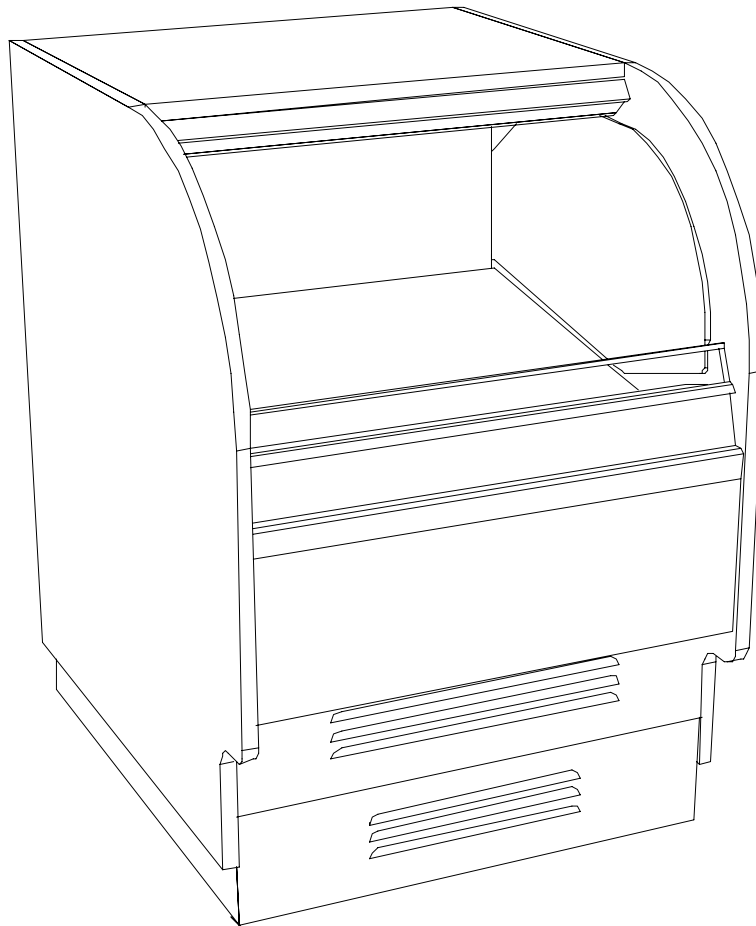




OPERATING MANUAL

PN 99399

SELF-CONTAINED REFRIGERATED SERVICE/SELF-SERVE CO2739R



Model CO2739R 27 1/2"L* x 39"H x 33"D

**Includes end panels.*

Certification: NSF-7, CRMA, UL/CSA



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OVERVIEW

- The CO2739R's are dual functional cases designed to merchandise pre-chilled packaged bakery products at 5° Celsius / 41° Fahrenheit or less and unpackaged bakery products at ambient temperatures.
- This self contained unit should perform quietly with easy operation.
- These cases meet the NSF and FDA suggested standards for maintaining proper refrigerated food temperatures and sanitation.
- These cases must be installed and operated according to the following instructions to insure proper performance.
- This unit is intended for the display of products in store conditions where ambient temperatures and humidity are maintained at a maximum of 24° C/ 75° F and 55% relative humidity.



WARNING
Risk of Electric Shock.
Disconnect Power Before Servicing Unit



WARNING
Hazardous Moving Parts.
Do Not Operate unit with covers removed.
Fan blades may be exposed when deck panel is removed. Disconnect
power before removing deck panel.



WARNING
Evaporator Tray is Hot

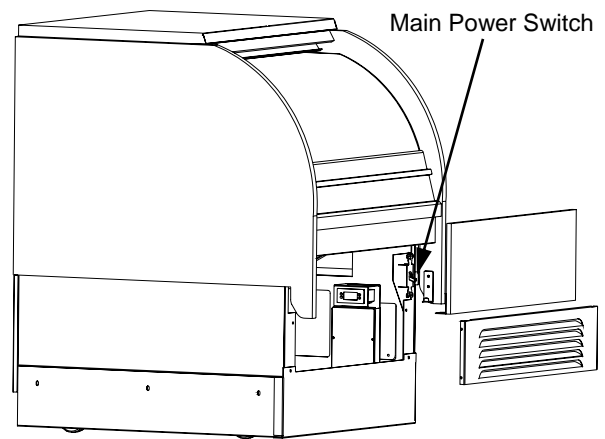


CAUTION
Lamps have been treated to resist breakage and must be replaced with a
similarly treated lamp.

START-UP AND OPERATION

Merchandiser Start-Up

- Do not use an extension cord with this appliance.
- Do not operate this equipment with a damaged cord, plug or outlet.
- Insure the main power switch is off.
- Plug cord into a certified 120v electrical outlet with ground.
- Turn main power on.
 - Remove upper front panel (See maintenance for panel removal). Switch is on the right side of case.
- Coil fan should turn on.
 - From inside of the case, check for discharge air from front baffle, to confirm that the fans are functioning properly.
 - When the case is in a start up mode or has been idle for a long period of time, the unit will require 75 minutes in order to pull-down temperature.
- The lights should come on at the same time.
 - First time lighting may require a short warm up period for the bulbs. Slightly dim or a flickering of new bulbs is normal.
- It is recommended that the **self contained** refrigerated cases maintain front and rear airflow clearance of approximately six inches.
- Obstruction or restriction of air can void warranty.
- The interior case temperature reaches 2° to 5° C / 35° to 41°F.
 - **Note:** The case temperature is set at the factory, as determined by the case size. The temperature is controlled by a thermostat. If a temperature setting change is required, refer to the instructions for the JohnsonTemperature Control Programming operating section of this manual.
- *Note: Set point should be 4.5 °C / 40°F. This will maintain the product temperature range. Settings lower than 4.5 °C / 40°F can cause food items to freeze.*



Removing the Front Panel

- Lifting the panel from lower edge upward approximately a half inch into a channel lip, disengages the support tabs on the lower edges.
- Pivot out lower edge approximately one inch and lower panel to remove.

Removing the Front Grill

- Lifting the grill upward approximately a half inch disengages a top support flange and the support tabs on the back lower side of the grill from the frame .
- Pivot out lower edge and remove grill.

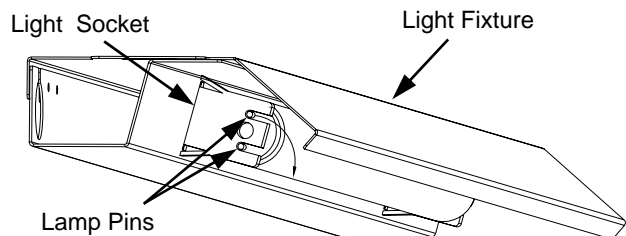
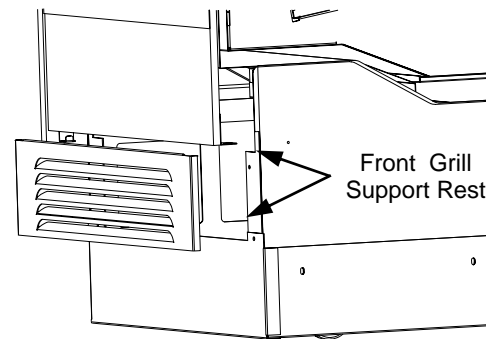
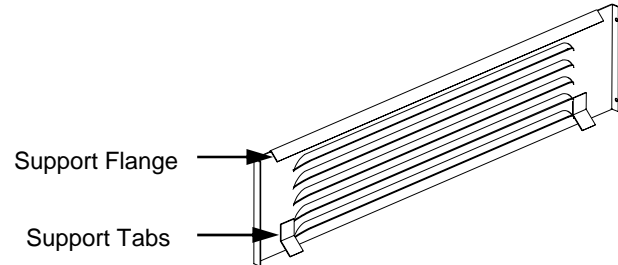
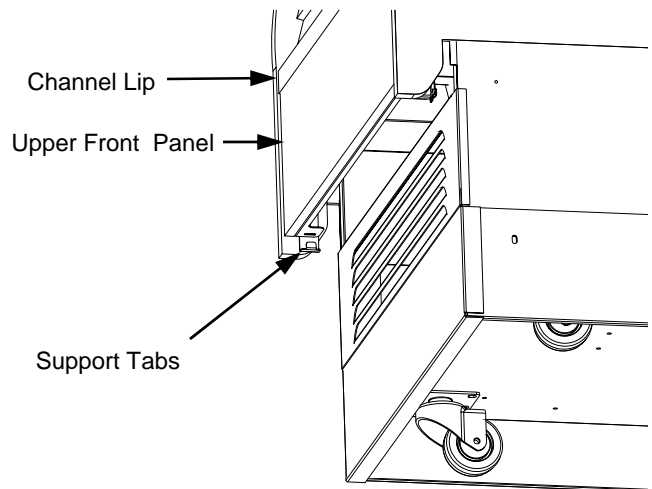
Light Fixture

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 pulling 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) pinned contacts into the sockets.
- Rotate the remaining bulb contacts (1/4 turn) into the remaining lamp mounting socket contacts. .



Electrical: Access and Connections

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

Light Ballast Access

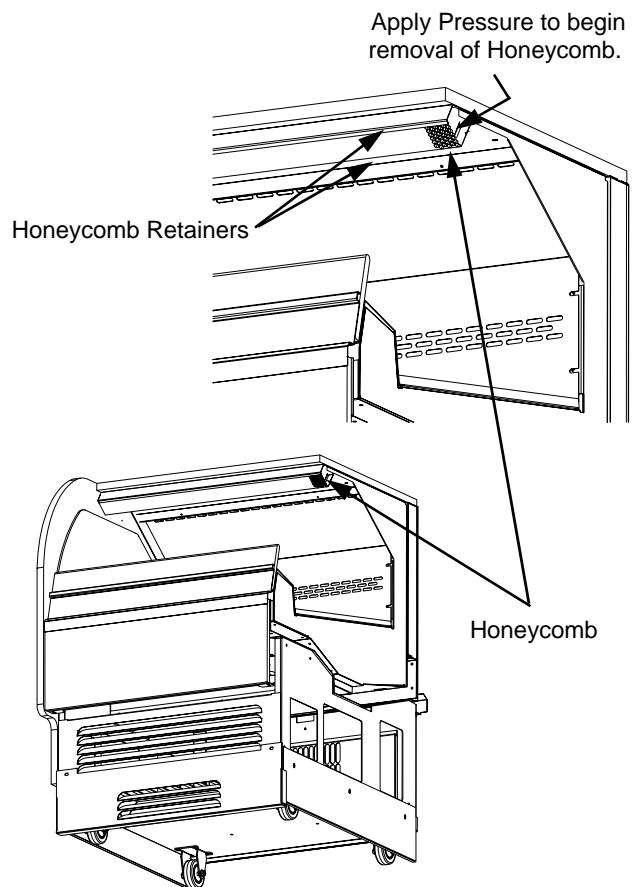
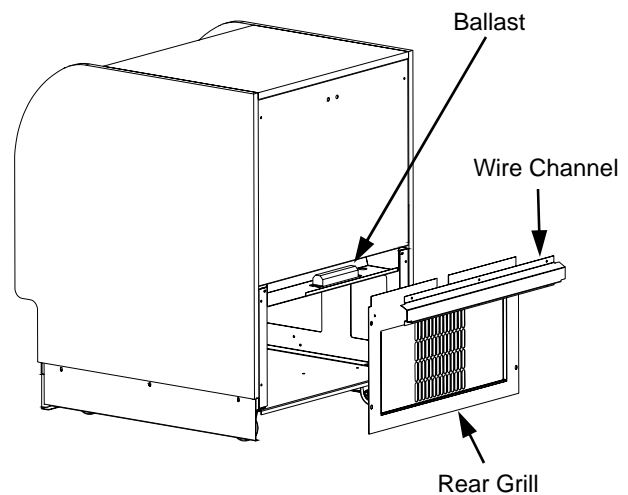
- Remove three screws from the rear wire channel.
- Remove four screws from the rear grill.

Honeycomb Air Diffuser Removal

- Obtain a nonmetallic device of suitable strength such as a ballpoint pen.
 - Use care not to remove the heating wire that prevents condensation on the lamp assembly.
- Wedge the instrument between the honeycomb and the top cap closure/end panel.
- Apply pressure to collapse the honeycomb and pry downward and away from the honeycomb retainer.
- Pull honeycomb out fully by grasping with fingers and pulling downward.

Honeycomb Air Diffuser Installation

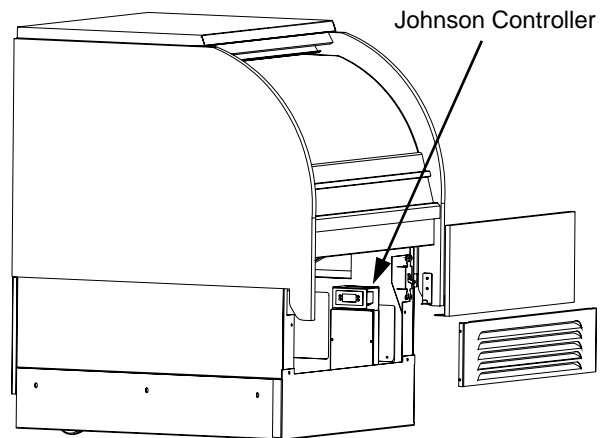
- Insert honeycomb up into top retainer first.
- Apply suitable pressure to collapse the honeycomb up into lower the honeycomb retainer.



REFRIGERATION FUNDAMENTALS

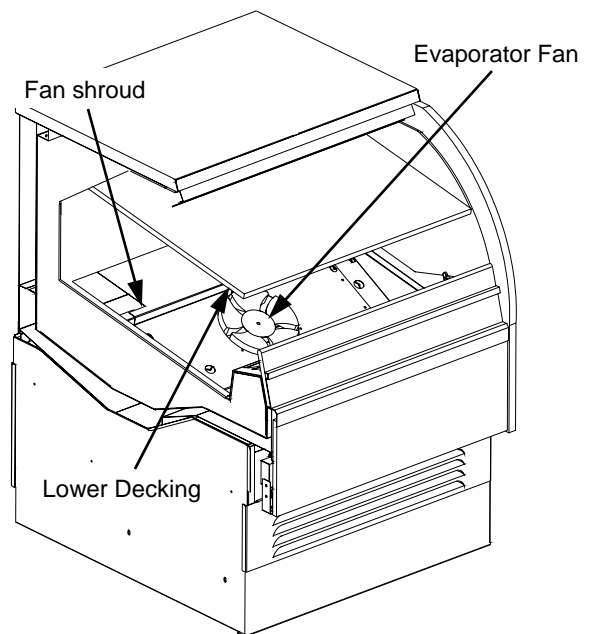
Temperature & Defrost Control

- The case temperature is set at the factory, as determined by the case size. The temperature is controlled by a thermostat. If a temperature setting change is required, follow the instructions for the **Johnson Control Temperature Control Programming Steps** in the technical information section of this operating manual.
- If service is required to the temperature control unit, call Structural Concepts. This maintenance should be performed by a certified technician.



Evaporator fan access

- Remove lower decking. A finger hole is provided to assist in lifting up and pulling out deck.



Expansion valve access

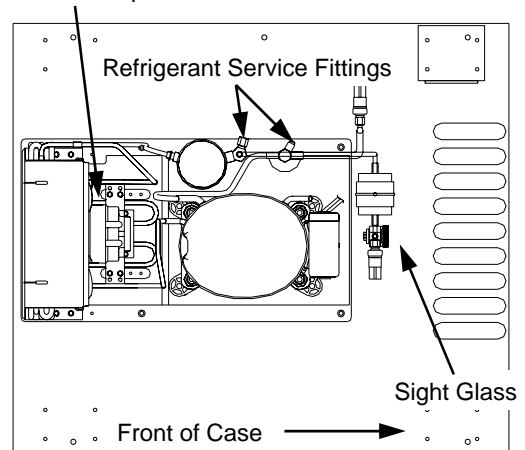
- Remove lower decking. A finger hole is provided to assist in lifting up and pulling out deck.
- Remove fan shroud assembly.
 - Unplug the fan at the shroud support.
 - Remove four screw knobs from the fan shroud.
- Carefully remove shroud to avoid damage to mirrors or front air deflector.

Refrigeration:

Access and Connections




- ***Assembly or disassembly and servicing to be accomplished by licensed refrigeration contractor.***
- Refer to maintenance fundamentals for access.
 - Remove front panel.
 - Remove front grill.

Hot Gas Evaporator






Serial Label Location & Information Listed / Technical Information & Service

- Serial labels are located near the electrical access on your case.
- Serial labels contain electrical, temperature & refrigeration information, as well as regulatory standards to which the case conforms.
- For additional technical information and service, see the *TECHNICAL SERVICE* page in this manual for instructions on contacting Structural Concepts' Technical Service Department.
- See images below for samples of both refrigerated and non-refrigerated serial labels.

 <p>888 E. Porter Rd · Muskegon, MI 49441</p>		 <p>MODEL HV74RSS SCROLL SERIAL NO.</p>	
<p>FOR PARTS AND SERVICE CALL 1-800-433-9489</p>			
 <p>3048256</p>		<p>ELECTRICAL RATING 120/1/60 24A REFRIGERANT R404A AMOUNT ?? OZ DESIGN PRESSURE HIGH 450 LOW 200 MINIMUM CIRCUIT 30A MAXIMUM OVERCURRENT 30A</p>	
<p>CONFORMS TO UL STD 471 CONFORMS TO NSF STD 7 CERTIFIED TO CAN/CSA STD C22.2 NO 120</p>			
<p>Super Heat Temp 8-10°F BTUH Requirements 9,738 BTUH @ 20° F SST Defrost 6 defrosts per day, 45° F termination, 45 min. failsafe</p>			

----- Sample Serial Label For Refrigerated Case -----

 <p>888 E. Porter Rd · Muskegon, MI 49441</p>		 <p>PC5682 txtRemote txtSerialNumber</p>	
 <p>3048256</p>		<p>120 VOLTS 60 HZ SINGLE PHASE 1.84AMP</p>	
<p>CONFORMS TO UL STD 65 CERTIFIED TO CAN/CSA STD C22.2 NO 120</p>		<p>FOR PARTS OR SERVICE CALL STRUCTURAL CONCEPTS AT 1-800-433-9489</p>	
		<p>SAMPLE ONLY</p>	

----- Sample Serial Label For Non-Refrigerated Case -----

TROUBLESHOOTING

Alarm Going Off.	See alarm and fault codes (JOHNSON CONTROL).
Product is Drying Out.	Check the relative humidity in the store.
Water on the Floor.	Check the drain trap is free of debris.
	Check that the condenser hot gas evaporator for cleanliness.
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.
Johnson Control has No illumination.	Check connections on power supply contactor board.
	Check fuse on power supply contactor board.
Fans Not Working.	Check that the power is on.
	Check that fans are plugged in at the fan shroud.
	Faulty motor.
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.
	Faulty ballast.

TROUBLESHOOTING

Not Holding Temperature.

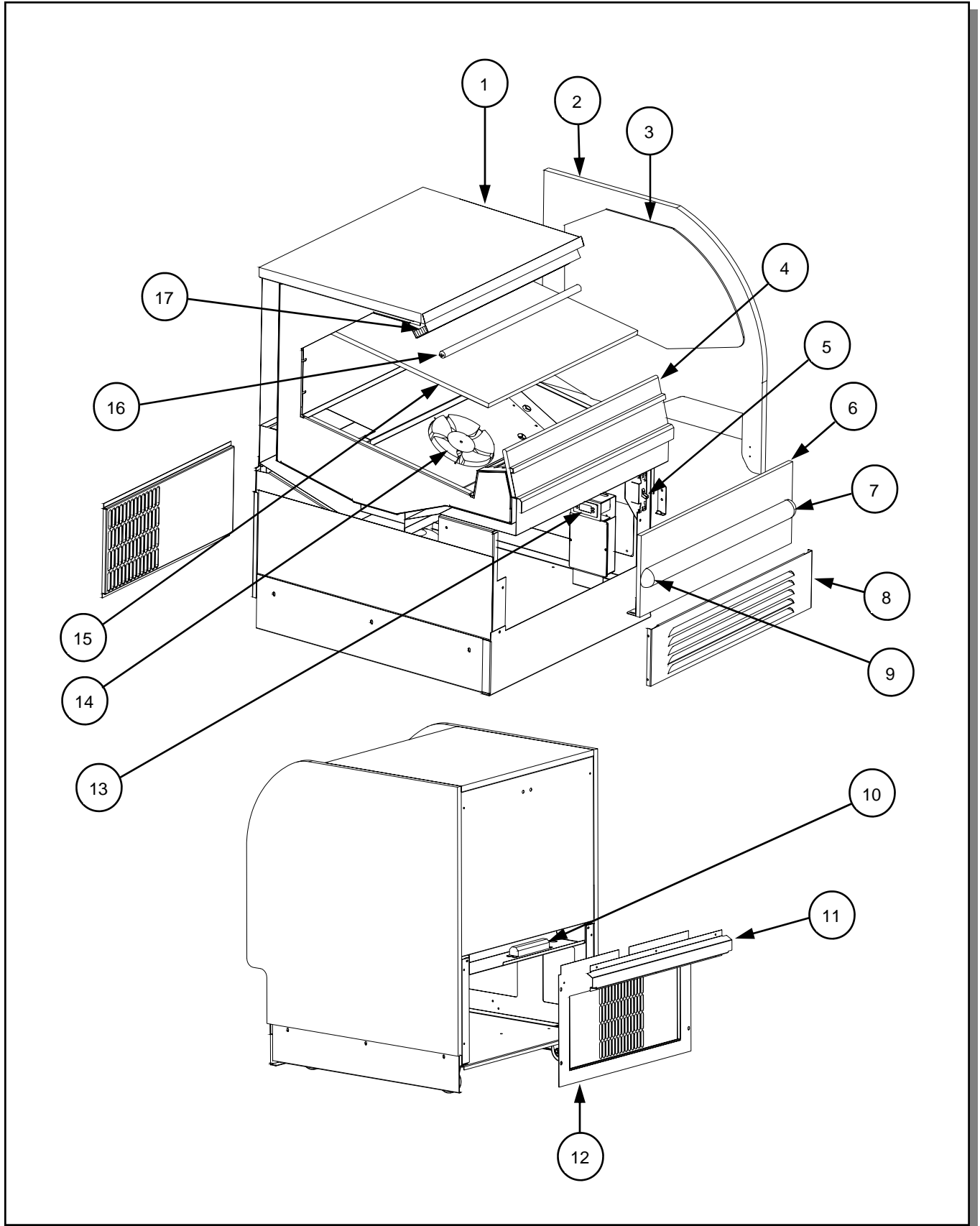
If a large amount of warm product was added to the case, it will take time for the temperature to adjust.

The temperature will change during defrost mode but will return to normal.

Check that the case is not in the sun or near a heat or air-conditioning vent.

Is case located near front doors.

ILLUSTRATED PARTS BREAKDOWN COU2757R



PARTS LIST

1	Top Board	10	Light Ballast
2	End Panel	11	Wire Channel
3	End Panel Mirror	12	Rear Grill
4	Air Deflector Glass	13	Johnson Controller
5	Single Pole Switch	14	Fan Motor, Evaporator
6	Front Panel	15	Deck Pan
7	Bumper Insert	16	Lamp Bulb
8	Front Grill	17	Honeycomb
9	Bumper End Cap		

CLEANING SCHEDULE

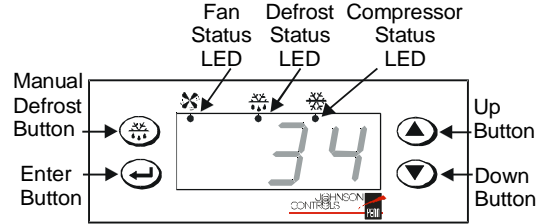
Cleaning	Daily	Weekly	Monthly	Task
Clean Case Exterior	X			The acrylic must be cleaned with a mild soap and water solution and a soft cloth (Never use a household cleaner on acrylic) .
Clean Case Interior	X			Clean glass shelves and mirrors with a household or commercial glass cleaner. The deck can be cleaned with a warm soap and water solution.
		X		Remove the deck and clean with soap and water.
		X		Remove rear doors and clean with a household or commercial cleaner.
		X		Vacuum tub under deck or soap and water if necessary. To flush out the tub, disconnect power to the case. Remove the ABS deck and the fan shroud. Note: be sure to plug fans back in after cleaning and before installing decks.
		X		Keep drain clean and free of debris which could clog the drain and rob the case of needed refrigeration.
Clean Condensing Coil		X		Vacuum grill area on back of case.
			X	Using air pressure if available, or an industrial strength vacuum, clean the dust and dirt that collects on the condenser coil.

Alarm and Fault Codes

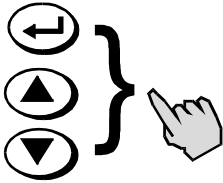
These alarm and fault codes will flash on the display when the control detects the following faults:

Table 1: Error Codes and Status

Error Code	System Status
F1 Indicates an open or shorted temperature sensor	Alarm output is on. Compressor runs according to the sensor failure mode selected (parameter SF). Cycle power to reset control.
F2 Indicates an open or shorted evaporator sensor	Alarm output is on. Defrost cycle is controlled by parameters di (defrost initiation) and dd (defrost duration). Correct problem to reset control.
A1 Indicates that the digital input was open for longer than the time delay (id) and digital input (iF) Option 1 is selected	Compressor output is off. Alarm output is on. Correct problem to reset control.
A2 Digital input closed for longer than time delay (id) and digital input (iF) Option 2 is selected	Alarm output is on. Correct problem to reset control.
A3 Digital input open for longer than the time delay (id) and digital input (iF) Option 3 selected	Fan output is off. Alarm output is on. Correct problem to reset control.
HI Temperature has exceeded the high temperature alarm value (AH)	Alarm output is on. Correct problem to reset control.
LO Temperature has fallen below the low temperature alarm value (AL)	Alarm output is on. Correct problem to reset control.
EE Program failure	Alarm output is on. Other outputs are off. Replace control.

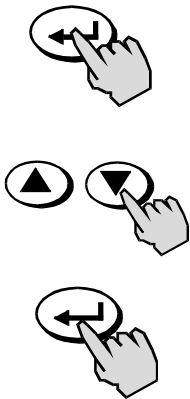


To lock and unlock the unit for programming



Press the Enter, Up, and Down buttons in sequence and hold them all down until “- - -” is displayed. Hold for about 10 seconds until the current temperature is displayed. This toggles the keypad between locked and unlocked.

To change the setpoint



1. Hold the Enter button down for 3 seconds. The display will change to show the setpoint. Release the Enter button.
2. Press the Up or Down button until you reach the new setpoint.
3. Press the Enter button to save the new setpoint.

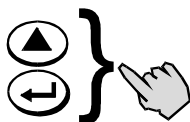
Note: If the Enter button is not pressed after selecting the new setpoint, the new setpoint is not saved, and the control will revert to the original setpoint.

To begin a Manual Defrost Cycle



Hold the Defrost button down for 3 seconds.

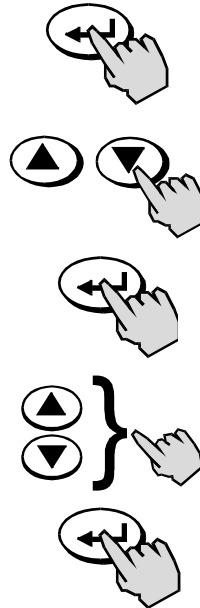
To begin a Deep Freeze Cycle



Press the Enter and Up buttons in sequence and hold both for 5 seconds. The compressor status LED will light.

To program values other than the setpoint

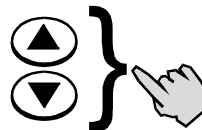
A parameter settings reference page is included in Table 3 of this bulletin. Filling out the parameter settings before programming may be helpful.



1. Hold the Enter button down for about 10 seconds. The display will change to HY.
2. Press the Up or Down button until the desired parameter is displayed.
3. Press the Enter button. The parameter's current value is displayed.
4. Press the Up or Down button until the desired value is shown.
5. Press the Enter button to save the new value. After 10 seconds of inactivity, the display will return to its normal function.

Note: If the Enter button is not pressed after selecting the new value, the new value is not saved, and the control will revert to using the previous value.

To run the Self-test procedure



Press the Up and Down buttons in sequence, and hold for 5 seconds.

IMPORTANT: Disconnect loads before beginning Self-test procedure. Cycle power to resume normal operation.

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 CONSEQUENTIAL 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 caused 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 or Goods. Notwithstanding the foregoing, any warranty with respect to such parts or 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 HEREIN ARE IN LIEU OF ALL WARRANTIES, EXPRESS, IMPLIED, STATUTORY, 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 the 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 any 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 consent 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 has 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.

**STRUCTURAL CONCEPTS CORPORATION
TECHNICAL SERVICE DEPARTMENT
1.800.433.9489**