USER GUIDE

Primo Cappuccino™ Next Generation 3 Station Dispensing System

Style Varies - PCNG3 Shown

READ AND SAVE THESE INSTRUCTIONS

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

Contact Information

Wilbur Curtis Co., Inc.
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Email: sales-us@seb-professional.com | Web: www.wilburcurtis.com

For the latest specifications and information go to www.wilburcurtis.com
Toll Free: 800-995-0417 | Monday - Friday 5:30 A.M. - 2:30 P.M. PT
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Key Features

- Digital Control Module providing precise control over all critical blending and dispensing functions.
- Factory configured for out-of-the-box operation.
- LCD Digital Display for improved visibility.
- Scroll-Through Precision Programming.
- Powder-to-Water ratio adjustment in 1% increments
- Water temperature settings from 80°F (27°C) to 204°F (96°C) to create the perfect hot or cold beverage.

Specifications (Selected Models)

Electrical Supply Requirements

MODEL #	DESCRIPTION	PHASE	VOLTS	AMPS	HEATING CONFIG	WIRE	WATTS	HERTZ	CAPACITY
PCNG3	3 Station	1 PH	110-120 V	12.3-15.0 A	1 x 1600 W	2W + G	1350-1800 W	50/60 Hz	5.4 gal/hr [20.4 l/hr]
PCNG3DV	3 Station Dual Voltage	1 PH	120/220 V	15/14.5 A	2 x 1600 W	2W/3W + G	1800/3000 W	50/60 Hz	5.4 /10.7 gal/hr [20.4 / 40.5 l/hr]
PCNG3300	3 Station with lift door	1 PH	110-120 V	12.3-15.0 A	1 x 1600 W	2W + G	1350-1800 W	50/60 Hz	5.4 gal/hr [20.4 l/hr]
PCNG3C300	3 Station with lift door	1 PH	110-120 V	15.0 A	1 x 1150 W	2W + G	1500 W	50/60 Hz	5.4 gal/hr [20.4 l/hr]
PCNG3800	3 Station with hot water option	1 PH	110-120 V	15.0 A	1 x 1600 W	2W + G	1800 W	50/60 Hz	5.4 gal/hr [20.4 l/hr]

Dimensions / Water Supply Requirements

MODEL #	HEIGHT	WIDTH	DEPTH	SHIP WEIGHT	SHIP CUBE	WATER CONNECTOR	WATER PRESSURE	MIN. FLOW RATE
PCNG3	36.22" [92.0 cm]	14.65" [37.2 cm]	24.36" [61.9 cm]	125.0 lbs [56.7 kg]	21.64 cu. ft. [0.16 m^3]	1/4" flare	20 - 90 psi [138 - 620 kPa]	1.0 gpm [3.8 lpm]
PCNG3DV	36.22" [92.0 cm]	14.65" [37.2 cm]	24.36" [61.9 cm]	125.0 lbs [56.7 kg]	21.64 cu. ft. [0.16 m^3]	1/4" flare	20 - 90 psi [138 - 620 kPa]	1.0 gpm [3.8 lpm]
PCNG3300/ PCNG3C300	36.17" [91.9cm]	14.28" [36.3 cm]	24.36" [61.9 cm]	125.0 lbs [56.7 kg]	21.64 cu. ft. [0.16 m^3]	1/4" flare	20 - 90 psi [138 - 620 kPa]	1.0 gpm [3.8 lpm]
PCNG3800	36.22" [92.0 cm]	14.65" [37.2 cm]	24.36" [61.9 cm]	125.0 lbs [56.7 kg]	21.64 cu. ft. [0.16 m^3]	1/4" flare	20 - 90 psi [138 - 620 kPa]	1.0 gpm [3.8 lpm]
PCNG33800	36.17" [91.9cm]	14.28" [36.3 cm]	24.66" [62.6 cm]	125.0 lbs [56.7 kg]	21.64 cu. ft. [0.16 m^3]	1/4" flare	20 - 90 psi [138 - 620 kPa]	1.0 gpm [3.8 lpm]

Factory Default Settings

Water Temperature

- Standard Units: 190°F/88°C
- Iced Cappacino Units: 96°F/36°C

Powder Ratio *(Ratio of product powder to water dispensed)***:** 60%

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

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.

EU Regulations & Directives

- This appliance meets the requirements of all applicable regulations in Regulation 1907/2006/EU (REACH), Directive 2011/65/EU (ROHS) and its amendment (EU) 2015/863, Directive 2012/19/EU (WEEE), Directive 2014/30/EU (EMC), Directive 2006/42/EC (Machinery) and Directive 2014/35/EU (LVD).
- The declaration of conformity is included with this appliance. The appliance bears the CE mark.
- This appliance is subject to the directive on waste electrical and electronic equipment (WEEE/ EU directive). Do not dispose of this appliance in domestic waste. Contact your local governing authorities for information on disposal requirements.

- Any modifications to equipment that are not approved by the Wilbur Curtis Company will render this declaration invalid.

WARNING: Installation should only be performed 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 Requirements

- A secure surface capable of supporting the weight of the appliance.

- **For units without an attached power cord 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 requirements in the *Specifications* section. The circuit must be protected by an appropriately 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. Refer to the Curtis Equipment Catalog for a full line of 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 compatible the flare fitting on the back of the unit, as listed in the in the *Specifications* section. 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 twice the depth of the appliance) is required so it can be moved when cleaning underneath the brewer.

2 This equipment must 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.

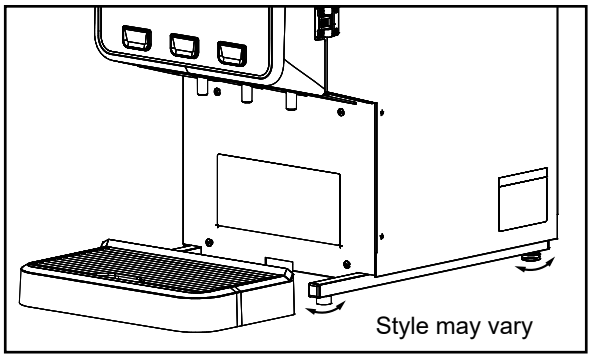
The International Plumbing Code of the International Code Council and the Food and Drug Administration (FDA) Food Code manual, specify that this equipment must be installed with adequate back-flow prevention in compliance with federal, state and local codes. For units installed outside of the U.S.A.,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

Installation

Leveling

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

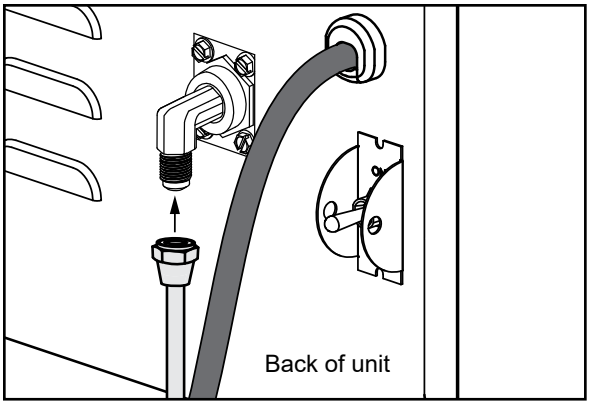
1 Position the dispenser on the counter top. Level it left to right and front to back by turning the bottom of the legs.



Connect the Water Supply

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

3 Connect the water supply line to the flare fitting on the back of the unit. *Leave the water supply valve closed until power is connected.*



Dual Voltage Set Up

WARNING: Do not connect the power cord to the power supply until instructed to do so.

4 Remove the top and left side covers to expose the terminal block.

5 Loosen the strain relief on the back of the unit.

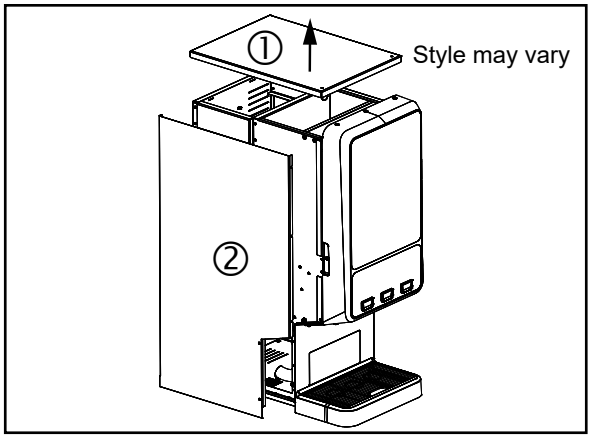
6 Disconnect the existing power cable from the terminal block and remove.

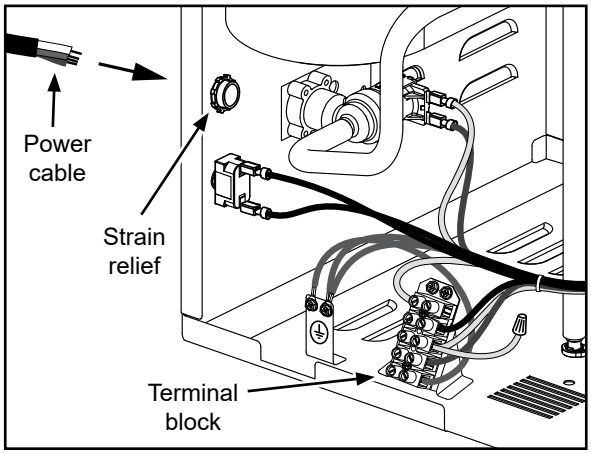
7 *Disconnect and cap the jumper wire between the "C" and "N" terminals on the terminal block.*

8 Feed the 220-240 Volt power cable through the strain relief, into the unit. *The unit may be wired for direct connection to a junction box or for use with a plug that connects to an electrical outlet meeting the requirements in the Specifications section.*

9 Connect the wires on the power cable to the terminal block inside the unit as as shown in the corresponding *Electrical Schematics* for your machine.

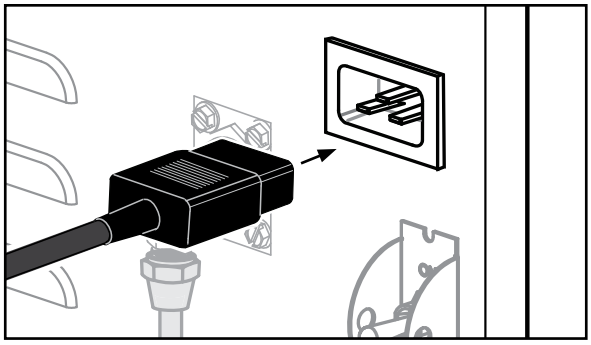
10 Tighten the strain relief and replace the covers.





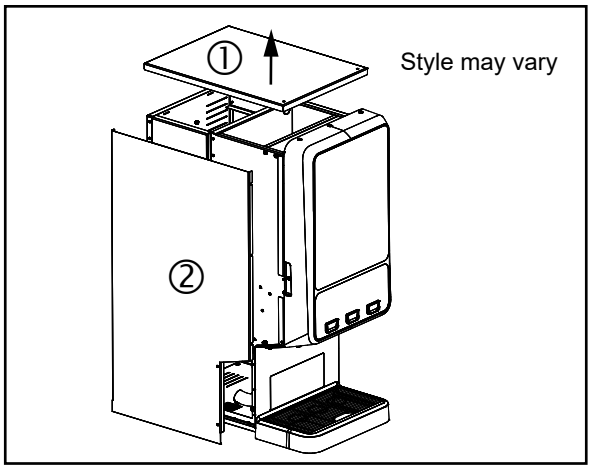
Connecting the Wiring (Units Without a Power Cord Attached)

WARNING: Do not connect the power cord to the power supply until instructed to do so.



Units With a Power Connector Mounted to the Back

1 Connect a C20 IEC power cord (not supplied) compatible with the electrical outlet installed in the facility and that meets specifications.



Units With a Strain Relief Mounted to the Back

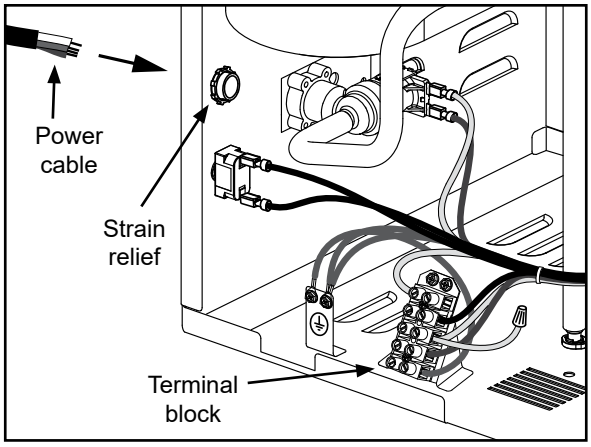
2 Remove the top and left side covers to expose the terminal block.

3 Loosen the strain relief on the back of the unit.

4 Feed the power cable into the unit. *The unit may be wired for direct connection to a junction box or for use with a plug that connects to an electrical outlet meeting the requirements in the Specifications section.*

5 Connect the wires on the power cable to the terminal block inside the unit as as shown in the corresponding *Electrical Schematics* for your machine.

6 Tighten the strain relief and replace the cover.

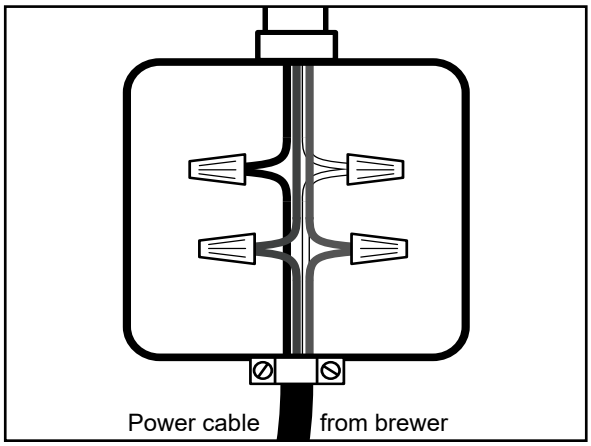


Electrical Connection

Connection to a Junction Box

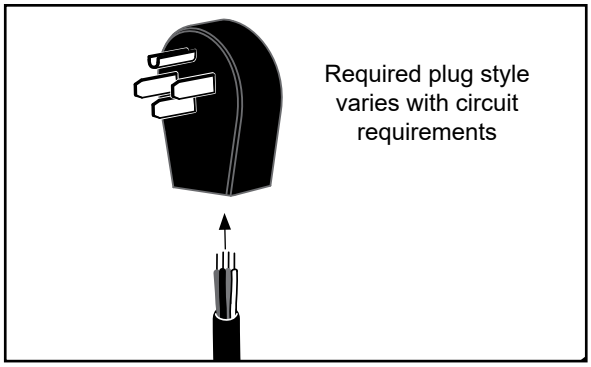
WARNING: Turn off power to the junction box at the circuit breaker panel and lock out and tag the circuit breaker before connecting the power cable to the junction box.

7 Connect the power cable wires to the terminals in the junction box and replace the cover. *For the correct power supply requirements, please refer to the Electrical Schematics* for your machine.



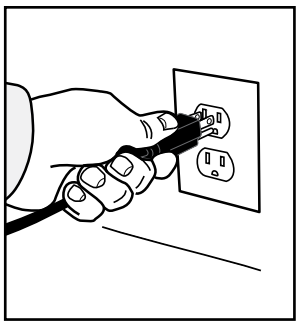
Connection to an Electrical Outlet

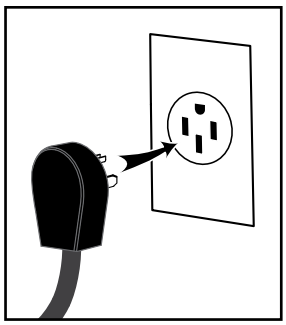
WARNING: Connect the power cord only to the appropriate type and size electrical outlet. If it is not compatible, either have the cord replaced or have the electrical outlet upgraded by a licensed electrician. Do not use an extension cord. Do not use a power cord/plug that is damaged.



1 Install the appropriate power plug for your locality. *Consult your local electrical codes to determine the approved plug for your region.*

2 Connect the power plug to the appropriate electrical outlet.



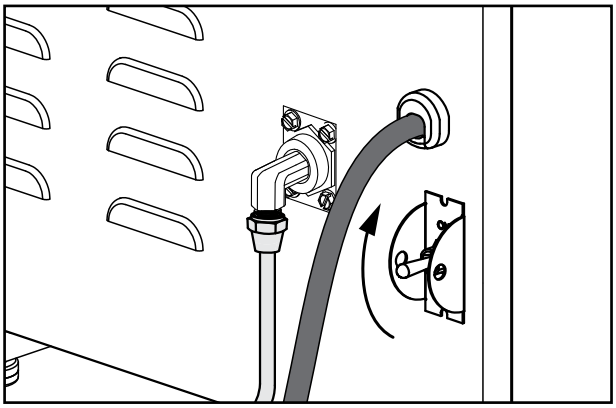


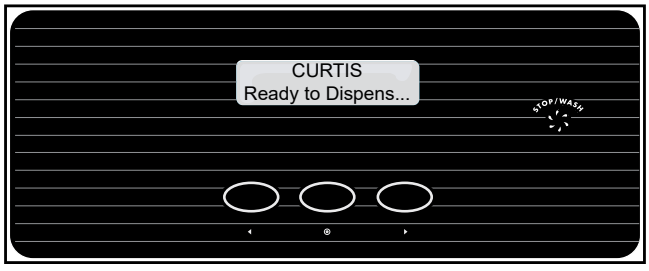
3 Turn on the water supply valve.

4 Ensure the circuit breaker that is supplying power to the dispenser is on.

5 Turn or the dispenser using toggle switch on the back panel. *Inspect the water supply line for leaks while the tank is filling.*

6 The heating element(s) will automatically turn on when the water in the tank reach the correct level. Depending on the incoming water temperature and electrical specifications of the machine, the water tank typically requires approximately 30 to 60 minutes to reach the factory-default operating temperature. When the water has reached the specified temerature, the diplay will red *"Ready to Dispense."*



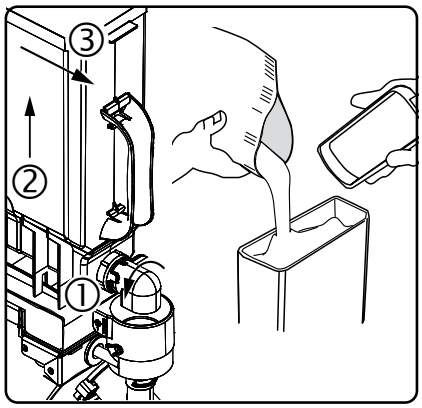


7 *Before using a unit equipped with a hot water faucet, for the first time, dispense 12 oz./350 ml of hot water from the hot water faucet to help purge air from the tubing inside the unit.*

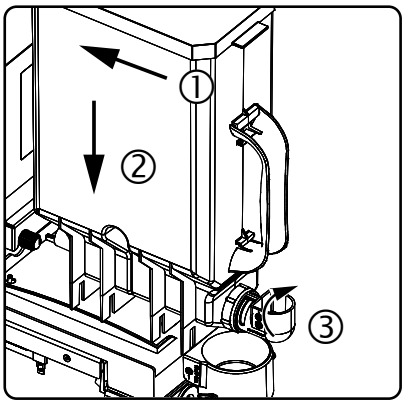
8 Follow the Operating Instructions to dispense at least 12 oz./350 ml from each spout, to purge any remaining air from the tubing. During initial dispensing, and whenever the filter is replaced, you may hear the air being purged from the filter, tubing, and water tank.

Dispensing

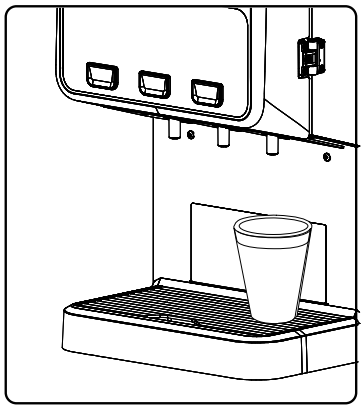
WARNING - TO AVOID SCALDING, AVOID SPLASHING. Keep body parts clear of the spout during dispensing. Do not remove the cup during dispensing.



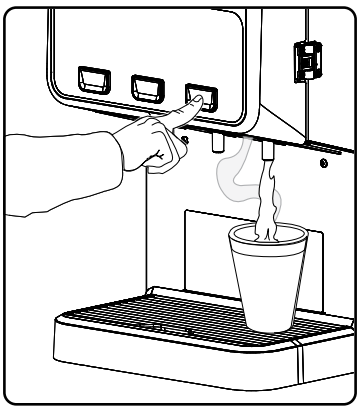
1 Open the front panel. On some models the panel swings to the right, on others, the panel swings up. Turn the elbow on each canister to be filled upward, then lift each canister up and out. Fill with powdered cappuccino product.



2 Reinstall each canister in the same location it was removed from. Properly mate the gear socket on the back of each canister with the gear inside the dispenser. Turn the canister elbows downward and close the door.



3 Place a cup under the spout for the desired flavor.



4 *Push and hold* the dispensing button for the desired flavor. Release the button when the cup is ¾ full. Remove the cup when product stops flowing.

Spout Cleaning - Every 3 or 4 Hours

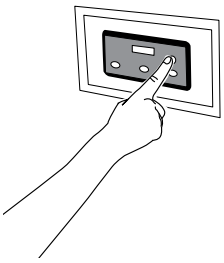
1 Make sure the power is ON.

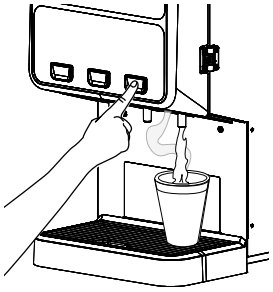
2 Place a container under the spout to catch the dispensed liquid.

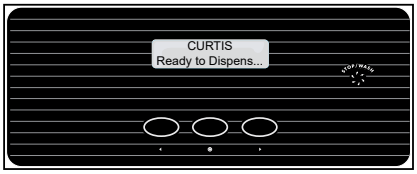
3 To rinse each flavor:

- Press the WASH button to switch the machine to Rinse Mode: The screen will display “Washing… Select Station.”
- Close the door, then press and hold the dispensing button for the first spout you want to clean.
- Repeat the previous step for each flavor/spout.

  The machine will exit Rinse Mode after 15 seconds of inactivity, and the screen will revert to displaying “Ready to dispense.”
- When you have finished the rinsing process, you can press the Wash button or wait 15 seconds for the machine to exit Rinse Mode. The screen will display “Ready to Despens...”







Cleaning the Exterior - Daily

WARNING: HOT SURFACES - To avoid injury, allow the dispenser to cool before cleaning.

WARNING: DO NOT immerse the dispenser in water or any other liquid.

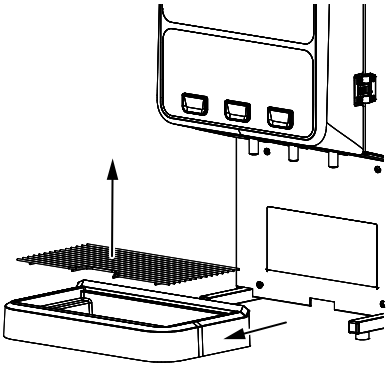
NOTICE - Do not use cleaning liquids, compounds or powders containing chlorine (bleach) or corrosives. These products promote corrosion and will damage the finishes. **USE OF THESE PRODUCTS WILL VOID THE WARRANTY.**

1. Turn off the machine using the toggle switch on the back panel.

2 Wipe the exterior dispenser surfaces with a damp cloth to remove spills and debris.

3 Remove the drip tray by sliding it forward, remove the grill, then wash the tray with the detergent solution. Wash the grill, then rinse both pieces with water and dry them.

4 Wipe and clean the dispensing area with the detergent solution, then reinstall the drip tray.



Cleaning the PCNG Whipper Plate Assembly - Weekly or As Needed

The following cleaning process requires a mild solution of dish-washing detergent and warm water and a food grade lubricant (Curtis PN WC-4916).

1. Turn off the machine using the toggle switch on the back panel.

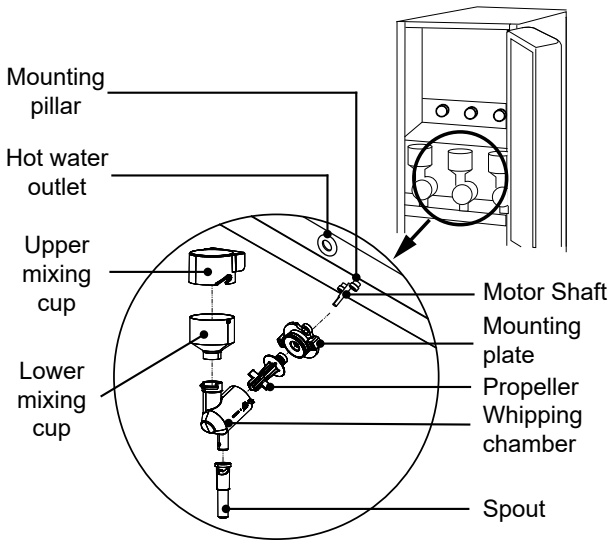
2 Remove the dispensing spout from the whipper chamber. Clean the inside using a narrow brush.

3 Pull the upper mixing cup forward and twist it up and to the left to separate it from the lower mixing cup.

4 To remove the lower mixing cup, pull it up and forward to free it from the hot water inlet.

5 Take hold of the whipper chamber. Turn it clock-wise to free it from the mounting plate.

6 Pull the whipper propeller off of the motor shaft.



7 Wash, rinse, and air dry the whipper assembly parts:

- Wash the parts in the mild detergent solution.
- Rinse in clean warm water, then let them air dry.

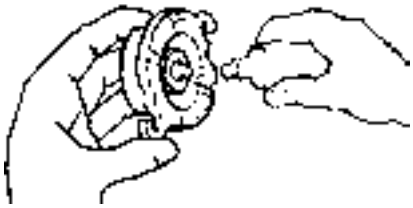
8 Clean the motor shaft with a cloth and the mild detergent before removing the mounting plate.

9 Twist the mounting plate clockwise and pull it off of the motor shaft.

IMPORTANT - Do not remove the mounting pillars to remove the mounting plate.

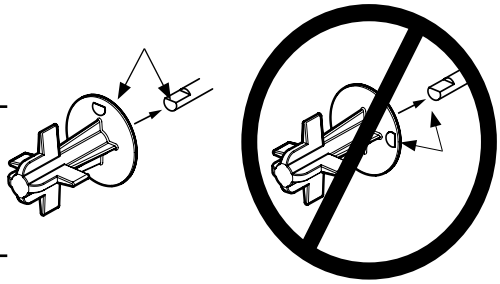
10 Clean the area behind the mounting plate and the water inlet fitting.

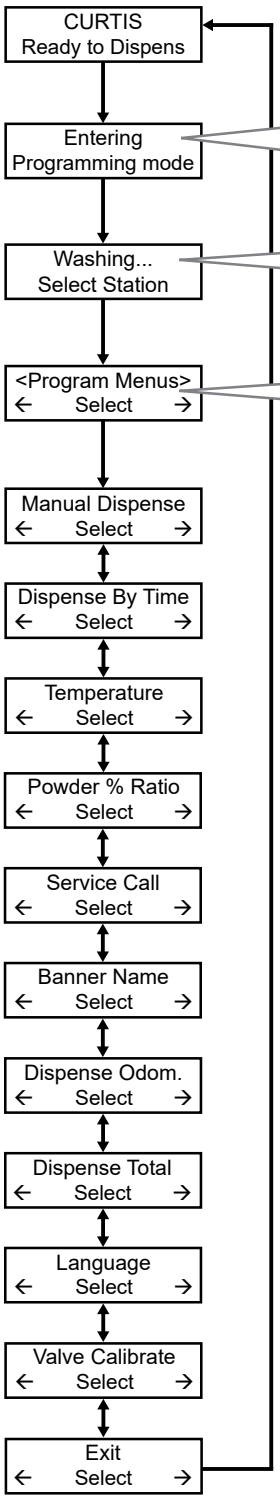
11 Lubricate the center seal of the mounting plate with the food grade lubricant (WC-4916) before reinstalling.



12 Reinstall the whipper assembly parts in reverse order.

CAUTION: When replacing the propeller, line up the “D” shaped mark on the propeller with the “D” shape on the motor shaft. Failure to line up the propeller properly will cause it to fuse with the shaft. This condition is not covered under the warranty.



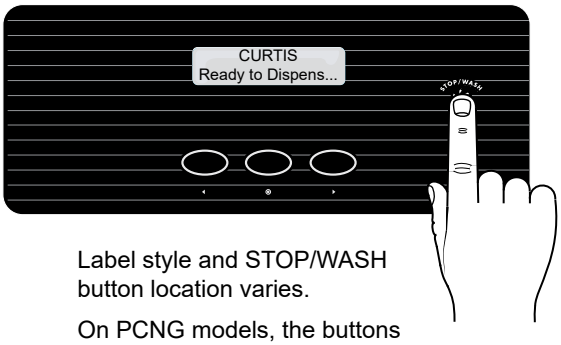


To enter programming mode:

With unit ON, press and hold STOP/WASH button for 10 seconds.

While pressing STOP/WASH, "Washing...Select Station" appears on the display.

After 10 seconds, the programming menu appears.



Label style and STOP/WASH button location varies.

On PCNG models, the buttons are located inside the front door.

IMPORTANT: All programming functions are performed with the three center buttons.

The symbols below the buttons are:

- ◄ Scroll UP (1)
- ⊙ SELECT or ENTER to save new parameter (2)
- ► Scroll DOWN (3)

In programming mode:

1. Press ◄ or ► to scroll UP or DOWN through the various functions and features.
2. Press ⊙ (Select) to make changes to the function/feature displayed.
3. Then press ◄ or ► to scroll through the various available settings.

For detailed instructions, please refer to the ***Programming Options*** section on the next page.

Programming Options

Please refer to the previous page for instructions on how to access the programming menu.

To exit programming mode, press ► until EXIT appears on the display, then press ⊙.

Manual Dispense - This is the factory default setting for PCNG stations, in which the amount of product dispensed is based on how long the dispense button is pressed.

To switch a station to Manual Dispense mode:

1. Enter Programming mode and press ► until the screen reads *Manual Dispense*.
2. Press ⊙.
3. Press the dispense button for the station you want to switch over to Manual Dispense mode.
4. Press ⊙.

"Saving Complete!" will appear on the display, then the machine will return to the programming menu.

If you need to set other station to Manual Dispense mode, you can either repeat the steps listed above or press ► to go to the next menu.

Dispense by Time - This option configures a station to dispense the amount of product based on time rather than how long the dispense button is held until the desired amount is dispensed.

To switch a station to Dispense by Time mode:

1. Enter Programming mode and press ► until the screen reads *Dispense by Time*.
2. Press ⊙. The display will read *Select Station*.
3. Press the dispense button for the station you want to switch over to Dispense by Time mode.
4. Press Plus (+) or Minus (-) to set the dispense time based on the size of the cup, or the amount of product you want to dispense.
5. Press ⊙.

"Saving Complete!" will appear on the display, then the machine will return to the programming menu.

You may need to repeat these steps until the desired amount of product is reached.

If you need to set other station to Dispense by Time mode, you can repeat the steps listed above.

Temperature - Sets the water temperature for the machine, with a range is 80ºF (27°C) to 204ºF (96°C).

- The recommended temperature for iced coffee units is 96°F.
- For all other units, the recommended temperature is 190°F (88°C).

To adjust the water temperature:

1. Enter Programming mode and press ► until the screen reads *Temperature*.
2. Press ⊙.
3. Adjust the water temperature by pressing ◄ or ►.
4. Press ⊙ to save the new setting and exit.

"Saving Complete!" will appear on the display, then the machine will return to the programming menu.

Powder % Ratio - This option sets the ratio of product powder to water dispensed from a station in 1% increments.

- The factory default ratio setting is 60%, with a range of 0% (only hot water) to 100% (7 grams per 10%).
- A higher powder ratio results in a richer tasting product beverage
- The factory default setting is 60%. The range is from 0% (hot water) to 100% (7 grams per 10%).

% Ratio	Grams*
10%	7 gm
20%	14 gm
30%	21 gm
40%	28 gm
50%	35 gm
60%	42 gm
70%	49 gm
80%	56 gm
90%	63 gm
100%	70 gm

To adjust the Powder Ratio:

1. Enter Programming mode and press ► until the screen reads *Powder % Ratio*.
2. Press ⊙. The display will read *Select Station*.
3. Press the corresponding dispense button for the station you want to adjust.
4. Adjust the ratio by pressing ◄ or ► (- or +).

"Saving Complete!" will appear on the display, then the machine will return to the programming menu.

You may need to repeat these steps to achieve your ideal ratio.

If you need to adjust other stations, you can either repeat the steps listed above or press ► to go to the next menu.

Service Call - This is where you can enter or edit the service phone number that appears on the display when the unit detects a Temperature Sensor error or Water Level error.

To enter or edit the Service Call phone number:

1. Enter Programming mode and press ► until the screen reads *Service Call.*
2. Press ⊙.
3. Press ◄ or ► to choose the digit to be changed.
4. Press ⊙ until the number you want to enter appears.
5. Press ◄ or ► to navigate to the next digit to you want to change, or press ► to move the cursor the **ex** option to exit.
6. When you have finished your edits, and selected **ex** as described above, press ⊙ to save your changes.

   "*Saving Complete!"* will appear on the display, then the machine will return to the programming menu.

Banner Name - This option lets you edit change or delete factory default banner name (CURTIS) that appears on the display. The maximum character count is fourteen.

To enter or edit the Banner Name:

1. Enter Programming mode and press ► until the screen reads *Banner Name*.
2. Press ⊙.
3. Press ◄ or ► to choose a character you want to change.
4. Press ⊙ until the letter or special character you want to enter appears.
5. Press ◄ or ► to navigate to the next character to you want to change, or press ► to move the cursor the **ex** option to exit.
6. When you have finished your edits, and selected **ex** as described above, press ⊙ to save your changes.

   "*Saving Complete!"* will appear on the display, then the machine will return to the programming menu.

Dispense Odom - Displays the aproximate volume dispensed since the odometer was last reset.

To view the Dispense Odometer:

1. Enter Programming mode and press ► until the screen reads "*Dispense Odom.*"
2. Press ⊙.
3. Press ◄ or ► to exit the odometer.
4. To reset the Dispense Odometer to zero before exiting, press ⊙.

   "*Saving Complete!"* will appear on the display, then the machine will return to the programming menu.

Dispense Total - This also displays the aproximate volume dispensed, but it cannot be reset.

To view the Dispense Total:

1. Enter Programming mode and press ► until the screen reads "*Dispense Total.*"
2. Press ⊙.

The number of dispense cycles is displayed for a few seconds before the machine automatically returns to the programming menu.

Language - This setting lets you change the language that appears on the display from English (factory default) to French, German, Spanish or Dutch.

To change the language:

1. Enter Programming mode and press ► until the screen reads *Language.*
2. Press ⊙.
3. Choose the new language by pressing ◄ or ►.
4. Press ⊙ to save your selection and exit.

"Saving Complete!" will appear on the display, then the machine will return to the programming menu.

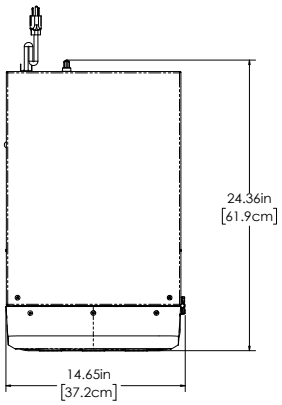
Valve Calibrate - When measuring the flow rate for a Dump Valves, this process dispenses water from the corresponding spout, for 10 seconds so that the valve can be calibrated.

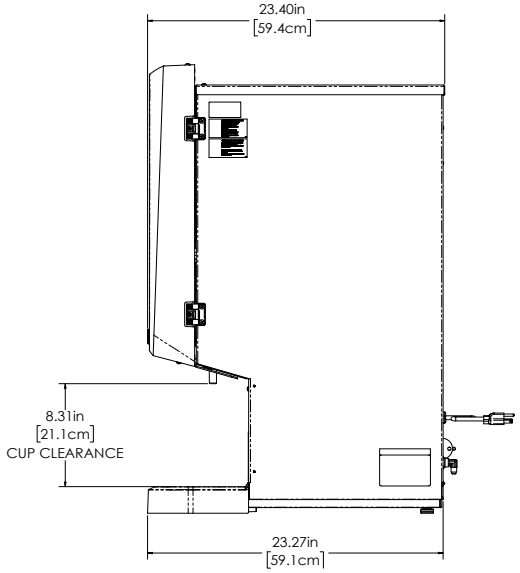
For more important information and complete instructions for the Dump Valve calibration procedure, refer to *Dump Valve Calibration* in the *Troubleshooting Section.*

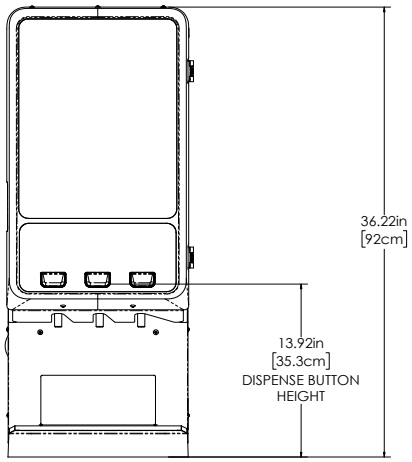
To run the process:

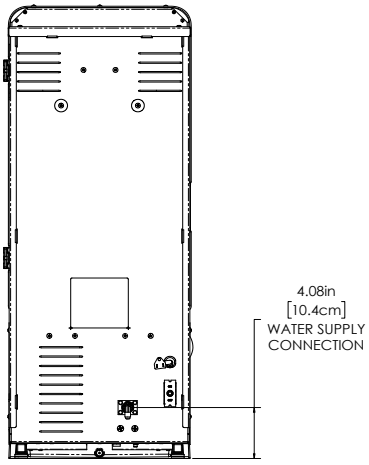
1. Enter Programming mode and press ► until the screen reads *Language.*
2. Press ⊙. The display will read *Select Station.*
3. Place an empty measuring cup under the corresponding spout for the valve you are calibrating, then press the dispense button for that station. Water will be dispensed for ten seconds.
4. Press ⊙ to measure the flow rate for a different valve.

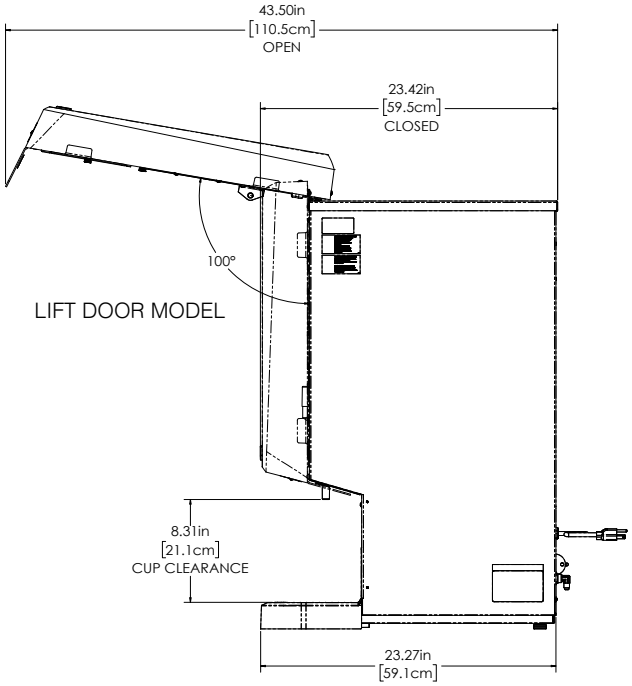
PCNG3


24.36in
[61.9cm]
14.65in
[37.2cm]

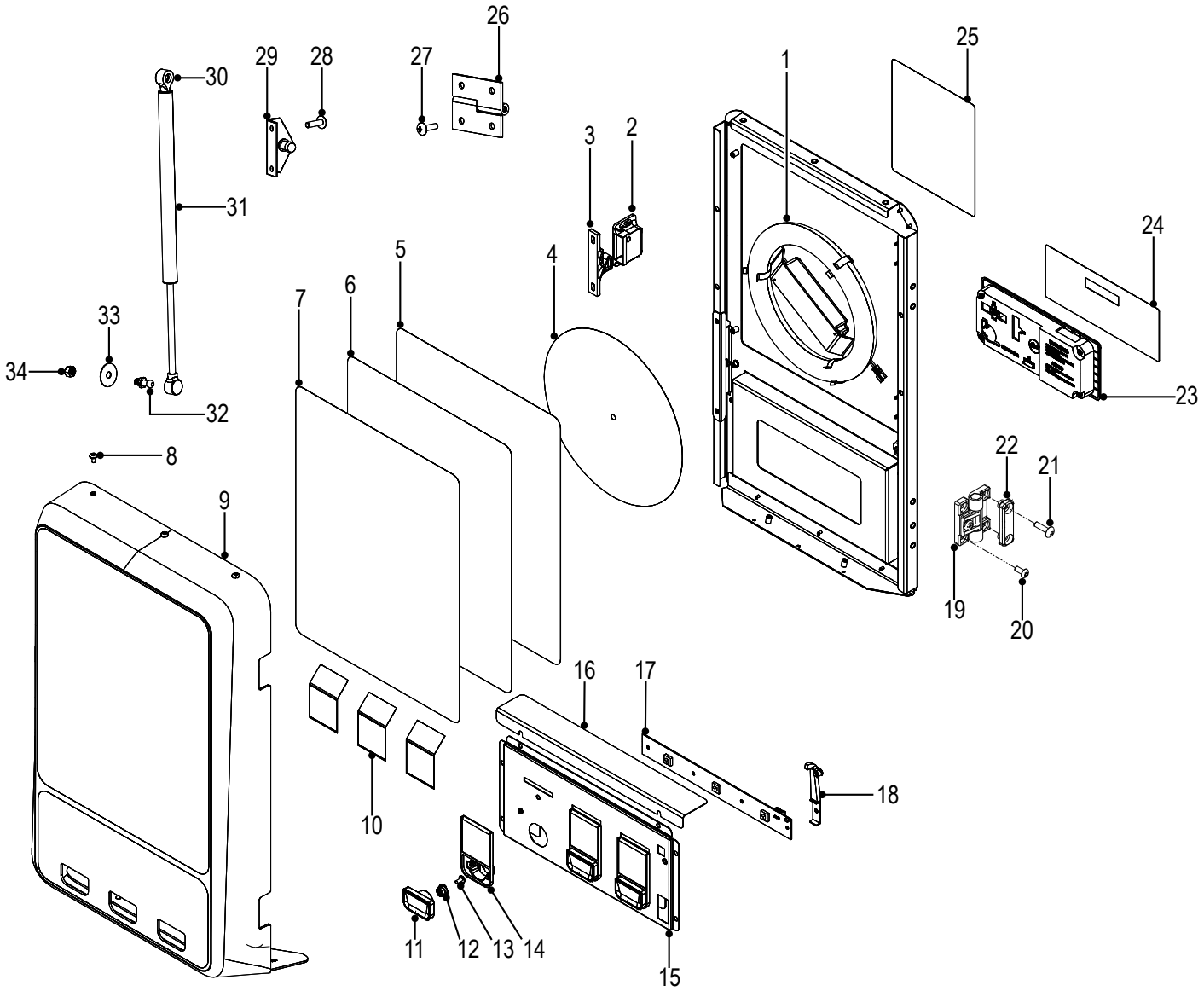

23.40in
[59.4cm]
8.31in
[21.1cm]
CUP CLEARANCE
23.27in
[59.1cm]


36.22in
[92cm]
13.92in
[35.3cm]
DISPENSE BUTTON
HEIGHT


4.08in
[10.4cm]
WATER SUPPLY
CONNECTION


43.50in
[110.5cm]
OPEN
23.42in
[59.5cm]
CLOSED
100°
LIFT DOOR MODEL
8.31in
[21.1cm]
CUP CLEARANCE
23.27in
[59.1cm]

PCNG3, PCNG3DV, PCNG3300, PCNG3C300 - Door - Exploded View



PCNG3/PCNG3DV/PCNG3300

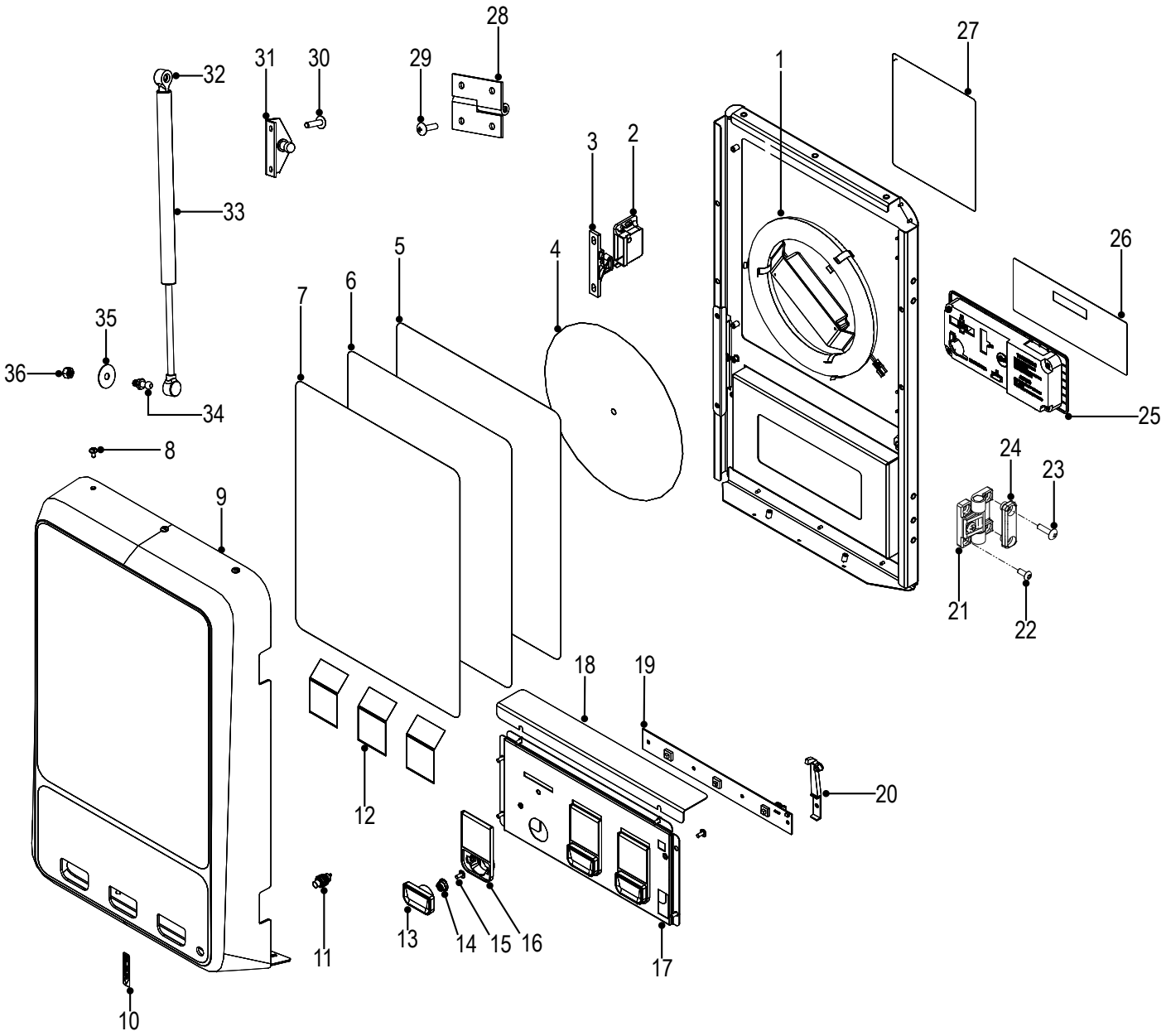
ITEM #	PART #	DESCRIPTION
1	CA-1176 *	LAMP, LED ASSY 120V/12W
2	WC-1135[1,2]	LATCH ASSY, DOOR SIDE MOUNT
3	WC-1135[1,2]	LATCH ASSY, DOOR SIDE MOUNT, KEEPER
4	WC-390677	LABEL, REFLECTOR RING
5	WC-390676	FRONT GRAPHIC LAYER 2
6	WC-390675	FRONT GRAPHIC LAYER 1
7	WC-390674	FRONT GRAPHIC CURTIS
8	WC-4442	SCREW, 8-32 x 3/8 PH HEAD TRUSS SS BLACK
9	WC-66178-3 Δ	DOOR ASSY
10	WC-390669	LABELS, FLAVOR PCNG
11	WC-66185	BUTTON, DISPENSING
12	WC-4941	SPRING, TAPERED 4.2IN-LBS for WC-66185
13	WC-4426	SCREW, 8-32 x 3/8 PH HEAD TRUSS SS
14	WC-66186	HOUSING, DISPENSING BUTTON
15	WC-66183-103	BRACKET, BUTTON HOUSING
16	WC-66183-105	BRACKET, LIGHT BLOCKING
17	WC-10059-3-E	CONTROL MODULE, PUSH BUTTON 3 STATION
18	WC-10060-E	CONTROL MODULE, LED LIGHT PIPE PCNG
19	CA-1136[1,2]	HINGE ASSY, PLASTIC
20	WC-4532[1,2]	SCREW, 8-32 x 3/8 BLK PAN HD PH STL/ST BLK OXIDE
21	WC-4460[1,2]	SCREW, 8-32 x 5/8 PHILLIPS HEAD TRUSS BLACK
22	WC-66191[1,2]	STOPPER, DOOR HINGE
23	WC-10057-E	CONTROL MODULE, UCM 120/240V
24	WC-390028	LABEL, UCM PCGT/PCNG
25	WC-39203	LABEL, SERVICE INSTRUCTIONS
26	WC-4935 [3, 4]	HINGE ASSY
27	WC-4468 [3, 4]	SCREW, 8-32 x 5/8 PHILLIPS HEAD TRUSS SS
28	WC-4442 [3, 4]	SCREW, 8-32 x 3/8 PH HEAD TRUSS SS BLACK
29	WC-4930 [3, 4]	MOUNT, UPPER GAS SPRING
30	WC-4933 [3, 4]	RECEPTACLE QUICK RELEASE M6 THREAD FOR GAS SPRING
31	WC-4937 [3, 4] *	GAS SPRING, 35lbs, 18-5/8" Extended Length
32	WC-4931 [3, 4]	MOUNT, LOWER BALL STUD GAS SPRING
33	WC-43095 [3, 4]	WASHER, FLAT 1-1/4"OD x 11/32"ID ZINC PLATED
34	WC-4934 [3, 4]	NUT, LOCK 5/16"-18 THREAD NYLOCK

[1]PCNG3, [2] PCNG3DV, [3] PCNG3300, [4] PCNG3C300

* Recommended parts to stock.

Δ The complete door assembly includes the plastic front and window, but it does not include the UCM and light assembly.

PCNG3800/PCNG33800 - Door - Exploded View



PCNG3800/PCNG33800 - Door

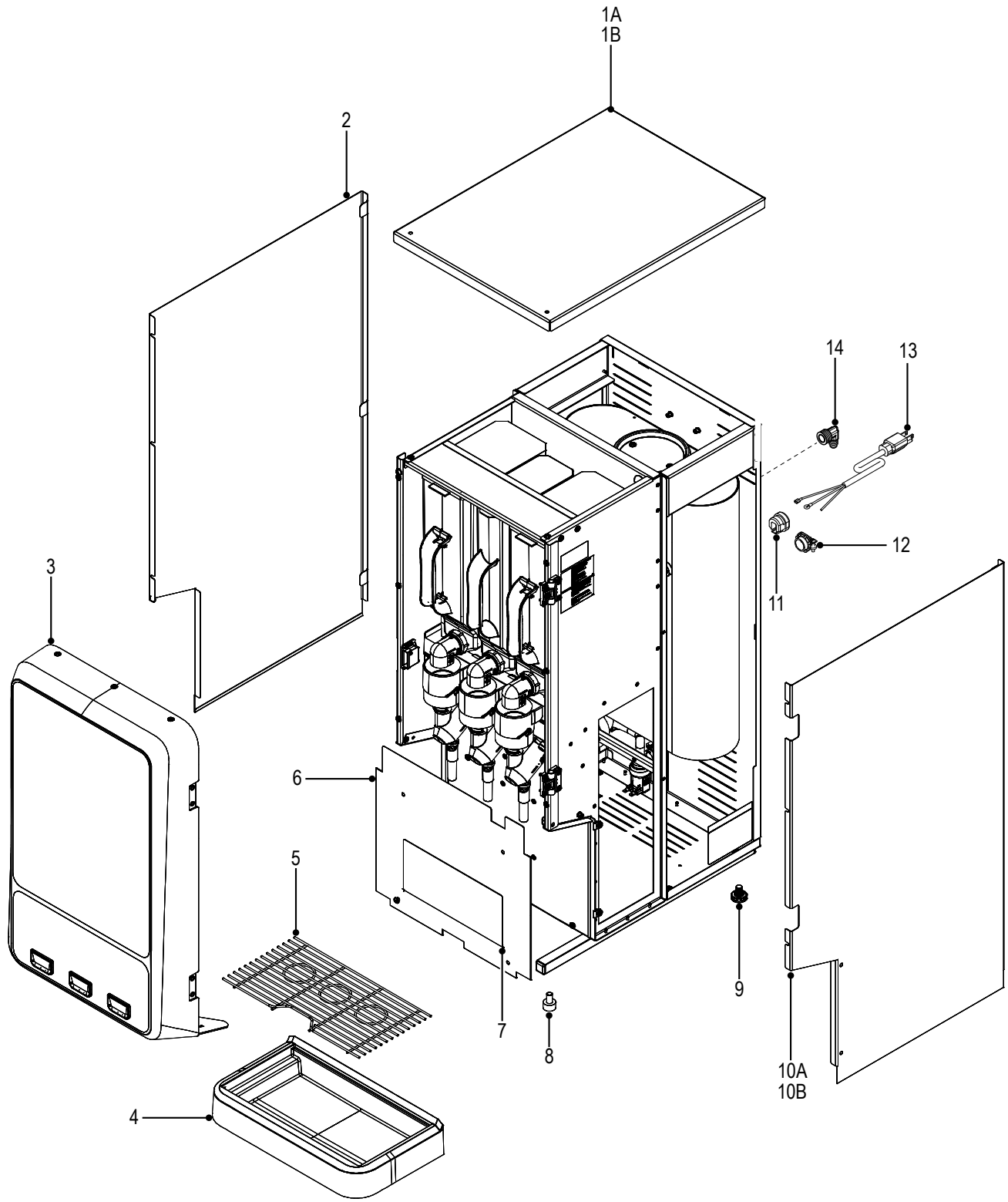
ITEM #	PART #	DESCRIPTION
1	CA-1176 *	LAMP, LED ASSY 120V/12W
2	WC-1135[1,3]	LATCH ASSY, DOOR SIDE MOUNT
3	WC-1135[1,3]	LATCH ASSY, DOOR SIDE MOUNT, KEEPER
4	WC-390677	LABEL, REFLECTOR RING
5	WC-390676	FRONT GRAPHIC LAYER 2
6	WC-390675	FRONT GRAPHIC LAYER 1
7	WC-390674	FRONT GRAPHIC CURTIS
8	WC-4442	SCREW, 8-32 x 3/8 PH HEAD TRUSS SS BLACK
9	WC-66178-3 Δ	DOOR ASSY
10	WC-38071	LABEL, HOT WATER
11	WC-179	SWITCH ASSY, HOT WATER
12	WC-390669	LABELS, FLAVOR PCNG
13	WC-66185	BUTTON, DISPENSING
14	WC-4941	SPRING, TAPERED 4.2IN-LBS for WC-66185
15	WC-4426	SCREW, 8-32 x 3/8 PH HEAD TRUSS SS
16	WC-66186	HOUSING, DISPENSING BUTTON
17	WC-66183-103	BRACKET, BUTTON HOUSING
18	WC-66183-105	BRACKET, LIGHT BLOCKING
19	WC-10059-3-E	CONTROL MODULE, PUSH BUTTON 3 STATION
20	WC-10060-E	CONTROL MODULE, LED LIGHT PIPE PCNG
21	CA-1136[1]	HINGE ASSY, PLASTIC
22	WC-4532[1]	SCREW, 8-32 x 3/8 BLK PAN HD PH STL/ST BLK OXIDE
23	WC-4460[1]	SCREW, 8-32 x 5/8 PHILLIPS HEAD TRUSS BLACK
24	WC-66191[1]	STOPPER, DOOR HINGE
25	WC-10057-E	CONTROL MODULE, UCM 120/240V
26	WC-390028	LABEL, UCM PCGT/PCNG
27	WC-39203	LABEL, SERVICE INSTRUCTIONS
28	WC-4935 [2]	HINGE ASSY
29	WC-4468 [2]	SCREW, 8-32 x 5/8 PHILLIPS HEAD TRUSS SS
30	WC-4442 [2]	SCREW, 8-32 x 3/8 PH HEAD TRUSS SS BLACK
31	WC-4930 [2]	MOUNT, UPPER GAS SPRING
32	WC-4933 [2]	RECEPTACLE QUICK RELEASE M6 THREAD FOR GAS SPRING
33	WC-4937 [2] *	GAS SPRING, 35lbs, 18-5/8" Extended Length
34	WC-4931 [2]	MOUNT, LOWER BALL STUD GAS SPRING
35	WC-43095 [2]	WASHER, FLAT 1-1/4"OD x 11/32"ID ZINC PLATED
36	WC-4934 [2]	NUT, LOCK 5/16"-18 THREAD NYLOCK

[1]PCNG3800, [2] PCNG33800

* Recommended parts to stock.

Δ The complete door assembly includes the plastic front and window, but it does not include the UCM and light assembly.

PCNG3, PCNG3DV, PCNG3300, PCNG3C300 - Exterior - Exploded View



PCNG3, PCNG3DV, PCNG3300, PCNG3C300 - Exterior - Parts List

ITEM #	PART #	DESCRIPTION
1A	WC-58110 [1,2]	COVER, TOP PCNG
1B	WC-58110-102 [3,4]	COVER, TOP FOR UNITS W/FRONT LIFT DOOR
2	WC-68123	PANEL, SIDE LEFT PCNG
3	WC-66178-3 [Δ]	DOOR ASSY, PCNG3
4	WC-66194-101	TRAY, DRIP
5	WC-66188-102*	SCREEN, DRIP TRAY, 3-STATION
6	WC-58351-101	COVER, ALCOVE PCNG3
7	WC-390673	LABEL, 3-STATION CUP BACKSPLASH

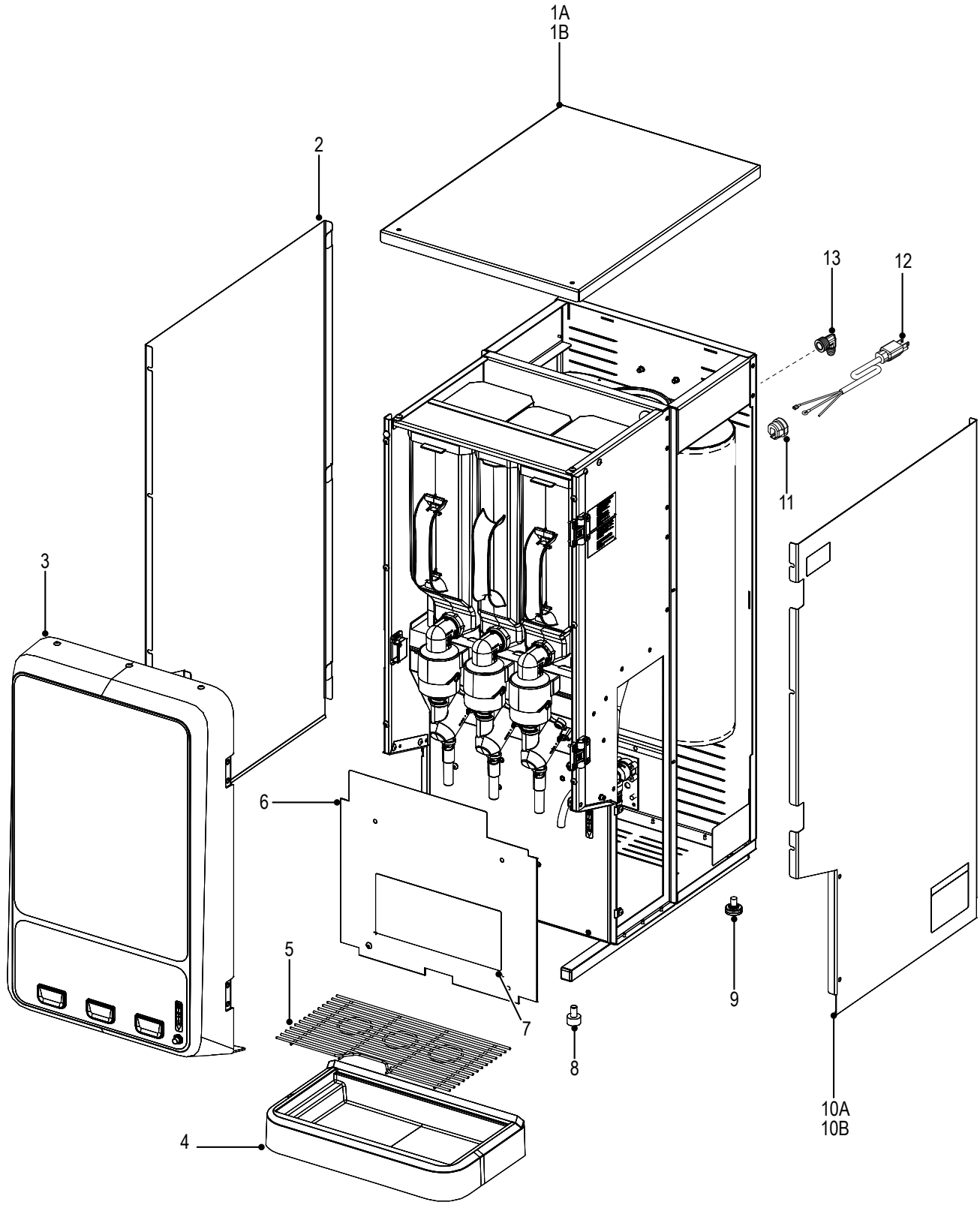
ITEM #	PART #	DESCRIPTION
8	WC-3503	LEG, 3/8"-16 STUD SCREW BUMPER
9	WC-3518	LEG, GLIDE 3/8"-16 STUD SCREW
10A	WC-68121-102 [1,2]	PANEL, SIDE RIGHT PCNG
10B	WC-68121-101 [3,4]	PANEL, SIDE RIGHT
11	WC-1408 [1,2,3,4]	CORD GRIP, 7/8" O.D.
12	WC-1412 [2]	CORD GRIP, 3/4"
13	WC-1200 [1,2,3,4] *	CORD, 14/3 SJTO 6' BLK W/PLUG
14	WC-2401	ELBOW, 3/8 NPT x 1/4 FLARE 304SST

[1]PCNG3, [2] PCNG3DV, [3] PCNG3300, [4] PCNG3C300

*Recommended parts to stock.

Δ Refer to the exploded view and parts list for the PCNG3/PCNG3300/PCNG3DV door.

PCNG3800/PCNG33800 - Exterior - Exploded View



PCNG3800/PCNG33800 - Exterior - Parts List

ITEM #	PART #	DESCRIPTION
1A	WC-58110 [1]	COVER, TOP PCNG
1B	WC-58110-102 [2]	COVER, TOP FOR UNITS W/FRONT LIFT DOOR
2	WC-68123	PANEL, SIDE LEFT PCNG
3	WC-66178-3HW Δ	DOOR ASSY, PCNG3 w/HOT WATER
4	WC-66194-101	TRAY, DRIP
5	WC-66188-102*	SCREEN, DRIP TRAY, 3-STATION
6	WC-58352-102	COVER, ALCOVE, PCNG3 w/HOT WATER
7	WC-390673	LABEL, 3-STATION CUP BACKSPLASH

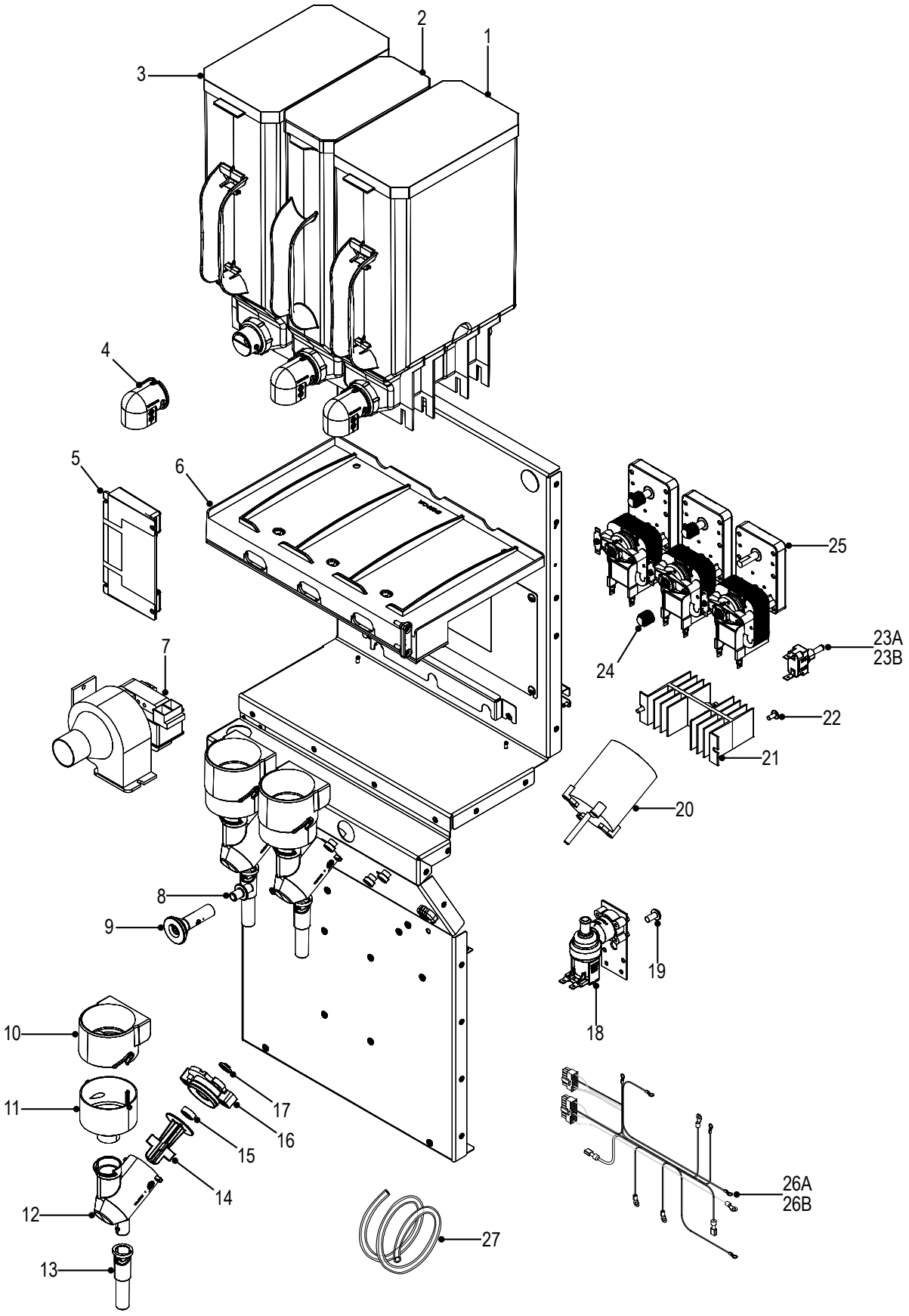
ITEM #	PART #	DESCRIPTION
8	WC-3503	LEG, 3/8”-16 STUD SCREW BUMPER
9	WC-3518	LEG, GLIDE 3/8”-16 STUD SCREW
10A	WC-68121-102 [1]	PANEL, SIDE RIGHT PCNG
10B	WC-68121-101 [2]	PANEL, SIDE RIGHT
11	WC-1408	CORD GRIP, 7/8” O.D.
12	WC-1200 *	CORD, 14/3 SJTO 6’ BLK W/PLUG
13	WC-2401	ELBOW, 3/8 NPT x 1/4 FLARE 304SST

[1]PCNG3800, [2]PCNG33800

*Recommended parts to stock.

Δ Refer to the exploded view and parts list for the PCNG3800/PCNG33800 door.

PCNG3, PCNG3DV, PCNG3300, PCNG3C300 - Interior Components - Exploded View



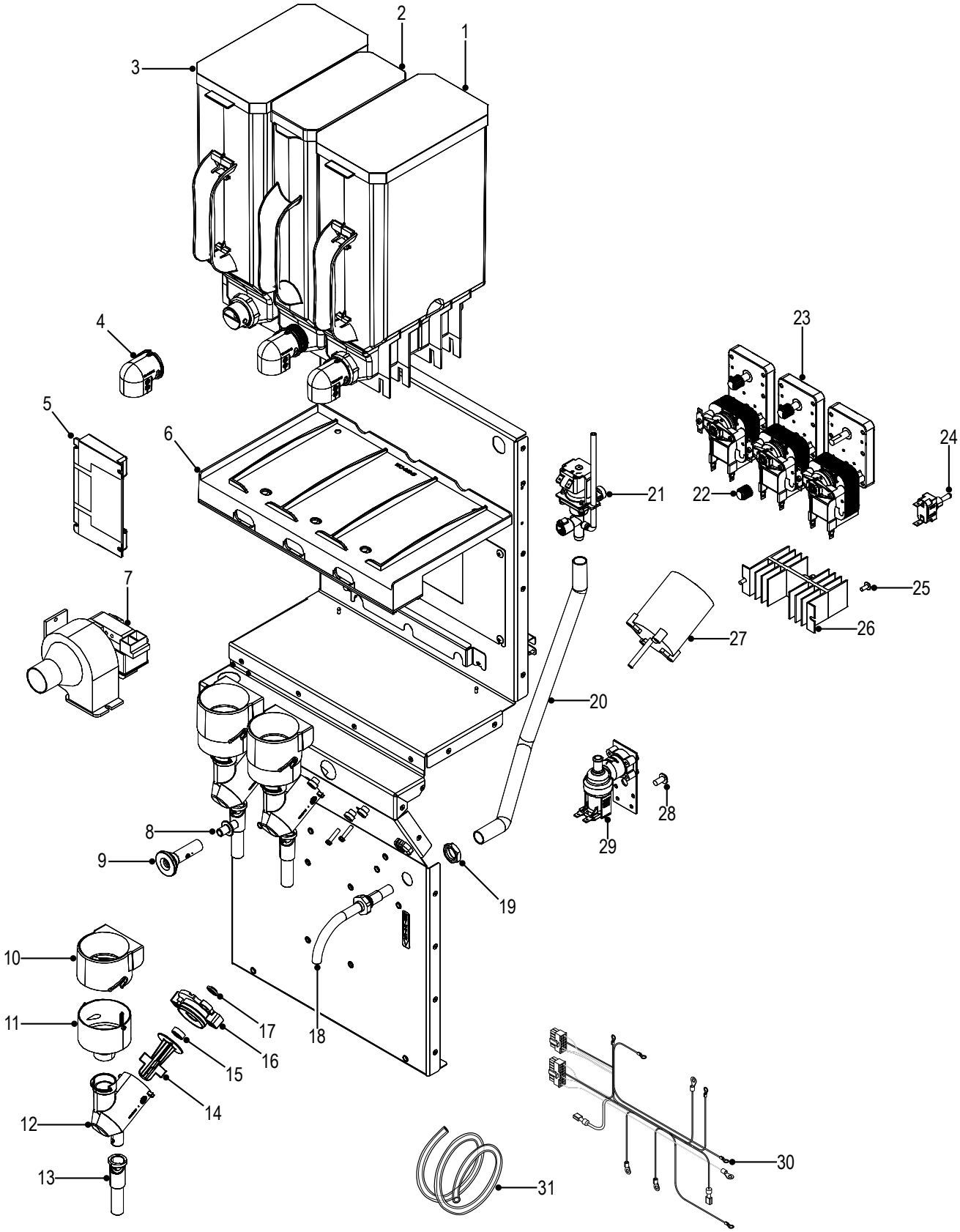
PCNG3, PCNG3DV, PCNG3300, PCNG3C300 - Interior Components - Parts List

ITEM #	PART #	DESCRIPTION
1	CA-1113-08R *	CANISTER ASSY, LARGE RIGHT
2	CA-1112-08 *	CANISTER ASSY, MEDIUM MIDDLE
3	CA-1113-08L *	CANISTER ASSY, LARGE LEFT
4	WC-66164-101 *	ELBOW, CANISTER SHORT
5	WC-10058-E *	CONTROL MODULE, UPM 120/240V PCNG
6	WC-66043	CANISTER TRAY, ASSY PLASTIC
7	CA-1014-05	FAN, EXTRACT 120V 29CFM 60Hz
8	CA-1095	CONNECTOR, ORIFICE WATER PLASTIC
9	CA-1011-05	BULKHEAD, WATER FITTING
10	WC-66166	STEAM TRAP, PCNG
11	WC-66167	BOWL, MIXING PCNG
12	WC-66168	CHAMBER, WHIPPER PCNG
13	WC-66170	TUBE, EXTENSION 3IN LONG GRAY
14	CA-1008-07	PROPELLER, WHIPPER CHAMBER
15	WC-66007	SEAL, MOTOR SHAFT
16	WC-66169	PLATE, WHIPPER CHAMBER
17	WC-43791	RING, MOTOR SHAFT PLASTIC
18	WC-847 *	VALVE, INLET 2 GPM 120V 9W
19	WC-4616	SCREW, 1/4-20 x 1/2 PHILLIPS PAN HEAD SS
20	CA-1012-05 *	MOTOR, WHIPPER 120V 60W/.50A 50/60HZ
21	WC-8556PH	HEATSINK/TRIAC ASSY 600V/40A
22	WC-4426	SCREW, 8-32x3/8 PH HEAD TRUSS SS
23A	WC-102 [1,3,4]	SWITCH, TOGGLE SPST 15A 125/250VAC
23B	WC-103 [2]	SWITCH, TOGGLE DPST 25A 125/250VAC
24	CA-1036 *	GEAR, PLASTIC USE ON CA-1013-05
25	CA-1013-05 *	MOTOR, GEAR ASSY W/BRAKE 120V 45W/1.0A 50/60HZ
26A	WC-13537 [1,3,4]	HARNESS ASSY, COMPLETE PCNG
26B	WC-13537-101 [2]	HARNESS ASSY, COMPLETE PCNG DV
27	WC-5310 *	TUBE, 5/16 ID x 1/8W SILICONE GEN USE

[1] PCNG3, [2] PCNG3DV, [3] PCNG3300, [4] PCNG3C300

*Recommended parts to stock.

PCNG3800/PCNG33800 - Interior Components - Exploded View



PCNG3800/PCNG33800 - Interior Components - Parts List

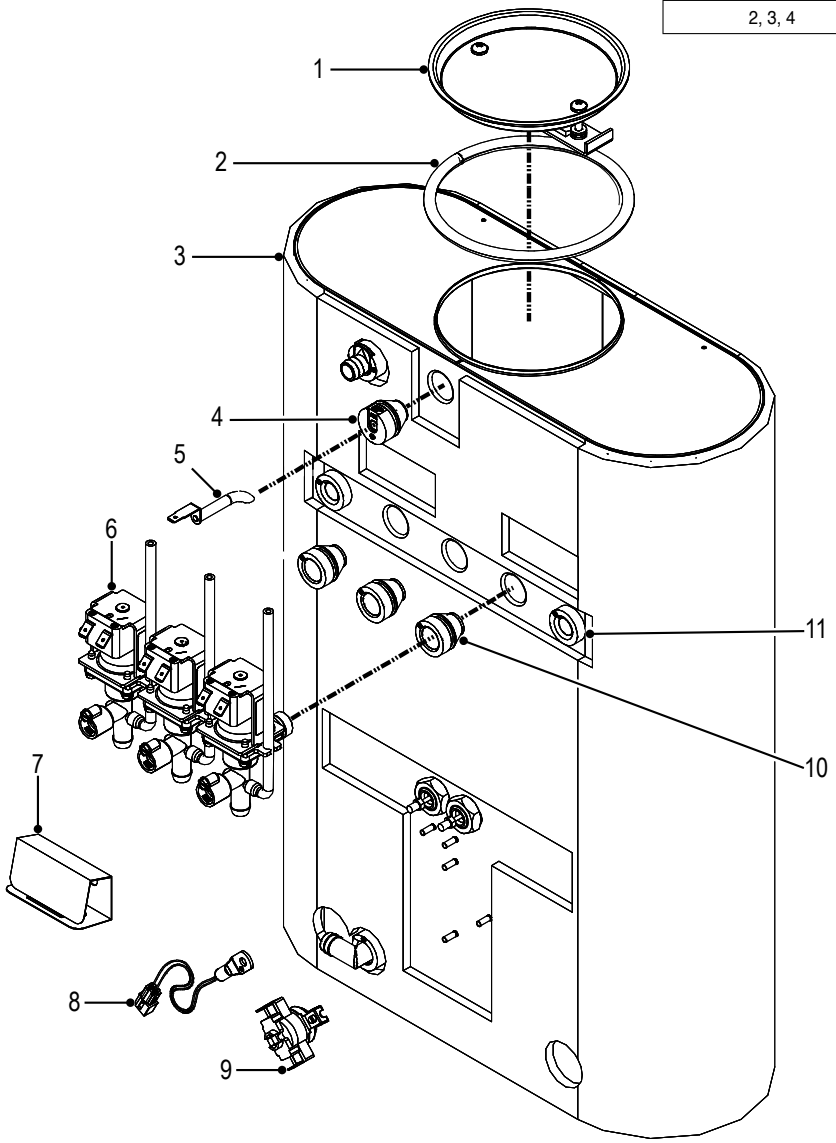
ITEM #	PART #	DESCRIPTION
1	CA-1113-08R *	CANISTER ASSY, LARGE RIGHT
2	CA-1112-08 *	CANISTER ASSY, MEDIUM MIDDLE
3	CA-1113-08L *	CANISTER ASSY, LARGE LEFT
4	WC-66164-101 *	ELBOW, CANISTER SHORT
5	WC-10058-E *	CONTROL MODULE, UPM 120/240V PCNG
6	WC-66043	CANISTER TRAY, ASSY PLASTIC
7	CA-1014-05	FAN, EXTRACT 120V 29CFM 60Hz
8	CA-1095	CONNECTOR, ORIFICE WATER PLASTIC
9	CA-1011-05	BULKHEAD, WATER FITTING
10	WC-66166	STEAM TRAP, PCNG
11	WC-66167	BOWL, MIXING PCNG
12	WC-66168	CHAMBER, WHIPPER PCNG
13	WC-66170	TUBE, EXTENSION 3IN LONG GRAY
14	CA-1008-07	PROPELLER, WHIPPER CHAMBER
15	WC-66007	SEAL, MOTOR SHAFT
16	WC-66169	PLATE, WHIPPER CHAMBER

ITEM #	PART #	DESCRIPTION
17	WC-43791	RING, MOTOR SHAFT PLASTIC
18	WC-29602-106	SPOUT ASSY, HOT WATER
19	WC-4212	NUT, 5/8-18 JAM UNF SS
20	WC-5310 *	TUBING, HOT WATER PCNG3
21	WC-880-E	VALVE, DUMP 120V 12W
22	CA-1036 *	GEAR, PLASTIC USE ON CA-1013-05
23	CA-1013-05 *	MOTOR, GEAR ASSY W/BRAKE 120V 45W/1.0A 50/60HZ
24	WC-102	SWITCH, TOGGLE SPST 15A 125/250VAC
25	WC-4426	SCREW, 8-32x3/8 PH HEAD TRUSS SS
26	WC-8556	HEATSINK/TRIAC ASSY 600V/40A
27	CA-1012-05 *	MOTOR, WHIPPER 120V 60W/.50A 50/60HZ
28	WC-4616	SCREW, 1/4-20 x 1/2 PHILLIPS PAN HEAD SS
29	WC-847 *	VALVE, INLET 2 GPM 120V 9W
30	WC-13537	HARNESS ASSY, COMPLETE PCNG
31	WC-5310 *	TUBE, 5/16 ID x 1/8W SILICONE GEN USE

*Recommended parts to stock.

PCNG3/PCNG3300

ITEM 6: DUMP VALVES (WC-880E) INSTALLED IN POSITIONS:	ITEM 10: CONICAL BUSHING (WC-2627) INSTALLED IN POSITIONS:	ITEM11: BLIND BUSHING (WC-2630) INSTALLED IN POSITIONS:
2, 3, 4	2, 3, 4	1, 5



Parts List

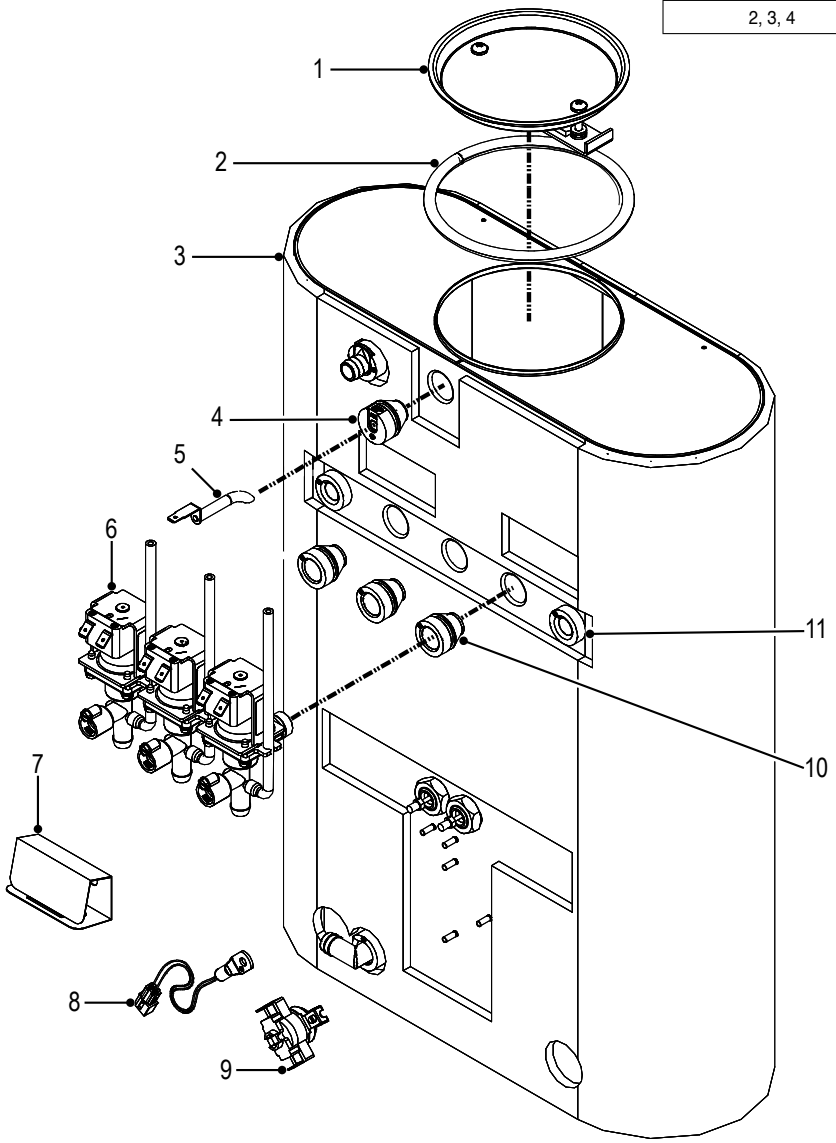
ITEM #	PART #	DESCRIPTION
1	WC-5661	LID ASSY, TANK
2	WC-43067 *	O-RING, 4-1/2" I.D. x Ø.285 SILICONE TANK LID
3	WC-54126	TANK ASSY, 120Vac, 1 x 1600W Tank Element, 5.23 Gallons
4	WC-2635 *	BUSHING, CONICAL .200 ID x .945 OD x .936 LG
5	WC-5528 *	PROBE, WATER LEVEL S.S.
6	WC-880E*	VALVE, DUMP 120V 12W PC'S

ITEM #	PART #	DESCRIPTION
7	WC-4394	GUARD, SHOCK/HEATING ELEMENT
8	WC-1438-101-E	SENSOR, TEMPERATURE TANK
9	WC-523 *	THERMOSTAT, MANUAL RESET 120/240VAC 25A
10	WC-2627 *	BUSHING, CONICAL .583ID X .945 OD .886LG 12mm GEN USE
11	WC-2630 *	BUSHING, CONICAL BLIND

* Recommended parts to stock.

PCNG3C300

ITEM 6: DUMP VALVES (WC-880E) INSTALLED IN POSITIONS:	ITEM 10: CONICAL BUSHING (WC-2627) INSTALLED IN POSITIONS:	ITEM11: BLIND BUSHING (WC-2630) INSTALLED IN POSITIONS:
2, 3, 4	2, 3, 4	1, 5



Parts List

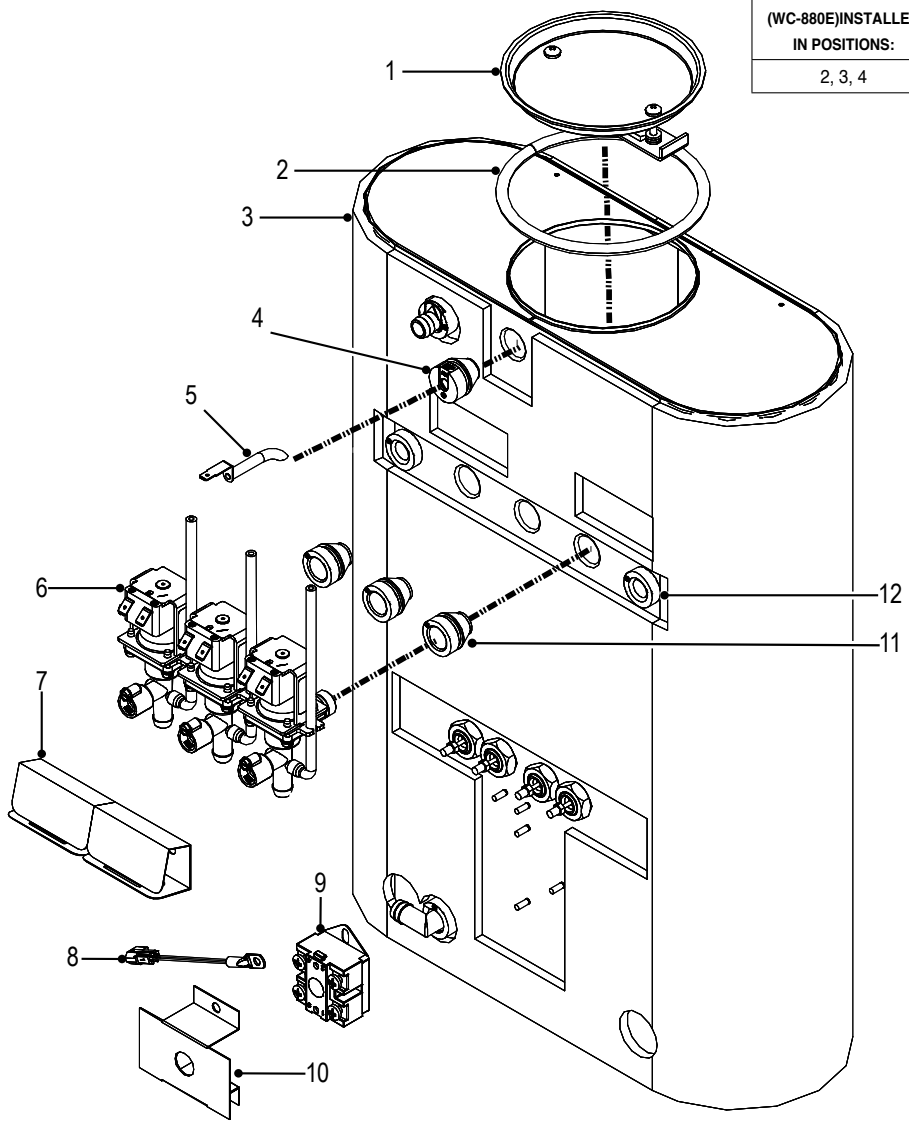
ITEM #	PART #	DESCRIPTION
1	WC-5661	LID ASSY, TANK
2	WC-43067 *	O-RING, 4-1/2" I.D. x Ø.285 SILICONE TANK LID
3	WC-54126-20	TANK ASSY, 120Vac, 1 x 1150W Tank Element, 5.23 Gallons
4	WC-2638 *	BUSHING, CONICAL .200 ID x .945 OD x .936 LG
5	WC-5528 *	PROBE, WATER LEVEL S.S.
6	WC-880E*	VALVE, DUMP 120V 12W PC'S

ITEM #	PART #	DESCRIPTION
7	WC-4394	GUARD, SHOCK/HEATING ELEMENT
8	WC-1438-101-E	SENSOR, TEMPERATURE TANK
9	WC-523 *	THERMOSTAT, MANUAL RESET 120/240VAC 25A
10	WC-2627 *	BUSHING, CONICAL .583ID X .945 OD .886LG 12mm GEN USE
11	WC-2630 *	BUSHING, CONICAL BLIND

* Recommended parts to stock.

PCNG3DV

ITEM 6: DUMP VALVES (WC-880E)INSTALLED IN POSITIONS:	**ITEM 11: CONICAL BUSHING (WC-2627) INSTALLED IN POSITIONS:**	**ITEM 12: BLIND BUSHING (WC-2630)INSTALLED IN POSITIONS:**
2, 3, 4	2, 3,4	1, 5



Parts List

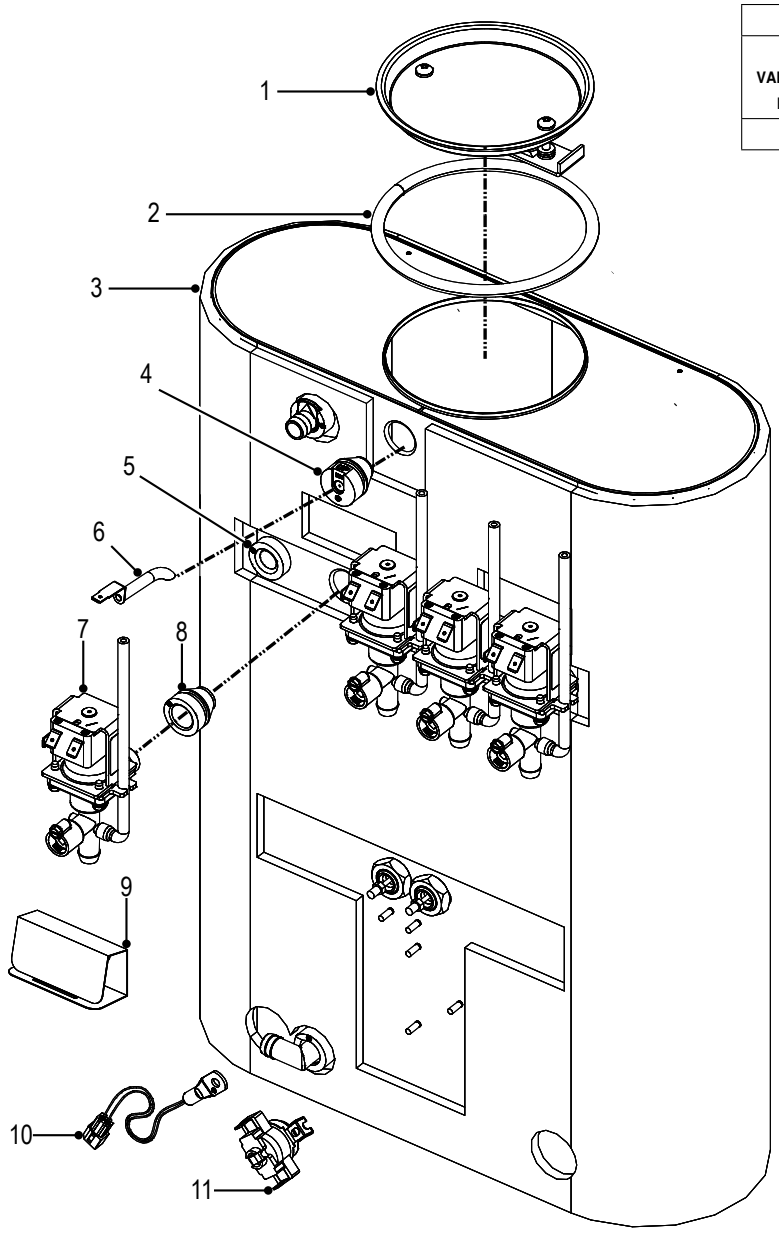
ITEM #	PART #	DESCRIPTION
1	WC-5661	KIT, TANK LID ROUND (INCLUDES ITEM 3)
2	WC-43067 *	O-RING, 4-1/2" I.D. X Ø.285 SILICONE TANK LID
3	WC-54306	TANK, ASSY PCNG DV 2 x 1600 W - 120/220V
4	WC-2638	BUSHING, CONICAL .200 ID x .945 OD x .936 LG
5	WC-5528 *	WATER LEVEL PROBE, SILICONE
6	WC-880E *	VALVE, DUMP 120V 12W
7	WC-4394 *	GUARD, SHOCK/HEATING ELEMENT

ITEM #	PART #	DESCRIPTION
8	WC-1438-101-E*	SENSOR, TEMPERATURE TANK
9	WC-522 *	THERMOSTAT, HI LIMIT HEATER CONTROL DPST 277V 40A
10	WC-43055 *	GUARD, SHOCK RESET THERMOSTAT (WC-522)
11	WC-2627 *	BUSHING, CONICAL .583ID X .945 OD .886LG 12mm
12	WC-2630 *	BUSHING, CONICAL BLIND GEN USE

* Recommended parts to stock.

PCNG3800/PCNG33800

ITEM 7: DUMP VALVES INSTALLED IN POSITIONS:	**ITEM 8: (CONICAL BUSHING) INSTALLED IN POSITIONS:**	**ITEM 5: (BLIND BUSHING) INSTALLED IN POSITIONS:**
2, 3, 4,5	2, 3,4,5	1



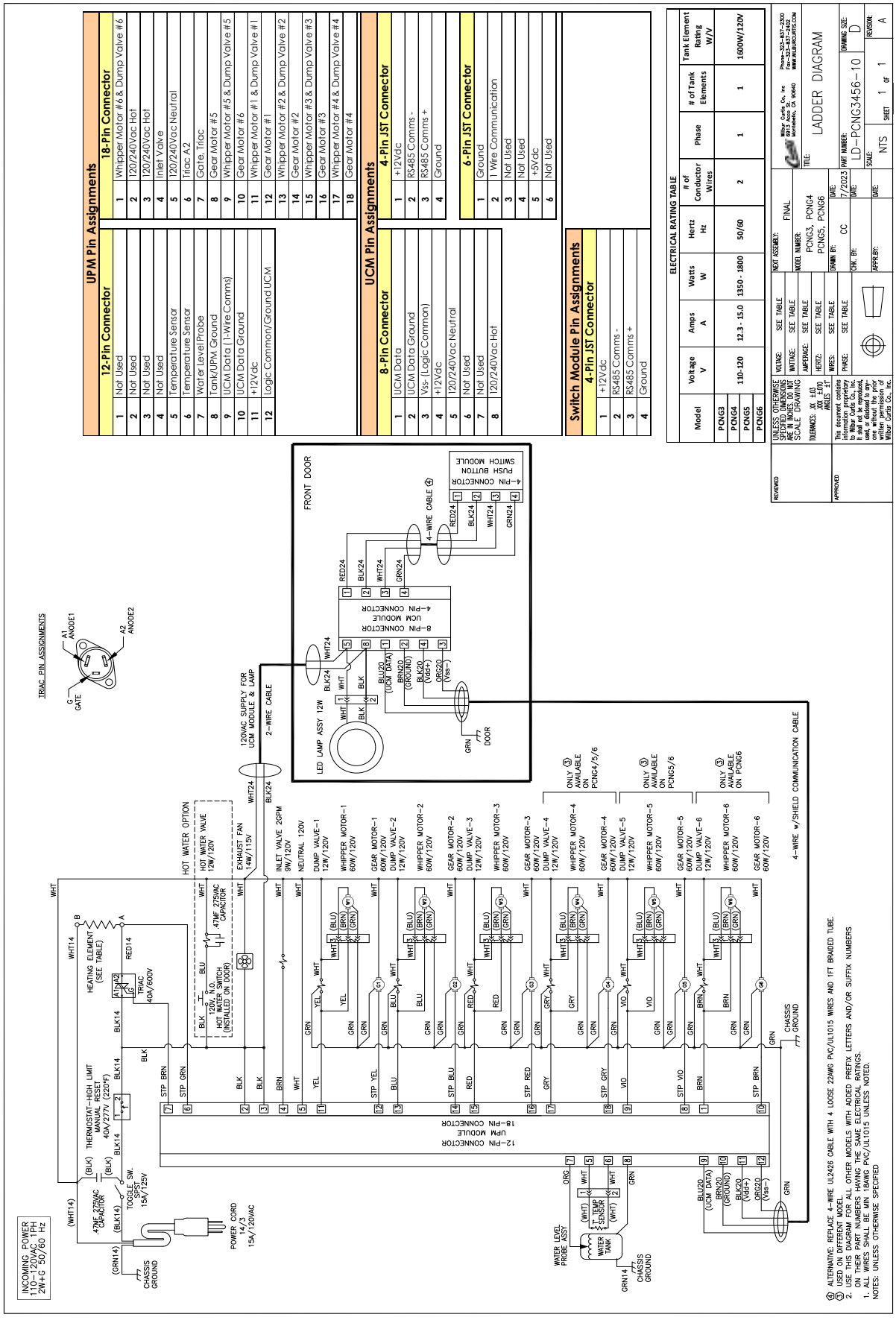
Parts List

ITEM #	PART #	DESCRIPTION
1	WC-5661	LID ASSY, TANK
2	WC-43067 *	O-RING, 4-1/2" I.D. X Ø.285 SILICONE TANK LID
3	WC-54126	TANK ASSY, 120Vac, (1) Tank Element, 5.23 Gallons
4	WC-2638 *	BUSHING, CONICAL .200 ID x .945 OD x .936 LG
5	WC-2630 *	BUSHING, CONICAL BLIND
6	WC-5528 *	PROBE, WATER LEVEL S.S.
7	WC-880E*	VALVE, DUMP 120V 12W PC'S

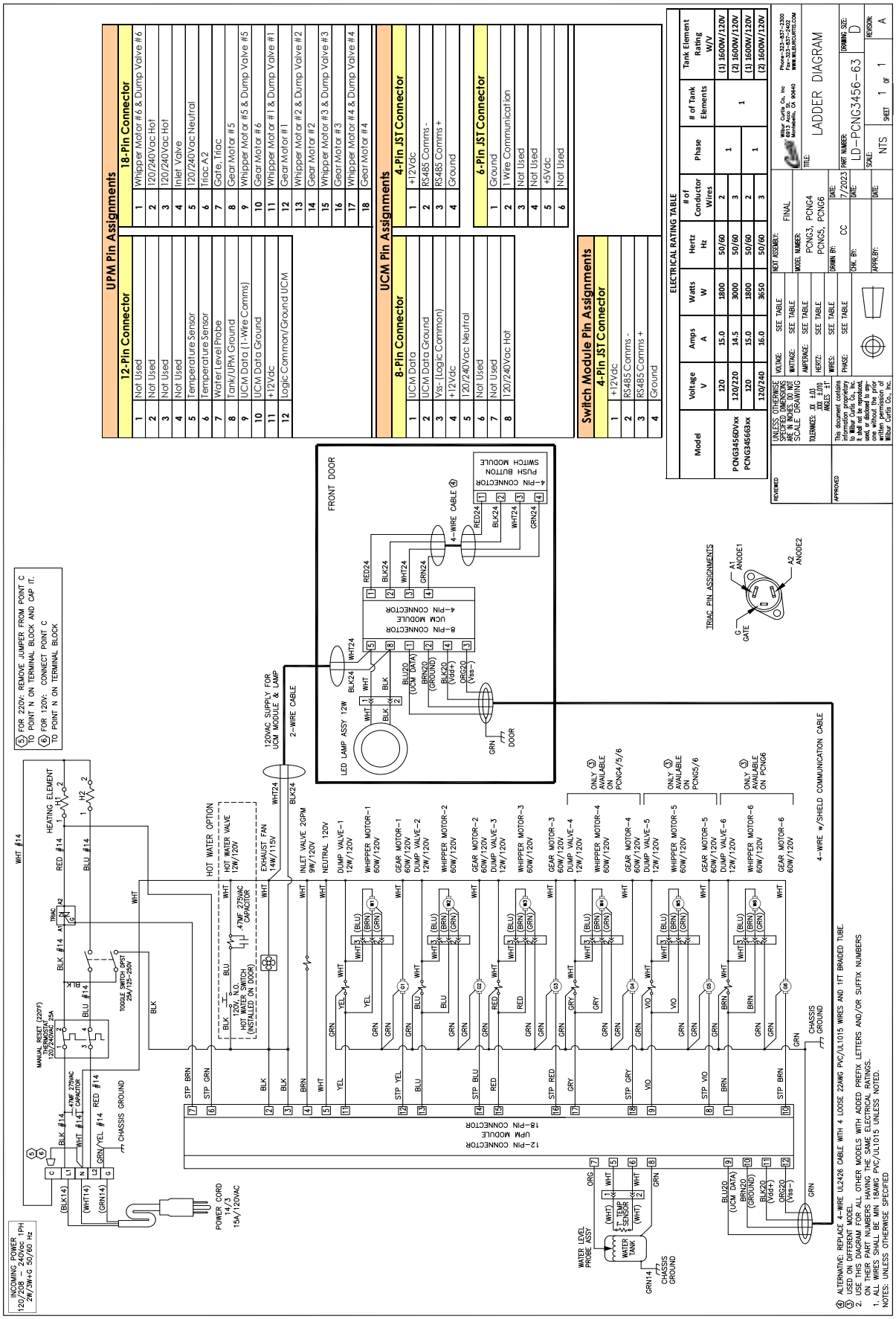
ITEM #	PART #	DESCRIPTION
8	WC-2627*	BUSHING, CONICAL .583ID X .945 OD .886LG 12mm GEN USE
9	WC-4394*	GUARD, SHOCK/HEATING ELEMENT FOR SINGLE HEATING ELEMENT
10	WC-1438-101-E	SENSOR, TEMPERATURE TANK
11	WC-523*	THERMOSTAT, MANUAL RESET 120/ 240 VAC 25A 220 DEG F MAX

* Recommended parts to stock.

PCNG3x, PCNG4x, PCNG5x, PCNG6x - 110-120 Volt Models



PCNG3x, PCNG4x, PCNG5x, PCNG6x - 120/220-240 Volt Models



Electric Shock Hazard - The procedures in this troubleshooting guide should *only* be performed by a qualified service technician.

Disconnect power when replacing components.

Neither Wilbur Curtis Co., Inc., SEB Professional, nor the seller are 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: If it is necessary to replace the universal power module (UPM), always check all inlet and dump valve coils for a short and replace the valve as necessary, before replacing the module. See the ***Valve Test Procedure***, below to test for defective valves.

Troubleshooting Guidelines

- If an error message appears on the display, consult the *Error Codes* section before troubleshooting.
- A dispenser that is not level may not function properly. Make sure the unit is properly leveled before proceeding.
- This troubleshooting guide identifies some but not all causes for common issues that can arise.
- Use this troubleshooting guide along with the appropriate electrical schematic.

Valve Test Procedure

Use a digital multi-meter to measure the resistance of Valve Coils.

- 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 harness.

2 Power up the dispenser with the appropriate cover(s) removed to allow access to the valve.

3 Run a dispense cycle while monitoring the voltage at the Valve Coil terminals:

- If voltage is present at the terminals, you should hear the Dump Valve click open and closed, 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 Inlet Valve. If voltage is not detected, first check the wiring. If the wiring is OK, replace the UPM.

Water Is Not Hot Enough

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

2 If the temperature setting is OK, but the actual water temperature does not match the setting on the control panel, replace the Temperature Sensor.

Water Heats Slower Than Usual

1 Check for power across the terminals of the heating element(s).
- If power is being supplied, disconnect the heating element(s) and check for continuity.
- Replace a heating element if the resistance is too high (nominal resistance is 13 Ohms).

2 If there is no power to the heating element(s):
- Confirm whether the wiring to any element has the proper voltage across it.
- Check for corroded connections anywhere between the power cord and the heating element(s).

Water Does Not Heat

1. Confirm that the water level in the tank is in contact with the water level probe.
- If not, refer to *Tank Does Not Fill*. The water will not heat unless it is in contact with the probe.

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

3. If **Ready to Dispense** appears on the display, but the water is not hot:
- Check the resistance across the leads of the Temperature Sensor.
- Replace the Temperature Sensor if the resistance is less than 10 k and the water is not hot.
- If the sensor resistance is above 10 k when the water is cool, replace the Universal Power Module (UPM).

If **Heating...** appears on the display, but the water is not hot, leave the rear toggle switch in the ON position and perform the following steps:

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.

2 If there is no power to the element(s), use the Electrical Schematic to help you trace the circuit back to the power cord, to find out where power is lost.
- If power is flowing into the Triac but not out, proceed the next step.

3 If power flows into the Triac, but not out, check for power at the Gate Terminal.
- If the connections are good and power is being supplied to the Triac, but there is no voltage out of A2, replace the Triac.
- If power is not flowing from the UPM, but **Heating...** appears on the display, check the wiring from the UPM to the Triac. If the wiring is OK, replace the UPM.

Water Is Too Hot (Boiling or Excessive Steaming)

IMPORTANT: If the unit is being operated at elevations above 2000 feet (600 m), before proceeding, make sure that the control panel temperature is set to the factory default setting of 190°F (88°C). The boiling point of water goes down with increases in elevation.

1 If **Over Temp Sensor** or **Ready to Dispens..** appears on the display and the water is too hot, refer to *Over Temp Sensor Error Message*.

2 If the display constantly reads **Heating...**, confirm that the temperature sensor is attached tightly to the tank and that heat sink compound was used.
- A properly mounted Temperature Sensor should have a resistance of around 7 k when the water is hot. Replace the sensor if the resistance is incorrect.

Continued...

3 Confirm that power constantly flows through Universal Power Module (UPM) to the Triac, regardless of the resistance of the temperature sensor. If not, the UPM is probably bad.

4 If the UPM is working properly, check for a bad Triac.

Sensor Error Message

This error indicates a Temperature Sensor system malfunction (open circuit).

- Once the malfunction is corrected, the error message must be cleared.
- To reset the dispenser and return to normal operation, turn off the unit for 5 seconds, then turn it back on.

1 Check the resistance across the leads of the Temperature Sensor while it is disconnected from the Universal Power Module (UPM).

- If an open circuit is measured (resistance above 200 k), replace the sensor.
- If the sensor resistance is less than 200 k check the sensor wires for corrosion and reconnect them to the UPM.
- If the error message comes back after resetting the control and power modules, replace the UPM.

No Power - Display Not Lit

1 Confirm that the circuit breaker on the back panel has not been tripped and is turned on.

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

3 Confirm that the toggle switch on the back panel is in the ON position.

4 Verify that all wires from the power cord are properly connected inside the unit.

- Loose connections can create heat. Ensure that the wires are not burned or overheated.
- Check the chassis ground.

5 Confirm that power and ground are being supplied to the Universal Control Module (UCM).

- If there is power into the UCM, but the display is blank, the UCM is probably bad.

6 If there is no power into the UCM, use the corresponding wiring diagram to trace the circuit back to the power cord to find out where power is being lost.

- If power is flowing into the Thermostat Reset Switch, but not out, proceed to step 7.

7 If power is flowing into the Thermostat Reset Switch, but not out, confirm that the water tank is not empty.

- If the tank is empty, the reset switch has probably opened due to a low water level. Refer to *Water Tank Does Not Fill*.
- If there is water in the tank, but no power out, push the reset button to see if it restores power.
- If power is restored, confirm that the switch is not opening at the wrong temperature. It should not open at normal operating temperatures.
- If power still does not flow through the switch after pushing the button, replace the Thermostat Reset Switch.

Water Tank Overfills

1 Turn the unit 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 tank when the toggle switch is turned OFF and continues when the switch is turned back ON:

- Remove the orange wire from the Water Level 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 the tank stops filling when the orange wire is shorted, check for a corroded connection at the Water Level Probe.

3 If water does not stop flowing when the orange wire is shorted:

- Check the tank ground connection and the continuity of the orange wire connected to the Universal Power Module (UPM). If both are OK, replace the UPM.

Water Tank Does Not Fill

IMPORTANT: An empty water tank or low water level can cause the tank to overheat, resulting in the thermostat reset switch opening. If power still doesn't flow to the control panel after correctly filling the tank, push the reset button.

1 Confirm that the water supply is turned on, and check for a clogged water supply line, water filter, or Inlet Valve.

2 If there are no blockages 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 for corroded connections between the universal power module (UPM) and the inlet valve.

4 If the wiring between the UPM and the Inlet Valve is OK, but power is not reaching the Inlet Valve, remove the orange wire from the Water Level Probe.

- If the tank starts filling, replace the Water Level Probe. If the tank does not start filling, replace the UPM.

Water Level Error Message

Condition: *Water Level error.*

This error message appears when the Inlet Valve Solenoid has been on for too long during an initial fill or tank refill. Refer to the *Error Codes* section for the maximum times allowed.

Once the malfunction has been corrected, the error message must be cleared. To reset the unit and return to normal operation, turn off the machine using the switch on the back panel for 5 seconds, then switch it back on, or press and hold the ⊙ button on the control panel.

1 Confirm that the flow rate and water pressure from the water supply line meets the minimum flow rate requirements for your machine, listed in the ***Specifications*** section.

2 Check for blockages at the either side Inlet Valve and the tubing between the Inlet Valve and the tank.

3 Check the Water Level Probe wire for an open condition or corroded connections.

Continued...

4 If the probe connections are OK, cycle power off and on.
   - Confirm that power is reaching the Inlet Valve terminals.
   - If power is reaching the terminals, but water is not flowing, replace the Inlet Valve.

5 Confirm that power is flowing from the Universal Power Module (UPM) to the Inlet Valve. If the wiring is OK, replace the UPM.

Water Constantly Flows from a Dispenser Spout

1 Check whether water continues flowing from a spout when the toggle switch is turned OFF. Replace any valves that are stuck open.

2 If one or more of the valves activates when the machine is switched on and deactivates when it is switched off, replace the Universal Power Module (UPM).

Water Does Not Flow from the Spout While "Dispensing..." Appears on the Display

Condition: *Whipper motor runs but only powder comes out of the spout.*

1 Confirm that power is being supplied to the corresponding Dump Valve when a dispense button is pushed. If power is being supplied, but there is no water flow, replace the Dump Valve.

2 If power is not being supplied to the Dump Valve during the dispense cycle, check the wiring from the Universal Power Module (UPM) to the valve.

3 If the wiring is OK, check for power output from the UPM while the dispense button is being pushed. Replace the UPM if there is no power out.

Cup Does Not Fill to the Normal Level During Dispensing or Overflows

Confirm that the Dispense by Time setting is correct. Refer to the *Programming Guide* section.

Only Water is Dispensed

Condition: *Water flows and whipper motor runs, but powder is not dispensed.*

1 Confirm whether the canister is empty.

2 Ensure that the powder is not damp, as moisture will inhibit powder flow.
   - Moisture build-up inside the canister is usually due to a defective exhaust fan.
   - Confirm that the fan is receiving power and working correctly.
   - Confirm that the Powder % Ratio is not set to 0%. Refer to the *Programming Guide* section.

3 Remove the canister and push the dispense button to confirm that the canister gear at the back of the compartment is turning. If it is, check for a stripped gear on both the canister and the gear motor shaft.
   - If the gears are OK, check the canister auger assembly.

Continued...

Dispensed Product is Weak

IMPORTANT: Dump valves should NOT be field adjusted to change product strength. Product strength adjustments should only be done through programming on the front panel.

Condition: Water flows and the whipper motor runs, but the amount of powder is too low:

1 Confirm that the canister is full.

2 Confirm that the powder is damp.

- Damp powder inhibits powder flow.
- Moisture build-up inside the canister is usually caused by a defective exhaust fan.
- Confirm that power is reaching the fan, and that it is turning.

3 Confirm that the Powder % Ratio is properly set. Refer to the *Programming Guide* section.

4 Check for a stripped gear on both the canister and gear motor shaft. If the gears are OK, check the canister.

Whipper Motor Does Not Run During Dispensing

Condition: Whipper Motor does not run, but water and powder flows when the dispense button is pressed:

1 Confirm that power is being supplied to the associated Whipper Motor when the dispense button is pushed.

- If power is being supplied, but the motor does not run, replace the motor.

2 If power is not being supplied to the Whipper Motor during the dispense cycle, check the wiring from the Universal Power Module (UPM) to the motor.

3 If the wiring is OK, confirm that power is flowing from the UPM while the dispense button is being pressed. Replace the UPM if this is not happening.

Dispenser Does Not Respond When Dispense Button is Pushed

1 If **Dispensing...** appears on the display, check for faulty wiring and connections between the Universal Control module (UCM) and the Universal Power Module (UPM).

- If the wiring is OK, but nothing happens when **Dispensing...** appears on the display, check the UCM and UPM.

2 If **Dispensing...** does not appear on the display, check for a faulty membrane panel, or Universal Control Module (UCM).

Dispenser Overflows While Dispensing

- **In Manual Dispense Mode:** Release the dispense button when the cup is 3/4 full.
- **In Dispense by Time Mode:** Check the Dispense by Time setting. Refer to the *Programming Guide* section.

Front Panel Light Does Not Work

1 Units with tubular shaped LED light:

- With the power switch on, check for 120 Vac into the light power supply and 36 Vdc out.
- Check for 36 Vdc to the light fixture. If power is being supplied but light but it does not work, replace the light assembly.

Continued...

2 Units with florescent or new style LED light assembly*:

- Make sure the power switch on the back panel is ON, then confirm that power is being supplied to the light fixture.
- If power is being supplied to the light but it does not come on, replace the light assembly.

*Refer to the *Illustrated Parts List* for your machine.

Dump Valve Calibration

After installing a new dump valve, the following calibration steps must be performed *before* reinstalling the dump valve cover and canisters:

1 Switch on the unit using the toggle switch on the back panel, and wait for the ready light to illuminate.

2 Place a measuring cup below the corresponding spout for the new dump valve.

3 Push the dispense button.

- Water should flow at a rate of 7 oz. (8 oz. Max) in 10 seconds.
- If the flow rate is OK, skip to step 6. If the flow rate is too high or too low, perform the steps that follow.

4 Open the door on the front of the unit:

- Use a 6 mm hex wrench to turn the adjustment screw on the front of the dump valve one half turn counterclockwise to increase the flow rate, or clockwise to decrease it.

5 Close the door and check the flow rate:

- If the flow rate is 7 oz. (8 oz. Max) in 10 seconds, proceed to step 6.
- If the flow rate is incorrect, repeat steps 4 and 5 until the flow rate is within range.

6 Replace the dump valve cover and canisters when the flow rate is correct to return the unit to normal use.

All PCNG series units are equipped with a valve calibration feature that dispenses water for 10 seconds, eliminating the need for manual timing. Please refer to the *Programming Guide* section for more information.

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 Break in control board communication circuit.

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

ERROR MESSAGE	WARNING DESCRIPTION	CAUSE
Water Level Error 1-(800)-000-0000	Fill run error Tank not Filling	The water inlet valve has either been open for more than 10 minutes on the initial tank fill or has been open for more than 1 1/2 minutes in normal operation.
Sensor Error 1-(800)-000-0000	Open Sensor	Break in the temperature thermistor circuit.
Communication Error	Communication issue between the Universal Control Module (UCM) and the Universal Power Module (UPM)	Break in the communication wires between the two control boards.

Product Warranty

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.