**USER GUIDE**

# RU/URN Series Automatic Coffee Urn

**Style Varies, RU-300 Shown**

## READ AND SAVE THESE INSTRUCTIONS

**NOTICE TO INSTALLER**: Please leave this booklet with the machine.

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**Contact Information**

**Wilbur Curtis Co., Inc.**
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Email: techsupport@wilburcurtis.com

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

## Key Features

- Automatic refill during brew cycle.
- Thermostatically controlled for near-instant recovery.
- Closed-lid brewing creates superior flavor and full coffee aroma.
- Swing-spray head evenly saturates coffee grounds for complete extraction.

## Specifications (Selected Models)

### Electrical Supply Requirements

| MODEL # | DESCRIPTION | PHASE | VOLTS | AMPS | HEATING CONFIG | WIRE | WATTS | HERTZ | GAL/HR | CAPACITY |
|---|---|---|---|---|---|---|---|---|---|---|
| **RU-150-12** | Single 3 Gallon | 1 PH | 220 V | 21.1 A | 2 X 2500 W | 3W + G | 5000 | 50/60 Hz | 13.0 | 1 X 3 Gal. |
| **RU-150-20** | Single 3 Gallon, 3 Phase | 3 PH | 220 V | 13.8 A | 3 X 1750 W | 3W + G | 5200 | 50/60 Hz | 13.0 | 1 X 3 Gal. |
| **RU-225-12** | Single 6 Gallon | 1 PH | 220 V | 31.0 A | 2 X 3500 W | 3W + G | 7000 | 50/60 Hz | 15.0 | 1 X 6 Gal. |
| **RU-225-20** | Single 6 Gallon, 3 Phase | 3 PH | 220 V | 20.0 A | 3 X 2500 W | 3W + G | 7500 | 50/60 Hz | 15.0 | 1 X 6 Gal. |
| **RU-300-12/URN-300-12** | Twin 3 Gallon | 1 PH | 220 V | 27.3 A | 2 X 3000 W | 3W + G | 6000 | 50/60 Hz | 13.0 | 2 X 3 Gal. |
| **RU-300-20//URN-300-20** | Twin 3 Gallon, 3 Phase | 3 PH | 220 V | 20.0 A | 3 X 2500 W | 3W + G | 7500 | 50/60 Hz | 13.0 | 2 X 3 Gal. |
| **RU-600-12/URN-600-12** | Twin 6 Gallon | 1 PH | 220 V | 45.5 A | 2 X 5000 W | 3W + G | 10,000 | 50/60 Hz | 30.0 | 2 X 6 Gal. |
| **RU-600-20/URN-600-20** | Twin 6 Gallon, 3 Phase | 3 PH | 220 V | 27.6 A | 3 X 3500 W | 3W + G | 10,500 | 50/60 Hz | 30.0 | 2 X 6 Gal. |
| **RU-1000-12/URN-1000-12** | Twin 10 Gallon | 1 PH | 220 V | 45.5 A | 2 X 5000 W | 3W + G | 10,000 | 50/60 Hz | 30.0 | 2 X 10 Gal. |
| **RU-1000-20/URN-1000-20** | Twin 10 Gallon, 3 Phase | 3 PH | 220 V | 27.5 A | 3 X 3500 W | 3W + G | 10,500 | 50/60 Hz | 30.0 | 2 X 10 Gal. |
| **EXPORT** | | | | | | | | | | |
| **RU-150-62** | Single 3 Gallon | 1 PH | 220 V | 23.0 A | 2 X 2500 W | 2W + G | 5000 | 50/60 Hz | 13.0 | 1 X 3 Gal. |
| **RU-150-91** | Single 3 Gallon, 3 Phase | 3 PH | 380 V | 10.0 A | 3 X 3000 W | 4W + G | 6600 | 50/60 Hz | 13.0 | 1 X 3 Gal. |
| **RU-300-63** | Twin 3 Gallon | 1 PH | 220 V | 36.0 A | 2 X 4000 W | 2W + G | 8000 | 50/60 Hz | 15.0 | 2 X 3 Gal. |
| **RU-300-91** | Twin 3 Gallon, 3 Phase | 3 PH | 380 V | 18.5 A | 3 X 4000 W | 4W + G | 12,000 | 50/60 Hz | 15.0 | 2 X 3 Gal. |
| **RU-600-63** | Twin 6 Gallon | 1 PH | 220 V | 45.5 A | 2 X 5000 W | 2W + G | 10,000 | 50/60 Hz | 30.0 | 2 X 6 Gal. |
| **RU-600-91** | Twin 6 Gallon, 3 Phase | 3 PH | 380 V | 18.5 A | 3 X 4000 W | 4W + G | 12,000 | 50/60 Hz | 30.0 | 2 X 6 Gal. |
| **RU-1000-91** | Twin 10 Gallon, 3 Phase | 3 PH | 380 V | 18.5 A | 3 X4000 W | 4W + G | 12,000 | 50/60 Hz | 30.0 | 2 X 10 Gal. |

### Dimensions / Water Supply Requirements

| MODEL # | HEIGHT | WIDTH | DEPTH | SHIP WEIGHT | SHIP CUBE | WATER CONNECTOR | WATER PRESSURE | MIN. FLOW RATE |
|---|---|---|---|---|---|---|---|---|
| **RU-150-12** | 29.25” | 23.75” | 16.50” | 78.0 lbs | 11.62 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-150-20** | 29.25” | 23.75” | 16.50” | 78.0 lbs | 11.62 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-225-12** | 32.50” | 23.50” | 16.50” | 85.0 lbs | 13.33 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-225-20** | 32.50” | 23.50” | 16.50” | 85.0 lbs | 13.33 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-300-12/URN-300-12** | 28.40” | 32.60” | 18.50” | 95.0 lbs | 13.85 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-300-20/URN-300-20** | 28.40” | 32.60” | 18.50” | 95.0 lbs | 13.85 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-600-12/URN-600-12** | 32.50” | 38.00” | 17.00” | 120.0 lbs | 19.37 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-600-20/URN-600-20** | 32.50” | 38.00” | 17.00” | 120.0 lbs | 19.37 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-1000-12/URN-1000-12** | 29.50” | 38.00” | 17.00” | 146.0 lbs | 23.74 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-1000-20/URN-1000-20** | 29.50” | 38.00” | 17.00” | 146.0 lbs | 23.74 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **EXPORT** | | | | | | | | |
| **RU-150-62** | 29.25” | 23.75” | 16.50” | 78.0 lbs | 11.62 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-150-91** | 29.25” | 23.75” | 16.50” | 78.0 lbs | 11.62 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-300-63** | 28.40” | 32.60” | 18.50” | 95.0 lbs | 13.85 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-300-91** | 28.40” | 32.60” | 18.50” | 95.0 lbs | 13.85 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-600-63** | 32.50” | 38.00” | 17.00” | 120.0 lbs | 19.37 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-600-91** | 32.50” | 38.00” | 17.00” | 120.0 lbs | 19.37 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |
| **RU-1000-91** | 29.50” | 38.00” | 17.00” | 146.0 lbs | 23.74 cu ft | 1/4” flare | 20 - 90 psi | 1.0 gpm |

## 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, could result in death or serious injury.

**CAUTION** - Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

**NOTICE** - Indicates a situation which, if not avoided, could result in property damage.

**IMPORTANT** - Provides information and tips for proper operation.

**SANITATION REQUIREMENTS**

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**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.

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## 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.
3. 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

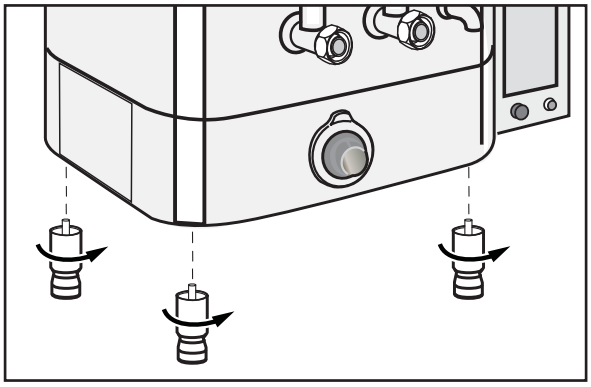
### Prepare the Location

**WARNING:** DO NOT place the urn closer than 6 inches from the wall. The urn must have adequate cross-ventilation.

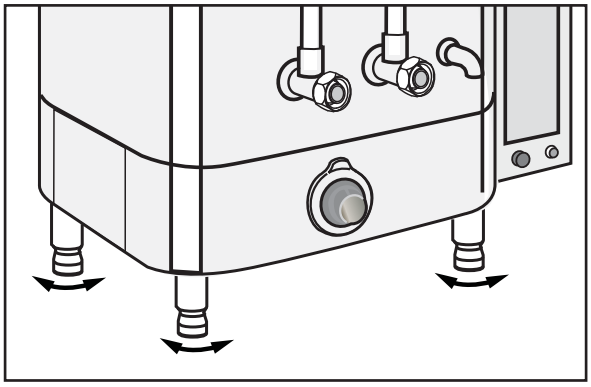
1 Determine the location. Make sure that the counter is capable of supporting at least 600 lbs. to allow for the urn weight at full capacity.

### Level the Unit

2 Remove the urn from the shipping carton and install the legs on the 4 corners. Screw them firmly into place on the bottom of the unit.



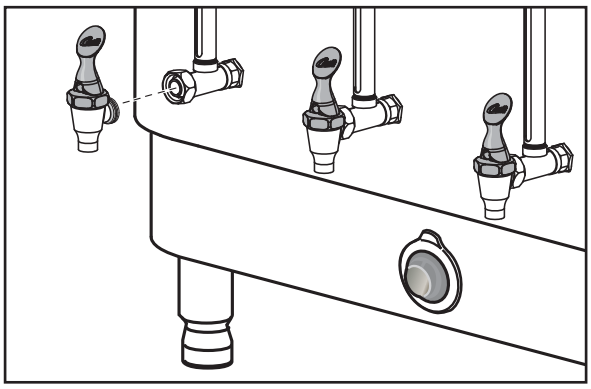
3 Position the urn on the countertop. Level it left to right and front to back by turning the feet at the bottom of the legs.



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

### Install the Faucets

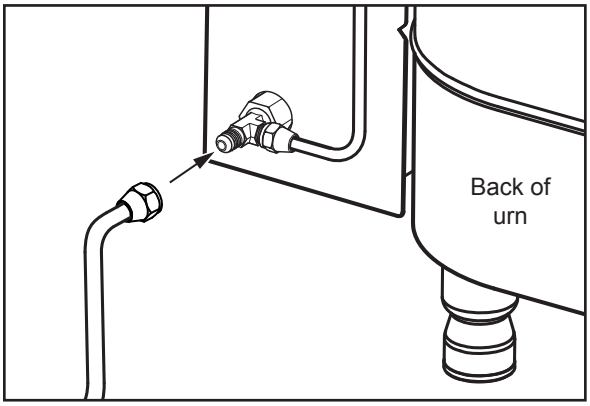
4 Install the faucets on the front of the unit. Be careful not to over tighten the faucet mounting nuts.



**Connect the Water Supply**

5 Flush the water supply line prior to installation to purge air and debris from the water filter and tubing.

6 Connect the water supply line to the flare fitting on the back of the urn control panel. Leave the water supply valve closed until power is connected.




**Connect the Wiring**

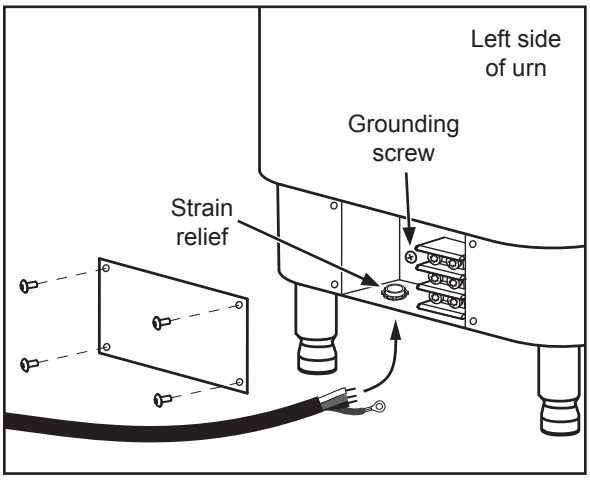
**WARNING:** Turn off power to the junction box at the circuit breaker panel before connecting the power cable to the urn.

7 Remove the electrical access cover on the left side of the urn.

8 Loosen the strain relief under the electrical access hole and feed the power cable into the chassis.

9 Connect the wires on the power cable to the terminal block inside the unit. Use the proper wire gauge, plus 25%. Refer to the *SPECIFICATIONS* for the required urn wire gauge.

10 Connect the ground wire to the chassis grounding screw inside the unit.



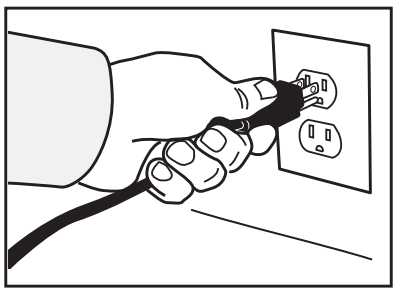

**WARNING:** The body of the urn must be securely grounded with a separate grounding conductor and never with the neutral conductor of a single phase, 3 wire system.

11 Tighten the strain relief.

12 Replace the access cover.

13 Connect the power cable wires to the terminals in the junction box. See the *ELECTRICAL SCHEMATIC* for the power supply requirements.

14 Some models are equipped with a second 120 Volt power cord. Connect it to a dedicated electrical outlet protected by a 15-20 Amp. circuit breaker.



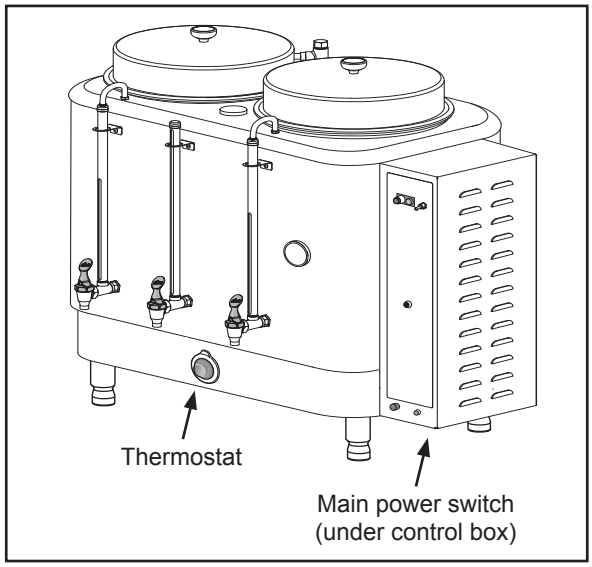
continued...

**Power Up the Brewer**

15 Turn on the water supply valve.

16 Make sure that the circuit breaker(s) supplying power to the unit is on.

17 Turn the main power toggle switch on the bottom of the urn control box to the ON position. When you turn the toggle switch ON, the water jacket will start to fill. To expedite filling, you may open the emergency refill valve located on the back of the control panel. While the tank is filling, inspect the water supply lines for leaks. During the initial water tank fill, the initial brew and whenever the filter is replaced, you may hear the sounds of air being purged from the filter and water supply tubing.




**NOTICE:** Do not forget to close the emergency refill valve once the water jacket has filled.

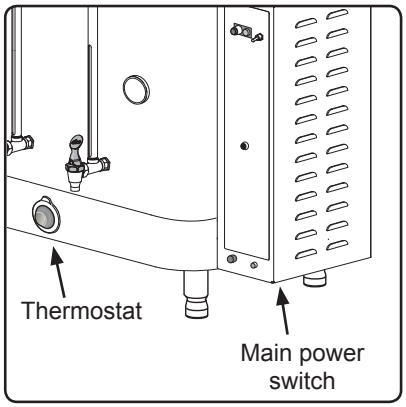
18 When the water jacket has filled, turn on the thermostat by turning the dial clockwise to the desired setting. Depending on the water temperature and the electrical specifications, the water typically requires 50 to 60 minutes to reach operating temperature. The thermostat indicator will light as the unit heats and turns off when the unit is at brew temperature.

**IMPORTANT:** When operating the unit at elevations above 4000 ft. (1200 m), Curtis recommends that you contact our Technical Support department (800-995-0417), to determine if adjustments to the unit are necessary for your application.

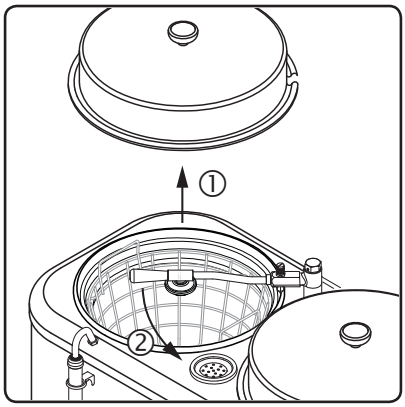
## Brewing Instructions

**WARNING** - TO AVOID SCALDING, AVOID SPLASHING. Do not open the lid(s) while the brew light is on. Keep body parts clear of hot surfaces on the outside of the urn.

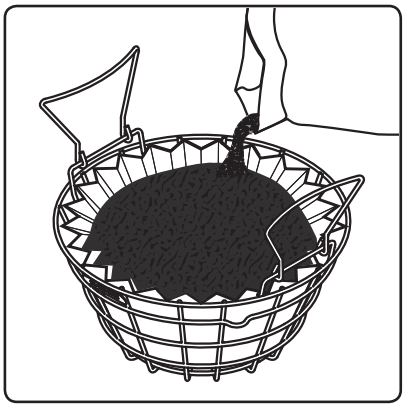
**The urn is factory preset for optimal performance.**



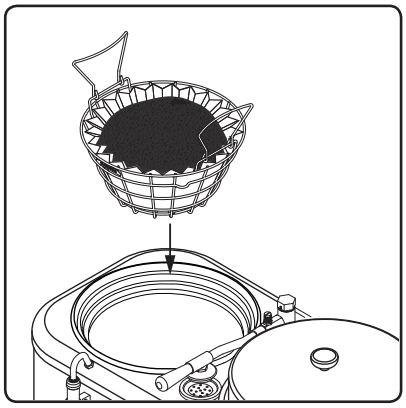

1 The brewer should be ON. Confirm this at the main power toggle switch, located on the bottom of the control box. The thermostat should be set to ON and the thermostat light should be OFF (indicating that the water is hot).



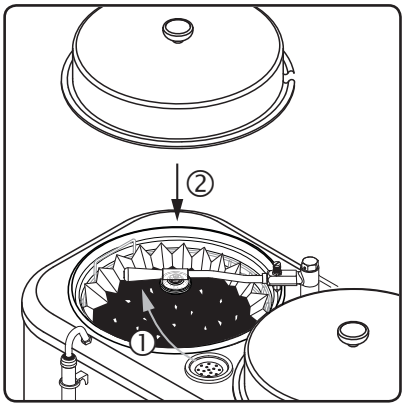

2 Remove the urn lid and rotate the spray arm to the side.



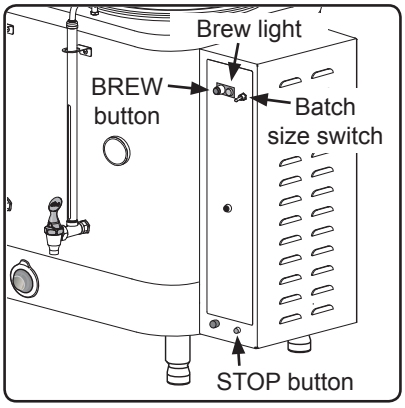
3 Remove the brew basket and insert a clean paper filter. Fill the basket with the proper amount of ground coffee. Make sure that the coffee is level in the filter.



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




5 Rotate the spray head over the bed of coffee inside the filter and center it. Put the lid on top of the urn.




6 Make sure the batch size selector switch is in the desired position, then press the BREW button. Brewing will begin immediately. To stop brewing before the cycle is complete, press the STOP button.

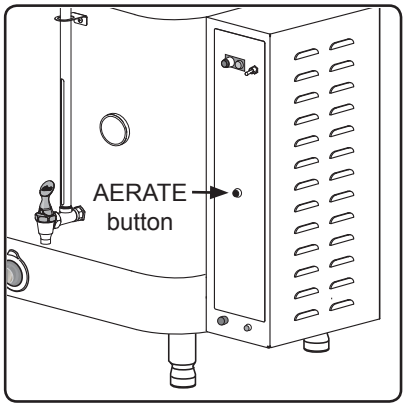
## Aeration

During brewing, the richer, thicker coffee tends to settle toward the bottom of the liner, while the weaker part of the mixture tends to move to the top. The aeration feature assures uniform mixing of the brewed coffee by pumping air into the liner(s) and mixing the coffee. The aeration pump comes on for 30 seconds automatically at the end of the brew cycle.

For best coffee taste, aerate the coffee manually once an hour.

**To manually aerate the coffee:**

Push and hold the **AERATE** button on the control panel for 30 seconds. The air pump will aerate the coffee. On twin urn models, both sides aerate at the same time. Release the button to stop aeration.



**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 a second time 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.

## 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.

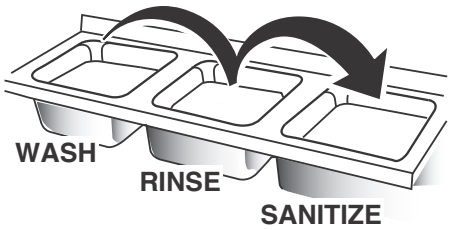
3 **Wash** - Wash the faucet and gauge parts in the detergent solution. Clean the glass tube with a gauge brush soaked with the detergent solution.

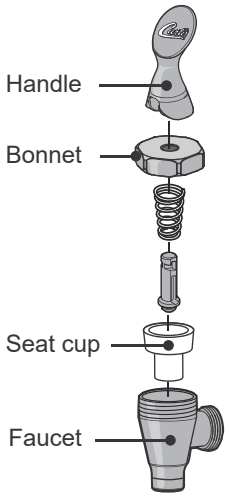
4 **Rinse** - Thoroughly rinse all parts with clean, warm water.

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.

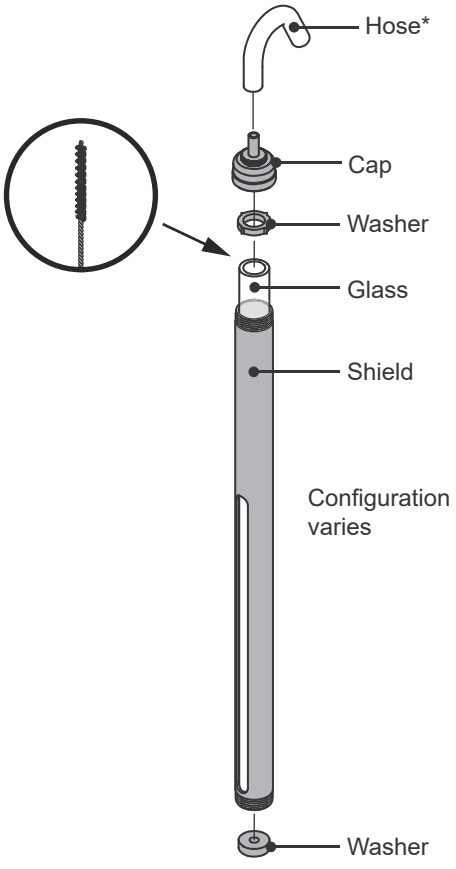
6 **Air Dry** - Remove the parts from the sanitizer, rinse thoroughly and allow them to air dry.

7 Reassemble - When dry, reassemble the handle/bonnet. Hand tighten the handle/bonnet onto the top of the faucet assembly. Reassemble the gauge.



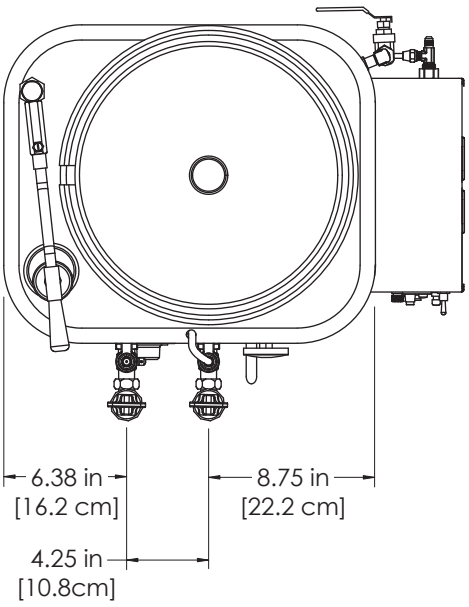

**Faucet Disassembly**

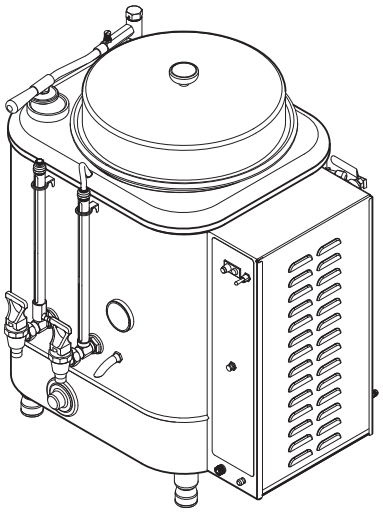


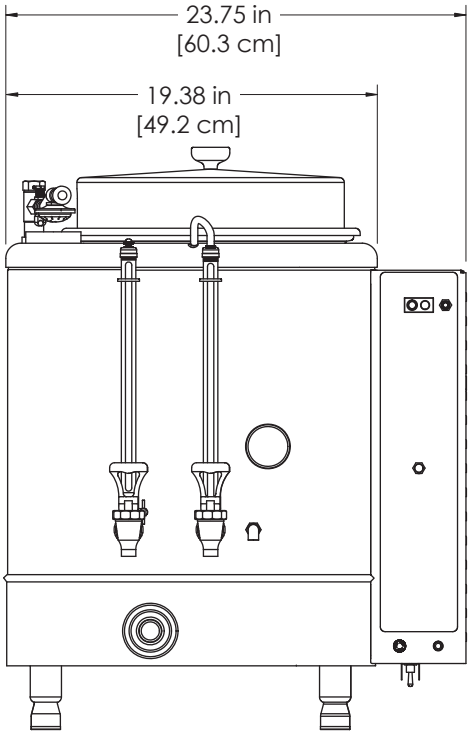

**Sight Glass Disassembly**

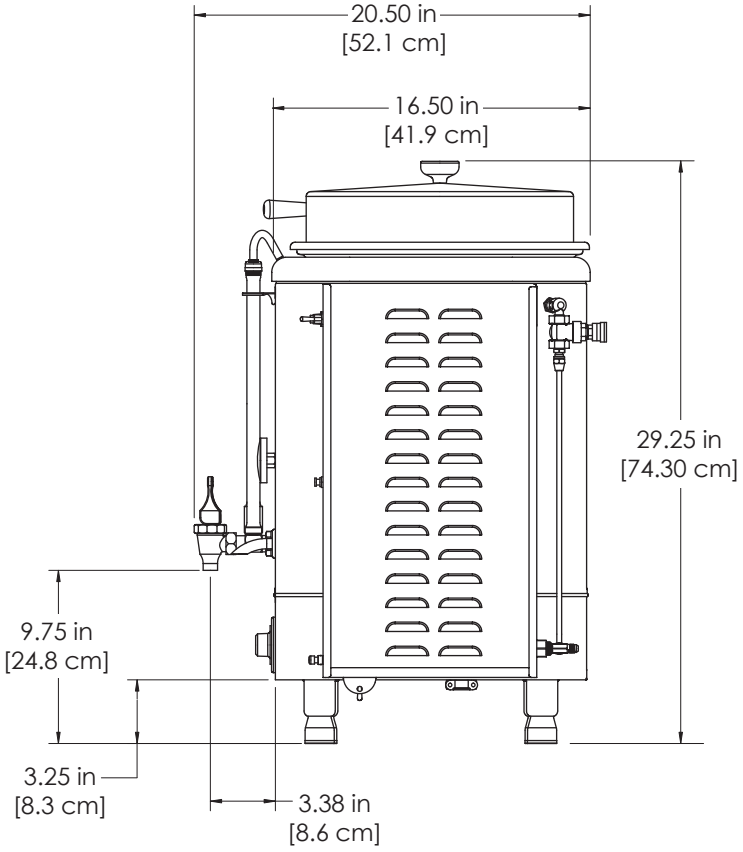
* Hose used only on models with aeration feature

## RU-150 Series

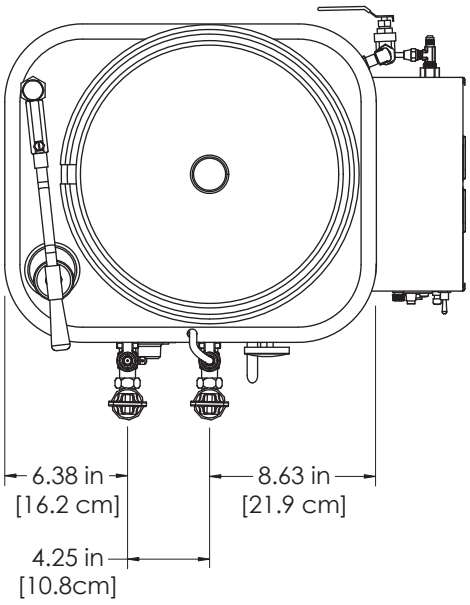


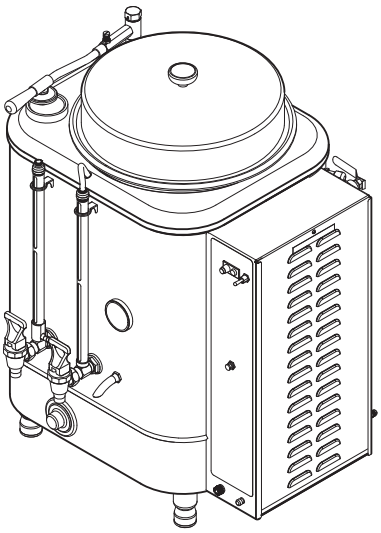



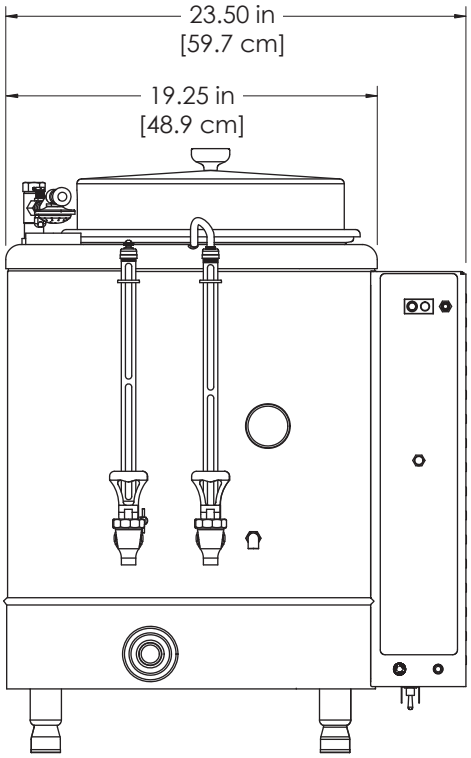


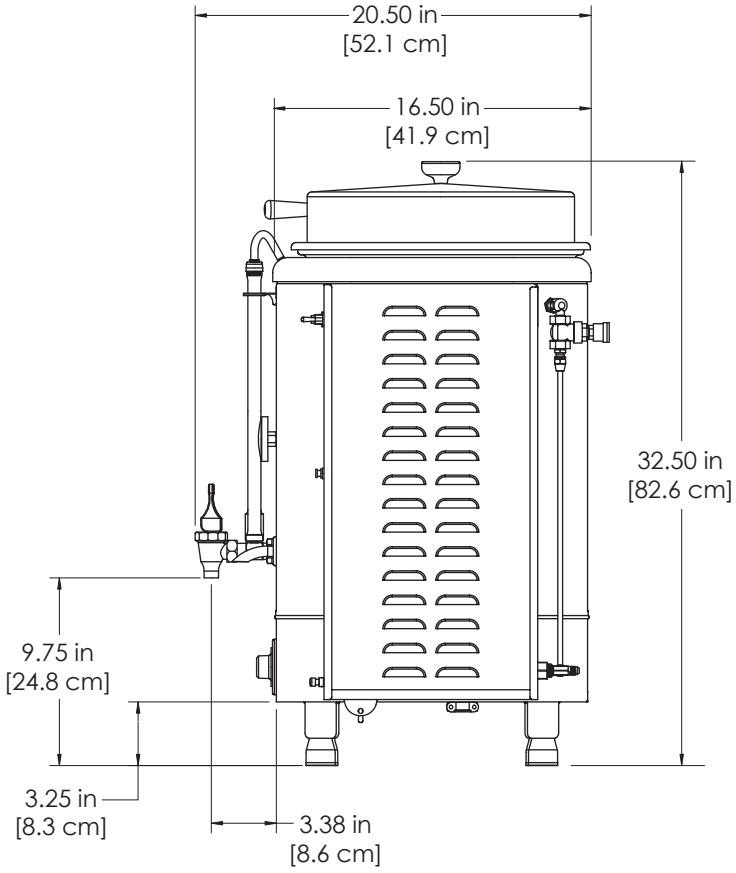



## RU-225 Series

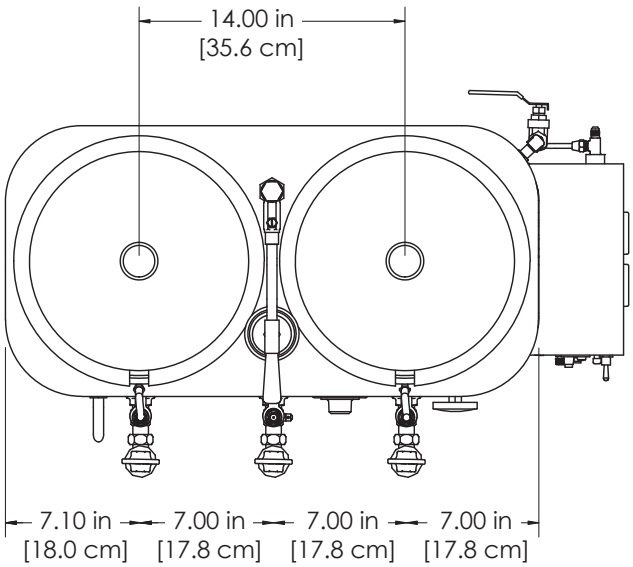


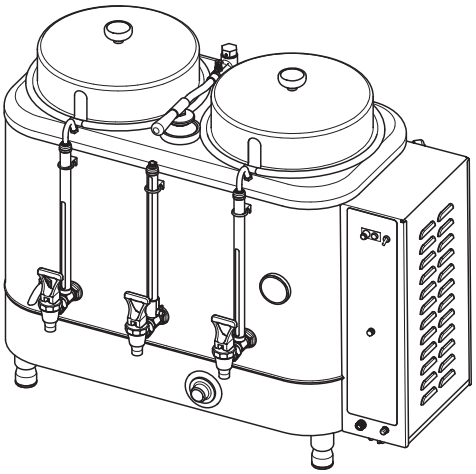



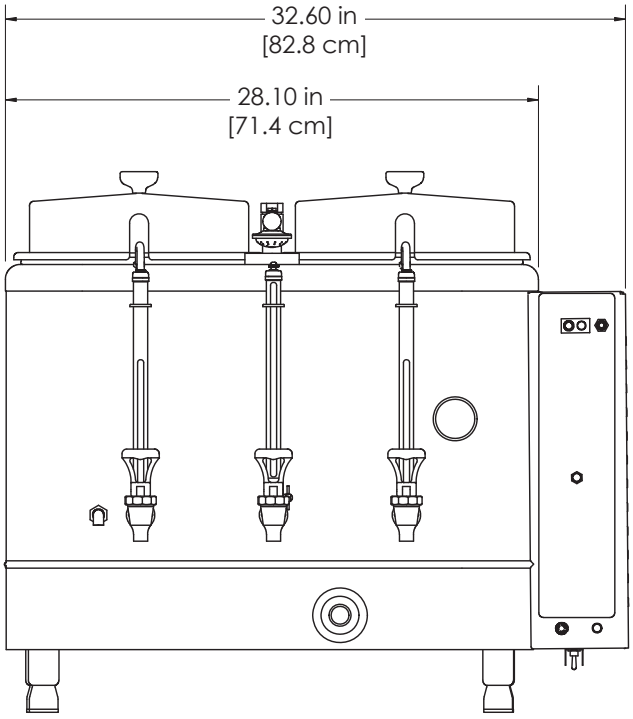


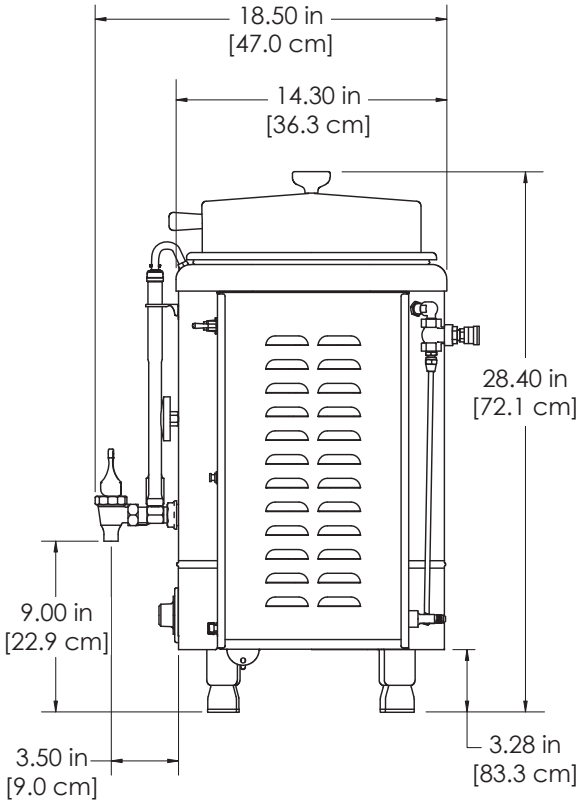



## RU-300 Series

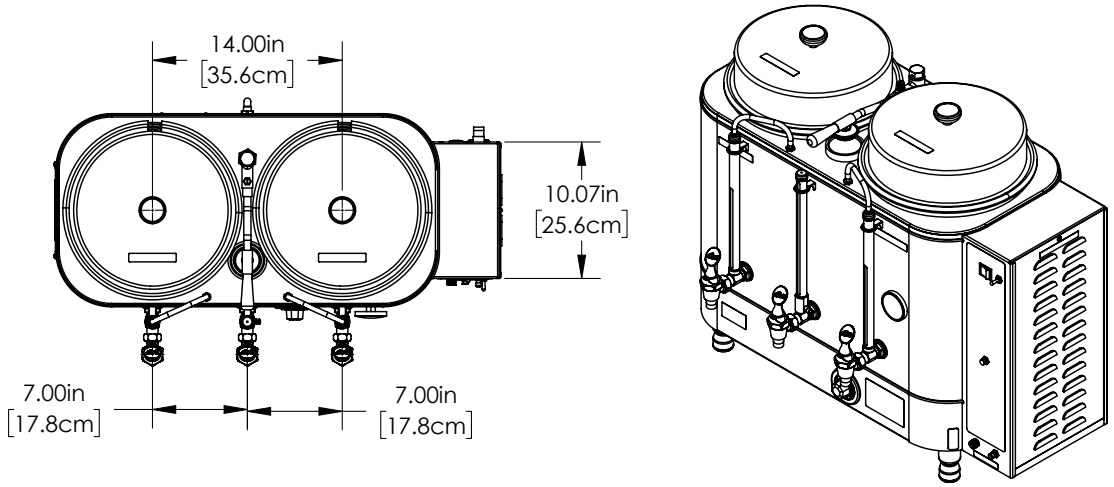


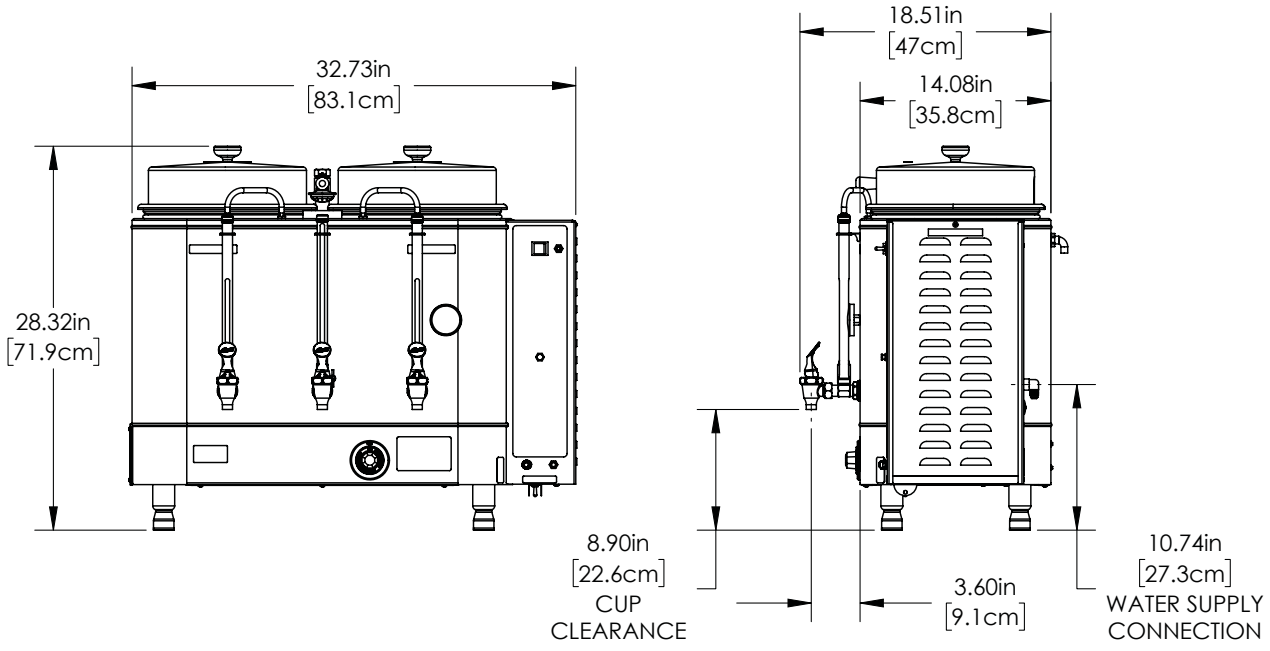





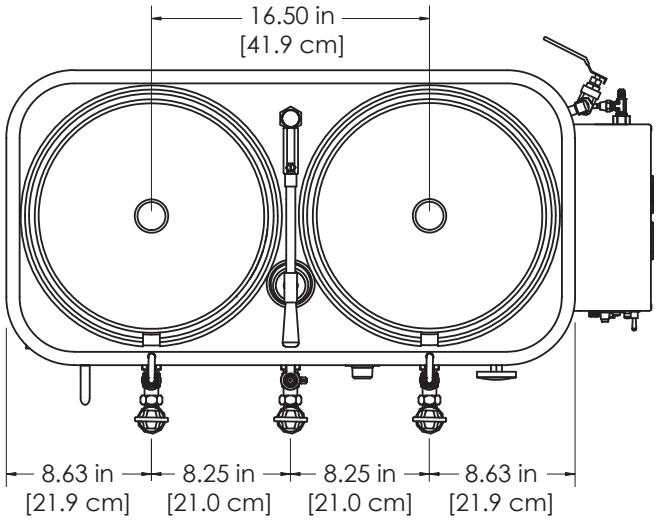



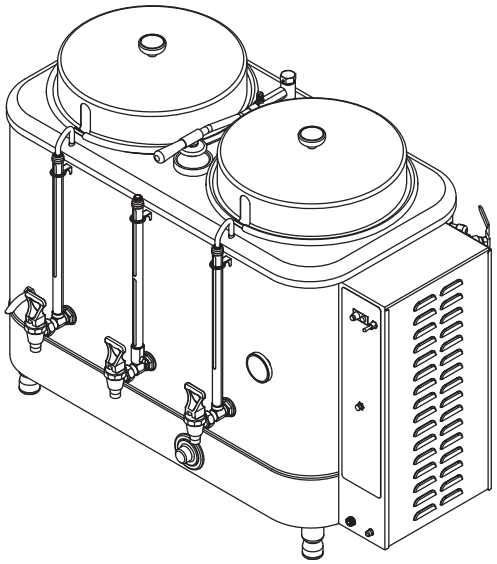
URN-300 Series

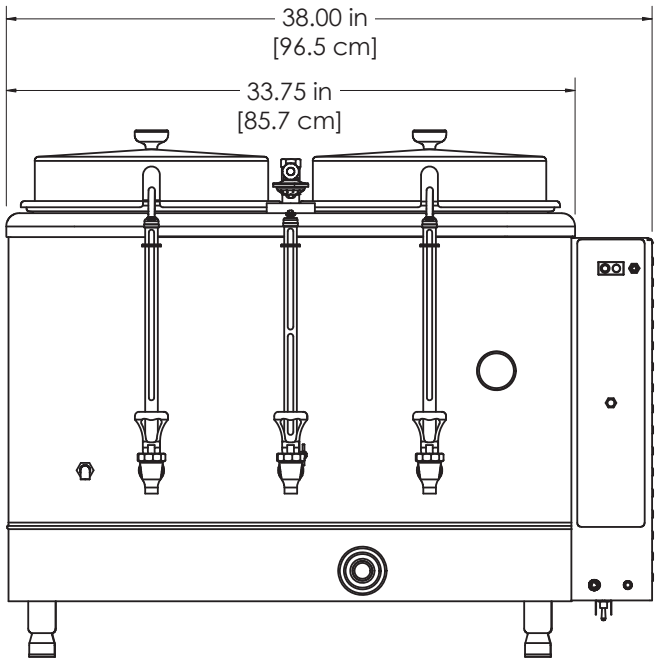


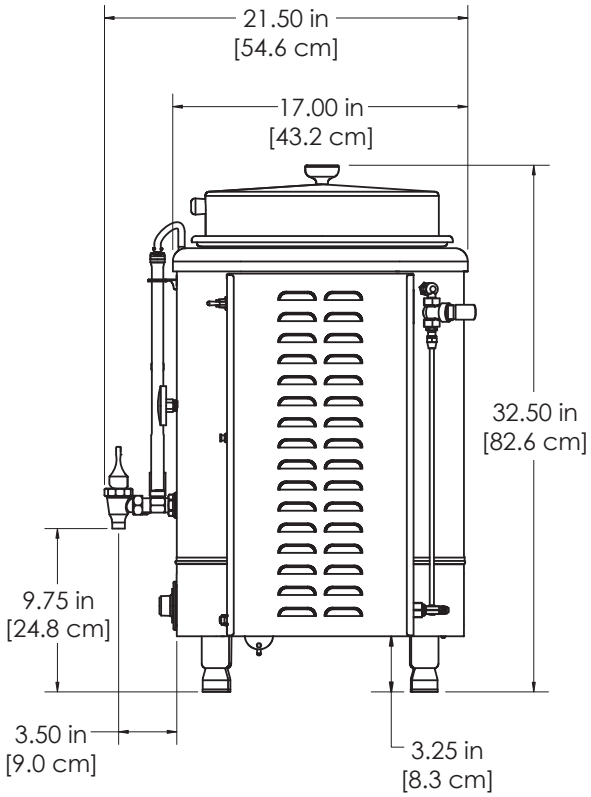



## RU-600 Series

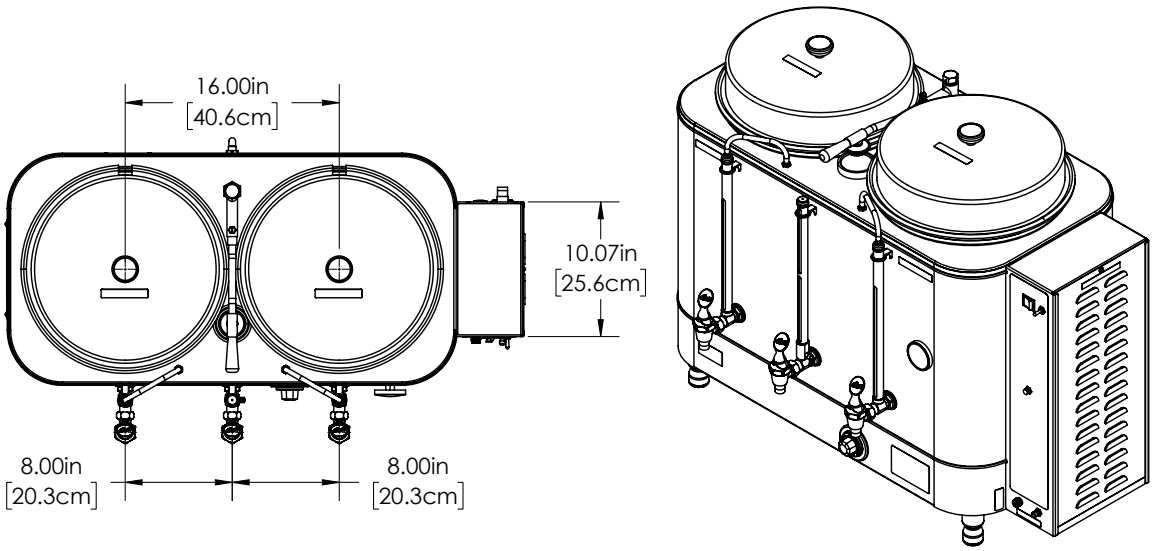


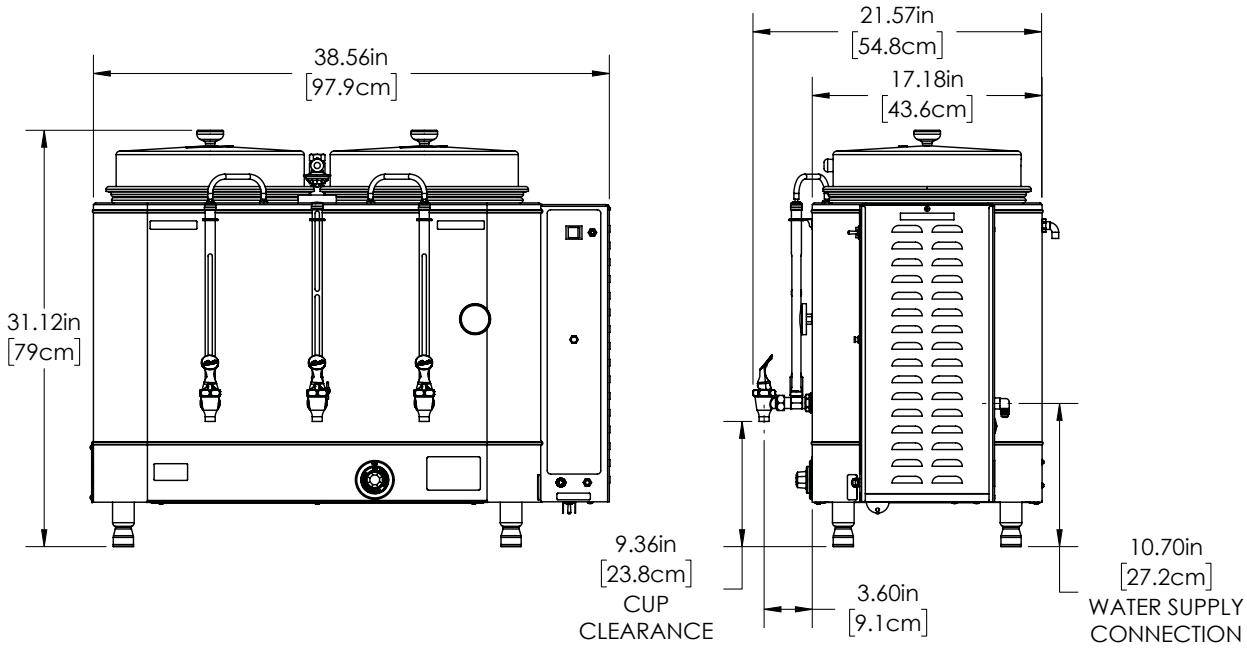





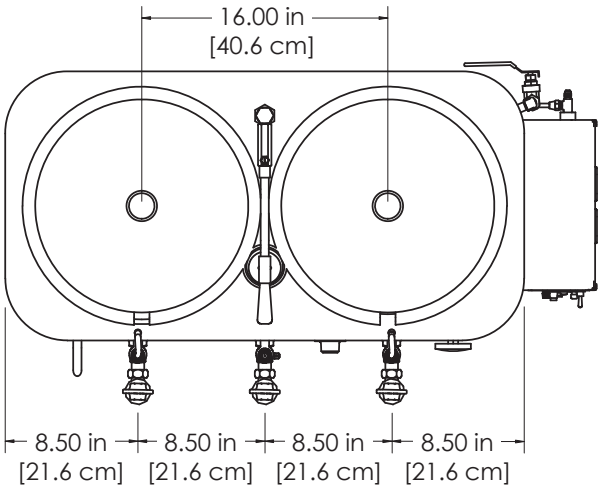



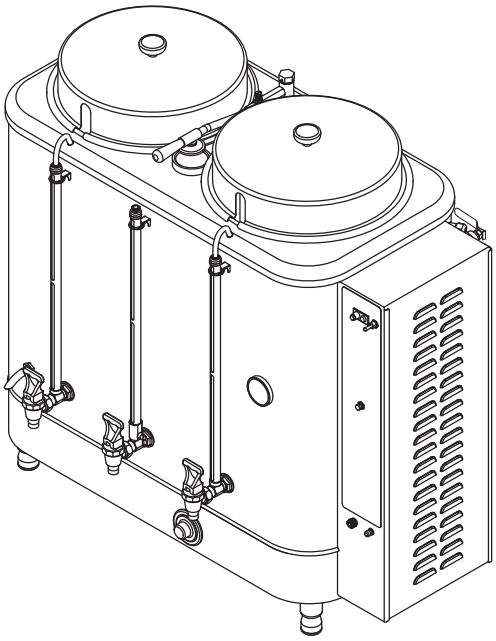
URN-600 Series

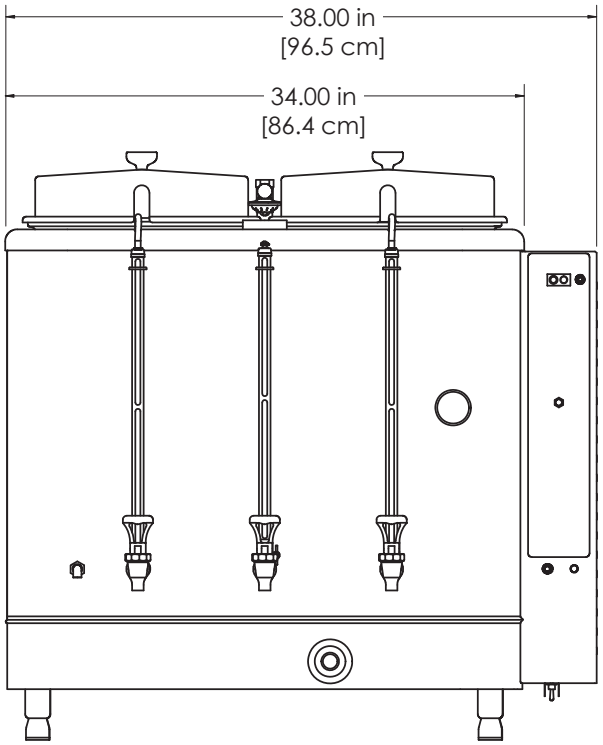


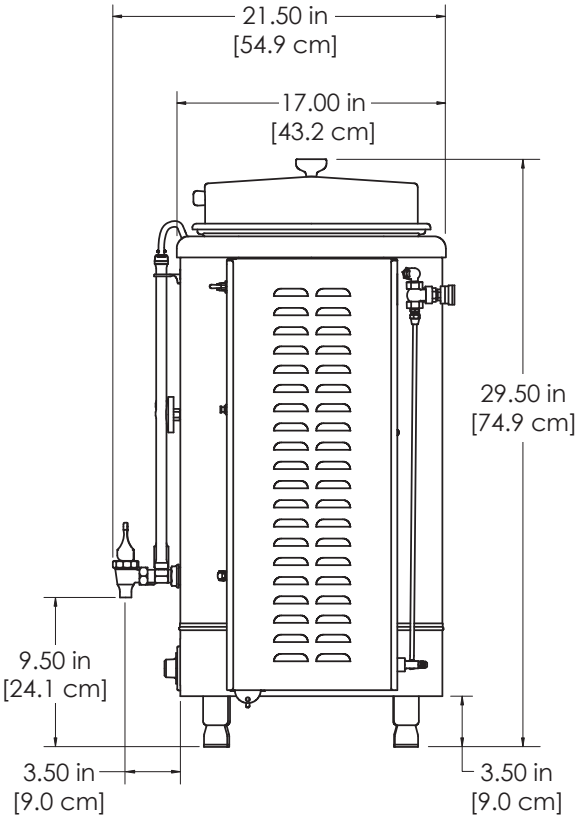



## RU-1000 Series

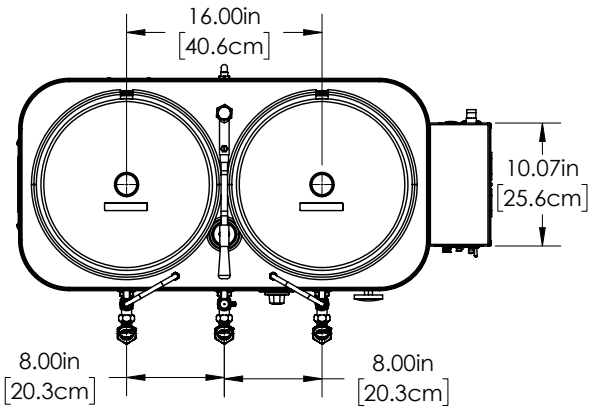


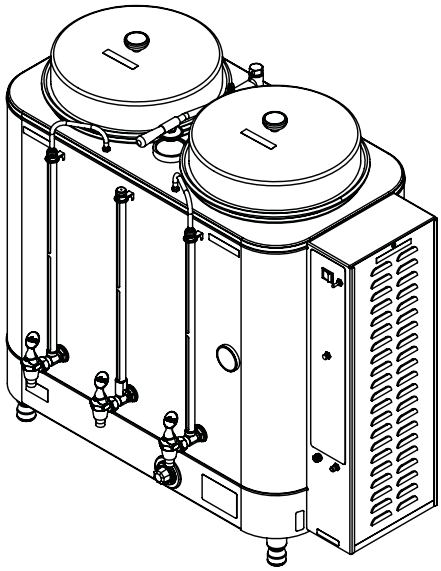



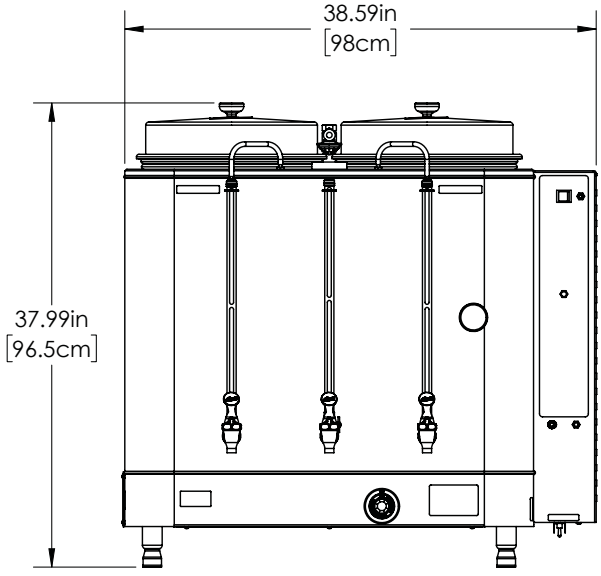


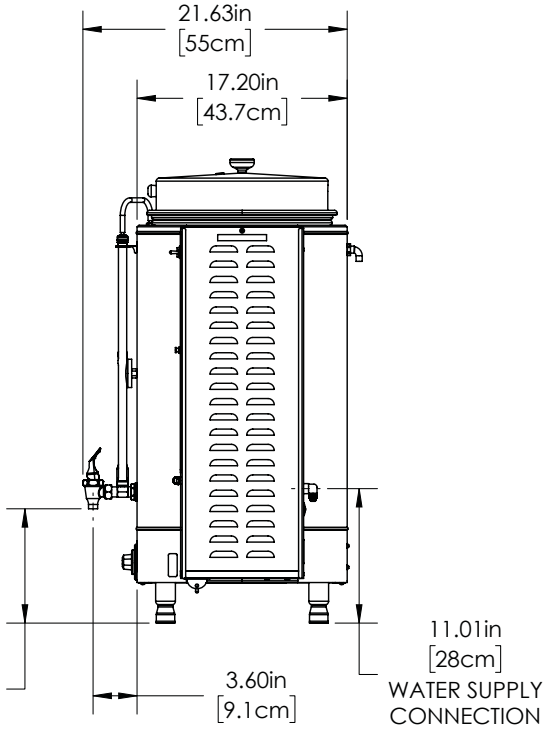



## URN-1000 Series



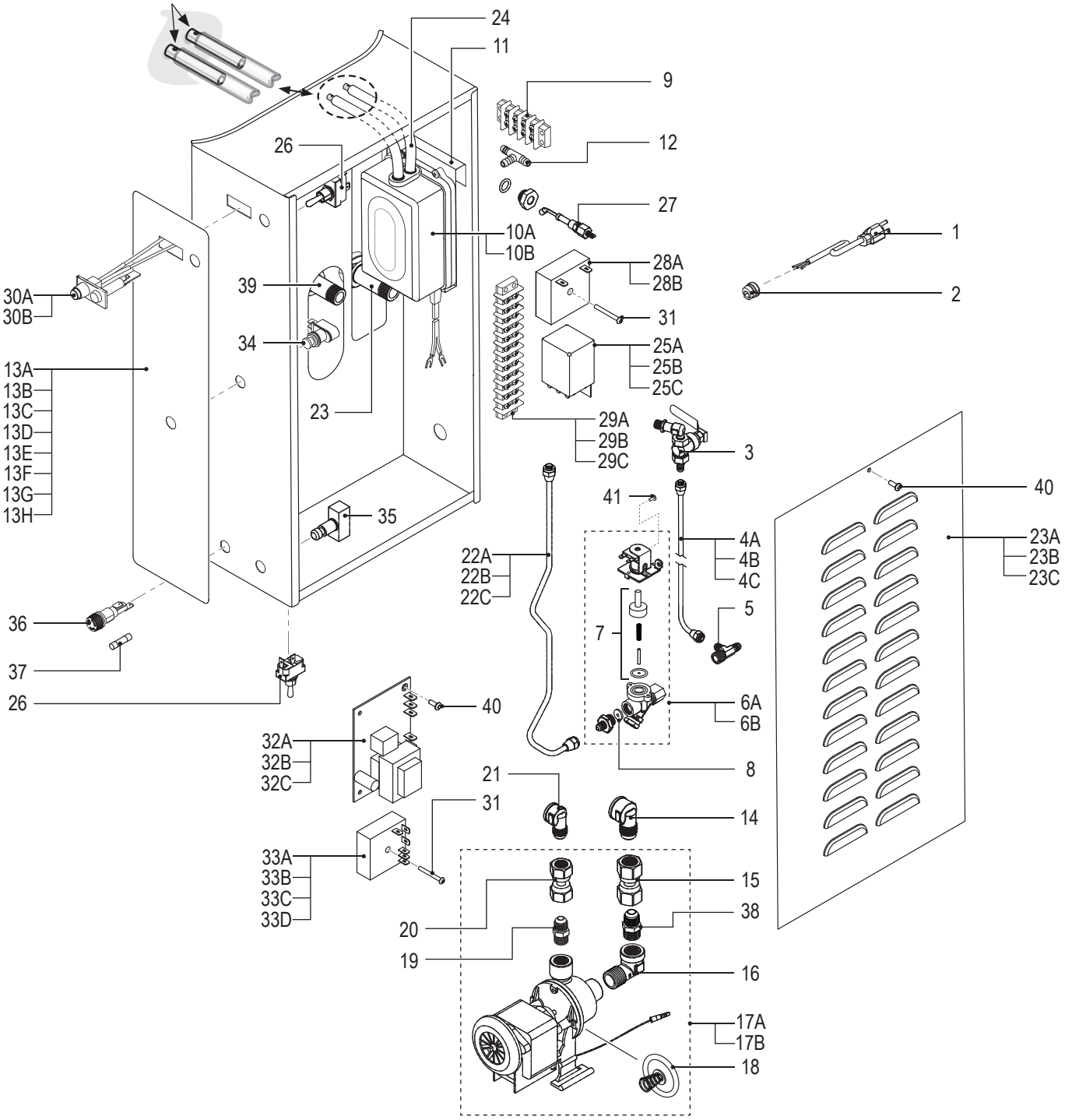





## RU/URN Series - Control Box - Exploded View

Older models: when reconnecting the silicone tubing to the copper tubes, make sure you do not cover the small holes on the copper tubes.



## RU/URN Series - Control Box - Parts List

| ITEM # | PART # | DESCRIPTION | USED ON |
|---|---|---|---|
| 1 | WC-1200 | CORD, 14/3 SJTO 6' BLK W/PLUG | DOMESTIC 3 PHASE UNITS |
| 2 | WC-1408 | GRIP, CORD 7/8" OD | DOMESTIC 3 PHASE UNITS |
| 3 | WC-806 | VALVE, 1/4" BRASS BALL ASSY EMERGENCY REFILL RU'S | ALL RU UNITS |
| 4A | WC-53104 | TUBE ASSY, 1/4x14.50 ER W/NUTS RU-150/300 | RU-150, RU-300 |
| 4B | WC-53105 | TUBE ASSY, 1/4x17.00 ER W/NUTS RU-225/600 | RU-225, RU-600 |
| 4C | WC-53109 | TUBE ASSY, 1/4" ER W/NUTS RU-1000 | RU-1000 |
| 5A | WC-2705 | TEE, 1/4 X 1/4 FLARE X 3/8 NPT PLATED | ALL RU UNITS |
| 5B | WC-2402P | ELBOW, 3/8 FLARE x 3/8 NPT PLATED | URN-300, URN-600, URN-1000 |
| 6A* | WC-801 | VALVE, INLET BRASS .50 GPM 120V 10W | DOMESTIC RU UNITS |
| 6B | WC-858 | VALVE, INLET BRASS .50 GPM 220V 10W | EXPORT RU UNITS |
| 6C | WC-12019 | VALVE, INLET 4GPM 120V | DOMESTIC URN-300, URN-600, URN-1000 |
| 7* | WC-3700 | KIT, INLET VALV REPAIR USE ON WC-801/801R/885/890/858 | ALL RU UNITS |
| 8 | WC-813 | FLOW WASHER, .5GPM .5" S45 | ALL RU UNITS |
| 9 | WC-301 | TERMINAL STRIP, 4-S | OLDER RU UNITS [1] |
| 10A | WC-37166 | KIT, AIR PUMP | DOMESTIC RU UNITS |
| 10B | WC-1009 | PUMP, AGITATION 220V | EXPORT RU UNITS |
| 10C | WC-1002 | PUMP, AGITATION 120V W/TERMS | DOMESTIC URN-300, URN-600, URN-1000 |
| 11 | WC-5843 | BRACKET, AERATOR PUMP RU | ALL RU UNITS |
| 12 | WC-3600 | TEE, CONNECTOR 3/16 POLYPROPYLENE | RU-150, RU-225 |
| 13A | WC-3900 | LABEL, INSTRUCTION PANEL RU-150 | RU-150 [1] |
| 13B | WC-3901 | LABEL, INSTRUCTION PANEL RU225 | RU-225 [1] |
| 13C | WC-3902 | LABEL, INSTRUCT'S PANEL CURTIS RU-300 | RU-300 [1] |
| 13D | WC-3903 | LABEL, INSTRUCT'S PANEL CURTIS RU-600 | RU-600 [1] |
| 13E | WC-3904 | LABEL, INSTRUCT'S PANEL CURTIS RU1000 | RU-1000 [1] |
| 13F | WC-38570 | LABEL, INSTRUCTION PANEL RU-150/RU-300 | RU-150 [2], RU-300 [2] |
| 13G | WC-38571 | LABEL, INSTRUCTION PANEL RU225/RU-600 | RU-225 [2], RU-600 [2] |
| 13H | WC-38574 | LABEL, INSTRUCTION PANEL RU1000 | RU-1000 [2] |
| 14 | WC-2405 | ELBOW, 1/2 FLARE x 1/2 NPT | ALL RU UNITS |
| 15 | WC-2609 | SWIVEL, 1/2" TUBE X 1/2 NPT | ALL RU UNITS |
| 16 | WC-2504 | ELBOW, 1/2 NPT X 1/2 NPT | ALL RU UNITS |
| 17A* | WC-1037 | PUMP, WATER W/FITTINGS 120VAC | DOMESTIC RU UNITS |
| 17B | WC-1039 | PUMP, WATER W/FITTING 220/240 VAC | EXPORT RU UNITS |
| 17C | WC-1040-101 | PUMP, WATER DIRECT DRIVE 120V/60HZ | DOMESTIC URN-300, URN-600, URN-1000 |
| 18* | WC-3702 | KIT, WATER PUMP SEAL RU'S USE ON WC-1000 | ALL RU UNITS |
| 19 | WC-2605 | CONNECTOR, 3/8 FLARE X 3/8 NPT | ALL RU UNITS |
| 20 | WC-2608 | SWIVEL, 3/8 TUBE x 3/8 NPT | ALL RU UNITS |
| 21 | WC-2403 | ELBOW, 3/8 FLARE x 3/8 NPT PLATED GEN USE | ALL RU UNITS |
| 23A | WC-5808 | DOOR, CONTROL BOX LOUVER, RU-225/600 | RU-225, RU-600 |
| 23B | WC-5807 | DOOR, LOUVER ACB RU150/300 | RU-150, RU-300 |
| 23C | WC-5809 | DOOR, CONTROL BOX LOUVER | RU-1000 |
| 23D | WC-87481 | DOOR, CONTROL BOX | URN-300 |
| 23E | WC-87483 | DOOR, CONTROL BOX | URN-600 |
| 23F | WC-87485 | DOOR, CONTROL BOX | URN-1000 |
| 22A | WC-5322 | TUBE ASSY, 1/4x20.00 WI W/NUTS | RU-225, RU-600 |
| 22B | WC-5321 | TUBE ASSY, 1/4x17.00 WI W/NUTS | RU-150, RU-300 |

CONTINUED ON FOLLOWING PAGE

[1] UNITS BUILT BEFORE 1/29/13
[2] UNITS BUILT 1/29/13 AND LATER
[3] USE FOR POWER SWITCH, UNITS BUILT AFTER 1/29/13 ARE EQUIPPED WITH A SECOND TOGGLE SWITCH USED FOR BATCH SELECTION

* RECOMMENDED PARTS TO STOCK

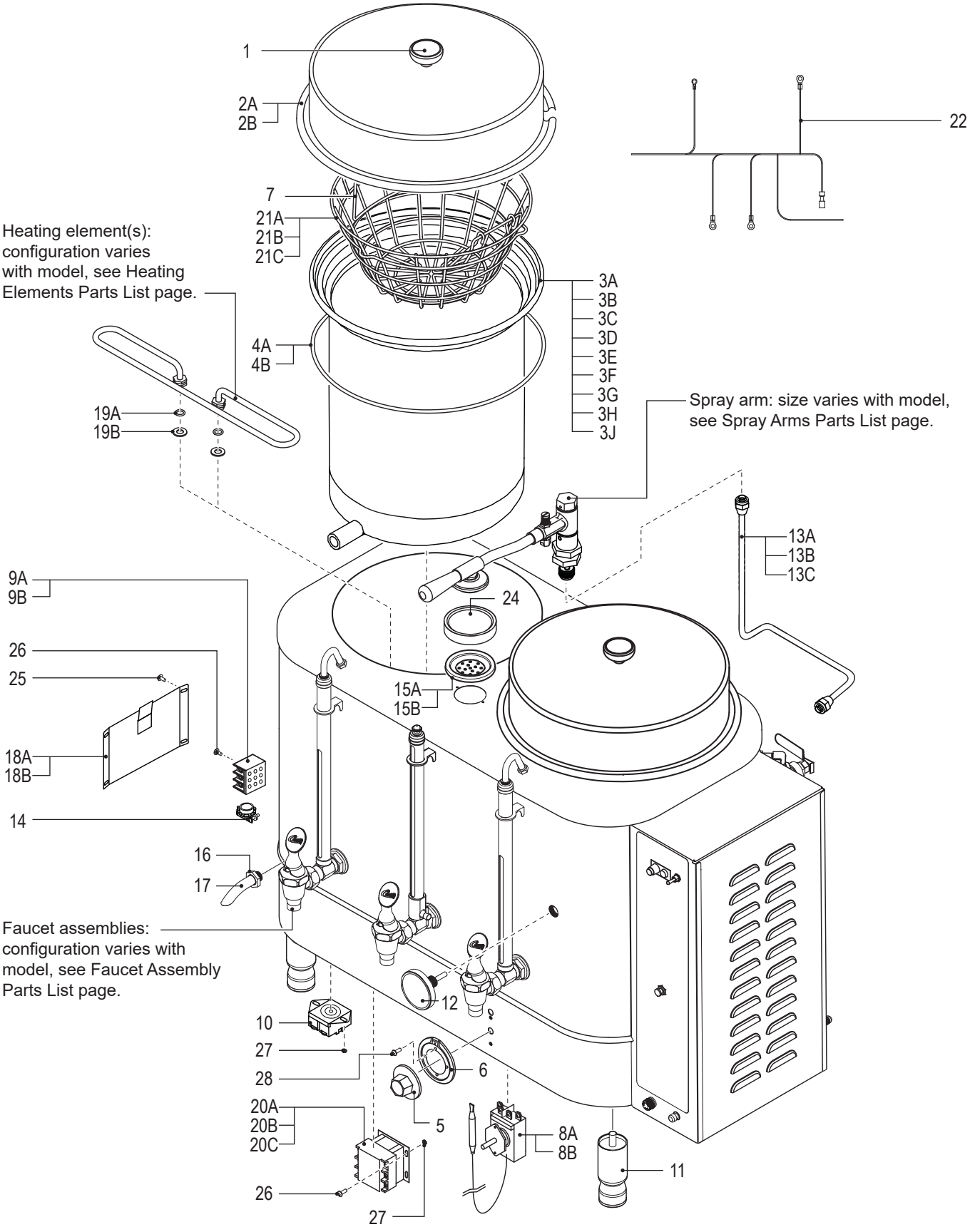
## RU/URN Series - Control Box - Parts List (continued)

| ITEM # | PART # | DESCRIPTION | USED ON |
|---|---|---|---|
| 22C | WC-5323 | TUBE ASSY, 1/4x26.00 WI W/NUTS | RU-1000 |
| 23A | WC-2929P | FITTING, 1/2 NIPPLE/NUT PLATED | ALL RU UNITS |
| 23B | WC-3045 | FITTING, STRAIGHT 3/8-18 NPSM X 3/8 BARB X2 SS | URN-300, URN-600, URN-1000 |
| 24A | WC-5307 | TUBE, 3/16 ID x 3/32W SILICONE | ALL RU UNITS/ URN-300, URN-600, URN-1000 |
| 24B | WC-5310 | TUBE, 5/16 ID x 1/8W SILICONE | URN-300, URN-600, URN-1000 |
| 25A | WC-402 | RELAY, HOLDING 120V COIL 10A | OLDER RU UNITS EXCEPT RU-1000 [1] |
| 25B | WC-403 | RELAY HOLDING 120V 3 POLE 6.6A RES.@240V | OLDER RU-1000 UNITS [1] |
| 25C | WC-417 | RELAY, HOLDING 220V 2P 10A RU | OLDER RU UNITS |
| 26* | WC-102 | SWITCH, TOGGLE NON-LIT SPST 15A 125/6A 250VAC RESISTIVE | ALL RU UNITS [3], URN-300, URN-600, URN-1000 |
| 27A* | WC-5502-01 | KIT, PROBE, ASSY WATER LEVEL W/HEX FITTING, O-RING & NUT | ALL RU UNITS |
| 27B | WC-5528 | PROBE, WATER LEVEL S.S. | URN-300, URN-600, URN-1000 |
| 27C | WC-2638 | BUSHING, CONICAL .200 ID X.945 OD X .936 LG | URN-300, URN-600, URN-1000 |
| 28A | WC-405R-101K-120 | KIT, AGITATION TIMER 120V RU-150,225,300,600,1000 | DOMESTIC RU UNITS |
| 28B | WC-405R-101K-220 | KIT, AGITATION TIMER 220V RU-150,225,300,600,1000 | EXPORT RU UNITS |
| 28C | WC-405R-101 | TIMER, AGITATION 90-260 VAC 30 SEC | URN-300, URN-600, URN-1000 |
| 29A* | WC-303 | TERMINAL STRIP 12-S | OLDER RU-150, RU-3000 UNITS |
| 29B | WC-304 | TERMINAL STRIP, 14-S(RU1,6) | OLDER RU-225, RU-600 UNITS |
| 29C | WC-302 | TERMINAL STRIP, 6-S(GM,CRA) | OLDER RU-1000 UNITS |
| 30A | WC-3737 | KIT, BREW SWITCH 120V RU'S | DOMESTIC RU UNITS |
| 30B | WC-3738 | KIT, BREW SWITCH 220V RU RPL | EXPORT RU UNITS |
| 30C | WC-122 | SWITCH, BREW (GREEN) 120V NEON SPST 15A 250V | DOMESTIC URN-300, URN-600, URN-1000 |
| 31 | WC-4608 | SCREW, 8-32x1¼ PHIL RD HD 18-8 | ALL RU UNITS |
| 32A | WC-10030 | CONTROL MODULE,120/220V LIQUID LEVEL/BREW TIMER | NEWER RU UNITS[5], URN-300, URN-600, URN-1000 |
| 32B* | WC-10030K-RU | KIT, CONTROL BOARD LIQUID LEVEL/BREW TIMER 120/240V RU | NEWER RU UNITS[4] |
| 32C | WC-608-101K | KIT, LIQUID LEVEL CONTROL BOARD RETROFIT | OLDER RU UNITS[1] |
| 33A | WC-10030 | CONTROL MODULE,120/220V LIQUID LEVEL/BREW TIMER | NEWER RU UNITS[5], URN-300, URN-600, URN-1000 |
| 33B* | WC-10030K-RU | KIT, CONTROL BOARD LIQUID LEVEL/BREW TIMER 120/240V RU | NEWER RU UNITS[4] |
| 33C | WC-603-101K-RU | KIT, RETROFIT TIMER, BREW SELECTOR 120V RU-300 W/ 1/2BB | OLDER DOMESTIC RU UNITS[1] |
| 33D | WC-622-101K-RU | KIT, RETROFIT BREW TIMER FULL & 1/3 BATCH 220V RU | OLD EXPORT UNITS AND RU-300 W/O HALF BATCH[1] |
| 34 | WC-101 | SWITCH, ON/OFF NON-LIT SPST MOMENTARY 3/6A 250/120V | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 35 | WC-100 | SWITCH, RESET-STOP N.C.NON-LIT SP MOMENTARY 10/15A 250/120V | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 36 | WC-1501 | FUSE, HOLDER ASSY W/5A FUSE | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 37* | WC-1500 | FUSE, 5 AMP | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 38 | WC-2606 | CONNECTOR, 1/2 FLARE X 1/2 NPT | ALL RU UNITS |
| 39A | WC-2928P | FITTING, 3/8 NIPPLE/NUT PLATED | ALL RU UNITS |
| 39B | WC-3045 | FITTING, STRAIGHT 3/8-18 NPSM X 3/8 BARB X2 SS | URN-300, URN-600, URN-1000 |
| 40 | WC-4403 | SCREW, 6-32x3/8 PHIL ROUND HD | ALL RU UNITS, URN-600, URN-1000 |
| 41 | WC-4616 | SCREW, 1/4-20 x 1/2 PHILLIPS PAN HEAD STAINLESS STEEL | ALL RU UNITS, URN-600, URN-1000 |

[1] UNITS BUILT BEFORE 1/29/13
[2] UNITS BUILT 1/29/13 AND LATER
[3] USE FOR POWER SWITCH, UNITS BUILT AFTER 1/29/13 ARE EQUIPPED WITH A SECOND TOGGLE SWITCH USED FOR BATCH SELECTION
[4] UNITS BUILT BETWEEN 1/29/13 AND 5/04/18
[5] UNITS BUILT 5/04/18 AND LATER

* RECOMMENDED PARTS TO STOCK

## RU/URN Series - Main Chassis - Exploded View



## RU/URN Series - Main Chassis - Parts List

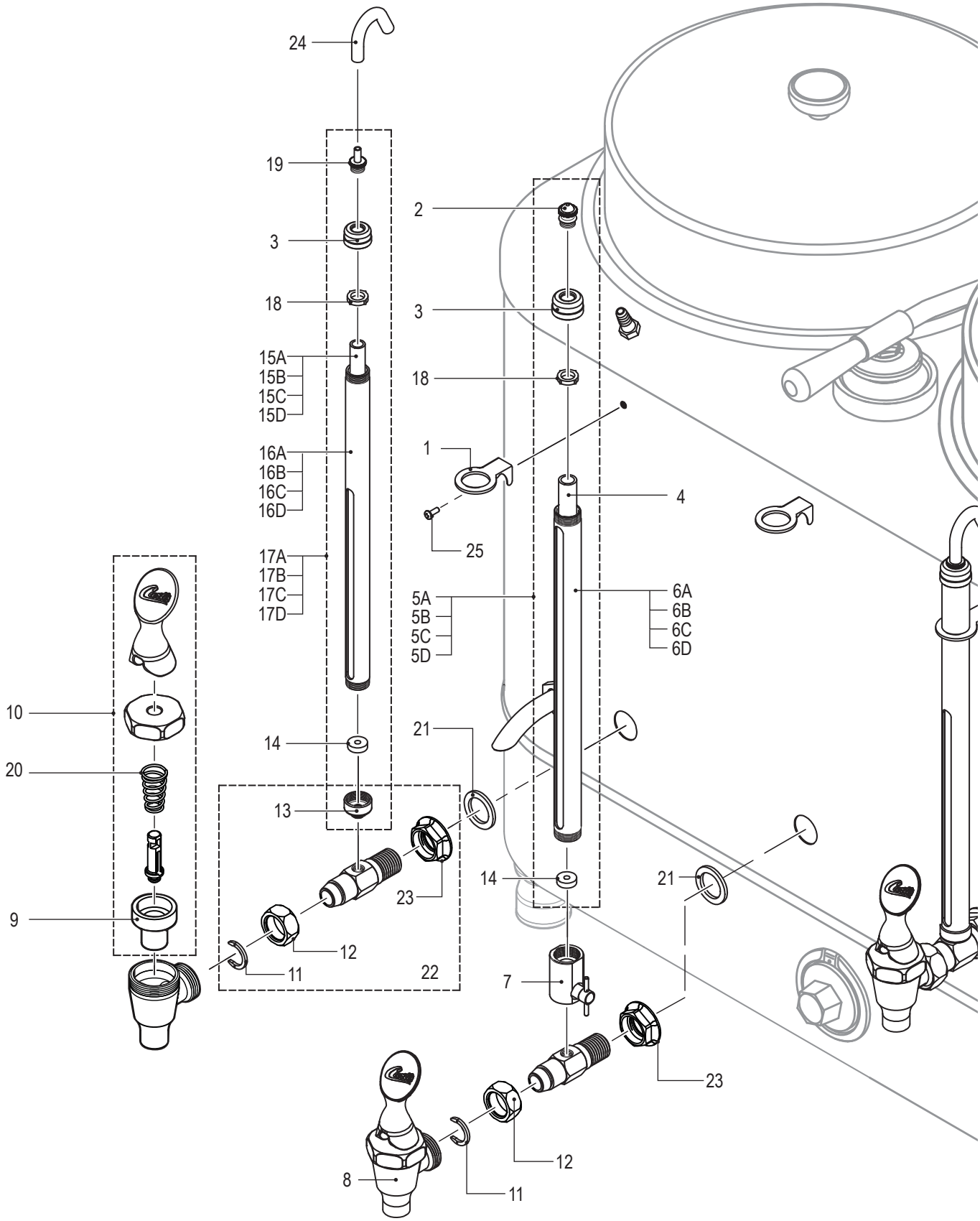
| ITEM # | PART # | DESCRIPTION | USED ON |
|---|---|---|---|
| 1 | WC-3205 | KNOB, LID 1/4-20 FEMALE THRD USE ON WC-5601/5602/5603 | ALL RU UNITS, URN-600, URN-1000 |
| 2A | WC-5601 | LID, LINER ASSY (SC)RU-150/300 (INCLUDES KNOB) | RU-150, RU-300, URN-600, URN-1000 |
| 2B | WC-5603 | LID, LINER ASSY RU225/600/1000 (INCLUDES KNOB) | RU-225, RU-600, RU-1000, URN-600, URN-1000 |
| 3A | WC-5700 | LINER, 3 GAL RU-150 | RU-150 |
| 3B | WC-5701 | LINER, 3 GAL D/S RU-150 | RU-150DS |
| 3C | WC-5706 | LINER, 6 GAL RU-600 | RU-225, RU-600, URN-600 |
| 3D | WC-5703 | LINER, 6 GAL D/S RU-225 | RU-225DS |
| 3E | WC-5707 | LINER, 6 GAL D/S RU-600 | RU-600DS |
| 3F | WC-5704 | LINER, 3 GAL RU-300 | RU-300, URN-300 |
| 3G | WC-5705 | LINER, 3 GAL D/S RU-300 | RU-300DS |
| 3H | WC-5708 | LINER, 10 GAL RU-1000 | RU-1000, URN-1000 |
| 3J | WC-5709 | LINER, 10 GAL D/S RU-1000 | RU-1000DS |
| 4A | WC-4303 | O-RING, LINER RU-150/300 | RU-150, RU-300 |
| 4B | WC-43076 | O-RING, LINER, RU'S, 6, 10 GA | RU-225, RU-600, RU-1000 |
| 4C | WC-43175 | O-RING, LINER | URN-300 |
| 4D | WC-43176 | O-RING, LINER | URN-600, URN-1000 |
| 5 | WC-3217 | KNOB, ELECTRIC THERMOSTAT RU | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 6 | WC-3220 | BEZEL, THERMOSTAT ELECTRIC URN'S | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 7 | WC-3305 | FLAP, WIRE BASKET RU150/300 (2 REQUIRED) | RU-150, RU-300, URN-300, URN-600, URN-1000 |
| 8A | WC-37165 | KIT, THERMOSTAT WC-500A/501A | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 8B | WC-502 | THERMOSTAT, CAPILLARY LWC OFF DPST | OLDER 3 PHASE UNITS |
| 9A | WC-300 | POWER BLOCK 3-STA 175A 600V RU'S | ALL DOMESTIC AND EXPORT SINGLE PHASE UNITS |
| 9B | WC-313 | POWER BLOCK, 4 STA 85A 600V | EXPORT 3 PHASE UNITS |
| 10 | WC-522 | THERMOSTAT, HI LIMIT HEATER CONTROL DPST 277V 40A | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 11 | WC-3528 | LEG, 4" ADJUSTABLE 3/8-16 THRD ITALIAN STYLE | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 12 | WC-511 | THERMOMETER, DIAL RU'S | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 13A | WC-5313 | TUBE, SPRAYARM ASSY W/NUTS RU-300 | RU-150, RU-300, URN-300 |
| 13B | WC-5314 | TUBE, SPRAYARM ASSY W/NUTS RU-600 | RU-225, RU-600, URN-600 |
| 13C | WC-5315 | TUBE, SPRAYARM ASSY W/NUTS RU-1000 | RU-1000, URN-1000 |
| 13D | WC-5310 | TUBE, 5/16 ID x 1/8W SILICONE | URN-300, URN-600, URN-1000 |
| 14 | WC-1412 | CORD GRIP, 3/4" FOR METAL CORD TO .81"OD | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 15A | WC-5800 | RING, STEAM | SINGLE SERVICE RU, URN-300, URN-600, URN-1000 |
| 15B | WC-5458 | PLATE, RING STEAM D/SERVICE SHEAR SIZE 4.00 | ALL DUAL SERVICE RU UNITS |
| 16 | WC-4205 | NUT, 1/4 LOCK NPS BRASS | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 17 | WC-2913 | SPOUT OVERFLOW | ALL RU UNITS |
| 18A | WC-5810 | COVER, W/A ELECTRIC BOX RU'S RU-600,1000 | RU-150/-600/-225/-1000, URN-600, URN-1000 |
| 18B | WC-58067 | COVER, W/A ELECTRIC BOX RU-300 | RU-300, URN-300 |
| 19A | WC-43123 | O'RING, .549 ID X .103CS SILICONE FOR HEATING ELEMENT | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 19B | WC-4305 | WASHER 5/8" TEFLON | OLDER UNITS |
| 20A | WC-431 | CONTACTOR, 120V 60A 3P DP | ALL DOMESTIC RU'S, URN-300, URN-600, URN-1000 |
| 20B | WC-439 | CONTACTOR, 220V 3POLE 63A RES | EXPORT SINGLE PHASE UNITS |
| 20C | WC-443 | CONTACTOR, 3POLE 50A 208-240VAC COIL | EXPORT THREE PHASE UNITS |
| 21A | WC-3302 | BREW BASKET WIRE W/FLAPS RU-300 | RU-150, RU-300, URN-300 |
| 21B | WC-3303 | BREW BASKET, WIRE W/ FLAPS RU-600 | RU-225, RU-600, URN-600 |
| 21C | WC-3304 | BREW BASKET, WIRE W/ FLAPS RU-1000 | RU-1000, URN-1000 |
| 22A | WC-13501 | HARNESS ASSY, CONTROL CIRCUIT RU-300/600/1000 | ALL RU UNITS |
| 22B | WC-13501-101 | HARNESS ASSY, CONTROL CIRCUIT URN-300/600/1000 | URN-300, URN-600, URN-1000 |

CONTINUED ON FOLLOWING PAGE

## RU/URN Series - Main Chassis - Parts List (continued)

| ITEM # | PART # | DESCRIPTION | USED ON |
|---|---|---|---|
| 23A | WC-13361 | HARNESS ASSY RU-150-12 FOR THERMOSTAT (NOT SHOWN) | RU-150-12, RU-150-62 |
| 23B | WC-13362 | HARNESS ASSY RU-225-12 FOR THERMOSTAT (NOT SHOWN) | RU-225-12 |
| 23C | WC-13363 | HARNESS ASSY RU-300-12 FOR THERMOSTAT (NOT SHOWN) | RU-300-12, RU-300-63, URN-300-12 |
| 23D | WC-13364 | HARNESS ASSY RU-600-12/RU1000-12 FOR THERMOSTAT (NOT SHOWN) | RU-600-12, RU-600-63, RU-1000-12, URN-600-12 |
| 23E | WC-13365 | HARNESS ASSY RU-600-20/RU1000-20 FOR THERMOSTAT (NOT SHOWN) | RU-600-20, RU-1000-20, URN-600-20, URN-1000-20 |
| 23F | WC-13366 | HARNESS ASSY RU-150-20/225-20 FOR THERMOSTAT (NOT SHOWN) | RU-150-20, RU-150-91, RU-225-20 |
| 23G | WC-13368 | HARNESS ASSY RU-300-20 FOR THERMOSTAT (NOT SHOWN) | RU-300-20, RU-300-91, RU-600-91, RU-1000-91 |
| 24 | WC-5634 | CAP, URN STEAM RING | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 25 | WC-4403 | SCREW, 6-32x3/8 PHIL ROUND HD | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 26 | WC-4503 | SCREW, 8-32x1/2 PHILLIPS HEAD | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 27 | WC-4201 | NUT, 8-32 HEX KEP ZINC | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 28 | WC-4439 | SCREW, 6-32x¼ PHIL PAN HD SS | ALL RU UNITS, URN-300, URN-600, URN-1000 |

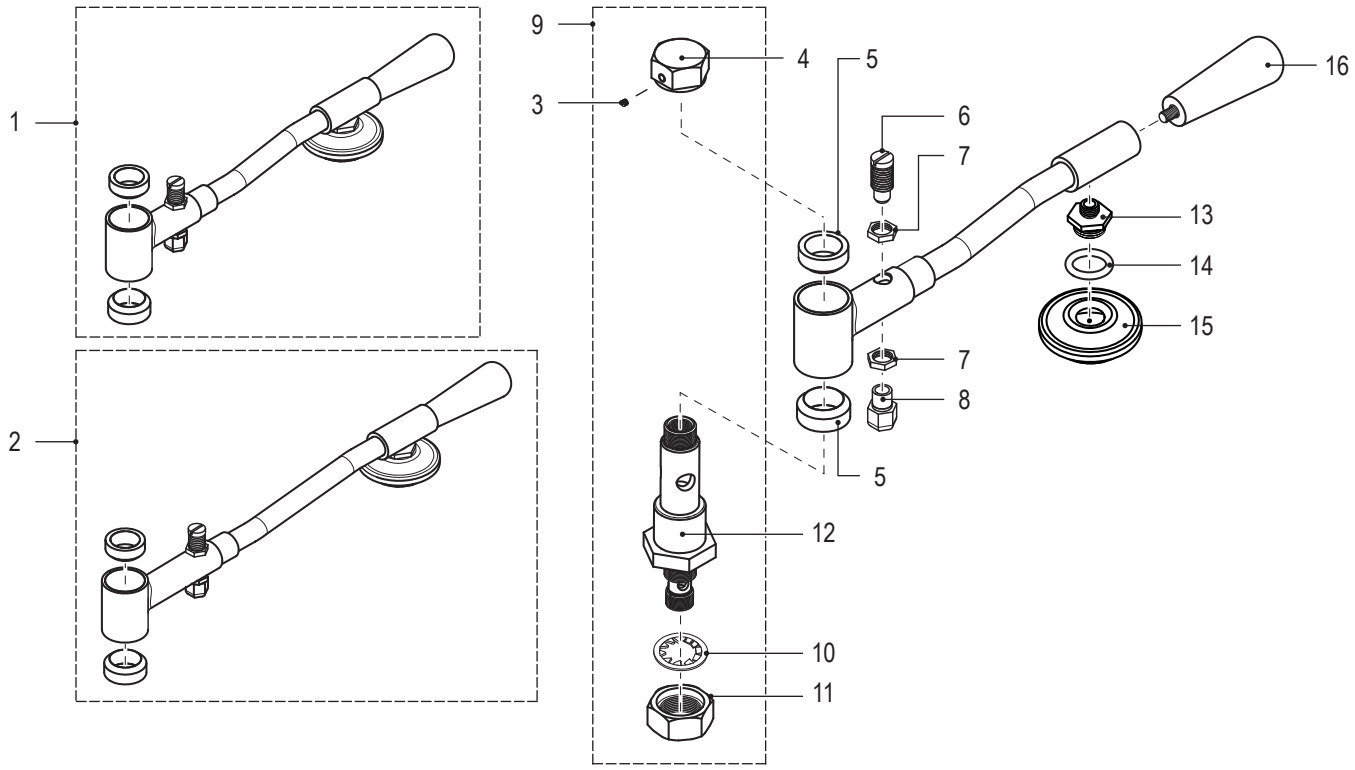
RU/URN Series - Faucet Assemblies - Exploded View



# RU/URN Series - Faucet Assemblies - Parts List

| ITEM # | PART # | DESCRIPTION | USED ON |
|---|---|---|---|
| 1 | WC-2007 | BRACKET, GAUGE GLASS GEM-3 | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 2 | WC-2003 | CAP, PLUG VENTED 44 | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 3A | WC-2002K | KIT, SHIELD CAP W/CLEAN OUT | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 3B | WC-2001 | CAP, SHIELD W/VENT | URN-300, URN-600, URN-1000 |
| 4 | WC-2030 | GLASS, GAUGE 13” | RU-225, RU-600, URN-600 |
| 5A | WC-2108 | GAUGE GLASS ASSEMBLY 13” USE ON RU-225 | RU-225, RU-600, URN-600 |
| 5B | WC-2104 | GAUGE GLASS ASSEMBLY 10” | RU-150 |
| 5C | WC-2105 | GAUGE GLASS, ASSY 11” USE ON RU-150/300 | RU-150, RU-300, URN-300 |
| 5D | WC-2113 | GAUGE GLASS, ASSY 19” | RU-1000, URN-1000 |
| 6A | WC-2017 | SHIELD, GAUGE GLASS 13” | RU-225, RU-600, URN-600 |
| 6B | WC-2104 | SHIELD, GAUGE GLASS 10” | RU-150 |
| 6C | WC-2014 | SHIELD, 11” GAUGE GLASS | RU-300, URN-300 |
| 6D | WC-2022 | SHIELD, 19” GAUGE GLASS 1/8 NPT | RU-1000, URN-1000 |
| 7 | WC-1900 | VALVE, GAUGE SHIELD SHUT-OFF 1/8 NPT | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 8 | WC-1800 | FAUCET,”S” SERIES BLK LOCKING 1-1/32-14 UNS CURTIS | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 9 | WC-1805 | SEAT CUP, “S” FAUCET USE ON WC-1800/B/LB/D/DL/L/WC-1803 | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 10 | WC-3705 | KIT, FAUCET HANDLE S SERIES NONLOCK | ALL RU URNS, URN-300, URN-600, URN-1000 |
| 11 | WC-1906 | C’ RING .917 X .760 X .090 TT-3 TC’S | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 12 | WC-1903 | NUT, UNION SHANK WB-10/WB-10-60/WB-30-12 | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 13 | WC-2004K | KIT, BASE GAUGE GLASS SHIELD | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 14 | WC-2006 | WASHER, .188 ID X .188 THK BOTTOM GAUGE GLASS GEN USE | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 15A | WC-2028 | GLASS, GAUGE 5/8” X 11” | RU-150, RU-300, URN-300 |
| 15B | WC-2031 | GLASS, GAUGE 14” | RU-225, RU-600, URN-600 |
| 15C | WC-2029 | GLASS, GAUGE 5/8” X 12” | RU-300, URN-300 |
| 15D | WC-2037 | GLASS, GAUGE 5/8” X 20” | RU-1000, URN-1000 |
| 16A | WC-2014 | SHIELD, 11” GAUGE GLASS | RU-150, RU-300, URN-300 |
| 16B | WC-2016 | SHIELD, GAUGE GLASS 3/4D.X 12” | RU-300, URN-300 |
| 16C | WC-2019 | SHIELD, 14c” GAUGE GLASS | RU-600, URN-600 |
| 16D | WC-2023 | SHIELD, 20” GAUGE GLASS | RU-1000, URN-1000 |
| 17A | WC-2105 | GAUGE GLASS, ASSY 11” USE ON RU-150 | RU-150 |
| 17B | WC-2109 | GAUGE GLASS, ASSY 14” | RU-225, RU-600, URN-600 |
| 17C | WC-2107 | GAUGE GLASS, ASSY 12” SHORT WIN | RU-300, URN-300 |
| 17D | WC-2114 | GAUGE GLASS, ASSY 20” | RU-1000, URN-1000 |
| 18 | WC-2005 | WASHER, SHIELD CAP 1/8” GEM-3/TC’S W/SG | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 19 | WC-2000 | FITTING, AGITATION PLATED RU’S | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 20 | WC-3402 | SPRING, RETURN “S”SERIES FAUCT | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 21 | WC-1813 | WASHER, 1-1/8” OD ETHYLENE PROPYLENE RUBBER | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 22 | WC-1901AK | KIT,FAUCET SHANK W/SHIELD BASE | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 23 | WC-1939 | NUT, FLANGED TLS-2, GEM3, RU’S | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 24 | WC-5307 | TUBE, 3/16 ID x 3/32W SILICONE GEN USE | ALL RU UNITS, URN-300, URN-600, URN-1000 |
| 25 | WC-4439 | SCREW, 6-32x¼ PHIL PAN HD SS | ALL RU UNITS, URN-300, URN-600, URN-1000 |

## RU/URN Series - Spray Arms - Exploded View




## RU/URN Series Urns - Spray Arms - Parts List

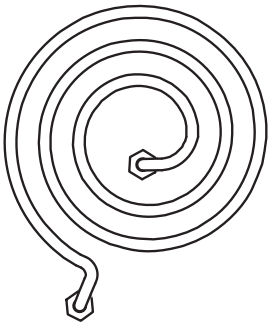
| ITEM # | PART # | DESCRIPTION |
|---|---|---|
| 1 | WC-2908K | KIT, SPRAY ARM ASSY RU-150/300 |
| 2 | WC-2909 | SPRAY ARM ASSEMBLY, RU-225/600/1000 |
| 3 | WC-4800 | SCREW, 8-32 x 1/8" SET S.S. |
| 4 | WC-3103K | KIT, CAP CLEAN OUT, VALVE CORE RU'S |
| 5 | WC-4307 | RING, PACKING TEFLON 2-REQ |
| 6 | WC-2916 | NEEDLE, BY PASS PLTD (SPRAY ARM) |
| 7 | WC-4202P-P | NUT, 3/8" - 24 JAM, PLATED |
| 8 | WC-2914 | SPOUT, BY PASS PLTD (SPRAY ARM) |
| 9 | WC-3753 | KIT, VALVE CORE REPLACEMENT O-RING STYLE |

| ITEM # | PART # | DESCRIPTION |
|---|---|---|
| 10 | WC-4310 | WASHER, 7/8" INTERNAL TOOTH LOCK |
| 11 | WC-4215P | NUT, 7/8" JAM PLATED |
| 12A | WC-3109K | KIT, CORE VALVE RU'S |
| 12B | WC-3109-102 | VALVE, CORE PLATED URN'S |
| 13 | WC-2904 | SPRAY HEAD HOLDER PLATED |
| 14* | WC-4320 | O'RING, 0.487I.D.x 0.693OD x 0.103CS |
| 15* | WC-2907-P | KIT, SPRAYHEAD ASSY RU'S |
| 16 | WC-3200** | HANDLE, SPRAY ARM BLACK PLASTIC RU/MWM |

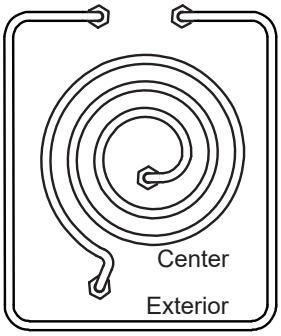
* RECOMMENDED PARTS TO STOCK

** USE ONLY WITH VALVE CORES THAT DO NOT HAVE TEFLON RETRACTORS.

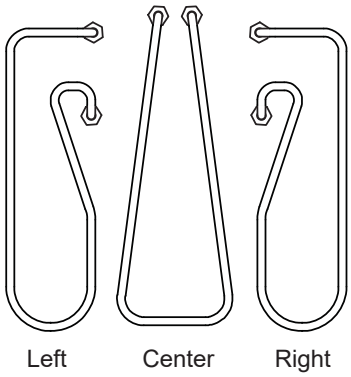
## RU/URN Series - Heating Elements



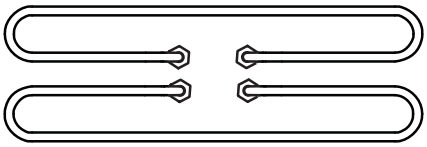
**Element Configuration “A”**



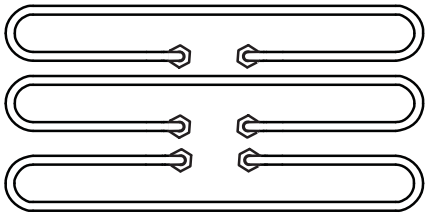

**Element Configuration “B”**




**Element Configuration “C”**



**Element Configuration “D”**

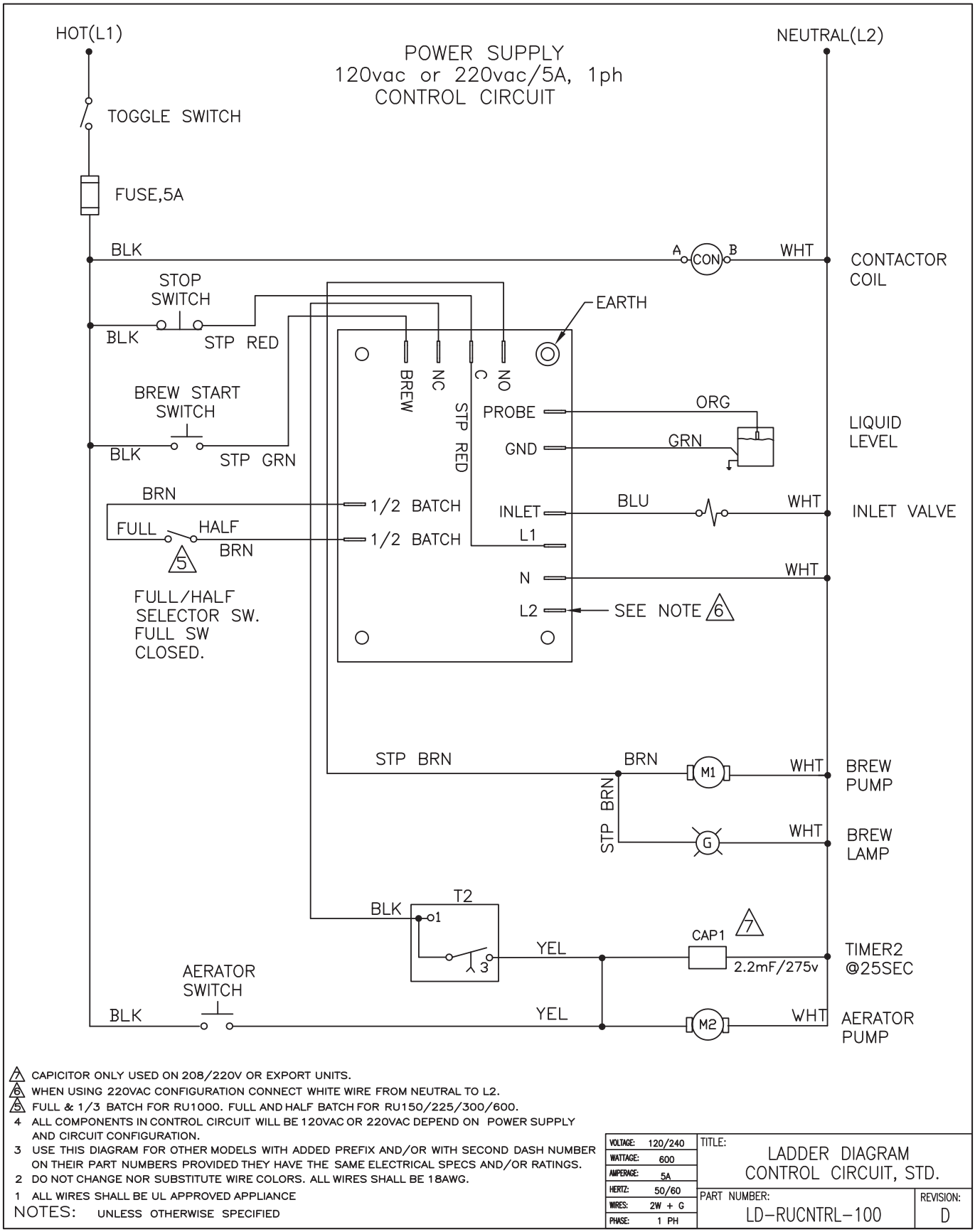


**Element Configuration “E”**

| URN MODEL | ELECTRICAL SUPPLY | ELEMENT CONFIGURATION | ELEMENT LOCATION | ELEMENT PART # | ELEMENT DESCRIPTION |
|---|---|---|---|---|---|
| RU-150-12 | 208/220V-1 PHASE | A | - | WC-913-01 | ELEMENT, HEATING 5KW 220V FOR MED SPIRAL |
| RU-150-20 | 208/220V-3 PHASE | C | LEFT | WC-907-01 | ELEMENT, HEATING 1.75KW 220V FORMED LEFT |
| | | | CENTER | WC-907-02 | ELEMENT, HEATING 1.75KW 220V FORMED CENTER |
| | | | RIGHT | WC-907-03 | ELEMENT, HEATING 1.75KW 220V FORMED RIGHT |
| RU-225-12 | 208/220V-1 PHASE | B | CENTER | WC-911-02 | ELEMENT, HEATING 3.5KW FORMED CENTER |
| | | | EXTERIOR | WC-911-01 | ELEMENT, HEATING 3.5KW 208/ 220V W/JAM NUT FORMED EXTERIOR |
| RU-225-20 | 208/220V-3 PHASE | C | LEFT | WC-908-01 | ELEMENT, HEATING 2.5KW 220V FORMED LEFT |
| | | | CENTER | WC-908-02 | ELEMENT, HEATING 2.5KW 220V FORMED CENTER |
| | | | RIGHT | WC-908-03 | ELEMENT, HEATING 2.5KW 220V FORMED RIGHT |
| RU-300-12 | 208/220V-1 PHASE | D | ALL | WC-910 | ELEMENT, HEATING 3KW 220V RU’s |
| RU-300-20 | 208/220V-3 PHASE | E | ALL | WC-908 | ELEMENT, HEATING 2.5KW 220V |
| RU-300-63 | 208/220V-1 PHASE | D | ALL | WC-912 | ELEMENT, HEATING 4KW 220V |
| RU-600-12 | 208/220V-1 PHASE | D | ALL | WC-913 | ELEMENT, HEATING 5KW 220V |
| RU-600-20 | 208/220V-3 PHASE | E | ALL | WC-911 | ELEMENT, HEATING 3.5KW 220V |
| RU-600-63 | 208/220V-1 PHASE | D | ALL | WC-913 | ELEMENT, HEATING 5KW 220V |
| RU-1000-12 | 208/220V-1 PHASE | D | ALL | WC-913 | ELEMENT, HEATING 5KW 220V |
| RU-1000-20 | 208/220V-3 PHASE | E | ALL | WC-911 | ELEMENT, HEATING 3.5KW 220V |
| URN-300-20 | 208/220V-3 PHASE | E | ALL | WC-908-20[1] | ELEMENT, HEATING 2.5KW 220V W/NUTS & O-RINGS, FORMED URN-300-20 |
| URN-300-12 | 208/220V-1 PHASE | D | ALL | WC-910-10[1] | ELEMENT, HEATING 3.0KW 220V W/NUTS & O-RINGS, FORMED URN-300-12 |
| URN-600-20 | 208/220V-3 PHASE | E | ALL | WC-911-20[1] | ELEMENT, HEATING 3.5KW 220V W/NUTS & O-RINGS, FORMED URN-600-20 |
| URN-1000-20 | 208/220V-3 PHASE | E | ALL | WC-911-20[1] | ELEMENT, HEATING 3.5KW 220V W/NUTS & O-RINGS, FORMED URN-1000-20 |
| URN-600-12 | 208/220V-1 PHASE | D | ALL | WC-913-10[1] | ELEMENT, HEATING 5.0KW 220V W/NUTS & O-RINGS, FORMED URN-600-12 |
| URN-1000-12 | 208/220V-1 PHASE | D | ALL | WC-913-10[1] | ELEMENT, HEATING 5.0KW 220V W/NUTS & O-RINGS, FORMED URN-1000-12 |

[1] UNITS BUILT 3/2023 AND LATER

## RU Series Control Circuit

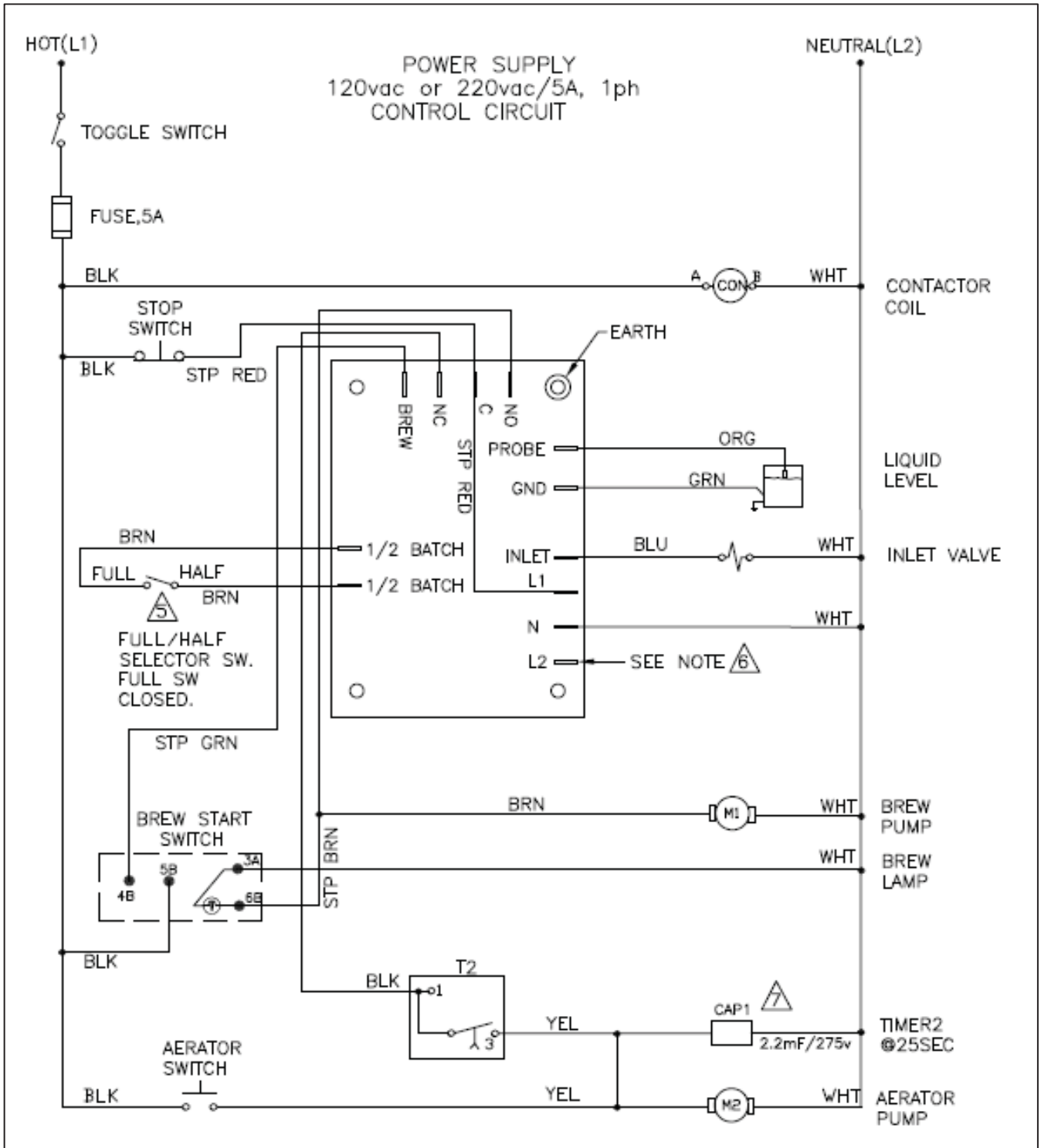



7 CAPICITOR ONLY USED ON 208/220V OR EXPORT UNITS.
6 WHEN USING 220VAC CONFIGURATION CONNECT WHITE WIRE FROM NEUTRAL TO L2.
5 FULL & 1/3 BATCH FOR RU1000. FULL AND HALF BATCH FOR RU150/225/300/600.
4 ALL COMPONENTS IN CONTROL CIRCUIT WILL BE 120VAC OR 220VAC DEPEND ON POWER SUPPLY AND CIRCUIT CONFIGURATION.
3 USE THIS DIAGRAM FOR OTHER MODELS WITH ADDED PREFIX AND/OR WITH SECOND DASH NUMBER ON THEIR PART NUMBERS PROVIDED THEY HAVE THE SAME ELECTRICAL SPECS AND/OR RATINGS.
2 DO NOT CHANGE NOR SUBSTITUTE WIRE COLORS. ALL WIRES SHALL BE 18AWG.
1 ALL WIRES SHALL BE UL APPROVED APPLIANCE
NOTES: UNLESS OTHERWISE SPECIFIED

| | |
|---|---|
| VOLTAGE: | 120/240 |
| WATTAGE: | 600 |
| AMPERAGE: | 5A |
| HERTZ: | 50/60 |
| WIRES: | 2W + G |
| PHASE: | 1 PH |

TITLE: LADDER DIAGRAM CONTROL CIRCUIT, STD.
PART NUMBER: LD-RUCNTRL-100
REVISION: D

## URN Series Control Circuit

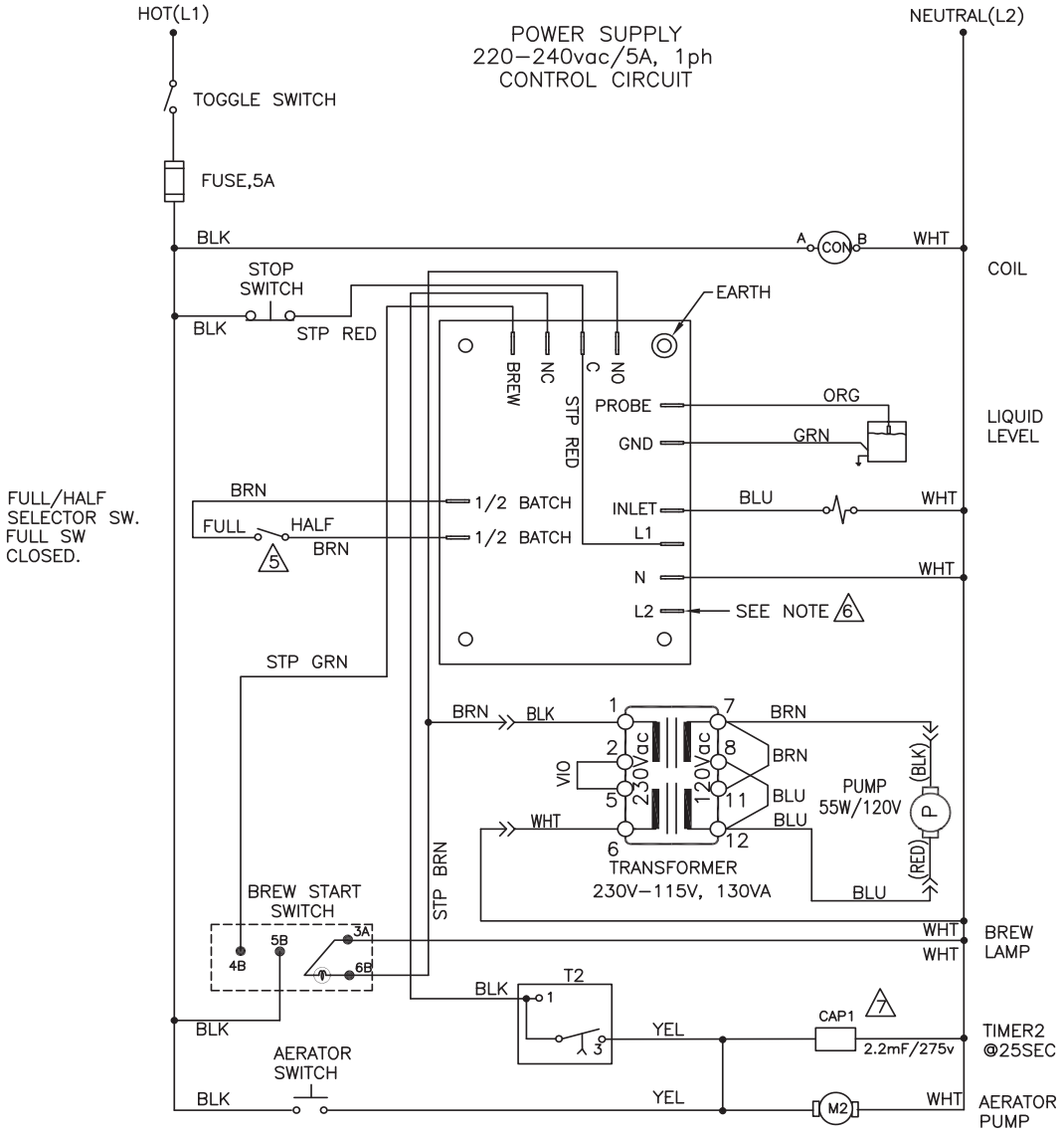



7 CAPICITOR ONLY USED ON 208/220V OR EXPORT UNITS.
6 WHEN USING 220VAC CONFIGURATION CONNECT WHITE WIRE FROM NEUTRAL TO L2.
5 FULL & 1/3 BATCH FOR RU1000. FULL AND HALF BATCH FOR RU150/225/300/600.
4 ALL COMPONENTS IN CONTROL CIRCUIT WILL BE 120VAC OR 220VAC DEPEND ON POWER SUPPLY AND CIRCUIT CONFIGURATION.
3 USE THIS DIAGRAM FOR OTHER MODELS WITH ADDED PREFIX AND/OR WITH SECOND DASH NUMBER ON THEIR PART NUMBERS PROVIDED THEY HAVE THE SAME ELECTRICAL SPECS AND/OR RATINGS.
2 DO NOT CHANGE NOR SUBSTITUTE WIRE COLORS. ALL WIRES SHALL BE 18AWG.
1 ALL WIRES SHALL BE UL APPROVED APPLIANCE
NOTES: UNLESS OTHERWISE SPECIFIED

| | |
|---|---|
| VOLTAGE: | 120/240 |
| WATTAGE: | 600 |
| AMPERAGE: | 5A |
| HERTZ: | 50/60 |
| WIRES: | 2W + G |
| PHASE: | 1 PH |

TITLE: LADDER DIAGRAM CONTROL CIRCUIT, STD.
PART NUMBER: LD-RUCNTRL-105
REVISION: NC

## URN Series Control Circuit - Export

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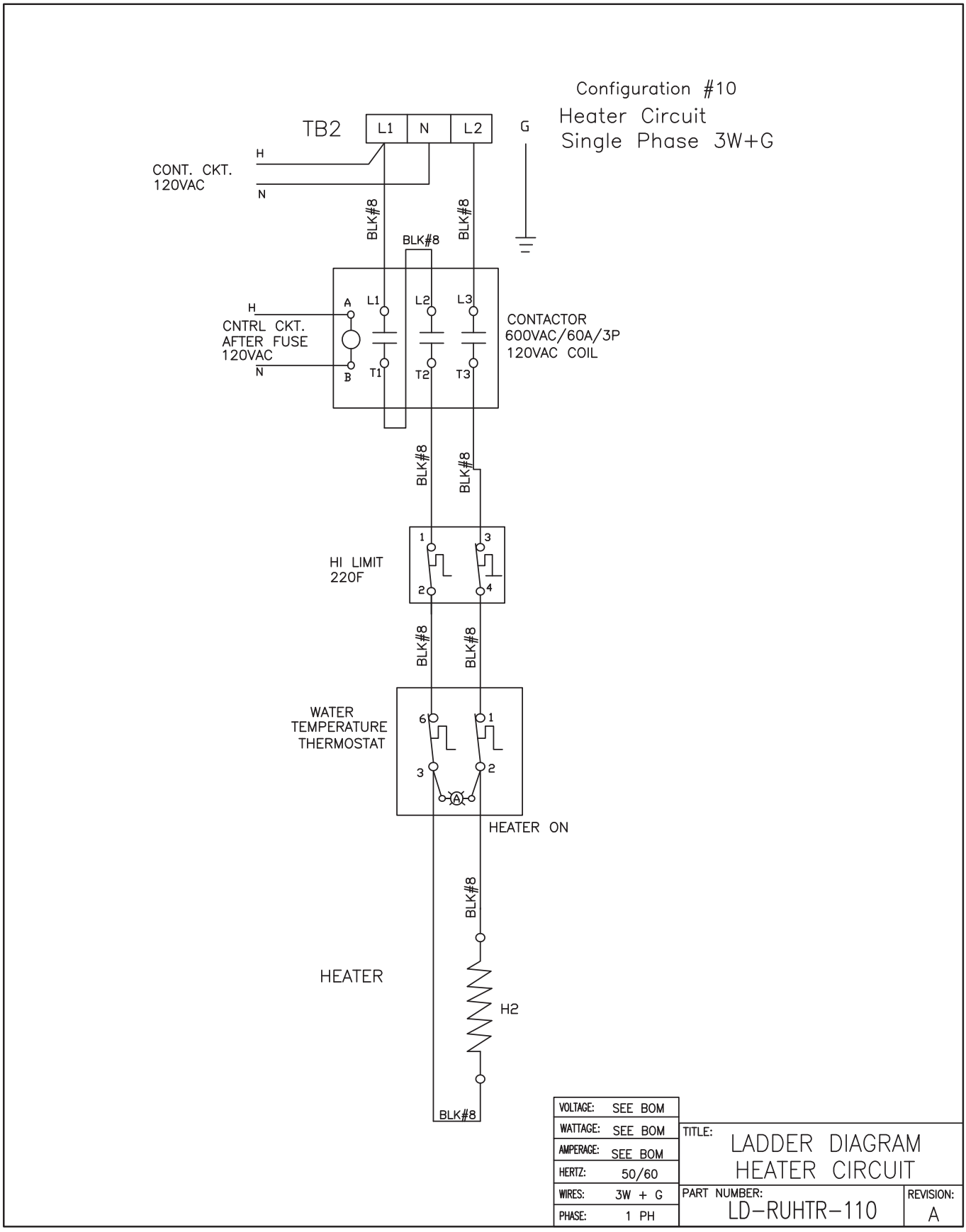
2 DO NOT CHANGE NOR SUBSTITUTE WIRE COLORS. ALL WIRES SHALL BE 18AWG.
1 ALL WIRES SHALL BE UL APPROVED APPLIANCE

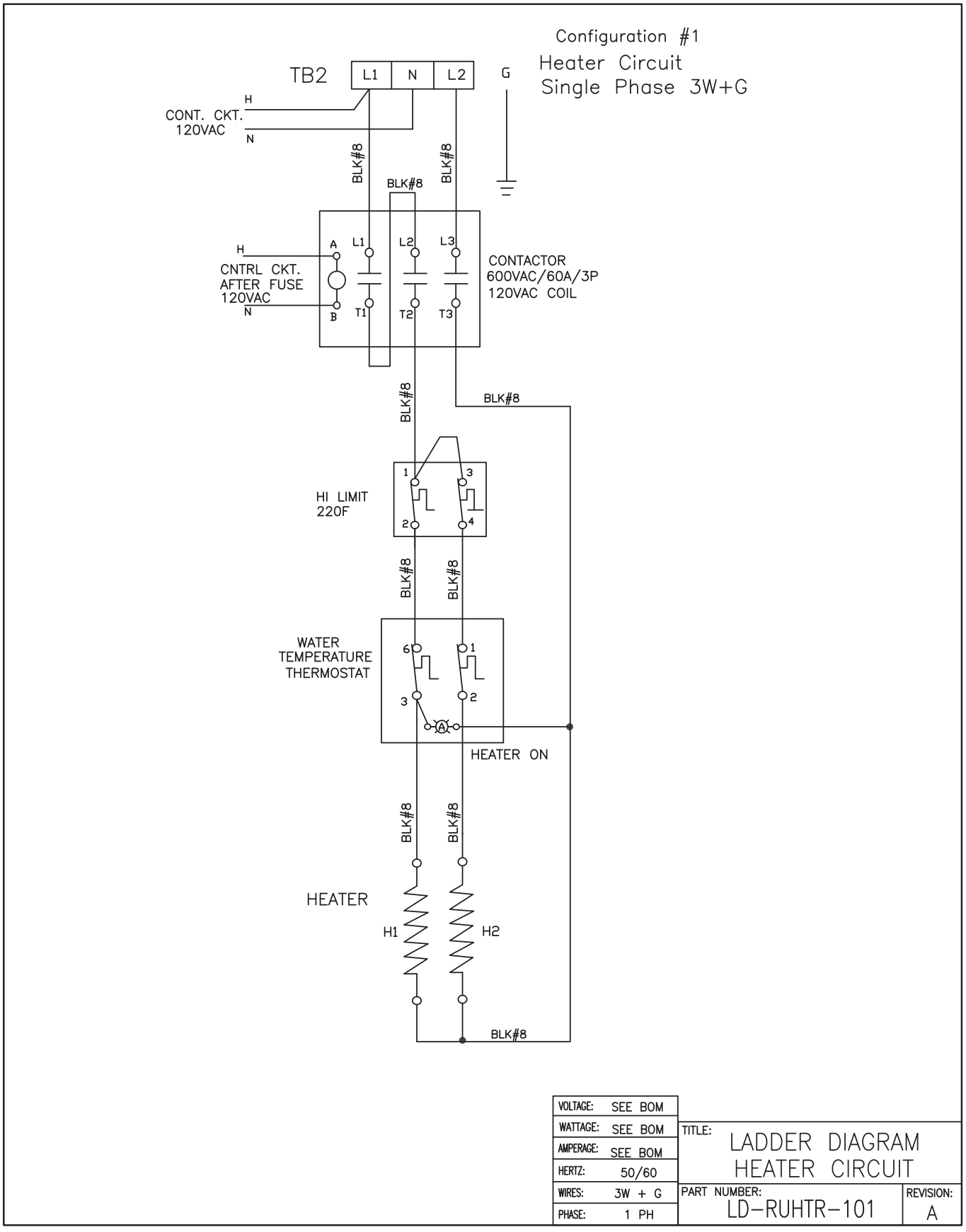
NOTES: UNLESS OTHERWISE SPECIFIED

| | | | | | |
|---|---|---|---|---|---|
| REVIEWED | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. REMOVE ALL BURRS AND SHARP EDGES. TOLERANCES: .XX ±.03 .XXX ±.010 ANGLES ±1° | VOLTAGE: 220–240 | NEXT ASSY: FINAL | Curtis® Wilbur Curtis Co., Inc. 6913 Acco St. Montebello, CA 90640 Phone–323–837–2300 Fax–323–837–2402 WWW.WILBURCURTIS.COM | |
| | | WATTAGE: 600 | MODEL NUMBER: URN–300–33 URN–600–33 | TITLE: LADDER DIAGRAM, CONTROL CIRCUIT URN's 220–240V (WC–132) | |
| | | AMPERAGE: 5A | | | |
| | | HERTZ: 50/60 | | | |
| | | WIRES: 2W+G | DRAWN BY: – DATE: 9/2022 | PART NUMBER: LD–RUCNTRL–106 | DRAWING SIZE: A |
| APPROVED | This document contains information proprietary to Wilbur Curtis Co., Inc. It shall not be reproduced, used, or disclosed to anyone without the prior written permission of Wilbur Curtis Co., Inc. | PHASE: 1PH | CHK. BY: DATE: | SCALE: NTS | SHEET 1 OF 1 |
| | | | APPR.BY: DATE: | | REVISION: NC |

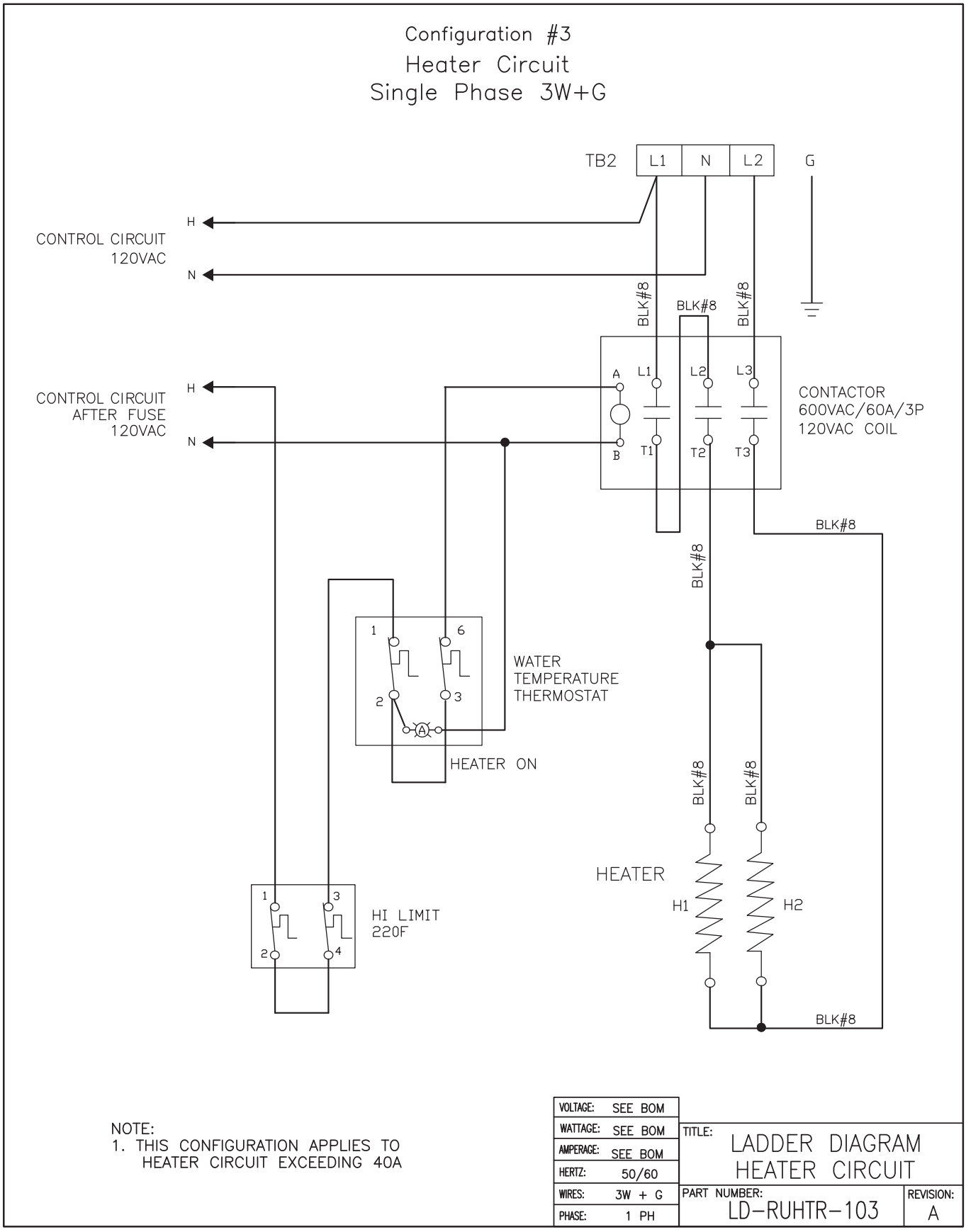
## RU Series Heater Circuit, RU-150-12



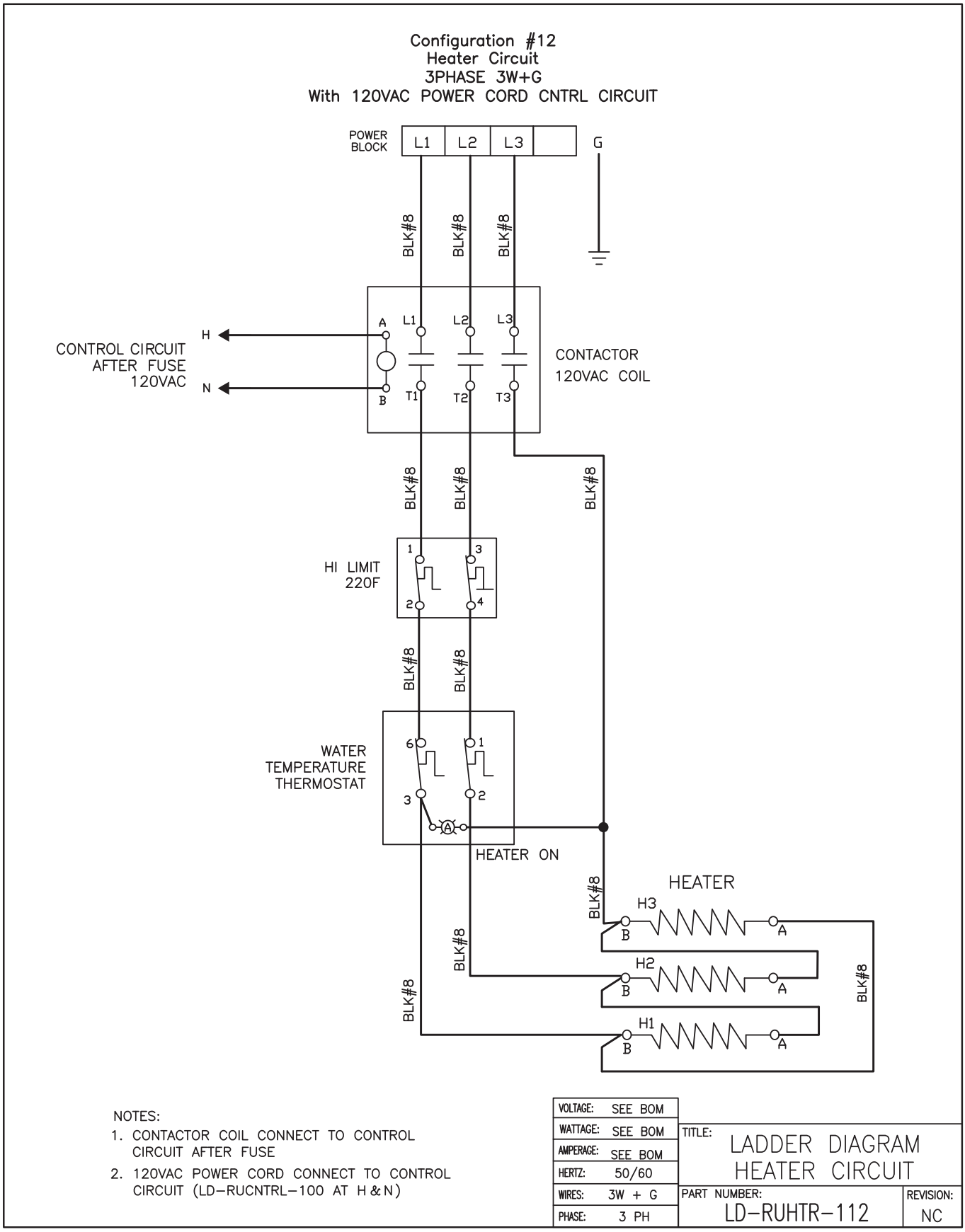
## RU Series Heater Circuit, RU-225-12, RU-300-12, RU-600-12



## RU Series Heater Circuit, RU-1000-12



RU Series Heater Circuit, RU-150-20, RU-225-20, RU-300-20, RU-600-20, RU-1000-20




NOTES:

1. CONTACTOR COIL CONNECT TO CONTROL CIRCUIT AFTER FUSE
2. 120VAC POWER CORD CONNECT TO CONTROL CIRCUIT (LD-RUCNTRL-100 AT H & N)

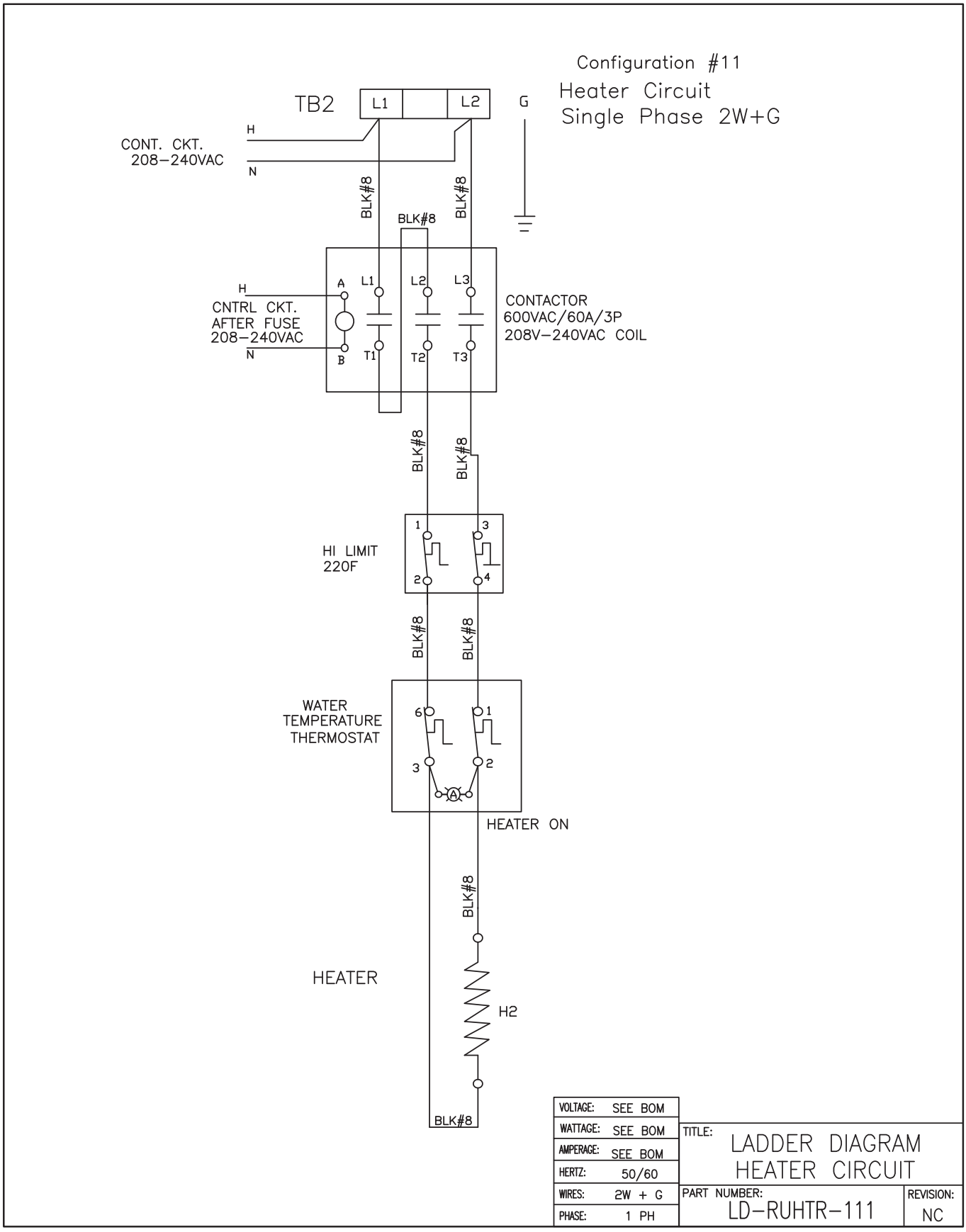
| | |
|---|---|
| VOLTAGE: | SEE BOM |
| WATTAGE: | SEE BOM |
| AMPERAGE: | SEE BOM |
| HERTZ: | 50/60 |
| WIRES: | 3W + G |
| PHASE: | 3 PH |

TITLE: LADDER DIAGRAM HEATER CIRCUIT

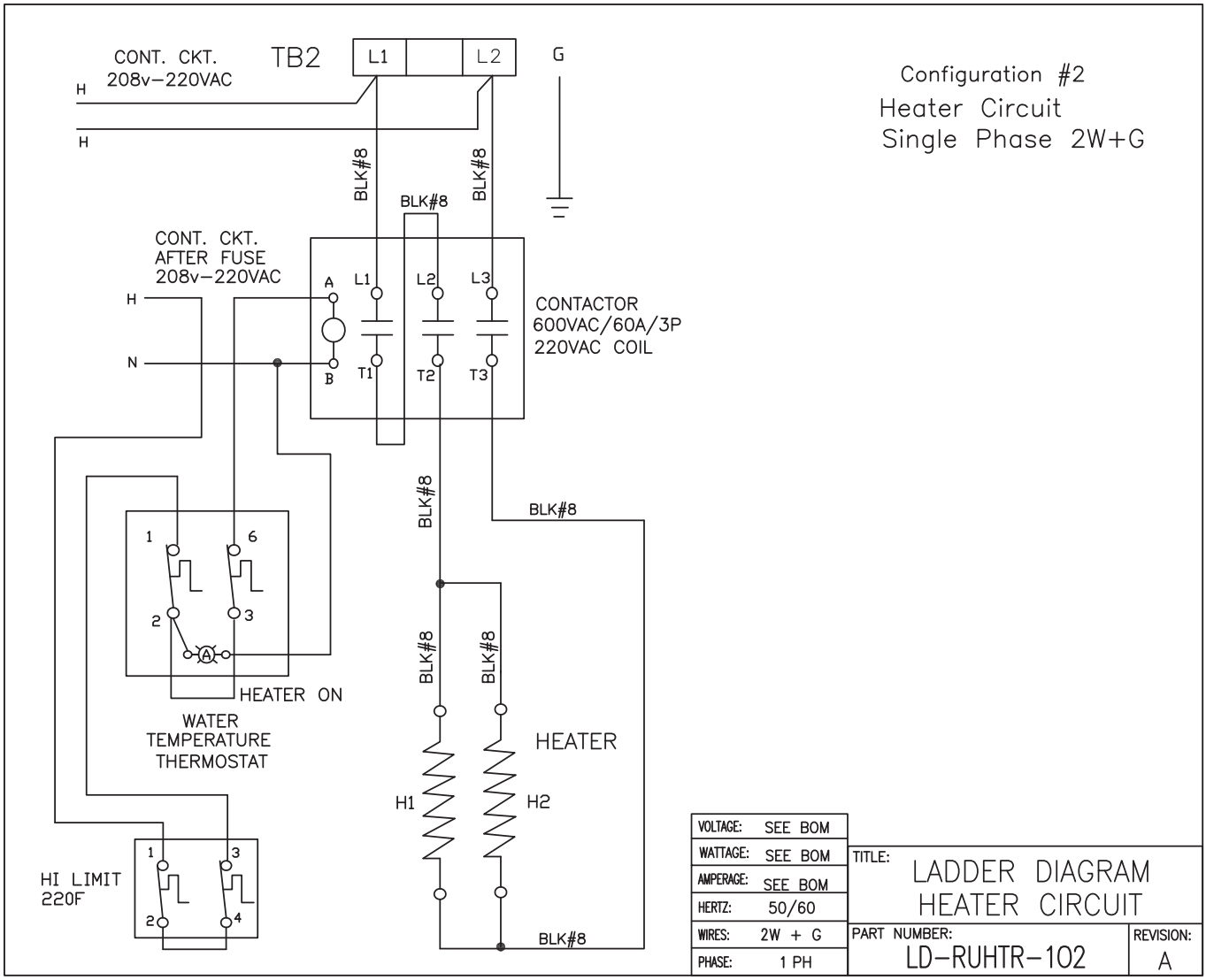
PART NUMBER: LD-RUHTR-112

REVISION: NC

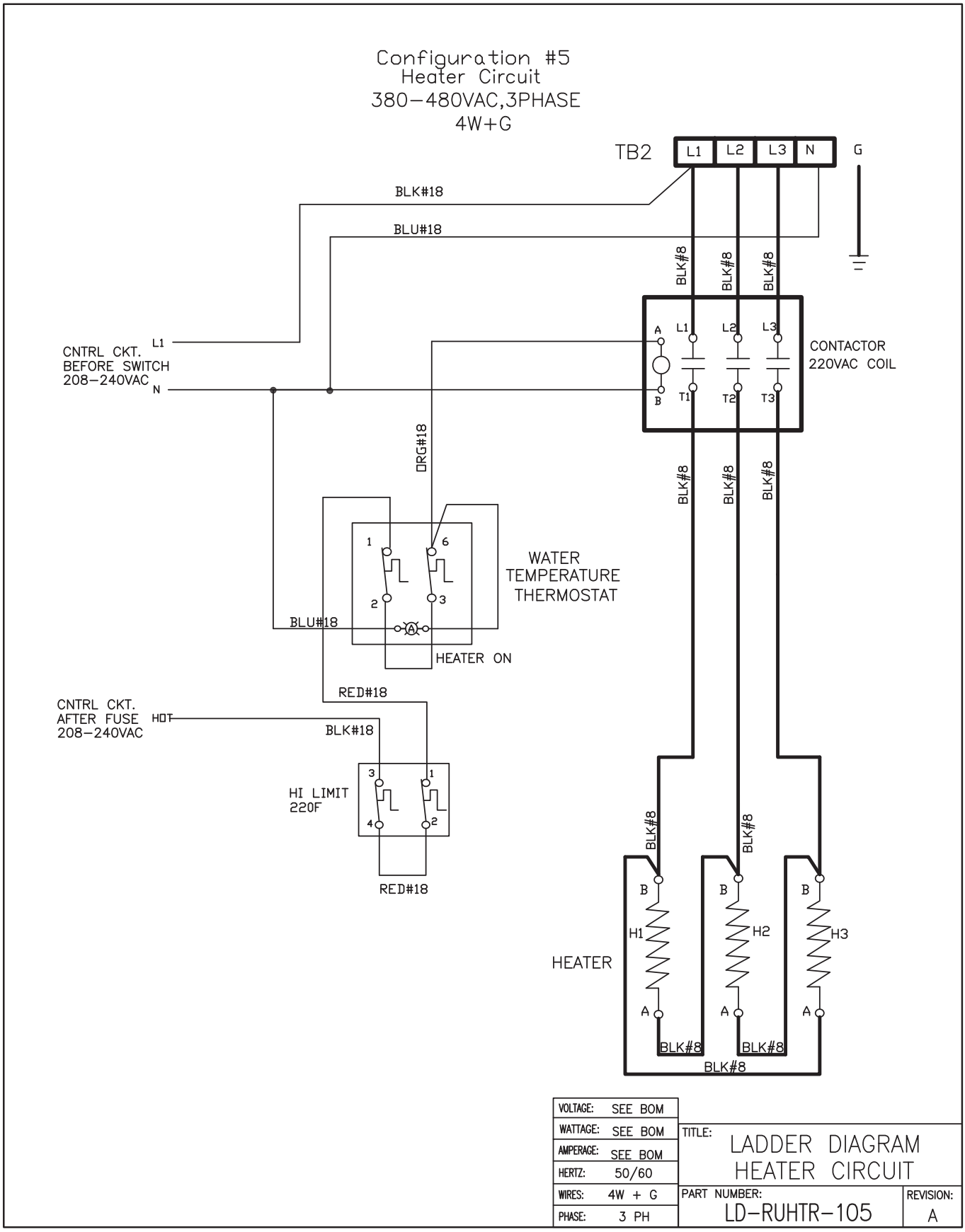
## RU Series Heater Circuit, RU-150-62



# RU Series Heater Circuit, RU-300-63, RU-600-63



RU Series Heater Circuit, RU-150-91, RU-300-91, RU-600-91, RU-1000-91



**WARNING:**

**Electric Shock Hazard -** the following procedures are to be performed only by a qualified service technician. Turn off power when replacing components. 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.

### Troubleshooting Guidelines

- An urn that is not level may not function properly. Make sure the urn is properly leveled before proceeding.
- This troubleshooting guide identifies some, but not all, of the possible causes for common problems that can occur.
- Use this troubleshooting guide along with the appropriate *ELECTRICAL SCHEMATIC.*

### No Power - Nothing Works

1 Make sure the circuit breaker for the circuit supplying power to the urn is not tripped and is turned on. On units with both a 120 Volt and 220 Volt power supply, make sure both circuits are turned on.

2 On urns with a power plug, make sure it is connected to the power receptacle.

3 Make sure that the main power toggle switch on the bottom of the control box is turned ON.

4 Remove the fuse on the front of the control box and make sure it is not blown.

5 Remove the electrical box cover and verify that all wires from the power cord are properly connected inside the unit. Check to make sure the wires are not burned/overheated. Check chassis ground.

### Urn Does Not Start to Brew When BREW BUTTON is Pressed

If the urn starts to brew when the BREW BUTTON is press, but stops brewing when it is released, see ***Brewing Stops When BREW BUTTON is released***.

1 First check the water level in the water jacket. If the water level is low, see ***Water Jacket Does Not Fill***.

2 Press the BREW BUTTON and check for power across the terminals of the brew pump. If there is power to the pump, but water does not flow, replace the pump.

3 If the brew pump is not getting power, first check for faulty wiring and connections between the timer and the pump.

4 If the wiring is OK, check for power across terminals 2 and 3 and across terminals 3 and 9 on the timer.

5 If power is being supplied to the timer, check to make sure power is supplied to pin 5 of the timer when the BREW BUTTON is pressed. If power is being supplied to all the terminals checked in steps 4 and 5, but there is no power supplied to the pump when the BREW BUTTON is pressed, replace the timer. After replacing the timer, set the timer as instructed in the ***Setting the Timer*** section on the following page.

### Brewing Stops When BREW BUTTON is Released

The brew light stays on only while the switch is pressed, but turns off when released and water comes out of the spray head only while the switch is kept pressed. Normally, the timer should reset itself to the N. O. position after every brewing cycle but if it fails to reset, brewing will stop when the button is released.

1 Turn off power to the urn.

2 Disconnect the wires to terminals 8 and 9 on the timer.

3 Using a multi-meter, check for continuity between terminals 8 and 9 on the timer. If there is continuity, the timer is faulty and must be replaced. After replacing the timer, set the timer as instructed in the ***Setting the Brew Timer*** section on the following page.

**Liner Not Filled To Normal Level During Brewing**

1 Before brewing, make sure that the water jacket is full. If water flow into the jacket is slow, see ***Water Jacket Does Not Fill***.

2 Check the position of the batch switch.

3 Check for obstructions in the spray head and spray head water supply tubing that slow down the delivery rate of the water during brewing. Also check to make sure that the pump is working properly.

4 Run a brew cycle with the batch switch in one position, then a second time with the switch in the opposite position. If the brew time/volume does not change based on the position of the switch, check the batch selector switch and wiring harness. If both are OK, replace the timer.

5 If the batch switch is working, try changing the timer setting. See ***Setting the Brew Timer***. If changing the timer setting does not lengthen the brew cycle sufficiently, replace the timer.

**Brew Light Does Not Come on During Brewing**

Press the brew button and check for power to the light. If power is being supplied, but the light does not come on, replace the BREW BUTTON assembly.

**Liner Overflows During Brewing**

1 Check to make sure the liner is empty before starting a brew cycle.

2 Try changing the timer setting. See ***Setting the Brew Timer***. If changing the timer setting does not shorten the brew cycle sufficiently, replace the timer.

**Water Jacket Does Not Fill**

**IMPORTANT:** No water or low water in the water jacket can cause the water to overheat, resulting in the thermostat reset switch opening. If after correcting a jacket fill problem there is no power to the heating elements, 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 or plugged 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, repair or replace the inlet valve.

3 If power is not being supplied to the inlet valve, check the wires between the liquid level control board and the inlet valve. Check for corroded connections.

4 If the wiring between the water level control board, and the inlet valve is OK, disconnect the orange wire from the control board. If the water tank starts to fill, either the wire or the probe is shorted to ground. If the water tank does not start to fill, replace the control board.

**Water Jacket Overfills**

1 Turn the toggle switch on the bottom of the control box ON and OFF. If water continues to flow when the switch is in both positions, replace the inlet valve.

2 If water stops flowing to the water jacket when the toggle switch is turned OFF and resumes when the switch is turned back ON, remove the orange wire from the water probe inside the control box. While power is ON, short the end of the orange wire to ground. If the water jacket stops filling, check for a corroded connections at both ends of the orange wire.

3 If water does not stop flowing when the orange wire is shorted to ground, check the ground wire to the water level control board and the continuity of the orange wire. If all connections are OK, replace the control board.

### Air Does Not Flow Through One (or Both) Tubes When AERATE Button is Pressed

**IMPORTANT:** On older units, when reconnecting the silicone tubing to the copper tubes inside the control box, make sure that you do not cover the small holes on the copper tubes. See the diagram on the following page.

1 Remove the aeration tubing from the copper tubes (or tee) inside the control box. Press the AERATE button. Air should blow through both tubes. If air blows through only one tube or the pump makes noise but air does not come out of either tube, replace the pump. If air comes out of both tubes, skip to step 3.

2 If the pump does not make noise when the AERATE button is pressed, check to make sure the pump is getting power. If the pump is getting power when the button is pressed, but does not operate, replace the pump.

3 If the pump is working normally, reconnect the tubing inside the control box. Press the AERATE button and check for leaks in the aeration system. See the diagram on the following page.

### Automatic Aeration Does Not Work, Manual (AERATE) Button Works OK

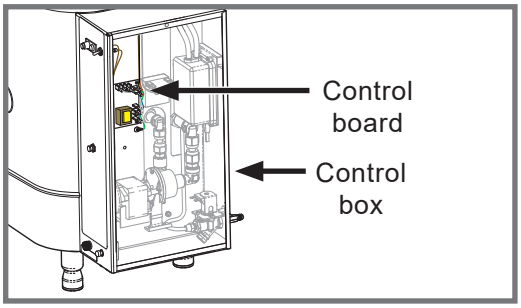
Remove the black wire from terminal 1 on the aeration timer. Disconnect the black wire from the aerator switch. Plug the wire from the switch into terminal 1 of the timer. The air pump should immediately start pumping air into the liner. If the pump works, replace the agitation timer. If the pump does not work, check the wiring between the aeration timer and the pump.

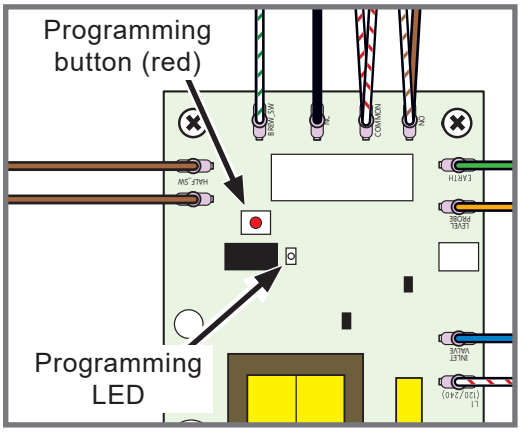
### Coffee Does Not Flow Back Into Gauge After Aeration

Older model urns are equipped with holes in the top of the copper tubes that feed air to the gauge assemblies. See the diagram on the following page for location. Make sure that the holes are not covered by the silicone tubing from the pump. If the holes are not exposed, coffee will not flow back into the gauge after aeration.

### Setting the Brew Timer (Brew Volume)

**WARNING:** During programming, keep hands clear of all bare wires/terminals. Touch only the control board. Keep all body parts clear of the liner/spray arm to avoid scalding.




1 Remove the side cover from the control box. Power must be connected and the water supply on. Turn the toggle switch on the bottom of the control box ON.

2 Wait for the water jacket to fill and heat.

3 Turn the batch selector switch to HALF BREW/ONE POUND.

4 Remove the lid and brew basket from the urn liner and swing the spray arm into place.

5 Make sure the liner is empty.

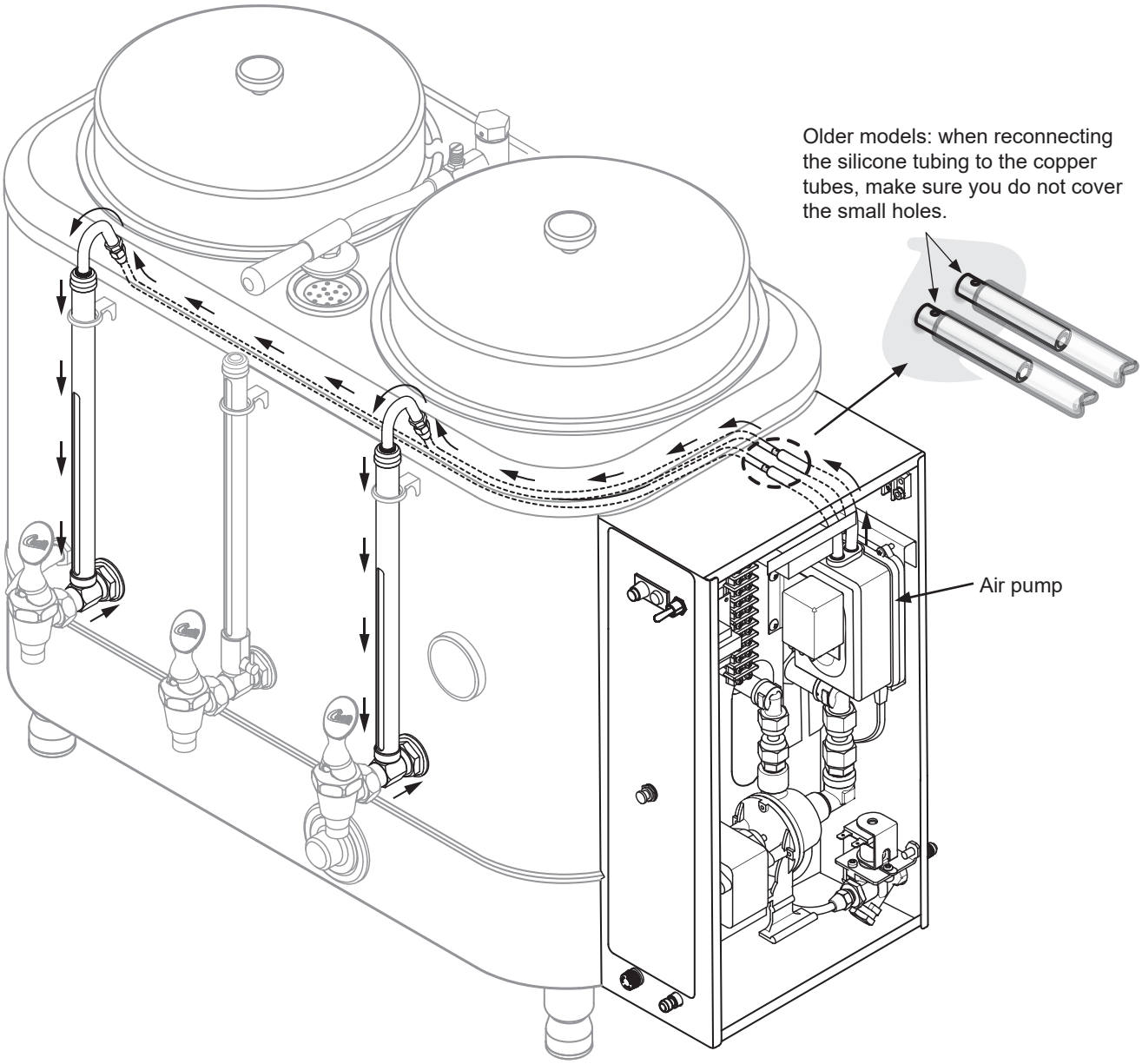
6 Push and hold the programming button until the programming LED flashes.

7 Press the BREW button on the front panel.

8 When the liner is half full, press the BREW button again. Half batch is now programmed.

9 Empty the liner.

10 Turn the batch selector switch to the FULL BREW or TWO POUNDS position and repeat steps 4 through 9 when the brew light comes back on, this time waiting for the liner to fill all the way during programming.




**Aeration System Airflow Diagram - RU-300 Shown**

**Water Does Not Heat At All**

If the water heats, but is not hot enough, see ***Water Not Hot Enough***.

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

1 Check for power across the terminals of the heating element(s). If power is being supplied, remove the wires and check for an open heating element (nominal resistance is 13 Ohms).

2 If there is no power to the element, trace the circuit back (using the ***ELECTRICAL SCHEMATIC***) to the power source(s) to find out where power is lost.

**Water Heats More Slowly Than Usual**

1 Check for the proper voltage across the terminals of the heating element.

2 If the proper voltage is being supplied, disconnect the heating element and check for high resistance (nominal resistance should be 13 Ohms). Replace a heating element if the resistance is too high.

**Water Not Hot Enough**

1 Check for the correct temperature setting on the thermostat knob.

2 Make sure that the water has had sufficient time to heat. Heating time for cold water can be up to 60 minutes.

3 If the temperature setting is OK, check the heating elements for high resistance (nominal resistance should be 13 Ohms). Also make sure all elements are getting power.

4 If the elements are OK, contact the Curtis Technical Support department to determine if temperature adjustments are necessary.

**Water Too Hot (Boiling or Excessive Steaming)**

1 If operating the urn at higher elevations, contact the Curtis Technical Support department to determine if temperature adjustments are necessary.

2 Check for a thermostat that is stuck closed. Replace as necessary.

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
**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.