head over the bed of coffee inside the filter and center it. Replace the lid.



6 Make sure that <u>both</u> transfer valves are closed, then press the appropriate **BREW** button. Brewing will begin immediately. **NOTE:** To cancel the brew cycle, press and hold the BREW button for 3 to 5 seconds.

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The brewer will brew coffee based on the settings programmed into the universal control module (UCM). To change the settings, see the *Programming Guide*.

BB/BH, OPERATING INSTRUCTIONS

Aeration

During brewing, the stronger coffee tends to settle toward the bottom of the liner, while the weaker coffee tends to move to the top. The aeration feature assures uniform mixing of the brewed coffee by pumping air into the liners. The aeration pump comes on automatically for 30 seconds at the end of the brew cycle.

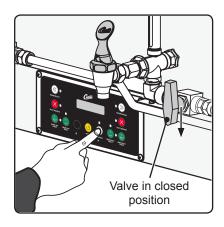
For best coffee taste, aerate the brewed coffee inside the banquet brewer manually, once an hour. The optional banquet holder does not have this feature.

To manually aerate the coffee:

Push and hold the **AERATION** button on the universal control module (UCM) for 30 seconds. The air pumps will aerate the coffee in both liners. Release the button to stop aeration.

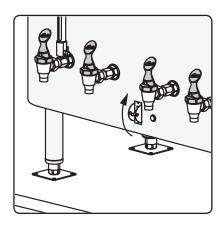


IMPORTANT: Both transfer valves must be in the closed position during aeration.

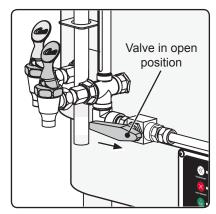


Transferring Coffee to the Optional Banquet Holder

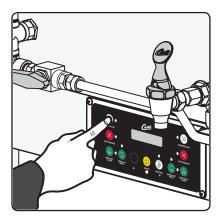
NOTICE: DO NOT leave the banquet holder power switch on for long periods of time when it is empty. Doing so will cause the safety switch to trip. Make sure that there is enough remaining capacity in the banquet holder before transferring coffee.



1 Turn on the banquet holder switch 15 to 20 minutes before transferring the coffee.



Open the appropriate transfer valve on the banquet brewer (left or right).



3 Press the TRANSFER LEFT or TRANSFER RIGHT button. The transfer pump will shut off automatically when transfer is complete, or you may press STOP TRANSFER. Close the transfer valve when transfer is complete.



NOTICE - Do not use cleaning liquids, compounds or powders containing acids or corrosives. These products promote corrosion and will pit the stainless steel. Never use abrasives to clean the unit(s). **USE OF THESE PRODUCTS WILL VOID THE WARRANTY.**

Daily Cleaning - Urns



WARNING: Avoid injury. The cleaning instructions below involve cleaning hot surfaces with very hot water.

- 1 Clean the brewer liner(s). Drain any remaining coffee out of the liner(s). Run a brew cycle of fresh water. Spray the hot water into the liner(s), then thoroughly brush out with a long handled brush. Drain the water out of the liner(s), then repeat the proceeding cleaning procedure. After draining the second time, wipe down the liners with a clean towel. If the urn is not going to be used immediately, pour a gallon or two of fresh water inside each liner. Remember to drain off this water before making another brew.
- 2 Remove the wire baskets from the unit and wash with urn cleaner. Rinse thoroughly.
- 3 Clean the exterior. Turn off the main power toggle switch and allow the unit to cool. Wipe the exterior surfaces with a damp cloth to remove spills and debris. Turn power back on when done.

Bi-Weekly Cleaning - Urns

The following cleaning process requires TABZ[™] brand, Z95 Cleaning Tablets (Curtis PN WC-79000).



WARNING: Avoid injury. The cleaning instructions below involve cleaning hot surfaces with very hot water. After scouring, flush the entire system as instructed before running another brew cycle.

- 1 Be sure the water jacket is full of water at brewing temperature. Drop one (1) Z95 tablet into the water for each 1.5 gallons of liner capacity. Mix until the tablets are completely dissolved.
- 2 Scrub the inside of the liner cover(s) and the inside of the liner(s) with a long handled brush.
- 3 Allow the liners to soak at brewing temperature for five to ten minutes.
- 4 After soaking is complete, open all faucets on the unit to drain the cleaning solution.
- 5 After the cleaning solution has drained, fill the liner(s) with hot rinse water and drain.
- 6 Fill the liner(s) with hot rinse water <u>a second time</u> and drain.
- 7 Switch off power to the unit at the circuit breaker panel. Turn off the water supply. Drain the liner(s).
- 8 If the urn is not going to be used immediately, pour a gallon or two of fresh water into each liner. Remember to drain off this water before making another brew.

Spray Head Cleaning - Weekly

Remove the spray head from the spray arm and clean it once a week using a mild solution of dish-washing detergent and warm water. Clean the spray heads more often in heavy lime areas.

URN, CLEANING INSTRUCTIONS 050420B



NOTICE - Do not use cleaning liquids, compounds or powders containing acids or corrosives. These products promote corrosion and will pit the stainless steel. Never use abrasives to clean the unit(s). **USE OF THESE PRODUCTS WILL VOID THE WARRANTY.**

Daily Cleaning - Banquet Brewer with Banquet Holder



WARNING: Avoid injury. The cleaning instructions below involve cleaning hot surfaces with very hot water.

- Drain any remaining coffee out of both units. Run a brew cycle of fresh water. Spray hot water into the liners on the brewer, then thoroughly brush out with a long handled brush. Open both transfer valves and transfer the contents of the brewer (using the TRANSFER buttons) into the holder to flush the transfer lines. Thoroughly brush out the interior of the holder with a long handled brush. Spray additional water inside as necessary. Drain the water out of the brewer and the holder, then repeat the proceeding cleaning procedure. After draining the second time, wipe down the liners with a clean towel. If the brewer and holder are not going to be used immediately, pour a gallon or two of fresh water inside each liner on the brewer, and inside the holder. Remember to drain off this water before making another brew.
- 2 Remove the wire baskets from the brewer and wash with urn cleaner. Rinse thoroughly.
- 3 Clean the brewer/holder exteriors. Turn off the main power toggle switch and allow the unit(s) to cool. Wipe the exterior brewer surfaces with a damp cloth to remove spills and debris. Turn power back on when done.

Bi-Weekly Cleaning - Banquet Brewer with Banquet Holder



WARNING: Avoid injury. The cleaning instructions below involve cleaning hot surfaces with very hot water. After scouring, flush the entire system as instructed before running another brew cycle.

- 1 Be sure the water jacket of the banquet brewer is full of water at brewing temperature. Run a full brew cycle with water only, in both liners, and stir in coffee urn cleaning compound. Dilute it according to the manufacturer's recommendations. Allow the brewer to soak at brewing temperature for the amount of time recommended in the manufacturer's instructions.
- 2 Scrub the inside of the brewer covers and the inside of the brewer liners with a long handled brush.
- 3 Transfer cleaning solution from the brewer liners to the banquet holder using the TRANSFER buttons, to clean the transfer lines. Spray water into the holder until it is full. Add additional cleaner as necessary and allow to soak for the specified amount of time. After soaking is complete, open all faucets on the brewer and holder to drain the cleaning solution.
- 4 After the cleaning solution is drained, fill both brewer liners with hot rinse water. Transfer the rinse water from both liners to the holder to flush out the transfer lines. Fill the holder up the rest of the way with hot rinse water.
- 5 Drain both units, then repeat step 4.
- 6 Switch off power to the units at the circuit breaker panel. Turn off the water supply to the banquet brewer. Drain both units and wait for them to cool.

Spray Head Cleaning - Weekly - Banquet Brewer

Remove the spray head from the spray arm and clean it once a week, more often in heavy lime areas.

BB/BH, CLEANING INSTRUCTIONS 051517A

Cleaning the Faucet and Sight Gauge - As Needed

The following cleaning process requires a mild solution of dish-washing detergent and warm water, and One-Pro Beverage Equipment Cleaner (Curtis PN WC-79001). Mix the One-Pro cleaner at a ratio of 1 oz. (28 g.) per 5 gal. (19 L) of hot water (122°F/50°C min.).

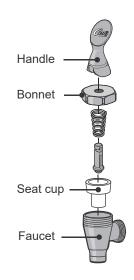
- 1 Unscrew the handle/bonnet assembly and remove. Inspect the seat cup for wear. Replace the seat cup if it is damaged.
- 2 Remove the hose on top of the gauge (if applicable) by pulling it up and off of the cap. Remove the gauge cap and the glass tube. Inspect the glass tube for cracks or chips.



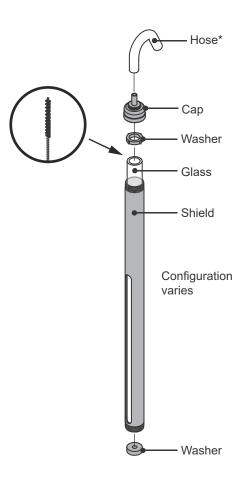
WARNING - If the gauge glass is broken, carefully inspect and remove all traces of glass and insert a new glass tube, then thoroughly rinse out the faucet shank.

- 3 **Wash** Wash the faucet and gauge parts in the detergent solution. Clean the glass tube with a gauge brush soaked with the detergent solution.
- 4 **Rinse** Thoroughly rinse all parts with clean, warm water.
- 5 **Sanitize** After rinsing, place the faucet and gauge parts in One-Pro solution, mixed as specified above, and allow them to soak for 15 minutes.
- 6 **Air Dry** Remove the parts from the sanitizer, rinse thoroughly and allow them to air dry.
- 7 Reassemble When dry, reassemble the handle/bonnet. Hand tighten the handle/bonnet onto the top of the faucet assembly. Reassemble the gauge.



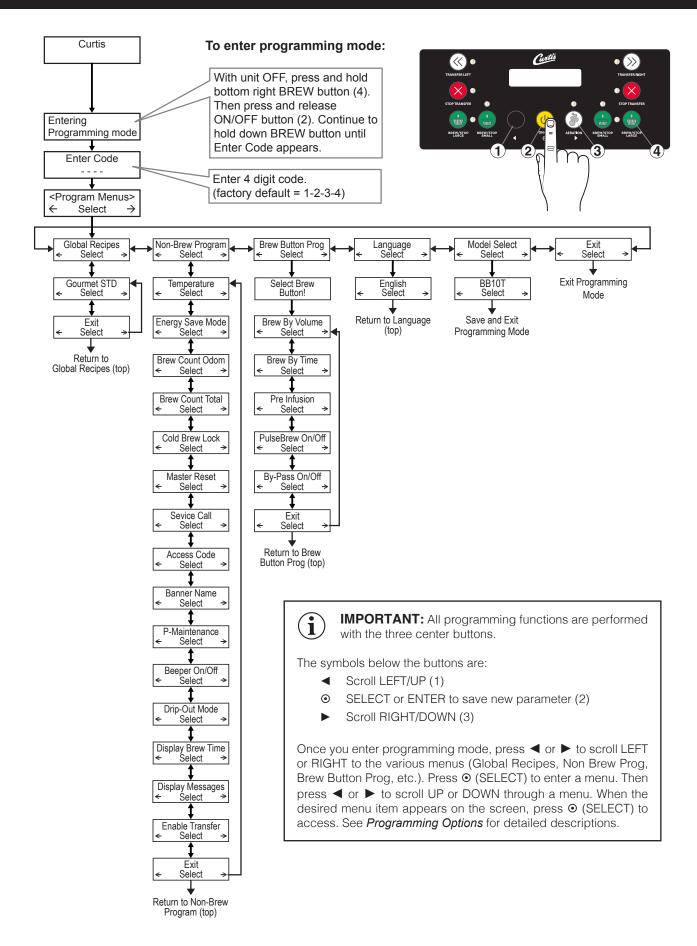


Faucet Disassembly



Sight Glass Disassembly

* Hose used only on models with aeration feature



Programming Options

See the first page of the programming guide for instructions on accessing each individual menu item. Some menus save and exit automatically when a parameter is updated. Other menus exit to the previous menu when a parameter is saved. To exit, press ▶ until EXIT appears on the display, then press ⊙.

Global Recipes Menu

Select from the following coffee types: Gourmet STD (standard). Selecting the coffee type sets the various brew settings for the brewer, shown below and on the following pages, to the factory recommended settings for the type of coffee being brewed. If desired, the individual brew settings may be changed once the coffee type is selected to meet your brewing needs.



IMPORTANT: If you change any of the brewer settings on the following pages, some or all of them may be modified if you change the coffee type afterward using the Global Recipes menu.

Non-Brew Programming Menu

Temperature - adjusts the maximum tank water temperature. Once accessed (⊙), press ◀ or ▶ to increase or decrease the temperature. The range is 170°F to 202°F. Press ⊙ to save. Press ▶ to display the subsequent menu features.

Energy Save Mode - saves energy during periods when the brewer is not in use. When set to On, the brewer automatically shuts off four hours after the last brew cycle. Press the ON/OFF button to return to normal operation. When set to On-140°F, the brewer shuts off four hours after the last brew cycle, but the water tank temperature remains at 140°F. Use the On-140°F setting to reach brewing temperature faster after periods of non-use. Once accessed (⊙), press ◀ or ▶ to choose the desired setting. Press ⊙ to save. Press ▶ to display the subsequent menu features.

Brew Count Odom - When accessed, this feature displays the total brew cycles since the odometer was last reset. Press ▶ to go back without resetting or ⊙ to reset. Press ▶ to display the subsequent menu features.

Brew Count Total - when accessed (⊙), displays the total brew cycles on the brewer. It cannot be reset. The display returns to the previous screen automatically after a few seconds. Press ► to display the subsequent menu features.

Cold Brew Lock - adjusts the temperature at which the brewer will brew when a BREW button is pressed (**Ready to brew** appears on the display). This feature also adjusts the temperature at which the heating element turns on to reheat the water in the tank. The available settings are 5°F, 15°F and Off. Off is within 30°F below the temperature setting. Once accessed (⊙), press ◀ or ► to select the desired setting. Press ⊙ to save. Press ► to display the subsequent menu features.

Master Reset - resets the brewer universal control module (UCM) to the factory default settings. Once accessed (⊙), "Are You Sure?" will appear on the display. Press ◀ for Yes or ▶ for No. If you press No, the display goes back to the programming menu. If you press Yes, the UCM will reset and exit programming mode.

Service Call - sets the service phone number that appears on the display when the UCM detects a SENSOR ERROR or WATER ERROR. Once accessed (⊙), press ◀ or ▶ to select the number to be changed. Press ⊙ repeatedly to change the number value. Press ◀ or ▶ to select the next number to change. When done, press ▶ until **ex** flashes on the display and press ⊙. Press ▶ to display the subsequent menu features.

Programming Options (cont.)

Access Code - sets the access code entered to access programming mode (the factory default is 1-2-3-4). Once accessed (⊙), press ◀ or ▶ to select the number to be changed. Press ⊙ repeatedly to change the number value. Press ◀ or ▶ to select the next number to change. When done, press ▶ until **ex** flashes on the display and press ⊙. Press ▶ to display the subsequent menu features.

Banner Name - changes the banner name that appears on the display. No banner name appears when all blanks are entered. Once accessed (⊙), press ◀ or ► to select the letter to change. Press ⊙ repeatedly to change the letter. When done, press ► until **ex** flashes on the display and press ⊙. Press ► to display the subsequent menu features.

P-Maintenance - adjusts the P-Maintenance (preventive maintenance) brew monitor. When on, the UCM measures the number of gallons brewed before the P-Maintenance reminder appears on the display. The range is Off to 9500 gallons. Once accessed (⊙), press ◀ or ▶ to select the desired setting, then press ⊙ to save. Press ▶ to display the subsequent menu features.

Beeper On/Off - turns the beeper that is heard each time a button is pressed. Once accessed (⊙), press ◀ or ▶ to toggle between On and Off. Press ⊙ to save. Press ▶ to display the subsequent menu features.

Drip-out Mode - sets the Drip-Out time. Drip-out allows additional time for coffee to drain from the brew basket before "Brewing" disappears from the display. Once accessed (⊙), press ◀ or ▶ to increase or decrease time. The range is Off to 5:00. Press ⊙ to save. Press ▶ to display the subsequent menu features.

Displ. Brew Time - turns the display of the brew time during brewing On and Off. Once accessed (⊙), press ◀ or ▶ to toggle between On and Off. Press ⊙ to save. Press ▶ to display the subsequent menu features.

Display Messages - turns display of the message "Rinse Urn Before Brewing" On or Off. Once accessed (⊙), press ◀ or ▶ to toggle between On and Off. Press ⊙ to save. Press ▶ to display the subsequent menu features.

Enable Transfer - turns the transfer function On or Off. Once accessed (⊙), press ◀ or ▶ to toggle between On and Off. Then, press ⊙ to exit. Press ▶ to display the subsequent menu features.

Brew Button Programming Menu

When you first enter the Brew Button Programming menu, you will be asked to select (press) a BREW button to change the settings for. To program more than one BREW button, finish programming the first, then press ▶ until Exit appears on the display. Press ⊙ to exit, then re-enter the Brew Button Program to program the next one.

Brew By Volume - sets brewing volume. Once accessed (⊙), press the BREW button for which the brew volume needs to be changed. Press the same BREW button again to start. When the desired volume is reached, press the BREW button again to stop the flow. The volume has been set. Press ▶ to display the subsequent menu features.

Brew by Time - sets the amount of coffee brewed according to time. Once accessed (⊙), press the BREW button for which the brew time needs to be changed. Press ◀ or ▶ to highlight minutes or seconds. Press ⊙ to change the setting. The range is 0:00 to 19:59. Once the amount of time is entered, press ▶ until ex is flashing, then press ⊙ to save. Press ▶ to display the subsequent menu features..

Programming Options (cont.)

Pre-Infusion - sets the Pre-Infusion time (Pulse Brew must be Off to access). Pre-infusion increases control of coffee clarity and extraction. Once accessed (⊙), press the BREW button for which pre-infusion needs to be changed. Press ◀ or ▶ to change the setting. The range is Off to 60 seconds. Press ⊙ to save. Press ▶ to display the subsequent menu features.



When Pre-infusion is ON, Pulse Brew disappears from the list of menu items.

Pulse Brew On/Off - selects the Pulse Brew pattern (Pre-Infusion must be Off to access). The pulse brew pattern selected "tunes" or changes the flavor of the coffee. Once accessed (⊙), press the BREW button for which Pulse Brew needs to be changed. Press ◀ or ▶ to select the desired setting (see guidelines below for information on various settings). Press ⊙ to save. Press ▶ to display the subsequent menu features..



When Pulse Brew is on, Cold Brew Lock is set within 5°F and, Cold Brew Lock and Pre-Infuson disappear from the list of program selections.

Pulse Brew Guidelines

- Filter pack type coffees typically extract better with the A and B pulse setting.
- Decaffeinated coffees typically extract better with the B pulse setting.
- High-yield coffees typically extract better with the C pulse setting. Of course, any of the A, B or C settings may be used to suit your taste profile.
- Settings D and E are manual pulse counts.

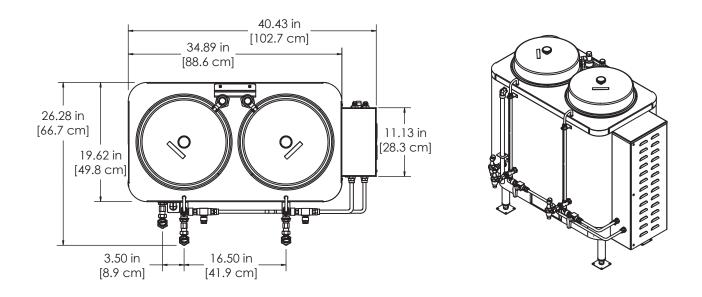
By-Pass On/Off - turns by-pass feature On and Off. Press ⊙ to access. Press ◀ or ▶ to toggle between On and Off. Press ⊙ to save. Press ▶ to display the subsequent menu features.

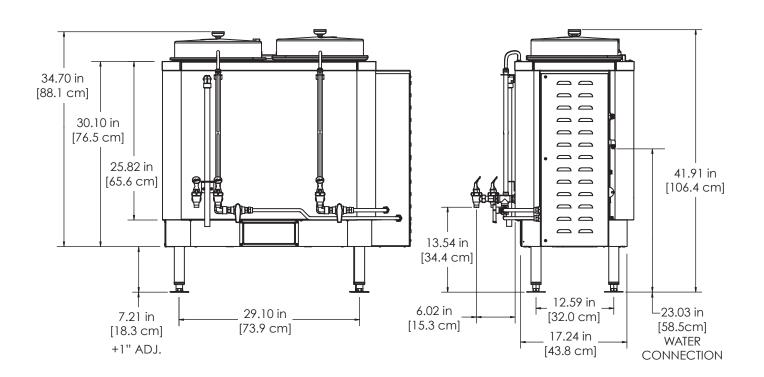
Language - changes the language that appears on the display. This feature is programmable for changing and adding languages. Once accessed, press ◀ or ▶ to choose the desired setting, then press ⊙ to exit.

Model Select - changes the model number. Once accessed, press ◀ or ▶ until the model number matching the model number label on the brewer appears, then press ⊙. The brewer will reset and the new model number will be saved.

RD4

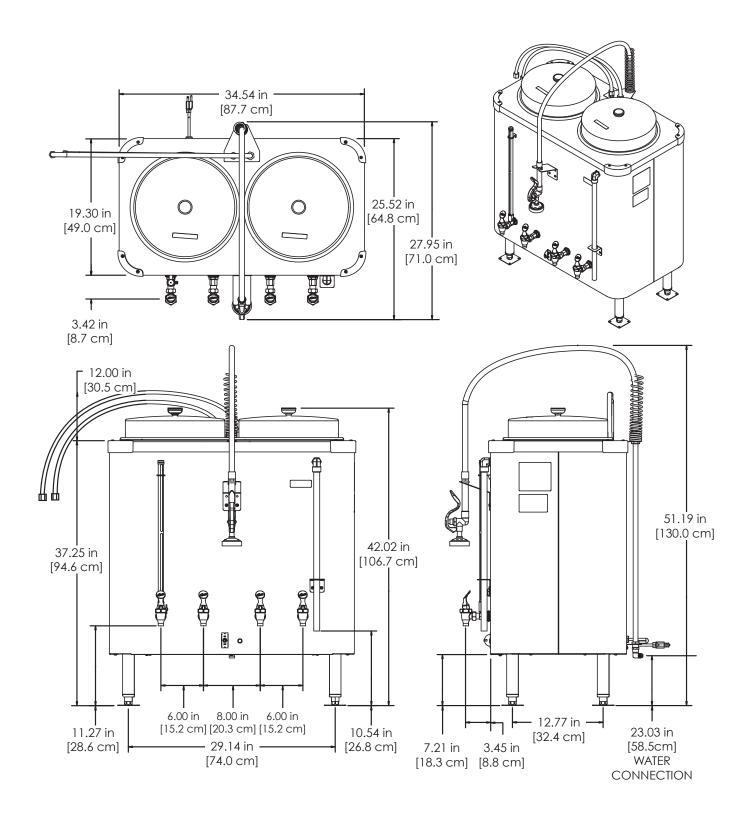
BB - Banquet Brewer





BB, ROUGH-IN DRAWING 011217NC

BH - Banquet Holder

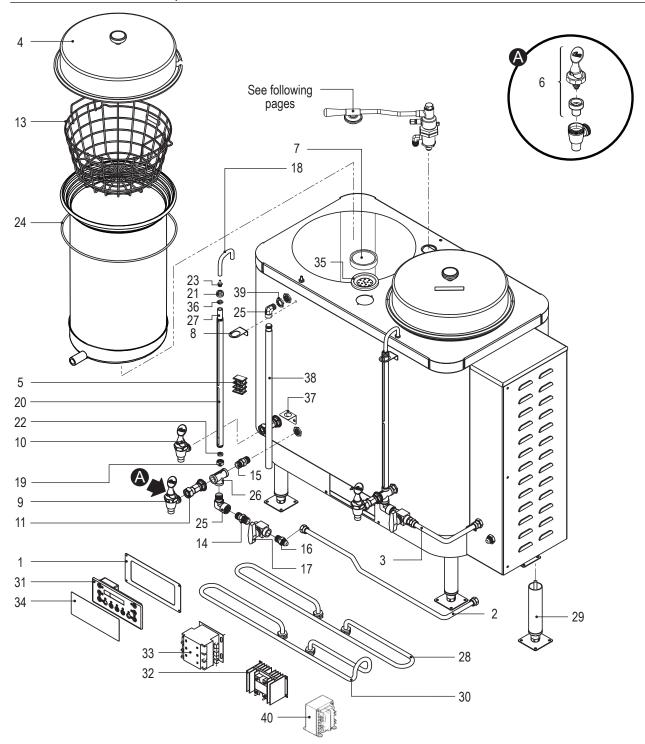


BH, ROUGH-IN DRAWING 011217NC

Supplies and Accessories - All Models



BB - Main Chassis - Exploded View



BB - Main Chassis - Parts List

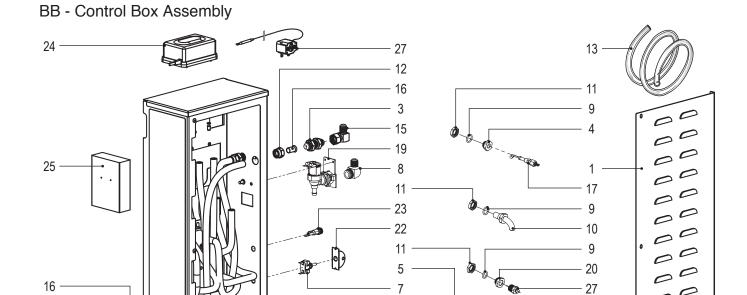
ITEM#	PART#	DESCRIPTION
1	WC-89376	PANEL, UCM MOUNTING BB
2	WC-89395	TUBE,FORMED 1/2"OD LEFT ASSY SST
3	WC-89397	TUBE, FORMED 1/2" OD RIGHT ASSY SST
4	WC-5603	LID, LINER ASSY RU225/600/1000
5	WC-300	POWER BLOCK, 3 STA 175A 600V RU'S
6	WC-3705	KIT, FAUCET HANDLE S SERIES NONLOCK
7	WC-5634	CAP, URN STEAM RING
8	WC-2007-101	BRACKET, GAUGE GLASS BB
9	WC-1800	FAUCET,"S" SERIES BLK LOCKING 1-1/32-14 UNS CURTIS
10	WC-1800HW	FAUCET, "S" SERIES HOT WATER 1-1/32-14 UNS
11	WC-1902-101	SHANK, FAUCET PLAIN ASSY
12	WC-13531	HARNESS, ASSY BB (NOT SHOWN)
13	WC-3304	BREW BASKET, WIRE W/ FLAPS RU-1000
14	WC-2325-102	NIPPLE, 1/2NPT MACHINE BOTH SIDES SST.
15	WC-2325-101	NIPPLE, 1/2"NPT MACHINE ONE SIDE ONLY SST
16	WC-3118-101	ADAPTER, 1/2NPT X1/2T MACHINED SST. BB
17	WC-3117	VALVE, BALL MANUAL 1/2" SST BH/BB
18	WC-5307	TUBE, 3/16 ID x 3/32W SILICONE GEN USE
19	WC-2004	BASE, SHIELD GAUGE GLASS GEN USE
20	WC-2023	SHIELD, 20" GAUGE GLASS
21	WC-2002	CAP, SHIELD W/CLEAN OUT
22	WC-2006	WASHER, .188 ID X .188 THK BOTTOM GAUGE GLASS GEN USE

ITEM#	PART#	DESCRIPTION
23	WC-2000	FITTING, AGITATION PLATED RU'S
24	WC-43076	O-RING, LINER, RU'S, 6, 10 GA
25	WC-2481	ELBOW, 1/2IN MxF SST
26	WC-2326-101	TEE, 1/2NPT SST. BB
27	WC-2037	GLASS, GAUGE 5/8"D. X 20"
28	WC-913	ELEMENT, HEATING 5KW 220V
29	WC-3507T	LEG, 8" ADJUSTABLE W/TIE DOWNS 3/8-16 THRD RU'S
30	WC-913-103	ELEMENT, HEATING 5KW/220VAC BENT 1-END HI-LIMIT
31	WC-10026	CONTROL MODULE, UCM 120/220V BB
32	WC-8559-101	RELAY, SOLID STATE 480V/60A W/HEATSINK AND SCREW TERMINALS
33	WC-431	CONTACTOR, 120V, 60A 3P DP
34	WC-390278	LABEL, UCM BANQUET BREWER CURTIS
35	WC-5800	RING, STEAM
36	WC-2005	WASHER, SHIELD CAP 1/8" GEM-3/TC'S W/SG
37	WC-89411	BRACKET, OVERFLOW/VENT BH
38	WC-89399	PIPE, OVER FLOW 1/2IN X 23"LG THREAD 1-END
39	WC-4214P-101	NUT, 1/2" JAM, SST.
40	WC-592	TRANSFORMER, 230-115V 130VA GEN USE
41	WC-5634	CAP, URN STEAM RING

BB - Recommended Parts to Stock

ITEM#	PART#	DESCRIPTION
6	WC-3705	KIT, FAUCET HANDLE S SERIES NONLOCK
18	WC-5307	TUBE, 3/16 ID x 3/32W SILICONE GEN USE
22	WC-2005	WASHER, .188 ID X .188 THK BOTTOM GAUGE GLASS GEN USE
28	WC-913	ELEMENT, HEATING 5KW 220V
30	WC-913-103	ELEMENT, HEATING 5KW/220VAC BENT 1-END HI-LIMIT

ITEM#	PART #	DESCRIPTION
31	WC-10026	CONTROL MODULE, UCM 120/220V BB
32	WC-8559-101	RELAY, SOLID STATE 480V/60A W/HEATSINK AND SCREW TERMINALS
33	WC-431	CONTACTOR, 120V, 60A 3P DP



12

14

18

6

BB - Control Box - Parts List

12

ITEM#	PART #	DESCRIPTION
1	WC-89375	DOOR, SLIDING ELECT. CONTROL BOX BB
2	WC-37780	KIT, FITTING INLET ENLARGED HEX
3	WC-3119	BULKHEAD, 1/2" T SST BB/BH
4	WC-2938	FITTING, PROBE 1/8 NPT ORIFICE HEX SS
5	WC-2950	ELBOW,1/2 FL X 3/8 FPT 304SST
6	WC-1438-101	SENSOR, TEMPERATURE TANK
7	WC-103	SWITCH, TOGGLE NON-LIT DPST 25A 125/250VAC RESISTIVE
8	WC-2402P	ELBOW, 3/8"FL x 3/8" NPT PLATED
9	WC-4320	O'RING, ½" I.D.
10	WC-2948	FFITTING, TANK OVERFLOW 304SST
11	WC-4212	NUT, 5/8-18 JAM UNF SS
12	WC-4106	NUT, 1/2" FLARE SST 304
13	WC-53164	TUBE, 3/8 ID x 1/8W SILICONE GEN USE
14	WC-2637-101	RESTRICTOR, 3/8" BARB X 0.132"ORIFICE SST.

ITEM#	PART #	DESCRIPTION
15	WC-2487	ELBOW, 90DEG.1/2" FLARE X 1/2" SWIVEL SST.
16	WC-53185	TUBE, EXTENSION 1/2"od x .75LG FLARE 1-END
17	WC-5502	PROBE, WATER LEVEL
18	WC-1059	PUMP, ASSY 24 VDC 12 LPM DIGITAL URN
19	WC-12019	VALVE, INLET 4GPM 120V 9W BB/BH
20	WC-29124	FITTING, CAPILLARY THERMOSTAT SST BB/BH
21	WC-4305	WASHER, 5/8" TEFLON
22	WC-3249	GUARD, SWITCH DIG EQUIP
23	WC-1501	FUSE, HOLDER ASSY W/5A FUSE
24	WC-1002	PUMP, AGITATION 120V W/TERMS MCV/RU
25	WC-10029	POWER SUPPLY,120-230Vac X24Vdc /75W BB
26	WC-4377	WASHER, 5/8 SAE FLAT, SS
27	WC-5119	HI-LIMIT THERMOSTAT, 220F FIXED +10F/ -0F

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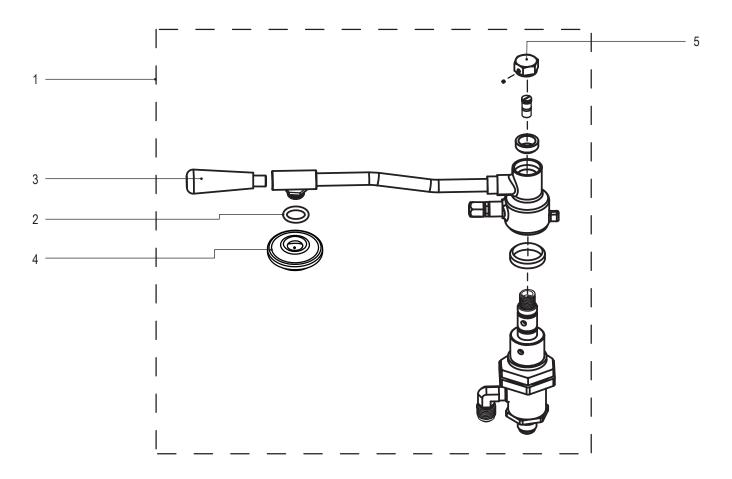
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BB - Control Box Recommended Parts to Stock

ITEM#	PART #	DESCRIPTION
6	WC-1438-101	SENSOR, TEMPERATURE TANK
7	WC-102	SWITCH, TOGGLE NON-LIT SPST 15A 125/6A 250VAC RESISTIVE
13	WC-53164	TUBE, 3/8 ID x 1/8W SILICONE GEN USE
17	WC-5502	PROBE, WATER LEVEL
18	WC-1059	PUMP, ASSY 24 VDC 12 LPM DIGITAL URN

ITEM #	PART #	DESCRIPTION
19	WC-12019	VALVE, INLET 4GPM 120V 9W BB/BH
23	WC-1501	FUSE, HOLDER ASSY W/5A FUSE
24	WC-1002	PUMP, AGITATION 120V W/TERMS MCV/RU
25	WC-10029	POWER SUPPLY,120-230Vac X24Vdc /75W BB
27	WC-5119	HI-LIMIT THERMOSTAT, 220F FIXED +10F/-0F

BB - Spray Arm



BB - Spray Arm Parts List

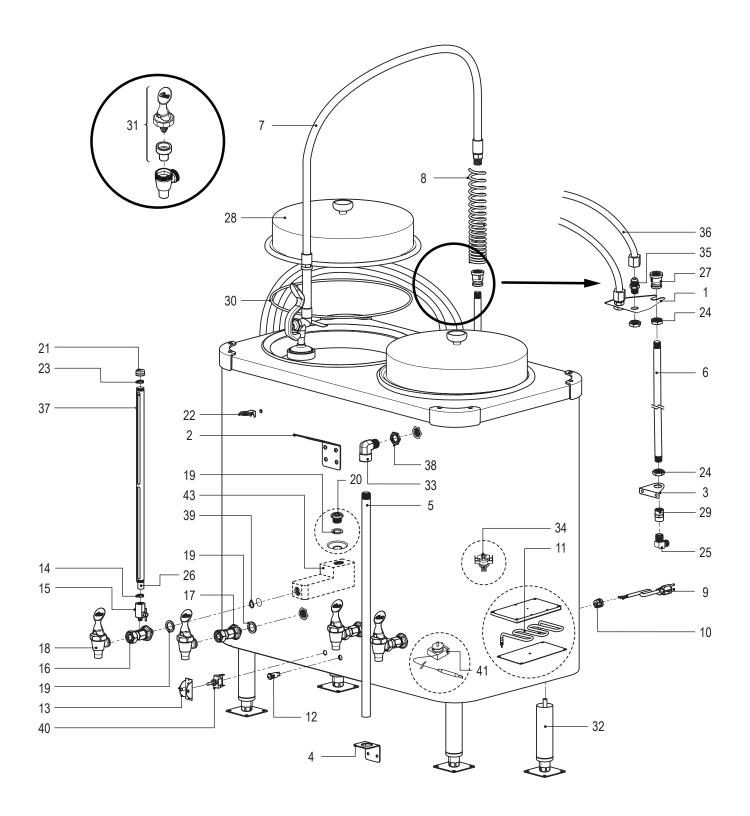
ITEM#	PART#	DESCRIPTION
1	WC-29102	SPRAYARM, ASSY COMPLETE DIGITAL URN 225/600/1000
2	WC-4320	O'RING, ½" I.D.
3	WC-3200	HANDLE, SPRAY ARM BLACK PLASTI C RU/ MWM

ITEM #	PART #	DESCRIPTION	
4 WC-2907		SPRAYHEAD, ASSY (SC)RU-150/300/600/1000	
5 WC-4800		SCREW, 8-32x1/8 SET SS	

BB - Spray Arm Recommended Parts to Stock

1 WC-29102 4 WC-2907		DESCRIPTION	
		SPRAYARM, ASSY COMPLETE DIGITAL URN 225/600/1000	
		SPRAYHEAD, ASSY (SC)RU-150/300/600/1000	

BH - Main Chassis - Exploded View



BH - Main Chassis - Parts List

ITEM#	PART#	DESCRIPTION	
1	WC-89364	BRACKET, UPPER PRE-RINSE SPRAY ARM BH	
2	WC-89404	BRACKET, PRE-RINSE ASSY	
3	WC-89365	BRACKET, LOWER PRE-RINSE PIPE BH	
4	WC-89411	BRACKET, OVERFLOW/VENT BH	
5	WC-89399	PIPE, OVER FLOW 1/2IN X 23"LG THREAD 1-END	
6	WC-89398	PIPE, 1/2" X 23" LG THREAD 1-END SST	
7	WC-29112	SPRAYARM ASSY, PRE RINSE BB,BH	
8	WC-29113	SPRING, PRE-RINSE SPRAY ARM	
9	WC-1200	CORD, 14/3 SJTO 6' BLK W/PLUG	
10	WC-1408	CORD GRIP, 7/8" O.D.	
11	WC-984	ELEMENT, WARMER 120VAC/850W BH	
12	WC-207	LIGHT, BREW 115V GREEN	
13	WC-3249	GUARD, SWITCH DIG EQUIP	
14	WC-2006	WASHER, .188 ID X .188 THK BOTTOM GAUGE GLASS GEN USE	
15	WC-1900	VALVE, GAUGE SHIELD SHUT-OFF 1/8 NPT	
16	WC-1901A	SHANK, FAUCET W/SHIELD BASE	
17	WC-1902-101	SHANK, FAUCET PLAIN ASSY	
18	WC-1800	FAUCET,"S" SERIES BLK LOCKING 1-1/32-14 UNS CURTIS	
19	WC-1813	WASHER, 1-1/8" OD ETHYLENE PROPYLENE RUBBER	
20	WC-3122	ADAPTER, 1-1/4" X .831" SST BB/BH	
21	WC-2001	CAP, SHIELD W/VENT 77-4 GEN USE	
22	WC-2007	BRACKET, GAUGE GLASS GEM-3	
23	WC-2005	WASHER, SHIELD CAP 1/8" GEM-3/TC'S W/SG	

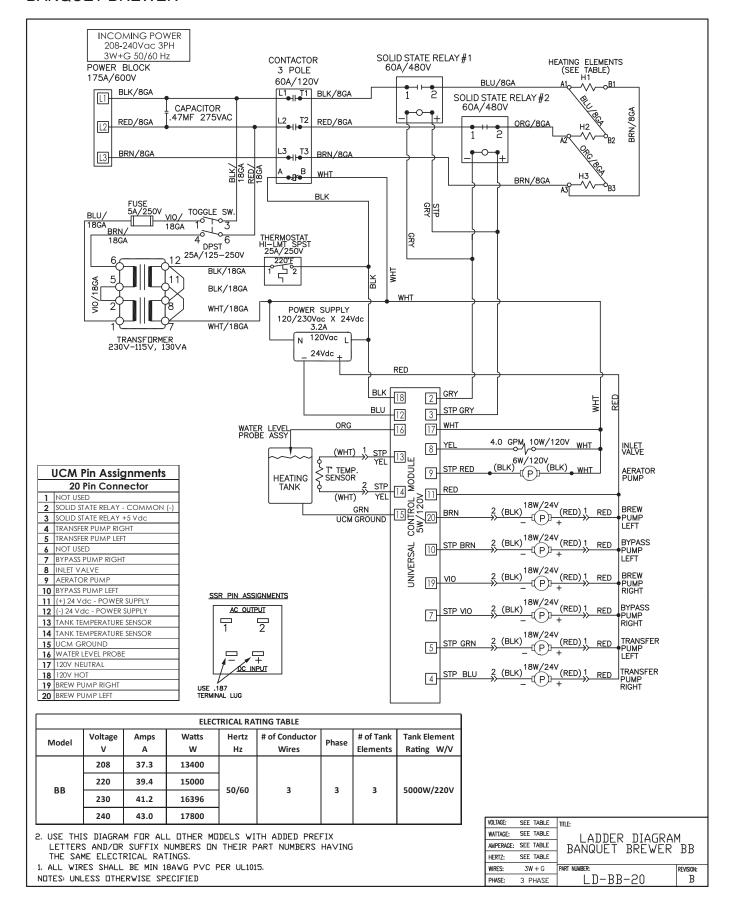
ITEM#	PART#	DESCRIPTION
24	WC-4211	NUT, 3/8 JAM NPSM NICKEL PLATE D W/O WASHER FACE
25	WC-2402P	ELBOW, 3/8"FL x 3/8" NPT PLATED
26	WC-2037	GLASS, GAUGE 5/8"D. X 20"
27	WC-2483	COUPLING, REDUCER 1/2" X 3/8" SST BB/BH
28	WC-56048	LID, BANQUET HOLDER BH
29	WC-2482	COUPLING, 3/8" SST BB/BH
30	WC-43076	O-RING, LINER, RU'S, 6, 10 GA
31	WC-3705	KIT, FAUCET HANDLE S SERIES NONLOCK
32	WC-3507T	LEG, 8" ADJUSTABLE W/TIE DOWNS 3/8-16 THRD RU'S
33	WC-2481	ELBOW, 1/2" M X F SSTT
34	WC-523	THERMOSTAT, MANUAL RESET 120/ 240 VAC 25A 220 DEG F MAX
35	WC-3120	ADAPTER, 3/8"P X 1/2" FLARE SST BB/BH
36	WC-53186	HOSE, TEFLON LINER 1/2"X48" LG BRAIDED SST BH
37	WC-2023	SHIELD, 20" GAUGE GLASS
38	WC-4214P-101	NUT, 1/2" JAM, SST.
39	WC-43177	O-RING, .799ID X .103 CS #117 SILICONE BB
40	WC-102	SWITCH, TOGGLE NON-LIT SPST 15A 125/6A 250VAC RESISTIVE
41	WC-504	THERMOSTAT, CAPILLARY SPST 250V 25A GEM
42	WC-13532	HARNESS ASSY, HEATER CKT BB (NOT SHOWN)
43	WC-3121	ADAPTER, SHANK 1.625D X 4.91" BB/BH

BH - Recommended Parts to Stock

ITEM #	PART#	DESCRIPTION	
11	WC-984	ELEMENT, WARMER 120VAC/850W BH	
12	WC-207	LIGHT, BREW 115V GREEN	
23	WC-2005	WASHER, SHIELD CAP 1/8" GEM-3/TC'S W/SG	
26	WC-2037	GLASS, GAUGE 5/8"D. X 20"	
31	WC-3705	KIT, FAUCET HANDLE S SERIES NONLOCK	
34	WC-523	THERMOSTAT, MANUAL RESET 120/ 240 VAC 25A 220 DEG F MAX	

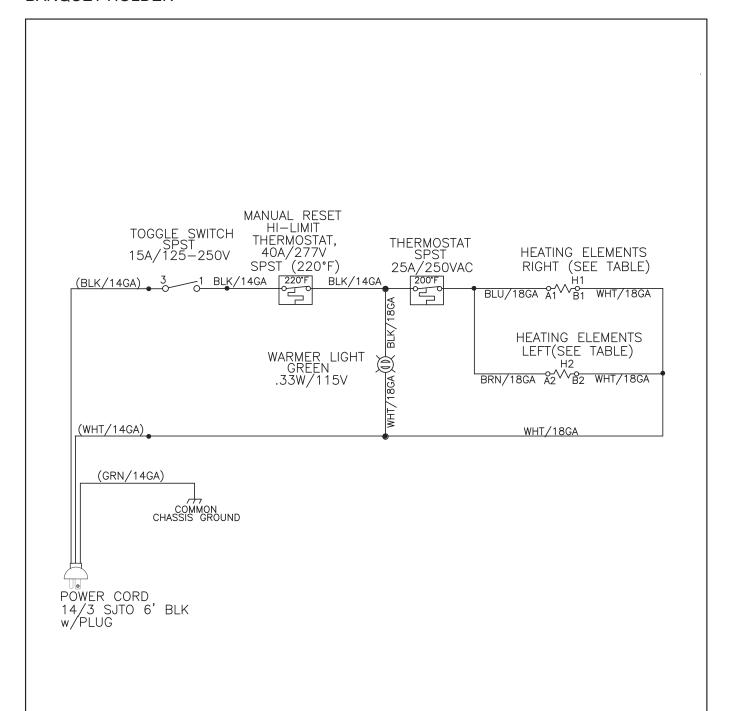
ITEM#	PART #	DESCRIPTION	
40	WC-102	SWITCH, TOGGLE NON-LIT SPST 15A 125/6A 250VAC RESISTIVE	
41	WC-504	THERMOSTAT, CAPILLARY SPST 250V 25A GEM	
42	WC-523	THERMOSTAT, MANUAL RESET 120/ 240 VAC 25A 220 DEG F MAX	
44	WC-2006	WASHER, .188 ID X .188 THK BOTTOM GAUGE GLASS GEN USE	

BANQUET BREWER



BB, ELECTRICAL SCHEMATIC 091317A

BANQUET HOLDER



NOTES: 1. ALL WIRES WITH HI-TEMPERATURE RATING 150C MINIMUM EXCEPT 14AWG WIRES.

ELECTRICAL RATING TABLE								
Model	Voltage V	Amps A	Watts W	Hertz Hz	# of Conductor Wires	Phase	# of Warmer Elements	Element Rating W/V
ВН	120	14.2	1700	50/60	2	1	2	850W/120V

1	VOLTAGE:	SEE TABLE		
۱	WATTAGE:	SEE TABLE		
١	AMPERAGE:	SEE TABLE	ITTE:	1.4
١	HERTZ:	SEE TABLE	LADDER DIAGRA	·Μ
١	WIRES:	2W + G	PART NUMBER:	REVISION:
	PHASE:	1 PH	LD-BH-10	A

BH, ELECTRICAL SCHEMATIC 091317A



WARNING:

Electric Shock Hazard - the following procedures are to be performed only by a qualified service technician. Disconnect power when replacing components. "Lock out and tag the circuit breaker. Neither Wilbur Curtis Co., Inc. nor the seller can be held responsible for the interpretation of this information, or any liability in connection with its use.

Scald and Burn Hazard - keep body parts clear of hot surfaces during troubleshooting.

Important Troubleshooting Guidelines

- If an error message appears on the display, consult the ERROR CODES section before troubleshooting.
- A brewer that is not level may not function properly. Make sure the brewer is properly leveled before proceeding.
- This troubleshooting guide identifies some, but not all, possible causes for common problems that can occur.
- Use this troubleshooting guide along with the appropriate ELECTRICAL SCHEMATIC.

Banquet Brewer Inlet Valve Test Procedure



IMPORTANT: If it is necessary to replace the G3 universal control module (UCM), <u>always</u> check the inlet, valve coil for a short and replace the valve as necessary before replacing the module. See the *Inlet Valve Test Procedure*, below to test for a defective valve.

Use a digital multi-meter to measure the resistance of the valve coil. Measure the resistance across the valve coil terminals with the wiring harness disconnected. Reverse the meter leads on the terminals and measure the resistance in the opposite direction. A resistance of less than 100 ohms, in either direction, indicates a shorted coil. The valve must be replaced.

If a shorted coil is not detected, test for an open coil:

- 1 Reconnect the valve terminals to the wiring.
- 2 Open the side panel and power up the brewer.
- 3 While monitoring the voltage at the inlet valve coil terminals, disconnect the orange wire from the water level sensor. You should hear the valve click open/closed at the moment power is applied or removed from the terminals. The inlet valve should open any time the water tank is not full. If the valve does not open, replace the valve. If voltage is not detected, first check the wiring. If the wiring is OK, replace the UCM.

No Power - Display Not Lit

- 1 Make sure that the 120 Volt power cord is connected to the power receptacle.
- 2 Make sure that the circuit breaker for power receptacle is not tripped and turned on.
- 3 Make sure that the main power toggle switch on the back panel is turned ON.
- 4 Check to make sure power and ground are being supplied to the control module (UCM). If there is power into the UCM, but display is blank, the UCM is probably bad.
- 5 If there is no power into the UCM, trace the circuit back (using the ELECTRICAL SCHEMATIC) to the 120 Volt power cord to find out where power is lost. If there is power into the thermostat reset switch, but not out, see step 6.
- If there is power into the thermostat reset switch, but not out, check to make sure that the water tank is not empty. If the tank is empty, the reset switch has probably opened up due to a low water level, go to *Water Tank Does Not Fill*. If there is water in the tank, but no power out, push in on the reset switch button to see if it restores power. If power is restored, check to make sure that the switch is not opening up at the wrong temperature (the switch should not open up at normal water temperatures). If there is still no power through the switch after pushing the button, replace the thermostat reset switch.

Brewer Does Not Start When Brew Button is Pressed

- 1 If **Brewing** appears on the display, check for faulty wiring and connections between the universal control module (UCM) and the pumps.
- 2 If **Brewing** does not appear on the display, check for a faulty UCM.

Water Does Not Heat At All

The following steps are performed with the rear toggle switch in the ON position.

- 1 Check for power across the terminals of the heating elements. If power is being supplied, remove the wires and check for an open heating element.
- 2 If there is no power to the elements, trace the circuit back (using the ELECTRICAL SCHEMATIC) to the 3 phase power cord to find out where power is lost. If there is power into the solid state relays (SSRs) but not out, see the following step. On units having two SSRs, be sure to check both.
- 3 If there is power into the SSRs, but not out, check for 5 Vdc (nominal*) across the + and pins of the SSRs. If there is 5 Vdc across the + and pins of a SSR, but no (or low) output voltage at a SSR output terminal, replace the SSR. If 5 Vdc is not being supplied from the UCM, but **Heating...** appears on the display, check the wiring from the UCM to the SSRs. If the wiring is OK, replace the UCM.
- 4 If **Ready to brew** appears on the display, but the water is not hot, check the resistance across the leads of the temperature sensor. If the resistance is less than 10 k and the water is not hot, replace the temperature sensor. If the temperature sensor resistance is above 10 k when the water is cool, replace the universal control module (UCM).

Water Too Hot (Boiling or Excessive Steaming)



IMPORTANT: Before proceeding, make sure that the control panel temperature is adjusted to compensate for higher elevations. The factory setting is 200°F. Reduce the factory set temperature setting two degrees for each 1000 feet of elevation above 4000 feet.

- 1 If **Over Temp Sensor** or **Ready to Brew** appears on the display and the water is too hot, go to **Over Temp Sensor Error Message**.
- 2 If the display reads **Heating** constantly, first check to make sure that the temperature senor is attached tightly to the tank and that heat sink compound was used. A properly mounted sensor should have a resistance of around 7 kOhms when the water is hot. If not, replace the sensor.
- 3 Check to see if the universal control module (UCM) constantly has +5 Vdc output (nominal) to the solid state relay (SSR), regardless of the resistance of the temperature sensor. If so, the UCM is probably bad.
- 4 If the UCM is working properly, check for a shorted SSR.

Water Not Hot Enough

If the water heats, but is not hot enough, first check for the correct temperature setting on the control panel. Reprogram as necessary.

Water Heats More Slowly Than Usual

- 1 Check for power across the terminals of the heating elements. If power is being supplied, disconnect the heating elements and check for continuity. Replace a heating element if it is open (nominal resistance is approximately10 Ohms).
- 2 Check the wiring to any element that does not have the proper or no voltage across it. Also check for corroded connections anywhere between the power block and the heating elements.
- If there is power into a SSR, but not out, check for 5 Vdc (nominal*) across the + and pins of the SSR. If there is 5 Vdc across the + and pins of an SSR, but no (or low) output voltage at a SSR output terminal, replace the SSR. If 5 Vdc is not being supplied from the UCM, but **Heating...** appears on the display, check the wiring from the UCM to the SSRs. If the wiring is OK, replace the UCM.

Over Temp Sensor Error Message

This error message indicates the universal control module (UCM) has detected a water overheating problem. The UCM is reading a water temperature in the tank above 210°F. Once the malfunction causing the error is corrected, the error message must be cleared. To reset the UCM and return to normal operation, turn the toggle switch on the back of the brewer to the OFF position for 5 seconds, then back ON.

- 1 Turn off power to the brewer and allow the water tank to cool. Once cool, turn power back on. Monitor the voltage supplied to the SSRs. It should be +5 Vdc (nominal) while the water is heating, then drop below +1 Vdc when the water is hot. If the SSR input voltage drops to +1 Vdc, but the heating elements remain on, check for a shorted SSR.
- 2 If the SSR voltage does not drop to below +1 Vdc when the water is hot, first check to make sure that the temperature sensor is attached snuggly to the tank with heat sink compound. If the temperature sensor is OK, check the UCM.

Sensor Error Message

This error indicates a malfunction (open circuit) in the temperature sensor system. Once the malfunction is corrected, the error message must be cleared. To reset the brewer and return to normal operation, turn the toggle switch on the back of the brewer to the OFF position for 5 seconds, then back ON.

- 1 Check for and open circuit across the leads of the temperature sensor while it is disconnected from the universal control module (UCM). If an open circuit is measured, replace the sensor.
- 2 If the sensor resistance is less than 200 k check the sensor wires for corrosion and reconnect them to the UCM. Afterward, if the error message comes back after resetting the brewer, replace the UCM.

Water Tank Overfills

- 1 Turn the toggle switch on the back of the brewer ON and OFF. If water continues to flow when the switch is in both positions, replace the inlet valve.
- 2 If water stop flowing to the water tank when the toggle switch is turned OFF and continues when the switch is turned back ON, remove the orange wire from the water probe on the tank. While power is ON, short the end of the orange wire to the metal surface on the outside of the tank. If water does not stop flowing when the orange wire is shorted to the tank, check the tank ground connection and the continuity of the orange wire connecting to the universal control module (UCM). If both are OK, replace the UCM.

Water Tank Does Not Fill



IMPORTANT: No water or low water in the tank can cause the tank to overheat, resulting in the thermostat reset switch opening. If after correcting a tank fill problem there is no power to the control panel, wait for the water tank to cool and push the reset switch button to reset.

- 1 Check to make sure the water supply is turned on. Check for a plugged water supply line, water filter or inlet valve.
- 2 If there are no plugs in the water supply line, check for power across the inlet valve terminals. If power is being supplied, but there is no water flow, replace the inlet valve.
- 3 If power is not being supplied to the inlet valve, check the wires between the universal control module (UCM) and the inlet valve. Check for corroded connections.
- 4 If the wiring between the UCM and the inlet valve is OK, but there is no power to the inlet valve, remove the orange wire from the water tank probe. If the water tank starts to fill, check the water probe to see if it is shorted. If the water tank does not start to fill, replace the UCM.

Water Level Error Message

Water level fill error or overflow. This error message occurs when the inlet valve solenoid has been on too long during initial fill or tank refill, See the ERROR CODES section for the maximum times allowed. Once the malfunction is corrected, the error message must be cleared. To reset the brewer and return to normal operation, turn the toggle switch on the back of the brewer to the OFF position for 5 seconds, then back ON.

- 1 Make sure that the water supply valve is completely open and that the water filter is not plugged.
- 2 Check to make sure that the flow rate from the water supply line meets the minimum flow rate specifications for the brewer. Also check the water pressure. See the SPECIFICATIONS section.
- 3 Check for blockage at the inlet valve inlet or outlet. Check for blockage in the tubing between the inlet valve and the water tank.
- 4 Check the water probe wire for an open condition or corroded connections.
- If the probe connections are OK, cycle power to the unit by turning the rear toggle switch OFF, then ON. Check to see if power is applied to the inlet valve terminals. If power is applied to the terminals, but there is no water flow, replace the inlet valve.
- 6 Check for power from the universal control module (UCM) to the inlet valve. If the wiring is OK, replace the UCM.

Liner Overflows During Brewing

- 1 Check to make sure the control module (UCM) brew and bypass levels are set properly.
- 2 Make sure the liner is empty before starting the brew cycle. If not, empty it before brewing.

Liner Not Filled To Normal Level After Brewing (One Side Only)

- 1 Are the control module (UCM) brew and bypass levels set properly?
- 2 Is the spray head is clean and free of debris? If no, clean or replace as needed.
- 3 Run a brew cycle and confirm that water comes out of the spray head, and bypass spout, in turn during the brew cycle. If not, check the associated pump (brew or bypass). Check to make sure that the pump is getting power. If not, check the wiring and the UCM output.

No Water Flows From One of the Spray Heads/Arms During Brewing

See *Liner Not Filled to Normal Level After Brewing*. If water does not flow from either spray head, see *No Water Flows from Both Spray Heads During Brewing*.

No Water Flows From One of the Bypass Spouts During Brewing

See *Liner Not Filled to Normal Level After Brewing*. If water does not flow from either bypass spout, see *No Water Flows from Both Spray Heads/Arms During Brewing*.

Coffee Too Strong

See Liner Not Filled To Normal Level After Brewing.

Coffee Does Not Transfer to Banquet Holder When Transfer Button is Pushed

- 1 Before pushing the transfer button on the control module (UCM), be sure to open the appropriate valve (left or right) on the front of brewer. Close the valve when transfer is complete.
- 2 Check the transfer hoses. They must both be installed in an arc from the banquet brewer to the banquet holder with NO sagging in between. Sagging will create air bubbles that will interfere with the proper operation of the transfer pump.
- 3 Check to see if the unit is brewing properly. If not, see *No Water Flows from Both Spray Heads/Arms During Brewing*.
- 4 Does the transfer pump make noise when the transfer button is pressed? If yes, first check for sediment build up in the strainers in the bottom of the brewer liners and clean as necessary. Then check for blockage in the transfer lines from the point they exit the brewer liners all the to the holder.
- 5 Is 24 Vdc being supplied to the transfer pump when the transfer button is pressed? If yes, replace the pump.
- 6 If power is not being supplied, check the wiring between the pump and the UCM. If the wiring is OK, replace the UCM.

Aerator Not Functioning

- 1 Make sure the transfer valves are closed during aeration.
- 2 Does the aerator pump make noise when the AERATION button is pressed (brewer must be on)? If yes, check for collapsed, loose or disconnected hoses. If all hoses are OK, but the pump makes noise when the button is pressed, check for a defective pump.
- 3 If the aerator pump does not make noise when the button is pressed, make sure power is being supplied to the pump. Check for bad wiring, corroded connections or no power output at the UCM.

BANQUET HOLDER

No Power - Indicator Light Not On

- 1 Make sure that the circuit breaker supplying power to the power receptacle is not tripped and turned on.
- 2 Make sure that the power plug is connected to the power receptacle.
- 3 Make sure that the main power toggle switch on the front of the unit is turned on.

The following tests are performed with the toggle switch in the ON position:

- 4 Is there 120 Vac across the terminals of the indicator light? If yes, replace the indicator light.
- 5 If there is no voltage across the indicator light terminals, check the wiring to and from the power switch and the neutral (white) wire. If the wiring is OK, check the switch.

Water Does Not Heat or Is Not Hot Enough

- 1 Is the indicator light on? If no, go to No Power Indicator Light Not On.
- 2 Is the reset button on the thermostat popped out? If yes, check to make sure that the tank is not empty (tank will overheat if it is empty, causing thermostat to pop out). Press in on the button to reset (water temperature must be below 210°F).
- 3 Is there power across the terminals of the heating elements? If yes, remove the wires and check for open heating elements and/or corroded connections.
- 4 If there is no power to the heating elements, check for wiring problems, a defective thermostat or defective high limit switch.

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ERROR CODES EC3

System Fault Messages

An error message will appear on the screen in the event of a malfunction under the following conditions:

1 Water level overflow. This error indicates that either there is not enough incoming water flow/pressure or a water overflow condition (unit will stop functioning).

- 2 Break in temperature control circuit.
- 3 Excess temperature in heating tank.

If any of the errors below appear on the screen, turn off the main power toggle switch and call for service.

ERROR CODES - BREWING STOPS				
ERROR MESSAGE	WARNING DESCRIPTION	CAUSE		
Water Level Error 1-(800)-000-0000	Fill run error/Overflow	The water inlet valve has either been open for more than 30 minutes on the initial tank fill or has been open for more than 120 seconds in normal operation. Water level error algorithm is disabled during brew cycle.		
Sensor Error 1-(800)-000-0000	Open Probe	Break in the temperature thermistor circuit.		
Over Temp. Error 1-(800)-000-0000	Excess Temperature	The sensor is reading that temperature in the heating tank has risen above 210°F.		

WARNING CODES - BREWING CONTINUES				
ERROR MESSAGE	WARNING DESCRIPTION	CAUSE		
CHECK IF HOLDING URN HAS CAPACITY PRESS TO TRANSFER "TRANSFERRING PRESS TO STOP"	Transfer Button Display	Safety message when TRANSFER button is pressed.		

BB, ERROR CODES 011217NC

PRODUCT WARRANTY PW1

Wilbur Curtis Co., Inc. certifies that its products are free from defects in material and workmanship under normal use. The following limited warranties and conditions apply:

- 3 years, parts and labor, from original date of purchase on digital control boards
- 2 years, parts, from original date of purchase on all other electrical components, fittings and tubing
- f 1 year, labor, from original date of purchase on all other electrical components, fittings and tubing

Additionally, Wilbur Curtis Co., Inc. warrants its grinding burrs for four (4) years from the date of purchase. Stainless steel components are warranted for two (2) years from the date of purchase against leaking or pitting. Replacement parts are warranted for ninety (90) days from the date of purchase or for the remainder of the limited warranty period of the equipment in which the component is installed.

All in-warranty service calls must have prior authorization. For authorization, call the Technical Support Department at 800-995-0417. Additional conditions may apply. Go to www.wilburcurtis.com to view the full product warranty information.

CONDITIONS & EXCEPTIONS

The warranty covers original equipment at time of purchase only. Wilbur Curtis Co., Inc., assumes no responsibility for substitute replacement parts installed on Curtis equipment that have not been purchased from Wilbur Curtis Co., Inc. Wilbur Curtis Co., Inc. will not accept any responsibility if the following conditions are not met. The warranty does not cover:

- Adjustments and cleaning: The resetting of safety thermostats and circuit breakers, programming and temperature adjustments are the responsibility of the equipment owner. The owner is responsible for proper cleaning and regular maintenance of this equipment.
- Replacement of items subject to normal use and wear: This shall include, but is not limited to, spray heads, faucets, light bulbs, shear
 disks, "O" rings, gaskets, silicone tubing, silicone elbows, canister assemblies, whipper chambers and plates, mixing bowls, agitation
 assemblies and whipper propellers.

The warranty is void under the following circumstances:

- Improper operation of equipment: The equipment must be used for its designed and intended purpose and function.
- **Improper installation of equipment:** This equipment must be installed by a professional technician and must comply with all local electrical, mechanical and plumbing codes.
- Improper voltage: Equipment must be installed at the voltage stated on the serial plate supplied with this equipment.
- Improper water supply: This includes, but is not limited to, excessive or low water pressure and inadequate or fluctuating water flow rate.
- Damaged in transit: Equipment damaged in transit is the responsibility of the freight company and a claim should be made with the carrier.
- Abuse or neglect (including failure to periodically clean or remove lime accumulations): The manufacturer is not responsible for variation in equipment operation due to excessive lime or local water conditions. The equipment must be maintained according to the manufacturer's recommendations.
- Unauthorized repair or modification: This equipment must be serviced only by qualified service technicians, using factory specified
 parts to factory specifications.
- Modified/Missing Serial Tag: The serial number label (tag) must not be defaced or removed.

Repairs and/or Replacements are subject to Curtis' decision that the workmanship or parts were faulty and the defects showed up under normal use. All labor shall be performed during regular working hours. Overtime charges are the responsibility of the owner. Charges incurred by delays, waiting time, or operating restrictions that hinder the service technician's ability to perform service is the responsibility of the owner of the equipment. This includes institutional and correctional facilities. Wilbur Curtis Co., Inc. will allow up to 100 miles, round trip, per in-warranty service call.

Return Merchandise Authorization (RMA): All claims under this warranty must be submitted to the Wilbur Curtis Technical Support Department prior to performing any repair work or return of this equipment to the factory. All returned equipment must be properly re-packaged in the original carton and received by Curtis within 45 days following the issuance of a RMA. No units will be accepted if they are damaged in transit due to improper packaging. NO UNITS OR PARTS WILL BE ACCEPTED WITHOUT A RETURN MERCHANDISE AUTHORIZATION (RMA). THE RMA NUMBER MUST BE MARKED ON THE CARTON OR SHIPPING LABEL. All warranty claims must be submitted within 60 days of service. Invoices will not be processed or accepted without a RMA number. Any defective parts must be returned in order for warranty invoices to be processed and approved. All in-warranty service calls must be performed by an authorized service agent. Call the Wilbur Curtis Technical Support Department to find an agent near you.

PRODUCT WARRANTY, (3-2-1) 101519D