

Crathco Cold Powdered Beverage Dispensers

Service Manual

For

Models CP3, CP3A, CP33A,
CP3E, CP3AE, CP33AE

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Warning Labels



Part # 71582 – Warning label located on the lower right hand corner of the lower front panel. **“Disconnect power before servicing unit”**



Part # 61848 – Warning label located on plenum cover under hoppers on inner front tray. **“Do not pour liquids into tray. Failure to comply will damage the dispenser and void the warranty”** It is also written in French and Spanish as well.



Part # 65288 – Warning label on upper front panel. **“Important to prevent overflow, release button when cup is 2/3’s full. This will produce a full cup”**

Installation

Installation Notice

A water filter is recommended for the water supply to the dispenser, especially in areas where water contains a high level of minerals such as calcium or other solids. Over long periods of time, calcium deposits build on heat-exchanger coils and will lower the cooling capacity of the system. Calcium build-up will also occur on the strainers enclosed in the inlet of the water valves as well as in the inlet of the dispensing valve.

The cooling system is provided with copper coils, designed to last the life of the dispenser. However, some chemicals in treated or non-treated water, specifically chlorine and sulfur (sulfide) may shorten the life of the coils. The initial investment in the filtering system will pay for itself in product quality and by ensuring a longer life for the machine.

Water Inlet Connection

The National Sanitation Foundation requires the following for an NSF approved water hook-up:

1. A quick disconnect water connection or enough coiled tubing so the machine can be moved for cleaning underneath without the water being disconnected from the machine.
2. An approved backflow prevention device, such as a double check valve to be installed between the machine and water supply.
3. Water pipe connections and fixtures directly connected to potable water supply shall be sized, installed, and maintained in accordance with applicable codes.

Unpacking

To remove the machine from the box:

1. Remove staples from the top of the box.
2. Remove top padding from the top of box.
3. Using a utility knife, cut the box vertically from the top to the bottom starting at the top rear corner.
4. Cut the box in the front corners.
5. Remove the machine.

If you intend to keep the box:

1. Tilt the box with the machine 45° and remove staples from the bottom - bring the bottom box flaps up.
2. Tilt the box to the opposite side and remove remaining staples - bring the bottom box flaps up.
3. Set the box to normal position and slide the box upward.
4. Remove drip tray accessories from the bottom pad.
5. Remove the machine from the pad.

Start-up Procedure

1. Install drain tray in front of machine.
2. Flush the water line to purge any debris from the supply line.
3. Connect the 1/4" male flare adapter (provided) to the inlet valve on the back of the machine.
4. Connect the water line to the connection and turn the water supply on.
 - a. Minimum water pressure to the machine: 20 psi (1.3 bar)
 - b. Maximum water pressure to the machine: 100 psi (6.8 bar)
5. Plug the power cord into the proper electrical outlet (either 115V 60 Hz or 220V, 50 Hz).

115 Volt power requirements are as follows 115Volt, 60 Hertz 518 watts , 4.6 amperes.

Note : Take precautions to insure the electrical circuit is not overloaded. It is advised that this unit be installed on a dedicated electrical circuit.

6. Turn the power switch to the "ON" position and allow the water tank to fill. The machine will make a subtle hissing sound when this occurs. Allow 1-3 minutes for fill time depending on inlet water pressure.

Installation (cont.)

7. After the water tank has filled, allow 90-150 minutes to build ice-bank depending on ambient temperature and the initial water temperature. (Green ready light will illuminate when compressor stops and the machine has reached full cooling capacity.)
8. Remove the powder hoppers, rotate the dispense elbow to the "UP" position and fill with desired powder product. **IMPORTANT:** Make sure that the auger inside inside the hopper is correctly installed prior to filling. Reinstall powder hoppers. Turn dispense elbow down toward the mixing funnel to rest at a 7 o'clock position.
9. Peel protective film off the merchandiser cover and install graphic. Install flavor decals as needed.

NOTE: If water supply is allowed to run dry, watchdog timer circuit may disable fill circuit. Ensure adequate water supply for machine, then reset machine by turning power switch "OFF" for 3 seconds and then turning the power switch back "ON".

MOVING MACHINE, TANK DRAINING INSTRUCTIONS

Turn the power switch off first.

1. If the CP3 machine needs to be moved, tank draining instructions are as follows.

Identify the right hand side panel and remove it. Locate the ice bank tank drain hose. Pull the hose out to allow it to drain into a bucket

Remove blank off plug from hose. The tank will drain all liquid out into the bucket (about 2 gallons of liquid).

The ice bank (about 1.5 quarts) will remain in the tank, to remove proceed as follows.

Place blank off plug back into drain line. Turn power switch on and allow the tank to refill with water.

Turn off the power switch off and repeat the draining procedurell and drain the tank at least 3 times to insure all ice is melted away from coils

2. If machine will be exposed to temperatures below 32 degrees F (less than 0 degrees C) all of the water from the machine must be removed to avoid water freeze-up and damage to the valves.

Follow above procedure for draining the ice bank tank and in addition.

Turn off water supply and remove water supply line from the water inlet valve.

Power up machine.

Apply pressurized air to the inlet valve and at the same time push dispensing button. Repeat this for each dispensing head. Some water will splash at the dispensing funnel and nozzle.

Air pressure should not exceed 4.1 bar (60 psi).

Cleaning

CAUTION: When cleaning the unit, do not use cleansers, liquid bleach, powders or any other substance that contains chlorine. These products promote corrosion of stainless steel and plastic parts. Use of these products voids the warranty.

Daily Cleaning (2 times per day)

1. Empty drip pan as needed and wash in a solution of dish detergent.



2. Rinse out the whipper chambers by placing the rinse switch (located on the right of the dispensing valves when the door is open) in the "ON" position. Dispense one to two cups until the water is clean. Short bursts of dispensing may also help clean the chambers more effectively. When completed, return the rinse switch to the "OFF" position.

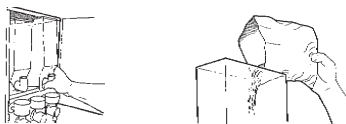


Daily Cleaning (once at the end of the day)

Cleaning the Chambers - Disassembly

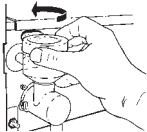
Cleaning the Chambers - Reassembly

1. Remove the hoppers and refill with product.

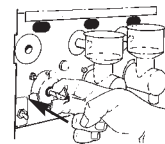


1. Replace the o-ring onto the whipper shaft.

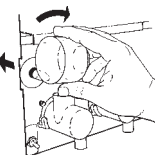
2. Open the door and remove the mixing funnel shroud by pulling forward while turning 1/4 turn to the right. Lift off and remove.



2. Replace the whipper blade by aligning the flat side inside the blade with the flat side of the motor shaft. Push blade firmly onto shaft up to the end of the flat.

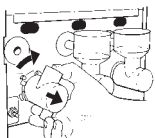


3. Remove the mixing funnel by lifting the neck of the funnel out of the whipper chamber, then tilt clockwise. With one hand on the water inlet fitting on the back panel, pull the funnel out of the white ring.

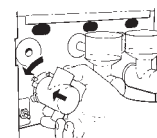


3. Press dispense nozzle onto whipper chamber.

4. Remove the whipper chamber by rotating it 1/8 of a turn clockwise, then pull to remove.

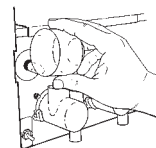


4. Put whipper chamber over whipper blade and whipper base and turn counterclockwise until it locks into place.

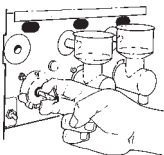


5. Remove the dispense nozzle from the whipper chamber by pulling it apart.

5. Replace the mixing funnel by positioning the large opening up and tilting it slightly counterclockwise. Lubricate the o-ring on the water inlet with a film of food grade approved lubricant. Insert the water inlet into the water inlet fitting on the back panel then rotate the funnel to the right until the neck of the funnel seats inside the whipper chamber opening.

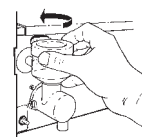


6. Remove the whipper blade by grasping the whipper blade with two fingers and firmly pulling to remove.



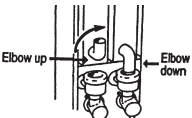

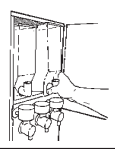
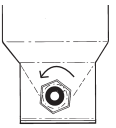
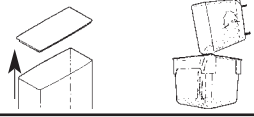
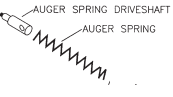
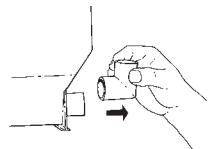

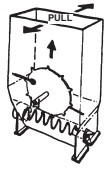
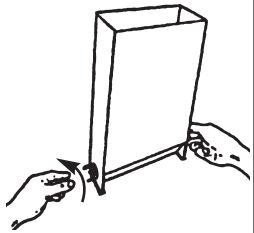
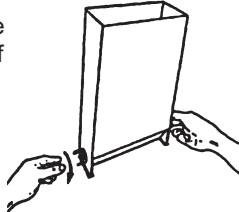
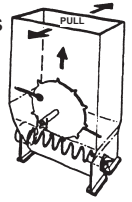


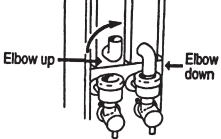
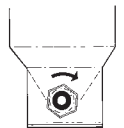

7. Remove the o-ring from the whipper shaft near the whipper base and wipe the motor shaft with a clean, damp towel. Wash o-ring in running water.

6. Replace the shroud by placing it on the mixing funnel with the opening to the right. Turn the shroud to the left until the opening in the shroud rests inside the opening in the back panel. If shroud doesn't rest inside the opening on the front panel, push in or lift up on the funnel.



8. PARTS IN CONTACT WITH FOOD MUST BE WASHED, RINSED, SANITIZED, AND AIR DRIED.

Weekly Cleaning (cont.)

Cleaning Hoppers - Disassembly	Cleaning Hoppers - Reassembly
<p>⚠ CAUTION: Do not wash hopper without first disassembling.</p>	<p>IMPORTANT: All components must be completely dry prior to reassembly.</p>
<p>1. Open door and rotate elbow on hopper to the UP position to prevent spillage.</p> 	<p>1. Place driveshaft bearing inside hopper with threads going through the hole in the rear of the hopper.</p> 
<p>2. Remove the hopper from the cabinet.</p> 	<p>2. Secure the bearing by attaching the palnut to the bearing at the outside rear hopper opening. Tighten using fingers only. Use one hand inside the hopper to push the bearing outward while turning the palnut counterclockwise.</p> 
<p>3. Remove the hopper cover and empty hopper contents.</p> 	<p>3. Install the auger spring driveshaft and the auger spring by inserting the flat end of the spring into the hole in the auger spring driveshaft.</p> 
<p>4. Pull off the elbow.</p> 	<p>4. Insert assembly into lower front opening, making sure the threaded end of the auger spring driveshaft completely inserts into the driveshaft bearing in the rear of the hopper.</p> 
<p>5. Remove the auger pinwheel by pulling it forward while stretching out the sides of the hopper.</p> 	<p>5. Place the washer over the driveshaft bearing threads followed by securing the driveline onto the driveshaft bearing by turning counterclockwise. Secure the auger spring with one hand while attaching the driveline with the other.</p> 
<p>6. Remove the driveline and washer at the rear of the hopper by holding the auger spring with one hand at the front of the hopper while turning the driveline clockwise with the other hand.</p> 	<p>6. Replace the auger pinwheel making sure the pins are securely positioned inside the notches under the hopper.</p> 
<p>7. Remove the auger spring and auger spring driveshaft by pulling out through the lower front opening of the hopper.</p>  	<p>7. Turn the elbow DOWN toward the mixing funnel. Stop when the elbow is at the 7 o'clock position.</p> 
<p>8. Remove the palnut at the rear of the hopper by turning it clockwise then remove the driveshaft bearing from the inside of the hopper.</p>  	
<p>9. All parts in contact with food must be washed, rinsed, sanitized, and air dried.</p>	

How to Dispense a Cup of Beverage

Models with Manual Dispense Switches
(Refer to serial tag to verify model number of your machine)

Models with Portion Control
(Single portion or 3 portion per head)

- 1.** Place cup under the selected drink dispense nozzle.



- 1.** Place cup under the selected drink dispense nozzle.



- 2.** Push and hold the appropriate switch on the touchpad until cup is 2/3 full and then release switch.

Dispense Switch



- 2.** Push appropriate switch on the touchpad, then release to dispense one preset serving. (See **Portion Control Adjustment** to set portion size)

Dispense Switch



NOTE: Portion may be cancelled by “push and release” of the switch during dispensing.

CAUTION: Cup must rest flat on tray with a 1/4” (6 mm) clearance between cup and spout.

Changing the Merchandiser Lightbulb

WARNING: Disconnect machine from branch electrical supply before changing the lightbulb.

NOTE: The machine uses a F8T5 12” 8 watt replacement bulb.

- 1.** Remove the front merchandiser photo and cover by grasping the edges of the merchandiser.



- 4.** Gently insert both ends of the bulb into the socket and turn the bulb 1/4 turn to the right until the bulb locks into place.



- 2.** Remove the old lightbulb by gently turning the lightbulb 1/4 turn to the left and pulling the bulb from the socket.



- 5.** Replace the merchandiser photo and cover.







- 3.** Install the new bulb by lining up the pins on either end of the bulb parallel with the socket opening.




Portion Adjustment

If machine is a manual dispense, there are no portion control adjustments to be made. (Please refer to serial tag to reference model number.)

Setting Single Portion Control	Setting Three Portion Sizes Per Head
<p>1. Place a cup under the selected drink dispense nozzle.</p> 	<p>1. Place a cup under the selected drink dispense nozzle.</p> 
<p>2. Press and <u>hold</u> the dispense switch for 10 seconds.</p>  <p style="text-align: center; margin-left: 20px;">Dispense Switch</p>	<p>2. Press and <u>hold</u> one of the size buttons (S, M or L) on the touch pad. (Hold button throughout entire procedure). Then press and <u>release</u> the manual (top-off) button (*). After 10 seconds, while still depressing portion button, programming sequence will start.</p> 
<p>3. After a 10 second time delay, the machine is triggered into program mode and will begin dispensing.</p>	<p>3. Continue pressing the size button until cup is approximately 2/3 full, then release the switch to prevent overflow. The elapsed portion dispense time is saved to memory and will remain until the dispense switch is reprogrammed.</p>
<p>4. Continue pressing the button until cup is approximately 2/3 full, then release the switch to prevent overflow. The elapsed portion dispense time is saved to memory and will remain until the dispense switch is reprogrammed.</p>	<p>4. Check the portion size by placing an empty cup under the desired dispense nozzle, then press and release the dispense switch. The machine will dispense the preprogrammed portion size.</p>
<p>5. Check the portion size by placing an empty cup under the desired dispense nozzle, the press and release the dispense switch. The machine will dispense the preprogrammed portion size.</p>	<p>4. Check the portion size by placing an empty cup under the desired dispense nozzle, then press and release the dispense switch. The machine will dispense the preprogrammed portion size.</p>
<p>6. If the portion size is incorrect, repeat above steps until the desired portion size is achieved. Each dispense switch needs to be set separately.</p>	<p>5. If the portion size is incorrect, repeat above steps until the desired portion size is achieved. Each portion size for each head needs to be set separately.</p>
<p>CAUTION: After button release, there will be 50 ml (1.7 fl. oz.) of water added to the cup. Each dispense includes a 1 second delay for powder at start and 1 second run-on for water and whipper at end of dispense. This allows for extra rinsing inside the whipper chamber.</p>	
<p>NOTE: Each "S" button on touch pad is pre-set to dispense 150 ml (5 fl. oz.) of water. "M" and "L" settings are not pre-set for any specified volume unless requested.</p>	

Drink Strength Adjustment

Tools Required: Small, Flat Screwdriver

<p>1. Dispense a drink to determine if drink is too strong or too weak.</p> 	<p>3. Using a flat head screwdriver, adjust individual dispense heads by rotating appropriate adjustment knob. Clockwise rotation will result in a stronger drink and counterclockwise will result in a weaker drink.</p>
<p>2. Remove drip tray.</p>	<p>4. Dispense a drink to determine if drink strength is acceptable, repeat adjustment steps until desired drink strength is achieved.</p>

NOTE: Clockwise rotation will result in a stronger drink and counterclockwise will result in a weaker drink.

NOTE: Water flow rate is factory preset at approximately 24 mL (0.80 ounces) per second.

NOTE: Machines are factory set in cooling mode to control drinking water temperature between 2.2°C (36°F) and 5.5°C (42°F) and it cannot be adjusted.

Prepare for Shipment

Important: Always completely empty ice bank water tank and **POWDER HOPPERS** prior to shipping unit. (See Draining the Tank and Cleaning the Hoppers section).

NEVER SHIP UNIT WITH POWDER IN HOPPER OR WATER IN TANK - THIS MAY CAUSE IRREPARABLE DAMAGE.

Draining the Tank

Always empty the tank before shipping.

 **WARNING:** Draining of the tank should be performed by a qualified service technician.

NOTE: CP3 ice bank tank contains 7.5 L (2 gallons) of water if no ice is present in the tank.

- 1.** Prepare a container to drain the tank water into. The container must hold at least 10 L (2.6 gallons).



- 5.** Allow the tank to drain completely.

NOTE: It is likely that there will be approximately 4.5 lb (2 kg) of ice around the evaporator. This ice needs to be melted and the water drained from the machine:

- a) Plug the drain hose
- b) Power up the machine
- c) Allow to fill the tank.
- d) When the compressor starts (fan blade will turn) turn the machine OFF.
- e) Drain the tank.
- f) Repeat this cycle three times beginning step (a).

- 2.** Remove right side louver panel. Drain hose is right behind the panel routed down and then up to lean against back wall - The hose is insulated.

- 6.** To drain remaining water from the bottom of the tank, tilt the dispenser 30° to the right. Once the tank is empty, securely replace the plug and clamp on the end of the hose. Reposition the drain hose inside the hose clip.



- 3.** Locate the silicone drain hose end. Put the end of the drain hose into the container.



- 7.** Replace the louver panel.

- 4.** Pinch hose with fingers and remove the hose clamp and plug.

Refrigeration System Maintenance

Ice Bank Tank Cleaning

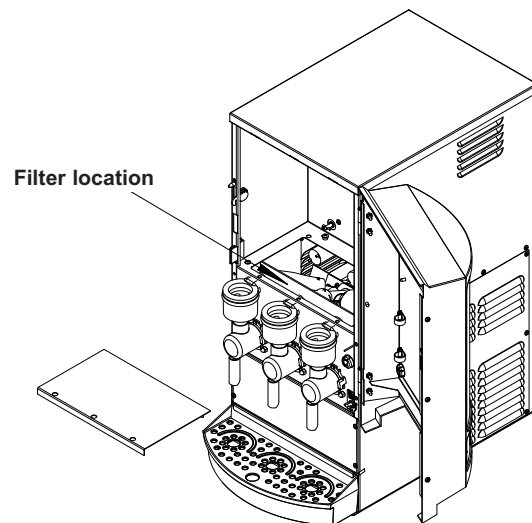
NOTE: This procedure may need to be performed once every other year depending on water quality.

If time to make the ice bank or recover the ice bank from the dispensing period is becoming excessively long (e.g. twice as long as it should take compared to the experience noted in the same ambient conditions) it is likely that there is too much mineral deposit on the evaporator coil and/or the heat exchanger. The layer of minerals insulates the coil from the water or ice therefore cooling time increases. To correct the problem, the ice bank tank assembly needs to be cleaned. Proceed as follows:

<p>1. Turn the power OFF and unplug the machine from the power receptacle.</p>	<p>7. Turn the machine OFF.</p>
<p>2. Drain the tank (see instructions on page 5).</p>	<p>8. Drain the ice bank tank (see instructions on page 5). When water will stop flowing tilt the machine to the right about 30° to remove remaining water. Reconnect water inlet valve (brown wire).</p>
<p>3. Remove agitator motor from the ice bank tank and clean any visible mineral deposits from the motor shaft, bottom of the motor and the propeller.</p>	<p>9. Plug the drain hose and start the machine.</p>
<p>4. Through the opening in the lid of the ice bank, add to the tank a mixture of 1 liter (34 fl. oz.) of distilled vinegar (clear) and 5 liters (1.3 gallons) of lukewarm water. Replace the agitator motor. Disconnect water inlet valve. (Pull the brown wire). Valve is located on the left side of the machine at the back.</p>	<p>10. When the compressor starts, turn the machine OFF and repeat this process beginning with step #8 twice.</p>
<p>5. Turn the machine ON.</p>	<p>11. Replace side panel. The tank and the coils now should be free of mineral deposits.</p>
<p>6. Run the machine for 15 minutes.</p>	<p>12. Turn the machine ON.</p>

Filter Cleaning

- 1.** Remove the service panel located under the hoppers.
- 2.** Remove the dark gray foam filter from plenum.
- 3.** Bring the filter under running water.
- 4.** Under the running water, squeeze the filter a couple of times, by hand, to wash the powder from it.
- 5.** Squeeze the filter one more time to remove the water from the foam.
- 6.** Shake the filter vigorously a couple of times to dry it.
- 7.** Roll the foam sheet as a tube 1" (25.4 mm) diameter.
- 8.** Insert the foam into the plenum.
- 9.** Replace the service access panel.
- 10.** Install the hopper back into the machine.



CP3 Preventative Maintenance Checklist (Every 6 to 12 months)

A preventative maintenance visit should be performed every 6 to 12 months, depending on usage. The following procedures should be performed during a preventative maintenance visit.

Parts Required: One PM parts kit (Part # 60933).

Tools Required: 11/32 nut driver, needle nose pliers, phillips head screwdriver, food grade lubricant.

The following procedures should be performed by a qualified service technician.



WARNING - Risk of electric shock. Disconnect power before servicing.

1. Document model and serial number of equipment above.
2. Disconnect unit from power supply and turn power switch off. Then remove all access panels.
3. Shut off the water supply valve to the machine.
4. Open front door of unit and remove product hoppers. Clean hoppers following procedures on the decal on panel behind hoppers or as stated in instruction manual.
5. Remove the plenum chamber access panel and filter. Wipe out exposed plenum.
6. Locate the tank drain hose. It is located behind the right side access panel. It is a white silicone tubing that has a 3/8" stainless steel barb plug and a black 5/8" hose clamp on it.
7. Prepare a container to drain the tank water into. 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. Pinch hose with fingers and remove the hose clamp and plug. Allow 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 process until tank is drained completely. Once the tank is empty, securely replace the plug and clamp on the end of the hose. Refer to Draining the Tank section on page 5.
8. Remove the mixing funnel shroud and mixing funnel from each chamber. Remove and discard the o-ring on the mixing funnel. Set the shroud and funnel aside.
9. Remove each whipper chamber and whipper blade and discard. Then remove and discard the small whipper shaft o-rings from each dispense head.
10. Remove the two screws from each whipper base and save the screws. Clean the whipper motor shaft and clean all dried product in this area under where the whipper base was located. Discard the old whipper base and slinger washer, and replace with the new parts in the PM kit.
11. Install the new slinger washer onto the whipper motor shaft.
12. Lubricate inside of whipper base with a food grade lubricant. Then install whipper base over the whipper motor shaft and tighten mounting screws.
13. Check whipper motor shaft to ensure it can turn freely using fingers. **If shaft is hard to turn, remove screws, rotate base 180°, and then re-tighten the mounting screws.** If the motor shaft is still hard to turn, replace the motor.
14. Install the new, red, small o-rings, along with the new whipper blades, and new whipper chambers. Clean the funnel shrouds and funnels. Install the new funnel o-ring and lubricate. Install funnel and shroud.
15. Remove plenum through side access opening and remove the plenum hose(s) from the blower to the plenum chamber. Clean the plenum and either clean or replace the hose. Clean the air filter (see instructions on page 6). If the blower fan is clogged with powder product clean it by taking apart the blower shroud and blower blade. Re-install clean parts.
16. Turn on water supply, and verify adequate water flow.
17. Plug the power cord back into outlet. Turn main power switch to "on".
18. Verify water tank is filling. .
19. Allow unit to fill and shut off. Check around valves and any tubing for signs of water leaks. Verify the cooling cycle has started
20. Replace all access panels and reinstall hoppers inside the unit. Verify nut on back of hopper is secure.
21. Verify each dispense head is operating properly and that the settings are correct. Adjust if necessary.
22. Check for proper product temperature and check mix ratio for proper setting, and adjust if necessary.
23. Review proper care, cleaning and maintenance procedures with store personnel.

Troubleshooting Guide


















Only a qualified service technician should perform electrical and mechanical adjustments or repairs. Always disconnect power before attempting any maintenance procedures.

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Powder is not dispensing	<ul style="list-style-type: none"> Rinse switch turned to "RINSE ON" position 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"> Flip rinse switch to "RINSE OFF" position Clean hoppers Refill hoppers Remove and reinstall hopper. Ensure engagement with motor Turn down dispense elbow; align with mixing funnel
Machine is not dispensing	<ul style="list-style-type: none"> Power turned "OFF" to machine Dispense cycle watchdog timer has tripped Faulty transformer Faulty control board 	<ul style="list-style-type: none"> Ensure power switch is in "ON" position, machine is plugged in and water is turned on Reset machine by flipping power switch "OFF" then "ON" once Contact factory for assistance with faulty components
Product not whipping	<ul style="list-style-type: none"> Whipper blade broken or missing Faulty whipper motor speed control Faulty whipper motor 	<ul style="list-style-type: none"> Verify blade is in place. Replace if broken or missing Reset speed control. If cannot reset speed control - replace it.
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 factory for assistance Remove obstruction in mixing chamber or nozzle Verify blade is in place. Replace if broken or missing
Drink is too weak or strong		Refer to Drink Strength Adjustment section (page 4)
No cold water from dispense head	<ul style="list-style-type: none"> Water level in tank is below water probe Faulty compressor relay Tube from dispensing valve is kinked Water shorting out probe connections Faulty Ice Bank Agitator Motor (ice bank frozen) Faulty dispensing triple valve 	<ul style="list-style-type: none"> Ensure water supply is on to machine and reset power Replace relay Check tubing for obstructions Dry connections on tank Thaw out ice bank, replace the motor Replace the valve
REFRIGERATION TROUBLESHOOTING		
Compressor will not start	<ul style="list-style-type: none"> No power Compressor power relay failed (located on controller board) Controller board or water inlet valve failure Wiring improper/loose 	<ul style="list-style-type: none"> Trace power input Replace relay Check power light is ON Check if ice bank has sufficient water level (compressor will not start unless ice bank has correct water level) Check wiring against wiring diagram (compressor electrical box, water inlet valve or compressor power relay)
Compressor will not start - hums but trips on overload	<ul style="list-style-type: none"> Compressor improperly wired Low voltage to the unit Compressor relay failing to close Compressor failure 	<ul style="list-style-type: none"> Check wiring in compressor electrical box Determine reason and correct Replace relay (compressor electrical box) Replace compressor
Compressor starts but start relay does not switch off.	<ul style="list-style-type: none"> Improperly wired Low voltage to unit Relay failing to open 	<ul style="list-style-type: none"> Correct wiring Determine reason and correct Replace relay
Compressor starts but short cycles on overload protector	<ul style="list-style-type: none"> Low voltage to the unit Overload protector defective Excessive discharge pressure Compressor is too hot, return gas line (suction is hot) Compressor motor has windings shorted 	<ul style="list-style-type: none"> Determine reason and correct Replace overload protector Check air flow across condenser (dirty condenser), restrictions in the refrigeration system Check for leaks, low charge Replace compressor
Unit operates long or continuously	<ul style="list-style-type: none"> Frequent dispensing cycle Dirty condenser Unit is low on refrigerant 	<ul style="list-style-type: none"> Normal operation Clean condenser (remove condenser fan shroud and rear panel) Check for refrigerant leaks and repair then recharge unit.
Suction line frosted	<ul style="list-style-type: none"> Refrigerant charge too high 	<ul style="list-style-type: none"> Correct the charge (169 grams or 5.91 ounces of R134a)
Liquid line frosted or sweating	<ul style="list-style-type: none"> Restriction in filter drier (dehydrator) (more likely end of capillary tube) 	<ul style="list-style-type: none"> Replace the filter drier

If you still need help, call our service department at (800) 695-4500 (USA & Canada only) or (502) 425-4776 Monday - Friday, 8 am -6 pm EST) or an authorized service center in your area. Please have the model and serial numbers ready so that accurate information may be given.

Prior authorization must be obtained from Grindmaster Corporation's Technical Services Department for all warranty claims.

Replaceable Parts

Part #		Description	Part #		Description
PIC 3 Cold 120V/60z	PIC 3E Cold 230V/50z		PIC 3 Cold 120V/60z	PIC 3E Cold 230V/50z	
61490	61490	 Assy, Hopper 5#, Auger .718 Sugarbased, 2 pinwheel	62395	62395	 Chamber, Whipper
62925	62925	 Assy, Hopper 5#, Auger .406 non-sugar, 2 pinwheel	61221	61221	 Funnel, Whipper Mixing
61442	61442	 Assy, Hopper 5#, Auger .718 Sugarbased, 1 pinwheel	61127	61127	 O-Ring, Funnel
62926	62926	 Assy, Hopper 5#, Auger .406 non-sugar, 1 pinwheel	60741	60741	 O-Ring, Whipper Shaft
61302	61302	 Spring, Auger .718 Pitch Sugarbased Product	65014	65014	 Controller
61278	61278	 Spring, Auger .406 Pitch Non-sugar Product	61539	61539	 Remote Board
61223	61223	 Elbow, 3/4 x 3/4 Hopper	100174	100175	 100174 100175 Compressor
61523	61523	 Whipper Base Assembly	61118	61118	 Lamp, Fluorescent F8T5 8 Watts
61458	61458	 Blade, Whipper (4 Blade)	05096	70271	 Lamp, Red

Replaceable Parts

Part #		Description	Part #		Description
PIC 3 Cold 120V/60z	PIC 3E Cold 230V/50z		PIC 3 Cold 120V/60z	PIC 3E Cold 230V/50z	
62436	61125	 Light, Indicator Green	61847	61466	 61847 61466 Switch, Power
61103	61111	 Motor, Fan	61847	61847	 Switch, Rinse
65045	65045	 Motor Gear, Auger Dispenser 220 rpm for Sugarbased Product	62432	62432	 Touch Pad - Single Portion
65057	65057	 Motor Gear, Auger Dispenser 30 rpm for Non-sugar Product	62415	62415	 Touch Pad - Three Portions
61116-01	61117-01	 Motor, Whipper	61481	61470	 61481 61470 Transformer
61131	61131	 Relay	61198	61198	 Tray, Drain
61194	61194	 Starter, FS-5	61892	61892	 Grid, Drain
61196	61468	 Ballast	65062	65020	 Valve Dispensing, Triple Outlet
65399 Kraft restrictor	65399 Kraft restrictor		65066	65034	 Valve Inlet, Dual Outlet

Controller Information

Jumper settings

The controller has (5) 3-pin jumpers along side the left hand side of the controller. The top pin is number one, the center is number two and the bottom pin is number three.

See Figure 1

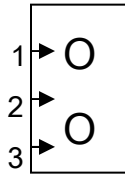
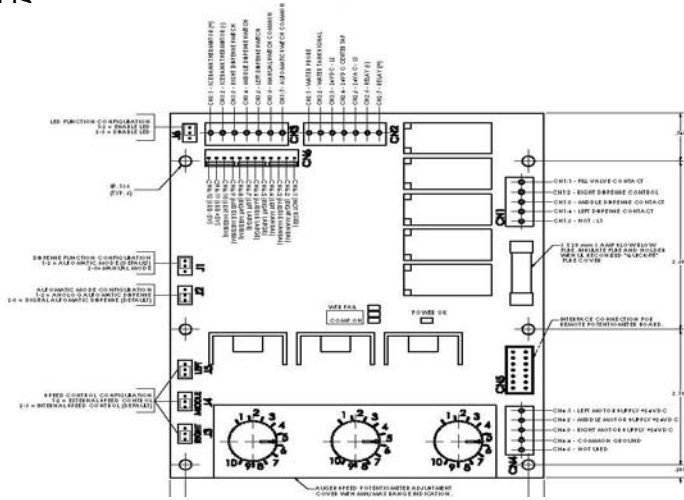


Figure 1



Cleaning indicator

The J6 jumper is in on the upper left hand corner
 This controls the cleaning or rinse reminder LED on the front touch pad. If the jumper is between terminal 1 and 2 the reminder LED is enabled. If the jumper is between the 2 and 3 terminal the reminder LED is off. The timing sequence is every 23 hours the reminder will illuminate the led. To reset: turn the unit to the rinse mode and rinse each flavor. This will then reset the timer for the next 23 hour period.

Dispense Function configuration

The J1 jumper is on the left hand side towards the center
 This is the dispense function configuration. The default is between pin 1 and 2 (automatic mode) Do not place the pin between the 2 and 3 pin as the unit will not function.

Cleaning indicator reset – Rinse switch reset circuit

The J2 jumper is just below the J1 on the left side center
 This has a connector that hold two wires that goes to the rinse switch. When the rinse switch is turned on, terminals 2 and 3 are jumped together resetting the cleaning LED.

Speed Control Configuration

The lower left hand side contains three jumpers
 These three jumpers will set the controller to recognize the onboard auger speed controllers. Set the jumper between 2 and 3 pin for onboard control (shown) Set the jumper between 1 and 2 pin for remote controllers (front panel)



Auger speed controllers

These control the speed of the DC auger motors

CP-3 Refrigeration System Part Numbers



Filter Drier (65013)

Compressor 115 V (100174)

Condenser Shroud (100169)



Condenser Fan (65064)

Condenser (100168)

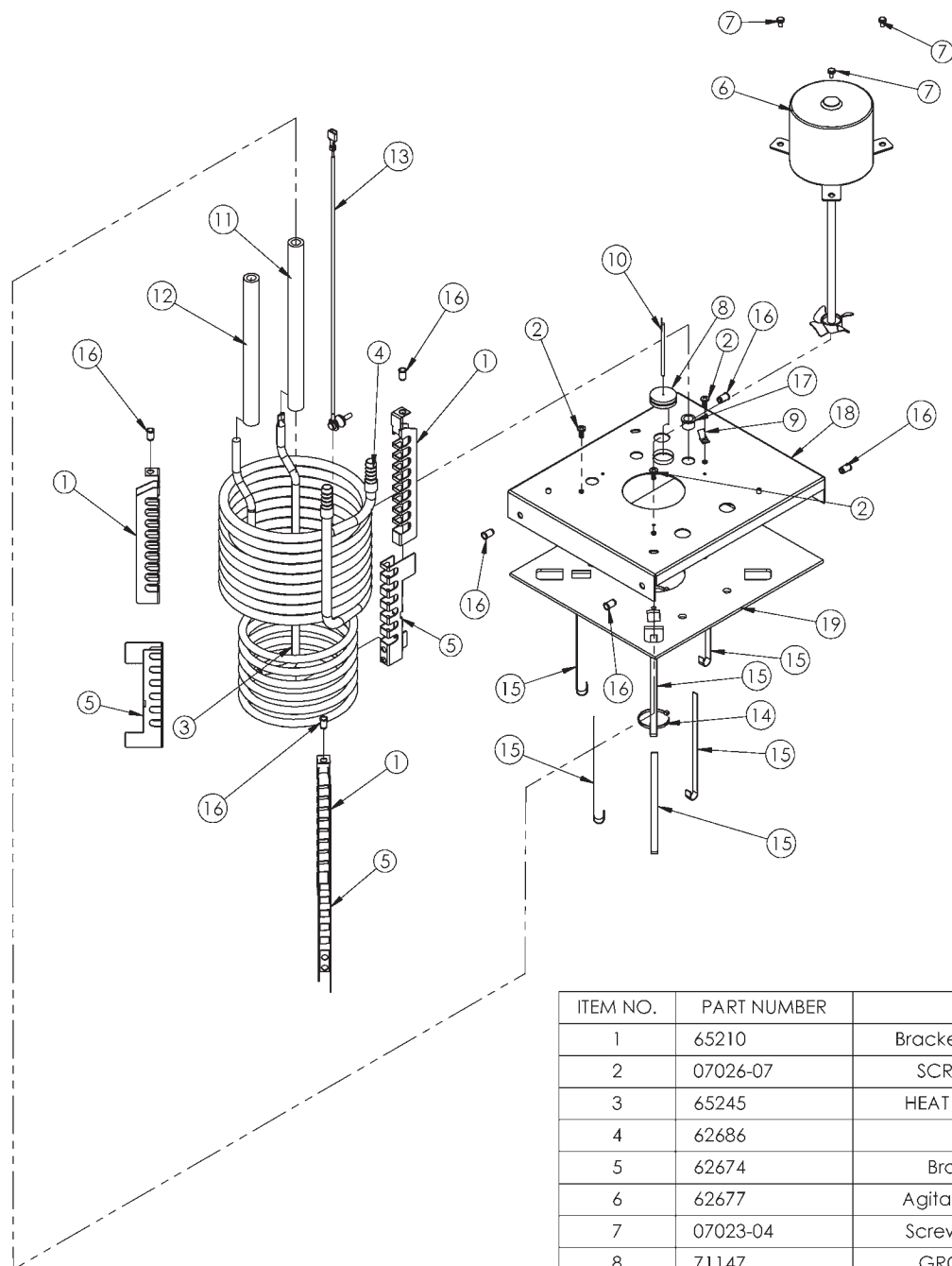
Refrigeration System information;

Refrigerant R-134A

Amount 169 Grams (5.91 Ounces)

The refrigeration system builds and maintains a thickness of ice inside and at the bottom of the water tank. The remaining tank water is in constant motion via the agitator propeller. The dispensing water travels through a heat exchanger coil also inside the water tank. Therefore the dispensing water is not in direct contact with the tank water but travels through it and is chilled to the desired temperature. The water level inside the tank is maintained by the control board to a preset level. The refrigeration system is sealed and the system is charged with a very precise amount of refrigerant. No gauge access is provided.

CP3 Ice Bank Assembly



ITEM NO.	PART NUMBER	Title
1	65210	Bracket, Spacer Top Heat Exch
2	07026-07	SCRW, 8-32 X 3/8 PH PN SS
3	65245	HEAT EXCHANGER ASSY, CP3
4	62686	Evaporator Coil,
5	62674	Bracket, Spacer Bottom
6	62677	Agitator Motor Assy, 220 VAC
7	07023-04	Screw,6-32x1/4 PH BD M/S SS
8	71147	GROMMET, SILICONE WHT
9	70635	TERMINAL, 1/4-032 X 45DEG TAB
10	100752	Probe,Ice Bank Water Level
11	05826,8.0	Silicone Insul., Evaporator Inlet
12	05826,7.000	Silicon Insul., Evaporator Outlet
13	65005	Ice Thickness Sensor
14	86600	Tie,Wire,Nylon,T18R
15	100588	STRIP, COIL RETAINING
16	82096	Rivnut, 8-32 AKS4-832-80
17	07339-02	Bushing,Snap-1/2 Hey#SB-500-6
18	65161	LID, ICE BANK
19	65160	GASKET, ICE BANK

DWG #62679

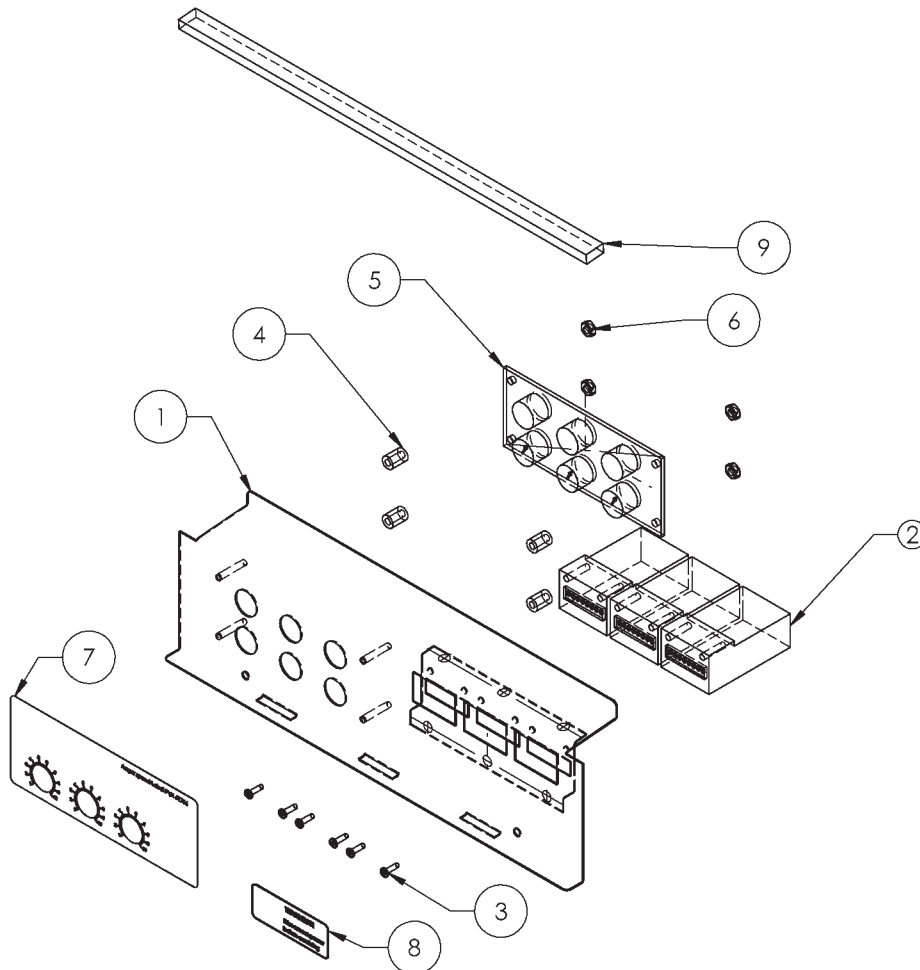
CP3 Lower Panel Assembly

BOM P/N 65076 LOWER PANEL ASSEMBLY 120 V

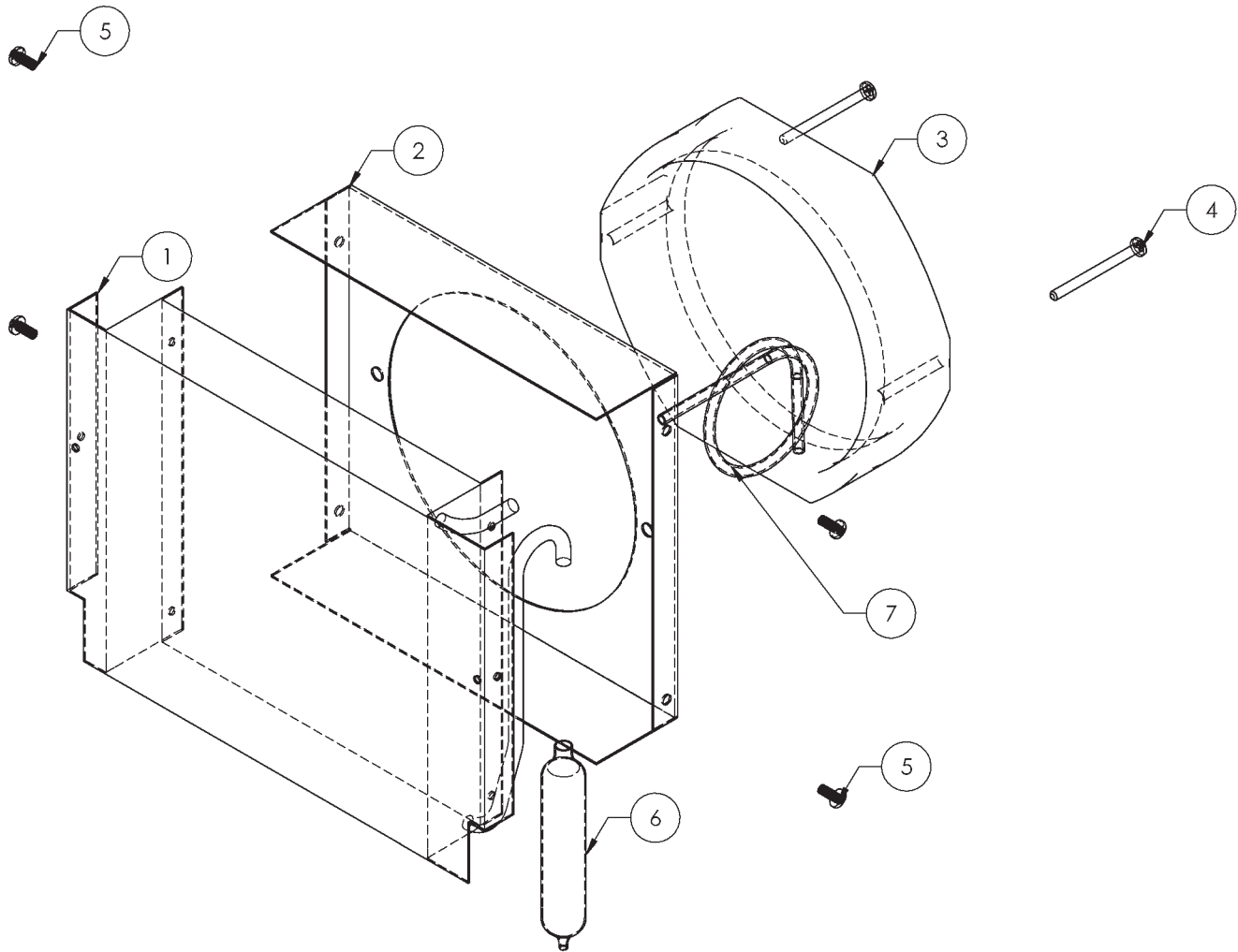
ITEM NO.	exploded/QTY.	PART NUMBER	Title
1	1	61528	Panel Lower, Remote
2	3	61540	COUNTER, 80-135 V
3	6	62522	Screw, 4-36 x 3/8
4	4	61515	Spacer Heyco OD .312, .15 ID, L 7/16
5	1	61539	Board, Remote
6	4	61532	NUT, 6-32 x 5 /16 HEX NYLON
7	1	61766	Decal, PIC3 Remote Augers
8	1	61775	Decal, Warning Disconnect power
9	1	61159	Seal, closed cell foam,12"

BOM P/N 62564 LOWER PANEL ASSEMBLY 220 V

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1, 3-9		THE SAME AS BOM P/N 65076	
2	3	61754	COUNTER, 180-250 V



CP3 Condenser Assembly



BOM P/N 65028

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	100168	Condenser,Spectrum(E27)
2	1	100169	Shroud,Condenser,Spectrum(E27)
3	1	100171	Motor,Fan,220V,Axial
4	2	100172	Screw,8-32x2,PPH,SS
5	4	61303	Screw, #8 x 3/8 black trilobe
6	1	65013	FILTER DRIER, 10g MOLECULAR SIEVE
7	1	65082	LINE, DISCHARGE, KK COMPRESSOR

BOM P/N 65073

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1,2, 3-6		ARE THE SAME AS BOM P/N 65028	
3	1	65064	Motor,Fan,120V,Axial
7	1	65016	LINE, DISCHARGE, COMPRESSOR 120 V

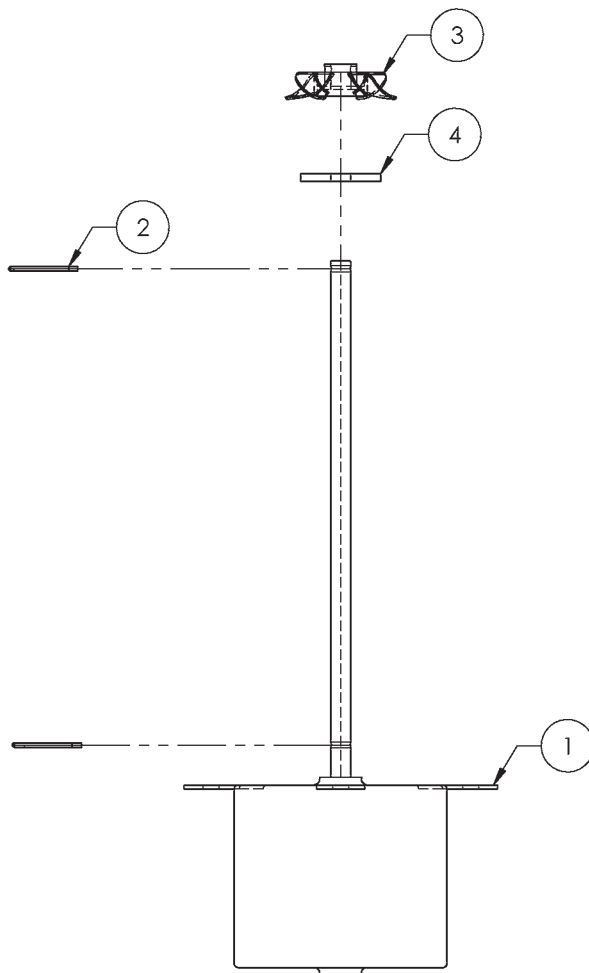
CP3 Agitator Motor Assembly

BOM P/N 62677

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	62687	AGITATOR MOTOR, 220 VAC
2	2	65031	Pin,Cotter,1"
3	1	65032	Propeller,Ice Bank
4	1	65033	Washer,1.25 OD x .310 ID,Nylon

BOM P/N 65077

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	65078	AGITATOR MOTOR, 120 VAC
2 - 4		THE SAME AS BOM P/N 62677	

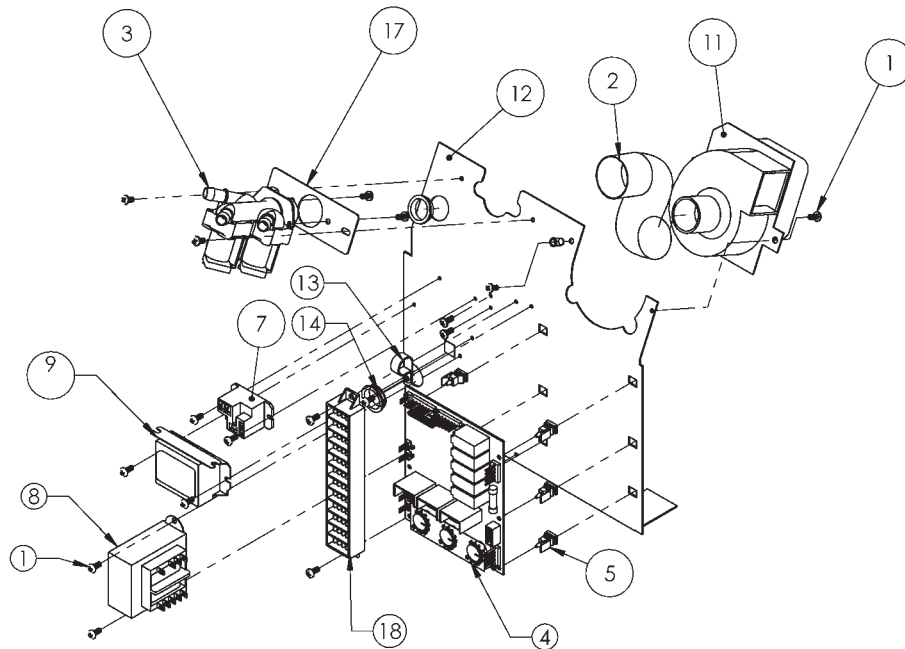


CP3 Controller Panel

ITEM NO.	PART NUMBER	TITLE
1	61303	Screw, #8 x 3/8 black trilobe
2	65015	Hose,Exhaust
3	65020	Valve, Dispensing,Triple, 220V
	65062	Valve, Dispensing,Triple, 120V
4	65014	Controller,CP3 3 Portion
5	61266	STANDOFF, RVRS EDGEMOUNT
6	61272	SCRW, #8X3/8 PH PN T/B ZNC/GN
7	61131	Relay,12 vdc Coil
8	61470	TRANSFOMER, CE
	61481	TRANSFOMER, 120; 12V 43VA
9	61468	Ballast 220/240 V CE
	61196	BALLAST 120V
10	82096	Rivnut, 8-32 AKS4-832-80
11	61111	Mtr,FAN 230v/50Hz
	61103	FAN, BLOWER 120V
12	62668	BRACKET, Controller CP3
13	60080	Clamp,5/8"Nylon **SC**
14	60394	Bushing,Snap-7/8"OD x 3/4"
15	10073	Label,Ground Symbol
16	70426	TERM, 1/4F INS QD 18-22 GA
17	65059	Bracket, Dispensing Valve Mtg.
18	65287	Terminal Block, 4 Circuit
19	65052	HARNESS, DISPENSING VALVE
20	65058	HARNESS, BLOWER AND INLET VALVE

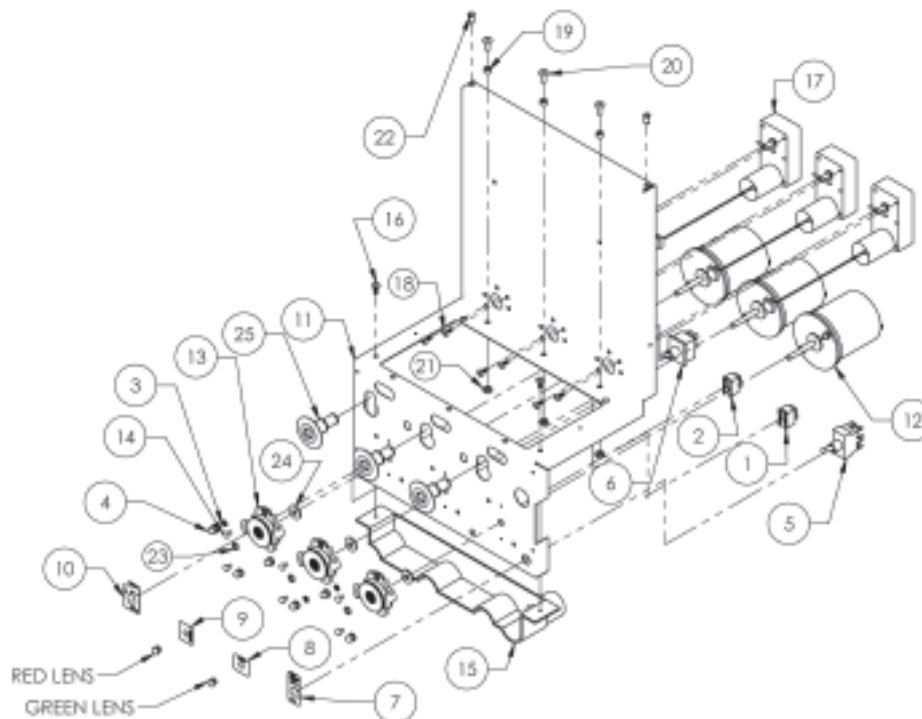
NOTE:

Items: #19 - Harness, Dispensing Valve
 #20 - Harness, Blower & Inlet
 are not shown on Exploded View



CP3 Hopper Shelf Assembly - 120V

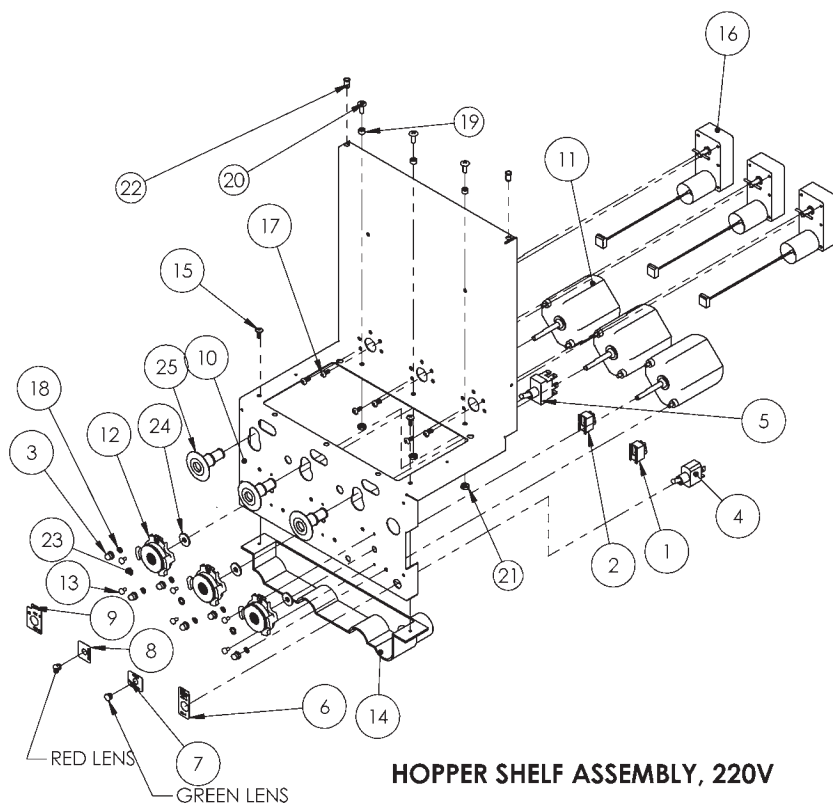
ITEM NO.	PART NUMBER	TITLE
1	62436-2	Lamp, Incd. 125v, GmNeon, 3/16Tab
2	05096-2	Light, Indicator, 125v, Red
3	61250	Washer, #8 Split Lock
4	61339	8-32 UNF S.S. ACORN NUT
5	65108	Switch, DPDT ON-ON, 10A
6	61466	Switch, Toggle 16 Amp Dpst
7	61242	Label, Flush On/Off
8	61248	Label, Ready Light PIC
9	61247	Label, Power On Light PIC
10	61889	Label, PWR ON/OFF PIC
11	65209	Bracket, Hopper Shelf CP3
12	61116-01	WHIPPER MOTOR, 120 VAC 60Hz
13	61523	Whipper Base Assy
14	07023-04	Screw, 6-32x1/4 PH BD M/S SS
15	61197	Tray, Steam Recvry Plenum
16	86877	SCRW, #8X3/8 PH PN T/B ZNC/GN
17	65045	Gear Motor, 24DC, 220RPM
	65057	Gear Motor, 24VDC, 30RPM
18	61303	Screw, #8 x 3/8 black trilobe
19	61228	Spacer, NYL HEY #334 SPU98
20	61236	SCRW, 10-32X1/2 PH TR SS
21	70322	NUT, 10-32 KEPS SS
22	60381	Rivnut, 6-32 ALS4-632-80
23	60741	O-Ring, 2-014
24	61334	Washer, Slinger
25	61226	FIG, FUNNEL DISCONNECT



HOPPER SHELF ASSEMBLY, 120 V

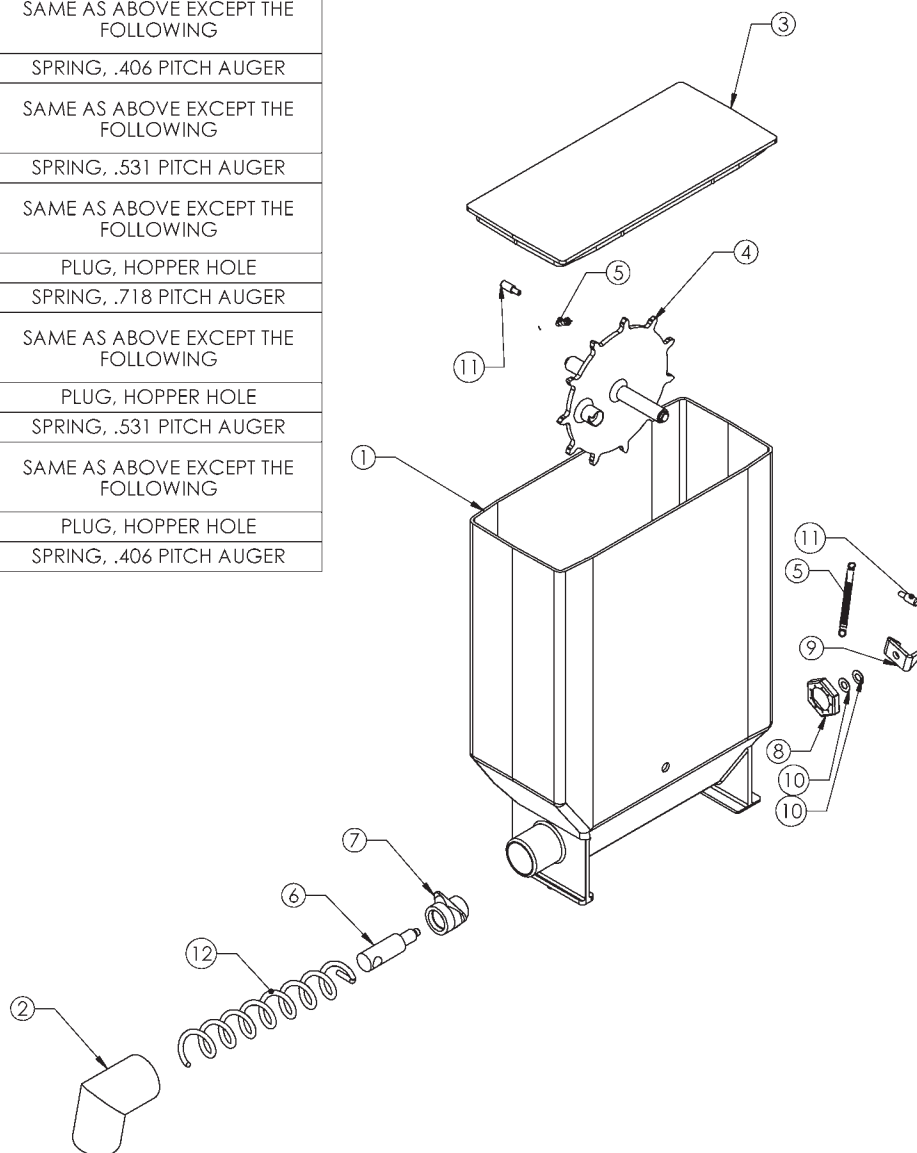
CP3 Hopper Shelf Assembly - 220V

ITEM NO.	PART NUMBER	TITLE
1	61125	Light, Indicator Green 250V
2	70271	Light, Ind 230V A70271
3	61339	8-32 UNF S.S. ACORN NUT
4	61847	Switch,Toggle-Spst
5	65108	Switch, DPDT ON-ON, 10A
6	61242	Label, Flush On/Off
7	61248	Label, Ready Light PIC
8	61247	Label, Power On Light PIC
9	61889	Label, PWR ON/OFF PIC
10	65209	Bracket, Hopper Shelf CP3
11	61117	MOTOR, WHIPPER,230VAC
12	61523	Whipper Base Assy
13	07023-04	Screw,6-32x1/4 PH BD M/S SS
14	61197	Tray, Steam Recvry Plenum
15	86877	SCRW, #8X3/8 PH PN T/B ZNC/GN
16	65045	Gear Motor Assy, 24DC, 220RPM
	65063	Gear Motor, 24VDC, 30RPM, Componenti
17	61303	Screw, #8 x 3/8 black trilobe
18	61250	Washer, #8 Split Lock
19	61228	Spacer, NYL HEY #334 SPU98
20	61236	SCRW, 10-32X1/2 PH TR SS
21	70322	NUT, 10-32 KEPS SS
22	60381	Rivnut, 6-32 ALS4-632-80
23	60741	O-Ring,2-014
24	61334	Washer, Slinger
25	61226	FTG, FUNNEL DISCONNECT

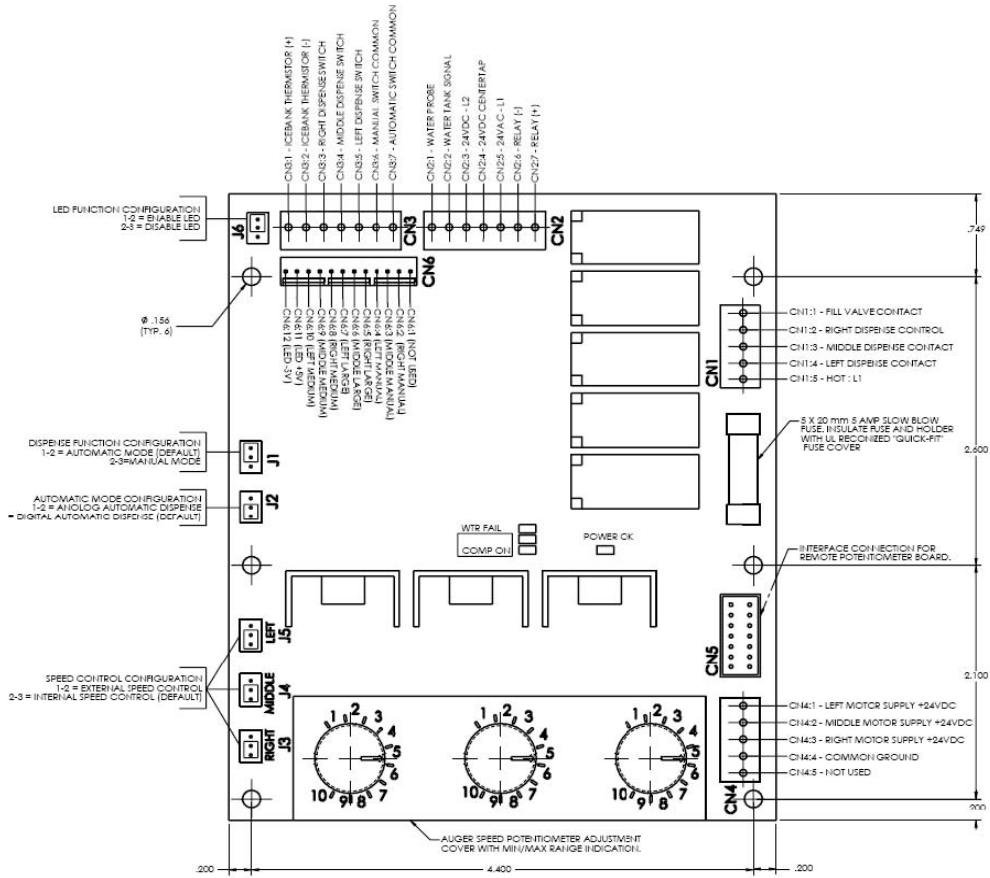


CP3 Hopper Assembly

ITEM NO.	PART NUMBER/ 61442	TITLE
1	61222	HOPPER, 5#, SINGLE PINWH
2	61223	Elbow Hopper PIC
3	61315	LID, 5# POWDER HOPPER
4	61316	AGITATOR, PINWHEEL
5	61313	SPRING, PINWHEEL ARM
6	61230	DRIVESHAFT, AUGER SPRING
7	61246	BEARING, DRIVESHAFT
8	61314	PALNUT, 5/8-11 UNC
9	61225	LINK, AUGER DRIVE
10	07301-04	WASHER A07301-04
11	61437	SCREW, 6-32 KNURL
12	61302	SPRING, AUGER .718 PITCH
	PART NUMBER/ 62926	SAME AS ABOVE EXCEPT THE FOLLOWING
12	61278	SPRING, .406 PITCH AUGER
	PART NUMBER/ 61372	SAME AS ABOVE EXCEPT THE FOLLOWING
12	61224	SPRING, .531 PITCH AUGER
	PART NUMBER/ 65217	SAME AS ABOVE EXCEPT THE FOLLOWING
4	65114	PLUG, HOPPER HOLE
12	61302	SPRING, .718 PITCH AUGER
	PART NUMBER/ 65218	SAME AS ABOVE EXCEPT THE FOLLOWING
4	65114	PLUG, HOPPER HOLE
12	61224	SPRING, .531 PITCH AUGER
	PART NUMBER/ 65219	SAME AS ABOVE EXCEPT THE FOLLOWING
4	65114	PLUG, HOPPER HOLE
12	61278	SPRING, .406 PITCH AUGER



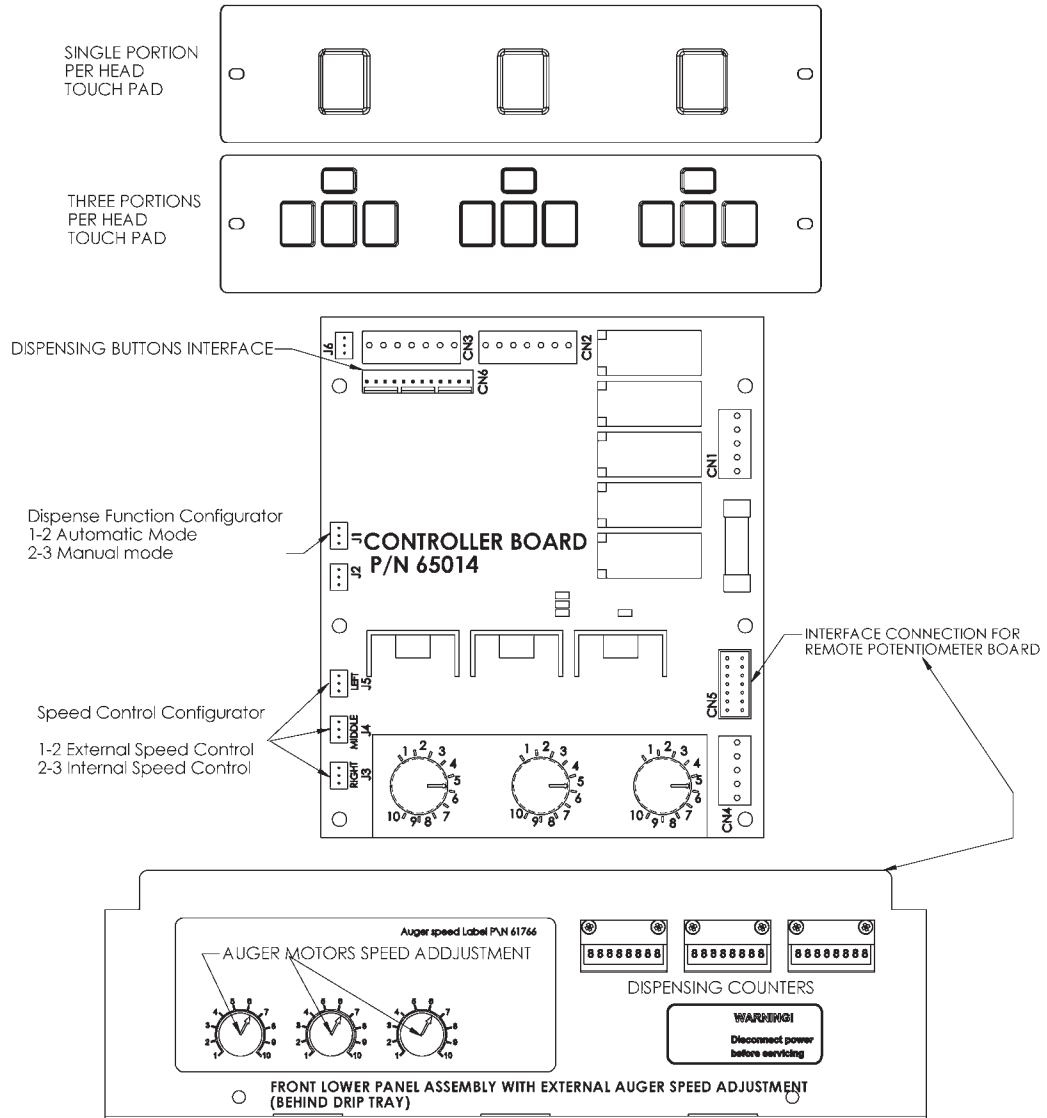
CP-3 Controller



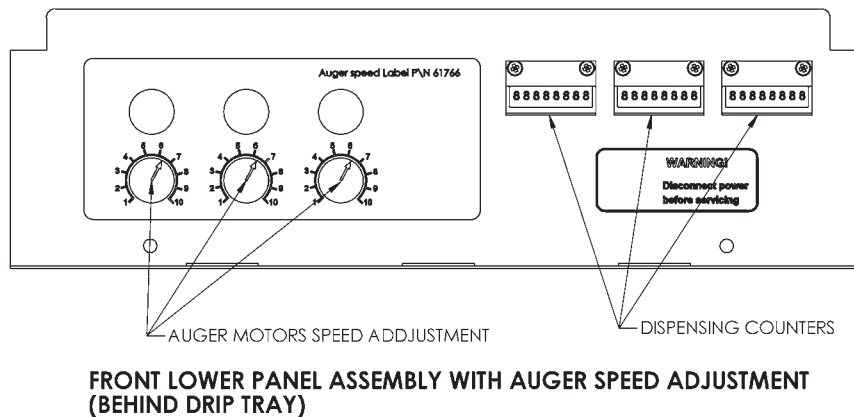
Controller part number 65014



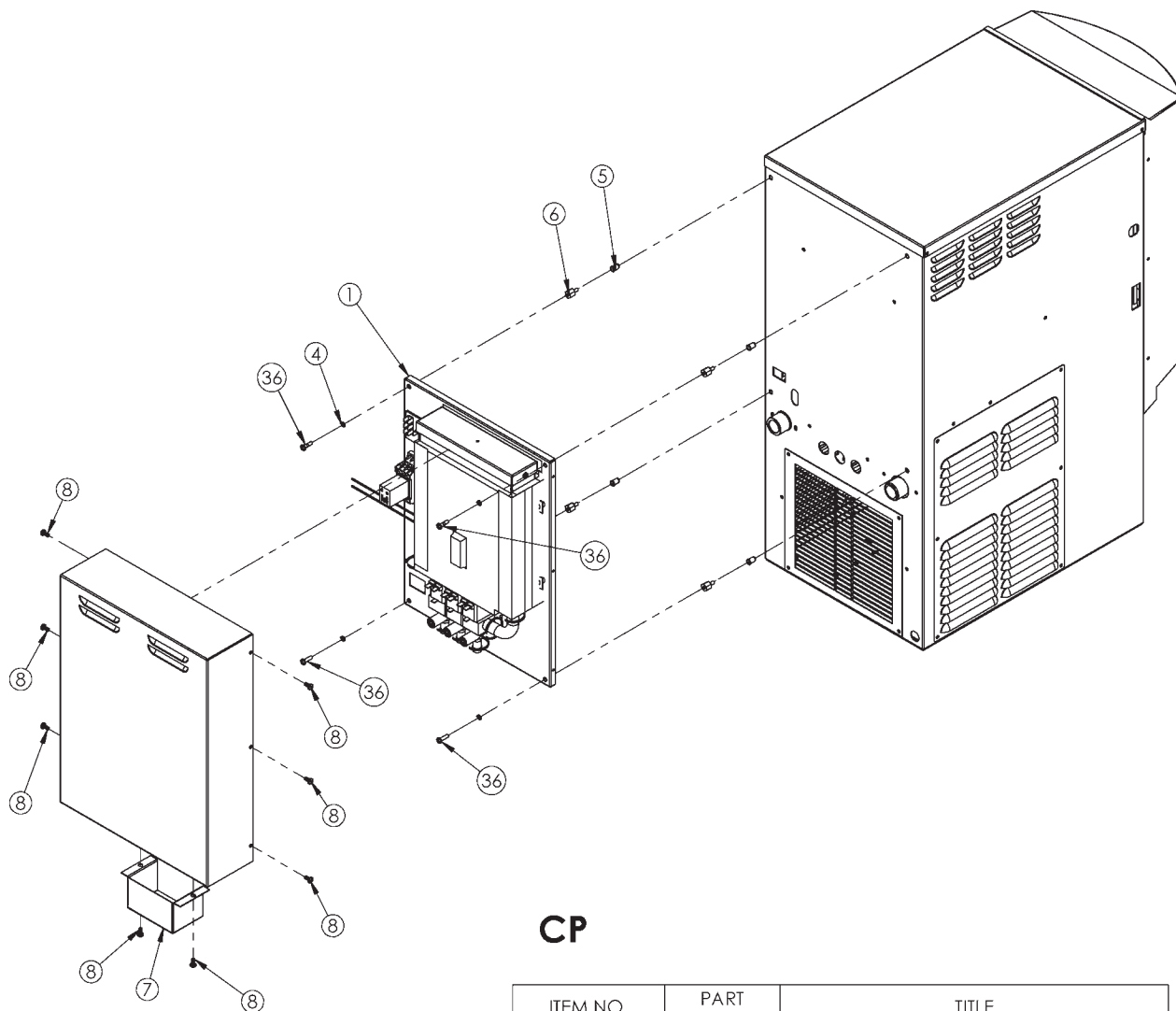
CP3 Drink Strength & Portion Control Adjustment



CP3 Auger Speed Adjustment



CP3 Hot Flush Final Assembly

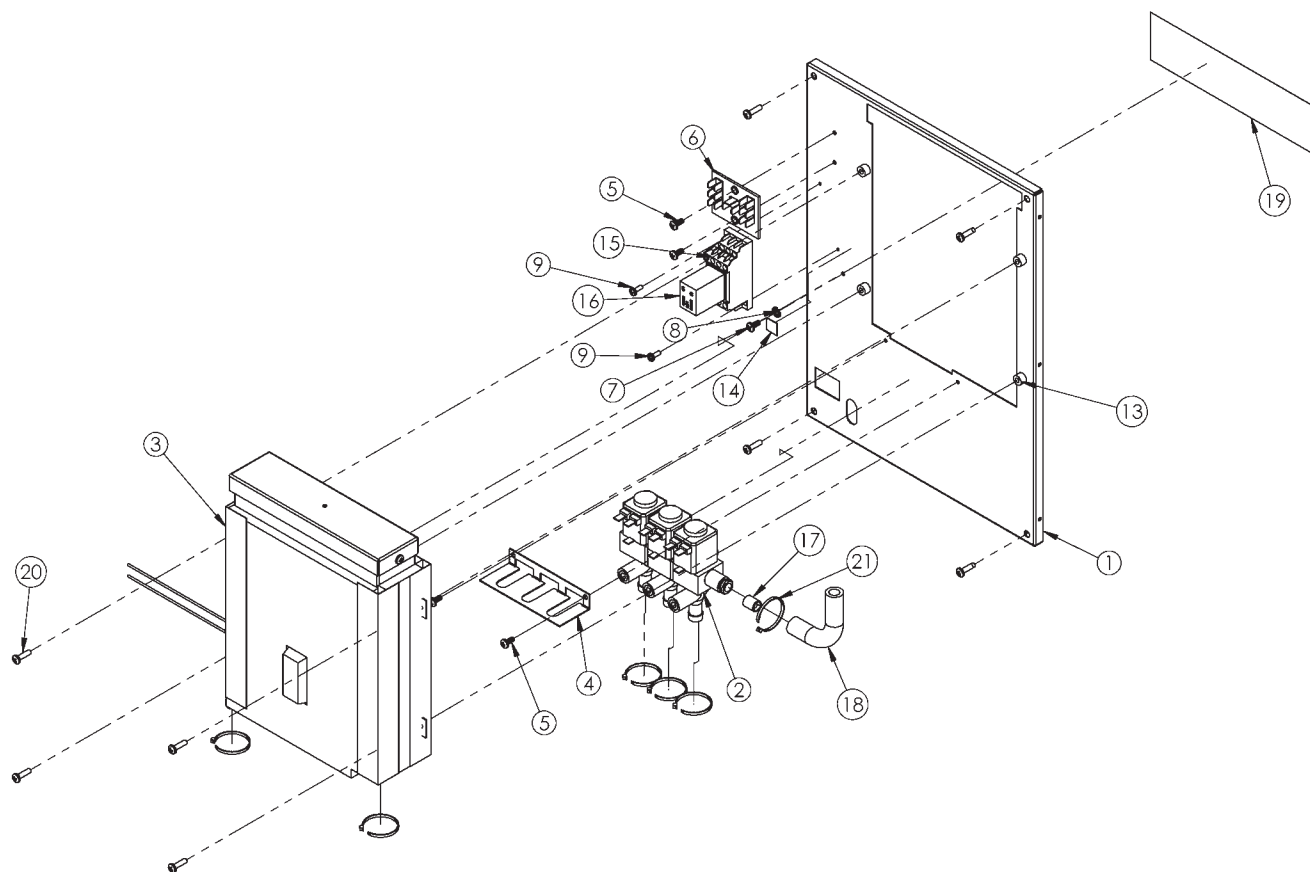


CP

ITEM NO.	PART NUMBER	TITLE
1	65320	CP3 HOT FLUSH ASSY 230V/50Hz
2	61303	Screw, #8 x 3/8 Black
3	65310	COVER CP3 HOT FLUSH SYSTEM
4	61250	Washer, #8 Split Lock
5	82096	Rivnut, 8-32 AKS4-832-80
6	65306	STANDOFF M-F HEX 3/8, 8-32
7	65311	COVER EXTENSION
8	61303	Screw, #8 x 3/8 Black
	65176	Screw, #8-32 x 3/8 Blue
33	65385	Fixed Orifice CP3
34	05826-3.25	SIPHON TUBE EXTENSION
35	60262-8.0	AL ADHESIVE TAPE 2" WIDE
36	61305	Screw, 8-32 x 5/8 black
37	86600	Tie,Wire,Nylon,T18R

PART#65320

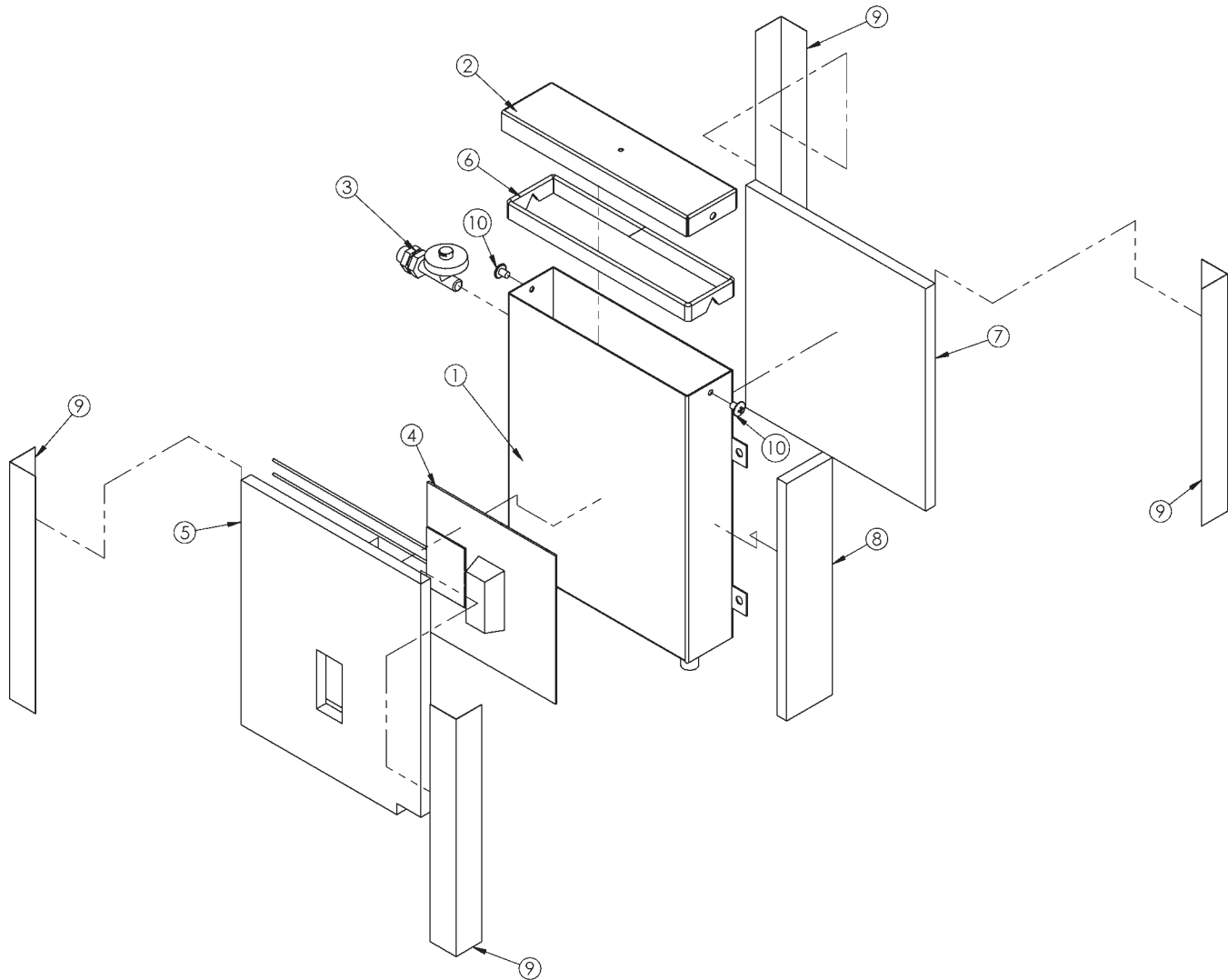
CP3 Hot Flush Assembly



ITEM NO.	PART NUMBER	TITLE
1	65317	BASE - CP3 HOT FLUSH
2	65307	DUMP VALVE ASSY,3 VALVES BANK
3	65322	HOT WATER TANK ASSEMBLY, CP3 HOT FLUSH
4	65309	BRACKET, BANK VALVE HOLDER
5	61303	Screw, #8 x 3/8 black trilobe
6	61338	Terminal Board
7	61272	SCRW, #8X3/8 PH PN T/B ZNC/GN
8	61187	Washer, #8 Star Lock
9	07023-01	Screw,6-32x3/8 PH BD M/S SS
10	65330	HARNESS, RELAY HOT FLUSH
11	65331	HARNESS, DUMP VALVE
12	65332	HARNESS, VALVE GROUND
13	65335	SPACER .375 OD .171 ID X .250
14	10073	Label,Ground Symbol
15	65328	CONNECTOR, MY4 RELAY
16	65327	4PDT RELAY 24VAC COIL
17	65385	Fixed Orifice CP3
18	05826-3.25	SIPHON TUBE EXTENSION
19	60262-8.0	AL ADHESIVE TAPE 2" WIDE
20	61305	Screw, 8-32 x 5/8 black
21	86600	Tie,Wire,Nylon,T18R

PART#65320

CP3 Hot Flush Tank Assembly

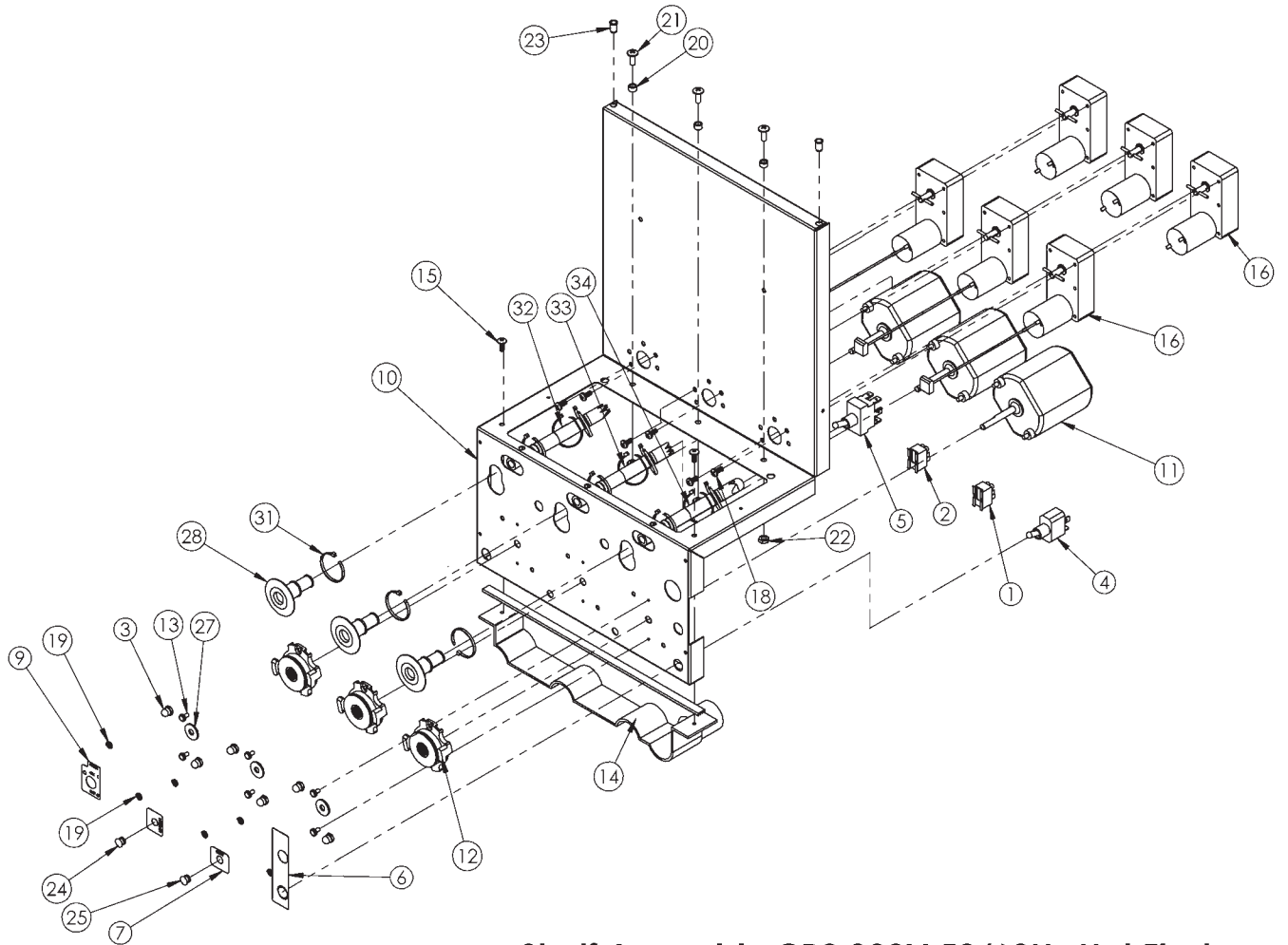


CP3 HOT FLUSH TANK ASSEMBLY

ITEM NO.	PART NUMBER	Title
1	65323	TANK ASSEMBLY WELDED
2	65313	LID, CP3 HOT WATER TANK
3	65312	FLOAT SWITCH
4	65314	HEATER 250 W 220 VAC
5	65324	INSULATION CP3 HOT TANK
6	65326	Gasket, Hot Flush Tank
7	65325	HOT TANK BACK WALL INSULATION
8	65315	INSULATION, TANK SIDE
9	60262-8.0	AL ADHESIVE TAPE 2" WIDE
10	W0610264	SCREW, 10-24 X 1/4 TRUSS HD S.S.

PART#65322

CP3 Hot Flush Shelf Assembly

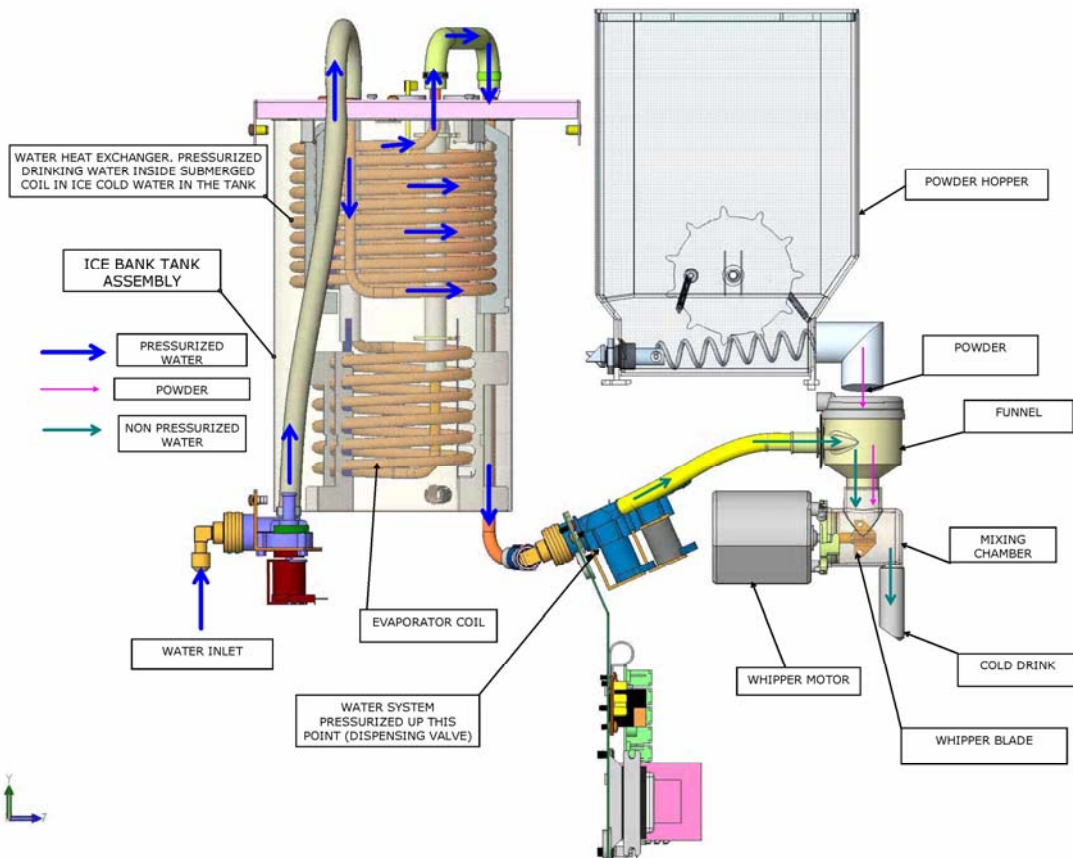
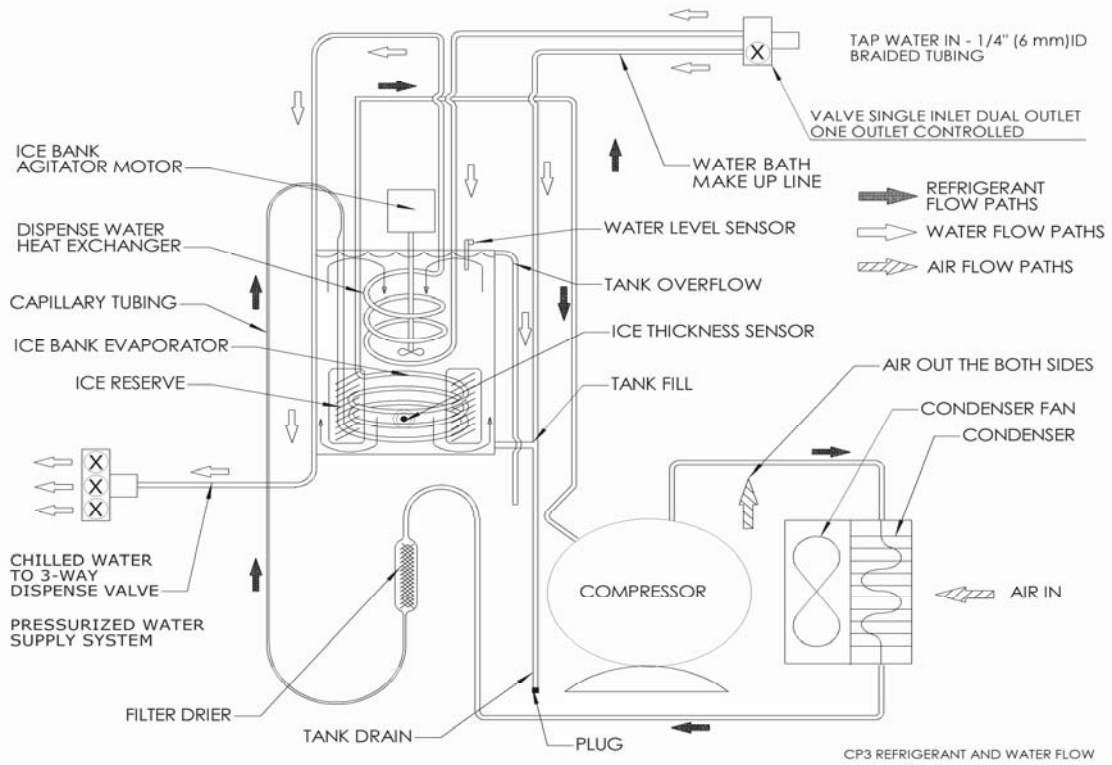


Shelf Assembly, CP3 230V 50/60Hz Hot Flush

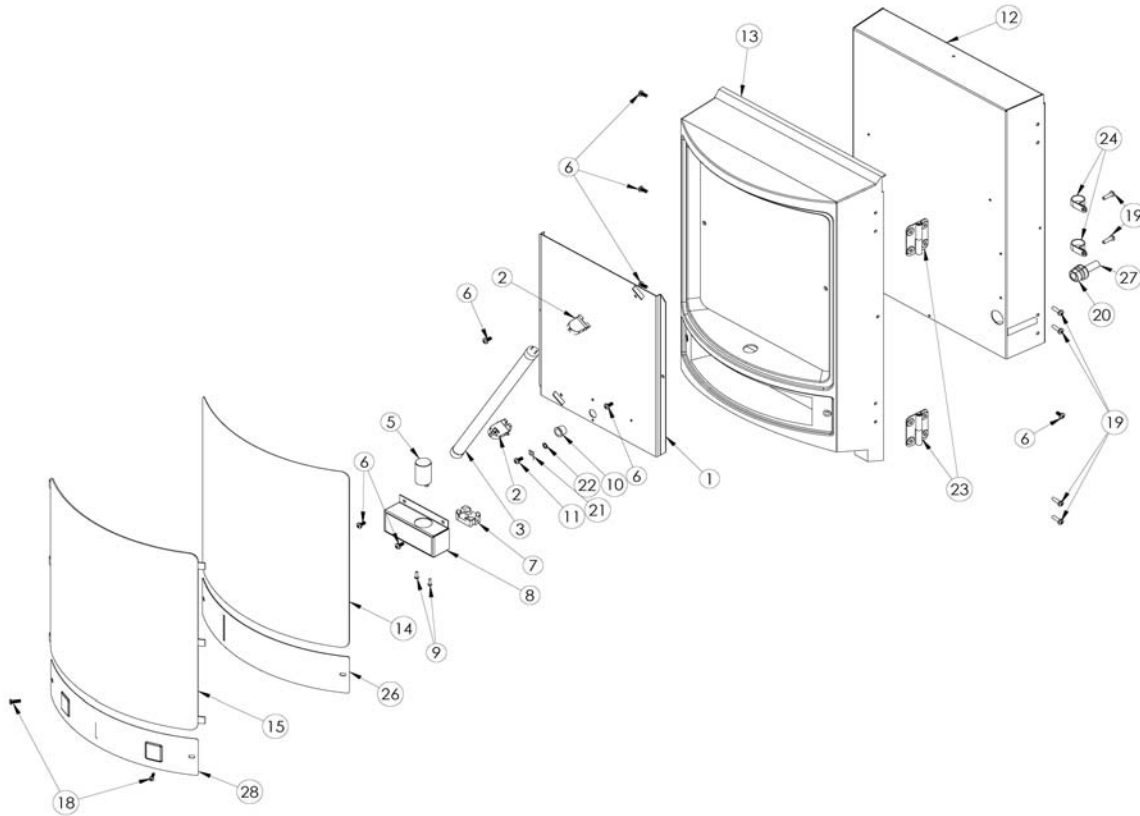
ITEM NO.	PART NUMBER	TITLE	ITEM NO.	PART NUMBER	TITLE
1	61125	Light, Indicator Green 250V	18	61303	Screw, #8 x 3/8 black trilobe
2	70271	Light, Ind 230V A70271	19	61250	Washer, #8 Split Lock
3	61339	8-32 UNF S.S. ACORN NUT	20	61228	Spacer, NYL HEY #334 SPU98
4	61847	Switch, Toggle-Spst	21	61236	SCRW, 10-32X1/2 PH TR SS
5	65108	Switch, DPDT ON-ON, 10A	22	70322	NUT, 10-32 KEPS SS
6	65336	Label, Flush On/Off	23	60381	Rivnut, 6-32 ALS4-632-80
7	61248	Label, Ready Light PIC	24	70271-1	Light, Ind 230V A70271
8	61247	Label, Power On Light PIC	25	61125-1	Light, Indicator Green 250V
9	61889	Label, PWR ON/OFF PIC	26	60741	O-Ring, 2-014
10	65209	Bracket, Hopper Shelf CP3	27	61334	Washer, Slinger
11	61117	MOTOR, WHIPPER, 230VAC	28	61226	FTG, FUNNEL DISCONNECT
12	61523	Whipper Base Assy	30	61352-12	Seal, Hopper Brkt - 12"
13	07023-04	Screw, 6-32x1/4 PH BD M/S SS	31	86600	Tie, Wire, Nylon, T18R
14	61197	Tray, Steam Recvry Plenum	32	65345	CP3 HF Dispense Assy, Left
15	86877	SCRW, #8X3/8 PH PN T/B ZNC/GN	33	65346	CP3 HF Dispense Assy, Center
16	65045	Gear Motor Assy. 24DC, 220RPM	34	65347	CP3 HF Dispense Assy, Right
	65063	Gear Motor, 24VDC, 30RPM, Componenti			

Dwg #65349

CP-3 Refrigeration and Water System



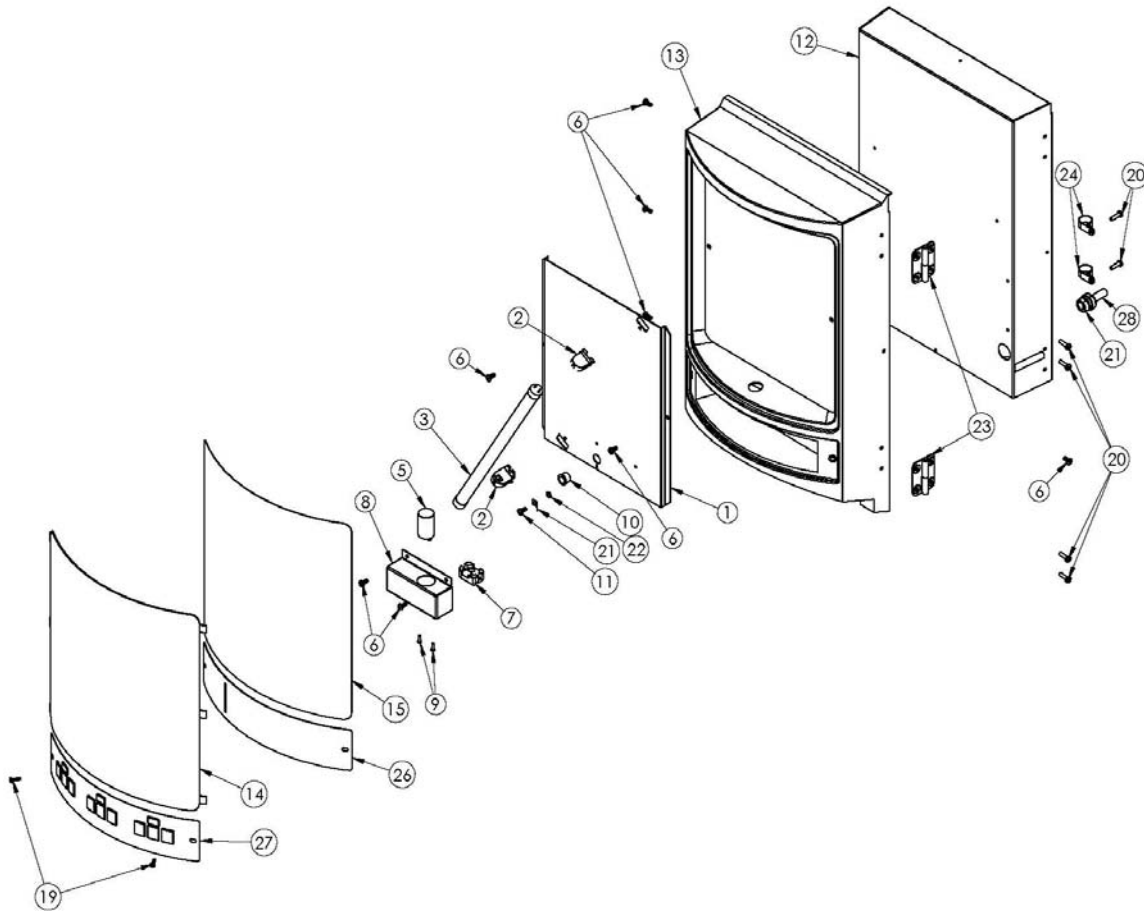
CP-3 Door Assembly – single portion



CP DOOR ASSEMBLY SINGLE PORTION

ITEM NO.	PART NUMBER	Title	ITEM NO.	PART NUMBER	Title
1	61120	Bracket, Lamp Mtg PIC2/3	15	61219	CVR, MERCHANDISER PIC2/3
2	61513	Holder, Mini Bi Pin	16	71261	NUT, 8-32 ESNA SS
3	61118	Lamp, F8T5	17	60122	Rivnut, 6-32
4	61327	Decal, Light Replace	18	61304	Screw, 6-32 x 1/2 PPH,SS
5	61194	Starter, Bulb	19	61305	Screw, 8-32 x 5/8 black
6	61303	Screw, #8 x 3/8 black trilobe	20	61479	STRAIN RELIEF,HEYCO
7	62521	Base, Starter	21	70635	TERMINAL, 1/4-032 X 45DEG TAB
8	61134	Shield, Igniter	22	61186	Washer, #8 Int Lock
9	62522	Screw, 4-36 x 3/8	23	61792	HINGE, PWDR COATED SS 2 LEAF
10	07339-02	Bushing, Snap-1/2 Hey#SB-500-6	24	60080	Clamp, 5/8"Nylon **SC**
11	61272	SCRW, #8X3/8 PH PN T/B ZNC/GN	25	61440	CAP, #8 SCREW SOFT
12	62516	Panel, Merch Reinf	26	61824	PANEL, SWITCH PIC2/3 *IH*
13	61199	MERCHANDISER, PIC 2/3	27	65201	Harness, CP3, Door Interc
14	65060	GRAPHIC	28	65125	Touchpad,CP3,Single-Butto Blue

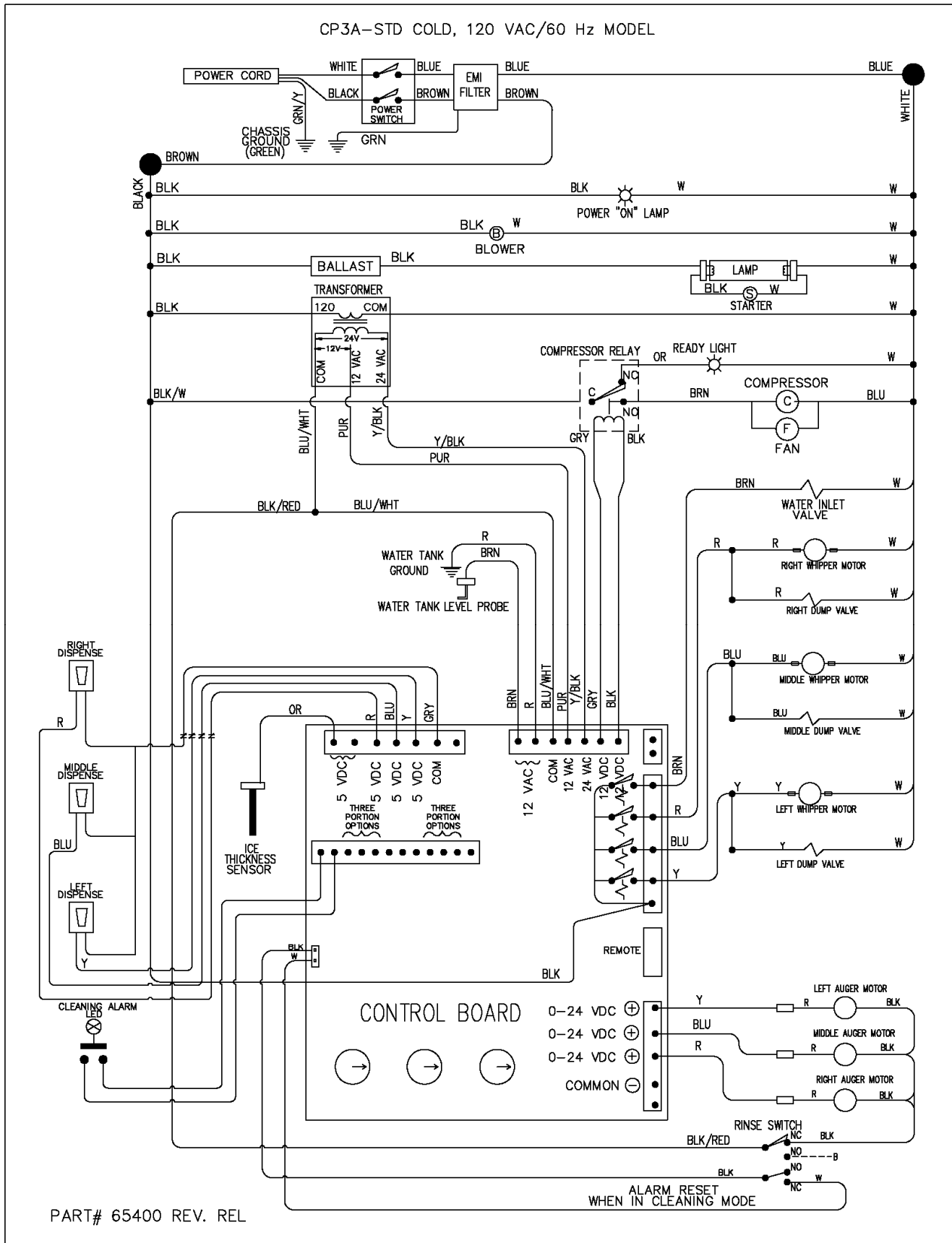
CP-3 Door assembly – three portion



CP DOOR ASSEMBLY THREE PORTION

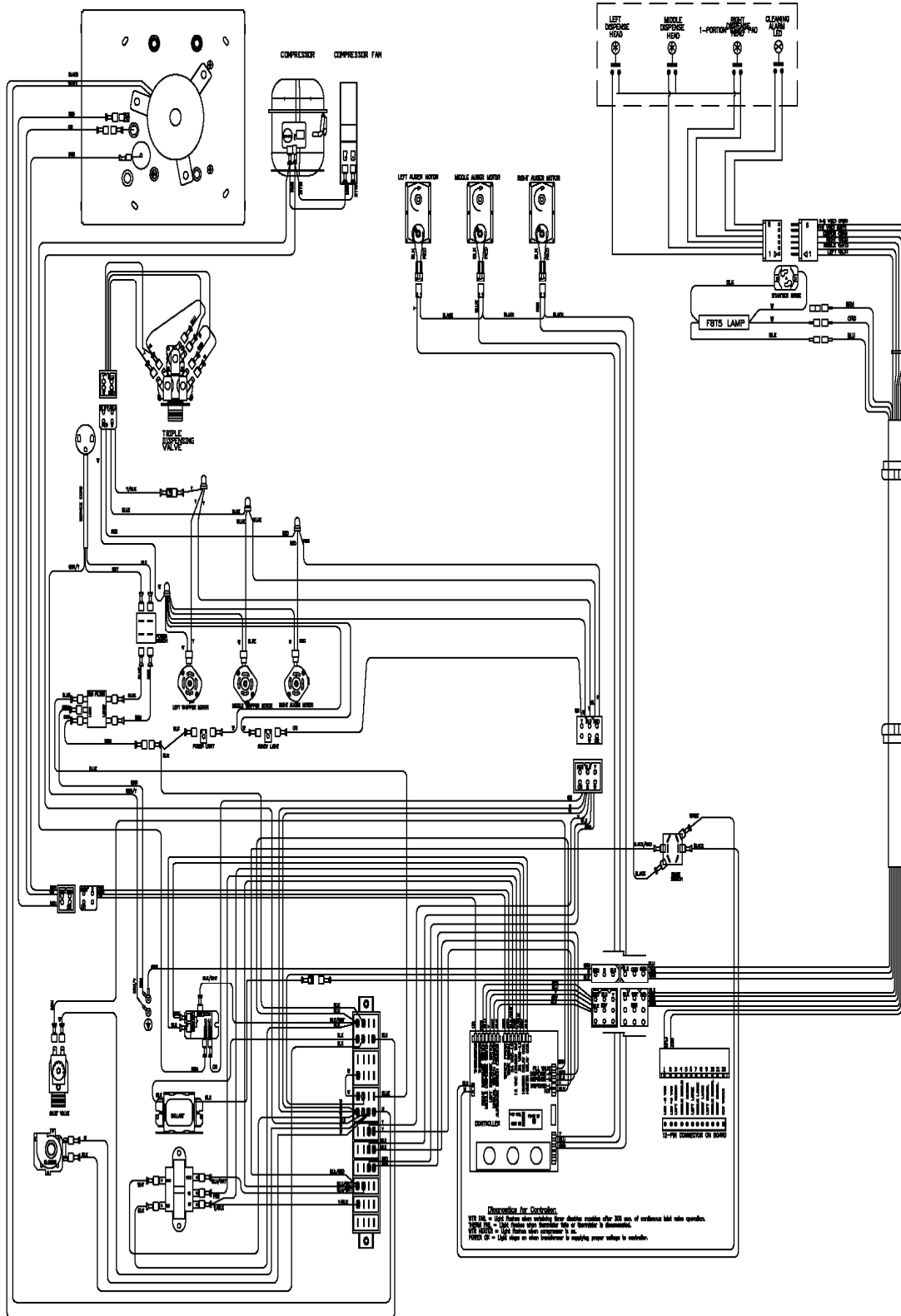
ITEM NO.	PART NUMBER	Title	ITEM NO.	PART NUMBER	Title
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2	61513	Holder, Mini Bi Pin	16	71261	NUT, 8-32 ESNA SS
3	61118	Lamp, F8T5	17	60122	Rivnut, 6-32
4	61327	Decal, Light Replace	18	61304	Screw, 6-32 x 1/2 PPH, SS
5	61194	Starter, Bulb	19	61305	Screw, 8-32 x 5/8 black
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7	62521	Base, Starter	21	70635	TERMINAL, 1/4-032 X 45DEG TAB
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9	62522	Screw, 4-36 x 3/8	23	61792	HINGE, PWDR COATED SS 2 LEAF
10	07339-02	Bushing, Snap-1/2 Hey#SB-500-6	24	60080	Clamp, 5/8" Nylon **SC**
11	61272	SCRW, #8X3/8 PH PN 1/B ZNC/GN	25	61440	CAP, #8 SCREW SOFT
12	62516	Panel, Merch Reinf	26	61824	PANEL, SWITCH PIC2/3 *IH*
13	61199	MERCHANDISER, PIC 2/3	27	61826	TOUCH PAD, 3PORT W/O HOT WATER
14	65060	GRAPHIC	28	61820	HARNNESS, PIC3 3 PORT INTER

CP-3 Wiring Diagram 120 VAC

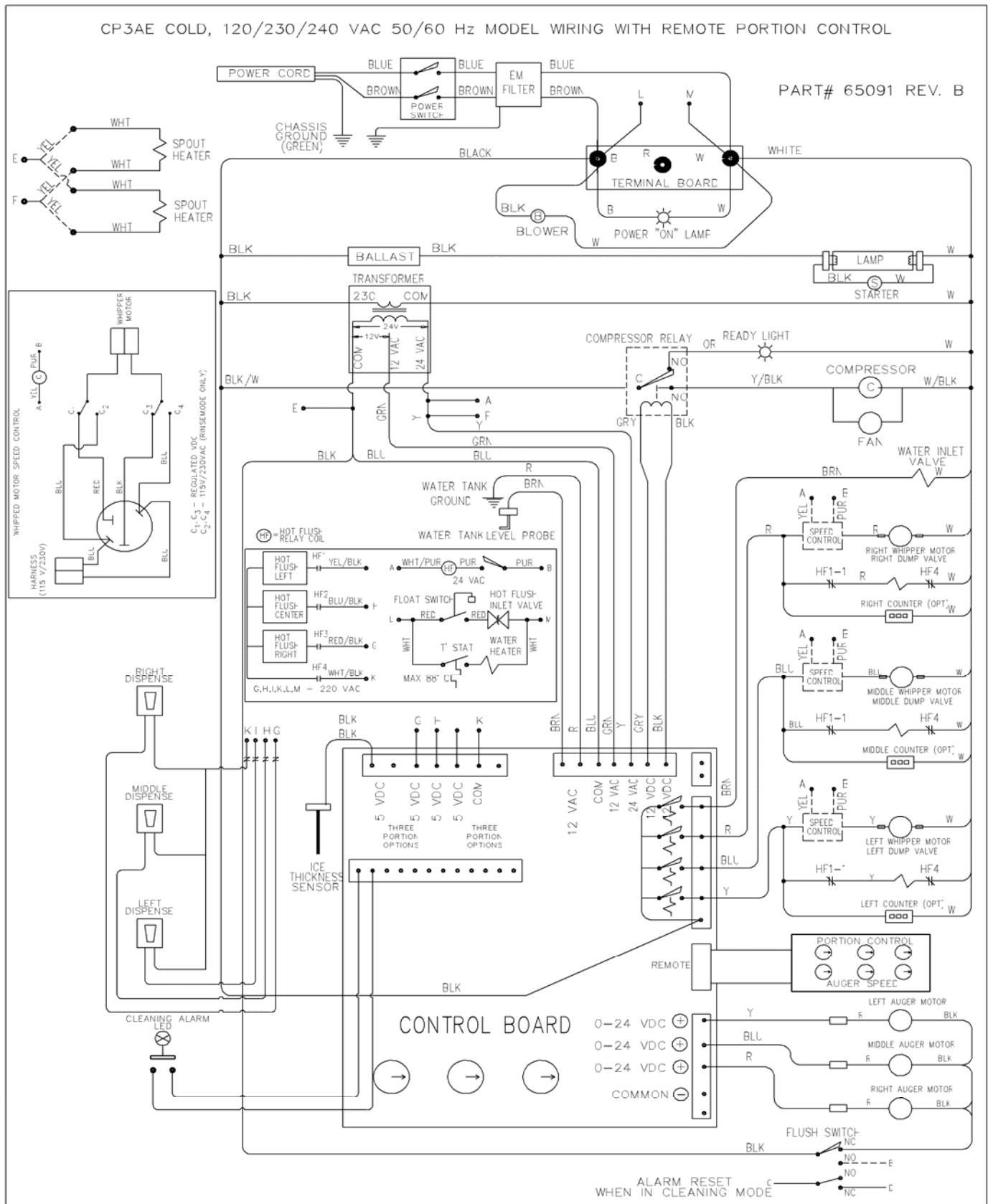


CP-3 Pictorial Wiring Diagram 120 VAC

CP3A-STD



CP-3AE Wiring Diagram with all options shown



Notes and Comment page





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Part #