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OVERVIEW

- *The Structural Concepts Renaissance refrigerated service cases are designed to merchandise packaged candy products at 65° at 55% RA or less product temperatures.
- These cases should be installed and operated according to the following instructions to insure proper performance.
- This unit is designed for the display of products in ambient store conditions where temperatures and humidity are maintained at a maximum of 75° F and 55% relative humidity.



SET-UP

Merchandiser Set-Up

- Mobile Units (Cases with Casters)
- For your safety, the equipment is furnished with a properly grounded cord connector. Do not attempt to defeat the grounded connector.
 - Plug cord into a certified electrical outlet with ground.
- Stationary Units
 - Self-contained refrigeration. Note: Servicing to be accomplished by refrigeration / electrical contractor.
 - Removing the rear grill will expose access to the a 3" service opening in the base adjacent to a junction box.
 - Electrical 120v leads are provided in the junction box.
 - Remote refrigeration system. Note: Servicing to be accomplished by refrigeration / electrical contractor.
 - Removing the rear grill will expose access to the a 3" service opening in the base adjacent to a junction box.
 - 120v Electrical leads are provided in the junction box.
 - Refrigeration stub up connections are provided inside the case, from the rear and in back of the electrical box.
 - To facilitate maintenance see electrical section for electrical box removal.



STRUCTURAL CONCEPTS®

START-UP AND OPERATION

Raise the Curved Glass

- To raise the front curved glass, grab the lift handle extrusion on the bottom edge of the front curved glass and lift up.
- Gas cylinders hold the glass open for hands free access to the interior of the case.

Merchandiser Start-Up

- Turn on the main power. Switch is on the control panel at the rear left hand side of base. Supply power will start evaporator coil fan(s), the front fan and the evaporator/ condensate pan. It will supply power to the light switch and thermostat, (self-contained units).
- From the front of the case, raise the deck pans and check to see that the coil fans are all functioning properly.
- On the top of the front panel a register directs air flow provided by the front fans, (front air flow is to prevent condensation from forming on the curved glass). Check across the top of the front panel to see if air is discharging across the entire front of the case.
- Turn on the lights. Light switch is in the rear control panel. First time lighting may require a short warm up period for the bulbs. Slightly dim or a flickering of new bulbs is normal. If lights do not turn on, check all of the raceway plugs. The lighting is wired in series so **all lights must be plugged in or recepta-cles capped** in order for the case to light.



MAINTENANCE FUNDAMENTALS

Preventive Maintenance should be per-• formed every 30 days unless conditions warrant a more frequent replacement cycle.

Air Filter

- Magnetic strips attached to the filter adhere • the filter to the rear grill.
- The nylon mesh filter can be cleaned by rins-• ing thoroughly with water against the air flow direction. A mild detergent removes smoke/ grease stains.

Rear Ledge Removal

- Pull ledge back to stops. •
- Rotate down to the vertical position. •
- From the shelf's lowered position (as indi-• cated at right), lift from bottom edge upward to disengage shelf track from bracket.

Front Panel Removal

Refer to front fan access in the electrical • fundamentals.

Under Case Cleaning

- Note: Refer to Evaporator Pan Access/ • Removal in electrical fundamentals.
- Remove rear grill, use a vacuum with a hose • attachment to clean under the case.
- Under case cleaning is accessible by had or • 1 1/2 inch diameter cleaning tool such as a vacuum hose.



Shelf Assembly Removal

- Raise the front curved glass.
- Remove and carefully set aside glass or wire shelves.
- For lighted shelving, unplug the light cord and detach from the rear shelf support.
- Slide light assembly back to unlock, then rotate up to separate from brackets.
- Slide rear support back to unlock and rotate up to separate from brackets.
- Remove brackets. Note, it may be necessary to remove the nylon shipping bracket retainer. Pliers will be required to accomplish this task.

Light Fixture

Removal of lamp:

- Rotate lamp (1/4 turn) either direction to disengage (upper or lower) pins/contacts from lamp mounting sockets.
- Remove bulb buy applying even pressure from the back side at the bulb ends and pull-ing the remaining contact from the sockets.

Installation of lamp:

- Align pins with slot.
- Insert pins into socket by rotating the bulb 1/4 turn to secure either the (upper or lower) pined contacts into the sockets.
- Rotate the remaining bulb contacts (1/4 turn) into the remaining lamp mounting socket contacts.

Removing the Rear Doors

- Note: Doors are not interchangeable. There is an inner and outer door. The outer must be removed first and replaced last.
- The outer door, is the right hand door (from the service side or rear of the case). It can be identified by a stop located at the lower right hand corner to the inside of the case.
- Move the doors toward the center of the case.
- Individually lift each door up toward the top of the case and pivot the bottom of the door out.
- Reverse to install.



ELECTRICAL FUNDAMENTALS

Warning, disconnect power before providing maintenance and service to unit.

Ballast Access/Removal

- Assembly or disassembly and servicing to be accomplished by licensed electrical contractor.
- Remove the rear grill by removing the six screws located on both sides of the grill.
- Remove the control panel by removing the three remaining screws located on the right side of the panel.
- Release quick disconnect from wire harness.
- Remove two nuts from both end mounting flanges.

Electrical Box Access/Removal

- Assembly or disassembly and servicing to be accomplished by licensed electrical contractor.
- Remove the rear grill by removing the six screws located on both sides of the grill.
- Remove the control panel by removing the three remaining screws located on the right side of the panel.
- Remove the electrical box by removing the four screws located inside and at the top of the box.

Evaporator Pan Access/Removal

- Assembly or disassembly and servicing to be accomplished by licensed electrical contractor.
- Turn off main power and allow evaporator pan to cool.
- Remove the rear grill by removing the six screws located on both sides of the grill.
- Check temperature of pan prior to handling.
- Withdraw evaporator pan from the right side behind electrical box.
- Disconnect evaporator pan power cord from receptacle at the pan.
- Empty evaporator pan contents into a suitable container.







ELECTRICAL FUNDAMENTALS

Warning, disconnect power before providing maintenance and service to unit.

Evaporator Fan Access

- Raise the front curved glass. •
- Shelving can be removed to facilitate main-• tenance
 - Turn off the electrical power at main • power switch if servicing fans.
- Remove deck pans to access coil fans. •
- Remove mounting screws from fan assem-• bly to separate fan from shroud.



ELECTRICAL FUNDAMENTALS

Warning, disconnect power before providing maintenance and service to unit.

Front Fan Access

The front fans supply air flow to the top of the front panel louvers. This air flow is to eliminate any condensation formed on the face of the curved glass.

- Fan/s are located behind the front panels. •
 - Turn off the main electrical power at main power switch if servicing fans.
- Remove the lower front panel. •
 - Remove screws from the lower flange at the base of the unit.
 - Remove screws from the upper flange of the lower front panel, located behind the lower edge of the upper front panel.
- Remove the upper front panel. •
 - Remove screws from the lower flange of the plenum at the base of the unit.
 - Remove screws from the front panel support brackets.
 - Raise the front curved glass.
 - From inside the case remove screws from the **upper edge only** of the deck support & glass stop.
 - Pull entire assembly forward and care-• fully set aside.
 - Remove mounting screws from fan assembly to separate fan from shroud.



Deck Support & Glass Stop Screws



Temperature Settings

- Assembly or disassembly and servicing to be accomplished by licensed electrical / refrigeration contractor.
- The case temperature is set at the factory, as determined by the case size.
- The temperature can be controlled by a manual thermostat. Switch is on the control panel rear right hand side of base.
- If a temperature setting change is required, rotate the control in the desired direction and monitor the thermometer for the corrected air temperature change.

Refrigeration: Access, Connections & Servicing

- Assembly or disassembly and servicing to be accomplished by licensed refrigeration contractor.
- Service connections are located on the compressor / condenser assembly.
- Refrigerant lines are flexible to facilitate rear access maintenance to condenser.
- Plastic glides are mounted to the unit base to assist in sliding the condenser out for access.
- Remove the rear grill by removing the six screws located on both sides of the grill.
- Remove structural stiffener by removing the four screws located on at bottom edge of the base.
- Withdraw the unit using pull flanges on condenser frame.



STRUCTURAL CONCEPTS®

Electrical Ratings RCG4848R **RCG5948R** RCG7748R Self-Contained Incoming Supply 120/1/60 120/1/60 120/1/60 Min. Circuit Amps 15.0 15.0 15.0 7.32 7.32 8.32 Amps Watts 878 878 998 Hook-Up Leads or Cord w/ Leads or Cord w/ Leads or Cord w/ Nema L5-15 P Nema L5-15 P Nema L5-15 P **Electrical Controller** Electrical Control-Electrical Control-**Electrical Controller** ler ler

Lighting

	RCG4848R	RCG5948R	RCG7748R	
Lamp Quantity	4	4	4	
Lamp Type	F25 T8	F32 T8	F40 T8	

Refrigeration

	RCG4848R	RCG5948R	RCG7747R	
Self-Contained				
Compressor, RLA	2.8	2.8	2.8	
Refrigerant	R134A	R134A	R134A	
Display Space (Ft ³)	14.58	18.03	23.67	
BTUH @ 20°	1560	1560	1560	
Condensate Evap.	120V/300W	120V/300W	120V/300W	

Control Settings

Mechanical

Mechanical Settings						
Pressure Settings – S/Contained						
Differental	60					
High Side Cut-In	260					
Superheat	8-10					

Control Settings

Thermostat

Therm	ostat	Setting	js			
Set Po	oint				50	
Diferer	ntial				Minim	um

REGULATORY APPROVALS

ETL Listed Conforms to UL 471

ETL Sanitation Conforms to NSF 7



ILLUSTRATED PARTS BREAKDOWN



PARTS LIST

1	Curved Glass	18	Rear Rack Support
2	End Panel Full	19	Bulb Seal
3	End Panel Mirror	20	Clam Shell Assembly
4	Lift Handle	21	Thermometer
5	Shelf Light	22	Glass or Wire Shelf
6	Lamp	23	Rear Door, Right
7	Deck Pan	24	Rear Door, Left
8	Bumper Insert	25	Ledge Hinge
9	Bumper End Cap	26	Evaporator Pan
10	Lower Front Panel	27	Ballasts
11	Front Air Chute	28	Control Panel
12	Front Panel	29	Rocker Switch
13	Front Fans	30	Thermostat
14	End Panel Cutaway	31	Electrical Panel Plexi Cover
15	Fan Motor, Evaporator	32	Magnetic Filter
16	Insulated End Glass	33	Rear Grill
17	Shelf Bracket	34	Lower Rear Stiffener
		35	Package Ledge

Product is Drying Out	Check the relative humidity in the store.
Water on the Floor	Check that all of the hoses are connected.
	Check that the drain trap is free of debris.
	Is the evaporator pan positioned correctly under drain.
	Is the evaporator pan plugged in and heating properly.
Excessive Fan Noise	Check that the case is aligned, level and plumb.
	Check that nothing is obstructing the blade rotation.
	Check that the fan shroud is properly secured.
System is not Operating	Check that the utility power is on.
	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
Fans Not Working	Check that the fans are plugged in at the fan shroud.
	Determine if there is ice build up blocking the fan.
Case Lights Not Working	Check bulbs for proper installation and connection.
	Check for burned out bulbs.
	Clean dirt and dust from the bulbs to prevent flickering.
Not Holding Temperature	Check that the coil fans are working.
	Check that the discharge air is not disrupted or blocked by product.
	If a large amount of warm product was added to the case, it will take time for the temperature to adjust.
	Check the coil for ice build up.
	Check that the condenser coil is clean (self contained unit).
	Check that the case is not in the sun or near a heat or air- conditioning vent.
	Case temperature will rise during defrost mode but will return to normal. Proper product temperature will be maintained.
	Is case located near front doors.
Condensing Unit Not Operat- ing (self contained unit).	Check that the power is turned on.

WIRING DIAGRAM RCG(48/59)48R SELF CONTAINED



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WIRING DIAGRAM RCG(48/59)48R REMOTE



WIRING DIAGRAM RCG 7748R SELF CONTAINED REFRIGERATION



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WIRING DIAGRAM RCG 7748R SELF REMOTE



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CLEANING SCHEDULE

Cleaning	Daily	Weekly	Monthly	Task
Clean Case Exterior	x			The acrylic must be cleaned with a mild soap and water solution and a soft cloth, (Never use a household cleaner on acrylic).
	Х			Clean outside surface of front curved glass with a household or commercial glass cleaner.
		х		Clean wood, laminate and painted surfaces with a mild soap and water solution and a soft cloth .
			Х	Remove rear grill. Clean under case with a vacuum. Use caution when removing evaporator pan. Pan my be hot.
Clean Case Interior	Х			Clean inside surface of front curved glass, glass shelves and mirrors with a household or commercial glass cleaner.
	x			The acrylic must be cleaned with a mild soap and water solution and a soft cloth, (Never use a household cleaner on acrylic).
	x			Remove the decks and clean with soap and water.
		x		Vacuum tub under deck. Clean with soap and water. Wipe dry with clean cloth.
		x		Keep drains clean and free of debris which could clog the drain and rob the case of needed refrigeration.
			х	Warning: lowering the front glass with fingers or items inside top cap can cause serious injury or damage to case. Raise the front curved glass. Clean inside the cavity at both ends of the hinged top cap with a mild soap and water.
(Self contained Units)		X		Remove the rear grill air filter and clean rinsing thoroughly with water against air flow direction. A mild detergent removes smoke and grease.

CLEANING SCHEDULE

Cleaning	Annually	Task
Clean Condensing Coil (Self contained Units)	Х	Clean the condenser coil. Using air pressure if available, or an industrial strength vacuum, clean the dust and dirt that collects on the condenser coil. (Be careful not to damage the fins on the coil.)

WARRANTY

All sales by Structural concepts Corporation (SCC) are subject to the following limited warranty. "Goods" refers to the product or products being sold by SCC.

Warranty; Remedies; Limitations. SCC warrants that if any Goods are found by an authorized representative of SCC not to be of good material or workmanship within one year of the date of shipments SCC will, at its option after inspection by an authorized representative, replace any defective Good or pay the reasonable cost of replacement for any such defective Goods, provided that written notice of the defect is given to SCC within 30 days of the appearance of such defect. If notice is not given within such period, any claim for breach of warranty shall be conclusively deemed to have been waived and SCC shall not be liable under this warranty. If SCC is unable to repair or replace the defective Goods, SCC shall issue a credit to the Purchaser for all or part of the purchase price, as SCC shall determine. The replacement or payment in the manner described above shall be the sole and exclusive remedy of Purchaser for a breach of this warranty. If any Goods are defective or fail to conform to this warranty, SCC will furnish instructions for their disposition. No Goods shall be returned to SCC without its prior consent.

SCC's liability for any defect in the Goods shall not exceed the purchase price of the Goods. SCC SHALL HAVE NO LIABILITY TO PURCHASE FOR CONSE-QUENTIAL DAMAGES OF ANY KIND WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, LOST PROFITS, OR OTHER ECONOMIC INJURY DUE TO ANY DEFECT IN THE GOODS OR ANY BREACH OF SCC, SCC SHALL NOT BE LIABLE TO THE PURCHASER IN TORT FOR ANY NEGLIGENT DESIGN OR MANUFACTURE OF THE GOODS, OR FOR THE OMISSION OF ANY WARNING THEREFROM.

SCC shall have no obligation or liability under this warranty for claims arising from any other party's (including Purchaser's) negligence or misuse of the Goods or environmental conditions. This warranty does not apply to any claim or damage arising for or cause by improper storage, handling, installation, maintenance, or from fire, flood, accidents, structural defects, building settlement or movement, acts of God, or other causes beyond SCC's control.

Except as expressly stated herein, SCC makes no warranty, express, implied, statutory or otherwise as to any parts or goods not manufactured by SCC. SCC shall warrant such parts or Goods only (I) against such defects, (II) for such periods of time, and (III) with such remedies, as are expressly warranted by the manufacturer of such parts of Goods. Notwithstanding the foregoing, any warranty with respect to such parts of Goods and any remedies available as a result of a breach thereof shall be subject to all of the procedures, limitations, and exclusions set forth herein.

THE WARRANTIES HERIN ARE IN LIEU OF ALL WARRANTIES, EXPRESS, IMPLIED, STATUTOTY, OR OTHERWISE. IN PARTICULAR, SCC MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No representative, agent or dealer of SCC has authority to modify, expand, or extend this Warranty, to waive any of the limitations or exclusions, or to make any different or additional warranties with respect to Goods.

Period of Limitations. No claim, suit or other proceeding may be brought by Purchaser for any breach of the foregoing warranty or this Agreement by SCC or in any way arising out of this Agreement or relating to the Goods after one year from the date of the breach. In the interpretation of this limitation on action for a breach by SCC, it is expressly agreed that there are no warranties of future performance of he goods that would extend that period of limitation herein contained for bringing an action.

Indemnifications. Purchaser agrees to indemnify, hold harmless, and defend SCC if so requested, from any and all liabilities, as defined herein, suffered, or incurred by SCC as a result of, or in connection with, any act, omission, or use of the Goods by Purchaser, its employees or customers, or any breach of this Agreement by Purchaser. Liabilities shall include all costs, claims, damages, judgments, and expenses (including reasonable attorney fees and costs).

Remedies of SCC. SCC's rights and remedies shall be cumulative and may be exercised from time to time. In a proceeding or action relating to the breach of this Agreement by Purchaser, Purchaser shall reimburse SCC for reasonable costs and attorney's fees incurred by SCC. No waiver by SCC of any breach of Purchaser shall be effective unless in writing nor operate as a waiver of any other breach of the same term thereafter. SCC shall not lose nay right because it has not exercised it in the past.

Applicable Law. This Agreement is made in Michigan and shall be governed by and interpreted according to Michigan law. Any lawsuit arising out of this Agreement or the Goods may be handled by a federal or state court whose district includes Muskegon County, Michigan, and Purchaser consents that such court shall have personal jurisdiction over Purchaser.

Miscellaneous. If any provision of this Agreement is found to be invalid or unenforceable under any law, the provision shall be ineffective to that extent and for the duration of the illegality, but the remaining provisions shall be unaffected. Purchaser shall not assign any of its rights nor delegate any of this obligations under this Agreement without prior written of SCC. This Agreement shall be binding upon and inure to the benefit of SCC and Purchaser and each of their legal representatives, successors and assigns.

SCC warrants its products to be free of defects in materials and workmanship under normal use and service for a period of one (1) year from the date of delivery.

This warranty is extended only to the original purchaser for use of the Goods. It does not cover normal wear parts such as plastic tongs, tong holders, tong cables, bag holders, or acrylic dividers.

General Conditions. All service labor and/or parts charges are subject to approval by SCC. Contact the Customer Service Department in writing or call 231-798-8888.

All claims must contain the following information: (1) the model and serial code number of the equipment; (2) the date and place of installation; (3) the name and address of the agency which performed the installation; (4) the date of the equipment failure; and (5) a complete description of the equipment failure and all circumstances relating to that failure.

Once the claim has been determined to be a true warranty claim by SCC's Customer Service Department, the following procedure will be taken: (1) replacement parts will be sent at no charge from SCC on a freight prepaid basis; (2) reimbursement for service labor will be paid if the following conditions have been met— (a) prior approval of service agency was awarded from the Customer Service Department; and (b) an itemized statement of all labor charges incurred is received by the Customer Service Department. The cost of the service labor reimbursement will be based on straight time rates and reasonable time for the repair of the defect.

If problems occur with any compressor, notify SCC's Customer Service Department immediately. Any attempt to repair or alter the unit without prior consent from the Customer Service Department will render any warranty claim null and void. This warranty and protection plan does not apply to any condensing unit or any part thereof which has been subject to accident, negligence, misuse, or abuse, or which ahs not been operated in accordance with the manufacturer's recommendations or if the serial number of the unit has been altered, defaced, or removed.

Limit of Liability. The limit of liability of SCC toward the exchange cost of the original condensing unit, F.O.B. SCC, Norton Shores, MI, of each motor-compressor assembly replaced during the warranty shall not exceed manufacturer's current established wholesaler's exchange price and in no case shall the labor of removing or replacing the motor-compressor or parts thereof be the responsibility of SCC.



TECHNICAL SE	ERVICE
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TECHNICAL SERVICE DEPARTMENT

1.800.433.9489