

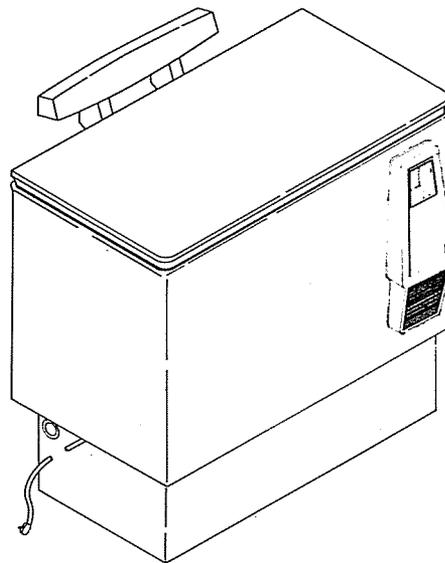


THE CORNELIUS COMPANY

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# COMPACT 45, 50, 60, 72 HORIZONTAL VENDER

INSTALLATION MANUAL



Manual Part No. 335867-000  
September 12, 1983  
Revised: April 18, 1984

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION

This Installation Manual must be read and understood before the installation and operation of this Vender.

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**IMPORTANT:** To the user of this manual - This manual is a guide for installing, operating, and maintaining this equipment. Refer to Table of Contents for page location of detailed information pertaining to questions that arise during installation, operation, service and maintenance, or troubleshooting this equipment.

**SECTION I**

**GENERAL DESCRIPTION**

This section gives the description, theory of operation, and design data for the Compact 50 and 72 Horizontal Bottle Venders and the Compact 45 and 60 Horizontal Can Venders (hereafter referred to as units).

**UNIT DESCRIPTION**

The units are compact and lightweight and provide coin operated vending of refrigerated bottled or canned product. The units consist basically of an adjustable thermostat controlled refrigeration system enclosed in lower part of a sheet-metal cabinet with the upper part of the cabinet being insulated where bottled or canned product are stored. The units are equipped with either a mechanical or solid-state electronically operated (depending upon model number) coin mechanism. Some models feature an illuminated sign on top of the cabinet which provides excellent product merchandising.

Kit P/N 335883-000 is available to convert a compact 50 Bottle Vender to a Compact 45 Can Vender. Also available is Kit P/N 335884-000 to convert a Compact 72 Bottle Vender to a Compact 60 Can Vender.

Also available, depending upon model number located on nameplate on back of unit, is a Solid-State Coin Accumulator Kit to convert units with mechanical-type coin mechanism to solid-state operated coin mechanisms.

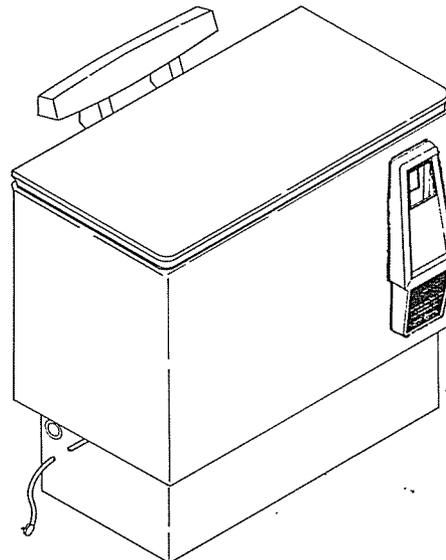
**CAUTION: Unit must be trucked or shipped in an upright (normal operating) position to prevent refrigeration compressor from being disconnected from its mountings which may render the refrigeration system inoperable and/or cause considerable damage inside the unit.**

**TABLE 1-1. DESIGN DATA**

Model Numbers: model number located on cabinet nameplate.

Overall Dimensions (approx.)

Compact 45 and 50	
Width	31 inches
Depth (without sign and crown/can tab catcher)	20 inches
Height (without legs and lighted sign)	32 inches



**FIGURE 1-1. COMPACT VENDER (LIGHTED SIGN MODEL SHOWN)**

Compact 60 and 72	
Width	36-1/4 inches
Depth (without sign and crown/can tab catcher)	20-3/8 inches
Height (without legs and lighted sign)	32-7/8 inches
Weights:	
Shipping: (approx)	
Compact 45 and 50	138 pounds
Compact 60 and 72	159 pounds
Empty (No Product):	
Compact 45 and 50	123 pounds
Compact 60 and 72	144 pounds
Compressor Horsepower	1/6 H.P.
Thermostat:	
Normal Cut-in	40 ± 1°F
Normal Cut-out	33 ± 1°F
Ambient Operating Temperature	40° to 100°F
Electrical Requirements:	
Operating Voltage	115VAC, 60HZ
Current Draw	4 Amps

## THEORY OF OPERATION

The unit consists of an adjustable thermostat controlled 1/6 H.P. refrigeration system mounted in lower part of a sheet-metal cabinet and is designed to cool bottled or canned products in upper insulated part of cabinet. When unit power cord is plugged into electrical outlet with proper electrical requirements, refrigeration compressor, condenser fan motor, and evaporator fan motor will start and operate until temperature inside

cabinet drops to the setting of the adjustable thermostat control. When cabinet temperature reaches thermostat setting, refrigeration compressor and condenser fan motor will stop but evaporator fan motor will continue to operate. Bottled or canned product is dispensed by sliding bottle or can along bottle or can rack to, and placing bottle or can in coin mechanism release gate. Insertion of proper coins in coin mechanism will release vend door allowing bottle or can of product to be lifted up and out of gate.

## SECTION II

### INSTALLATION

This section covers unpacking and inspection, identification of LOOSE-SHIPPED PARTS, selecting location, installing unit, preparing unit for operation, and unit operation.

### UNPACKING AND INSPECTION

**NOTE:** The unit was thoroughly inspected before leaving the factory and carrier has accepted and signed for it. Any damage or irregularities should be noted at time of delivery and immediately reported to delivering carrier. Request a written inspection report from Claims Inspector to substantiate any necessary claim. File claim with delivering carrier, *not* with The Cornelius Company.

- 1) After unit has been unpacked, remove shipping tape and other packing material.
- 2) Unpack LOOSE-SHIPPED PARTS. Make sure all items are present and in good condition.

TABLE 2-1. LOOSE-SHIPPED PARTS

Item No.	Part No.	Name	Qty
1	335746-044	Crown/Can Tab Catcher Ass'y	1
2	188103	Bottle Opener	1
3	188102	Sheet Metal Screw, Phil Flat Hd, Type A, No. 10 by 5/8-in.	3
4	332695	Decal, Glass Bottle (bottle unit only)	1
5	189705	Flavor Decal, Can Rack (can unit only)	1
*6	188072	Sheet Metal Screw, Phil Truss Hd, Chrome-pltd Steel, Type A, No. 10 by 1/2-in.	8
*7	343304	Lock Washer, Ext. Tooth	8
8	335733	Manual (for coin mechanism)	1
9	189991	Template	1
10		Plaque (franchise as ordered)	1
11		Lighted Sign Ass'y, with loose-shipped parts (depending upon unit model)	1
12	335732	Kit, Price Decal	1

\*Included with lighted sign models only.

### IDENTIFICATION OF LOOSE-SHIPPED PARTS

- 1) BOTTLE OPENER (item 2) to be installed on front of unit and secured with SHEET METAL SCREWS (item 3) as instructed.
- 2) CROWN/CAN TAB CATCHER (item 1) to be installed on front of unit as instructed.
- 3) DECAL, GLASS BOTTLES (item 4) to be installed on bottle unit as instructed.

- 4) FLAVOR DECAL, CAN RACK (item 5) to be installed on can unit as instructed.
- 5) LIGHTED SIGN ASS'Y (item 11), and its loose-shipped parts, to be installed on unit and secured with SHEET METAL SCREWS (item 6) and LOCK WASHERS (item 7) as instructed.
- 6) PLAQUE (item 10) to be installed on unit using TEMPLATE (item 9) as instructed.
- 7) MANUAL (item 8) provides information relating to coin mechanism adjustments and maintenance.
- 8) KIT, PRICE DECAL (item 12) contains an assortment of vend price decals of which the appropriate one is to be installed on top of coin mechanism.

### SELECTING LOCATION

**IMPORTANT:** This unit is designed for indoor use *only* and should be installed in a location with the following requirements:

The unit should be installed in a well lighted conspicuous location easily observed by the customers with the following additional requirements.

- 1) Near a properly grounded electrical outlet with proper electrical requirements. Circuit should be fused and no other electrical appliance should be connected to this circuit.
- 2) Allow sufficient clearance (three inches minimum) behind unit for proper air circulation through refrigeration condenser coil.
- 3) Unit *must* be sitting level to facilitate water draining from inside cabinet through drain hole and for proper unit operation.

### INSTALLING UNIT

INSTALLING LIGHTED SIGN ASS'Y (MODELS WITH LIGHTED SIGN) see Figure 4-1

- 1) Secure LIGHTED SIGN ASS'Y (item 11) to back of unit with SHEET METAL SCREWS (item 6) and LOCK WASHERS (item 7). Plug lighted sign power cord into convenience outlet located on lower left rear of unit.
- 2) If gasket, lens, and bumpers are loose-shipped with lighted sign assembly, install as shown in Figure 4-1.

INSTALLING BOTTLE OPENER see Figure 4-1

Install BOTTLE OPENER (item 2) on upper right front of unit. Secure bottle opener with SHEET METAL SCREWS (item 3).

## INSTALLING CROWN/CAN TAB CATCHER ASS'Y (see Figure 4-1)

Position two keyhole slots in back of CROWN/CAN TAB CATCHER ASS'Y (item 1) over two screws in front of unit. Push down on Crown/Can Tab Catcher Assembly so screws in front of unit are in narrow parts of Crown/Can Tab Catcher Assembly keyhole slots locking assembly in place on unit.

## INSTALLING GLASS BOTTLES DECAL (BOTTLE UNIT MODELS)

Install DECAL, GLASS BOTTLES (item 4) on unit in place easily observed by customers if non-return type bottles will be dispensed.

## INSTALLING FLAVOR DECAL, CAN RACK (CAN UNIT MODELS)

Install appropriate flavor decals from FLAVOR DECAL, CAN RACK (item 5) on can rack in places easily observed by the customer.

## INSTALLING PLAQUE (FRANCHISE)

Install PLAQUE (item 10) on unit as instructed on TEMPLATE (item 9).

## PLACING UNIT IN OPERATING LOCATION

**CAUTION: This unit is designed for indoor use *only*.**

In Areas Outside United States (Canada, etc.).

Place unit in operating location. Adjust each leveling legs until unit is level and unit stands "solid". Make sure all leveling legs are in contact with floor.

In Areas Within United States.

To comply with National Sanitation Foundation (NSF) requirements, unit base must be sealed to floor. Proceed as follows to seal unit base to floor.

- 1) Tilt unit up to expose bottom of unit base.
- 2) Liberally apply silastic sealant Dow Corning RTV 731 (or equivalent) on base bottom edges.

**NOTE: Do not move unit after positioning or seal from unit base to floor will be broken.**

- 3) Lower unit into operating position to complete seal from unit base to floor.
- 4) Apply additional sealant around bottom of unit base. Seal must have a minimum radius of 1/2-inch to prevent crevices and to insure a complete seal.

## STARTING REFRIGERATION SYSTEM

- 1) Using screwdriver, back off adjustable thermostat control located on lower left side (facing front of unit) of unit to "OFF" position, then turn control back to No. 2 position.



**WARNING: The unit must be electrically grounded to avoid possible fatal electrical shock or serious injury to operator. 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 unit.**

- 1) Plug unit power cord into properly grounded electrical outlet. Refrigeration compressor, condenser fan motor, and evaporator fan motor will start and operate until temperature inside cabinet drops to setting of the adjustable thermostat control. When cabinet temperature agrees with adjustable thermostat control setting, refrigeration compressor and condenser fan motor will stop but evaporator fan motor will continue to operate.
- 2) Check temperature inside cabinet and if not satisfactory, adjust thermostat control as instructed.

## PREPARING UNIT FOR OPERATION

### LOADING BOTTLE OR CAN RACK

Fill unit with can or bottle product as instructed.

### ADJUSTING COIN MECHANISM VEND PRICE

#### 1) Mechanical Coin Mechanism

The mechanical coin mechanism accumulator is factory set to vend at 40-cents but can be set to function between free vend and \$1.50 in 5-cents increments. Refer to instructions in coin mechanism MANUAL (item 8) to adjust coin mechanism for desired dispensed product vend price.

#### Solid-State Coin Mechanism

The solid-state coin mechanism accumulator is factory set to vend at 40-cents, but can be set to function between 5-cents to \$3.15. Refer to instructions in coin mechanism MANUAL (item 8) to adjust coin mechanism for desired dispensed product vend price.

- 2) After vend price adjustment to coin mechanism has been completed, pick appropriate vend price decal from KIT, PRICE DECAL (item 12) and install on top of coin mechanism.

## OPERATION

- 1) Move bottle or can along bottle or can rack channel to, and place in coin mechanism release gate.
- 2) Place appropriate coins in coin mechanisms to pay for one vend.
- 3) Pull bottle or can up which releases coin mechanism vend door releasing bottle or can from release gate.

## SECTION III

### OPERATORS INSTRUCTIONS

This section covers operators instructions for operation, daily pre-operation check, coin mechanism and coin box removal, adjustments, replenishing product supply, cleaning unit, checking refrigeration condenser coil for restrictions, and replacing lighted sign fluorescent tube, starter, or ballast.

**CAUTION:** This unit is designed for indoor use *only*.

#### OPERATION

- 1) Move bottle or can along bottle or can rack channel to, and place in coin mechanism release gate.
- 2) Place appropriate coins in coin mechanism to pay for one vend.
- 3) Pull bottle or can up which releases coin mechanism vend door releasing bottle or can from release gate.

#### DAILY PRE-OPERATION CHECK

- 1) Make sure coin box is emptied daily.
- 2) Keep unit fully stocked with product.
- 3) Crown/Can Tab Catcher is emptied and installed on unit.
- 4) Make sure exterior of unit is clean.

#### COIN MECHANISM AND COIN BOX REMOVAL

Coin mechanism must be removed for access to coin box which is inside coin mechanism. Remove coin mechanism as instructed.

#### ADJUSTMENTS

##### ADJUSTABLE THERMOSTAT CONTROL

An adjustable thermostat control, located on lower left side (facing front of unit), controls temperature inside cabinet and may be adjusted as instructed.

##### COIN MECHANISM VEND PRICE

###### 1) Mechanical Coin Mechanism

The mechanical coin mechanism accumulator is factory set to vend at 40-cents but can be set to function between free vend and \$1.50 in 5-cents increments. Refer to MANUAL (item 8) loose-shipped with coin mechanism for adjustment procedure.

##### Solid-State Coin Mechanism.

The solid-state coin mechanism accumulator is factory set to vend at 40-cents, but can be set to function between 5-cents to \$3.15. Refer to MANUAL (item 8) loose-shipped with coin mechanism for adjustment procedure.

#### REPLENISHING PRODUCT

Product supply should be checked daily and if necessary, replenished as instructed.

#### CLEANING UNIT

##### Unit Interior.

Unit interior should be cleaned as often as necessary to keep it clean and odor free as instructed.

##### Unit Exterior.

Unit exterior daily cleaning procedure should be performed at end of daily operation as instructed.

#### CHECKING REFRIGERATION CONDENSER COIL FOR RESTRICTIONS

Area back of unit must be kept free of obstructions at all times. Refrigeration condenser coil should be cleaned periodically to maintain cooling efficiency as instructed.

#### REPLACING LIGHTED SIGN FLUORESCENT TUBE, STARTER, OR BALLAST

Refer to SECTION IV, SERVICE AND MAINTENANCE in TABLE OF CONTENTS for instructions to gain access to fluorescent tube, starter, or ballast should lighted sign become inoperable.

## SECTION IV

### SERVICE AND MAINTENANCE

This section describes service and maintenance procedures to be performed on the unit.

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

#### PREPARING UNIT FOR SHIPPING OR RELOCATING

**CAUTION: Unit *must* be trucked or shipped in an upright (normal operating) position to prevent refrigeration compressor from being disconnected from its mountings which may render the refrigeration system inoperable and/or cause considerable damage inside unit.**

#### COIN MECHANISM, COIN BOX, CROWN/CAN TAB CATCHER, AND BOTTLE OR CAN RACK REMOVAL

##### COIN MECHANISM

- 1) Open cabinet door.
- 2) Unlock coin mechanism, then tilt front of coin mechanism up and lift out of unit. **SOLID-STATE COIN MECHANISM - DISCONNECT COIN MECHANISM POWER CORD CONNECTOR FROM UNIT 12 VAC POWER CORD CONNECTOR.**

##### COIN BOX

- 1) Unlock and remove coin mechanism as instructed.
- 2) Remove coin box from inside coin mechanism.

##### CROWN/CAN TAB CATCHER

- 1) Lift Crown/Can Tab Catcher up to disengage keyhole slots in back of catcher from screws on front of unit, then remove catcher.
- 2) Install Crown/Can Tab Catcher on unit by reversing removal procedure.

##### BOTTLE OR CAN RACK

- 1) Unlock and remove coin mechanism.
- 2) Slide bottle or can rack to left side of cabinet, then lift rack up and out of unit.
- 3) Install bottle or can rack by reversing removal procedure.

#### PERIODIC INSPECTION

- 1) Check refrigeration condenser coil for obstruction and dirt. *Do not* place objects in back of unit restricting circulating air to cool condenser coil.
- 2) Check cleanliness of unit interior and exterior and clean as instructed.

## ADJUSTMENTS

### THERMOSTAT CONTROL

- 1) Check temperature inside cabinet.
- 2) Using screwdriver, turn adjustable thermostat control to the right (clockwise) for colder temperature or to the left (counterclockwise) for warmer temperature.
- 3) Allow refrigeration system to complete several on and off cycles after thermostat has been adjusted, then check temperature inside cabinet. Adjust thermostat and cycle refrigeration system as many times as necessary until desired temperature is reached.

### COIN MECHANISM VEND PRICE

#### Mechanical Coin Mechanism.

The mechanical coin mechanism accumulator is factory set to vend at 40-cents but can be set to function between free vend and \$1.50 in 5-cents increments. Refer to MANUAL (item 8) loose-shipped with coin mechanism for adjustment procedure.

#### Solid-State Coin Mechanism.

The solid-state coin mechanism accumulator is factory set to vend at 40-cents, but can be set to function between 5-cents to \$3.15. Refer to MANUAL (item 8) loose-shipped with coin mechanism for adjustment procedure.

### REPLENISHING BOTTLED OR CANNED PRODUCT

- 1) Unlock and remove coin mechanism from unit as instructed.

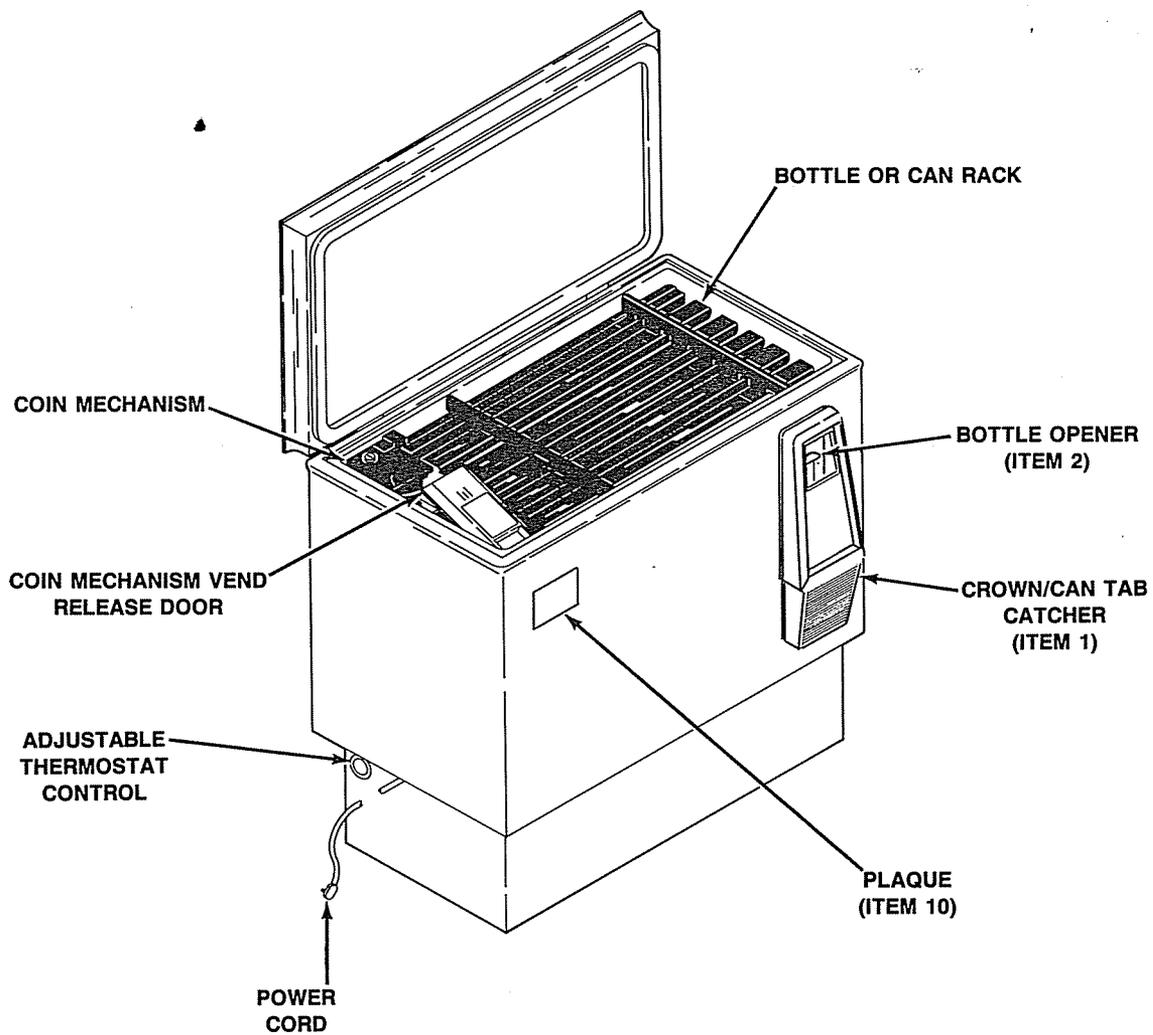
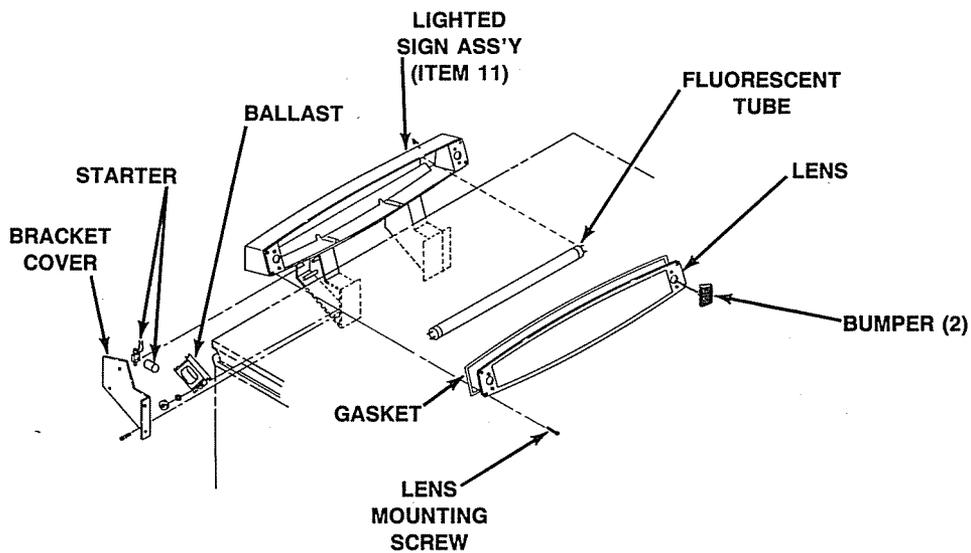
**NOTE: Bottled or canned product may be stored below bottle or can rack to be pre-cooled for later transfer to bottle or can rack.**

- 2) Slide bottle or can rack to the left, then load bottles or cans into rack channels from right-hand side.
- 3) Slide loaded bottle or can rack to the right, then install and lock coin mechanism.

### CLEANING CONDENSER COIL

Excessive accumulation of dust, lint, debris, or grease build-up on condenser coil will restricted air flow through coil and cause loss of operating efficiency. Perform following procedure to clean condenser coil.

- 1) Unplug unit power cord from electrical outlet.
- 2) Vacuum or use soft brush to clean condenser coil. If available, use low-pressure compressed air to blow dirt out of coil. If grease build-up is evident on coil, use mild soap solution to remove grease build-up.



**FIGURE 4-1. PARTS IDENTIFICATION (UNIT WITH LIGHTED SIGN SHOWN)**

## CLEANING UNIT

### UNIT INTERIOR

Unit interior should be cleaned as often as necessary to keep clean and odor free. Proceed as follows:

- 1) Unplug unit power cord from electrical outlet.
- 2) Unlock and remove coin mechanism from unit as instructed.
- 3) Remove product from bottle or can rack, then remove rack from unit.
- 4) Wash all interior surfaces of cabinet with sponge. Rinse out sponge with clean water, then wring excess water out of sponge. Wipe all interior surfaces of unit with wrung out sponge. **DO NOT USE ABRASIVE-TYPE CLEANERS.**
- 5) Wash bottle or can rack, then rinse with clean water.
- 6) Install bottle or can rack in unit, then load rack with product.
- 7) Install and lock coin mechanism in unit.
- 8) Plug unit power cord into electrical outlet.

### UNIT EXTERIOR

Unit exterior should be cleaned at end of daily operation. Proceed as follows:

- 1) Remove Crown/Can Tab Catcher as instructed and wash thoroughly inside and out.
- 2) Clean all exterior surfaces of unit with sponge. Rinse out sponge with clean water, then wring excess water out of sponge. Wipe off exterior surfaces of unit with wrung out sponge. **DO NOT USE ABRASIVE-TYPE CLEANERS.**

- 3) Install crown/can tab catcher on unit.

## GAINING ACCESS TO LIGHTED SIGN

### FLUORESCENT TUBE, STARTER, OR BALLAST

(see Figure 4-1)



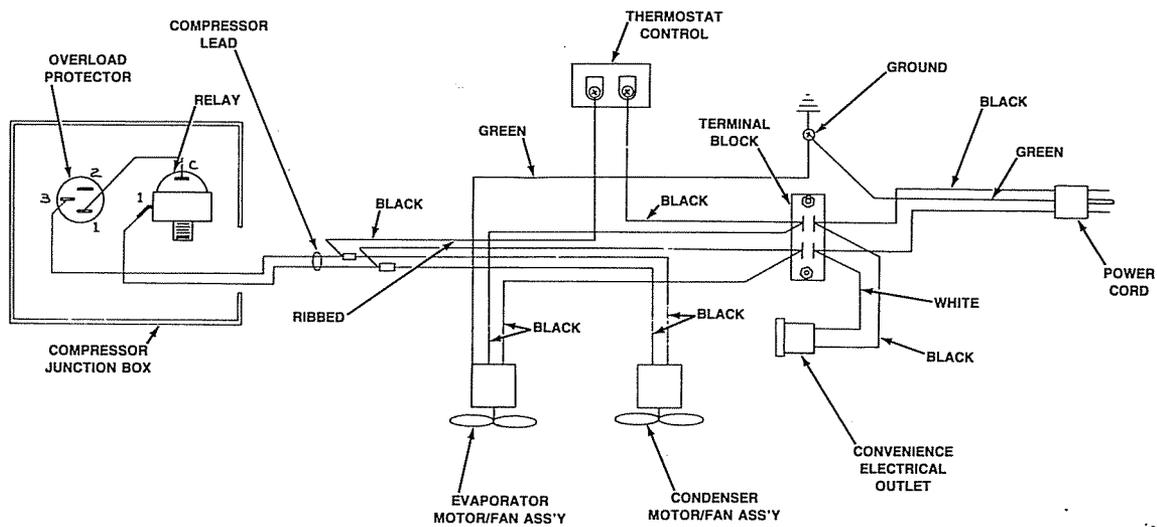
**WARNING: Make sure lighted sign power cord is disconnected from electrical outlet before proceeding to repair lighted sign.**

### FLUORESCENT TUBE

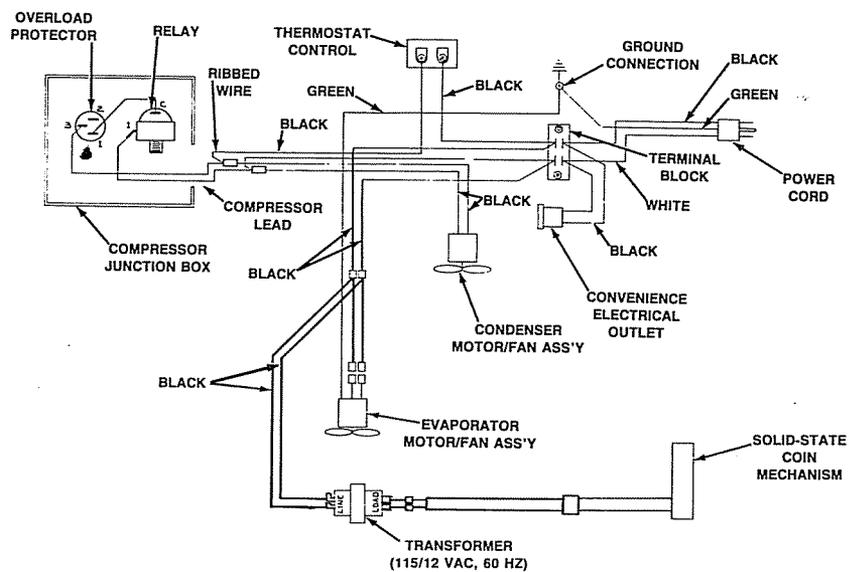
- 1) Unplug lighted sign power cord from convenience electrical outlet on lower left rear of unit.
- 2) Remove screws securing lighted sign lens, then remove lens for access to fluorescent tube.
- 3) Replace fluorescent tube, then install lens and secure with screws.
- 4) Plug lighted sign power cord into convenience electrical outlet.

### STARTER OR BALLAST

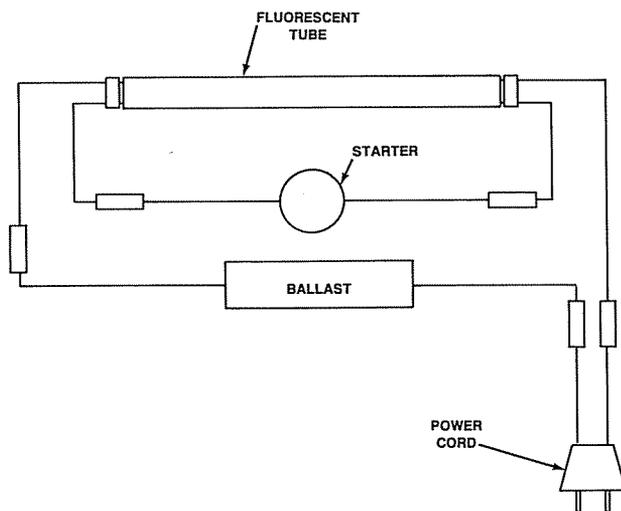
- 1) Unplug lighted sign power cord from convenience electrical outlet on lower left rear of unit.
- 2) Remove five screws securing left-hand (facing front of unit) bracket cover from lighted sign, then remove cover for access to starter or ballast.
- 3) Replace starter or ballast, then install bracket cover and secure with five screws.
- 4) Plug lighted sign power cord into convenience electrical outlet.



**FIGURE 4-2. WIRING DIAGRAM (UNIT WITH MECHANICAL COIN MECHANISM)**



**FIGURE 4-3. WIRING DIAGRAM (UNIT WITH SOLID-STATE COIN MECHANISM)**



**FIGURE 4-4. LIGHTED SIGN WIRING DIAGRAM**

## SECTION V

### TROUBLESHOOTING

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



**WARNING: Disconnect electrical power to unit before attempting any electrical repairs to internal components.**

Trouble	Probable Cause	Remedy
LIGHTED SIGN NOT OPERATING.	<ol style="list-style-type: none"> <li>1. Lighted sign power cord unplugged from convenience electrical outlet on unit.</li> <li>2. Fluorescent tube burned out.</li> <li>3. Starter inoperable.</li> <li>4. Ballast inoperable.</li> </ol>	<ol style="list-style-type: none"> <li>1. Plug lighted sign power cord into convenience electrical outlet.</li> <li>2. Replace fluorescent tube as instructed.</li> <li>3. Replace starter as instructed.</li> <li>4. Replace ballast as instructed.</li> </ol>
COIN MECHANISM NOT OPERATING PROPERLY.		Refer to Manual P/N 335733-000 provided with Coin Mechanism.
COIN MECHANISM (SOLID-STATE) INOPERABLE).	<ol style="list-style-type: none"> <li>1. Unit power cord unplugged from electrical outlet.</li> <li>2. Coin mechanism power cord connector disconnected from unit 12 VAC power cord connector.</li> <li>3. Coin mechanism coin accumulator inoperable.</li> <li>4. 115/12 VAC transformer inoperable.</li> </ol>	<ol style="list-style-type: none"> <li>1. Plug unit power cord into electrical outlet.</li> <li>2. Connect coin mechanism power cord connector to unit 12 VAC power cord connector.</li> <li>3. Replace coin accumulator.</li> <li>4. Replace transformer.</li> </ol>
WARM PRODUCT.	<ol style="list-style-type: none"> <li>1. Unit power cord unplugged from electrical outlet.</li> <li>2. Unit door not shut tight.</li> <li>3. Thermostat control not properly adjusted.</li> <li>4. Evaporator fan motor inoperative.</li> <li>5. Refrigeration system inoperative.</li> </ol>	<ol style="list-style-type: none"> <li>1. Plug unit power cord into electrical outlet.</li> <li>2. Close unit door.</li> <li>3. Adjust thermostat control.</li> <li>4. Replace evaporator fan motor.</li> <li>5. Repair refrigeration system.</li> </ol>
COMPRESSOR DOES NOT OPERATE.	<ol style="list-style-type: none"> <li>1. Product cooled sufficiently.</li> <li>2. Unit power cord unplugged from electrical outlet.</li> <li>3. No power source (blown fuse or tripped circuit breaker).</li> <li>4. Low voltage.</li> </ol>	<ol style="list-style-type: none"> <li>1. Refrigeration not called for.</li> <li>2. Plug power cord into electrical outlet.</li> <li>3. Replace fuse or reset circuit breaker. (Note: Fuse is not part of unit).</li> <li>4. Voltage must be at least 103 volts at compressor terminals when compressor is trying to start.</li> </ol>

Trouble	Probable Cause	Remedy
COMPRESSOR DOES NOT OPERATE. (cont'd)	5. Loose, disconnected, or broken wiring.	5. Tighten connections or replace broken wiring.
	6. Overload protector cut out; overheated compressor. Condenser fan motor not operating as required.	6. Compressor will cool enough to restart. Refer to " <i>CONDENSER FAN MOTOR NOT OPERATING</i> " in this section.
	7. Inoperative overload protector or start relay.	7. Replace inoperative part.
	8. Inoperative thermostat control.	8. Replace thermostat control.
	9. Inoperative compressor.	9. Replace compressor.
COMPRESSOR OPERATES CONTINUOUSLY.	1. Thermostat control cap tube kinked or broken.	1. Replace thermostat control.
	2. Thermostat control stuck.	2. Replace thermostat control.
	3. Unit located in excessively hot area or air circulation through condenser coil is restricted.	3. Relocate unit or clean condenser coil as instructed.
CONDENSER FAN MOTOR NOT OPERATING.	<b>NOTE: If overload protector cuts out compressor, condenser fan motor will continue to operate; otherwise; troubleshooting condenser fan motor is same as "<i>COMPRESSOR DOES NOT OPERATE</i>" paragraph plus the following:</b>	
	1. Loose or broken electrical connection.	1. Tighten or repair electrical connection.
	2. Fan blade obstructed.	2. Remove obstruction.
	3. Inoperative condenser fan motor.	3. Replace condenser fan motor.



THE CORNELIUS COMPANY

## COMMERCIAL WARRANTY

THE CORNELIUS COMPANY ("CORNELIUS") warrants to the original purchaser from CORNELIUS who buys solely for commercial or industrial uses or for resale in the ordinary course of business that each of the products covered hereby shall be free from defects in material and/or workmanship, under normal and proper use and service conditions.

The **Period of Warranty** is one (1) year from the date of installation or fifteen (15) months from the date of shipment by CORNELIUS of a product covered hereby, whichever time period elapses first. For products incorporating a sealed refrigeration system the period of Warranty, with respect to the refrigeration system only (defined as the compressor, evaporator, condenser, interconnecting tubing and related parts within the sealed system), is five (5) years from the date of installation or sixty-three (63) months from the date of shipment by CORNELIUS whichever time period elapses first.

**Products covered** by this Warranty include all beverage and food dispensing or vending equipment manufactured or sold by CORNELIUS after the date hereof not excluded hereinafter, and limited to the use thereof in connection with soft drinks, soft drink syrups, beer, coffee, hot chocolate, tea or food commodities for which use the particular product is identified.

**Specific exceptions** to this Warranty include Liquid Juice Dispensers, Frozen Carbonated Beverage Dispensers, Compactor, O.E.M. Sales, water filter cartridges, coin mechanisms, light bulbs, fuses, glass, diaphragms, seals, o-rings, silicone or rubber parts, parts in contact with water or the product dispensed and which become inoperative due to scale or chemical change, normal maintenance items. This Warranty shall not apply to damage resulting from improper voltage, inadequate wiring, abuse, accident, alteration, misuse, neglect, unauthorized repair, improper cleaning or failure to follow installation, operating or maintenance instructions. Remote water-cooled refrigeration systems must have properly sized and installed remote cooling towers or systems. Failure of refrigeration components (compressor-valves) due to remote condenser system failure, incorrect sizing, operation, or installation are not covered by this Warranty.

Any products covered by this **Warranty**, including components thereof, demonstrated to have been defective when shipped by CORNELIUS will be either repaired, replaced (with new or rebuilt replacement) or the purchase price thereof refunded as CORNELIUS may determine solely in its discretion. A product or component thereof covered by this Warranty supplied as a Warranty replacement will assume the balance of the period of Warranty applicable to the original measured from the date of replacement. This Warranty does **not** include, and CORNELIUS will not assume or pay, the expense of any repair, replacement, analysis or any other services or parts furnished by any party other than CORNELIUS Unless specifically authorized in writing by CORNELIUS. This Warranty does **not** include labor for diagnosis, removal or installation of any products or components.

Any **claim** under this Warranty must be made as promptly as is reasonably possible, but in no event later than thirty (30) consecutive calendar days, after the discovery of the defect. Such claims are to be directed to the CORNELIUS SERVICE DEPARTMENT at One Cornelius Place, Highway 10 West, Anoka, MN 55303-1592 (612) 421-6120.

The product covered by this Warranty, or components thereof, must not be returned to CORNELIUS without authorization from the CORNELIUS SERVICE DEPARTMENT. Instructions for return will be given with any such authorization. All returned products and/or parts must be shipped prepaid to CORNELIUS. CORNELIUS will prepay return shipping costs of repaired or replacement products or parts, except that as to Alaskan and Hawaiian original purchasers, CORNELIUS will pay shipping costs only to Seattle or San Francisco respectively. CORNELIUS will not accept collect shipments. Replaced products or parts become the property of CORNELIUS. Any product or parts returned to CORNELIUS Under the terms of this Warranty must be accompanied by a Returned Goods Tag, properly filled out as to unit model number and serial number and detailed explanation of failure.

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Under no circumstances should the entire unit be returned to CORNELIUS except for repair or replacement of the sealed refrigeration unit. Whenever this product is returned to CORNELIUS for repair or replacement of the sealed refrigeration system under the terms of the Warranty and the defect is found to exist in parts other than the sealed refrigeration system, (example: ice bank control, agitator motor, condenser fan motor, start capacitor or relay), an evaluation fee of twenty dollars (\$20.00) will be charged. If such defective part needs replacement or repair and is within its Warranty period, such part will be replaced or repaired at no charge, except for labor for removal and installation of such part; if not within its period of Warranty, a charge for such part and labor will be made.

CORNELIUS' LIABILITIES ARE LIMITED SOLELY AND EXCLUSIVELY TO THE REPLACEMENT OR REPAIR OF THE DEFECTIVE PRODUCT OR REFUND OF THE PURCHASE PRICE OF SAID PRODUCT. CORNELIUS IS NOT LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER, WHETHER ANY CLAIM FOR RECOVERY IS BASED ON THEORIES OF CONTRACT, NEGLIGENCE OR TORT, and, without limitation, do not include shipping charges, labor, installation or any other losses or expenses incurred in operation or installation of any replaced, repaired or returned product or component. In those jurisdictions where liability for damaged cannot be disclaimed, original purchaser's recovery shall not exceed the cost of the Warranty product.

Except for descriptions of size, quantity and type, which may appear on CORNELIUS' invoices and other written materials, and except for any statements of conformity of CORNELIUS' products with specifications of certain industry, government or professional organizations standards which may appear as product information disclosures in CORNELIUS' literature and other documents from time to time. THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

CORNELIUS neither assumes nor authorizes any salesman, employee, agent or other person to assume for it any liability or obligation of any kind which is in variance with the terms of this Warranty.

CORNELIUS MAKES NO WRITTEN WARRANTY TO ANY PURCHASER WHO BUYS FOR PERSONAL, FAMILY OR HOUSEHOLD USE.

For CORNELIUS Warranties on products other than covered hereunder, see the Warranties covering each product category.

**THE CORNELIUS COMPANY  
ONE CORNELIUS PLACE  
HIGHWAY 10 WEST  
ANOKA, MINNESOTA 55303-1592**

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