



COLDFUSION[®]

Operator's Manual



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The products, technical information, and instructions contained in this manual are subject to change without notice. These instructions are not intended to cover all details or variations of the equipment, nor to provide for every possible contingency in the installation, operation or maintenance of this equipment. This manual assumes that the person(s) working on the equipment have been trained and are skilled in working with electrical, plumbing, pneumatic, and mechanical equipment. It is assumed that appropriate safety precautions are taken and that all local safety and construction requirements are being met, in addition to the information contained in this manual.

This Product is warranted only as provided in Cornelius' Commercial Warranty applicable to this Product and is subject to all of the restrictions and limitations contained in the Commercial Warranty.

Cornelius will not be responsible for any repair, replacement or other service required by or loss or damage resulting from any of the following occurrences, including but not limited to, (1) other than normal and proper use and normal service conditions with respect to the Product, (2) improper voltage, (3) inadequate wiring, (4) abuse, (5) accident, (6) alteration, (7) misuse, (8) neglect, (9) unauthorized repair or the failure to utilize suitably qualified and trained persons to perform service and/or repair of the Product, (10) improper cleaning, (11) failure to follow installation, operating, cleaning or maintenance instructions, (12) use of "non-authorized" parts (i.e., parts that are not 100% compatible with the Product) which use voids the entire warranty, (13) Product parts in contact with water or the product dispensed which are adversely impacted by changes in liquid scale or chemical composition.

Contact Information:

To inquire about current revisions of this and other documentation or for assistance with any Cornelius product contact:

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This document contains the original instructions for the unit described.

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SAFETY

SAFETY INSTRUCTIONS

Read and Follow all Safety Instructions

Read and follow all safety instructions in this manual and on the machine (decals, labels, and laminated cards).

Read and understand all applicable OSHA (Occupation Safety and Health Administration) safety regulations before operating the machine.

Recognize Safety Alerts



This is the safety alert symbol. When you see it in this manual or on the machine be alert to the potential of personal injury or damage to the machine.

Different Types of Alerts

There are 3 types of safety alerts:



DANGER:

Indicates an immediate hazardous situation which if not avoided **WILL** result in serious injury, death, or equipment damage.



WARNING:

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in serious injury, death, or equipment damage.



CAUTION:

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury or equipment damage.

SAFETY TIPS

- Carefully read all safety messages in this manual and safety signs on the machine.
- Keep safety signs in good condition and replace missing or damaged safety signs.
- Learn how to operate the machine and how to use the controls properly.
- Do not let anyone operate the machine without proper training. This appliance is not intended for use by very young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
- Keep your machine in proper working condition and do not allow unauthorized modifications to the machine.

CO₂ (CARBON DIOXIDE) WARNING



WARNING:

CO₂ Displaces Oxygen. Strict Attention **must** be observed in the prevention of CO₂ gas leaks in the entire CO₂ and soft drink system. If a CO₂ gas leak is suspected, particularly in a small area, **immediately** ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentration of CO₂ gas will experience tremors which are followed rapidly by loss of consciousness.

START-UP AND OPERATING INSTRUCTIONS

ICE DRINK DISPENSER

The ice drink dispenser shall be installed by qualified personnel following instructions given in the Installation Manual part number 621057625INS.

Fill the hopper with ice. Dispense several large cups of ice (approximately 20 to 30 seconds total dispensing time) to allow ice to fill the cold plate cabinet. Add ice to the hopper as necessary to refill, then replace the lid. Allow 10 to 15 minutes for the cold plate to cool down. Repeat this procedure whenever the dispenser has run out of ice. Contact your local syrup distributor for complete information on the beverage system.

CAUTION:

Dispenser cannot be used with crushed or flaked ice. Use of bagged ice which has frozen into large chunks can void warranty. The dispenser agitator is not designed to be an ice crusher. Use of large chunks of ice which “jam up” inside the hopper will cause failure of the agitator motor and damage to the hopper. If bagged ice is used, it must be carefully and completely broken into small, cube-sized pieces and left to “temper” or warm up for a minimum of 20 minutes in room temperature before loading into the dispenser hopper.

In normal operation, pushing the ice dispenser mechanism will cause ice to flow from the ice chute. Ice flow will continue until the dispenser mechanism is released. Dispensing of any faucet will provide beverage of the appropriate flavor.

CAUTION:

Use caution to avoid spilling ice when filling dispenser. Clean up immediately any spilled ice from filling or operating the unit. To prevent contamination of ice, the lid must be installed on the unit at all times.

If the dispenser fails to dispense ice or beverage, refer to the troubleshooting guide in the Installation Manual part number 621057625INS.

CLEANING INSTRUCTIONS

WARNING:

Disconnect Power Before Cleaning. Do not use metal scrapers, sharp objects or abrasives on the ice storage hopper, top cover and the agitator disk, as damage may result. Do not use solvents or other cleaning agents, as they may attack the plastic material.

- Soap solution – Use a mixture of mild detergent and warm (100°F) potable water.
- Sanitizing solution – Dissolve 2 packets (4 oz.) Stera Sheen Green Label into 2 gallons of warm (80-100°F) water to insure 200 ppm of available chlorine.

DISPENSER

Cleaning Exterior Surfaces

Important: Perform the following daily.

1. Remove cup rest from drip tray.
2. Wash the drip tray with soap solution. Rinse drip tray with clean water and allow solution to run down the drain.
3. Wash cup rest with soap solution and rinse in clean water. Install the cup rest in the drip tray.
4. Clean all exterior surfaces of Unit with soap solution, then rinse with clean water.

Cleaning Interior Surfaces

CAUTION:

When pouring liquid into the hopper, do not exceed the rate of 1/2 gallon per minute.

IMPORTANT Perform the following at least once a month.

1. Remove agitator assembly.
2. Using a nylon bristle brush or sponge, clean the interior of the hopper, top cover and agitator assembly with soap solution. Thoroughly rinse the hopper, cover and agitator surfaces with clean potable water.
3. Reassemble agitator assembly. Take special care to ensure that the thumbscrew is tight.
4. Using a mechanical spray bottle filled with sanitizing solution, spray the entire interior and agitator assembly. Allow to air dry.
5. Remove merchandiser and ice chute cover from unit.
6. With a nylon bristle brush or sponge, clean the inside of the ice chute, gasket, and cover with soap solution and rinse thoroughly to remove all traces of detergent.
7. Reassemble ice chute assembly.
8. Using a mechanical spray bottle filled with sanitizing solution, spray the inside of the ice chute. Allow to air dry.
9. Reinstall merchandiser.

BEVERAGE SYSTEM (IF APPLICABLE)

WARNING:

Disconnect Power Before Cleaning! Do not use metal scrapers, sharp objects, or abrasives on the ice storage hopper, top cover and the agitator disk, as damage may result. Do not use solvents or other cleaning agents, as they may attack the plastic material.

- Soap solution – Use a mixture of mild detergent and warm (100°F) potable water.
- Sanitizing solution – Dissolve 2 packets (4 oz.) Stera Sheen Green Label into 2 gallons of warm (80-100°F) water to insure 200 ppm of available chlorine.
- Cleaning tank – Fill clean, empty tank with a mixture of mild detergent and five (5) gallons of warm potable water (120°F).

CAUTION:

When pouring liquid into the hopper, do not exceed the rate of 1/2 gallon per minute.

Cold Plate

1. Remove splash panel.
2. Remove or move the plastic cold plate covers to expose the cold plate.
3. Locate and remove any debris from the drain trough. Check that the drain holes are not clogged.
4. Pour small amount of soap solution through cold plate openings in hopper.
5. Using a cloth, wash down the surfaces of the cold plate and plastic cover with soap solution.
6. Install and properly position the access covers on the cold plate.
7. Install the splash panel in the reverse order it was removed.
8. Rinse cold plate surface by pouring potable water through hopper openings.

Dispensing Valves

Refer to addendum supplied with the unit that is applicable to the manufacturer of the valves installed on the unit.

Product Tubing

IMPORTANT Only trained and qualified persons should perform these cleaning and sanitizing procedures.

Sanitize Post-Mix tank system

1. Remove all the quick disconnects from all the tanks. Fill a suitable pail or bucket with soap solution.
2. Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. **(Do not use a wire brush)**. Rinse with clean water.
3. Prepare sanitizing solution and using a mechanical spray bottle, spray the disconnects. Allow to air dry.
4. Using a clean, empty tank, prepare five (5) gallons of the sanitizing solution. Rinse the tank disconnects with approximately 9 oz. of the sanitizing solution. Close the tank.
5. Prepare cleaning tank by filling clean five (5) gallon tank with a mixture of mild detergent and potable water (120°F).
6. Connect a gas disconnect to the tank and then apply one of the product tubes to the cleaning tank. Operate the appropriate valve until liquid dispensed is free of any syrup.
7. Disconnect cleaning tank and hook up sanitizing tank to syrup line and CO₂ system.
8. Energize beverage faucet until chlorine sanitizing solution is dispensed through the faucet. Flush at least two (2) cups of liquid to ensure that the sanitizing solution has filled the entire length of the syrup tubing.
9. Allow sanitizer to remain in lines for fifteen (15) minutes.
10. Repeat the step above, applying a different product tube each time until all tubes are filled with the sanitizing solution.
11. Remove the nozzle and syrup diffuser and clean them in a mild soap solution. Rinse with clean water and reassemble the nozzle and syrup diffuser on the valve.
12. Rinse the parts in clean water, reassemble the valve and reconnect it to the dispenser.
13. Discard the tank of sanitizing solution and reconnect the product syrup tanks. Operate the valves until all sanitizer has been flushed from the system and only product syrup is flowing.

Sanitize syrup lines, B-I-B Systems

1. Remove all the quick disconnects from all the B-I-B containers.
2. Fill a suitable pail or bucket with soap solution.
3. Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. **(Do not use a wire brush)**. Rinse with clean water.
4. Using a plastic pail, prepare approximately five (5) gallons of sanitizing solution.
5. Rinse the B-I-B disconnects in the sanitizing solution.
6. Sanitizing fittings must be attached to each B-I-B disconnect. If these fittings are not available, the fittings from empty B-I-B bags can be cut from the bags and used. These fittings open the disconnect so the sanitizing solution can be drawn through the disconnect.
7. Place all the B-I-B disconnects into the pail of sanitizing solution. Operate all the valves until the sanitizing solution is flowing from the valve. Allow sanitizer to remain in lines for fifteen (15) minutes.
8. Remove the nozzle and syrup diffuser from each valve and clean them in a soap solution. Rinse with clean water and reassemble the nozzle and syrup diffuser to the valve.
9. Remove the sanitizing fittings from the B-I-B disconnects and connect the disconnects to the appropriate B-I-B container. Operate the valves until all sanitizer has been flushed from the system and syrup is flowing freely.

Replenishing CO₂ Supply

NOTE: When indicator on the 1800-psi gage is in the shaded (“change CO₂ cylinder”) portion of the dial, CO₂ cylinder is almost empty and should be changed.

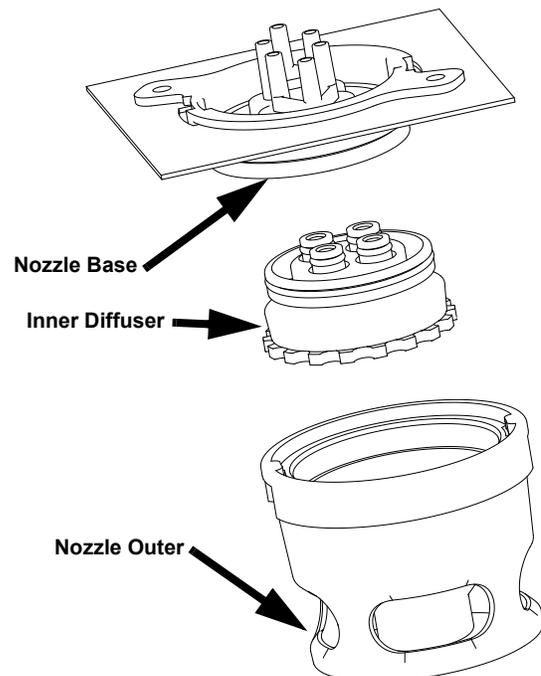
1. Fully close (clockwise) the CO₂ cylinder valve.
2. Slowly loosen the CO₂ regulator assembly coupling nut allowing CO₂ pressure to escape, then remove the regulator assembly from the empty CO₂ cylinder.
3. Unfasten safety chain and remove the empty CO₂ cylinder.

WARNING: To avoid personnel injury and/or property damage, always secure the CO₂ cylinder with a safety chain to prevent it from falling over. Should the valve become accidentally damaged or broken off, a CO₂ regulator can cause serious personnel injury.

4. Position the full CO₂ cylinder and secure with a safety chain.
5. Make sure gasket is in place inside the CO₂ regulator assembly coupling nut, then install the regulator assembly on the CO₂ cylinder.
6. Open (counterclockwise) the CO₂ cylinder valve slightly to allow the lines to slowly fill with gas, then open the valve fully to back-seat the valve (back-seating the valve prevents gas leakage around the valve shaft).
7. Check CO₂ connections for leaks. Tighten any loose connections.

Cleaning Brand Nozzle

1. Remove Outer Nozzle from unit by rotating counterclockwise and pulling downward.
2. Remove the Inner Diffuser by pulling downward.
3. Wash the Inner Diffuser and Nozzle Outer in warm water.
4. With a clean towel and warm water, wipe down the Nozzle Base.
5. Replace the Inner Diffuser by aligning the ports and pushing upwards.
6. Replace the Outer Nozzle by pushing upwards while rotating clockwise until both clips engage.



MAINTENANCE

The following dispenser maintenance should be performed at the intervals indicated:

DAILY (OR AS REQUIRED)

Remove foreign material from vending area drip tray to prevent drain blockage.

Clean vending area. Check for proper water drainage from the vending area drip tray.

Checking CO2 Supply

Make sure CO2 cylinder regulator assembly 1800-psi gage indicator is not in shaded ("change CO2 cylinder") portion of the dial. If so, the CO2 cylinder is almost empty and must be replaced.

Checking for CO2 and water leak

Check the Unit for CO2 and water leaks and if found, call a qualified Service Person to repair as necessary.

MONTHLY

Clean and sanitize the hopper interior and beverage system, if applicable (see CLEANING INSTRUCTIONS).

YEARLY

Water Pump Maintenance (or after water system disruption)

The water pump water strainer screen and the liquid dual check valve must be inspected and cleaned at least once a year under normal circumstances and after any water system disruption (plumbing work, earthquake, etc.). Call a qualified Service Person to inspect and clean the strainer screen and the liquid dual check valve.

Cleaning CO2 Gas Check Valve

The CO2 gas check valve, located on the carbonated water tank, must be inspected and serviced at least once a year under normal conditions and after any CO2 system servicing disruption. Call a qualified Service Person to inspect and clean the CO2 gas check valve.

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