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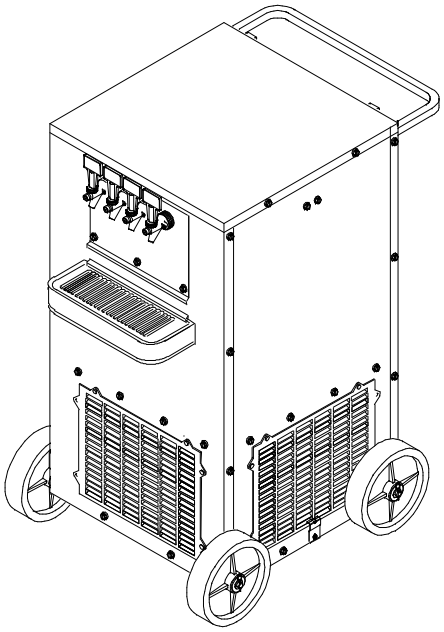
Operator's Manual
C-1550XR UNIVERSAL PRE-MIX DISPENSER (R-404A REFRIGERANT)



Part No. 309989002
January 7, 1986
Revised: January 27, 1999
Control Code A

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION
This Manual must be read and understood before installing or operating this equipment

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SAFETY INFORMATION

Recognize Safety Information

This is the safety-alert symbol. When you see this symbol on our machine or in this manual, be alert to the potentially of personal injury.

Follow recommended precautions and safe operating practices.

Understand Signal Words

A signal word - ***DANGER, WARNING,*** *OR* ***CAUTION*** is used with the safety-alert symbol. ***DANGER*** identifies the most serious hazards.

Safety signs with signal word ***DANGER*** or ***WARNING*** are typically near specific hazards.

General precautions are listed on ***CAUTION*** safety signs. ***CAUTION*** also calls attention to safety messages in this manual.

Follow Safety Instructions

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. 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 instructions. Keep your machine in proper working condition. Unauthorized modifications to the machine may impair function and/or safety and affect the machine life.

CO_2 (Carbon Dioxide) Warning

CO_2 Displaces Oxygen. Strict Attention *must* be observed in the prevention of CO_2 (carbon dioxide) gas leaks in the entire CO_2 and soft drink system. If a CO_2 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 CO_2 gas will experience tremors which are followed rapidly by loss of consciousness and suffocation.

Shipping, Storing, Or Relocating Unit

CAUTION: Before shipping, relocating, or storing this Unit, the product coils *must* be flushed with potable water, all water *must* be purged from the product coils, ice bank *must* be melted, and water *must* be drained from the water tank. A freezing ambient environment will cause residual water remaining inside the Unit to freeze resulting in damage to the Unit internal components.

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GENERAL INFORMATION

TO THE USER OF THIS MANUAL

This is an Operator's Manual for the C-1550XR Universal Pre-Mix Dispenser (hereafter referred to as a Unit). Retain this manual for future reference.

This section covers WARRANTY REFERENCE INFORMATION and DESIGN DATA information for the C-1550XR Universal Pre-Mix Dispenser. This Unit contains no User serviceable parts.

WARRANTY REFERENCE INFORMATION

Warranty Registration Date (to be filled out by customer)
Unit Part Number:
Serial Number:
Install Date:
Local Authorized Service Center:

Table 1. Design Data	
Unit Part Numbers:	
Universal C-1550XR Four-Flavor (115 VAC, 60 Hz)	2849749020
Universal C-1550XR Four-Flavor (115 VAC, 60 Hz)	2849749200
Universal C-1550XR Five-Flavor (115 VAC, 60 Hz)	2849759200
Universal C-1550XR Five-Flavor (115 VAC, 60 Hz)	2849759020
Universal C-1550XR Five-Flavor (230 VAC, 50 Hz)	4949759020
Universal C-1550XR Five-Flavor (230 VAC, 50 Hz)	4949759200
Overall Dimensions:	
Height	42-1/2 inches
Width	21 3/4-inches
Depth (with drip tray)	31-1/2 inches
Weights:	
Dry Weight	170 pounds
With Water Tank Full of Water	403 pounds
Ice Bank Weight	100 pounds
Capacities:	
Unit Water Bath (no ice bank) approx.	28 gallons
Dispensing Rate:	
12-oz. drinks 8/minute	724 (see **NOTE**)
NOTE: *Number of 12-oz. drinks that can be dispensed at 40°F or below with 75°F product inlet temperature and 75°F ambient.	
Ambient Operating Temperature	40°F to 100°F
Electrical Requirements:	See Unit Nameplate

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OPERATOR'S INSTRUCTIONS

This section covers operating controls, pre-operation check, Unit operation, and maintenance procedures that may be performed by the Operator.

IMPORTANT: Only qualified Personnel should service internal components of the Unit.

CAUTION: This Unit is intended for indoor installation *only. Do not* install this Unit in an outdoor environment which would expose it to the outside elements.

IMPORTANT: For the most efficient operation of the Unit, the ambient operating temperature for the Unit should not exceed 90°F. Satisfactory temperatures may be obtained using blowers, air conditioning, etc. Check your local codes.

WARNING: The Unit must be electrically grounded to avoid possible fatal electrical shock or serious injury to the operator. The Unit power cord is equipped with a three-prong plug. If a three-hole (grounded) electrical outlet is not available, use an approved method to ground the Unit.

OPERATING CONTROLS

(see Figure 1)

DISPENSING VALVE LEVER

The dispensing valves levers need only be pulled forward to dispense product and released when cup or glass is full.

UNIT POWER SWITCH (115 VAC, 60 HZ UNITS ONLY)

The Unit power switch, located on back of the Unit. must be in the "ON" (up) position before Unit will operate.

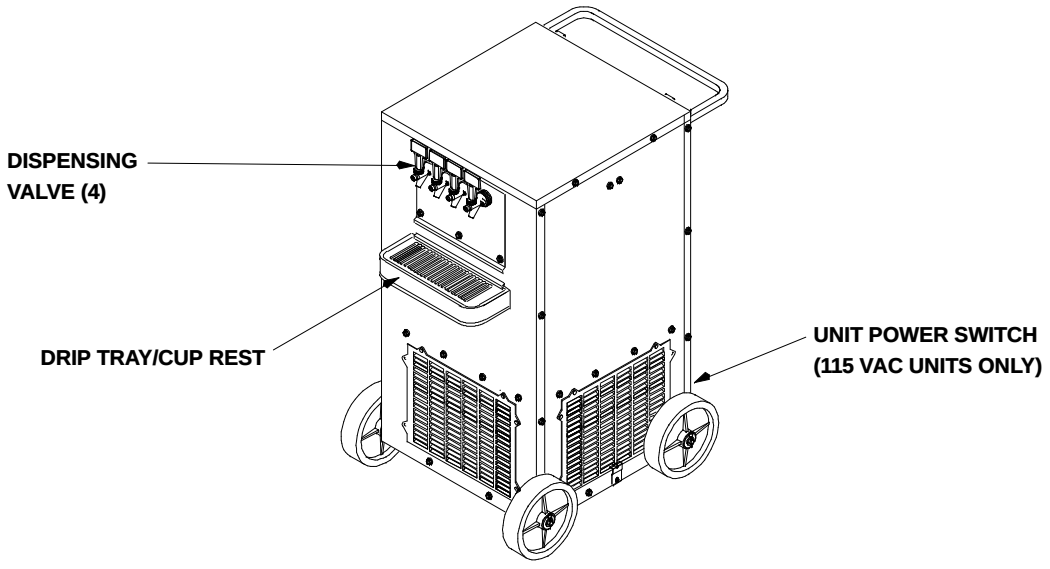

FIGURE 1. UNIVERSAL C-1550XR (FOUR-FLAVOR UNIT SHOWN)

UNIT OPERATION

1. If applicable, make sure drip tray drain hose is routed to a waste container.
2. Make sure Unit power switch (115 VAC Units only), located on back side of the Unit, is in the "ON" (up) position.
3. Hold cup or glass under the dispensing valve. Pull dispensing valve lever forward and dispense until cup or glass is full, then release lever.

DAILY PRE-OPERATION CHECK

1. Make sure CO_2 cylinder regulator assembly 1800 psi gage indicator is not in shaded ("change CO_2 cylinder") portion of the dial. If so, CO_2 cylinder is almost empty and must be replaced as instructed.
2. Be sure of sufficient product supply in all product tanks. If not, replenish product supply as instructed.

ADJUSTMENTS

ADJUSTING PRODUCT TANKS CO_2 REGULATORS

The product tanks CO_2 regulators should be periodically checked for proper pressure settings and if necessary, be adjusted by a qualified Service Person.

ADJUSTING DISPENSED PRODUCT FLOW RATE

Dispensed product flow rate of the dispensing valves should be periodically checked and if necessary, be adjusted by a qualified Service Person.

REPLENISHING CO_2 SUPPLY

NOTE: When indicator on CO_2 cylinder regulator assembly 1800 psi gage is in shaded ("change CO_2 cylinder") portion of dial, CO_2 cylinder is almost empty and should be replaced.

CAUTION: Wear protective eyewear to avoid injury from gas-driven particles.

WARNING: CO_2 displaces oxygen. Strict attention *must* be observed in the prevention of CO_2 (carbon dioxide) gas leaks in the entire CO_2 and soft drink system. If a CO_2 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 CO_2 gas will experience tremors which are followed rapidly by loss of consciousness and suffocation.

1. Fully close (clockwise) CO_2 cylinder valve.
2. Slowly loosen CO_2 regulator assembly coupling nut allowing CO_2 pressure to escape, then remove regulator assembly from empty CO_2 cylinder.
3. Unfasten safety chain and remove empty CO_2 cylinder.

WARNING: To avoid personal injury and/or property damage, always secure CO_2 cylinder in an upright position with safety chain to prevent it from falling over. Should the shutoff valve become accidentally broken off, CO_2 cylinder can cause serious personal injury.

4. Position CO_2 cylinder and secure with safety chain.
5. Make sure gasket is in place inside CO_2 regulator coupling nut, then install regulator on CO_2 cylinder.
6. Open (counterclockwise) CO_2 cylinder valve slightly to allow lines to slowly fill with gas, then open valve fully to back-seat valve. (Back-seating valve prevents leakage around valve shaft).
7. Check CO_2 connections for leaks.

REPLENISHING PRODUCT SUPPLY

1. Remove inlet (CO_2) disconnect (grey) and outlet disconnect (black) from empty product tank, then remove tank.
2. Place full product tank in position, then connect inlet (CO_2) disconnect (grey) and outlet disconnect (black) to tank.

PRODUCT FLAVOR CHANGE

Sanitize applicable system as instructed, then install full tank of new flavor product.

CLEANING CONDENSER COIL

NOTE: Air circulation through the condenser coil, required to cool the coil, is drawn in through grille on Unit front panel and is exhausted out through grilles on sides and back of the Unit. Restricting air flow through the condenser coil will decrease cooling efficiency of the Unit.

Area in front, sides, and back of the Unit *must* be kept free of obstructions at all times which would prevent air flow in and out of the Unit.

An excessive accumulation of dust, lint, and grease on the condenser coil will restrict air flow through the coil which will decrease cooling efficiency of the Unit. The Unit condenser coil should be periodically cleaned to maintain cooling efficiency of the Unit. Contact a qualified Service Person to clean the Unit condenser coil.

CHECKING ICE WATER BATH

A gurgle heard from the Unit while it is operating, indicates the water level in the water tank is low and more water should be added to the tank. Contact a qualified Service Person to replenish the water tank water supply and if necessary, also clean the water tank.

CLEANING AND SANITIZING

DAILY CLEANING OF UNIT

NOTE: A drip tray that does not have a drain hose routed to a waste container or a permanent drain *must* be removed from the Unit and be thoroughly cleaned. A drip tray that has a drip tray drain hose routed to a waste container or a permanent drain may be cleaned in place on the Unit as follows.

3. Remove cup rest from the drip tray.
4. Wash drip tray in place on the Unit, then rinse drip tray with hot water allowing water to drain out through the drain hose.
5. Wash cup rest, then rinse the cup rest with clean water. Install cup rest in drip tray.
6. Clean all external surfaces of the Unit with a sponge. Rinse out the sponge with clean water, then wring excess water out of the sponge and wipe off all external surfaces of the Unit. Wipe Unit dry with a clean soft cloth. DO NOT USE ABRASIVE-TYPE CLEANERS.

SANITIZING PRE-MIX SYSTEMS

IMPORTANT: Only qualified Service Personnel should perform sanitizing procedure on the pre-mix product systems.

The pre-mix product systems should be sanitized every 90-days using a non-scented household liquid bleach such as Hi-Lex or Chlorox containing a 5.25% sodium hypochlorite concentration. Proceed as follows to sanitize the pre-mix product systems.

1. Disconnect product tanks from the product systems.
2. Rinse product tanks quick disconnects with warm potable water.
3. Using a clean empty product tank, prepare a full tank of non-scented liquid dishwasher detergent solution by using 70°F (21°C) to 100°F (38°C) potable water and 0.5 oz. (15 ml) of liquid dishwasher detergent (such as Joy, Ivory, etc.) to one gallon of potable water. Shake tank containing detergent solution to thoroughly mix the solution.
4. Connect tank containing detergent solution into one of the product systems.
5. Place waste container under the applicable dispensing valve.
6. Activate the dispensing valve to permit detergent solution to purge product out of the line, coil, and the dispensing valve. Continue to dispense until only detergent solution is dispensed from the dispensing valve.
7. Connect tank containing detergent solution into remaining product systems and flush product out of systems as instructed in steps 5 and 6 preceding.
8. Using a clean product tank, prepare sanitizing solution using 70°F (21°C) to 100°F (38°C) potable water and 0.5 oz. (15 ml) of household liquid bleach such as non-scented Hi-Lex or Chlorox that contains a 5.25 % sodium hypochlorite concentration to one gallon of potable water. This mixture *must* not exceed 200 PPM of chlorine. Shake tank containing sanitizing solution to thoroughly mix the solution.
9. Connect tank containing sanitizing solution into one of the product systems.
10. Place waste container under the applicable dispensing valve.
11. Activate the dispensing valve for one minute to purge detergent solution from and install sanitizing solution in the product system.
12. Continue activating the dispensing valve in cycles ("ON" for 15–seconds, "OFF", then "ON" for 15-seconds). Repeat "ON" and "OFF" cycles for 15 cycles.
13. Repeat steps 9 through 11 preceding to purge detergent solution from the remaining product systems.
14. Allow sanitizing solution to remain in the product system for not less than 10-minutes or for no more than 15-minutes.
15. Connect product tank containing potable water into the product system to be flushed.

WARNING: Flush sanitizing solution from the system(s) as instructed. Residual sanitizing solution left in the product system(s) could create a health hazard.

16. Place waste container under applicable dispensing valve.
17. Activate the dispensing valve for one minute to purge all sanitizing solution out of the product system.
18. Continue activating the dispensing valve in cycles ("ON" for 15–seconds, "OFF", then "ON" for 15-seconds). Repeat "ON" and "OFF" cycles for 15 cycles.
19. Repeat steps 15 through 18 preceding to purge sanitizing solution from the remaining product systems.

20. Remove product tank containing flush water from the product system, then connect a clean empty product tank into the system.

21. Place waste container under applicable dispensing valve.

22. Activate the dispensing valve to purge all water from the product system.

23. Repeat steps 20 and 22 preceding to purge all water from the remaining product systems.

24. Dispose of waste sanitizing solution in a sanitary sewer, not in a storm drain, then thoroughly rinse the inside and the outside of the container that was used for sanitizing solution to remove all sanitizing solution residue.

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TROUBLESHOOTING

IMPORTANT: Only qualified personnel should service internal components or electrical wiring.

WARNING: If repairs are to be made to a product system, remove quick disconnects from the applicable product tank, then relieve the system pressure before proceeding. If repairs are to be made to the CO_2 system, stop dispensing, shut off the CO_2 supply, then relieve the system pressure before proceeding. If repairs are to be made to the refrigeration system, make sure electrical power is disconnected from the Unit.

TROUBLESHOOTING PRODUCT SYSTEM

Trouble	Probable Cause	Remedy
NO PRODUCT DISPENSED.	A. Product tank quick disconnects not attached properly.	A. Securely attach product tank quick disconnects.
	B. No product supply (product tank empty).	B. Replenish product supply as instructed.
	C. No CO_2 supply.	C. Replenish CO_2 supply as instructed.
DISPENSED PRODUCT COMES OUT OF DISPENSING VALVE CLEAR BUT FOAMS IN CUP OR GLASS	A. Oil film or soap scum in cup or glass.	A. Use clean cups and glasses.
	B. Ice used for finished drink is sub-cooled.	B. Do not use ice directly from freezer. Allow ice to become "wet" before using. (Refer to following **NOTE**)

NOTE: Crushed ice also causes dispensing problems. When dispensed drink hits sharp edges of ice, carbonation is released from dispensed drink.

DISPENSED PRODUCT FOAMS AS IT LEAVES DISPENSING VALVE.	A. Recovery rate of Unit exceeded (ice bank depleted).	A. Allow ice bank to recover.
	B. Product tanks CO_2 regulator improperly adjusted.	B. Contact a qualified Service Person to adjust product tanks CO_2 regulator
	C. Dispensing valve restricted or dirty.	C. Sanitize product system as instructed.
	D. Refrigeration system not operating properly.	D. Contact a qualified Service Person.

TROUBLESHOOTING REFRIGERATION SYSTEM

REFRIGERATION SYSTEM COMPRESSOR DOES NOT OPERATE	A. Ice bank sufficient.	A. Refrigeration not called for.
	B. Unit power cord unplugged or Unit power switch in "OFF" (down) position.	B. Plug in Unit power cord or place power switch in "ON" (up) position.

Trouble	Probable Cause	Remedy
	C. No power source (blown fuse or tripped circuit breaker).	C. Replace fuse or reset circuit breaker. (Note: Fuse or circuit breaker are not part of unit.)
REFRIGERATION SYSTEM COMPRESSOR DOES NOT OPERATE (CONT'D)	D. Low voltage at compressor terminals.	D. Voltage must be at least 103 volts (115 VAC Unit) or 208 (230 VAC Unit) at compressor terminals when compressor is trying to start.
	E. Inoperative refrigeration system.	E. Contact a qualified Service Person.
REFRIGERATION SYSTEM COMPRESSOR OPERATES CONTINUOUSLY BUT DOES NOT FORM SUFFICIENT ICE BANK.	A. Cooling capacity is exceeded by over-drawing drinks.	A. Reduce amount of drinks drawn per given time.
	B. Unit located in excessively hot area or air circulation through condenser coil is restricted.	B. Relocate Unit or contact a qualified Service Person to clean the condenser coil.
	C. Refrigeration system leak.	C. Contact a qualified Service Person to repair the refrigeration system.

WARRANTY

IMI Cornelius Inc. warrants that all equipment and parts are free from defects in material and workmanship under normal use and service. For a copy of the warranty applicable to your Cornelius, Remcor or Wilshire product, in your country, please write, fax or telephone the IMI Cornelius office nearest you. Please provide the equipment model number, serial number and the date of purchase.

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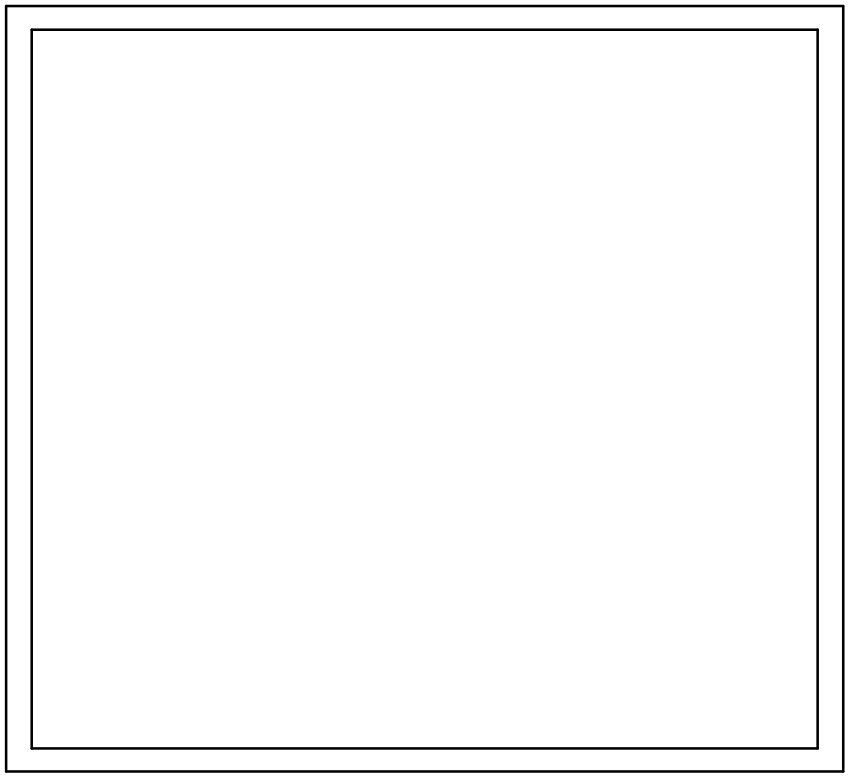

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