



Cecilware®

Operator Manual

Radiance™ Cappuccino Dispenser

Radiance 5C, 5CW

Radiance 10C, 10CW



Multiple national and international patents pending



Model: Radiance 5C pictured

Table of Contents

Safety Information.....	2	USB and HDMI Ports	17
Specifications	4	Maintenance	19
Installation	5	Troubleshooting Guide.....	20
Operation	8	Parts Diagram and List.....	22
Cleaning	12	Wiring Diagrams	30
Wi-Fi Password	16	Decals.....	36
Grindmaster Connect™ Usage Data .	16		

Thank you for purchasing this quality beverage dispenser. For your safety and the safety of others, read all warnings and the operator manual before installing or using the product. Properly instruct all operators. Keep training records. For future reference, record serial number here:

Grindmaster-Cecilware provides the industry's BEST warranty. Visit gmcw.com for warranty terms and conditions.

Grindmaster-Cecilware

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0816 Form # CW-343-01
Part # 390-00057

Safety Information

Important Safety Information



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

For your safety and the safety of others, read all warnings and the operator manual before installing or using the product.

DANGER: This term warns the user of imminent hazard that will result in serious injury or death.

WARNING: This term refers to a potential hazard or unsafe practice, which could result in serious injury or death.

CAUTION: This term refers to a potential hazard or unsafe practice, which could result in minor or moderate injury.

NOTICE: This term refers to information that needs special attention or must be fully understood.

WARNING

To reduce risk of electrical shock, do not remove side panels. No user-serviceable parts inside. Refer servicing to qualified personnel.

Certain internal parts are intentionally not grounded and may present a risk of electric shock only during servicing. Service Personnel – Do not contact the following parts while the appliance is energized: power supply.

The appliance is not intended for outdoor use.

Do not clean with a pressure washer or use in an area where a pressure washer may be used.

Cleaning and maintenance shall be made only by properly trained persons with supervision.

When installing, wait for water tank to fill before opening door. Otherwise, unit can tip over and may cause severe injury.

Do not open door while product is dispensing.

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.

Do not alter or deform the power cord or plug in any way! Altering or deforming the plug may cause electrical shock, damage unit and will void warranty.

CAUTION

Lifting hazard. Single person lift could cause injury. It is required that moving or lifting the unit be done by two people to avoid injury.

For safe and proper operation the appliance must be placed in a stable, vertical position.

Do not use this appliance without the legs in place.

To reduce risk of serious burns or scalding do not place hand or other body parts under dispenser.

To avoid pinching injury, use care when closing door.

NOTICE

Observe machine voltage configuration. Do not apply improper voltage to machine or damage to machine may occur.

For use on individual dedicated branch circuit only.

Do not use extension cord.

Do not clean with pressure washer.

Do not allow water to be splashed or poured on front, sides, top, or back.

Safety Information (continued)

NOTICE

Wi-Fi Models only:

Contains Transmitter Module FCC ID: 2AHRD

This device is granted for use in mobile only configurations in which the antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all person and not be co-located with any other transmitters except in accordance with FCC multi-transmitter product procedures.

Wi-Fi AGENCY CERTIFICATIONS

FCC ID: 2AHRD-EPN8508GS

Certificate Number: 162180419/AA/00

AGENCY STATEMENTS

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Notice: Any changes or modifications not expressly approved by the Grindmaster-Cecilware could void the user's authority to operate the equipment.

Specifications

Model	Certifications	Number of Hoppers	Water Tank	Electrical	Product Dimensions (H x W x D)*
Radiance 5	NSF Sanitation; cULus Electrical	5	7.25 gal 27.4 L	115V / 1Ph / 50/60 Hz / 12.9 A / 1475 W 120V / 1Ph / 50/60 Hz / 13.5 A / 1600 W	32.5" x 19" x 22.8" 82.6 cm x 48.3 cm x 57.9 cm
Radiance 10	NSF Sanitation; cULus Electrical	10	9.75 gal 36.9 L	115V / 1Ph / 50/60 Hz / 12.9 A / 1475 W 120V / 1Ph / 50/60 Hz / 13.5 A / 1600 W	35.5" x 29.25" x 22.8" 90.2 cm x 74.3 cm x 57.9 cm

*Height includes 4" (10.2 cm) legs (not extended)

Side Clearance required - 1" (2.5 cm)

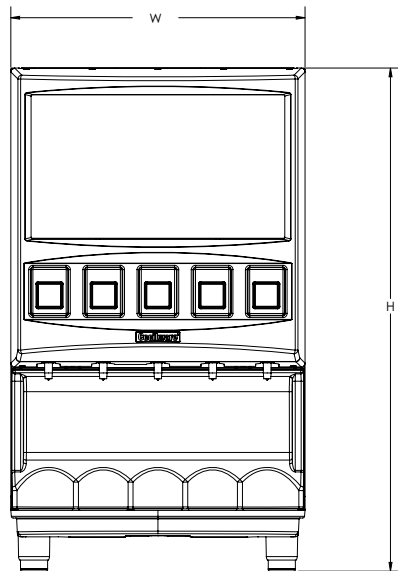
Rear Clearance required - 3" (7.6 cm) for water and electrical connections

Water connection size - 3/4" GHT

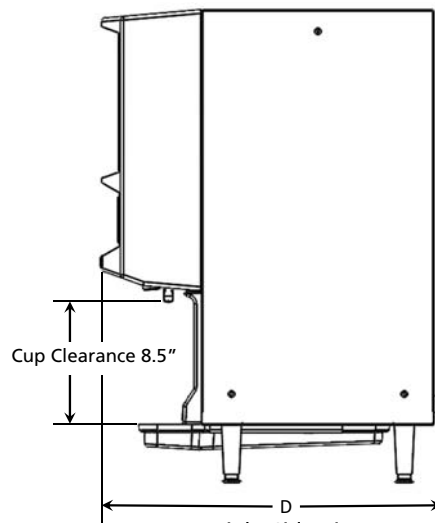
Water pressure between 20 PSI and 120 PSI (138 kPa - 827 kPa). Use regulator if higher pressure.

Hopper Capacity - 5 pounds (2.3 kg) each hopper

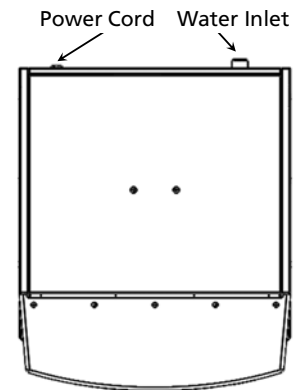
Cup Clearance - 8.5" (21.6 cm)



Front View



Right Side View



Top View

Specifications (continued)

Mechanical

The Radiance 5 requires 21" counter space and the Radiance 10 requires 31.25". Height of all units with door open is 42.5" for Radiance 5 and 46.5" for Radiance 10. The units weigh approximately 118 and 150 pounds empty and 213 and 300 pounds full of water and product.

Electrical

A NEMA 5-15R receptacle is required on a dedicated, 15 amp circuit.

Water Supply

The Radiance beverage dispenser can use any standard municipal water supply as well as any commercial-grade filtered, reverse osmosis, distilled, de-ionized, or purified water.

This machine must have a water supply of between 20 and 100 psi of line pressure with a 3/4" standard garden hose fitting to the inlet valve of the machine. Any water supply not compliant with the required 20 – 100 psi range must be pressure regulated accordingly. It is recommended to install a manual shut-off valve between the main water supply and the machine.

This machine and any associated water supply lines must be compliant and maintained in accordance with all local, state and federal laws associated with commercial beverage dispensing equipment and use of potable water supply lines. Water pipe connections and fixtures directly connected to potable water supply shall be sized, installed, and maintained in accordance with Federal, State, and Local codes. (Required for NSF approved water hook-up)

The use of a water filter can improve flavor and taste consistency from region to region.

Note: In areas with water hardness above 5 grains, a water softener must be installed and maintained in order to prevent mineral deposits that will cause malfunctioning of the equipment.

Installation

▲ CAUTION: Lifting hazard. Single person lift could cause injury. It is recommended that moving or lifting the unit be done by two people to avoid injury.

Water Inlet Connection requirements:

NOTICE: Do not reuse old hose. Only use new hose.

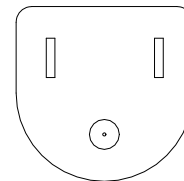
The following is required for water connection:

1. A 3/4" GHT NSF approved flexible hose for hook-up to water supply.
2. Installation to a water filter system is suggested to prevent lime and mineral scale build up in the machine.
3. Equipment must be installed with adequate backflow protection to comply with applicable Federal, State, and local codes. (Required for NSF approved water hook-up)

Electrical Connection requirements

Always ensure that the machine power switch is in the OFF position and unplugged from power supply when making or maintaining electrical connections.

This appliance is equipped with a three wire power cord. A **dedicated** three wire 120V, 15A, electrical circuit must be used.



NEMA 5-15P

Location requirements

This machine must be located on a level surface that can support 400 pounds across a span as wide as the machine.

Installation (continued)

⚠ CAUTION: Lifting hazard. Single person lift could cause injury. It is recommended that moving or lifting the unit be done by two people to avoid injury.

NOTICE: NEVER attempt to lift or maneuver the unit with the plastic drain tray and drain grid attached.

To avoid damage to the unit, do not use apply lifting or maneuvering force to any plastic parts. Do not lay unit on the back surface; power cord and water inlet valve may become damaged.

Unpacking Instructions

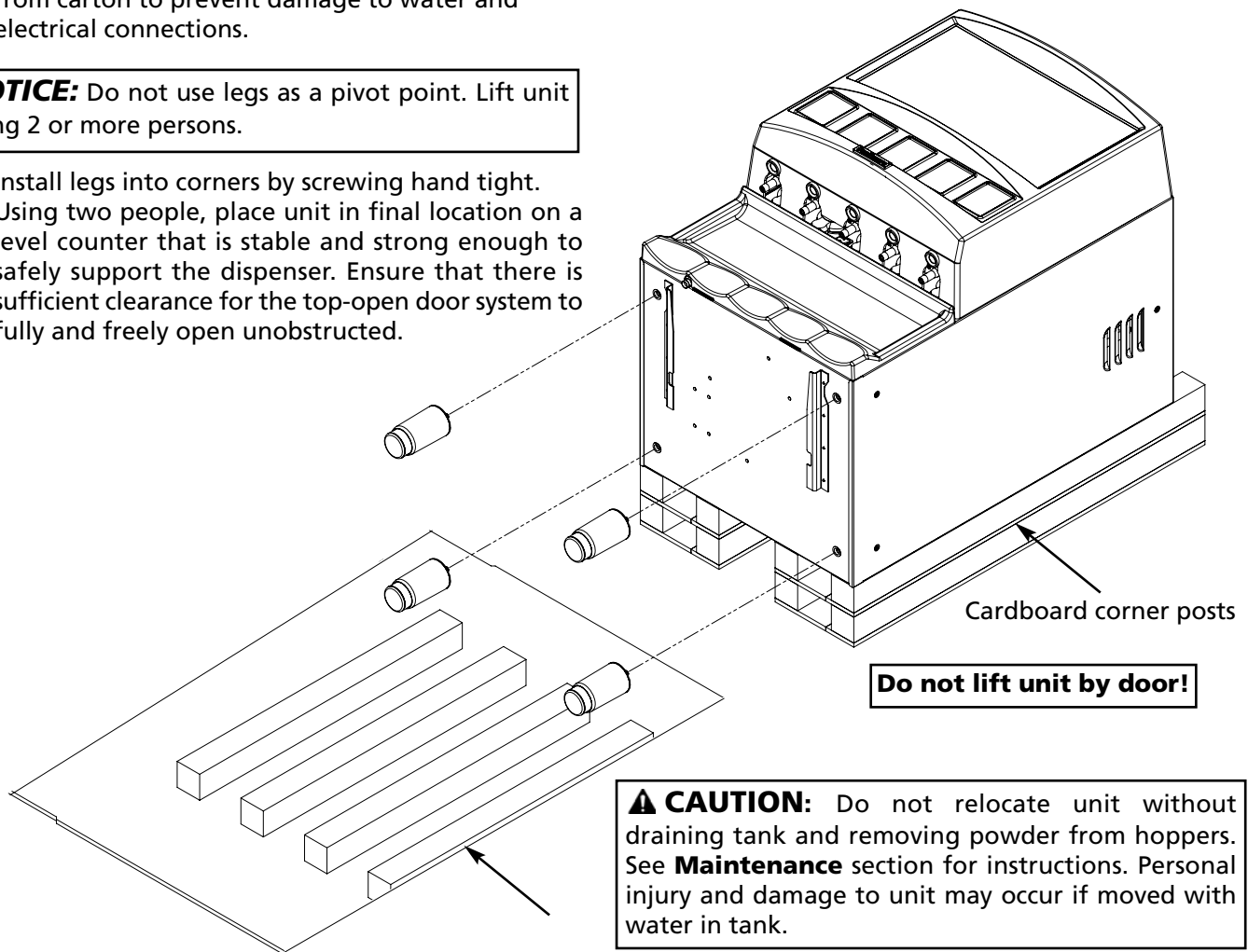
Carefully unpack the machine and inspect immediately for shipping damage. The packaging may contain unattached parts. Your machine was shipped in a carton designed to give it maximum protection in normal handling. It was thoroughly inspected before leaving the factory. In case of damage, contact the shipper, not Grindmaster-Cecilware.

Locate the following items: legs, drain pan, drain grid (separate box inside of packaging).

1. Lay unit on back on top of cardboard corner posts from carton to prevent damage to water and electrical connections.

NOTICE: Do not use legs as a pivot point. Lift unit using 2 or more persons.

2. Install legs into corners by screwing hand tight.
3. Using two people, place unit in final location on a level counter that is stable and strong enough to safely support the dispenser. Ensure that there is sufficient clearance for the top-open door system to fully and freely open unobstructed.



⚠ WARNING: Tip over hazard until tank is filled.

4. Have one person support the unit to prevent tip over.
5. Place drain grid in position on top of drain tray. Slide both into position using the metal guide rails underneath.
6. Level legs by screwing feet either counterclockwise to extend or clockwise to retract. Ensure:
 - that all 4 legs are contacting the counter,
 - that the machine does not rock in any direction, and
 - that the machine is level front to back and side-to-side.
7. Flush water line. Connect water line to unit.
8. Plug unit into a grounded 3 prong outlet. Do not use extension cord.

⚠ WARNING: Do not alter or deform the plug in any way! Altering or deforming the plug may cause electrical shock, damage unit and will cause personal injury.

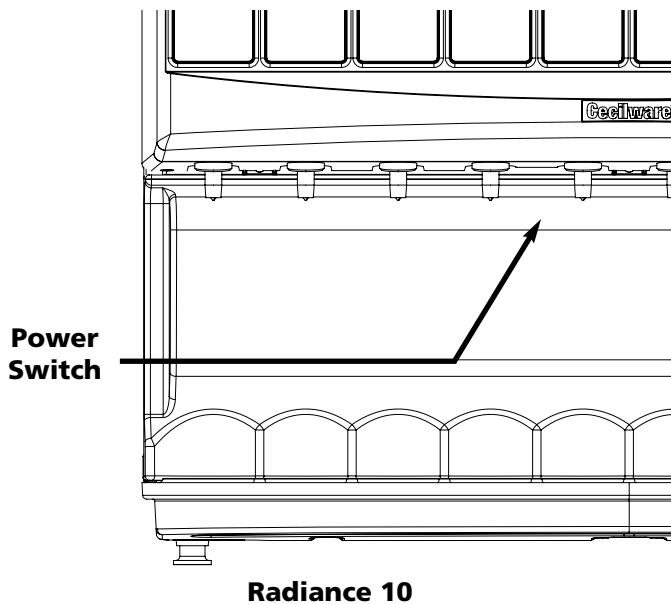
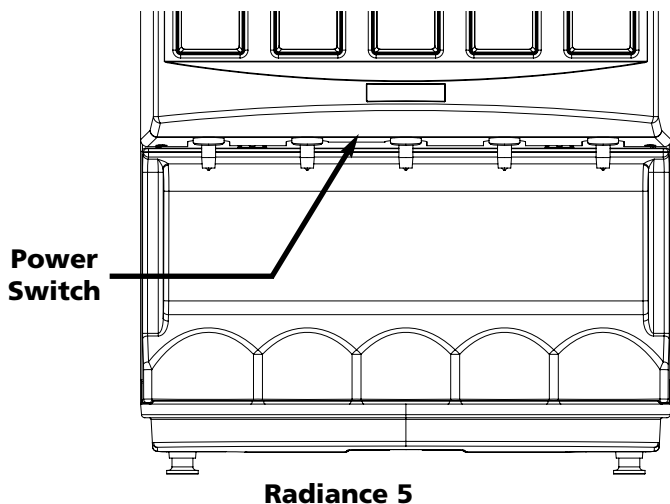
Do not lift unit by door!

⚠ CAUTION: Do not relocate unit without draining tank and removing powder from hoppers. See **Maintenance** section for instructions. Personal injury and damage to unit may occur if moved with water in tank.

Installation (continued)

Start-up

1. Turn on power switch located just behind front panel near bottom to the "ON" position. Water will flow into the tank and will stop when the tank is full (5 - 15 minutes).



2. After water has stopped running into tank, open door. No unlatching is required. Slowly lift door upwards. Door has a counter-balance system that will hold the door open to a position of approximately 105 degrees from vertical.

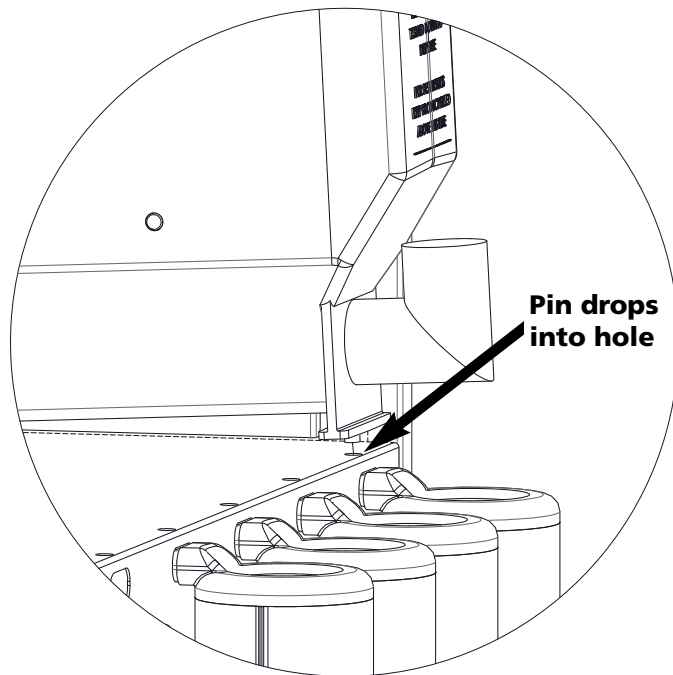
▲ WARNING: Do not open door until water has stopped flowing into hot water tank. Otherwise unit may tip over, causing severe injury.

3. Clean, sanitize, and reassemble Hopper and Whipper assemblies before first use. See **Cleaning**.

Important: Parts must be completely dry before installing.

IMPORTANT: Check to make sure that the Auger and Pinwheels inside the Hopper are correctly installed prior to filling.

4. Rotate the Dispense Elbow to the "up" position. Remove hoppers by lifting. Fill Hoppers with dry powder product. The Hoppers hold up to 5 pounds of Cappuccino product. Install Flavor Labels to match product (place one on each Hopper.) Place the Hopper back into position. Ensure front pin drops into hole.



5. Turn Dispense Elbow down toward the mixing funnel.
6. Close door by gently pulling down.
7. Apply matching Flavor Decals to area above each dispense button.

Allow 100 minutes (125 minutes for Radiance 10) for the water to reach operating temperature after tank has filled.

- The Push Button back lights will fade ON and OFF with a low level of illumination to communicate that the water heater is bringing the water temperature up to the factory preset level.
- The unit will not dispense product if water is not heated to preset temperature.
- When the tank is up to temperature, the dispense buttons will stay lit.
- Rinse each head to clear powder spillage when filled hopper was installed. See **Cleaning** section.

Your Radiance Cappuccino dispenser is ready to dispense!

Operation

▲ CAUTION: Operate with care. Do not place hand under dispenser. Radiance dispenses hot beverages that can cause serious burns. Cup must rest flat on tray with at least 1/4" (6 mm) clearance between cup and nozzle.

NOTICE: No more than 3 heads can dispense at the same time.
If door is opened, the machine will not operate.

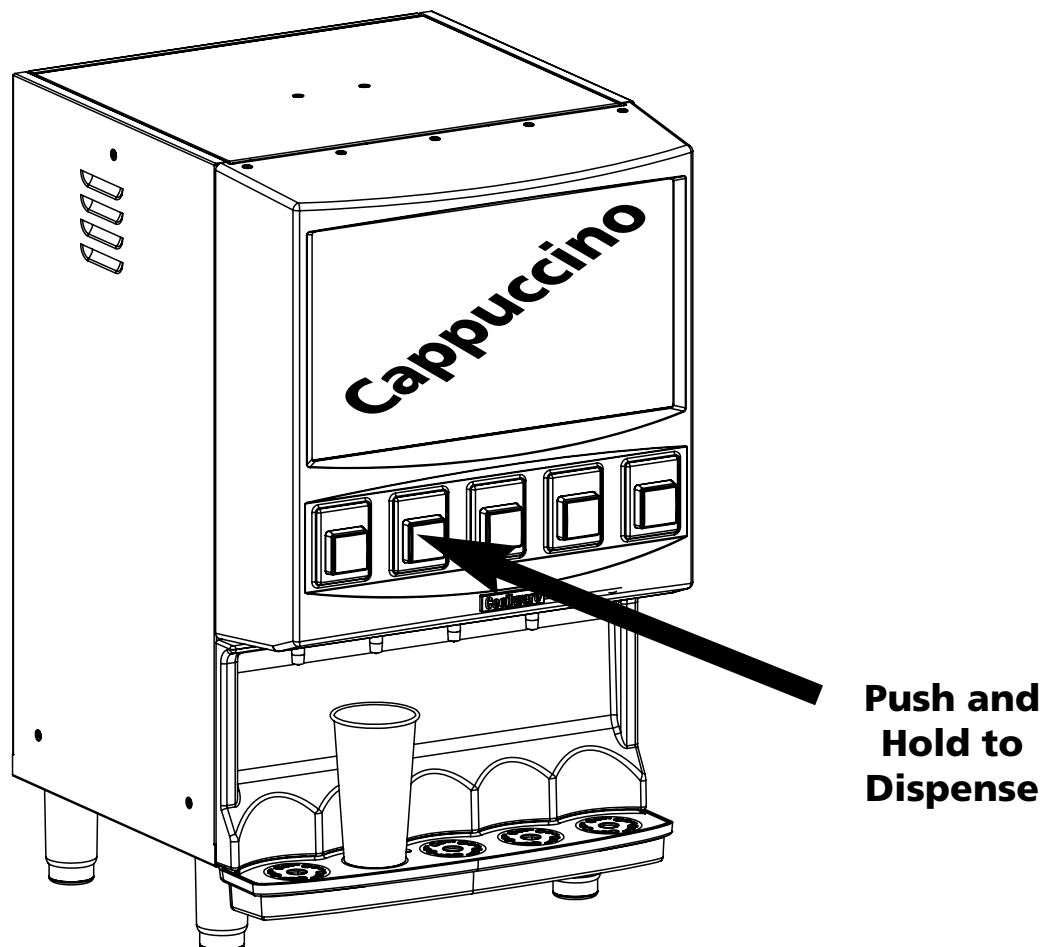
Your new powdered beverage dispenser is easy to operate and maintain. Before you place it in service, please have all personnel familiarize themselves with these instructions. **Keep this manual in a convenient place for ready reference.**

If you need help, call Grindmaster-Cecilware Technical Service Department for help, (502) 425-4776 or (800) 695-4500 (USA & Canada only) 8 AM - 6 PM EST.

How to Operate

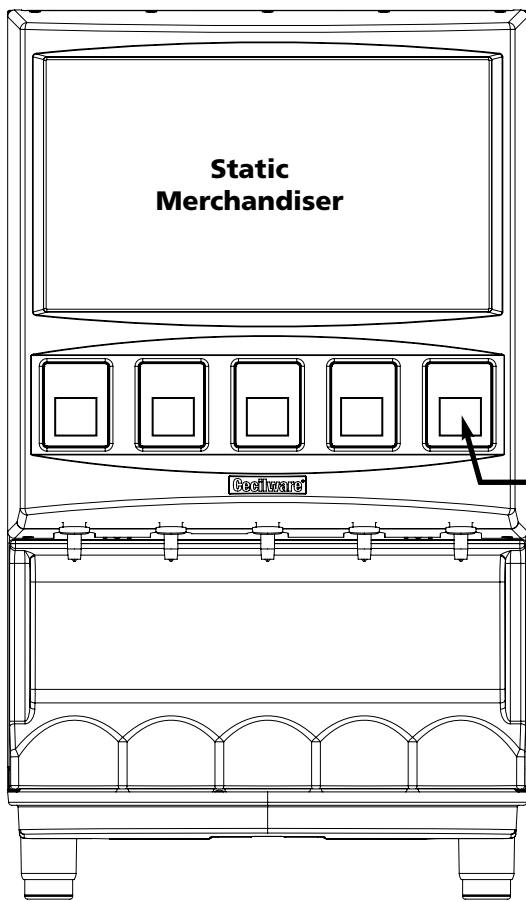
To dispense a cup of Cappuccino:

- Place a cup under selected drink dispense nozzle.
- Push and hold Dispense Button until cup is 2/3 full, then release button.

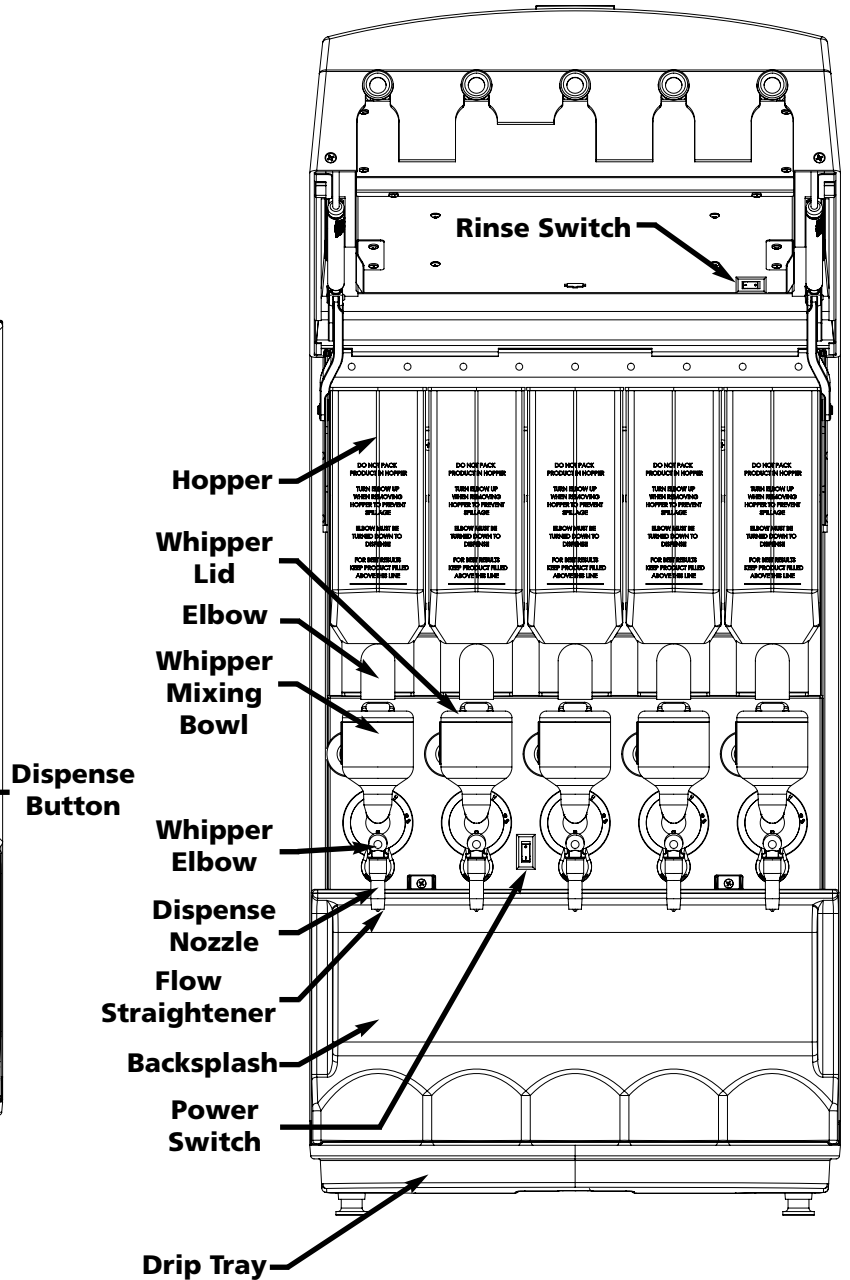


Operation (continued)

Location of Features



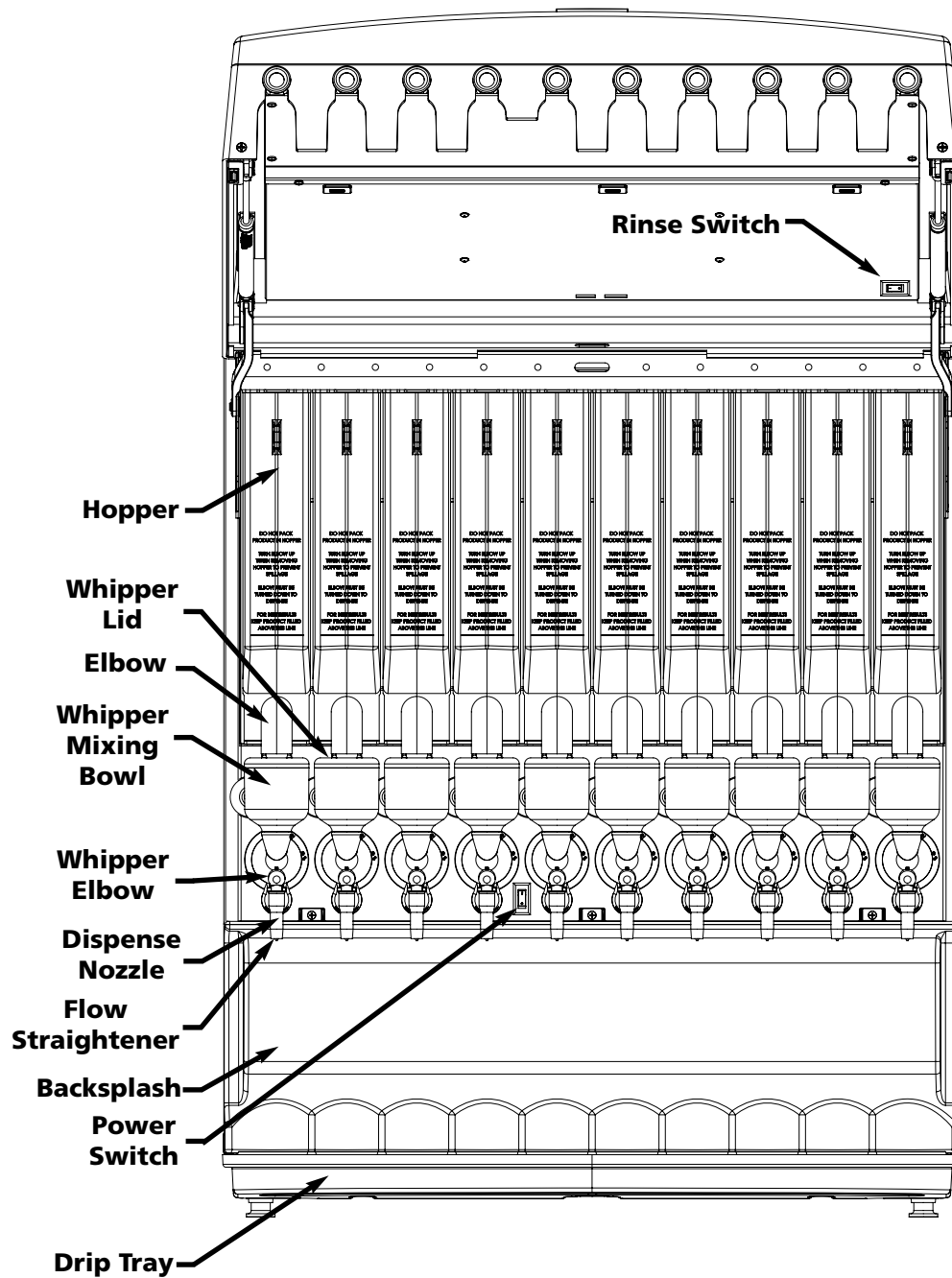
FRONT VIEW DOOR CLOSED



FRONT VIEW DOOR OPEN
Radiance 5

Operation (continued)

Location of Features (continued)

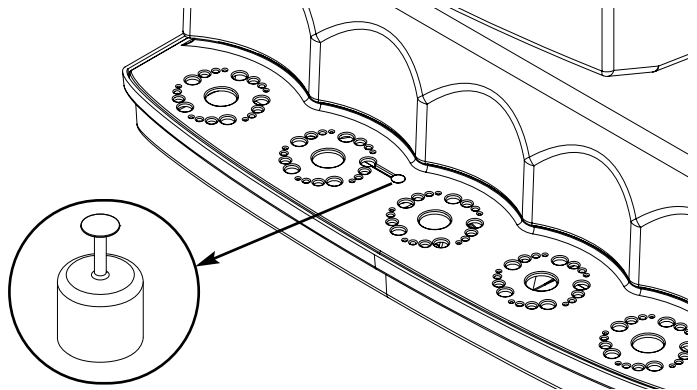


**FRONT VIEW DOOR OPEN
Radiance 10**

Operation (continued)

Drip tray level indicator

Every drip tray includes a red level indicator. At any time, if the indicator protrudes above the drain grid, this indicates that spillage into the drain tray has become excessive and the tray should be drained and rinsed. To remove the drain grid and drain pan, simply pull the drain pan forward and lift the drain grid (with attached red level indicator) out of place. Then pull the drain pan forward, away from the machine, being careful not to spill contents. Thoroughly rinse the drain pan and the drain grid. It is not necessary to remove the level indicator from the drain grid.



Fault codes:

If all dispense button lights are flashing, this means the unit is in a "Machine Level" fault code. The unit must be powered off and back on again for the fault to clear. See the Troubleshooting section of this manual for definition of Fault codes and corrective action. The push buttons will communicate the Fault code in the following sequence:

1. All Push Buttons will flash two times at the same time
2. The buttons will not flash for three seconds
3. If a two digit code, then all buttons will flash at the same time to designate the first of the two digit Fault code (I.E. one flash for the tens digit means 1X is the first digit for the fault code.)
4. The buttons will not flash for a three second period
5. All of the buttons will flash to indicate the second digit of the Fault code
6. The buttons will not flash for three seconds and then start the communication sequence over again.

Power the unit off and then on to clear the fault code and to verify that the Fault was only an instantaneous fault and has been corrected.

Note: Push Buttons flash in groups of 5. Example: on a Radiance 5 unit, all buttons will flash at the same time to communicate a fault code. Radiance 10 units can have a fault code on only the left or right groups of 5 dispense heads; it is possible to have both groups on a Radiance 10 unit flashing different fault codes or one side operating normally while the other side is flashing a fault code to the operator.

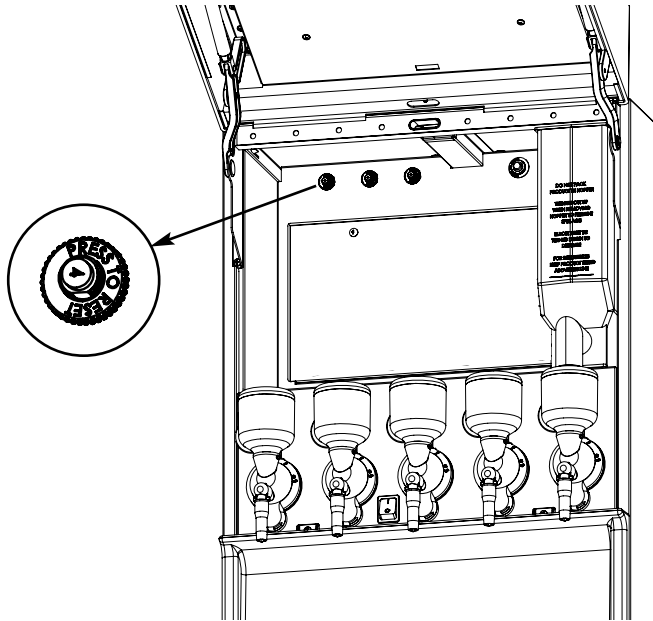
In all cases of Fault codes, first turn off the unit and turn back on.

FAULT CODE	DESCRIPTION	TYPE
04	Tank temperature probe is out of range	Machine
05	The tank temperature is not rising as expected	Machine
06	The tank is not being filled as expected or the tank has overflowed	Machine
11	Tank communications Timeout	Machine
12	IO Communications Timeout	Machine
13	IO Communications Timeout	Machine
14	BDCS bus timeout (two or more boards are not communicating to the main board)	Machine
15	Key Pressed Fault	Head
16	Communication fault between two main boards Radiance 10 only)	Machine

Operation (continued)

Circuit Breakers

In the event that one or more dispense heads are not functioning, and no fault code or out of service message is indicated, then the circuit breakers should be checked. The circuit breakers are accessed by opening the door panel, and removing the powder hoppers. Rotate the plastic dispense elbows (from the powder bins) up to avoid powder spillage before removing bins. There are 4 circuit breakers located behind the powder hoppers at the top. Three of the circuit breakers are located together on the left side (as looking from the front). The 3 left-side circuit breakers each control the power to components. If one is tripped, the button will protrude forward. Simply push the button in to reset. The single circuit breaker on the right side controls power to control boards and sensors. It is reset using the same procedure.



Cleaning

▲ CAUTION: To avoid pinching injury use care when closing door.

NOTICE: All sanitizing agents in the food zone must comply with 21 CFR 178.1010.

Sanitize all food dispensing units periodically. All parts to be sanitized must be cleaned first. Cleaning and sanitizing frequency must follow state and local health department regulations.

Daily Rinse

Each dispense nozzle and associated components must be rinsed daily using a built-in 'Quick Rinse' function. To access the Quick Rinse feature, open door and turn on rinse switch. It is located on the underneath of the front door, on the right side (see diagram). Ensure that dispense zone below dispense nozzle is clear of skin contact. A large cup or vessel is recommended for use during rinse to capture the hot water and prevent splatter. Touch and hold the Dispense button for a continuous 10 seconds minimum. You may rinse beyond the 10 seconds. Repeat for all heads. When rinsing is complete, open door and turn on rinse switch.

Daily Cleaning:

1. Turn up elbow on hopper to prevent loose powder from falling while cleaning.
2. Remove and disassemble whipper assembly. Wash, rinse, sanitize, and allow to air dry.
3. After all parts are completely dry, replace whipper assembly except for the whipper bowl lid.
4. Turn hopper elbow down.
5. Replace whipper bowl lid.
6. Run rinse cycle if loose powder fell when turning elbow.
7. Empty drip tray as needed and wash daily in a solution of dish detergent.

Before refilling hopper

Wash, rinse, and sanitize hoppers and elbows every time before refilling. **IMPORTANT:** All components must be completely dry prior to reassembly.

Sanitizing

1. Prepare a sanitizing solution in accordance with local health department regulations. You may also refer to the US Food and Drug Administration regulation 21 CFR 178.1010 "Sanitizing Solutions" and US Environmental Protection Agency 40 CFR 18.940 "Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (Food-contact surface sanitizing solutions)".
2. Follow the instructions provided with the sanitizing agent.
3. Let all sanitized parts drain and dry naturally. **DO NOT WIPE DRY.**

Cleaning (continued)

Cleaning Instructions for cosmetic outer plastics and dispense buttons:

NOTICE: Using a cleaning agent or process that damages the polycarbonate will void warranty. Turn off power to unit before cleaning to prevent damage to screen or dispense buttons.

Use a soft, wet cloth to wipe plastic panels. For difficult soils, a light amount of common liquid dish detergent on a soft, wet cloth is most recommended. Do not use powdered cleaners or abrasive pads.

To prevent damage to plastic, NEVER use any cleaning agents with harsh chemicals including ammonia or isopropyl alcohol.

To prevent scratches, NEVER rub the plastic panels with a dry cloth, paper towel, or dry skin.

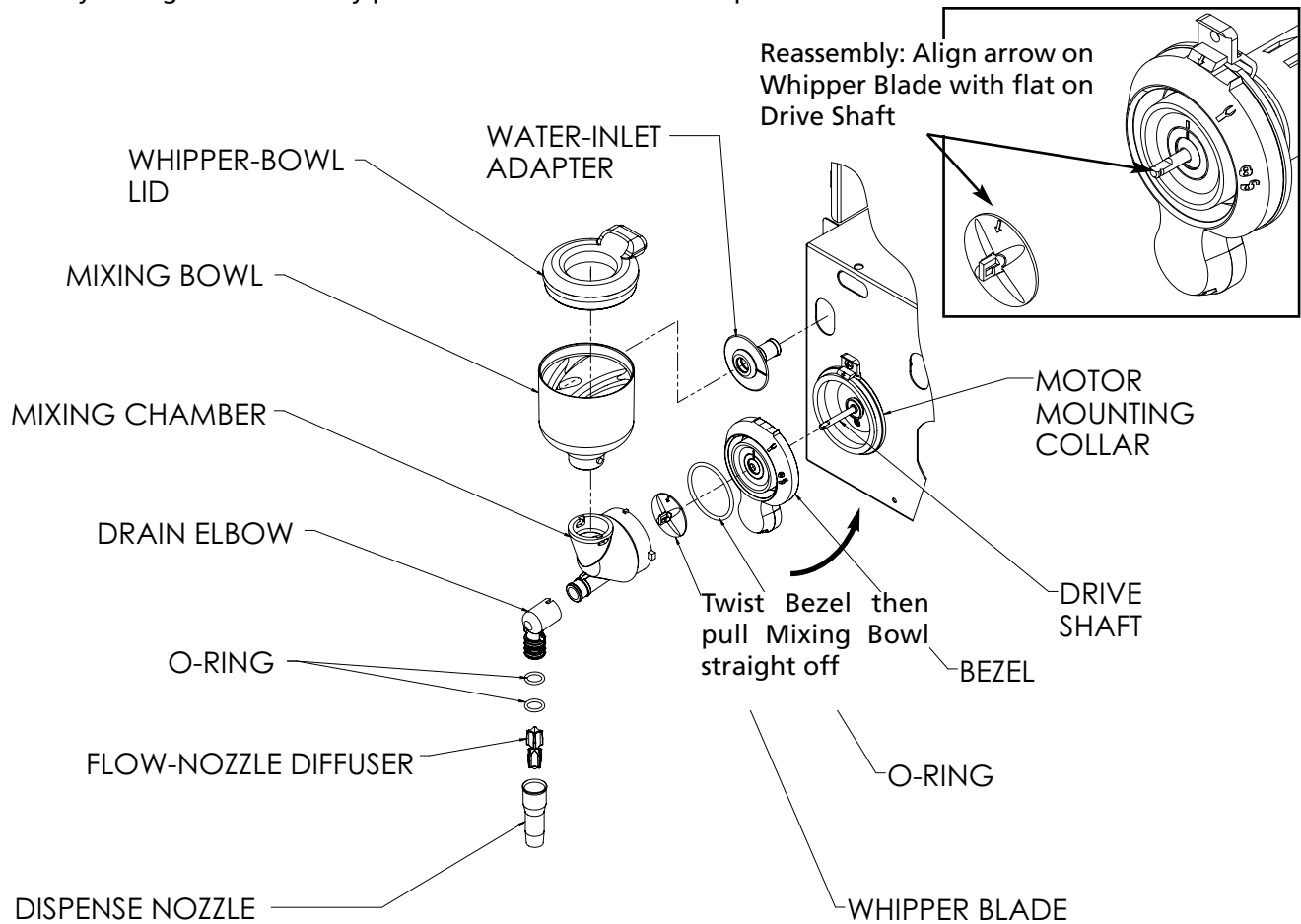
Cleaning Instructions for outside metal:

NOTICE: To protect plastic panels, turn off power and open door before using stainless steel cleaner. Avoid contact between stainless metal cleaner and plastic.

Use a soft, damp cloth to wipe outer metal case. For difficult soils, use a stainless steel cleaner, following manufacturer instructions.

Whipper Disassembly:

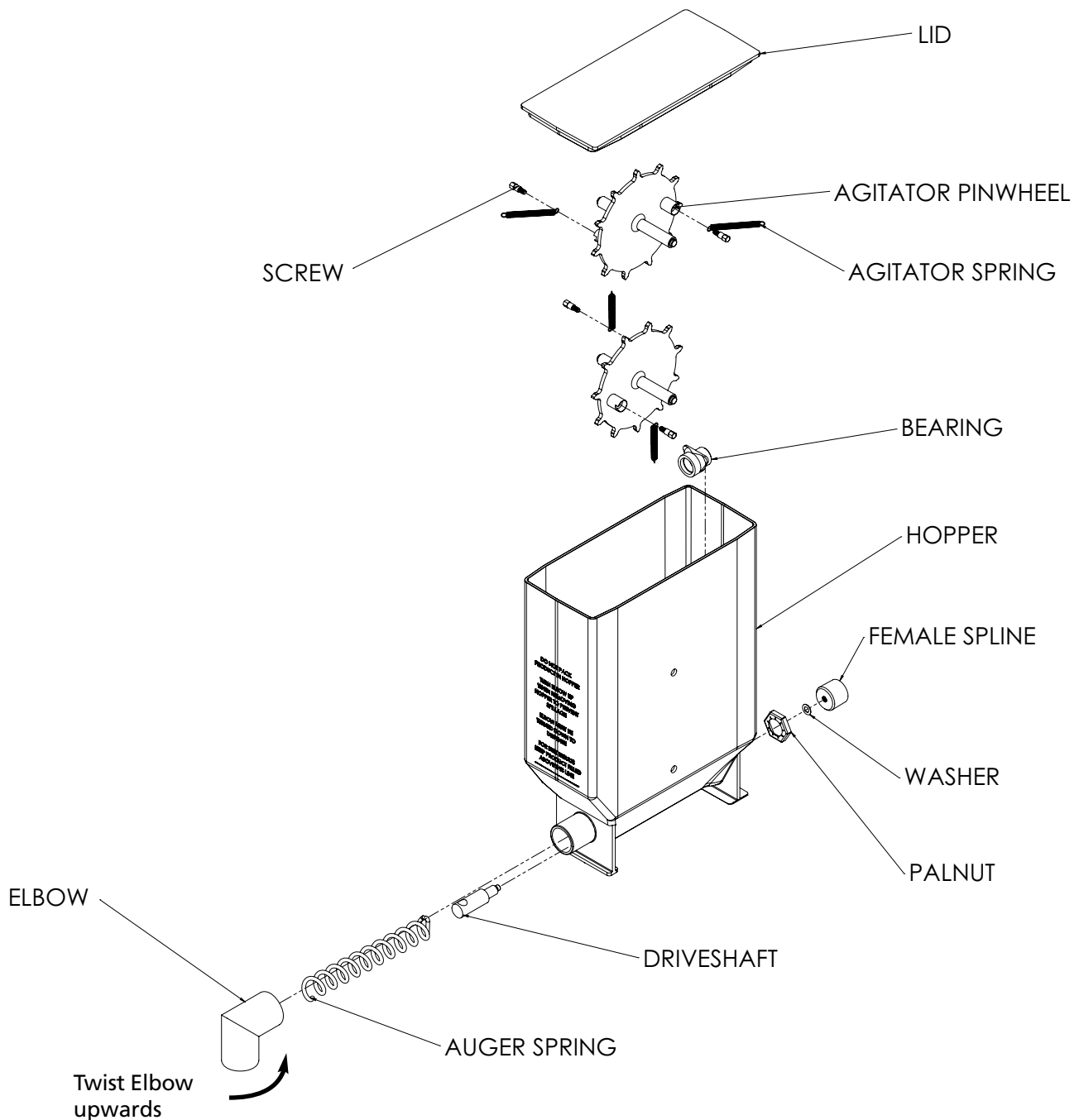
1. With door open, twist Bezel counterclockwise to second mark (lock/unlock symbol).
2. Pull Mixing Bowl straight away from Bezel.
3. Pull apart Whipper Bowl Lid, Drain Elbow, Flow Nozzle Diffuser, and Dispense Nozzle.
4. Verify O-ring is still correctly placed inside Water Inlet Adapter.



Cleaning (continued)

Hopper Disassembly - Radiance 5 units:

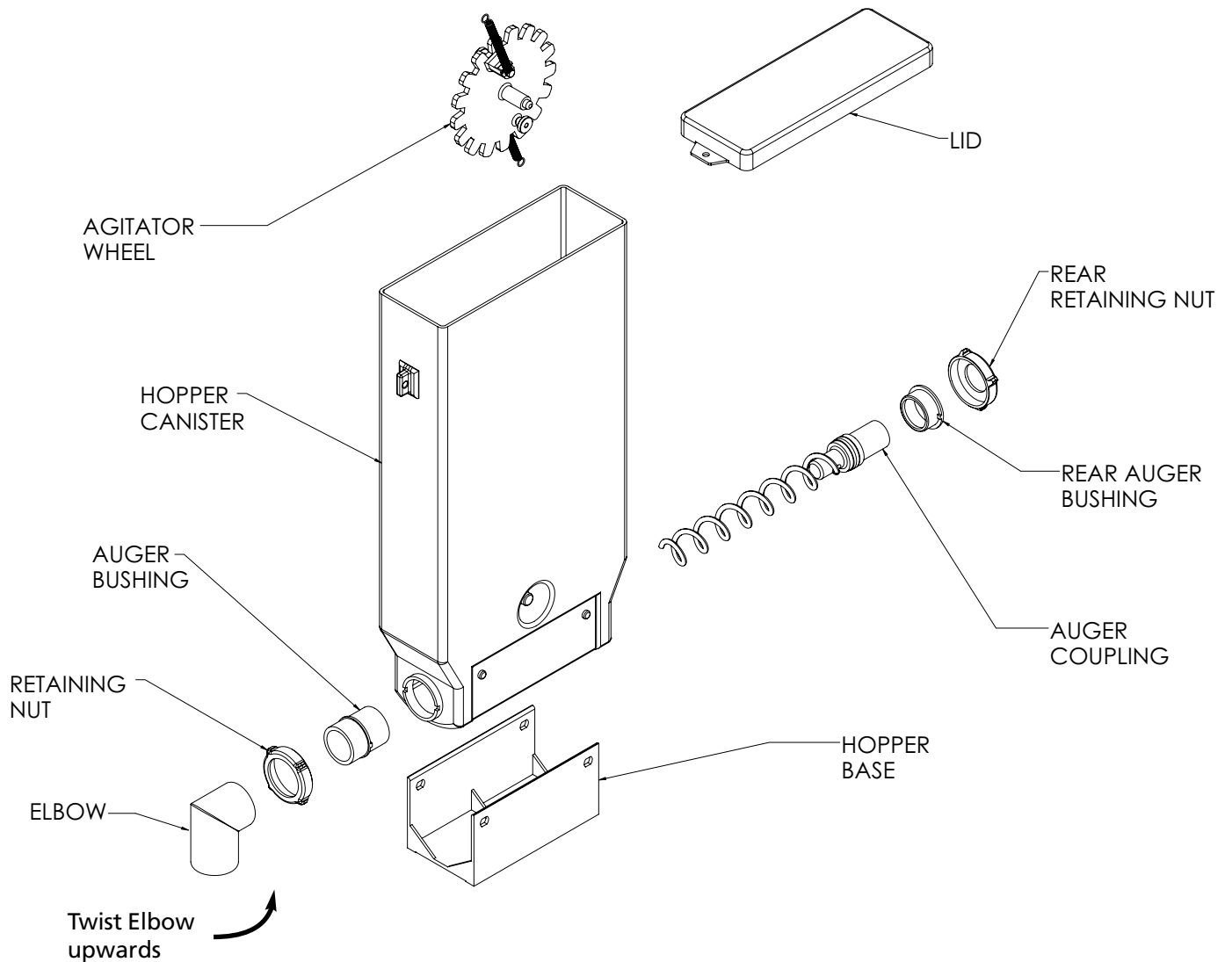
1. With door open, turn Elbow up and lift Hopper out of unit. Empty contents of Hopper.
2. Remove lid and pull out Pinwheels while slightly flexing sides apart.
3. Remove black Spline from back of hopper by turning clockwise (reverse thread) while holding Auger Spring from inside Hopper. Remove Washer.
4. Remove Palnut from back of Hopper by turning counterclockwise.
5. From top of Hopper, remove Auger Spring, Driveshaft, and Bearing.
6. From front of Hopper, remove Dispense Elbow.



Cleaning (continued)

Hopper Disassembly - Radiance 10 units:

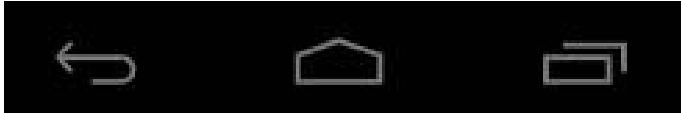
1. With door open, turn Elbow up and lift Hopper out of unit.
2. Remove Lid and pull out Agitator Wheel while slightly flexing sides apart.
3. Unscrew Rear Retaining Nut from back of hopper. Remove Rear Auger Bushing and Auger Coupling.
4. From front of Hopper, pull Elbow straight off, and then unscrew Retaining Nut and Auger Bushing.
5. Pull off Hopper Base.



Wi-Fi Password

To change the Wi-Fi password:

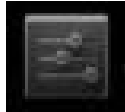
1. This unit does not have a video display. Connect a video monitor to the HDMI port on back side of front door. (See diagrams on following pages.)
2. Connect a USB mouse (either wired or wireless) to the USB port labeled "Wi-Fi Control" on the back side of the door.
3. Select the center Home icon,



then select the Apps icon,



then select the Settings icon.



4. Ensure Wi-Fi is "ON". If not, set switch to "ON".



5. Select your Wi-Fi network from the list on the right side of the screen.
6. Type the network password and select "CONNECT". Contact your network administrator if you don't know your network name or password.

Grindmaster Connect™ Usage Data

Some Radiance models feature capability to remotely connect to the unit to obtain machine status information such as product levels, total ounces and number of drinks dispensed, current water temperature, and dispenser status.

To log in, go to <https://gmcw.kbfsm.com/>.



Customer Login



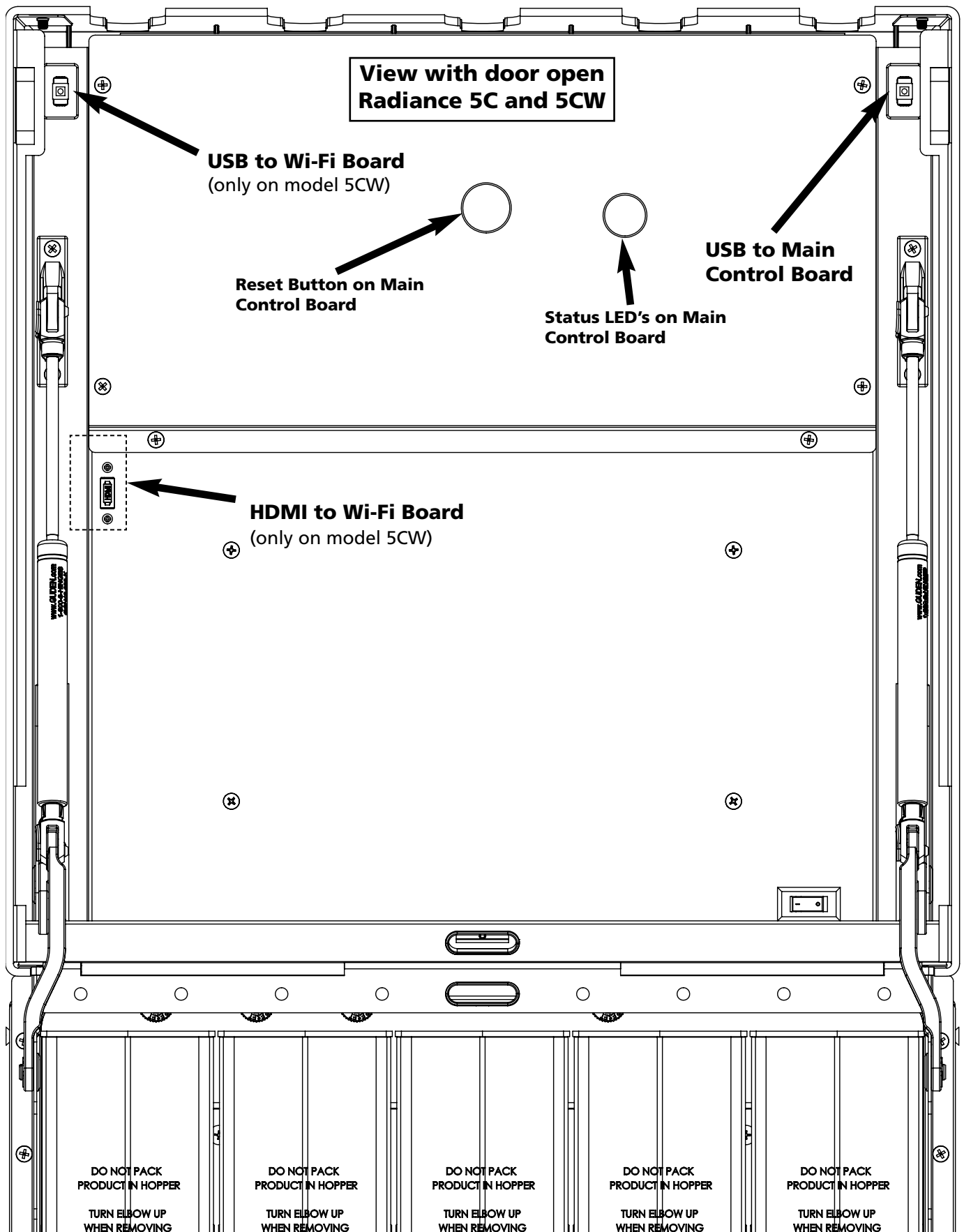
Username:

Password:

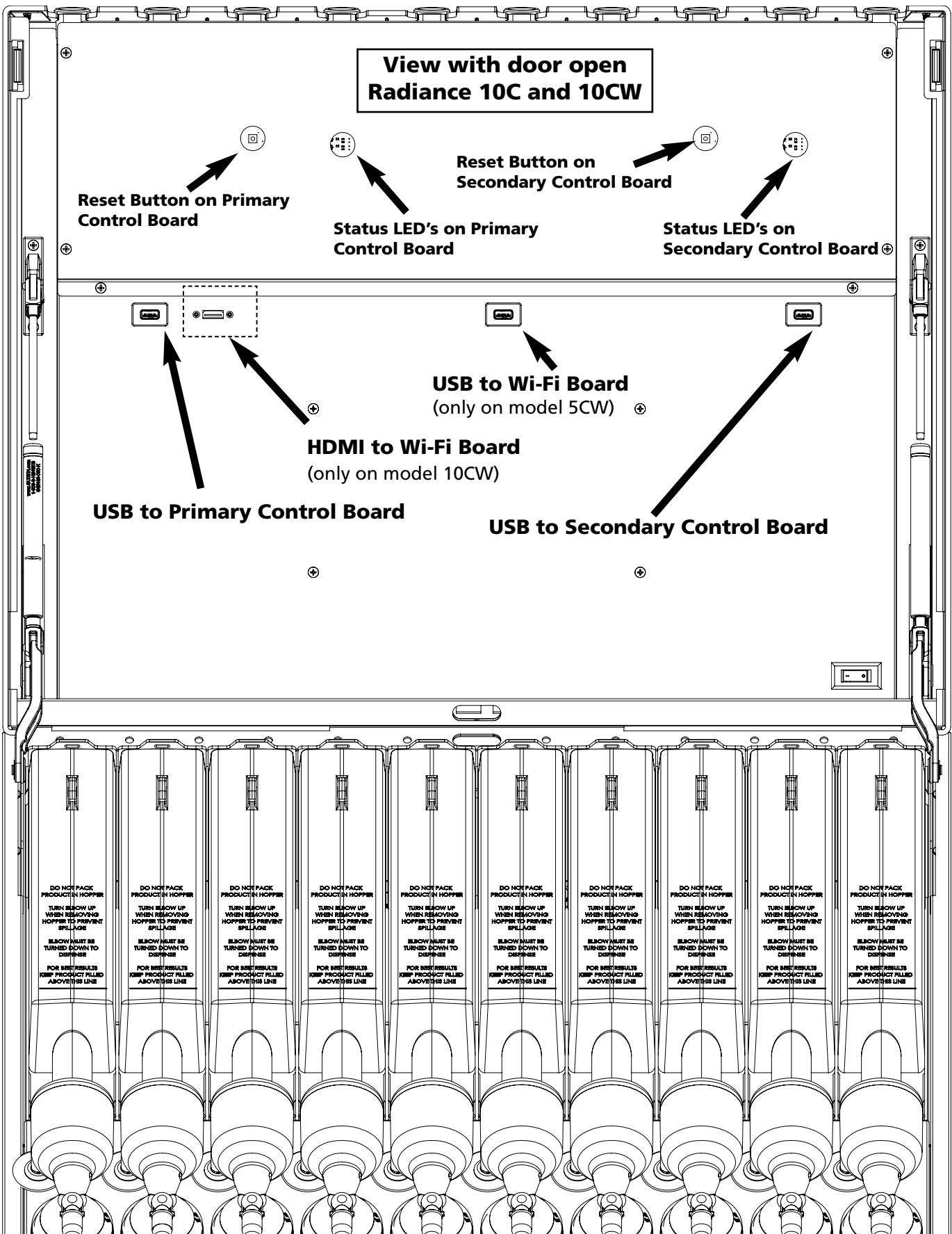
[forgot password?](#)

Contact our customer service department for your Username and Password.
See separate Grindmaster Connect™ Manual.

USB and HDMI Ports



USB and HDMI Ports (continued)



Maintenance

⚠ WARNING Certain internal parts are intentionally not grounded and may present a risk of electric shock only during servicing. Service Personnel – Do not contact the following parts while the appliance is energized: power supply.

To Prepare for Transport

NOTICE: Never transport unit with powder in hopper - this will cause irreparable damage.

Important: Always completely empty water tank and **POWDER HOPPERS** prior to transporting unit.

Draining the Tank

⚠ CAUTION: Draining of tank should be performed by a qualified service technician. The tank contains very hot water. May cause severe burns.

Always empty the tank before transporting.

1. Prepare a heat resistant container to drain the tank water into. (Radiance 5 contains 7.25 gallons of water; Radiance 10 contains 9.8 gallons.)
2. Unplug the machine.
3. Remove the drain tray and backsplash.
4. Locate the silicone drain hose on the left side wall. Put the end of the drain hose into the container. Secure the end of the drain hose (i.e. with tape) into the container.
5. Very carefully remove the hose clamp and plug, directing hot water away from the body and into the prepared container.
6. Allow the tank to drain completely.

NOTE: It may be necessary to pinch the hose and stop the water before container is full. Carefully re-install plug, then empty container. Repeat steps 4-6 to completely drain tank.

Empty Hoppers

Important: Always completely empty water tank and **POWDER HOPPERS** prior to shipping unit.

NEVER SHIP UNIT WITH POWDER IN HOPPER - THIS WILL CAUSE IRREPARABLE DAMAGE.

Troubleshooting Guide

▲ WARNING: To reduce the risk of electrical shock, unplug the dispenser power cord before repairing or replacing any internal components of the unit. Before any attempt to replace a component, be sure to check all electrical connections for proper contact. Only a qualified service technician should perform electrical and mechanical adjustments or repairs.

Before you call for help, please read the following:

Problem	Probable Cause	Corrective Actions
No powder dispensed into mixing funnel	<ul style="list-style-type: none"> • Powder hopper dispense outlet clogged • No or low powder level in hopper • Hopper driveline not engaged with motor • Hopper elbow is not directed into the mixing funnel 	<ul style="list-style-type: none"> • Refer to Cleaning of hoppers section • Refill hopper • Remove and reinstall hopper and ensure engagement with motor • Turn down dispense elbow; align with mixing funnel
Machine will not dispense any product (water or powder)	<ul style="list-style-type: none"> • Dispense cycle watchdog timer has tripped • Faulty transformer • Faulty control board 	<ul style="list-style-type: none"> • Reset machine by flipping power switch "OFF" then "ON" once • Contact Technical Support for assistance • Contact Technical Support for assistance
Product not whipping	<ul style="list-style-type: none"> • Whipper blade broken or missing • Whipper motor not turning 	<ul style="list-style-type: none"> • Verify blade is in place. Replace if broken or missing • Replace whipper motor
Water overflows mixing funnel	<ul style="list-style-type: none"> • Water flow too fast • Whipper chamber outlet restricted • Whipper blade broken or missing 	<ul style="list-style-type: none"> • Contact Technical Support for assistance • Dump valves to be adjusted • Remove obstruction • Verify blade is in place. Replace if broken or missing
Drink is too weak or strong	<ul style="list-style-type: none"> • Change strength parameters in programming • Powder in hopper is not level (powder is mounded in rear, near powder sensor) 	<ul style="list-style-type: none"> • Refer to Technical Service Manual, Adjustment section • Remove hopper and redistribute powder evenly. Add more powder if low.
Drink is too hot or cold		<ul style="list-style-type: none"> • Refer to Technical Service Manual, Adjustment section
Water tank boils water	<ul style="list-style-type: none"> • Thermostat adjustment set too high • Faulty heater relay 	<ul style="list-style-type: none"> • Refer to Technical Service Manual, Adjustment section • Replace heater relay (see Technical Service Manual)
Water overflows from water tank	<ul style="list-style-type: none"> • Leaky inlet water valve • Faulty level probe connection • Faulty level probe due to mineral build-up • Inlet water pressure too high (greater than 120 psi) 	<ul style="list-style-type: none"> • Replace inlet water valve • Check level probe connections • Replace probe • Install pressure regulator to water inlet
Machine inadvertently dispenses from dispense heads	<ul style="list-style-type: none"> • Wet wiring connections on harness or controller 	<ul style="list-style-type: none"> • Allow connections to dry • Contact Technical Support for assistance

Machine Level Faults:

Fault #	Fault Definition	Corrective Actions
FAULT 4	Tank temperature probe is out of range (i.e. it is too hot, too "cold" or there is an open or short circuit on the pin that reads the temperature)	<ul style="list-style-type: none"> • Verify that the appropriate power supply is connected to the machine • Verify that the heating connections to the heating element are good • Cycle the main power switch to reset machine and verify operation • Call Technical Service if issue is not corrected
FAULT 5	The tank temperature is not rising as expected	<ul style="list-style-type: none"> • Verify that the appropriate power supply is connected to the machine • Verify that the heating connections to the heating element are good • Cycle the main power switch to reset machine and verify operation • Call Technical Service if issue is not corrected
FAULT 6	The tank is not being filled as expected	<ul style="list-style-type: none"> • Verify that water supply is connected and turned "on" to unit • Verify that there are no restrictions in the water supply line • Verify that the water valve is connected to power • Verify that the tank float switch is connected • Cycle the main power switch to reset machine and verify operation • Verify that all of the connectors to the Tank board are attached • Call Technical Service if issue is not corrected
	The tank has overflowed	<ul style="list-style-type: none"> • Verify that the float switch is operating properly • Verify that the float switch is connected to the system • Call Technical Service if issue is not corrected

Troubleshooting Guide (continued)

⚠ WARNING: To reduce the risk of electrical shock, unplug the dispenser power cord before repairing or replacing any internal components of the unit. Before any attempt to replace a component, be sure to check all electrical connections for proper contact. Only a qualified service technician should perform electrical and mechanical adjustments or repairs.

Before you call for help, please read the following:

Machine Level Faults:		
After 30 seconds of not receiving a message from a board, these faults are activated:		
Fault #	Fault Definition	Corrective Actions
FAULT 11	Tank communications Timeout	<ul style="list-style-type: none"> • Verify that the connectors to the tank board and Main Control board are good • Check for damaged wires due to previous service, installation, or maintenance • Cycle the main power switch to reset machine and verify operation • Call Technical Service if issue not corrected
FAULT 12	IO Communications Timeout	<ul style="list-style-type: none"> • Verify that the connectors to the IO Boards and the Main Control boards are good • Check for damaged wires due to previous service, installation, or maintenance • Cycle the main power switch to reset machine and verify operation • Call Technical Service if issue not corrected
FAULT 14	BDCS bus timeout (two or more boards are not communicating to the main board)	<ul style="list-style-type: none"> • Verify that the connectors to all of the circuit boards and the Main Control boards are good • Check for damaged wires due to previous service, installation, or maintenance • Cycle the main power switch to reset machine and verify operation • Call Technical Service if issue not corrected
FAULT 16	Communication fault between two main boards (Radiance 10 Units only)	<ul style="list-style-type: none"> • Verify that the connectors between the two Main Control boards is good • Check for damaged wires due to previous service, installation, or maintenance • Cycle the main power switch to reset machine and verify operation • Call Technical Service if issue not corrected
<p>(Communications issues can occur due to Electro-Magnetic Interference at a particular installation. A dedicated power circuit for the unit is required. However, the equipment that is installed near the machine can also be affecting the communications.)</p>		
Dispense Head Level Faults:		
FAULT 15	Key Pressed Fault (If the dispense button is held for longer than 45 seconds, this fault will appear, and the dispense will stop. This is a head specific fault.)	<ul style="list-style-type: none"> • Check for damaged wires due to previous service, installation or maintenance • Cycle the main power switch to reset machine and verify operation • Call Technical Service if issue not corrected

If you still need help, call Grindmaster-Cecilware Technical Service Department, (502) 425-4776 or (800) 695-4500 (USA & Canada only) (Monday through Friday 8 AM - 6 PM EST). Please have the model and serial number ready so that accurate information can be given.

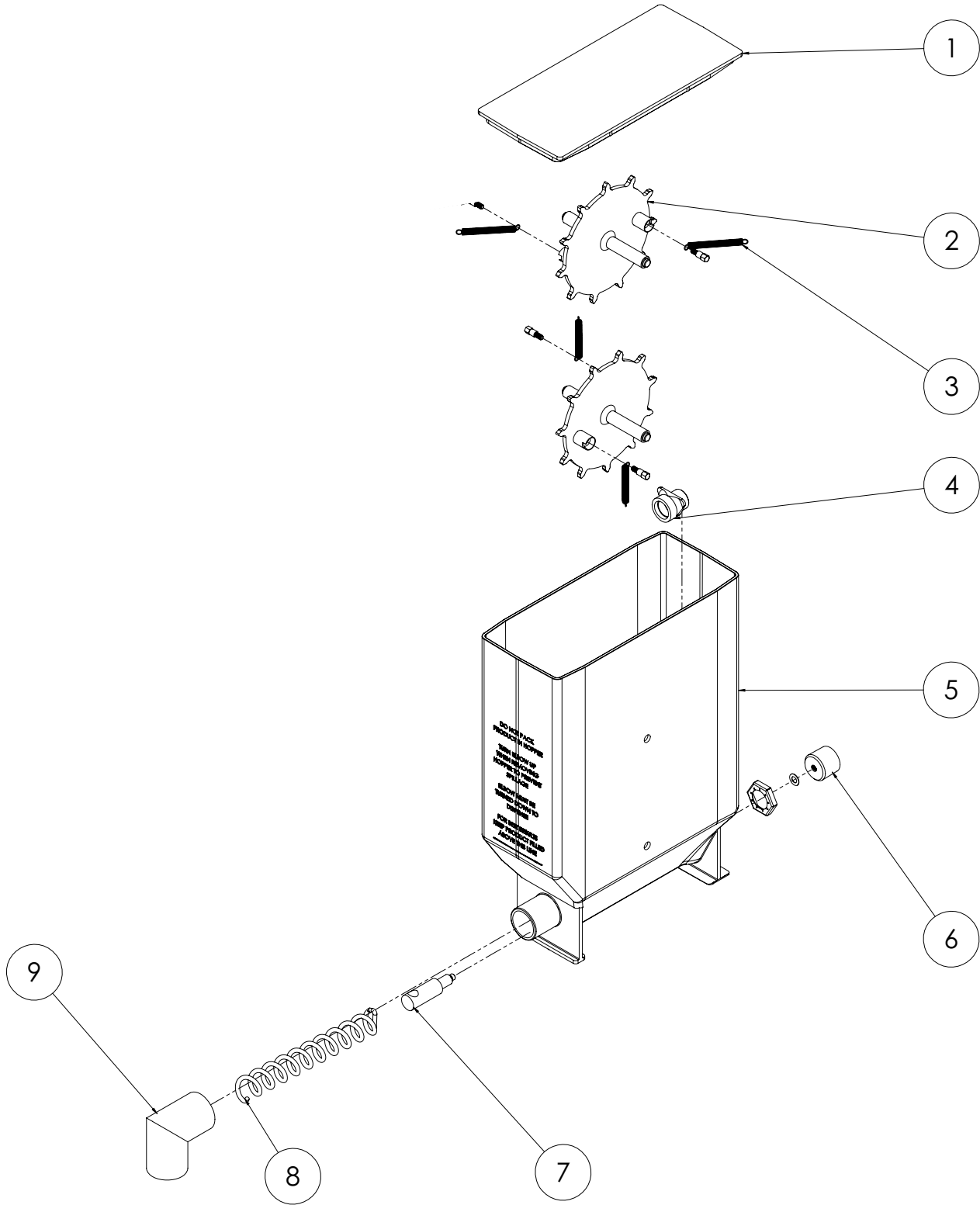
Prior authorization must be obtained from Grindmaster-Cecilware for all warranty claims.

Grindmaster-Cecilware provides the industry's BEST warranty. Visit our website at gmcw.com for warranty terms and conditions.

Fault codes continue next page.

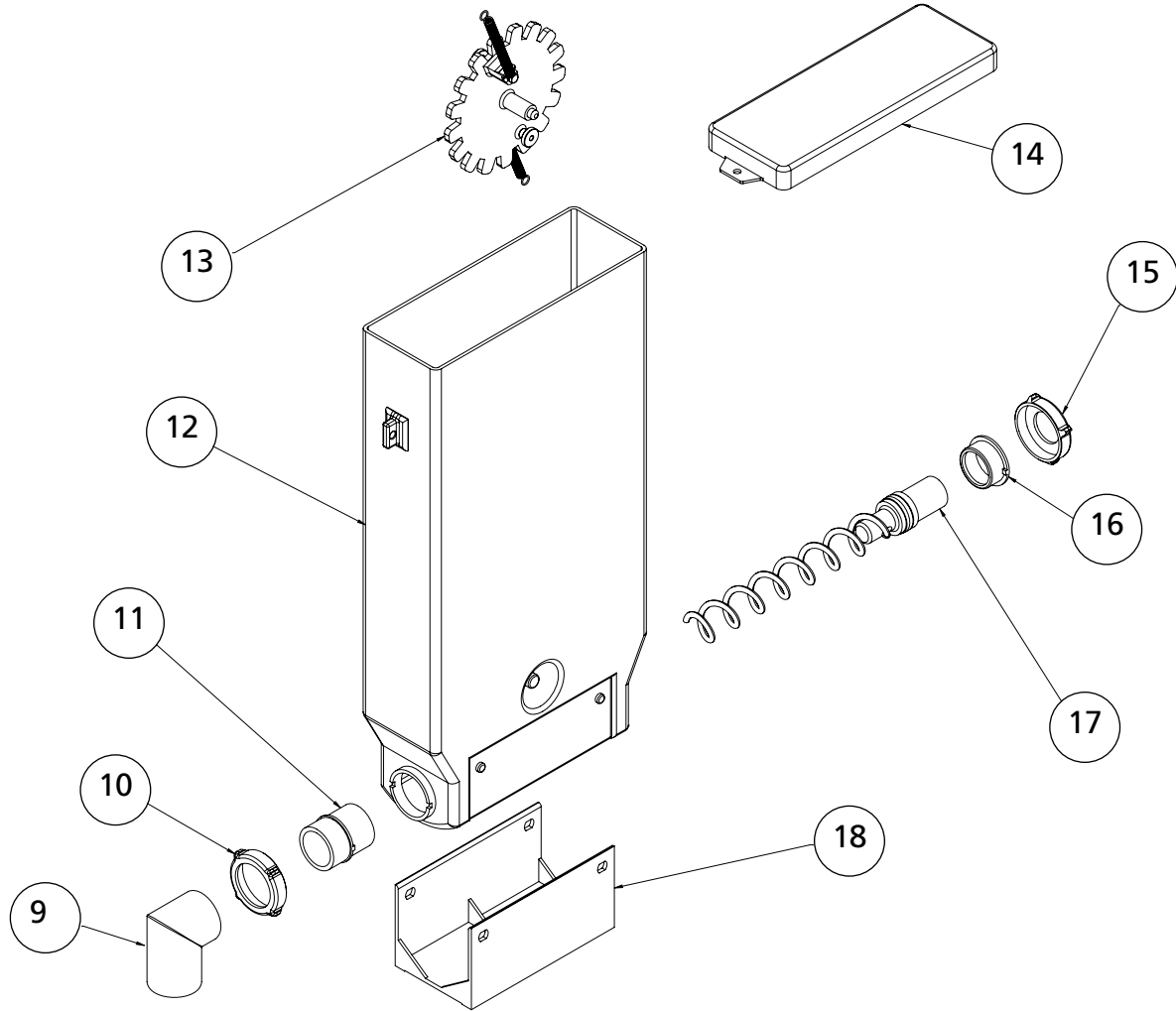
Parts Diagram and List

Hopper Assembly - Radiance 5



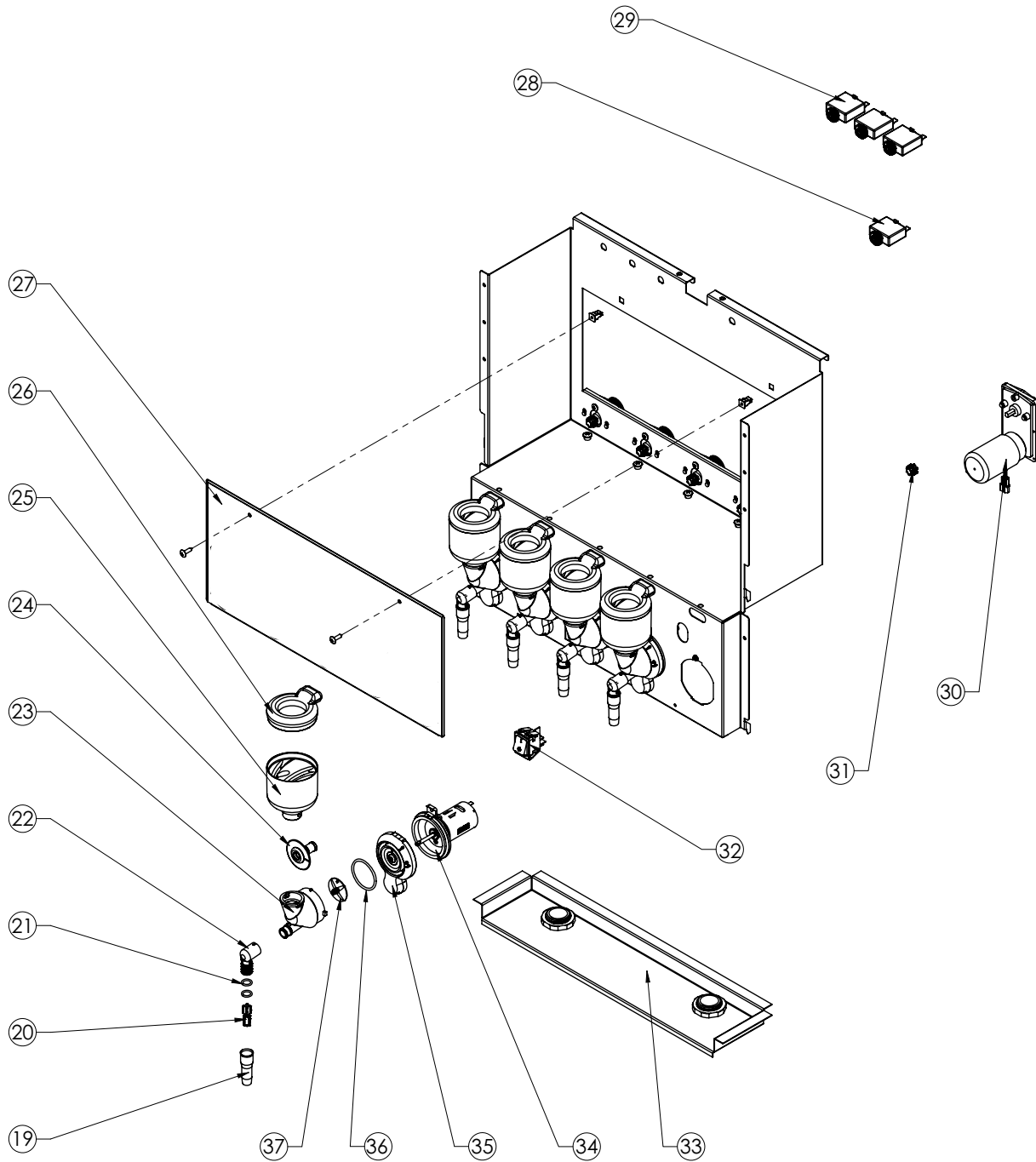
Parts Diagram and List (continued)

Hopper Assembly - Radiance 10



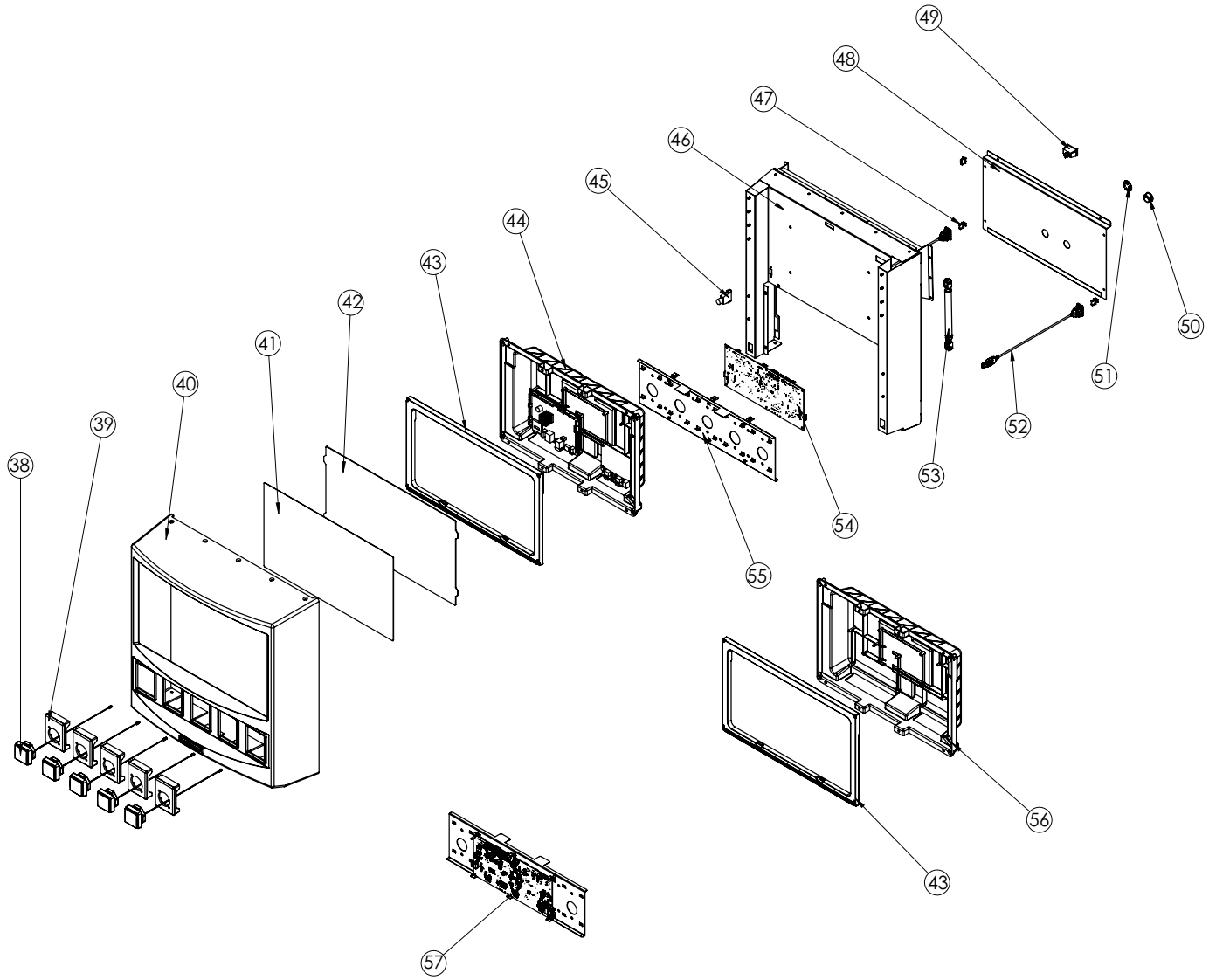
Parts Diagram and List (continued)

Interior Assembly



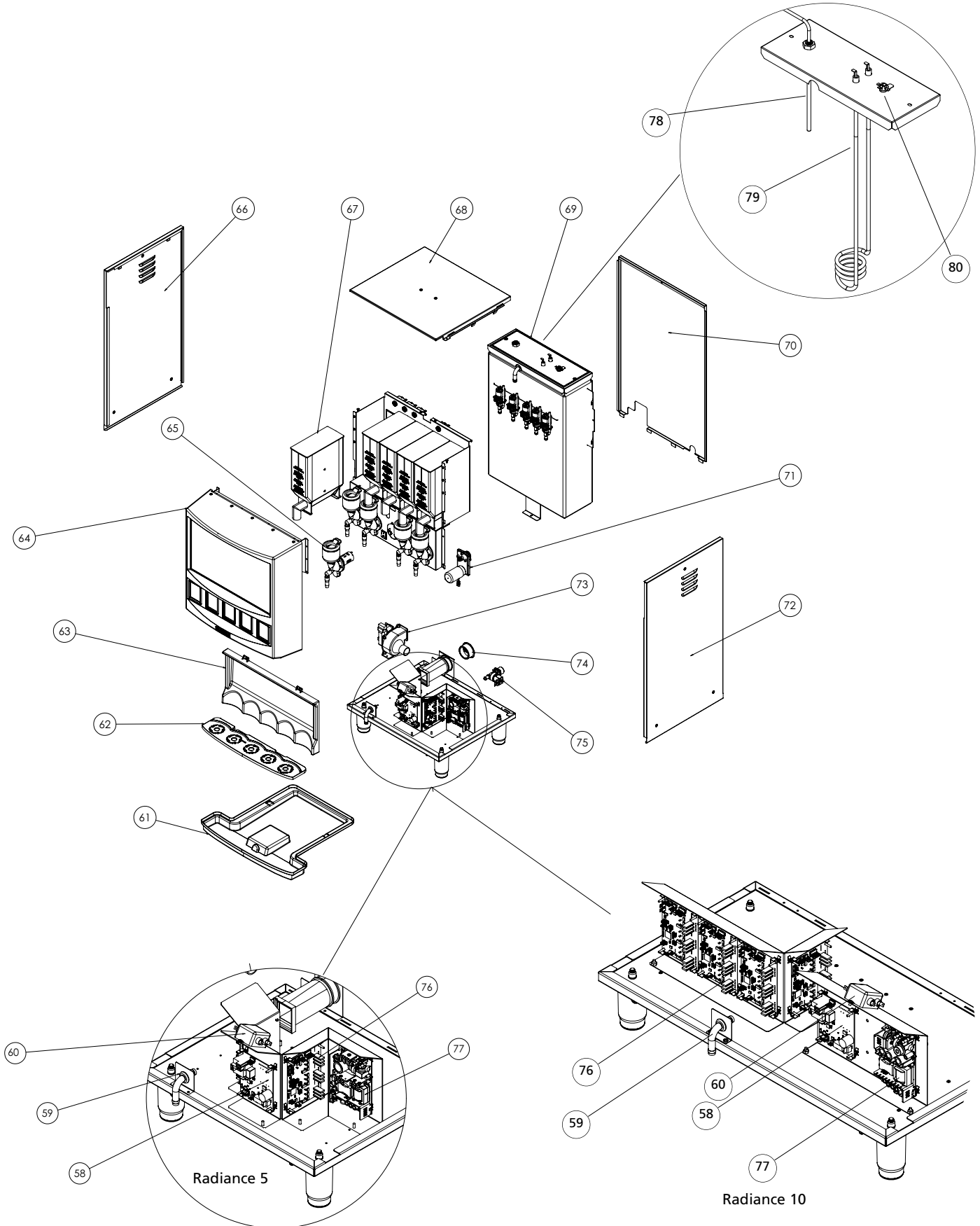
Parts Diagram and List (continued)

Door Assembly



Parts Diagram and List (continued)

Unit Assembly



Parts Diagram and List (continued)

Item #	Part Number	Description	Quantity	
			RAD5	RAD10
1	61315	LID (Model 5)	5	
2	61316	AGITATOR, PINWHEEL (Model 5)	10	
3	61313	AGITATOR SPRING (Model 5)	20	
4	61246	BEARING (Model 5)	5	
5	61489	HOPPER (Model 5)	5	
6	210-00429	SPLINE (Model 5)	5	
7	61230	DRIVESHAFT (Model 5)	5	
8	61224	AUGER SPRING (Model 5)	5	
9	210-00438	ELBOW (Model 5 & 10)	5	10
10	CD278	RETAINING NUT (Model 10)		10
11	CD277	AUGER BUSHING (Model 10)		10
12	210-00543	10 # Hopper Canister (Model 10)		10
13	CD182	AGITATOR WHEEL ASSY (Model 10)		10
14	210-00544	LID (Model 10)		10
15	CD447	REAR RETAINING NUT (Model 10)		10
16	CD446	REAR AUGER BUSHING (Model 10)		10
17	CD449	AUGER COUPLING WITH SPRING (Model 10)		10
18	CD186	HOPPER BASE (Model 10)		10
19	220-00311	NOZZLE_DISPENSE	5	10
20	210-00439	DIFFUSER_FLOW NOZZLE	5	10
21	290-00076	O-RING_WHIPPER ELBOW	10	20
22	210-00432	DRAIN ELBOW_WHIPPER	5	10
23	210-00507	MIXING CHAMBER	5	10
24	210-00434	ADAPTER_WATER INLET	5	10
25	210-00506	MIXING BOWL	5	10
26	210-00455	LID_WHIPPER BOWL	5	10
27	234-00037	PANEL ASSEMBLY_CONTROL BOARD (Models 5C and 5CW)	1	
27	234-00075	PANEL ASSEMBLY_CONTROL BOARD (Models 10C and 10CW)		1
28	83107	CIRCUIT BREAKER - 5 AMP	1	2
29	346-00035	CIRCUIT BREAKER - 4 AMP	3	6
30	260-00020	MOTOR_400 RPM NO-LOAD_24 VDC	5	10
31	210-00430	SPLINE_AUGER DRIVE_MALE	5	10
32	344-00043	SWITCH, ROCKER, DPST, 20 AMP	1	1
33	234-00036	PLENUM ASSEMBLY (Model 5)	1	
33	234-00077	PLENUM ASSEMBLY (Model 10)		1
34	260-00030	MOTOR_WHIPPER	5	10
35	210-00548	MOUNT, WHIPPER CHAMBER (INC. SEAL)	5	10
36	290-00098	O-RING, MOUNT WHIPPER, CHAMBER	5	10
37	210-00549	WHIPPER BLADE	5	10
38	344-00037*	DISPENSE PUSH BUTTON	5	10
39	210-00490*	PUSH BUTTON INSERT	5	10
40	210-00393*	DOOR COVER (MODEL 5)	1	
40	210-00413*	DOOR COVER (MODEL 10)		1
41	380-00233	NON-BACKLIT GRAPHIC (Model C)	1	1
42	210-00488	GRAPHIC COVER (Model C)	1	1
43	210-00491	INSERT, DISPLAY ENCLOSURE	1	1
44	234-00113	DISPLAY ASSY, W/ WIFI (Models 5CW and 10CW)	1	1
45	343-00149	HDMI PORT W/ CABLE (Model 5BW, 5CW, 10BW & 10CW only)	1	1
46	234-00140	DOOR SUPPORT ASSEMBLY_W/ HINGE (Model 5B, 5BW, 5C, 5CW)	1	
46	234-00141	DOOR SUPPORT ASSEMBLY_W/ HINGE (Model 10B, 10BW, 10C, 10CW)		1
47	210-00556	COVER, HDMI PORT (Model 5BW, 5CW, 10BW & 10CW only)	1	1
48	200-00590	ACCESS PANEL (Model 5)	1	
48	200-00689	ACCESS PANEL (Model 10)		1

*Add suffix B for Black or G for Gray

Parts Diagram and List (continued)

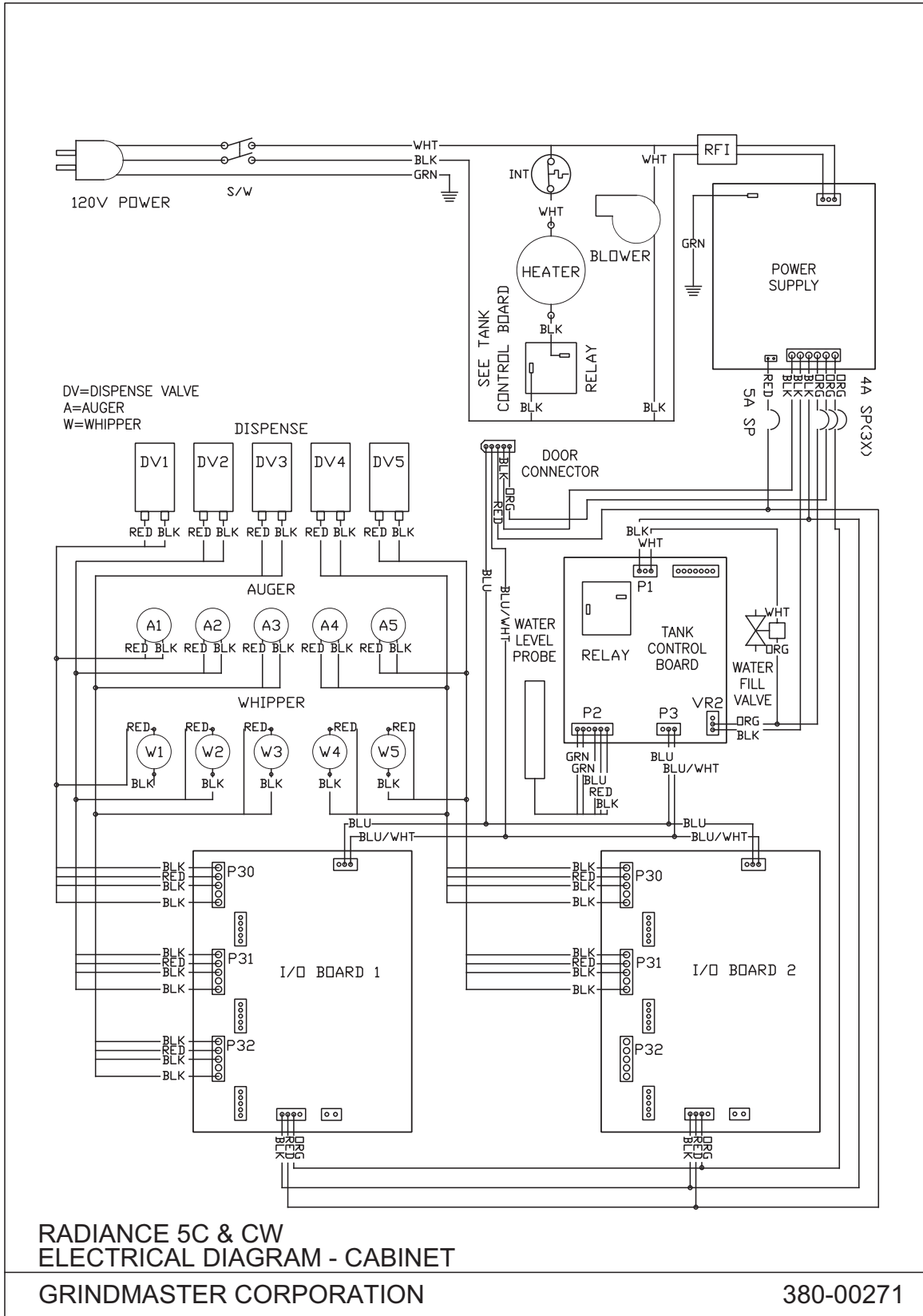
Item #	Part Number	Description	Quantity	
			RAD5	RAD10
49	3373	RINSE SWITCH (Model C)	1	1
50	210-00563	PLUG, PANEL, CLEAR	1	2
51	210-00575	PLUG, PANEL, 0.750	1	2
52	343-00139	USB PORT w/ CABLE (ADD 1 COVER FOR 5CW AND 10CW)	1	2
53	234-00039	SPRING_GAS_W/ ENDS (Model 5)	2	
53	234-00073	SPRING_GAS_W/ ENDS (Model 10)		2
54	349-00022	CONTROL BOARD_MAIN	1	2
55	200-00591	PANEL_MOUNTING_TOUCHPAD (Model 5)	1	
55	200-00705	PANEL_MOUNTING_TOUCHPAD (Model 10)		1
56	234-00070	DISPLAY ASSY, W/O WIFI (Models 5C and 10C)	1	1
57	234-00037	CONTROL BOARD ASSEMBLY_MAIN_W/ (Model 5)	1	
57	234-00075	CONTROL BOARD ASSEMBLY_MAIN_W/ (Model 10)		1
58	349-00028	CONTROL BOARD_TANK	1	1
59	290-00070	GROMMET_DRAIN	1	1
60	L728A	FILTER, EMI	1	1
61	210-00361*	PAN_DRAIN (Model 5)	1	
61	210-00411*	PAN_DRAIN (Model 10)		1
62	210-00362*	GRID_DRAIN PAN (Model 5)	1	
62	210-00412*	GRID_DRAIN PAN (Model 10)		1
63	210-00454*	PANEL_BACKSPLASH (Model 5)	1	
63	210-00481*	PANEL_BACKSPLASH (Model 10)		1
64	234-00069*	DOOR ASSEMBLY (Model 5C)	1	
64	234-00114*	DOOR ASSEMBLY (Model 5CW)	1	
64	234-00116*	DOOR ASSEMBLY (Model 10C)		1
64	234-00111*	DOOR ASSEMBLY (Model 10CW)		1
65	234-00055	WHIPPER ASSEMBLY	5	10
66	200-00442	PANEL_CABINET_LEFT (Model 5)	1	
66	200-00679	PANEL_CABINET_LEFT (Model 10)		1
67	234-00062	HOPPER ASSEMBLY (Model 5)	5	
67	234-00117	HOPPER ASSEMBLY (Model 10)		10
68	200-00774	PANEL_WELDMENT_TOP (Model 5)	1	
68	234-00082	PANEL_WELDMENT_TOP (Model 10)		1
69	234-00143	TANK ASSEMBLY (Model 5C)	1	
69	234-00144	TANK ASSEMBLY (Model 10C)		1
70	200-00443	PANEL_CABINET_REAR (Model 5)	1	
70	200-00677	PANEL_CABINET_BACK (Model 10)		1
71	234-00094	AUGER ASSEMBLY (Model C and CW)	5	10
72	200-00441	PANEL_CABINET_RIGHT (Model 5)	1	
72	200-00678	PANEL_CABINET_RIGHT (Model 10)		1
73	CD56AL	FAN 120V BLOWER	1	2
74	220-00316	VENT_LOUVERED_EXHAUST	1	1
75	280-00056	VALVE_WATER INLET	1	1
76	346-00028	POWER SUPPLY_24V/265W	1	1
77	349-00020	I/O BOARD	2	4
78	321-00019	PROBE, MULTI-SENSOR	1	1
79	320-00058	HEATING ELEMENT, 1600W/120V	1	1
80	L573AL	HI LIMIT SWITCH	1	1
*Add suffix B for Black or G for Gray				
NOT SHOWN				
	B256AL	COVER, USB PORT (ADD 1 COVER FOR 5CW AND 10CW)	1	2
	343-00106	POWER CORD (MAIN POWER HARNESS)	1	
	343-00118	POWER CORD (MAIN POWER HARNESS)		1

Parts Diagram and List (continued)

Item #	Part Number	Description	Quantity	
			RAD5	RAD10
ACCESSORY - NOT SHOWN				
	250-00080	KG 500 BOX - for network connections - 1 per site		
REPAIR KITS				
	250-00082	KIT_SMALL PARTS_HOPPER (Model 5)	5	
	250-00083	KIT_SMALL PARTS_HOPPER (Model 10)		10
	250-00084	KIT_WHIPPER MAINTENANCE PARTS (Includes Flow Diffuser, Drain Elbow O-rings, Bezel O-ring, Bezel with whipper motor seal, and Water Inlet Adapter) ,	5	10
	250-00093	KIT_DUMP VALVE & SEAL_RADIANCE	5	10

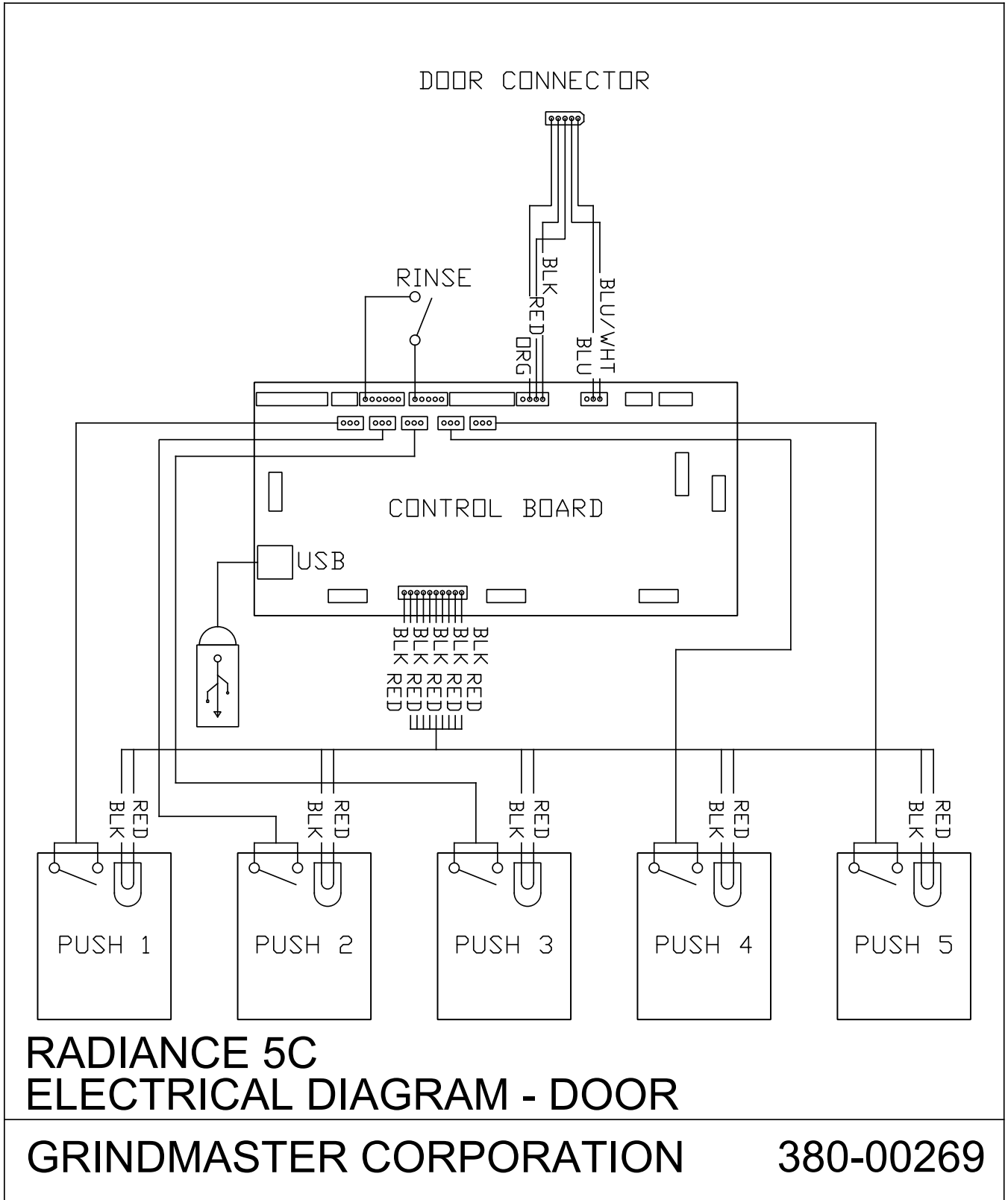
Wiring Diagrams

Radiance 5C, 5CW Cabinet



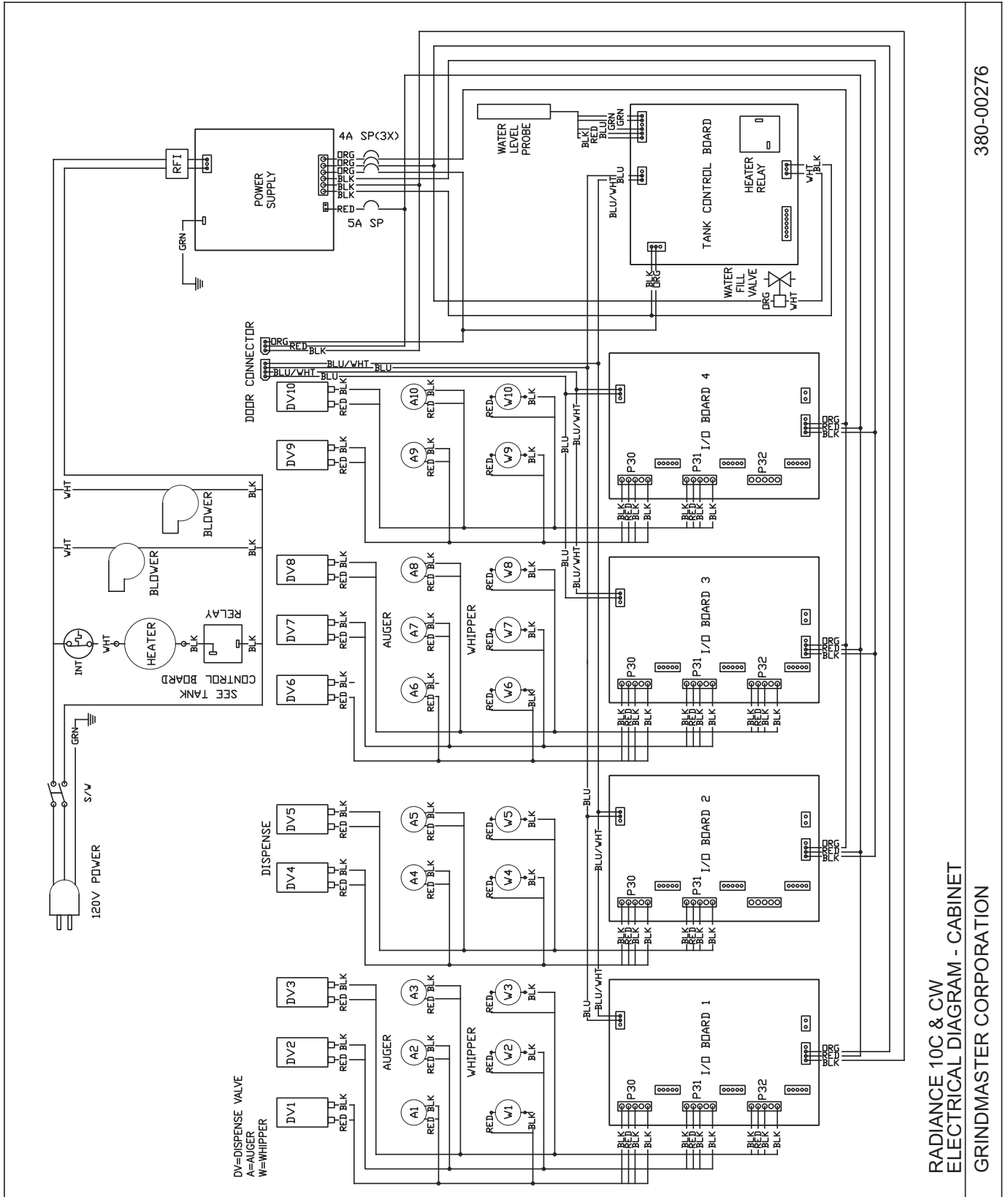
Wiring Diagrams (continued)

Radiance 5C Door



Wiring Diagrams (continued)

Radiance 10C, CW Cabinet

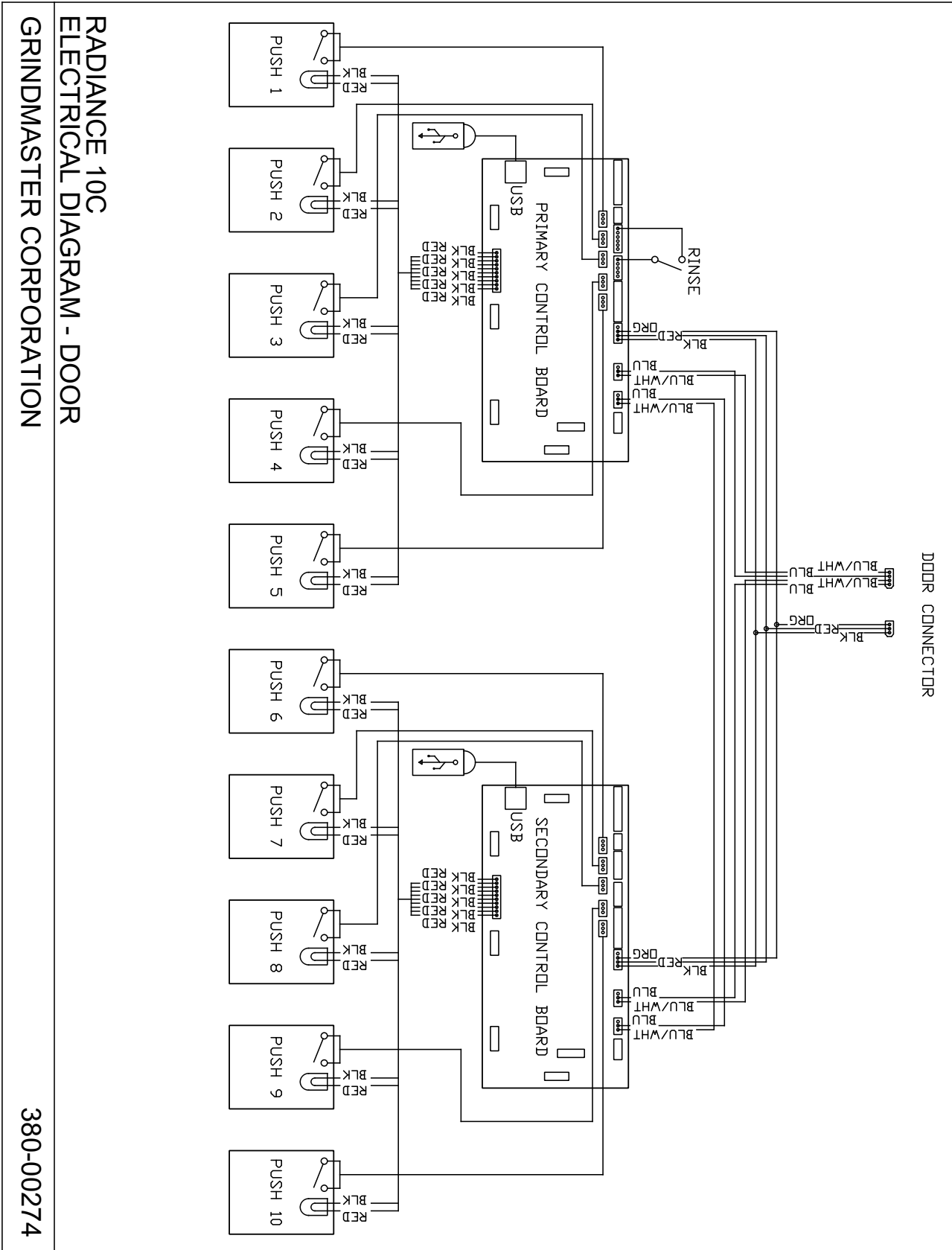


RADIANCE 10C & CW
 ELECTRICAL DIAGRAM - CABINET
 GRINDMASTER CORPORATION

380-00276

Wiring Diagrams (continued)

Radiance 10C Door

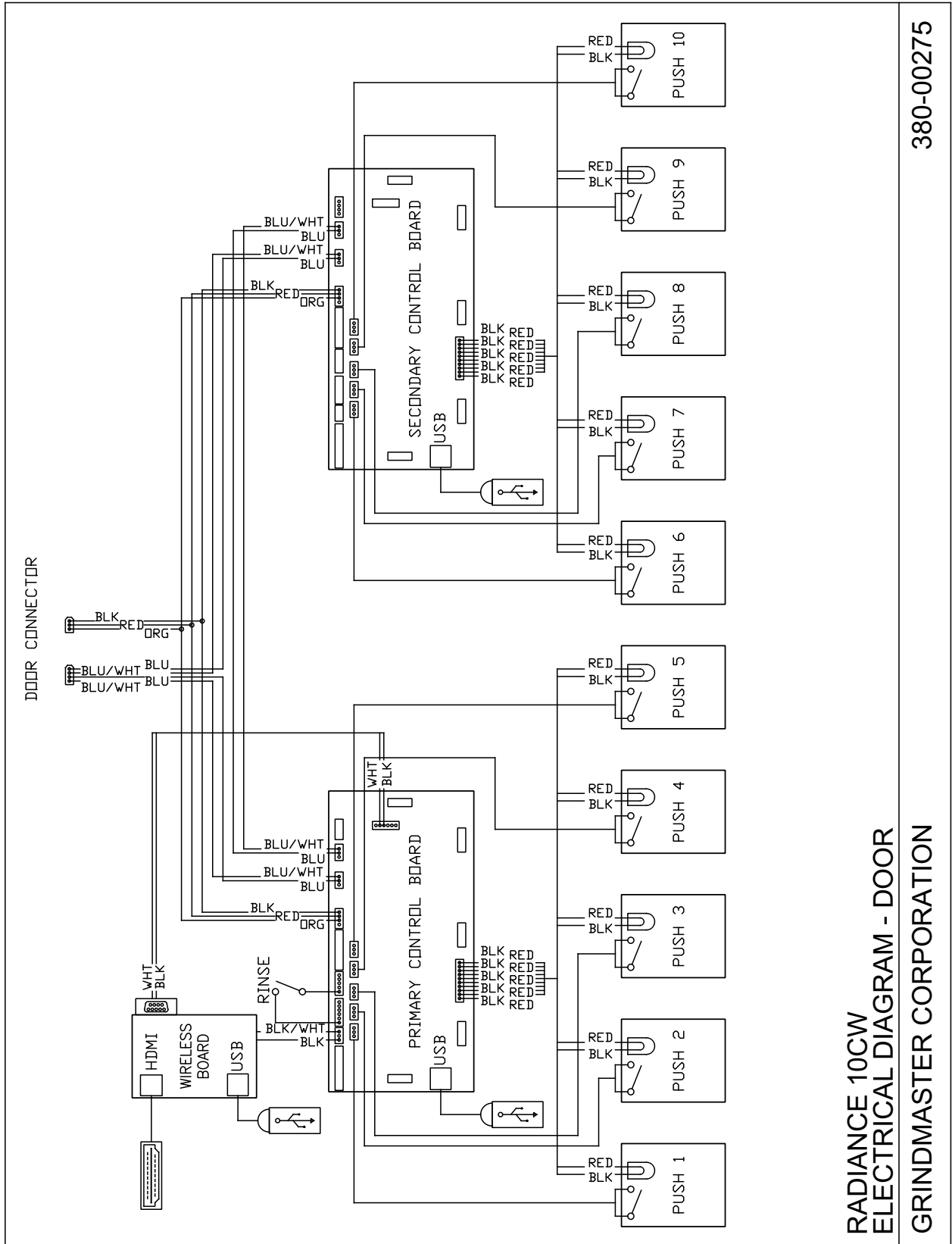


RADIANCE 10C
ELECTRICAL DIAGRAM - DOOR
GRINDMASTER CORPORATION

380-00274

Wiring Diagrams (continued)

Radiance 10CW Door



RADIANCE 10CW
ELECTRICAL DIAGRAM - DOOR
GRINDMASTER CORPORATION

380-00275

Decals

<p>! WARNING</p> <p>Contents can cause severe burns if handled improperly.</p> <p>PN# 62981</p>		<p>! ADVERTENCIA</p> <p>Contenidos pueden causar quemaduras severas si el uso es inadecuado.</p> <p>! AVERTISSEMENT</p> <p>Contenu peut provoquer des brûlures graves si il est manipulé incorrectement.</p>
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! WARNING

Disconnect from power supply before servicing.

To reduce the risk of electric shock, do not remove or open cover. No user-serviceable parts inside. Refer servicing to qualified personnel. Certain internal parts are intentionally not grounded and may present a risk of electric shock only during servicing.

Service Personnel: Do not contact the following parts while the appliance is energized: power supply.

380-00243

NOTICE

This unit requires team lifting and installation. Always provide additional tip over prevention during installation, until the unit is properly located and filled with water.

The unit must be equipped with legs provided by the manufacturer. Do not install this unit without legs.

The unit must be cleaned and sanitized before operating.

380-00251

THIS EQUIPMENT IS TO BE INSTALLED TO COMPLY WITH THE APPLICABLE FEDERAL, STATE, OR LOCAL PLUMBING CODES HAVING JURISDICTION.

IN ADDITION:

1. A QUICK DISCONNECT WATER CONNECTION OR ENOUGH EXTRA COILED TUBING (AT LEAST 2X THE DEPTH OF THE UNIT) SO THAT THE MACHINE CAN BE MOVED FOR CLEANING UNDERNEATH.
2. AN APPROVED BACK FLOW PREVENTION DEVICE, SUCH AS A DOUBLE CHECK VALVE TO BE INSTALLED BETWEEN THE MACHINE AND THE WATER SUPPLY.

NB17A

NOTICE

DO NOT LIFT

HERE

380-00286

PRESS and HOLD UNTIL CUP IS $\frac{2}{3}$ FULL, THEN RELEASE

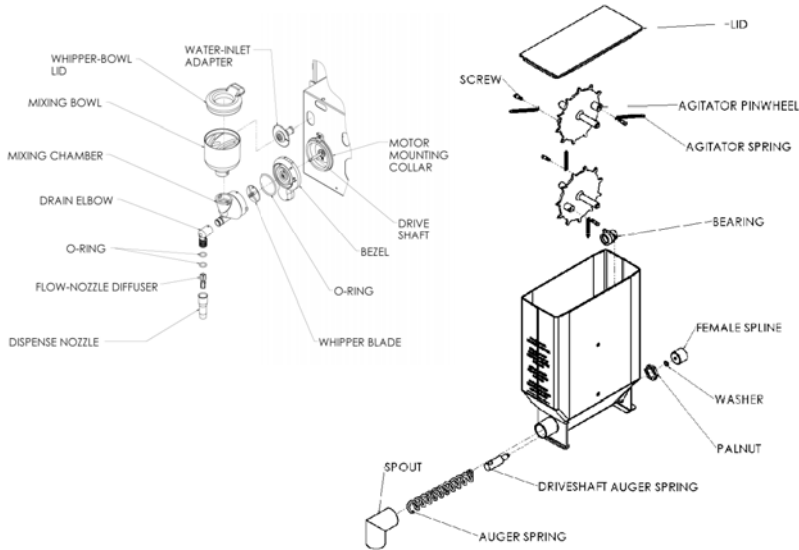
380-00250 or 380-00289

Decals (continued)

Daily maintenance

1. Remove whipper assemblies, disassemble, wash, rinse, and sanitize.
2. Remove hopper assemblies, disassemble, wash, rinse, sanitize, and refill.
3. Empty drip tray as needed and wash daily in a solution of dish detergent.

Whipper Disassembly: With door open, twist bezel counterclockwise. Pull mixing bowl straight away from bezel. Pull apart whipper bowl lid, drain elbow, flow nozzle diffuser, and dispense nozzle. Verify O-ring is still correctly placed inside water inlet adapter.



Hopper Disassembly:

With door open, turn elbow up and lift hopper out of unit. Remove lid, empty powder, remove pinwheels while slightly flexing hopper. Remove black spline from back of hopper by turning clockwise (reverse thread). Remove washer. Remove nut from back of hopper by turning counterclockwise. From front, remove spout, auger spring, driveshaft, and bearing. Remove hopper base (RAD 10 only)

Whipper Reassembly:

After parts are dry, replace Whipper Assembly except without the Lid, insert Hopper Assembly and turn down elbow. Replace Whipper Bowl Lid. Run rinse cycle to remove any loose powder.

NOTICE:

All sanitizing agents in the food zone must comply with 21 CFR 178.1010. Sanitize all food dispensing units periodically. All parts to be sanitized must be cleaned first. Cleaning and sanitizing frequency must follow state and local health department regulations.

Sanitizing:

1. Prepare a sanitizing solution in accordance with local health department. You may also refer to the US Food and Drug Administration regulation 21 CFR 178.1010 "Sanitizing Solutions".
2. Follow the instructions provided with the sanitizing agent.
3. Let all sanitized parts drain and dry naturally.

DO NOT WIPE DRY

380-00230-B

USB CONNECTION
PRIMARY CONTROL

380-00277

USB CONNECTION
SECONDARY CONTROL

380-00278

USB CONNECTION
Wi-Fi CONTROL

380-00279

Decals (continued)

Cleaning Instructions for screens:

Do not spray liquid directly on the screen. Do not use powdered cleaners or abrasive pads.

Turn off power before cleaning screen.

Use a dry microfiber cloth and lightly wipe the screen.

If spots remain, slightly dampen the microfiber cloth with water.

Dry screen completely with microfiber cloth before turning unit on.

Cleaning Instructions for cosmetic outer plastics:

Use a soft, wet cloth to wipe plastic panels. For difficult soils, a light amount of common liquid dish detergent on a soft, wet cloth is most recommended. Do not use powdered cleaners or abrasive pads.

NEVER use any cleaning agents with harsh chemicals including ammonia or isopropyl alcohol.

NEVER rub the plastic panels with a dry cloth, paper towel, or dry skin.

Cleaning Instructions for outside metal:

NOTICE: To protect plastic panels, turn off power and open door before using stainless steel cleaner. Avoid contact between stainless metal cleaner and plastic. Do not use powdered cleaners or abrasive pads.

Use a soft, wet cloth to wipe outer metal case. For difficult soils, use a stainless steel cleaner, following manufacturer instructions.

380-00249-A

Grindmaster-Cecilware

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