Excellence in Compliance Testing

Certification Exhibit

FCC ID: ODB-CORCO250

FCC Rule Part: 15.247

ACS Project: 12-2147

Manufacturer: ValidFill, LLC
Model: HD006SA006

User Manual

Installation, Service, and User Manual

Cornelius ED250 30 Inch

For additional assistance please contact:
Office Phone: 941-379-9858
Technical Support: 866-239-6898
Email: support@validfill.com

Edition 2013
700-R-10000r0

Installation, Service, and User Manual for Cornelius ED250 30in

Specifications

	30" Wide	
DIMENSIONS		
HEIGHT:	39.6 Inches (1006 mm)	
WIDTH:	30 Inches (762 mm)	
DEPTH:	30.6 Inches (777 mm)	
TOTAL ICE CAPACITY:	250 Pounds (113 kg)	
DISPENSABLE ICE CAPACITY:	N/A	
COUNTER WEIGHT (WITHOUT ICE):	250 Pounds (113 kg)	
SHIPPING WEIGHT:	300 Pounds (136 kg)	
ELECTRICAL		
VOLTAGE:	120	230
AMPS:	3.5	3.5
Hz:	60	50/60

Warning

This unit is equipped with automatic agitation. It may activate unexpectedly. DO NOT place hands, or foreign objects in the ice storage compartment. When unit is being serviced cleaned, or sanitized, umplug dispenser from the power source. *Cornelius does not recommend the use of shaved, flake, nugget, or pellet ice in dispensers not properly equipped to do so.]*

Installation

1.0) Installation

1.1) Receiving

Each unit is completely tested under operating conditions and thoroughly inspected before shipment. At time of shipment the carrier accepts the unit, and any claim for damage must be made with the carrier. Upon receiving units from the delivering carrier, carefully inspect carton for visible indication of damage. If damage exists, have carrier note same on bill of lading and file claim with carrier.

1.2) Unpacking

A. Set shipping carton upright on the floor.
B. Cut band and remove.
C. Open top of carton and remove interior packing.
D. Lift Carton up and off of the dispenser.
E. Remove wood shipping base from the bottom of the dispenser. (Support dispenser while removing shpping base to prevent damage to the dispenser.)

1.3) Selecting Counter Location

Warning

This applicance must be earthed. This dispenser must be electrically grounded to avoid danger to the operator. The power cord provided has a three prong grounded plug. If a three hold grounded electical outlet is not available, use an approved method of insuring a proper ground to the dispenser.

A. Select a location close to a properly grounded electircal outlet, convenient to an open type drain access for soda, water, and syrup lines, and sufficient clearance for air circulation.

i) If at all possible, location should be away from direct sunlight or other heat sources.
ii) Connecting lines may be run through access in back of the unit or extend down through a counter cut out.
iii) The counter must support the weight of the dispenser, ice, and possibly and ice maker. Total weight may exceed 800lbs (363.6 kg).

Installation Cont.

B. Unit may be installed directly on the countertop or on legs supplied with the unit. If installed directly on the counter, the unit must be sealed to the countertop. *If an ice maker is to be mounted on top of the dispenser , do not install dispenser on legs.*

C. Location must insure sufficient clearance on sides, top, and back of the unit to provide proper ventilation and air circulation.

D. Additionally, if an ice maker is not top mounted on the unit, sufficient clearance should be provided [a minimum of 16 inches is recommended] to allow filling the unit with ice from a five (5) gallon container.

1.4) Installing the Dispenser

A. Remove Cup Rest, Drip Tracy, Splash Plate, and Top Cover.

B. Remove Cover Plate at rear of unit if not a through the counter installation.

C. Connect Soda and water supply lines to 3/8 inch barb fittings at the front of the unit. Check for leaks.

D. Connect syrup supply lines to the 3/8 inch baarb inlet fittings at the front of the unit. Check for leaks.

E. Uncoil drain hose from Cold Plate drain and extend to an open type drain.

F. Install Drip Tray and extend hose to open type drain.

G. Both drain lines must be insulated with a closed cell insulation. Insulation must cover the entire length of the drain hose, including fittings. The drain should be installed in such a mannger that water does not collect in sags or other low points, as condensation will form.

H. Install Cup Rest and Splash Plate.

I. Connect Power Cord to grounded electircal outlet that is protected by a 20 amp, or less, circuit breaker.

J. Test Motor operation by putting keyswitch in bypass and pressing ice chute.

K. Clean and sanitize dispenser (see Section 2).

L. Fill unit approximately half full with ice. Push Chute and check for ice delivery, finish filling unit with ice, install top cover.

2.) Cleaning and Sanitizing instructions

2.1) General Information

A. Cornelius equiment (new or reconditioned) is shipped from the factory cleaned and snitized in accordance with NSF guidelines. This equipment must be cleaned and sanitized after installtion is complete, and the operator of the equipment must provide continuous mainteneance as required by this manual and or state and local health department guildines to ensure proper operation and sanitation requirements are maintained.

B. Cleaning and sanitizing should be accomplished only by trained personnel. Sanitary gloves are to be used during cleaning and sanitizing operation. Applicable safey precautions must be observed. Instuction warnings on the product being used must be followed.

C. Water lines are not to be disconnected during the cleaning and sanitizing of syrup lines to avoid contamination.

D. Do NOT use strong bleaches or detergents.

E. Do NOT use metal scrapers, sharp objects, steel wool, souring pads, abrasives, solvents, etc., on the dispenser.

F. Do NOT use hot water above 140F (60C).

2.2) Required Cleaning Equipment

A. Cleansers (for example, Ivory Liquid, Calgon, etc.) mixed with clean, potable water at a temperature of 90° to 110° degrees Fahrenheit should be used to clean equipment. The mixture ratio, using Ivory Liquid, is one (1) ounce of cleanser to two (2) gallons of water. A minimum of five (5) gallons of cleaning mixture should be prepared. Any equivalent cleanser may be used as long as it provides a caustic based, non-perfumed, easily rinsed mixture containing at least two (2) percent sodium hydroxide (NaOH). Rinsing must be thorough and use clean, potable water which is also at a temperature of 90° to 110°F.

B. Sanitizing solutions should be prepared in accordance with the manufacturer's written recommendations and safety guidelines. The solution must provide 200 parts per million (PPM) available chlorine. A minimum of five (5) gallons should be prepared.

B. (Cont..) Any sanitizing solution may be used as long as it is prepared in accordance with the manufacturer's written recommendations and safety guidelines, and provides 200 parts per million (PPM) available chlorine. Sanitizing solution is to be purged from line(s) and equipment by flushing with product only until there is no after taste. Do not rinse with water.

C. Other:

i) Clean cloth towels
ii) Bucket.
iii) Small brush - included with installation kit
iv) Extra nozzle.
v) Sanitary Gloves

2.3 Daily Cleaning

Using a mild detergent solution, clean Top Cover and all exterior stainless steel surfaces. Clean exterior of dispensing valves and ice chute. Remove Cup Rest. Clean Drip Tray and Cup Rest, and replace Cup Rest. Wipe clean all splash areas using a damp cloth soaked in cleaning solution. Clean beverage valves as specified by the valve manufacturer.

2.4) Ice Bin Cleaning - Start up and Monthly

A. Disconnect Dispenser from power source.
B. Remove Top Cover.
C. Remove Agitator Pin from Agitator Shaft. Slide Agitator Shaft rearward out of Motor Shaft and pull out of rear Bearing to remove.
D. Remove Dispensing Wheel from Motor Shaft by sliding rearward.
E. Remove Dispensing Wheel Shroud.
F. Remove Splash Plate Assembly by lifting it up and out from the dispenser face.
G. Using cleaning solution, described in Section 2.2, and a clean cloth or soft brush, clean all removable parts, sides of Ice Bin, Ice Chute, and surface of aluminum casting.
H. Repeat Step G for all exterior surfaces of the dispenser.
I. Using hot water, thoroughly rinse away the cleaning solution.
J. Wearing sanitary gloves, soak a clean cloth towel in sanitizing solution, described in Section 2.2, and wash all surfaces of removable parts, sides of Ice Bin, Ice Chute, and surface of aluminum casting.
K. Repeat Step J for all metal and plastic surfaces (but not labels) of the dispenser exterior.

2.4) Ice Bin Cleaning - Start up and Monthly (Continued...)

L. Wearing sanitary gloves, reassemble all removable parts.
M. Fill Unit with ice and replace Top Cover.
N. Reconnect Dispenser to power source.

2.5) Cleaning and sanitizing beverage components - Figial Systems

A. Disconnect syrup lines from syrup containers (for example, quick disconnects, figal containers, etc.).
B. Connect hose half of syrup line to a syrup tank filled with clean, potable, room temperature water. Connect CO_2 supply hose to tank and pressurize.
C. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product.

WARNING
TO AVIOD POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE, DO NOT ATTEMPT TO REMOVE SYRUP TANK COVER UNTIL CO_2 PRESSURE HAS BEEN RELEASED FROM TANK.

C. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product.
D. Disconnect CO_2 supply hose from the water filled syrup tank.
E. Following the instructions as described in Section 2.2 above, mix appropriate amount of cleaning solution. Fill a tank with this solution. Connect hose half of syrup line to the tank. Connect CO2 supply hose to tank and pressurize.
F. Activate valve and draw cleaning solution through lines for a minimum of 60 seconds. This will ensure line is flushed and filled with cleaning solution. Allow line to stand for at least 30 minutes.
G. Disconnect CO2 supply hose from the tank.
H. Connect hose half of syrup line to a tank filled with clean, potable, water at a temperature of 90° to 110°F. Connect CO_2 supply hose to tank and pressurize.
I. Activate valve to flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of cleaning solution.
Continue rinsing until testing with phenolpthalein shows that the rinse water is free of residual detergent.
J. Disconnect CO_2 supply hose from the tank.

2.5) Cleaning and sanitizing beverage components - Figial Systems (Cont...)

K. Following the instructions as described in 2.2 above, mix appropriate amount of sanitizing solution. Fill a tank with this solution. Connect hose half of syrup line to the tank. Connect CO_2 supply hose to tank and pressurize.

L. Activate valve and draw sanitizing solution through line for a minimum of 60 seconds. This will ensure line is flushed and filled with sanitizing solution. Allow line to stand for at least 30 minutes.

M. Disconnect CO_2 supply hose from the tank.

N. Reconnect syrup lines to syrup containers (for example, quick disconnects, figal containers, etc.) and ready unit for operation.

O. Draw drinks to refill lines and flush the sanitizing solution from the dispenser.

P. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.

Q. Repeat cleaning, rinsing, and sanitizing procedures for each valve and each circuit.

2.6) Cleaning and sanitizing beverage components - Bag-in-box systems.

A. Disconnect syrup quick disconnect coupling from syrup packages and connect coupling to a bag valve removed from an empty Bag-in-Box (BIB) package.

B. Place syrup inlet line in a clean container filled with clean, potable, room temperature water.

C. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product.

D. Following the instructions as described in 2.2 above, mix appropriate amount of cleaning solution in a clean container. Place syrup inlet line in container filled with cleaning solution.

E. Activate valve and draw cleaning solution through lines for a minimum of 60 seconds. This will ensure line is flushed and filled with cleaning solution. Allow line to stand for at least 30 minutes.

F. Place syrup inlet line in a clean container filled with clean, potable, water at a temperature of 90° to 110°F.

G. Activate valve to flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of cleaning solution. Continue rinsing until testing with phenolpthalein shows that the rinse water is free of residual detergent.

H. Following the instructions as described in 2.2 above, mix appropriate amount of sanitizing solution in a clean container. Place syrup inlet line in container filled with sanitizing solution.

I. Activate valve and draw sanitizing solution through line for a minimum of 60 seconds. This will ensure line is flushed and filled with sanitizing solution. Allow line to stand for at least 30 minutes.

J. Remove bag valve from quick disconnect coupling and reconnect syrup inlet line to syrup package. Ready unit for operation.

K. Draw drinks to refill lines and to flush the chlorine sanitizing solution from the dispenser.

L. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.

M. Repeat cleaning, rinsing, and sanitizing procedures for each valve and each circuit.

3) The ValidFill System: How it works

3.1) The RFID Specific Components Defined

In the ValidFill system there are three main Radio Frequency Identification (RFID) specific components that make the system work:

An RFID tag (also known as a transponder) is programmed with information that uniquely identifies itself. These tags are located on the bottom or between the shell and the liner of the Whirley-DrinkWorks' refillable mugs used with the ValidFill system. Each individual tag holds information that is unique to that tag such as the size of the cup, the name of your organization, the date the cup was purchased, where it was purchased, how many times it has been used, how many refills it has left, and multiple other fields of data.

An RFID reader (also known as a transceiver) to translate the information that is programmed onto the tag into a format the computer software can interpret and send out the proper commands.

An antenna, located in the soda dispenser's drip tray, transmits a small radio signal that has been generated by the RFID reader.

3.2) An Overview of How the ValidFill System Works

On the bottom of your Whirley-DrinkWorks refillable mug is an RFID tag that is uniquely identified by the information that is stored on that tag.

When the button on the soda valve is pushed, the antenna is turned on and produces a small radio signal. With the Whirley-DrinkWorks refillable mug sitting directly under the soda valve and on the drip tray grate, the radio signal actives the tag.

If no tag is present when the button is pushed, the "Place Cup on Tray" image is displayed along with an audible indicator.

With the tag present, the antenna reads the information stored on that tag and sends it to the Black Box.

The Black Box processes this information and responds by doing one of the following: dispensing soda, displaying an error message accompanied by an audible signal, or displaying the information stored on the cup's RFID tag.

NOTE: For more information on this process, please refer to the Chart in Appendix B.

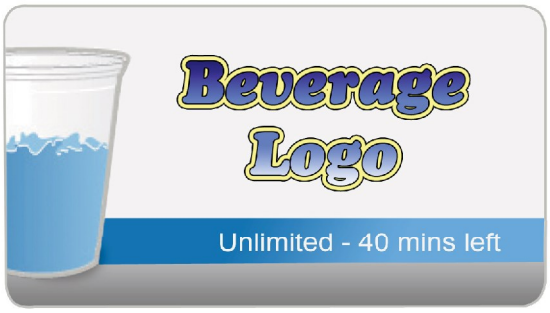
4) The ValidFill System: The infomration it Provides

4.1) Pop-up Messages

When a user walks up to a Validfill machine and presses the dispense button on any of the valves, a variety of pop up messages appear with helpful information. The information included in the pop-up messages are as follows:

4.1.1) Action Messages

Action messages appear on the screen when a user walks up and places a valid cup on the drip tray and activates the dispense button. The specific action message shown will depend on how your organizations program is set up. A few examples are shown below.



4.1.2) Error Messages

Error Messages appear on the screen when a user does one of the following: tries to use an expired cup, tries to use a cup with no RFID tag, does not place the cup directly under the soda valve and on the grate, or tries to refill his cup too quickly after the cup's last fill. Each error message is shown below with a brief description.

This error message appears when a user tries to use an expired cup. Depending on how your organization's program is set up, the user may have run out of refills, is trying to use the cup outside of the allotted time, or trying to use the cup past its expiration date.

This error message can appear for one of two reasons: 1) Either the user is trying to use a cup that does not have an RFID tag, 2) The cup is not directly under the soda valve and on the grate.

This error message appears when a user tries to refill his or her cup too quickly after the previous fill. The Validfill system is set up so that a user can only refill their cup once per given unit of time (the standard is 5 minutes).

This error message appears when a user tries to use a cup that has an RFID tag on it that is not programmed to work with your organization's system. An example would be a Disney Cup was being used at Busch Gardens.